City of Kenmore

City of Kenmore - 18120 68th Avenue NE Kenmore, WA 98028 Phone: 425-398-8900
Agendas also available at www.kenmorewa.gov E-mail: cityhall@kenmorewa.gov

City Council Special & Regular Meeting
February 28, 2022 - 6 PM

VIA ZOOM - LINK:https://us02web.zoom.us/j/86566422474
US: +12532158782,,86566422474# or +13462487799,,86566422474#
Or Telephone: Dial US: +1 253 215 8782
Webinar ID: 865 6642 2474

I. CALL SPECIAL MEETING TO ORDER - 6 PM

II. ROLL CALL

III. EXECUTIVE SESSION

A. Pursuant to RCW 42.30.110(1)(b), the Council will enter an executive session to consider real estate acquisition, and pursuant to RCW 42.30.110(1)(i), to discuss pending or potential litigation. The session is scheduled to conclude at approximately 6:59 PM.

IV. POSSIBLE ACTION RELATING TO EXECUTIVE SESSION

V. ADJOURN SPECIAL MEETING

VI. CALL REGULAR MEETING TO ORDER - 7 PM

VII. FLAG SALUTE

VIII. AGENDA APPROVAL

IX. PROCLAMATION

A. In Honor of Women's History Month
Women's History Month Proclamation

B. Recognizing the **50th** Anniversary of Evergreen Health
Evergreen Health Proclamation

X. PRESENTATION

A. Northshore Senior Center Introduction with Nathan Phillips, CEO, and Pasha Mohajerjasbi, Program Coordinator

B. King County Passenger Ferry Update with guests Chris Arkills, Government Relations and Paul Brodeur, Marine Division Director of King County Metro Transit Department
Marine Proviso - Kenmore Council Briefing
Preliminary Water Taxi Expansion Progress Report

XI. PUBLIC COMMENTS

A. We welcome our community members to the Council's meeting. In this forum, the Council does not engage or dialogue with the public; the primary role of the Council is to listen. Please use the "raise hand" feature now if you wish to speak. Guest must address comments to the Mayor and City Council. The Clerk will acknowledge your request and call your name when it is your turn. Your time will start when we confirm that we can hear you. Please state your name and city of residence for the record and keep your comments to the allotted time. We will not split your time with others or reset your time except by express approval of the Presiding Officer. Screen-sharing is not allowed; you can submit materials to the Council or Clerk in advance. Please do not comment about pending development projects on which the Council will make future decisions as those are quasi-judicial matters, and Councilmembers must limit their communications about such matters. This meeting is being recorded. Thank you for taking the time to express your comments.

XII. CONSENT AGENDA

A. Approve Total Check #s 48938 through 49036 totaling $693,539.94 and Total Payroll/Taxes/Flexible Spending/Retirement & Health Savings Account Electronic Deposits Dated 1/28/22 in the amount totaling $187,718.77, and an ACH Payment to KBA Inc. in the amount of $91,843.88, and ACH Payment to Road Construction NR in the amount of $178,789.46, and ACH Payment to US Bank Purchase Cards in the amount of $13,159.57.
Voucher Approval Report Dated 2/2/2022

B. Ratify Contract No. 21-C2757 between the City of Kenmore and the Department of Ecology accepting 2021-2023 Solid Waste Management Local Solid Waste Financial Assistance Funds
Agenda Bill - DOE Solid Waste Management Local Solid Waste Financial Assistance Agreement
Contract 21-C2757-DOE- SWMLSWFA

C. Authorize the City Manager to Execute Contract No. 22-C2770 with Olympic Environmental Resources in the amount not to exceed $122,500 for the Management of Residential Recycling Events and Administration of the Supporting Grant Funds.
Agenda Bill - Contract 22-C2770 Olympic Environmental Resources
Contract 22-C2770 Olympic Environmental Resources

D. Approve January 8, 2022 City Council Retreat Report

Agenda Bill - January 2022 Retreat Report
Retreat Report January 2022

E. Ratification of 2021 King County Countywide Planning Policies an the 2021 King County Growth Capacity Report
Agenda Bill - Ratification 2021 King County Countywide Planning Policies (CPP) and the 2021 Urban Growth Capacity Report
Ordinance 19369
Ordinance 19384

F. Authorize the City Manager to enter into an Interlocal Agreement with the Northshore Utility District to Construct the District's Water Main Replacement Project
Agenda Bill - NUD Interlocal - 190th Culvert - February 2022

G. Approve ARCH Work Plan Budget, Work Program, Fall 2021 Housing Trust Fund Projects, and Resolution No. 22-378 Amendment No. 1 to the Amended and Restated Interlocal Agreement for ARCH
Agenda Bill - 28 Feb 2022 ARCH Work Plan, Budget, Trust Fund
2022 ARCH Budget and Work Program
Trust Fund Recommendations to Councils Fall 2021
Resolution 22-378 ARCH ILA Amendment re Board Diversity 2022
ARCH Budget WOrk Program, Trust Fund, ILA - Powerpoint

XIII. BUSINESS AGENDA

A. Ordinance No. 22-0542, Adopting the Kenmore Automated Traffic Photo Enforcement Program (KAPE), presented by Traffic Engineer Tobin Bennett-Gold, *for Adoption*
Agenda Bill - Automated Enforcement (KAPE Program)
Attachment A - Tech Memo - Photo Enforcement Changelog
Attachment B -Tech Memo - Photo Enforcement
Attachment C - 22-0542 Ordinance Automated Traffic Safety Cameras
Attachment D - KMC Automated Traffic Safety Cameras - Chap 10.45
Attachment E - Tech Memo - Photo Enforcement Crash Data
Attachment F - Tech Memo - Photo Enforcement Violation Data
Attachment G - Memo - Photo Enforcement Court Data
Photo Enforcement Presentation Slides

B. Threshold Determination for MainStreet Property Group's Development Agreement, presented by Development Services Director Bryan Hampson, *for Discussion and Action*
Agenda Bill- MainStreet Development Agreement
Attachment 1 - MainStreet Property Group - Development Agreement Request Package February 2022
MainStreet Property Group - Kenmore 7520 City Council Presentation

C. Kenmore Cares Update with Assistant City Manager/ARPA Administrator Stephanie Lucash and partners from the Northshore Schools Foundation, *for Information*
Agenda Bill - ARPA Direct Cash Assistance Update and Recommendation - February 2022

D. Personnel Policy Wellness Program Amendment, Resolution 22-379, presented by Human Resource Manager Leanora Palaña and Wellness Committee Representative Tela Gardner, *for Approval*
Agenda Bill - Resolution 22-379 Personnel Policy Amendments
Attachment A - Resolution 22-379 Resolution Adopting Change to the Personnel Policy
Attachment B - Example Wellness Day Off Checklist

XIV. STAFF REPORT

A. Aqua Club Programming - Oral Update by Community Development Director Debbie Bent

B. King County Aquatic Center Siting Study Grants - Update by Assitant City Manager/ARPA Administrator Stephanie Lucash

XV. COUNCILMEMBER REPORTS & COMMENTS

A. Coffee with Council

XVI. ADJOURNMENT

Upcoming Meetings:

A. March 14, 2022
March 21, 2022
March 28, 2022

City of Kenmore, Washington

Proclamation

WHEREAS, American women of every race, class, and ethnic background have made historic contributions to the growth and strength of our City, State, and Nation in countless recorded and unrecorded ways; and

WHEREAS, American women have played and continue to play critical economic, cultural, and social role in every sphere of the life of the Nation by constituting a significant portion of the labor force working inside and outside of the home; and

WHEREAS, American women have played a unique role throughout the history of the Nation by providing the majority of the volunteer labor force of the Nation; and

WHEREAS, American women were particularly important in the establishment of early charitable, philanthropic, and cultural institutions in our Nation; and

WHEREAS, American women of every race, class, and ethnic background served as early leaders in the forefront of every major progressive social change movement; and

WHEREAS, American women have served our country courageously in the military; and

WHEREAS, American women have been leaders, not only in securing their own rights of suffrage and equal opportunity, but also in the abolitionist movement, the emancipation movement, the industrial labor movement, the civil rights movement, and other movements, especially the peace movement, which create a more fair and just society for all; and

WHEREAS, despite these contributions, the role of American women in history has been consistently overlooked and undervalued, in the literature, teaching and study of American history:

NOW, THEREFORE, I, Nigel Herbig, Mayor of the City of Kenmore, on behalf of the City Council, do hereby proclaim March as Women's History Month in the City of Kenmore. The City makes this proclamation to celebrate all women and as an affirmation of the City's commitment to honor the contributions of all women in the past, and to support the women who contribute to our future.

IN WITNESS WHEREOF, signed this 28th day of February 2022.

Signed:_____ Mayor Nigel Herbig

Attested:_____ City Clerk Anastasiya Warhol

City of Kenmore, Washington

Proclamation

EvergreenHealth

WHEREAS, on November 7, 1967, residents of Kenmore and Northeast King County voted to form King County Public Hospital District No. 2 to provide hospital and health care services to the community; and

WHEREAS, Evergreen General Hospital opened its doors on March 9, 1972 and for the past 50 years has advanced the health of the community it serves through its dedication to high quality, safe, compassionate, and cost-effective health care; and

WHEREAS, EvergreenHealth is governed by a publicly elected Board of Commissioners; and

WHEREAS, EvergreenHealth provided exceptional care and service to patients and our community during the ongoing COVID-19 pandemic; and

WHEREAS,EvergreenHealth is committed to consistent, year-over-year superior clinical performance across a broad spectrum of care as evidenced by its recognition from Healthgrades as one of America's 50 Best Hospitals, placing it among the top 1% of hospitals in the U.S. ; and

WHEREAS, the EvergreenHealth medical staff is made up of over 1,100 providers, serving the community with cutting edge medical care in 70 medical specialties; and

WHEREAS, EvergreenHealth is committed to advancing the health and wellbeing of the residents of Kenmore:

NOW, THEREFORE, I, Nigel Herbig, Mayor of the City of Kenmore, on behalf of the City Council, do herby proclaim March 9, 2022 as EvergreenHealth Day, and encourage all citizens to join me in recognizing EvergreenHealth for 50 years of dedicated service to our community, enriching the health and well-being of every life it touches.

IN WITNESS WHEREOF, signed this 28th day of February 2022.

KENMORE BY THE LAKE

Signed:_____ Mayor Nigel Herbig

Attested:_____ City Clerk Anastasiya Warhol

King County Water Taxi Update

Kenmore City Council Meeting

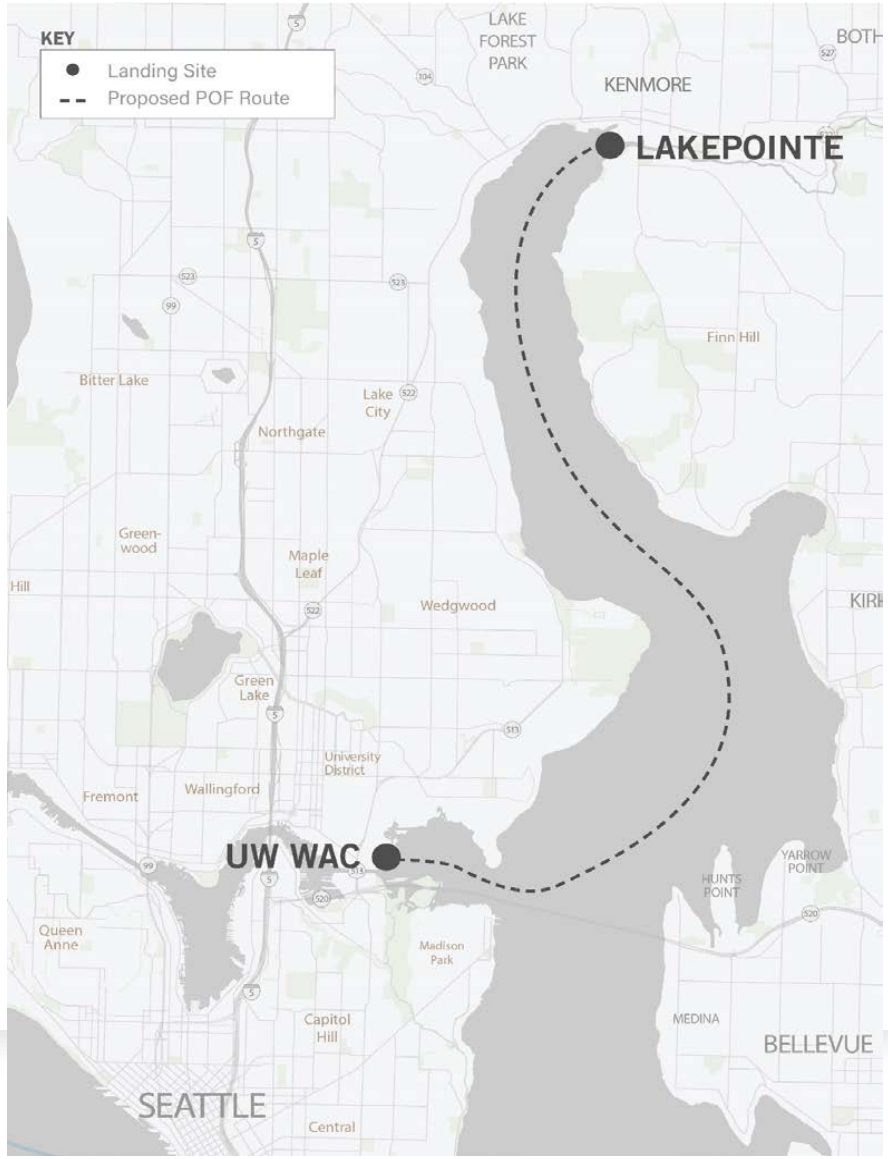
February 28, 2022

King County METRO

Moving forward together

King County Water Taxi Background

- Kenmore expansion route identified & studied in previous planning work
  - 2015 King County Ferry Expansion Study
  - 2020 King County Proviso Study
  - 2020 PSRC Ferry Study
- Kenmore – UW WAC route identified as higher performing expansion route



King County METRO

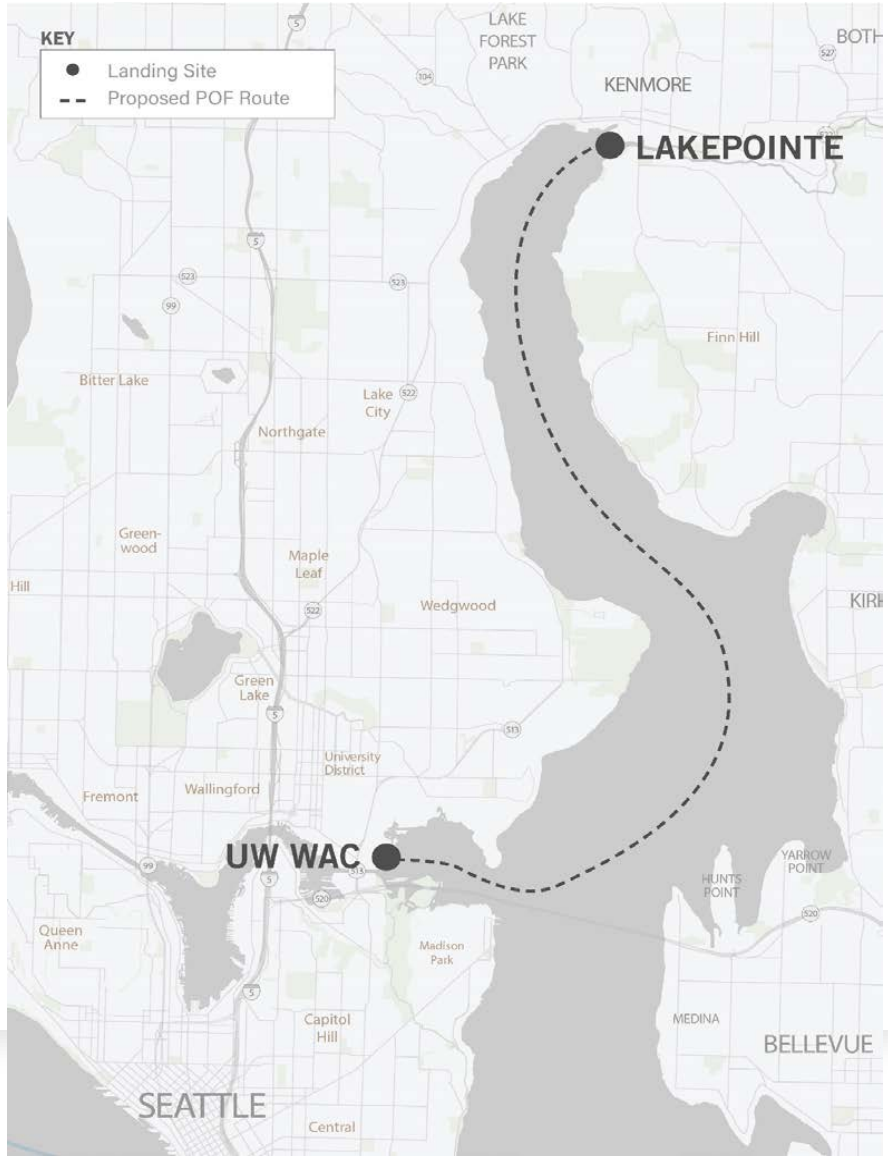
Current Efforts: Council Proviso Response

- To report progress on route implementation readiness for expansion routes in Kenmore and Ballard:
  - Shoreside Preliminary Design
  - Route Planning
  - Equipment Specifications
  - Capital & Operating Budgets
- Final Report due June 30, 2022
  - A preliminary Report is currently under consideration by the Council
- This efforts does not include recommendations for implementation, dedication of capital or operating budget, or how either expansion route would be prioritized across all King County services.

King County METRO

Kenmore Expansion Route Highlights

- Landing at LakePointe Redevelopment Site
  - High potential for new multimodal connections
  - Maintenance facility required
- Anticipate at least hourly sailings
  - 2 vessels needed – more flexibility & shorter headways
- Plug-in hybrid vessel technology
  - Moving toward zero-emission goal



King County METRO

Questions?

- Paul Brodeur, King County Metro Marine Division Director
- Chris Arkills, King County Metro Government Relations

King County METRO

Attachment A

Preliminary Water Taxi Expansion Progress Report

November 29, 2021

King County

I. Contents

II. Proviso Text

The King County Council ("Council") on November 17, 2020 unanimously adopted ordinance 19210[1], a final $12.59 billion budget for the 2021-22 biennium, including Section 113, Transit, Proviso P3 and Expenditure Restriction ER2:

PROVISO P3:

Of this appropriation, $1,000,000 shall not be expended or encumbered until the executive transmits a preliminary and a final water taxi expansion progress report detailing progress on route planning and motions that should acknowledge receipt of the preliminary and of the final reports and motions acknowledging the preliminary and final reports are passed by the council. Each motion should reference the subject matter, the proviso's ordinance number, ordinance section and proviso number in both the title and body of the motion.

The preliminary and a final water taxi expansion progress reports shall include a discussion of the progress on the planning activities identified in Expenditure Restriction ER2 of this section, including, but not limited to, shoreside preliminary design, route planning, equipment specification, preliminary capital and operating budgets and other details necessary to prepare for implementation of the routes by the council.

The executive should electronically file the preliminary report and motion required by this proviso no later than November 29, 2021, and the final report and motion required by this proviso no later than June 30, 2022, with the clerk of the council, who shall retain an electronic copy and provide an electronic copy to all councilmembers, the council chief of staff and the lead staff for the mobility and environment committee, or its successor.

ER2 EXPENDITURE RESTRICTION:

Of this appropriation, $500,000 shall be expended or encumbered solely for operational planning for previously studied water taxi expansion routes originating in Kenmore and Shilshole. The planning shall include, but not be limited to, shoreside preliminary design, route planning, equipment specification, preliminary capital and operating budgets and other details necessary to prepare for implementation of the routes by the council.

[1] King County 2021-22 Biennial Budget, Section 113, Transit

III. Executive Summary

This report is a preliminary response to a proviso in the 2021-2022 adopted budget, Ordinance 19210, Section 113, Transit, Proviso P3 directing the Executive to transmit a report on water taxi expansion progress for previously studied water taxi expansion routes originating in Kenmore and Ballard. This includes technical analysis and stakeholder engagement around shoreside preliminary design, route planning, equipment specification, preliminary capital and operating budgets, and other details necessary to prepare for implementation of the routes by the Council. The scope of this proviso response will not include how implementation of these routes would be prioritized across all King County services. This preliminary report details assumptions and technical work completed to date; further details will be included in the final report, to be transmitted to the Council as directed in the proviso no later than June 30, 2022.

At this stage of work, terminal improvements and transit network connections are being identified at the landing sites proposed in previous work. The Kenmore route landing sites would be the Lakepointe development site in Kenmore and the University of Washington Waterfront Activity Center (UW WAC) in Seattle. The Ballard route landing sites would be Shilshole Marina in the Ballard neighborhood of Seattle and the Seattle waterfront Pier 50. Additional engagement with landing site owners will be required.

Lakepointe: The site currently has no in-water or uplands terminal infrastructure and connections to transit would require additional multimodal improvements. Several bus routes could be revised to better serve the landing site.

UW WAC: The landing site would be adjacent to the Sound Transit University of Washington Link light rail station; however, uplands multimodal infrastructure and redevelopment of an existing in-water dock would be needed.

Shilshole: The landing site would have existing terminal infrastructure but limited network connectivity with no transit service within a ¼ mile walkshed as well as limited multimodal access. A fixed route water taxi shuttle would be needed to connect riders between central Ballard and Golden Gardens Park.

Pier 50: Pier 50 docking capacity is limited by two King County routes and two Kitsap County routes. The addition of a new route would require additional docking capacity. The landing site would have good access to transit and multimodal connections so no additional network changes would be needed.

Adopted King County policies such as the King County Mobility Framework, King County Equity and Social Justice Strategic Plan, King County 2020 Strategic Climate Action Plan, as well as policies being updated in coordination with the Council such as the Service Guidelines and Metro Connects were used to assess route planning and establish service profiles for both expansion routes. The service profiles were set to meet a minimum of 1-hour frequencies, 12-hour spans of service, and an increase in service during the summer sailing season. Hourly service aligns with guidance for other fixed-route transit options and increases opportunities to integrate with Metro's transit network. It also better meets the Service Guidelines' guidelines for facilitating connections between modes, serving multiple purposes, and being easy to understand. In meeting these guidelines, the Ballard route would operate with one

vessel while the Kenmore route would require two vessels to meet the desired 1-hour frequency. As a result of the second vessel, the Kenmore route could operate at greater frequencies, every 40 minutes, which is assumed in the route profiles.

Preliminary vessel specifications, propulsion technology, and related design requirements were developed as a part of this phase of work. As proposed in the previous work, a vessel size with a passenger load of 150 and a cruising speed of 28 knots was selected to meet estimated demand. Electrical capacity to meet the load requirements of a single run on a fully electric plug-in ferry would not be met within the specified dwell time of the potential ferry service schedules and would require terminal battery storage. However, a plug-in hybrid system could be accommodated without terminal battery storage. A plug-in hybrid diesel-electric ferry technology is deemed most appropriate for the Kenmore and Ballard routes for costing and further technical analysis. As battery and hydrogen fuel cell technology evolve, the feasibility of alternative zero-emission propulsion technologies will increase. Metro will continue to consider alternative technologies in fleet choices to align with policies such as the Strategic Climate Action Plan to reduce emissions.

Additional constraints around battery storage capacity, terminal electrical equipment, and electrical grid capacity would impact capital and operating costs. A propulsion technology baseline will be included in the final report for costing comparisons. This baseline will assume that the new Kenmore and Ballard services would be implemented with the propulsion technology that is currently used by the rest of the water taxi system, conventional diesel. The cost baseline will be produced for comparative purposes, with the plug-in hybrid being the propulsion method deemed most promising by the propulsion analysis.

This preliminary report represents the working assumptions and initial reporting on technical work for implementation of water taxi expansion routes. These efforts require additional technical work on shoreside and vessel design, network planning, engagement with stakeholders, and detailed capital and operating costing.

IV. Background

Department Overview: The King County Ferry District (KCFD) was founded in 2008, and year-round passenger-only ferry (POF) service from downtown Seattle to West Seattle and Vashon Island began in 2010. Governance by the King County Council began in 2015. The Marine Division, which currently operates the King County water taxi routes, joined the King County Metro Transit Department (Metro) in 2019.

Historical Context: As part of the state approved business plan used to form the KCFD, provision of POF service was planned to grow over time. In mid-2009, the KCFD began to study demonstration routes on Puget Sound and Lake Washington, but by late 2009 the KCFD ended the study in response to the economic recession. The Council directed the Marine Division, through a proviso in the 2015-2016 adopted budget, to revisit the 2009 study and expand the analysis to incorporate potential new long-term, passenger-only route service expansion opportunities. That effort resulted in a Final Report on Ferry Expansion Options for Marine Division, which identified both the Kenmore and Ballard routes as top potential expansions and was approved by Motion 14561 in 2015. The Council then directed the Marine Division, through two separate proviso requests in the 2019-2020 adopted budget, to continue planning and implementation work on both a Kenmore and Ballard expansion water taxi route. The 2015

study and subsequent 2020 proviso work is the starting point from which this proviso report was developed. Furthermore, a 2020 Puget Sound Regional Council (PSRC) Ferry Study, published in 2020 identified opportunity and interest in additional regional ferry service into the downtown Seattle waterfront and identified the Kenmore to Seattle route as ranking 6 of 18 routes identified in that report.

Current Context: Metro policy, such as the Service Guidelines, Metro Connects, and the Strategic Plan guide investment priorities in support of a regional mobility network and to better advance equity and environmental sustainability through Metro's operations and service growth. While the implementation of a Kenmore or Ballard water taxi route would advance County goals of providing access to public transportation and help reduce greenhouse gas emissions in the region, the scope of this proviso response does not include how these new routes would be prioritized across all King County Metro public transportation services. Additionally, economic conditions will require further analysis of how the Kenmore or Ballard route would align with the department's priorities for both capital and operating programs in the context of future funding, as well as how these align with partner agency priorities.

Report Methodology: Metro's Marine Division and Mobility Division developed the approach for the proviso response. The two Metro divisions jointly developed a scope of work to meet the requirements and identified key staff within each division to develop the response. Additionally, Metro retained the services of a passenger ferry consultant, KPFF Consulting Engineers – Marine Transit Consulting Group and their subconsultants to provide technical support, analysis, and development of technical reports. The diverse team, including representatives from Metro's partnerships and engagement team, worked together with the consultant to complete the work in a stepped approach. This methodology allowed for an assessment of the many characteristics of POF service as well as the path toward implementation and clearly identifies opportunities and constraints of POF service. The scope of work to properly respond to the proviso request used the findings and recommendations from the 2015 and 2020 studies as a basis for the technical work in further understanding implementation of both the Kenmore and Ballard expansion routes.

V. Report Requirements

This section is organized to align with the proviso request to detail information around planning for previously studied water taxi expansion routes originating in Kenmore and Ballard. Specifically, the proviso requests detail around shoreside preliminary design, route planning, equipment specification, preliminary capital and operating budgets, and other details necessary to prepare for implementation of the routes by the Council. Metro's Marine and Mobility Divisions worked with the consultant and subconsultants to perform technical analysis and develop the following responses to these requirements.

A. Shoreside Preliminary Design

This section details methodology, assumptions, and preliminary work for shoreside design for the new routes as requested in the proviso.

Landing Site Assumptions

For the Ballard route, the assumed landing sites would be Ballard's Shilshole Marina and the existing King County water taxi terminal at Pier 50 located on the downtown Seattle waterfront. Figure 1 shows

the assumed Ballard routing and landing sites. For the Kenmore route, the assumed landing sites would be the Lakepointe development site in Kenmore and the UW WAC. Figure 2 shows the assumed Kenmore routing and landing sites.

These landing site assumptions align with previous planning efforts. Pier 50 was selected as it is home to current King County water taxi services. Shilshole Bay Marina is operated by the Port of Seattle and provides some existing infrastructure that would allow for easier implementation of a new route. The Lakepointe development site is the preferred landing site by the City of Kenmore and could also be utilized for vessel maintenance and tie-up. The UW WAC was selected for its numerous transit connections, particularly Link light rail to downtown Seattle and Northgate and bus options to many other destinations.

Figure 1. Ballard routing and landing sites

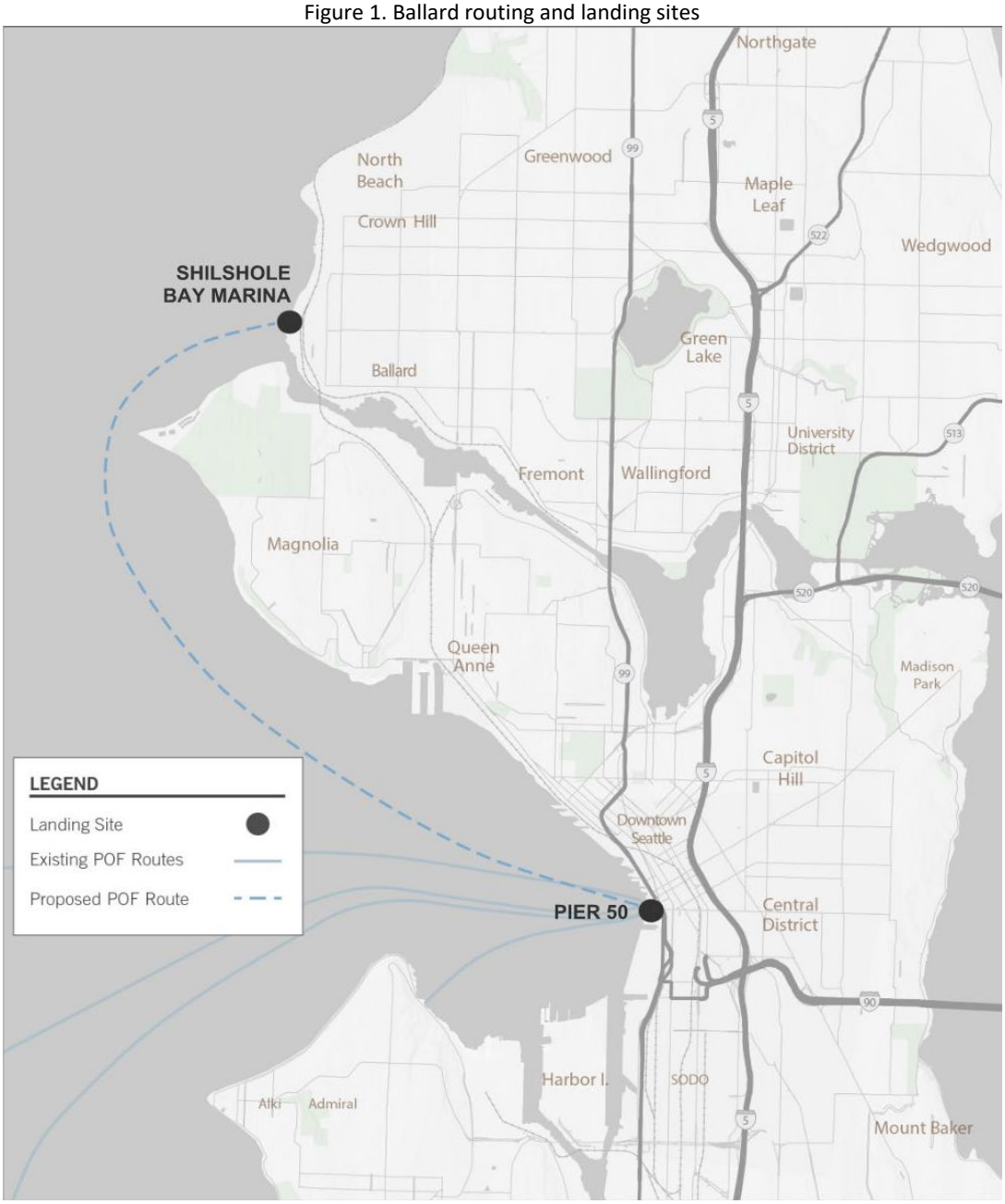
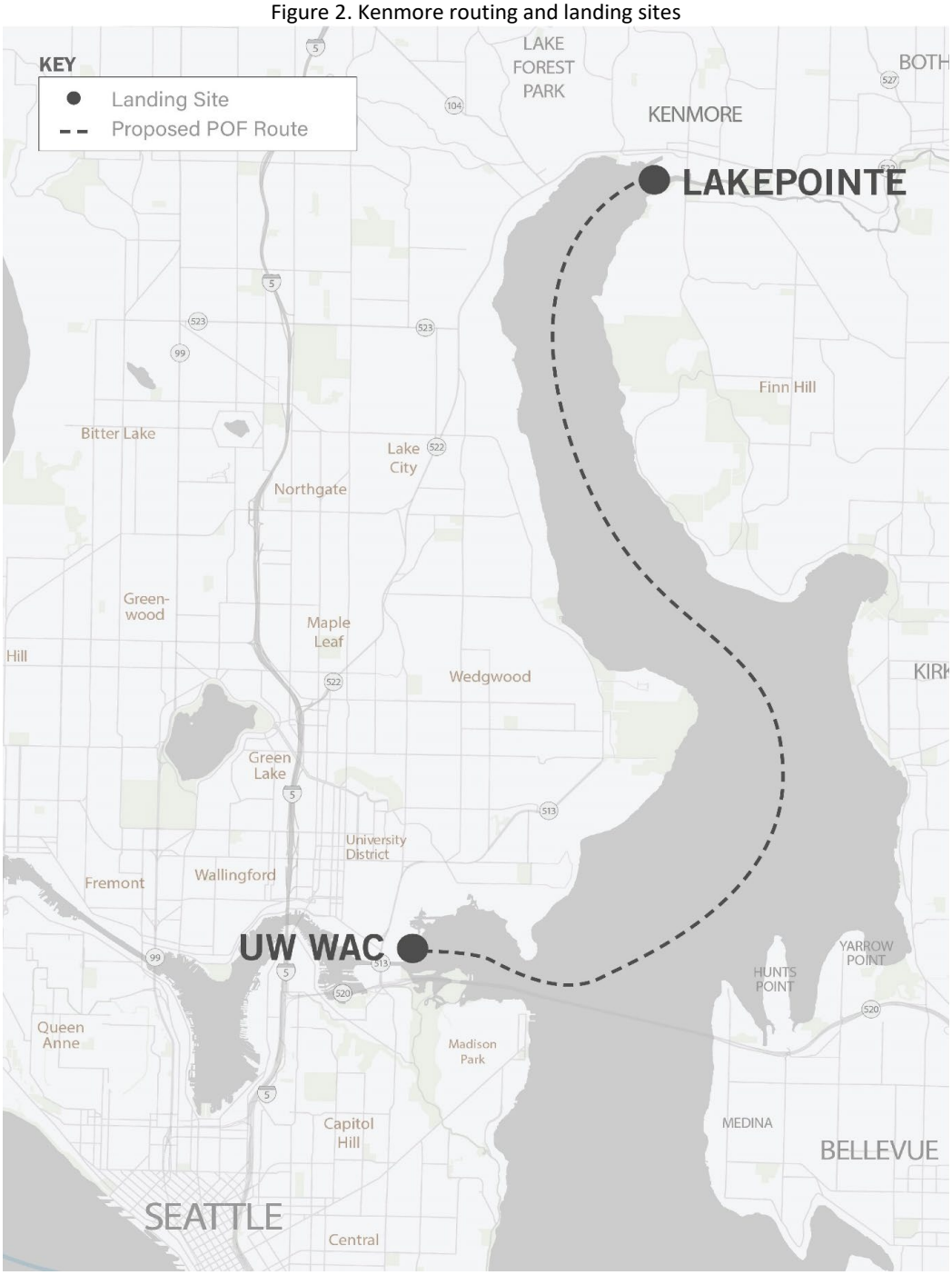


Figure 2. Kenmore routing and landing sites



Maintenance Facility Assumptions
For the Ballard route, the existing King County water taxi maintenance facility at Pier 48 could be utilized for routine maintenance activities. Shipyard maintenance activities assumed vessel drydocks and hull/out-of-water maintenance with labor, materials, and ancillary costs being estimated. Routine terminal maintenance activities such as minor repairs and cleaning were also assumed.

For the Kenmore route, though the same maintenance activities were assumed, a new maintenance facility would need to be planned to avoid the inefficiencies of travelling via the Hiram M. Chittenden Locks to and from the existing Pier 48 maintenance barge for routine maintenance. The maintenance location was assumed to be at the new Lakepointe terminal where additional space and capital investment would be dedicated to creating the needed maintenance facility.

Pier 50 Capacity
The current Pier 50 facility supports the existing King County water taxi routes to West Seattle and Vashon Island and supports two of the three Kitsap Transit Fast Ferry routes. With its two operating slips, the facility is currently operating at capacity, particularly during the commute periods when services run more frequently. An additional float would be needed to support any additional service given the four routes that currently operate out of this location and the current and anticipated ridership demand in the peak periods.

The limited capacity at the current facility and the strong desire for additional POF services to the downtown Seattle waterfront has been a growing matter of interest for many, as outlined in the 2020 PSRC Passenger-Only Ferry Study. Additionally, Kitsap Transit is currently undertaking a Siting Study to identify a long-term solution to current capacity constraints on their POF services. The findings of the Siting Study and whether Kitsap Transit would relocate POF operations from Pier 50 are not yet known, and this proviso response does not speculate upon them.

This preliminary and final report will not evaluate the potential capital infrastructure needed to support any additional routes landing at Pier 50 beyond the Ballard route, nor will it evaluate what is needed to support the potential of expanded or more frequent service on any of the existing water taxi and/or Fast Ferry routes that currently land at Pier 50, though these are areas that should be analyzed to support successful integrated waterborne transit planning along the downtown Seattle waterfront.

Instead, for the purposes of costing, this preliminary and final report will assume that, with all conditions remaining the same at Pier 50, a Ballard POF route could not be added to the facility without constructing a new float with additional operating slips. This was evidenced by the start-up of the Southworth Fast Ferry route leading to the relocation of the Bremerton Fast Ferry route to Pier 54 to ensure sufficient landing space and maintain schedule.

The recently completed habitat beach to the South also presents limitations on in-water and over-water expansion at the terminal. Float expansion would need to be designed to avoid the habitat beach extent and maintain any overwater footprint within the harbor line.

Terminal Improvements
Terminal improvement needs vary by landing site location. In Kenmore, the Lakepointe landing site currently has no in-water or uplands terminal infrastructure and connections to transit would require

additional improvement. At the University of Washington uplands infrastructure would be required, as well as redevelopment of an existing in-water dock. Shilshole and Pier 50 both have existing infrastructure; however, some improvements would be needed due to the expansion of services at those existing facilities.

Electrical Capacity
Electrical power and grid capacity infrastructure are limited at and near the terminal locations. Depending on the electrical loads needed for future POF routes and the timing of the route implementation, additional electrical grid infrastructure could be needed. Early negotiation with the local utilities (Seattle City Light and Puget Sound Energy) would be required as the process to expand grid electrical capacity could take up to five years. Additionally, as more industries seek to reduce emissions via electrification, electrical grid capacity could become even further constrained. Local utilities are seeking to conduct additional capacity planning, and incorporating water taxi expansions into these plans could assist future implementation efforts.

Landing Site Access
The terminals would be accessed by pedestrian, bicycle, and vehicle traffic by way of personal vehicle, rideshare, or potential fixed-route bus or shuttle drop-off. Access enhancement to accommodate these modes differs by terminal location. Preliminary site layouts that include all considerations of landside and marine access, capacities, and terminal infrastructure elements, and their costs, needed to support service will be included in the final report.

B. Route Planning

This section details methodology, assumptions, and preliminary work for route planning and network integration analysis for the expansion routes as requested in the Proviso.

King County Policies & Plans

The assumptions and technical analysis around route planning and implementation are guided by adopted King County policies. Some of the policy documents guiding this work have been updated by Metro and proposed by the King County Executive to King County Council. These include the King County Metro Strategic Plan for Public Transportation, Metro Connects, and the Metro Service Guidelines. The ongoing work of these policy documents have influenced the work to date, however further details of these policies, following Council adoption, and their subsequent influence on the technical work will be included in the final report. Key policies guiding this work include:

King County Equity and Social Justice Strategic Plan
The King County Equity and Social Justice (ESJ) Strategic Plan is a blueprint for change, mutually created by King County employees and community partners. The shared vision is to create "[a] King County where all people have equitable opportunity to thrive." The ESJ Strategic Plan directs King County to invest upstream and where needs are greatest to address root causes and be pro-equity. For Transportation and Mobility, efforts are focused around:

1. Investments in service improvements
2. Investments in community partnerships
3. Investments in the places and people with greatest needs
4. Leveraging the County's role as a major employer

King County 2020 Strategic Climate Action Plan
King County's Strategic Climate Action Plan (SCAP) is a five-year blueprint for County climate action, integrating climate change into all areas of County operations. The core sections, reducing greenhouse gas (GHG) emissions, sustainable and resilient frontline communities, and preparing for climate changes, are guided by the following principles:

- Innovate equitably and sustainably
- Ensure safety
- Encourage dense, affordable housing in urban areas near transit
- Improve access to mobility
- Provide fast, reliable, integrated mobility services
- Support our workforce
- Align our investments with equity, sustainability, and financial responsibility
- Engage deliberately and transparently

Transportation is the region's largest source of GHG emissions, and the SCAP outlines focus areas to increase regional transit ridership, reduce total vehicle miles, and adopt clean fuels standards to reduce transportation-fuel GHG emissions.

This policy was informed by Metro's Mobility Framework and recommendations were incorporated into the proposed policy updates for King County Metro's Strategic Plan, Metro Connects, and Service Guidelines.

King County Mobility Framework
Metro's Mobility Framework envisions a regional network of traditional and new transportation services that gets people where they want to go, when they want to get there, while contributing to healthy communities, a thriving economy, and a sustainable environment. The following guiding principles set a vision for how Metro and partners can achieve a regional mobility system that is innovative, integrated, equitable, and sustainable.

- Invest where needs are greatest
- Address the climate crisis and environmental justice
- Innovate equitably and sustainably
- Ensure safety
- Encourage dense, affordable housing in urban areas near transit
- Improve access to mobility
- Provide fast, reliable, integrated mobility services
- Support our workforce
- Align our investments with equity, sustainability, and financial responsibility
- Engage deliberately and transparently

King County Metro Strategic Plan for Public Transportation 2011-2021
The Strategic Plan outlines Metro's goals, the strategies and objectives to achieve them, and measures to determine if the goals are being met. The goals are related to the following:

1. Safety
2. Human potential
3. Economic growth and built environment
4. Environmental sustainability

5. Service excellence
6. Financial stewardship
7. Public engagement and transparency
8. Quality workforce

Metro's Strategic Plan has been updated by Metro and proposed updates have been transmitted from the King County Executive to King County Council. The existing policy and any changes approved by the Council will be considered in this ongoing technical work.

King County Metro Long-Range Plan 2016 (METRO CONNECTS)
Metro Connects is Metro's vision for bringing more and better transit service to King County. The plan is guided by Metro's values of safety, excellent customer service, sustainability, equity and social justice, partnerships, and innovation.

Adopted in 2017, Metro Connects does not currently address water taxi service. Metro Connects has been updated by Metro and proposed updates have been transmitted from the King County Executive to King County Council. The proposed update includes additional information on future water taxi service. Target service levels established in the proposed update were used to determine proposed service levels and spans of service for the Kenmore and Ballard routes. The existing policy and any changes approved by the Council will be considered in this ongoing technical work.

King County Metro Service Guidelines 2015 Update
Metro uses service guidelines to evaluate, design, and modify transit services to meet changing needs and to deliver efficient, high-quality service. The guidelines help make sure that decision-making and recommendations to policy makers are objective, transparent, and aligned with the region's goals for public transportation. Use of the guidelines fulfills Metro's Strategic Plan Strategy 6.1.1, "Manage the transit system through service guidelines and performance measures." The service guidelines establish criteria and processes that Metro uses to analyze and plan changes to the transit system.

The current Service Guidelines do not include information on water taxi service. The Service Guidelines has been updated by Metro and proposed updates have been transmitted from the King County Executive to King County Council. The proposed update includes criteria and processes for evaluating, designing, and modifying existing water taxi service. The existing policy and any changes approved by the Council will be considered in this ongoing technical work.

Methodology & Assumptions

Time Competitiveness and Demand
For users to select the ferry as a mode of transit, the ferry must be competitive with other currently available transit options. Route profiles were developed to generate feasible travel times and evaluate how competitive the new ferry routes would be in comparison to other existing modes. Both the Kenmore and Ballard POF routes, as profiled, provide similar travel times that would be competitive with existing transit options.

Ridership demand was developed as part of the previous proviso effort. The existing ridership estimates will be used as a baseline in the upcoming work effort around costs. Demand is based on the PSRC SoundCast model, which is unconstrained by particular sailing times and includes assumptions regarding

recreational ridership potential that were based on trends observed in the West Seattle water taxi route. The unconstrained ridership model provided an understanding of the high-end number of commute riders that could be expected. However, recreational ridership potential is difficult to predict.

These ridership estimates produced by the model were then used to help develop service schedules and properly size the potential service vessels. Ridership will be used in the financial analysis but is not the only driver of service schedules, which were also informed by the factors detailed below aligning with Metro service policies. Service schedules based on demand forecasting and trends observed in existing water taxi routes were used in previous studies and will be used as a baseline comparison in this work as needed.

Frequency of Sailings
The proposed update of Metro Connects, Metro's long-range plan, specifies that water taxi services should run at least every hour, and service for both routes was designed to align with this vision. Hourly service aligns with guidance for other fixed-route transit options and increases opportunities to integrate with Metro's transit network. It also better meets the Service Guidelines' developing service guidelines for facilitating connections between modes, serving multiple purposes, and being easy to understand.

For Ballard service, hourly service could be met with one vessel, but more frequent service could not. To minimize cost while maintaining effective service, an hourly service schedule supported by one vessel was assumed.

In the case of Kenmore, due to the length of the route, hourly service could only be supported by two vessels operating simultaneously. With two vessels, it would be possible to run more frequent service, with sailings departing every 40 minutes. As more frequent service is preferred, particularly for commute periods, all sailings for the Kenmore route were assumed to depart every 40 minutes.

Seasonal Schedules
Current King County water taxi routes see an increase in service and demand during the summer season, which is common for many POF and vehicle ferry operators. To align with this demand pattern, two different service schedules were assumed for each route: one for the lower-demand winter season and one for the higher-demand summer season.

Experience from existing water taxi routes and other ferry services indicates that, to be competitive and provide sufficient options for commute riders, three round trips per commute period [6:00 to 9:00 am for the AM commute, and 3:00 to 6:00 pm for the PM commute] must be provided. As a result, commute-only service is assumed to provide, at minimum, this level of round trips.

Six months of the year were assumed to follow the winter schedule while the remaining six months of the year were assumed to follow the summer schedule. This six-month split aligns with the existing West Seattle water taxi schedule.

Service Predictability
Metro Connects outlines that water taxi services should have between eight and 18 hours of service a day while fixed-route services should have a minimum of 12 hours of service a day. To ensure predictable service that is easy for riders to use, a minimum of a 12-hour service day would be provided, including on winter Saturdays, running approximately 8:00 am to 8:00 pm. The 12-hour winter Saturday service day was included regardless of perceived Saturday winter demand to align with key Metro service guidelines and match service levels of other transit service connecting to the water taxi terminals.

Level of Service

Kenmore Service Schedule
Due to the length of the route, and to meet service level guidelines (hourly frequency), the Kenmore route would require two operating vessels in both the winter and summer months. With two vessels providing service, sailings could depart as frequently as every 40 minutes.

The lower demand Kenmore winter schedule was designed to primarily serve the weekly commute periods with at least three round trips in the AM peak (6 a.m. - 9 a.m.) and three round trips in the PM peak (4 p.m. - 7 p.m.). For the Kenmore route, one additional commute round trip before the AM commute period was added to serve school and hospital employees that work in the UW area with early shift start times. This was in response to feedback received in previous engagement efforts for Metro's North Link Connections Mobility Project.

The winter schedule would also include Saturday service to help meet the needs of non-traditional workers and potential recreational ridership.

The summer schedule for the Kenmore route would be expanded in the mid-day, and weekends to meet anticipated recreational ridership demand. Service would be expanded to all-day seven days a week. Late evening service would be added to the schedule on Friday and Saturday nights to further support recreational and discretionary riders.

Special event service to UW was assumed for ten days out of the year during the winter service schedule, for events such as football games. The extended summer service schedule is assumed sufficient to cover service needs for any special events in that season.

Table 1 summarizes the potential Kenmore service schedule for the 6-month winter and 6-month summer service levels.

Table 1. Kenmore service schedule summary

	Winter	Summer
Vessel Passenger Capacity	150 passengers	150 passengers
Operating Vessels	2 vessels	2 vessels
Backup Vessels	1 vessel	1 vessel
Maximum Service Frequency	40-minute headway	40-minute headway
Commute Service	11 RTs per day: •6 RTs in the AM peak •5 RTs in the PM peak	21 RTs per day Mon-Thurs: •6 RTs in the AM peak •5 RTs in the PM peak •Mid-day service (10 RTs) 26 RTs per day Fridays: •Additional late night Friday service (5 RTs)
Saturday Service	•18 RTs per day	•21 RTs per day •Late night service (3 RTs)
Sunday Service	No service	•18 RTs per day
Special Events	10 per year	None; extended service schedule assumed to cover special events

Note: Round Trips are abbreviated as "RTs." Weekend schedule could be reduced to one-hour headways with fewer daily RTs.

Ballard Service Schedule

The Ballard route could meet an hourly service schedule year-round with one operating vessel.

The potential Ballard winter schedule is designed to primarily serve the commute periods during the week, with at least three round trips in the AM peak (6 a.m. - 9 a.m.) and three round trips in the PM peak (4 p.m. - 7 p.m.). The Ballard winter schedule would also include Saturday service to help meet the needs of non-traditional workers and potential recreational ridership.

The summer schedule for the Ballard route assumed service would be expanded to meet increased recreational/discretionary ridership demand. Service would be expanded to all day seven days a week. Late evening service would be added to the schedule on Friday and Saturday nights to further support recreational riders providing service for 15 hours per day.

There would be no special event service for the potential Ballard water taxi route.

Table 2 summarizes the potential Ballard service schedule for the 6-month winter and 6-month summer service levels.

Table 2. Ballard service schedule summary

	Winter	Summer Peak
Vessel Passenger Capacity	150 passengers	150 passengers
Operating Vessels	1 vessel	1 vessel
Backup Vessels	1 vessel	1 vessel
Maximum Service Frequency	1 hour headway	1 hour headway
Commute Service	6 RTs per day: •3 RTs in the AM peak •3 RTs in the PM peak	14 RTs per day Mon-Thurs: •3 RTs in the AM peak •4 RTs in the PM peak • Midday service (7 RTs) 16 RTs per day Fridays: •Additional late night Friday service (2 RTs)
Saturday Service	•12 RTs per day	•15 RTs per day
Sunday Service	No service	•12 RTs per day
Special Events	None	None

Network Analysis

Kenmore

Existing Conditions

Kenmore is currently served by local and peak-only Metro services as well as Sound Transit services. The transit and bicycle network near the potential Lakepointe landing site is shown in Figure 3. Routes, including frequencies and spans, are shown in Table 3.

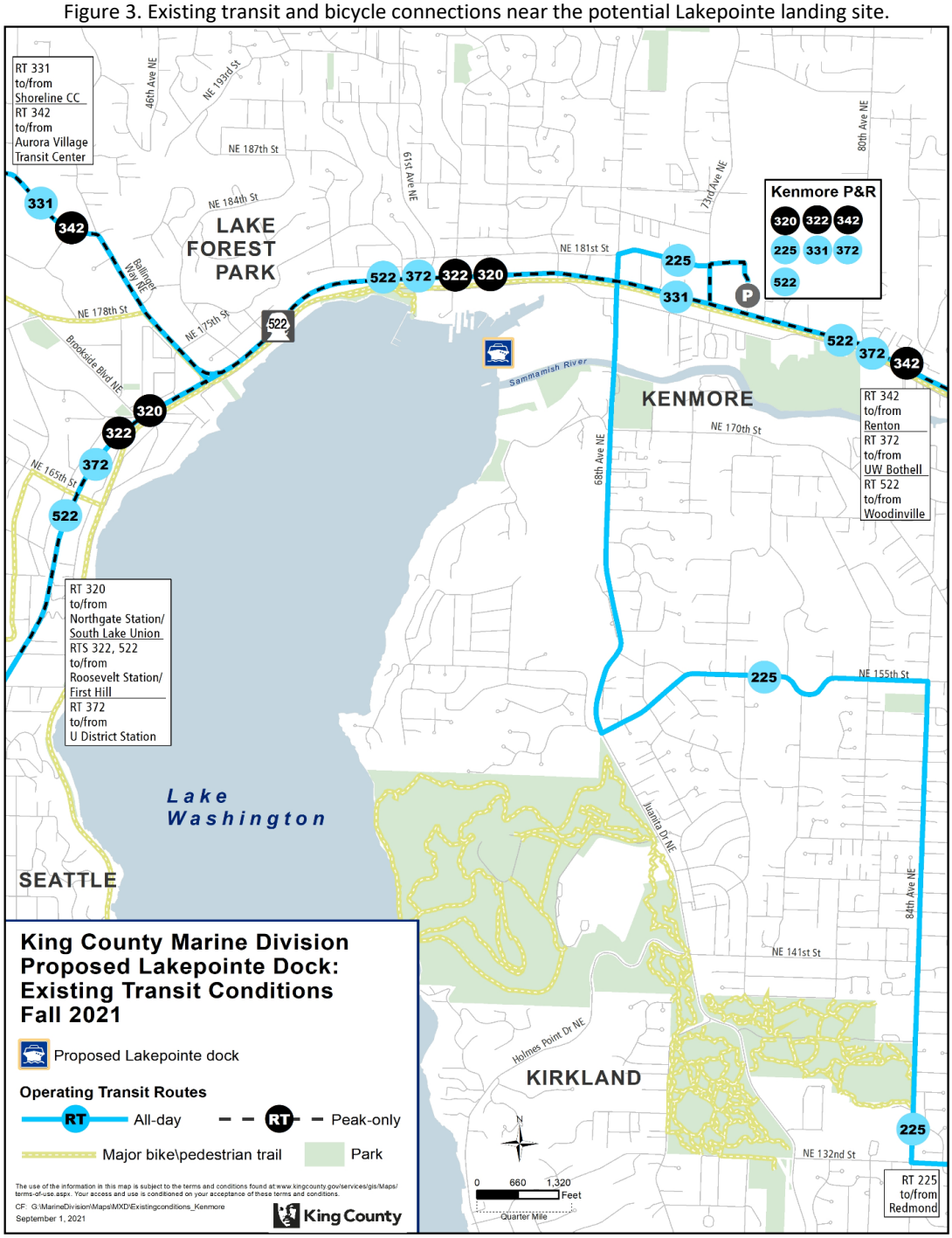
Table 3. Transit routes* near the potential Lakepointe landing site

Route	Connections	Frequency*	Span
225	Kenmore P&R – Kingsgate P&R – Totem Lake TC – Lake Washington Technical Institute – Redmond Technology Station	30 minutes	All Day
320	Kenmore P&R – Lake City – Northgate Station – South Lake Union	Nine AM peak trips, eight PM peak trips	Peak Only
322	Kenmore P&R – Lake City – Roosevelt Station – First Hill	Seven AM peak trips, Ten PM peak trips	Peak Only
331	Kenmore P&R – Lake Forest Park – Aurora Village TC – Shoreline CC	20 minutes during the peak, 30 minutes during the day	All Day
342	Aurora Village TC – Lake Forest Park – Kenmore – Bothell – Woodinville – I-405 corridor – Renton TC	Four AM peak trips, Four PM peak trips	Peak Only
372	UW Bothell – Bothell P&R – Kenmore P&R – Lake City – UW Seattle – U District Station	Five-15 minutes during the peak, 15 minutes during the day	All Day
ST 522	Woodinville P&R – UW Bothell – Kenmore P&R – Lake City – Roosevelt Station	15 minutes during the peak, 20 minutes during the day	All Day

*This represents the routes and frequency of trips for the Fall 2021 service change.

Routes 320 and 322 are new and were implemented as part of the North Link Connections Mobility Project in Fall 2021. Other routes in or connections around Kenmore may also be impacted by the ongoing East Link Connections Mobility Project, including Route 342. Any changes from the East Link project would be implemented in 2024.

Figure 3. Existing transit and bicycle connections near the potential Lakepointe landing site.



Sound Transit plans to implement Stride BRT along the SR-522 corridor between Bothell and the Shoreline South/148th Link light rail Station after the Lynnwood Link extension is complete. This would replace existing ST Route 522, which operates between Woodinville and Roosevelt Station, connecting to both BRT services on I-405 and Link light rail in Shoreline. Metro's Metro Connects interim network also envisions frequency and span improvements on existing routes, in addition to other network changes. Based on these improvements, the PSRC's Vision 2050 regional planning document identifies Kenmore and Bothell areas as high-capacity transit communities that are considered hubs for employment and population growth.

There are multiple Metro park-and-rides, both Metro owned and leased lots, in the vicinity of the Lakepointe landing site. Table 4 details the permanent Metro park and rides in the area. The future of any existing leased park-and-ride lots are dependent on property owner and Metro needs. The closest permanent park-and-ride, the Kenmore Park-and-Ride, is shown in Figure 3. The figures for 2021 represent the average utilization through the second quarter of the year.

Table 4. Metro managed permanent park and rides near the Lakepointe landing site

Metro-managed permanent P&R Lot	**Owner**	**Total Spaces**	**2019 Average Utilization**	**Q2 2021 Average Utilization**	**Located within 1/2-mile of potential landing site?**
Bothell P&R	KC	220	89%	11%	No
Brickyard Road P&R	WSDOT	443	84%	12%	No
Kenmore P&R*	KC	603	92%	8%	Yes
Woodinville P&R	WSDOT	438	53%	6%	No

*A transit-oriented development is planned next to the existing Kenmore P&R, which would add parking stalls.

The Burke-Gilman Trail follows the Lake Washington shoreline to the west and south of the site as shown in Figure 3. To the east is the Sammamish River Trails along the Sammamish River. Together, the two well-established trails offer extensive paved, flat, separated access for long distances. Both can be considered all ages and abilities facilities.

Access from the north is limited and requires crossing multi-lane, high traffic NE Bothell Way/SR-522. The nearest signalized crossing of SR522 to the site is at 68th Avenue NE. A signal is in place on 68th Avenue NE and NE 175th Street for access from the east.

The Lakepointe landing site is in an industrial area with limited to no pedestrian or bike infrastructure on the site itself or from the site to SR-522. The site is adjacent to the Kenmore Air Harbor, an asphalt manufacturing plant, and a concrete mix plant and landscaping supply company.

To the south toward Kirkland, there is no sidewalk or bike lane on 68th Avenue NE over the bridge crossing the Sammamish River. A sidewalk begins on the west side of 68th Avenue NE south of the bridge. Several other roadways to the southwest have marked bike lanes, though moderate to considerable grades. These facilities are likely to be comfortable only for people confident cycling with traffic. The City of Kenmore has planned improvements to bike and walk infrastructure in 2022 as part of the Walkways and Waterways bond and other future improvements outlined in the Pedestrian and

Bicycle Safety Strategy. Neighboring cities, including Bothell and Kirkland, also have planned improvements to their bike and walk infrastructure.

The UW WAC landing site is adjacent to Husky Stadium, within a ¼ mile walk to the University of Washington Link light rail Station and Montlake Boulevard NE and NE Pacific Street with frequent transit service. The transit and bicycle network near the potential landing site at UW WAC is shown in Figure 4. Routes, including frequencies and spans, are shown in Table 5. Only routes that operate along NE Pacific Street and Montlake Boulevard NE are included in the figure and table. There are other routes which operate further from the UW WAC landing site along West Stevens Way NE and NE 45th Street.

Table 5: Transit routes near the potential UW WAC landing site (Fall 2021)

Route	Connections	Frequency*	Span
43	University District – Montlake – Capitol Hill – Downtown Seattle	21 AM peak trips (14 northbound, seven southbound), 17 PM peak trips (four northbound, 13 southbound)	Peak Only
44	Ballard – Wallingford – University of Washington Station	10 minutes during the peak, 12 minutes during the day	All Day
48	Mt. Baker TC – Central District – Montlake – University District	12 minutes during the peak, 15 minutes during the day	All Day
65	Jackson Park – Lake City – University District*	15 minutes all day	All Day
73	Jackson Park – Maple Leaf – University of Washington Station	15 minutes during the peak, 30 minutes during the day	All Day
255	Totem Lake TC – Kirkland – University District	Six-12 minutes during the peak, 15 minutes during the day	All Day
271	Issaquah – Eastgate – Bellevue College – Bellevue Transit Center – Montlake – University District	10-12 minutes during the peak, 15 minutes during the day	All Day
ST 542	Redmond TC – Evergreen Point – University District	20 minutes during the peak, 30 minutes during the day	All Day

*Route 67 only stops on NE Pacific St/Montlake Blvd NE in the northbound direction.

At the potential UW WAC landing site there is complete sidewalk infrastructure throughout adjacent neighborhoods and a well-established network of separated and marked bike or multiuse trails from all directions to the site, including the Burke-Gilman Trail to the north and west; unpaved trail network northeast of the site through Union Bay Natural Area; and Montlake, Arboretum and Portage Bay neighborhoods. See Figure 4.

Bikes and pedestrians share narrow sidewalks on both sides of Montlake Bridge for riders coming from the south. For connections to Link light rail at the adjacent University of Washington Station, there are open bike racks and on-demand lockers available. Bikes can also be carried on all Metro buses and Link light rail cars.

Figure 4. Existing transit and bicycle connections near the potential UW WAC landing site.

Potential changes to connect to water taxi

Metro anticipates that there may be changes needed to the transit network to connect riders to and from the water taxi terminals. Using the potential levels of service, Metro developed the following route proposals and cost estimates to be used in costing and operational planning for this work. These potential changes may be subject to Council approval. Proposed route changes are subject to Council approval except as follows (per King County code 28.94.020):

- Any single change or cumulative changes in a service schedule which affect the established weekly service hours for a route by 25 percent or less.
- Any change in route location which does not move the location of any route stop by more than 1/2 mile.
- Any changes in route numbers.

Fixed Route Changes

Potential changes to fixed-route services were based on the Metro Connects interim network. Connections to and from the Kenmore Park & Ride, SR-522, and the Finn Hill area were prioritized in the potential changes to ensure riders from different areas would have access opportunities to the Lakepointe landing site, in addition to other Metro or Sound Transit services.

Metro Connects routes 1215, between Shoreline Community College and Kenmore Park & Ride, and 3114, between Redmond and the Kenmore Park & Ride, would be extended from their terminal to serve the water taxi as shown in Figure 5. Cost estimates are based on the route extension matching with the seasonal water taxi service levels, meaning these routes would also extend to the Lakepointe landing site when the water taxi is operating. Service levels on routes 1215 and 3114 would be higher than the comparable routes in the current network, however, the cost estimates are based on if the Metro Connects network were implemented. The two routes would have 30-minute frequencies and could be scheduled to provide 15-minute frequency between the landing site and the Kenmore Park-and-Ride. Additional resources would be needed to match planned Metro Connects service levels. The additional resources needed for the route extensions to serve the Lakepointe landing site at Metro Connects service levels are shown in Table 6.

Figure 5. Metro Connects interim network and potential extension of Metro Connects routes 1215 and 3114 to serve the Lakepointe landing site.

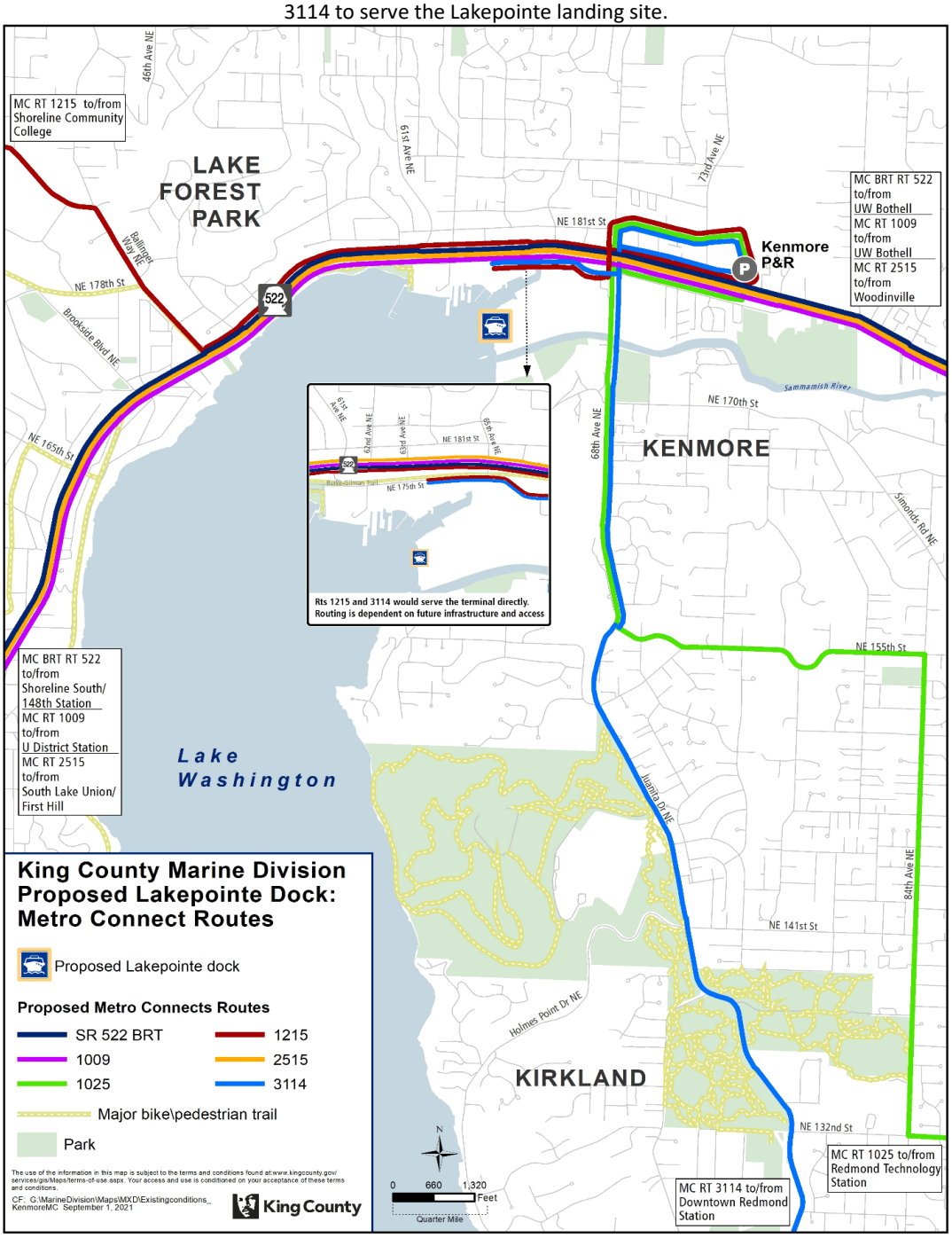


Table 6. Resources to support potential Metro Connects fixed route changes at the Lakepointe landing site

MC Route	Connections	Frequency		Resources Needed	
		Full Route	To Water Taxi	Annual Hours	2021 Dollars
1215	Shoreline CC - North City - Ballinger Way - Lake Forest Park - Kenmore P&R	15 minutes	30 minutes	1,751	$330,957
3114	Redmond - Education Hill - Totem Lake TC - Juanita - Finn Hill - Kenmore P&R	30 minutes	30 minutes	1,751	$330,957
				3,503	*$661,913*

The costs shown in Table 6 reflect the full cost to operate service (fully allocated rate) in 2021 and do not reflect additional necessary layover and comfort station access to support these revisions. Metro would require layover space for approximately three 60' coaches for all operating hours, which would impact capital and operating costs.

Due to the existing proximity of the UW WAC landing site to the University of Washington Link light rail Station and multiple frequent transit connections in the Metro Connects interim network, there would be no potential network changes near this terminal.

Multimodal Changes

The immediate area around the Lakepointe landing site would require multimodal improvements on-site and to the west and the north, including across SR-522. Because the neighboring businesses are industrial in nature, Metro and partners would need to balance freight, pedestrian, and bike safety and priority in the area. Pedestrian improvements may also be required to provide safe access through existing University of Washington parking lots adjacent to Husky Stadium and closer to the UW WAC landing site. Metro would need to coordinate with the City of Kenmore, the City of Seattle, and the University of Washington on any necessary improvements for multimodal access outside the terminal locations.

Ballard

Existing Conditions

Shilshole Bay Marina is located to the west of downtown Ballard, along Seaview Avenue NW near the Sunset Hill neighborhood. There is no current transit service within ¼ mile walkshed of the potential landing site location. Other parts of Ballard are served by Metro peak-only and all-day routes, including the RapidRide D Line along 15th Avenue NW. Details on frequency and span are shown in Table 7 and transit in the greater Ballard area is shown in Figure 6.

Table 7. Transit routes near the potential Shilshole landing site

Route	Connections	Frequency	Span
15X	Blue Ridge – Crown Hill – Downtown Seattle	Six AM peak trips, Six PM peak trips	Peak Only
17X	Loyal Heights – Downtown Seattle	Five AM peak trips, Five PM peak trips	Peak Only
18X	North Beach – Downtown Seattle	Five AM peak trips, Five PM peak trips	Peak Only
29	Ballard – SPU – Queen Anne – Downtown Seattle	Six AM peak trips, Six PM peak trips	Peak Only
40	Northgate Station – Crown Hill – Ballard – Fremont – South Lake Union – Downtown Seattle	Eight to 10 minutes during the peak, 15 minutes during the day	All Day
44	Ballard – Wallingford – U District Station	10 minutes during the peak, 12 minutes during the day	All Day
45	Loyal Heights – Greenwood – Green Lake – Roosevelt Station – U District Station – UW Campus	10 minutes during the peak, 15 minutes during the day	All Day
D Line	Crown Hill – Ballard – Interbay – Uptown – Downtown Seattle	Six-eight minutes during the peak, 10 minutes during the day	All Day

Figure 6. Existing transit and bicycle connections near the potential Shilshole landing site.

Sound Transit plans to extend Link light rail to Ballard as part of the Sound Transit 3 (ST3) regional transit system plan, approved by voters in 2016. Due to funding uncertainties, implementation is now planned to occur in 2039. The Metro Connects interim network also envisions frequency and span improvements on existing routes, in addition to other network changes that reflect the implementation of Link light rail between Ballard and downtown Seattle.

There are no Metro managed or leased park-and-ride lots in the vicinity of the Shilshole landing site.

Shilshole Marina is isolated from most of Ballard's population, businesses, and services, with constrained access by any mode of travel. At 1.7 miles from central Ballard (NW Market Street and Ballard Avenue NW), walking would take about 35 minutes and biking about 9 minutes. Shilshole Marina's land access is along a single north-south linear roadway, Seaview Avenue NW, running parallel to the shoreline. Seaview Avenue NW has continuous sidewalks and a section of the separated and paved Burke Gilman Trail directly from central Ballard and east.

Parallel to the east side of Seaview Avenue NW are railroad tracks owned by BNSF Railway. The tracks are fully fenced and can be crossed only at very limited locations. On the other side of the tracks is a very steep hillside below neighborhoods that consist of single-family homes. These residential areas are accessible by way of very few streets, trails, and stairways. Thus, access from the neighborhoods uphill to the east is extremely limited and only for people with strong mobility. For those who would walk the trails or stairs, the travel time is at least 30 minutes or longer. The trails have no lights.

The Pier 50 landing site is adjacent to robust multimodal and transit connections throughout downtown Seattle.

Potential changes to connect to water taxi

Fixed Route Changes

There is no current or planned fixed-route transit service on or near Seaview Ave NW. However, as with the West Seattle water taxi landing site, which is not proximate to all-day transit service, a fixed route water taxi shuttle would be planned to create a connection for riders.

The potential fixed route shuttle would connect riders from Golden Gardens Park to NW Market St, shown in Figure 7. This shuttle would also create transfer opportunities to routes 15, 17, 18, 1010, 1012, 1993, and RapidRide D Line in the Metro Connects interim network. The shuttle would operate approximately every 30 minutes, matching the seasonal schedule of the water taxi. The creation of this route would need to be approved by the Council by ordinance. Additional costs are shown in Table 8.

Figure 7. Metro Connects interim network and potential shuttle service to the Shilshole landing site

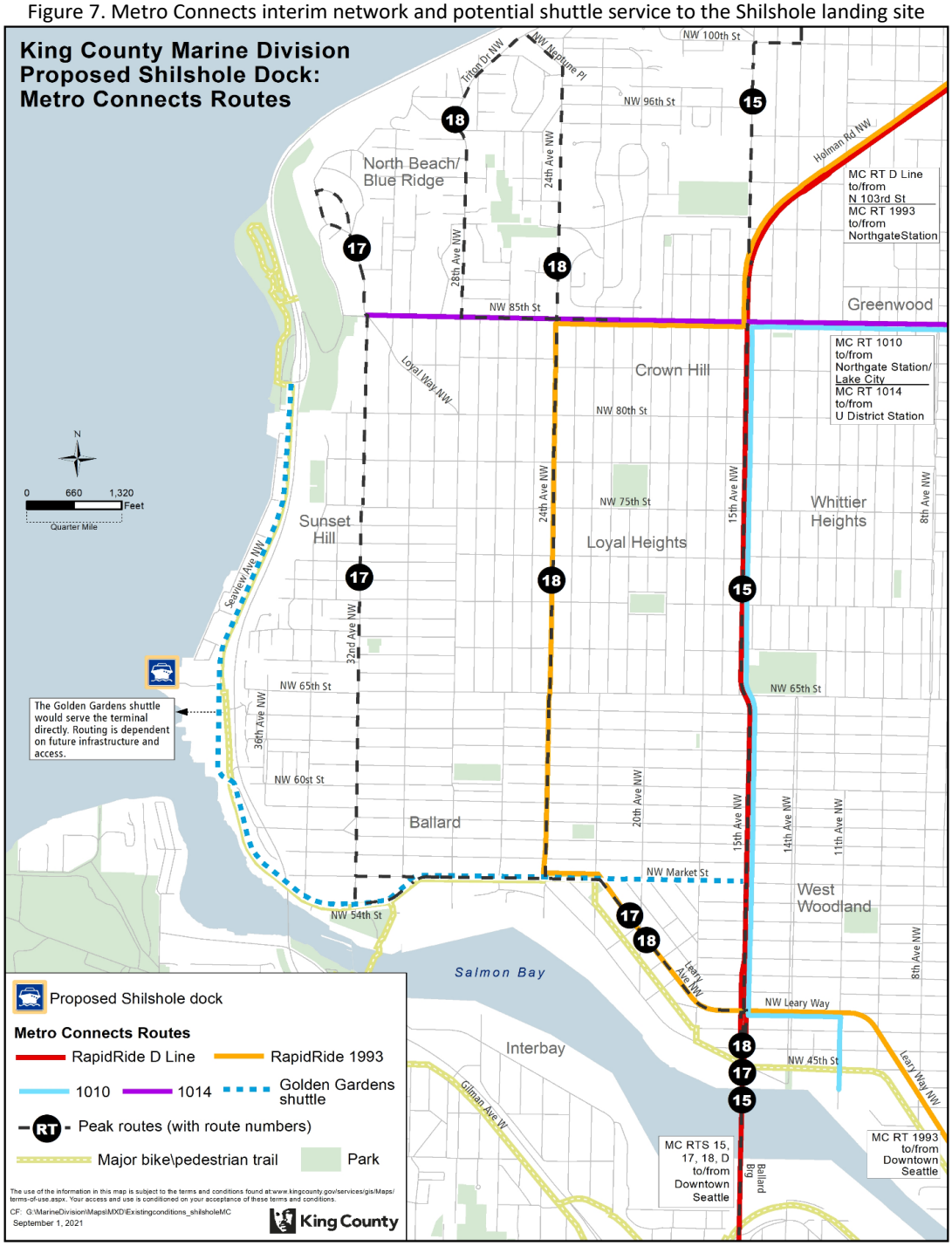


Table 8. Resources to support a potential Ballard water taxi shuttle

Route	Connections	Frequency To Water Taxi	Resources Needed Annual Hours	Resources Needed 2021 Dollars*
Golden Gardens Shuttle	Golden Gardens - Shilshole Landing Site - Market Street	30 minutes	5,834	$755,808 to $1,102,470

*Based on 2021 Budget Costs for comparable services. Operating costs vary depending on service operator.

The cost estimates shown in Table 8 do not include additional operating costs for potential turnaround loops or capital costs relating to securing layover and comfort station access or vehicle procurement costs. These will be further assessed and included in the costing analysis.

Multimodal Changes

The completion of the Burke Gilman Trail, known as the "Missing Link," is the main planned improvement to bike, walk, and roll access in the area. However, this project has an unclear completion date. Opportunities for alternative improvements would be limited due to the location and topography of the area. Any other improvements would require consultation with the City of Seattle, as the area around the landing site is not identified as an equity priority area for future Metro investments.

C. Equipment Specification

This section details methodology, assumptions, and preliminary work for the propulsion analysis and equipment specifications for the expansion routes as requested in the proviso. Equipment specification is a foundational assumption for moving forward with service understanding, landing site layouts, and costing of landing site and vessel capital and operating elements.

Methodology & Assumptions

Vessel General Specifications

To meet the service frequency proposed above, the vessels selected for the service were assumed to have a cruising speed of 28 knots. Vessel size was assumed to be a maximum passenger load of 150 passengers to meet estimated ridership demand and fall within the manning and other regulatory United States Coast Guard (USCG) requirements of a subchapter T vessel. Each potential vessel assumes an operating crew of three personnel, including one captain and two deck hands.

Vessel Emission Profile and Associated Propulsion Systems

Metro's sustainability goals involve decreasing greenhouse gases now and into the future, and the propulsion alternative(s) selected for the Kenmore and Ballard routes should support these goals as much as possible. To be consistent with Metro's emissions reductions goals, the selection of new vessel propulsion technology that will be modeled and costed in the final report have been selected based on the ability to meet and balance the following goals:

- Decrease greenhouse gas emissions
- Capitalize on current and future marine industry technological developments
- Reduce and balance the level of risk/ uncertainty in design cost and schedule of newly emerging technologies

A variety of propulsion alternatives were evaluated during the propulsion analysis with plug-in hybrid-electric using renewable diesel chosen to move forward into preliminary concept layouts and costing in the final report. The basis for this propulsion selection is outlined in the propulsion analysis below.

Terminal Power Storage

Terminal electrical power storage is needed when the power grid cannot support fast, high-power charging. The electrical power needs of the potential hybrid system would be minimal and the electrical power to serve the Kenmore and Ballard routes would require minimal physical space to support switch gear and capacitor banks. In the future, if the hybrid system is converted to a fully electric plug-in system, additional space at the terminal would likely be required to accommodate slower electrical power transfer from the electrical grid to storage on-site at the terminal. Equipment to support the plug-in hybrid electric system and potential additional equipment needed for full electrification has been outlined as part of the propulsion analysis and will be included in the preliminary terminal layouts and cost estimates to be included in the final report.

Propulsion Analysis

Overview

Before arriving at the plug-in hybrid propulsion system identified for further study, research, industry engagement, and analysis took place on a variety of options. The analysis involved consultation with industry stakeholders, including local passenger-only ferry vessel designers, marine battery manufacturers, and local utility companies, to gather information on the following key topics:

- Current available vessel and propulsion technologies and associated specifications
- Future technological landscape and timeframe of technological development
- Power requirements and landside infrastructure to support low-emissions propulsion

Please see Appendix A for a full list of stakeholders consulted in the propulsion analysis.

Multiple propulsion alternatives were evaluated specific to the two routes in review, each with different route profiles and power needs. Table 9 below shows all analyzed options, from zero-emissions to alternative diesel and gas fuels. For findings and more detail on the technologies behind each propulsion method, please see Appendix A.

Table 9. Alternative propulsion options assessed

Zero-Emissions	Hybrid Propulsion	Alternative Diesel & Gas Fuels
• Nuclear • Hydrogen Fuel Cell • Full Plug-in Electric	• Hybrid Diesel-Electric • Plug-in Hybrid	• Conventional Diesel (ultra-low sulfur diesel) • Biodiesel – B20 Blend • R99/ Renewable Diesel • Liquefied Natural Gas (LNG)

Of the analyzed alternatives, the plug-in hybrid option was deemed most promising to move forward to the costing analysis. For comparison purposes, a cost baseline will also be provided. This baseline will assume that the new Kenmore and Ballard services would be implemented with the propulsion technology that is currently used by the rest of the water taxi system, conventional diesel. The cost

baseline will be produced for comparative purposes only, with the plug-in hybrid being the propulsion method deemed most promising by the propulsion analysis. The following sections outline the process by which the plug-in hybrid alternative was selected, which included first identifying the needs a propulsion system must meet for each route and then discussing how the potential options meet the selection goals.

Needs and Considerations by Route

Taking the knowledge obtained through extensive outreach with industry stakeholders, each route was examined individually to identify its power needs and any route-specific conditions. Both routes require a cruising speed of 28 knots to meet the potential service schedules and remain time-competitive with other modes. The selected propulsion system alternative would need to provide enough power to travel at this high-speed for a significant portion of each route which ranges from approximately 9 to 10.5 miles in distance.

Kenmore

The potential Kenmore route would require more power than the Ballard route with its longer length of 10.5 miles in one direction. The uplands of the Kenmore landing site would have ample space for terminal energy storage, such as battery banks, if any were required to support the chosen alternative. The UW WAC would have less space and would be more constrained. Table 10 shows power requirements for the Kenmore route.

Table 10. Power requirements for the Kenmore route

Power Need per Round Trip	Kenmore Uplands Space	UW Uplands Space	Time between Sailings
2,900 kW hr	Sufficient	Limited	40 min

Ballard

As a slightly shorter route of just over nine miles, the Ballard route would require less power overall than the Kenmore route, despite also traveling at the high speed of 28 knots for most of the route length. Though having the same dwell time, or time a vessel spends at the dock between sailings, as the Kenmore route, the Ballard route would have 20 minutes longer between sailings. Both the Shilshole and Pier 50 landing sites would have sufficient space for shoreside infrastructure.

Additionally, with one end of this route landing at Pier 50, adjacent to the planned WSF Colman Dock electrification project, there is opportunity for the Ballard route to partner with other proposed projects along the downtown Seattle waterfront to more efficiently support improvements to the local power supply. However, it is important to note that transitioning the entire water taxi system, including the existing water taxi routes to zero emissions operations would result in additional power demands at the Pier 50 terminal. Table 11 shows power requirements for the Ballard route.

Table 11. Power requirements for the Ballard route

Power Need per Round Trip	Shilshole Uplands Space	Pier 50 Uplands Space	Time between Sailings
2,600 kW hr	Sufficient	Sufficient	60 min

Propulsion Alternative Evaluation

Each propulsion alternative was evaluated based on the identified goals for selection, which include:

- Decrease greenhouse gas emissions
- Potential to capitalize on future technological developments to further decrease emissions
- Level of risk/ uncertainty in design cost and schedule

Zero emission propulsion options (nuclear, hydrogen fuel, cell and full plug-in electric) would have the highest emissions reduction opportunity and the highest level of uncertainty as it relates to the timeframe, cost, and availability of fuel sources. This is mostly associated with the current state of power density, or the size and weight at which power can be stored on a vessel and the power produced from these alternatives. Alternative diesel and other gas fuels, such as biodiesel, R99, and LNG, provide low implementation risk, however they also offer the least amount of emission reduction and limited options to retrofit to other new technologies, if available. Hybrid options could support the desired route profiles with the current state of technology and would have the flexibility to be converted to zero-emissions systems in the future. Table 12 below summarizes how each of the propulsion options align with the selection goals.

Table 12. Summary of propulsion option analysis

Propulsion Option	Emissions reduction potential	Potential to capitalize on future technologies	Level of risk/ uncertainty in design cost & schedule
Zero-Emissions	Highest	Uncertain	High
Hybrid: Plug-in Hybrid	**Medium** Plug-in hybrid has a higher potential to reduce emissions than diesel-electric based on the ability to reduce emissions through landside charging using clean electricity from the grid.	**High** Diesel components could be removed while electric motors could remain and be powered by emerging technologies, such as improved batteries or hydrogen fuel cells.	**Medium** Technology currently exists that meets the specified route profiles, though it is not widespread.
Alternative Diesel and Gas Fuels	Medium to Low	Limited	Low

Hybrid Option Selected for Operations and Capital Cost Modeling

Due to the rapid pace of technological development for both hydrogen fuel cells and marine electric batteries, achieving zero-emissions operations by 2030 seems to be a feasible goal, provided that the selected propulsion alternative has a high potential to capitalize on future technological developments that would further decrease operational emissions. Hybrid options could support the desired route profiles with the current state of technology and would have the flexibility to be converted to zero-emissions systems in the future.

R99 is a specific form of renewable biodiesel that could be used to further decrease emissions when the system is not operating on electric power.

Hybrid propulsion systems also provide opportunities to reduce GHG emissions but would have a higher capacity to capitalize on future technological developments. Being powered by a diesel motor rather than shoreside power like the plug-in hybrid, the hybrid diesel-electric propulsion has fewer opportunities to reduce emissions. The plug-in hybrid propulsion would be a better option for the potential water taxi routes based on the ability to reduce emissions through landside charging. Hybrid systems require fewer heavy batteries and could support the potential route profiles.

Of the two hybrid options, the plug-in hybrid propulsion option reduces more GHG emissions and allows for easier future conversion to zero emissions technologies, therefore, the plug-in hybrid has been selected for the cost analysis in the final report. Table 13 includes a comparison of the hybrid options.

Table 13. Comparison of hybrid options

Type	Description	Strengths	Weaknesses
Hybrid Diesel-Electric	Vessel is propelled by electric motors that are powered by diesel generators. On-board battery banks are used for power storage. Battery power is generally used during low-speed operations when power requirements are low.	Higher capital cost than traditional diesel but less than full battery electric Reduced emissions and noise when operating near terminals and in low-wake zones No shore power is needed. Can be converted to zero-emissions technologies developed in the future	Minimal emissions reduction as the batteries are charged by onboard diesel generators Added weight of the batteries and other electrical components increase the vessel weight, thereby increasing the power and fuel required to maintain speed unless other weight saving measures are implemented Batteries (with current technology) require replacement every 5 to 10 years
Plug-in Hybrid [selected option]	Vessel can be propelled with one of two operating models: diesel or electric. On-board battery banks are used for power storage and power an electric motor for propulsion. Batteries are charged by a landside power source. A diesel engine is also provided, and the vessel switches between power systems based on route operating needs	Reduced emissions Redundant systems Higher capital cost than conventional diesel but less than full battery electric Limited shore power infrastructure required Weight of additional propulsion system components could be offset using a carbon fiber hull to improve operating efficiency Easier to convert to zero-emissions technologies developed in the future	Added weight of the batteries and other electrical components increase the vessel weight, thereby increasing the power and fuel required to maintain speed unless other weight saving measures are implemented Batteries (with current technology) require replacement every 5 to 10 years

Although the added weight of batteries and other components would initially limit the net impact on GHG emissions for a plug-in hybrid, the propulsion system could be designed to facilitate the replacement of the diesel engine and fuel tanks with either a high-power electric or fuel cell propulsion system when one of those technologies is sufficiently mature to be practical and efficient.

Propulsion Options Analyzed and Dismissed
Though propulsion options besides hybrid had promising features, they were ultimately not selected. The following sections discuss the dismissed options in more detail and provide key reasons for why they were dismissed from further consideration at this time.

Zero Emissions Options
The propulsion analysis first focused on the zero-emissions options of nuclear power, hydrogen fuel cell, and full plug-in battery electric and on the ability of these options to meet the desired service profile and route conditions. Table 14 summarizes the findings of this analysis, and additional detail is provided in the following pages.

Table 14. Zero-emissions propulsion analysis summary

Propulsion Option Analyzed	Emissions reduction potential	Potential to capitalize on future technologies	Level of risk/ uncertainty in design cost & schedule
Zero-Emissions Nuclear Hydrogen Fuel Cell Full Plug-in Electric	**Highest** Zero-emissions operations could be achieved once technology is mature enough to be practical and efficient.	**Uncertain** These technologies are the ones experiencing future development. Convertibility between technologies is currently unknown.	**High Risk** No technology currently exists that meets the specified route profiles. Nuclear has the highest risk and is not a prime focus of current technological development in the industry.

Nuclear-powered propulsion was eliminated early in the analysis due to its high safety requirements, production of radioactive waste, and the lack of interest and investment in nuclear power observed in the ferry industry. Hydrogen fuel cell and full plug-in electric were next evaluated. Numerous industry stakeholders have expressed interest in these emerging technologies, and their potential to bring zero-emission impacts to ferry operations is highly desirable. However, when applied to the Kenmore and Ballard route conditions specifically, the following challenges were observed:

1. Currently available zero-emissions technologies would not provide enough power to meet the needed route schedule and profile without making the vessel too heavy.
2. Developing cutting-edge technologies to meet the Kenmore and Ballard route profiles has a high level of uncertainty in the cost and schedule of the vessel design.

Given these high energy and power requirements on both routes, a zero-emissions vessel design using current battery and or fuel cell technology would be significantly heavier than using a traditional diesel propulsion system. To ensure that the vessel is not too heavy to operate could require alternating the routes' cruising speed and passenger capacity to decrease the amount of power needed to run the vessel. Changing the potential service speed and capacity would make both routes less desirable for users and/or less time competitive with current travel options, leading to low route ridership.

To avoid undesirable changes to the Kenmore and Ballard route profiles, updates to battery and fuel cell technology and/or emerging hull technologies (such as foil assisted or carbon fiber hulls) could be

pursued to make the vessel lighter while still providing sufficient power. However, investing in technology that is currently unavailable and/or not approved by the USCG would create risks to the schedules and costs of implementing the routes. As a result, choosing one of these zero-emissions options with the intent of developing experimental propulsion or associated vessel technology as a part of route implementation would introduce high risk to cost and schedule. Uncertainties include:

- Timeframe of vessel design
- Timeframe of and level of technological testing
- Cost of design effort
- Cost of manufacturing
- Length of USCG negotiations and regulatory approvals

Based on the challenges and risks outlined above, a zero-emissions propulsion option was not deemed the most feasible option for implementing the Kenmore and Ballard routes at this time.

Alternative Diesel and Gas Fuels
Of the remaining options, biodiesel, R99 renewable diesel, and LNG are alternative liquid fuels that could significantly reduce GHG emissions in comparison to traditional diesel. However, these options would have challenges in converting to future zero-emissions technologies because both rely on a liquid fuel powered engine. These types of engines cannot be powered by hydrogen fuel cell power or electric battery power and converting to zero-emissions technology in the future would require completely replacing the engine and the entire propulsion system. Table 15 summarizes alternative diesel and gas fuel options analyzed.

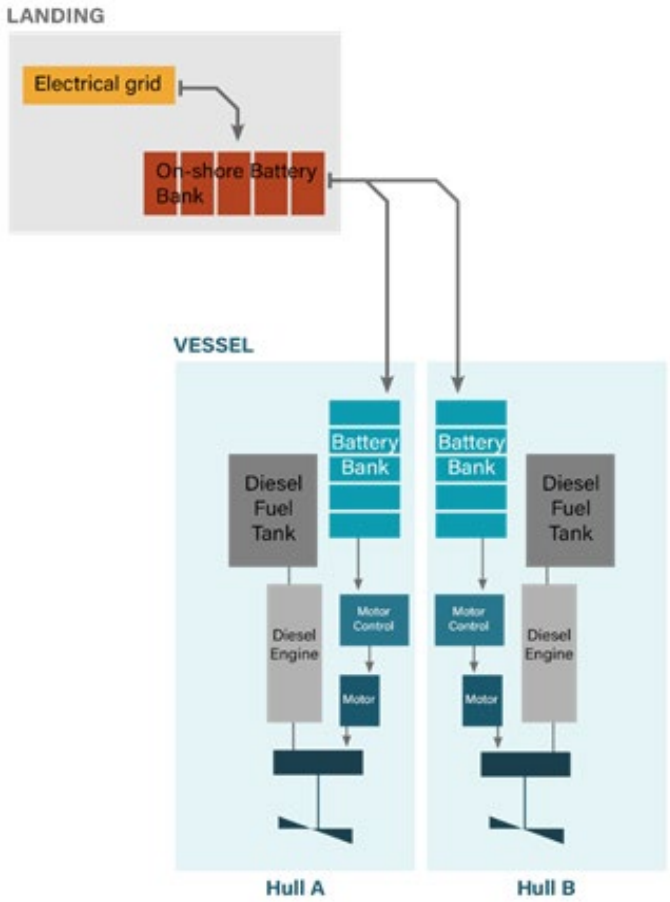
Table 15. Alternative diesel and gas fuels propulsion analysis summary

	Emissions reduction potential	Potential to capitalize on future technologies	Level of risk/ uncertainty in design cost & schedule
Alternative Diesel & Gas Fuels Conventional Diesel (ultra-low sulfur diesel) Biodiesel – B20 Blend R99/ Renewable Diesel Liquefied Natural Gas (LNG)	**Medium to Low** R99 renewable diesel, biodiesel, and LNG can decrease emissions but will never be able to achieve zero emissions. Conventional diesel produces the most emissions of all evaluated options.	**Low** Engine systems would need complete replacement to convert to hydrogen fuel cell or full electric.	**Low Risk** Existing engine systems currently make use of these types of fuels, and many proofs of concepts are available. Of the options, R99 is the most experimental with higher uncertainty in supply chain and cost.

Recommended Plug-in Hybrid System
The propulsion configuration most appropriate to move forward for costing and operations analysis as part of this technical work on implementation of the Kenmore and/or Ballard routes is a plug-in diesel electric hybrid. With this configuration, the ferry would operate on battery power during all low-speed segments of the route profile: approaching and departing the terminal, embarking and disembarking

passengers, and transiting through any low-wake or low-speed zones, such a west of Webster Point on Lake Washington, where the speed limit is seven knots. Figure 8 illustrates the components of a plug-in diesel-electric hybrid vessel in a 150-passenger catamaran vessel and how the system connects to the electrical grid.

Figure 8. Plug-In diesel-electric hybrid propulsion system and its connection to the grid



This option was selected for its ability to upgrade to the newest clean propulsion technology as batteries and/or fuel cell technology continue to advance. Though shorter and slower routes could operate with currently available technologies, the route lengths and speeds result in weights of the batteries and/or fuel cells that are currently infeasible for the potential Ballard and Kenmore routes. With the rapid pace of technological development, it is a goal that the hybrid system would be convertible to zero emissions operations within the next ten years. Please see Appendix A for figures that show how the initial hybrid system could be converted to either full plug-in electric or fuel cell propulsion while keeping the existing hull, low-speed electric motor, reduction gear, shafting, and propeller.

Until the time of system conversion, to decrease emissions as much as possible with the potential hybrid system, it is recommended that the diesel engine run on the lowest emission diesel option currently available, R99. Costing will include the higher cost of this diesel option as opposed to conventional diesel. Emissions savings will be estimated as operational profiles are further defined and will be provided in the final report.

Shoreside Infrastructure to Support a Plug-in Hybrid System
The selected plug-in hybrid would only operate on diesel power for the high-speed portion of the route and would use electric power for the low-speed zone east of Webster's Point and during all maneuvering to and from each landing. As a result, less electrical power would be needed at the terminal to charge the ferry batteries than if the system were full plug-in electric. The terminal electrical power demands to charge the batteries in this option would be small enough that chargers could be provided at both ends of the route with minimal local infrastructure improvements. Though minimal, this infrastructure would still take up terminal space and would include the following components:

- Capacitor Storage bank
- Switchgear
    - Primary circuit breaker
    - Utility meter
    - Service transformer
    - Main circuit breaker
    - Auxiliary panel
    - Distribution / energy storage system (ESS) panel

The shoreside infrastructure also requires an upland area to support these elements. The equipment would require an area of approximately 85 feet by 39 feet.

However, in the future when converting the hybrid system to an all-electric zero-emissions system additional space could be required as additional battery storage would likely be needed. Estimates for the current additional space, given existing battery energy density, are provided in Appendix A. Additional grid capacity may also be needed to support a full electric system which would require additional coordination with local utilities and could take up to five years depending on projects going on at the time and on the additional capacity needed.

If in future, a hydrogen fuel cell system was selected instead, terminal infrastructure needs would be different and could vary depending on the source of the hydrogen. If hydrogen is trucked in, the terminals would need to be reconfigured in a way that allows truck access to the dock, if such access is not currently available. If hydrogen is instead produced on-site, an electrolyzer and associated infrastructure would be needed. Additional details on terminal infrastructure needs would need to be developed at the time of system conversion.

D. Preliminary Capital and Operating Budgets

This preliminary report does not include any costing or budgetary values. The assumptions and technical analysis detailed in this preliminary report, as well as future technical work, will be used as the basis in all costing analysis. The final report to the Council will include detailed analysis and reporting on capital

as well as operations and maintenance costs. The final report will also detail budget assumptions for potential funding schemes for the expansion routes.

Costs and budgetary needs addressed in previous studies will be reviewed as part of the costing analysis for the final report. Capital and operational costs will differ from previous study findings. Key areas already identified in this preliminary report that will impact costs relative to previous studies include:

- The service levels for both routes have been updated to align with King County policy to provide additional service relative to previous study assumptions
- This study assumes two vessels instead of one for the Kenmore route
- Shoreside infrastructure costs will differ to accommodate the plug-in hybrid propulsion technology
- Plug-in Hybrid propulsion technology will have differing operational costs.

Additional details on preliminary costing assumptions are below.

Capital Assumptions
Grant funding was assumed to be a desirable option to support needed capital investments. As many federal grant programs require the National Environmental Policy Act (NEPA) process, implementation timelines will assume a formal NEPA process. Capital cost estimates will be informed by past and current Seattle marine waterfront work.

Operating Assumptions
The Ballard route was assumed to operate service with one vessel, while Kenmore assumes simultaneous operation of two vessels to support service. Both routes assume the presence of an additional vessel to serve as a back-up in case of unplanned maintenance, etc.

Both services assume that 45 minutes of crew costs would be needed both before and after planned vessel operating hours to allow for startup and tie-up time before and after passenger service. Terminal staff hours would be assumed for operations at the Lakepointe facility for the Kenmore route, while existing Pier 50 terminal personnel hours would be assumed sufficient to cover the Ballard route personnel needs.

Three crew members would be assumed necessary to operate each vessel. These members include one captain and two deckhands. An additional staff member (Port Captain) would be assumed for the Ballard route. Regarding maintenance personnel, three full-time dedicated maintenance personnel/employees (one engineer and two oilers) would be assumed for the Kenmore routes. The Ballard route would be assumed to have only two full-time dedicated maintenance personnel (one engineer and one oiler) as existing Pier 48 maintenance staff could also help support the route.

E. Additional Considerations to Prepare for Implementation of the Routes

In addition to the key areas addressed through earlier sections, additional considerations to prepare for implementation of the expansion routes will be detailed further in the final report. This may include more detailed information on water taxi system integration and prioritization, additional environmental considerations, funding scenarios, or specific details in response to comments on the preliminary report.

Stakeholder Engagement

The 2020 proviso work, as well as the 2015 expansion study and 2020 PSRC study, included stakeholder engagement activities. This included coordinating technical aspects and priorities with landing site property owners and local government agencies, as well as community surveys that showed support for these expansion routes and the potential landing sites. The technical work and recommendations included in the previous studies were guided by those efforts. The current proviso work will require engaging with landing site property owners and partner agencies to advance technical understanding for implementation including the Port of Seattle, the City of Seattle, the City of Kenmore, the University of Washington, and the Lakepointe development site owner. Additionally, technical coordination around shoreside, propulsion, and vessel technology needs for implementation will require engagement with utility providers and other specialized vendors. Further community engagement in addition to more robust stakeholder engagement with area agencies, tribes, and community groups would be conducted as a part of actual route implementation. Engagement with partners in previous planning efforts showed support for the routing and landing site locations for water taxi expansion from the Port of Seattle and City of Kenmore, however the UW does not support service to and from the UW WAC at this time. In advance of finalizing the technical analysis, the County will work with project partners to ensure the analysis and findings properly represent their priorities.

VI. Conclusion/Next Steps

This report provides preliminary analysis of planning and implementation of Kenmore and Ballard expansion water taxi routes. Key technical components detailed in this report include assumptions around route planning and service profile and delivery (including alternative propulsion) that are guiding the ongoing technical work. The final report body of work will further detail costs associated with capital improvements and operating elements needed to support the service levels outlined. Additional stakeholder engagement through the next phases of work will better inform preliminary design assumptions, associated costs, and additional implementation tasks. Metro, working with the Executive and the Council, will advance technical understanding and work with partners in preparing implementation readiness through this ongoing work. As detailed throughout this report, additional technical analysis and coordination with the Council and King County's partners is ongoing and will provide more robust findings in the Final Water Taxi Expansion Report, which will be transmitted to the Council as directed in the proviso prior to June 30, 2022.

VII. Appendices

Appendix A: Propulsion Analysis and Electrification

Preliminary Water Taxi Expansion Progress Report

appendix

Propulsion Analysis and Electrification

Propulsion Analysis Introduction and Methodology

To reduce the effects of climate change, ferry services and the transportation industry have been innovating technologically and working toward zero-emissions operations. Traditional passenger-only ferry (POF) vessels are powered by conventional diesel propulsion, or in the case of the current King County Water Taxi vessels, use of a B20 blend of biodiesel and ultra-low sulfur diesel fuel. Diesel fuel releases carbon dioxide, a greenhouse gas that contributes to climate change. At the state and local level there is a focus on establishing goals to decrease greenhouse gas emissions and aligning with these goals is a priority for implementing new King County Water Taxi service.

This alternative propulsion analysis was conducted to understand the propulsion alternatives available, how those alternatives apply to the proposed expansion routes (Kenmore and Ballard), and what level of emission savings could be achieved with the goal of achieving zero-emissions, as much as possible. Consultation with industry leaders provided information to help frame the applicability, timeframe of technology progression, and input as to the power required to meet the service profiles for the Kenmore and Ballard routes. Key industry stakeholders included local vessel designers, vessel builders, marine battery manufacturers, and local utility companies. Consultation with these stakeholders were around the following key topics:

- Current available vessel and propulsion technologies, and associated specifications
- Future technological landscape and timeframe of technological development
- Power requirements and landside infrastructure to support low-emissions propulsion

Industry Stakeholders
ABB
All American Marine
Arcadia Alliance
BAE Systems
BMT
Elliott Bay Design Group
Glosten
Green City Ferries
Schneider Electric
Seattle City Light
Spear Power Systems

The following sections of this analysis present the background information and current conditions of POF propulsion technology, a summary of propulsion alternatives considered, the strengths and weaknesses when applying to Water Taxi service, and identification of the preferred propulsion system to be analyzed in the final report.

Analysis Overview

Multiple propulsion alternatives were evaluated specific to the two routes in review, each with different route profiles and power needs. Table A1 below shows all analyzed options, from zero-emissions to alternative diesel and gas fuels. For findings regarding each of the analyzed options, please see the *Propulsion Alternatives and Vessel Design* section of this Appendix.

Table A1: Alternative Propulsion Options Assessed

Zero-Emissions	Hybrid Propulsion	Alternative Diesel & Gas Fuels
• Nuclear • Hydrogen Fuel Cell • Full Plug-in Electric	• Hybrid Diesel-Electric • Plug-in Hybrid	• Conventional Diesel (ultra-low sulfur diesel) • R99/ Renewable Diesel • Liquefied Natural Gas (LNG)

Of the analyzed alternatives, the plug-in hybrid option was recommended to move forward to the costing analysis. For comparison purposes, a cost baseline will be also provided. This baseline will assume that the new Kenmore and Ballard services will be implemented with the propulsion technology

that is currently used by the rest of the water taxi system, conventional diesel. The cost baseline will be produced for comparative purposes only, with the plug-in hybrid being the propulsion method deemed most promising by the propulsion analysis. The following sections outline how this alternative was selected by first identifying the needs a propulsion system must meet for each route and then discussing how the potential options meet the selection goals.

Background and Current Conditions

Passenger vessels operating at high speeds (>25 knots) have high energy requirements and the regulatory framework for these alternative propulsion options is not yet clearly defined. The following section provides background on the energy needed to power the proposed water taxi services and an overview of the current regulatory and technological conditions in which the proposed POF routes would operate.

Energy and power needs for high-speed ferries

POF services with smaller vessels that run at high speeds require a large amount of power to operate with a smaller space to accommodate battery storage. Given current technologies, these characteristics are currently challenging to decrease emissions while maintaining higher vessel speeds. The vessel hull resistance of high-speed ferries increases exponentially with the vessel speed. In other words, a ferry operating at 28 knots (the speed proposed for both the Kenmore and Ballard route to meet time competitiveness of other modes) needs between four and eight times as much power as a similar ferry operating at half that speed.

Providing this much power from alternative energy sources can prove difficult as current electric battery and other low emissions technologies have a lower energy density than diesel fuel. In the case of batteries, this means that the number and size of batteries required to store enough energy to operate the vessel at the required speed (energy density), would be too heavy to fit in a standard hull design for a 150-passenger vessel and would require even more energy to push the heavier vessel through the water. Significant hull design changes could mitigate this. These changes may include making the hull larger while carrying fewer passengers, though this mitigation measure would likely be insufficient and would still result in a negative impact of the service profile currently established for these routes. Another option would be to use advanced hull materials, such as carbon fiber, to reduce the weight of the hull. These advanced materials may reduce the hull weight enough to maintain the current service profile but will likely require arduous regulatory approvals with uncertain timelines. This is discussed more in more detail in the *Regulatory environment* subsection later in this report. Until the energy density of current battery technology improves, full electrification of a high-speed, smaller vessel may be unattainable.

An alternative energy form, compressed hydrogen, used in fuel cells has an energy density that is higher than current battery technology but still lower than diesel fuel. The hydrogen is stored in a compressed gas form and current regulations would require the storage tanks be located outside the hull for safety.

Like other transit modes, high-speed POF services aim to move people as quickly as possible with just enough time in the dock to unload and load passengers (referred to as dwell time). This ferry service model does not allow for long periods of time at the dock for charging batteries.

Current state of battery technology

With the increasing demand for battery powered automobiles and buses, battery technologies for these land-based modes of transport have been developing in parallel with batteries for marine vessels. While lessons can be learned across platforms, the battery technologies themselves are very different and are

not directly interchangeable. For example, marine batteries are under the jurisdiction of the US Coast Guard (USCG) and must meet a higher level of safety requirements. These safety requirements, particularly related to preventing and suppressing fires if the batteries overheat, can cause marine batteries to be more expensive than their landside counterparts. Marine battery systems can also charge more quickly and supply more power per battery than the batteries currently used in the automobile industry.

Marine battery technology is rapidly developing, but the weight of batteries significantly increases energy consumption. Additionally, current batteries can be limited in how fast they can be charged or discharged. A major focus of marine battery innovation is the development of alternative chemistries that have a greater energy density, allowing future battery banks the ability to store the same amount of energy with less weight. Another focus for marine battery development is the ability to charge and discharge quickly without affecting the service life of the batteries.

Given the larger energy requirements for high-speed ferry routes and the short dwell times available for charging, transferring sufficient energy into the vessel batteries creates a very high demand for a relatively short period of time. In many locations, these high, short-term demands cannot be met if the ferry were to be charged directly from the electrical grid. To mitigate this, shoreside batteries can be used to reduce the peak demand on the grid, but the short discharge time is likely to shorten the expected service life for the batteries.

Regulatory environment

Low-emissions ferry technology is a rapidly evolving industry. USCG regulations for electric propulsion technology and hydrogen storage and transfer are in development. As a result, regulations do not currently exist for many technologies, and would require coordination with the USCG through the planning, design, and construction phases of the project. Vessel design alternatives that include lighter materials (such as carbon fiber) and reduce fuel consumption are also under development by the USCG.

Other federal regulations faced by ferry propulsion systems that use diesel engines include all new and re-powered engines being required to mee the EPA's Tier 4 engine standards. Tier 4 engines are accompanied by exhaust treatment systems that result in lower emissions of dangerous air pollutants such as nitrous oxides, sulfur oxides, and particulates. However, Tier 4 engine regulations are not specifically aimed at reducing the greenhouse gas emissions that contribute to climate change. Apart from Tier 4 engine systems, leaner low-sulfur diesel and biodiesel blends are also used by many services to decrease smog and particulates caused by combustion engines that are used in POF operations.

Propulsion Alternatives and Vessel Design

There are a variety of vessel propulsion system options and vessel hull designs that can reduce greenhouse gas emissions. The following sections summarize the vessel propulsion options and vessel design options considered for the potential Kenmore and Ballard Water Taxi routes.

Alternative diesel and gas fuels

Low-emission and renewable fuels are available that can be used with traditional diesel (compression ignition) engines. While these fuels do not necessarily reduce greenhouse gas emissions, they are currently used to reduce the emission of particulates and other air pollutants compared to conventional diesel fuel. A B20 blend ultra-low sulfur bio-diesel fuels are used in the current King County Water Taxi vessels. These alternatives are drop in fuels, do not require any additional shoreside infrastructure, and can be used with existing engines. However, some alternatives, like liquefied natural gas (LNG), require different engines, modifications to an engine's fuel system, and could affect maintenance schedules.

While conventional diesel fuel is currently the least expensive option, it has the highest greenhouse gas emissions. Of the fuel options, R99/Renewable Diesel best meets Metro's emissions goals by providing the greatest reduction in greenhouse gases. Table A2 provides a summary of the strengths and weaknesses of the alternative diesel and gas fuel options.

Table A2: Strengths and Weaknesses of Alternative Diesel and Gas Fuels

Type	Description	Strengths	Weaknesses
Conventional Diesel (B20 ultra-low sulfur bio-diesel)	Use Tier 4 engines and conventional liquid diesel fuel	• Least expensive • Same as existing service • No shoreside infrastructure required; delivered by truck or at commercial fuel pier	• Highest emissions • Subject to fluctuating diesel prices • Future retrofits/technological updates would likely be expensive
R99/ Renewable Diesel[1]	Use Tier 4 engines and renewable diesel	• Significant emissions reduction (60 to 90% cleaner than conventional diesel[1] • Petroleum free • Familiar technological platform • Minimal shoreside infrastructure-possibility of fueling by truck	• More expensive than conventional diesel • Non-zero emissions • Limited maritime experience with R99 - additional maintenance and replacement of filters may be required • Future retrofits/technological updates would likely be expensive
Liquefied Natural Gas (LNG)	Natural gas is held in a liquid state using a cryogenic tank and is used to fuel an engine that is designed to accommodate LNG.	• Decrease in emissions when compared to non-biodiesel options • Multiple current examples in operations • Potential operations and maintenance cost savings due to LNG being cleaner than diesel • Minimal shoreside infrastructure-possibility of fueling by truck	• Diesel engines require modifications to use LNG • Current operations use LNG engines for significantly larger vessels • Non-zero emissions in burning • Emissions are often released during extraction and storage • Fuel must be stored at sub-zero temperatures • Limited opportunity to convert systems and capitalize on emerging technologies • Infrastructure has higher capital costs than diesel • Gas tanks would need to be located above deck due to USCG regulations

Hybrid propulsion options

Hybrid propulsion options strive to maintain the reliability of diesel power while providing opportunities to decrease emissions and transition to more electric propulsion as battery technology continues to

[1] https://frogferry.com/pilot/sustainability/

improve. A variety of hybrid options are currently available and represent the mid-range for vessel costs--they are more expensive than conventional diesel options but less expensive than the zero-emission propulsion options discussed in the following section[2].

The hybrid propulsion options provide redundancy to be able to use both diesel and electric propulsion. The hybrid diesel-electric option is powered by a diesel motor rather than shoreside power like the plug-in hybrid, thus has fewer opportunities to reduce emissions. The plug-in hybrid propulsion is a better option for the Kenmore and Ballard potential water taxi routes based on the ability to reduce emissions through landside charging using clean electricity generated from hydropower. Table A3 provides a summary of the strengths and weaknesses of currently available hybrid propulsion options.

Table A3: Strengths and Weaknesses of Hybrid Propulsion Options

Type	Description	Strengths	Weaknesses
Hybrid Diesel-Electric	Diesel generators are used to generate power for electrical propulsion motors. On-board battery banks are used for power storage. Battery power is generally used during low-speed operations when power requirements are low.	• Higher capital cost than traditional diesel but less than full battery electric • Reduced emissions and noise when operating near terminals and in low-wake zones • Moderate transition to zero-emissions technologies developed in the future	• Minimal emissions reduction as the batteries are charged by onboard diesel generators • Added weight of the batteries and other electrical components increase the vessel weight, thereby increasing the power and fuel required to maintain speed unless other weight saving measures are implemented • Batteries (with current technology) require replacement every 5 to 10 years
Plug-in Hybrid	On-board battery banks are used for power storage and power an electric motor for propulsion. Batteries are charged by a landside power source. A diesel engine is also provided, and the vessel switches between power systems based	• Reduced emissions • Redundant systems • Higher capital cost than conventional diesel but less than full battery electric • Limited shore power infrastructure required • Weight of additional propulsion system components could be offset using a carbon fiber hull to improve operating efficiency • Easy transition to zero-emissions technologies developed in the future	• Emission reductions when operating on battery power which is slightly offset due to the weight of the systems • Added weight of the batteries and other electrical components increase the vessel weight, thereby increasing the power and fuel required to maintain speed unless other weight saving measures are implemented • Batteries (with current technology) require replacement every 5 to 10 years

[2] Lummi Island Ferry System Alternative Fuel Analysis

	on route operating needs		

Zero-emissions options

Nuclear, hydrogen fuel cell, and full plug-in electric vessels are on the cutting edge of zero-emissions propulsion technology. Smaller high-speed POF vessels, such as those proposed for the Kenmore and Ballard routes, are an emerging frontier for zero emissions technology. Due to the very large power requirements for these routes, the challenges with energy density that are faced by hydrogen fuel cell propulsion options are similar to those faced by battery technology when attempting to maintain sufficiently fast service speeds while keeping operating costs relatively low.

While nuclear power has zero emissions, there are no ferry vessels that are powered by this technology. There are challenges with safety, the regulatory environment, and nuclear waste disposal.

Hydrogen fuel cells have a lot of potential as a marine power source and demonstration vessels have been built in the U.S. Currently, the size and weight of the fuel cell itself, the need to store hydrogen as a compressed gas, and the relatively low energy density of this fuel limits the applicability of this energy source for high-speed ferries. Another challenge is the availability of hydrogen fuel, which must be delivered by truck from California at this time, thereby offsetting any emission reductions resulting from its use[3].

Each of these challenges is being addressed by emerging technologies, and during the preparation of this report, Washington Maritime Blue[4] submitted a letter of interest in response to the US Department of Energy's Hydrogen Energy Earthshot program outlining the numerous regional initiatives and studies currently underway to develop a sustainable hydrogen-based maritime ecosystem including generators, distributors, end users, and supporting industries. The potential for hydrogen fuel cell ferry service operated by King County Metro was included in the letter. If adequate support can be found for these programs, hydrogen as a clean fuel could be a much more viable option in five to ten years.

Full plug-in electric vessels use battery technology to power the vessels. This technology, while currently employed in the maritime industry, is typically ideal for shorter, slower routes. Currently, the battery power required for full plug-in electric vessels weighs down the vessel that inhibits the necessary higher speeds.

Table A4 summarizes the strengths and weakness of the zero-emission propulsion options that could potentially be used for the proposed Kenmore and Ballard Water Taxi routes.

[3] There is a project underway to build a hydrogen generation plant at the Wells Dam in Eastern Washington using excess hydropower. Once complete, hydrogen will be more readily available in the Puget Sound area.

[4] Washington Maritime Blue is a non-profit, strategic alliance formed to accelerate innovation and sustainability in support of an inclusive blue economy.

Table A4: Strengths and Weaknesses of Zero-emissions Propulsion Options

Type	Description	Strengths	Weaknesses
Nuclear	Powered by nuclear fission	• Zero emissions	• Higher safety requirements • No nuclear-powered ferry vessels are currently in operation • Nuclear waste disposal • Significant coordination with the USCG due to limited existing regulations
Hydrogen Fuel Cell	Batteries are used for startup and can be used alongside fuel cell power for faster speeds. Fuel cell-only power can be used. While travelling at slower speeds and idling at the dock, fuel cells can recharge the batteries.	• Zero emissions- provided that the hydrogen is produced w/o emissions as well • Alignment with the DOE's Hydrogen Energy Earthshot initiative • Better suited to the high speeds (and high-power requirements) of the routes in this study • Potential for technological upgrades and increased speed/capacity in the next 5 years • Fewer mechanical parts than a traditional diesel system could lead to decreasing maintenance costs • Minimal shore power infrastructure needed	• Production of hydrogen offsite can be emissions generating • Refueling of current technology could take a couple of hours • Current closest hydrogen production is in California- significant emissions produced in transport of hydrogen fuel • No current vessels of this size and speed have been developed as proof of concept • Hydrogen tanks may need to be located above deck due to safety regulations • Significant coordination with the USCG due to limited existing regulations
Full Plug-in Electric	Electricity is drawn from the power grid or onshore battery reserves into onboard electrical battery storage. Batteries power an electrical propulsion motor.	• Zero emissions- provided that the electricity is also produced w/o emissions • Ideal for shorter/slower routes with lower power demand • Fewer mechanical parts than a traditional diesel system could lead to decreasing maintenance costs	• Weight from batteries needed may necessitate an alternate hull form (foil-assisted hull form, carbon fiber composite hull) which is more expensive and carries a higher design risk • Limited dwell time requires landside battery infrastructure to reduce demand on the power grid • Batteries (with current technology) require replacement every 5 to 10 years • Extensive shore power infrastructure needed • Significant coordination with the USCG due to limited existing regulations

Vessel Design to Reduce Emissions

Vessel design elements like foil-assist hulls or carbon fiber hulls can be used to decrease the weight and energy needs of a vessel and thereby reduce emissions. However, these associated technologies are often expensive and few US shipyards currently have the ability to construct them.

These vessel design options can be used in conjunction with alternative propulsion options. Figure A1 shows how these technologies work with different propulsion options.

Example Vessel Design Options

Most Similar to Current Water Taxi

Traditional Diesel + Light-weight Aluminum Hull

Most Experimental Technology Water Taxi Vessel Options

Plug-In Full Electric + Foil Assisted Hull

Hydrogen Fuel Cell + Foil Assisted Hull

Plug-In Full Electric + Carbon Fiber Hull

Hydrogen Fuel Cell + Carbon Fiber Hull

Foil-Borne and Foil-Assist Hulls

Energy demands can be reduced by developing hull forms with lower resistance. Hydrofoils that either fully or partially support the hull at cruising speed are currently in service, with partially supporting foils more common. Hydrofoils reduce resistance by lifting the hull out of the water, thereby reducing wave-making resistance. While this reduces resistance at medium to high speeds, the foil increases drag and vessel draft at low speeds. For deep water routes with no speed restrictions, such as Ballard to downtown Seattle, foils can work well. On the Kenmore to UW route, the slow zone west of Webster Point and the water depth at the UW WAC present challenges that would require additional study to determine the viability of a foil-supported hull.

Carbon Fiber or Composite Hull Structure

Light-weight hull options such as carbon fiber are being developed to improve the efficiency of conventionally powered ferries and they can also be used to mitigate the weight impacts of electric propulsion batteries and other currently weight-intensive propulsion alternatives.

These materials are strong but are less malleable than traditional metal hulls. While the breaking strength of carbon fiber may be higher than aluminum, if an unusual load is applied, such as hitting a mostly submerged log at high speed, carbon fiber would crack or break where aluminum would be bend or dent. This behavior drives the need for material-specific design formulas and safety factors for new USCG regulations currently under development to ensure a carbon fiber or composite hulls are at least as safe as those built from steel or aluminum.

Moreover, manufacturing carbon fiber hulls requires advanced technology and training available at only a few US boatbuilders. Consequently, pursuing a vessel with this technology may limit the location options for vessel construction and/or hull maintenance.

Propulsion Alternative for Costing: Plug-in Hybrid

Based on the reduction in greenhouse gas emissions, the available technology, and ability for future conversion to zero-emission propulsion, the plug-in hybrid propulsion option is recommended for future analysis for the potential Kenmore and Ballard water taxi routes. The following sections provide the goals established for evaluating propulsion alternatives, the route characteristics, and additional detail regarding plug-in hybrid vessel technology.

Propulsion Alternative Evaluation Goals

Each propulsion alternative was evaluated based on the identified goals for selection, which include:

- Decrease greenhouse gas emissions
- Be able to capitalize on future technological developments to further decrease emissions
- Avoid high levels of risk/ uncertainty in design cost & schedule

Evaluation of alternatives relative to these goals helped to identify the options most suitable for the proposed routes and aligned with overall King County Metro goals of reducing greenhouses gases of the overall Metro system.

Route considerations

Taking the identified goals and the knowledge obtained through extensive outreach with industry stakeholders, each route was examined individually to identify its power needs and any route-specific conditions. Both routes require a cruising speed of 28 knots to meet the proposed service schedules and remain time-competitive with other modes. The selected propulsion system alternative would need to provide enough power to travel at this high-speed for a significant portion of each route which ranges from approximately 9 to 10.5 miles in distance.

Kenmore

The proposed Kenmore Water Taxi route, which is approximately ten and a half miles long in one direction and requires a cruising speed of 28 knots to provide a competitive travel time, requires more power compared to other existing Water Taxi routes.

2,900 kW hr	Sufficient	Limited	40 min
Power Need per Round Trip	Kenmore Uplands Space	UW Uplands Space	Time Available to Charge Batteries b/w Sailings

Ballard

As a slightly shorter route of just over nine miles, the Ballard route would require less power overall than the Kenmore route, despite also traveling at the high speed of 28 knots for most of the route length. Additionally, as sailings on this route depart every hour, there is additional time to charge landside batteries, meaning that the overall grid demand would be lower for this route than for the Kenmore route. There is also more opportunity to charge shoreside electric batteries at both ends of the route due to the longer dwell time between sailings

With one end of this route landing at Pier 50, adjacent to the planned WSF Colman Dock electrification project, there is opportunity for the Ballard route to partner with other proposed projects along the Seattle Waterfront to more efficiently support improvements to the local power supply. However, it is

important to note that transitioning the entire Water Taxi system, including the existing Water Taxi routes to zero emissions operations would result in additional power demands at the Pier 50 terminal.

2,600 kW hr	Sufficient	Sufficient	60 min
Power Need per Round Trip	Ballard Uplands Space	Pier 50 Uplands Space	Time Available to Charge Batteries b/w Sailings

Propulsion Alternative Evaluation

Taking into consideration the selection goals and the route characteristics, each propulsion alternative was then evaluated to identify the options most suitable for the proposed routes.

Zero emission propulsion options (nuclear, hydrogen fuel cell and full plug-in electric) were found to have the highest emissions reduction opportunity and also the highest level of uncertainty as it relates to the timeframe, cost, and availability of fuel sources. This is mostly associated with the current state of power density, or the size and weight at which power can be stored on a vessel and the power produced from these alternatives. Alternative diesel and other gas fuels such as hydrogen were identified to provide low implementation risk, however they also provide the least amount of emission reduction and would be more difficult to retrofit if new technology options become available. Hybrid options can support the desired route profiles with the current state of technology and have the flexibility to be converted to zero-emissions systems in the future. Table A5 below summarizes how each of the propulsion options align with the selection goals. The following sections provide additional detail on how the proposed propulsion options do and do not align with the identified goals.

Table A5: Summary of Propulsion Option Analysis

Propulsion Option	Emissions reduction potential	Potential to capitalize on future technologies	Level of risk/ uncertainty in design cost & schedule
Zero-Emissions	Highest	Uncertain	High Risk
Hybrid	**Medium** Plug-in hybrid has a higher potential to reduce emissions than diesel-electric based on the ability to reduce emissions through landside charging using clean electricity from the grid.	**High** Diesel components could be removed while electric motors could remain and be powered by emerging technologies, such as improved batteries or hydrogen fuel cells.	**Medium Risk** Technology currently exists that meets the specified route profiles, though it is not widespread.
Alternative Diesel and Gas Fuels	Medium to Low	Limited	Low

Decrease Greenhouse Gas Emissions

The first factor considered was how the propulsion alternative(s) selected for the Kenmore and Ballard route would align with Metro's goal to decrease greenhouse gases now and into the future. As a result, the zero-emissions propulsion options of hydrogen fuel cell and full plug-in electric would be the most desired if the systems were light enough to support POF service at the needed cruising speed for the desired vessel size of 150 passengers. However, interviews with industry stakeholders indicated that no

POF vessel of the desired size is currently operating with a zero-emissions propulsion system at a 28-knot speed for a route of this length.

Given the energy requirements and dwell times on both routes, full electrification with direct charging of the ferries from the grid is not feasible without significant upgrades to the available electrical utility infrastructure. Using shoreside batteries to limit the peak demand may be possible but only if one-way charging is provided at both ends of both routes. Even with one-way charging available at all landings, a full-electric propulsion system would weigh more than a comparable diesel propulsion system and either a carbon fiber or foil-supported hull would be required to mitigate the added weight. Additionally, space available at the terminal locations was evaluated to determine how much square footage could be devoted for electric battery onshore storage. While most terminals had sufficient space for the footprint for batteries to support a fully-electric service, space available at the UW WAC is currently limited to support the large footprint needed for batteries to support a fully-electric option for this route, given current battery energy density.

Level of risk/uncertainty in design cost & schedule

Although the zero-emissions vessel propulsion options would reduce emissions, pursing a vessel design of zero emissions for the Kenmore and Ballard route profiles at this stage would have two primary risks.

1. A high likelihood of the vessel design requiring alteration to the routes' cruising speed and passenger capacity due to current technology weight limitations. Changing the proposed service speed and capacity would make both routes less desirable for users and/or less time competitive with current travel options, ultimately leading to low route ridership.
2. The uncertainty in the cost and schedule of the vessel design process due to the lack of currently available technology to meet the proposed route specifications. New technology could be developed as a part of this design process that may not require changes to the proposed service profiles, but it is uncertain how long these technologies would take to be developed, how much they would cost to design and manufacture, and how long they might take to be approved by USCG and other relevant regulatory agencies.

Potential to capitalize on future technological developments

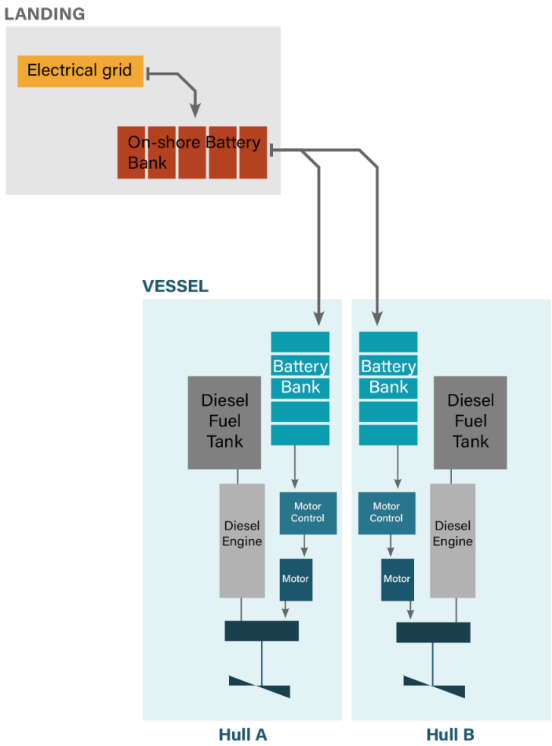
Due to the risks outlined above, a zero-emissions propulsion option was not deemed the most feasible option for implementing the Kenmore and Ballard water taxi routes at this time. However, due to the rapid pace of technological development for both hydrogen fuel cells and marine electric batteries, achieving zero-emissions operations by 2030 seems to be a feasible goal, provided that the selected propulsion alternative has a high potential to capitalize on future technological developments that would further decrease operational emissions. Of the remaining propulsion alternatives, a hybrid propulsion system would provide the greatest potential for future emission reductions as it would include both a diesel engine and an electric motor. Provided it is designed with future upgrades in mind, the electric motor can be powered by electricity from hydrogen fuel cells or electric batteries charged from onshore power. The diesel engine and diesel storage tank can be then replaced with additional battery capacity and a more powerful electric motor or hydrogen storage and a more efficient fuel cell.

Plug-in Hybrid

Based on this analysis, a plug-in hybrid propulsion vessel would be the most viable for the proposed routes. The vessel would only operate on diesel power for the high-speed portion of the route and would use electric power for the low-speed zone east of Webster's Point (Kenmore/WAC route) and all maneuvering to and from each landing. The shoreside electrical demands to charge the batteries in this option would be small enough that chargers could be provided at both ends of the route with minimal local infrastructure improvements. Although the added weight of batteries and other components would initially limit the net impact on greenhouse gas emissions, the propulsion system could be

designed to facilitate the replacement of the diesel engine and fuel tanks with either a high-power electric or fuel cell propulsion system when one of those technologies is sufficiently mature to be practical and efficient.

Figure A2 illustrates the components of a plug-in diesel-electric hybrid vessel in a 150-passenger catamaran vessel and how the system connects to the electrical grid.



This option was selected for its ability to upgrade to the newest clean propulsion technology as batteries and/or fuel cell technology continue to advance. Though shorter and slower routes could operate with currently available technologies, the route lengths and speeds result in weights of the batteries and/or fuel cells that are currently infeasible for the proposed Ballard and Kenmore routes. With the rapid pace of technological development, this hybrid system could be converted to zero-emissions operations within the next ten years. Figure A3 shows how the initial hybrid system could be converted to either full plug-in electric of fuel cell propulsion while keeping the existing hull, low-speed electric motor, reduction gear, shafting, and propeller.

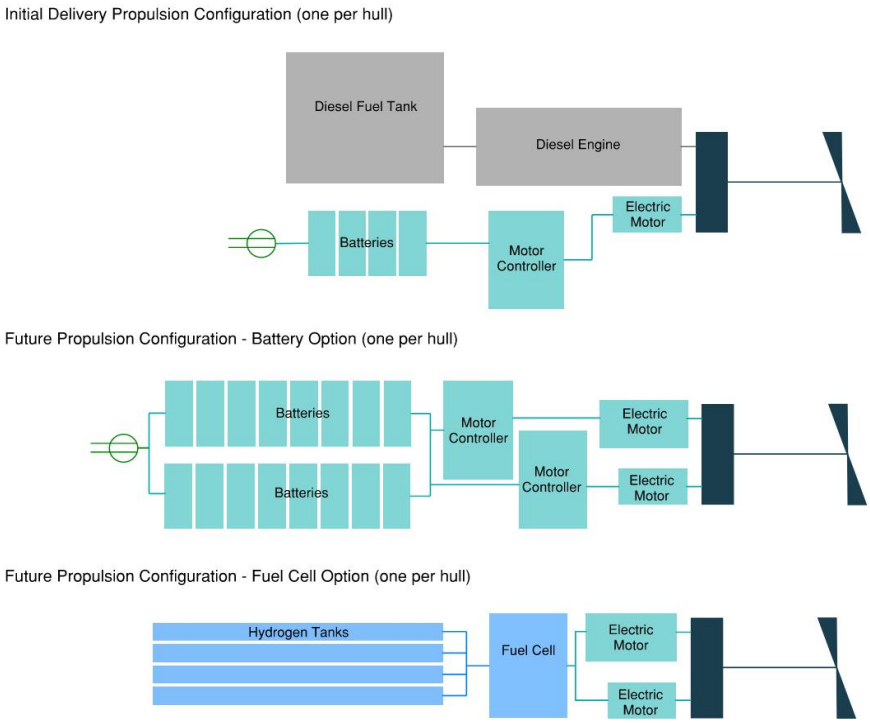


Figure A3- Proposed Hybrid Propulsion Configuration and Potential System Conversion Options

Until the time of system conversion, to decrease emissions as much as possible with the proposed hybrid system, it is recommended that the diesel engine run on R99 that is the lowest emission diesel option currently available. Costing will include the higher cost of this diesel option as opposed to conventional diesel. Emissions savings will be estimated as operational profiles are further defined and will be provided in the final report.

Shoreside infrastructure to support plug-in hybrid

To support a full plug-in electric or a hybrid plug-in electric service with round-trip charging on either route, shoreside electrical infrastructure is required. Compared to the high infrastructure needs of a fully-electric system, a plug-in hybrid requires less infrastructure and would have a much lower demand if charging directly from the grid. For the recommended plug-in hybrid option, the battery Energy Storage Systems (ESS) containers would not be required but a capacitor bank would likely be required to mitigate the upstream impacts of the short-term demand. Switchgear including a primary circuit breaker, utility meter, service transformer, main circuit breaker, auxiliary panel, and distribution / ESS panel would also be required.

The electrical equipment required for a future full plug-in electric service with round trip charging is more extensive and, with current technology, would include the following:

- Three containerized battery energy storage systems (ESS)
- Three ESS transformers

- Switchgear
  - Primary circuit breaker
  - Utility meter
  - Service transformer
  - Main circuit breaker
  - Auxiliary panel
  - Distribution / ESS panel

The shoreside infrastructure also requires an upland area to support these elements. The equipment would require an area of approximately 85 feet by 39 feet, as shown in Figure A4.

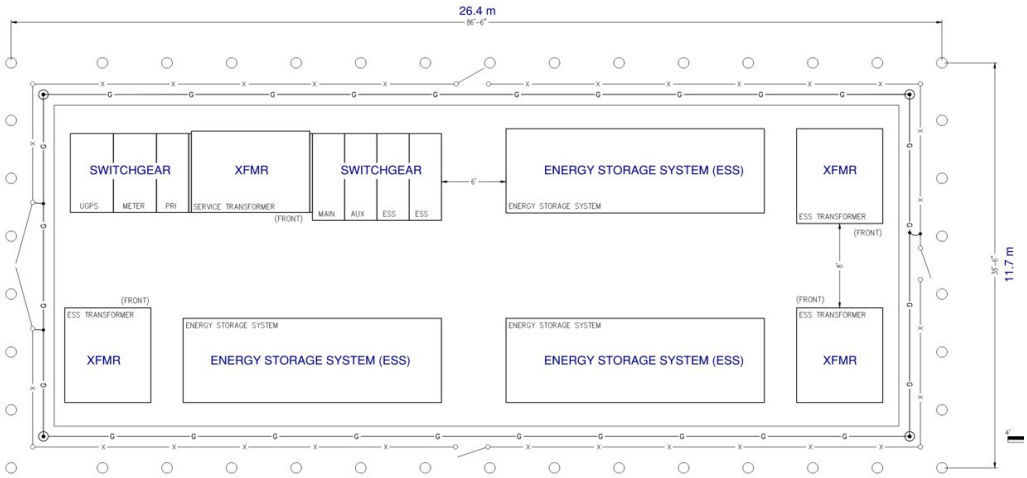


Figure A4: Electrical Equipment at Kenmore or Shilshole for Round-Trip Full-Electric Service

With lower energy requirements, the equipment for one-way charging of a full-electric ferry at these terminals would still require two battery ESS, transformers, and switchgear but it could be configured to occupy a small area of approximately 46 feet by 52 feet, as is shown in Figure A5.

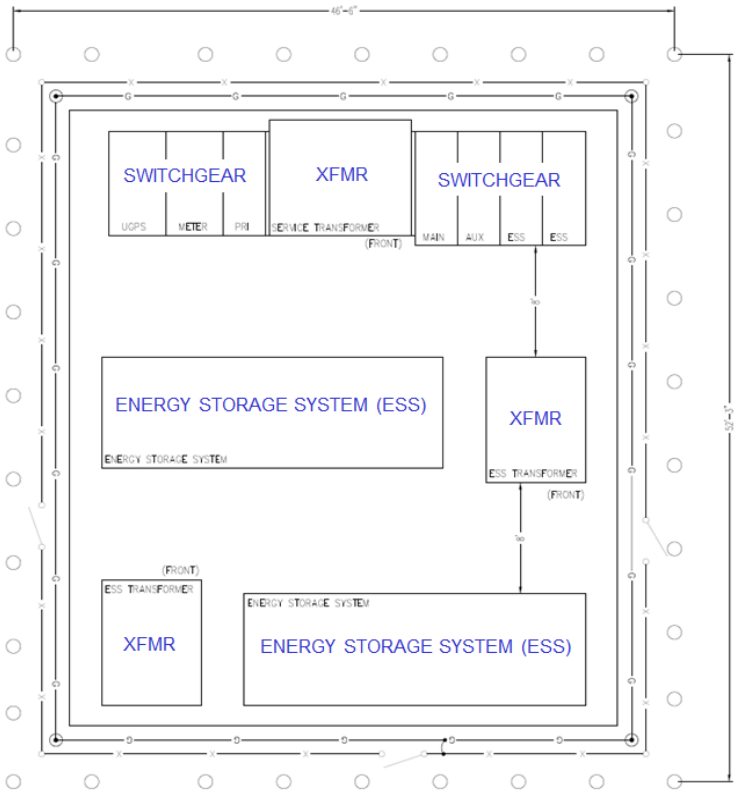


Figure A5: Electrical Equipment at Kenmore or Shilshole for One-Way Full-Electric Service

In future, when converting the hybrid system to an all-electric zero-emissions system, additional space requirements may differ depending upon advancements in battery technology. Based on coordination with the local utilities, additional grid capacity may also be needed to support a full electric system, which would require additional coordination and could take up to 5 years depending on projects going on at the time and on the additional capacity needed.

If in the future, a hydrogen fuel cell system was selected instead, terminal infrastructure needs would be different and could vary depending on the source of the hydrogen. If hydrogen is trucked in, the terminals will need to be reconfigured in a way that allows truck access to the dock, if such access is not currently available. If hydrogen is instead produced on-site, an electrolyzer and associated infrastructure would be needed. Additional details on terminal infrastructure needs would be developed at the time of system conversion.

Voucher Certification and Approval

City of Kenmore
DATE RANGE:
01/22/2022 - 02/04/2022

I, the undersigned, do hereby certify under penalty of perjury that the materials have been furnished, the services rendered or the labor performed as described herein, that any advance payment is due and payable pursuant to a contract or is available as an option for full or partial fulfillment of a contractual obligation, and the the claim is a just, due and unpaid obligation against the City of Kenmore and that I am authorized to authenticate and certify to said claim. The following checks and electronic payments are approved for payment:

Total Check #s 48938 through 49036: $693,539.94

Total Payroll/Taxes/Flexible Spending/Retirement & Health Savings Acct Electronic Deposits Dated: 01/28/2022: $187,718.77

ACH Payment to KBA Inc.: $91,843.88

ACH Payment to Road Construction NW: $178,789.46

ACH Payment to US Bank Purchase Cards: $13,159.57

Rob Karlinsey
Rob Karlinsey (Feb 7, 2022 19:20 PST)
Feb 7, 2022
City Manager / Date

Leticia Salcido
Leticia Salcido (Feb 8, 2022 09:03 PST)
Feb 8, 2022
Finance Director / Date

Vendor Name	Check #	Date	Description	Amount
KBA INC.	1071	02/04/2022	18-C1846 Dec. W. Sammamish Bridge Const. Mgmt.	91,843.88
ROAD CONSTRUCTION NW, INC.	1072	02/04/2022	21-C2669 1/1-1/21/22 Log Boom Park Construction	178,789.46
U.S. BANK PURCHASE CARDS	1073	02/04/2022	Amazon/International Code Council	752.84
U.S. BANK PURCHASE CARDS	1074	02/04/2022	Zoom/Commandlink/KC Recorder/PRA Case Law	4,366.45
U.S. BANK PURCHASE CARDS	1075	02/04/2022	Cell Phone Cases/National Assoc. of Town Watch	68.00
U.S. BANK PURCHASE CARDS	1076	02/04/2022	AWC/Strong Towns/Wix/Council Training	302.78
U.S. BANK PURCHASE CARDS	1077	02/04/2022	Zoom/NLC/United Airlines	1,084.74
U.S. BANK PURCHASE CARDS	1078	02/04/2022	Amazon Boathouse Signage/Space Heaters	612.25
U.S. BANK PURCHASE CARDS	1079	02/04/2022	Zoom/Congress for the New Urbanism	158.00
U.S. BANK PURCHASE CARDS	1080	02/04/2022	Amazon Purchases	44.30
U.S. BANK PURCHASE CARDS	1081	02/04/2022	The Guest House/Zeeks Pizza/Vcita/Shutterstock	196.89
U.S. BANK PURCHASE CARDS	1082	02/04/2022	Saniflow/Platt/Cedarbrook/ Rhomar Ind/1000Bulbs	4,427.63
U.S. BANK PURCHASE CARDS	1083	02/04/2022	Volgistics/WA Festivals & Events	140.00
U.S. BANK PURCHASE CARDS	1084	02/04/2022	ITE WA Safety Conf./Amazon/King Cty Dispute Resol.	368.69
U.S. BANK PURCHASE CARDS	1085	02/04/2022	Userway/Calameo Inc.	637.00
UNITED STATES POSTMASTER	48938	01/25/2022	Postage for Winter Newsletter	1,928.18
AFLAC	48939	01/28/2022	Employee Medical/Disability Plans	216.19
AWC EMPLOYEE BENEFIT TRUST	48940	01/28/2022	Employee Health Insurance	78,903.50
AWC EMPLOYEE BENEFIT TRUST	48941	01/28/2022	Void	-

AWC EMPLOYEE BENEFIT TRUST	48942	01/28/2022	Void	-
DEPARTMENT OF LABOR AND INDUSTRIES	48943	01/28/2022	City of Kenmore	3,937.47
DEPARTMENT OF LABOR AND INDUSTRIES	48944	01/28/2022	Void	-
EMPLOYMENT SECURITY DEPARTMENT	48945	01/28/2022	Paid Family & Medical Leave	2,264.39
EMPLOYMENT SECURITY DEPARTMENT	48946	01/28/2022	Void	-
ICMA RETIREMENT C/O ALLFIRST BANK / 109964	48947	01/28/2022	City of Kenmore 401a	21,089.19
ICMA RETIREMENT TRUST 457 / 304745	48948	01/28/2022	ICMA 457 Deferred Comp	8,495.48
LINCOLN NATIONAL LIFE INSURANCE	48949	01/28/2022	Life Ins/ADD & LTD	1,696.86
NATIONAL LIFE OF VERMONT	48950	01/28/2022	Life Insurance	123.17
STATE OF FLORIDA DISBURSEMENT UNIT	48951	01/28/2022	Employee Deduction	275.00
UNITED WAY OF KING COUNTY	48952	01/28/2022	Employee Charitable Contribution	80.00
AMERICAN PLANNING ASSOCIATION	48953	02/04/2022	Membership 4/1/22-3/31/23	668.00
AMERICAN SOCIETY OF COMPOSERS	48954	02/04/2022	2022 Annual Music License Fee	390.00
AQUALIS	48955	02/04/2022	Catch Basin Cleaning	9,920.01
AQUALIS	48956	02/04/2022	Emergency Catch Basin Cleaning 19411 77th Pl.	1,618.47
AURORA RENTS	48957	02/04/2022	Surface Water Excavator Rental	975.31
BCN TELECOM, INC.	48958	02/04/2022	1/15-2/14/22 City Hall Phone Lines	384.79
BOTHELL KENMORE CHAMBER OF COMMERCE	48959	02/04/2022	Annual Dues	1,500.00
BRIEN, GAYLYNN	48960	02/04/2022	Nov. 2021 Sales Tax Data Conversion Svcs	50.00
CALPORTLAND COMPANY	48961	02/04/2022	Ecology Block	16.55
CANON FINANCIAL SERVICES, INC.	48962	02/04/2022	Jan. 2nd Floor Copier Lease	266.08
CASCADE PEST CONTROL	48963	02/04/2022	Rhododendron Park Pest Control	154.58
CASCADIA CONSULTING GROUP, INC.	48964	02/04/2022	21-C2679 9/26-10/25/21 CAP Consulting	9,606.88
CHANIN KELLY-RAE CONSULTING LLC	48965	02/04/2022	December DEI Consulting Services	10,105.00
CHICAGO TITLE	48966	02/04/2022	NOH Mailing Labels - Gellner 78 Appeal	3.86
COMCAST BUSINESS	48967	02/04/2022	1/14-2/13 City Hall Cable & Internet	154.21
COMCAST BUSINESS	48968	02/04/2022	1/10-2/9 Squire's Landing Internet	71.95
CONTECH ENGINEERED SOLUTIONS, INC	48969	02/04/2022	Shipping of SWM Filter Cartridges	600.00
DAILY JOURNAL OF COMMERCE	48970	02/04/2022	Log Boom Park Bid Notices	308.20
EMERALD FIRE LLC	48971	02/04/2022	Log Boom Park Annual Standpipe Inspection	705.00
ENGAGED PUBLIC	48972	02/04/2022	One Year Subscription	8,500.00
FLEMINGS HOLIDAY LIGHTING LLC	48973	02/04/2022	Holiday Lights Removal	1,491.99
FOSTER GARVEY PC	48974	02/04/2022	Dec. Attorney Svcs - Moore Condemnation	3,410.00
GORDON THOMAS HONEYWELL	48975	02/04/2022	Jan. Governmental Affairs Consulting	4,300.00
GRAINGER	48976	02/04/2022	Parts for Boat Launch Restroom Repair	19.90
GRAINGER	48977	02/04/2022	Marking Paint	16.42
GRANICUS LLC	48978	02/04/2022	Website Subscription - Communications Cloud	15,932.79
HONEY BUCKET	48979	02/04/2022	1/22-2/18 Log Boom Park Rental	1,116.50

HONEY BUCKET	48980	02/04/2022	1/10-2/6 Public Works Yard Rental	156.75
HYAS GROUP, LLC	48981	02/04/2022	8/1/21-1/31/22 401a & 457b Consulting Svcs	3,750.00
IMPERIAL NW CONSTRUCTION LLC	48982	02/04/2022	Senior Center Asbestos Testing	462.42
INSLEE, BEST, DOEZIE & RYDER, P.S.	48983	02/04/2022	Dec. Legal Services	23,971.79
INTERNATIONAL INST OF MUNI CLERKS	48984	02/04/2022	4/1/22-3/31/23 Annual Membership	215.00
JEFF LUKE PHOTOGRAPHY LLC	48985	02/04/2022	Council Photography	5,364.77
JET CITY PRINTING	48986	02/04/2022	Misc. Office Supplies	385.35
JUDHA OF LION LANDSCAPING AND SERVICES LLC	48987	02/04/2022	April-December ROW Landscaping Svcs	26,952.48
KENMORE COMMUNITY CLUB	48988	02/04/2022	Facility Rental - Feb. 5th Vaccination Clinic	180.00
KING COUNTY FINANCE W.L.R.D.	48989	02/04/2022	3rd Trimester 2021 WRIA 8 Svcs	5,426.00
LAKESIDE INDUSTRIES	48990	02/04/2022	Cold Mix Asphalt	1,007.42
MINUTEMAN PRESS	48991	02/04/2022	ARPA Priorities Postcard Mailer & Postage	4,226.73
NORTHSHORE FIRE DEPT	48992	02/04/2022	October Fire Marshal Plan Review	60.00
NORTHSHORE FIRE DEPT	48993	02/04/2022	Sept. Fire Marshal Plan Review	800.00
NORTHSHORE FIRE DEPT	48994	02/04/2022	November Fire Marshal Plan Review	480.00
NORTHSHORE FIRE DEPT	48995	02/04/2022	December Fire Marshal Plan Review	860.00
NORTHSHORE ROTARY CLUB	48996	02/04/2022	4th Qtr 2021 Dues/Meals	300.00
NORTHSHORE SCHOOLS FOUNDATION	48997	02/04/2022	ARPA Resident Disbursements	300,000.00
NORTHSHORE UTILITY DIST	48998	02/04/2022	11/15-1/15 Various Water/Sewer Billings	2,039.60
OFFICE DEPOT	48999	02/04/2022	Misc. Office Supplies	102.36
OFFICE DEPOT	49000	02/04/2022	Public Works Crew Notebooks	63.81
O'REILLY/FIRST CALL	49001	02/04/2022	Vehicle Maintenance Supplies	30.81
OSBORN CONSULTING INC.	49002	02/04/2022	19-C2012 NE 190th Culvert - Phase 2	2,655.91
OSBORN CONSULTING INC.	49003	02/04/2022	19-C2012 66th Ave NE Drainage Improvement	1,445.06
OSBORN CONSULTING INC.	49004	02/04/2022	19-C2012 Dec. Citywide Fish Barrier Svcs	8,499.28
OSBORN CONSULTING INC.	49005	02/04/2022	19-C2012 Dec. 61st PL NE Slope Assessment	1,490.69
OUSLEY, NANCY	49006	02/04/2022	1/14 Mileage Reimbursement	23.99
PACE ENGINEERS, INC.	49007	02/04/2022	Dec. On-Call Professional Services	932.50
PACIFIC OFFICE AUTOMATION	49008	02/04/2022	1/15-2/15 1st Floor Facial Scanner Maint.	92.04
PACIFIC TOPSOILS	49009	02/04/2022	Gravel Purchased & Vegetation/Soil Dumping	355.19
PENDLETON CONSULTING LLC	49010	02/04/2022	City Council Retreat Consulting	3,575.00
PUGET SOUND CLEAN AIR AGENCY	49011	02/04/2022	Annual Puget Sound Clean Air Assessment Fee	19,183.00
PUGET SOUND ENERGY	49012	02/04/2022	12/15-1/13 Street Lights/Signals/Electricity Chgs	35,541.56
QUALITY BUSINESS SYSTEMS / WELLS FARGO	49013	02/04/2022	1st Floor Copier Lease 1/5-2/4/22	676.14
RED BARN ENGINEERING, INC.	49014	02/04/2022	21-C2666 12/18/21-1/16/22 On-Call Engineering Svcs	2,390.00
REPUBLIC SERVICES	49015	02/04/2022	Jan. City Hall Solid Waste Svcs	646.33
REPUBLIC SERVICES	49016	02/04/2022	Jan. Rhododendron Park Solid Waste Svcs	425.36
RFI ENTERPRISES INC.	49017	02/04/2022	City Hall Garage Door Repairs	236.72

SESAC	49018	02/04/2022	2022 Music Performance License Fee	513.00
SMS CLEANING, INC.	49019	02/04/2022	Jan. City Hall/Hangar/PW Office Janitorial	6,495.00
SOUND SAFETY PRODUCTS CO.	49020	02/04/2022	Public Works Crew - Boots	194.29
STAPLES ADVANTAGE	49021	02/04/2022	N95 Masks	260.61
STAPLES ADVANTAGE	49022	02/04/2022	Hangar Bldg. Trash Liners	88.07
STAPLES ADVANTAGE	49023	02/04/2022	City Hall Sponges & Wipes	270.25
STEWART MACNICHOLS HARMELL, INC.	49024	02/04/2022	Dec. Public Defense Services	5,000.00
T MOBILE USA, INC.	49025	02/04/2022	Staff Cell Phones & Data Plans	1,162.76
THE ORIGINAL POOP BAGS	49026	02/04/2022	Pet Waste Bag Refills	1,453.20
TOTAL LANDSCAPE CORP	49027	02/04/2022	City Hall & Parks Landscaping	5,030.02
TRACY BANASZYNSKI	49028	02/04/2022	Overpayment of Appeal Fees	47.00
UTILITIES UNDERGROUND LOCATION CTR	49029	02/04/2022	Jan.-Feb. Finance Fee	3.87
WA ASSOC OF BUILDING OFFICIALS	49030	02/04/2022	2022 Building Official Training Registration	1,375.00
WA ASSOC. OF SHERIFFS & POLICE CHIEFS	49031	02/04/2022	Dues for Police Chief Brandon Moen	180.00
WA STATE DEPT OF TRANSPORTATION	49032	02/04/2022	Dec. 68th & 175th/181st Traffic Signal Maint.	986.24
WA STATE DEPT OF TRANSPORTATION	49033	02/04/2022	Salt for PW Snow & Ice Response	7,150.63
ZIPLY FIBER	49034	02/04/2022	1/19-2/18 Public Works Office Internet	153.00
CARAHSOFT TECHNOLOGY CORPORATION	49035	02/04/2022	Cost Allocation Software License Renewal	3,633.30
SOFTWAREONE, INC.	49036	02/04/2022	2022 Microsoft Office 365 & Remote Desktop License	13,243.72
DRS 457	DFT0001204	01/28/2022	DRS 457 Deferred Comp	1,210.59
AVIDIA HEALTH	DFT0001205	01/28/2022	Employee Health Savings Contribution	100.00
DEPARTMENT OF RETIREMENT SYSTEMS	DFT0001206-1211	01/28/2022	Public Employees Retirement	30,927.05
NAVIA	DFT0001212	01/28/2022	Employee Flexible Spending Account	602.64
BANK OF AMERICA 941	DFT0001213	01/28/2022	Federal Taxes	23,529.49
PAYROLL	Electronic Dep.	1/28/2022	Direct Deposit	131,349.00
TOTAL				1,165,051.62

Vendor Purchasing Report

City of Kenmore

For Date Range 01/01/2022 - 02/04/2022

Vendor Set: Vendor Set 01

Vendor	Name	Volume
0014	AMERICAN PLANNING ASSOCIATION	668
0064	CASCADE PEST CONTROL	154.58
0067	CENTER FOR HUMAN SERVICES	5550
0083	CITY OF LAKE FOREST PARK	51948
0109	DAILY JOURNAL OF COMMERCE	308.2
0121	REPUBLIC SERVICES	1071.69
0130	EMPLOYMENT SECURITY DEPARTMENT	2264.39
0151	CALPORTLAND COMPANY	16.55
0184	INSLEE, BEST, DOEZIE & RYDER, P.S.	23971.79
0191	INTERNATIONAL INST OF MUNI CLERKS	215
0197	JET CITY PRINTING	385.35
0204	KENMORE COMMUNITY CLUB	180
0205	KENMORE HERITAGE SOCIETY	25
0206	KENMORE MIDDLE SCHOOL	2650
0212	KING COUNTY FINANCE W.L.R.D.	5426
0213	KING COUNTY ANIMAL SVCS	135
0251	LIGHTHOUSE CONSULTING INC	10539.15
0261	PENDLETON CONSULTING LLC	3575
0285	NORTHSHORE FIRE DEPT	860
0286	NORTHSHORE SCHOOL DISTRICT	35128
0287	NORTHSHORE SENIOR CENTER	9500
0288	NORTHSHORE UTILITY DIST	2039.6
0292	HONEY BUCKET	1273.25
0300	OFFICE DEPOT	166.17
0310	PACIFIC TOPSOILS	355.19
0327	PUGET SOUND CLEAN AIR AGENCY	19183
0328	PUGET SOUND ENERGY	38424.91
0355	STAPLES ADVANTAGE	618.93
0357	STEWART MACNICHOLS HARMELL, INC.	5000
0359	SOUND CITIES ASSOC	16314.32
0365	TOTAL LANDSCAPE CORP	5030.02
0371	UNITED STATES POSTMASTER	1928.18
0385	WA ASSOC OF BUILDING OFFICIALS	1375
0387	WA CITIES INSURANCE AUTHORITY	486509
0389	WASHINGTON CITY/COUNTY MGMT ASSOC	315
0401	WA STATE DEPT OF TRANSPORTATION	8136.87
0405	WASHINGTON STATE OFFICE CASH MGMT	610.5
0424	ICMA RETIREMENT TRUST 457 / 304745	16891.76
0425	DRS 457	2386.38
0426	AFLAC	216.19
0428	BANK OF AMERICA 941	46493.17
0429	AWC EMPLOYEE BENEFIT TRUST	78903.5
0431	DEPARTMENT OF RETIREMENT SYSTEMS	61841.84
0432	DEPARTMENT OF LABOR AND INDUSTRIES	3937.47
0434	UNITED WAY OF KING COUNTY	80
0436	NATIONAL LIFE OF VERMONT	123.17
0448	UPS STORE KENMORE	76.8
0450	AURORA RENTS	1235.5
0542	AMERICAN SOCIETY OF COMPOSERS	390
0685	PACE ENGINEERS, INC.	932.5
0692	HDR ENGINEERING, INC	158094.67
0696	AMERICAN GENERAL LIFE GPO/400S	279.92

Vendor Purchasing Report

For Date Range 01/01/2022 - 02/04/2022

Vendor Set: Vendor Set 01

Vendor	Name	Volume
0764	OUSLEY, NANCY	23.99
0791	NORTHSHORE ROTARY CLUB	300
0817	GRAINGER	110.94
0892	JACOBS ENGINEERING GROUP	16321.51
0913	KENMORE ELEMENTARY	1250
0981	COMCAST BUSINESS	226.16
0994	GORDON THOMAS HONEYWELL	4300
1003	iWORQ SYSTEMS	2800
1034	EMERALD FIRE LLC	705
1053	INTERNATIONAL CODE COUNCIL, INC	600
1215	STATE OF FLORIDA DISBURSEMENT UNIT	550
1226	CONTECH ENGINEERED SOLUTIONS, INC	600
1313	BOTHELL KENMORE CHAMBER OF COMMERCE	1800
1331	KBA INC.	91843.88
1337	STATE OF WA DEPT. OF LICENSING	1.52
1356	KARLINSEY, ROB	1145
1383	CHICAGO TITLE	3.86
1390	UTILITIES UNDERGROUND LOCATION CTR	3.87
1403	OSBORN CONSULTING INC.	14090.94
1431	BRIEN, GAYLYNN	50
1459	FLEMINGS HOLIDAY LIGHTING LLC	1491.99
1464	ROAD CONSTRUCTION NW, INC.	178789.46
1504	SCORE	39833
1555	LINCOLN NATIONAL LIFE INSURANCE	1696.86
1673	KPFF CONSULTING ENGINEERS	27412.19
1689	MOTT MACDONALD GROUP, INC.	15536.13
1711	SOFTWAREONE, INC.	13243.72
1754	RFI ENTERPRISES INC.	236.72
1816	NAVIA	7705.29
1820	PIPER SANDLER	23920
1838	AVIDIA HEALTH	200
1930	T MOBILE USA, INC.	1162.76
1979	MSPT XXII, LLC C/O FLYWAY RETAIL + LIVING	1500
1980	HRA VEBA TRUST	20203.44
1993	HYAS GROUP, LLC	3750
1999	KING COUNTY POLICE CHIEFS ASSOCIATION	50
2004	RED BARN ENGINEERING, INC.	225
2010	JUDHA OF LION LANDSCAPING AND SERVICES LLC	26952.48
2048	SMS CLEANING, INC.	6495
2113	WA ASSOC. OF SHERIFFS & POLICE CHIEFS	180
2142	ICMA RETIREMENT C/O ALLFIRST BANK / 109964	42303.68
2176	CANON FINANCIAL SERVICES, INC.	266.08
2209	MORUP SIGNS, INC.	522.98
2221	O'REILLY/FIRST CALL	46.2
2236	COMCAST	2090.1
2249	KING COUNTY BAR ASSOCIATION	250
2254	U.S. BANK PURCHASE CARDS	13346.75
2259	MINUTEMAN PRESS	4226.73
2270	LAKESIDE INDUSTRIES	1007.42
2285	QUALITY WATER FINANCIAL	182.59
2353	NORTHSHORE SCHOOLS FOUNDATION	300000
2368	JEFF LUKE PHOTOGRAPHY LLC	5364.77
2386	CECCANTI, INC.	303357.18
2396	ZIPLY FIBER	153
2402	PACIFIC OFFICE AUTOMATION	92.04
2403	AMERICALL	144.16
2486	CASCADIA LAW GROUP	4077
2489	THE ORIGINAL POOP BAGS	1453.2

Vendor Purchasing Report

For Date Range 01/01/2022 - 02/04/2022

Vendor Set: Vendor Set 01

Vendor	Name	Volume
2512	CARAHSOFT TECHNOLOGY CORPORATION	3633.3
2531	BCN TELECOM, INC.	384.79
2543	FOSTER GARVEY PC	3410
2544	ACTION SERVICES CORPORATION	1512
2579	CHANIN KELLY-RAE CONSULTING LLC	10105
2584	AQUALIS	11538.48
2618	STEPHANIE LUCASH	673.34
2621	TRACY BANASZYNSKI	47
2622	IMPERIAL NW CONSTRUCTION LLC	462.42
	Vendor Set Vendor Set 01 Total:	2331695.43

02-04-2022

Final Audit Report 2022-02-08

Created:	2022-02-07
By:	Carla Schnee (cschnee@kenmorewa.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAA3JJhFejkLrwW37IGAyVMrE6gpHvVwWd9

"02-04-2022" History

Document created by Carla Schnee (cschnee@kenmorewa.gov)
2022-02-07 - 11:56:06 PM GMT- IP address: 20.36.220.138

Document emailed to Rob Karlinsey (rkarlinsey@kenmorewa.gov) for signature
2022-02-08 - 0:01:02 AM GMT

Email viewed by Rob Karlinsey (rkarlinsey@kenmorewa.gov)
2022-02-08 - 3:19:33 AM GMT- IP address: 24.22.167.111

Document e-signed by Rob Karlinsey (rkarlinsey@kenmorewa.gov)
Signature Date: 2022-02-08 - 3:20:24 AM GMT - Time Source: server- IP address: 24.22.167.111

Document emailed to Leticia Salcido (lsalcido@kenmorewa.gov) for signature
2022-02-08 - 3:20:26 AM GMT

Email viewed by Leticia Salcido (lsalcido@kenmorewa.gov)
2022-02-08 - 5:03:37 PM GMT- IP address: 50.235.209.34

Document e-signed by Leticia Salcido (lsalcido@kenmorewa.gov)
Signature Date: 2022-02-08 - 5:03:43 PM GMT - Time Source: server- IP address: 50.235.209.34

Agreement completed.
2022-02-08 - 5:03:43 PM GMT

POWERED BY Adobe Sign

City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: **2021-2023 Department of Ecology Solid Waste Management Local Solid Waste Financial Assistance Agreement (SWMLSWFA)**	**For Council Meeting Agenda of: February 28, 2022** **Department: Public Works Operations** **Prepared by: Jennifer Gordon, Public Works Operations Manager** **Initial & Date** **Approved by Department Head: JG 2/11/22** **Approved by City Attorney: N/A** **Approved by Finance Director: LS 2/17/22** **Approved by City Manager: _____**
Proposed Council Action/Motion: **Ratify Contract No. 21-C2757 between the City of Kenmore and the Department of Ecology accepting 2021-2023 Solid Waste Management Local Solid Waste Financial Assistance funds.**	**Exhibits/Attachments:** Contract No. 21-2757

INFORMATION/BACKGROUND:

The City of Kenmore has been able to host two residential recycling events annually supported by 100% funding from three separate grants:

- King County Waste Reduction and Recycling Grant;
- King County/Public Health Local Hazardous Waste Management Grant; and
- **Department of Ecology Solid Waste Management Local Solid Waste Financial Assistance Grant**

With the decrease in past grand funds and knowing that every residential recycling event is so well attended, the City partnered with the City of Lake Forest Park combing grant funds to keep continue the level of service in offering two residential recycling events annually. Although funding has increased, the City will continue to partner with the City of Lake Forest Park for 2021-2023 grant cycle.

Funds totaling $70,220.00 from the Solid Waste Management Local Solid Waste Financial Assistance Agreement (SWMLSWFA) from the Department of Ecology will be dedicated to support four residential recycling events between 2021 and 2023 in partnership with the City of Lake Forest Park.

Each recycling event will continue to be held in the City of Kenmore. Organics, household hazardous waste and other hard to recycle items will be collected along with 'usual' recyclables at each City hosted event. Educational materials about reducing waste and recycling will also be handed out during the events.
FISCAL CONSIDERATION: Residential recycling events are 100% grant funded.
COUNCIL GOAL/BUDGET OBJECTIVE BEING ADDRESSED: • Develop a Kenmore Climate Plan and promote Environmental Stewardship, including water, air, forest, and habitat restoration • Develop and Implement a Diversity, Equity, and Inclusion Policy and Program • Implement the Economic Development Plan • Protects natural and environmentally sensitive areas, significant open spaces, trees, and air and water quality. • Has an economic base that provides a range of goods and services, offers quality employment opportunities, and supports local business. • Supports the safety, health, and welfare to all of its citizens.

City of Kenmore Contract
21-C2757

Agreement No. SWMLSWFA-2021-Kenmor-00082

SOLID WASTE MANAGEMENT LOCAL SOLID WASTE FINANCIAL ASSISTANCE AGREEMENT

BETWEEN

THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

AND

CITY OF KENMORE

This is a binding Agreement entered into by and between the state of Washington, Department of Ecology, hereinafter referred to as "ECOLOGY," and CITY OF KENMORE, hereinafter referred to as the "RECIPIENT," to carry out with the provided funds activities described herein.

GENERAL INFORMATION

Project Title:	IMP City of Kenmore
Total Cost:	$70,220.00
Total Eligible Cost:	$70,220.00
Ecology Share:	$52,665.00
Recipient Share:	$17,555.00
The Effective Date of this Agreement is:	07/01/2021
The Expiration Date of this Agreement is no later than:	06/30/2023
Project Type:	Planning & Implementation

Project Short Description:
In coordination with Lake Forest Park, the RECIPIENT will host up to four residential recycling collection events with $70,220.00. The RECIPIENT expects to divert 182 tons of recycled material, which includes an estimated 21 tons of organics, 35 tons of household hazardous waste, and 126 tons of recyclable material from 2,350 residential participants.

Project Long Description:
See the Scope of Work section for more detailed information related to individual Tasks.

Overall Goal:
Provide regional solutions and intergovernmental cooperation; prevent or minimize environmental contamination through planning and project implementation; and comply with state and local solid and hazardous waste management plans and laws.

RECIPIENT INFORMATION

Organization Name:	CITY OF KENMORE
Federal Tax ID:	91-1912254
DUNS Number:	041752978
Mailing Address:	18120 68th Ave NE Kenmore, Washington 98028
Physical Address:	18120 68th Ave NE Kenmore, Washington 98028
Organization Email:	rkarlinsey@kenmorewa.gov

Contacts

Project Manager	Jennifer Gordon 18120 68th Ave NE Kenmore, Washington 98028 Email: jgordon@kenmorewa.gov Phone: (425) 984-6160
Billing Contact	Paul Devine General Manager 4715 SW WALKER ST Seattle, Washington 98116 Email: pauldevine@msn.com Phone: (206) 938-8262
Authorized Signatory	Rob Karlinsey City Manager 18120 68th Ave NE Kenmore, Washington 98028 Email: rkarlinsey@kenmorewa.gov Phone: (425) 398-8900

ECOLOGY INFORMATION

Mailing Address: Department of Ecology
Solid Waste Management
PO BOX 47600
Olympia, WA 98504-7600

Physical Address: Solid Waste Management
300 Desmond Drive SE
Lacey, WA 98503

Contacts

Project Manager	Diana Wadley PO Box 330316 Shoreline, Washington 98133-9716 Email: dwad461@ecy.wa.gov Phone: (425) 429-4639
Financial Manager	Diana Wadley PO Box 330316 Shoreline, Washington 98133-9716 Email: dwad461@ecy.wa.gov Phone: (425) 429-4639

AUTHORIZING SIGNATURES

RECIPIENT agrees to furnish the necessary personnel, equipment, materials, services, and otherwise do all things necessary for or incidental to the performance of work as set forth in this Agreement.

RECIPIENT acknowledges that they had the opportunity to review the entire Agreement, including all the terms and conditions of this Agreement, Scope of Work, attachments, and incorporated or referenced documents, as well as all applicable laws, statutes, rules, regulations, and guidelines mentioned in this Agreement. Furthermore, the RECIPIENT has read, understood, and accepts all requirements contained within this Agreement.

This Agreement contains the entire understanding between the parties, and there are no other understandings or representations other than as set forth, or incorporated by reference, herein.

No subsequent modifications or amendments to this agreement will be of any force or effect unless in writing, signed by authorized representatives of the RECIPIENT and ECOLOGY and made a part of this agreement. ECOLOGY and RECIPIENT may change their respective staff contacts without the concurrence of either party.

This Agreement shall be subject to the written approval of Ecology's authorized representative and shall not be binding until so approved.

The signatories to this Agreement represent that they have the authority to execute this Agreement and bind their respective organizations to this Agreement.

Washington State
Department of Ecology

By: Laurie G. Davies Digitally signed by Laurie Davies Date: 2021.11.04 12:12:38 -07'00'

Laurie Davies Date
Solid Waste Management
Program Manager

Template Approved to Form by
Attorney General's Office

CITY OF KENMORE

By: Rob Karlinsey Rob Karlinsey (Oct 27, 2021 14:46 PDT) 10/27/2021

Rob Karlinsey Date
City Manager

Template Version 12/10/2020

SCOPE OF WORK

Task Number: 1 **Task Cost:** $70,220.00

Task Title: CROP Recycling Operations

Task Description:
The RECIPIENT, in coordination with the City of Lake Forest Park, will host up to four residential recycling collection events for City residents. Organics, household hazardous waste (HHW), and other large or hard-to-recycle items will be collected along with 'usual' recyclables at a convenient City location. Educational materials, which describe how to reduce waste and recycle more using City-sponsored or private sector recycling programs, will also be distributed.

Work to be performed:
- Organize, stage, and staff the event, including scheduling and paying vendors.
- Advertisement of the event.
- Distribution of the outreach materials at the event.
- Responsible recycling, reusing, or disposing (such as for some hazardous waste) of the collected materials.
- Calculating and reporting outcomes of each event to ECOLOGY.

Who will perform it:
- A contractor, in conjunction with any vendors hired or utilized by said contractor for final management of materials.
- RECIPIENT employee intends to be minimally involved, performing basic oversight.

This task includes development and distribution of promotional materials in a variety of formats to encourage participation. RECIPIENT is encouraged to work with their ECOLOGY grant manager when developing promotional materials, and is reminded of provisions 3 and 19 of the General Terms and Conditions of this Agreement.

This task will not reimburse costs covered by existing product stewardship organizations (E-Cycle Washington, LightRecycle Washington, PaintCare, Call2Recycle) or for costs covered by new product stewardship organizations that are fully implemented during this agreement period.

RECIPIENT is not participating in the PaintCare product stewardship program and will be implementing special collection events. ECOLOGY encourages RECIPIENT to contact PaintCare to coordinate PaintCare's presence at events. PaintCare will take all acceptable products during the event at no charge to the RECIPIENT, resulting in a cost savings to the RECIPIENT. LSWFA will not cover the costs at collection events that are covered by PaintCare.

RECIPIENT will credit the grant for any revenue received from the collection of fees or commodity sales of items this task is directly supporting.

The scope of this task includes recycling activity managed or performed by RECIPIENT at a recycling center such as a transfer station or drop box location, or at another location. Disposal of any materials collected or advertised as collected for recycling or reuse or marketed for recycling or reuse under this task is prohibited. RECIPIENT must immediately notify ECOLOGY when they become aware that disposal of materials collected for recycling or reuse occurred. ECOLOGY may deny new costs or require RECIPIENT to repay costs already reimbursed or both.

Task Goal Statement:

The goal of this task is to decrease the amount of organic waste, household hazardous waste, and hard-to-recycle items going to landfill by holding collection events in a convenient location for City residents. The City will also help reduce waste and encourage recycling by distributing educational materials to City residents. The events will also provide an opportunity to distribute environmentally friendly products such as rain barrels and compost/worm bins.

Task Expected Outcome:

The collection events proposed are expected to net an approximate total of 252,000 pounds of material for recycling, 42,000 pounds of organics, and 70,000 pounds of household hazardous waste. Depending on vendor availability, there is potential to also collect items for reuse. These metrics represent the percentage of the task's total overall cost that is supported by the Ecology Share plus Recipient Share under this Agreement.

Recipient Task Coordinator: Paul Devine

CROP Recycling Operations

Deliverables

Number	Description	Due Date
1.1	Task Expected Outcomes are the deliverables and achieved incrementally throughout the biennium.	

BUDGET

Funding Distribution EG220129

NOTE: *The above funding distribution number is used to identify this specific agreement and budget on payment remittances and may be referenced on other communications from ECOLOGY. Your agreement may have multiple funding distribution numbers to identify each budget.*

Funding Title:	City of Kenmore	Funding Type:	Grant
Funding Effective Date:	07/01/2021	Funding Expiration Date:	06/30/2023

Funding Source:

Title:	Model Toxics Control Operating Account (MTCOA)
Fund:	
Type:	State
Funding Source %:	100%
Description:	Local Solid Waste Financial Assistance

Approved Indirect Costs Rate:	Approved State Indirect Rate: 30%
Recipient Match %:	25%
InKind Interlocal Allowed:	No
InKind Other Allowed:	No

Is this Funding Distribution used to match a federal grant? No

City of Kenmore	Task Total
CROP Recycling Operations	$ 70,220.00

Total: $ 70,220.00

Funding Distribution Summary

Recipient / Ecology Share

Funding Distribution Name	Recipient Match %	Recipient Share	Ecology Share	Total
City of Kenmore	25.00 %	$ 17,555.00	$ 52,665.00	$ 70,220.00
Total		**$ 17,555.00**	**$ 52,665.00**	**$ 70,220.00**

AGREEMENT SPECIFIC TERMS AND CONDITIONS

N/A

SPECIAL TERMS AND CONDITIONS

If the scope of this Agreement includes recycling activity managed or performed by the RECIPIENT at a recycling center (such as a transfer station or drop box location) or other locations, Ecology will not reimburse disposal costs for materials collected or advertised as collected for recycling/reuse or marketed for recycling/reuse under this Agreement, unless approved in writing by Ecology. RECIPIENT must immediately notify ECOLOGY when the RECIPIENT becomes aware that disposal of materials occurred or may occur due to the market conditions for recycled/reused materials. ECOLOGY may deny new costs or require repayment of costs already reimbursed or remove the task from the Agreement or terminate the Agreement.

Ecology will conduct a risk assessment of all Local Solid Waste Financial Assistance recipients. The level of risk determines the level of oversight required by Ecology throughout the biennium. If the RECIPIENT's performance or project circumstances change, Ecology may reassess risk and notify the RECIPIENT of any changes to administrative requirements.

RECIPIENT shall update the Spending Plan and Outcomes Data Collection form at least quarterly. The Spending Plan and Outcomes Data Collection form must be completed concurrent with the submittal of each payment Request/Progress Report. RECIPIENT shall report outcomes in a manner consistent with instructions in the Local Solid Waste Financial Assistance guidelines.

RECIPIENT must submit within thirty (30) days after the expiration date of this Agreement, all financial (including payment requests), performance, and other reports required by this Agreement. Ecology shall have the right to deny reimbursement of payment requests received after this date.

GENERAL FEDERAL CONDITIONS

If a portion or all of the funds for this agreement are provided through federal funding sources or this agreement is used to match a federal grant award, the following terms and conditions apply to you.

A. CERTIFICATION REGARDING SUSPENSION, DEBARMENT, INELIGIBILITY OR VOLUNTARY EXCLUSION:

1. The RECIPIENT/CONTRACTOR, by signing this agreement, certifies that it is not suspended, debarred, proposed for debarment, declared ineligible or otherwise excluded from contracting with the federal government, or from receiving contracts paid for with federal funds. If the RECIPIENT/CONTRACTOR is unable to certify to the statements

contained in the certification, they must provide an explanation as to why they cannot.

2. The RECIPIENT/CONTRACTOR shall provide immediate written notice to ECOLOGY if at any time the RECIPIENT/CONTRACTOR learns that its certification was erroneous when submitted or had become erroneous by reason of changed circumstances.
3. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact ECOLOGY for assistance in obtaining a copy of those regulations.
4. The RECIPIENT/CONTRACTOR agrees it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under the applicable Code of Federal Regulations, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction.
5. The RECIPIENT/CONTRACTOR further agrees by signing this agreement, that it will include this clause titled "CERTIFICATION REGARDING SUSPENSION, DEBARMENT, INELIGIBILITY OR VOLUNTARY EXCLUSION" without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
6. Pursuant to 2CFR180.330, the RECIPIENT/CONTRACTOR is responsible for ensuring that any lower tier covered transaction complies with certification of suspension and debarment requirements.
7. RECIPIENT/CONTRACTOR acknowledges that failing to disclose the information required in the Code of Federal Regulations may result in the delay or negation of this funding agreement, or pursuance of legal remedies, including suspension and debarment.
8. RECIPIENT/CONTRACTOR agrees to keep proof in its agreement file, that it, and all lower tier recipients or contractors, are not suspended or debarred, and will make this proof available to ECOLOGY before requests for reimbursements will be approved for payment. RECIPIENT/CONTRACTOR must run a search in <http://www.sam.gov> and print a copy of completed searches to document proof of compliance.

B. FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT (FFATA) REPORTING REQUIREMENTS:

CONTRACTOR/RECIPIENT must complete the FFATA Data Collection Form (ECY 070-395) and return it with the signed agreement to ECOLOGY.

Any CONTRACTOR/RECIPIENT that meets each of the criteria below must report compensation for its five top executives using the FFATA Data Collection Form.

- Receives more than $25,000 in federal funds under this award.
- Receives more than 80 percent of its annual gross revenues from federal funds.
- Receives more than $25,000,000 in annual federal funds.

Ecology will not pay any invoices until it has received a completed and signed FFATA Data Collection Form. Ecology is required to report the FFATA information for federally funded agreements, including the required DUNS number, at www.fsrs.gov <http://www.fsrs.gov/> within 30 days of agreement signature. The FFATA information will be available to the public at www.usaspending.gov <http://www.usaspending.gov/>.

For more details on FFATA requirements, see www.fsrs.gov <http://www.fsrs.gov/>.

C. FEDERAL FUNDING PROHIBITION ON CERTAIN TELECOMMUNICATIONS OR VIDEO SURVEILLANCE

SERVICES OR EQUIPMENT:

As required by 2 CFR 200.216, federal grant or loan recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

1. Procure or obtain;
2. Extend or renew a contract to procure or obtain; or
3. Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that use covered telecommunications equipment, video surveillance services or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232 <https://www.govinfo.gov/content/pkg/PLAW-115publ232/pdf/PLAW-115publ232.pdf>, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

Recipients, subrecipients, and borrowers also may not use federal funds to purchase certain prohibited equipment, systems, or services, including equipment, systems, or services produced or provided by entities identified in section 889, are recorded in the System for Award Management (SAM) <https://sam.gov/SAM/> exclusion list.

GENERAL TERMS AND CONDITIONS

Pertaining to Grant and Loan Agreements With the state of Washington, Department of Ecology

GENERAL TERMS AND CONDITIONS
For DEPARTMENT OF ECOLOGY GRANTS and LOANS
06/24/2021 Version

1. ADMINISTRATIVE REQUIREMENTS

a) RECIPIENT shall follow the "Administrative Requirements for Recipients of Ecology Grants and Loans – EAGL Edition." (https://fortress.wa.gov/ecy/publications/SummaryPages/1701004.html)

b) RECIPIENT shall complete all activities funded by this Agreement and be fully responsible for the proper management of all funds and resources made available under this Agreement.

c) RECIPIENT agrees to take complete responsibility for all actions taken under this Agreement, including ensuring all subgrantees and contractors comply with the terms and conditions of this Agreement. ECOLOGY reserves the right to request proof of compliance by subgrantees and contractors.

d) RECIPIENT's activities under this Agreement shall be subject to the review and approval by ECOLOGY for the extent and character of all work and services.

2. AMENDMENTS AND MODIFICATIONS

This Agreement may be altered, amended, or waived only by a written amendment executed by both parties. No subsequent modification(s) or amendment(s) of this Agreement will be of any force or effect unless in writing and signed by authorized representatives of both parties. ECOLOGY and the RECIPIENT may change their respective staff contacts and administrative information without the concurrence of either party.

3. ACCESSIBILITY REQUIREMENTS FOR COVERED TECHNOLOGY

The RECIPIENT must comply with the Washington State Office of the Chief Information Officer, OCIO Policy no. 188, Accessibility (https://ocio.wa.gov/policy/accessibility) as it relates to "covered technology." This requirement applies to all products supplied under the Agreement, providing equal access to information technology by individuals with disabilities, including and not limited to web sites/pages, web-based applications, software systems, video and audio content, and electronic documents intended for publishing on Ecology's public web site.

4. ARCHAEOLOGICAL AND CULTURAL RESOURCES

RECIPIENT shall take all reasonable action to avoid, minimize, or mitigate adverse effects to archaeological and historic archaeological sites, historic buildings/structures, traditional cultural places, sacred sites, or other cultural resources, hereby referred to as Cultural Resources.

The RECIPIENT must agree to hold harmless ECOLOGY in relation to any claim related to Cultural Resources discovered, disturbed, or damaged due to the RECIPIENT's project funded under this Agreement.

RECIPIENT shall:

a) Contact the ECOLOGY Program issuing the grant or loan to discuss any Cultural Resources requirements for their project:

• Cultural Resource Consultation and Review should be initiated early in the project planning process and must be completed prior to expenditure of Agreement funds as required by applicable State and Federal requirements.

* For state funded construction, demolition, or land acquisitions, comply with Governor Executive Order 21-02, Archaeological and Cultural Resources.

• For projects with any federal involvement, comply with the National Historic Preservation Act of 1966 (Section 106).
b) If required by the ECOLOGY Program, submit an Inadvertent Discovery Plan (IDP) to ECOLOGY prior to implementing any project that involves field activities. ECOLOGY will provide the IDP form.
RECIPIENT shall:
• Keep the IDP at the project site.
• Make the IDP readily available to anyone working at the project site.
• Discuss the IDP with staff, volunteers, and contractors working at the project site.
• Implement the IDP when Cultural Resources or human remains are found at the project site.
c) If any Cultural Resources are found while conducting work under this Agreement, follow the protocol outlined in the project IDP.
• Immediately stop work and notify the ECOLOGY Program, who will notify the Department of Archaeology and Historic Preservation at (360) 586-3065, any affected Tribe, and the local government.
d) If any human remains are found while conducting work under this Agreement, follow the protocol outlined in the project IDP.
• Immediately stop work and notify the local Law Enforcement Agency or Medical Examiner/Coroner's Office, the Department of Archaeology and Historic Preservation at (360) 790-1633, and then the ECOLOGY Program.
e) Comply with RCW 27.53, RCW 27.44, and RCW 68.50.645, and all other applicable local, state, and federal laws protecting Cultural Resources and human remains.

5. ASSIGNMENT
No right or claim of the RECIPIENT arising under this Agreement shall be transferred or assigned by the RECIPIENT.

6. COMMUNICATION
RECIPIENT shall make every effort to maintain effective communications with the RECIPIENT's designees, ECOLOGY, all affected local, state, or federal jurisdictions, and any interested individuals or groups.

7. COMPENSATION
a) Any work performed prior to effective date of this Agreement will be at the sole expense and risk of the RECIPIENT. ECOLOGY must sign the Agreement before any payment requests can be submitted.
b) Payments will be made on a reimbursable basis for approved and completed work as specified in this Agreement.
c) RECIPIENT is responsible to determine if costs are eligible. Any questions regarding eligibility should be clarified with ECOLOGY prior to incurring costs. Costs that are conditionally eligible require approval by ECOLOGY prior to expenditure.
d) RECIPIENT shall not invoice more than once per month unless agreed on by ECOLOGY.
e) ECOLOGY will not process payment requests without the proper reimbursement forms, Progress Report and supporting documentation. ECOLOGY will provide instructions for submitting payment requests.
f) ECOLOGY will pay the RECIPIENT thirty (30) days after receipt of a properly completed request for payment.
g) RECIPIENT will receive payment through Washington State's Office of Financial Management's Statewide Payee Desk. To receive payment you must register as a statewide vendor by submitting a statewide vendor registration form and an IRS W-9 form at website, https://ofm.wa.gov/it-systems/statewide-vendorpayee-services. If you have questions about the vendor registration process, you can contact Statewide Payee Help Desk at (360) 407-8180 or email PayeeRegistration@ofm.wa.gov.
h) ECOLOGY may, at its sole discretion, withhold payments claimed by the RECIPIENT if the RECIPIENT fails to satisfactorily comply with any term or condition of this Agreement.
i) Monies withheld by ECOLOGY may be paid to the RECIPIENT when the work described herein, or a portion thereof, has been completed if, at ECOLOGY's sole discretion, such payment is reasonable and approved according to this Agreement, as appropriate, or upon completion of an audit as specified herein.

j) RECIPIENT must submit within thirty (30) days after the expiration date of this Agreement, all financial, performance, and other reports required by this Agreement. Failure to comply may result in delayed reimbursement.

8. COMPLIANCE WITH ALL LAWS

RECIPIENT agrees to comply fully with all applicable federal, state and local laws, orders, regulations, and permits related to this Agreement, including but not limited to:

a) RECIPIENT agrees to comply with all applicable laws, regulations, and policies of the United States and the State of Washington which affect wages and job safety.

b) RECIPIENT agrees to be bound by all applicable federal and state laws, regulations, and policies against discrimination.

c) RECIPIENT certifies full compliance with all applicable state industrial insurance requirements.

d) RECIPIENT agrees to secure and provide assurance to ECOLOGY that all the necessary approvals and permits required by authorities having jurisdiction over the project are obtained. RECIPIENT must include time in their project timeline for the permit and approval processes.

ECOLOGY shall have the right to immediately terminate for cause this Agreement as provided herein if the RECIPIENT fails to comply with above requirements.

If any provision of this Agreement violates any statute or rule of law of the state of Washington, it is considered modified to conform to that statute or rule of law.

9. CONFLICT OF INTEREST

RECIPIENT and ECOLOGY agree that any officer, member, agent, or employee, who exercises any function or responsibility in the review, approval, or carrying out of this Agreement, shall not have any personal or financial interest, direct or indirect, nor affect the interest of any corporation, partnership, or association in which he/she is a part, in this Agreement or the proceeds thereof.

10. CONTRACTING FOR GOODS AND SERVICES

RECIPIENT may contract to buy goods or services related to its performance under this Agreement. RECIPIENT shall award all contracts for construction, purchase of goods, equipment, services, and professional architectural and engineering services through a competitive process, if required by State law. RECIPIENT is required to follow procurement procedures that ensure legal, fair, and open competition.

RECIPIENT must have a standard procurement process or follow current state procurement procedures. RECIPIENT may be required to provide written certification that they have followed their standard procurement procedures and applicable state law in awarding contracts under this Agreement.

ECOLOGY reserves the right to inspect and request copies of all procurement documentation, and review procurement practices related to this Agreement. Any costs incurred as a result of procurement practices not in compliance with state procurement law or the RECIPIENT's normal procedures may be disallowed at ECOLOGY's sole discretion.

11. DISPUTES

When there is a dispute with regard to the extent and character of the work, or any other matter related to this Agreement the determination of ECOLOGY will govern, although the RECIPIENT shall have the right to appeal decisions as provided for below:

a) RECIPIENT notifies the funding program of an appeal request.

b) Appeal request must be in writing and state the disputed issue(s).

c) RECIPIENT has the opportunity to be heard and offer evidence in support of its appeal.

d) ECOLOGY reviews the RECIPIENT's appeal.

e) ECOLOGY sends a written answer within ten (10) business days, unless more time is needed, after concluding the review.

The decision of ECOLOGY from an appeal will be final and conclusive, unless within thirty (30) days from the date of such decision, the RECIPIENT furnishes to the Director of ECOLOGY a written appeal. The decision of the Director or duly authorized representative will be final and conclusive.
The parties agree that this dispute process will precede any action in a judicial or quasi-judicial tribunal.
Appeals of the Director's decision will be brought in the Superior Court of Thurston County. Review of the Director's decision will not be taken to Environmental and Land Use Hearings Office.
Pending final decision of a dispute, the RECIPIENT agrees to proceed diligently with the performance of this Agreement and in accordance with the decision rendered.
Nothing in this Agreement will be construed to limit the parties' choice of another mutually acceptable method, in addition to the dispute resolution procedure outlined above.

12. ENVIRONMENTAL DATA STANDARDS

a) RECIPIENT shall prepare a Quality Assurance Project Plan (QAPP) for a project that collects or uses environmental measurement data. RECIPIENTS unsure about whether a QAPP is required for their project shall contact the ECOLOGY Program issuing the grant or loan. If a QAPP is required, the RECIPIENT shall:

- Use ECOLOGY's QAPP Template/Checklist provided by the ECOLOGY, unless ECOLOGY Quality Assurance (QA) officer or the Program QA coordinator instructs otherwise.
- Follow ECOLOGY's Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies, July 2004 (Ecology Publication No. 04-03-030).
- Submit the QAPP to ECOLOGY for review and approval before the start of the work.

b) RECIPIENT shall submit environmental data that was collected on a project to ECOLOGY using the Environmental Information Management system (EIM), unless the ECOLOGY Program instructs otherwise. The RECIPIENT must confirm with ECOLOGY that complete and correct data was successfully loaded into EIM, find instructions at: http://www.ecy.wa.gov/eim.

c) RECIPIENT shall follow ECOLOGY's data standards when Geographic Information System (GIS) data is collected and processed. Guidelines for Creating and Accessing GIS Data are available at: https://ecology.wa.gov/Research-Data/Data-resources/Geographic-Information-Systems-GIS/Standards. RECIPIENT, when requested by ECOLOGY, shall provide copies to ECOLOGY of all final GIS data layers, imagery, related tables, raw data collection files, map products, and all metadata and project documentation.

13. GOVERNING LAW

This Agreement will be governed by the laws of the State of Washington, and the venue of any action brought hereunder will be in the Superior Court of Thurston County.

14. INDEMNIFICATION

ECOLOGY will in no way be held responsible for payment of salaries, consultant's fees, and other costs related to the project described herein, except as provided in the Scope of Work.
To the extent that the Constitution and laws of the State of Washington permit, each party will indemnify and hold the other harmless from and against any liability for any or all injuries to persons or property arising from the negligent act or omission of that party or that party's agents or employees arising out of this Agreement.

15. INDEPENDENT STATUS

The employees, volunteers, or agents of each party who are engaged in the performance of this Agreement will continue to be employees, volunteers, or agents of that party and will not for any purpose be employees, volunteers, or agents of the other party.

16. KICKBACKS

RECIPIENT is prohibited from inducing by any means any person employed or otherwise involved in this Agreement to give up any part of the compensation to which he/she is otherwise entitled to or receive any fee, commission, or gift in return for award of a subcontract hereunder.

17. MINORITY AND WOMEN'S BUSINESS ENTERPRISES (MWBE)

RECIPIENT is encouraged to solicit and recruit, to the extent possible, certified minority-owned (MBE) and women-owned (WBE) businesses in purchases and contracts initiated under this Agreement.

Contract awards or rejections cannot be made based on MWBE participation; however, the RECIPIENT is encouraged to take the following actions, when possible, in any procurement under this Agreement:

a) Include qualified minority and women's businesses on solicitation lists whenever they are potential sources of goods or services.

b) Divide the total requirements, when economically feasible, into smaller tasks or quantities, to permit maximum participation by qualified minority and women's businesses.

c) Establish delivery schedules, where work requirements permit, which will encourage participation of qualified minority and women's businesses.

d) Use the services and assistance of the Washington State Office of Minority and Women's Business Enterprises (OMWBE) (866-208-1064) and the Office of Minority Business Enterprises of the U.S. Department of Commerce, as appropriate.

18. ORDER OF PRECEDENCE

In the event of inconsistency in this Agreement, unless otherwise provided herein, the inconsistency shall be resolved by giving precedence in the following order: (a) applicable federal and state statutes and regulations; (b) The Agreement; (c) Scope of Work; (d) Special Terms and Conditions; (e) Any provisions or terms incorporated herein by reference, including the "Administrative Requirements for Recipients of Ecology Grants and Loans"; (f) Ecology Funding Program Guidelines; and (g) General Terms and Conditions.

19. PRESENTATION AND PROMOTIONAL MATERIALS

ECOLOGY reserves the right to approve RECIPIENT's communication documents and materials related to the fulfillment of this Agreement:

a) If requested, RECIPIENT shall provide a draft copy to ECOLOGY for review and approval ten (10) business days prior to production and distribution.

b) RECIPIENT shall include time for ECOLOGY's review and approval process in their project timeline.

c) If requested, RECIPIENT shall provide ECOLOGY two (2) final copies and an electronic copy of any tangible products developed.

Copies include any printed materials, and all tangible products developed such as brochures, manuals, pamphlets, videos, audio tapes, CDs, curriculum, posters, media announcements, or gadgets with a message, such as a refrigerator magnet, and any online communications, such as web pages, blogs, and twitter campaigns. If it is not practical to provide a copy, then the RECIPIENT shall provide a description (photographs, drawings, printouts, etc.) that best represents the item.

Any communications intended for public distribution that uses ECOLOGY's logo shall comply with ECOLOGY's graphic requirements and any additional requirements specified in this Agreement. Before the use of ECOLOGY's logo contact ECOLOGY for guidelines.

RECIPIENT shall acknowledge in the communications that funding was provided by ECOLOGY.

20. PROGRESS REPORTING

a) RECIPIENT must satisfactorily demonstrate the timely use of funds by submitting payment requests and progress reports to ECOLOGY. ECOLOGY reserves the right to amend or terminate this Agreement if the RECIPIENT does not document timely use of funds.
b) RECIPIENT must submit a progress report with each payment request. Payment requests will not be processed without a progress report. ECOLOGY will define the elements and frequency of progress reports.
c) RECIPIENT shall use ECOLOGY's provided progress report format.
d) Quarterly progress reports will cover the periods from January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31. Reports shall be submitted within thirty (30) days after the end of the quarter being reported.
e) RECIPIENT must submit within thirty (30) days of the expiration date of the project, unless an extension has been approved by ECOLOGY, all financial, performance, and other reports required by the Agreement and funding program guidelines. RECIPIENT shall use the ECOLOGY provided closeout report format.

21. PROPERTY RIGHTS

a) Copyrights and Patents. When the RECIPIENT creates any copyrightable materials or invents any patentable property under this Agreement, the RECIPIENT may copyright or patent the same but ECOLOGY retains a royalty free, nonexclusive, and irrevocable license to reproduce, publish, recover, or otherwise use the material(s) or property, and to authorize others to use the same for federal, state, or local government purposes.
b) Publications. When the RECIPIENT or persons employed by the RECIPIENT use or publish ECOLOGY information; present papers, lectures, or seminars involving information supplied by ECOLOGY; or use logos, reports, maps, or other data in printed reports, signs, brochures, pamphlets, etc., appropriate credit shall be given to ECOLOGY.
c) Presentation and Promotional Materials. ECOLOGY shall have the right to use or reproduce any printed or graphic materials produced in fulfillment of this Agreement, in any manner ECOLOGY deems appropriate. ECOLOGY shall acknowledge the RECIPIENT as the sole copyright owner in every use or reproduction of the materials.
d) Tangible Property Rights. ECOLOGY's current edition of "Administrative Requirements for Recipients of Ecology Grants and Loans," shall control the use and disposition of all real and personal property purchased wholly or in part with funds furnished by ECOLOGY in the absence of state and federal statutes, regulations, or policies to the contrary, or upon specific instructions with respect thereto in this Agreement.
e) Personal Property Furnished by ECOLOGY. When ECOLOGY provides personal property directly to the RECIPIENT for use in performance of the project, it shall be returned to ECOLOGY prior to final payment by ECOLOGY. If said property is lost, stolen, or damaged while in the RECIPIENT's possession, then ECOLOGY shall be reimbursed in cash or by setoff by the RECIPIENT for the fair market value of such property.
f) Acquisition Projects. The following provisions shall apply if the project covered by this Agreement includes funds for the acquisition of land or facilities:
1. RECIPIENT shall establish that the cost is fair value and reasonable prior to disbursement of funds provided for in this Agreement.
2. RECIPIENT shall provide satisfactory evidence of title or ability to acquire title for each parcel prior to disbursement of funds provided by this Agreement. Such evidence may include title insurance policies, Torrens certificates, or abstracts, and attorney's opinions establishing that the land is free from any impediment, lien, or claim which would impair the uses intended by this Agreement.
g) Conversions. Regardless of the Agreement expiration date, the RECIPIENT shall not at any time convert any equipment, property, or facility acquired or developed under this Agreement to uses other than those for which assistance was originally approved without prior written approval of ECOLOGY. Such approval may be conditioned upon payment to ECOLOGY of that portion of the proceeds of the sale, lease, or other conversion or encumbrance which monies granted pursuant to this Agreement bear to the total acquisition, purchase, or construction costs of such property.

22. RECORDS, AUDITS, AND INSPECTIONS

RECIPIENT shall maintain complete program and financial records relating to this Agreement, including any engineering documentation and field inspection reports of all construction work accomplished.

All records shall:

a) Be kept in a manner which provides an audit trail for all expenditures.

b) Be kept in a common file to facilitate audits and inspections.

c) Clearly indicate total receipts and expenditures related to this Agreement.

d) Be open for audit or inspection by ECOLOGY, or by any duly authorized audit representative of the State of Washington, for a period of at least three (3) years after the final grant payment or loan repayment, or any dispute resolution hereunder.

RECIPIENT shall provide clarification and make necessary adjustments if any audits or inspections identify discrepancies in the records.

ECOLOGY reserves the right to audit, or have a designated third party audit, applicable records to ensure that the state has been properly invoiced. Any remedies and penalties allowed by law to recover monies determined owed will be enforced. Repetitive instances of incorrect invoicing or inadequate records may be considered cause for termination.

All work performed under this Agreement and any property and equipment purchased shall be made available to ECOLOGY and to any authorized state, federal or local representative for inspection at any time during the course of this Agreement and for at least three (3) years following grant or loan termination or dispute resolution hereunder.

RECIPIENT shall provide right of access to ECOLOGY, or any other authorized representative, at all reasonable times, in order to monitor and evaluate performance, compliance, and any other conditions under this Agreement.

23. RECOVERY OF FUNDS

The right of the RECIPIENT to retain monies received as reimbursement payments is contingent upon satisfactory performance of this Agreement and completion of the work described in the Scope of Work.

All payments to the RECIPIENT are subject to approval and audit by ECOLOGY, and any unauthorized expenditure(s) or unallowable cost charged to this Agreement shall be refunded to ECOLOGY by the RECIPIENT.

RECIPIENT shall refund to ECOLOGY the full amount of any erroneous payment or overpayment under this Agreement.

RECIPIENT shall refund by check payable to ECOLOGY the amount of any such reduction of payments or repayments within thirty (30) days of a written notice. Interest will accrue at the rate of twelve percent (12%) per year from the time ECOLOGY demands repayment of funds.

Any property acquired under this Agreement, at the option of ECOLOGY, may become ECOLOGY's property and the RECIPIENT's liability to repay monies will be reduced by an amount reflecting the fair value of such property.

24. SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, and to this end the provisions of this Agreement are declared to be severable.

25. STATE ENVIRONMENTAL POLICY ACT (SEPA)

RECIPIENT must demonstrate to ECOLOGY's satisfaction that compliance with the requirements of the State Environmental Policy Act (Chapter 43.21C RCW and Chapter 197-11 WAC) have been or will be met. Any reimbursements are subject to this provision.

26. SUSPENSION

When in the best interest of ECOLOGY, ECOLOGY may at any time, and without cause, suspend this Agreement or any portion thereof for a temporary period by written notice from ECOLOGY to the RECIPIENT. RECIPIENT shall resume performance on the next business day following the suspension period unless another day is specified by ECOLOGY.

27. SUSTAINABLE PRACTICES

In order to sustain Washington's natural resources and ecosystems, the RECIPIENT is fully encouraged to implement sustainable practices and to purchase environmentally preferable products under this Agreement.

a) Sustainable practices may include such activities as: use of clean energy, use of double-sided printing, hosting low impact meetings, and setting up recycling and composting programs.

b) Purchasing may include such items as: sustainably produced products and services, EPEAT registered computers and imaging equipment, independently certified green cleaning products, remanufactured toner cartridges, products with reduced packaging, office products that are refillable, rechargeable, and recyclable, 100% post-consumer recycled paper, and toxic free products.

For more suggestions visit ECOLOGY's web page, Green Purchasing, https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Sustainable-purchasing.

28. TERMINATION

a) For Cause

ECOLOGY may terminate for cause this Agreement with a seven (7) calendar days prior written notification to the RECIPIENT, at the sole discretion of ECOLOGY, for failing to perform an Agreement requirement or for a material breach of any term or condition. If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

Failure to Commence Work. ECOLOGY reserves the right to terminate this Agreement if RECIPIENT fails to commence work on the project funded within four (4) months after the effective date of this Agreement, or by any date mutually agreed upon in writing for commencement of work, or the time period defined within the Scope of Work.

Non-Performance. The obligation of ECOLOGY to the RECIPIENT is contingent upon satisfactory performance by the RECIPIENT of all of its obligations under this Agreement. In the event the RECIPIENT unjustifiably fails, in the opinion of ECOLOGY, to perform any obligation required of it by this Agreement, ECOLOGY may refuse to pay any further funds, terminate in whole or in part this Agreement, and exercise any other rights under this Agreement.

Despite the above, the RECIPIENT shall not be relieved of any liability to ECOLOGY for damages sustained by ECOLOGY and the State of Washington because of any breach of this Agreement by the RECIPIENT. ECOLOGY may withhold payments for the purpose of setoff until such time as the exact amount of damages due ECOLOGY from the RECIPIENT is determined.

b) For Convenience

ECOLOGY may terminate for convenience this Agreement, in whole or in part, for any reason when it is the best interest of ECOLOGY, with a thirty (30) calendar days prior written notification to the RECIPIENT, except as noted below. If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

Non-Allocation of Funds. ECOLOGY's ability to make payments is contingent on availability of funding. In the event funding from state, federal or other sources is withdrawn, reduced, or limited in any way after the effective date and prior to the completion or expiration date of this Agreement, ECOLOGY, at its sole discretion, may elect to terminate the Agreement, in whole or part, or renegotiate the Agreement, subject to new funding limitations or conditions. ECOLOGY may also elect to suspend performance of the Agreement until ECOLOGY determines the funding insufficiency is resolved. ECOLOGY may exercise any of these options with no notification or restrictions, although ECOLOGY will make a reasonable attempt to provide notice.

In the event of termination or suspension, ECOLOGY will reimburse eligible costs incurred by the RECIPIENT through the effective date of termination or suspension. Reimbursed costs must be agreed to by ECOLOGY and the RECIPIENT. In no

event shall ECOLOGY's reimbursement exceed ECOLOGY's total responsibility under the Agreement and any amendments. If payments have been discontinued by ECOLOGY due to unavailable funds, the RECIPIENT shall not be obligated to repay monies which had been paid to the RECIPIENT prior to such termination.
RECIPIENT's obligation to continue or complete the work described in this Agreement shall be contingent upon availability of funds by the RECIPIENT's governing body.

c) By Mutual Agreement
ECOLOGY and the RECIPIENT may terminate this Agreement, in whole or in part, at any time, by mutual written agreement.

d) In Event of Termination
All finished or unfinished documents, data studies, surveys, drawings, maps, models, photographs, reports or other materials prepared by the RECIPIENT under this Agreement, at the option of ECOLOGY, will become property of ECOLOGY and the RECIPIENT shall be entitled to receive just and equitable compensation for any satisfactory work completed on such documents and other materials.
Nothing contained herein shall preclude ECOLOGY from demanding repayment of all funds paid to the RECIPIENT in accordance with Recovery of Funds, identified herein.

29. THIRD PARTY BENEFICIARY
RECIPIENT shall ensure that in all subcontracts entered into by the RECIPIENT pursuant to this Agreement, the state of Washington is named as an express third party beneficiary of such subcontracts with full rights as such.

30. WAIVER
Waiver of a default or breach of any provision of this Agreement is not a waiver of any subsequent default or breach, and will not be construed as a modification of the terms of this Agreement unless stated as such in writing by the authorized representative of ECOLOGY.

End of General Terms and Conditions

WA DOE Solid Waste Management Local Solid Waste Financial Assistance Agreement

Final Audit Report 2021-10-27

Created:	2021-10-27
By:	Jennifer Gordon (jgordon@kenmorewa.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAAIC4UdV2sv7Bz-7Z1F7rj2gBg8QgeVYRA

"WA DOE Solid Waste Management Local Solid Waste Financia l Assistance Agreement" History

Document created by Jennifer Gordon (jgordon@kenmorewa.gov)
2021-10-27 - 3:23:12 PM GMT- IP address: 67.170.119.181

Document emailed to Rob Karlinsey (rkarlinsey@kenmorewa.gov) for signature
2021-10-27 - 4:46:40 PM GMT

Email viewed by Rob Karlinsey (rkarlinsey@kenmorewa.gov)
2021-10-27 - 9:45:52 PM GMT- IP address: 24.22.167.111

Document e-signed by Rob Karlinsey (rkarlinsey@kenmorewa.gov)
Signature Date: 2021-10-27 - 9:46:22 PM GMT - Time Source: server- IP address: 24.22.167.111

Agreement completed.
2021-10-27 - 9:46:22 PM GMT

POWERED BY Adobe Sign

City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: **Recycling Event Project Management for 2022 and 2023**	**For Council Meeting Agenda of: February 28, 2022** **Department: Public Works** **Prepared by: Jennifer Gordon, Public Works Operations Manager**
Proposed Council Action/Motion: **Authorize City Manager to Execute Contract No. 22-C2770 with Olympic Environmental Resources in the amount not to exceed $ 122, 500.00 for the management of residential recycling events and administration of the supporting grant funds.**	**Initial & Date** **Approved by Department Head: JG 2/11/22** **Approved by City Attorney: DR 2/17/22** **Approved by Finance Director: LS 2/11/22** **Approved by City Manager: RK 2/17/22** **Exhibits/Attachments:** Contract No. 22-C2770

INFORMATION/BACKGROUND:

The City has been receiving grant funds from the Seattle-King County Health Department, King County Solid Waste Division, and the Washington State Department of Ecology Grant for many years and has used those funds to host two residential recycling events annually. The City's events have always been extremely popular and very successful at getting many recyclables out of the waste stream. It had been becoming increasingly difficult to continue to provide the community with the same level of service as the availability of grant funding has been on a steady decline. As a result of dwindling funds, the City has had to find creative ways to get the most out of the funds for our community. During the last few grant cycles, the City has been partnering with the City of Lake Forest Park, combining grant funds to host recycling events that serve both communities. We have also had to eliminate some of the recycling options offered in the past and we were no longer able to provide the option for residents to purchase rain barrels and/or compost bins at a discounted rate.

The good news is that grant funds have increased for the 2022-2023 grant cycle but due to inflation and the current economic status, the cost of doing business has also increased. We will continue to partner with the City of Lake Forest Park for our residential recycling events but are hopeful that we will be able to increase the options for types of materials collected as well as offer rain barrels and/or compost bins to our residents.

Olympic Environmental Resources (OER) will continue to provide assistance with grant administration, reimbursement requests and coordination with the City of Lake Forest Park for our residential recycling events.

The work performed by OER consists of the planning, assisting with grant applications, implementation, and reporting requirements necessary to fulfill the different grant requirements. All costs incurred by OER associated with the annual recycling collection events are completely covered by grant funds. If grant funds are not available as estimated, services offered at the recycling event will be reduced. The table below is the breakdown of current funding sources.

2022-2023 Ecology CPG Grant (through June 2023)	$ 42,329.00
2023 Ecology CPG Grant (July-December 2023 estimate)	$ 15,000.00
2022 King County Solid Waste Division WRR Grant	$ 20,276.00
2023 King County Solid Waste Division WRR Grant (estimate)	$ 16,000.00
2022 King County Health Department Grant	$ 11,740.15
2023 King County Health Department Grant (estimate)	$ 12,000.00
Contingency in case additional grant funds become available	$ 5,000.00
2022-2023 Total	**$ 122, 345.15**

FISCAL CONSIDERATION:

All work associated with the annual residential recycling events are 100% grant funded.

COUNCIL GOAL/BUDGET OBJECTIVE BEING ADDRESSED:

- Develop a Kenmore Climate Plan and promote Environmental Stewardship, including water, air, forest, and habitat restoration
- Develop and Implement a Diversity, Equity, and Inclusion Policy and Program
- Implement the Economic Development Plan
- Protects natural and environmentally sensitive areas, significant open spaces, trees, and air and water quality.
- Has an economic base that provides a range of goods and services, offers quality employment opportunities, and supports local business.
- Supports the safety, health, and welfare to all of its citizens.

City of Kenmore Contract #: 22-C2770
Authorized Amount: $122,350.00
Date Start: January 1, 2022
Date End: December 31, 2023

CONSULTANT SERVICES AGREEMENT

THIS AGREEMENT is entered into by and between the City of Kenmore, Washington, a municipal corporation ("City") and Olympic Environmental Resources, ("Consultant") organized under the laws of the State of Washington, located and doing business at 4717 SW Walker St., Seattle, WA 98116, Ph. (206) 938-8262 Contact: Paul Devine (hereinafter the "Consultant").

RECITALS:

WHEREAS, the City desires to have certain services performed for its residents; and

WHEREAS, the City has selected the Consultant to perform such services pursuant to certain terms and conditions; and

NOW, THEREFORE, in consideration of the mutual benefits and conditions set forth below, the parties agree as follows:

AGREEMENT:

1. <u>Scope of Services to be Performed by Consultant</u>.
The Consultant shall perform those services described on Exhibit "A," which is attached hereto and incorporated herein by this reference as if set forth in full. In performing such services, the Consultant shall at all times comply with all federal, state, and local statutes, rules and ordinances applicable to the performance of such services and the handling of any funds used in connection therewith. The Consultant shall perform the services diligently and completely and in accordance with professional standards of conduct and performance. The Consultant shall request and obtain prior written approval from the City if the scope or schedule is to be modified in any way.

2. <u>Compensation and Method of Payment</u>. The City shall pay the Consultant for services rendered according to the rates and methods set forth below. The Consultant shall request payment for work performed using the billing invoice form at Exhibit "B."

[Check all applicable payment terms]

__ According to the rates set forth in Exhibit "C"

X A sum not to exceed One hundred twenty-two thousand three hundred fifty dollars ($122,350.00)
__ Other (describe): _____

The City shall pay the Consultant for services rendered within ten (10) days after City Council voucher approval. However, if the City objects to all or any portion of an invoice, it shall notify Consultant and reserves the option to only pay that portion of the invoice not in dispute. In that event, the Parties will immediately make every effort to settle the disputed portion.

The City further reserves the right to direct the Consultant's compensated services before reaching the maximum amount.

The Consultant shall complete and return to the City Exhibit "D," federal tax Form W-9, prior to or along with the first billing invoice.

3. <u>Duration of Agreement</u>. This Agreement shall be in full force and effect for a period commencing on January 1, 2022 and ending December 31, 2023 unless sooner terminated under the provisions of this Agreement. Time is of the essence of this Agreement in each and all of its provisions in which performance is required.

4. <u>Ownership and Use of Documents</u>.

A. *Ownership.* Any records, files, documents, drawings, specifications, data, or information, regardless of form or format, and all other materials produced by the Consultant in connection with the services provided to the City, shall be the property of the City whether the project for which they were created is executed or not.

B. *Records preservation.* Consultant understands that this Agreement is with a government agency and thus all records created or used in the course of Consultant's work for the City are considered "public records" and are subject to disclosure by the City under the Public Records Act, Chapter 42.56 RCW ("the Act"). Consultant agrees to safeguard and preserve records in accordance with the Act. The City may be required, upon request, to disclose the Agreement, and the documents and records submitted to the City by Consultant, unless an exemption under the Public Records Act applies. If the City receives a public records request and asks Consultant to search its files for responsive records, Consultant agrees to make a prompt and thorough search through its files for responsive records and to promptly turn over any responsive records to the City's public records officer at no cost to the City.

5. <u>Independent Consultant</u>. The parties intend that an independent contractor-client relationship will be created by this Agreement. As the Consultant is customarily engaged in an independently established trade which encompasses the specific service provided to the City hereunder, no agent, employee, representative or sub-consultant of the Consultant shall be or shall be deemed to be the employee, agent, representative or sub-consultant of the City. In the performance of the work, the Consultant is an independent contractor with the ability to control and direct the performance and details of the work, the City being interested only in the results obtained under this Agreement. None of the benefits provided by the City to its employees, including, but not limited to, compensation, insurance, and unemployment insurance are available from the City to the employees, agents, representatives, or sub-consultants of the Consultant. The City shall not be responsible for withholding or otherwise deducting federal income tax or social

security or contributing to the State Industrial Insurance Program, or otherwise assuming the duties of an employer with respect to the Consultant, or any employee of the Consultant. The Consultant will be solely and entirely responsible for its acts and for the acts of its agents, employees, representatives, and sub-consultants during the performance of this Agreement. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work that the Consultant performs hereunder.

6. **Indemnification**. Consultant shall defend, indemnify, and hold the City, its officers, officials, employees, agents, and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorneys' fees, arising out of or resulting from the acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence.

It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties.

The provisions of this section shall survive the expiration or termination of this Agreement.

7. **Insurance**. The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

A. *Minimum Scope of Insurance*. Consultant shall obtain insurance of the types described below:

i. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.

ii. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent Consultants and personal injury and advertising injury. The City shall be named as an insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.

iii. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

iv. Professional Liability insurance appropriate to the Consultant's profession.

B. *Minimum Amounts of Insurance.* Consultant shall maintain the following insurance limits:

i. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of $1,000,000 per accident.

ii. Commercial General Liability insurance shall be written with limits no less than $1,000,000 each occurrence, $2,000,000 general aggregate.

iii. Professional Liability insurance shall be written with limits no less than $1,000,000 per claim and $1,000,000 policy aggregate limit.

C. *Other Insurance Provision.* The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain, that they shall be primary insurance as respect the City. Any Insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

D. *Acceptability of Insurers*. Insurance is to be placed with insurers with a current A.M. Best rating of not less than A-VII.

E. *Verification of Coverage*. The Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work.

F. *Notice of Cancellation.* The Consultant shall provide the City with written notice of any policy cancellation, within two business days of their receipt of such notice.

G. *Failure to Maintain Insurance.* Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days' notice to the Consultant to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.

H. *No Limitation.* Consultant's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

8. <u>Record Keeping and Reporting</u>.

A. The Consultant shall maintain accounts and records, including personnel, property, financial, and programmatic records, which sufficiently and properly reflect all direct and indirect costs of any nature expended and services performed pursuant to this Agreement. The Consultant shall also maintain such other records as may be deemed necessary by the City to ensure proper accounting of all funds contributed by the City to the performance of this Agreement.

B. The foregoing records shall be maintained for a period of seven (7) years after termination of this Agreement unless permission to destroy them is granted by the Office of the Archivist in accordance with Chapter 40.14 RCW and by the City.

9. City's Right of Inspection and Audit.

A. Even though the Consultant is an independent contractor with the authority to control and direct the performance and details of the work authorized under this Agreement, the work must meet the approval of the City and shall be subject to the City's general right of inspection to secure the satisfactory completion thereof. The Consultant agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now effective or become applicable within the terms of this Agreement to the Consultant's business, equipment, and personnel engaged in operations covered by this Agreement or accruing out of the performance of such operations.

B. The records and documents with respect to all matters covered by this Agreement shall be subject at all times to inspection, review or audit by the City during the performance of this Agreement. All work products, data, studies, worksheets, models, reports, and other materials in support of the performance of the service, work products, or outcomes fulfilling the contractual obligations are the products of the City.

10. Consultant to Maintain Records to Support Independent Contractor Status. On the effective date of this Agreement (or shortly thereafter), the Consultant shall comply with all federal and state laws applicable to independent contractors including, but not limited to the maintenance of a separate set of books and records that reflect all items of income and expenses of the Consultant's business, pursuant to the Revised Code of Washington (RCW) Section 51.08.195, as required to show that the services performed by the Consultant under this Agreement shall not give rise to an employer-employee relationship between the parties which is subject to RCW Title 51, Industrial Insurance.

11. Work Performed at the Consultant's Risk. The Consultant shall take all precautions necessary and shall be responsible for the safety of its employees, agents, and sub-consultants in the performance of the work hereunder and shall utilize all protection necessary for that purpose. All work shall be done at the Consultant's own risk, and the Consultant shall be

responsible for any loss of or damage to materials, tools, or other articles used or held by the Consultant for use in connection with the work.

12. <u>Termination</u>.

A. The City reserves the right to terminate or suspend this Agreement at any time, with or without cause, upon seven (7) days' prior written notice. In the event of termination or suspension, all finished or unfinished documents, data, studies, worksheets, models, reports, or other materials prepared by the Consultant pursuant to this Agreement shall promptly be submitted to the City.

B. In the event this Agreement is terminated or suspended, the Consultant shall be entitled to payment for all services performed and reimbursable expenses incurred to the date of termination.

C. This Agreement may be canceled immediately if the Consultant's insurance coverage is canceled for any reason, or if the Consultant is unable to perform the services called for by this Agreement.

D. The Consultant reserves the right to terminate this Agreement with not less than fourteen (14) days written notice, or in the event that outstanding invoices are not paid within sixty (60) days.

E. This provision shall not prevent the City from seeking any legal remedies it may otherwise have for the violation or nonperformance of any provisions of this Agreement.

13. <u>Force Majeure</u>. Notwithstanding anything to the contrary in this Agreement, any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, acts of war, terrorist acts, inability to obtain services, labor, or materials or reasonable substitutes therefor, governmental actions, governmental laws, regulations or restrictions, civil commotions, Casualty, actual or threatened public health emergency (including, without limitation, epidemic, pandemic, famine, disease, plague, quarantine, and other significant public health risk), governmental edicts, actions, declarations or quarantines by a governmental entity or health organization, breaches in cybersecurity, and other causes beyond the reasonable control of the party obligated to perform, regardless of whether such other causes are (i) foreseeable or unforeseeable or (ii) related to the specifically enumerated events in this paragraph (collectively, a "**Force Majeure**"), shall excuse the performance of such party for a period equal to any such prevention, delay or stoppage. To the extent this Agreement specifies a time period for performance of an obligation of either party, that time period shall be extended by the period of any delay in such party's performance caused by a Force Majeure. Provided however, that the current COVID-19 pandemic shall not be considered a Force Majeure unless constraints on a Party's performance that result from the pandemic become substantially more onerous after the effective date of this Agreement.

14. <u>Discrimination Prohibited</u>. The Consultant shall not discriminate against any employee, applicant for employment, or any person seeking the services of the Consultant under this Agreement, on the basis of race, color, religion, creed, sex, sexual orientation, age, national

origin, marital status, presence of any sensory, mental or physical disability, or other circumstance prohibited by federal, State or local law or ordinance, except for a bona fide occupational qualification.

15. **Assignment and Subcontract**. The Consultant shall not assign or subcontract any portion of the services contemplated by this Agreement without the prior written consent of the City. Any assignment made without the prior approval of the City is void.

16. **Conflict of Interest**. The Consultant represents to the City that it has no conflict of interest in performing any of the services set forth in Exhibit "A." In the event that the Consultant is asked to perform services for a project with which it may have a conflict, Consultant will immediately disclose such conflict to the City.

17. **Confidentiality**. All information regarding the City obtained by the Consultant in performance of this Agreement shall be considered confidential. Breach of confidentiality by the Consultant shall be grounds for immediate termination.

18. **Non-Appropriation of Funds.** If sufficient funds are not appropriated or allocated for payment under this Agreement for any future fiscal period, the City will so notify the Consultant and shall not be obligated to make payments for services or amounts incurred after the end of the current fiscal period. This Agreement will terminate upon the completion of all remaining services for which funds are allocated. No penalty or expense shall accrue to the City in the event that the terms of the provision are effectuated.

19. **Entire Agreement**. This Agreement contains the entire agreement between the parties, and no other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or bind either of the parties. If there is a conflict between the terms and conditions of this Agreement and the attached exhibits, then the terms and conditions of this Agreement shall prevail over the exhibits. Either party may request changes to the Agreement. Changes which are mutually agreed upon shall be incorporated by written amendments to this Agreement.

20. **Notices**. All notices or other communications required or permitted under this Agreement shall be in writing and shall be (a) personally delivered, in which case the notice or communication shall be deemed given on the date of receipt at the office of the addressee; (b) sent by registered or certified mail, postage prepaid, return receipt requested, in which case the notice or communication shall be deemed given three (3) business days after the date of deposit in the United States mail; or (c) sent by overnight delivery using a nationally recognized overnight courier service, in which case the notice or communication shall be deemed given one business day after the date of deposit with such courier. In addition, all notices shall also be emailed, however, email does not substitute for an official notice. Notices shall be sent to the following addresses:

Notices to the City of Kenmore shall be sent to the following address:

City Clerk
City of Kenmore

18120 68th Ave. NE
Kenmore, Washington 98028-0607

Notices to the Consultant shall be sent to the following address:

_____

_____
Phone No.:_____
Email:_____

21. **Applicable Law; Venue; Attorneys' Fees**. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. In the event any suit, arbitration or other proceeding is instituted to enforce any term of this Agreement, the parties specifically understand and agree that venue shall be exclusively in King County, Washington. The prevailing party in any such action shall be entitled to its attorneys' fees and costs of suit, which shall be fixed by the judge hearing the case and such fee shall be included in the judgment.

22. **Compliance with Laws.** The Vendor agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now effective or in the future become applicable to Vendor's business, equipment, and personnel engaged in operations covered by this Agreement or accruing out of the performance of those operations.

23. **Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall constitute an original, and all of which will together constitute this one Agreement.

24. **Severability.** Any provision or part of this Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon the City and the Consultant, who agree that the Agreement shall be reformed to replace such stricken provision or part with a valid and enforceable provision that comes as close as reasonably possible to expressing the intent of the stricken provision.

IN WITNESS WHEREOF, the City and the Consultant have executed this Agreement as of the dates listed below.

CONSULTANT	**CITY OF KENMORE**
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

APPROVED AS TO FORM

_____
Kenmore City Attorney's Office

EXHIBIT A

<u>Scope of Services to be Provided by Consultant</u>. The Consultant shall furnish services including, but not limited to, the following outlined here or attached separately.

Scope of Services

2022-23 City of Kenmore Recycling Projects

City of Kenmore Project Manager
Jennifer Gordon
425-984-6160
jgordon@kenmorewa.gov

Residential Recycling Collection Events

The events are tentatively scheduled for spring (May, June) and fall (September, October, November) of 2022 and 2023. At the events the following materials will be collected and recycled: tires, batteries, mattresses, bulky yard waste (large material only), scrap wood, appliances (including refrigerators, freezers, household air conditioners, and other appliances), ferrous metals, nonferrous metals, cellular phones, electronic equipment, shredded paper, textiles and reusable or recyclable household goods (if a service provider is available), porcelain toilets and sinks, propane tanks, and other materials whenever practical. User fees will apply to the collection of some materials. Computers, computer monitors, and TV sets will be collected if the material is paid for by Washington Materials Management & Financing Authority. The City will partner with the City of Lake Forest Park in hosting these events.

If funding is available, rain barrels and/or compost bins will be sold at one or more events in 2022-23.

EXHIBIT B

City of Kenmore
Billing Invoice

To: City of Kenmore
18120 68th Ave. NE
Kenmore, Washington 98028
Phone: (425) 398-8900
Fax: (425) 481-3236

Invoice Number: _____ Date of Invoice: _____

Consultant: _____

Mailing Address: _____

_____

Telephone: ( ) _____

Contract Period: _____ Reporting Period: _____

Amount requested this invoice: $_____

Attach itemized description of services provided.

Specific Program/Project: _____

_____
Authorized signature

For Department Use Only

BUDGET SUMMARY

Total contract amount	$_____
Previous payments	$_____
Current request	$_____
Balance remaining	$_____

Approved for Payment by: _____ Date: _____

Authorized Signature (Required)_____

EXHIBIT C

Rates for Services to be Provided by Consultant. The Consultant shall furnish the services in accordance with the rates specified below or attached hereto, as Exhibit C.

Rate Schedule

The project budget will incorporate the City of Kenmore grant funds available from the Seattle-King County Health Department, King County Solid Waste Division, and the Washington State Department of Ecology Grant. OER will assist Kenmore with grant administration and reimbursement requests. Total grant funds are $122,345.15 and include all items that will be billed to the grants directly by the City, such as City staff time.

All costs incurred by Olympic Environmental Resources associated with the annual recycling collection events are completely covered by grant funds. Olympic Environment Resources is available to provide additional services at the request of the City of Kenmore. Olympic Environment Resources hourly rates are: Project Manager - $70/hour and Recycling Event Staff - $55/hour. For 2022-23, the total contract shall not exceed $122,345.15. Of this, no more than $62,000 will be spent on administrative expenses.

The City of Kenmore is eligible and has applied for the following grants. It is expected that no non-grant City funds will be expended on recycling projects in 2022-23. The recycling budget is based on the following:

2022 King County Solid Waste Division WRR Grant Total	$20,276.00
2023 King County Solid Waste Division WRR Grant Total - estimate	$16,000.00
2022 King County Health Department Grant	$11,740.15
2023 King County Health Department Grant - estimate	$12,000.00
2022-23 Ecology CPG Grant – through June, 2023	$42,329.00
2023 Ecology CPG Grant – from July - December, 2023 – estimate	$15,000.00
Contingency in case additional grant funds come available	$ 5,000.00
2022-2023 Total	**$122,345.15**

EXHIBIT D

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▸ Go to *www.irs.gov/FormW9* for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

Print or type.
See **Specific Instructions** on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

Individual/sole proprietor or single-member LLC | C Corporation | S Corporation | Partnership | Trust/estate

Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▸

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

Other (see instructions) ▸

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any)

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

Part I **Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN,* later. **or**

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			–			–				

Employer identification number

		–							

Part II **Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here **Signature of U.S. person** ▸ **Date** ▸

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to *www.irs.gov/FormW9.*

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *later*

City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: January 8, 2022 City Council Retreat Report Move to: Approve January 8, 2022 City Council Retreat Report	For Council Meeting Agenda of: February 28, 2022 Department: City Manager's Office Prepared by: Rob Karlinsey, City Manager Initial & Date Approved by City Attorney: __N/A____ Approved by Finance Director: _LS Approved by City Manager: __RGK____ Exhibits/Attachments: January 8, 2022 City Council Retreat Report

INFORMATION/BACKGROUND:

The Kenmore City Council held its annual retreat on January 8, 2022. At the retreat, the City Council discussed various issues and identified a number of those issues for further follow up. The retreat report, including follow up items, is attached to this agenda bill.

PENDLETON CONSULTING, L.L.C.

MICHAEL R. PENDLETON Ph.D.

34225 BRIDGEVIEW DR. N.E.
KINGSTON, WASHINGTON 98346
Cell (360) 509-1333
e-mail: mpendleton@telebyte.com

THE

KENMORE CITY COUNCIL

ANNUAL RETREAT

January 8th, 2022

Summary Report

Introduction

The Kenmore City Council annual retreat was held on January 8th, 2022. Due to the Covid-19 pandemic, the retreat was conducted over the Zoom remote meeting system. The purpose of this retreat was to discuss, in depth, key projects and policy issues identified by the participants during a pre-retreat interview to establish the agenda. The following agenda guided the discussions during this council retreat:

1. Financial Sustainability Plan Review
2. Downtown, Connectivity, and Economic Vitality
3. Council Process and Community Interaction
4. Environmental Stewardship
5. Public Swimming Pool
6. Tenant Protections
7. Public Safety
8. General City Issues

The following report is a summary of the discussions and outcomes of the retreat (a complete recording of this retreat was made and is retained by City officials):

Financial Sustainability Plan Review

The staff provided an overview of the Financial Sustainability Plan and briefly discussed the possibility of a future economic recession. Staff recommended to proceed with the adopted phases of the approved plan. The phases for 2023 include the adoption of a traffic photo enforcement program and the establishment of a cable TV utility tax among other elements.

Downtown Connectivity and Economic Vitality

Connect the Downtown Core, Burke Gilman Trail, 522 and other related issues. The participants discussed a range of issues/topics related to connecting major areas and travel systems with the downtown core. It was noted that this connection system should include downtown, the "Bench", the Burke Gilman Trail, and Lakepointe. Staff provided and update on sidewalk replacement on 61st street. Others noted the desire to consider an overpass/underpass to connect

Kenmore Village and the Burke Gilman Trail. The economic impact for greater connectivity was noted along with the possibility of getting grants to support these efforts. It was noted that greater connectivity would enhance a lively, walkable community oriented downtown. Participants also discussed specific items such as fencing that might need to be addressed, signage improvements, possible signalized at-grade crossings, opportunities to purchase properties, eyesore areas, opportunities for funding to help with cleanup in particular areas (Kenmore Plaza), and other topics. It was noted that the Asphalt Plant is still a concern within the community. The need to consider policy to protect the shoreline and habitat around the lake was noted. It was also noted that open trucks leave sites without being covered and that should be addressed.

Participants discussed the importance of Kenmore's "brand" or identity. The nature of a Kenmore icon such as Seaplanes, The Hangar, Hank the Heron, Brew Row, and the Lodge were discussed. It was noted that many of the projects discussed within this discussion module are large and either need to be included in the Capital Plan and/or also be nominated as a future goal. Regarding sustainable development, one participant wanted to confirm that the Council did vote, in the past, to support a local control approach. The participants discussed the "missing middle" concluding further discussion of this topic might be best after the Planning Commission has addressed the issue. Finally, it was noted that it is desirable to strive for building requirements that encourage density but also are "green" in nature.

After this long discussion covering several topics, the participants agreed to the following:

Agreement One: Consider budgeting for a feasibility study to evaluate primary areas for a 522 over/underpass at several potential locations. (An item of this magnitude may need to be identified as a top Council goal to be included within future budgets.)

Agreement Two: Continue to look for opportunities to slowly purchase property in key "connectivity areas".

Agreement Three: Add the "Kenmore Brand" as a discussion item on the June City Council retreat agenda.

Agreement Four: Encourage efforts to create and build on organic neighborhood identities such as the "Warehouse District", The Lodge, "Brew Row" and/or the "Art District" as they naturally occur.

Council Process and Community Interaction

The participants next discussed a range of City Council internal processes including council feedback during public comment, the need to consistently enforce council rules of procedure, the value of more training on procedure and protocols, the status of the Customer Service portal system and the value of a civic engagement/learning program for Kenmore citizens. After a long discussion the participants agreed to the following:

Agreement Five: To add a closing statement to the public comment portion of the Council meeting thanking the public speakers for coming to comment and to direct speakers to the proper avenues to get answers and/or follow-up on their comments.

Agreement Six: In the future, have the City Clerk and not the Mayor read the Public Comment preamble.

Agreement Seven: Look into other modes of connecting with the public to include offering a lunchtime or evening "Coffee with the Council", a "Kenmore Essentials" civic engagement class to introduce the public to city functions, and perhaps utilize open houses, videos and social media to increase connectivity with Kenmore citizens.

Agreement Eight: To prevent "reply all" emails, staff will use the "bcc" function when addressing communications with members of the City Council.

Agreement Nine: To consider improving the Customer Service Portal that will be accessible, mobile friendly, trackable, and responsive.

Environmental Stewardship

Participants next discussed a range of issues relating to Environmental Protection and Stewardship. These items included restoration of the Sammamish River Slough, Tree preservation, Aquatic Weed removal, Green New Deal, and

the Tolt River Pipeline trail improvements. Staff provided an update of activities related to the Sammamish River Slough. Participants discussed the desire to keep working with sister cities and others to further sustainability goals as they relate to the slough. Participants next discussed tree preservation, canopy cover within the city and in particular the importance of the older, larger trees within Kenmore. Participants expressed concern over clear cutting and an interest in balancing tree preservation with the need to provide low-cost housing.

Participants next discussed the annual challenge of controlling milfoil growth and removal. It was noted that it might be useful to get started early on milfoil management this year to prevent the overgrowth that was observed by some last year. Participants expressed an interest in partnering with private property owners to manage the milfoil problem.

Participants next discussed the status and nature of the Green New Deal branding approach that was introduced at last year's retreat. It was noted that one application of a Green New Deal approach is on job creation related to environmental protection, restoration and awareness.

Finally, the participants discussed expansion and improvements to the Tolt River Pipeline Trail that passes through the city. It was noted that it might be possible to make some east-west low maintenance connections in the section of east side of 61st and improving the crossing between 63rd and 64th. Staff noted that these improvements and others can be addressed as part of the Transportation Element of the Comprehensive Plan. The update of this specific element is recommended to appear on the Planning Commission Docket for 2022. This could also parallel the update of the Capital Facilities Update which outlines specific projects to be addressed.

The participants made the following agreements during the above discussion:

Agreement Ten: Engage with business and private property owners who might partner with the City to address the milfoil growth problem.

Agreement Eleven: The City Manager will work with staff and come back with a branding/naming idea for the City's Climate Action and Diversity, Equity and Inclusion initiatives.

Agreement Twelve: The Tolt River Trail Improvements are important and should be addressed starting with the Comprehensive Plan and related city processes.

Public Swimming Pool

Participants next discussed the status of efforts to bring a new aquatic center to north King County to serve the residents of Kenmore. Staff reported that, in partnership with our neighboring cities of Kirkland, Lake Forest Park and Shoreline, the City submitted two grant proposals to conduct an aquatic center siting/feasibility study utilizing King County Parks, Recreation, Trails and Open Space levy grant funds. Notification of grant decisions is expected in early 2022. Interest in collaborating with the City of Bothell to explore the opportunities to include a portion of the Wayne Golf Course was expressed.

Fun, Youth Activities and Families

The participants next discussed the importance and opportunities to create activities, and recreational opportunities for families and various age groups within the city. Topics included City Hall Park Phase II and half-court basketball, programing the gym at St Edward, the need for a youth center and other opportunities for family fun. It was noted that there are few programmatic opportunities for youth 12 to 18 in Kenmore. Various topics were discussed including lighting at ball fields, a ball fields task force and the importance to do "what we can" to provide activities for young people. Staff noted that the city provides venues for activities and looks for partners to create programming. It was also noted that there currently is no programming for preschool aged children in the city. It was noted that it is important to upgrade play areas and spaces to make them more accessible. It was noted that the concert series was very popular. After a discussion the participants agreed to the following:

Agreement Thirteen: To explore bringing back community play day. Staff will discuss this topic and report back to Council.

Tenant Protections

The participants next discussed the need for Tennant Protections within Kenmore. It was noted that the city has already done work on protecting tenants from evictions during the Covid Pandemic. It was noted that it may be time to consider a more permanent set of protections going forward. It was noted that other jurisdictions such as King County and the City of Seattle have provided

tenant protections in part by funding groups such as the Housing Justice Project and Stay Housed Stay Healthy group. It was noted that there is recent legislation prohibiting income discrimination against renters. It was noted that tenant protections would be important to discuss in the broader context of the housing crisis and the need for a larger housing supply. After a discussion the participants agreed to the following:

Agreement Fourteen: The City Manager will meet with staff to determine the nature and timing of bringing back to the City Council a package of possible tenant protections.

Public Safety

The participants next discussed a range of Public Safety topics. Participants noted the importance of getting an update of the activities of the Kenmore Municipal Court which might include information on jury trials, plea deals, criminal cases that might reflect applications of recent laws etc. It was noted that it would be useful to get an update on how Covid has impacted the operation of the court. The Chief of Police gave a brief update recent programs and trends to include data on fatal overdoses, use of police body cams, the use of Narcan, incidents of suicides and other topics. After a discussion the participants agreed to the following:

Agreement Fifteen: The staff will present court data along with a police activity report in a Public Safety Study Session for the City Council scheduled for April. Efforts will be made to invite Judges and Prosecutors to join the study session. In addition, the Chief indicated he would look into the use of the pharmacy lockbox program for disposal of medications and report back.

Other City Issues

Diversity, Equity and Inclusion (DEI) Task Force. The participants briefly discussed the DEI Task Force. It was noted that 14 members had been identified to join the task force and the composition of taskforce will be announced at the next City Council meeting. It was noted that the current $80 stipend per meeting might be a bit low for the task force. Staff noted that the DEI task force will make recommendations in multiple areas, including City purchasing and RFP/RFQ processes.

Affordable Housing Update. Staff provided an update on Affordable Housing activities. It was noted that the Planning Commission is currently working on policies related to what is known as the "Missing Middle". It was noted that the Affordable Housing Working Group is moving ahead on an RFP for an affordable housing partner to develop affordable housing units on the "Old Shell Property". Finally, it was noted that several activities are focused on property acquisition. It was noted that the Planning Commission will be bringing updates to the Housing Element of the Comprehensive Plan later this year and updates to the Affordable Housing Strategy in a future year.

Dog Park. Participants discussed the need and location of a Dog Park in Kenmore. The discussion included various locations, the possible need to rotate the use of space due to wear and tear. After a discussion the participants agreed to the following:

Agreement Sixteen: Host a study session with an expert on Dog Parks to learn more about the topic to better inform subsequent actions.

Rooster Regulation. Participants briefly discussed the existence of Roosters in Kenmore. No further information or next step was requested.

City Council Health Insurance. The participants next discussed the need to offer health insurance to City Council members. It was noted that the current City Council salary is low and by adding health insurance as a benefit it might encourage more interest in others to run for City Council. It was noted that it would be useful to add Covid Testing as a reimbursable cost to City Council members particularly since meeting attendance and travel are expected activities. It was noted that the City Council role is viewed as a part time job and therefore may not justify health insurance benefits. It was noted that more information on this topic would be useful. After a discussion the participant agreed to the following:

Agreement Seventeen: The staff will research the AWC benefit trust rules regarding insurance, costs, and how other cities approach the issue. Staff will assemble options to include Covid Testing reimbursement and report back to the Council.

Appendix One
Retreat Participants

Mayor
David Baker

Deputy Mayor
Nigel Herbig

Councilmember
Angela Kugler

Councilmember
Joe Marshall

Councilmember
Melanie O'Cain

Councilmember
Corina Pfeil

Councilmember
Debra Srebnik

City Manager
Rob Karlinsey

Selected Department Directors Participated During Specific Conversations

Facilitator
Michael Pendleton

City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: Ratification of the 2021 King County Countywide Planning Policies (CPP) and the 2021 Urban Growth Capacity (UGC) Report.	**For Council Meeting Agenda of:** 2/28/22 **Department:** Community Development **Prepared by:** Debbie Bent, Community Development Director **Initial & Date** **Approved by Department Head:** 2/9/22 DB **Approved by City Attorney:** N/A **Approved by Finance Director:** N/A **Approved by City Manager:** 2/9/22 RK
Proposed Council Action/Motion: No action means ratification of the 2021 Countywide Planning Policies and the 2021 Urban Growth Capacity Report	**Exhibits/Attachments:** 1) King County Ordinance 19384 Adopting 2021 King County Countywide Planning Policies 2) King County Ordinance 19369 Adopting the 2021 Urban Growth Capacity (UGC) Report

INFORMATION/BACKGROUND: Kenmore is deemed to have ratified the 2021 Countywide Planning Policies (CPPs), King County Ordinance 19384 (Attachment #1) and the 2021 Urban Growth Capacity (UGC) Report, King County Ordinance 19369 (Attachment #2) unless by 4/6/22 the City takes legislative action to disapprove the amendments. Staff recommends Council ratifies both ordinances by taking no legislative action.

At the 4/6/21 Council meeting, King County staff presented the draft Countywide Planning Policies (CPPs) and Urban Growth Capacity (UGC) report. Kenmore's comprehensive plan must be consistent with the CPP's and UGC report.

The Growth Management Planning Council (GMPC) developed and recommended the original CPPs, which were adopted by the King County Council and ratified by the cities in 1992. Subsequent amendments to the CPPs follow the same adoption process, which includes recommendation by the GMPC, adoption and ratification by the King County Council, and ratification by the cities. Amendments to the CPPs become effective when ratified by at least 30 percent of the city and county governments representing at least 70 percent of the population of King County. A city shall be deemed to have ratified an amendment to the CPPs unless the city disapproves it by legislative action within 90 days of adoption by King County.

Ordinance 19384 King County Countywide Planning Policies: On 12/14/21 the King County Council approved Ordinance 19384 on behalf of unincorporated King County and the ordinance became effective 1/6/22. King County Ordinance 19384 adopts the 2021 King County Countywide Planning Policies. The CPPs create a framework for growth management planning for all jurisdictions in King County. The CPPs were last comprehensively reviewed and updated in 2012. The CPPs are being updated in 2021 to be consistent with the Multicounty Planning Policies (MPPs) and Regional Growth Strategy contained in the Puget Sound Regional Council's VISION 2050. The CPPs are attached to the ordinance (see Attachment #1).

Ordinance 19369 Urban Growth Capacity Report: On 12/14/21, the King County Council approved Ordinance 19369 on behalf of unincorporated King County and the ordinance became effective 1/6/22. King County Ordinance 19369 adopts the 2021 Urban Growth Capacity (UGC) report. The report is attached to the ordinance (See Attachment #2). The Urban Growth Capacity (UGC) Report is a required component of the Growth Management Act. The Report is a mid-planning cycle assessment on how jurisdictions are achieving the planning goals of their comprehensive plans. The UGC Report includes development and capacity information for each jurisdiction, an assessment of countywide and Regional Geography trends, and data on growth target planned density achievement. The 2021 Urban Growth Capacity Report documents that King County continues to have sufficient urban capacity for both housing and employment growth to 2044 and beyond.

FISCAL CONSIDERATION: Staff time.

COUNCIL GOAL/BUDGET OBJECTIVE BEING ADDRESSED:
2021—2022 Council Priorities: Priority #11 engage and educate the community on growth and development in Kenmore

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

KING COUNTY

Signature Report

Ordinance 19369

Proposed No. 2021-0255.2 **Sponsors** Dembowski

AN ORDINANCE adopting and ratifying Growth Management Planning Council Motion 21-2.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. **Findings:**

A. Growth Management Planning Council Motion 21-2 recommends the 2021 Urban Growth Capacity Report to the King County council.

B. The Urban Growth Capacity Report is King County's buildable lands report as required by RCW 36.70A.215 and WAC 365-196-315.

C. On June 23, 2021, the Growth Management Planning Council approved Motion 21-2.

SECTION 2. The 2021 King County Urban Growth Capacity Report, attached to this ordinance via Growth Management Planning Council Motion 21-2 as Attachment A

to this ordinance, is hereby adopted by King County and ratified on behalf of the population of unincorporated King County.

Ordinance 19369 was introduced on 7/27/2021 and passed by the Metropolitan King County Council on 12/14/2021, by the following vote:

Yes: 9 - Ms. Balducci, Mr. Dembowski, Mr. Dunn, Ms. Kohl-Welles, Ms. Lambert, Mr. McDermott, Mr. Upthegrove, Mr. von Reichbauer and Mr. Zahilay

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

DocuSigned by:
Claudia Balducci
7E1C273CE9994B6...
Claudia Balducci, Chair

ATTEST:

DocuSigned by:
Angel Allende
C267B914088E4A0...
Melani Pedroza, Clerk of the Council

APPROVED this _____ day of 12/27/2021, _____.

DocuSigned by:
Dow Constantine
4FBCAB8196AE4C6...
Dow Constantine, County Executive

Attachments: A. GMPC Motion 21-2, dated July 28, 2021

Ordinance 19369
6/23/21
Revised July 28, 2021

Attachment A

Sponsored By: Executive Committee

GMPC MOTION NO. 21-2

A MOTION recommending approval of the 2021 King County Urban Growth Capacity Report to the King County Council

WHEREAS; the Urban Growth Capacity Report is King County's buildable lands report as required by RCW 36.70A.215 and WAC 365-196-315; and

WHEREAS, this the fourth report King County has prepared; and

WHEREAS, the Urban Growth Capacity Report includes findings from three key components as required by RCW 36.70A.215 and WAC 365-196-315: analysis of countywide and jurisdictional growth trends between 2006 and 2018 compared to the 2035 growth targets, analysis of achieved densities by jurisdiction based on growth that occurred between 2012 and 2018, and capacity for housing and job growth over the next 20 years; and

WHEREAS, staff from King County and the cities in King County have worked cooperatively to analyze and prepare the data for consideration by the Growth Management Planning Council; and

WHEREAS, a Public Review Draft of the 2021 Urban Growth Capacity Report was shared with the public and comments were received from stakeholders; and

WHEREAS, the 2021 Urban Growth Capacity Report documents that King County continues to have sufficient urban capacity for both housing and employment growth to 2044 and beyond:

THEREFORE, the King County Growth Management Planning Council recommends the 2021 King County Urban Growth Capacity Report, included with this motion as Attachment A, to the King County Council. The Interjurisdictional Staff Team is authorized to make technical changes to the policies, text, maps, and tables such as fixing grammatical errors, correcting spelling, or aligning policy references without changing the meaning prior to transmittal to the King County Council.

Dow Constantine, Chair, Growth Management Planning Council

Appendix A: 2021 King County Urban Growth Capacity Report

2021 King County Urban Growth Capacity Report

June 2021

APPROVED BY THE KING COUNTY GROWTH MANAGEMENT PLANNING COUNCIL JUNE 23, 2021

(Technical updates July 28, 2021)

July 28, 2021 Technical Update*: Data for Bothell updated. Technical updates do not meaningfully alter the findings from the report approved by GMPC on June 23, 2021.*

Acknowledgements

This 2021 Urban Growth Capacity (UGC) Report was prepared by King County and its cities under RCW 36.70A.215 amendment to the Washington State Growth Management Act. Every jurisdiction in King County has participated in collecting and evaluating development information to prepare this Report. Thanks to the following cities and towns for participation:

City of Algona
City of Auburn
Town of Beaux Arts Village
City of Bellevue
City of Black Diamond
City of Bothell
City of Burien
City of Carnation
City of Clyde Hill
City of Covington
City of Des Moines
City of Duvall
City of Enumclaw
City of Federal Way
Town of Hunts Point
City of Issaquah
City of Kenmore
City of Kent
City of Kirkland
City of Lake Forest Park
City of Maple Valley
City of Medina
City of Mercer Island
City of Milton
City of Newcastle
City of Normandy Park
City of North Bend
City of Pacific
City of Redmond
City of Renton
City of Sammamish
City of SeaTac
City of Seattle
City of Shoreline
Town of Skykomish
City of Snoqualmie
City of Tukwila
City of Woodinville
Town of Yarrow Point

This Report was compiled by the King County Office of Performance, Strategy, and Budget in collaboration with BERK Consulting and Heartland LLC. Thanks to the following individuals and groups who contributed greatly to this effort.

King County:	Rebeccah Maskin, Ben Larson, Karen Wolf, Ivan Miller, Lauren Smith, Jeffrey Linn, Paul McCombs, Jacqueline Reid, Kevin LeClair, David Goodman
Interjurisdictional Team:	Hayley Bonsteel, Michael Hubner, Angie Mathias, Nicholas Matz, Beverly Mesa-Zendt, Brian Parry, Jesse Reynolds, Liz Underwood-Bultmann, Adam Weinstein
UGC Technical Committee:	Jeff Dixon, David Johanson, Miryam Laytner, Andrew Leon, Katherine Nesse, Kaelene Nobis, Chris Pasinetti, Jennifer Pettyjohn, Robin Proebsting, David Pyle, Aaron Raymond, Jaimie Reavis, Jesse Reynolds
BERK Consulting:	Kevin Ramsey, Lisa Grueter, Ben Silver, Josh Linden, Andrew Bjorn, Jessie Hartmann, Lisa Johnson, Dawn Couch
Heartland LLC:	Mark Goodman, Chris Fiori, Tyson Heriot

The development of this report and the data and assumptions throughout it was generously supported by a grant from the Washington State Department of Commerce.

Cover images: Google Earth

Table of Contents

Exhibits

Executive Summary

About the Urban Growth Capacity Report

The 2021 Urban Growth Capacity Report is King County's periodic assessment of development capacity for future housing and employment. The report is a mid-planning cycle assessment on how jurisdictions are achieving the planning goals of their 2035 comprehensive plans. The report is a culmination of the county's Review and Evaluation Program, commonly referred to as "Buildable Lands," as required by the Growth Management Act in RCW 36.70A.215, and it is King County's fourth buildable lands report. It is a collaborative production of the 40 jurisdictions across King County that analyzes the form, quantity, and density of residential and non-residential development observed between 2012 and 2018. It also estimates capacity for accommodating 2035 growth targets with consideration for market and infrastructure constraints.

Amendments to the Growth Management Act in 2017 expanded the purview of the report beyond measuring capacity for projected growth, requiring the seven buildable lands counties to examine more broadly how jurisdictions are achieving targets and density goals. A finding that a jurisdiction has insufficient capacity for its target—or that a jurisdiction is not achieving its growth targets or urban densities—could necessitate Reasonable Measures to be adopted in the next periodic update of comprehensive plans. In response to this amendment, the 2021 Urban Growth Capacity Report compares estimated housing and employment growth from 2006-2018 relative to 2006-2035 growth targets, as well as the achieved densities of 2012-2018 development to the densities allowed in zoning and development regulations.

The 2017 GMA amendments also call for Buildable Lands counties to scrutinize market constraints, infrastructure gaps, and development regulation assumptions utilized in the report to ensure that more meaningful market-based assumptions guide capacity calculations.

Regional Planning Context

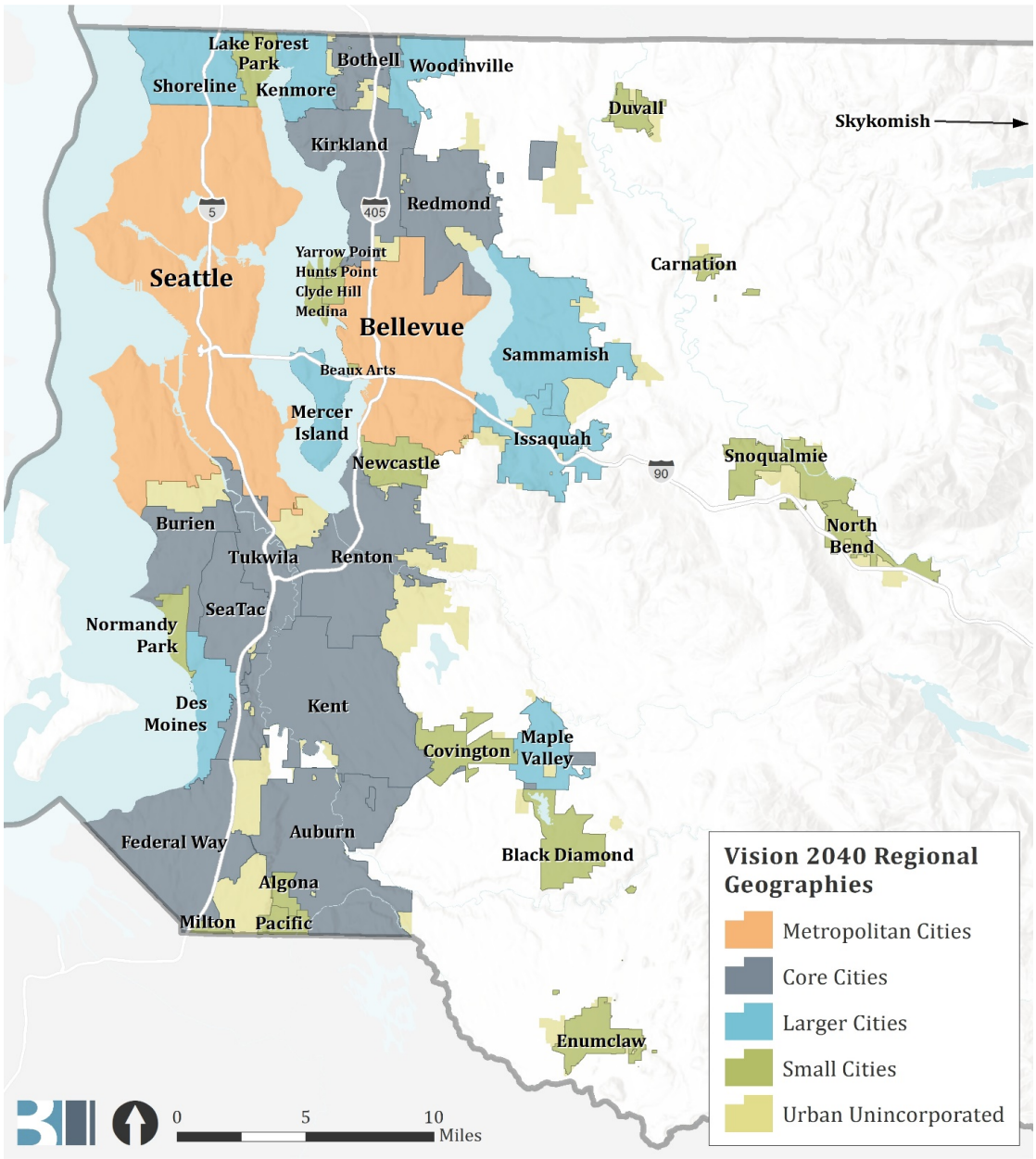
The 2021 Urban Growth Capacity Report implements King County's Review and Evaluation Program as set out in the King County Countywide Planning Policies. The Report analyzes King County jurisdictions' progress toward adopted planning goals expressed in the 2012 King County Countywide Planning Policies growth targets and 2015 Comprehensive Plans. The Report examines capacity and growth assumptions for 2035, the 20-year planning period established by the 2015 comprehensive plans.

The 2015 comprehensive plans and 2012 Countywide Planning policies implement the VISION 2040

policy framework and Regional Growth Strategy, developed by the Puget Sound Regional Council (PSRC). While PSRC has since adopted VISION 2050 and a revised Regional Growth Strategy, because the Urban Growth Capacity Report looks back to the 2012 countywide planning policies and 2015 comprehensive plans implementing VISION 2040, most of the report's analysis is organized by the VISION 2040 Regional Geographies, shown in Exhibit 1. Final capacity results and city profiles are grouped by VISION 2050 Regional Geographies (shown in Exhibit 2), to emphasize how the data can be used while updating comprehensive plans for the 2024 periodic update.

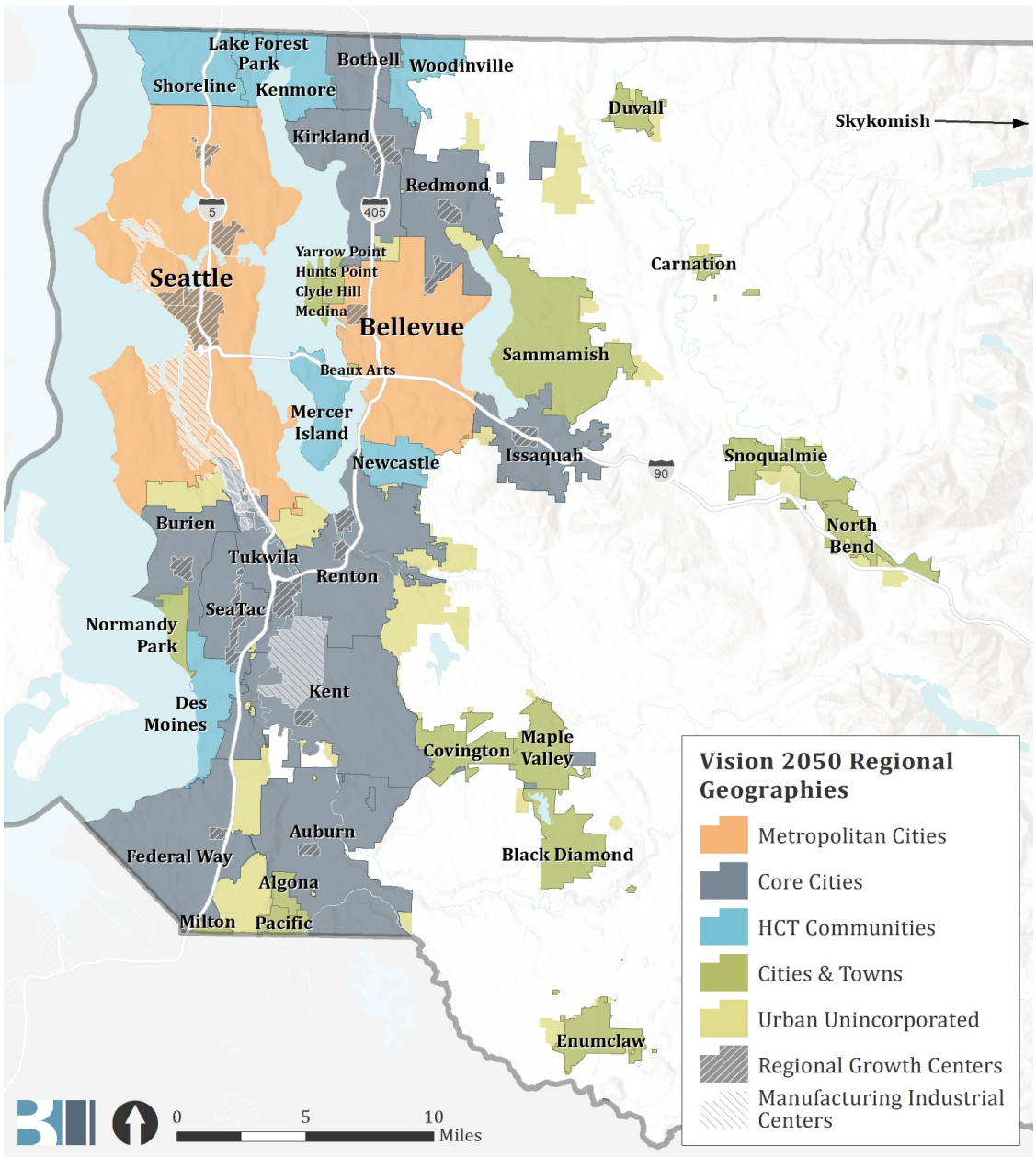
Findings from the Urban Growth Capacity Report underscore how cities and King County are planning for growth focused on a network of designated Regional Growth Centers and high capacity transit station areas. Growth patterns have been consistent with growth targets implementing the Regional Growth Strategy. Capacity exists to support new growth across the density spectrum, and much of it is concentrated in higher density areas in Metropolitan and Core Cities with Regional Growth Centers and Manufacturing/Industrial Centers. Development trends in the county have been evolving toward the higher densities many jurisdictions have planned for, as the high capacity transit network builds out and demand for higher density development expands to new communities.

Exhibit 1. PSRC VISION 2040 Regional Geographies Used for Summarizing Development Trends



Source: PSRC VISION 2040; BERK, 2021.

Exhibit 2. PSRC VISION 2050 Regional Geographies Used for Summarizing Growth Capacity



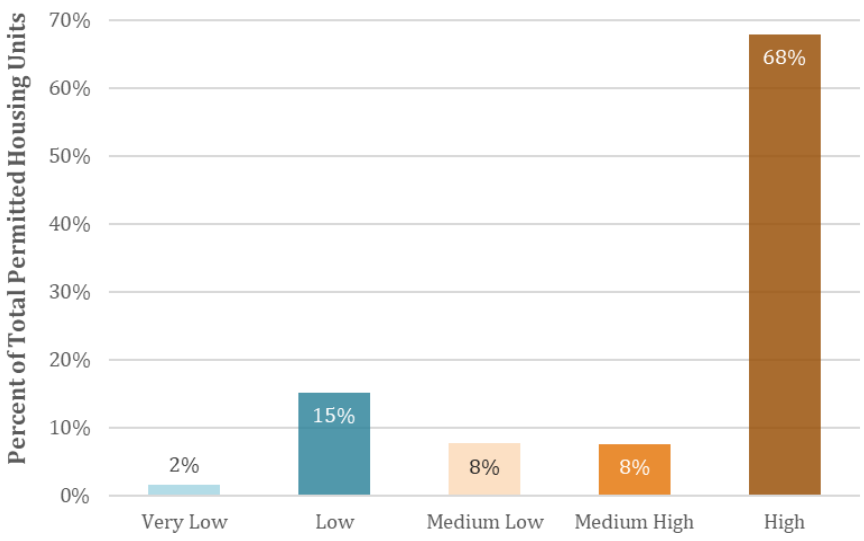
Sources: PSRC VISION 2050; BERK, 2021.

Summary of Findings

Development Activity

The Urban Growth Capacity Report summarizes the densities and locations of urban development between 2012-2018. This period was marked by significant multifamily and higher density development, reflecting King County's continued progress towards directing growth towards cities and efficient land uses. As shown in Exhibit 3, nearly 70% of the housing permitted during the evaluation period was developed at densities of at least 48 dwelling units per acre, and 17% of permitted housing during this period was constructed at under 10 dwelling units per acre. Development in middle density formats was more limited. These findings demonstrate how residential development during this period trended towards the high and low ends of the density spectrum.

Exhibit 3. Permitted Housing Units by Achieved Density, 2012-2018



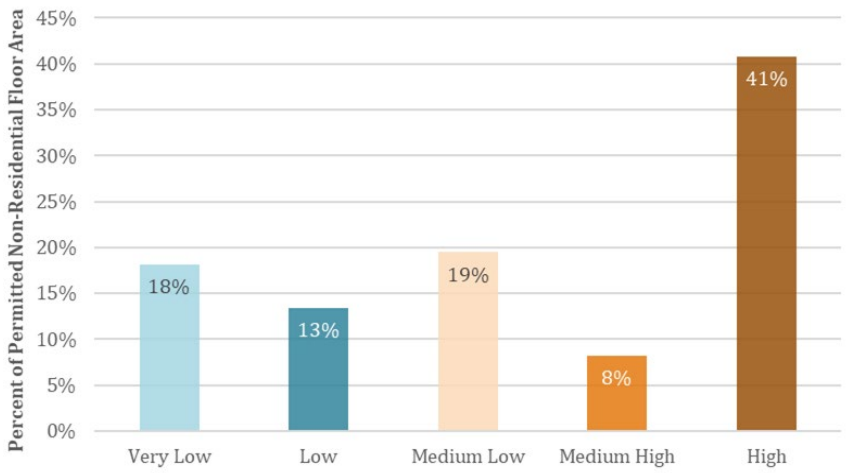
Density Level	Units per Net Acre
Very low	Less than 4
Low	4-10
Medium-Low	10-24
Medium-High	24-48
High	48+

Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

Non-residential development was more evenly distributed across density levels. Just over 40% of non-residential built space was developed at the highest density level, reflecting the large volume of dense office and mixed-use development during the time period. Half of observed non-residential

development developed at densities less than 1 floor area ratio (FAR).[1]

Exhibit 4. Permitted Non-Residential Development by Achieved Density, 2012-2018



Density Level	FAR
Very low	<0.35
Low	0.35-0.5
Medium-Low	0.5-1.0
Medium-High	1.0-3.0
High	>3.0

Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

This study also included analysis comparing achieved densities to maximum as-of-right densities allowed by zoning. Findings varied significantly by jurisdiction. Some jurisdictions saw average achieved residential densities higher than their planned maximum within lower or middle density zones. Others saw achieved densities much lower than planned, particularly in zones allowing the highest densities. This later finding was particularly true for non-residential development. One reason for this outcome is that communities zoned for higher density development in anticipation of future market shifts that had not yet occurred in the 2012-2018 evaluation period.

Progress Toward Growth Targets

King County has experienced historic population and economic growth in recovery from the Great Recession. Guided by the Regional Growth Strategy and adopted growth targets, this growth has been overwhelmingly urban; less than 3% of population growth in King County since 2006 has occurred in the rural area. The Urban Growth Capacity Report analyzes progress made by cities and urban unincorporated King County towards achieving 2006-2035 growth targets. Because past buildable lands reports have not focused on this specific outcome before, the 2021 report examines growth since 2006 and through 2018.

[1] FAR stands for Floor Area Ratio, a measure comparing the area of built space to the land area of the associated lot or parcel. Higher FAR values reflect more dense development, and values higher than 1.0 indicate that the built space surpasses the land area of the associated parcel (as can occur in multi-story buildings).

Urban King County is growing at a rate to achieve its adopted growth targets. Approximately 41% of the target period has elapsed between 2006-2018. Urban King County has achieved 47% of its housing and employment targets, growing slightly faster than this prorated pace. These growth rates are particularly notable given that the time period spans the Great Recession, which diminished population and housing growth to a near standstill and netted out most of the employment gained during the 2000s.

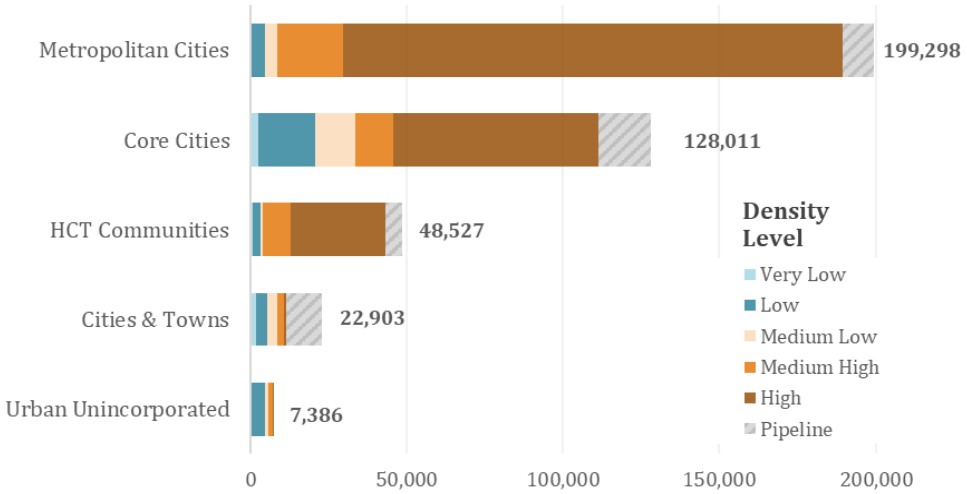
The effects of the recession and rates of recovery were not uniform across King County. At a Regional Geography level, Metropolitan, Larger, and Small Cities grew faster than the pace needed to achieve growth targets. Job growth compared to targets was also strong in Metropolitan and Small Cities. While housing growth has been less strong in Core Cities and the urban unincorporated area, these geographies are still on track to achieve their residential growth targets. Employment growth in Core and Larger Cities was slower than pace but meets the countywide definition of consistency with growth targets 2006-2018. The urban unincorporated area was slightly ahead of pace to achieve its employment growth target. More information on growth trends and achieving targets is in Chapter 3 of the Report.

Development Capacity

The 2021 Urban Growth Capacity Report finds that urban King County has capacity for over 400,000 housing units and 600,000 jobs. This capacity is sufficient to accommodate the remainder of its 2035 housing and employment growth targets, and looking ahead, sufficient to accommodate projected future growth during the next planning period. See Exhibit 5 and Exhibit 6 for summaries of residential and employment capacity by Regional Geography and density level.

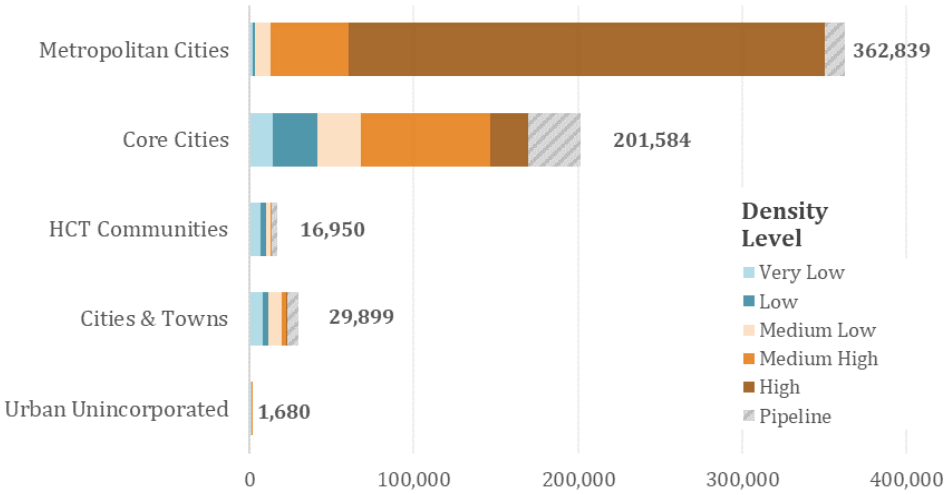
Approximately 50% of residential and 60% of employment capacity in King County is in Metropolitan Cities. Additionally, nearly a third of residential and non-residential developable capacity is in the eleven Core Cities. Residential capacity in Metropolitan and Core Cities is overwhelmingly at the county's highest density levels and drives the finding that 83% of the county's developable residential capacity exists at densities greater than 24 dwelling units per acre. Nearly 80% of King County's employment capacity is zoned at 1 FAR or higher. At the other end of the density spectrum, approximately two-thirds of King County's developable residential land is zoned for ten dwelling units or less, making up 10% of residential capacity. More findings and detail on capacity is contained in Chapters 4 and 7.

Exhibit 5. Dwelling Unit Capacity by Density Level



Source: BERK, 2021, based on capacity data summarized by King County jurisdictions.

Exhibit 6. Employment Capacity by Density Level



Source: BERK, 2021, based on capacity data summarized by King County jurisdictions.

Implementing Urban Growth Capacity Findings

As a mid-planning cycle check on development trends and achievement of growth management goals, the Urban Growth Capacity Report contains a host of information useful for the upcoming periodic 2024 comprehensive plan update. Most directly, the Urban Growth Capacity Report contains

recommendations that some jurisdictions adopt Reasonable Measures in their comprehensive plans to address specific inconsistencies identified in the report. More information about the evaluation of when and where Reasonable Measures may be necessary is provided in Chapter 5. Data about achieved density and capacity by density level can help jurisdictions identify where shortfalls in development capacity may impede achieving targeted planning goals, like encouraging the production of "missing middle" housing or mixed-use development near transit station areas. Chapter 6 contains more information on applying or using Urban Growth Capacity Report data or findings for future planning efforts.

Ch. 1 Introduction

This report presents the findings of King County's Urban Growth Capacity Study. King County is a Growth Management Act (GMA) jurisdiction and must plan to accommodate projected growth within its boundaries, with most growth focused into urban growth areas (UGAs) where urban services are available or can be made available. The purpose of the Urban Growth Capacity Study and Report are to provide a periodic evaluation to determine whether projected growth can be accommodated within the UGA. In previous cycles, this product was referred to as the King County Buildable Lands Report (BLR). Past Buildable Lands Reports were completed by King County in 2002, 2007, and 2014.

This report includes findings from three key components of King County's Buildable Lands Program which are required under RCW 36.70A.215 and WAC 365-196-315:

- Analysis of countywide and jurisdictional growth trends between 2006 and 2018 compared to 2035 growth targets.
- Analysis of achieved densities by jurisdiction based on growth between 2012 and 2018 and comparison to planned densities.
- Capacity for housing and job growth through the year 2035.

This report was developed by King County in collaboration with each of its 39 cities through the Growth Management Planning Council (GMPC). The findings inform the development of new growth targets by jurisdiction for the 2019-2044 planning period. Findings will also be used by cities to inform the next round of comprehensive plan updates and subsequent implementation.

Regulatory and Policy Framework

The Washington State Growth Management Act (GMA) was adopted to address the need for rapidly growing cities and counties to adequately plan for future growth while protecting natural resource lands and environmentally sensitive areas. A key component of the GMA is the Review and Evaluation Program (also known as the Buildable Lands Program), a requirement which applies to King County and all cities within it. This program mandates the review and evaluation of urban growth capacity to ensure each jurisdiction has designated adequate residential, commercial, and industrial lands to meet growth allocations developed by the counties in consultation with their cities.

In 2017, the Washington State Legislature passed the first major revision to the program (SB 5254). This update to GMA includes new requirements related to infrastructure gap analysis, market factor assumptions, and Reasonable Measures. This update to GMA specifies the following:

- Reasonable Measures: Under SB 5254, these measures that are adopted to address inconsistency between forecasted and experienced growth are no longer required to be monitored and adjusted annually by buildable lands counties and cities.
- Land Suitable for Development: Under SB 5254, the required evaluation of suitable land must

include land use or zoning regulations, environmental regulations impacting development, other regulations that might inhibit the achievement of assigned densities, and infrastructure gaps. The evaluation of suitable land must also include development of a reasonable market supply factor that identifies reductions in land suitable for development and redevelopment.

- Buildable Lands Report Timing: Under SB 5254, the buildable lands report must be completed no later than two years prior to a jurisdiction's next comprehensive plan update for those comprehensive plans due to updated prior to 2024.

Countywide Planning Policies

The Proposed 2021 King County Countywide Planning Policies (CPPs) establish the county's Urban Growth Area (UGA) and allocate projected countywide growth in the form of growth targets for each city as well as urban and rural unincorporated areas. CPPs also establish the Review and Evaluation Program for King County and guide the development of the Urban Growth Capacity Study and Report through policies DP-19, DP-20, and DP-X2.[2] Components of the Buildable Lands Program include annual data collection, periodic evaluation reports, and adoption of Reasonable Measures as needed to ensure capacity to accommodate projected growth within the county's UGA. These Reasonable Measures are to be adopted in comprehensive plans, and jurisdictions will collaborate to provide data periodically about the effectiveness of those measures.

In King County, growth targets are adopted in the King County Countywide Planning Policies.[3] Countywide growth targets are derived from population projections released by the State Office of Financial Management (OFM) and an economic forecast developed by the Puget Sound Regional Council. Population growth is converted to housing units and the projected housing and employment growth is then allocated to jurisdictions within the Regional Geographies established in the VISION 2050. Jurisdictions within Regional Geographies then collaboratively distribute their allocated growth to create city and urban unincorporated growth targets.

Local Comprehensive Plans

Under GMA, jurisdictions must plan and provide for both household and job growth to meet their targets through designation of sufficient land suitable for development in their comprehensive plans and regulations. This Urban Growth Capacity Report presents estimated capacity for housing and employment growth by jurisdictions based on a methodology informed by actual achieved densities from recent development activity. The results enable evaluation of whether counties and cities can meet the adopted targets. Deficiencies identified in this study must be addressed by the jurisdiction in

[2] The Proposed 2021 CPPs include temporary numbering. Policy numbers could change when the final CPP are adopted.
[3] The Urban Growth Capacity Report evaluates the growth targets adopted in the 2012 Countywide Planning Policies. The adopted targets cover a period of 2006-2031. For the Urban Growth Capacity Report, these targets were updated for major annexations and extended on a pro rata basis to 2035, to be consistent with the 2015-2035 planning period for 2015 comprehensive plans. This method was recommended to jurisdictions to extend their 2031 targets to 2035, as the periodic comprehensive plan update deadline was delayed to 2015 after the Great Recession.

their next comprehensive plan update.

Department of Commerce Guidelines

In 2017, the Washington State Legislature passed E2SSB 5254, which constituted the first major revision to the buildable lands program since its inception in 1997. In 2018, the Washington State Department of Commerce (Commerce) published a revised Buildable Lands Guidelines report for use by counties and cities responsible for carrying out a Review and Evaluation Program under GMA. These Guidelines summarize requirements of RCW 36.70A.215 and WAC 365-196-315, and provide best practices and methodologies for carrying out those requirements. King County used these Guidelines as a resource when developing its own policies and procedures for carrying out the Urban Growth Capacity Study.

Countywide Coordination

This report is the result of nearly two years of coordination and collaboration between King County and the 39 cities within King County. King County facilitated development of the report by establishing a methodology, creating standardized data collection and assumption guidelines, and completing the final report. King County also led the Technical Committee—an interjurisdictional group of planners and data technicians—to develop and vet assumptions in the study methodology. Individual cities and King County supply development and land supply data and select assumptions appropriate to their jurisdictions to complete the report. Exhibit 7 below describes the roles and responsibilities for King County and cities in developing the Urban Growth Capacity Report.

Exhibit 7. Roles and Responsibilities

	King County	Individual Jurisdictions
Interjurisdictional coordination	Facilitator of the UGC and report preparation.	Volunteer and participate in Technical Committee methodology review.
Developing guidance for data collection and analysis	Develop standardized guidance and templates for data collection and analysis, with input from the UGC Technical Committee.	Review and offer feedback on draft guidance.
Conduct analysis of achieved densities	Review data shared by jurisdictions for consistency with guidance. Work with jurisdictions to resolve any inconsistencies.	Gather and analyze data in accordance with guidance and share results with County for review.
Conduct land capacity analysis	Review data shared by jurisdictions for consistency with guidance. Work with jurisdictions to resolve any inconsistencies.	Identify developable land supply, select local development assumptions to calculate capacity in accordance with guidance.
Reasonable Measures	Identify inconsistencies between growth, capacity, and planning goals using standard criteria.	Review inconsistencies and determine whether Reasonable Measures are necessary. Implement Reasonable Measures in 2024 comp plan updates.

Changes from the 2014 Buildable Lands Report

While the overall purpose of this report is identical to the 2014 King County Buildable Lands Report, there are several changes in the 2021 Urban Growth Capacity Report. Highlights of the changes are listed below.

- **New analysis of capacity and achieved density for all jurisdictions.** Unlike the 2014 Buildable Lands Report, which carried forward several key assumptions and findings from the previous 2007 edition, this study conducted a new and complete analysis of both development trends and growth capacity for all jurisdictions.
- **New regional geographies for summarizing capacity and growth targets.** VISION 2050 was adopted by PSRC in 2021. This regional plan updates the Regional Growth Strategy, including the organization of cities and unincorporated areas into five Regional Geographies, each with population and employment growth targets for 2019-2044. Ch. 4 summarizes growth capacity for these new VISION 2050 regional geographies. However, Ch. 3 summarizes historic development

trends using the older VISION 2040 regional geographies because that growth is being compared to targets developed when those older geographies were in use.

- **Infrastructure gap analysis.** The methodology used in this study includes a formal evaluation of infrastructure gaps and their effects on urban growth capacity. While consideration of infrastructure availability had long been a component of King County's buildable lands analysis, this change included more specific guidance and up-front analysis to address a new requirement added by the legislature in 2017.
- **Updated approach to "market factor" assumptions.** 2017 legislative changes also called for a more rigorous approach to developing "market factor" assumptions that account for the estimated percentage of developable land that is likely to remain undeveloped over the course of the planning period due to market barriers.
- **Reasonable Measures.** The 2017 legislative changes added additional points of analysis for which jurisdictions would need to adopt Reasonable Measures. Under past buildable lands analyses, jurisdictions experiencing a shortfall of capacity for their adopted target could be subject to Reasonable Measures. The 2017 legislation indicated that jurisdictions not achieving their growth targets or planned densities—and unlikely to achieve them by the planning horizon—would also be required to adopt Reasonable Measures to overcome these circumstances. The 2021 Urban Growth Capacity Report presents an analysis against the three Reasonable Measures tests and note jurisdictions that will adopt Reasonable Measures in their 2024 comprehensive plans.

Report Components and Organization

This report is organized into the following components.

- **Executive Summary**
- **Ch. 1. Introduction:** This chapter describes the regulatory and policy framework for Buildable Lands reporting in Washington State and King County. It provides an overview of the coordination process between the County and cities to prepare this report, identifies key changes from the 2014 Buildable Lands Report, and outlines the report components and organization.
- **Ch. 2. Methodology and Guidance Overview:** This is an overview of the methodologies used by individual jurisdictions for evaluating historic development trends as well as future growth capacity. The full guidance provided to jurisdictions are included in appendices to this report.
- **Ch. 3. Development Trends:** This chapter begins with a summary of residential and employment growth that occurred between 2006 and 2018. These trends are compared to adopted targets for jurisdictions and PSRC Vision 2040 Regional Geographies. This chapter also summarizes new development that occurred between 2012 and 2018 by achieved density level.
- **Ch. 4. Growth Capacity:** This is a summary and discussion of urban growth capacity within jurisdictions and aggregated by PSRC Vision 2050 Regional Geographies. Capacity is also summarized by assumed density level to provide an indicator of how much capacity may be available for different kinds of development and housing types—from new towers in dense downtown areas to lower density single family neighborhoods and the middle density typologies in between.

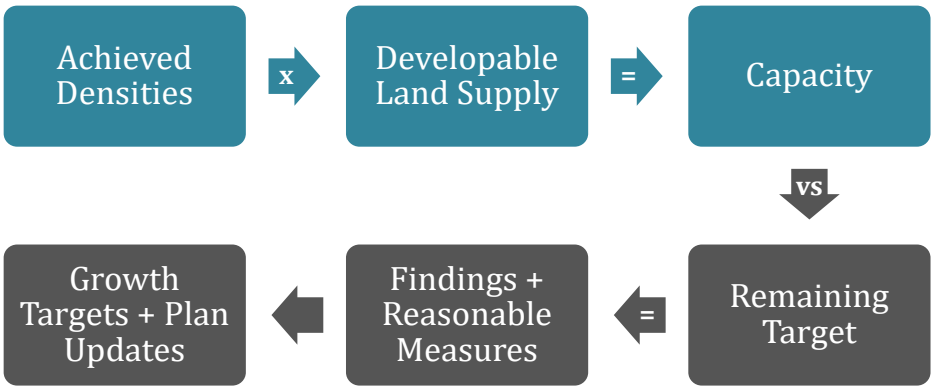
- **Ch. 5 Reasonable Measures:** This chapter explains how the county, in collaboration with cities, evaluated whether historic growth trends in each jurisdiction have been consistent with local comprehensive plans. It also presents the results of this assessment and a summary of jurisdiction responses that provide context for the quantitative assessment. Finally, this chapter identifies instances where "Reasonable Measures" are recommended to improve consistency.
- **Ch. 6 Applying Urban Growth Capacity Findings:** This chapter describes how jurisdictions can use this study and its findings to inform the next round of local comprehensive plan updates. It also presents a set of new population and employment growth targets by jurisdiction for the 2019-2044 period.
- **Ch. 7. Profiles of Cities and Unincorporated Areas:** This chapter presents detailed profiles summarizing growth trends and capacity findings for each individual jurisdiction, organized by PSRC Vision 2050 Regional Geographies.

Ch. 2 Methodology and Guidance Overview

Overview

This chapter provides an overview of the methodology used by King County and its cities to calculate urban growth capacity for residential and non-residential development. Exhibit 8 shows the three major steps in this process in blue, as well as three major steps following this process in grey. These steps highlight how capacity analysis results will be used to inform the development of potential Reasonable Measures, new growth targets for jurisdictions, and eventually comprehensive plan updates.

Exhibit 8. Urban Growth Capacity Analysis Overview



Source: Graphic adapted from King County Urban Growth Capacity Guidance, 2019.

This process for data collection to support urban growth capacity analysis was split into four phases:

- **Phase One** – Achieved Densities
- **Phase Two** – Land Supply
- **Phase Three** – Initial Capacity
- **Phase Four** – Final Capacity

Throughout the 2021 Urban Growth Capacity Report data development process, King County provided guidance documents to jurisdictions that walked through the analytical steps required in each phase, and when relevant, provided data to support the analysis. Along with the guidance documents, jurisdictions were asked to fill out standardized data tables to support data aggregation as well as comparisons across different jurisdictions and Regional Geographies. The remainder of this chapter

summarizes the process required of each jurisdiction throughout the phases of data collection and analysis. It also describes additional analyses King County and a consultant team developed to update and add rigor to data assumptions used in the analysis, or to develop new processes embedded in the data collection guidance. The individual guidance documents are attached to the end of this report in the Technical Appendices.

Phase 1 - Achieved Densities

The goal of this phase was to calculate the achieved densities of new development that occurred between 2012 and 2018. For residential development, density is typically measured in dwelling units per acre. For non-residential development, density is typically measured as floor-area ratio, or the amount of building floor area divided by the total parcel area. Achieved densities form the basis for determining the assumed density of future development in urban growth capacity calculations. That process is described in more detail in Phase 3.

During Phase 1, King County jurisdictions collected the necessary data to calculate achieved density for each zone where development occurred during the six-year review and evaluation period of 2012 to 2018. An initial parcel-based analysis by King County was supplied to the jurisdictions to streamline reporting on achieved densities, which was then supplemented by jurisdiction-led analysis. The portions of reporting are:

1. Reviewing and supplementing a parcel-based analysis of new residential development, and
2. Reporting on additional development permitted during the review period, particularly non-residential and mixed-use development.

The parcel-based analysis was the starting place for residential data collection in the Urban Growth Capacity Study. It was designed to replace the majority of plat and permit reporting by identifying new residential development on parcels that changed boundaries or added residential units during 2012-2018. Permit reporting on single family and multifamily/mixed-use development was still necessary for residential developments not identified in the parcel-based analysis data, and to review or supplement the parcel-based analysis with project data (for example, non-buildable critical areas area). New non-residential development was designed to be addressed through permit reporting.

Using the parcel-based analysis supplemented by permit data, jurisdictions filled out several data templates provided by King County to support the calculation of achieved densities in residential, non-residential, and mixed-use zones. For details see Appendix A: Guide for Local Government Reporting Template PART 1.

Data Review and Achieved Density Calculations

With consultant support, King County staff reviewed permit data shared by jurisdictions for reliability and consistency with guidance. When necessary, jurisdictions were engaged to make corrections or refinements. This permit data provided the basis for calculating achieved densities for residential and non-residential development between 2012-2018.

Jurisdictions aggregated permits and reported residential and non-residential development by zone. For residential permits, this reported data included developed residential units, gross acreage, and several categories for acreage deductions: non-buildable critical areas, public purpose area, and right-of-way area. After deducting these categories from gross acreage, jurisdictions reported net developed area for residential units within each zone. Residential achieved density is therefore measured as housing units per net acre, which accounts for area that is not suitable for residential development. Furthermore, summarization of permit activity by achieved density level in this report reflect the average achieved density of each zone, rather than the achieved density of each individual building permit.

For non-residential development, achieved density is measured using floor area ratio (FAR). Jurisdictions calculated the gross developed non-residential area within each zone, and made similar deductions for critical areas, public purpose area, and right-of-way area. The total floor area of non-residential development within each zone was then divided by that zone's net developed area (in square feet), which produced a zone-wide achieved density for non-residential development.

Rural Development Trends Methodology

Residential development trends on rural and resource lands were measured by residential permits issued between 2012 and 2018. Permits were geocoded by their parcel identification number or address to identify their presence outside the Urban Growth Area.

Parcel quantities, area, and current use information was provided by the King County Assessor. Supplemental development-related data (year built, residential units, and non-residential square feet) was derived from Assessor data on residential and commercial buildings. Parcels were identified as rural if their centroid was located outside of the Urban Growth Area. Parcels on resource land were identified by overlaying the parcels with current King County zoning shapefiles and selecting parcels with centroids within Agriculture, Forest, or Mineral zoned land.

Phase 2 - Land Supply

The goal of Phase 2 was for jurisdictions to identify vacant and redevelopable land that has potential to see new development activity over the next 20 years. To quantify the developable land supply, jurisdictions followed the steps below. Results of this analysis were documented in standard data templates provided by King County.

- Assemble data, including parcel/assessor data, critical areas, and zoning (a set of 2019 parcel data and assessment information was provided to jurisdictions);
- Exclude land uses or parcels that are unlikely to develop for categorical reasons (e.g. parks, schools, public facilities, and other institutions);
- Identify planned density by zone (see discussion below);
- Define thresholds for identifying vacant and redevelopable parcels (see discussion below);
- Identify vacant and redevelopable parcels using thresholds;

- Review and refine the resulting developable land supply;
- Remove area for environmentally sensitive lands (critical areas);
- Screen for infrastructure gaps; and
- Summarize developable land supply by zone.

Planned Density Reporting

Planned density typically refers to the maximum density allowed by zoning code and development regulations. Planned densities were collected for two reasons: First, as a part of new requirements to the Growth Management Act (GMA) buildable lands statute passed by the State Legislature in 2017, King County jurisdictions are required to evaluate whether planned densities are being achieved in the 2021 Urban Growth Capacity Study. Achieved densities (evaluated in Phase One reporting) are later compared to planned densities as one indicator of whether development is occurring as planned.

Second, planned densities are used in the identification of redevelopable lands. These are lands that have some development already, but which could reasonably be expected to see additional development during the planning period. Redevelopable parcels include **partially utilized** parcels, meaning the parcel is large enough to be subdivided to allow for the creation of additional residential lots. They can also include **underutilized** parcels, which are parcels that could be converted to a more intensive use typically because the planned density is significantly higher than the existing density on the parcels. Since the 2007 Buildable Lands Report, King County has recommended jurisdictions identify both kinds of redevelopable lands by comparing the existing density of development to its planned or potential density (see additional discussion below).

Typically, planned densities for residential zones are reported in dwelling units per acre (du/acre), and in floor area ratio (FAR) for non-residential zones. In certain cases, residential planned density is reported in terms of FAR or minimum lot size. Non-residential planned density has more variation and is less frequently defined as explicitly as residential zones. For these zones, jurisdictions were asked to fill out a FAR calculator to assist with consistent comparisons later in the study.

Developable Land Supply Reporting

This portion of the analysis involved a jurisdiction-wide scan to quantify all land available for residential or commercial/industrial development for the next 20-year planning period. “Land supply” is the phrase used to refer to an inventory of land “suitable for development.” Land supply inventories for each jurisdiction ideally strive for a snapshot of land with development potential as of January 2019, approximating the end of the most recent evaluation period (2012-2018). The land supply is comprised of both vacant and redevelopable lands and is typically based on a parcel-based dataset provided by King County. In certain cases, individual jurisdictions maintain a land supply based on development site data in lieu of parcel data.

Vacant Definition

Vacant lands are devoid of development or contain only low value accessory structures. For this study, a recommended two-part test was used to determine if a parcel was vacant: query parcels with assessor present use codes indicating vacant land use *and* query parcels with improvement values less than $10,000. Selected parcels were then screened for known exclusions, such as school district land, parking lots associated with condo buildings, government-owned land, and other land use types (see Appendix).

Redevelopable Definition (Residential)

For redevelopable residential land, a ratio of potential to existing density on a parcel was used to determine if a parcel was redevelopable. For example, if a city defined redevelopable land to be where existing development is less than two times the potential density for that property, then a single family property on an acre lot which is zoned for up to four units per acre, would be considered redevelopable.

Jurisdictions were recommended to choose a threshold between 2and 3.5. The threshold a jurisdiction selected was influenced by development pressure and existing density, i.e. a lower threshold is more appropriate for denser, rapidly developing jurisdictions.

King County provided calculated residential density by parcel for this phase. Combined with planned density, jurisdictions were able to calculate the above ratio and test various thresholds. Once a given threshold was selected, results were queried and then screened through a variety of factors (for details see Appendix B: Phase 2 Guidance).

Redevelopable Definition (Non-Residential and Mixed-Use)

Two methods were provided to jurisdictions for identifying redevelopable non-residential and mixed-use parcels. While a density-based ratio—as is recommended for residential lands—can be informative in some areas (particularly those facing significant development pressure), an improvement-to-land-value based ratio may also accurately identify properties likely to redevelop.

> **Value-ratio method.** In the parcel/assessor data table provided by King County, an improvement-to-land-value ratio was calculated for each parcel (appraised improvement value divided by land value). A low ratio indicates more potential for redevelopment. Theoretically, the ratio reflects the potential profitability of more intensive use of a site relative to the revenue generating potential of the existing use. Typical threshold ratios for determining "redevelopability" range from 0.25 to 1. A threshold of 0.5 was recommended for most areas within the county. Jurisdictions experiencing more intense development pressure were allowed to consider a higher ratio.
>
> **Density-ratio method**. Since planned densities for all zones were being evaluated for this analysis, using a density-based filter is more possible than in past studies. The existing FAR-based density was calculated for every parcel (existing development divided by the parcel area) and included in the parcel data for each jurisdiction. Using the planned density of the

parcel's related zoning, jurisdictions could calculate a potential density value for each parcel. By comparing the potential and existing densities, jurisdictions could create a ratio by which to judge a parcel's redevelopability. Starting with a ratio of 1.5 (potential-to-existing density) and testing a +/-0.5 tolerance was the recommended starting place for reviewing the redevelopable land supply results. Jurisdictions with less non-residential development pressure were advised to set a higher threshold.

Screening

Regardless of method, queried parcels were screened and selectively removed from the analysis. Full documentation on the screening process can be found in Appendix B: Phase 2 Guidance. Two major factors in reducing land supply—critical areas and infrastructure gaps—bear additional description.

Critical Areas

Using the initial land supply, jurisdictions intersected and removed only non-buildable critical areas and critical area buffers in accordance with development standards, as described in Appendix B.

Infrastructure Gaps

Comporting with the new Department of Commerce Buildable Lands Guidance, the land supply was screened to remove or discount land supply experiencing significant water, sewer, stormwater, or transportation infrastructure gaps that would fully or partially impede development at planned levels. Jurisdictions were provided with a summary of infrastructure constraints identified in their comprehensive plan, and then performed a two-step analysis to further identify infrastructure constrained development: first identifying any areas with development potential outside existing service areas or affected by a significant, but unscheduled infrastructure need, and secondly removing or discounting specific parcels that were unserved and unlikely to be serviced in the next 20 years due to these gaps. Further detail on the infrastructure gaps guidance is contained in Appendix G.

Final Land Supply

After critical area deductions and infrastructure constrained lands were removed, each jurisdiction reported net vacant and net redevelopable land by zone. This is the final land supply.

Major Planned Development – Pipeline

The last section of Phase 2 asked each jurisdiction to fill out permitted development already in the pipeline, and when possible, the corresponding parcel number. Pipeline development was considered separately in the capacity analysis, and this step was to ensure that parcels with permitted development were not double counted towards future capacity as well.

Phases 3 and 4 – Capacity

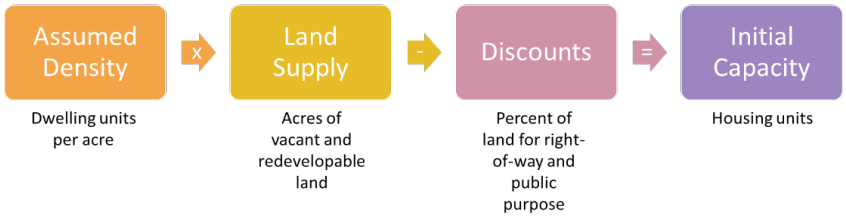
Calculating capacity was spread across two phases of data reporting. Phase 3 focused on an initial capacity calculation by zone paired with local reporting on achieved growth and densities. Phase 4 data reporting finalized urban growth capacity calculations for each jurisdiction by applying market factor and employment density assumptions to the initial capacity calculated in Phase 3.

Capacity Overview

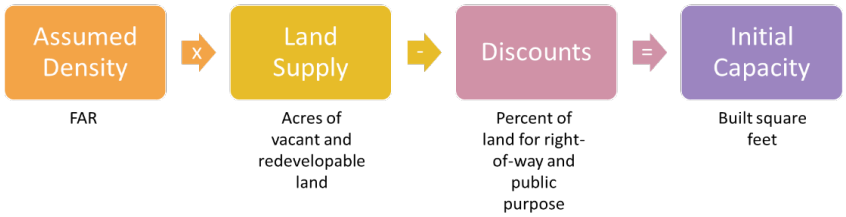
Generally, developable capacity is calculated by zone and is the product of a zone's assumed density and the area of land supply minus a percentage accounting for streets, sidewalks, and public purpose land. Achieved densities calculated in Phase 1 of data collection typically form the basis for the assumed densities and the land supply was reported by zone in Phase 2. Jurisdictions selected discounts for right-of-way and public purpose lands, informed by recent development trends, to reduce the land supply for non-buildable, necessary infrastructure. This process is illustrated below in Exhibit 9.

Exhibit 9. Capacity Calculation Steps

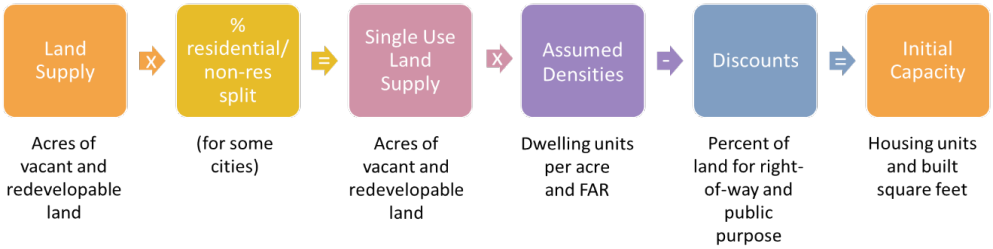
Calculating Residential Capacity



Calculating Non-Residential Capacity



Calculating Mixed-use Capacity



Source: King County Phase 3 Guidance Document, 2020.

Calculating Capacity

The steps for calculating capacity are broken down in the following sections: reporting assumed density, determining mixed-use splits, taking discounts, and calculating capacity.

Assumed Densities

Assumed densities are an important part of developing capacity calculations. They are reported for each zone where development can occur. Except in limited circumstances, assumed densities must be based upon the achieved densities observed in the 2012-2018 evaluation period reported in Phase 1 of Urban Growth Capacity data collection. This is specifically called out in RCW 36.70A.215(3)a, e.

Deviation from achieved density is only permitted for zones in the following circumstances:

- **Insufficient observed development in the evaluation period**. Some zones may have experienced limited or no development to draw reasonable conclusions for anticipated development densities, either in the types of development allowed in a mixed-use zone, or in the quantity of development.
- **Changes in regulations**. Densities achieved in development permitted during the five-year review period may reflect zoning and development regulations that have since changed. Where regulations have changed to effectively increase or decrease achievable net densities, assumed future densities should reflect the impact of those regulatory changes, and the specific changes should be documented.
- **Trends over time**. A trend of increasing dwelling units per acre or FAR over time could justify an assumed future density higher than indicated in the zonal average reported as achieved density in Phase 1. Annual reporting in Phase 1 data would indicate this trend.
- **Infrastructure gaps.** "Partial infrastructure gaps," where infrastructure limitations affected portions of zones from achieving planned densities were identified in Phase 2 data reporting.

In such cases, jurisdictions may look to the planned density to inform the assumed density. Documentation of the specific development circumstances that demand deviation from the achieved density, and the rationale for the selected assumed density are required in the reporting tools.

Assumed densities are the basis for calculating initial capacity below.

Mixed-Use Zone Splits

Mixed-use zones are defined as zones with capacity for both residential and non-residential development. In some cities, mixed-use zones require the achieved use splits observed in Phase 1 to apportion area to residential and non-residential uses to calculate capacity, but all cities were asked to report on differences between achieved density and planned density for mixed-use development.

Some mixed-use zones did not see development in the evaluation period. In these instances, jurisdictions were advised to draw from additional sources:

- Observed splits in zones in comparable zones in or outside of the given jurisdiction
- Expressed vision for these areas in comprehensive and neighborhood plan policies, or development regulations
- Local knowledge of market conditions, demand for space, projects in the development pipeline, and developer interest
- Existing development like that envisioned for a zone

Defining these splits is a key component in understanding the breakdown in land supply available to residential and non-residential development on mixed-use land.

Discounts

To estimate the actual developable capacity, the area of vacant and redevelopable land supply must be reduced or "discounted" to account for land that gets utilized for rights-of-way and other public purpose uses where people do not live or work. Public purpose uses are generally stormwater facilities, parks, or other open space. These amounts vary by type and density of development. The starting place for approximating these discounts is the observed development data used to calculate achieved densities in Phase 1.

Past buildable lands reports provide additional reference points, built from the development observed during those evaluation periods. As development becomes denser and occurs as infill, these discount rates reduce, as right-of-way and public purpose uses are already built into the urban fabric.

Jurisdictions were encouraged to tailor discount selections to major land use types (e.g., multifamily, or non-residential development) and to vacant or redevelopable land. Some jurisdictions varied discounts by zone, based on future development conditions.

Initial Capacity

In this step, capacity is calculated by combining all portions of the analysis up until this point. From here, capacity was calculated by the following steps:

1. Report land supply area by vacant/redevelopable and by zone.
2. Deduct the selected percentages for rights-of-way and public purpose, determining the actual buildable area.
3. Calculate initial capacity by multiplying assumed density by buildable area, resulting in either initial dwelling unit calculations for residential capacity, or square feet of developable floor area for non-residential capacity.
4. Subtract existing units/development on redevelopable parcels in order to obtain the net capacity by zone.

It is important to note that in Phase 1 data collection, achieved densities were separately calculated for the residential and non-residential components of mixed-use projects. These achieved densities were generally calculated from the number of residential units or commercial/office square footage over the entire parcel area. Calculating density in this manner factors in a split between residential and non-residential uses into the achieved density, making a separate apportionment of mixed-use zoned land before the assumed density is applied unnecessary. Some jurisdictions preferred to apportion mixed-use land to single uses to calculate achieved densities. For these jurisdictions, it was necessary to apply the achieved mixed-use land split to the land supply before applying their assumed densities.

Final Capacity

Creating the final urban growth capacity calculations for each jurisdiction involves applying market factor and employment density assumptions to the general capacity calculation process outlined in Phase 3. This section describes those assumptions.

Market Factor

Market Factor is the estimated percentage of developable land contained within an urban growth area that is likely to remain unavailable over the course of a 20-year planning period and is, in practice, the final non-developable land deduction when calculating lands suitable for development and redevelopment. Appendix E: Market Factor Guidance details considerations jurisdictions used when selecting appropriate assumptions to apply in each zone based on local market conditions or other factors.

Employment Density

Estimating employment densities is the final step in estimating total capacity for new job growth in a jurisdiction. While there are various ways to convert land capacity to capacity for new employment, King County selected to use an approach that converts non-residential development capacity measured in square feet of floor area to capacity for new employment. This conversion requires assumptions for the average number of built square feet of floor area for each job. The lower the square foot per job, the higher the density of use. The calculation is simply:

Total job capacity *= Gross square footage[4] of floor area capacity / gross square footage per job*

Square footage per job can vary widely by building type or employment sector. For example, warehouses devote a great deal of square footage to storing inventory or other goods, and therefore typically require considerably more square footage per job than office uses. Average employment density assumptions should reflect the types of job growth that are expected in an area.

Many jurisdictions selected different employment density assumptions for commercial and industrial zones to reflect different expectations for the type of development and job growth expected in those zones. Some jurisdictions even varied employment density assumptions among different commercial zones. For example, a city may assume that average square footage per job is lower in a downtown zone than in other commercial zones further from the core. This decision could reflect expectations that a higher proportion of the downtown floor area capacity will be used as office space, compared to other commercial zones where lower density retail uses may be more common.

Appendix F: Employment Density Guidance provides additional details about considerations jurisdictions could use when selecting the assumptions.

[4] Gross square footage simply refers to the total square footage of the building, including walls. Gross square footage capacity is calculated as the floor area ratio (FAR) * the parcel size in square feet.

Data Review, Land Supply, and Capacity Calculations

With consultant support, King County staff reviewed and summarized data received from the jurisdictions for land supply and capacity throughout Phases 2 through 4. In certain cases, jurisdictions were asked to correct or recalculate portions of the analysis due to inconsistencies discovered in the review process. In other cases, King County staff along with the consultant team reviewed and corrected calculations and sent data back to the jurisdictions for review.

This was an important step for refining the data and providing greater consistency across the entire analysis. The jurisdictions were involved in all conversations when data was changed or corrected, and all data presented in this report have been reviewed and approved by each relevant jurisdiction.

Ch. 3 Development Trends

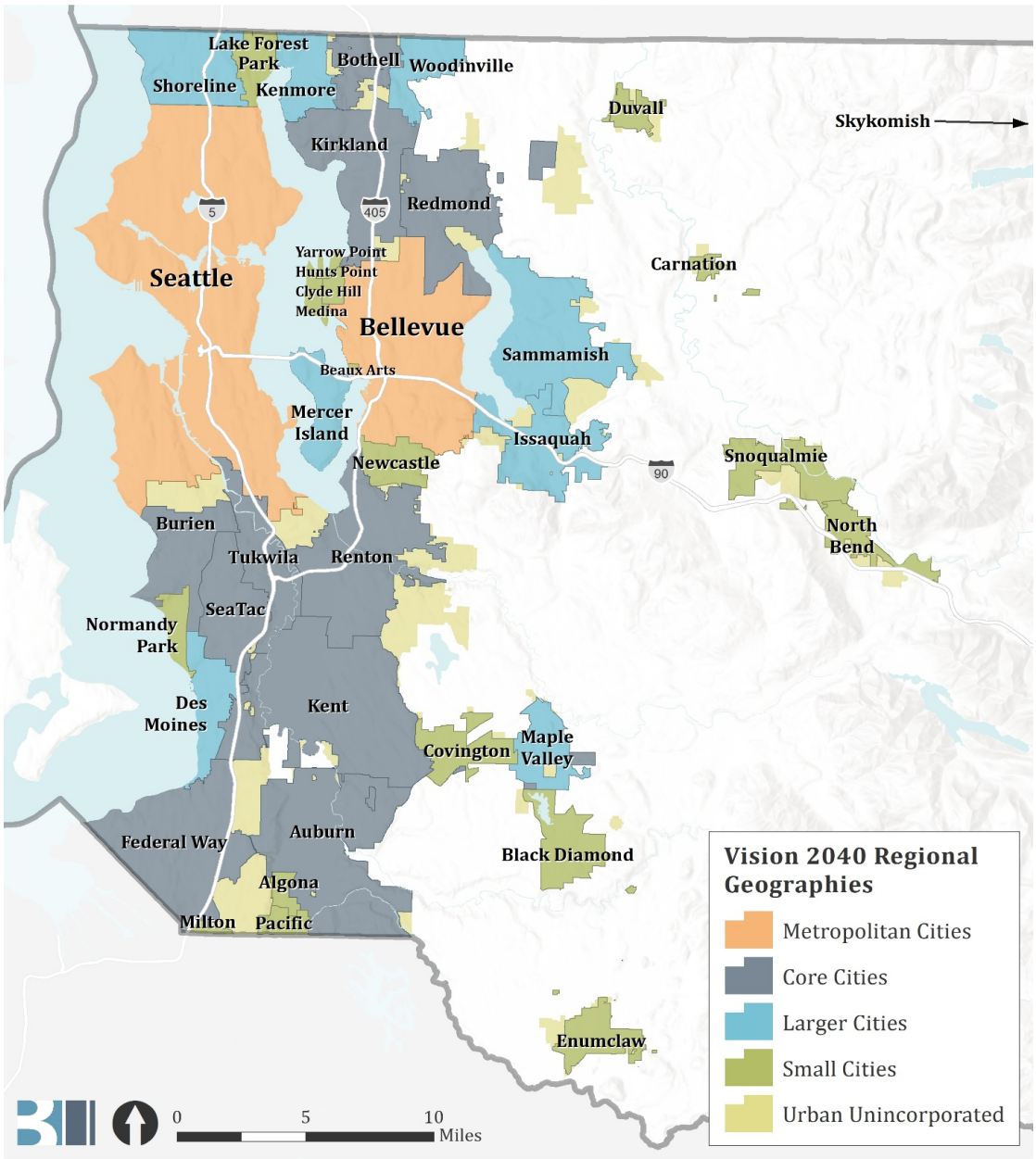
This chapter reviews residential and employment growth trends in King County between 2006 and 2018. It also compares these trends to growth targets set in the 2012 King County Countywide Planning Policies—subsequently extended to 2035.[5] These targets include growth for the Urban Growth Area as a whole and individual jurisdictions, as well as a set of five Regional Geographies for grouping individual jurisdictions: Metropolitan Cities, Core Cities, Larger Cities, Small Cities, and Urban Unincorporated areas (for a map, see Exhibit 10).

Regional Geographies used in this chapter are based on Puget Sound Regional Council's VISON 2040 regional plan, as the 2006-2035 targets were adopted using the VISION 2040 plan as a framework. They should not be confused with the new VISION 2050 Regional Geographies King County adopted in 2020. Chapter 6 will use the new Regional Geographies to summarize capacity with an eye towards planning for new 2019-2044 growth targets.

The final section of this chapter summarizes development trends in rural areas.

[5] King County extended the 2006-2031 growth targets out to 2035 using a linear projection based on continuing the same average annual growth rate. These 2035 targets may vary from land use assumptions used in local comprehensive plans for jurisdictions that selected a different method for extending their 2031 growth targets to 2035.

Exhibit 10. Map of VISION 2040 Regional Geographies Used for 2035 Growth Targets

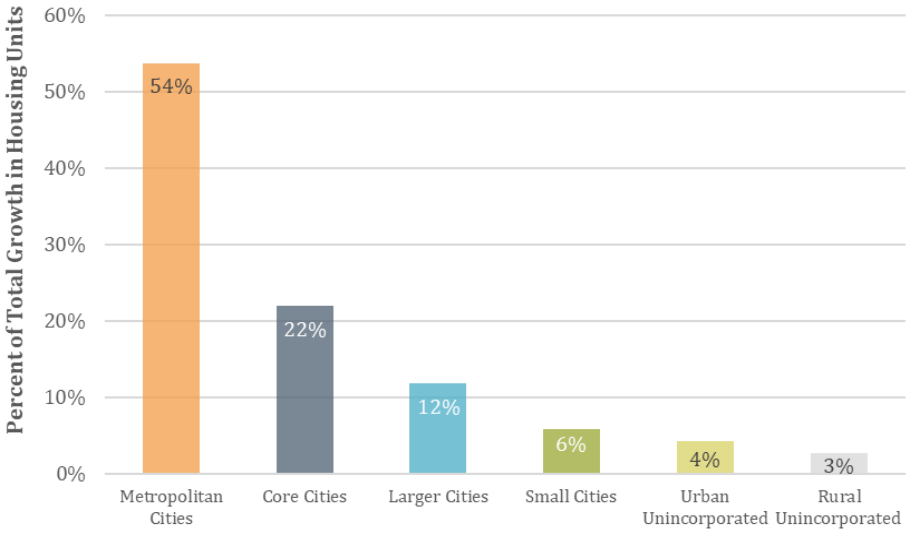


Source: PSRC VISION 2040; BERK, 2021.

Residential Growth Trends

Between 2006 and 2018, the county had a net gain of 415,591 new residents and 130,892 new housing units. The average annual rate of net new housing production was 1.4%. Exhibit 11 shows net new housing with break downs by Regional Geography. Over half of all new housing units were constructed in Metropolitan Cities, with the vast majority in the City of Seattle. During this period only 3% of all housing production was in rural unincorporated areas.

Exhibit 11. Net New Housing Units by Regional Geography, 2006-2018



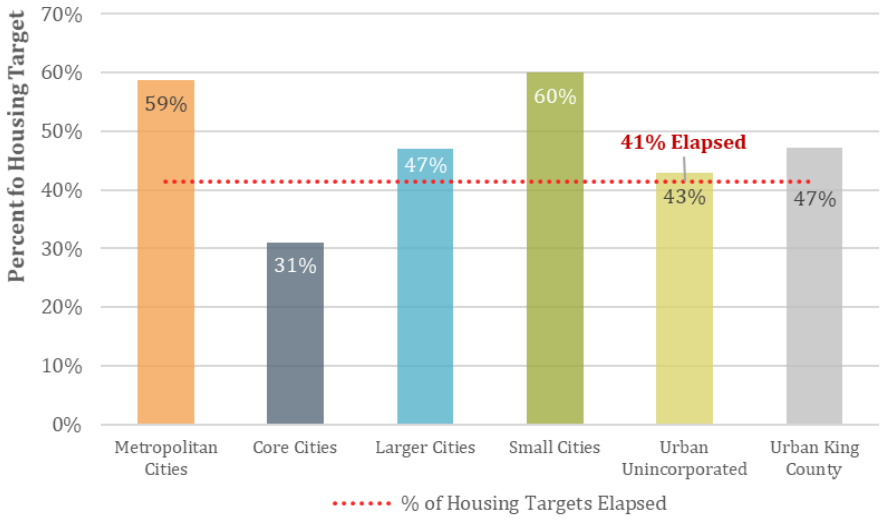
Source: King County, 2021, based on Washington State Office of Financial Management (OFM) Small Area Estimates[6].

Consistency of Residential Growth with Adopted Targets

Urban King County is on pace to meet the 2035 countywide growth target of 276,604 net new units. Exhibit 12 shows progress toward the 2035 housing growth targets. As of 2018, King County was 47% of the way to achieving the 2035 target, compared to 41% of the growth period having elapsed (12 out of 29 years). The exhibit shows that progress by Regional Geography has varied. Collectively, Metropolitan Cities, Larger Cities, and Small Cities have all growth at a faster pace than needed to achieve their targets in 2035. On the other hand, Core Cities have grown more slowly than needed to achieve their 2035 targets.

[6] All 2006 and 2018 city and urban unincorporated area estimates in this chapter are sourced from block-level data from the WA Office of Financial Management (OFM) Small Area Estimates Program. This source was used to develop jurisdictional estimates for both years that reflect approximate current municipal boundaries to control for growth due to annexation. Some variation from OFM official April 1st population estimates for jurisdictions will be evident.

Exhibit 12. Progress Towards 2035 Housing Targets, 2006-2018



Source: King County, 2021, based on OFM Small Area Estimates.

Exhibit 13 compares housing growth to targets for each jurisdiction. The column with colored cells (% of 2035 Target Pace) measures the progress of each city and urban unincorporated King County compared to the pace needed to achieve their 2035 target. A value of 100% indicates the jurisdiction was growing at exactly the right rate to meet their 2035 target, while lower values indicate the jurisdiction was growing at a slower rate than implied in the growth target. For jurisdictions growing slower than the target pace, the color of the cell indicates how close the pace of growth is to target. Jurisdictions very close to the target pace are shown in green, while those further from the pace are in yellow, orange, or red. Relatively few jurisdictions grew significantly slower than the target pace. Most cities that grew significantly faster than their target rate had relatively low residential targets.

Exhibit 13. Residential Growth Compared to Targets, 2006-2018

City/Jurisdiction	2006 Total Housing Units	2006-2035 Housing Target	2006-2018 Housing Production	2018 Total Housing Units	% of 2035 HU target pace	Remaining 2035 Target	Annual Growth Needed to Achieve Target
Metropolitan Cities							
Bellevue	55,107	20,056	6,591	61,698	79%	13,465	1.3%
Seattle	292,881	99,760	63,675	356,556	154%	36,085	0.6%
Subtotal	**347,988**	**119,816**	**70,266**	**418,254**	**142%**	**49,550**	**0.7%**
Core Cities							
Auburn	23,602	11,159	3,138	26,740	68%	8,021	1.8%
Bothell	9,522	4,420	2,204	11,726	121%	2,216	1.1%
Burien	19,584	5,150	1,225	20,809	57%	3,926	1.1%
Federal Way	34,560	9,396	2,525	37,085	65%	6,871	1.1%
Kent	43,552	10,753	4,259	47,811	96%	6,495	0.8%
Kirkland	35,556	9,941	3,100	38,656	75%	6,841	1.0%
Redmond	22,790	11,896	4,946	27,736	100%	6,950	1.5%
Renton	36,168	17,231	6,607	42,775	93%	10,623	1.5%
SeaTac	10,301	6,728	548	10,849	20%	6,180	3.4%
Tukwila	7,739	5,626	130	7,869	6%	5,496	4.1%
Subtotal	**243,374**	**92,300**	**28,683**	**272,057**	**75%**	**63,617**	**1.4%**
Larger Cities							
Des Moines	12,287	3,480	413	12,700	29%	3,067	1.4%
Issaquah	11,517	6,670	5,096	16,612	185%	1,574	0.6%
Kenmore	8,156	4,060	1,120	9,276	67%	2,940	1.9%
Maple Valley	6,765	2,088	2,061	8,826	239%	27	0.0%
Mercer Island	9,467	2,320	1,006	10,473	105%	1,314	0.7%
Sammamish	18,196	4,849	3,585	21,780	179%	1,264	0.3%
Shoreline	22,173	5,800	1,529	23,702	64%	4,271	1.1%
Woodinville	4,550	3,480	604	5,154	42%	2,876	3.3%
Subtotal	**93,110**	**32,747**	**15,413**	**108,523**	**114%**	**17,334**	**0.9%**
Small Cities							
Algona	960	220	89	1,049	97%	132	0.7%
Beaux Arts Village	119	3	1	120	82%	2	0.1%
Black Diamond	1,623	2,204	112	1,735	12%	2,092	7.1%
Carnation	739	383	141	880	89%	242	1.6%
Clyde Hill	1,083	12	8	1,091	176%	3	0.0%
Covington	5,470	1,705	1,564	7,034	222%	141	0.1%
Duvall	2,105	1,322	576	2,681	105%	746	1.6%
Enumclaw	5,048	1,653	278	5,326	41%	1,375	1.5%
Hunts Point	183	1	4	187	888%	-	Met Target
Lake Forest Park	5,226	551	201	5,427	88%	350	0.4%
Medina	1,162	22	72	1,234	795%	-	Met Target
Milton	337	58	271	608	1129%	-	Met Target
Newcastle	3,784	1,392	1,404	5,188	244%	-	Met Target
Normandy Park	2,794	139	83	2,877	144%	56	0.1%
North Bend	3,352	771	361	3,712	113%	411	0.7%
Pacific	2,146	331	316	2,462	231%	15	0.0%
Skykomish	166	12	7	173	144%	5	0.2%
Snoqualmie	2,864	1,873	2,087	4,951	269%	-	Met Target
Yarrow Point	401	16	25	426	375%	-	Met Target
Subtotal	**39,560**	**12,670**	**7,601**	**47,160**	**145%**	**5,069**	**0.6%**
Urban Unincoporated							
Urban Unincorporated	35,910	12,837	5,498	41,408	104%	7,339	1.0%
Subtotal	**35,910**	**12,837**	**5,498**	**41,408**	**104%**	**7,339**	**1.0%**
Urban King County	**759,942**	**270,370**	**127,461**	**887,403**	**114%**	**142,909**	**0.9%**

Source: King County, 2021, based on OFM Small Area Estimates.
Note that data for cities that straddle two counties include only the King County portion.

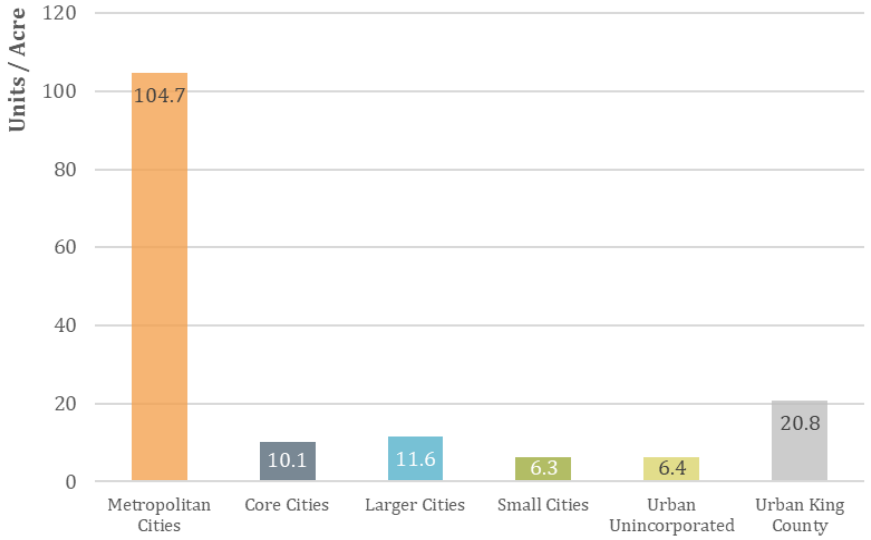
Percent of Target Pace

0% — 100% +

Achieved Residential Density

This section evaluates achieved density in dwelling units per acre for residential construction that was permitted between 2012 and 2018. Achieved density varied significantly between Regional Geographies, as shown in Exhibit 14. Metropolitan Cities permitted housing at ~105 du/acre on average, while in the remainder of the county average density ranged between 6 and 21 units per acre.

Exhibit 14. Average Achieved Density of Permitted Housing Units, 2012-2018



Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

The density of new housing development is strongly related to the types of housing that are provided. This study summarizes development by density level categories[7] that correspond to typical residential development styles. Exhibit 15 shows the categories used in the study, as well as examples of development in King County that fall into each category. Allowing for and encouraging new housing development in a variety of housing types is an important way to increase housing diversity. When a community provides a greater diversity of housing options, it can meet the housing needs of a greater diversity of household types.

[7] Note that these density levels are based on dwelling units per *net* acre. In other words, net density measures units per acre on individual buildable lots. It excludes street rights-of-way and common areas.

Exhibit 15. Categories for Summarizing Achieved Residential Density

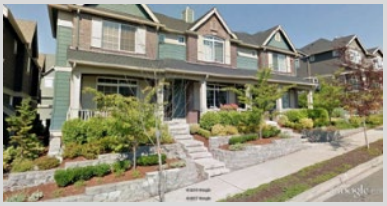
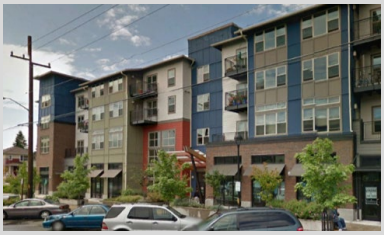
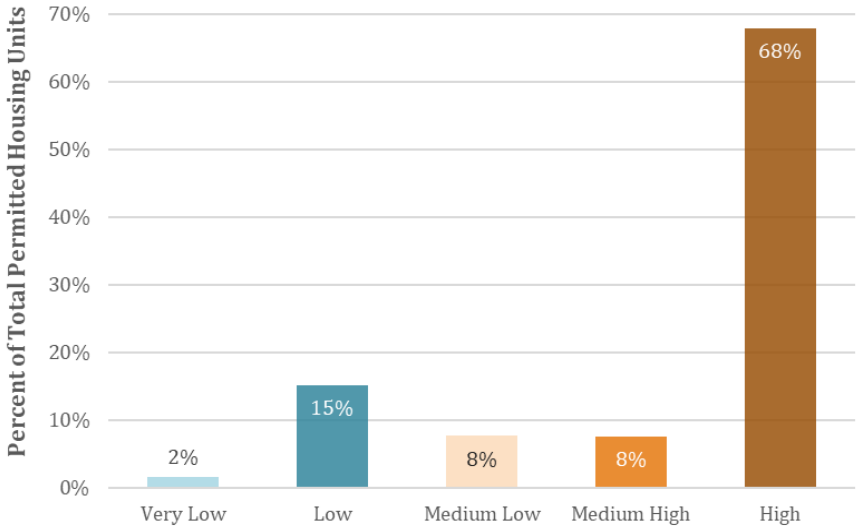
Density Level	Units per Net Acre	Description	Example
Very low	Less than 4	Detached single family homes on large lots	
Low	4-10	Detached single family homes at typical suburban density level Image: Single family neighborhood in Snoqualmie, WA	
Medium-Low	10-24	Small lot single family homes, duplex, triplex, & lower-density townhouses Image: Triplex in Issaquah Highlands, WA	
Medium-High	24-48	Low-rise apartments and condominiums; higher-density townhomes. Image: 5th Avenue condominiums in Kirkland, WA.	
High	48+	Mid- and high-rise apartments and condominiums. Image: Nia apartments in White Center (King County), WA.	

Image sources: mschellhase/flickr.com (Very Low) and Bob Bengford/Google Street View, 2017 (other categories).

Over two-thirds of all newly permitted housing units were High density (48+ units per acre), as shown in Exhibit 16. Housing in this category would almost exclusively be in multifamily buildings such as apartments or condominiums. About 17% of all housing development was in the Low or Very Low categories, indicating single-family housing built at 10 units per acre or less. Only 15% of all housing production was built at Medium densities between 10 and 48 units per acre. Residences in these categories could include "missing middle" formats such as small lot single family, multiplexes, townhomes, and some low-rise apartments or condominiums.

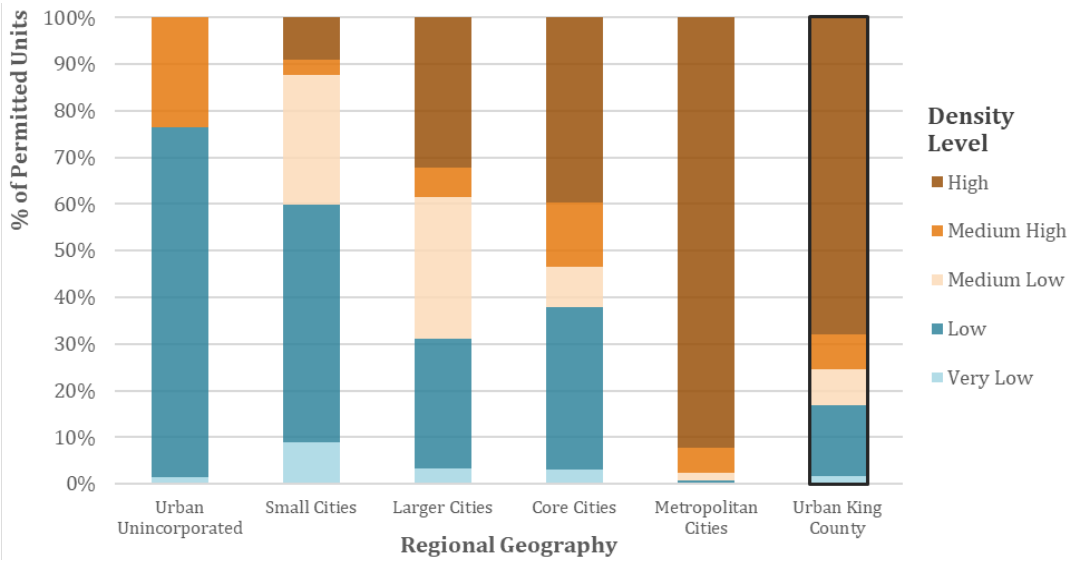
Exhibit 16. Countywide Permitted Housing Units by Achieved Density, 2012-2018



Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

Exhibit 17 shows the distribution of achieved density for each Regional Geography. Over 90% of permitted units in Metropolitan Cities were in the High density housing range. High density housing also accounted for between 30% and 40% of permitted units in Core Cities and Larger Cities, both of which included a diversity of different density levels. In Urban Unincorporated and Small Cities, Low and Very Low density development was most common.

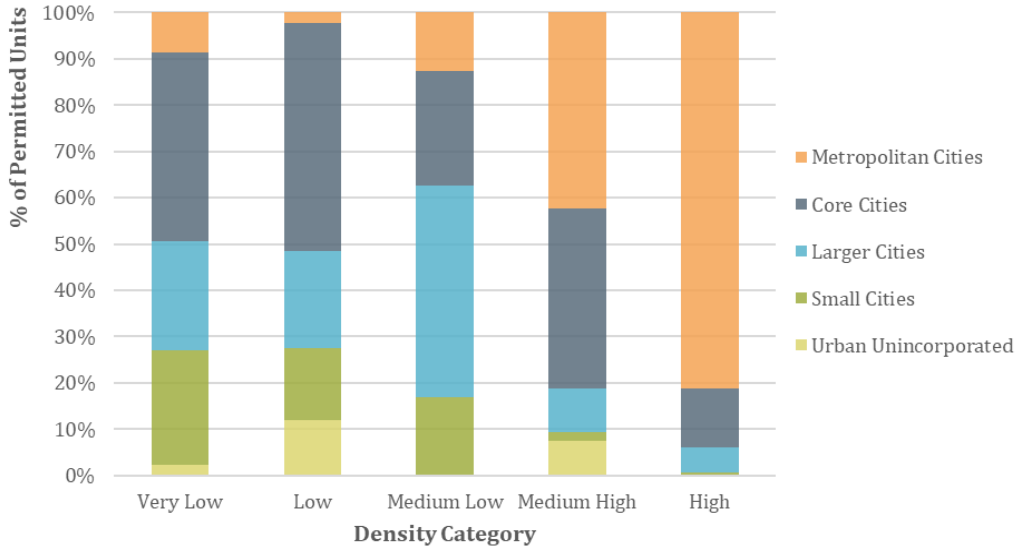
Exhibit 17. Permitted Housing Units by Regional Geography and Achieved Density, 2012-2018



Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

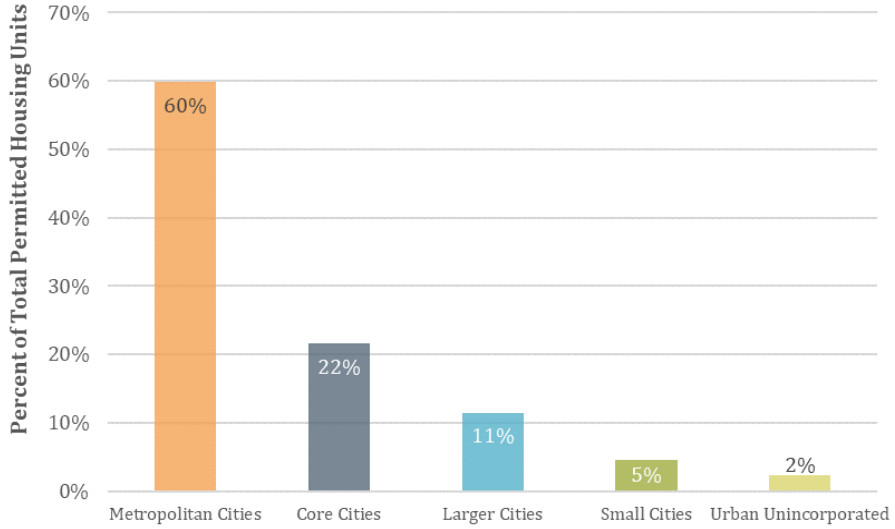
Exhibit 18 presents the same permit data transposed to show the distribution by Regional Geography for each achieved density level. Not surprisingly, most of the High density growth occurred in Metropolitan Cities. Most of the Medium-High density growth was split between Metropolitan Cities and Core Cities. About 70% of both Low and Medium-Low density growth occurred in Core Cities and Larger Cities.

Exhibit 18. Permitted Housing Units by Achieved Density and Regional Geography, 2012-2018



Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

Exhibit 19. Permitted Housing Units by Regional Geography, 2006-2018

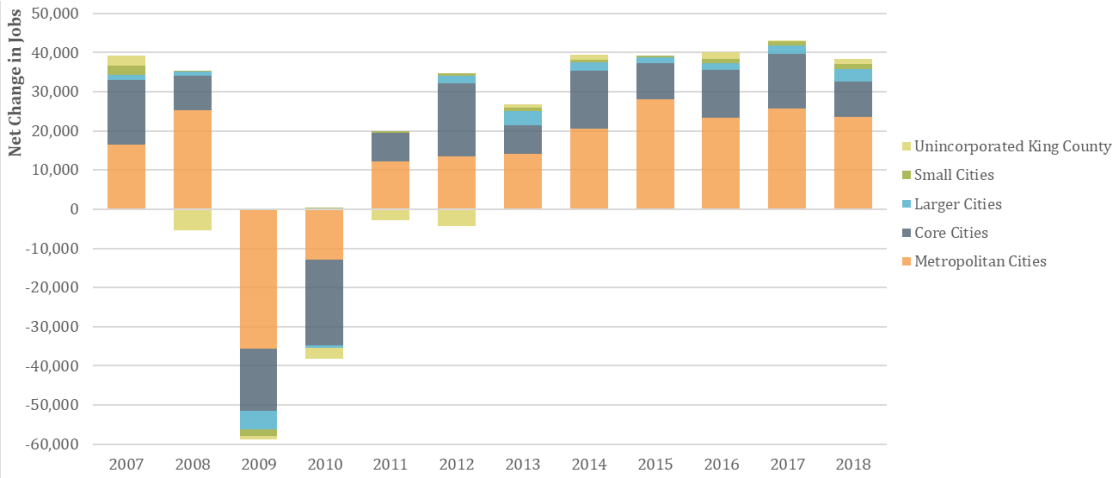


Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

Employment Growth Trends

Between 2006 and 2018, the county had a net gain of 246,475 new jobs. The average annual rate of job growth was 1.8%. Exhibit 20 shows annual gain or loss of jobs by Regional Geography. It shows significant job losses during Great Recession in 2009 and 2010. It also shows smaller losses of jobs in Unincorporated King County in 2008, 2011, and 2012. These are likely due to annexations of unincorporated areas into cities, which would represent a shift of jobs from one Regional Geography category to another rather than actual job losses. With regards to job growth, these trends show annual gains highly concentrated in Metropolitan and Core Cities.

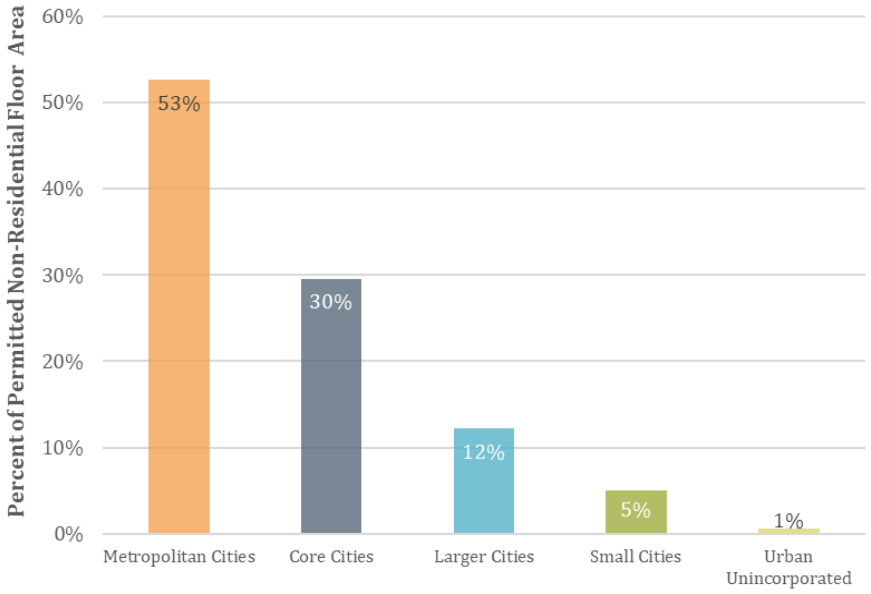
Exhibit 20: Annual Net Change in Jobs by Regional Geography, 2007-2018



Source: PSRC, 2020.

Exhibit 21 breaks down all non-residential development permitted in urban King County by Regional Geography. Over half of this growth was within Metropolitan Cities, and nearly a third was in Core Cities. The other geographies had much smaller shares.

Exhibit 21. Permitted Non-Residential Floor Area by Regional Geography, 2012-2018

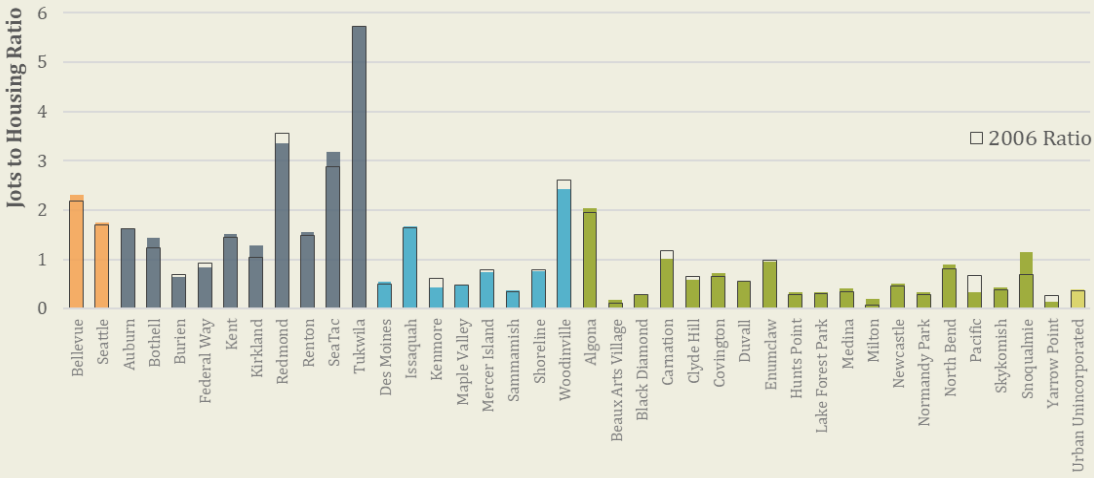


Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

Jobs Housing Balance

The chart below shows the ratio of jobs to housing units for each Regional Geography. Metropolitan Cities and Core Cities are significantly higher than other geographies, reflecting their roles containing King County's primary employment centers. The following exhibit shows the same ratio calculated for each individual jurisdiction. There is significant variation, with Tukwila, SeaTac, and Redmond each standing out with relatively high ratios.

Exhibit 22. Jobs to Housing Ratio by Jurisdiction (2018 vs 2006)

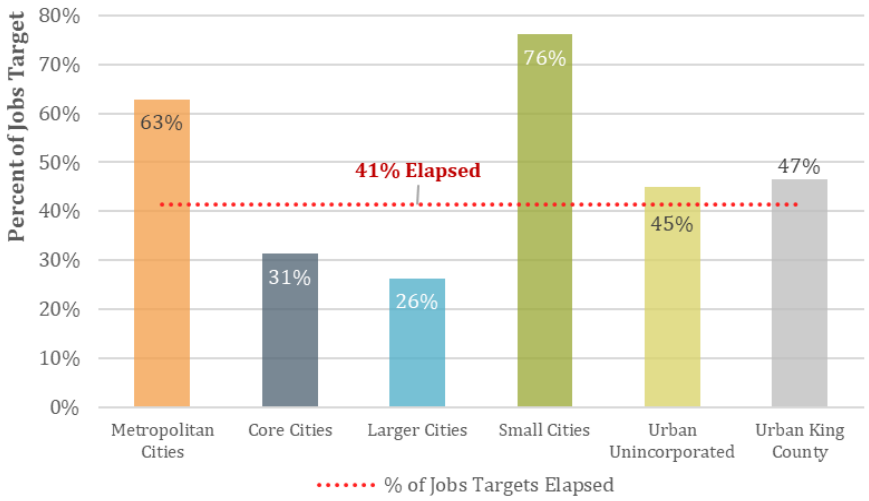


Source: PSRC, 2020; OFM, 2020.

Consistency of Employment Growth with Adopted Targets

Urban King County is on pace to hit the 2035 countywide growth target of 488,659 net new jobs. Exhibit 23 shows progress toward the 2035 job growth targets. As of 2018, King County was 47% of the way to achieving the 2035 target, compared to 41% of the growth period having elapsed (12 out of 29 years). The exhibit shows that progress by Regional Geography has varied. As a category, both Metropolitan Cities and Small Cities have grown at a faster pace than needed to achieve their targets in 2035. On the other hand, Core Cities and Large Cities have grown more slowly than needed to achieve their 2035 targets.

Exhibit 23. Progress Toward 2035 Jobs Target by Regional Geography, 2006-2018



Source: King County, 2021; PSRC, 2020.

Exhibit 24 compares job growth to targets for each jurisdiction. The column with colored cells (% of Jobs Target Pace) measures the progress of each city and unincorporated urban King County compared to the pace needed to achieve their 2035 target. A value of 100% indicates the jurisdiction was growing at exactly the right rate to hit their 2035 target while lower values indicate the jurisdiction was growing at a slower rate than implied in the growth target. For jurisdictions growing slower than the target pace, the color of the cell indicates how close the pace of growth is to target. Jurisdictions close to or above the target pace are shown in green, while those slower than the pace are in yellow, orange, or red.

Exhibit 24. Employment Growth Compared to Targets, 2006-2018

City	2006 Total Jobs	2006-2035 Jobs Target	2006-2018 Jobs Growth	2018 Total Jobs	% of Jobs Target Pace	Remaining 2035 Target	Annual Growth to Achieve 2035 Target
Metropolitan Cities							
Bellevue	120,494	61,480	22,529	143,023	89%	38,951	1.6%
Seattle	498,931	170,172	123,190	622,121	175%	46,982	0.4%
Subtotal	**619,425**	**231,652**	**145,719**	**765,144**	**152%**	**85,933**	**0.7%**
Core Cities							
Auburn	38,252	22,446	5,518	43,770	59%	16,928	2.3%
Bothell	11,757	5,800	5,023	16,780	209%	777	0.3%
Burien	13,371	5,754	(26)	13,345	-1%	5,754	2.5%
Federal Way	31,616	14,268	(468)	31,148	-8%	14,268	2.7%
Kent	63,299	15,405	9,061	72,360	142%	6,344	0.5%
Kirkland	36,698	24,186	12,582	49,280	126%	11,604	1.4%
Redmond	81,207	26,680	11,967	93,174	108%	14,713	0.9%
Renton	53,431	33,640	12,720	66,151	91%	20,920	1.9%
SeaTac	29,585	29,348	4,937	34,522	41%	24,411	4.2%
Tukwila	44,345	20,358	621	44,966	7%	19,737	2.6%
Subtotal	**403,561**	**197,884**	**61,935**	**465,496**	**76%**	**135,455**	**1.7%**
Large Cities							
Des Moines	6,206	5,800	859	7,065	36%	4,941	4.1%
Issaquah	18,889	23,200	8,950	27,839	93%	14,250	3.0%
Kenmore	5,062	3,480	(1,050)	4,012	-73%	3,480	5.1%
Maple Valley	3,297	2,320	893	4,190	93%	1,427	2.0%
Mercer Island	7,453	1,160	292	7,745	61%	868	0.7%
Sammamish	6,199	2,088	1,987	8,186	230%	101	0.1%
Shoreline	17,411	5,800	487	17,898	20%	5,313	1.7%
Woodinville	11,876	5,800	643	12,519	27%	5,157	2.4%
Subtotal	**76,393**	**49,648**	**13,061**	**89,454**	**64%**	**35,537**	**2.3%**
Small Cities							
Algona	1,879	244	263	2,142	261%	-	Met Target
Beaux Arts Village	13	4	9	22	595%	-	Met Target
Black Diamond	458	1,218	57	515	11%	1,161	13.3%
Carnation	871	429	15	886	8%	414	2.7%
Clyde Hill	713	-	(79)	634	N/A	N/A	N/A
Covington	3,528	1,531	1,485	5,013	234%	46	0.1%
Duvall	1,182	974	301	1,483	75%	673	2.7%
Enumclaw	4,960	853	96	5,056	27%	757	0.9%
Hunts Point	51	-	13	64	N/A	N/A	N/A
Lake Forest Park	1,612	244	165	1,777	164%	79	0.3%
Medina	409	-	110	519	N/A	N/A	N/A
Milton	22	186	98	120	128%	88	4.3%
Newcastle	1,736	853	891	2,627	253%	-	Met Target
Normandy Park	773	75	161	934	516%	-	Met Target
North Bend	2,707	1,218	590	3,297	117%	628	1.1%
Pacific	1,443	429	(609)	834	-343%	429	3.0%
Skykomish	64	-	12	76	N/A	N/A	N/A
Snoqualmie	2,004	1,218	3,684	5,688	731%	-	Met Target
Yarrow Point	109	-	(49)	60	N/A	N/A	N/A
Subtotal	**24,534**	**9,475**	**7,213**	**31,747**	**184%**	**4,275**	**0.8%**
Urban Unincorporated							
Urban Unincorporated	12,843	7,900	3,557	16,400	109%	4,343	1.6%
Subtotal	**12,843**	**7,900**	**3,557**	**16,400**	**109%**	**4,343**	**1.6%**
Urban King County	**1,136,756**	**496,559**	**231,485**	**1,368,241**	**113%**	**265,074**	**1.1%**

Source: King County 20211; PSRC, 2020.

Percent of Target Pace

0% — 100% +

Achieved Non-Residential Density

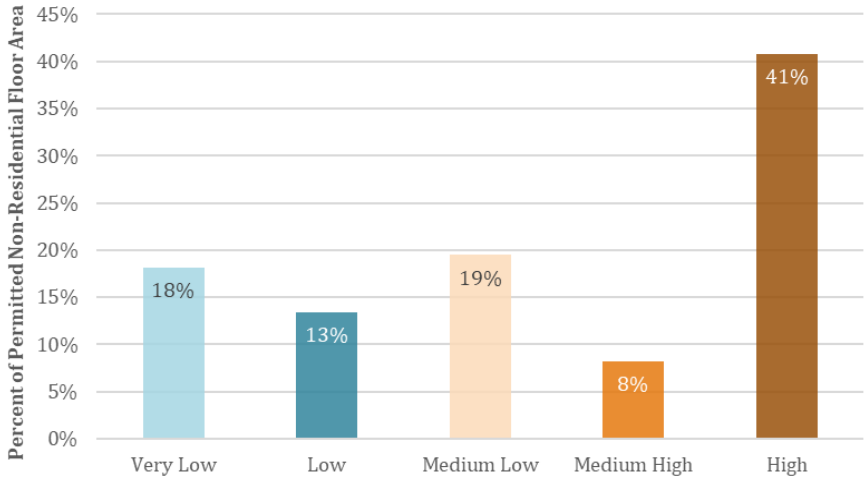
For non-residential construction that occurred between 2012 and 2018, jurisdictions evaluated achieved density in floor area ratio (FAR). This metric compares the built floor area of structures to the total area of the parcel. For multistory buildings, this method sums floor area on each story. This can result in floor area ratios greater than 1.0. When presenting the results of this analysis, this report summarizes achieved density in five density categories, shown in Exhibit 25.

Exhibit 25. Categories for Summarizing Achieved Non-Residential Density (FAR)

Very Low	Low	Medium-Low	Medium-High	High
Less than 0.35	**0.35 – 0.5**	**0.5 – 1.0**	**1.0 – 3.0**	**Greater than 3.0**

During the six-year analysis period, about 41% of all newly permitted non-residential development was High density (greater than 3 FAR), as shown in Exhibit 26. Medium-Low and Very Low were the two next common density levels. Medium-High was the least common with only 8% of all development.

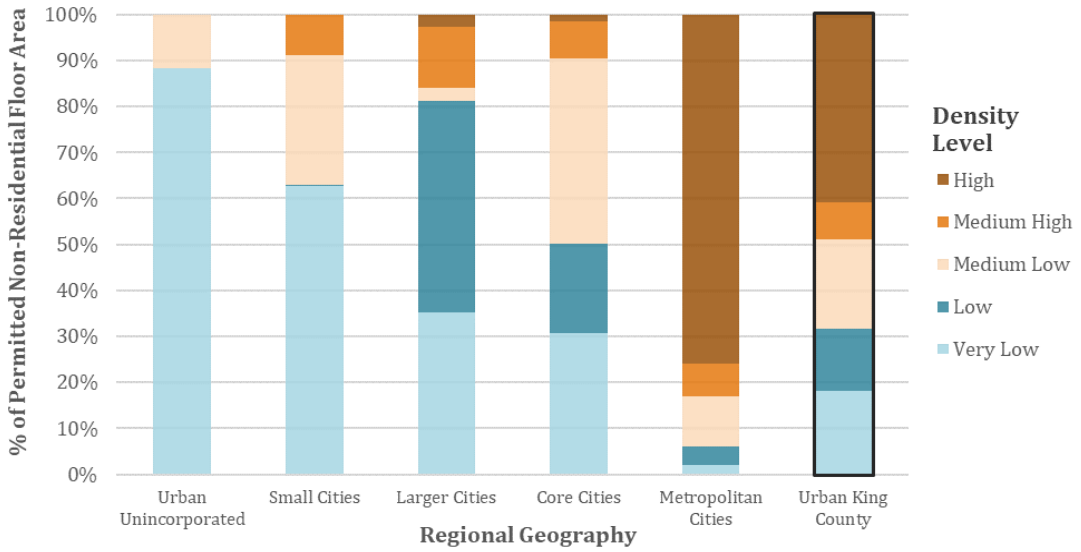
Exhibit 26. Permitted Non-Residential Development by Achieved Density Level, 2012-2018



Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

Exhibit 27 shows the distribution of achieved non-residential density for each Regional Geography. About 75% of build square footage in Metropolitan Cities was developed at High density. In all other Regional Geographies, Low or Very Low development accounted for half or more of all square footage.

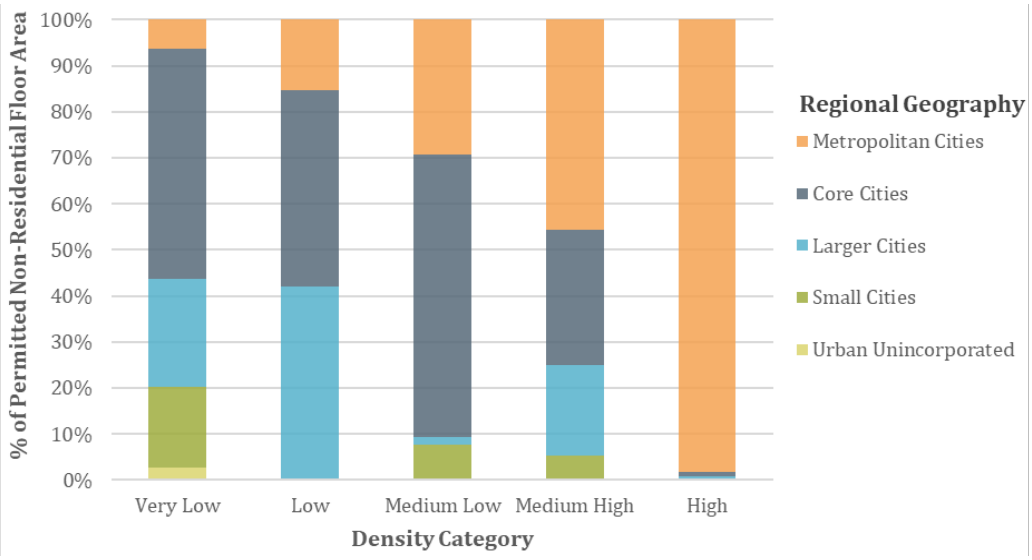
Exhibit 27. Permitted Non-Residential Development by Regional Geography and Achieved Density, 2012-2018



Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

Exhibit 28 presents the same permit data transposed to show the distribution by Regional Geography for each achieved density level. Not surprisingly, nearly all High-density development occurred in Metropolitan Cities. Development at other density levels was spread out across different Regional Geographies. The one exception is Urban Unincorporated, which saw very limited development overall and mostly in Very Low density projects.

Exhibit 28. Permitted Non-Residential Development by Achieved Density and Regional Geography, 2012-2018



Source: BERK, 2021, based on permit data summarized by King County jurisdictions.

Rural Development Trends

While the purpose of the Urban Growth Capacity Report is to analyze urban development trends and determine whether King County and its cities have sufficient capacity within the Urban Growth Area to accommodate the county's forecasted population and job growth, RCW 36.70A.215 (2) requires analysis of land uses and development outside the UGA. Such information can be useful in analysis of residential trends and to assist the county in directing its programs to areas of greatest need. It is also helpful in analyzing links between urban and rural growth trends. This report examines growth trends on rural and resource lands during the 2012-2018 evaluation period.

Rural Areas and Resource Lands in King County

The landscape of King County's rural and resource areas is characterized by extensive forests, small-scale farms, free-flowing streams, and a variety of residential housing—mostly at very low densities. There is no growth target for rural or resource areas. Their role is as supplier of resources including timber and agricultural products with primary characteristics including:

- Rural areas cover approximately 300 square miles of King County (15% of the land area), including all of Vashon Island and a band of territory east of the contiguous UGA.
- Resource lands—including designated Forest and Agricultural Production Districts and Mineral Lands—cover about 1,350 square miles, or nearly 65% of King County's total land area.

- By contrast, the entire King County UGA covers 460 square miles, less than 22% of the county's land area.
- Together, the rural- and resource-designated areas cover more than three-fourths of the county's land area but contain only 130,000 people, about 6% of the county's total population.
- The Countywide Planning Policies (CPPs) assume only a small fraction of King County's residential growth will occur in rural and resource areas; staff projected about two percent of countywide growth for the 2006-35 planning period.

Growth Trends Outside the Urban Growth Area

A major goal of the King County Comprehensive Plan and the Countywide Planning Policies is to focus growth into the Urban Growth Area. As Ch. 4 Growth Capacity demonstrates, King County's Urban Growth Area has sufficient capacity to accommodate its entire growth target. Prior to the adoption of the Growth Management Act in 1991, about 10-14% of each year's new residential units were built outside the UGA. Following adoption of the county Comprehensive Plan in 1994, the percent of growth in rural areas declined precipitously. While permitting in rural King County increased as growth returned to King County following the Great Recession, it remains a small percentage of the county's overall growth. Since 2012, only about 1.5% of new units have been developed outside the UGA, as shown in Exhibit 29. These findings demonstrate that King County is succeeding in directing growth to—and accommodating growth within—the Urban Growth Areas.

Exhibit 29. Permit Trends on Rural and Resource Lands

Year	Total Units Permitted	Units Permitted in the Rural Area	Rural Percent of County total
2012	12,191	92	0.8%
2013	11,688	138	1.2%
2014	13,350	201	1.5%
2015	13,620	215	1.6%
2016	13,300	244	1.8%
2017	14,700	278	1.9%
2018	17,400	260	1.5%

Source: King County/Puget Sound Regional Council, 2020

Key Development Findings on Rural and Resource Lands

The major findings regarding land uses and activities in the rural areas and on resource lands are as follows:

- There are approximately 48,300 existing housing units on rural and resource lands (approximately 43,500 units on rural and 4,800 units on resource lands).
- An average of about 200 new residential units per year were permitted on rural and resource lands between 2012 and 2018.
- This small amount of growth is expected to continue, consistent with the assumption in the CPPs of a small fraction of residential growth occurring in rural areas and resource lands.
- Of approximately 66,000 total parcels in rural and resource areas, about 56,000 are developed with residential, commercial, public, or open space use. Another 10,000 parcels are vacant or in an accessory use.
- Many parcels in rural areas are smaller than the minimum lot size because they were created before current zoning was in place.
- At current rates of residential permitting, the rural area will still have undeveloped lots at the end of the planning period in 2035.

For commercial and industrial uses on rural and resource lands, the major findings are as follows:

- There are approximately 150 vacant parcels zoned for commercial or industrial uses in rural and resource lands, covering over 2,000 acres.
- Approximately 40 of these parcels are on designated resource land, accounting for over half of the vacant non-residential area, nearly 1,200 acres.
- A limited amount of non-residential development occurred on rural parcels from 2012-2018. Most non-residential development was school or church buildings.
- Excluding the school, church, and accessory development, approximately 50,000 square feet of development was constructed across 6 different developments.

Ch. 4 Growth Capacity

This chapter presents urban growth capacity for housing and jobs in King County. Summaries include capacity for the county as a whole, individual jurisdictions, and a set of five Regional Geographies for grouping individual jurisdictions based on the Puget Sound Regional Council (PSRC) VISION 2050 growth plan: Metropolitan Cities, Core Cities, High Capacity Transit (HCT) Communities, Cities & Towns, and Urban Unincorporated areas.

PSRC designated three unincorporated potential annexation areas (PAAs), Federal Way PAA, North Highline PAA, and Renton PAA, as HCT Communities. However, for capacity results in this chapter, data for HCT Communities excludes all unincorporated areas and groups the PAAs into the Urban Unincorporated areas. See Exhibit 30 for a map of jurisdictions by Regional Geography.

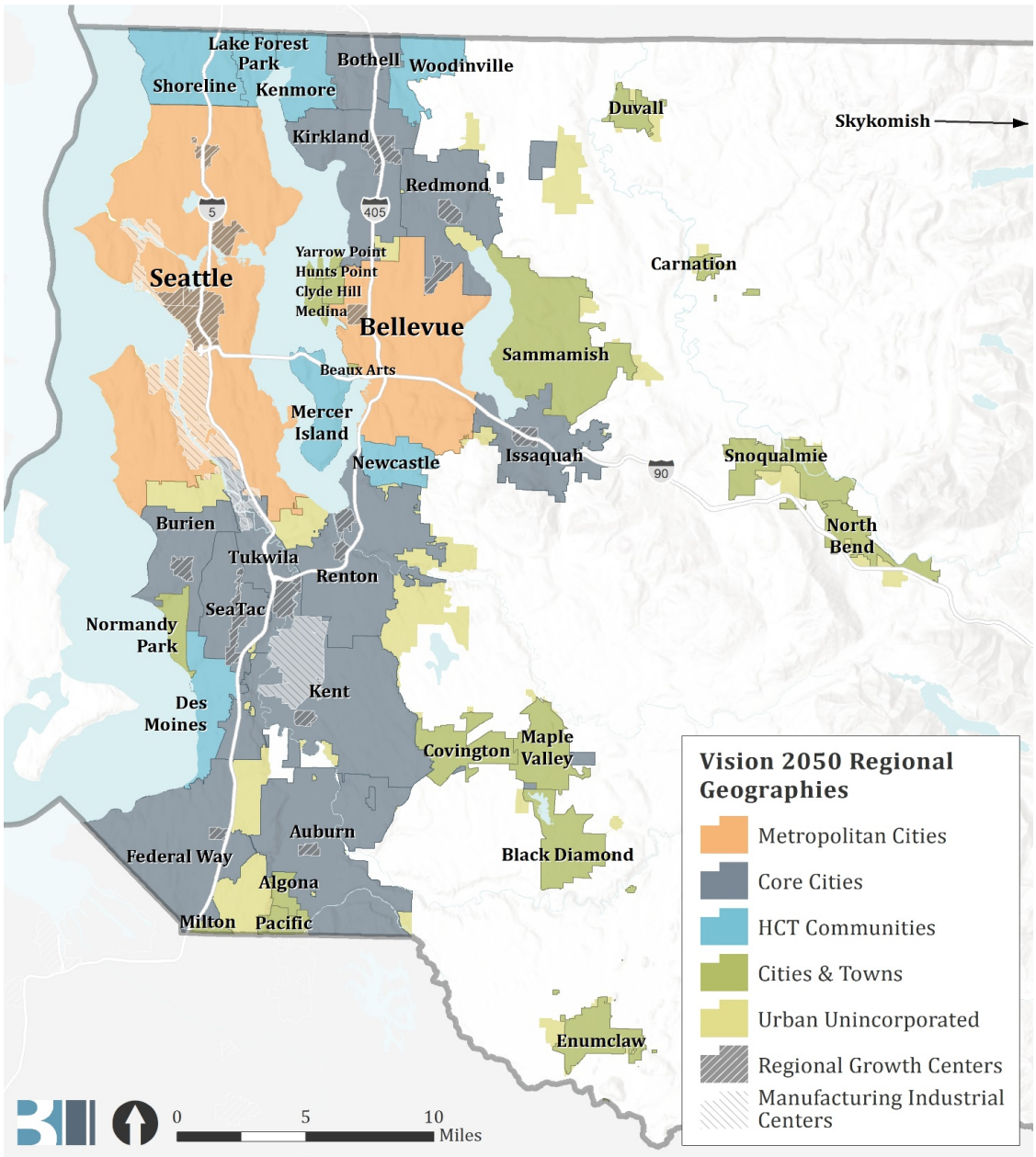
The Regional Geographies used in this chapter and in the jurisdictional profiles in Chapter 7 should not be confused with the older VISION 2040 Regional Geographies discussed in Chapter 4. These new geographies are consistent with those used in the VISION 2050 multicounty planning policies developed through PSRC in 2020, although all unincorporated urban areas are included in the urban unincorporated category.

General Findings

Urban King County has growth capacity of 406,124 housing units and 612,952 jobs in the urban areas of the county. This capacity is distributed within jurisdictions across the county, as shown in Exhibit 31. This exhibit breaks down both housing and employment capacity by VISION 2050 Regional Geography, and it shows the share of capacity by jurisdiction within each geography. Note that data for cities that straddle two counties include only the King County portion.[8]

[8] These cities include Auburn, Bothell, Milton, and Pacific.

Exhibit 30. Map of VISION 2050 Regional Geographies



Sources: PSRC VISION 2050; BERK, 2021.

Exhibit 31. Housing and Job Capacity by VISION 2050 Regional Geography and Jurisdiction

Jurisdiction	Total Housing Capacity (Units)	Share of Housing Capacity in Regional Geography	Total Job Capacity (Jobs)	Share of Job Capacity in Regional Geography
Metropolitan Cities				
Bellevue	26,859	13%	117,241	32%
Seattle	172,440	87%	245,598	68%
Subtotal	**199,298**		**362,839**	
Core Cities				
Auburn	9,151	7%	7,927	4%
Bothell	6,370	5%	9,335	5%
Burien	10,816	8%	752	0%
Federal Way	14,077	11%	29,500	15%
Issaquah	14,103	11%	15,561	8%
Kent	11,248	9%	28,995	14%
Kirkland	13,352	10%	18,139	9%
Redmond	17,777	14%	15,851	8%
Renton	16,503	13%	26,210	13%
SeaTac	6,396	5%	15,565	8%
Tukwila	8,219	6%	33,749	17%
Subtotal	**128,011**		**201,584**	
HCT Communities				
Des Moines	8,386	17%	2,410	14%
Kenmore	4,135	9%	3,881	23%
Lake Forest Park	1,870	4%	691	4%
Mercer Island	1,607	3%	961	6%
Newcastle	3,234	7%	680	4%
Shoreline	25,590	53%	3,953	23%
Woodinville	3,705	8%	4,373	26%
Subtotal	**48,527**		**16,950**	
Cities & Towns				
Algona	266	1%	313	1%
Beaux Arts	2	0%	0	0%
Black Diamond	8,434	37%	3,188	11%
Carnation	704	3%	2,864	10%
Clyde Hill	5	0%	28	0%
Covington	4,609	20%	8,421	28%
Duvall	1,343	6%	681	2%
Enumclaw	1,308	6%	1,152	4%
Hunts Point	5	0%	0	0%
Maple Valley	2,221	10%	1,784	6%
Medina	8	0%	0	0%
Milton	66	0%	1,213	4%
Normandy Park	135	1%	35	0%
North Bend	2,098	9%	5,759	19%
Pacific	137	1%	77	0%
Sammamish	1,144	5%	305	1%
Skykomish	29	0%	0	0%
Snoqualmie	372	2%	4,079	14%
Yarrow Point	17	0%	0	0%
Subtotal	**22,903**		**29,899**	
Urban Unincorporated				
Subtotal	**7,386**		**1,680**	
Total Urban Capacity:	**406,124**	**Housing Units**	**612,952**	**Jobs**

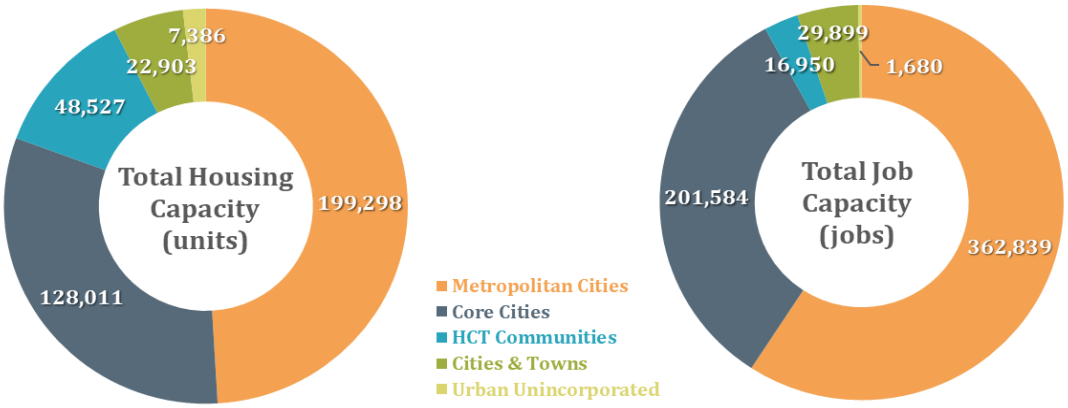
Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020-2021.

Findings by Regional Geography

Exhibit 32 summarizes housing and job capacity in King County, with breakdowns by VISION 2050 Regional Geographies. Nearly half of all housing capacity is in the Metropolitan Cities (Seattle and Bellevue), with another 32% of capacity located in Core Cities. Job capacity is even more focused in Metropolitan Cities and Core Cities. Only 20% of housing capacity and less than 9% of all job capacity is in the HCT Communities, Cities & Towns, or Urban Unincorporated categories. HCT Communities have a much higher relative share of housing capacity with 12% of countywide total, compared to only 3% of countywide job capacity.

Exhibit 32. Capacity Summary, King County – VISION 2050 Geographies

VISION 2050 Regional Geographies	Total Housing Capacity		Total Job Capacity	
	Units	Percent	Jobs	Percent
Metropolitan Cities	199,298	49%	362,839	59%
Core Cities	128,011	32%	201,584	33%
HCT Communities	48,527	12%	16,950	3%
Cities & Towns	22,903	6%	29,899	5%
Urban Unincorporated	7,386	2%	1,680	0.3%
Total Urban Capacity	**406,124**	**Housing Units**	**612,952**	**Jobs**



Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020-2021.

Residential Capacity

Exhibits in this section are grouped both by VISION 2050 Regional Geographies, as well as by assumed density level. For capacity calculations, individual jurisdictions selected an assumed density level for each zone based on a combination of factors, including the achieved density measured in historic development activity as well as current planned density. See Chapter 3 for more information about achieved density.

For residential capacity, each zone is categorized by density level according to the assumed dwelling units per acre (du/acre) for future development. Exhibits reporting residential capacity throughout the rest of this report rely on the following density levels, consistent with the categorization of achieved density levels in Ch. 3.

Exhibit 33. Assumed Density Levels – Residential Capacity (dwelling units per acre)

Very Low	Low	Medium-Low	Medium-High	High
Less than 4	**4 - 10**	**10 – 24**	**24 – 48**	**Greater than 48**

Source: BERK, 2021

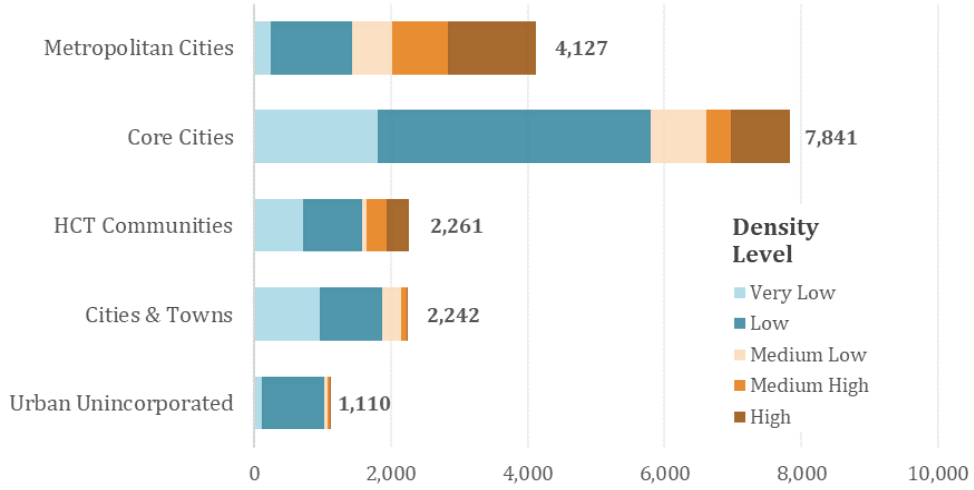
Residential Land Supply

Exhibit 34 and Exhibit 35 show the breakdown of the net buildable land for residential development after all deductions have been made. Deductions include the removal of non-buildable critical acres and critical area buffers, infrastructure constrained areas, future rights of way and usage for public purpose, and market factor. It is important to emphasize that these exhibits do not show growth capacity for new housing units, rather they show the acreage of land available for residential development.

There are 17,581 acres of buildable land available for residential development. Much of that land is grouped in the very low and low assumed density levels. This exhibit highlights the relative higher amount of land available in Very Low and Low density levels.

Exhibit 34. Buildable Residential Land by Assumed Density (acres)

Vision 2050 Geography	Assumed Density					Total	
	Very Low	Low	Medium Low	Medium High	High	#	%
Metropolitan Cities	244	1,190	590	810	1,293	4,127	23%
Core Cities	1,807	3,985	819	363	867	7,841	45%
HCT Communities	712	864	63	302	321	2,261	13%
Cities & Towns	965	906	284	76	11	2,242	13%
Urban Unincorporated	108	921	41	33	6	1,110	6%
Urban King County	**3,837**	**7,865**	**1,797**	**1,584**	**2,498**	**17,581**	**100%**

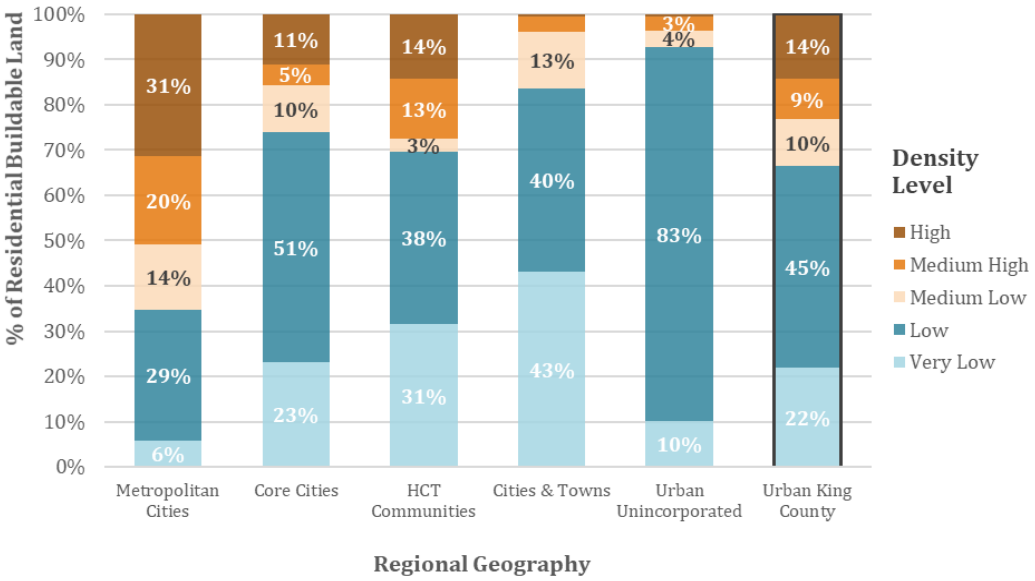


Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020-2021.

Exhibit 35 shows similar data presented by percent breakdown by geography by assumed density level as opposed to total acres of residential land supply. Metropolitan Cities have the greatest share of land supply allocated for higher density development, with 51% of available land for residential development falling into Medium-High or High density zones. The share of land in these density levels is much lower in the other Regional Geographies. HCT Communities have a somewhat higher share of Medium-High and High density land supply (27%) than Core Cities (16%), likely reflecting a relatively larger share of land in zones established to support transit-oriented residential and mixed-use development.

Across the entire county, two-thirds of residential land supply falls into the Low or Very Low density levels, with just 23% of land supply categorized as High density or Medium-High density. While there is less residential land supply available at the higher density levels, the higher density levels allow for a far larger relative share of housing unit growth capacity, as discussed in the following section.

Exhibit 35. Percent of Residential Buildable Land by Regional Geography and Assumed Density



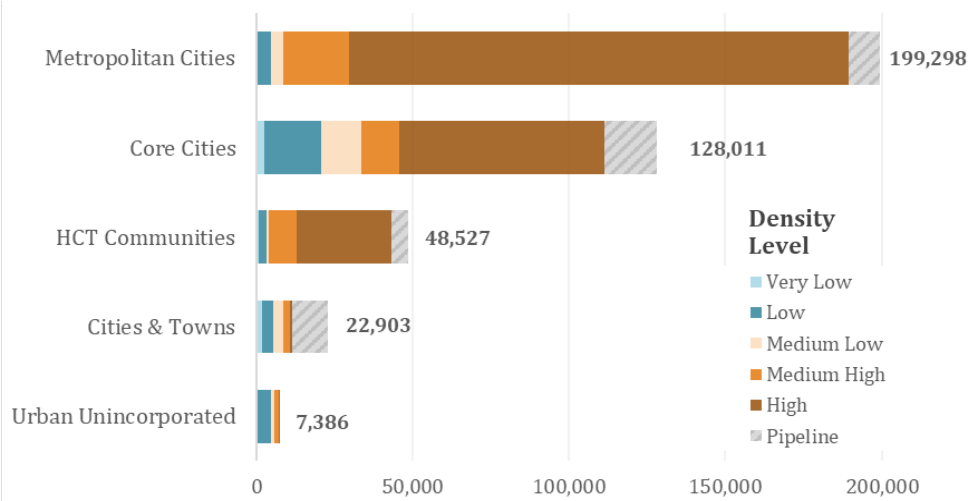
Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020-2021.

Residential Unit Capacity

Exhibit 36 and Exhibit 37 show residential growth capacity in terms of housing units, broken down by assumed density level and pipeline capacity. Pipeline capacity refers to housing units or non-residential development that has been permitted for construction, but not yet built as of the baseline for this study of January 1, 2019. Parcels with pipeline development are set aside and not counted in the remaining capacity broken down by assumed density level. See Chapter 3 for a more detailed discussion.

Exhibit 36. Housing Capacity by Assumed Density (units)

Vision 2050 Geography	Assumed Density						Total	
	Very Low	Low	Medium Low	Medium High	High	Pipeline	#	%
Metropolitan Cities	438	4,308	3,803	21,053	159,711	9,984	199,298	49%
Core Cities	2,555	18,307	12,778	11,991	65,645	16,734	128,011	32%
HCT Communities	622	2,649	679	8,851	30,486	5,239	48,527	12%
Cities & Towns	1,846	3,558	3,265	1,860	770	11,604	22,903	6%
Urban Unincorporated	68	4,656	964	1,400	298	0	7,386	2%
Urban King County	**5,529**	**33,479**	**21,490**	**45,155**	**256,910**	**43,561**	**406,124**	**100%**

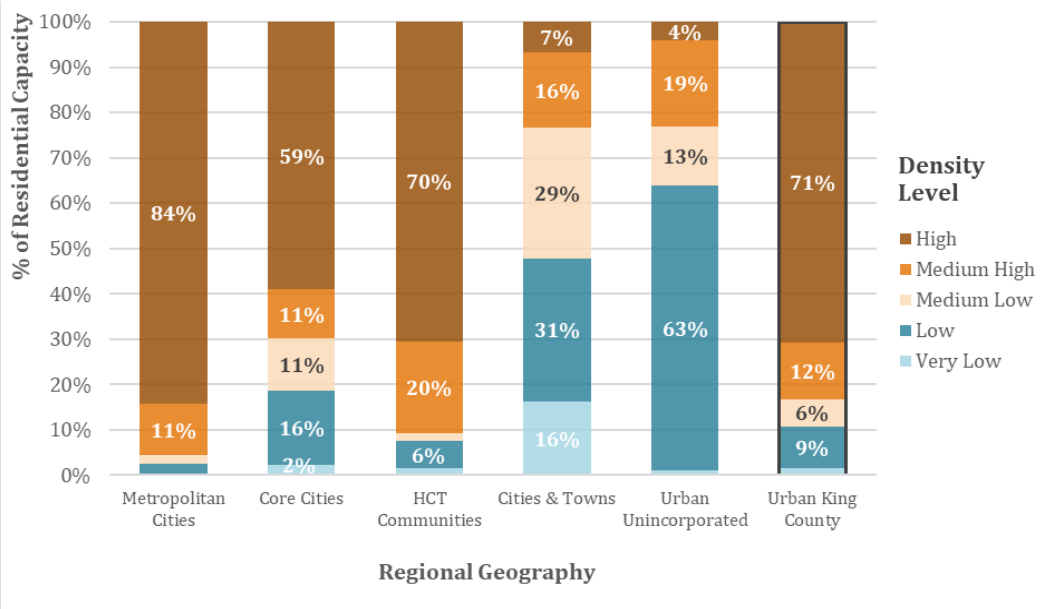


Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020.

There is growth capacity for nearly 200,000 housing units in Metropolitan Cities, followed by capacity for roughly 128,000 housing units in Core Cities. These two VISION 2050 geographies make up about 80% of urban housing unit capacity in King County. The remaining 20% of capacity found in HCT Communities, with capacity for just under 50,000 housing units; Cities & Towns, with capacity for nearly 23,000 housing units; and the Urban Unincorporated areas, with capacity for nearly 7,400 housing units.

Exhibit 37 shows the percent breakdown of housing unit capacity by assumed density level. Countywide, 71% of urban housing capacity (nearly 257,000 units) is in High density zones (see also Exhibit 36). Almost all the housing capacity in Metropolitan Cities is in High density zones, and in Core Cities and HCT Communities, most of the capacity is in High and Medium-High density zones. Cities & Towns and Urban Unincorporated areas have a much greater share of capacity in Low and Very Low density zones.

Exhibit 37. Percent of Non-Pipeline Housing Unit Capacity by Assumed Density



Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020.

Employment Capacity

Exhibits in this section are grouped both by VISION 2050 Regional Geographies, as well as by assumed density level. For non-residential capacity, each zone is categorized by density level according to the assumed floor area ratio (FAR) for future development. Exhibits reporting non-residential capacity throughout the rest of this report rely on the following density levels, consistent with the categorization of achieved density in Ch. 3.

Exhibit 38. Assumed Density Levels – Non-Residential Capacity (FAR)

Very Low	Low	Medium-Low	Medium-High	High
Less than 0.35	**0.35 – 0.5**	**0.5 – 1.0**	**1.0 – 3.0**	**Greater than 3.0**

Source: BERK, 2021.

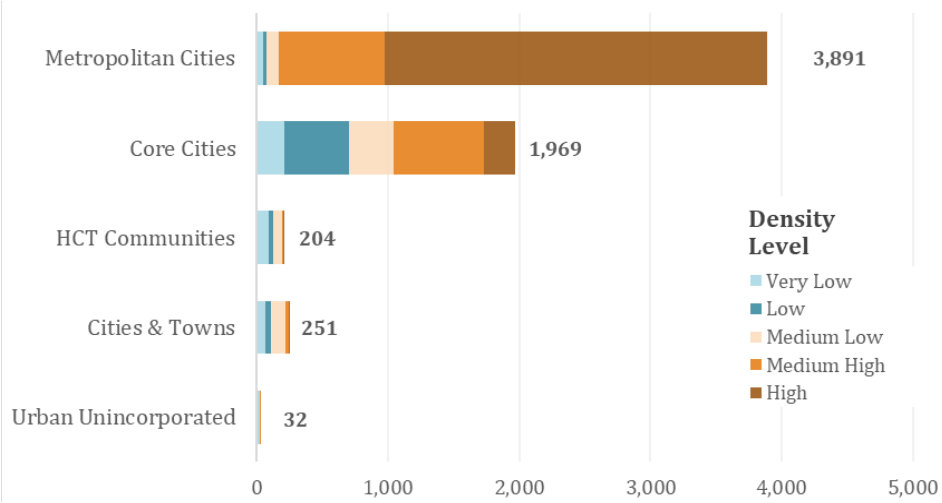
Nonresidential Land Supply

Exhibit 39 and Exhibit 40 show the breakdown of the net buildable land for non-residential development after all deductions have been made. This also includes removal of critical acres and critical area buffers, infrastructure constrained areas, future rights-of-way and usage for public purpose, and market factor. It is important to emphasize that these exhibits do not show growth

capacity, rather they show the dispersion of land available for non-residential growth.

Exhibit 39. Buildable Non-Residential Land by Assumed Density (acres)

Geography	Assumed Density Level					Total	
	Very Low	Low	Medium Low	Medium High	High	#	%
Metropolitan Cities	51	24	98	800	2,919	3,891	61%
Core Cities	212	490	343	691	232	1,969	31%
HCT Communities	93	32	73	5	1	204	3%
Cities & Towns	67	45	111	24	5	251	4%
Urban Unincorporated	27	0	0	5	0	32	1%
Urban King County	**450**	**591**	**624**	**1,524**	**3,158**	**6,347**	**100%**

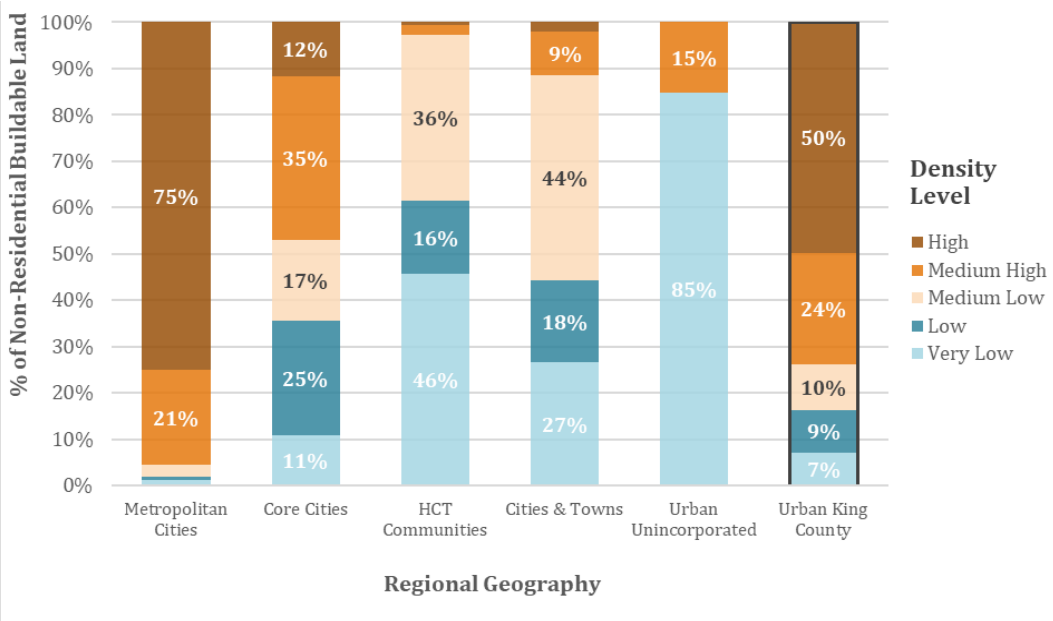


Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020-2021.

There are roughly 6,350 acres of buildable land available for non-residential development. The overwhelming majority of non-residential land supply is focused in Metropolitan Cities and Core Cities, consistent with the location of regional growth center (RGCs) and manufacturing-industrial centers (MICs) in the VISION 2050 plan (shown in Exhibit 30).

HCT Communities, Cities & Towns, and Urban Unincorporated areas have far less land available for non-residential development, totaling just 8% of total non-residential urban land supply across the county.

Exhibit 40. Percent of Non-Residential Buildable Land by Assumed Density



Note: Metropolitan Cities includes estimated breakdowns of residential/non-residential land supply in Seattle.
Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020-2021.

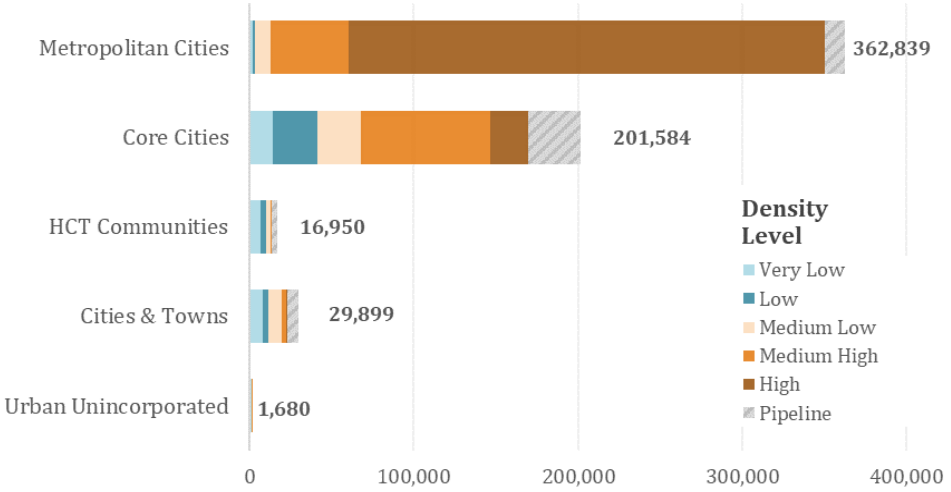
Across all of urban King County, half of land available for non-residential development is at the High assumed density level, with the 24% in the Medium-High level, and the remaining land supply spread across the lower assumed density levels. Similar to the residential side of land supply, the Metropolitan Cities have the highest share of buildable land in the High density level, with comparatively less land available for non-residential development available in the Medium-Low, Low, and Very Low density levels. The breakdown is more varied amongst the Core Cities, HCT Communities, and Cities & Towns, with Urban Unincorporated areas being comprised of almost entirely Very Low density land supply for non-residential development.

Capacity for Job Growth

Exhibit 41 and Exhibit 42 show non-residential growth capacity in terms of jobs, broken down by assumed density level and pipeline capacity.

Exhibit 41. Job Capacity by Assumed Density (jobs)

Geography	Assumed Density Level						Total	
	Very Low	Low	Medium Low	Medium High	High	Pipeline	#	%
Metropolitan Cities	1,699	1,694	9,593	47,015	290,561	12,278	362,839	59%
Core Cities	13,828	27,289	26,427	78,837	23,229	31,973	201,584	33%
HCT Communities	6,404	3,885	2,586	686	124	3,265	16,950	3%
Cities & Towns	7,668	3,761	8,113	2,725	747	6,884	29,899	5%
Urban Unincorporated	1,251	0	0	429	0	0	1,680	0%
Total	**30,850**	**36,629**	**46,719**	**129,693**	**314,662**	**54,399**	**612,952**	**100%**



Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020.

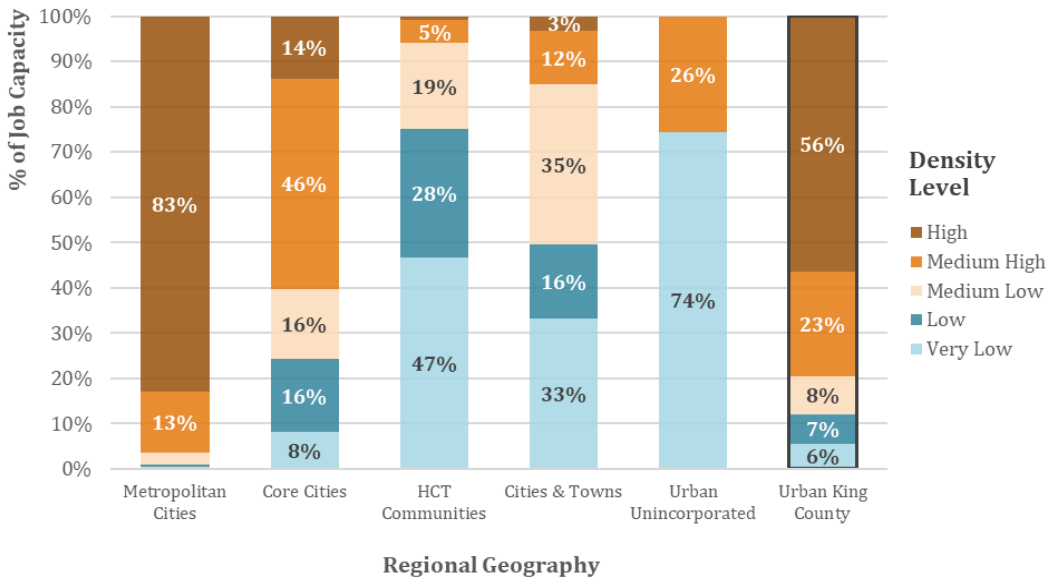
The Metropolitan Cities have capacity for over 360,000 jobs, 59% of total urban job capacity in King County. Most of this capacity in both Metropolitan Cities and countywide is in the High assumed density level. Countywide, there is capacity for 314,662 jobs in the High assumed density level, with 290,561 of those found in Metropolitan Cities.

Capacity for another 201,584 jobs is found in Core Cities, 33% of total urban job capacity in King County. This capacity is more evenly spread across the various assumed density levels, with a higher concentration in the Medium-High level.

There is comparatively less job capacity elsewhere in the county, with HCT Communities, Cities & Towns, and Urban Unincorporated areas only comprising roughly 8% of total job capacity, or just over 47,000 jobs.

Exhibit 42 shows the percent breakdown of job capacity by density levels within the VISION 2050 Regional Geographies.

Exhibit 42. Percent of Non-Pipeline Job Capacity by Assumed Density



Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020.

Nearly all the job capacity in Metropolitan Cities is in the High or Medium-High density zones, similar to the residential capacity results. In Core Cities, the largest share of job capacity is in the Medium-High assumed density level, while in HCT Communities, Cities & Towns, and Urban Unincorporated areas, job capacity is more spread across the assumed density levels.

Countywide, 80% of job capacity in urban areas is found in High or Medium-High density zones, with remaining capacity spread somewhat evenly across Medium-Low, Low, and Very Low density zones.

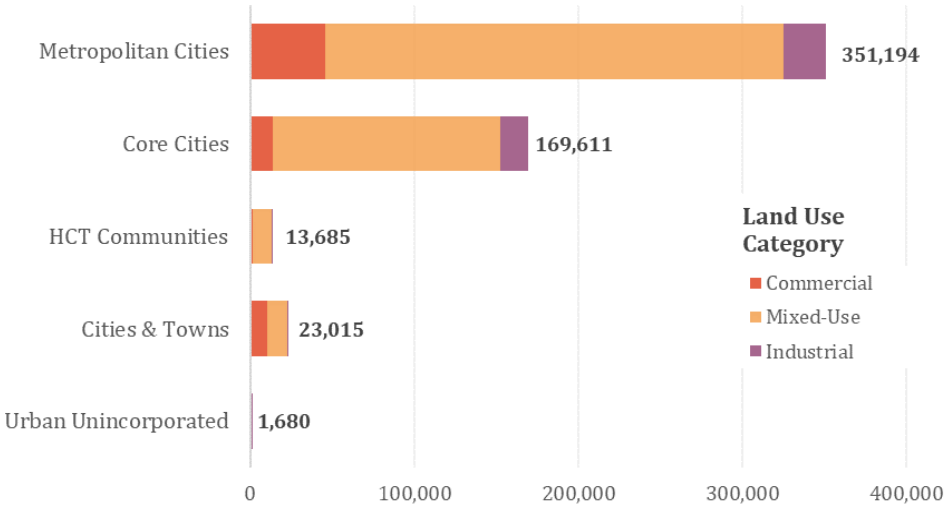
Job Capacity by Land Use Type

Throughout this study, jurisdictions were asked to categorize zones with potential for non-residential development by broad land use types: commercial, mixed-use, and industrial. The following section presents non-pipeline job capacity by those land use types and broken down by VISION 2050 Regional Geography. It is important to note that some jurisdictions allow for commercial development in industrial zones, industrial development in commercial zones, and multiple uses in mixed-use zones.[9]

[9] Since many jurisdictions allow for non-commercial uses in some commercial zones, a portion of job growth in commercial zones is likely to be from non-commercial jobs. Therefore, this study uses the phrase 'job capacity in commercial zones' instead of 'commercial job capacity' to describe job capacity by land use type.

Exhibit 43. Non-Pipeline Job Capacity by Land Use Type (jobs)

Geography	Land Use Type			Total
	Commercial	Mixed-Use	Industrial	
Metropolitan Cities	45,952	279,313	25,929	351,194
Core Cities	14,033	138,563	17,015	169,611
HCT Communities	1,813	11,564	308	13,685
Cities & Towns	10,271	12,180	565	23,015
Urban Unincorporated	429	574	677	1,680
Urban King County	**72,499**	**442,193**	**44,494**	**559,185**

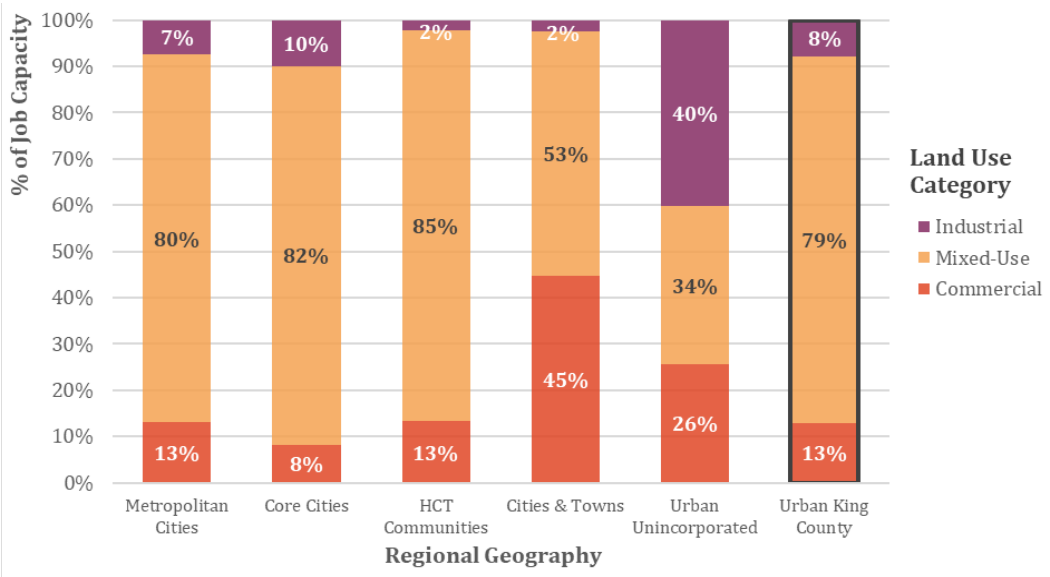


Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020.

Across all geographies, most of the job capacity is found in mixed-use zones. In urban King County, there is capacity for over 442,193 jobs in mixed-used zones, over 72,000 jobs in commercial zones, and nearly 45,000 jobs in industrial zones. In Metropolitan Cities alone, there is capacity for near 280,000 jobs in mixed-use zones.

Metropolitan Cities and Core Cities have the greatest amount of job capacity in industrial zones, with HCT Communities and Cities & Towns having a relative higher amount of job capacity in mixed-use and commercial zones.

Exhibit 44. Percent of Non-Pipeline Job Capacity by Land Use Type



Sources: BERK, 2021; Data provided by individual King County jurisdictions, 2020.

In Metropolitan Cities, Core Cities, and HCT Communities, over 80% of job capacity is found in mixed-use zones. Countywide, 79% of urban job capacity is found in mixed-use zones. HCT Communities and Cities & Towns have a small share of job capacity in industrial zones, just 2%. Cities & Towns have the highest share of job capacity in commercial zones, at 45%, whereas all other geographies have between just 8%-26% of job capacity found in commercial zones.

Ch. 5 Reasonable Measures

As discussed in Chapter 1, the GMA requires that certain counties and cities, including King County, conduct an analysis to determine if land is being used efficiently in urban growth areas (UGAs), and to determine if growth is occurring consistent with adopted comprehensive plans. If this review and evaluation demonstrates inconsistencies between actual growth and planning goals, the jurisdiction is required to identify Reasonable Measures that could be taken to improve consistency other than adjusting UGA boundaries. Examples of Reasonable Measures include rezones, subarea planning, permitting process streamlining, or development incentives. Any Reasonable Measures selected to address inconsistencies are required to be adopted in comprehensive plans and monitored annually. Prior to the Urban Growth Capacity study, King County and its jurisdictions did not have any adopted Reasonable Measures.

This chapter reviews findings of the Urban Growth Capacity Study to determine whether new Reasonable Measures are necessary to align growth trends with planning goals or to ensure there is sufficient capacity for accommodating growth. The process includes three steps. First, the County measured consistency between actual growth and planning goals using a set of standard criteria. Second, jurisdictions reviewed findings and considered circumstances that may have contributed to observed inconsistencies. Third, based on this review, jurisdictions determined if Reasonable Measures were necessary to address observed inconsistencies. The following sections describe this process and document outcomes.

Criteria for Evaluating Consistency

The first step was developing criteria for determining where there are potential inconsistencies between actual growth trends and planning goals. King County developed these criteria with input from the UGC Technical Committee and Interjurisdictional Team. Exhibit 45 presents each consistency check, as well as a summary of the method used to evaluate consistency.

Exhibit 45. Criteria for Identifying Potential Inconsistencies

Consistency Check	Evaluation Method/Criteria
Are achieved densities consistent with planned densities?	▪ Group all zones by planned/allowed density level. ▪ For each density level, calculate aggregate achieved density for all development observed 2012-2018. ▪ Compare aggregate achieved density to the range of allowed densities among all zones in that density level. There is a potential inconsistency if *both* of the following conditions are true: ○ Average achieved density is outside of this range of allowed density. ○ Average achieved density is below 50% of the max allowed density.
Is the rate of growth consistent with the 2035 growth target?	▪ Calculate the elapsed 2035 growth target for the period of 2006-2018: about 41% of the total growth target. ▪ Compare actual growth to elapsed target. If actual growth is less than 50% of the elapsed target, then there is a potential inconsistency.
Is there capacity for accommodating the 2035 growth target?	▪ Calculate the remaining growth needed to achieve the 2035 growth target. ▪ If capacity for growth is less than the remaining growth target, then there is a potential inconsistency.

Summary of Potential Inconsistencies

This section summarizes the findings of the consistency checks described above.

Achieved Densities

Exhibit 46 summarizes the analysis of potential inconsistencies between average achieved residential densities between 2012 and 2018, and density levels allowed under zoning. Consistency is evaluated for development within each of the five density levels used for summarizing growth trends and capacity throughout this report. The symbols indicate where there is and is not a potential inconsistency identified. A more detailed presentation of the data that backs up both of these exhibits can be found in Ch. 7 Profiles of Cities and Unincorporated Areas.

Exhibit 47 presents this same summarization for achieved non-residential densities. It shows many cities with average achieved densities below 50% of maximum allowed density for the zone category. When interpreting these findings, keep in mind that maximum allowed densities in this report are measured in terms of floor area ratio (FAR). Many jurisdictions do not use FAR as a standard of density, and reporting maximum allowed densities often involved converting development standards such as height, bulk, and/or setback requirements to very roughly estimate FAR. In reality, achievable FAR under these development standards may vary significantly by parcel. And some requirements such as building heights may be in place to accommodate portions of structures (e.g., facades, chimneys, or signage) and were never intended to accommodate multistory buildings. These kinds of issues were considered in the jurisdictional review of potential inconsistency findings, as discussed in the following section.

Exhibit 46. Consistency of Achieved Residential Densities with Planned Densities

	Very Low	Low	Medium-Low	Medium-High	High
Metropolitan Cities					
Bellevue	●	●	●	■	●
Seattle	N/A	●	■	●	●
Core Cities					
Auburn	▼	■	▲	N/A	▲
Bothell	■	●	▼	N/A	●
Burien	▲	■	■	■	▲
Federal Way	●	■	▲	N/A	▼
Issaquah	▲	▲	▲	▼	▼
Kent	▲	▼	▼	N/A	▼
Kirkland	●	●	●	▼	●
Redmond	▲	●	●	▲	●
Renton	▲	●	●	■	●
SeaTac	N/A	●	■	N/A	▲
Tukwila	N/A	■	▲	N/A	●
HCT Communities					
Des Moines	●	■	●	N/A	●
Kenmore	▲	●	▲	■	▲
Lake Forest Park	▼	●	●	N/A	■
Mercer Island	■	●	N/A	■	■
Newcastle	N/A	●	N/A	N/A	▼
Shoreline	N/A	●	■	▼	●
Woodinville	■	●	N/A	▼	N/A
Cities & Towns					
Algona	N/A	■	▼	N/A	N/A
Beaux Arts	N/A	▼	N/A	N/A	N/A
Black Diamond	N/A	▼	▼	N/A	N/A
Carnation	N/A	●	N/A	■	▼
Clyde Hill	■	N/A	N/A	N/A	N/A
Covington	N/A	●	N/A	N/A	▲
Duvall	N/A	●	●	N/A	N/A
Enumclaw	N/A	■	■	N/A	▼
Hunts Point	▼	N/A	N/A	N/A	N/A
Maple Valley	N/A	●	N/A	■	N/A
Medina	●	N/A	N/A	N/A	N/A
Milton	N/A	▼	N/A	N/A	N/A
Normandy Park	▲	■	N/A	N/A	▼
North Bend	N/A	▲	●	▼	N/A
Pacific	▼	▲	N/A	N/A	N/A
Sammamish	▲	▲	▲	N/A	N/A
Skykomish	N/A	▼	N/A	N/A	N/A
Snoqualmie	N/A	■	▲	N/A	N/A
Yarrow Point	■	N/A	N/A	N/A	N/A
Urban Unincorporated					
Unincorporated King County	▲	●	▼	▼	■

Symbol Definitions

●	Achieved density is within planned density range
■	Achieved density is within 50% - 100% of category max
▼	Achieved density is less than 50% of category max
▲	Achieved density is higher than the category max
N/A	No development within zones at this density level.

Exhibit 47. Consistency of Achieved Non-Residential Densities with Planned Densities

	Very Low	Low	Medium-Low	Medium-High	High
Metropolitan Cities					
Bellevue	▼	N/A	▼	▼	▼
Seattle	N/A	N/A	N/A	▼	●
Core Cities					
Auburn	N/A	N/A	N/A	N/A	▼
Bothell	N/A	N/A	N/A	▼	▼
Burien	▼	N/A	N/A	▼	▼
Federal Way	▼	N/A	N/A	▼	▼
Issaquah	▼	N/A	N/A	▼	▼
Kent	▼	N/A	N/A	▼	▼
Kirkland	●	▼	■	▲	N/A
Redmond	●	■	N/A	▼	N/A
Renton	▼	N/A	▼	▼	▼
SeaTac	▼	▲	N/A	N/A	N/A
Tukwila	▼	N/A	N/A	N/A	▼
HCT Communities					
Des Moines	N/A	N/A	N/A	▼	▼
Kenmore	N/A	N/A	N/A	▼	N/A
Lake Forest Park	N/A	N/A	N/A	N/A	N/A
Mercer Island	▼	N/A	N/A	N/A	▼
Newcastle	N/A	N/A	N/A	●	▼
Shoreline	▼	N/A	N/A	▼	▼
Woodinville	N/A	N/A	N/A	▼	▼
Cities & Towns					
Algona	N/A	N/A	N/A	N/A	N/A
Beaux Arts	N/A	N/A	N/A	N/A	N/A
Black Diamond	N/A	N/A	N/A	■	N/A
Carnation	N/A	N/A	N/A	▼	N/A
Clyde Hill	N/A	N/A	N/A	N/A	N/A
Covington	N/A	N/A	N/A	N/A	N/A
Duvall	N/A	N/A	N/A	N/A	■
Enumclaw	▼	N/A	▼	▼	▼
Hunts Point	N/A	N/A	N/A	N/A	N/A
Maple Valley	▼	N/A	N/A	▼	▼
Medina	N/A	N/A	N/A	N/A	N/A
Milton	N/A	N/A	N/A	N/A	N/A
Normandy Park	N/A	N/A	N/A	N/A	▼
North Bend	N/A	N/A	▼	▼	N/A
Pacific	N/A	N/A	N/A	▼	N/A
Sammamish	▲	N/A	N/A	N/A	N/A
Skykomish	N/A	N/A	N/A	N/A	▼
Snoqualmie	▼	N/A	N/A	▼	N/A
Yarrow Point	N/A	N/A	N/A	N/A	N/A
Urban Unincorporated					
Unincorporated King County	▼	N/A	N/A	▼	N/A

Symbol Definitions

●	Achieved density is within planned density range
■	Achieved density is within 50% - 100% of category max
▼	Achieved density is less than 50% of category max
▲	Achieved density is higher than the category max
N/A	No development within zones at this density level.

Growth Rates and Capacity

Exhibit 48 summarizes the evaluation of consistency between 2006-2018 growth rates and 2035 growth targets as well as capacity and remaining 2035 target growth. These findings are presented for both housing and employment. The symbols indicate where there is and is not a potential inconsistency identified. More detailed presentations of the data that backs up this evaluation can be found in Exhibit 13. Residential Growth Compared to Targets, 2006-2018, Exhibit 31. Housing and Job Capacity by VISION 2050 Regional Geography and Jurisdiction, and Ch. 7 Profiles of Cities and Unincorporated Areas.

Exhibit 48. Consistency of Growth Rates and Capacity with 2035 Targets

	Growth Rate Consistent with 2035 Targets?		Capacity for Achieving 2035 Targets?	
	Residential	Employment	Residential	Employment
Metropolitan Cities				
Bellevue	●	●	●	●
Seattle	●	●	●	●
Core Cities				
Auburn	●	●	●	!
Bothell	●	●	●	●
Burien	●	!	●	!
Federal Way	●	!	●	●
Issaquah	●	●	●	●
Kent	●	●	●	●
Kirkland	●	●	●	●
Redmond	●	●	●	●
Renton	●	●	●	●
SeaTac	!	!	●	!
Tukwila	!	!	●	●
HCT Communities				
Des Moines	!	!	●	!
Kenmore	●	!	●	●
Lake Forest Park	●	●	●	●
Mercer Island	●	●	●	●
Newcastle	●	●	●	●
Shoreline	●	!	●	!
Woodinville	!	!	●	!
Cities & Towns				
Algona	●	●	●	●
Beaux Arts	●	●	!	●
Black Diamond	!	!	●	●
Carnation	●	!	●	●
Clyde Hill	●	●	●	●
Covington	●	●	●	●
Duvall	●	●	●	●
Enumclaw	!	!	!	●
Hunts Point	●	●	●	●
Maple Valley	●	●	●	●
Medina	●	●	●	●
Milton	●	●	●	●
Normandy Park	●	●	●	●
North Bend	●	●	●	●
Pacific	●	!	●	!
Sammamish	●	●	!	●
Skykomish	●	●	●	●
Snoqualmie	●	●	●	●
Yarrow Point	●	●	●	●
Urban Unincorporated				
Unincorporated King County	●	●	●	!

Growth Rate Symbol Definitions

●	Growth was at least 50% of elapsed growth target.
!	Growth was less than 50% of elapsed growth target.

Capacity Symbol Definitions

●	Capacity for growth exceeds remaining 2035 target.
!	Capacity for growth is less than remaining 2035 target.

Jurisdictional Review of Potential Inconsistencies

In May 2021, King County staff shared the criteria for identifying potential inconsistencies and preliminary findings with individual jurisdictions. They also shared guidance for reviewing these inconsistencies and determining whether Reasonable Measures are necessary. This review included consideration for circumstances that may help determine whether there was an actual inconsistency and explain why such an inconsistency occurred. If the jurisdiction determined that Reasonable Measures would not be necessary to overcome an inconsistency, then they were asked to provide documentation and analysis to explain how the inconsistency would be overcome to achieve the planning goal without adopting additional Reasonable Measures.

The guidance for determining whether potential inconsistencies necessitated Reasonable Measures was grounded in the Department of Commerce's Buildable Lands Guidelines. Jurisdictions were encouraged to consider the following kinds of questions to identify issues that could have impacted development outcomes during the evaluation period or provide context for interpreting potential inconsistencies:

- Are the developments permitted during the evaluation period a large enough sample and representative enough of development trends to serve as the basis for reliable findings?
- Have permitting and development trends after the evaluation period shifted in significant ways?
- Do code and development regulations promote unintended consequences that could impact development feasibility?
- Have there been any changes to code or development regulations during or following the evaluation period that address barriers to development consistent with planning objectives?
- Are there other relevant changes in market conditions such as infrastructure investment that could impact future development in the jurisdiction?

After completing this evaluation, jurisdictions provided King County with documentation of their findings regarding the potential inconsistencies, noting where Reasonable Measures are and are not necessary.

For the purpose of summarization in the Urban Growth Capacity Report, county staff and consultants reviewed these jurisdiction responses and categorized them by nine common themes. These themes are described in Exhibit 49. Individual jurisdiction responses to potential inconsistencies are summarized in Exhibit 50 through Exhibit 52. These tables only show cities in which a potential inconsistency was identified, where an observed trend fell short of the planning goal.

Exhibit 49. Theme Categories in Jurisdiction Responses to Potential Inconsistencies

Category Title	Definitions
Development aligned to planning framework	Response cited methodological issues related to translating their planning framework into an FAR-based density approach. The observed development reflects uses, forms, and densities allowed under a jurisdiction's planning framework.
Small development sample	The observed development sample included too few projects to reasonably determine whether development was achieving a planning goal, or included an unusual case causing inconsistency with the planning goal.
Additional development in pipeline	Additional specific projects are underway which represent a shift from trends observed during the evaluation period.
Expected market shift	There are indicators of shifts in market demand which would result in future development trends that do not resemble patterns observed during the evaluation period.
Addition of high capacity transit	High capacity transit such as light rail is coming in and is expected to shift market demand, resulting in future development that does not resemble patterns observed during the evaluation period.
Recent zoning or policy change	New zoning or policies have already been implemented either during or after the evaluation period. These changes are expected to shape future development trends.
Anticipated policy, zoning, or strategy updates	The jurisdiction anticipates adopting and implementing new policies, zoning, or strategies which are expected to shape future development trends.
Fully built out	The jurisdiction has no vacant land available for new development, and marginal redevelopable land maintains the existing growth pattern.
Environmental or utility constraints	Environmental or utility constraints are a barrier to new development.

Exhibit 50. Summary of Jurisdiction Responses - Residential Density Achieved

		Rationale For Why Reasonable Measures Are or Are Not Required								
	Are reasonable measures necessary?	Development aligned to planning approach	Small development sample	Additional development in pipeline	Expected market shifts	Addition of high capacity transit	Recent zoning or policy change	Anticipated policy or strategy updates	Fully built out	Environmental or utility constraints
Core Cities										
Auburn	No			*			*			*
Bothell	No			*			*			*
Burien	No	*								
Federal Way	No	*	*		*	*				
Issaquah	No	*		*			*	*		
Kent	No	*		*	*	*	*	*		
Kirkland	No						*			
Renton	No	*	*	*	*			*		
SeaTac	No	*	*							*
HCT Communities										
Des Moines	No	*			*					
Kenmore	No		*			*				
Lake Forest Park	No	*							*	
Mercer Island	No	*								*
Newcastle	No	*			*	*				
Shoreline	No	*				*				
Woodinville	No	*					*			*
Cities & Towns										
Algona	No	*	*					*		
Beaux Arts	No		*						*	
Black Diamond	No	*	*	*						
Carnation	No	*	*							
Enumclaw	No	*								
Maple Valley	No	*								
Milton	No	*								
Normandy Park	No			*						
North Bend	No			*	*			*		
Skykomish	No		*							
Snoqualmie	No	*								
Yarrow Point	No	*								
Urban Unincorporated										
Unincorporated King County	No	*	*							

Note: This table includes jurisdictions with potential inconsistencies related to achieved residential densities being lower than 50% of the zone category density max. It also includes several cities (Burien, Renton, Des Moines, Kenmore. Mercer Island, Snoqualmie, Yarrow Point) that showed potential inconsistencies using a prior screening approach and provided responses related to the need for Reasonable Measures.

Exhibit 51. Summary of Jurisdiction Responses – Non-Residential Density Achieved

		Rationale For Why Reasonable Measures Are or Are Not Required								
	Are reasonable measures necessary?	Development aligned to planning approach	Small development sample	Additional development in pipeline	Expected market shifts	Addition of high capacity transit	Recent zoning or policy change	Anticipated policy or strategy updates	Fully built out	Environmental or utility constraints
Metropolitan Cities										
Bellevue	No	*	*		*	*				
Seattle	No		*				*			
Core Cities										
Auburn	No	*			*					
Bothell	No	*								
Burien	No		*							
Federal Way	No	*	*			*		*		
Issaquah	No	*		*			*		*	
Kent	No	*				*	*			
Kirkland	No				*					
Redmond	No	*								
Renton	No	*	*		*					
Tukwila	No		*		*					
HCT Communities										
Des Moines	No	*								
Kenmore	No					*				
Mercer Island	No	*								
Newcastle	No	*			*	*				
Shoreline	No	*								
Woodinville	No			*			*			
Cities & Towns										
Carnation	No	*	*							
Enumclaw	No	*	*							
Maple Valley	No	*						*		
Normandy Park	No		*		*			*		
North Bend	No			*				*		
Pacific	No	*								
Skykomish	No		*							
Snoqualmie	No	*	*						*	
Urban Unincorporated										
Unincorporated King County	No	*								

Note: This table excludes jurisdictions in which there were no potential inconsistencies found with regards to achievement of non-residential densities.

Exhibit 52. Summary of Jurisdiction Responses to Potential Inconsistencies – Growth Rate

		Rationale For Why Reasonable Measures Are or Are Not Required								
	Are reasonable measures necessary?	Development aligned to planning approach	Small development sample	Additional development in pipeline	Expected market shifts	Addition of high capacity transit	Recent zoning or policy change	Anticipated policy or strategy updates	Fully built out	Environmental or utility constraints
RESIDENTIAL										
Metropolitan Cities										
Bellevue	No					*	*			
Core Cities										
Burien	No						*	*		
Federal Way	No					*		*		
Kirkland	No			*			*			
SeaTac	No			*	*		*			
Tukwila	Yes				*			*		
HCT Communities										
Des Moines	No			*						
Kenmore	No			*		*				
Shoreline	No			*		*				
Woodinville	No			*	*					
Cities & Towns										
Algona	No	*								
Black Diamond	No	*		*						
Carnation	No	*		*						
Enumclaw	No				*					
EMPLOYMENT										
Metropolitan Cities										
Bellevue	No			*						
Core Cities										
Burien	Yes							*		
Federal Way	No	*	*			*		*		
SeaTac	No		*			*				
Tukwila	Yes									
HCT Communities										
Des Moines	No			*	*	*				
Kenmore	No			*		*				
Mercer Island	No					*	*	*		
Shoreline	No	*								
Woodinville	No	*								
Cities & Towns										
Black Diamond	No			*	*					
Carnation	No	*			*					
Duvall	No	*								
Enumclaw	No	*								
Maple Valley	No	*		*						
Pacific	No	*		*	*					

Note: This table excludes jurisdictions in which there were no potential inconsistencies found with regards to growth rate.

Exhibit 53. Summary of Jurisdiction Responses to Potential Inconsistencies – Capacity

		Rationale For Why Reasonable Measures Are or Are Not Required								
	Are reasonable measures necessary?	Development aligned to planning approach	Small development sample	Additional development in pipeline	Expected market shifts	Addition of high capacity transit	Recent zoning or policy change	Anticipated policy or strategy updates	Fully built out	Environmental or utility constraints
RESIDENTIAL										
Cities & Towns										
Enumclaw	No				*			*		
Sammamish	Yes	*								*
EMPLOYMENT										
Core Cities										
Auburn	No		*		*		*			
Burien	Yes							*		
SeaTac	No	*			*			*		
HCT Communities										
Des Moines	No	*								
Shoreline	Yes				*	*	*			
Woodinville	-	*								
Cities & Towns										
Pacific	Yes							*		
Urban Unincorporated										
Unincorporated King County	No	*	*					*		

Note: This table excludes jurisdictions in which there were no potential inconsistencies found with regards to capacity.

Reasonable Measures Recommendations

As a result of the review of potential inconsistencies, the Urban Growth Capacity Report recommends that some jurisdictions adopt Reasonable Measures in the 2024 periodic update to comprehensive plans. Exhibit 54 notes the jurisdictions where Reasonable Measures are recommended, the identified inconsistency that supports the finding, and the general type(s) of Reasonable Measures that will be needed to address the inconsistency.

Exhibit 54. Recommendations for Adoption of Reasonable Measures

Jurisdiction	Inconsistency	Type(s) of Reasonable Measure Recommended
Burien	▪ Insufficient employment capacity ▪ Employment growth rate inconsistent with target	▪ Action(s) to increase employment capacity ▪ Action(s) to encourage and/or incentivize non-residential development
Pacific	▪ Insufficient employment capacity	▪ Action(s) to increase employment capacity
Sammamish	▪ Insufficient housing capacity	▪ Action(s) to increase residential capacity
Shoreline	▪ Insufficient employment capacity	▪ Action(s) to increase employment capacity
Tukwila	▪ Housing growth inconsistent with target ▪ Employment growth rate inconsistent with target	▪ Action(s) to encourage and/or incentivize residential development ▪ Action(s) to encourage and/or incentivize non-residential development

Following the adoption of comprehensive plans in 2024, each jurisdiction will be required to monitor progress toward resolving the inconsistency, with regular reporting to the Growth Management Planning Council.

Ch. 6 Applying Urban Growth Capacity Findings

The findings of this study can be used to inform several kinds of policy and regulatory decisions in local jurisdictions. This chapter provides an overview of two keys applications: growth target setting and local comprehensive plan updates. Additional information will be available in the Urban Growth Capacity Report User's Guide.

Regional Planning and Growth Targets

Growth capacity is one important input that King County uses to inform the allocation of projected countywide housing and employment growth by Regional Geography and jurisdiction. King County is currently in the process of developing new growth targets for the 2019-2044 time period. This process is guided by PSRC's VISION 2050 Regional Growth Strategy which allocates shares of regionally forecasted growth to King County and its Regional Geographies, creating control allocations for each of the urban Regional Geographies. Working in Regional Geography based subgroups, the 39 cities and King County collaborate through the Growth Management Planning Council (GMPC), to determine appropriate growth targets for each jurisdiction. Table DP-1 in the Proposed 2021 Countywide Planning Policies identifies the draft housing and job targets for each jurisdiction, sorted by Regional Geography, as specified in VISION 2050. These growth targets are policy statements of the amount of housing and job growth each jurisdiction is expected to accommodate and plan for in their comprehensive plan. The allocations of growth are consistent with the VISION 2050 Regional Growth Strategy, focusing growth primarily to the two "Metropolitan" cities (Seattle and Bellevue), within "Core" cities with designated Urban Centers, and within "High Capacity Transit" communities. Notably, growth targets for HCT Communities include three unincorporated potential annexation areas (PAAs): Federal Way PAA, North Highline PAA, and Renton PAA.

Exhibit 55 shows draft 2019-2044 growth targets for individual cities and urban unincorporated areas alongside growth capacity for context. In aggregate countywide and each Regional Geography, there is sufficient capacity to accommodate the target growth. However, in some individual jurisdictions the 2044 growth target exceeds available capacity. This is appropriate, as the primary purpose of measuring growth capacity in this report is confirming available capacity to accommodate remaining growth under the current 2035 growth target. Ultimately, jurisdictions will demonstrate zoned or planned capacity for their 2044 growth targets in the next round of comprehensive plan updates in 2024.

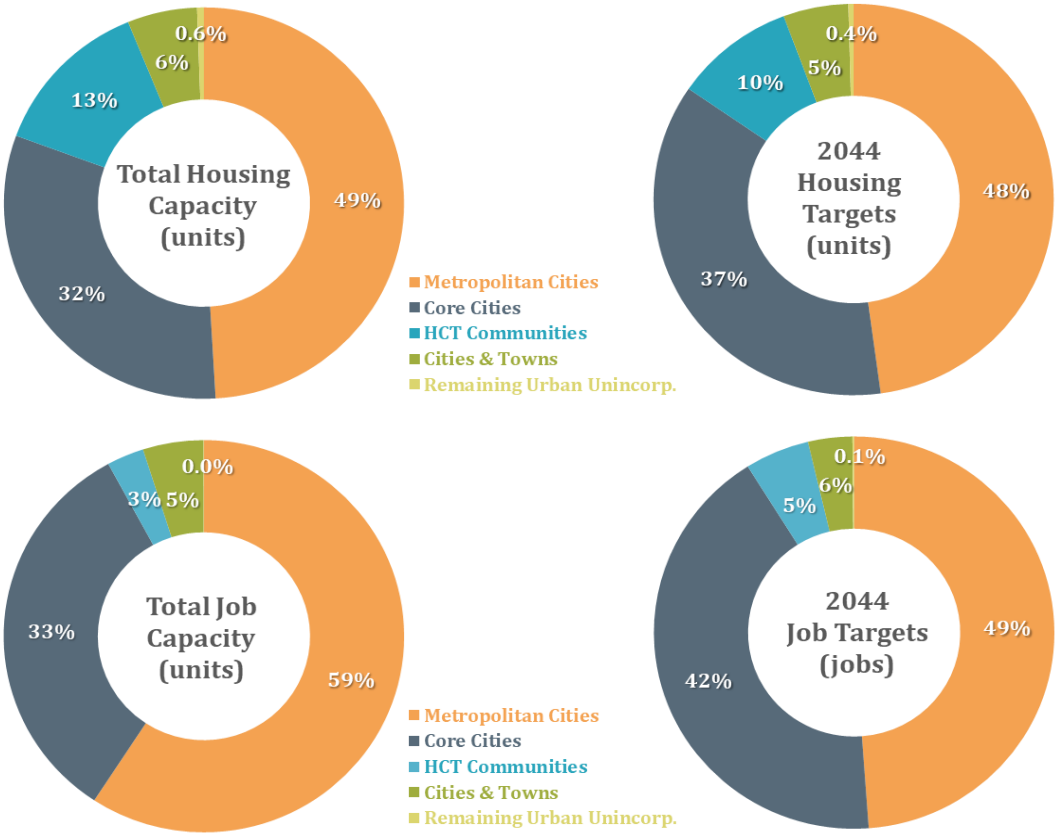
Exhibit 55. DRAFT King County Jurisdiction Growth Targets, 2019-2044

Jurisdiction	Total Housing Capacity (Units)	2044 Housing Target	Share of Housing Target in Regional Geography	Total Job Capacity (Jobs)	2044 Jobs Target	Share of Jobs Target in Regional Geography
Metropolitan Cities						
Bellevue	26,859	35,000	24%	117,241	70,000	29%
Seattle	172,440	112,000	76%	245,598	169,500	71%
Subtotal	**199,298**	**147,000**		**362,839**	**239,500**	
Core Cities						
Auburn	9,151	12,000	11%	7,927	19,520	9%
Bothell	6,370	5,800	5%	9,335	9,500	5%
Burien	10,816	7,500	7%	752	4,770	2%
Federal Way	14,077	11,260	10%	29,500	20,460	10%
Issaquah	14,103	3,500	3%	15,561	7,950	4%
Kent	11,248	10,200	9%	28,995	32,000	15%
Kirkland	13,352	13,200	12%	18,139	26,490	13%
Redmond	17,777	20,000	18%	15,851	24,000	12%
Renton	16,503	17,000	15%	26,210	31,780	15%
SeaTac	6,396	5,900	5%	15,565	14,810	7%
Tukwila	8,219	6,500	6%	33,749	15,890	8%
Subtotal	**128,011**	**112,860**		**201,584**	**207,170**	
HCT Communities						
Des Moines	8,386	3,800	13%	2,410	2,380	9%
Federal Way PAA	1,318	1,020	3%	613	720	3%
Kenmore	4,135	3,070	10%	3,881	3,200	13%
Lake Forest Park	1,870	870	3%	691	550	2%
Mercer Island	1,607	1,239	4%	961	1,300	5%
Newcastle	3,234	1,480	5%	680	500	2%
North Highline	1,172	1,420	5%	653	1,220	5%
Renton PAA	2,645	1,680	6%	185	700	3%
Shoreline	25,590	13,330	45%	3,953	10,000	39%
Woodinville	3,705	2,033	7%	4,373	5,000	20%
Subtotal	**53,662**	**29,942**		**18,400**	**25,570**	
Cities & Towns						
Algona	266	170	1%	313	325	2%
Beaux Arts	2	1	0%	0	0	0%
Black Diamond	8,434	2,900	18%	3,188	680	4%
Carnation	704	799	5%	2,864	450	3%
Clyde Hill	5	10	0%	28	10	0%
Covington	4,609	4,310	27%	8,421	4,496	26%
Duvall	1,343	890	5%	681	990	6%
Enumclaw	1,308	1,057	7%	1,152	989	6%
Hunts Point	5	1	0%	0	0	0%
Maple Valley	2,221	1,720	11%	1,784	1,570	9%
Medina	8	19	0%	0	0	0%
Milton	66	50	0%	1,213	900	5%
Normandy Park	135	153	1%	35	35	0%
North Bend	2,098	1,748	11%	5,759	2,218	13%
Pacific	137	135	1%	77	75	0%
Sammamish	1,144	700	4%	305	305	2%
Skykomish	29	10	0%	0	0	0%
Snoqualmie	372	1,500	9%	4,079	4,425	25%
Yarrow Point	17	10	0%	0	0	0%
Subtotal	**22,903**	**16,183**		**29,899**	**17,468**	
Remaining Urban Unincorporated (Excluding HCT Communities)						
Subtotal	**2,251**	**1,292**		**230**	**700**	
Total Urban Capacity:	**406,124**	**307,277**	**Housing Units**	**612,952**	**490,408**	**Jobs**

Many jurisdictions may draw from the Urban Growth Capacity Report to demonstrate sufficient capacity. However, capacity measured in the Urban Growth Capacity is focused on the 2035 planning period and constrained by achieved densities. Therefore, some jurisdictions may use zoned densities or updated future land use assumptions to inform a land capacity analysis in the 2024 comprehensive plans update to demonstrate sufficient capacity for 2044 growth targets. Nonetheless, comparing the Urban Growth Capacity Report capacity to the 2044 growth targets provides some context for the next planning cycle.

Exhibit 56 compares the share of countywide capacity as calculated in the Urban Growth Capacity Report for each VISION 2050 Regional Geography, with the share of growth allocated to Regional Geographies in the 2019-2044 growth targets. As a category, Core Cities have a higher share of countywide housing and employment growth targets than their share of housing and employment capacity. Conversely Metropolitan Cities and HCT Communities both have a greater share of housing capacity than their shares of housing target growth. This implies there is significant spare capacity for additional housing growth in those areas beyond the targets. Likewise, Metropolitan Cities have a significantly greater share of employment capacity than their share of target employment growth.

Exhibit 56. Share of Capacity and Share of Draft 2044 Growth Targets by Regional Geography



County and City Plans

All jurisdictions in King County are required to fully update their comprehensive plans by June 30, 2024. A comprehensive plan is a 20-year vision and roadmap for accommodated growth and development. It guides County or City decisions on where to build new jobs and houses, how to improve transportation systems, and where to make capital investments such as utilities, sidewalks, and libraries. Many cities are also in the process of completing Housing Action Plans which will be implemented in the years to come. These plans and implementing activities will be informed by housing and job growth targets discussed above. But there are many other ways in which the Urban Growth Capacity Report findings can inform these planning activities., as two examples: implementing Reasonable Measures findings from the Urban Growth Capacity Report and housing policy development.

Detailed jurisdiction-level information available in Ch. 7 Profiles of Cities and Unincorporated Areas, as well as resources available in the Urban Growth Capacity Report User's Guide, can be used to focus the development of policies, development regulations, incentives, or other actions for shaping local development activity. The sections that follow provide examples and guidance for applying and building upon Urban Growth Capacity findings.

Implementing Reasonable Measures

Ch. 5 includes a list of jurisdictions where Reasonable Measures were determined to be necessary. Each of these jurisdictions will need to identify actions in their 2024 comprehensive plan updates that are likely to reduce or mitigate the inconsistency between actual growth with planning goals. These actions could include changes to development regulations, new incentives, subarea planning, or reviewing processes to encourage development types that are consistent with local plans. Such changes are also required to be adopted in capital facility plans and development regulations when necessary for full implementation. In some cases, Reasonable Measures must be adopted in Countywide Planning Policies, but no findings from the 2021 Urban Growth Capacity Report indicate this is necessary. Wherever a measure is implemented, it should be clearly identified as a Reasonable Measure that addresses a growth inconsistency identified in the Urban Growth Capacity Report.

The findings of the Urban Growth Capacity Report can help to inform the selection of appropriate Reasonable Measures. Jurisdictions can use this data to answer questions such as:

- In which zones have there been inconsistencies between growth trends and planning goals?
- Where are there infrastructure gaps that create barriers to new development at planned density levels?
- What other barriers may be preventing development that is consistent with local plans?

The King County Urban Growth Capacity Report User's Guide will include a simple framework to help planners to zero in on potential answers to these last two questions, which lie at the heart of Reasonable Measure selection. Additional outreach to the development community, a market study, code audit, or example development feasibility analysis may to help ensure that the measures are both

targeted and effective. For examples of Reasonable Measures see the Department of Commerce Buildable Land Guidelines Appendix B (2018), Housing Memo: Issues Affecting Housing Availability and Affordability (2019), and Guidance for Developing a Housing Action Plan (2020) Chapter 4.

Following implementation, jurisdictions may develop a monitoring program to assess the effectiveness of the Reasonable Measures. This will help in determining when and where additional measures may be needed.

Housing Planning and Policy Development

Housing affordability is an urgent and complex challenge that has impacts throughout King County. This section draws upon the Washington State Department of Commerce Housing Memo: Issues Affecting Housing Availability and Affordability (2019), to discuss how to apply Urban Growth Capacity findings to support efforts to address housing affordability.

Regional Housing Planning

Housing affordability is a regional challenge, and the most effective responses to this challenge will involve coordination between jurisdictions. An example includes the King County Regional Affordable Housing Task Force which developed a coordinated regional strategy and action plan to address housing needs for lower income households. Regional housing planning can also involve an assessment of countywide housing needs and setting jurisdictional goals for future housing growth by housing type or affordability level.

The Urban Growth Capacity Report is an important resource to support this kind of regional collaboration within King County. By presenting data about housing capacity by density level for jurisdictions in a common format, it allows for the evaluation of aggregate countywide capacity to support different kinds of housing development. This information can be used to determine if there are any capacity limitations when compared to region housing needs. Moreover, Urban Growth Capacity data also allows for the evaluation of how capacity is distributed geographically across the county by jurisdiction. Mapping Urban Growth Capacity data can enable analysis to answer the following kinds of questions:

- Is there capacity for the kinds of new housing development that are called for in countywide housing needs assessments, such as multifamily or "missing middle" formats?[10]
- Is capacity located in high demand or amenity-rich locations, like near frequent transit, parks, schools, or employment centers?
- Are areas with housing capacity aligned with high opportunity areas, as defined by PSRC?

[10] The summaries of capacity by density level in the Urban Growth Capacity report provides a good proxy for capacity by housing type, with low density zones typically providing capacity for detached single family development, middle density zones often providing capacity for missing middle formats such as townhomes and multiplexes, and high density zones providing capacity for apartments and condominiums. More detailed analysis of the development code in individual jurisdictions can confirm what kinds of housing are allowed and what code barriers may hinder development in a desired format.

- What kinds of regional amenities or resources are missing in areas with significant capacity for new housing development?

Local Housing Planning

The findings of the Urban Growth Capacity Report can also inform the development of local housing policies and implementing actions during the next round of comprehensive plan updates. Several cities in King County have recently identified housing strategies for implementation through the process of developing Housing Action Plans with funding from Washington State Department of Commerce. The Urban Growth Capacity findings can inform the implementation of these strategies as well. Key policy questions that the Urban Growth Capacity can help answer include:

- Is there capacity for the kinds of new housing development that are called for in local housing needs assessments, such as multifamily or "missing middle" formats?[11]
- How does housing capacity compare to housing development trends? Are zones with available capacity seeing the kinds of housing development that is needed?
- What kinds of housing development does your plan call for but isn't being produced?

Similar to the selection of Reasonable Measures, additional outreach to the housing development community, a market study, code audit, or example development feasibility analysis may to help to identify and prioritize actions that are most likely to encourage the kinds of new housing development that are in greatest need. Resources for the selection of actions include Guidance for Developing a Housing Action Plan (2020) Chapter 4 and Housing Memo: Issues Affecting Housing Availability and Affordability (2019), both available from the Washington State Department of Commerce. Actions could include rezones or revisions to development standards to allow new housing types or density levels, actions to streamline the processing of permit applications, addressing infrastructure limitations (see below), or proving incentives to encourage the development of housing types or affordability levels in greatest need.

Targeting Anti-Displacement Efforts

Displacement is a complex and multifaceted problem that local planners are faced with as they plan for growing the housing supply in their communities. Housing supply shortage is a key driver of housing cost escalation across the county. When housing costs increase, so too does economic displacement pressures on existing residents. The best way to address this issue is increasing the housing supply, with an emphasis on housing formats that are in greatest need.

However, much of the capacity for new housing development is in the form of redevelopment. Many

[11] The summaries of capacity by density level in the Urban Growth Capacity report provides a good proxy for capacity by housing type, with low density zones typically providing capacity for detached single family development, middle density zones often providing capacity for missing middle formats such as townhomes and multiplexes, and high density zones providing capacity for apartments and condominiums. More detailed analysis of the development code in individual jurisdictions can confirm what kinds of housing are allowed and what code barriers may hinder development in a desired format.

redevelopable parcels contain older housing stock or commercial space that is typically less expensive to buy or rent than the prevailing market. So, when these older existing buildings are demolished in favor of redevelopment it can result in physical displacement of residents or businesses who cannot afford prevailing market costs in the area.

Parcel-level data developed through the Urban Growth Capacity Report can be of use to support analysis of what kinds of uses are present on redevelopable parcels, including both residential uses as well as nonresidential uses that may include small local businesses or cultural institutions. This information, combined with outreach to residents, community groups, businesses, or other stakeholders, can be essential to developing targeted strategies or partnerships to address physical displacement risks. A good resource for such efforts includes the Washington State Department of Commerce Guidance for Developing a Housing Action Plan (2020) Chapter 5: Strategies for Minimizing and Mitigating Displacement.

Addressing Infrastructure Gaps

As described in Appendix G: Approach for Identifying Infrastructure Gaps, each jurisdiction conducted an assessment to identify significant infrastructure gaps or capacity issues that present barriers to realizing development capacity. This information can support both local and regional capital facilities planning to provide timely infrastructure to facilitate housing development in locations and formats that are most needed to address housing affordability challenges.

Ch. 7 Profiles of Cities and Unincorporated Areas

This chapter provides detailed profiles summarizing findings for each individual jurisdiction. The profiles are divided into four separate pages covering the following topics:

- Page 1: Housing Growth and Residential Development Trends
- Page 2: Residential Land Supply and Capacity
- Page 3: Employment Growth and Commercial/Industrial Development Trends
- Page 4: Commercial/Industrial Land Supply and Job Capacity

These jurisdictions are presented alphabetically by VISION 2050 Regional Geography, as shown in Exhibit 57.

Exhibit 57. Profiled King County Jurisdictions by VISION 2050 Regional Geography

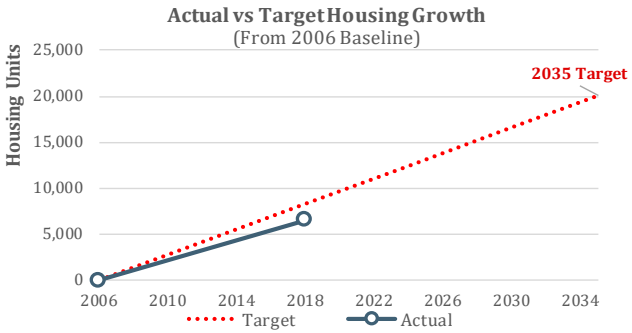
Metropolitan Cities	▪ City of Bellevue	▪ City of Seattle	
Core Cities	▪ City of Auburn ▪ City of Bothell ▪ City of Burien ▪ City of Federal Way	▪ City of Issaquah ▪ City of Kent ▪ City of Kirkland ▪ City of Redmond	▪ City of Renton ▪ City of SeaTac ▪ City of Tukwila ▪
High Capacity Transit Communities	▪ City of Des Moines ▪ City of Kenmore ▪ City of Lake Forest Park	▪ City of Mercer Island ▪ City of Newcastle ▪	▪ City of Shoreline ▪ City of Woodinville
Cities and Towns	▪ City of Algona ▪ City of Beaux Arts ▪ City of Black Diamond ▪ City of Carnation ▪ City of Clyde Hill ▪ City of Covington ▪ City of Duvall	▪ City of Enumclaw ▪ Town of Hunts Point ▪ City of Maple Valley ▪ City of Medina ▪ City of Milton ▪ City of Normandy Park	▪ City of North Bend ▪ City of Pacific ▪ City of Sammamish ▪ Town of Skykomish ▪ City of Snoqualmie ▪ Town of Yarrow Point
Urban Unincorporated Areas	▪ All urban unincorporated areas combined, including those that are classified as HCT Communities in VISION 2050.		

Metropolitan Cities

City of Bellevue
City of Seattle

City of Bellevue

Housing Growth and Residential Development Trends



Bellevue Housing Growth Target: 2006-2035	20,056
2006 Estimated Housing Units	55,107
2018 Estimated Housing Units	61,698
Estimated Housing Growth	**6,591**
Remaining 2035 Target	13,465

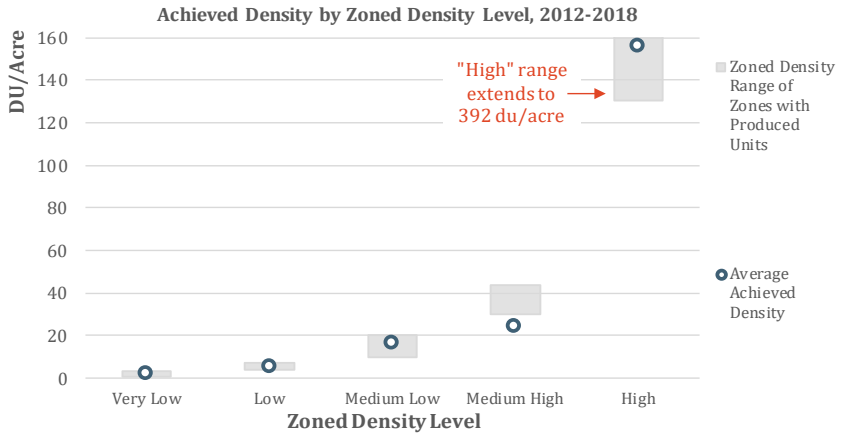
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
79.4%	0.95%	1.17%

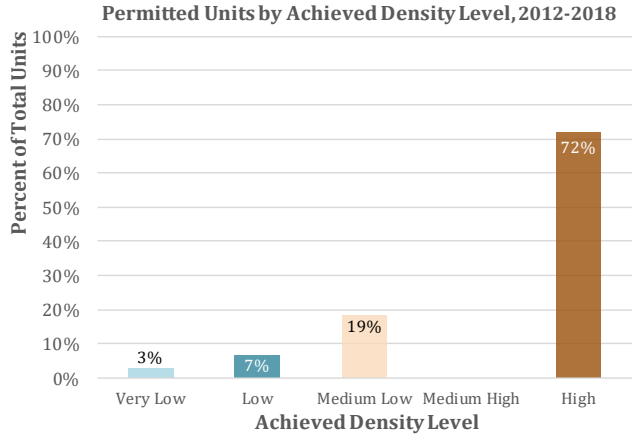
Since 2006, Bellevue has grown at 79% of the pace needed to achieve its 2035 housing growth target of 20,056 units. During this period, the total number of housing units in Bellevue grew by roughly 12%. At this current rate, Bellevue is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.2% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	67.1	10.3	0.9	1.1	54.7	120	2.2
Low	4 - 10 du/acre	41.0	2.3	0.7	3.3	34.7	186	5.4
Medium Low	10 - 24 du/acre	7.1	2.4	0.0	0.0	4.7	76	16.2
Medium High	24 - 48 du/acre	64.9	0.9	0.0	0.0	63.9	1,560	24.4
High	48 & up du/acre	14.6	0.0	0.0	0.0	14.6	2,278	155.5
	Total	194.7	15.9	1.7	4.4	172.7	4,220	24.4

Achieved Density Level	Net Area (acres)	Total Units
Very Low	54.7	120
Low	59.3	277
Medium Low	36.5	784
Medium High	0.0	0
High	22.1	3,039
Total	172.7	4,220



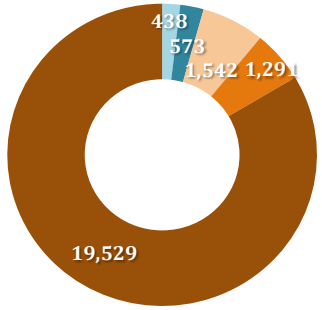


Bellevue - Residential Land Supply and Capacity

Assumed Density Level		Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acres)	Net Capacity (units)
Very Low Density	Land Supply	0.00	0.00	0.00	0.00	0.0% - 10.0%	243.98	0.8 / 3.4	**438**
Low Density	Land Supply	0.00	0.00	0.00	0.00	10.0% - 10.0%	137.65	4.1 / 6.6	**573**
Medium Low Density	Land Supply	0.00	0.00	0.00	0.00	0.0% - 10.0%	338.40	10.0 / 22.4	**1,542**
Medium High Density	Land Supply	0.00	0.00	0.00	0.00	10.0% - 15.0%	152.19	30.0 / 44.8	**1,291**
High Density	Land Supply	0.00	0.00	0.00	0.00	0.0% - 10.0%	318.06	53.9 / 303.0	**19,529**
All Zones	**Total**	**0.00**	**0.00**	**0.00**	**0.00**		**1,190.28**		**23,375**

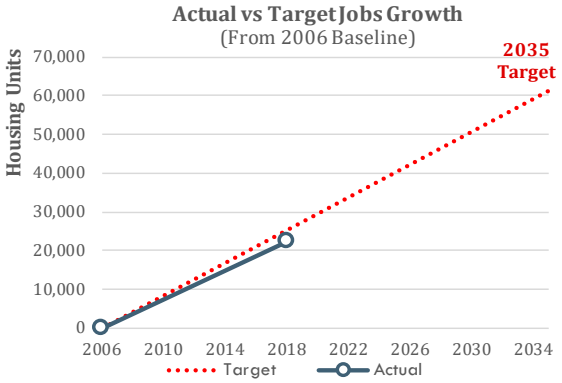
Capacity (units)	
Very Low Density Zones	438
Low Density Zones	573
Medium Low Density Zones	1,542
Medium High Density Zones	1,291
High Density Zones	19,529
Capacity in Pipeline	*3,484*
Total Capacity (Units)	**26,859**
Remaining Target (2018-2035)	13,465
Surplus/Deficit Capacity (Units)	**13,393**

Housing Capacity by Density Level (units)



Note: Bellevue zone density is largely based on FAR. For these zones, a dwelling/unit per acre equivalent was calculated to categorize zone density level. Additionally, the development density/intensity of parcels with critical areas and their buffers as identified in Bellevue's Land Use Code section 20.25H.035 was calculated using Bellevue's development density/intensity formula specified in LUC 20.25H.45. This net acreage was carried forward when determining net vacant and redevelopable land.

Bellevue - Employment Growth and Commercial/Industrial Development Trends



Bellevue Jobs Growth Target: 2006-2035	61,480
2006 Jobs (PSRC)	120,494
2018 Jobs (PSRC)	143,023
Total Jobs Growth	**22,529**
Remaining 2035 Target	38,951

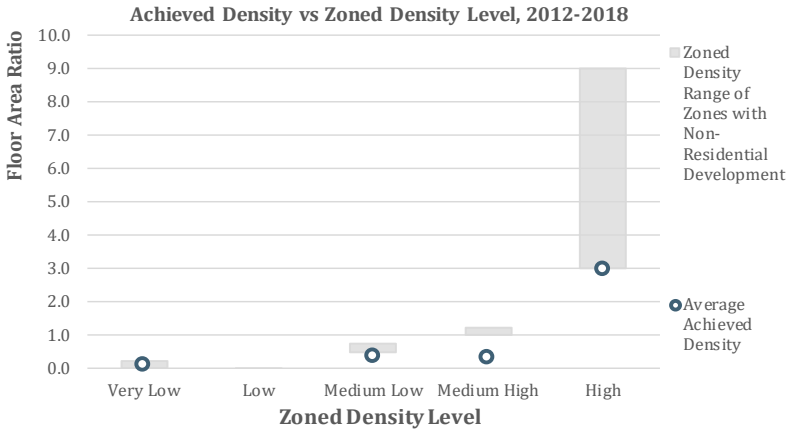
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
88.6%	1.44%	1.43%

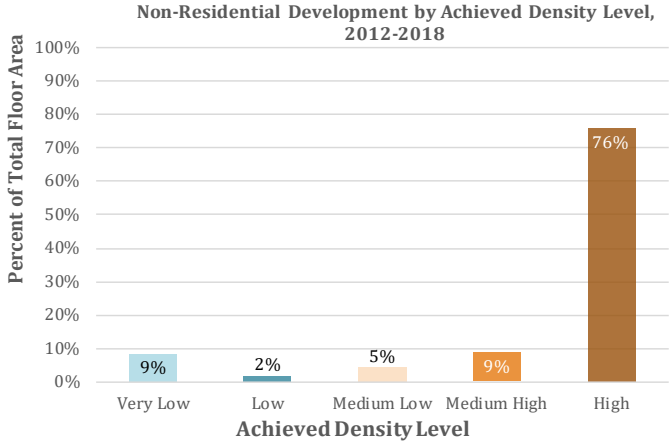
Since 2006, Bellevue has grown at 89% of the pace needed to achieve its 2035 jobs growth target of 61,480 units. During this period, the total number of jobs in Bellevue grew by roughly 19%. At this current rate, Bellevue is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 1.4% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	1,661,282	200,888	0.1
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	504,925	179,905	0.4
Medium High	1.0 - 3.0 FAR	1,348,453	412,671	0.3
High	3.0 & up FAR	909,541	2,704,313	3.0
	Total	4,424,202	3,497,777	0.8

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	2,446,734	301,651	0.1
Low	168,421	60,828	0.4
Medium Low	454,922	163,610	0.4
Medium High	585,613	311,958	0.5
High	768,513	2,659,730	3.5
Total	4,424,202	3,497,777	0.8



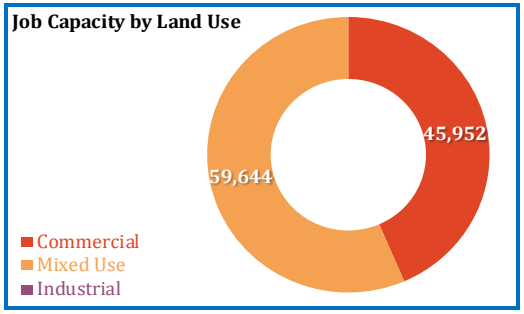


Bellevue - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	447	0.0	0.0	0.0	447	0% - 15%	402.6
Mixed Use	382	0.0	0.0	0.0	382	8% - 10%	71.3
Industrial	29	0.0	0.0	0.0	29	10%	25.8
Non-Res Land Total	**858**	**0.0**	**0.0**	**0.0**	**858**		**499.7**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Commercial Total	16.07	0.26 / 9.90	3.26	14.38	300 / 444	**45,952**
Mixed-Use						
Mixed Use Total	9.24	0.30 / 5.40	3.40	18.04	300 / 500	**59,644**
Industrial						
Industrial Total	1.12	0.11	0.20	0.00	550	**0**
City Total						
Commercial	16.07	0.26 / 9.90	0.69	14.38	300 / 444	45,952
Mixed Use	9.24	0.30 / 5.40	0.91	18.04	300 / 500	59,644
Industrial	1.12	0.11	0.26	0.00	550	0
Job Capacity in Pipeline						*11,645*
City Total	**26.43**	**9.90**	**1.86**	**32.42**	**550**	**117,241**

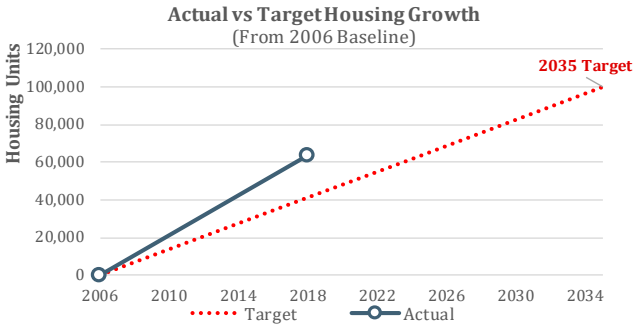
Job Capacity by Assumed Density Level	#	%
Very Low Density	1,699	2%
Low Density	1,694	2%
Medium Low Density	5,056	5%
Medium High Density	17,663	17%
High Density	79,485	75%
Capacity in Pipeline		*11,645*
Total Capacity (jobs)		**117,241**
Remaining Target (2018-2035)		38,951
Surplus/Deficit Capacity (jobs)		**78,290**



Note: The development density/intensity of parcels with critical areas and their buffers as identified in Bellevue's Land Use Code section 20.25H.035 was calculated using Bellevue's development density/intensity formula specified in LUC 20.25H.45. This net acreage was carried forward when determining net vacant and redevelopable land.

City of Seattle

Housing Growth and Residential Development Trends



Seattle Housing Growth Target: 2006-2035	99,760
2006 Estimated Housing Units	292,881
2018 Estimated Housing Units	356,556
Estimated Housing Growth	**63,675**
Remaining 2035 Target	36,085

% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035
154.3%	1.65%	0.57%

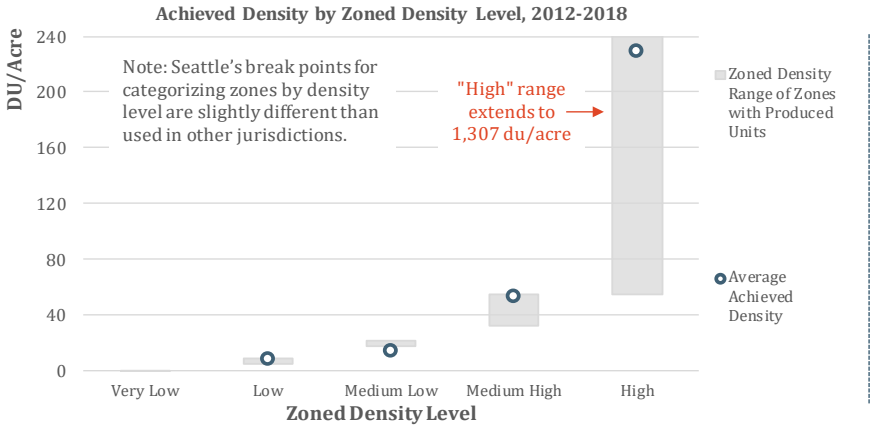
Since 2006, Seattle has grown at 154% of the pace needed to achieve its 2035 housing growth target of 99,760 units. During this period, the total number of housing units in Seattle grew by roughly 22%. At this current rate, Seattle is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.6% to reach its remaining target by 2035.

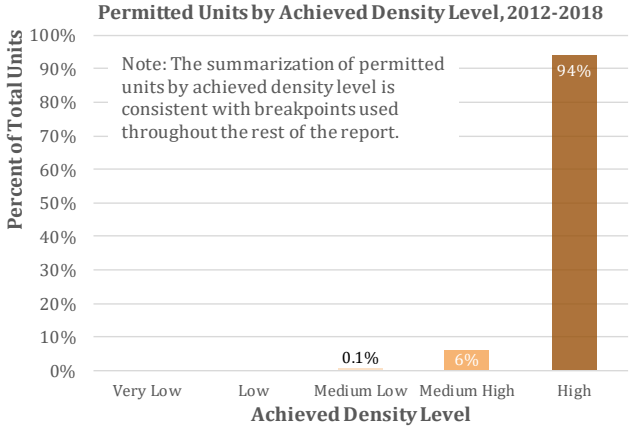
Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre							
Low	4 - 10 du/acre							7.8
Medium Low	10 - 24 du/acre							14.2
Medium High	24 - 54 du/acre							52.4
High	54 & up du/acre							229.2
Total						305.7	45,365	148.4

Achieved Density Calculations Provided By the City of Seattle

Achieved Density Level (du/acre)		Net Area (acres)	Total Units
Very Low	0 - 4 du/acre	1.9	0
Low	4 - 10 du/acre	0.0	0
Medium Low	10 - 24 du/acre	1.6	23
Medium High	24 - 48 du/acre	68.5	2,707
High	48 & up du/acre	233.7	42,635
Total		305.7	45,365



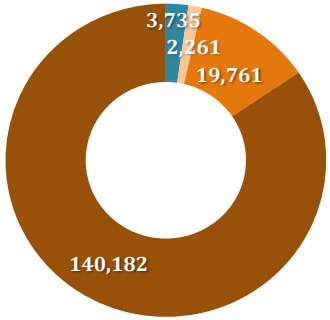


Seattle - Residential Land Supply and Capacity

Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas and Infrastructure Deductions	Buildable Area (acres)	Residential Split (low/high)	Assumed Densities (low/high - FAR)	Market Factor (low/high)	Net Capacity (units)
Very Low Density	Vacant Subtotal	0.0	Not available for disaggregation	0.0	0%	0.0	0%	0
	Redev Subtotal	0.0		0.0	0%	0.0	0%	0
	Subtotal	0.0	0.0	0.0				**0**
Low Density	Vacant Subtotal	0.0	Not available for disaggregation	0.0	0%	0.0	0%	0
	Redev Subtotal	1,283.9		1,052.3	100%	0.5	0% - 35%	3,735
	Subtotal	1,283.9	231.6	1,052.3				**3,735**
Medium Low Density	Vacant Subtotal	0.0*	Not available for disaggregation	0.0*	0%	0.0	0%	0
	Redev Subtotal	262.3		251.5	100%	0.8	10% - 38%	2,261
	Subtotal	262.3	10.8	251.5				**2,261**
Medium High Density	Vacant Subtotal	0.0*	Not available for disaggregation	0.0*	0%	0.0	0%	0
	Redev Subtotal	685.3		658.0	100%	1.3 / 1.8	10% - 38%	19,761
	Subtotal	685.3	27.3	658.0				**19,761**
High Density	Vacant Subtotal	41.0	Not available for disaggregation	36.4	0% - 100%	0.4 / 22.0	10% - 40%	4,813
	Redev Subtotal	964.8		938.1	20% - 100%	1.9 / 30.0	5% - 40%	135,369
	Subtotal	1,005.7	31.2	974.5				**140,182**
All Zones	Vacant Total	41.0		36.4				4,813
	Redev Total	3,196.2		2,899.9				161,127
	Total	**3,237.2**		**2,936.3**				**165,940**

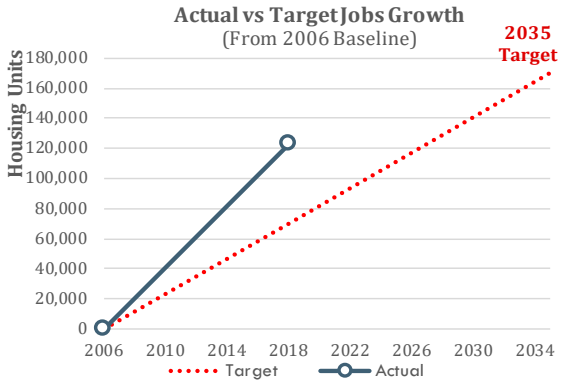
Capacity (units)	
Very Low Density Zones	0
Low Density Zones	3,735
Medium Low Density Zones	2,261
Medium High Density Zones	19,761
High Density Zones	140,182
Citywide ADU Capacity	*6,500*
Total Capacity (Units)	**172,440**
Remaining Target (2018-2035)	36,085
Surplus/Deficit Capacity (Units)	**136,355**

Housing Capacity by Density Level (units)



*In the Medium-Low and Medium-High density levels, the capacity showing up as vacant but with zero buildable area is a vestige of Seattle's split zoning,

Seattle - Employment Growth and Commercial/Industrial Development Trends



Seattle Jobs Growth Target: 2006-2035	170,172
2006 Jobs (PSRC)	498,931
2018 Jobs (PSRC)	622,121
Total Jobs Growth	**123,190**
Remaining 2035 Target	46,982

% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
174.9%	1.86%	0.43%

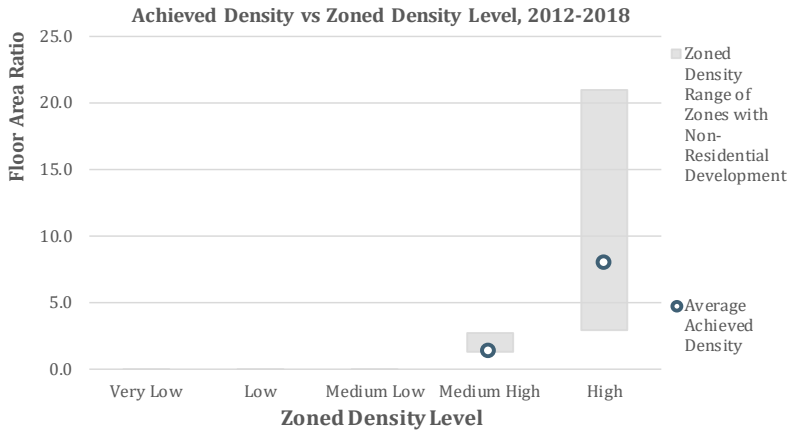
Since 2006, Seattle has grown at 175% of the pace needed to achieve its 2035 jobs growth target of 170,172 units. During this period, the total number of jobs in Seattle grew by roughly 25%. At this current rate, Seattle is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.4% to reach its remaining target by 2035.

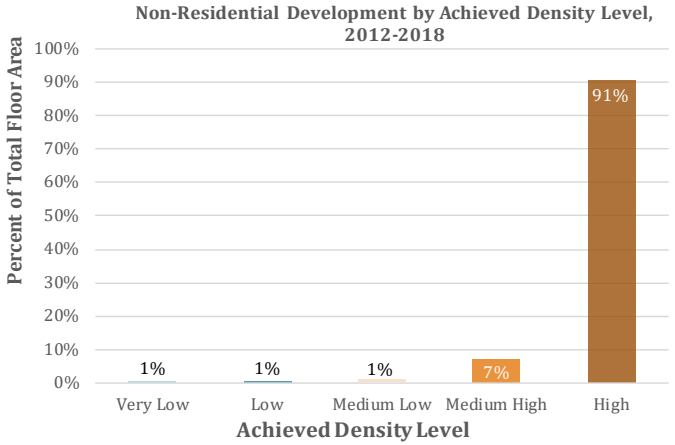
Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR			
Low	0.35 - 0.5 FAR			
Medium Low	0.5 - 1.0 FAR			
Medium High	1.0 - 3.0 FAR			1.3
High	3.0 & up FAR			8.0
	Total	3,272,305	16,401,456	5.0

Achieved Density Calculations Provided By the City of Seattle

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	397,813	109,271	0.3
Low	269,387	121,607	0.5
Medium Low	227,891	168,617	0.7
Medium High	588,131	1,142,705	1.9
High	1,789,082	14,859,256	8.3
Total	3,272,305	16,401,456	5.0



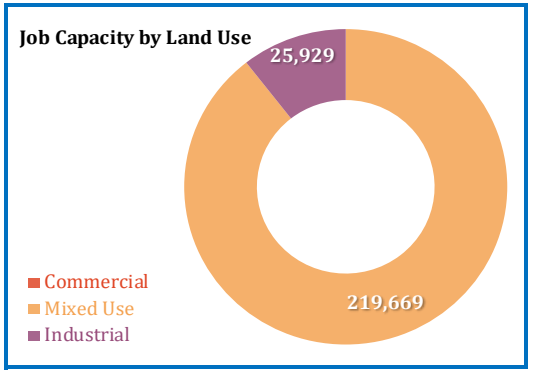


Seattle - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Mixed Use	306.0	0.0	0.0	0.0	306.0	0% - 40%	231.6
Industrial	417.9	0.0	0.0	0.0	417.9	0% - 25%	380.6
Non-Res Land Total	**723.9**	**0.0**	**0.0**	**0.0**	**723.9**		**612.1**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Commercial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
Mixed-Use						
Vacant	0.75	2.40 / 22.00	0.00	4.13	275 / 300	7,922
Redevelopable	18.32	0.50 / 30.00	21.71	69.42	0 / 300	211,747
Mixed Use Total	**19.06**	**0.50 / 30.00**	**21.71**	**73.55**	**0 / 300**	**219,669**
Industrial						
Vacant	19.74	0.40 / 2.75	5.12	20.03	500 / 700	25,929
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**19.74**	**0.40 / 2.75**	**5.12**	**20.03**	**500 / 700**	**25,929**
City Total						
Commercial	0.00	0.00	0.69	0.00	0	0
Mixed Use	19.06	0.50 / 30.00	0.91	73.55	0 / 300	219,669
Industrial	19.74	0.40 / 2.75	0.26	20.03	500 / 700	25,929
Job Capacity in Pipeline						*0*
City Total	**38.80**	**30.00**	**1.86**	**93.58**	**0 / 700**	**245,598**

Job Capacity by Assumed Density Level	#	%
Very Low Density	0	0%
Low Density	0	0%
Medium Low Density	4,536	2%
Medium High Density	29,352	12%
High Density	211,076	86%
Uncategorized Jobs - No Density Level		*633*
Total Capacity (jobs)		**245,598**
Remaining Target (2018-2035)		46,982
Surplus/Deficit Capacity (jobs)		**198,616**

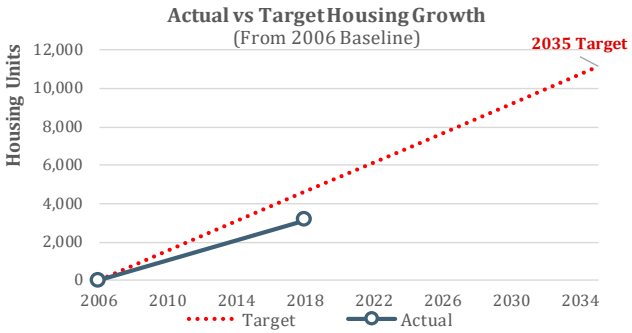


Core Cities

City of Auburn
City of Bothell
City of Burien
City of Federal Way
City of Issaquah
City of Kent
City of Kirkland
City of Redmond
City of Renton
City of SeaTac
City of Tukwila

City of Auburn

Housing Growth and Residential Development Trends



Auburn Housing Growth Target: 2006-2035	11,159
2006 Estimated Housing Units	23,602
2018 Estimated Housing Units	26,740
Estimated Housing Growth	**3,138**
Remaining 2035 Target	8,021

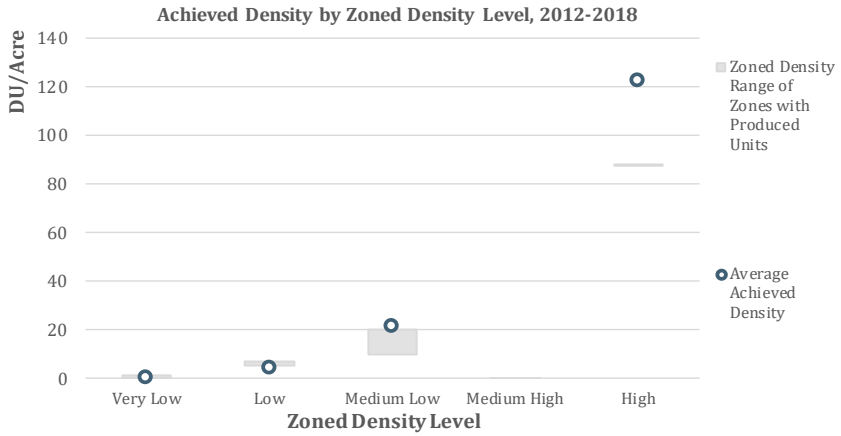
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
68.0%	1.05%	1.56%

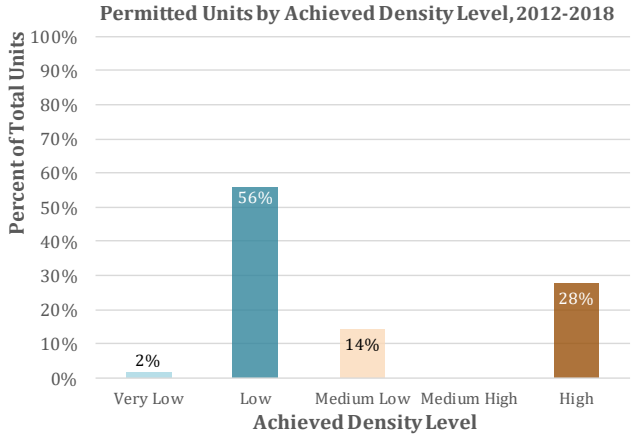
Since 2006, Auburn has grown at 68% of the pace needed to achieve its 2035 housing growth target of 11,159 units. During this period, the total number of housing units in Auburn grew by roughly 13%. At this current rate, Auburn is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.6% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	173.6	0.0	0.0	0.0	173.6	5	**0.0**
Low	4 - 10 du/acre	135.5	0.0	0.0	0.0	135.5	525	**3.9**
Medium Low	10 - 24 du/acre	6.2	0.0	0.0	0.0	6.2	132	**21.1**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	2.1	0.0	0.0	0.0	2.1	255	**122.1**
	Total	**317.5**	**0.0**	**0.0**	**0.0**	**317.5**	**917**	**2.9**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	208.6	18
Low	117.1	512
Medium Low	6.2	132
Medium High	0.0	0
High	2.1	255
Total	**334.0**	**917**



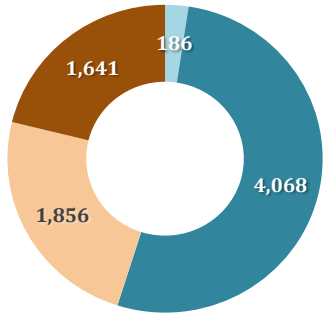


Auburn - Residential Land Supply and Capacity

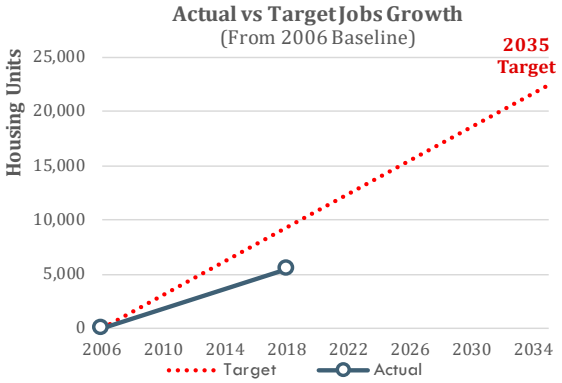
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				89.35	20.0% - 20.0%	268.04	0.3 / 1.0	119
	Redev Subtotal				114.76	20.0% - 20.0%	344.27	0.3 / 1.0	67
	Subtotal	1,508.47	354.51	133.45	204.10		612.31		**186**
Low Density	Vacant Subtotal				121.45	15.0% - 20.0%	387.16	4.4 / 7.0	1,939
	Redev Subtotal				183.49	15.0% - 20.0%	589.17	4.4 / 7.0	2,129
	Subtotal	1,947.77	299.20	123.89	304.94		976.33		**4,068**
Medium Low Density	Vacant Subtotal				11.06	5.0% - 20.0%	64.56	10.0 / 21.1	1,009
	Redev Subtotal				8.97	5.0% - 20.0%	52.92	10.0 / 21.1	847
	Subtotal	368.92	212.31	0.67	20.04		117.49		**1,856**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				1.03	5.0% - 5.0%	6.82	94.0	641
	Redev Subtotal				1.61	5.0% - 5.0%	10.65	94.0	1,000
	Subtotal	21.35	0.18	0.00	2.65		17.47		**1,641**
All Zones	Vacant Total				222.89		726.58		3,708
	Redev Total				308.83		997.01		4,043
	Total	**3,846.51**	**866.20**	**258.01**	**531.72**		**1,723.59**		**7,751**

Capacity (units)	
Very Low Density Zones	186
Low Density Zones	4,068
Medium Low Density Zones	1,856
Medium High Density Zones	0
High Density Zones	1,641
Capacity in Pipeline	*1,400*
Total Capacity (Units)	**9,151**
Remaining Target (2018-2035)	8,021
Surplus/Deficit Capacity (Units)	**1,130**

Housing Capacity by Density Level (units)



Auburn - Employment Growth and Commercial/Industrial Development Trends



Auburn Jobs Growth Target: 2006-2035	22,446
2006 Jobs (PSRC)	38,252
2018 Jobs (PSRC)	43,770
Total Jobs Growth	**5,518**
Remaining 2035 Target	**16,928**

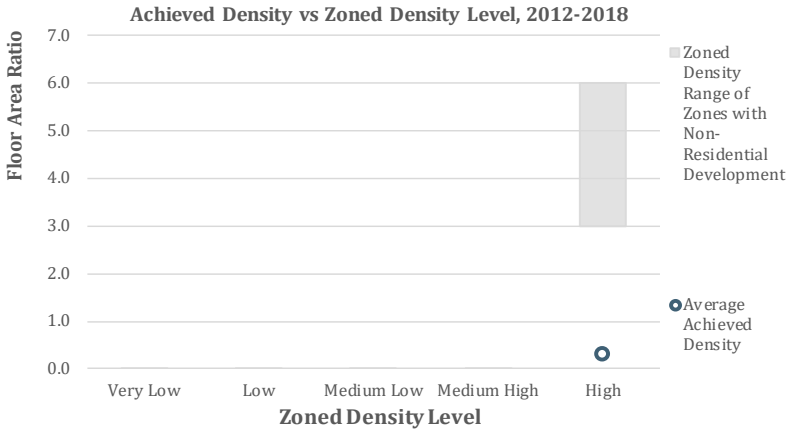
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
59.4%	**1.13%**	**1.94%**

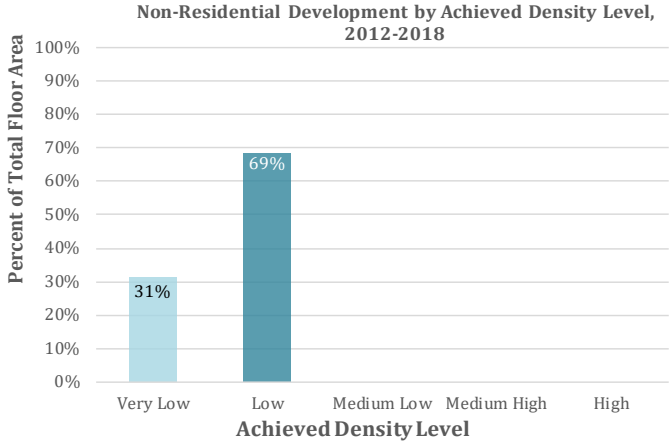
Since 2006, Auburn has grown at 59% of the pace needed to achieve its 2035 jobs growth target of 22,446 units. During this period, the total number of jobs in Auburn grew by roughly 14%. At this current rate, Auburn is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 1.9% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	1,435,270	400,061	**0.3**
	Total	**1,435,270**	**400,061**	**0.3**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	766,494	125,804	**0.2**
Low	668,776	274,257	**0.4**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**1,435,270**	**400,061**	**0.3**



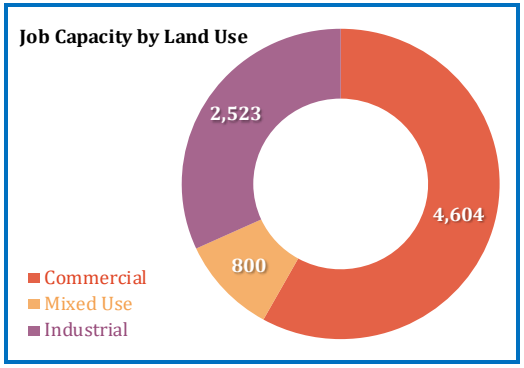


Auburn - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	420.4	93.2	16.4	24.5	286.3	15%	237.2
Mixed Use	152.6	113.3	2.0	2.9	34.4	5%	32.4
Industrial	718.2	362.8	17.8	26.7	310.9	8%	282.5
Non-Res Land Total	**1291.1**	**569.4**	**36.1**	**54.1**	**631.5**		**552.1**

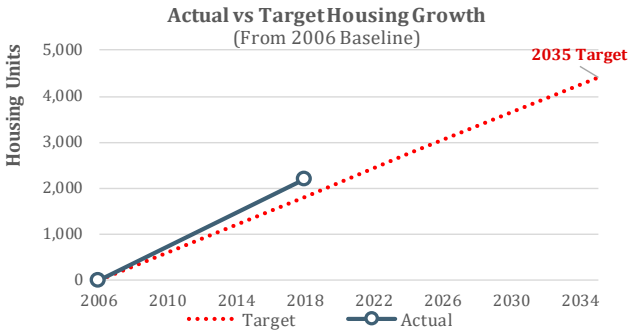
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	5.19	0.25	0.00	1.30	375 / 400	3,270
Redevelopable	5.14	0.25	0.76	0.53	375 / 400	1334
Commercial Total	**10.33**	**0.25**	**0.76**	**1.83**	**375 / 400**	**4,604**
Mixed-Use						
Vacant	0.95	0.25 / 0.37	0.00	0.33	400 / 1000	531
Redevelopable	0.46	0.25 / 0.37	0.06	0.11	400 / 1000	268
Mixed Use Total	**1.41**	**0.25 / 0.37**	**0.06**	**0.44**	**400 / 1000**	**800**
Industrial						
Vacant	6.71	0.07 / 0.41	0.00	1.63	1,000	1,631
Redevelopable	5.60	0.07 / 0.41	0.29	0.89	1,000	892
Industrial Total	**12.31**	**0.07 / 0.41**	**0.29**	**2.52**	**1,000**	**2,523**
City Total						
Commercial	10.33	0.25	0.69	1.83	375 / 400	4,604
Mixed Use	1.41	0.25 / 0.37	0.91	0.44	400 / 1000	800
Industrial	12.31	0.07 / 0.41	0.26	2.52	1,000	2,523
Job Capacity in Pipeline						*0*
City Total	**24.05**	**0.07 / 0.41**	**1.86**	**4.79**	**375 / 1000**	**7,927**

Job Capacity by Assumed Density Level	#	%
Very Low Density	4,877	62%
Low Density	3,050	38%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**7,927**
Remaining Target (2018-2035)		16,928
Surplus/Deficit Capacity (jobs)		**-9,001**



City of Bothell

Housing Growth and Residential Development Trends



Bothell Housing Growth Target: 2006-2035	4,420
2006 Estimated Housing Units	9,522
2018 Estimated Housing Units	11,726
Estimated Housing Growth	**2,204**
Remaining 2035 Target	2,216

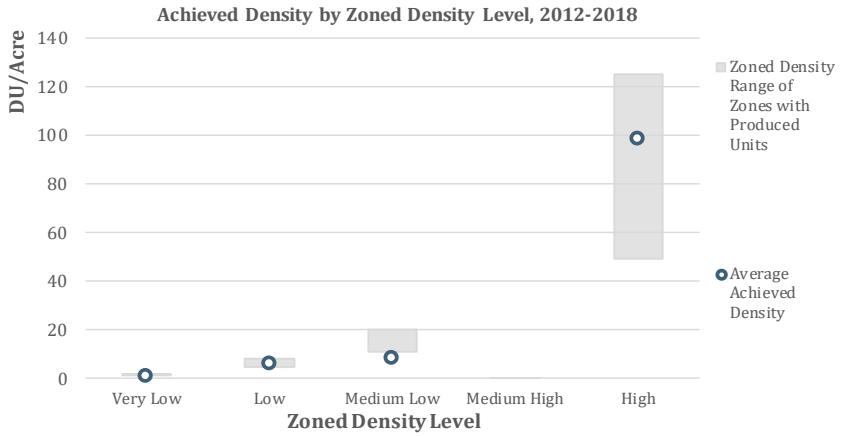
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
120.5%	1.75%	1.02%

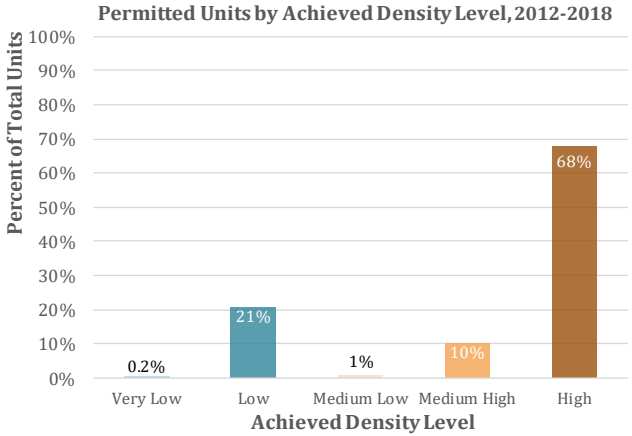
Since 2006, Bothell has grown at 121% of the pace needed to achieve its 2035 housing growth target of 4,420 units. During this period, the total number of housing units in Bothell grew by roughly 23%. At this current rate, Bothell is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	1.6	0.0	0.0	0.0	1.6	1	**0.6**
Low	4 - 10 du/acre	179.1	43.2	0.0	19.7	116.2	670	**5.8**
Medium Low	10 - 24 du/acre	6.3	0.2	0.0	0.0	6.1	49	**8.1**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	20.9	0.0	1.7	0.5	18.7	1,836	**98.1**
	Total	**207.9**	**43.5**	**1.7**	**20.2**	**142.5**	**2,556**	**17.9**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	3.7	6
Low	112.6	535
Medium Low	1.6	22
Medium High	9.5	260
High	15.1	1,733
Total	**142.5**	**2,556**



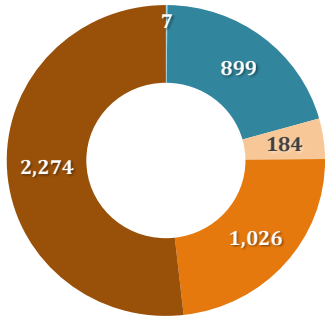


Bothell - Residential Land Supply and Capacity

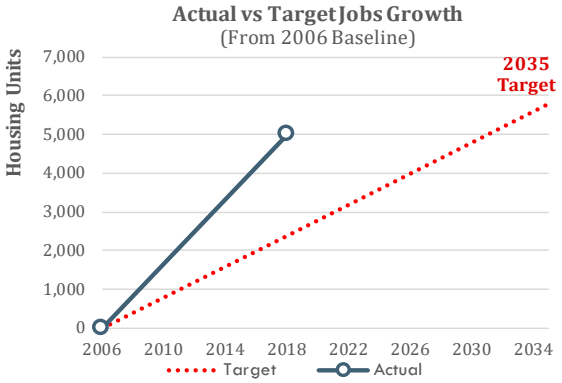
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				5.39	1.0% - 3.0%	10.03	3.1	7
	Redev Subtotal				1.20	1.0% - 3.0%	2.81	3.1	0
	Subtotal	34.07	13.33	0.00	6.58		12.85		**7**
Low Density	Vacant Subtotal				42.64	3.0% - 5.0%	77.45	4.3 / 8.0	392
	Redev Subtotal				71.22	3.0% - 5.0%	126.99	4.3 / 8.0	508
	Subtotal	376.01	47.71	0.00	113.86		204.45		**899**
Medium Low Density	Vacant Subtotal				0.75	3.0% - 5.0%	2.14	13.3 / 23.9	33
	Redev Subtotal				3.51	3.0% - 5.0%	9.78	13.3 / 23.9	151
	Subtotal	24.14	7.43	0.00	4.26		11.92		**184**
Medium High Density	Vacant Subtotal				4.47	3.0% - 3.0%	12.88	25.0 / 34.0	407
	Redev Subtotal				7.17	3.0% - 3.0%	20.66	25.0 / 34.0	620
	Subtotal	64.35	17.77	0.00	11.65		33.54		**1,026**
High Density	Vacant Subtotal				3.22	3.0% - 3.0%	9.27	66.3 / 192.4	1,271
	Redev Subtotal				3.43	3.0% - 3.0%	9.89	66.3 / 192.4	1,003
	Subtotal	30.11	3.50	0.00	6.65		19.16		**2,274**
All Zones	Vacant Total				56.47		111.78		2,109
	Redev Total				86.53		170.13		2,282
	Total	**528.68**	**89.74**	**0.00**	**143.00**		**281.91**		**4,391**

Capacity (units)	
Very Low Density Zones	7
Low Density Zones	899
Medium Low Density Zones	184
Medium High Density Zones	1,026
High Density Zones	2,274
Capacity in Pipeline	*1,979*
Total Capacity (Units)	**6,370**
Remaining Target (2018-2035)	2,216
Surplus/Deficit Capacity (Units)	**4,154**

Housing Capacity by Density Level (units)



Bothell - Employment Growth and Commercial/Industrial Development Trends



Bothell Jobs Growth Target: 2006-2035	5,800
2006 Jobs (PSRC)	11,757
2018 Jobs (PSRC)	16,780
Total Jobs Growth	**5,023**
Remaining 2035 Target	777

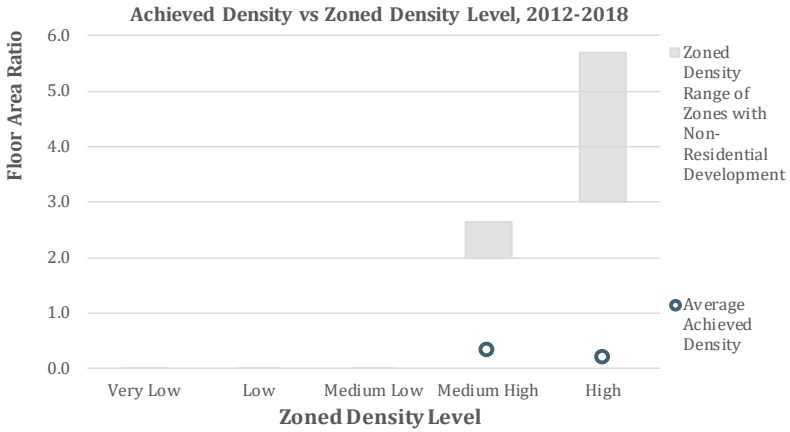
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
209.3%	3.01%	0.27%

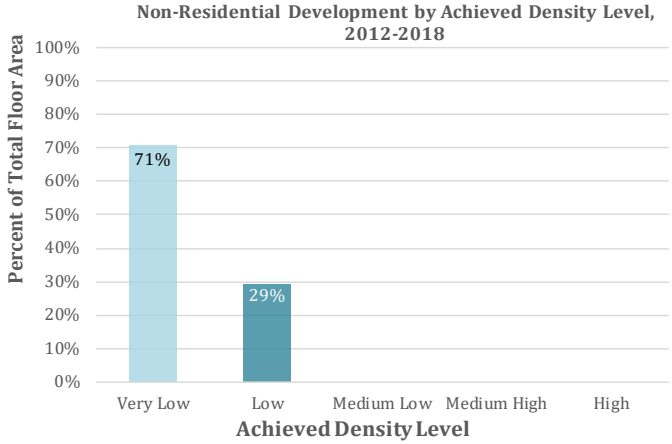
Since 2006, Bothell has grown at 209% of the pace needed to achieve its 2035 jobs growth target of 5,800 units. During this period, the total number of jobs in Bothell grew by roughly 43%. At this current rate, Bothell is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.3% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	17,550	5,592	0.3
High	3.0 & up FAR	634,620	121,751	0.2
	Total	652,170	127,343	0.2

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	551,332	90,251	0.2
Low	100,838	37,092	0.4
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	652,170	127,343	0.2



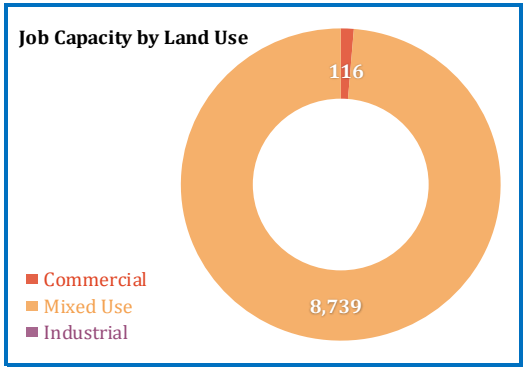


Bothell - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	6.5	2.6	0.6	0.4	2.9	5% - 10%	2.7
Mixed Use	159.4	57.2	15.3	10.2	76.6	1% - 5%	71.7
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**165.9**	**59.9**	**15.9**	**10.6**	**79.5**		**74.3**

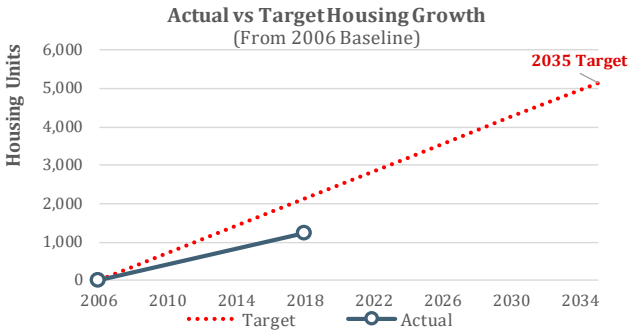
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.02	0.35 / 0.40	0.00	0.01	200	47
Redevelopable	0.09	0.35 / 0.40	0.07	0.01	200	69
Commercial Total	**0.12**	**0.35 / 0.40**	**0.07**	**0.02**	**200**	**116**
Mixed-Use						
Vacant	1.37	0.10 / 1.20	0.00	0.83	200 / 1000	4,137
Redevelopable	1.76	0.10 / 1.20	0.10	0.92	200 / 1000	4,602
Mixed Use Total	**3.12**	**0.10 / 1.20**	**0.10**	**1.75**	**200 / 1000**	**8,739**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.12	0.35 / 0.40	0.69	0.02	200	116
Mixed Use	3.12	0.10 / 1.20	0.91	1.75	200 / 1000	8,739
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*480*
City Total	**3.24**	**1.20**	**1.86**	**1.77**	**0 / 1000**	**9,335**

Job Capacity by Assumed Density Level	#	%
Very Low Density	225	3%
Low Density	2,605	29%
Medium Low Density	540	6%
Medium High Density	5,485	62%
High Density	0	0%
Capacity in Pipeline		*480*
Total Capacity (jobs)		**9,335**
Remaining Target (2018-2035)		777
Surplus/Deficit Capacity (jobs)		**8,558**



City of Burien

Housing Growth and Residential Development Trends



Burien Housing Growth Target: 2006-2035	5,150
2006 Estimated Housing Units	19,584
2018 Estimated Housing Units	20,809
Estimated Housing Growth	**1,225**
Remaining 2035 Target	3,926

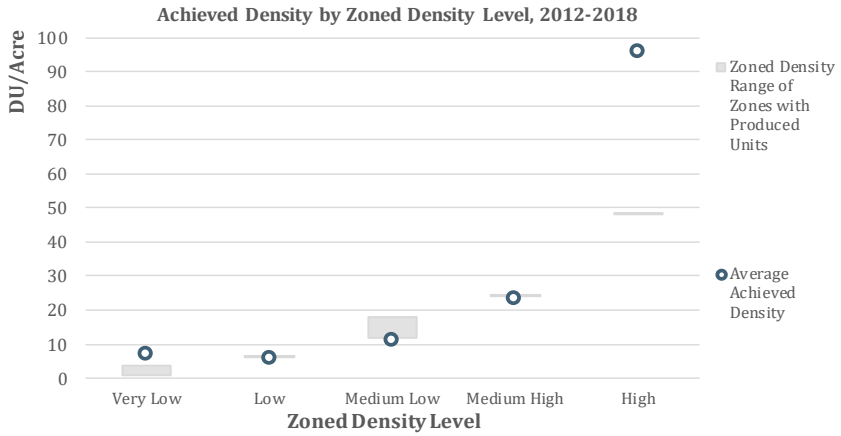
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
57.5%	0.51%	1.02%

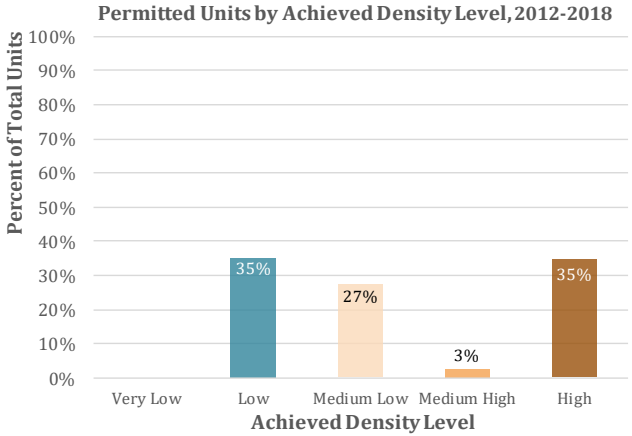
Since 2006, Burien has grown at 57% of the pace needed to achieve its 2035 housing growth target of 5,150 units. During this period, the total number of housing units in Burien grew by roughly 6%. At this current rate, Burien is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	17.6	12.5	0.0	0.2	4.8	33	**6.9**
Low	4 - 10 du/acre	58.3	0.0	0.5	2.1	55.6	323	**5.8**
Medium Low	10 - 24 du/acre	5.7	0.0	0.0	0.0	5.7	63	**11.0**
Medium High	24 - 48 du/acre	9.9	0.4	0.0	0.1	9.4	216	**23.1**
High	48 & up du/acre	4.0	0.0	0.0	0.0	4.0	381	**95.6**
	Total	**95.5**	**13.0**	**0.6**	**2.5**	**79.5**	**1,016**	**12.8**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	0.0	0
Low	60.4	356
Medium Low	15.1	279
Medium High	1.1	27
High	2.9	354
Total	**79.5**	**1,016**



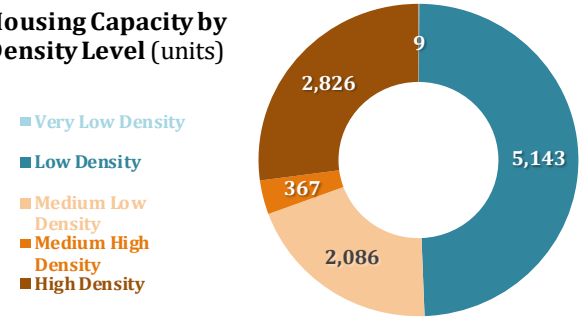


Burien - Residential Land Supply and Capacity

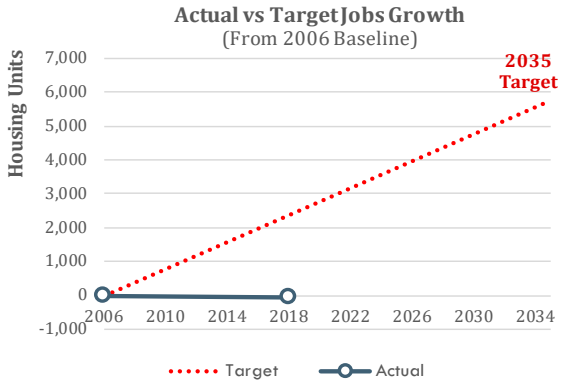
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				1.23	18.0% - 18.0%	7.17	1.0	7
	Redev Subtotal				0.54	20.0% - 20.0%	3.03	1.0	2
	Subtotal	15.23	0.53	0.00	1.76		10.20		**9**
Low Density	Vacant Subtotal				15.33	16.0% - 30.0%	92.35	5.6 / 8.0	946
	Redev Subtotal				52.01	17.0% - 32.0%	308.91	5.6 / 8.0	4,196
	Subtotal	1,276.66	712.44	0.00	67.34		401.26		**5,143**
Medium Low Density	Vacant Subtotal				2.21	22.0% - 31.0%	37.90	10.8 / 23.0	721
	Redev Subtotal				4.97	24.0% - 32.0%	82.12	10.8 / 23.0	1,365
	Subtotal	204.58	29.80	0.00	7.17		120.01		**2,086**
Medium High Density	Vacant Subtotal				0.16	30.0% - 31.0%	2.60	24.0 / 25.7	66
	Redev Subtotal				0.98	32.0% - 33.0%	15.58	24.0 / 25.7	301
	Subtotal	28.87	0.54	0.00	1.13		18.18		**367**
High Density	Vacant Subtotal				0.60	31.0% - 100.0%	2.47	120.7	349
	Redev Subtotal				1.33	32.0% - 100.0%	20.91	120.7	2,477
	Subtotal	50.50	7.05	0.00	1.93		23.38		**2,826**
All Zones	Vacant Total				19.52		142.49		2,089
	Redev Total				59.82		430.54		8,341
	Total	**1,575.84**	**750.36**	**0.00**	**79.34**		**573.03**		**10,431**

Capacity (units)	
Very Low Density Zones	9
Low Density Zones	5,143
Medium Low Density Zones	2,086
Medium High Density Zones	367
High Density Zones	2,826
Capacity in Pipeline	*385*
Total Capacity (Units)	**10,816**
Remaining Target (2018-2035)	3,926
Surplus/Deficit Capacity (Units)	**6,890**

Housing Capacity by Density Level (units)



Burien - Employment Growth and Commercial/Industrial Development Trends



Burien Jobs Growth Target: 2006-2035	5,754
2006 Jobs (PSRC)	13,371
2018 Jobs (PSRC)	13,345
Total Jobs Growth	**-26**
Remaining 2035 Target	**5,754**

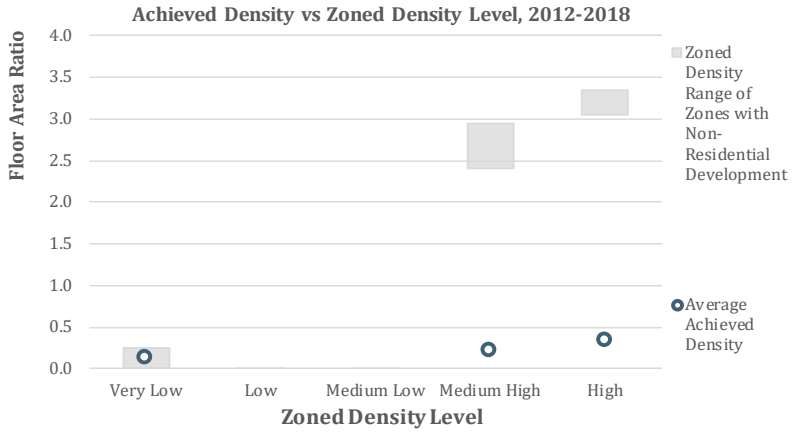
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
-1.1%	-0.02%	2.14%

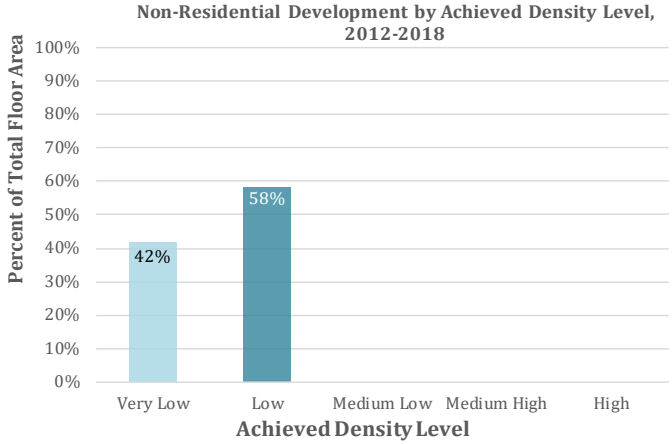
Since 2006, Burien has grown at -1% of the pace needed to achieve its 2035 jobs growth target of 5,754 units. During this period, the total number of jobs in Burien grew by roughly 0%. At this current rate, Burien is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 2.1% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	113,288	13,973	**0.1**
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	313,495	69,911	**0.2**
High	3.0 & up FAR	965,891	329,761	**0.3**
	Total	**1,392,674**	**413,645**	**0.3**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	808,777	172,505	**0.2**
Low	583,897	241,140	**0.4**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**1,392,674**	**413,645**	**0.3**



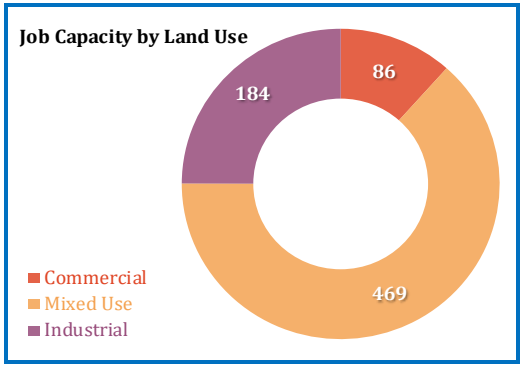


Burien - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	12.1	0.2	0.4	0.4	11.1	36% - 40%	6.7
Mixed Use	129.3	13.7	3.5	3.5	108.7	10% - 46%	64.9
Industrial	16.3	0.0	0.5	0.5	15.3	8% - 10%	13.7
Non-Res Land Total	**157.6**	**13.9**	**4.3**	**4.3**	**135.1**		**85.3**

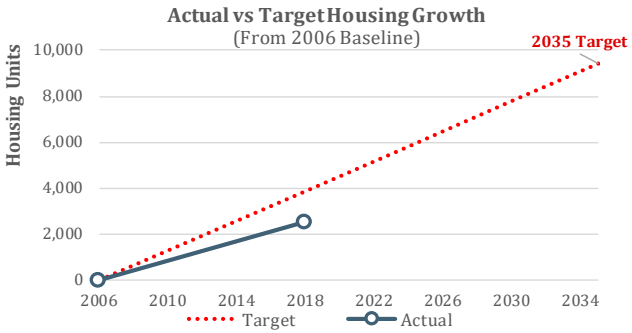
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.15	0.22 / 0.40	0.00	0.06	650	86
Redevelopable	0.14	0.22 / 0.40	0.11	0.00	650	0
Commercial Total	**0.29**	**0.22 / 0.40**	**0.11**	**0.06**	**650**	**86**
Mixed-Use						
Vacant	1.17	0.12 / 0.41	0.00	0.30	650 / 1200	406
Redevelopable	1.66	0.12 / 0.41	1.17	0.04	650 / 1200	62
Mixed Use Total	**2.83**	**0.12 / 0.41**	**1.17**	**0.34**	**650 / 1200**	**469**
Industrial						
Vacant	0.09	0.41	0.00	0.04	1,200	30
Redevelopable	0.51	0.41	0.02	0.19	1,200	154
Industrial Total	**0.60**	**0.41**	**0.02**	**0.22**	**1,200**	**184**
City Total						
Commercial	0.29	0.22 / 0.40	0.69	0.06	650	86
Mixed Use	2.83	0.12 / 0.41	0.91	0.34	650 / 1200	469
Industrial	0.60	0.41	0.26	0.22	1,200	184
Job Capacity in Pipeline						*13*
City Total	**3.71**	**0.12 / 0.41**	**1.86**	**0.62**	**650 / 1200**	**752**

Job Capacity by Assumed Density Level	#	%
Very Low Density	414	56%
Low Density	325	44%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*13*
Total Capacity (jobs)		**752**
Remaining Target (2018-2035)		5,780
Surplus/Deficit Capacity (jobs)		**-5,027**



City of Federal Way

Housing Growth and Residential Development Trends



Federal Way Housing Growth Target: 2006-2035	9,396
2006 Estimated Housing Units	34,560
2018 Estimated Housing Units	37,085
Estimated Housing Growth	**2,525**
Remaining 2035 Target	6,871

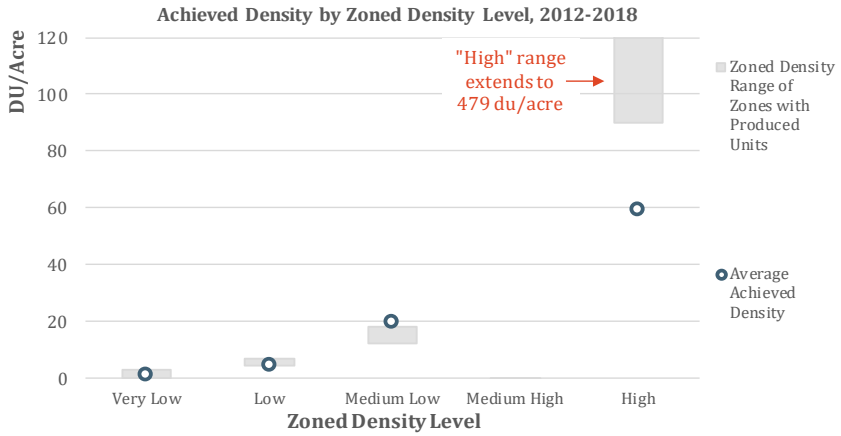
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
65.0%	0.59%	1.00%

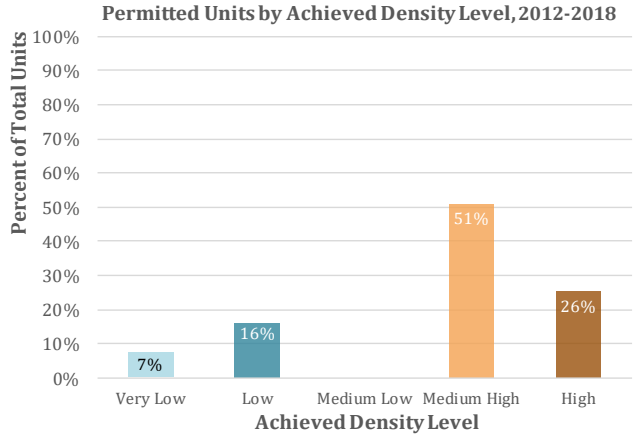
Since 2006, Federal Way has grown at 65% of the pace needed to achieve its 2035 housing growth target of 9,396 units. During this period, the total number of housing units in Federal Way grew by roughly 7%. At this current rate, Federal Way is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	29.7	0.0	0.0	0.0	29.7	29	**1.0**
Low	4 - 10 du/acre	57.1	0.0	0.0	0.0	57.1	245	**4.3**
Medium Low	10 - 24 du/acre	59.0	17.9	7.1	0.3	33.7	659	**19.5**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	14.1	0.0	0.5	1.5	12.2	723	**59.2**
	Total	**160.0**	**17.9**	**7.6**	**1.7**	**132.8**	**1,656**	**12.5**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	56.5	123
Low	46.4	264
Medium Low	0.0	0
Medium High	26.1	846
High	3.7	423
Total	**132.8**	**1,656**



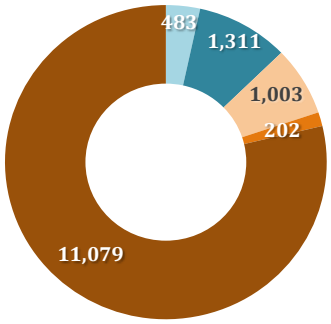


Federal Way - Residential Land Supply and Capacity

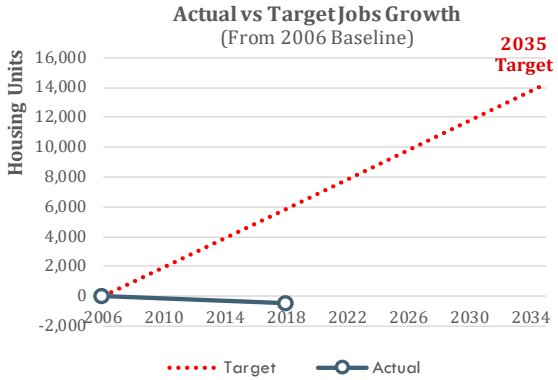
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				91.64	18.0% - 18.0%	123.06	0.2 / 2.9	258
	Redev Subtotal				118.17	18.0% - 18.0%	158.68	0.2 / 2.9	225
	Subtotal	1,391.30	791.83	0.00	209.81		281.75		**483**
Low Density	Vacant Subtotal				99.14	18.0% - 18.0%	133.14	4.5 / 8.7	723
	Redev Subtotal				136.12	18.0% - 18.0%	182.78	4.5 / 8.7	588
	Subtotal	1,459.97	787.80	0.00	235.26		315.92		**1,311**
Medium Low Density	Vacant Subtotal				12.13	7.0% - 10.0%	34.88	12.1 / 18.2	479
	Redev Subtotal				24.82	7.0% - 10.0%	69.72	12.1 / 18.2	524
	Subtotal	307.20	154.15	0.00	36.95		104.60		**1,003**
Medium High Density	Vacant Subtotal				2.43	7.0% - 7.0%	6.62	24.2	160
	Redev Subtotal				0.82	7.0% - 7.0%	2.22	24.2	42
	Subtotal	39.00	26.01	0.00	3.25		8.83		**202**
High Density	Vacant Subtotal				17.27	10.0% - 10.0%	60.44	54.0 / 135.0	3,400
	Redev Subtotal				23.15	10.0% - 10.0%	81.03	54.0 / 135.0	7,679
	Subtotal	406.99	86.43	0.00	40.42		141.47		**11,079**
All Zones	Vacant Total				222.62		358.13		5,020
	Redev Total				303.07		494.43		9,057
	Total	**3,604.46**	**1,846.21**	**0.00**	**525.68**		**852.56**		**14,077**

Capacity (units)	
Very Low Density Zones	483
Low Density Zones	1,311
Medium Low Density Zones	1,003
Medium High Density Zones	202
High Density Zones	11,079
Capacity in Pipeline	*0*
Total Capacity (Units)	**14,077**
Remaining Target (2018-2035)	6,871
Surplus/Deficit Capacity (Units)	**7,207**

Housing Capacity by Density Level (units)



Federal Way - Employment Growth and Commercial/Industrial Development Trends



Federal Way Jobs Growth Target: 2006-2035	14,268
2006 Jobs (PSRC)	31,616
2018 Jobs (PSRC)	31,148
Total Jobs Growth	**-468**
Remaining 2035 Target	14,268

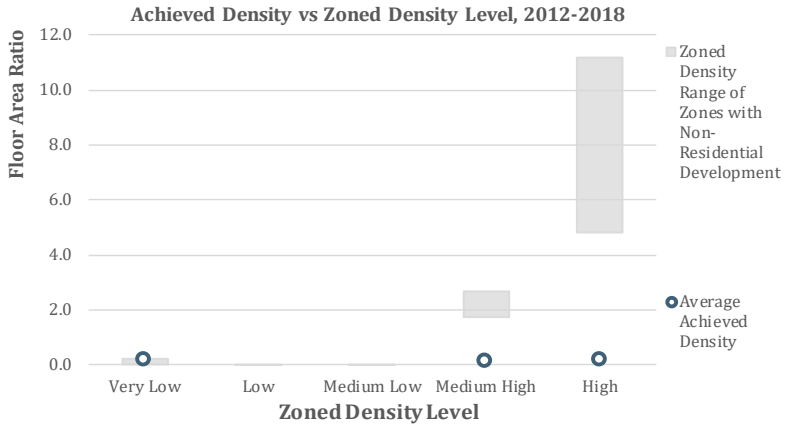
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
-7.9%	-0.12%	2.31%

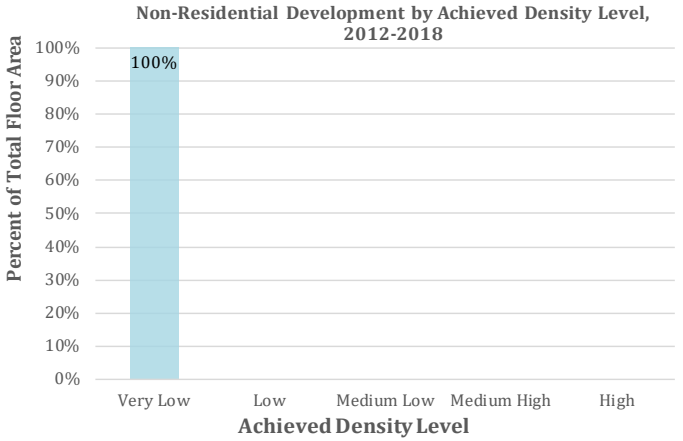
Since 2006, Federal Way has grown at -8% of the pace needed to achieve its 2035 jobs growth target of 14,268 units. During this period, the total number of jobs in Federal Way grew by roughly -1%. At this current rate, Federal Way is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 2.3% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	56,628	9,120	0.2
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	2,989,922	407,512	0.1
High	3.0 & up FAR	1,222,002	218,100	0.2
	Total	4,268,552	634,732	0.1

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	4,268,552	634,732	0.1
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	4,268,552	634,732	0.1



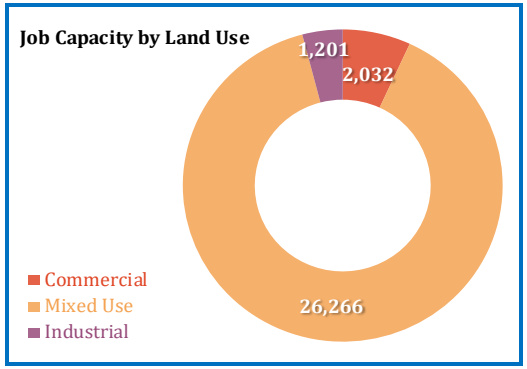


Federal Way - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	536.0	224.3	46.8	15.6	249.3	15%	202.6
Mixed Use	250.3	21.9	34.3	11.4	182.7	10%	159.9
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**786.3**	**246.2**	**81.0**	**27.0**	**432.1**		**362.5**

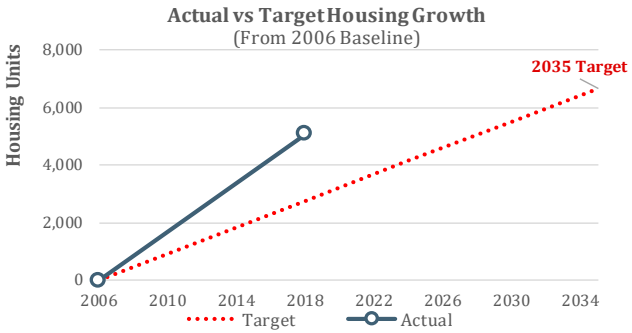
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	4.68	0.38	0.00	1.16	700 / 900	1,302
Redevelopable	4.14	0.38	0.08	0.66	700 / 900	730
Commercial Total	**8.82**	**0.38**	**0.08**	**1.82**	**700 / 900**	**2,032**
Mixed-Use						
Vacant	3.00	0.18 / 4.90	0.01	1.24	450	2,761
Redevelopable	3.96	0.18 / 4.90	0.35	10.58	450	23,505
Mixed Use Total	**6.96**	**0.18 / 4.90**	**0.36**	**11.82**	**450**	**26,266**
Industrial*						
Vacant	1.29	0.40	0.00	0.52	1,100	469
Redevelopable	2.32	0.40	0.12	0.81	1,100	732
Industrial Total	**3.61**	**0.40**	**0.12**	**1.32**	**1,100**	**1,201**
City Total						
Commercial	8.82	0.38	0.69	1.82	700 / 900	2,032
Mixed Use	6.96	0.18 / 4.90	0.91	11.82	450	26,266
Industrial	3.61	0.40	0.26	1.32	1,100	1,201
Job Capacity in Pipeline						*0*
City Total	**19.40**	**4.90**	**1.86**	**14.96**	**450 / 1100**	**29,500**

Job Capacity by Assumed Density Level	#	%
Very Low Density	1,673	6%
Low Density	3,174	11%
Medium Low Density	0	0%
Medium High Density	4,721	16%
High Density	19,933	68%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**29,500**
Remaining Target (2018-2035)		14,736
Surplus/Deficit Capacity (jobs)		**14,764**



City of Issaquah

Housing Growth and Residential Development Trends



Issaquah Housing Growth Target: 2006-2035	6,670
2006 Estimated Housing Units	11,517
2018 Estimated Housing Units	16,612
Estimated Housing Growth	**5,096**
Remaining 2035 Target	1,574

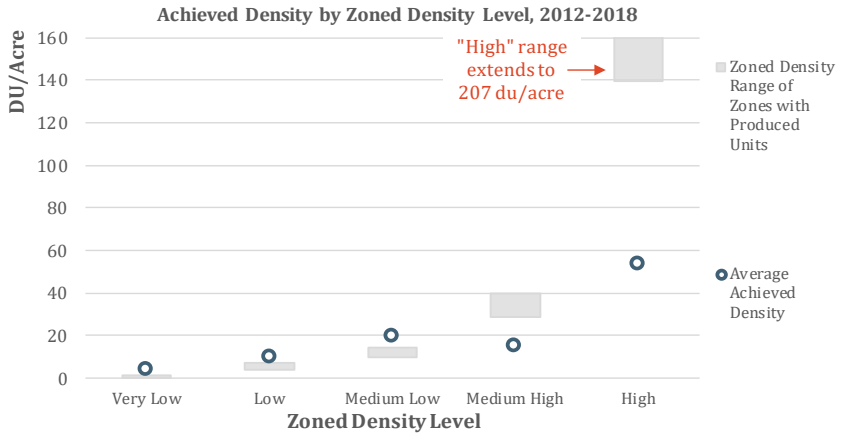
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
184.6%	3.10%	0.53%

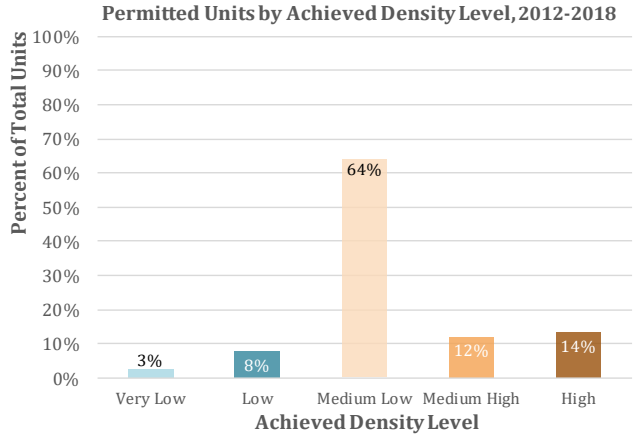
Since 2006, Issaquah has grown at 185% of the pace needed to achieve its 2035 housing growth target of 6,670 units. During this period, the total number of housing units in Issaquah grew by roughly 44%. At this current rate, Issaquah is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.5% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	26.0	7.3	0.0	0.0	18.7	78	**4.2**
Low	4 - 10 du/acre	47.7	0.3	0.0	0.0	47.4	481	**10.1**
Medium Low	10 - 24 du/acre	21.4	0.2	0.0	3.1	18.1	358	**19.8**
Medium High	24 - 48 du/acre	87.2	0.1	1.0	3.5	82.5	1,238	**15.0**
High	48 & up du/acre	9.7	3.0	0.0	0.0	6.6	356	**53.6**
	Total	**191.9**	**10.9**	**1.0**	**6.6**	**173.4**	**2,511**	**14.5**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	27.8	67
Low	26.7	196
Medium Low	103.0	1,606
Medium High	10.2	298
High	5.6	344
Total	**173.4**	**2,511**



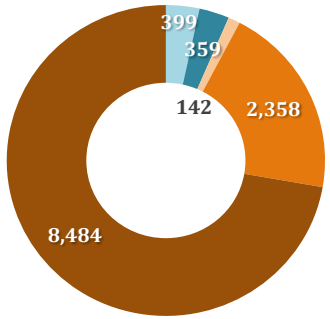


Issaquah - Residential Land Supply and Capacity

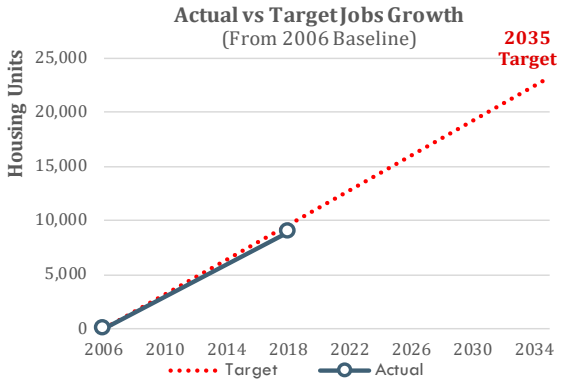
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				22.10	7.0% - 15.0%	69.11	4.0	175
	Redev Subtotal				44.47	7.0% - 15.0%	137.42	4.0	224
	Subtotal	392.70	103.48	0.00	66.57		206.53		**399**
Low Density	Vacant Subtotal				8.22	12.0% - 25.0%	27.10	6.9 / 9.2	197
	Redev Subtotal				19.78	12.0% - 25.0%	64.55	6.9 / 9.2	162
	Subtotal	166.28	27.60	0.00	28.00		91.65		**359**
Medium Low Density	Vacant Subtotal				1.32	1.0% - 15.0%	8.28	11.7 / 15.0	109
	Redev Subtotal				1.27	1.0% - 15.0%	7.50	11.7 / 15.0	32
	Subtotal	22.65	1.89	0.00	2.60		15.78		**142**
Medium High Density	Vacant Subtotal				11.37	1.0% - 25.0%	68.43	27.0 / 33.0	2,063
	Redev Subtotal				2.55	1.0% - 25.0%	12.73	27.0 / 33.0	295
	Subtotal	28.69	2.72	0.00	13.92		81.15		**2,358**
High Density	Vacant Subtotal				6.29	15.0% - 20.0%	33.55	50.0 / 60.0	1,982
	Redev Subtotal				32.50	15.0% - 20.0%	122.37	50.0 / 60.0	6,503
	Subtotal	292.63	21.71	0.00	38.79		155.92		**8,484**
All Zones	Vacant Total				49.30		206.47		4,526
	Redev Total				100.58		344.57		7,216
	Total	**902.95**	**157.40**	**0.00**	**149.87**		**551.04**		**11,743**

Capacity (units)	
Very Low Density Zones	399
Low Density Zones	359
Medium Low Density Zones	142
Medium High Density Zones	2,358
High Density Zones	8,484
Capacity in Pipeline	*2,360*
Total Capacity (Units)	**14,103**
Remaining Target (2018-2035)	1,574
Surplus/Deficit Capacity (Units)	**12,528**

Housing Capacity by Density Level (units)



Issaquah - Employment Growth and Commercial/Industrial Development Trends



Issaquah Jobs Growth Target: 2006-2035	23,200
2006 Jobs (PSRC)	18,889
2018 Jobs (PSRC)	27,839
Total Jobs Growth	**8,950**
Remaining 2035 Target	14,250

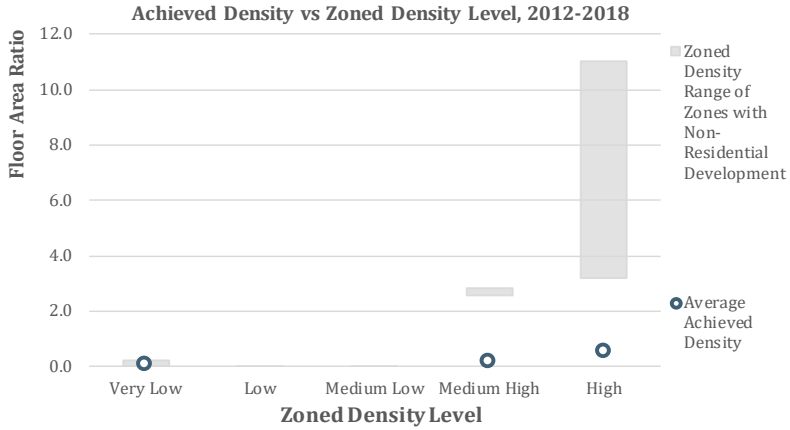
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
93.2%	3.29%	2.46%

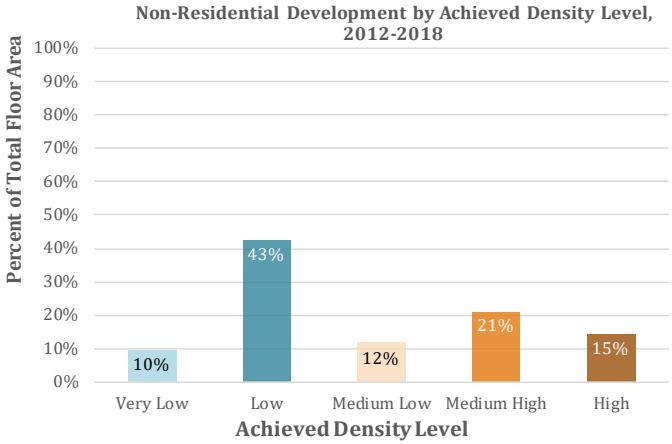
Since 2006, Issaquah has grown at 93% of the pace needed to achieve its 2035 jobs growth target of 23,200 units. During this period, the total number of jobs in Issaquah grew by roughly 47%. At this current rate, Issaquah is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 2.5% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	1,069,083	79,167	0.1
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	62,188	10,650	0.2
High	3.0 & up FAR	1,705,456	938,629	0.6
	Total	2,836,727	1,028,446	0.4

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	1,263,400	99,261	0.1
Low	1,226,830	439,629	0.4
Medium Low	204,521	122,521	0.6
Medium High	92,998	217,468	2.3
High	48,978	149,567	3.1
Total	2,836,727	1,028,446	0.4



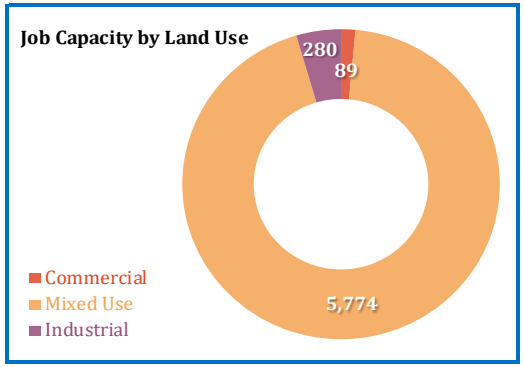


Issaquah - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	1.3	0.1	0.1	0.1	1.0	0%	1.0
Mixed Use	318.6	41.0	30.1	13.9	233.6	11% - 25%	183.6
Industrial	18.4	1.2	1.3	0.9	15.1	15%	12.5
Non-Res Land Total	**338.2**	**42.3**	**31.4**	**14.8**	**249.7**		**197.1**

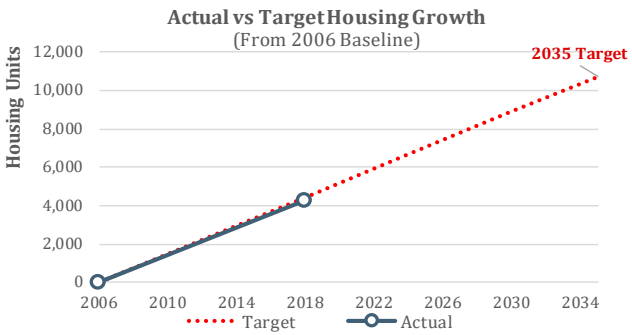
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.04	0.50	0.00	0.02	250	89
Redevelopable	0.00	0.50	0.00	0.00	250	0
Commercial Total	**0.04**	**0.50**	**0.00**	**0.02**	**250**	**89**
Mixed-Use						
Vacant	1.76	1.50	0.00	0.80	0 / 300	3,117
Redevelopable	6.24	1.50	2.45	0.77	0 / 300	2657
Mixed Use Total	**8.00**	**1.50**	**2.45**	**1.57**	**0 / 300**	**5,774**
Industrial						
Vacant	0.36	0.50	0.00	0.18	700	254
Redevelopable	0.19	0.50	0.08	0.02	700	26
Industrial Total	**0.54**	**0.50**	**0.08**	**0.20**	**700**	**280**
City Total						
Commercial	0.04	0.50	0.69	0.02	250	89
Mixed Use	8.00	1.50	0.91	1.57	0 / 300	5,774
Industrial	0.54	0.50	0.26	0.20	700	280
Job Capacity in Pipeline						*9,418*
City Total	**8.59**	**1.50**	**1.86**	**1.79**	**0 / 700**	**15,561**

Job Capacity by Assumed Density Level	#	%
Very Low Density	125	2%
Low Density	469	8%
Medium Low Density	5,549	90%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*9,418*
Total Capacity (jobs)		**15,561**
Remaining Target (2018-2035)		14,250
Surplus/Deficit Capacity (jobs)		**1,311**



City of Kent

Housing Growth and Residential Development Trends



Kent Housing Growth Target: 2006-2035	10,753
2006 Estimated Housing Units	43,552
2018 Estimated Housing Units	47,811
Estimated Housing Growth	**4,259**
Remaining 2035 Target	6,495

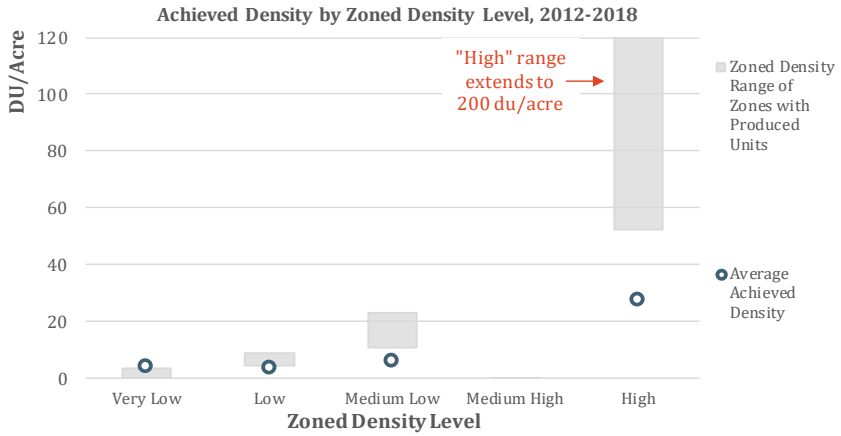
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
95.7%	0.78%	0.75%

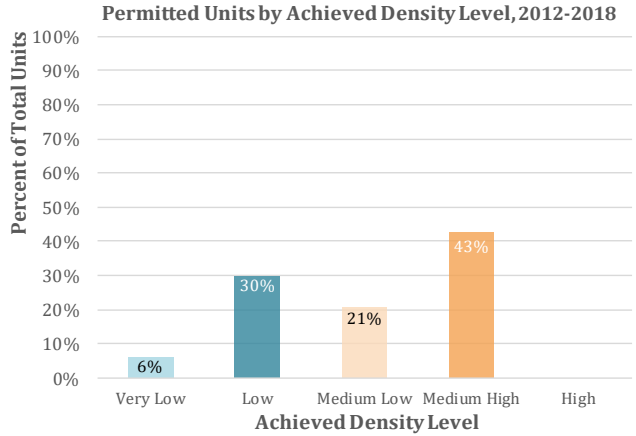
Since 2006, Kent has grown at 96% of the pace needed to achieve its 2035 housing growth target of 10,753 units. During this period, the total number of housing units in Kent grew by roughly 10%. At this current rate, Kent is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.8% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	81.2	27.5	0.0	41.7	11.9	48	**4.0**
Low	4 - 10 du/acre	275.7	54.6	0.0	22.1	199.0	644	**3.2**
Medium Low	10 - 24 du/acre	50.2	4.6	0.0	1.8	43.8	255	**5.8**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	76.8	19.0	0.0	0.4	57.4	1,572	**27.4**
	Total	**483.9**	**105.7**	**0.0**	**66.0**	**312.2**	**2,519**	**8.1**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	97.1	156
Low	155.9	755
Medium Low	27.1	528
Medium High	32.0	1,080
High	0.0	0
Total	**312.2**	**2,519**



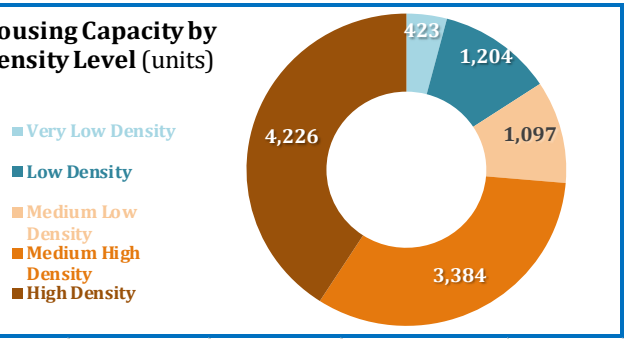


Kent - Residential Land Supply and Capacity

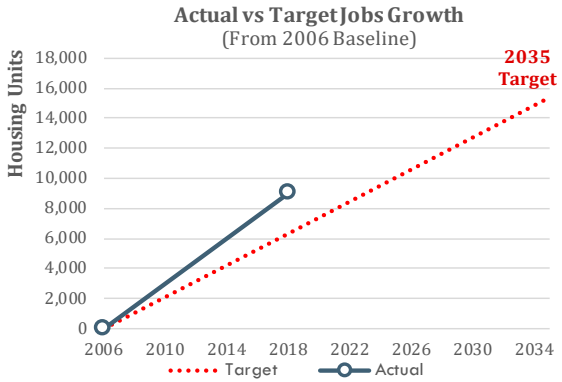
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				20.47	10.0% - 14.0%	159.75	3.9	365
	Redev Subtotal				12.33	10.0% - 14.0%	96.84	3.9	58
	Subtotal	590.80	263.04	0.00	32.80		256.59		**423**
Low Density	Vacant Subtotal				28.53	5.0% - 20.0%	228.17	4.7 / 5.8	1,085
	Redev Subtotal				30.68	5.0% - 20.0%	245.26	4.7 / 9.0	119
	Subtotal	880.15	287.95	0.00	59.21		473.43		**1,204**
Medium Low Density	Vacant Subtotal				4.07	11.0% - 20.0%	31.33	10.9 / 20.6	569
	Redev Subtotal				4.14	11.0% - 20.0%	32.30	10.9 / 20.6	528
	Subtotal	109.77	27.80	0.00	8.21		63.63		**1,097**
Medium High Density	Vacant Subtotal				8.57	11.0% - 20.0%	67.54	39.7 / 40.0	2,681
	Redev Subtotal				2.26	11.0% - 20.0%	17.77	39.7 / 40.0	703
	Subtotal	190.23	84.70	0.00	10.83		85.31		**3,384**
High Density	Vacant Subtotal				3.81	11.0% - 20.0%	29.15	83.3 / 174.2	2,800
	Redev Subtotal				1.87	11.0% - 20.0%	13.84	83.3 / 174.2	1,426
	Subtotal	79.72	22.92	0.00	5.68		42.99		**4,226**
All Zones	Vacant Total				65.45		515.95		7,500
	Redev Total				51.28		406.00		2,833
	Total	**1,850.67**	**686.40**	**0.00**	**116.73**		**921.95**		**10,333**

Capacity (units)	
Very Low Density Zones	423
Low Density Zones	1,204
Medium Low Density Zones	1,097
Medium High Density Zones	3,384
High Density Zones	4,226
Capacity in Pipeline	*915*
Total Capacity (Units)	**11,248**
Remaining Target (2018-2035)	6,495
Surplus/Deficit Capacity (Units)	**4,753**

Housing Capacity by Density Level (units)



Kent - Employment Growth and Commercial/Industrial Development Trends



Kent Jobs Growth Target: 2006-2035	15,405
2006 Jobs (PSRC)	63,299
2018 Jobs (PSRC)	72,360
Total Jobs Growth	**9,061**
Remaining 2035 Target	6,344

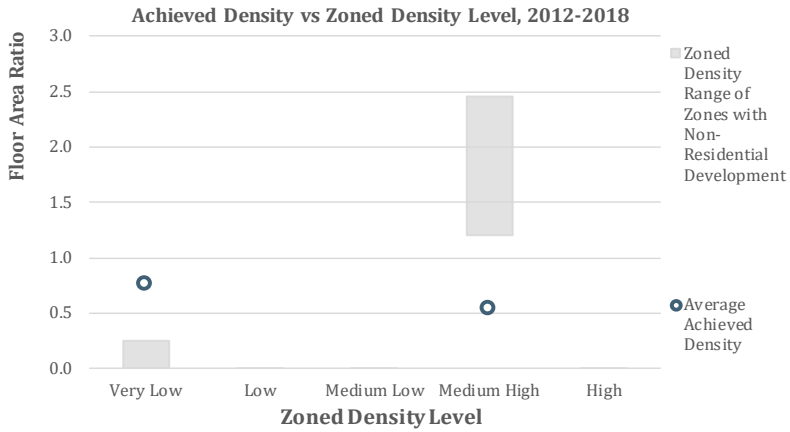
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
142.1%	1.12%	0.50%

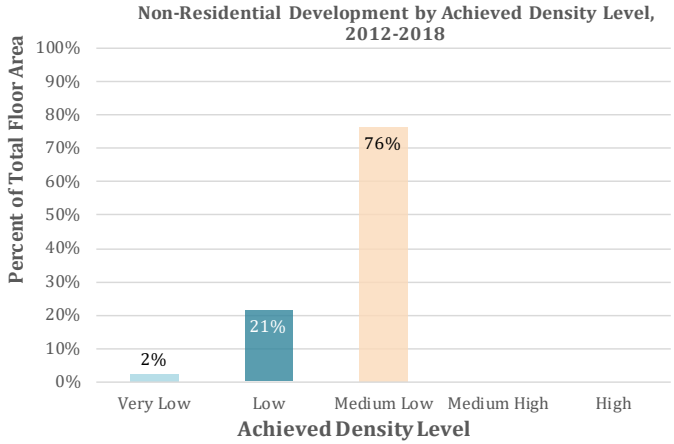
Since 2006, Kent has grown at 142% of the pace needed to achieve its 2035 jobs growth target of 15,405 units. During this period, the total number of jobs in Kent grew by roughly 14%. At this current rate, Kent is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.5% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	67,191	51,095	0.8
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	9,201,069	4,998,503	0.5
High	3.0 & up FAR	0	0	
	Total	9,268,260	5,049,598	0.5

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	745,943	123,090	0.2
Low	2,598,787	1,070,908	0.4
Medium Low	5,923,530	3,855,600	0.7
Medium High	0	0	0.0
High	0	0	0.0
Total	9,268,260	5,049,598	0.5



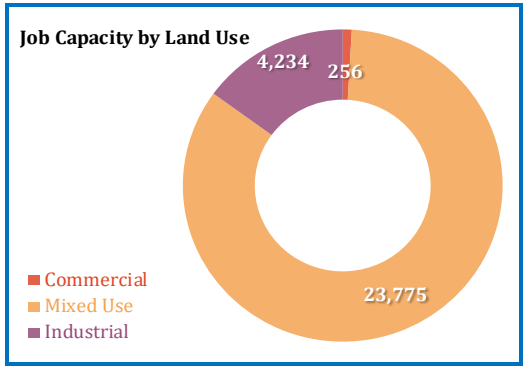


Kent - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	50.6	44.4	1.2	0.6	4.3	50%	1.2
Mixed Use	425.5	146.3	55.8	27.9	195.4	11% - 20%	162.6
Industrial	654.3	142.4	102.4	51.2	358.3	5%	332.7
Non-Res Land Total	**1130.3**	**333.0**	**159.5**	**79.7**	**558.1**		**496.6**

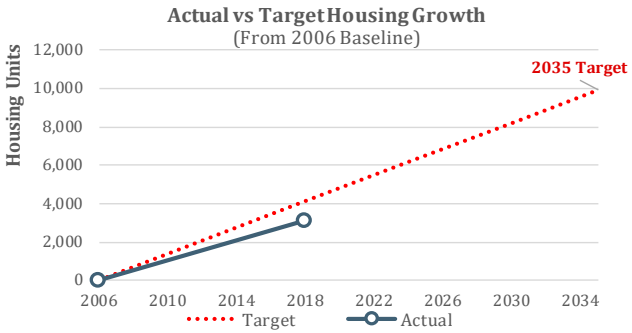
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial*						
Vacant	1.29	0.09 / 0.28	0.00	0.27	300 / 1200	252
Redevelopable	0.72	0.09 / 0.28	0.17	0.01	1,200	5
Commercial Total	**2.01**	**0.09 / 0.28**	**0.17**	**0.28**	**300 / 1200**	**256**
Mixed-Use						
Vacant	4.53	2.45	0.00	6.01	300	20,029
Redevelopable	2.55	2.45	2.44	1.12	300	3,746
Mixed Use Total	**7.08**	**2.45**	**2.44**	**7.13**	**300**	**23,775**
Industrial						
Vacant	6.90	0.39 / 0.64	0.00	3.35	1,200	2,790
Redevelopable	7.60	0.39 / 0.64	1.73	1.73	1,200	1444
Industrial Total	**14.49**	**0.39 / 0.64**	**1.73**	**5.08**	**1,200**	**4,234**
City Total						
Commercial	2.01	0.09 / 0.28	0.69	0.28	300 / 1200	256
Mixed Use	7.08	2.45	0.91	7.13	300	23,775
Industrial	14.49	0.39 / 0.64	0.26	5.08	1,200	4,234
Job Capacity in Pipeline						*730*
City Total	**23.59**	**2.45**	**1.86**	**12.49**	**300 / 1200**	**28,995**

Job Capacity by Assumed Density Level	#	%
Very Low Density	1,187	4%
Low Density	2,889	10%
Medium Low Density	2,372	8%
Medium High Density	21,817	77%
High Density	0	0%
Capacity in Pipeline		*730*
Total Capacity (jobs)		**28,995**
Remaining Target (2018-2035)		6,344
Surplus/Deficit Capacity (jobs)		**22,651**



City of Kirkland

Housing Growth and Residential Development Trends



Kirkland Housing Growth Target: 2006-2035	9,941
2006 Estimated Housing Units	35,556
2018 Estimated Housing Units	38,656
Estimated Housing Growth	**3,100**
Remaining 2035 Target	6,841

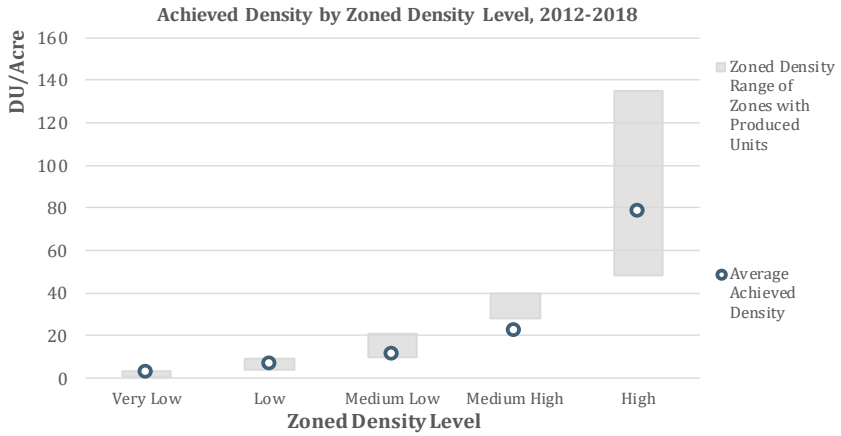
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
75.4%	0.70%	0.96%

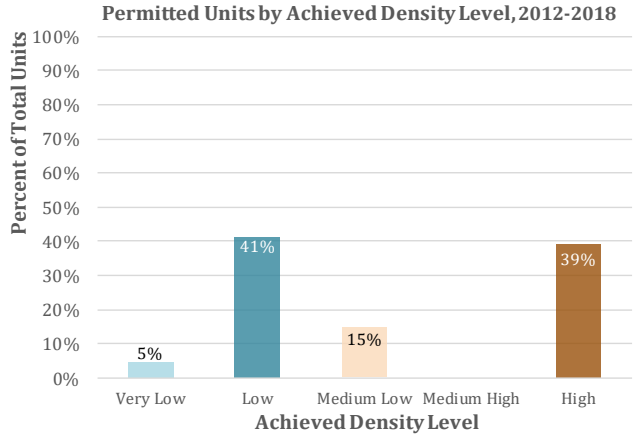
Since 2006, Kirkland has grown at 75% of the pace needed to achieve its 2035 housing growth target of 9,941 units. During this period, the total number of housing units in Kirkland grew by roughly 9%. At this current rate, Kirkland is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	5.9	0.1	0.0	0.0	5.8	17	**2.9**
Low	4 - 10 du/acre	146.8	5.5	0.0	0.0	141.2	888	**6.3**
Medium Low	10 - 24 du/acre	17.1	1.2	0.0	0.0	15.9	177	**11.1**
Medium High	24 - 48 du/acre	2.3	0.0	0.0	0.0	2.3	50	**21.9**
High	48 & up du/acre	9.0	0.0	0.0	0.0	9.0	705	**78.4**
	Total	**181.1**	**6.9**	**0.0**	**0.0**	**174.2**	**1,837**	**10.5**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	24.6	86
Low	118.0	759
Medium Low	22.5	271
Medium High	0.0	0
High	9.1	721
Total	**174.2**	**1,837**



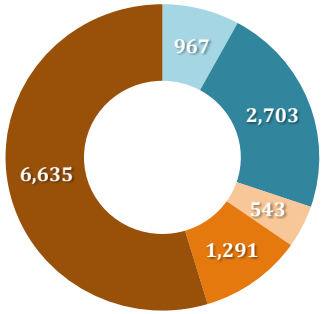


Kirkland – Residential Land Supply and Capacity

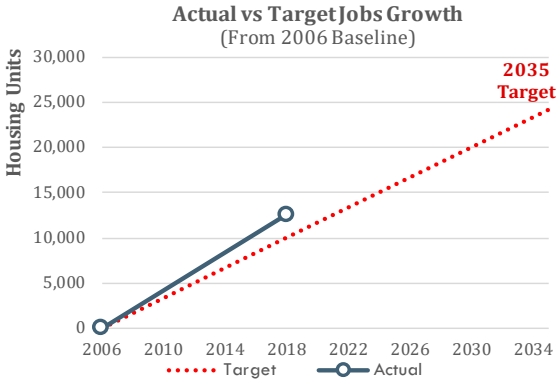
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				1.68	7.0% - 17.0%	88.44	3.9	265
	Redev Subtotal				5.05	7.0% - 17.0%	268.38	3.9	702
	Subtotal	545.45	109.43	0.00	6.73		356.82		**967**
Low Density	Vacant Subtotal				2.98	7.0% - 17.0%	46.15	4.0 / 9.3	305
	Redev Subtotal				35.02	7.0% - 17.0%	558.07	4.0 / 9.3	2,398
	Subtotal	828.95	58.12	0.00	37.99		604.22		**2,703**
Medium Low Density	Vacant Subtotal				0.16	7.0% - 17.0%	3.55	10.0 / 21.8	44
	Redev Subtotal				1.47	7.0% - 17.0%	54.22	10.0 / 21.8	499
	Subtotal	77.69	11.86	0.00	1.63		57.77		**543**
Medium High Density	Vacant Subtotal				0.03	7.0% - 7.0%	1.31	28.0 / 40.0	47
	Redev Subtotal				0.88	7.0% - 7.0%	40.26	28.0 / 40.0	1,244
	Subtotal	48.90	3.21	0.00	0.91		41.57		**1,291**
High Density	Vacant Subtotal				0.07	7.0% - 7.0%	3.19	48.0 / 135.0	324
	Redev Subtotal				1.63	7.0% - 7.0%	74.35	48.0 / 135.0	6,312
	Subtotal	95.32	4.37	0.00	1.70		77.55		**6,635**
All Zones	Vacant Total				4.92		142.65		985
	Redev Total				44.05		995.29		11,155
	Total	**1,596.31**	**186.99**	**0.00**	**48.97**		**1,137.93**		**12,140**

Capacity (units)	
Very Low Density Zones	967
Low Density Zones	2,703
Medium Low Density Zones	543
Medium High Density Zones	1,291
High Density Zones	6,635
Capacity in Pipeline	*1,212*
Total Capacity (Units)	**13,352**
Remaining Target (2018-2035)	6,841
Surplus/Deficit Capacity (Units)	**6,510**

Housing Capacity by Density Level (units)



Kirkland – Employment Growth and Commercial/Industrial Development Trends



Kirkland Jobs Growth Target: 2006-2035	24,186
2006 Jobs (PSRC)	36,698
2018 Jobs (PSRC)	49,280
Total Jobs Growth	**12,582**
Remaining 2035 Target	11,604

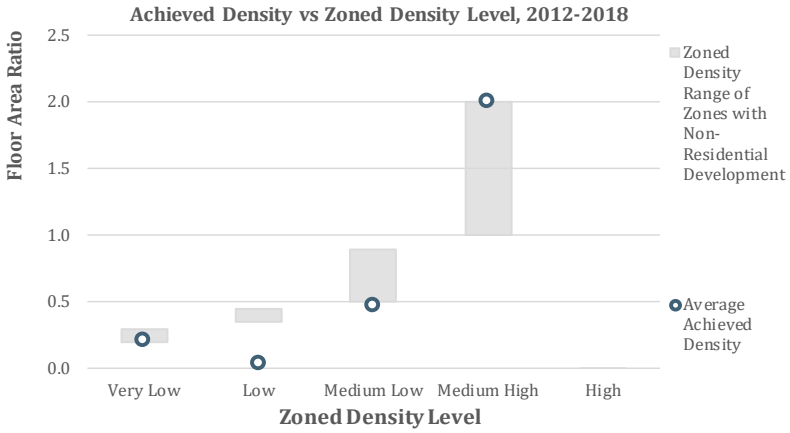
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
125.7%	2.49%	1.25%

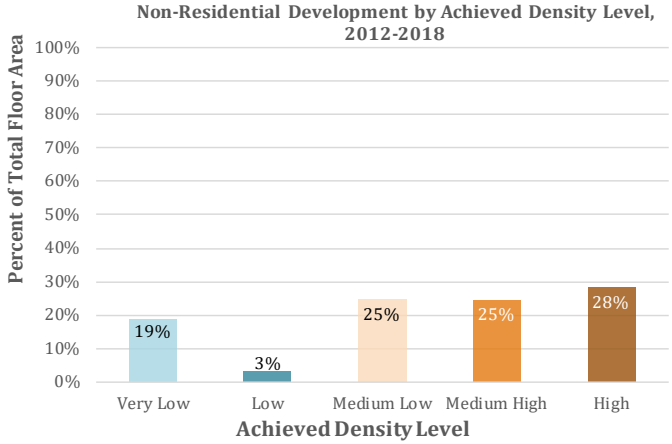
Since 2006, Kirkland has grown at 126% of the pace needed to achieve its 2035 jobs growth target of 24,186 units. During this period, the total number of jobs in Kirkland grew by roughly 34%. At this current rate, Kirkland is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 1.3% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	1,125,119	242,666	0.2
Low	0.35 - 0.5 FAR	186,909	7,394	0.0
Medium Low	0.5 - 1.0 FAR	391,250	183,070	0.5
Medium High	1.0 - 3.0 FAR	99,857	199,942	2.0
High	3.0 & up FAR	0	0	
	Total	1,803,134	633,072	0.4

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	1,439,813	118,814	0.1
Low	55,383	20,604	0.4
Medium Low	183,884	159,369	0.9
Medium High	98,507	156,492	1.6
High	40,012	180,793	4.5
Total	1,817,597	636,072	0.3





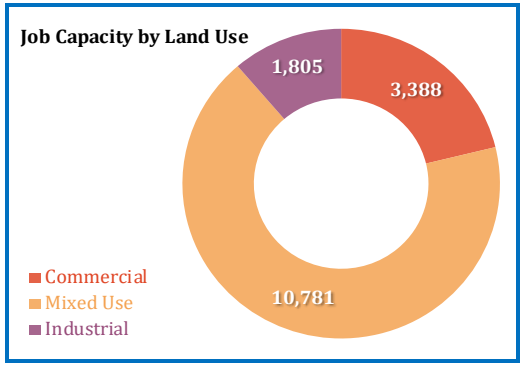
Kirkland – Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	87.3	11.0	1.5	0.0	74.8	5%	71.0
Mixed Use	191.8	16.2	3.5	0.0	172.1	7% - 17%	159.7
Industrial	1.1	1.1	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**280.2**	**28.3**	**5.0**	**0.0**	**267.7**		**230.7**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.61	0.02 / 1.80	0.00	0.14	250	561
Redevelopable	2.48	0.02 / 1.80	0.47	0.71	250	2827
Commercial Total	**3.09**	**0.02 / 1.80**	**0.47**	**0.85**	**250**	**3,388**
Mixed-Use						
Vacant	0.21	0.02 / 4.52	0.00	0.13	300	435
Redevelopable	6.75	0.02 / 4.52	1.68	3.10	300	10346
Mixed Use Total	**6.96**	**0.02 / 4.52**	**1.68**	**3.23**	**300**	**10,781**
Industrial*						
Vacant	0.01	0.88	0.00	0.01	300	30
Redevelopable	0.83	0.88	0.20	0.53	300	1775
Industrial Total	**0.84**	**0.88**	**0.20**	**0.54**	**300**	**1,805**
City Total						
Commercial	3.09	0.02 / 1.80	0.69	0.85	250	3,388
Mixed Use	6.96	0.02 / 4.52	0.91	3.23	300	10,781
Industrial	0.84	0.88	0.26	0.54	300	1,805
Job Capacity in Pipeline						*2,165*
City Total	**10.89**	**0.02 / 4.52**	**1.86**	**4.62**	**250 / 300**	**18,139**

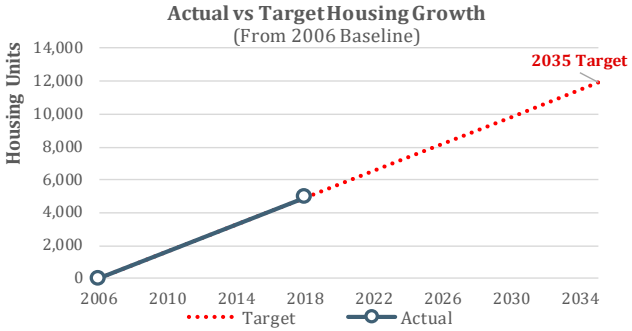
*Certain zones grouped as industrial allow for commercial use.

Job Capacity by Assumed Density Level	#	%
Very Low Density	525	3%
Low Density	1,206	8%
Medium Low Density	5,636	35%
Medium High Density	6,692	42%
High Density	1,914	12%
Capacity in Pipeline		*2,165*
Total Capacity (jobs)		**18,139**
Remaining Target (2018-2035)		11,604
Surplus/Deficit Capacity (jobs)		**6,535**



City of Redmond

Housing Growth and Residential Development Trends



Redmond Housing Growth Target: 2006-2035	11,896
2006 Estimated Housing Units	22,790
2018 Estimated Housing Units	27,736
Estimated Housing Growth	**4,946**
Remaining 2035 Target	6,950

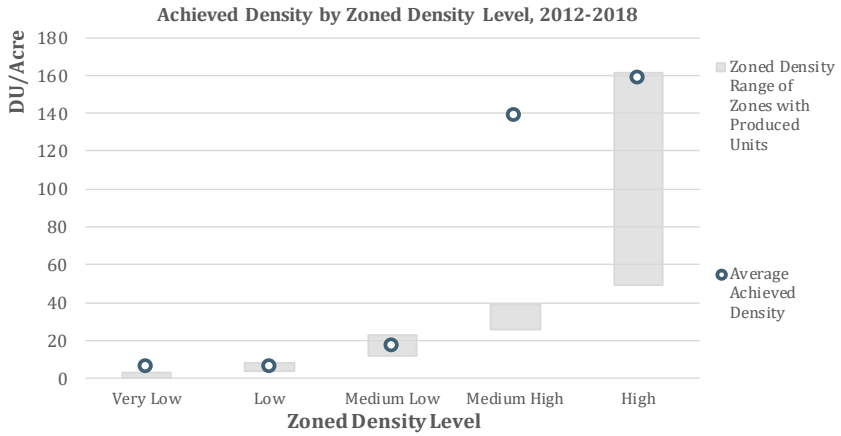
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
100.5%	1.65%	1.32%

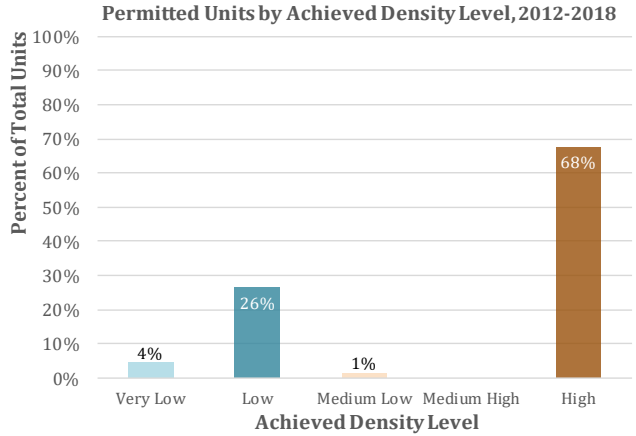
Since 2006, Redmond has grown at 100% of the pace needed to achieve its 2035 housing growth target of 11,896 units. During this period, the total number of housing units in Redmond grew by roughly 22%. At this current rate, Redmond is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.3% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	3.0	0.0	0.0	0.0	3.0	17	**5.6**
Low	4 - 10 du/acre	179.1	3.2	0.0	0.0	175.9	1,099	**6.2**
Medium Low	10 - 24 du/acre	2.6	0.0	0.0	0.0	2.6	44	**16.7**
Medium High	24 - 48 du/acre	13.4	0.0	0.0	0.0	13.4	1,859	**138.4**
High	48 & up du/acre	3.0	0.0	0.0	0.0	3.0	482	**158.5**
	Total	**201.2**	**3.2**	**0.0**	**0.0**	**198.0**	**3,501**	**17.7**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	46.8	162
Low	132.1	954
Medium Low	2.9	51
Medium High	0.0	0
High	17.8	2,439
Total	**199.7**	**3,606**



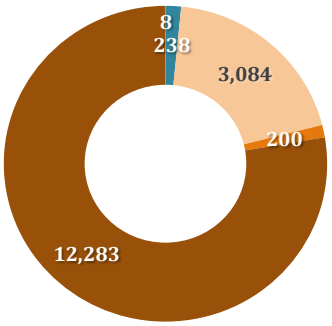


Redmond - Residential Land Supply and Capacity

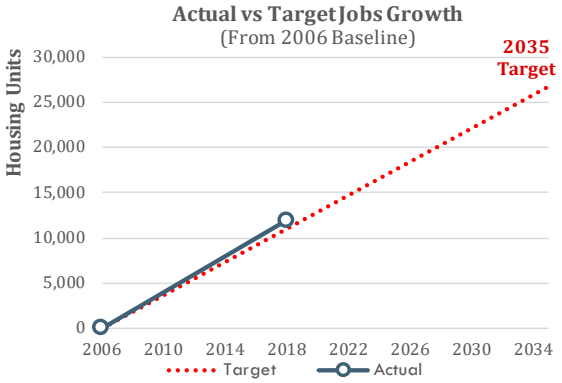
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.36	10.0% - 10.0%	1.80	0.1 / 3.0	3
	Redev Subtotal				0.62	10.0% - 10.0%	3.08	0.1 / 3.0	5
	Subtotal	209.70	193.62	9.50	0.98		4.88		**8**
Low Density	Vacant Subtotal				5.42	10.0% - 10.0%	27.08	4.0 / 9.4	129
	Redev Subtotal				12.35	10.0% - 10.0%	61.74	4.0 / 9.4	110
	Subtotal	493.36	212.07	162.87	17.76		88.82		**238**
Medium Low Density	Vacant Subtotal				6.41	5.0% - 10.0%	55.91	12.0 / 23.0	1,175
	Redev Subtotal				10.38	5.0% - 10.0%	89.30	12.0 / 23.0	1,908
	Subtotal	201.95	29.85	0.49	16.79		145.21		**3,084**
Medium High Density	Vacant Subtotal				0.14	7.0% - 7.0%	1.16	39.2 / 43.6	51
	Redev Subtotal				0.88	7.0% - 7.0%	7.27	39.2 / 43.6	149
	Subtotal	10.15	0.00	0.00	1.02		8.43		**200**
High Density	Vacant Subtotal				0.70	5.0% - 10.0%	5.78	49.2 / 161.2	315
	Redev Subtotal				13.82	5.0% - 10.0%	115.93	49.2 / 161.2	11,968
	Subtotal	149.35	2.61	1.35	14.52		121.71		**12,283**
All Zones	Vacant Total				13.02		91.73		1,672
	Redev Total				38.04		277.31		14,141
	Total	**1,064.52**	**438.15**	**174.21**	**51.07**		**369.04**		**15,813**

Capacity (units)	
Very Low Density Zones	8
Low Density Zones	238
Medium Low Density Zones	3,084
Medium High Density Zones	200
High Density Zones	12,283
Capacity in Pipeline	*1,964*
Total Capacity (Units)	**17,777**
Remaining Target (2018-2035)	6,886
Surplus/Deficit Capacity (Units)	**10,891**

Housing Capacity by Density Level (units)



Redmond - Employment Growth and Commercial/Industrial Development Trends



Redmond Jobs Growth Target: 2006-2035	26,680
2006 Jobs (PSRC)	81,207
2018 Jobs (PSRC)	93,174
Total Jobs Growth	**11,967**
Remaining 2035 Target	14,713

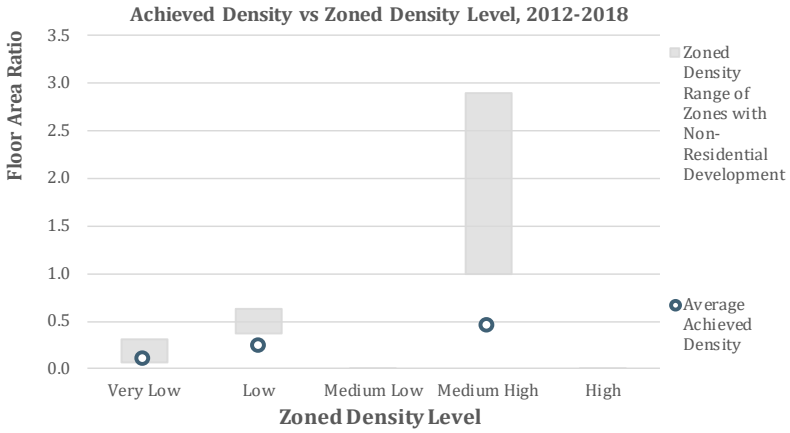
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
108.4%	1.15%	0.87%

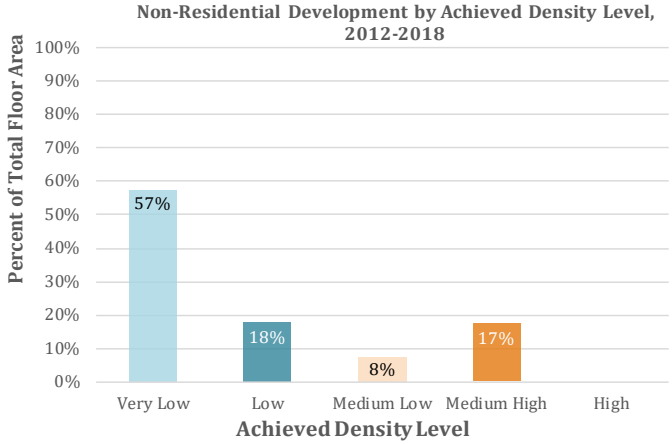
Since 2006, Redmond has grown at 108% of the pace needed to achieve its 2035 jobs growth target of 26,680 units. During this period, the total number of jobs in Redmond grew by roughly 15%. At this current rate, Redmond is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.9% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	4,021,624	375,664	0.1
Low	0.35 - 0.5 FAR	2,257,096	544,282	0.2
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	1,742,591	783,948	0.4
High	3.0 & up FAR	0	0	
	Total	8,021,311	1,703,894	0.2

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	7,551,156	1,022,721	0.1
Low	664,724	318,430	0.5
Medium Low	226,315	136,034	0.6
Medium High	206,450	310,063	1.5
High	0	0	0.0
Total	8,648,644	1,787,248	0.2



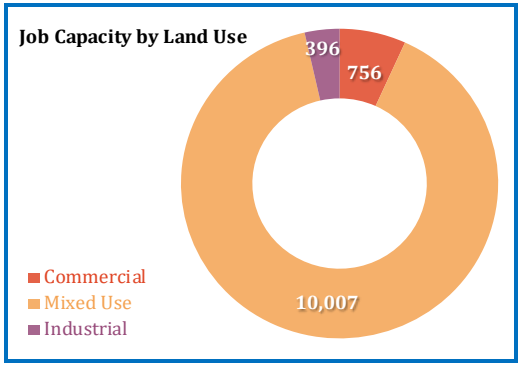


Redmond - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	177.6	111.2	0.0	0.0	66.4	5% - 10%	63.0
Mixed Use	377.4	54.5	16.1	16.1	290.8	5% - 10%	271.7
Industrial	134.4	32.5	0.0	0.0	101.9	35%	66.2
Non-Res Land Total	**695.2**	**198.1**	**16.1**	**16.1**	**464.9**		**401.0**

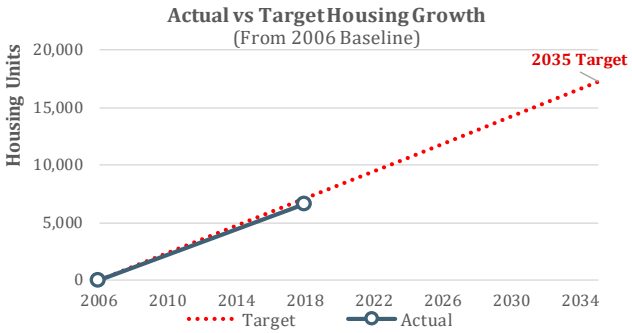
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.33	0.03 / 0.60	0.00	0.06	300 / 330	181
Redevelopable	2.42	0.03 / 0.60	0.39	0.19	300 / 330	575
Commercial Total	**2.74**	**0.03 / 0.60**	**0.39**	**0.25**	**300 / 330**	**756**
Mixed-Use						
Vacant	3.09	0.05 / 1.13	0.00	1.21	300 / 730	3,930
Redevelopable	8.75	0.05 / 1.13	3.05	1.85	300 / 730	6077
Mixed Use Total	**11.84**	**0.05 / 1.13**	**3.05**	**3.05**	**300 / 730**	**10,007**
Industrial						
Vacant	0.57	0.24 / 0.50	0.00	0.16	730	224
Redevelopable	2.31	0.24 / 0.50	0.67	0.13	730	171
Industrial Total	**2.88**	**0.24 / 0.50**	**0.67**	**0.29**	**730**	**396**
City Total						
Commercial	2.74	0.03 / 0.60	0.69	0.25	300 / 330	756
Mixed Use	11.84	0.05 / 1.13	0.91	3.05	300 / 730	10,007
Industrial	2.88	0.24 / 0.50	0.26	0.29	730	396
Job Capacity in Pipeline						*4,693*
City Total	**17.47**	**0.03 / 1.13**	**1.86**	**3.59**	**300 / 730**	**15,851**

Job Capacity by Assumed Density Level	#	%
Very Low Density	1,505	13%
Low Density	8,656	78%
Medium Low Density	997	9%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*4,693*
Total Capacity (jobs)		**15,851**
Remaining Target (2018-2035)		14,713
Surplus/Deficit Capacity (jobs)		**1,138**



City of Renton

Housing Growth and Residential Development Trends



Renton Housing Growth Target: 2006-2035	17,231
2006 Estimated Housing Units	36,168
2018 Estimated Housing Units	42,775
Estimated Housing Growth	**6,607**
Remaining 2035 Target	10,623

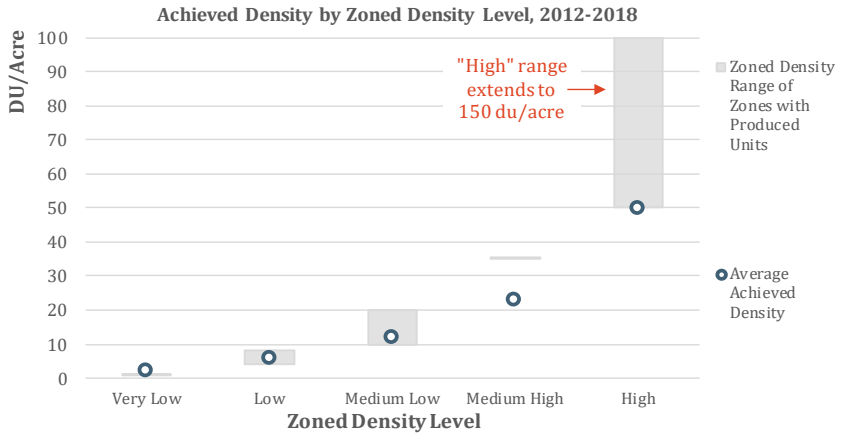
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
92.7%	1.41%	1.31%

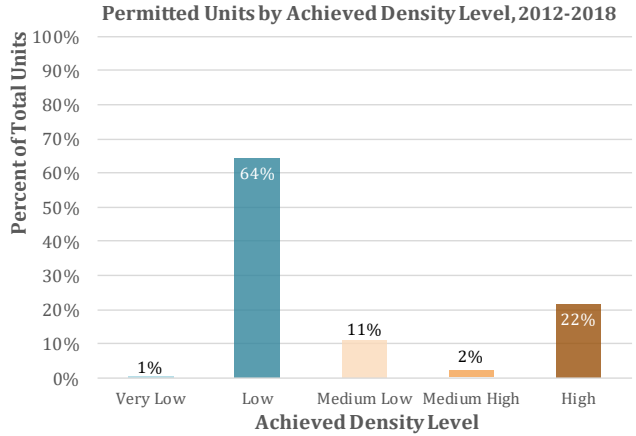
Since 2006, Renton has grown at 93% of the pace needed to achieve its 2035 housing growth target of 17,231 units. During this period, the total number of housing units in Renton grew by roughly 18%. At this current rate, Renton is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.3% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	14.8	2.7	3.9	0.0	8.2	16	**2.0**
Low	4 - 10 du/acre	378.1	45.4	13.0	50.8	269.0	1,550	**5.8**
Medium Low	10 - 24 du/acre	48.6	3.2	0.6	6.4	38.3	452	**11.8**
Medium High	24 - 48 du/acre	0.2	0.0	0.0	0.0	0.2	5	**22.7**
High	48 & up du/acre	17.5	1.8	0.4	2.7	12.7	630	**49.6**
	Total	**459.3**	**53.1**	**17.9**	**59.9**	**328.4**	**2,653**	**8.1**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	8.2	16
Low	288.9	1,707
Medium Low	18.7	300
Medium High	2.0	54
High	10.7	576
Total	**328.4**	**2,653**



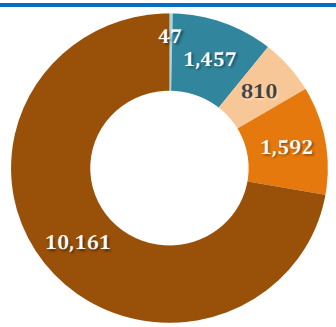


Renton - Residential Land Supply and Capacity

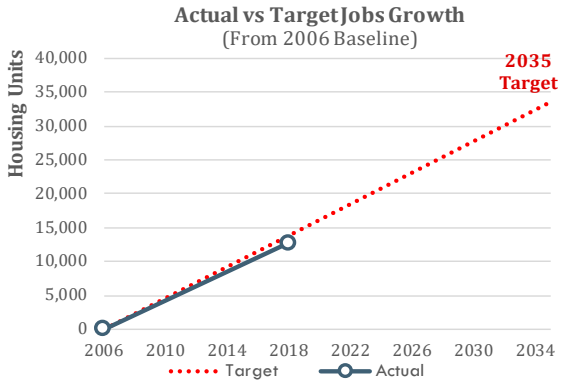
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				11.89	14.0% - 14.0%	25.98	0.2 / 2.0	32
	Redev Subtotal				6.61	14.0% - 14.0%	14.44	0.2 / 2.0	15
	Subtotal	106.75	38.24	0.00	18.50		40.43		**47**
Low Density	Vacant Subtotal				65.20	10.0% - 35.0%	152.17	5.4 / 8.2	906
	Redev Subtotal				106.67	10.0% - 35.0%	249.35	5.4 / 8.2	551
	Subtotal	693.07	53.16	0.00	171.87		401.52		**1,457**
Medium Low Density	Vacant Subtotal				11.79	15.0% - 35.0%	34.23	10.2 / 17.4	443
	Redev Subtotal				11.66	15.0% - 35.0%	35.28	10.2 / 17.4	367
	Subtotal	137.60	20.32	0.00	23.46		69.51		**810**
Medium High Density	Vacant Subtotal				2.58	15.0% - 15.0%	24.86	41.0	1,018
	Redev Subtotal				1.46	15.0% - 15.0%	14.01	41.0	574
	Subtotal	56.61	3.47	0.00	4.04		38.87		**1,592**
High Density	Vacant Subtotal				4.09	11.0% - 21.0%	38.78	54.3 / 112.5	3,438
	Redev Subtotal				9.39	11.0% - 21.0%	90.39	54.3 / 112.5	6,724
	Subtotal	421.82	28.69	0.00	13.48		129.17		**10,161**
All Zones	Vacant Total				95.55		276.03		5,836
	Redev Total				135.79		403.48		8,231
	Total	**1,415.85**	**143.87**	**0.00**	**231.34**		**679.50**		**14,067**

Capacity (units)	
Very Low Density Zones	47
Low Density Zones	1,457
Medium Low Density Zones	810
Medium High Density Zones	1,592
High Density Zones	10,161
Capacity in Pipeline	*2,436*
Total Capacity (Units)	**16,503**
Remaining Target (2018-2035)	10,601
Surplus/Deficit Capacity (Units)	**5,902**

Housing Capacity by Density Level (units)



Renton - Employment Growth and Commercial/Industrial Development Trends



Renton Jobs Growth Target: 2006-2035	33,640
2006 Jobs (PSRC)	53,431
2018 Jobs (PSRC)	66,151
Total Jobs Growth	**12,720**
Remaining 2035 Target	20,920

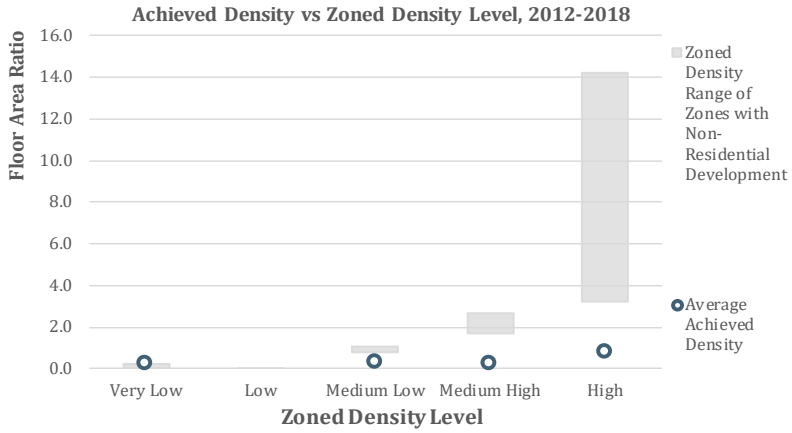
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
91.4%	1.80%	1.63%

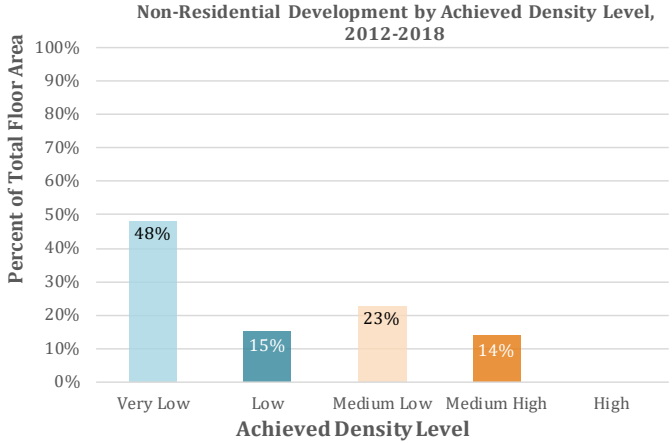
Since 2006, Renton has grown at 91% of the pace needed to achieve its 2035 jobs growth target of 33,640 units. During this period, the total number of jobs in Renton grew by roughly 24%. At this current rate, Renton is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 1.6% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	387,403	88,225	0.2
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	47,532	13,171	0.3
Medium High	1.0 - 3.0 FAR	7,136,894	1,913,364	0.3
High	3.0 & up FAR	1,518,735	1,167,138	0.8
	Total	9,090,564	3,181,898	0.4

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	6,324,143	1,530,240	0.2
Low	1,258,936	486,520	0.4
Medium Low	1,347,460	723,882	0.5
Medium High	160,025	441,256	2.8
High	0	0	0.0
Total	9,090,564	3,181,898	0.4



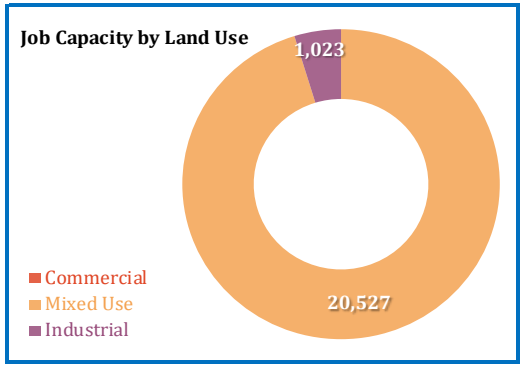


Renton - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Mixed Use	261.9	32.2	11.5	6.9	211.3	11% - 35%	179.8
Industrial	63.6	2.8	3.0	1.8	55.9	20% - 30%	41.9
Non-Res Land Total	**325.5**	**35.0**	**14.5**	**8.7**	**267.2**		**221.7**

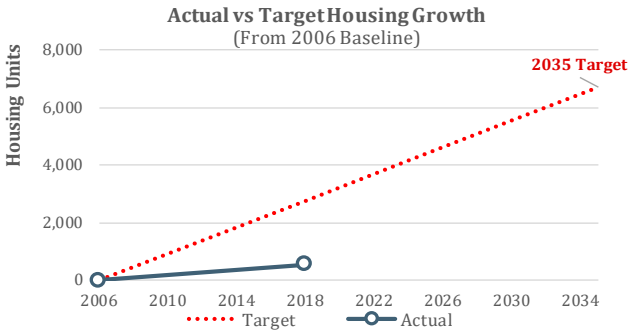
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Commercial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
Mixed-Use						
Vacant	3.75	0.28 / 4.01	0.00	3.21	250 / 400	12,415
Redevelopable	4.08	0.28 / 4.01	0.59	2.22	250 / 400	8112
Mixed Use Total	**7.83**	**0.28 / 4.01**	**0.59**	**5.44**	**250 / 400**	**20,527**
Industrial						
Vacant	0.88	0.20 / 0.39	0.00	0.32	450 / 700	688
Redevelopable	0.95	0.20 / 0.39	0.14	0.20	450 / 700	336
Industrial Total	**1.82**	**0.20 / 0.39**	**0.14**	**0.52**	**450 / 700**	**1,023**
City Total						
Commercial	0.00	0.00	0.69	0.00	0	0
Mixed Use	7.83	0.28 / 4.01	0.91	5.44	250 / 400	20,527
Industrial	1.82	0.20 / 0.39	0.26	0.52	450 / 700	1,023
Job Capacity in Pipeline						*4,660*
City Total	**9.66**	**4.01**	**1.86**	**5.96**	**0 / 700**	**26,210**

Job Capacity by Assumed Density Level	#	%
Very Low Density	2,989	14%
Low Density	1,012	5%
Medium Low Density	5,109	24%
Medium High Density	11,058	51%
High Density	1,382	6%
Capacity in Pipeline		*4,660*
Total Capacity (jobs)		**26,210**
Remaining Target (2018-2035)		20,920
Surplus/Deficit Capacity (jobs)		**5,290**



City of SeaTac

Housing Growth and Residential Development Trends



SeaTac Housing Growth Target: 2006-2035	6,728
2006 Estimated Housing Units	10,301
2018 Estimated Housing Units	10,849
Estimated Housing Growth	**548**
Remaining 2035 Target	6,180

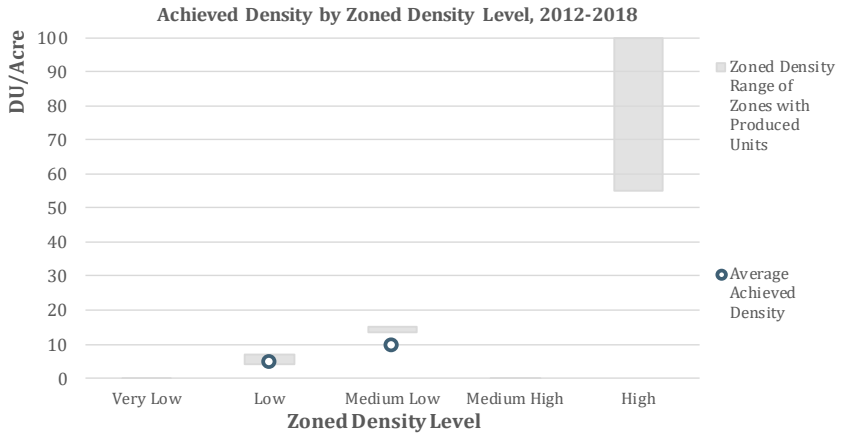
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
19.7%	0.43%	2.69%

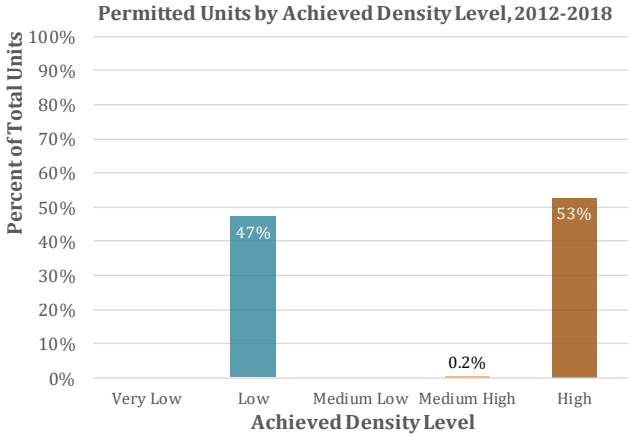
Since 2006, SeaTac has grown at 20% of the pace needed to achieve its 2035 housing growth target of 6,728 units. During this period, the total number of housing units in SeaTac grew by roughly 5%. At this current rate, SeaTac is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 2.7% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	16.8	0.0	0.0	0.0	16.8	79	**4.7**
Medium Low	10 - 24 du/acre	23.0	4.1	0.0	0.0	18.9	180	**9.5**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	2.9	0.0	0.0	0.0	2.9	290	**100.8**
	Total	**42.7**	**4.1**	**0.0**	**0.0**	**38.6**	**549**	**14.2**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	0.0	0
Low	35.7	259
Medium Low	0.0	0
Medium High	0.0	1
High	2.9	289
Total	**38.6**	**549**



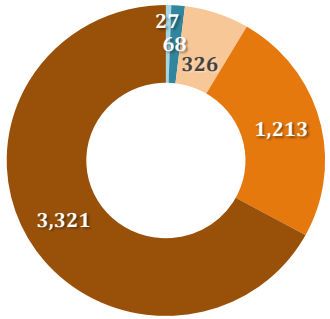


SeaTac - Residential Land Supply and Capacity

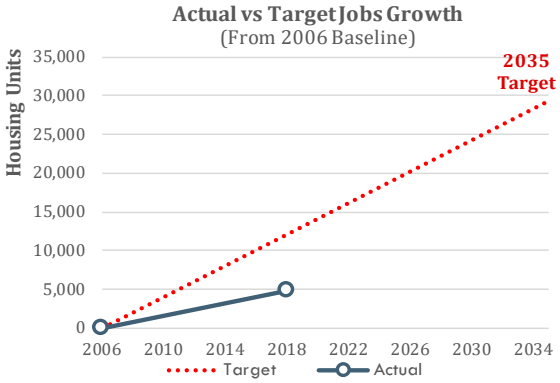
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	40.0% - 100.0%	5.16	2.2	11
	Redev Subtotal				0.00	40.0% - 100.0%	19.47	2.2	16
	Subtotal	49.92	8.86	0.00	0.00		24.63		**27**
Low Density	Vacant Subtotal				0.00	20.0% - 60.0%	11.69	4.0 / 6.9	55
	Redev Subtotal				0.00	20.0% - 60.0%	131.54	4.0 / 6.9	13
	Subtotal	386.22	29.48	0.00	0.00		143.23		**68**
Medium Low Density	Vacant Subtotal				0.72	21.0% - 50.0%	3.00	12.1 / 22.0	51
	Redev Subtotal				7.41	21.0% - 50.0%	26.33	12.1 / 22.0	274
	Subtotal	86.80	32.60	0.00	8.13		29.33		**326**
Medium High Density	Vacant Subtotal				5.87	35.0% - 75.0%	19.99	26.0 / 45.0	827
	Redev Subtotal				5.00	35.0% - 75.0%	16.82	26.0 / 45.0	386
	Subtotal	119.60	22.83	0.00	10.87		36.82		**1,213**
High Density	Vacant Subtotal				1.14	11.0% - 50.0%	6.34	70.0 / 101.3	542
	Redev Subtotal				8.48	11.0% - 50.0%	32.80	70.0 / 101.3	2,779
	Subtotal	338.85	28.26	0.00	9.63		39.14		**3,321**
All Zones	Vacant Total				7.73		46.19		1,487
	Redev Total				20.89		226.96		3,468
	Total	**981.39**	**122.04**	**0.00**	**28.62**		**273.14**		**4,955**

Capacity (units)	
Very Low Density Zones	27
Low Density Zones	68
Medium Low Density Zones	326
Medium High Density Zones	1,213
High Density Zones	3,321
Capacity in Pipeline	*1,441*
Total Capacity (Units)	**6,396**
Remaining Target (2018-2035)	6,180
Surplus/Deficit Capacity (Units)	**216**

Housing Capacity by Density Level (units)



SeaTac - Employment Growth and Commercial/Industrial Development Trends



SeaTac Jobs Growth Target: 2006-2035	29,348
2006 Jobs (PSRC)	29,585
2018 Jobs (PSRC)	34,522
Total Jobs Growth	**4,937**
Remaining 2035 Target	**24,411**

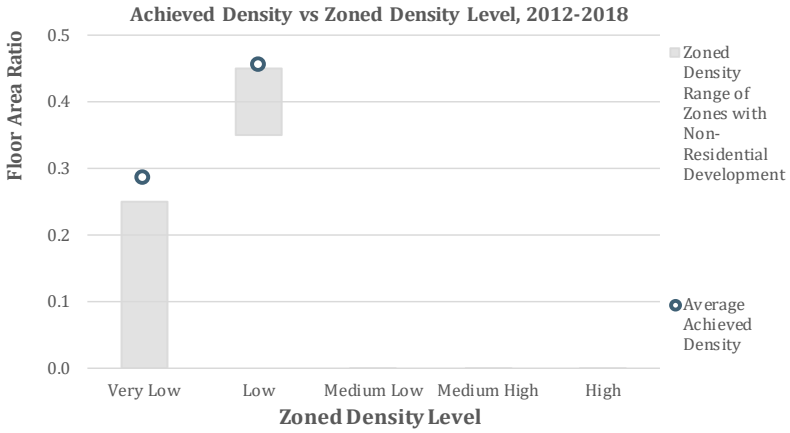
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
40.7%	**1.29%**	**3.20%**

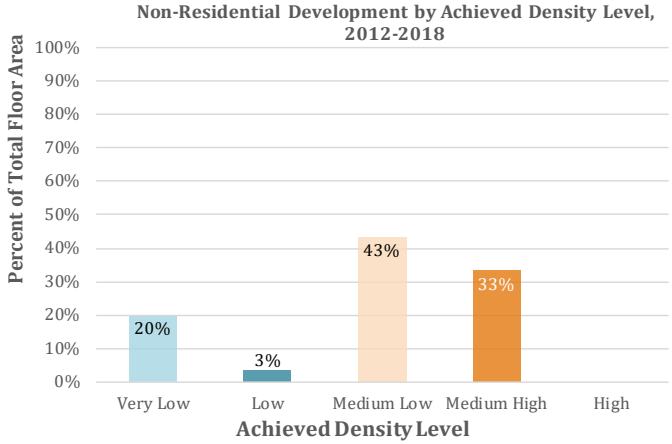
Since 2006, SeaTac has grown at 41% of the pace needed to achieve its 2035 jobs growth target of 29,348 units. During this period, the total number of jobs in SeaTac grew by roughly 17%. At this current rate, SeaTac is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 3.2% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	573,564	164,245	**0.3**
Low	0.35 - 0.5 FAR	19,925	9,050	**0.5**
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	**593,489**	**173,295**	**0.3**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	458,773	51,480	**0.1**
Low	19,925	9,050	**0.5**
Medium Low	114,791	112,765	**1.0**
Medium High	54,729	87,220	**1.6**
High	0	0	**0.0**
Total	**648,218**	**260,515**	**0.4**



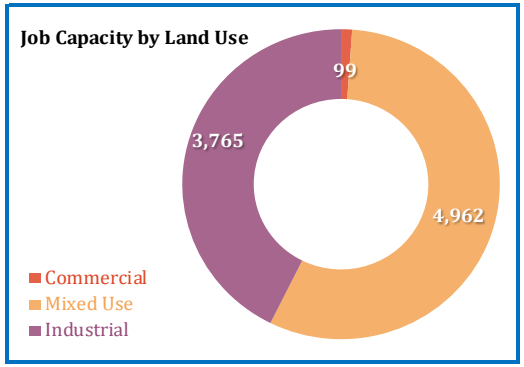


SeaTac - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	4.9	0.0	0.2	0.2	4.4	40%	2.4
Mixed Use	187.0	26.3	8.0	8.0	144.6	35% - 75%	66.2
Industrial	383.6	95.1	14.4	14.4	259.6	10% - 50%	151.4
Non-Res Land Total	**575.4**	**121.4**	**22.7**	**22.7**	**408.6**		**220.0**

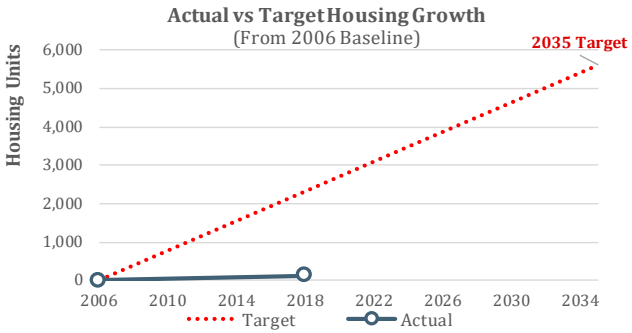
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.04	0.60	0.00	0.02	600	37
Redevelopable	0.07	0.60	0.00	0.04	600	62
Commercial Total	**0.11**	**0.60**	**0.00**	**0.06**	**600**	**99**
Mixed-Use						
Vacant	0.29	0.60 / 1.50	0.00	0.36	600	593
Redevelopable	2.59	0.60 / 1.50	1.01	2.62	600	4369
Mixed Use Total	**2.88**	**0.60 / 1.50**	**1.01**	**2.98**	**600**	**4,962**
Industrial						
Vacant	4.17	0.35 / 1.50	0.00	2.19	800 / 1200	2,218
Redevelopable	2.43	0.35 / 1.50	0.40	1.38	800 / 1200	1547
Industrial Total	**6.59**	**0.35 / 1.50**	**0.40**	**3.57**	**800 / 1200**	**3,765**
City Total						
Commercial	0.11	0.60	0.69	0.06	600	99
Mixed Use	2.88	0.60 / 1.50	0.91	2.98	600	4,962
Industrial	6.59	0.35 / 1.50	0.26	3.57	800 / 1200	3,765
Job Capacity in Pipeline						*6,739*
City Total	**9.58**	**0.35 / 1.50**	**1.86**	**6.61**	**600 / 1200**	**15,565**

Job Capacity by Assumed Density Level	#	%
Very Low Density	0	0%
Low Density	1,709	19%
Medium Low Density	269	3%
Medium High Density	6,848	78%
High Density	0	0%
Capacity in Pipeline		*6,739*
Total Capacity (jobs)		**15,565**
Remaining Target (2018-2035)		24,411
Surplus/Deficit Capacity (jobs)		**-8,846**



City of Tukwila

Housing Growth and Residential Development Trends



Tukwila Housing Growth Target: 2006-2035	5,626
2006 Estimated Housing Units	7,739
2018 Estimated Housing Units	7,869
Estimated Housing Growth	**130**
Remaining 2035 Target	5,496

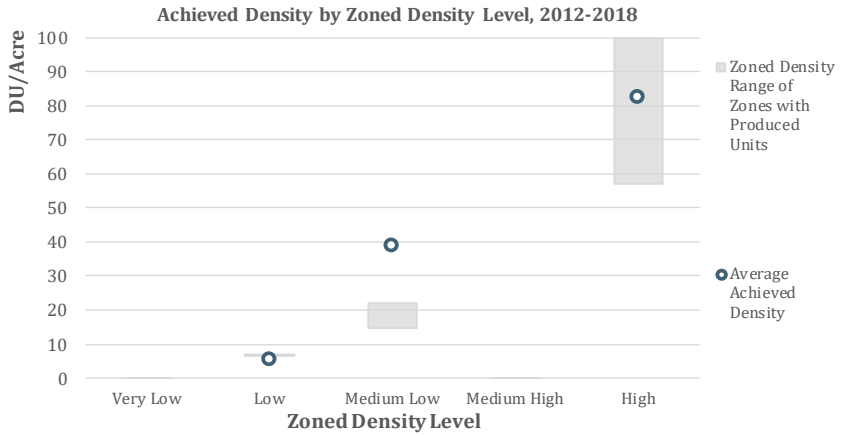
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
5.6%	0.14%	3.17%

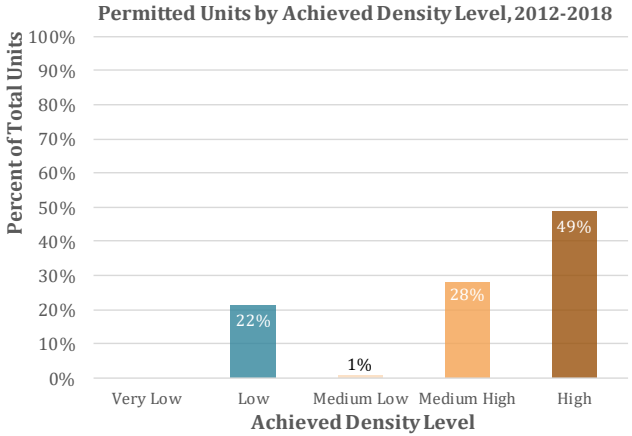
Since 2006, Tukwila has grown at 6% of the pace needed to achieve its 2035 housing growth target of 5,626 units. During this period, the total number of housing units in Tukwila grew by roughly 2%. At this current rate, Tukwila is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 3.2% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	35.6	1.7	2.3	0.0	31.6	163	**5.2**
Medium Low	10 - 24 du/acre	4.2	0.0	0.2	0.0	4.0	155	**38.9**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	5.3	0.0	0.0	0.0	5.3	440	**82.4**
	Total	**45.1**	**1.7**	**2.5**	**0.0**	**40.9**	**758**	**18.5**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	0.0	0
Low	31.6	163
Medium Low	0.6	9
Medium High	5.3	215
High	3.4	371
Total	**40.9**	**758**



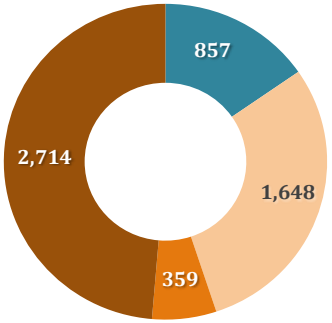


Tukwila - Residential Land Supply and Capacity

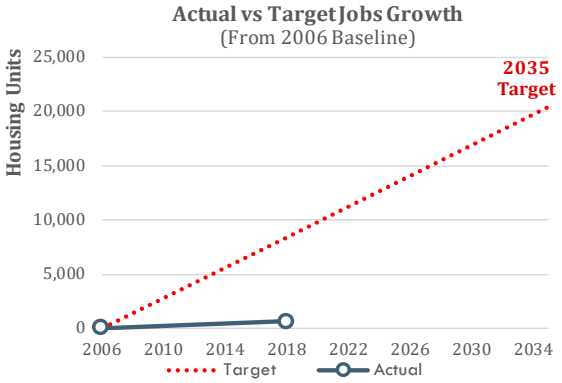
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Low Density	Vacant Subtotal				9.06	20.0% - 20.0%	63.41	5.1	323
	Redev Subtotal				31.52	20.0% - 20.0%	220.65	5.1	533
	Subtotal	645.65	225.11	14.74	40.58		284.06		**857**
Medium Low Density	Vacant Subtotal				7.65	10.0% - 20.0%	44.69	14.5 / 22.0	938
	Redev Subtotal				6.01	10.0% - 20.0%	39.04	14.5 / 22.0	710
	Subtotal	388.64	95.68	0.00	13.65		83.72		**1,648**
Medium High Density	Vacant Subtotal				0.43	10.0% - 10.0%	2.79	35.8	100
	Redev Subtotal				1.18	10.0% - 10.0%	7.69	35.8	259
	Subtotal	13.56	0.12	0.00	1.61		10.48		**359**
High Density	Vacant Subtotal				1.37	0.0% - 10.0%	8.92	61.7 / 61.7	271
	Redev Subtotal				13.82	0.0% - 10.0%	89.84	61.7 / 61.7	2,443
	Subtotal	155.60	28.98	0.00	15.19		98.76		**2,714**
All Zones	Vacant Total				18.51		119.81		1,632
	Redev Total				52.53		357.22		3,945
	Total	**1,203.45**	**349.89**	**14.74**	**71.04**		**477.03**		**5,577**

Capacity (units)	
Very Low Density Zones	0
Low Density Zones	857
Medium Low Density Zones	1,648
Medium High Density Zones	359
High Density Zones	2,714
Capacity in Pipeline	*2,642*
Total Capacity (Units)	**8,219**
Remaining Target (2018-2035)	5,496
Surplus/Deficit Capacity (Units)	**2,723**

Housing Capacity by Density Level (units)



Tukwila - Employment Growth and Commercial/Industrial Development Trends



Tukwila Jobs Growth Target: 2006-2035	20,358
2006 Jobs (PSRC)	44,345
2018 Jobs (PSRC)	44,966
Total Jobs Growth	**621**
Remaining 2035 Target	19,737

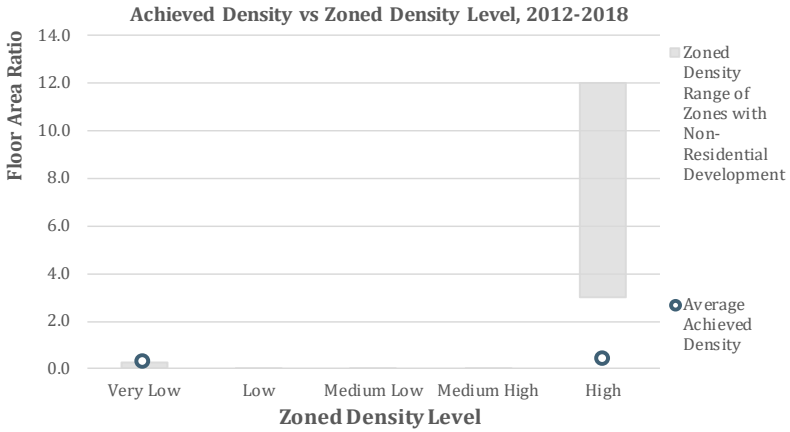
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
7.4%	0.12%	2.16%

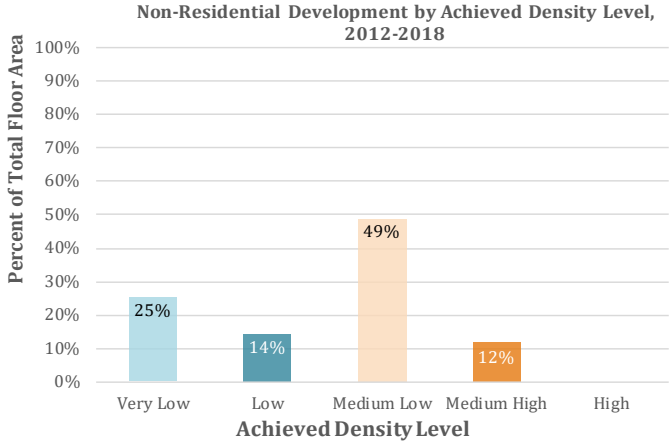
Since 2006, Tukwila has grown at 7% of the pace needed to achieve its 2035 jobs growth target of 20,358 units. During this period, the total number of jobs in Tukwila grew by roughly 1%. At this current rate, Tukwila is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 2.2% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	328,799	96,529	0.3
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	1,422,281	533,029	0.4
	Total	1,751,080	629,558	0.4

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	1,141,085	158,640	0.1
Low	219,547	90,252	0.4
Medium Low	348,948	307,035	0.9
Medium High	41,500	73,631	1.8
High	0	0	0.0
Total	1,751,080	629,558	0.4





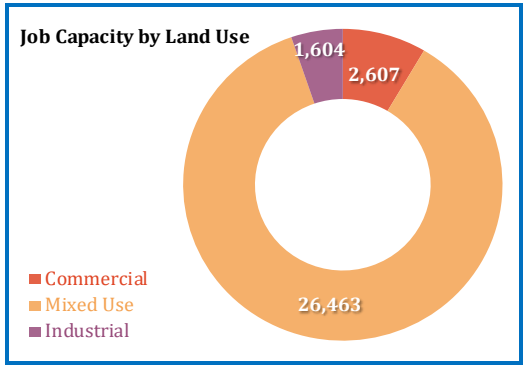
Tukwila - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	234.4	137.9	1.9	9.7	84.9	20%	65.6
Mixed Use	399.4	48.8	7.0	35.1	308.5	10% - 20%	256.3
Industrial	282.1	122.6	3.2	16.0	140.4	35%	84.5
Non-Res Land Total	**915.8**	**309.3**	**12.1**	**60.7**	**533.8**		**406.5**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial*						
Vacant	0.45	0.07 / 0.75	0.00	0.19	400 / 800	275
Redevelopable	3.97	0.07 / 0.75	0.95	1.09	400 / 800	2332
Commercial Total	**4.42**	**0.07 / 0.75**	**0.95**	**1.28**	**400 / 800**	**2,607**
Mixed-Use						
Vacant	5.48	0.06 / 1.75	0.00	8.67	400	21,679
Redevelopable	5.69	0.06 / 1.75	1.53	1.91	400	4,784
Mixed Use Total	**11.16**	**0.06 / 1.75**	**1.53**	**10.59**	**400**	**26,463**
Industrial						
Vacant	1.02	0.42	0.00	0.43	800	534
Redevelopable	2.67	0.42	0.26	0.86	800	1070
Industrial Total	**3.68**	**0.42**	**0.26**	**1.28**	**800**	**1,604**
City Total						
Commercial	4.42	0.07 / 0.75	0.69	1.28	400 / 800	2,607
Mixed Use	11.16	0.06 / 1.75	0.91	10.59	400	26,463
Industrial	3.68	0.42	0.26	1.28	800	1,604
Job Capacity in Pipeline						*3,074*
City Total	**19.26**	**0.06 / 1.75**	**1.86**	**13.15**	**400 / 800**	**33,749**

*Certain zones grouped as commercial allow for industrial use.

Job Capacity by Assumed Density Level	#	%
Very Low Density	309	1%
Low Density	2,195	7%
Medium Low Density	5,954	19%
Medium High Density	22,216	72%
High Density	0	0%
Capacity in Pipeline		*3,074*
Total Capacity (jobs)		**33,749**
Remaining Target (2018-2035)		19,737
Surplus/Deficit Capacity (jobs)		**14,012**

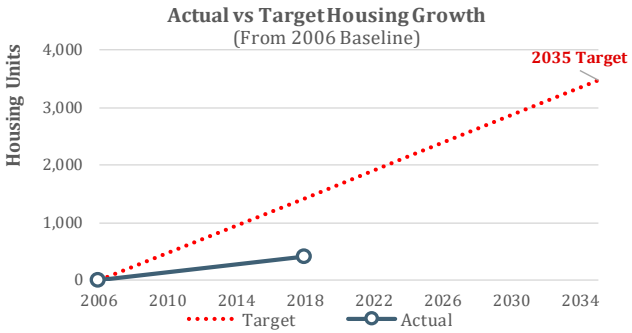


High Capacity Transit Communities

City of Des Moines
City of Kenmore
City of Lake Forest Park
City of Mercer Island
City of Newcastle
City of Shoreline
City of Woodinville

City of Des Moines

Housing Growth and Residential Development Trends



Des Moines Housing Growth Target: 2006-2035	3,480
2006 Estimated Housing Units	12,287
2018 Estimated Housing Units	12,700
Estimated Housing Growth	**413**
Remaining 2035 Target	3,067

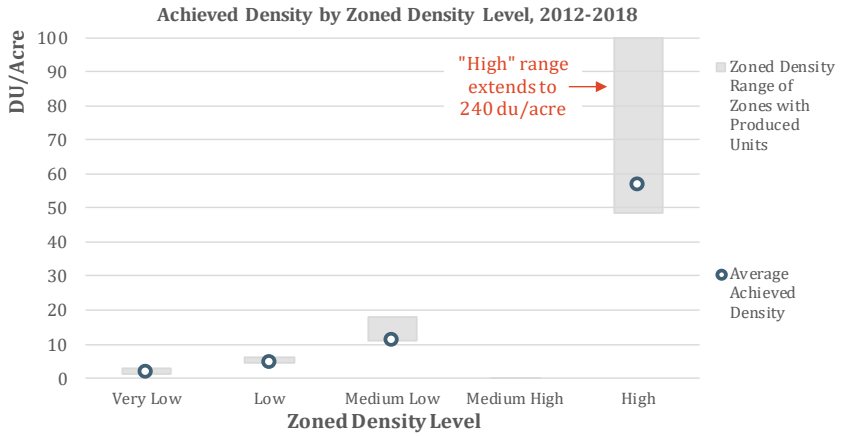
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
28.7%	0.28%	1.28%

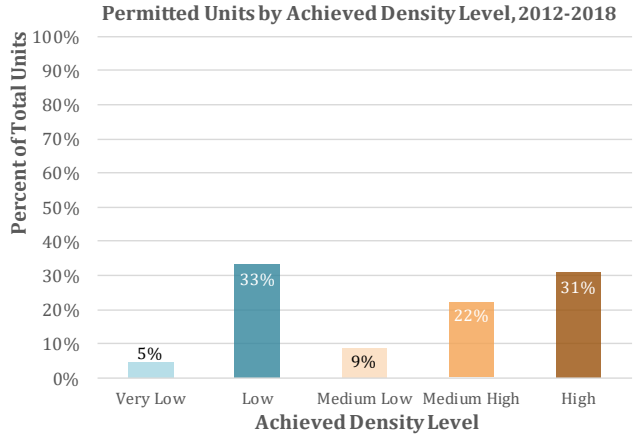
Since 2006, Des Moines has grown at 29% of the pace needed to achieve its 2035 housing growth target of 3,480 units. During this period, the total number of housing units in Des Moines grew by roughly 3%. At this current rate, Des Moines is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.3% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	2.4	1.1	0.0	0.0	1.3	2	**1.5**
Low	4 - 10 du/acre	36.0	0.9	3.9	0.2	31.0	138	**4.4**
Medium Low	10 - 24 du/acre	4.3	0.3	0.0	0.1	3.9	44	**11.2**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	3.7	0.0	0.0	0.0	3.7	209	**56.5**
	Total	**46.4**	**2.3**	**3.9**	**0.2**	**40.0**	**393**	**9.8**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	5.9	18
Low	27.9	131
Medium Low	2.8	35
Medium High	2.4	87
High	0.9	122
Total	**40.0**	**393**



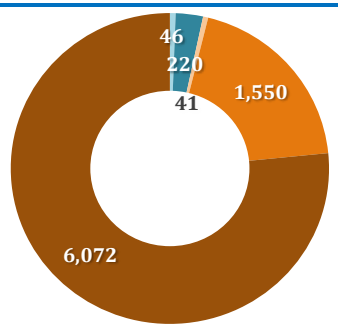


Des Moines - Residential Land Supply and Capacity

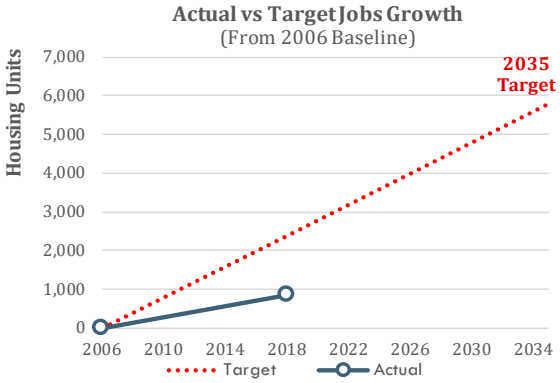
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				3.55	20.0% - 20.0%	7.82	1.2 / 3.8	28
	Redev Subtotal				6.33	20.0% - 20.0%	13.93	1.2 / 3.8	19
	Subtotal	181.56	111.71	0.00	9.89		21.75		**46**
Low Density	Vacant Subtotal				10.58	20.0% - 20.0%	24.42	4.4 / 8.8	118
	Redev Subtotal				23.13	20.0% - 20.0%	53.44	4.4 / 8.8	101
	Subtotal	516.05	376.59	0.00	33.71		77.86		**220**
Medium Low Density	Vacant Subtotal				0.07	20.0% - 20.0%	0.31	12.4	4
	Redev Subtotal				0.85	20.0% - 20.0%	3.67	12.4	37
	Subtotal	10.42	4.30	0.00	0.92		3.98		**41**
Medium High Density	Vacant Subtotal				2.90	14.0% - 30.0%	13.45	24.2 / 36.3	488
	Redev Subtotal				10.48	14.0% - 30.0%	43.42	24.2 / 36.3	1,062
	Subtotal	98.44	9.27	0.00	13.38		56.88		**1,550**
High Density	Vacant Subtotal				2.41	20.0% - 30.0%	10.01	48.4 / 129.7	988
	Redev Subtotal				12.71	20.0% - 30.0%	51.89	48.4 / 129.7	5,084
	Subtotal	103.04	1.91	0.00	15.12		61.91		**6,072**
All Zones	Vacant Total				19.51		56.01		1,626
	Redev Total				53.50		166.36		6,304
	Total	**909.51**	**503.78**	**0.00**	**73.01**		**222.37**		**7,930**

Capacity (units)	
Very Low Density Zones	46
Low Density Zones	220
Medium Low Density Zones	41
Medium High Density Zones	1,550
High Density Zones	6,072
Capacity in Pipeline	*456*
Total Capacity (Units)	**8,386**
Remaining Target (2018-2035)	3,067
Surplus/Deficit Capacity (Units)	**5,319**

Housing Capacity by Density Level (units)



Des Moines - Employment Growth and Commercial/Industrial Development Trends



Des Moines Jobs Growth Target: 2006-2035	5,800
2006 Jobs (PSRC)	6,206
2018 Jobs (PSRC)	7,065
Total Jobs Growth	**859**
Remaining 2035 Target	**4,941**

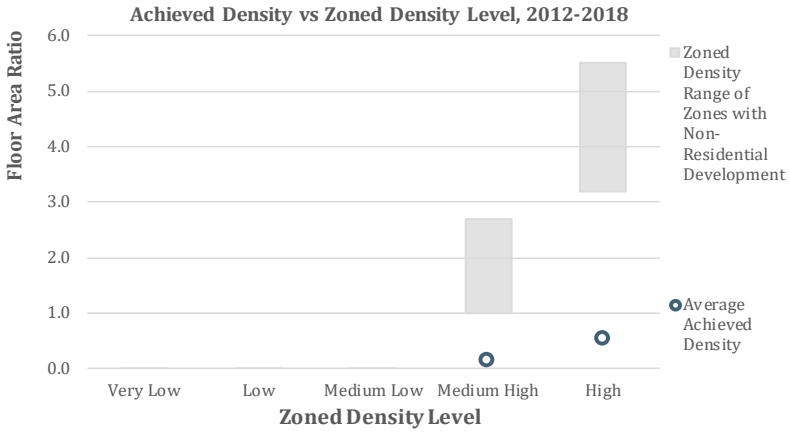
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
35.8%	**1.09%**	**3.17%**

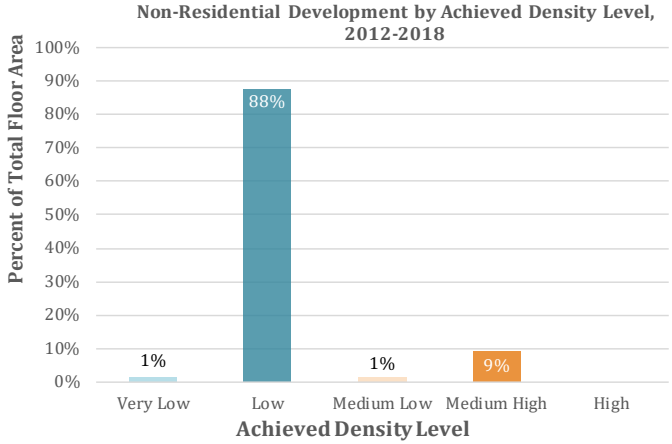
Since 2006, Des Moines has grown at 36% of the pace needed to achieve its 2035 jobs growth target of 5,800 units. During this period, the total number of jobs in Des Moines grew by roughly 14%. At this current rate, Des Moines is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 3.2% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	40,980	6,203	**0.2**
High	3.0 & up FAR	3,938,931	2,104,363	**0.5**
	Total	**3,979,911**	**2,110,566**	**0.5**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	114,290	29,744	**0.3**
Low	3,724,382	1,853,398	**0.5**
Medium Low	47,100	29,583	**0.6**
Medium High	94,139	197,841	**2.1**
High	0	0	**0.0**
Total	**3,979,911**	**2,110,566**	**0.5**



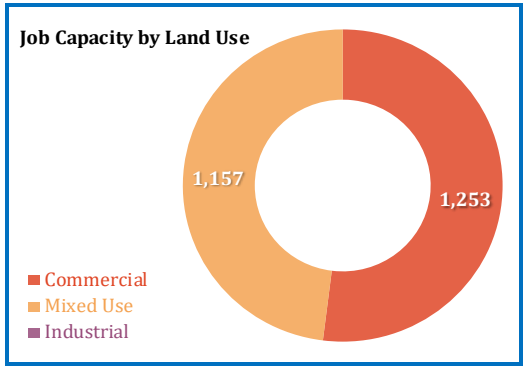


Des Moines - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	85.0	11.4	5.5	5.5	62.6	0% - 20%	51.2
Mixed Use	178.8	6.2	12.9	12.9	146.7	15% - 30%	106.6
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**263.8**	**17.6**	**18.5**	**18.5**	**209.3**		**157.8**

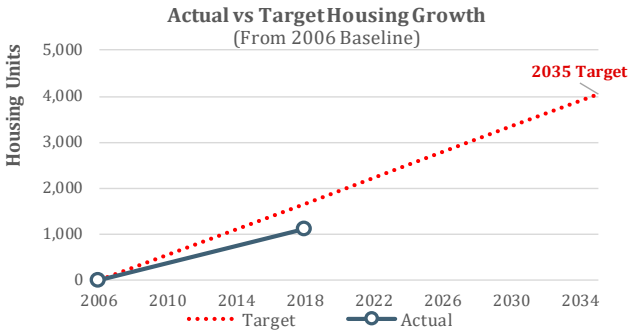
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.96	0.32 / 3.50	0.00	0.42	0 / 800	727
Redevelopable	1.27	0.32 / 3.50	0.29	0.30	0 / 800	526
Commercial Total	**2.23**	**0.32 / 3.50**	**0.29**	**0.72**	**0 / 800**	**1,253**
Mixed-Use						
Vacant	0.51	0.01 / 0.63	0.00	0.10	400 / 800	247
Redevelopable	4.13	0.01 / 0.63	1.51	0.41	400 / 800	911
Mixed Use Total	**4.64**	**0.01 / 0.63**	**1.51**	**0.51**	**400 / 800**	**1,157**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	2.23	0.32 / 3.50	0.69	0.72	0 / 800	1,253
Mixed Use	4.64	0.01 / 0.63	0.91	0.51	400 / 800	1,157
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*0*
City Total	**6.87**	**3.50**	**1.86**	**1.23**	**0 / 800**	**2,410**

Job Capacity by Assumed Density Level	#	%
Very Low Density	1,303	54%
Low Density	0	0%
Medium Low Density	823	34%
Medium High Density	160	7%
High Density	124	5%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**2,410**
Remaining Target (2018-2035)		4,941
Surplus/Deficit Capacity (jobs)		**-2,531**



City of Kenmore

Housing Growth and Residential Development Trends



Kenmore Housing Growth Target: 2006-2035	4,060
2006 Estimated Housing Units	8,156
2018 Estimated Housing Units	9,276
Estimated Housing Growth	**1,120**
Remaining 2035 Target	2,940

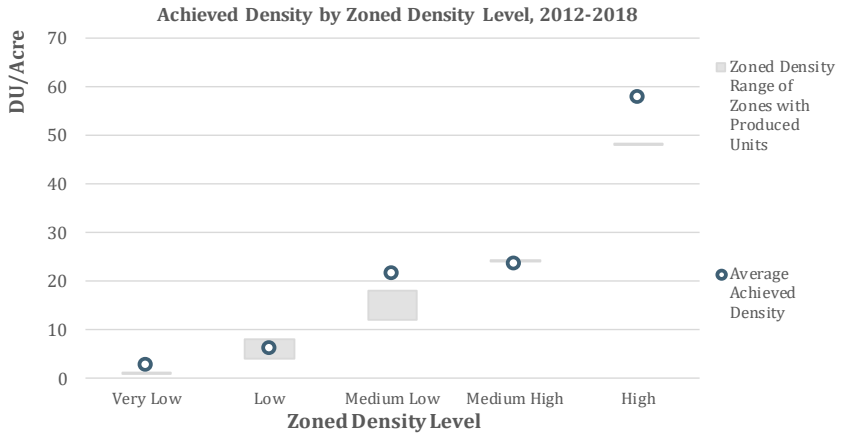
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
66.7%	1.08%	1.63%

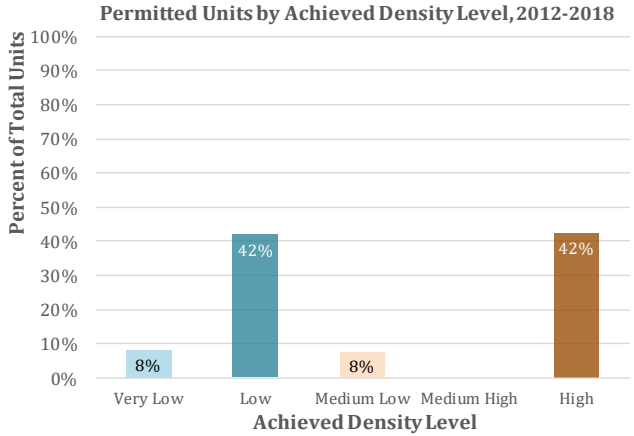
Since 2006, Kenmore has grown at 67% of the pace needed to achieve its 2035 housing growth target of 4,060 units. During this period, the total number of housing units in Kenmore grew by roughly 14%. At this current rate, Kenmore is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.6% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	3.5	0.0	0.0	0.0	3.5	9	**2.5**
Low	4 - 10 du/acre	65.3	2.8	0.3	0.5	61.7	365	**5.9**
Medium Low	10 - 24 du/acre	5.6	4.2	0.1	0.0	1.4	29	**21.4**
Medium High	24 - 48 du/acre	1.0	0.0	0.0	0.0	1.0	23	**23.3**
High	48 & up du/acre	5.5	0.0	0.0	0.0	5.5	320	**57.7**
	Total	**81.0**	**7.0**	**0.4**	**0.5**	**73.1**	**746**	**10.2**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	18.3	61
Low	46.9	313
Medium Low	2.6	56
Medium High	0.0	0
High	5.3	316
Total	**73.1**	**746**



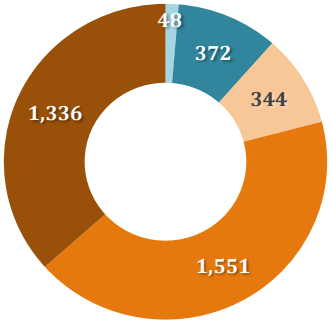


Kenmore - Residential Land Supply and Capacity

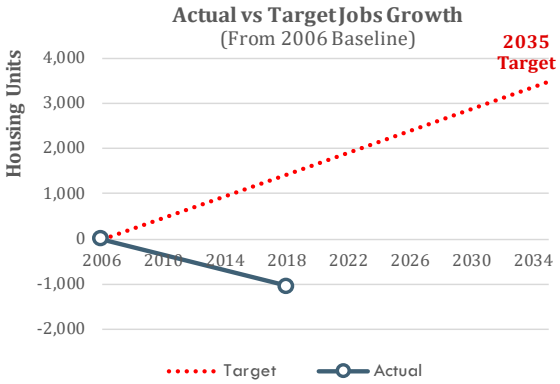
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				3.56	5.0% - 9.0%	15.04	2.5 / 3.5	47
	Redev Subtotal				3.48	0.0% - 9.0%	13.46	2.5 / 3.5	1
	Subtotal	151.92	114.06	0.00	7.05		28.50		**48**
Low Density	Vacant Subtotal				7.83	5.0% - 5.0%	22.03	6.7 / 8.0	149
	Redev Subtotal				21.56	5.0% - 5.0%	60.36	6.7 / 8.0	224
	Subtotal	218.79	101.13	0.00	29.39		82.39		**372**
Medium Low Density	Vacant Subtotal				1.36	5.0% - 5.0%	7.25	16.4 / 23.3	139
	Redev Subtotal				2.13	5.0% - 5.0%	11.36	16.4 / 23.3	205
	Subtotal	32.98	9.72	0.00	3.49		18.61		**344**
Medium High Density	Vacant Subtotal				0.14	5.0% - 5.0%	0.74	24.0	18
	Redev Subtotal				17.17	0.0% - 5.0%	51.59	24.0 / 31.0	1,533
	Subtotal	2.88	0.00	0.00	17.31		52.34		**1,551**
High Density	Vacant Subtotal				1.02	5.0% - 10.0%	5.33	48.0 / 72.0	266
	Redev Subtotal				3.80	5.0% - 10.0%	20.19	48.0 / 72.0	1,071
	Subtotal	116.09	12.21	0.00	4.82		25.51		**1,336**
All Zones	Vacant Total				13.91		50.39		618
	Redev Total				48.13		156.96		3,033
	Total	**522.66**	**237.12**	**0.00**	**62.04**		**207.35**		**3,651**

Capacity (units)	
Very Low Density Zones	48
Low Density Zones	372
Medium Low Density Zones	344
Medium High Density Zones	1,551
High Density Zones	1,336
Capacity in Pipeline	*484*
Total Capacity (Units)	**4,135**
Remaining Target (2018-2035)	2,940
Surplus/Deficit Capacity (Units)	**1,195**

Housing Capacity by Density Level (units)



Kenmore - Employment Growth and Commercial/Industrial Development Trends



Kenmore Jobs Growth Target: 2006-2035	3,480
2006 Jobs (PSRC)	5,062
2018 Jobs (PSRC)	4,012
Total Jobs Growth	**-1,050**
Remaining 2035 Target	3,480

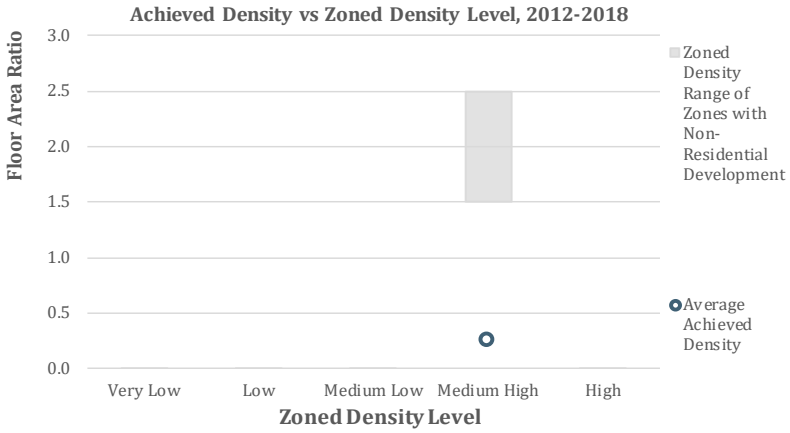
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
-72.9%	-1.92%	4.55%

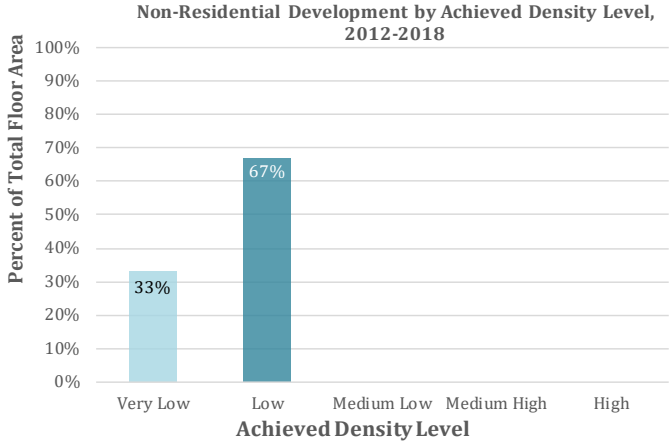
Since 2006, Kenmore has grown at -73% of the pace needed to achieve its 2035 jobs growth target of 3,480 units. During this period, the total number of jobs in Kenmore grew by roughly -21%. At this current rate, Kenmore is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 4.6% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	239,623	61,187	0.3
High	3.0 & up FAR	0	0	
	Total	239,623	61,187	0.3

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	134,034	20,211	0.2
Low	105,589	40,976	0.4
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	239,623	61,187	0.3



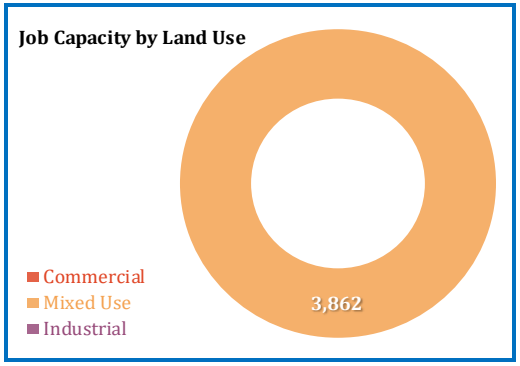


Kenmore - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Mixed Use	131.4	17.4	8.0	16.0	90.1	0% - 10%	87.5
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**131.4**	**17.4**	**8.0**	**16.0**	**90.1**		**87.5**

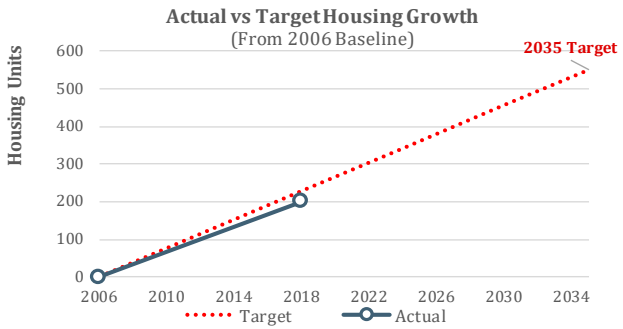
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Commercial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
Mixed-Use						
Vacant	0.48	0.16 / 1.50	0.00	0.19	300 / 400	623
Redevelopable	3.33	0.16 / 1.50	0.26	0.97	300 / 400	3239
Mixed Use Total	**3.81**	**0.16 / 1.50**	**0.26**	**1.16**	**300 / 400**	**3,862**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.00	0.00	0.69	0.00	0	0
Mixed Use	3.81	0.16 / 1.50	0.91	1.16	300 / 400	3,862
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*19*
City Total	**3.81**	**1.50**	**1.86**	**1.16**	**0 / 400**	**3,881**

Job Capacity by Assumed Density Level	#	%
Very Low Density	295	8%
Low Density	3,518	91%
Medium Low Density	0	0%
Medium High Density	49	1%
High Density	0	0%
Capacity in Pipeline		*19*
Total Capacity (jobs)		**3,881**
Remaining Target (2018-2035)		4,530
Surplus/Deficit Capacity (jobs)		**-649**



City of Lake Forest Park

Housing Growth and Residential Development Trends



Lake Forest Park Housing Growth Target: 2006-2035	551
2006 Estimated Housing Units	5,226
2018 Estimated Housing Units	5,427
Estimated Housing Growth	**201**
Remaining 2035 Target	350

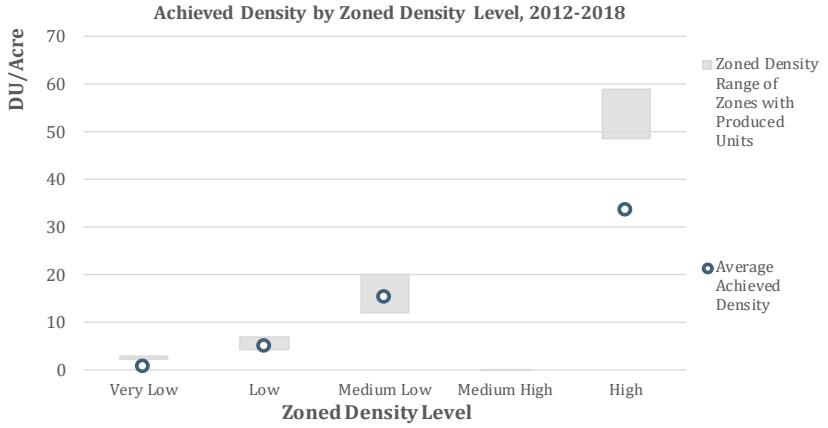
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
88.2%	0.32%	0.37%

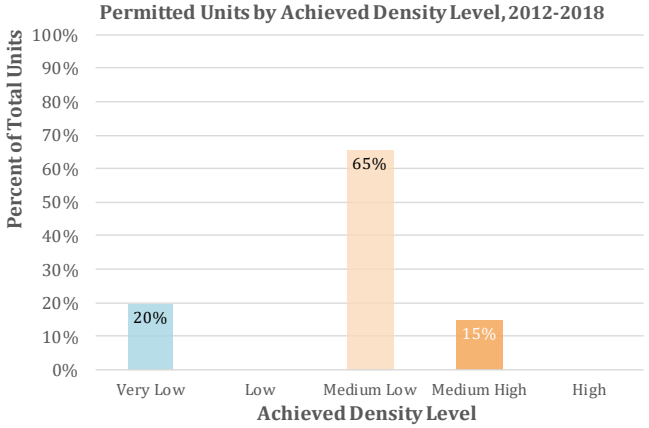
Since 2006, Lake Forest Park has grown at 88% of the pace needed to achieve its 2035 housing growth target of 551 units. During this period, the total number of housing units in Lake Forest Park grew by roughly 4%. At this current rate, Lake Forest Park is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.4% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	3.5	0.0	0.0	0.0	3.5	2	**0.6**
Low	4 - 10 du/acre	17.8	4.2	0.0	0.0	13.6	67	**4.9**
Medium Low	10 - 24 du/acre	5.1	0.0	0.0	0.1	5.1	77	**15.2**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.8	0.0	0.0	0.0	0.8	25	**33.3**
	Total	**27.2**	**4.2**	**0.0**	**0.1**	**22.9**	**171**	**7.5**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	15.2	34
Low	0.0	0
Medium Low	6.9	112
Medium High	0.8	25
High	0.0	0
Total	**22.9**	**171**



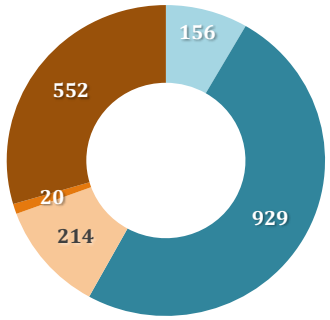


Lake Forest Park - Residential Land Supply and Capacity

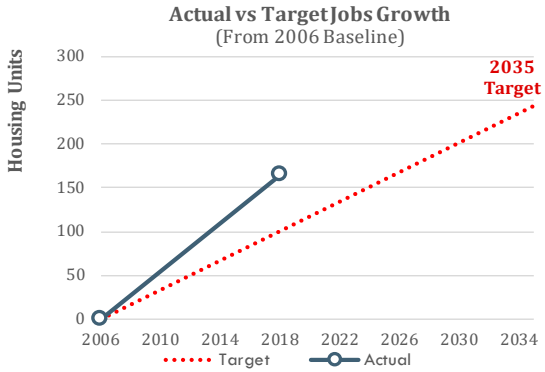
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				1.66	20.0% - 20.0%	24.94	2.0 / 3.0	56
	Redev Subtotal				6.32	20.0% - 20.0%	94.73	2.0 / 3.0	100
	Subtotal	207.12	47.27	0.29	7.98		119.66		**156**
Low Density	Vacant Subtotal				2.40	20.0% - 20.0%	35.93	4.4 / 6.0	192
	Redev Subtotal				14.79	20.0% - 20.0%	221.85	4.4 / 6.0	737
	Subtotal	373.29	27.13	2.45	17.19		257.78		**929**
Medium Low Density	Vacant Subtotal				0.00	16.0% - 20.0%	0.00	12.0 / 18.2	0
	Redev Subtotal				0.89	16.0% - 20.0%	14.08	12.0 / 18.2	214
	Subtotal	19.51	1.67	0.00	0.89		14.08		**214**
Medium High Density	Vacant Subtotal				0.00	16.0% - 16.0%	0.00	24.2 / 33.3	0
	Redev Subtotal				0.05	16.0% - 16.0%	0.71	24.2 / 33.3	20
	Subtotal	0.94	0.06	0.00	0.05		0.71		**20**
High Density	Vacant Subtotal				0.00	16.0% - 16.0%	0.00	65.0	0
	Redev Subtotal				0.56	16.0% - 16.0%	8.85	65.0	552
	Subtotal	11.17	0.00	0.00	0.56		8.85		**552**
All Zones	Vacant Total				4.06		60.87		247
	Redev Total				22.60		340.22		1,623
	Total	**612.01**	**76.14**	**2.74**	**26.66**		**401.09**		**1,870**

Capacity (units)	
Very Low Density Zones	156
Low Density Zones	929
Medium Low Density Zones	214
Medium High Density Zones	20
High Density Zones	552
Capacity in Pipeline	*0*
Total Capacity (Units)	**1,870**
Remaining Target (2018-2035)	350
Surplus/Deficit Capacity (Units)	**1,520**

Housing Capacity by Density Level (units)



Lake Forest Park - Employment Growth and Commercial/Industrial Development Trends



Lake Forest Park Jobs Growth Target: 2006-2035	244
2006 Jobs (PSRC)	1,612
2018 Jobs (PSRC)	1,777
Total Jobs Growth	**165**
Remaining 2035 Target	79

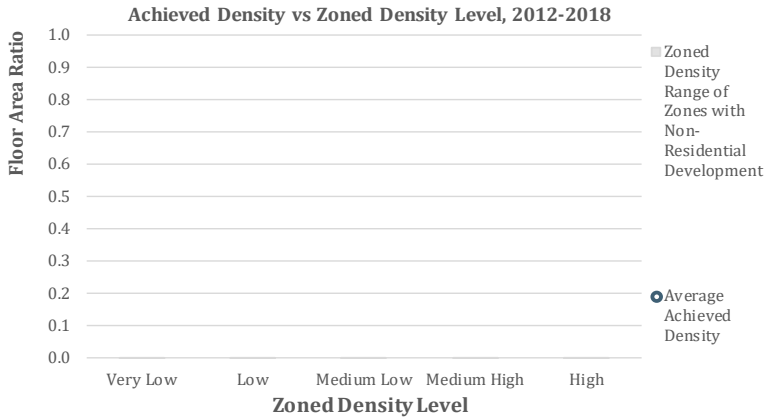
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
163.7%	0.82%	0.25%

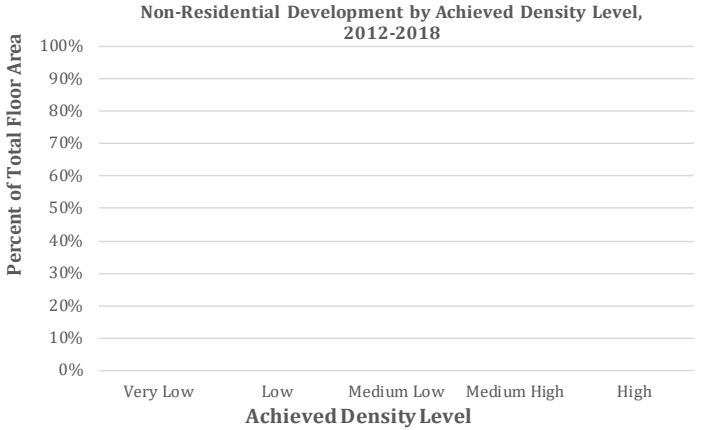
Since 2006, Lake Forest Park has grown at 164% of the pace needed to achieve its 2035 jobs growth target of 244 units. During this period, the total number of jobs in Lake Forest Park grew by roughly 10%. At this current rate, Lake Forest Park is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.3% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	0	0	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	0.0
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	0	0	0.0



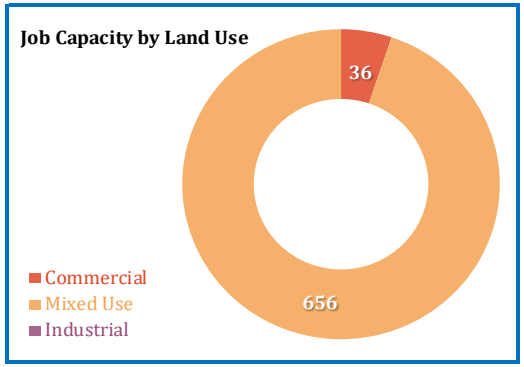


Lake Forest Park - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	3.4	0.2	0.1	0.0	3.0	26% - 50%	1.6
Mixed Use	31.1	1.7	1.2	0.3	28.0	16%	23.3
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**34.5**	**1.9**	**1.3**	**0.3**	**31.0**		**24.9**

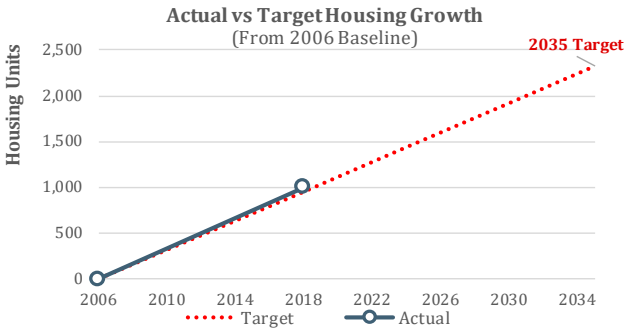
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	0.50	0.00	0.00	465	0
Redevelopable	0.07	0.50	0.02	0.02	465	36
Commercial Total	**0.07**	**0.50**	**0.02**	**0.02**	**465**	**36**
Mixed-Use						
Vacant	0.00	0.65	0.00	0.00	465	0
Redevelopable	1.01	0.65	0.29	0.30	465	656
Mixed Use Total	**1.01**	**0.65**	**0.29**	**0.30**	**465**	**656**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.07	0.50	0.69	0.02	465	36
Mixed Use	1.01	0.65	0.91	0.30	465	656
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*0*
City Total	**1.08**	**0.65**	**1.86**	**0.32**	**0 / 465**	**691**

Job Capacity by Assumed Density Level	#	%
Very Low Density	0	0%
Low Density	0	0%
Medium Low Density	691	100%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**691**
Remaining Target (2018-2035)		79
Surplus/Deficit Capacity (jobs)		**613**



City of Mercer Island

Housing Growth and Residential Development Trends



Mercer Island Housing Growth Target: 2006-2035	2,320
2006 Estimated Housing Units	9,467
2018 Estimated Housing Units	10,473
Estimated Housing Growth	**1,006**
Remaining 2035 Target	1,314

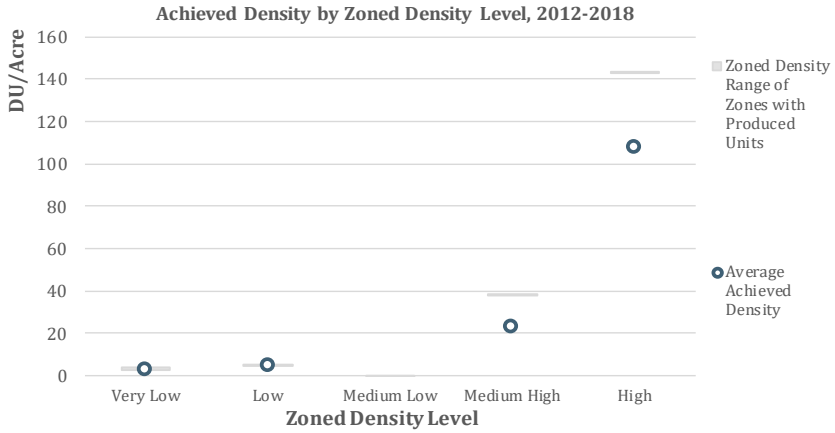
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
104.8%	0.85%	0.70%

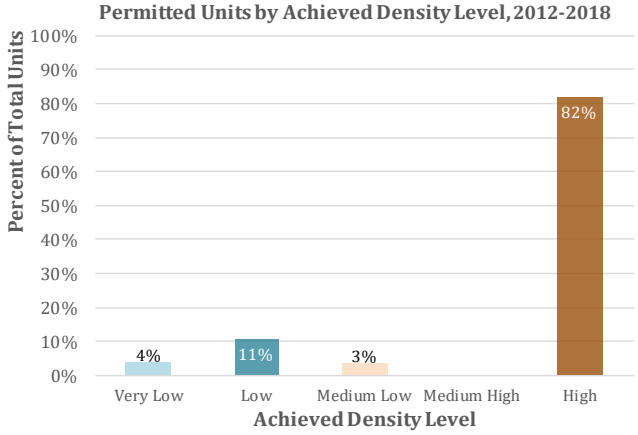
Since 2006, Mercer Island has grown at 105% of the pace needed to achieve its 2035 housing growth target of 2,320 units. During this period, the total number of housing units in Mercer Island grew by roughly 11%. At this current rate, Mercer Island is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.7% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	12.2	2.2	1.7	0.0	8.3	22	2.7
Low	4 - 10 du/acre	16.0	0.7	2.4	0.0	13.0	60	4.6
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	1.0	0.0	0.2	0.0	0.8	19	22.7
High	48 & up du/acre	4.7	0.2	0.2	0.0	4.3	460	107.5
	Total	33.8	3.1	4.4	0.0	26.4	561	21.3

Achieved Density Level	Net Area (acres)	Total Units
Very Low	8.3	22
Low	13.0	60
Medium Low	0.8	19
Medium High	0.0	0
High	4.3	460
Total	26.4	561



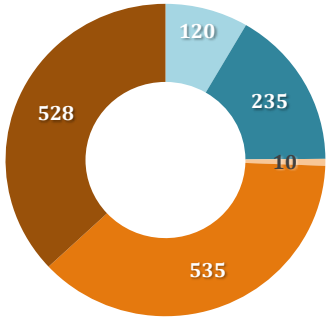


Mercer Island - Residential Land Supply and Capacity

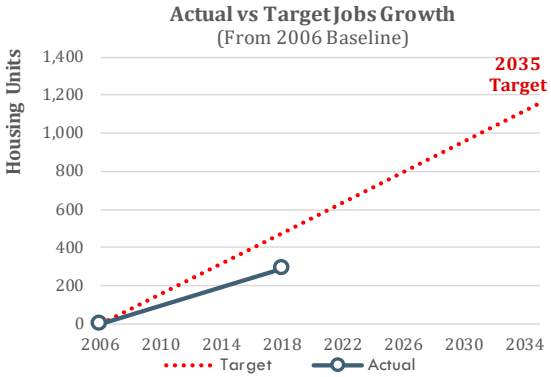
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				4.96	3.0% - 3.0%	32.05	2.6 / 3.3	85
	Redev Subtotal				13.31	3.0% - 3.0%	85.97	2.6 / 3.3	35
	Subtotal	352.32	211.82	0.00	18.27		118.02		**120**
Low Density	Vacant Subtotal				3.27	3.0% - 5.0%	21.12	4.6 / 6.1	98
	Redev Subtotal				16.64	3.0% - 5.0%	107.54	4.6 / 6.1	138
	Subtotal	287.75	134.59	0.00	19.91		128.65		**235**
Medium Low Density	Vacant Subtotal				0.02	20.0% - 20.0%	0.45	22.7	10
	Redev Subtotal				0.05	20.0% - 20.0%	1.13	22.7	0
	Subtotal	3.12	1.05	0.00	0.07		1.58		**10**
Medium High Density	Vacant Subtotal				0.00	20.0% - 20.0%	0.00	26.0	0
	Redev Subtotal				2.00	20.0% - 20.0%	43.70	26.0	535
	Subtotal	62.65	5.52	0.00	2.00		43.70		**535**
High Density	Vacant Subtotal				0.02	10.0% - 10.0%	0.54	100.6 / 167.8	91
	Redev Subtotal				0.95	10.0% - 10.0%	23.47	100.6 / 167.8	437
	Subtotal	29.86	2.10	0.00	0.97		24.01		**528**
All Zones	Vacant Total				8.27		54.16		284
	Redev Total				32.95		261.81		1,145
	Total	**735.70**	**355.08**	**0.00**	**41.22**		**315.97**		**1,429**

Capacity (units)	
Very Low Density Zones	120
Low Density Zones	235
Medium Low Density Zones	10
Medium High Density Zones	535
High Density Zones	528
Capacity in Pipeline	*178*
Total Capacity (Units)	**1,607**
Remaining Target (2018-2035)	1,314
Surplus/Deficit Capacity (Units)	**293**

Housing Capacity by Density Level (units)



Mercer Island - Employment Growth and Commercial/Industrial Development Trends



Mercer Island Jobs Growth Target: 2006-2035	1,160
2006 Jobs (PSRC)	7,453
2018 Jobs (PSRC)	7,745
Total Jobs Growth	**292**
Remaining 2035 Target	**868**

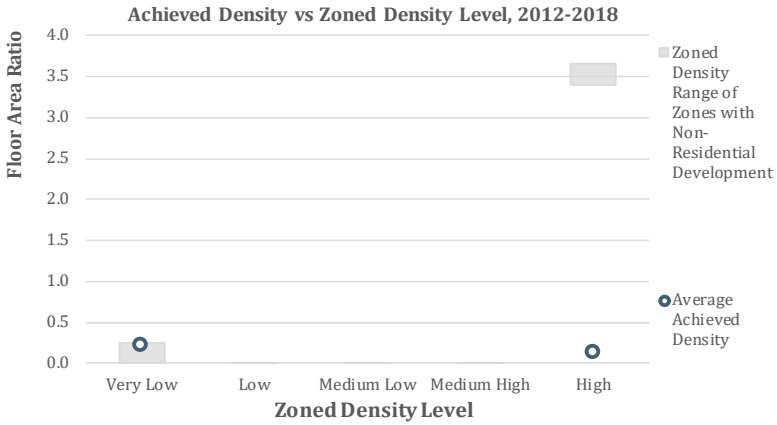
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
60.8%	**0.32%**	**0.63%**

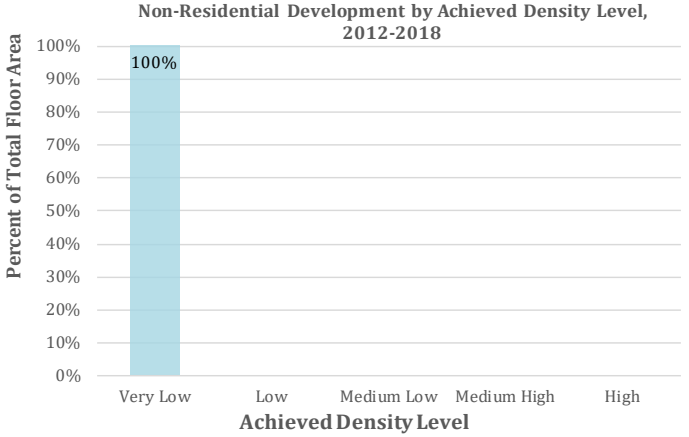
Since 2006, Mercer Island has grown at 61% of the pace needed to achieve its 2035 jobs growth target of 1,160 units. During this period, the total number of jobs in Mercer Island grew by roughly 4%. At this current rate, Mercer Island is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.6% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	364,525	77,277	**0.2**
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	195,824	24,137	**0.1**
	Total	**560,349**	**101,414**	**0.2**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	560,349	101,414	**0.2**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**560,349**	**101,414**	**0.2**



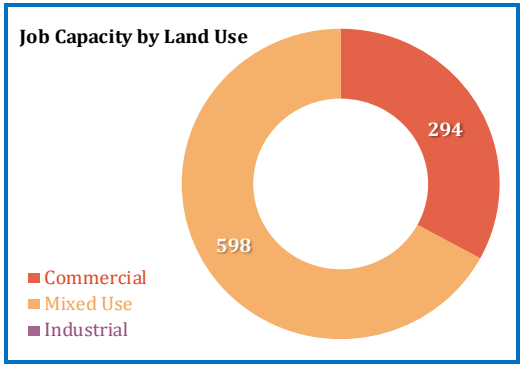


Mercer Island - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	25.0	15.6	0.0	0.3	9.0	15% - 20%	7.2
Mixed Use	29.9	2.1	0.0	1.0	26.8	10%	24.0
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**54.8**	**17.7**	**0.0**	**1.3**	**35.8**		**31.2**

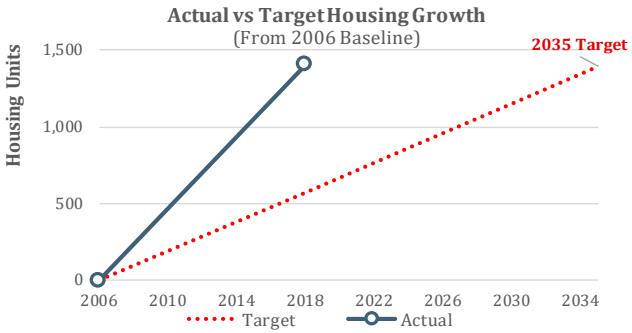
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.03	0.22 / 0.50	0.00	0.01	200	52
Redevelopable	0.29	0.22 / 0.50	0.06	0.05	200	242
Commercial Total	**0.31**	**0.22 / 0.50**	**0.06**	**0.06**	**200**	**294**
Mixed-Use						
Vacant	0.02	0.06 / 1.00	0.00	0.02	200	119
Redevelopable	1.02	0.06 / 1.00	0.48	0.10	200	479
Mixed Use Total	**1.05**	**0.06 / 1.00**	**0.48**	**0.12**	**200**	**598**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.31	0.22 / 0.50	0.69	0.06	200	294
Mixed Use	1.05	0.06 / 1.00	0.91	0.12	200	598
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*70*
City Total	**1.36**	**1.00**	**1.86**	**0.18**	**0 / 200**	**961**

Job Capacity by Assumed Density Level	#	%
Very Low Density	11	1%
Low Density	177	20%
Medium Low Density	227	25%
Medium High Density	477	54%
High Density	0	0%
Capacity in Pipeline		*70*
Total Capacity (jobs)		**961**
Remaining Target (2018-2035)		868
Surplus/Deficit Capacity (jobs)		**93**



City of Newcastle

Housing Growth and Residential Development Trends



Newcastle Housing Growth Target: 2006-2035	1,392
2006 Estimated Housing Units	3,784
2018 Estimated Housing Units	5,188
Estimated Housing Growth	**1,404**
Remaining 2035 Target	0

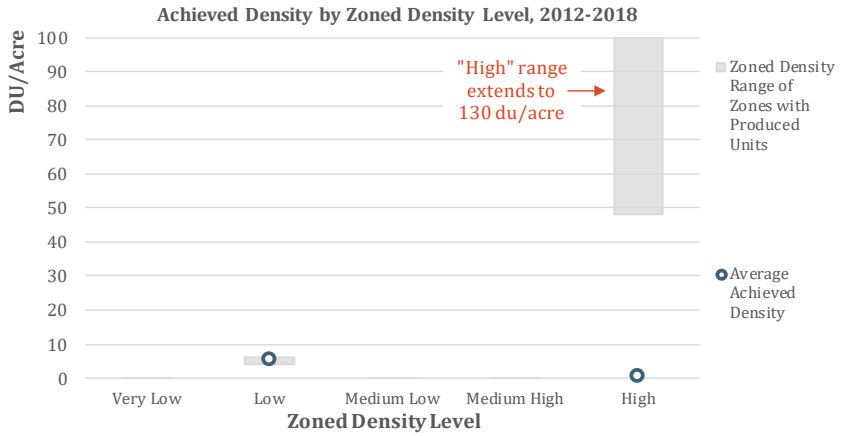
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
243.8%	2.67%	Met Target

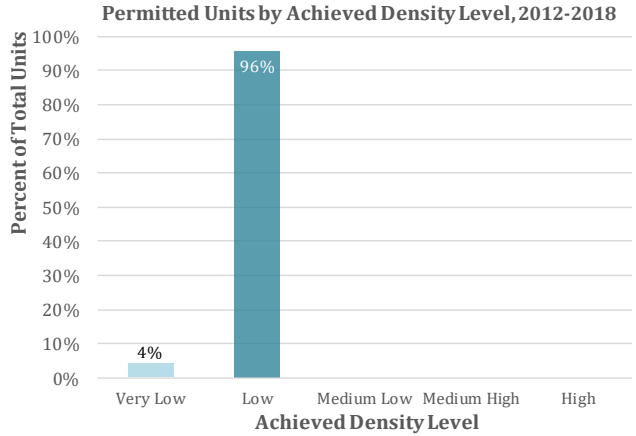
Since 2006, Newcastle has grown at 244% of the pace needed to achieve its 2035 housing growth target of 1,392 units. During this period, the total number of housing units in Newcastle grew by roughly 37%. Newcastle has achieved its 2035 housing growth target.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	77.0	18.7	11.5	4.2	42.6	223	**5.2**
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	57.9	13.6	1.0	5.4	37.9	10	**0.3**
	Total	**135.0**	**32.3**	**12.6**	**9.6**	**80.5**	**233**	**2.9**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	37.9	10
Low	42.6	223
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	**80.5**	**233**



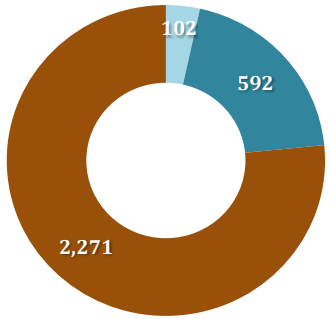


Newcastle - Residential Land Supply and Capacity

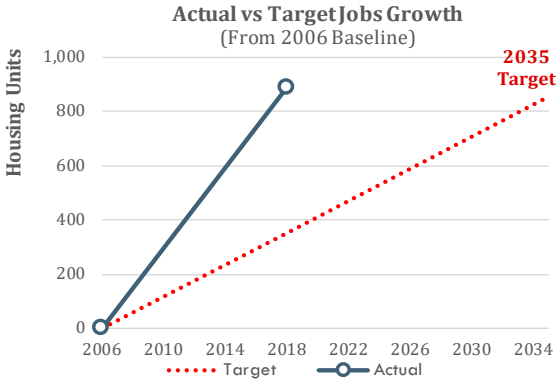
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				31.01	10.0% - 10.0%	70.49	1.0	70
	Redev Subtotal				19.23	10.0% - 10.0%	43.69	1.0	32
	Subtotal	218.80	0.61	35.50	50.24		114.18		**102**
Low Density	Vacant Subtotal				31.46	12.0% - 12.0%	69.22	4.0 / 6.0	298
	Redev Subtotal				38.73	12.0% - 12.0%	85.21	4.0 / 6.0	294
	Subtotal	266.80	11.55	0.00	70.20		154.43		**592**
Medium Low Density	Vacant Subtotal				0.00	10.0% - 10.0%	0.00	12.0	0
	Redev Subtotal				0.00	10.0% - 10.0%	0.00	12.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	10.0% - 10.0%	0.00	24.0	0
	Redev Subtotal				0.00	10.0% - 10.0%	0.00	24.0	0
	Subtotal	0.71	0.71	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	10.0% - 10.0%	0.00	48.0 / 60.0	0
	Redev Subtotal				5.86	10.0% - 10.0%	46.89	48.0 / 60.0	2,271
	Subtotal	58.61	0.00	0.00	5.86		46.89		**2,271**
All Zones	Vacant Total				62.48		139.71		369
	Redev Total				63.82		175.79		2,597
	Total	**544.92**	**12.87**	**35.50**	**126.30**		**315.50**		**2,966**

Capacity (units)	
Very Low Density Zones	102
Low Density Zones	592
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	2,271
Capacity in Pipeline	*268*
Total Capacity (Units)	**3,234**
Remaining Target (2018-2035)	0
Surplus/Deficit Capacity (Units)	**3,234**

Housing Capacity by Density Level (units)



Newcastle - Employment Growth and Commercial/Industrial Development Trends



Newcastle Jobs Growth Target: 2006-2035	853
2006 Jobs (PSRC)	1,736
2018 Jobs (PSRC)	2,627
Total Jobs Growth	**891**
Remaining 2035 Target	0

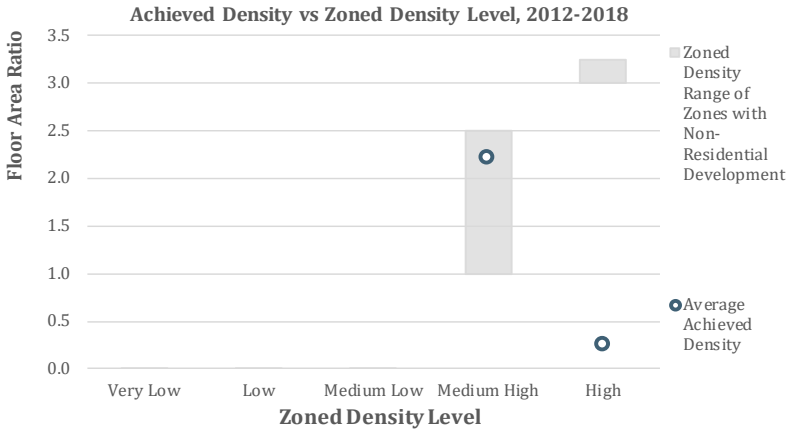
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
252.6%	3.51%	Met Target

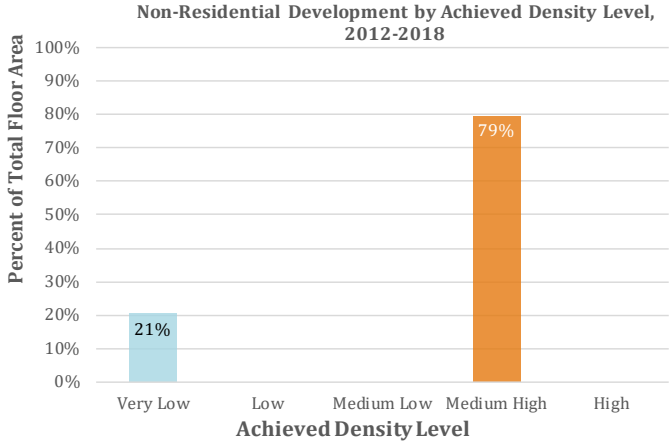
Since 2006, Newcastle has grown at 253% of the pace needed to achieve its 2035 jobs growth target of 853 units. During this period, the total number of jobs in Newcastle grew by roughly 51%. Newcastle has achieved its 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	40,769	90,451	2.2
High	3.0 & up FAR	95,013	23,330	0.2
	Total	**135,782**	**113,781**	**0.8**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	95,013	23,330	0.2
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	40,769	90,451	2.2
High	0	0	0.0
Total	**135,782**	**113,781**	**0.8**



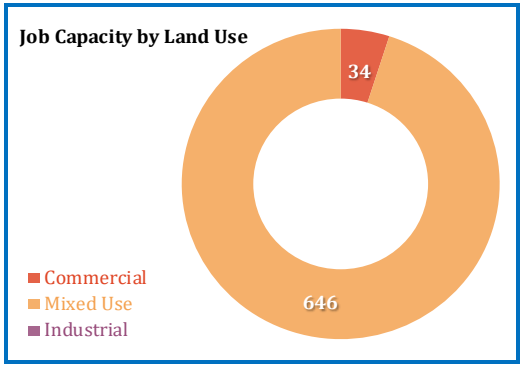


Newcastle - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	1.0	0.0	0.1	0.1	0.9	14%	0.8
Mixed Use	58.6	0.0	2.9	2.9	52.8	10%	46.9
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**59.6**	**0.0**	**3.0**	**57.4**	**1033.9**		**47.7**

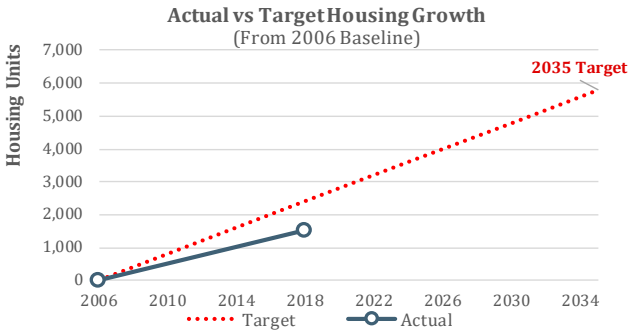
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	0.30	0.00	0.00	300	0
Redevelopable	0.03	0.30	0.00	0.01	300	34
Commercial Total	**0.03**	**0.30**	**0.00**	**0.01**	**300**	**34**
Mixed-Use						
Vacant	0.00	0.10 / 0.25	0.00	0.00	300	0
Redevelopable	2.04	0.10 / 0.25	0.43	0.19	300	646
Mixed Use Total	**2.04**	**0.10 / 0.25**	**0.43**	**0.19**	**300**	**646**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.03	0.30	0.69	0.01	300	34
Mixed Use	2.04	0.10 / 0.25	0.91	0.19	300	646
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*0*
City Total	**2.08**	**0.30**	**1.86**	**0.20**	**0 / 300**	**680**

Job Capacity by Assumed Density Level	#	%
Very Low Density	680	100%
Low Density	0	0%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**680**
Remaining Target (2018-2035)		0
Surplus/Deficit Capacity (jobs)		**680**



City of Shoreline

Housing Growth and Residential Development Trends



Shoreline Housing Growth Target: 2006-2035	5,800
2006 Estimated Housing Units	22,173
2018 Estimated Housing Units	23,702
Estimated Housing Growth	**1,529**
Remaining 2035 Target	4,271

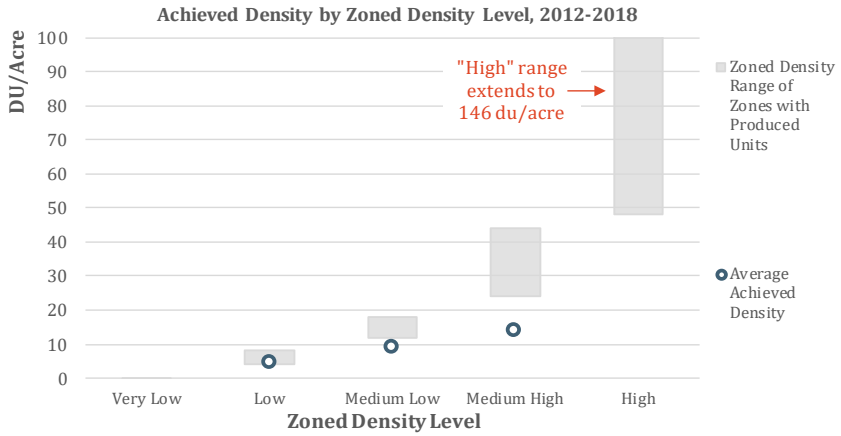
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
63.7%	0.56%	0.98%

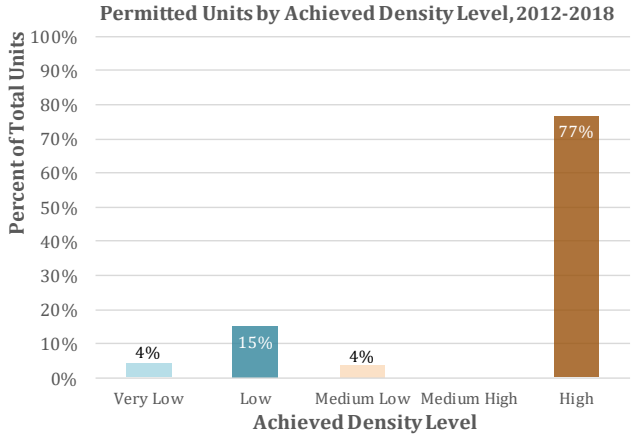
Since 2006, Shoreline has grown at 64% of the pace needed to achieve its 2035 housing growth target of 5,800 units. During this period, the total number of housing units in Shoreline grew by roughly 7%. At this current rate, Shoreline is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	94.1	10.6	0.0	0.0	83.5	360	**4.3**
Medium Low	10 - 24 du/acre	4.5	0.0	0.0	0.0	4.5	41	**9.1**
Medium High	24 - 48 du/acre	5.8	0.0	0.0	0.0	5.8	81	**14.0**
High	48 & up du/acre	15.1	0.0	0.0	0.0	15.1	1,639	**108.5**
	Total	**119.5**	**10.6**	**0.0**	**0.0**	**108.8**	**2,121**	**19.5**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	35.3	94
Low	54.2	319
Medium Low	5.8	81
Medium High	0.0	0
High	13.5	1,627
Total	**108.8**	**2,121**



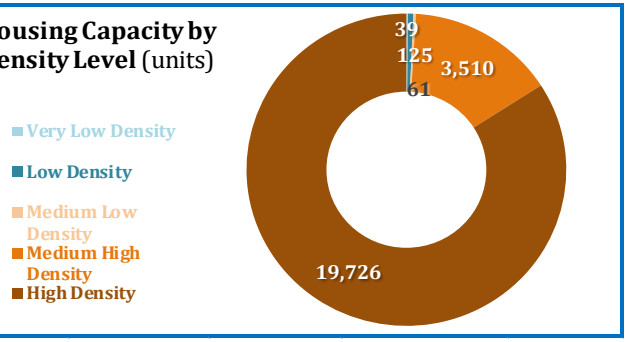


Shoreline - Residential Land Supply and Capacity

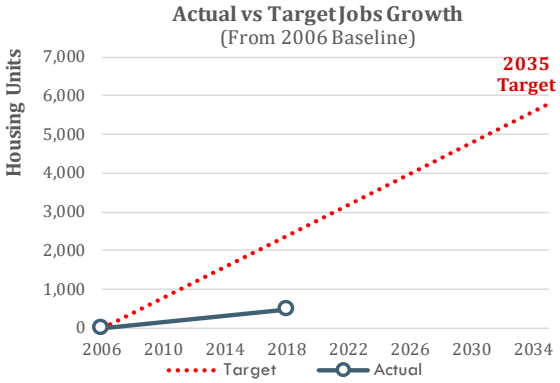
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 10.0%	0.76	3.7	1
	Redev Subtotal				0.00	0.0% - 10.0%	45.28	3.7	37
	Subtotal	58.48	7.37	0.00	0.00		46.04		**39**
Low Density	Vacant Subtotal				0.00	10.0% - 10.0%	24.11	5.1 / 9.6	125
	Redev Subtotal				0.00	10.0% - 10.0%	94.64	5.1 / 9.6	0
	Subtotal	142.68	10.74	0.00	0.00		118.74		**125**
Medium Low Density	Vacant Subtotal				0.00	10.0% - 20.0%	0.13	11.9 / 12.0	2
	Redev Subtotal				0.00	10.0% - 20.0%	10.22	11.9 / 12.0	59
	Subtotal	11.78	0.21	0.00	0.00		10.35		**61**
Medium High Density	Vacant Subtotal				0.00	20.0% - 30.0%	1.03	25.0 / 44.0	36
	Redev Subtotal				0.00	20.0% - 30.0%	98.77	25.0 / 44.0	3,474
	Subtotal	141.68	0.50	0.00	0.00		99.80		**3,510**
High Density	Vacant Subtotal				0.00	20.0% - 30.0%	22.06	102.8 / 150.4	2,916
	Redev Subtotal				0.00	20.0% - 30.0%	132.57	102.8 / 150.4	16,810
	Subtotal	203.39	0.02	0.00	0.00		154.63		**19,726**
All Zones	Vacant Total				0.00		48.08		3,080
	Redev Total				0.00		381.47		20,381
	Total	**558.01**	**18.84**	**0.00**	**0.00**		**429.55**		**23,461**

Capacity (units)	
Very Low Density Zones	39
Low Density Zones	125
Medium Low Density Zones	61
Medium High Density Zones	3,510
High Density Zones	19,726
Capacity in Pipeline	*2,129*
Total Capacity (Units)	**25,590**
Remaining Target (2018-2035)	4,271
Surplus/Deficit Capacity (Units)	**21,318**

Housing Capacity by Density Level (units)



Shoreline - Employment Growth and Commercial/Industrial Development Trends



Shoreline Jobs Growth Target: 2006-2035	5,800
2006 Jobs (PSRC)	17,411
2018 Jobs (PSRC)	17,898
Total Jobs Growth	**487**
Remaining 2035 Target	5,313

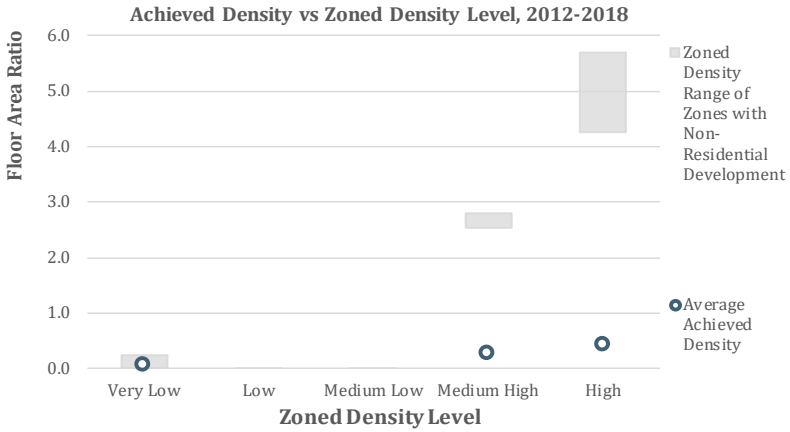
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
20.3%	0.23%	1.54%

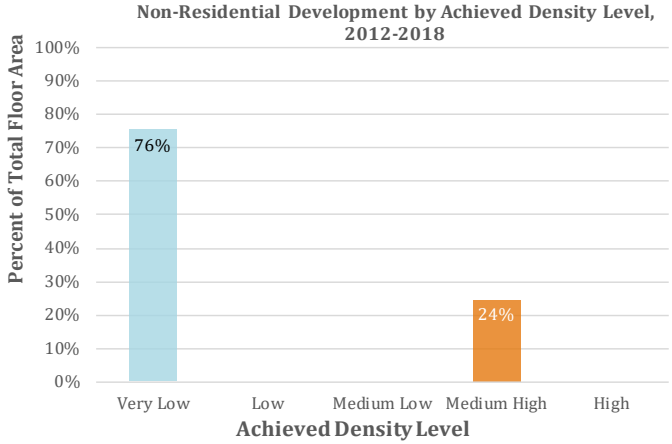
Since 2006, Shoreline has grown at 20% of the pace needed to achieve its 2035 jobs growth target of 5,800 units. During this period, the total number of jobs in Shoreline grew by roughly 3%. At this current rate, Shoreline is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 1.5% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	7,130,116	470,060	0.1
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	66,330	18,637	0.3
High	3.0 & up FAR	1,781,187	756,529	0.4
	Total	8,977,633	1,245,226	0.1

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	8,737,630	941,618	0.1
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	240,003	303,608	1.3
High	0	0	0.0
Total	8,977,633	1,245,226	0.1



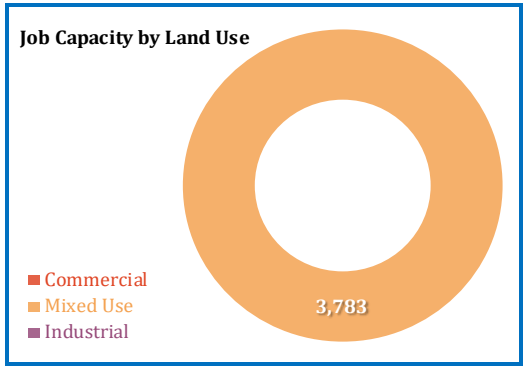


Shoreline - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Mixed Use	345.1	0.5	0.0	0.0	344.5	20% - 30%	254.4
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**345.1**	**0.5**	**0.0**	**0.0**	**344.5**		**254.4**

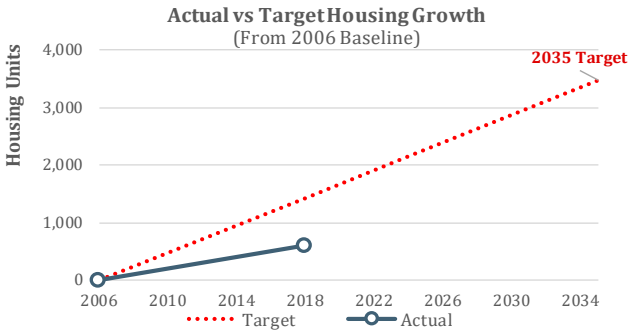
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Commercial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
Mixed-Use						
Vacant	1.01	0.10 / 0.50	0.00	0.42	500	835
Redevelopable	10.08	0.10 / 0.50	2.08	1.47	500	2,948
Mixed Use Total	**11.08**	**0.10 / 0.50**	**2.08**	**1.89**	**500**	**3,783**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.00	0.00	0.69	0.00	0	0
Mixed Use	11.08	0.10 / 0.50	0.91	1.89	500	3,783
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*170*
City Total	**11.08**	**0.50**	**1.86**	**1.89**	**0 / 500**	**3,953**

Job Capacity by Assumed Density Level	#	%
Very Low Density	2,939	78%
Low Density	0	0%
Medium Low Density	844	22%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*170*
Total Capacity (jobs)		**3,953**
Remaining Target (2018-2035)		5,313
Surplus/Deficit Capacity (jobs)		**-1,360**



City of Woodinville

Housing Growth and Residential Development Trends



Woodinville Housing Growth Target: 2006-2035	3,480
2006 Estimated Housing Units	4,550
2018 Estimated Housing Units	5,154
Estimated Housing Growth	**604**
Remaining 2035 Target	2,876

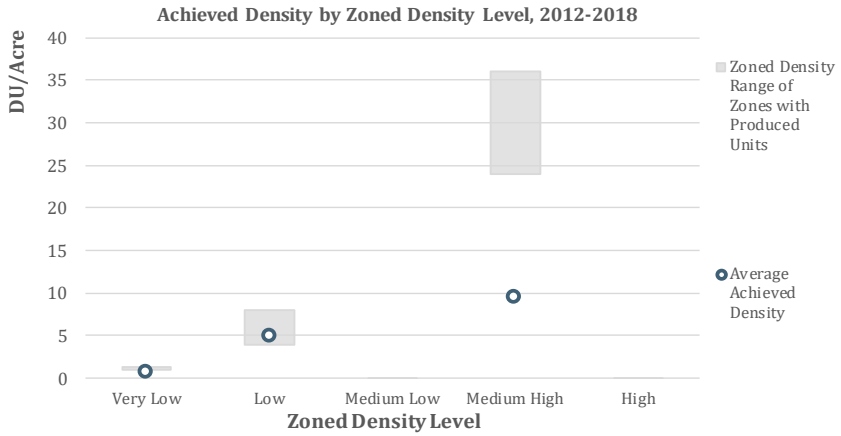
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
42.0%	1.04%	2.64%

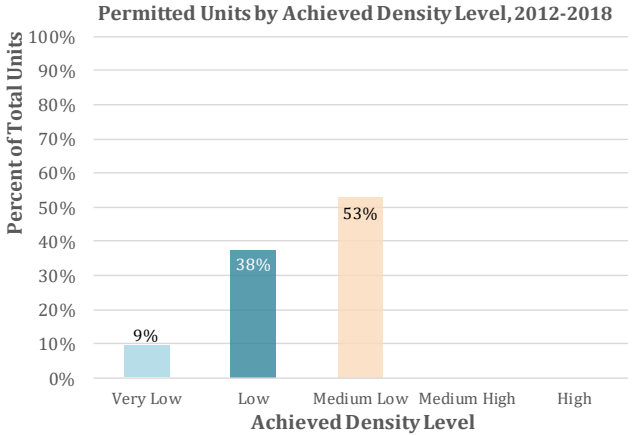
Since 2006, Woodinville has grown at 42% of the pace needed to achieve its 2035 housing growth target of 3,480 units. During this period, the total number of housing units in Woodinville grew by roughly 13%. At this current rate, Woodinville is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 2.6% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	57.6	1.1	0.0	0.1	56.3	40	**0.7**
Low	4 - 10 du/acre	35.2	0.0	0.0	0.0	35.2	171	**4.9**
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	28.3	2.9	0.0	0.2	25.3	237	**9.4**
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**121.1**	**4.0**	**0.0**	**0.3**	**116.7**	**448**	**3.8**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	61.5	42
Low	33.5	169
Medium Low	21.8	237
Medium High	0.0	0
High	0.0	0
Total	**116.7**	**448**



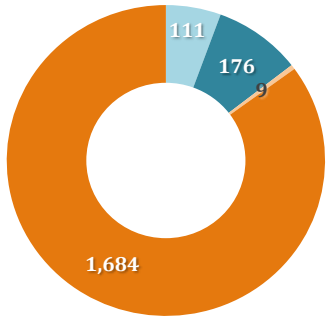


Woodinville - Residential Land Supply and Capacity

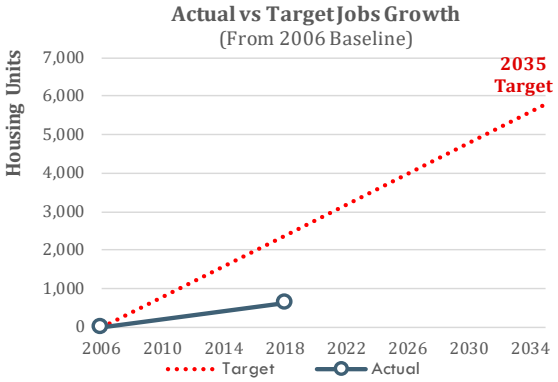
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				20.84	5.0% - 5.0%	111.14	0.7 / 1.2	91
	Redev Subtotal				28.62	5.0% - 5.0%	152.66	0.7 / 1.2	20
	Subtotal	538.85	65.66	143.44	49.46		263.80		**111**
Low Density	Vacant Subtotal				4.46	5.0% - 5.0%	23.81	5.0 / 8.0	122
	Redev Subtotal				3.77	5.0% - 5.0%	20.10	5.0 / 8.0	55
	Subtotal	123.94	65.62	10.05	8.23		43.91		**176**
Medium Low Density	Vacant Subtotal				0.13	5.0% - 5.0%	0.68	12.0 / 18.0	9
	Redev Subtotal				2.57	5.0% - 5.0%	13.70	12.0 / 18.0	0
	Subtotal	22.03	4.05	0.00	2.70		14.38		**9**
Medium High Density	Vacant Subtotal				4.51	1.0% - 80.0%	22.73	24.0 / 36.0	784
	Redev Subtotal				5.21	1.0% - 80.0%	25.42	24.0 / 36.0	901
	Subtotal	105.76	10.65	2.68	9.72		48.14		**1,684**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.72	100.0% - 100.0%	0.00	48.0	0
	Subtotal	4.78	0.00	0.00	0.72		0.00		**0**
All Zones	Vacant Total				29.94		158.36		1,006
	Redev Total				40.89		211.88		975
	Total	**795.36**	**145.98**	**156.17**	**70.83**		**370.24**		**1,981**

Capacity (units)	
Very Low Density Zones	111
Low Density Zones	176
Medium Low Density Zones	9
Medium High Density Zones	1,684
High Density Zones	0
Capacity in Pipeline	*1,724*
Total Capacity (Units)	**3,705**
Remaining Target (2018-2035)	2,876
Surplus/Deficit Capacity (Units)	**829**

Housing Capacity by Density Level (units)



Woodinville - Employment Growth and Commercial/Industrial Development Trends



Woodinville Jobs Growth Target: 2006-2035	5,800
2006 Jobs (PSRC)	11,876
2018 Jobs (PSRC)	12,519
Total Jobs Growth	**643**
Remaining 2035 Target	5,157

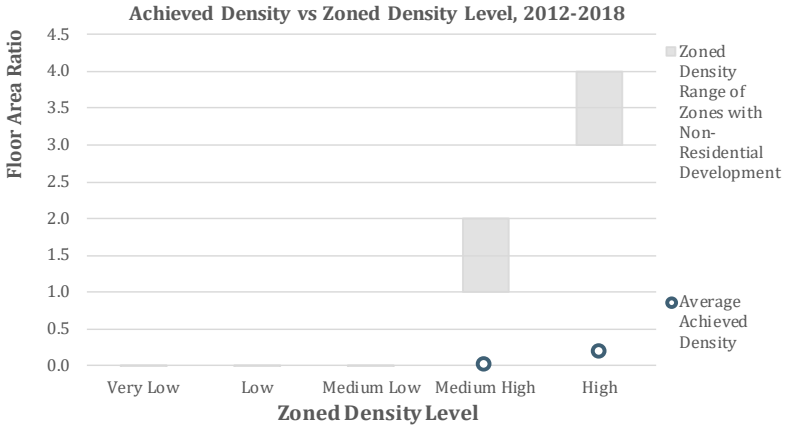
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
26.8%	0.44%	2.05%

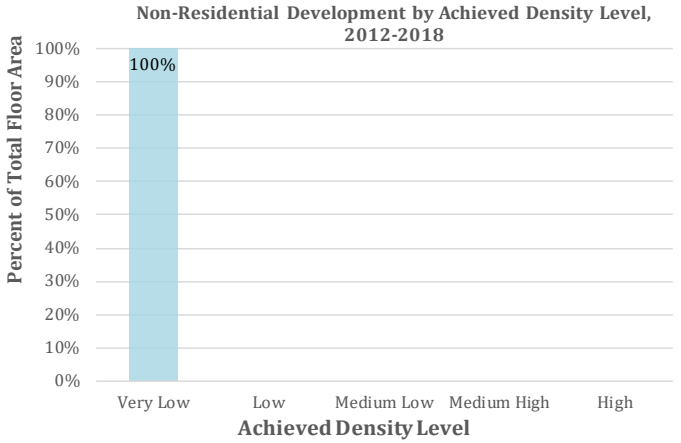
Since 2006, Woodinville has grown at 27% of the pace needed to achieve its 2035 jobs growth target of 5,800 units. During this period, the total number of jobs in Woodinville grew by roughly 5%. At this current rate, Woodinville is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 2.1% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	115,688	1,707	0.0
High	3.0 & up FAR	108,260	20,536	0.2
	Total	223,948	22,243	0.1

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	223,948	22,243	0.1
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	223,948	22,243	0.1



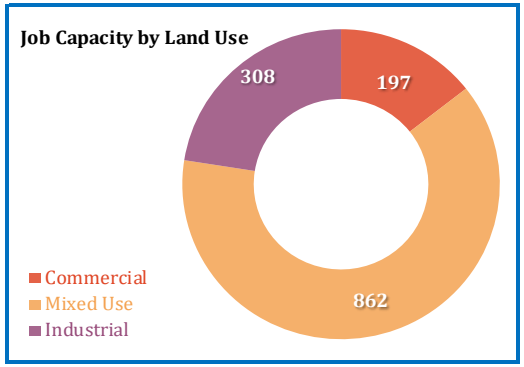


Woodinville - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	53.8	36.3	1.7	0.0	15.7	0% - 50%	12.0
Mixed Use	67.7	10.7	5.7	0.0	51.3	1% - 5%	50.6
Industrial	80.0	24.2	5.6	0.0	50.1	15%	41.8
Non-Res Land Total	**201.4**	**71.2**	**13.0**	**0.0**	**117.2**		**104.4**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.46	0.20 / 1.00	0.00	0.11	450 / 600	190
Redevelopable	0.07	0.20 / 1.00	0.01	0.00	450 / 600	7
Commercial Total	**0.52**	**0.20 / 1.00**	**0.01**	**0.12**	**450 / 600**	**197**
Mixed-Use						
Vacant	1.04	0.22 / 0.40	0.00	0.25	300	840
Redevelopable	1.16	0.22 / 0.40	0.26	0.01	300	21
Mixed Use Total	**2.20**	**0.22 / 0.40**	**0.26**	**0.26**	**300**	**862**
Industrial						
Vacant	1.25	0.17	0.00	0.21	700	303
Redevelopable	0.57	0.17	0.09	0.00	700	4
Industrial Total	**1.82**	**0.17**	**0.09**	**0.22**	**700**	**308**
City Total						
Commercial	0.52	0.20 / 1.00	0.69	0.12	450 / 600	197
Mixed Use	2.20	0.22 / 0.40	0.91	0.26	300	862
Industrial	1.82	0.17	0.26	0.22	700	308
Job Capacity in Pipeline						*3,006*
City Total	**4.55**	**0.17 / 1.00**	**1.86**	**0.59**	**300 / 700**	**4,373**

Job Capacity by Assumed Density Level	#	%
Very Low Density	1,176	86%
Low Density	190	14%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*3,006*
Total Capacity (jobs)		**4,373**
Remaining Target (2018-2035)		5,157
Surplus/Deficit Capacity (jobs)		**-784**

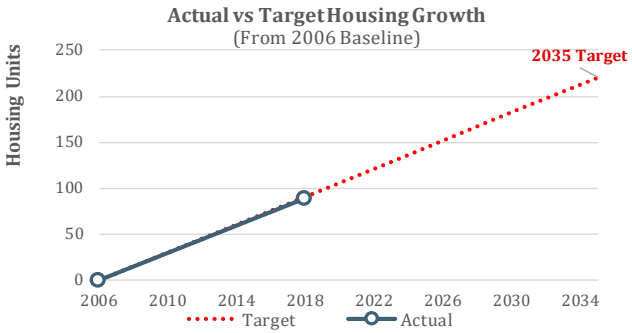


Cities and Towns

City of Algona
City of Beaux Arts
City of Black Diamond
City of Carnation
City of Clyde Hill
City of Covington
City of Duvall
City of Enumclaw
Town of Hunts Point
City of Maple Valley
City of Medina
City of Milton
City of Normandy Park
City of North Bend
City of Pacific
City of Sammamish
Town of Skykomish
City of Snoqualmie
Town of Yarrow Point

City of Algona

Housing Growth and Residential Development Trends



Algona Housing Growth Target: 2006-2035	220
2006 Estimated Housing Units	960
2018 Estimated Housing Units	1,049
Estimated Housing Growth	**89**
Remaining 2035 Target	132

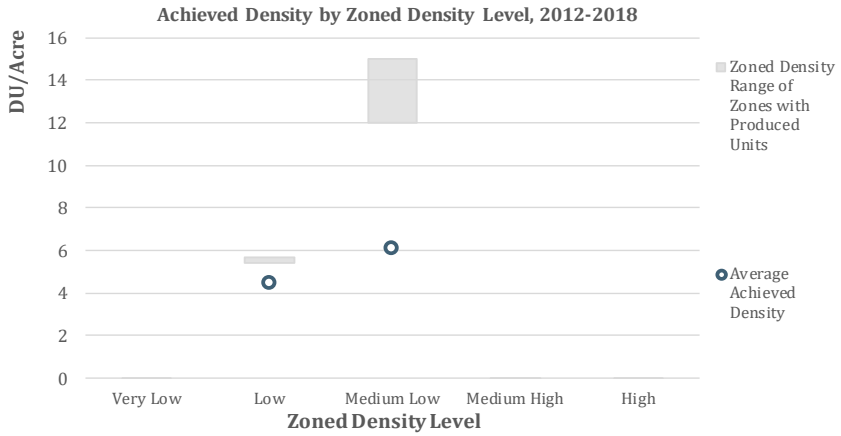
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
97.3%	0.74%	0.70%

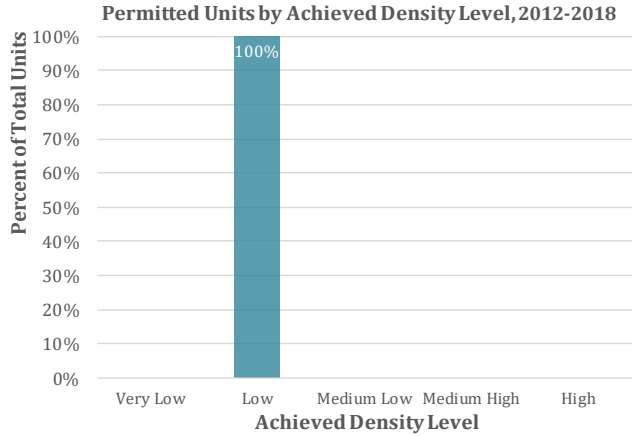
Since 2006, Algona has grown at 97% of the pace needed to achieve its 2035 housing growth target of 220 units. During this period, the total number of housing units in Algona grew by roughly 9%. At this current rate, Algona is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.7% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	2.9	0.0	0.0	0.0	2.9	13	**4.4**
Medium Low	10 - 24 du/acre	4.0	0.0	0.0	0.0	4.0	24	**6.1**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**6.9**	**0.0**	**0.0**	**0.0**	**6.9**	**37**	**5.4**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	0.0	0
Low	6.9	37
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	**6.9**	**37**



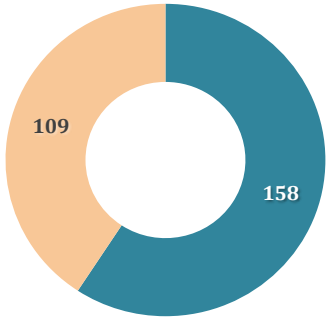


Algona - Residential Land Supply and Capacity

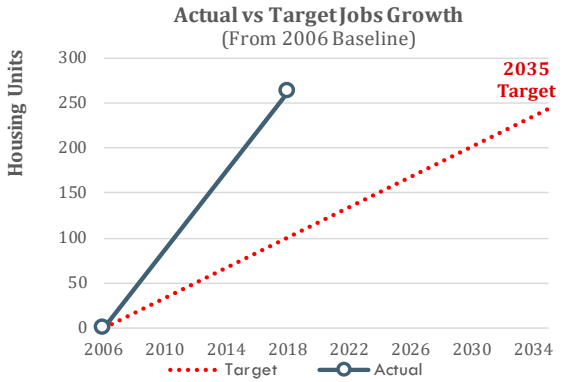
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Low Density	Vacant Subtotal				2.66	9.0% - 9.0%	9.44	4.1	38
	Redev Subtotal				9.98	9.0% - 9.0%	35.43	4.1	119
	Subtotal	63.29	0.05	0.00	12.64		44.87		**158**
Medium Low Density	Vacant Subtotal				1.96	9.0% - 35.0%	4.80	12.0 / 15.0	61
	Redev Subtotal				1.22	9.0% - 35.0%	4.07	12.0 / 15.0	48
	Subtotal	16.68	0.11	0.59	3.18		8.87		**109**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				4.62		14.24		99
	Redev Total				11.20		39.50		167
	Total	**79.97**	**0.16**	**0.59**	**15.82**		**53.74**		**266**

Capacity (units)	
Very Low Density Zones	0
Low Density Zones	158
Medium Low Density Zones	109
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**266**
Remaining Target (2018-2035)	132
Surplus/Deficit Capacity (Units)	**135**

Housing Capacity by Density Level (units)



Algona - Employment Growth and Commercial/Industrial Development Trends



Algona Jobs Growth Target: 2006-2035	244
2006 Jobs (PSRC)	1,879
2018 Jobs (PSRC)	2,142
Total Jobs Growth	**263**
Remaining 2035 Target	0

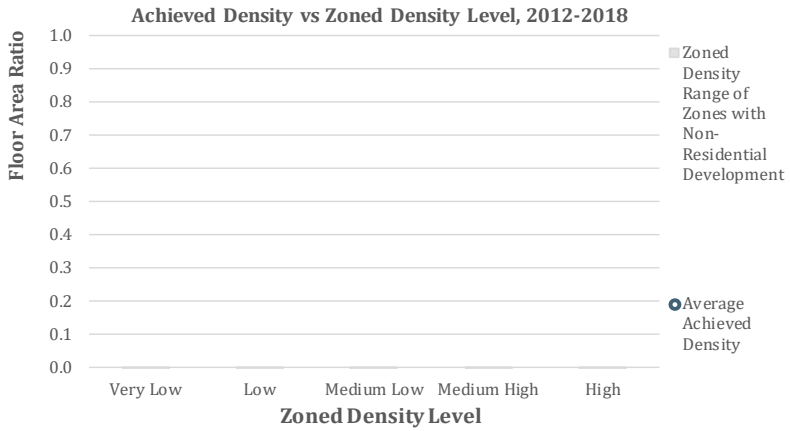
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
260.9%	1.10%	Met Target

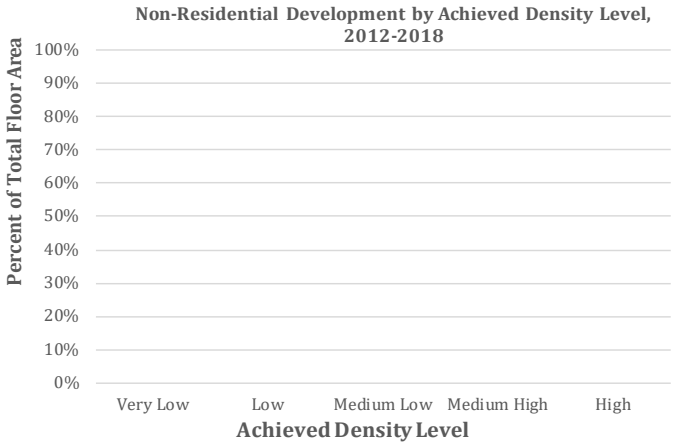
Since 2006, Algona has grown at 261% of the pace needed to achieve its 2035 jobs growth target of 244 units. During this period, the total number of jobs in Algona grew by roughly 14%. Algona has achieved its 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	0	0	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	0.0
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	0	0	0.0



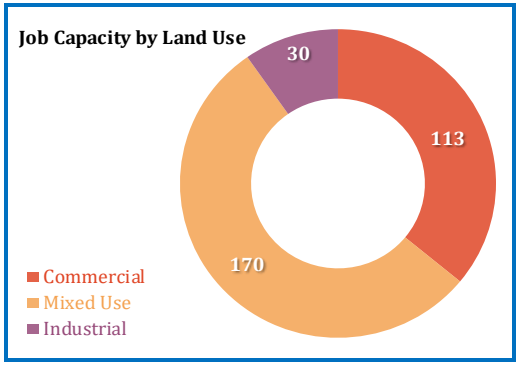


Algona - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	32.1	13.8	1.8	1.8	14.6	35%	8.2
Mixed Use	9.3	0.0	0.9	0.9	7.4	35%	4.2
Industrial	6.6	3.2	0.3	0.3	2.7	43%	1.3
Non-Res Land Total	**48.1**	**17.1**	**3.1**	**3.1**	**24.8**		**13.7**

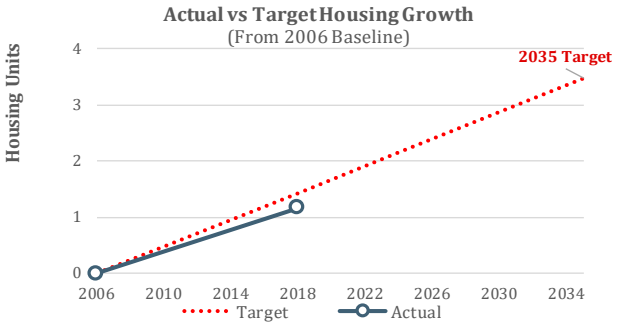
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.33	0.30	0.00	0.10	950	105
Redevelopable	0.03	0.30	0.00	0.01	950	8
Commercial Total	**0.36**	**0.30**	**0.00**	**0.11**	**950**	**113**
Mixed-Use						
Vacant	0.16	0.35	0.00	0.06	375	152
Redevelopable	0.02	0.35	0.00	0.01	375	18
Mixed Use Total	**0.18**	**0.35**	**0.00**	**0.06**	**375**	**170**
Industrial						
Vacant	0.05	0.50	0.00	0.03	900	30
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.05**	**0.50**	**0.00**	**0.03**	**900**	**30**
City Total						
Commercial	0.36	0.30	0.69	0.11	950	113
Mixed Use	0.18	0.35	0.91	0.06	375	170
Industrial	0.05	0.50	0.26	0.03	900	30
Job Capacity in Pipeline						*0*
City Total	**0.60**	**0.50**	**1.86**	**0.20**	**0 / 950**	**313**

Job Capacity by Assumed Density Level	#	%
Very Low Density	113	36%
Low Density	170	54%
Medium Low Density	30	10%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**313**
Remaining Target (2018-2035)		0
Surplus/Deficit Capacity (jobs)		**313**



City of Beaux Arts

Housing Growth and Residential Development Trends



Beaux Arts Village Housing Growth Target: 2006-2035	3
2006 Estimated Housing Units	119
2018 Estimated Housing Units	120
Estimated Housing Growth	**1**
Remaining 2035 Target	2

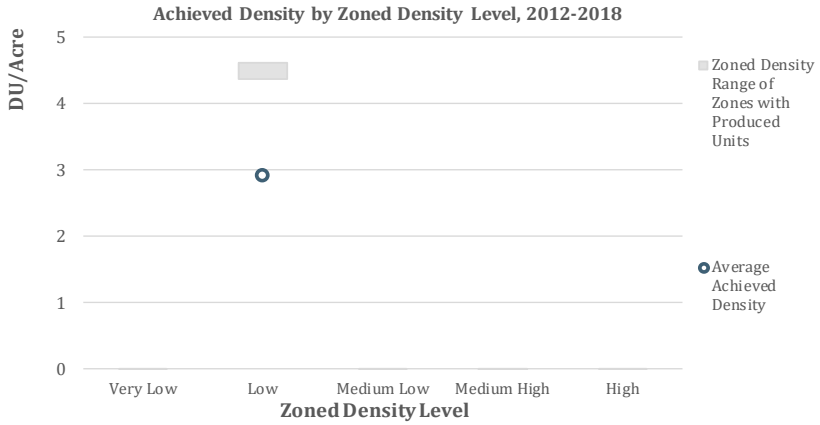
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
81.5%	0.08%	0.11%

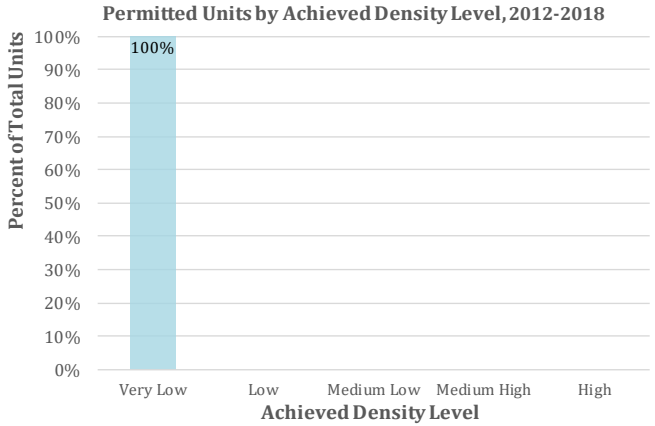
Since 2006, Beaux Arts Village has grown at 82% of the pace needed to achieve its 2035 housing growth target of 3 units. During this period, the total number of housing units in Beaux Arts Village grew by roughly 1%. At this current rate, Beaux Arts Village is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	1.0	0.0	0.0	0.0	1.0	3	2.9
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	1.0	0.0	0.0	0.0	1.0	3	2.9

Achieved Density Level	Net Area (acres)	Total Units
Very Low	1.0	3
Low	0.0	0
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	1.0	3



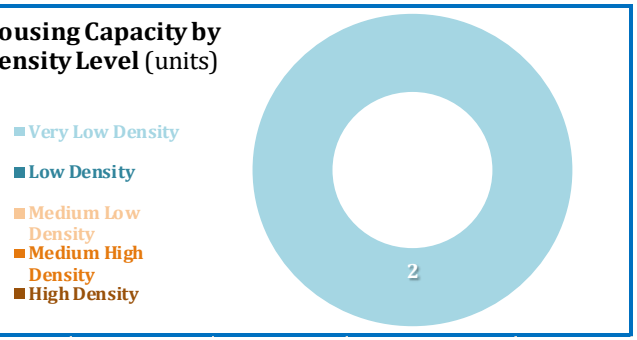


Beaux Arts - Residential Land Supply and Capacity

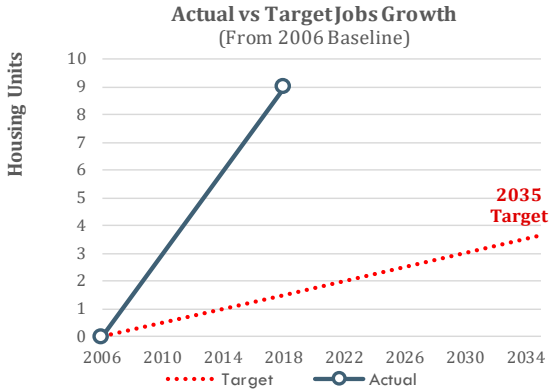
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	10.0% - 10.0%	0.31	2.9	1
	Redev Subtotal				0.00	10.0% - 10.0%	0.66	2.9	1
	Subtotal	6.15	1.64	0.00	0.00		0.97		**2**
Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				0.00		0.31		1
	Redev Total				0.00		0.66		1
	Total	**6.15**	**1.64**	**0.00**	**0.00**		**0.97**		**2**

Capacity (units)	
Very Low Density Zones	2
Low Density Zones	0
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**2**
Remaining Target (2018-2035)	2
Surplus/Deficit Capacity (Units)	**0**

Housing Capacity by Density Level (units)



Beaux Arts - Employment Growth and Commercial/Industrial Development Trends



Beaux Arts Village Jobs Growth Target: 2006-2035	4
2006 Jobs (PSRC)	13
2018 Jobs (PSRC)	22
Total Jobs Growth	**9**
Remaining 2035 Target	**0**

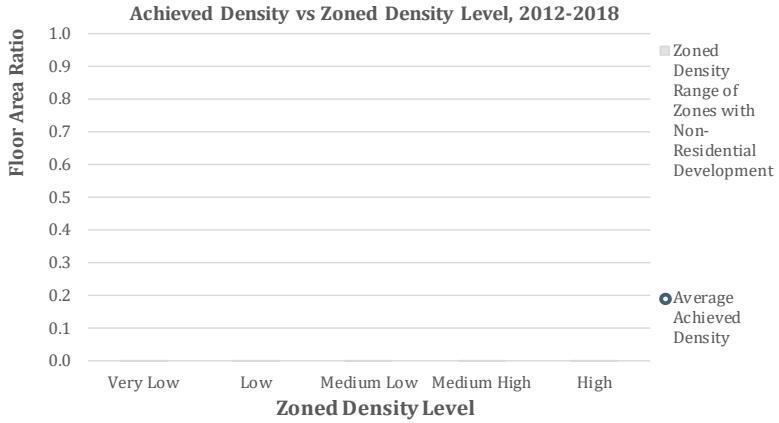
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
595.2%	**4.48%**	**Met Target**

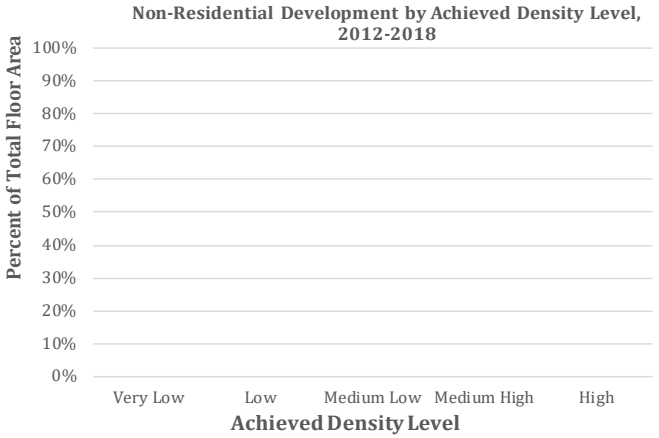
Since 2006, Beaux Arts Village has grown at 595% of the pace needed to achieve its 2035 jobs growth target of 4 units. During this period, the total number of jobs in Beaux Arts Village grew by roughly 69%. Beaux Arts Village has achieved its 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	**0**	**0**	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**0**	**0**	**0.0**



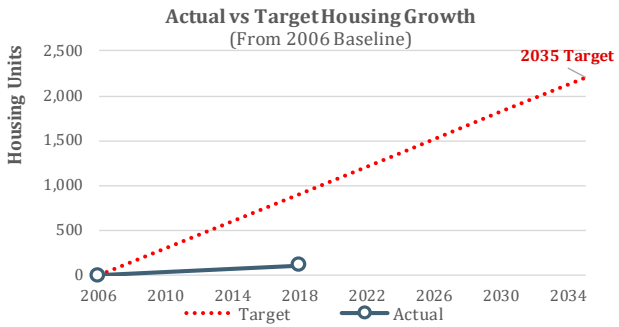


Beaux Arts - Commercial/Industrial Land Supply and Job Capacity

(no job capacity in Beaux Arts)

City of Black Diamond

Housing Growth and Residential Development Trends



Black Diamond Housing Growth Target: 2006-2035	2,204
2006 Estimated Housing Units	1,623
2018 Estimated Housing Units	1,735
Estimated Housing Growth	**112**
Remaining 2035 Target	2,092

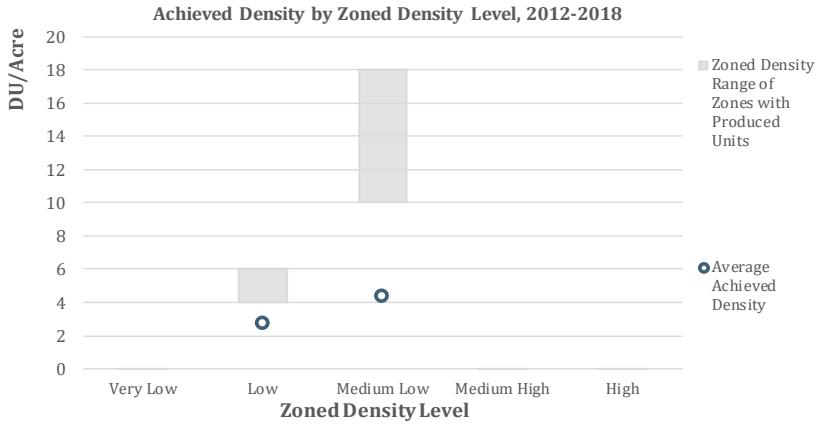
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
12.2%	0.56%	4.77%

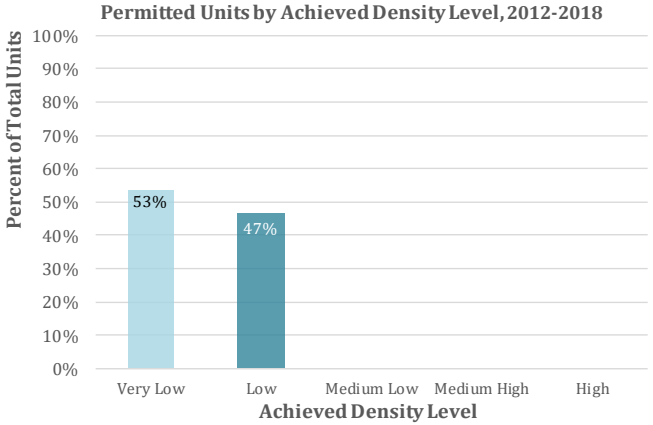
Since 2006, Black Diamond has grown at 12% of the pace needed to achieve its 2035 housing growth target of 2,204 units. During this period, the total number of housing units in Black Diamond grew by roughly 7%. At this current rate, Black Diamond is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 4.8% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	23.6	1.8	0.2	0.4	21.3	57	**2.7**
Medium Low	10 - 24 du/acre	16.1	0.0	1.7	7.2	7.1	31	**4.4**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**39.7**	**1.8**	**1.9**	**7.6**	**28.4**	**88**	**3.1**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	19.0	47
Low	9.4	41
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	**28.4**	**88**



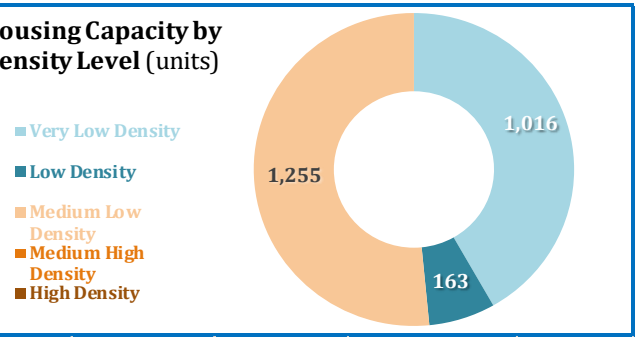


Black Diamond - Residential Land Supply and Capacity

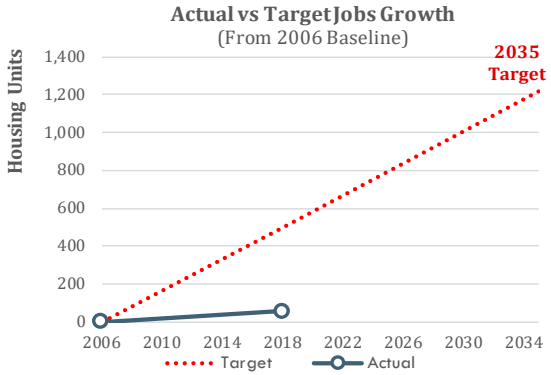
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				67.28	10.0% - 50.0%	235.73	2.5	577
	Redev Subtotal				71.55	10.0% - 50.0%	250.78	2.5	439
	Subtotal	789.70	60.18	29.14	138.82		486.51		**1,016**
Low Density	Vacant Subtotal				7.00	20.0% - 20.0%	21.00	4.5	94
	Redev Subtotal				6.86	20.0% - 20.0%	20.58	4.5	70
	Subtotal	84.53	5.23	10.00	13.86		41.58		**163**
Medium Low Density	Vacant Subtotal				8.73	25.0% - 50.0%	54.59	10.0 / 12.0	637
	Redev Subtotal				9.48	25.0% - 50.0%	57.57	10.0 / 12.0	618
	Subtotal	191.07	8.98	0.00	18.21		112.17		**1,255**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				83.01		311.33		1,308
	Redev Total				87.89		328.93		1,126
	Total	**1,065.29**	**74.38**	**39.14**	**170.89**		**640.26**		**2,434**

Capacity (units)	
Very Low Density Zones	1,016
Low Density Zones	163
Medium Low Density Zones	1,255
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*6,000*
Total Capacity (Units)	**8,434**
Remaining Target (2018-2035)	2,092
Surplus/Deficit Capacity (Units)	**6,342**

Housing Capacity by Density Level (units)



Black Diamond - Employment Growth and Commercial/Industrial Development Trends



Black Diamond Jobs Growth Target: 2006-2035	1,218
2006 Jobs (PSRC)	458
2018 Jobs (PSRC)	515
Total Jobs Growth	**57**
Remaining 2035 Target	**1,161**

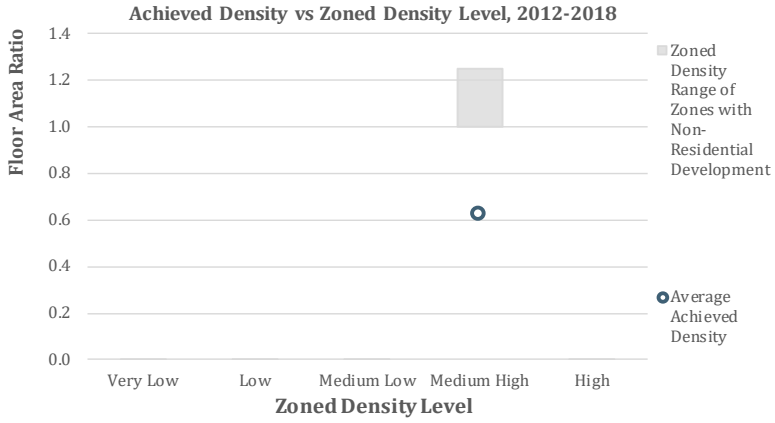
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
11.3%	**0.98%**	**7.22%**

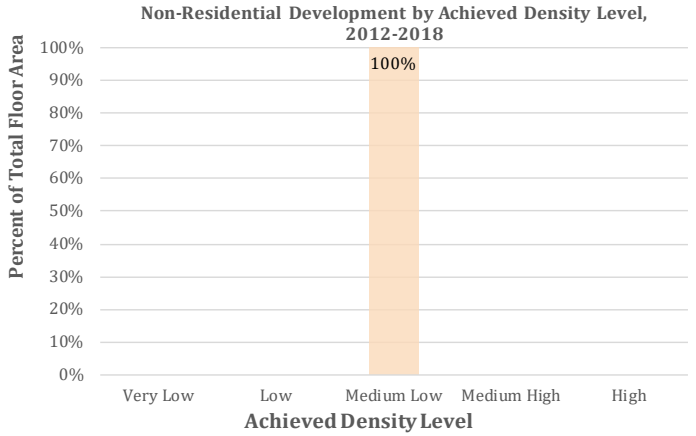
Since 2006, Black Diamond has grown at 11% of the pace needed to achieve its 2035 jobs growth target of 1,218 units. During this period, the total number of jobs in Black Diamond grew by roughly 12%. At this current rate, Black Diamond is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 7.2% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	84,071	52,231	**0.6**
High	3.0 & up FAR	0	0	
	Total	**84,071**	**52,231**	**0.6**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	0	0	**0.0**
Medium Low	84,071	52,231	**0.6**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**84,071**	**52,231**	**0.6**





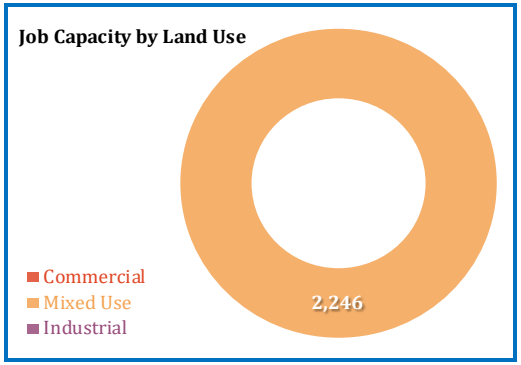
Black Diamond - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	2.4	2.4	0.0	0.0	0.0	0%	0.0
Mixed Use	156.3	6.2	7.5	7.5	135.1	25% - 50%	90.5
Industrial	70.7	0.0	3.5	3.5	63.6	70%	14.1
Non-Res Land Total	**229.4**	**8.6**	**11.0**	**22.3**	**401.1**		**104.6**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial*						
Vacant	1.69	0.00	0.00	0.00	1,000	0
Redevelopable	0.27	0.00	0.00	0.00	1,000	0
Commercial Total	**1.96**	**0.00**	**0.00**	**0.00**	**1,000**	**0**
Mixed-Use						
Vacant	2.07	0.20 / 0.40	0.00	0.79	600 / 860	1,310
Redevelopable	1.87	0.20 / 0.40	0.13	0.56	600 / 860	936
Mixed Use Total	**3.94**	**0.20 / 0.40**	**0.13**	**1.35**	**600 / 860**	**2,246**
Industrial						
Vacant	0.62	0.00	0.00	0.00	1,000	0
Redevelopable	0.00	0.00	0.00	0.00	1,000	0
Industrial Total	**0.62**	**0.00**	**0.00**	**0.00**	**1,000**	**0**
City Total						
Commercial	1.96	0.00	0.69	0.00	1,000	0
Mixed Use	3.94	0.20 / 0.40	0.91	1.35	600 / 860	2,246
Industrial	0.62	0.00	0.26	0.00	1,000	0
Job Capacity in Pipeline						*942*
City Total	**6.52**	**0.40**	**1.86**	**1.35**	**600 / 1000**	**3,188**

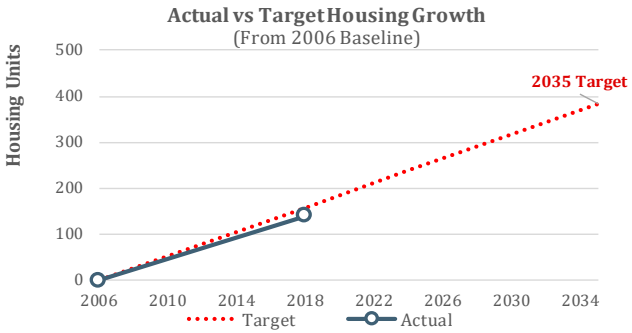
*Certain zones grouped as commercial allow for industrial use.

Job Capacity by Assumed Density Level	#	%
Very Low Density	67	3%
Low Density	2,179	97%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*942*
Total Capacity (jobs)		**3,188**
Remaining Target (2018-2035)		1,161
Surplus/Deficit Capacity (jobs)		**2,027**



City of Carnation

Housing Growth and Residential Development Trends



Carnation Housing Growth Target: 2006-2035	383
2006 Estimated Housing Units	739
2018 Estimated Housing Units	880
Estimated Housing Growth	**141**
Remaining 2035 Target	242

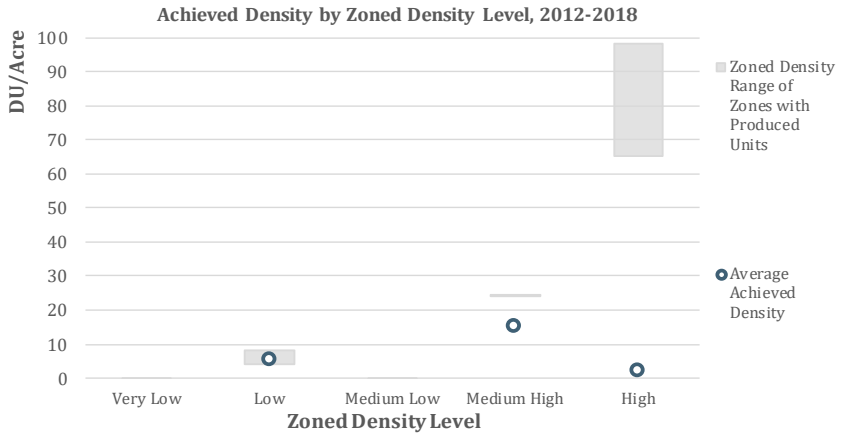
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
88.7%	1.46%	1.44%

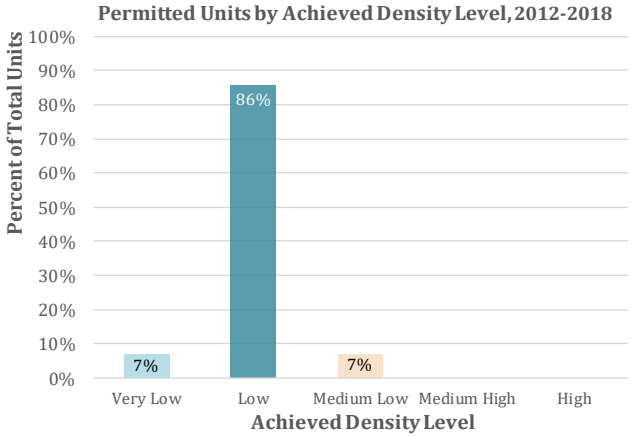
Since 2006, Carnation has grown at 89% of the pace needed to achieve its 2035 housing growth target of 383 units. During this period, the total number of housing units in Carnation grew by roughly 19%. At this current rate, Carnation is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.4% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	29.7	0.1	0.0	0.0	29.6	156	**5.3**
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.9	0.0	0.0	0.0	0.9	14	**15.0**
High	48 & up du/acre	4.3	3.7	0.0	0.0	0.5	1	**1.9**
	Total	**34.9**	**3.9**	**0.0**	**0.0**	**31.0**	**171**	**5.5**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	3.4	12
Low	26.9	147
Medium Low	0.7	12
Medium High	0.0	0
High	0.0	0
Total	**31.0**	**171**



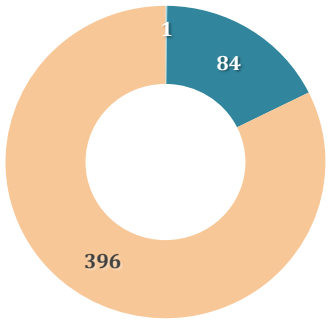


Carnation - Residential Land Supply and Capacity

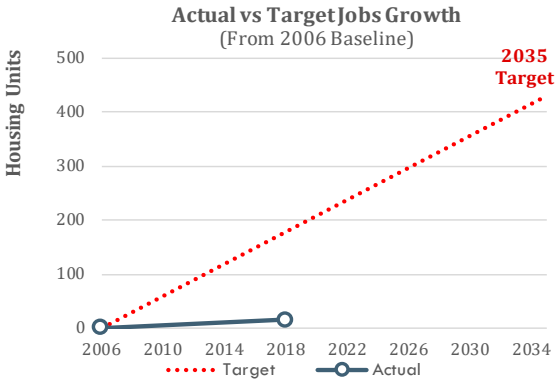
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	3.9	0
	Redev Subtotal				1.39	0.0% - 0.0%	3.23	3.9	1
	Subtotal	98.76	87.36	6.78	1.39		3.23		**1**
Low Density	Vacant Subtotal				0.90	0.0% - 0.0%	2.10	5.2 / 9.7	13
	Redev Subtotal				4.21	0.0% - 0.0%	11.39	5.2 / 9.7	72
	Subtotal	38.77	20.03	0.23	5.11		13.49		**84**
Medium Low Density	Vacant Subtotal				0.84	0.0% - 0.0%	2.96	12.0 / 17.0	49
	Redev Subtotal				7.87	0.0% - 0.0%	26.13	12.0 / 17.0	347
	Subtotal	30.25	13.55	0.00	8.71		29.09		**396**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				1.74		5.06		62
	Redev Total				13.47		40.75		420
	Total	**167.78**	**120.95**	**7.01**	**15.20**		**45.82**		**481**

Capacity (units)	
Very Low Density Zones	1
Low Density Zones	84
Medium Low Density Zones	396
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*223*
Total Capacity (Units)	**704**
Remaining Target (2018-2035)	242
Surplus/Deficit Capacity (Units)	**462**

Housing Capacity by Density Level (units)



Carnation - Employment Growth and Commercial/Industrial Development Trends



Carnation Jobs Growth Target: 2006-2035	429
2006 Jobs (PSRC)	871
2018 Jobs (PSRC)	886
Total Jobs Growth	**15**
Remaining 2035 Target	**414**

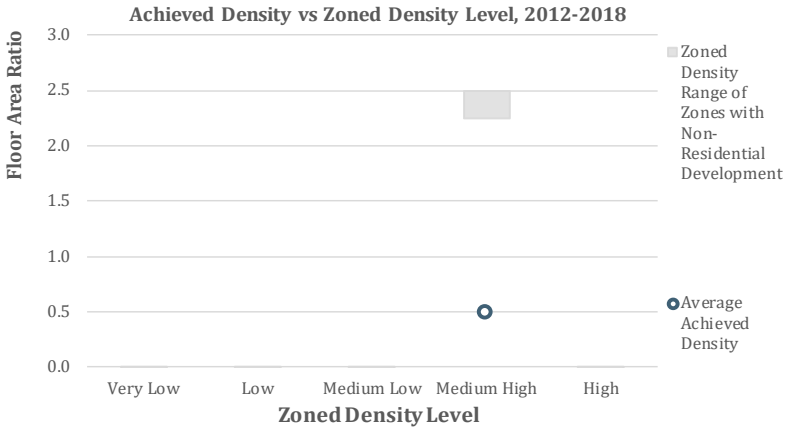
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
8.4%	**0.14%**	**2.28%**

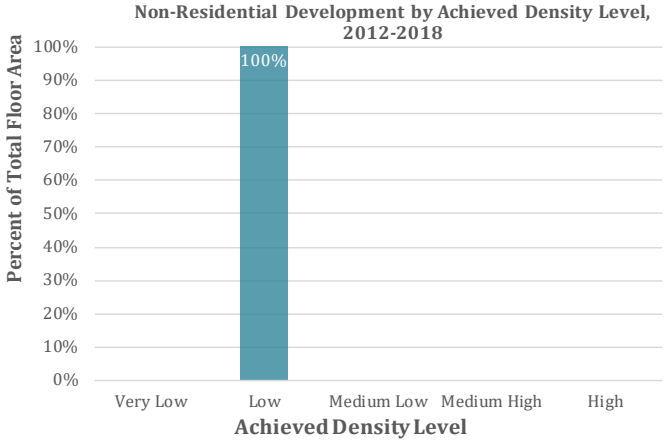
Since 2006, Carnation has grown at 8% of the pace needed to achieve its 2035 jobs growth target of 429 units. During this period, the total number of jobs in Carnation grew by roughly 2%. At this current rate, Carnation is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 2.3% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	2,387	1,152	**0.5**
High	3.0 & up FAR	0	0	
	Total	**2,387**	**1,152**	**0.5**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	2,387	1,152	**0.5**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**2,387**	**1,152**	**0.5**



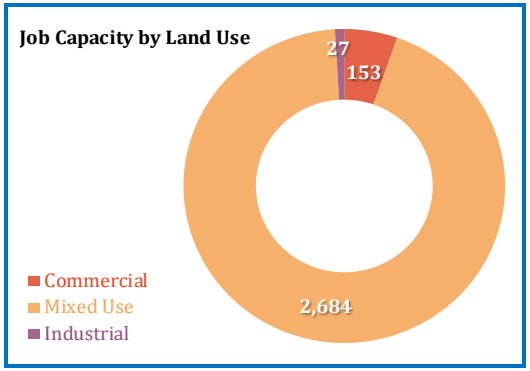


Carnation - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	0.6	0.0	0.1	0.1	0.5	0%	0.5
Mixed Use	73.3	61.6	1.4	1.2	9.1	0%	9.1
Industrial	17.9	16.6	0.2	0.1	1.0	0%	1.0
Non-Res Land Total	**91.8**	**78.2**	**1.6**	**1.4**	**10.6**		**10.6**

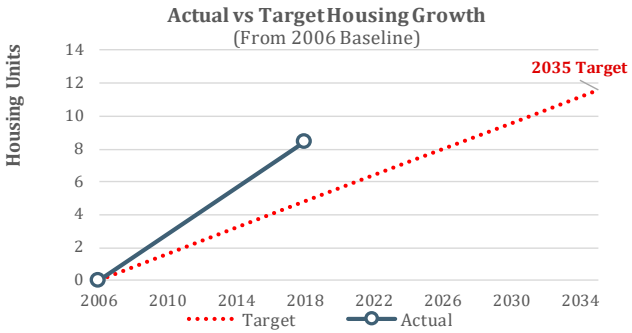
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	2.25	0.00	0.00	300	0
Redevelopable	0.02	2.25	0.00	0.05	300	153
Commercial Total	**0.02**	**2.25**	**0.00**	**0.05**	**300**	**153**
Mixed-Use						
Vacant	0.13	1.50 / 3.00	0.00	0.33	300 / 1000	883
Redevelopable	0.27	1.50 / 3.00	0.02	0.67	300 / 1000	1801
Mixed Use Total	**0.40**	**1.50 / 3.00**	**0.02**	**1.00**	**300 / 1000**	**2,684**
Industrial						
Vacant	0.00	0.48	0.00	0.00	800	0
Redevelopable	0.04	0.48	0.00	0.02	800	27
Industrial Total	**0.04**	**0.48**	**0.00**	**0.02**	**800**	**27**
City Total						
Commercial	0.02	2.25	0.69	0.05	300	153
Mixed Use	0.40	1.50 / 3.00	0.91	1.00	300 / 1000	2,684
Industrial	0.04	0.48	0.26	0.02	800	27
Job Capacity in Pipeline						*0*
City Total	**0.46**	**0.48 / 3.00**	**1.86**	**1.07**	**300 / 1000**	**2,864**

Job Capacity by Assumed Density Level	#	%
Very Low Density	0	0%
Low Density	27	1%
Medium Low Density	0	0%
Medium High Density	2,090	73%
High Density	747	26%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**2,864**
Remaining Target (2018-2035)		414
Surplus/Deficit Capacity (jobs)		**2,450**



City of Clyde Hill

Housing Growth and Residential Development Trends



Clyde Hill Housing Growth Target: 2006-2035	12
2006 Estimated Housing Units	1,083
2018 Estimated Housing Units	1,091
Estimated Housing Growth	**8**
Remaining 2035 Target	3

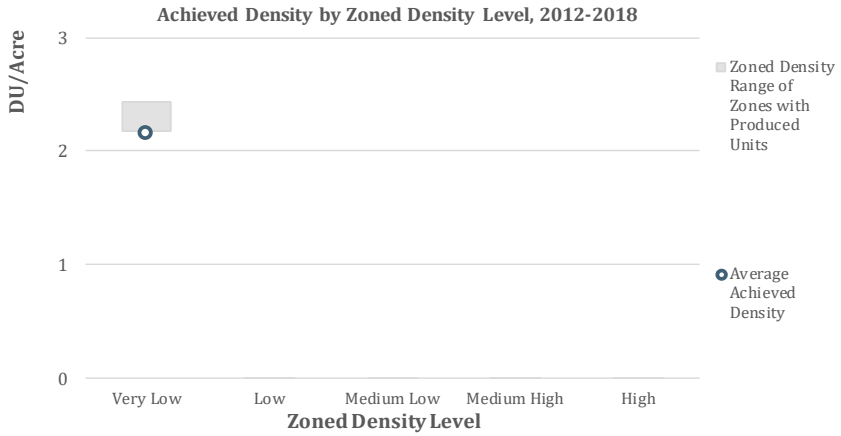
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
175.6%	0.06%	0.02%

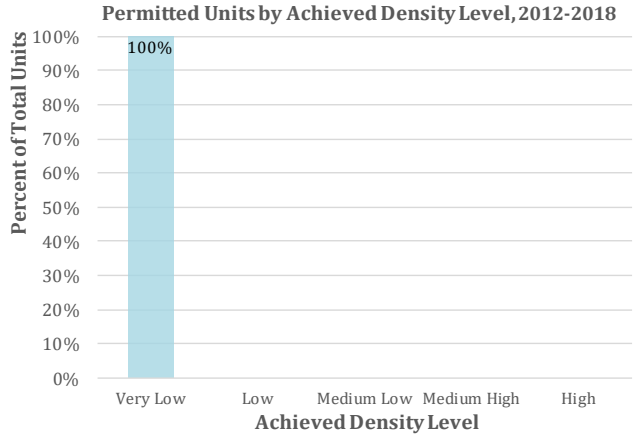
Since 2006, Clyde Hill has grown at 176% of the pace needed to achieve its 2035 housing growth target of 12 units. During this period, the total number of housing units in Clyde Hill grew by roughly 1%. At this current rate, Clyde Hill is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	2.8	0.0	0.0	0.0	2.8	6	2.2
Low	4 - 10 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	2.8	0.0	0.0	0.0	2.8	6	2.2

Achieved Density Level	Net Area (acres)	Total Units
Very Low	2.8	6
Low	0.0	0
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	2.8	6



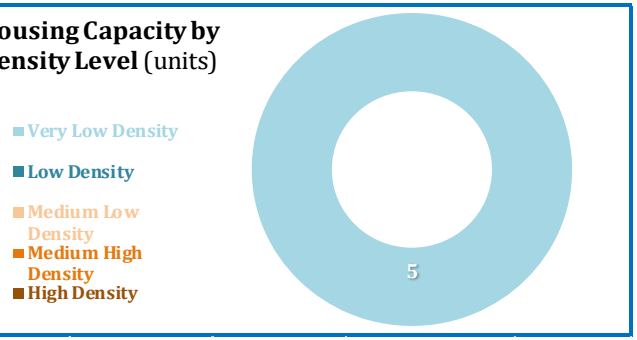


Clyde Hill - Residential Land Supply and Capacity

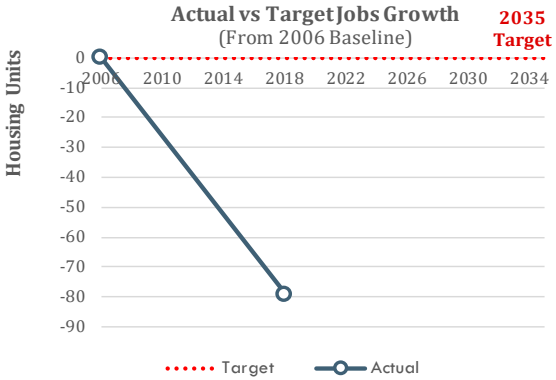
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.76	2.2	2
	Redev Subtotal				0.00	0.0% - 0.0%	1.83	2.2	3
	Subtotal	479.48	0.00	0.00	0.00		2.59		**5**
Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				0.00		0.76		2
	Redev Total				0.00		1.83		3
	Total	**479.48**	**0.00**	**0.00**	**0.00**		**2.59**		**5**

Capacity (units)	
Very Low Density Zones	5
Low Density Zones	0
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**5**
Remaining Target (2018-2035)	3
Surplus/Deficit Capacity (Units)	**1**

Housing Capacity by Density Level (units)



Clyde Hill - Employment Growth and Commercial/Industrial Development Trends



Clyde Hill Jobs Growth Target: 2006-2035	0
2006 Jobs (PSRC)	713
2018 Jobs (PSRC)	634
Total Jobs Growth	**-79**
Remaining 2035 Target	**Not Applicable**

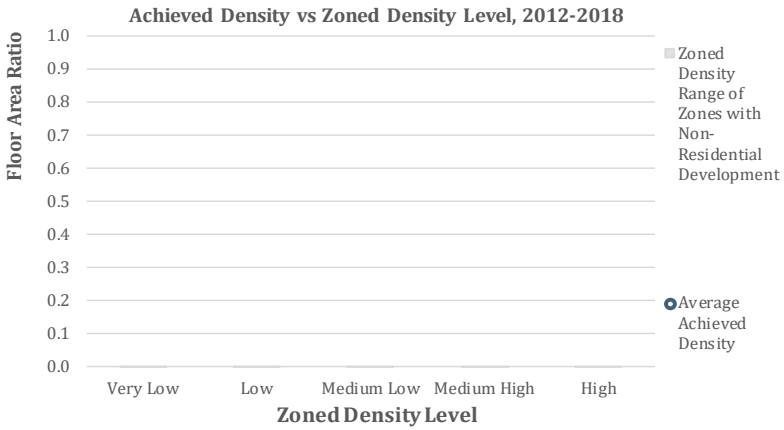
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
Not Applicable	**-0.97%**	**Not Applicable**

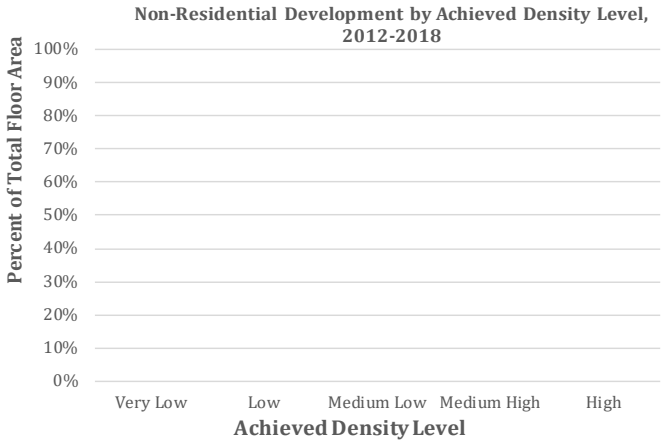
Since 2006, the total number of jobs in Clyde Hill grew by roughly -1%. There is no 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	**0**	**0**	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**0**	**0**	**0.0**





Clyde Hill - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Mixed Use	0.0	0.0	0.0	0.0	0.0	0%	0.0
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		**0.0**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	1.20	0.00	0.00	300	0
Redevelopable	0.00	1.20	0.00	0.00	300	0
Commercial Total	**0.00**	**1.20**	**0.00**	**0.00**	**300**	**0**
Mixed-Use						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Mixed Use Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.00	1.20	0.69	0.00	300	0
Mixed Use	0.00	0.00	0.91	0.00	0	0
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*28*
City Total	**0.00**	**1.20**	**1.86**	**0.00**	**0 / 300**	**28**

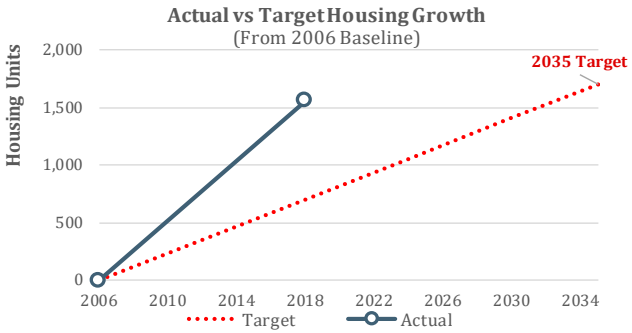
Job Capacity by Assumed Density Level	#	%
Very Low Density	0	
Low Density	0	
Medium Low Density	0	
Medium High Density	0	
High Density	0	
Capacity in Pipeline		*28*
Total Capacity (jobs)		**28**
Remaining Target (2018-2035)		79
Surplus/Deficit Capacity (jobs)		**-51**

Job Capacity by Land Use

- Commercial
- Mixed Use
- Industrial

City of Covington

Housing Growth and Residential Development Trends



Covington Housing Growth Target: 2006-2035	1,705
2006 Estimated Housing Units	5,470
2018 Estimated Housing Units	7,034
Estimated Housing Growth	**1,564**
Remaining 2035 Target	141

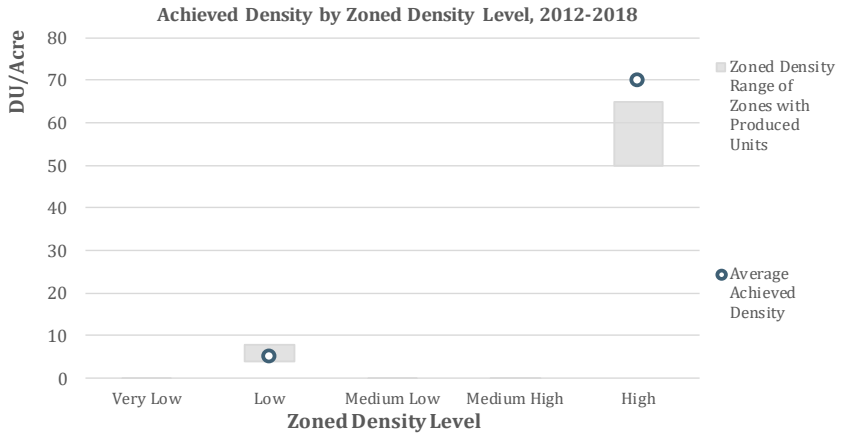
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
221.7%	2.12%	0.12%

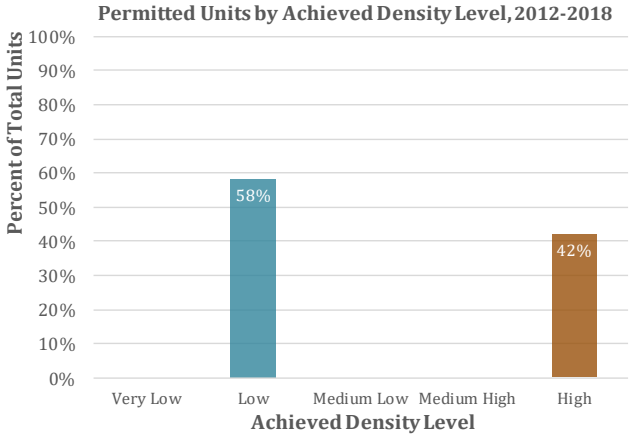
Since 2006, Covington has grown at 222% of the pace needed to achieve its 2035 housing growth target of 1,705 units. During this period, the total number of housing units in Covington grew by roughly 29%. At this current rate, Covington is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	135.8	11.7	13.1	9.2	101.8	493	**4.8**
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	7.0	0.0	0.7	1.2	5.1	356	**69.9**
	Total	**142.9**	**11.7**	**13.8**	**10.4**	**106.9**	**849**	**7.9**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	0.0	0
Low	101.8	493
Medium Low	0.0	0
Medium High	0.0	0
High	5.1	356
Total	**106.9**	**849**



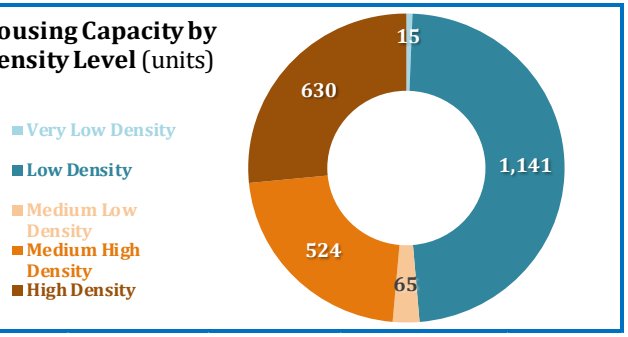


Covington - Residential Land Supply and Capacity

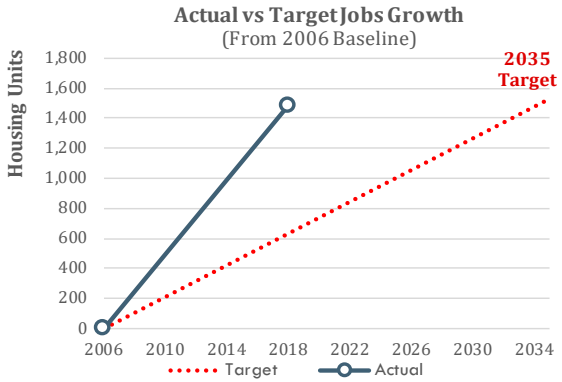
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				2.38	10.0% - 10.0%	9.52	1.0	8
	Redev Subtotal				3.84	10.0% - 10.0%	15.34	1.0	6
	Subtotal	48.67	17.59	0.00	6.22		24.87		**15**
Low Density	Vacant Subtotal				22.46	1.0% - 5.0%	89.85	4.1 / 5.5	424
	Redev Subtotal				57.45	1.0% - 5.0%	229.79	4.1 / 5.5	717
	Subtotal	500.85	101.31	0.00	79.91		319.64		**1,141**
Medium Low Density	Vacant Subtotal				0.00	0.0% - 30.0%	0.00	12.0 / 18.0	0
	Redev Subtotal				1.51	0.0% - 30.0%	8.55	12.0 / 18.0	65
	Subtotal	18.19	8.13	0.00	1.51		8.55		**65**
Medium High Density	Vacant Subtotal				1.50	10.0% - 25.0%	2.55	24.0 / 42.0	76
	Redev Subtotal				17.14	10.0% - 25.0%	29.14	24.0 / 42.0	448
	Subtotal	159.96	35.66	0.00	18.64		31.70		**524**
High Density	Vacant Subtotal				0.76	20.0% - 20.0%	1.29	64.0	63
	Redev Subtotal				6.95	20.0% - 20.0%	11.81	64.0	567
	Subtotal	53.27	1.88	0.00	7.71		13.11		**630**
All Zones	Vacant Total				27.11		103.22		571
	Redev Total				86.88		294.64		1,804
	Total	**780.95**	**164.57**	**0.00**	**113.99**		**397.86**		**2,375**

Capacity (units)	
Very Low Density Zones	15
Low Density Zones	1,141
Medium Low Density Zones	65
Medium High Density Zones	524
High Density Zones	630
Capacity in Pipeline	*2,234*
Total Capacity (Units)	**4,609**
Remaining Target (2018-2035)	141
Surplus/Deficit Capacity (Units)	**4,468**

Housing Capacity by Density Level (units)



Covington - Employment Growth and Commercial/Industrial Development Trends



Covington Jobs Growth Target: 2006-2035	1,531
2006 Jobs (PSRC)	3,528
2018 Jobs (PSRC)	5,013
Total Jobs Growth	**1,485**
Remaining 2035 Target	**46**

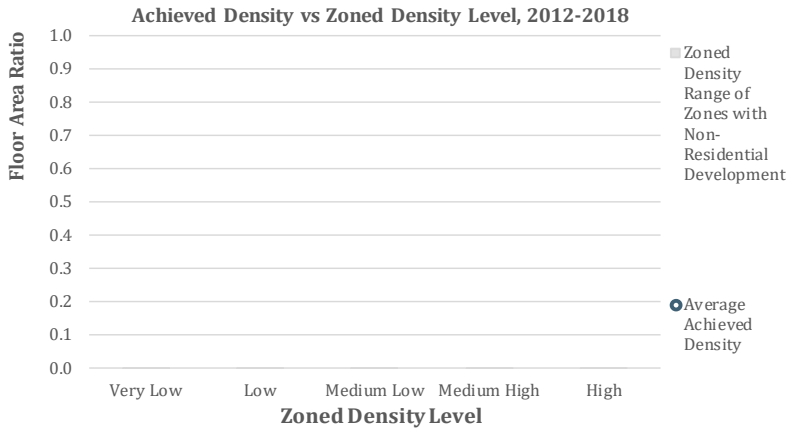
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
234.4%	2.97%	0.05%

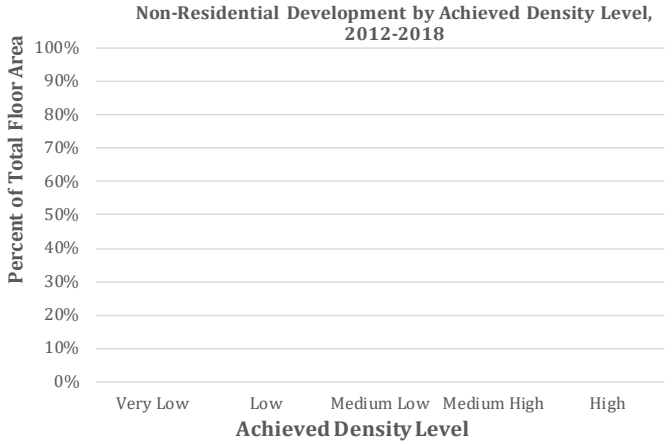
Since 2006, Covington has grown at 234% of the pace needed to achieve its 2035 jobs growth target of 1,531 units. During this period, the total number of jobs in Covington grew by roughly 42%. At this current rate, Covington is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.1% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	**0**	**0**	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	0.0
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	**0**	**0**	**0.0**



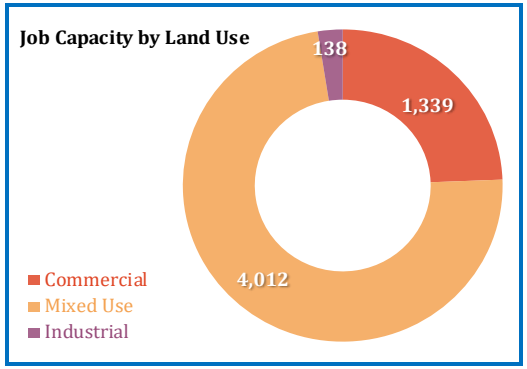


Covington - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	42.1	9.7	3.2	1.6	27.6	5% - 10%	24.5
Mixed Use	213.2	37.5	17.6	8.8	149.3	0% - 25%	111.4
Industrial	11.3	0.4	1.1	0.5	9.2	45%	4.3
Non-Res Land Total	**266.6**	**47.7**	**21.9**	**10.9**	**186.1**		**140.3**

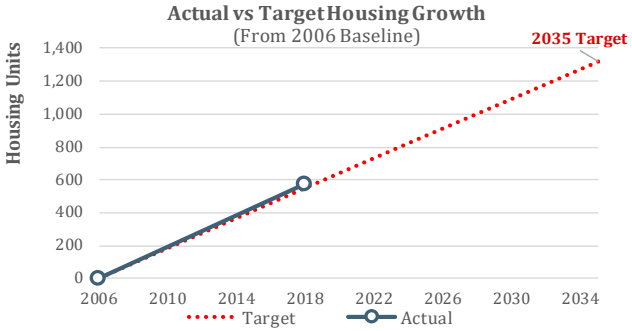
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.79	0.23 / 0.69	0.00	0.41	400	1,019
Redevelopable	0.30	0.23 / 0.69	0.03	0.13	400	320
Commercial Total	**1.09**	**0.23 / 0.69**	**0.03**	**0.54**	**400**	**1,339**
Mixed-Use						
Vacant	0.30	0.26 / 0.80	0.00	0.23	400 / 450	582
Redevelopable	3.27	0.26 / 0.80	1.18	1.37	400 / 450	3429
Mixed Use Total	**3.57**	**0.26 / 0.80**	**1.18**	**1.60**	**400 / 450**	**4,012**
Industrial						
Vacant	0.22	0.50	0.00	0.11	800	138
Redevelopable	0.00	0.50	0.00	0.00	800	0
Industrial Total	**0.22**	**0.50**	**0.00**	**0.11**	**800**	**138**
City Total						
Commercial	1.09	0.23 / 0.69	0.69	0.54	400	1,339
Mixed Use	3.57	0.26 / 0.80	0.91	1.60	400 / 450	4,012
Industrial	0.22	0.50	0.26	0.11	800	138
Job Capacity in Pipeline						*2,933*
City Total	**4.88**	**0.23 / 0.80**	**1.86**	**2.25**	**400 / 800**	**8,421**

Job Capacity by Assumed Density Level	#	%
Very Low Density	3	0%
Low Density	0	0%
Medium Low Density	5,485	100%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*2,933*
Total Capacity (jobs)		**8,421**
Remaining Target (2018-2035)		46
Surplus/Deficit Capacity (jobs)		**8,375**



City of Duvall

Housing Growth and Residential Development Trends



Duvall Housing Growth Target: 2006-2035	1,322
2006 Estimated Housing Units	2,105
2018 Estimated Housing Units	2,681
Estimated Housing Growth	**576**
Remaining 2035 Target	746

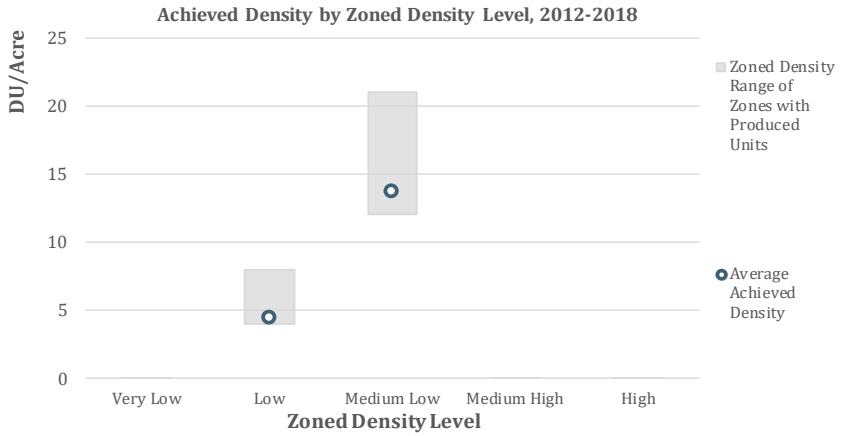
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
105.3%	2.04%	1.46%

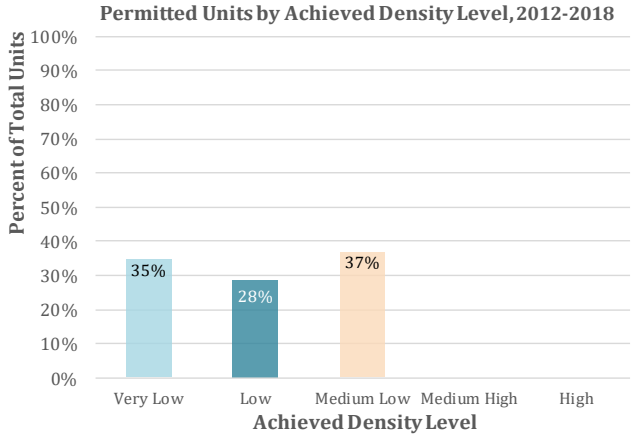
Since 2006, Duvall has grown at 105% of the pace needed to achieve its 2035 housing growth target of 1,322 units. During this period, the total number of housing units in Duvall grew by roughly 27%. At this current rate, Duvall is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.5% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	51.8	11.6	4.5	8.0	27.8	122	**4.4**
Medium Low	10 - 24 du/acre	7.3	0.0	0.8	1.3	5.2	71	**13.7**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**59.1**	**11.6**	**5.3**	**9.2**	**33.0**	**193**	**5.9**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	20.4	67
Low	7.4	55
Medium Low	5.2	71
Medium High	0.0	0
High	0.0	0
Total	**33.0**	**193**



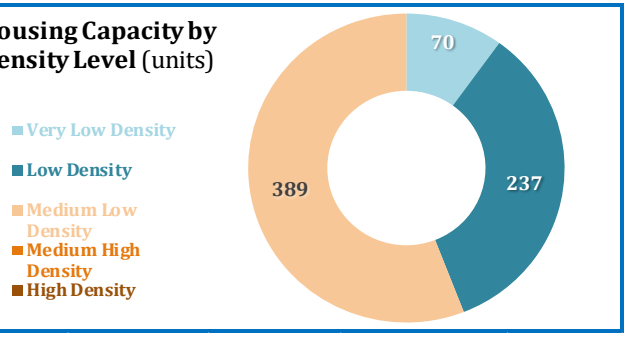


Duvall - Residential Land Supply and Capacity

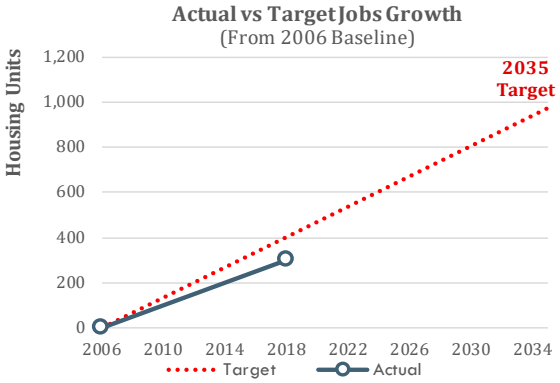
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				1.45	5.0% - 5.0%	4.05	3.3	13
	Redev Subtotal				9.91	5.0% - 5.0%	27.73	3.3	56
	Subtotal	93.22	38.46	0.00	11.35		31.79		**70**
Low Density	Vacant Subtotal				0.68	5.0% - 10.0%	1.89	4.5 / 8.0	14
	Redev Subtotal				20.63	5.0% - 10.0%	54.30	4.5 / 8.0	223
	Subtotal	108.45	10.88	0.00	21.32		56.18		**237**
Medium Low Density	Vacant Subtotal				1.99	20.0% - 50.0%	15.54	12.0 / 21.0	284
	Redev Subtotal				2.48	20.0% - 50.0%	7.61	12.0 / 21.0	106
	Subtotal	58.97	0.00	0.00	4.47		23.15		**389**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				4.12		21.48		311
	Redev Total				33.01		89.64		385
	Total	**260.64**	**49.34**	**0.00**	**37.14**		**111.12**		**696**

Capacity (units)	
Very Low Density Zones	70
Low Density Zones	237
Medium Low Density Zones	389
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*647*
Total Capacity (Units)	**1,343**
Remaining Target (2018-2035)	746
Surplus/Deficit Capacity (Units)	**597**

Housing Capacity by Density Level (units)



Duvall - Employment Growth and Commercial/Industrial Development Trends



Duvall Jobs Growth Target: 2006-2035	974
2006 Jobs (PSRC)	1,182
2018 Jobs (PSRC)	1,483
Total Jobs Growth	**301**
Remaining 2035 Target	**673**

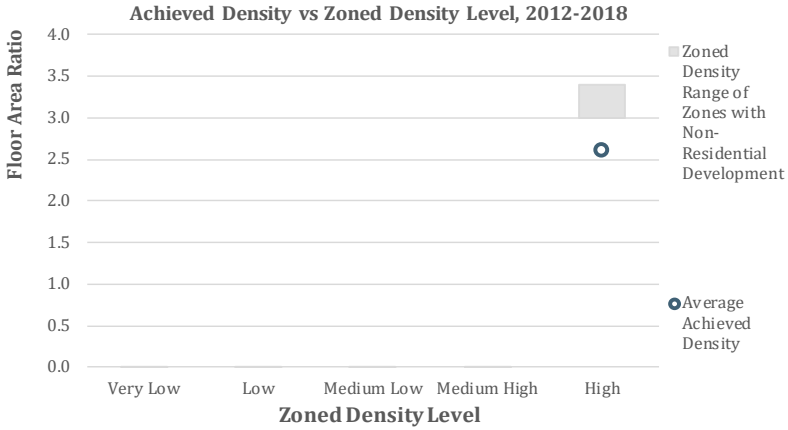
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
74.7%	1.91%	2.23%

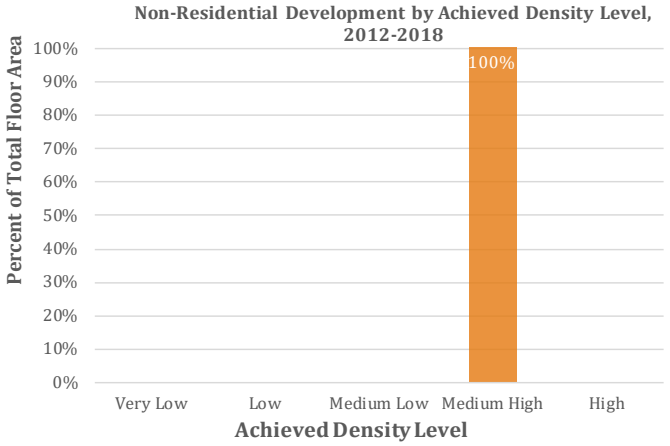
Since 2006, Duvall has grown at 75% of the pace needed to achieve its 2035 jobs growth target of 974 units. During this period, the total number of jobs in Duvall grew by roughly 25%. At this current rate, Duvall is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 2.2% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	39,075	101,294	2.6
	Total	**39,075**	**101,294**	**2.6**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	0.0
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	39,075	101,294	2.6
High	0	0	0.0
Total	**39,075**	**101,294**	**2.6**



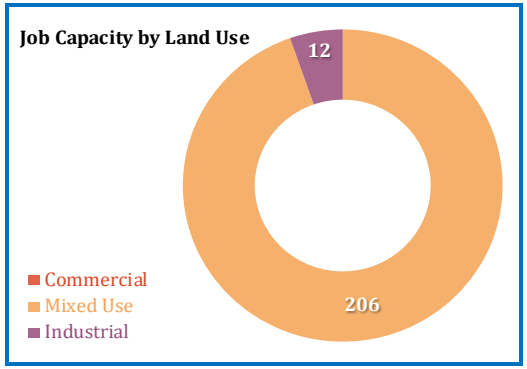


Duvall - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Mixed Use	24.1	0.0	1.2	0.2	22.7	25% - 50%	14.4
Industrial	1.2	0.0	0.1	0.0	1.1	15%	0.9
Non-Res Land Total	**25.3**	**0.0**	**1.3**	**0.3**	**23.8**		**15.4**

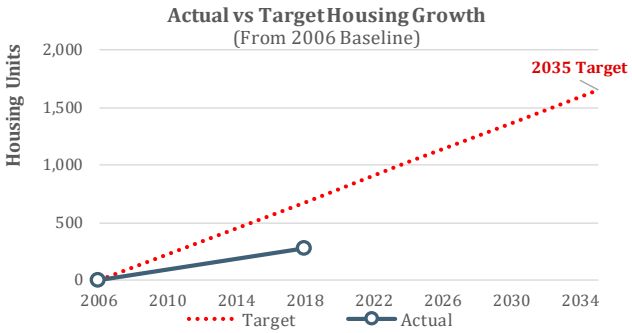
Job Capacity by Assumed Density Level	#	%
Very Low Density	206	95%
Low Density	12	5%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*464*
Total Capacity (jobs)		**681**
Remaining Target (2018-2035)		673
Surplus/Deficit Capacity (jobs)		**8**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Commercial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
Mixed-Use						
Vacant	0.60	0.20	0.00	0.12	500 / 600	205
Redevelopable	0.03	0.20	0.02	0.00	500 / 600	1
Mixed Use Total	**0.63**	**0.20**	**0.02**	**0.12**	**500 / 600**	**206**
Industrial						
Vacant	0.04	0.40	0.00	0.02	1,400	12
Redevelopable	0.00	0.40	0.00	0.00	1,400	0
Industrial Total	**0.04**	**0.40**	**0.00**	**0.02**	**1,400**	**12**
City Total						
Commercial	0.00	0.00	0.69	0.00	0	0
Mixed Use	0.63	0.20	0.91	0.12	500 / 600	206
Industrial	0.04	0.40	0.26	0.02	1,400	12
Job Capacity in Pipeline						*464*
City Total	**0.67**	**0.40**	**1.86**	**0.14**	**0 / 1400**	**681**



City of Enumclaw

Housing Growth and Residential Development Trends



Enumclaw Housing Growth Target: 2006-2035	1,653
2006 Estimated Housing Units	5,048
2018 Estimated Housing Units	5,326
Estimated Housing Growth	**278**
Remaining 2035 Target	1,375

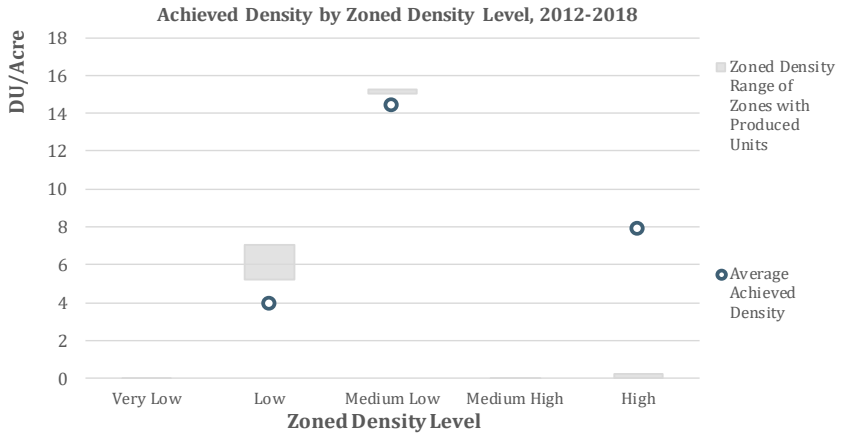
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
40.7%	0.45%	1.36%

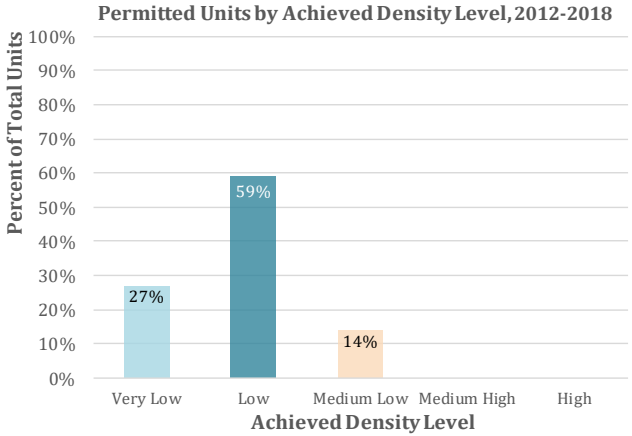
Since 2006, Enumclaw has grown at 41% of the pace needed to achieve its 2035 housing growth target of 1,653 units. During this period, the total number of housing units in Enumclaw grew by roughly 6%. At this current rate, Enumclaw is under the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1.4% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	46.1	0.0	1.7	3.9	40.6	157	**3.9**
Medium Low	10 - 24 du/acre	3.6	0.0	0.0	0.0	3.6	52	**14.4**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	46.0	4.1	8.9	10.8	22.2	174	**7.8**
	Total	**95.7**	**4.1**	**10.5**	**14.6**	**66.4**	**383**	**5.8**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	32.8	104
Low	29.9	226
Medium Low	3.7	53
Medium High	0.0	0
High	0.0	0
Total	**66.4**	**383**



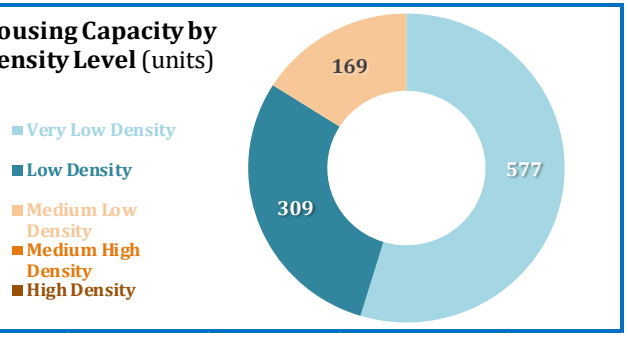


Enumclaw - Residential Land Supply and Capacity

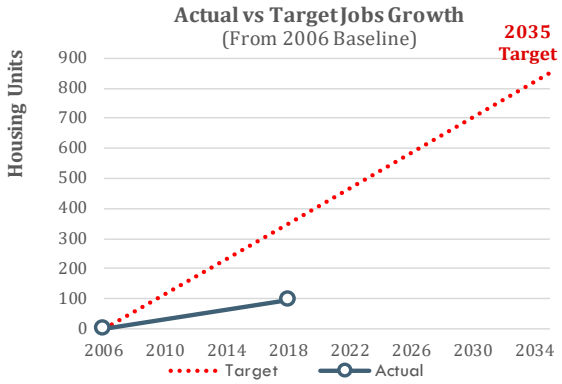
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				11.59	5.0% - 40.0%	63.44	3.2	112
	Redev Subtotal				46.42	5.0% - 40.0%	207.07	3.2	466
	Subtotal	816.36	28.62	215.28	58.01		270.51		**577**
Low Density	Vacant Subtotal				10.70	5.0% - 50.0%	47.38	4.4 / 6.8	288
	Redev Subtotal				1.01	5.0% - 50.0%	4.31	4.4 / 6.8	22
	Subtotal	71.84	3.42	0.00	11.71		51.69		**309**
Medium Low Density	Vacant Subtotal				2.86	50.0% - 50.0%	11.44	14.4	164
	Redev Subtotal				0.70	50.0% - 50.0%	2.82	14.4	4
	Subtotal	37.44	1.78	0.00	3.57		14.26		**169**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				25.15		122.27		564
	Redev Total				48.13		214.19		492
	Total	**925.64**	**33.83**	**215.28**	**73.28**		**336.45**		**1,056**

Capacity (units)	
Very Low Density Zones	577
Low Density Zones	309
Medium Low Density Zones	169
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*252*
Total Capacity (Units)	**1,308**
Remaining Target (2018-2035)	1,375
Surplus/Deficit Capacity (Units)	**-67**

Housing Capacity by Density Level (units)



Enumclaw - Employment Growth and Commercial/Industrial Development Trends



Enumclaw Jobs Growth Target: 2006-2035	853
2006 Jobs (PSRC)	4,960
2018 Jobs (PSRC)	5,056
Total Jobs Growth	**96**
Remaining 2035 Target	**757**

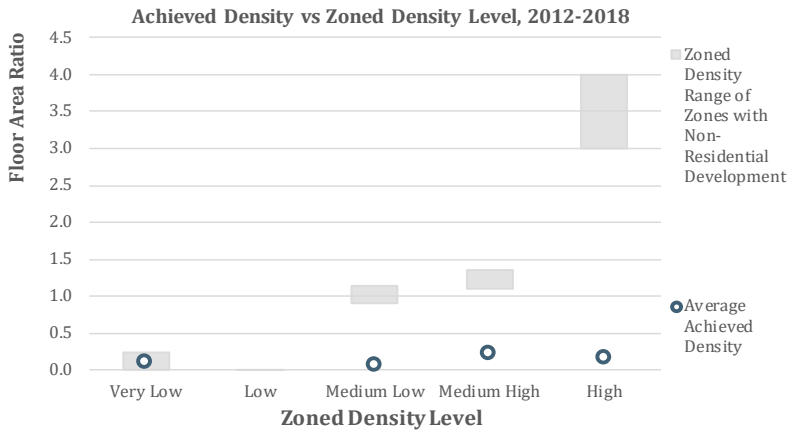
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
27.2%	**0.16%**	**0.82%**

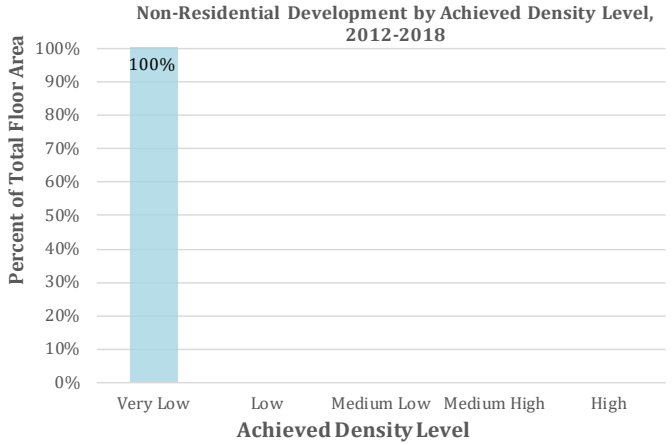
Since 2006, Enumclaw has grown at 27% of the pace needed to achieve its 2035 jobs growth target of 853 units. During this period, the total number of jobs in Enumclaw grew by roughly 2%. At this current rate, Enumclaw is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.8% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	135,907	14,549	**0.1**
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	22,000	1,623	**0.1**
Medium High	1.0 - 3.0 FAR	98,488	22,016	**0.2**
High	3.0 & up FAR	785,991	124,555	**0.2**
	Total	**1,042,386**	**162,743**	**0.2**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	1,042,386	162,743	**0.2**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**1,042,386**	**162,743**	**0.2**



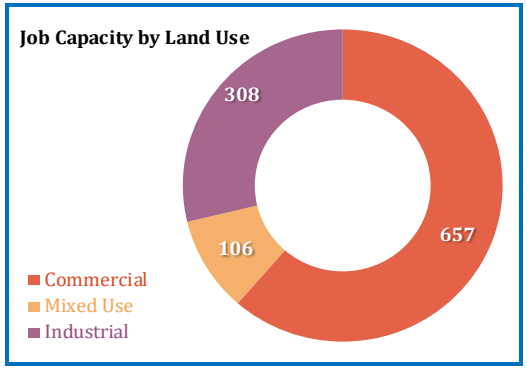


Enumclaw - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	86.7	4.1	4.1	4.1	74.3	15% - 20%	60.6
Mixed Use	10.7	1.1	0.5	0.5	8.7	40% - 50%	4.5
Industrial	74.9	11.5	3.2	3.2	57.0	36%	34.2
Non-Res Land Total	**172.3**	**16.7**	**7.8**	**7.8**	**140.0**		**99.2**

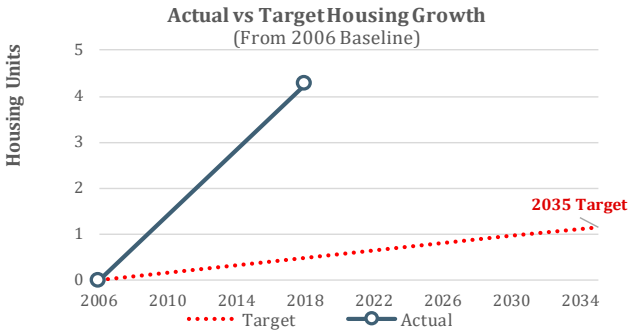
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.97	0.07 / 0.22	0.00	0.15	660	230
Redevelopable	1.67	0.07 / 0.22	0.02	0.28	660	427
Commercial Total	**2.64**	**0.07 / 0.22**	**0.02**	**0.43**	**660**	**657**
Mixed-Use						
Vacant	0.06	0.50	0.00	0.03	0 / 660	41
Redevelopable	0.14	0.50	0.01	0.04	0 / 660	64
Mixed Use Total	**0.19**	**0.50**	**0.01**	**0.07**	**0 / 660**	**106**
Industrial						
Vacant	1.15	0.25	0.00	0.29	1,200	239
Redevelopable	0.34	0.25	0.00	0.08	1,200	69
Industrial Total	**1.49**	**0.25**	**0.00**	**0.37**	**1,200**	**308**
City Total						
Commercial	2.64	0.07 / 0.22	0.69	0.43	660	657
Mixed Use	0.19	0.50	0.91	0.07	0 / 660	106
Industrial	1.49	0.25	0.26	0.37	1,200	308
Job Capacity in Pipeline						*81*
City Total	**4.32**	**0.50**	**1.86**	**0.87**	**0 / 1200**	**1,152**

Job Capacity by Assumed Density Level	#	%
Very Low Density	981	92%
Low Density	0	0%
Medium Low Density	90	8%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*81*
Total Capacity (jobs)		**1,152**
Remaining Target (2018-2035)		757
Surplus/Deficit Capacity (jobs)		**395**



Town of Hunts Point

Housing Growth and Residential Development Trends



Hunts Point Housing Growth Target: 2006-2035	1
2006 Estimated Housing Units	183
2018 Estimated Housing Units	187
Estimated Housing Growth	**4**
Remaining 2035 Target	0

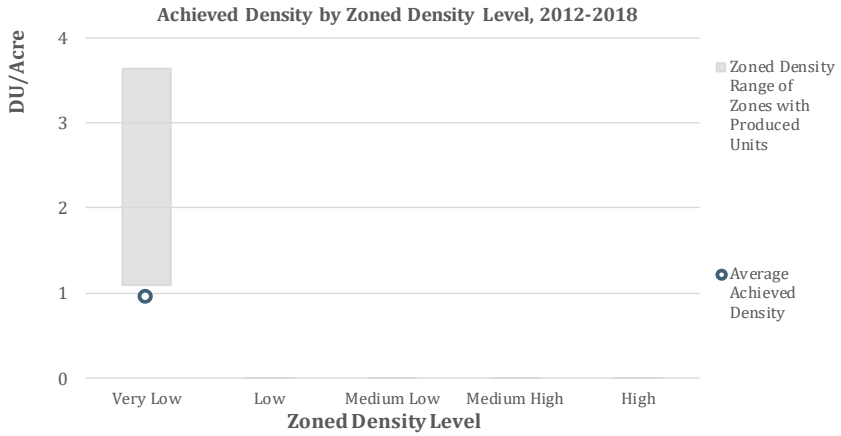
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
887.9%	0.19%	Met Target

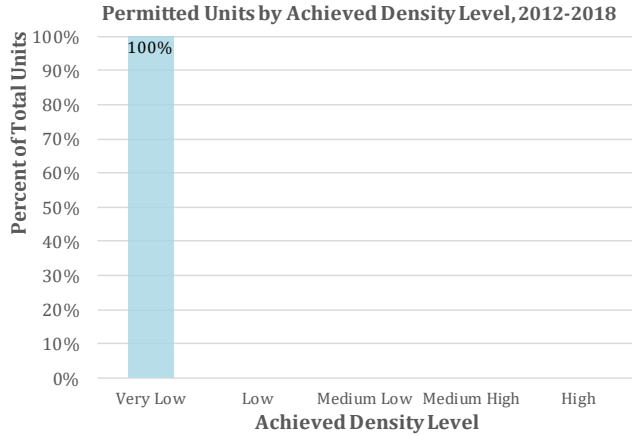
Since 2006, Hunts Point has grown at 888% of the pace needed to achieve its 2035 housing growth target of 1 units. During this period, the total number of housing units in Hunts Point grew by roughly 2%. Hunts Point has achieved its 2035 housing growth target.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	3.2	0.0	0.0	0.0	3.2	3	1.0
Low	4 - 10 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	3.2	0.0	0.0	0.0	3.2	3	1.0

Achieved Density Level	Net Area (acres)	Total Units
Very Low	3.2	3
Low	0.0	0
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	3.2	3



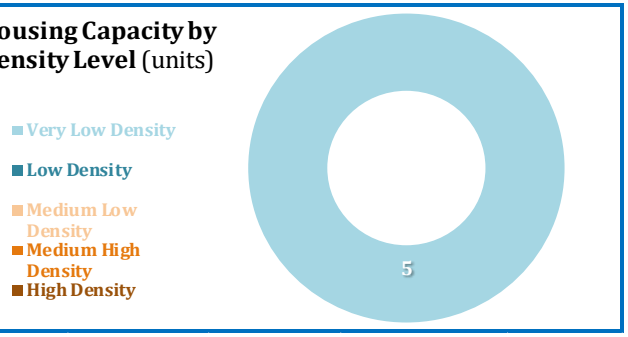


Hunts Point - Residential Land Supply and Capacity

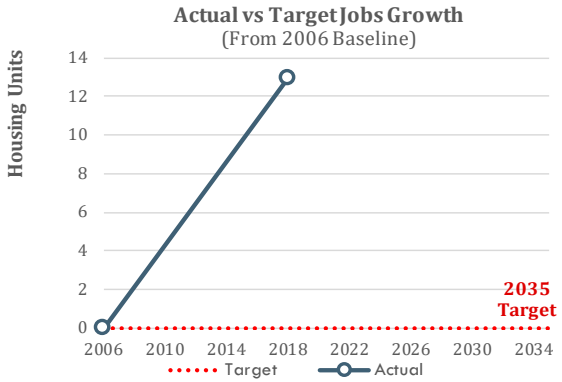
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	2.68	1.0 / 3.6	5
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	1.0 / 3.6	0
	Subtotal	17.08	6.54	0.40	0.00		2.68		**5**
Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				0.00		2.68		5
	Redev Total				0.00		0.00		0
	Total	**17.08**	**6.54**	**0.40**	**0.00**		**2.68**		**5**

Capacity (units)	
Very Low Density Zones	5
Low Density Zones	0
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**5**
Remaining Target (2018-2035)	0
Surplus/Deficit Capacity (Units)	**5**

Housing Capacity by Density Level (units)



Hunts Point - Employment Growth and Commercial/Industrial Development Trends



Hunts Point Jobs Growth Target: 2006-2035	0
2006 Jobs (PSRC)	51
2018 Jobs (PSRC)	64
Total Jobs Growth	**13**
Remaining 2035 Target	**Not Applicable**

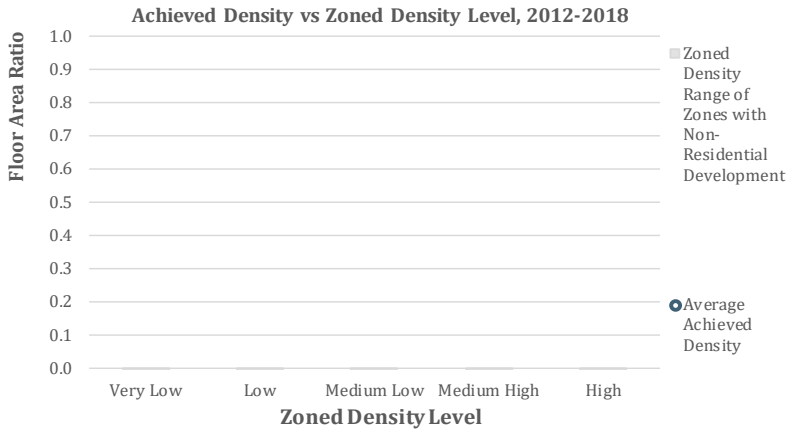
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
Not Applicable	**1.91%**	**Not Applicable**

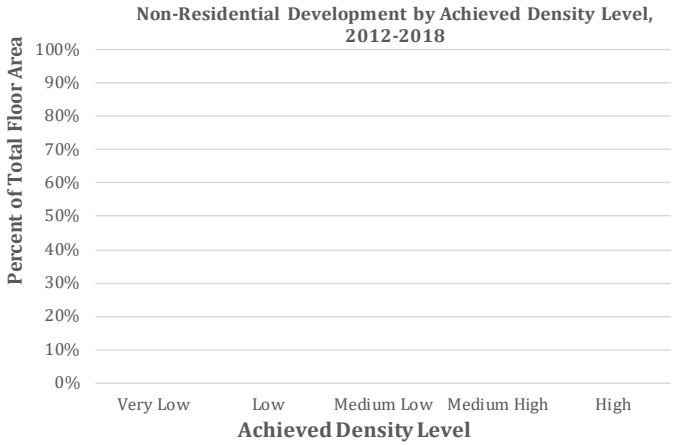
Since 2006, the total number of jobs in Hunts Point grew by roughly 2%. There is no 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	**0**	**0**	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**0**	**0**	**0.0**



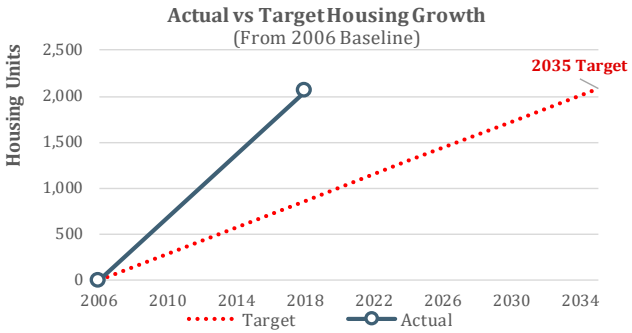


Hunts Point - Commercial/Industrial Land Supply and Job Capacity

(no job capacity in Hunts Point)

City of Maple Valley

Housing Growth and Residential Development Trends



Maple Valley Housing Growth Target: 2006-2035	2,088
2006 Estimated Housing Units	6,765
2018 Estimated Housing Units	8,826
Estimated Housing Growth	**2,061**
Remaining 2035 Target	27

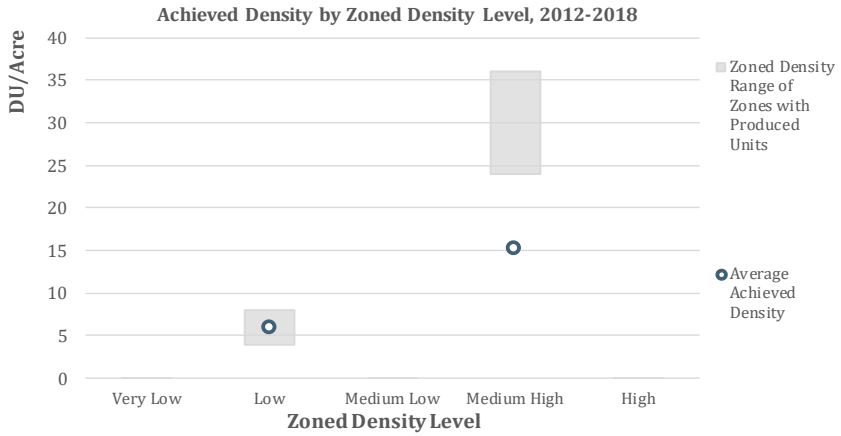
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
238.6%	2.24%	0.02%

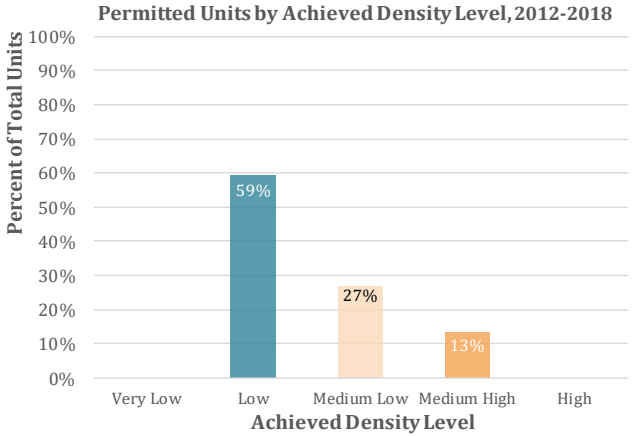
Since 2006, Maple Valley has grown at 239% of the pace needed to achieve its 2035 housing growth target of 2,088 units. During this period, the total number of housing units in Maple Valley grew by roughly 30%. At this current rate, Maple Valley is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	126.9	30.6	0.1	0.2	96.0	557	**5.8**
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	30.7	0.0	1.1	4.4	25.2	381	**15.1**
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**157.7**	**30.6**	**1.3**	**4.7**	**121.2**	**938**	**7.7**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	0.0	0
Low	96.0	557
Medium Low	20.1	255
Medium High	5.1	126
High	0.0	0
Total	**121.2**	**938**



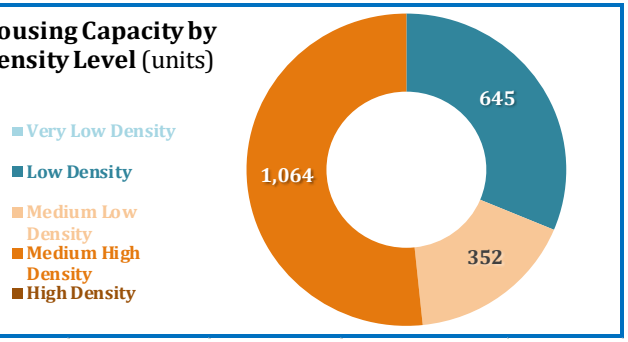


Maple Valley - Residential Land Supply and Capacity

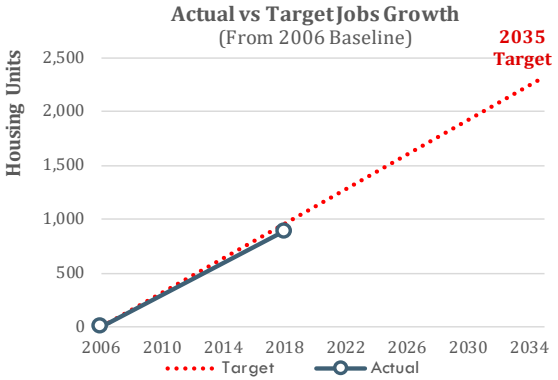
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.02	12.0% - 12.0%	0.07	0.0	0
	Redev Subtotal				0.08	12.0% - 12.0%	0.36	0.0	0
	Subtotal	0.61	0.00	0.00	0.10		0.43		**0**
Low Density	Vacant Subtotal				9.74	5.0% - 7.0%	29.94	5.4 / 7.4	186
	Redev Subtotal				33.79	5.0% - 7.0%	103.96	5.4 / 7.4	459
	Subtotal	202.24	12.99	0.00	43.53		133.90		**645**
Medium Low Density	Vacant Subtotal				0.00	12.0% - 20.0%	0.00	12.0 / 18.0	0
	Redev Subtotal				11.78	12.0% - 20.0%	42.19	12.0 / 18.0	352
	Subtotal	62.87	0.00	0.00	11.78		42.19		**352**
Medium High Density	Vacant Subtotal				3.51	12.0% - 20.0%	15.80	24.0 / 24.6	388
	Redev Subtotal				6.12	12.0% - 20.0%	27.55	24.0 / 24.6	676
	Subtotal	60.20	0.00	0.00	9.63		43.35		**1,064**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				13.26		45.81		574
	Redev Total				51.78		174.07		1,487
	Total	**325.92**	**12.99**	**0.00**	**65.04**		**219.87**		**2,061**

Capacity (units)	
Very Low Density Zones	0
Low Density Zones	645
Medium Low Density Zones	352
Medium High Density Zones	1,064
High Density Zones	0
Capacity in Pipeline	*160*
Total Capacity (Units)	**2,221**
Remaining Target (2018-2035)	27
Surplus/Deficit Capacity (Units)	**2,195**

Housing Capacity by Density Level (units)



Maple Valley - Employment Growth and Commercial/Industrial Development Trends



Maple Valley Jobs Growth Target: 2006-2035	2,320
2006 Jobs (PSRC)	3,297
2018 Jobs (PSRC)	4,190
Total Jobs Growth	**893**
Remaining 2035 Target	**1,427**

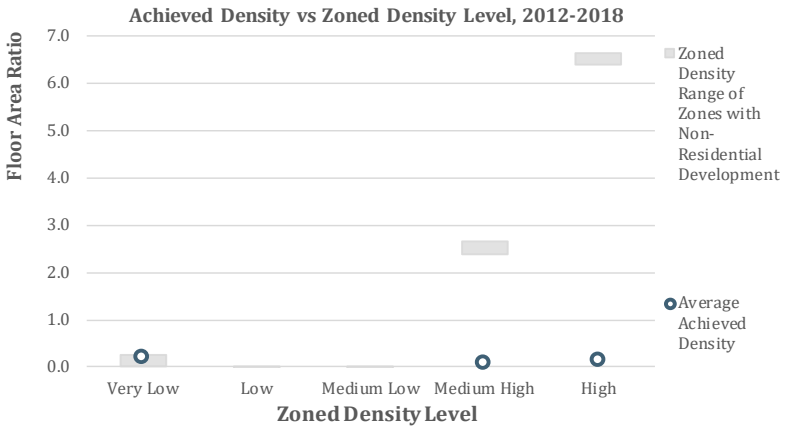
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
93.0%	2.02%	1.74%

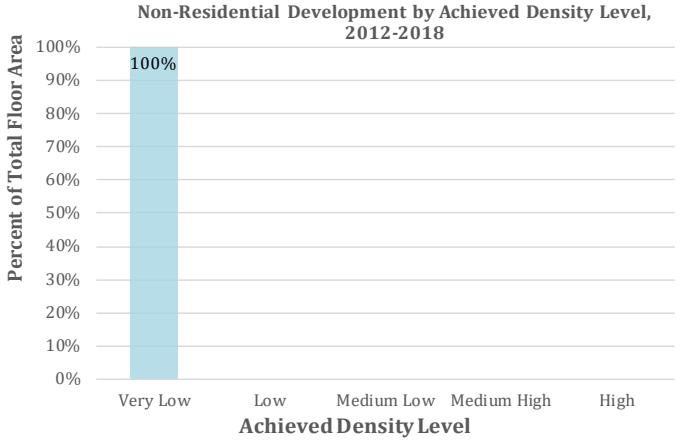
Since 2006, Maple Valley has grown at 93% of the pace needed to achieve its 2035 jobs growth target of 2,320 units. During this period, the total number of jobs in Maple Valley grew by roughly 27%. At this current rate, Maple Valley is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 1.7% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	2,140,550	409,209	**0.2**
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	63,513	4,826	**0.1**
High	3.0 & up FAR	2,133,765	275,858	**0.1**
	Total	**4,337,828**	**689,893**	**0.2**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	4,337,828	689,893	**0.2**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**4,337,828**	**689,893**	**0.2**





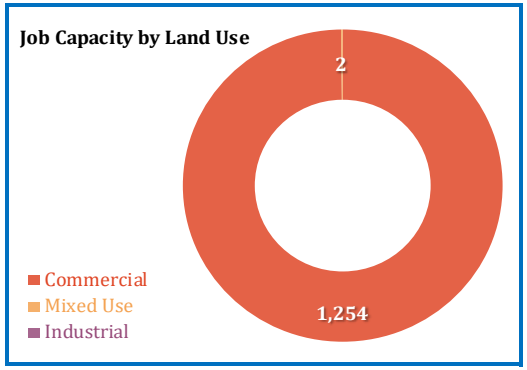
Maple Valley - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	105.2	10.8	6.6	8.5	79.3	12% - 16%	66.6
Mixed Use	0.6	0.0	0.0	0.1	0.5	12%	0.4
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**105.8**	**10.8**	**6.7**	**8.6**	**79.8**		**67.0**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial*						
Vacant	2.54	0.03 / 0.29	0.00	0.55	500	1,103
Redevelopable	2.36	0.03 / 0.29	0.12	0.08	500	151
Commercial Total	**4.89**	**0.03 / 0.29**	**0.12**	**0.63**	**500**	**1,254**
Mixed-Use						
Vacant	0.00	0.08	0.00	0.00	700	0
Redevelopable	0.02	0.08	0.00	0.00	700	2
Mixed Use Total	**0.02**	**0.08**	**0.00**	**0.00**	**700**	**2**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	4.89	0.03 / 0.29	0.69	0.63	500	1,254
Mixed Use	0.02	0.08	0.91	0.00	700	2
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*528*
City Total	**4.91**	**0.29**	**1.86**	**0.63**	**0 / 700**	**1,784**

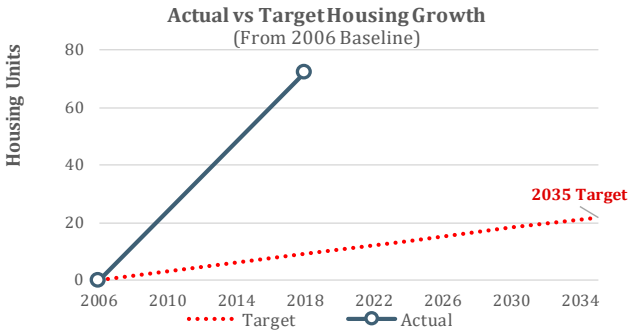
*Certain zones grouped as commercial allow for industrial use.

Job Capacity by Assumed Density Level	#	%
Very Low Density	1,256	100%
Low Density	0	0%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*528*
Total Capacity (jobs)		**1,784**
Remaining Target (2018-2035)		1,427
Surplus/Deficit Capacity (jobs)		**357**



City of Medina

Housing Growth and Residential Development Trends



Medina Housing Growth Target: 2006-2035	22
2006 Estimated Housing Units	1,162
2018 Estimated Housing Units	1,234
Estimated Housing Growth	**72**
Remaining 2035 Target	0

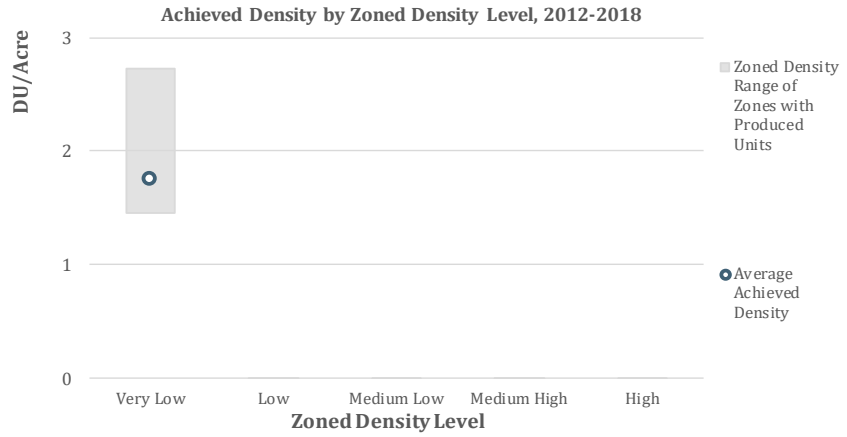
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
794.6%	0.51%	Met Target

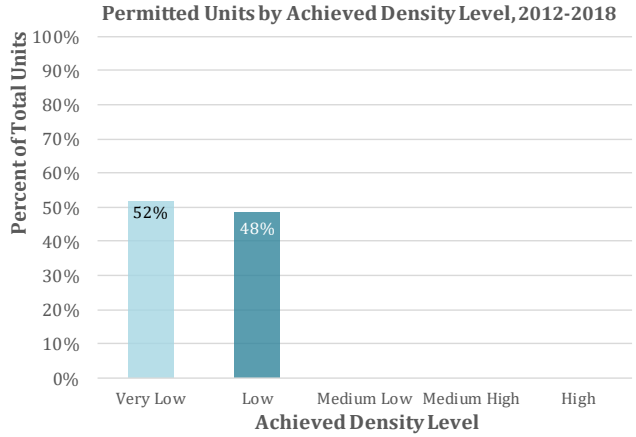
Since 2006, Medina has grown at 795% of the pace needed to achieve its 2035 housing growth target of 22 units. During this period, the total number of housing units in Medina grew by roughly 6%. Medina has achieved its 2035 housing growth target.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	55.3	4.5	0.0	0.0	50.9	89	1.7
Low	4 - 10 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	55.3	4.5	0.0	0.0	50.9	89	1.7

Achieved Density Level	Net Area (acres)	Total Units
Very Low	40.8	46
Low	10.0	43
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	50.9	89



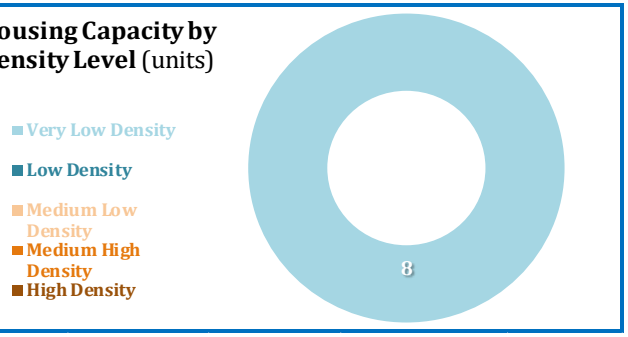


Medina - Residential Land Supply and Capacity

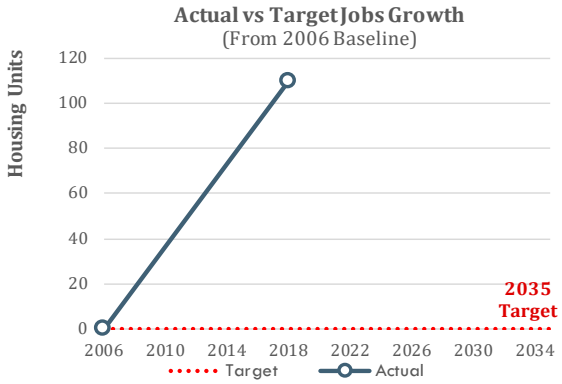
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.50	10.0% - 10.0%	4.00	3.0	7
	Redev Subtotal				0.50	10.0% - 10.0%	4.00	3.0	1
	Subtotal	0.00	0.00	0.00	1.00		8.00		**8**
Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				0.50		4.00		7
	Redev Total				0.50		4.00		1
	Total	**0.00**	**0.00**	**0.00**	**1.00**		**8.00**		**8**

Capacity (units)	
Very Low Density Zones	8
Low Density Zones	0
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**8**
Remaining Target (2018-2035)	0
Surplus/Deficit Capacity (Units)	**8**

Housing Capacity by Density Level (units)



Medina - Employment Growth and Commercial/Industrial Development Trends



Medina Jobs Growth Target: 2006-2035	0
2006 Jobs (PSRC)	409
2018 Jobs (PSRC)	519
Total Jobs Growth	**110**
Remaining 2035 Target	**Not Applicable**

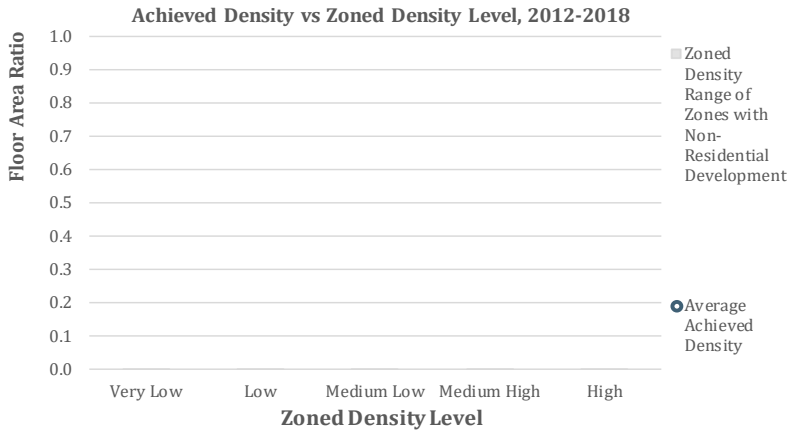
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
Not Applicable	**2.00%**	**Not Applicable**

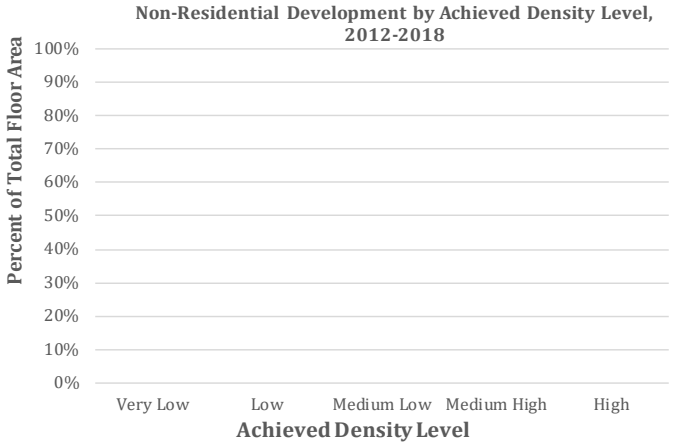
Since 2006, the total number of jobs in Medina grew by roughly 2%. There is no 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	**0**	**0**	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**0**	**0**	**0.0**



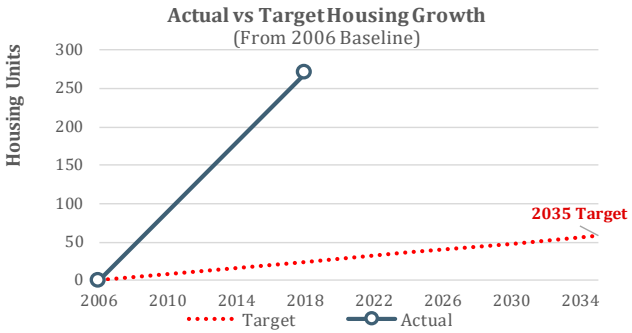


Medina - Commercial/Industrial Land Supply and Job Capacity

(no job capacity in Medina)

City of Milton

Housing Growth and Residential Development Trends



Milton Housing Growth Target: 2006-2035	58
2006 Estimated Housing Units	337
2018 Estimated Housing Units	608
Estimated Housing Growth	**271**
Remaining 2035 Target	0

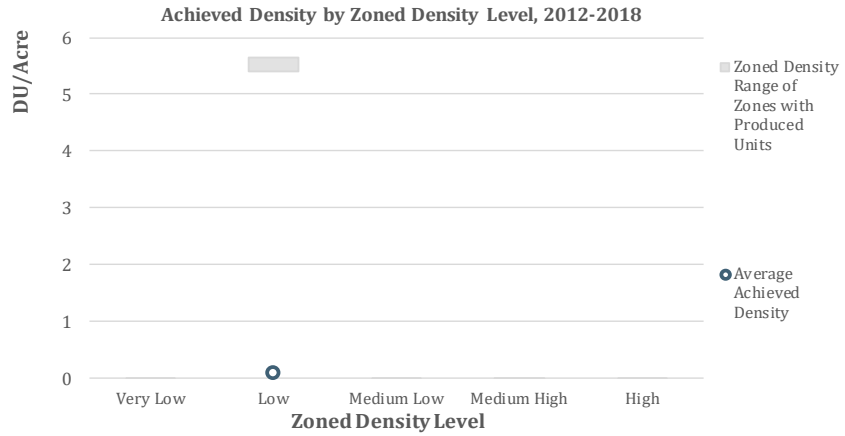
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
1128.6%	5.04%	Met Target

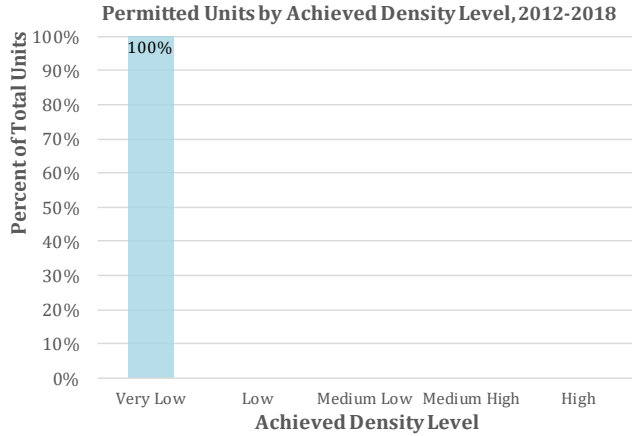
Since 2006, Milton has grown at 1129% of the pace needed to achieve its 2035 housing growth target of 58 units. During this period, the total number of housing units in Milton grew by roughly 80%. Milton has achieved its 2035 housing growth target.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	14.0	0.0	0.0	0.0	14.0	1	**0.1**
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**14.0**	**0.0**	**0.0**	**0.0**	**14.0**	**1**	**0.1**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	14.0	1
Low	0.0	0
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	**14.0**	**1**



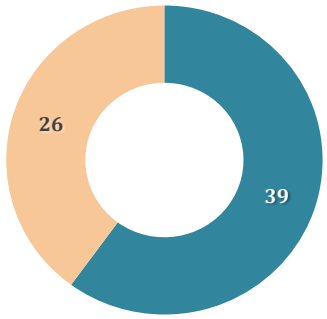


Milton - Residential Land Supply and Capacity

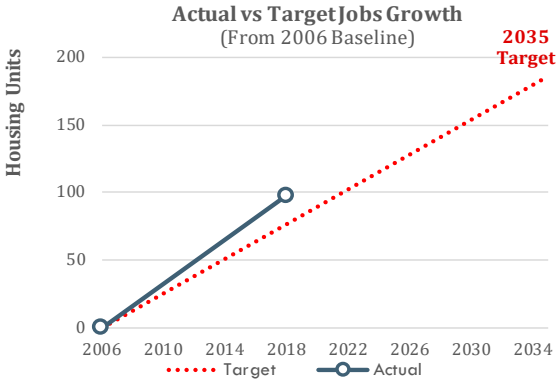
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	45.36	45.36	0.00	0.00		0.00		**0**
Low Density	Vacant Subtotal				0.07	0.0% - 0.0%	0.44	5.4	2
	Redev Subtotal				1.08	0.0% - 0.0%	7.22	5.4	37
	Subtotal	16.88	8.07	0.00	1.14		7.66		**39**
Medium Low Density	Vacant Subtotal				0.10	0.0% - 0.0%	0.70	12.0	8
	Redev Subtotal				0.25	0.0% - 0.0%	1.65	12.0	18
	Subtotal	3.84	1.09	0.00	0.35		2.35		**26**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				0.17		1.13		11
	Redev Total				1.33		8.87		55
	Total	**66.09**	**54.52**	**0.00**	**1.50**		**10.01**		**66**

Capacity (units)	
Very Low Density Zones	0
Low Density Zones	39
Medium Low Density Zones	26
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**66**
Remaining Target (2018-2035)	0
Surplus/Deficit Capacity (Units)	**66**

Housing Capacity by Density Level (units)



Milton - Employment Growth and Commercial/Industrial Development Trends



Milton Jobs Growth Target: 2006-2035	186
2006 Jobs (PSRC)	22
2018 Jobs (PSRC)	120
Total Jobs Growth	**98**
Remaining 2035 Target	88

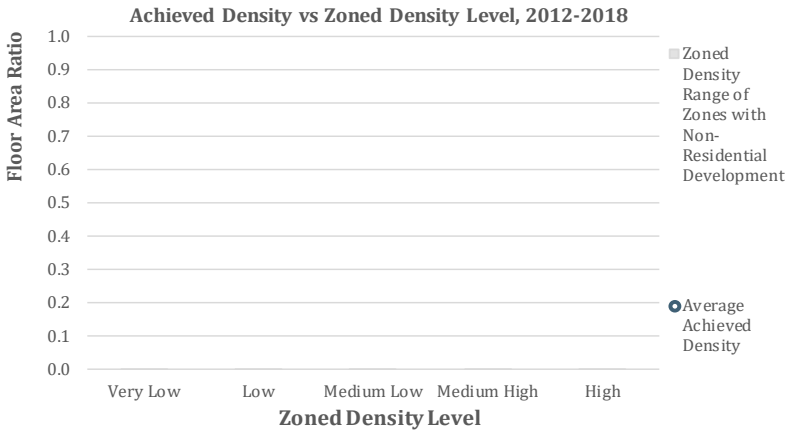
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
127.6%	15.49%	3.28%

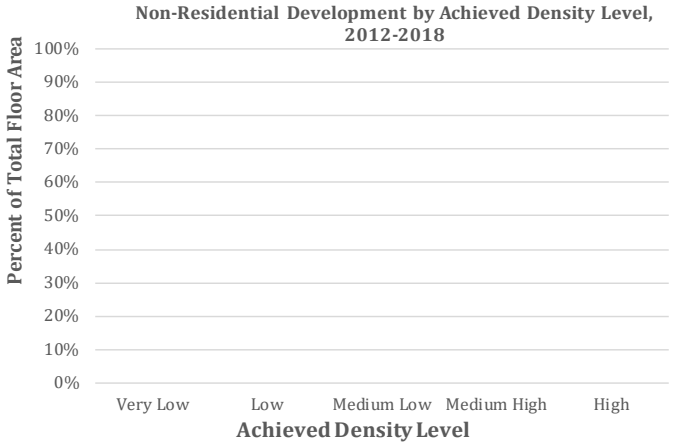
Since 2006, Milton has grown at 128% of the pace needed to achieve its 2035 jobs growth target of 186 units. During this period, the total number of jobs in Milton grew by roughly 445%. At this current rate, Milton is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 3.3% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	**0**	**0**	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**0**	**0**	**0.0**



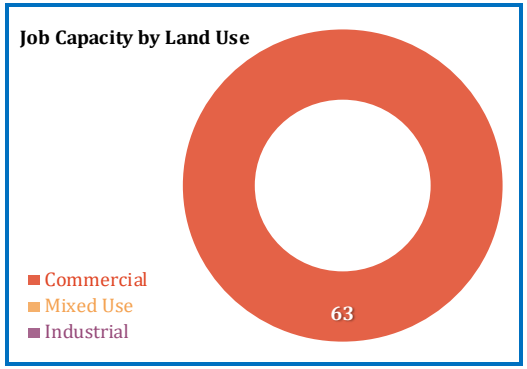


Milton - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	7.0	1.8	0.0	0.0	5.2	50%	2.6
Mixed Use	0.0	0.0	0.0	0.0	0.0	0%	0.0
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**7.0**	**1.8**	**0.0**	**0.0**	**5.2**		**2.6**

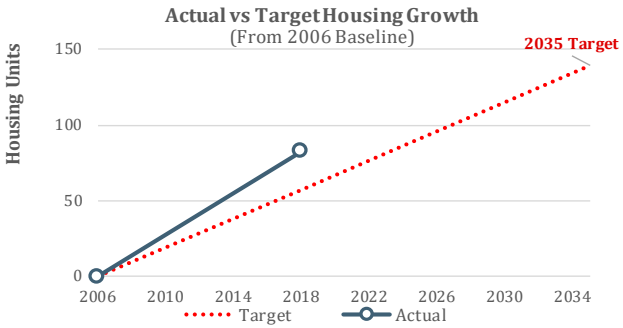
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.10	0.25	0.00	0.02	450	53
Redevelopable	0.02	0.25	0.00	0.00	450	10
Commercial Total	**0.11**	**0.25**	**0.00**	**0.03**	**450**	**63**
Mixed-Use						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Mixed Use Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.11	0.25	0.69	0.03	450	63
Mixed Use	0.00	0.00	0.91	0.00	0	0
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*1,150*
City Total	**0.11**	**0.25**	**1.86**	**0.03**	**0 / 450**	**1,213**

Job Capacity by Assumed Density Level	#	%
Very Low Density	63	100%
Low Density	0	0%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*1,150*
Total Capacity (jobs)		**1,213**
Remaining Target (2018-2035)		88
Surplus/Deficit Capacity (jobs)		**1,125**



City of Normandy Park

Housing Growth and Residential Development Trends



Normandy Park Housing Growth Target: 2006-2035	139
2006 Estimated Housing Units	2,794
2018 Estimated Housing Units	2,877
Estimated Housing Growth	**83**
Remaining 2035 Target	56

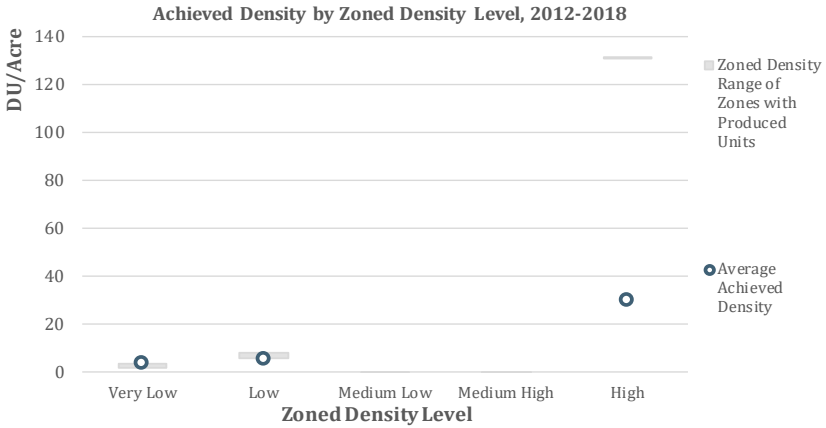
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
143.8%	0.24%	0.11%

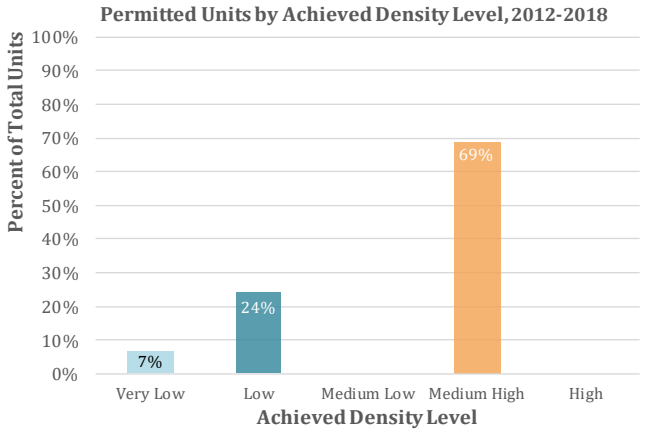
Since 2006, Normandy Park has grown at 144% of the pace needed to achieve its 2035 housing growth target of 139 units. During this period, the total number of housing units in Normandy Park grew by roughly 3%. At this current rate, Normandy Park is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	6.5	4.6	0.0	0.0	1.9	7	3.7
Low	4 - 10 du/acre	0.4	0.0	0.0	0.0	0.4	2	5.0
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	1.7	0.0	1.0	0.0	0.7	20	29.5
	Total	8.5	4.6	1.0	0.0	3.0	29	9.7

Achieved Density Level	Net Area (acres)	Total Units
Very Low	1.0	2
Low	1.3	7
Medium Low	0.0	0
Medium High	0.7	20
High	0.0	0
Total	3.0	29



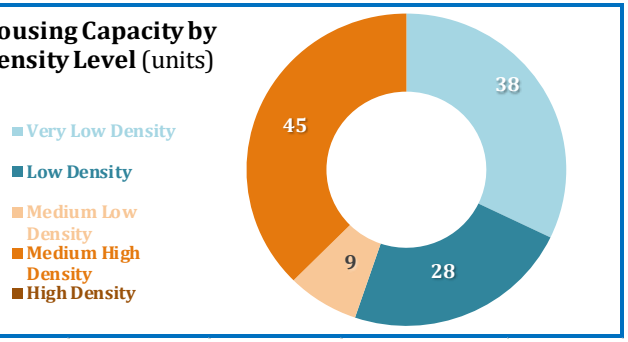


Normandy Park - Residential Land Supply and Capacity

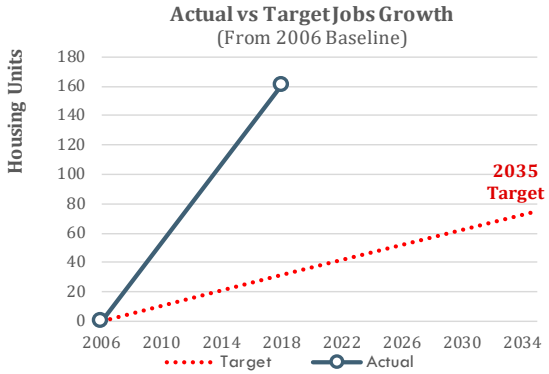
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				9.99	41.0% - 41.0%	15.09	2.0 / 3.3	38
	Redev Subtotal				6.96	41.0% - 41.0%	10.51	2.0 / 3.3	0
	Subtotal	132.96	19.34	40.12	16.95		25.61		**38**
Low Density	Vacant Subtotal				1.38	41.0% - 41.0%	2.09	5.0 / 8.0	10
	Redev Subtotal				2.21	41.0% - 41.0%	3.35	5.0 / 8.0	17
	Subtotal	15.78	0.00	0.48	3.60		5.43		**28**
Medium Low Density	Vacant Subtotal				0.00	10.0% - 10.0%	0.00	18.0	0
	Redev Subtotal				0.17	10.0% - 10.0%	0.48	18.0	9
	Subtotal	0.72	0.00	0.00	0.17		0.48		**9**
Medium High Density	Vacant Subtotal				0.00	10.0% - 10.0%	0.01	24.0 / 29.0	0
	Redev Subtotal				0.08	10.0% - 10.0%	1.57	24.0 / 29.0	44
	Subtotal	1.83	0.00	0.00	0.09		1.58		**45**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				11.37		17.19		49
	Redev Total				9.43		15.91		70
	Total	**151.29**	**19.34**	**40.60**	**20.80**		**33.10**		**119**

Capacity (units)	
Very Low Density Zones	38
Low Density Zones	28
Medium Low Density Zones	9
Medium High Density Zones	45
High Density Zones	0
Capacity in Pipeline	*16*
Total Capacity (Units)	**135**
Remaining Target (2018-2035)	56
Surplus/Deficit Capacity (Units)	**79**

Housing Capacity by Density Level (units)



Normandy Park - Employment Growth and Commercial/Industrial Development Trends



Normandy Park Jobs Growth Target: 2006-2035	75
2006 Jobs (PSRC)	773
2018 Jobs (PSRC)	934
Total Jobs Growth	**161**
Remaining 2035 Target	**0**

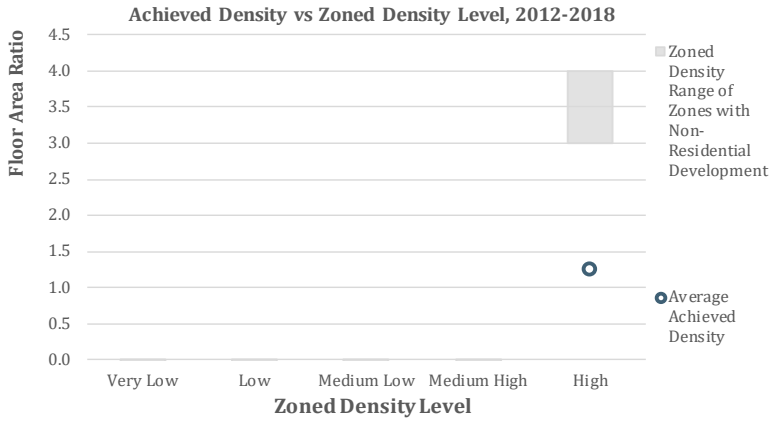
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
516.0%	1.59%	Met Target

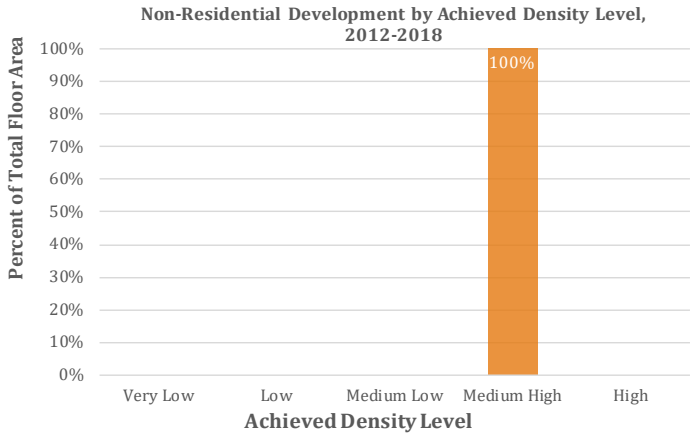
Since 2006, Normandy Park has grown at 516% of the pace needed to achieve its 2035 jobs growth target of 75 units. During this period, the total number of jobs in Normandy Park grew by roughly 21%. Normandy Park has achieved its 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	3,101	3,873	**1.2**
	Total	**3,101**	**3,873**	**1.2**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	3,101	3,873	**1.2**
High	0	0	**0.0**
Total	**3,101**	**3,873**	**1.2**



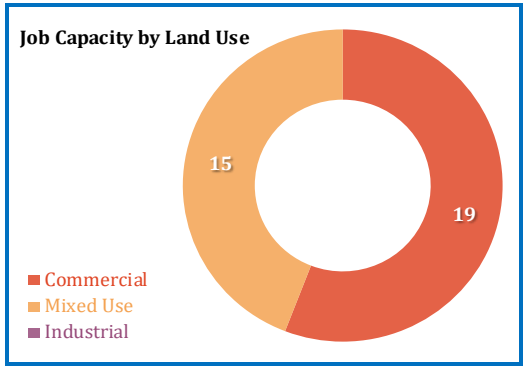


Normandy Park - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	0.5	0.0	0.0	0.0	0.5	11%	0.4
Mixed Use	1.8	0.0	0.1	0.0	1.7	10%	1.6
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**2.3**	**0.0**	**0.1**	**0.0**	**2.2**		**2.0**

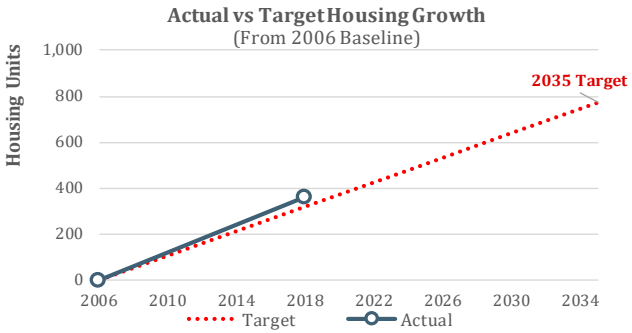
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.02	0.28	0.00	0.00	250	19
Redevelopable	0.00	0.28	0.00	0.00	250	0
Commercial Total	**0.02**	**0.28**	**0.00**	**0.00**	**250**	**19**
Mixed-Use						
Vacant	0.00	0.15	0.00	0.00	250	0
Redevelopable	0.07	0.15	0.01	0.00	250	15
Mixed Use Total	**0.07**	**0.15**	**0.01**	**0.00**	**250**	**15**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.02	0.28	0.69	0.00	250	19
Mixed Use	0.07	0.15	0.91	0.00	250	15
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*0*
City Total	**0.09**	**0.28**	**1.86**	**0.01**	**0 / 250**	**35**

Job Capacity by Assumed Density Level	#	%
Very Low Density	35	100%
Low Density	0	0%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**35**
Remaining Target (2018-2035)		0
Surplus/Deficit Capacity (jobs)		**35**



City of North Bend

Housing Growth and Residential Development Trends



North Bend Housing Growth Target: 2006-2035	771
2006 Estimated Housing Units	3,352
2018 Estimated Housing Units	3,712
Estimated Housing Growth	**361**
Remaining 2035 Target	**411**

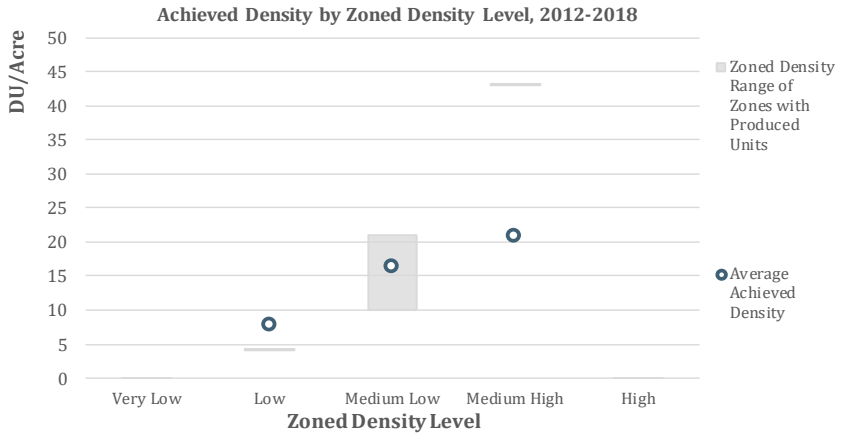
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
113.0%	0.86%	0.62%

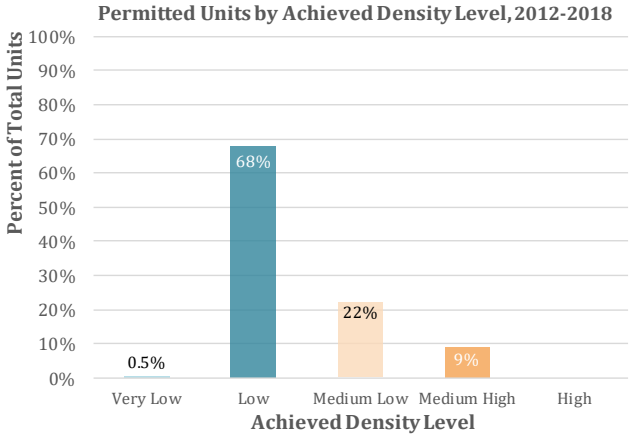
Since 2006, North Bend has grown at 113% of the pace needed to achieve its 2035 housing growth target of 771 units. During this period, the total number of housing units in North Bend grew by roughly 11%. At this current rate, North Bend is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.6% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	159.3	26.0	23.7	32.9	76.7	592	**7.7**
Medium Low	10 - 24 du/acre	18.5	0.0	3.1	3.5	11.9	194	**16.3**
Medium High	24 - 48 du/acre	4.1	0.0	0.0	0.0	4.1	85	**20.8**
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**181.9**	**26.0**	**26.8**	**36.4**	**92.7**	**871**	**9.4**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	1.5	4
Low	76.7	592
Medium Low	11.9	194
Medium High	2.6	81
High	0.0	0
Total	**92.7**	**871**



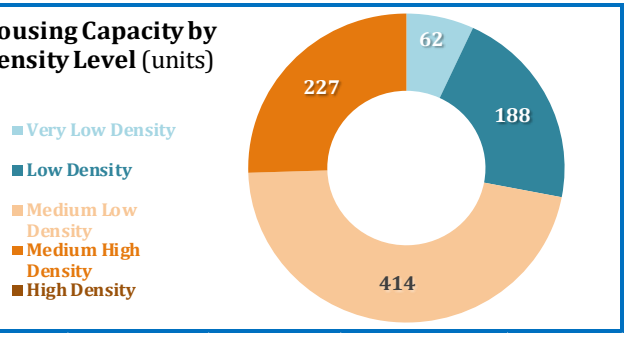


North Bend - Residential Land Supply and Capacity

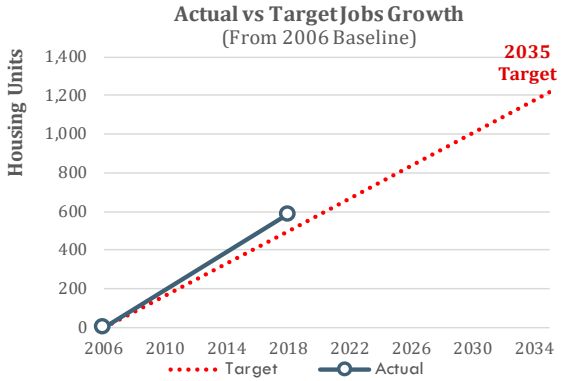
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				11.01	10.0% - 30.0%	25.07	2.0	50
	Redev Subtotal				12.23	10.0% - 30.0%	33.94	2.0	12
	Subtotal	69.64	5.56	0.00	23.24		59.01		**62**
Low Density	Vacant Subtotal				1.81	10.0% - 10.0%	5.58	4.0	22
	Redev Subtotal				19.25	10.0% - 10.0%	59.70	4.0	166
	Subtotal	388.92	76.23	175.49	21.06		65.28		**188**
Medium Low Density	Vacant Subtotal				3.37	4.0% - 25.0%	11.63	15.0 / 21.0	186
	Redev Subtotal				4.68	4.0% - 25.0%	15.77	15.0 / 16.0	228
	Subtotal	47.27	12.28	0.00	8.04		27.40		**414**
Medium High Density	Vacant Subtotal				0.70	25.0% - 25.0%	2.60	32.0	83
	Redev Subtotal				1.30	25.0% - 25.0%	4.78	32.0	144
	Subtotal	128.64	53.75	17.58	2.00		7.38		**227**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				16.89		44.88		342
	Redev Total				37.45		114.20		550
	Total	**634.47**	**147.82**	**193.07**	**54.34**		**159.07**		**891**

Capacity (units)	
Very Low Density Zones	62
Low Density Zones	188
Medium Low Density Zones	414
Medium High Density Zones	227
High Density Zones	0
Capacity in Pipeline	*1,207*
Total Capacity (Units)	**2,098**
Remaining Target (2018-2035)	411
Surplus/Deficit Capacity (Units)	**1,687**

Housing Capacity by Density Level (units)



North Bend - Employment Growth and Commercial/Industrial Development Trends



North Bend Jobs Growth Target: 2006-2035	1,218
2006 Jobs (PSRC)	2,707
2018 Jobs (PSRC)	3,297
Total Jobs Growth	**590**
Remaining 2035 Target	**628**

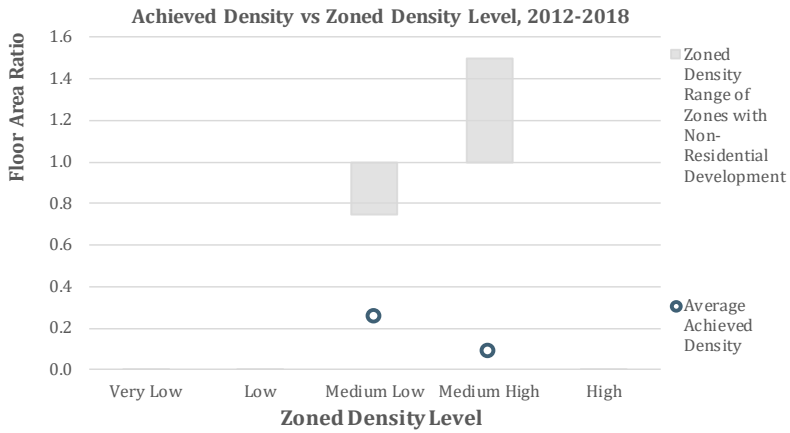
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
117.1%	**1.66%**	**1.03%**

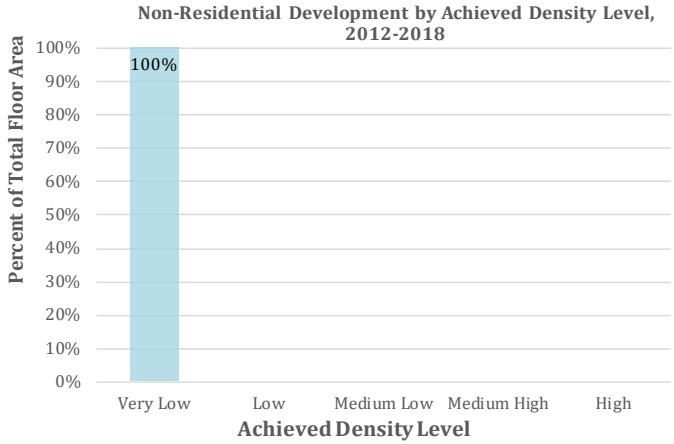
Since 2006, North Bend has grown at 117% of the pace needed to achieve its 2035 jobs growth target of 1,218 units. During this period, the total number of jobs in North Bend grew by roughly 22%. At this current rate, North Bend is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 1% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	1,634,066	413,860	**0.3**
Medium High	1.0 - 3.0 FAR	1,122,230	97,851	**0.1**
High	3.0 & up FAR	0	0	
	Total	**2,756,296**	**511,711**	**0.2**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	2,756,296	511,711	**0.2**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**2,756,296**	**511,711**	**0.2**





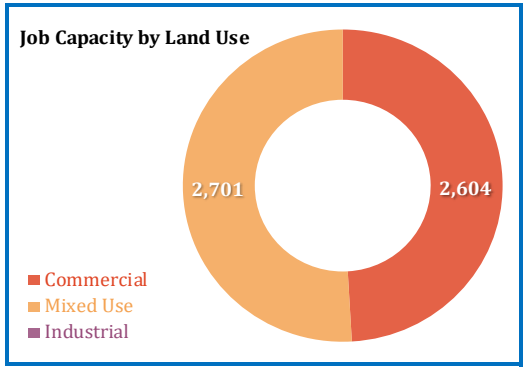
North Bend - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	129.1	89.5	3.2	3.2	33.3	20%	25.4
Mixed Use	59.5	0.0	4.8	4.8	50.0	25%	35.1
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**188.7**	**89.5**	**7.9**	**16.0**	**167.9**		**60.5**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial*						
Vacant	2.81	0.30 / 0.75	0.00	0.95	350 / 800	1,815
Redevelopable	0.89	0.30 / 0.75	0.03	0.33	350 / 800	789
Commercial Total	**3.69**	**0.30 / 0.75**	**0.03**	**1.28**	**350 / 800**	**2,604**
Mixed-Use						
Vacant	1.02	0.75 / 1.50	0.01	0.79	300 / 500	1,682
Redevelopable	0.51	0.75 / 1.50	0.02	0.43	300 / 500	1019
Mixed Use Total	**1.53**	**0.75 / 1.50**	**0.03**	**1.22**	**300 / 500**	**2,701**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	3.69	0.30 / 0.75	0.69	1.28	350 / 800	2,604
Mixed Use	1.53	0.75 / 1.50	0.91	1.22	300 / 500	2,701
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*453*
City Total	**5.22**	**1.50**	**1.86**	**2.51**	**0 / 800**	**5,759**

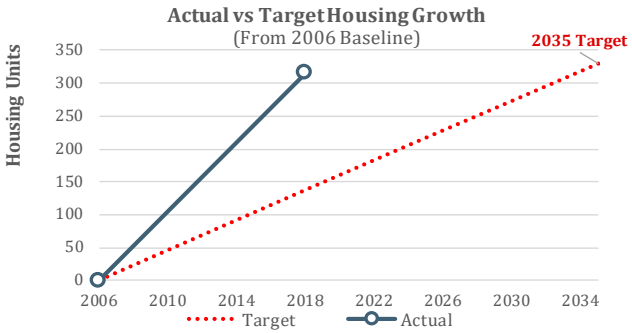
*Certain zones grouped as commercial allow for industrial use.

Job Capacity by Assumed Density Level	#	%
Very Low Density	1,234	23%
Low Density	928	18%
Medium Low Density	2,507	47%
Medium High Density	636	12%
High Density	0	0%
Capacity in Pipeline		*453*
Total Capacity (jobs)		**5,759**
Remaining Target (2018-2035)		628
Surplus/Deficit Capacity (jobs)		**5,131**



City of Pacific

Housing Growth and Residential Development Trends



Pacific Housing Growth Target: 2006-2035	331
2006 Estimated Housing Units	2,146
2018 Estimated Housing Units	2,462
Estimated Housing Growth	**316**
Remaining 2035 Target	15

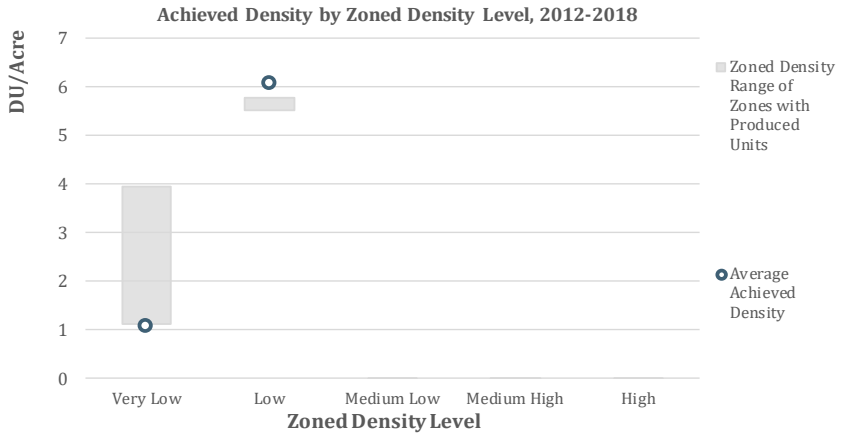
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
230.9%	1.15%	0.04%

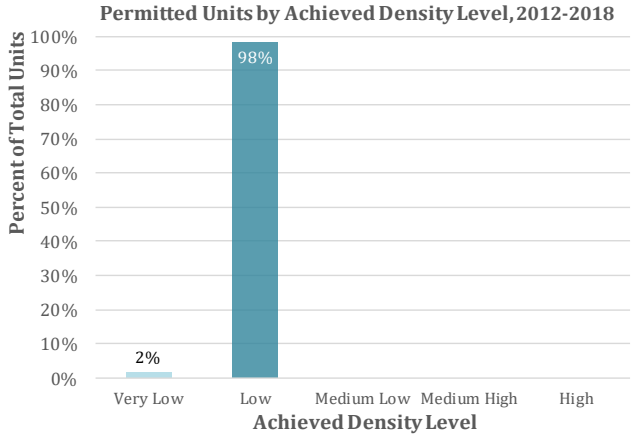
Since 2006, Pacific has grown at 231% of the pace needed to achieve its 2035 housing growth target of 331 units. During this period, the total number of housing units in Pacific grew by roughly 15%. At this current rate, Pacific is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	3.6	1.7	0.0	0.0	1.9	2	**1.1**
Low	4 - 10 du/acre	20.3	0.9	0.0	0.0	19.4	117	**6.0**
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**23.9**	**2.6**	**0.0**	**0.0**	**21.3**	**119**	**5.6**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	1.9	2
Low	19.4	117
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	**21.3**	**119**



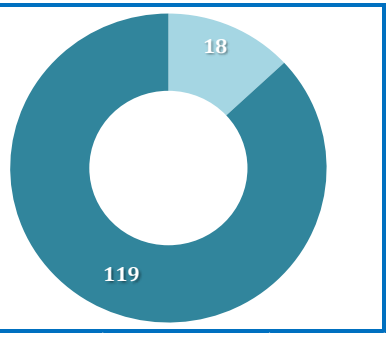


Pacific - Residential Land Supply and Capacity

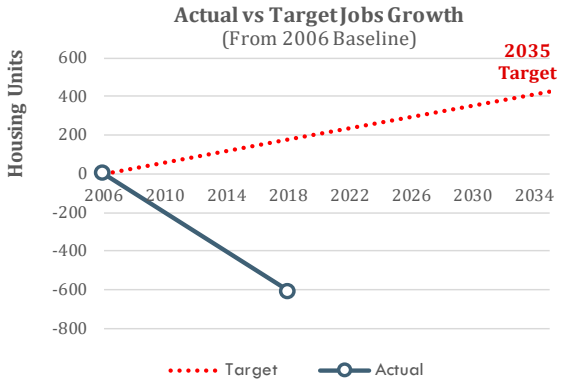
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				4.19	30.0% - 50.0%	10.16	1.1 / 4.0	13
	Redev Subtotal				3.97	30.0% - 50.0%	9.85	1.1 / 4.0	5
	Subtotal	68.75	27.94	0.00	8.16		20.01		**18**
Low Density	Vacant Subtotal				1.70	28.0% - 28.0%	4.43	5.9	26
	Redev Subtotal				11.64	28.0% - 28.0%	30.27	5.9	93
	Subtotal	86.40	19.68	0.00	13.35		34.70		**119**
Medium Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				5.90		14.59		40
	Redev Total				15.61		40.12		98
	Total	**155.15**	**47.62**	**0.00**	**21.51**		**54.71**		**137**

Capacity (units)	
Very Low Density Zones	18
Low Density Zones	119
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**137**
Remaining Target (2018-2035)	15
Surplus/Deficit Capacity (Units)	**123**

Housing Capacity by Density Level (units)



Pacific - Employment Growth and Commercial/Industrial Development Trends



Pacific Jobs Growth Target: 2006-2035	429
2006 Jobs (PSRC)	1,443
2018 Jobs (PSRC)	834
Total Jobs Growth	**-609**
Remaining 2035 Target	**429**

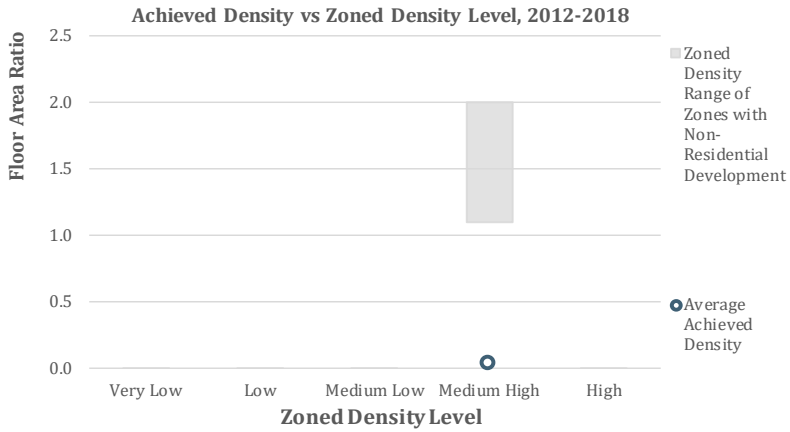
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
-342.9%	-4.46%	4.88%

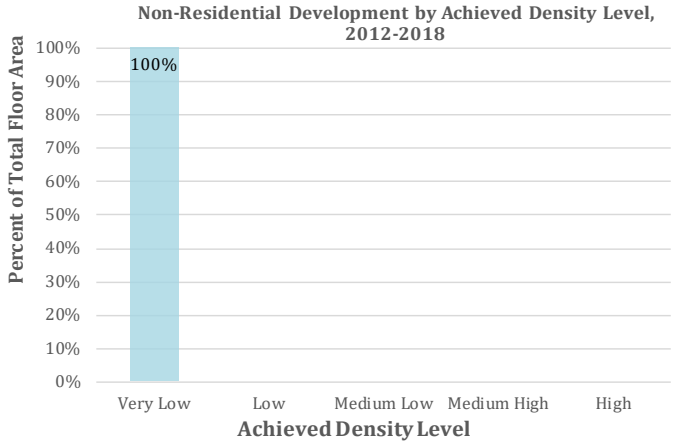
Since 2006, Pacific has grown at -343% of the pace needed to achieve its 2035 jobs growth target of 429 units. During this period, the total number of jobs in Pacific grew by roughly -42%. At this current rate, Pacific is under the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 4.9% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	22,128	756	0.0
High	3.0 & up FAR	0	0	
	Total	22,128	756	0.0

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	22,128	756	0.0
Low	0	0	0.0
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	22,128	756	0.0



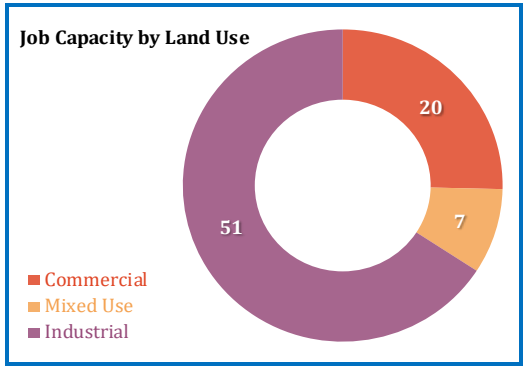


Pacific - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	14.1	11.4	0.3	0.3	2.2	50%	0.8
Mixed Use	3.8	3.0	0.1	0.1	0.6	50%	0.2
Industrial	27.7	8.8	1.9	1.9	15.1	50%	5.7
Non-Res Land Total	**45.6**	**23.2**	**2.2**	**2.2**	**17.9**		**6.7**

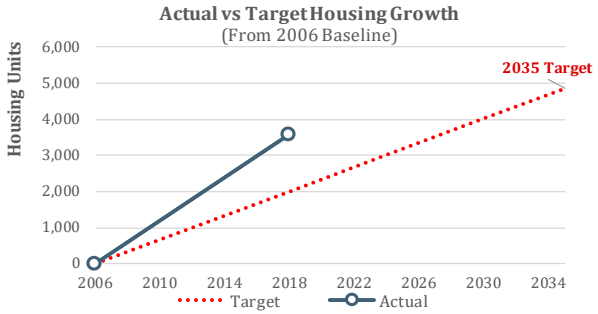
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.03	0.25	0.00	0.01	450	16
Redevelopable	0.01	0.25	0.00	0.00	450	3
Commercial Total	**0.04**	**0.25**	**0.00**	**0.01**	**450**	**20**
Mixed-Use						
Vacant	0.01	0.30	0.00	0.00	450	4
Redevelopable	0.00	0.30	0.00	0.00	450	2
Mixed Use Total	**0.01**	**0.30**	**0.00**	**0.00**	**450**	**7**
Industrial						
Vacant	0.08	0.26	0.00	0.02	1,200	18
Redevelopable	0.17	0.26	0.00	0.04	1,200	33
Industrial Total	**0.25**	**0.26**	**0.00**	**0.06**	**1,200**	**51**
City Total						
Commercial	0.04	0.25	0.69	0.01	450	20
Mixed Use	0.01	0.30	0.91	0.00	450	7
Industrial	0.25	0.26	0.26	0.06	1,200	51
Job Capacity in Pipeline						*0*
City Total	**0.29**	**0.25 / 0.30**	**1.86**	**0.07**	**450 / 1200**	**77**

Job Capacity by Assumed Density Level	#	%
Very Low Density	77	100%
Low Density	0	0%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**77**
Remaining Target (2018-2035)		1,038
Surplus/Deficit Capacity (jobs)		**-961**



City of Sammamish

Housing Growth and Residential Development Trends



Sammamish Housing Growth Target: 2006-2035	4,849
2006 Estimated Housing Units	18,196
2018 Estimated Housing Units	21,780
Estimated Housing Growth	**3,585**
Remaining 2035 Target	1,264

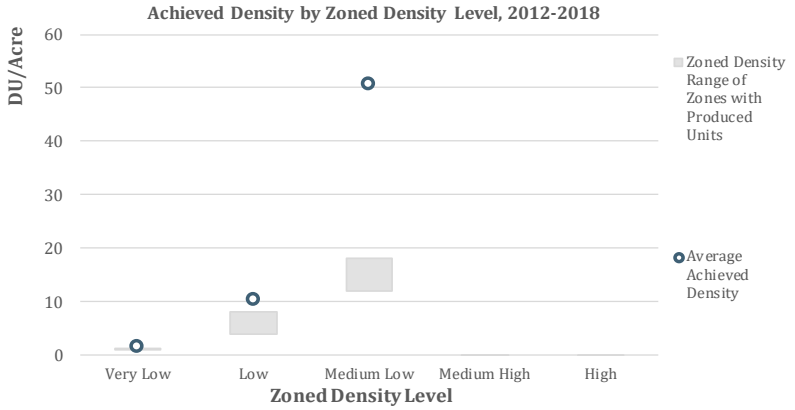
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
178.7%	1.51%	0.33%

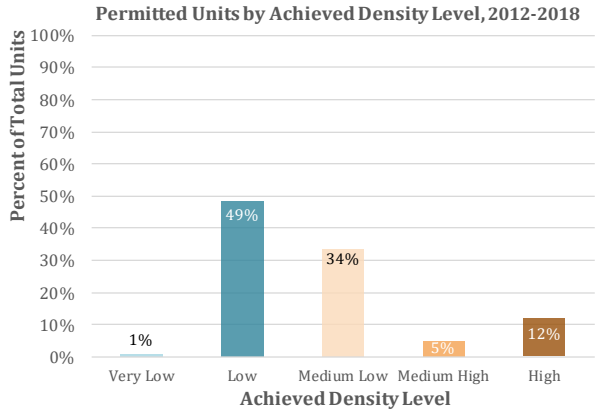
Since 2006, Sammamish has grown at 179% of the pace needed to achieve its 2035 housing growth target of 4,849 units. During this period, the total number of housing units in Sammamish grew by roughly 20%. At this current rate, Sammamish is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.3% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	25.1	6.5	3.4	0.0	15.1	21	**1.4**
Low	4 - 10 du/acre	338.5	14.1	162.3	16.9	145.2	1,498	**10.3**
Medium Low	10 - 24 du/acre	10.2	0.6	2.3	0.2	7.2	364	**50.7**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**373.8**	**21.2**	**167.9**	**17.1**	**167.5**	**1,883**	**11.2**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	15.1	21
Low	108.0	917
Medium Low	40.1	631
Medium High	2.2	92
High	2.1	222
Total	**167.5**	**1,883**





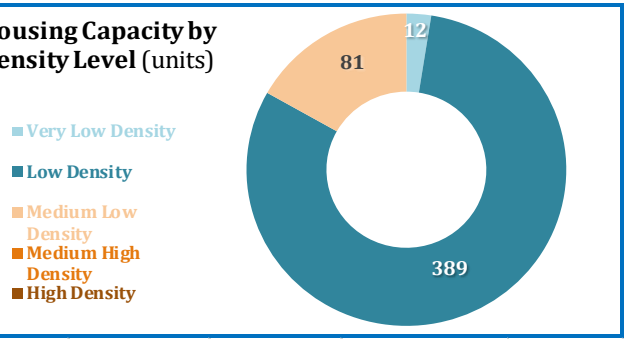
Note: Sammamish includes right-of-way or public purpose areas in the gross site area to calculate the net buildable area. While this report shows achieved density varying from planned density, if you adjust the approach to use Sammamish's formula for net buildable area, the densities are more comparable.

Sammamish - Residential Land Supply and Capacity

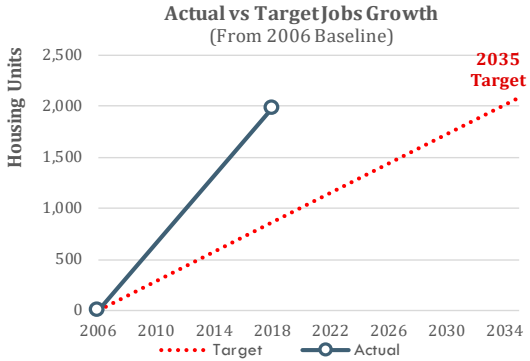
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				4.26	10.0% - 10.0%	7.01	1.0	7
	Redev Subtotal				4.88	10.0% - 10.0%	8.04	1.0	5
	Subtotal	2,128.94	852.74	166.21	9.14		15.05		**12**
Low Density	Vacant Subtotal				16.27	10.0% - 50.0%	26.79	4.0 / 8.0	122
	Redev Subtotal				60.53	10.0% - 50.0%	99.70	4.0 / 8.0	268
	Subtotal	7,729.35	2,223.54	282.52	76.80		126.49		**389**
Medium Low Density	Vacant Subtotal				0.00	50.0% - 50.0%	0.00	12.0 / 16.0	0
	Redev Subtotal				38.38	50.0% - 50.0%	18.06	12.0 / 18.0	81
	Subtotal	339.26	77.64	63.83	38.38		18.06		**81**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				20.52		33.80		129
	Redev Total				103.79		125.80		354
	Total	**10,197.55**	**3,153.91**	**512.57**	**124.32**		**159.60**		**483**

Capacity (units)	
Very Low Density Zones	12
Low Density Zones	389
Medium Low Density Zones	81
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*661*
Total Capacity (Units)	**1,144**
Remaining Target (2018-2035)	1,264
Surplus/Deficit Capacity (Units)	**-120**

Housing Capacity by Density Level (units)



Sammamish - Employment Growth and Commercial/Industrial Development Trends



Sammamish Jobs Growth Target: 2006-2035	2,088
2006 Jobs (PSRC)	6,199
2018 Jobs (PSRC)	8,186
Total Jobs Growth	**1,987**
Remaining 2035 Target	101

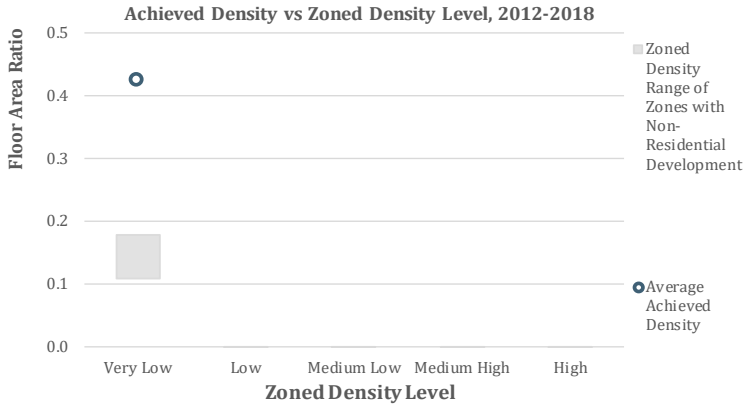
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
230.0%	2.34%	0.07%

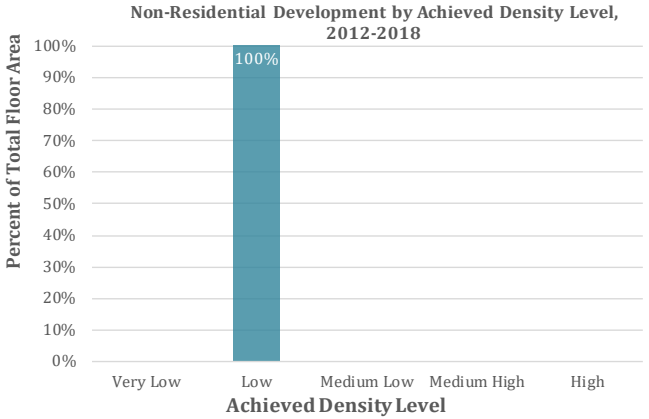
Since 2006, Sammamish has grown at 230% of the pace needed to achieve its 2035 jobs growth target of 2,088 units. During this period, the total number of jobs in Sammamish grew by roughly 32%. At this current rate, Sammamish is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 0.1% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	377,774	160,700	0.4
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	377,774	160,700	0.4

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	0.0
Low	377,774	160,700	0.4
Medium Low	0	0	0.0
Medium High	0	0	0.0
High	0	0	0.0
Total	377,774	160,700	0.4





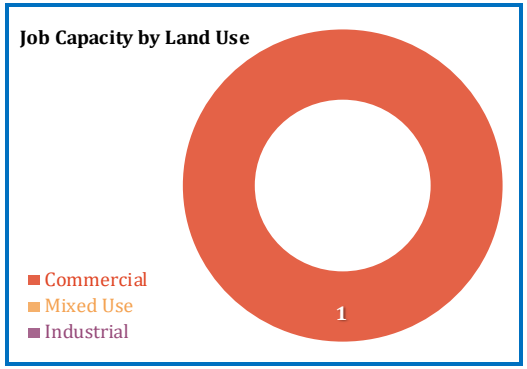
Note: Between 2012-2018, three mixed-use projects were completed in Town Center, some of which included parcels in multiple zones. Densities for all of these projects were guided by a Unified Zone Development Plan which established the level and intensity of new commercial and residential development within the city's Town Center.

Sammamish - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	18.5	13.7	0.9	0.8	3.2	50%	0.8
Mixed Use	12.7	12.7	0.0	0.0	0.0	50%	0.0
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**31.2**	**26.4**	**0.9**	**0.8**	**3.2**		**0.8**

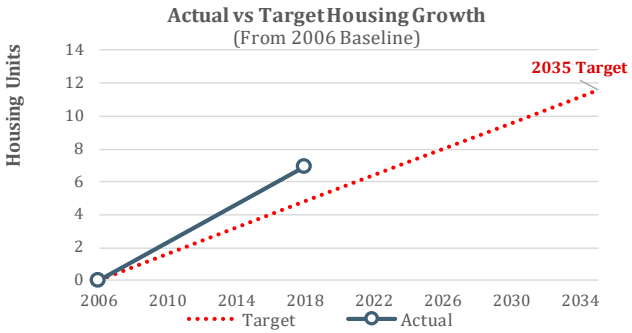
Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.03	0.50	0.03	0.00	370	1
Commercial Total	**0.03**	**0.50**	**0.03**	**0.00**	**370**	**1**
Mixed-Use						
Vacant	0.00	0.11 / 0.23	0.00	0.00	0 / 370	0
Redevelopable	0.00	0.18 / 0.23	0.00	0.00	0 / 370	0
Mixed Use Total	**0.00**	**0.11 / 8.00**	**0.00**	**0.00**	**0 / 370**	**0**
Industrial						
Vacant	0.00	0.00	0.00	0.00	0	0
Redevelopable	0.00	0.00	0.00	0.00	0	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0**
City Total						
Commercial	0.03	0.50	0.69	0.00	370	1
Mixed Use	0.00	0.11 / 8.00	0.91	0.00	0 / 370	0
Industrial	0.00	0.00	0.26	0.00	0	0
Job Capacity in Pipeline						*304*
City Total	**0.03**	**8.00**	**1.86**	**0.00**	**0 / 370**	**305**

Job Capacity by Assumed Density Level	#	%
Very Low Density	0	0%
Low Density	0	0%
Medium Low Density	1	100%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*304*
Total Capacity (jobs)		**305**
Remaining Target (2018-2035)		101
Surplus/Deficit Capacity (jobs)		**204**



Town of Skykomish

Housing Growth and Residential Development Trends



Skykomish Housing Growth Target: 2006-2035	12
2006 Estimated Housing Units	166
2018 Estimated Housing Units	173
Estimated Housing Growth	**7**
Remaining 2035 Target	5

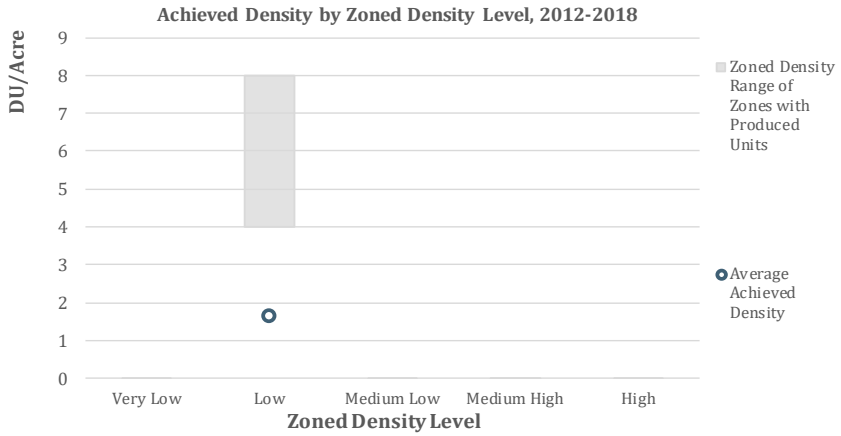
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
144.1%	0.34%	0.16%

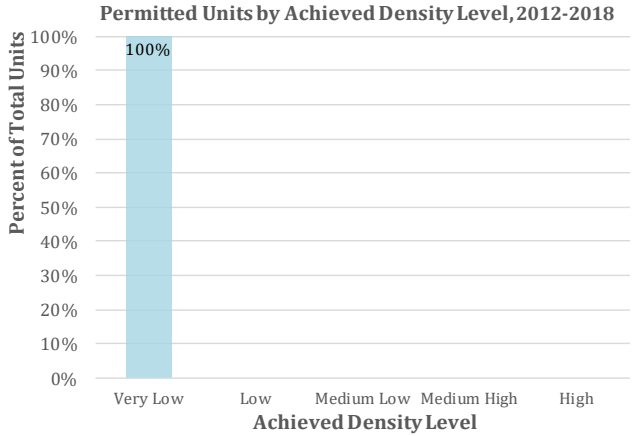
Since 2006, Skykomish has grown at 144% of the pace needed to achieve its 2035 housing growth target of 12 units. During this period, the total number of housing units in Skykomish grew by roughly 4%. At this current rate, Skykomish is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 0.2% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	1.2	0.0	0.0	0.0	1.2	2	**1.6**
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**1.2**	**0.0**	**0.0**	**0.0**	**1.2**	**2**	**1.6**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	1.2	2
Low	0.0	0
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	**1.2**	**2**



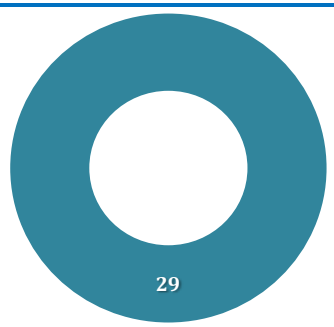


Skykomish - Residential Land Supply and Capacity

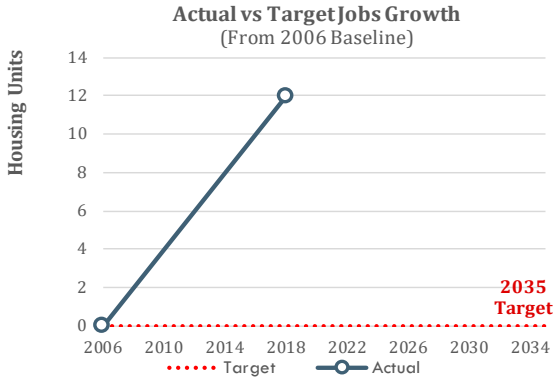
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Low Density	Vacant Subtotal				1.25	41.0% - 41.0%	6.14	4.0 / 8.0	29
	Redev Subtotal				0.00	41.0% - 41.0%	0.00	4.0 / 8.0	0
	Subtotal	118.13	105.41	0.19	1.25		6.14		**29**
Medium Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	36.0% - 40.0%	0.00	24.0	0
	Redev Subtotal				0.00	36.0% - 40.0%	0.00	24.0	0
	Subtotal	5.90	5.90	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				1.25		6.14		29
	Redev Total				0.00		0.00		0
	Total	**124.03**	**111.31**	**0.19**	**1.25**		**6.14**		**29**

Capacity (units)	
Very Low Density Zones	0
Low Density Zones	29
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**29**
Remaining Target (2018-2035)	5
Surplus/Deficit Capacity (Units)	**25**

Housing Capacity by Density Level (units)



Skykomish - Employment Growth and Commercial/Industrial Development Trends



Skykomish Jobs Growth Target: 2006-2035	0
2006 Jobs (PSRC)	64
2018 Jobs (PSRC)	76
Total Jobs Growth	**12**
Remaining 2035 Target	**Not Applicable**

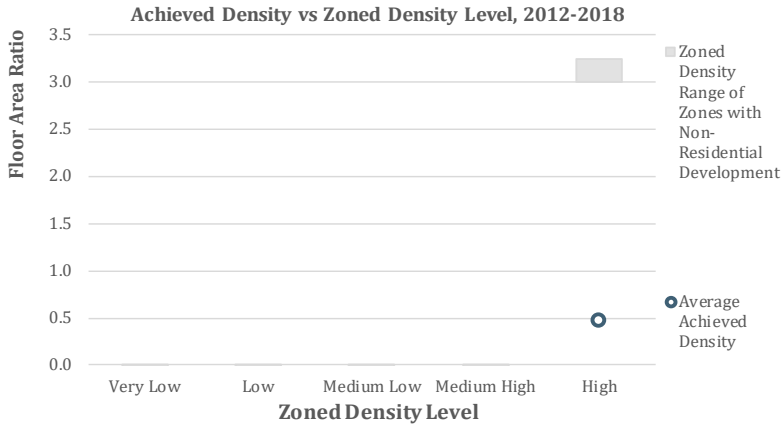
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
Not Applicable	**1.44%**	**Not Applicable**

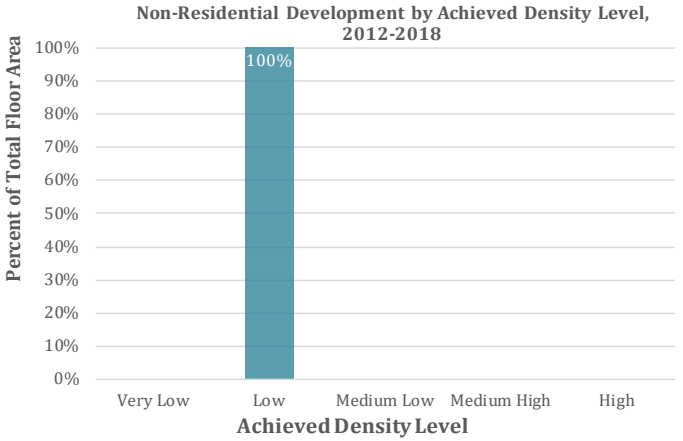
Since 2006, the total number of jobs in Skykomish grew by roughly 1.4%. There is no 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	5,227	2,450	**0.5**
	Total	**5,227**	**2,450**	**0.5**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	5,227	2,450	**0.5**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**5,227**	**2,450**	**0.5**



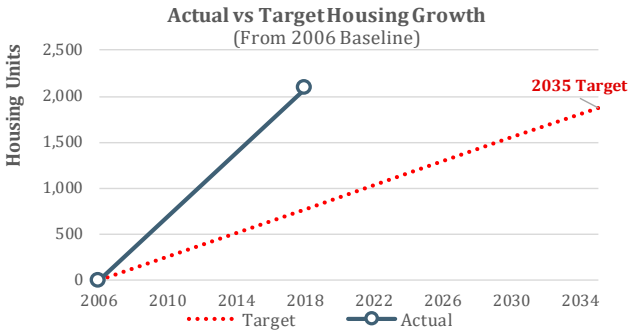


Skykomish - Commercial/Industrial Land Supply and Job Capacity

(no job capacity in Skykomish)

City of Snoqualmie

Housing Growth and Residential Development Trends



Snoqualmie Housing Growth Target: 2006-2035	1,873
2006 Estimated Housing Units	2,864
2018 Estimated Housing Units	4,951
Estimated Housing Growth	**2,087**
Remaining 2035 Target	0

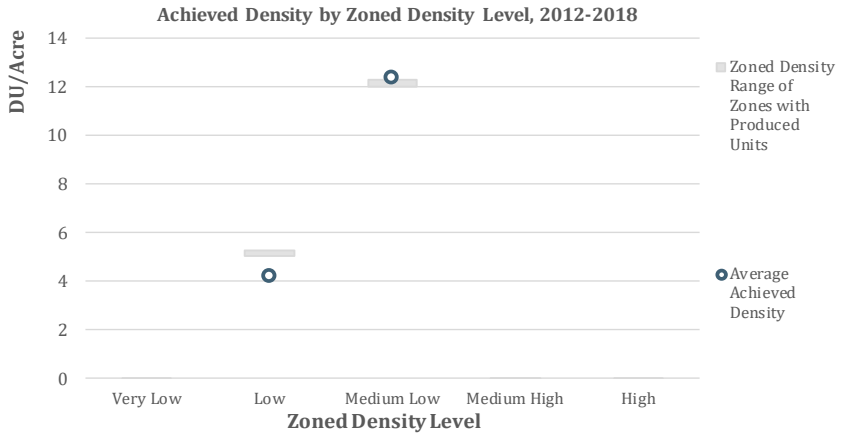
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
269.2%	4.67%	Met Target

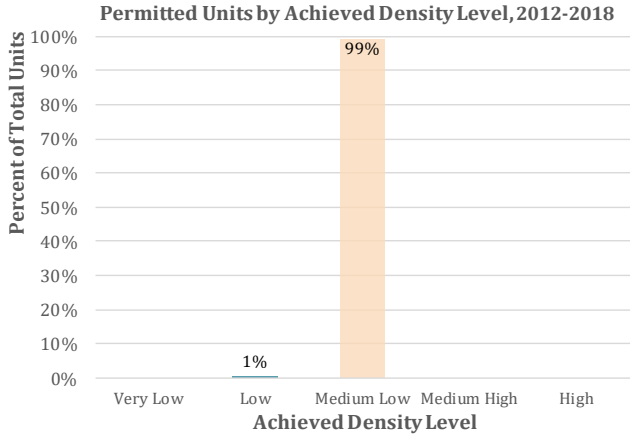
Since 2006, Snoqualmie has grown at 269% of the pace needed to achieve its 2035 housing growth target of 1,873 units. During this period, the total number of housing units in Snoqualmie grew by roughly 73%. Snoqualmie has achieved its 2035 housing growth target.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Low	4 - 10 du/acre	1.0	0.0	0.0	0.0	1.0	4	**4.1**
Medium Low	10 - 24 du/acre	52.0	0.0	0.0	0.0	52.0	640	**12.3**
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	**52.9**	**0.0**	**0.0**	**0.0**	**52.9**	**644**	**12.2**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	0.0	0
Low	1.0	4
Medium Low	52.0	640
Medium High	0.0	0
High	0.0	0
Total	**52.9**	**644**



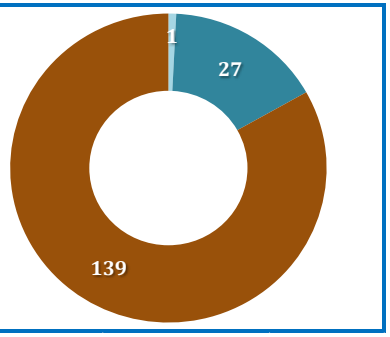


Snoqualmie - Residential Land Supply and Capacity

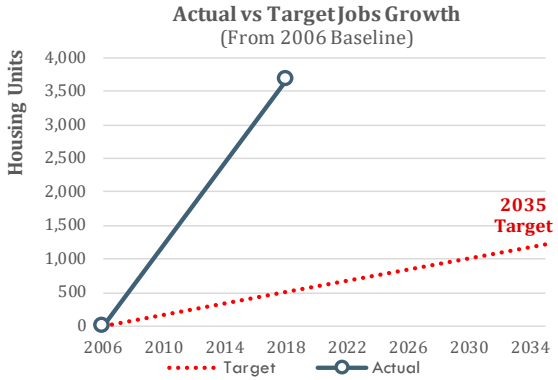
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				4.45	75.0% - 75.0%	6.67	0.2	1
	Redev Subtotal				0.03	75.0% - 75.0%	0.04	0.2	0
	Subtotal	79.30	34.58	0.00	4.47		6.71		**1**
Low Density	Vacant Subtotal				0.06	35.0% - 35.0%	0.31	4.2	1
	Redev Subtotal				1.17	35.0% - 35.0%	6.41	4.2	26
	Subtotal	12.63	11.01	0.00	1.22		6.72		**27**
Medium Low Density	Vacant Subtotal				0.00	1.0% - 1.0%	0.00	12.0 / 12.3	0
	Redev Subtotal				0.00	1.0% - 1.0%	0.00	12.0 / 12.3	0
	Subtotal	33.00	23.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	1.0% - 1.0%	0.00	25.0	0
	Redev Subtotal				0.00	1.0% - 1.0%	0.00	25.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.20	5.0% - 5.0%	1.07	130.0	139
	Redev Subtotal				0.00	5.0% - 5.0%	0.00	130.0	0
	Subtotal	1.34	0.00	0.00	0.20		1.07		**139**
All Zones	Vacant Total				4.70		8.05		142
	Redev Total				1.19		6.45		26
	Total	**126.27**	**68.59**	**0.00**	**5.90**		**14.50**		**168**

Capacity (units)	
Very Low Density Zones	1
Low Density Zones	27
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	139
Capacity in Pipeline	*204*
Total Capacity (Units)	**372**
Remaining Target (2018-2035)	0
Surplus/Deficit Capacity (Units)	**372**

Housing Capacity by Density Level (units)



Snoqualmie - Employment Growth and Commercial/Industrial Development Trends



Snoqualmie Jobs Growth Target: 2006-2035	1,218
2006 Jobs (PSRC)	2,004
2018 Jobs (PSRC)	5,688
Total Jobs Growth	**3,684**
Remaining 2035 Target	0

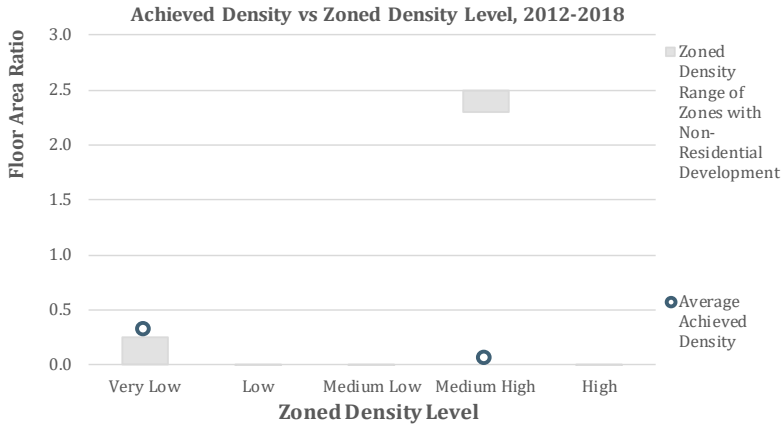
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
731.0%	9.12%	Met Target

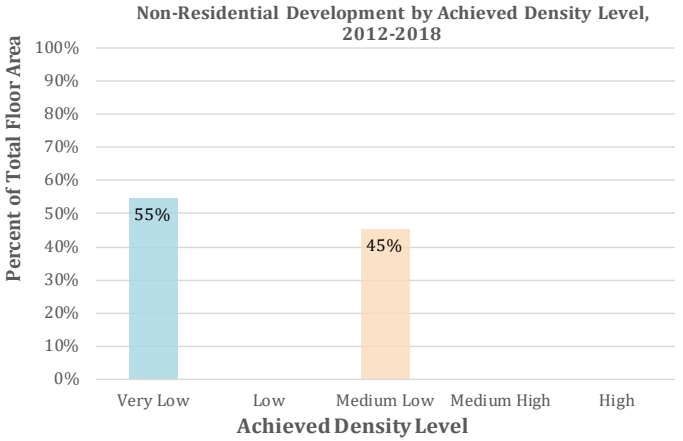
Since 2006, Snoqualmie has grown at 731% of the pace needed to achieve its 2035 jobs growth target of 1,218 units. During this period, the total number of jobs in Snoqualmie grew by roughly 184%. Snoqualmie has achieved its 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	3,819,208	1,239,861	0.3
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	736,164	39,699	0.1
High	3.0 & up FAR	0	0	
	Total	4,555,372	1,279,560	0.3

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	3,396,241	698,916	0.2
Low	0	0	0.0
Medium Low	1,159,131	580,644	0.5
Medium High	0	0	0.0
High	0	0	0.0
Total	4,555,372	1,279,560	0.3





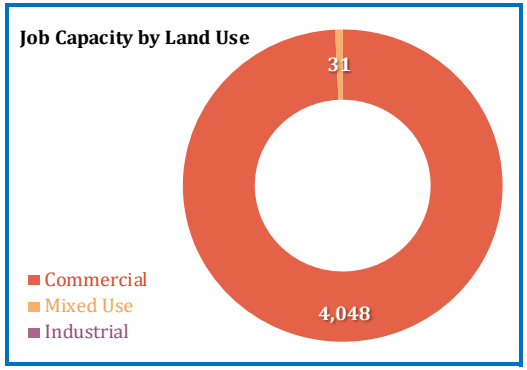
Snoqualmie - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	42.9	18.7	1.2	2.4	20.6	15% - 45%	11.1
Mixed Use	1.3	0.0	0.1	0.1	1.1	1% - 5%	1.1
Industrial	0.0	0.0	0.0	0.0	0.0	0%	0.0
Non-Res Land Total	**44.2**	**18.7**	**1.3**	**3.2**	**26.9**		**12.2**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial*						
Vacant	0.45	0.25 / 0.40	0.00	0.16	300 / 490	3,978
Redevelopable	0.16	0.25 / 0.40	0.01	0.03	300 / 490	70
Commercial Total	**0.60**	**0.25 / 0.40**	**0.01**	**0.20**	**300 / 490**	**4,048**
Mixed-Use						
Vacant	0.05	0.25	0.00	0.01	300 / 400	31
Redevelopable	0.00	0.25	0.00	0.00	300 / 400	0
Mixed Use Total	**0.05**	**0.25**	**0.00**	**0.01**	**300 / 400**	**31**
Industrial						
Vacant	0.00	0.00	0.00	0.00	800	0
Redevelopable	0.00	0.00	0.00	0.00	800	0
Industrial Total	**0.00**	**0.00**	**0.00**	**0.00**	**800**	**0**
City Total						
Commercial	0.60	0.25 / 0.40	0.69	0.20	300 / 490	4,048
Mixed Use	0.05	0.25	0.91	0.01	300 / 400	31
Industrial	0.00	0.00	0.26	0.00	800	0
Job Capacity in Pipeline						*0*
City Total	**0.65**	**0.40**	**1.86**	**0.21**	**300 / 800**	**4,079**

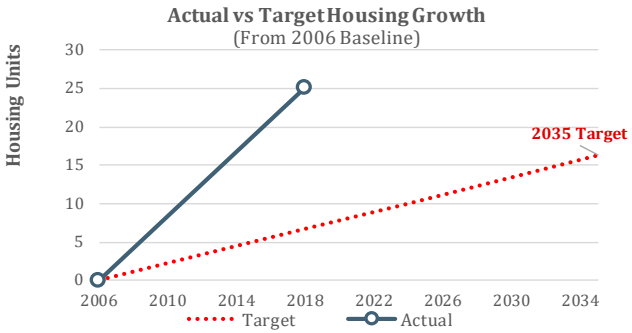
*Certain zones grouped as commercial allow for industrial use.

Job Capacity by Assumed Density Level	#	%
Very Low Density	3,633	89%
Low Density	446	11%
Medium Low Density	0	0%
Medium High Density	0	0%
High Density	0	0%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**4,079**
Remaining Target (2018-2035)		0
Surplus/Deficit Capacity (jobs)		**4,079**



Town of Yarrow Point

Housing Growth and Residential Development Trends



Yarrow Point Housing Growth Target: 2006-2035	16
2006 Estimated Housing Units	401
2018 Estimated Housing Units	426
Estimated Housing Growth	**25**
Remaining 2035 Target	0

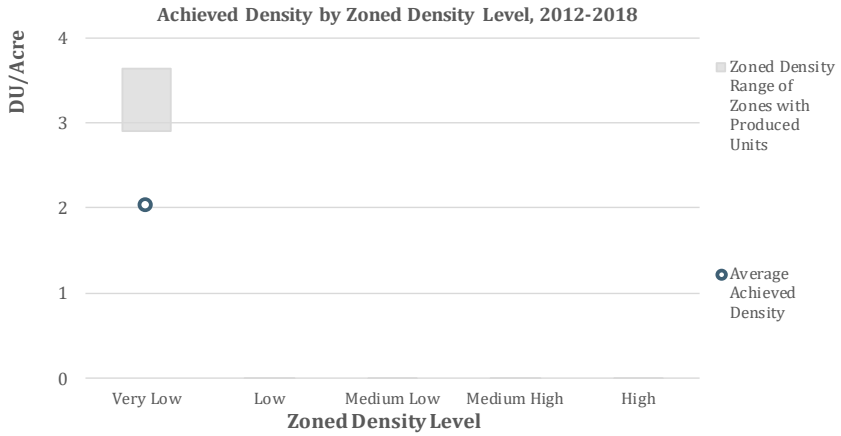
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
374.6%	0.51%	Met Target

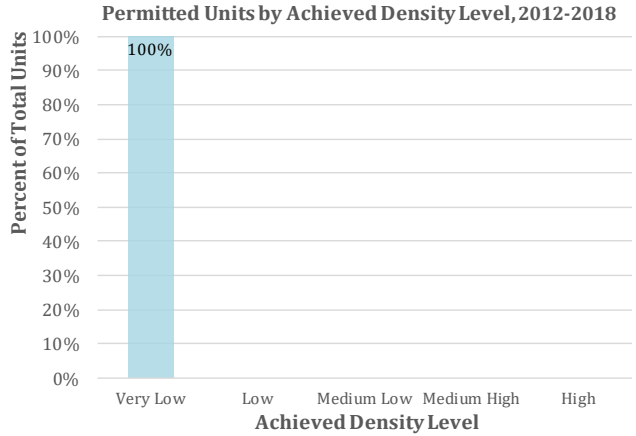
Since 2006, Yarrow Point has grown at 375% of the pace needed to achieve its 2035 housing growth target of 16 units. During this period, the total number of housing units in Yarrow Point grew by roughly 6%. Yarrow Point has achieved its 2035 housing growth target.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	1.0	0.0	0.0	0.0	1.0	2	2.0
Low	4 - 10 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium Low	10 - 24 du/acre	0.0	0.0	0.0	0.0	0.0	0	
Medium High	24 - 48 du/acre	0.0	0.0	0.0	0.0	0.0	0	
High	48 & up du/acre	0.0	0.0	0.0	0.0	0.0	0	
	Total	1.0	0.0	0.0	0.0	1.0	2	2.0

Achieved Density Level	Net Area (acres)	Total Units
Very Low	1.0	2
Low	0.0	0
Medium Low	0.0	0
Medium High	0.0	0
High	0.0	0
Total	1.0	2



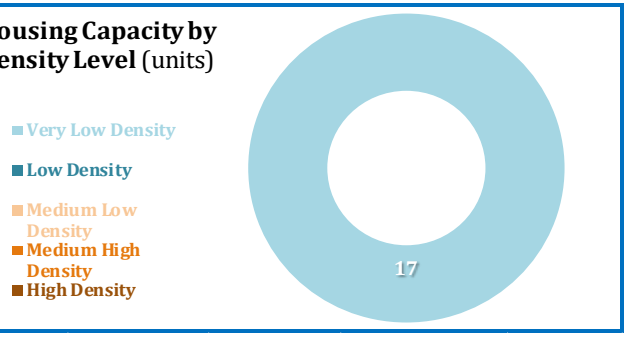


Yarrow Point - Residential Land Supply and Capacity

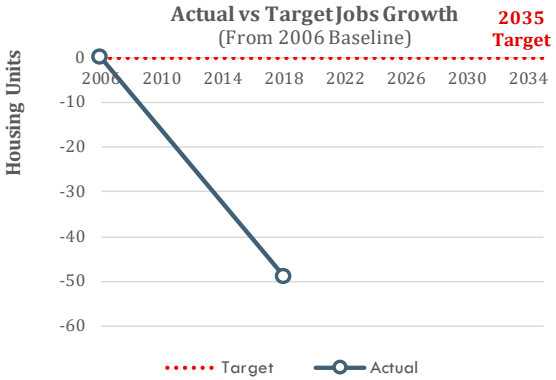
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	1.93	2.0 / 3.6	5
	Redev Subtotal				0.00	0.0% - 0.0%	8.67	2.0 / 3.6	12
	Subtotal	26.79	9.44	0.39	0.00		10.60		**17**
Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium Low Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
Medium High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
High Density	Vacant Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Redev Subtotal				0.00	0.0% - 0.0%	0.00	0.0	0
	Subtotal	0.00	0.00	0.00	0.00		0.00		**0**
All Zones	Vacant Total				0.00		1.93		5
	Redev Total				0.00		8.67		12
	Total	**26.79**	**9.44**	**0.39**	**0.00**		**10.60**		**17**

Capacity (units)	
Very Low Density Zones	17
Low Density Zones	0
Medium Low Density Zones	0
Medium High Density Zones	0
High Density Zones	0
Capacity in Pipeline	*0*
Total Capacity (Units)	**17**
Remaining Target (2018-2035)	0
Surplus/Deficit Capacity (Units)	**17**

Housing Capacity by Density Level (units)



Yarrow Point - Employment Growth and Commercial/Industrial Development Trends



Yarrow Point Jobs Growth Target: 2006-2035	0
2006 Jobs (PSRC)	109
2018 Jobs (PSRC)	60
Total Jobs Growth	**-49**
Remaining 2035 Target	**Not Applicable**

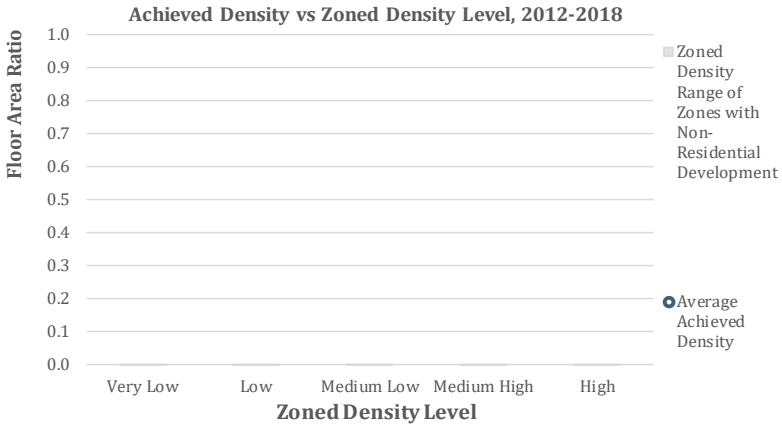
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
Not Applicable	**-4.85%**	**Not Applicable**

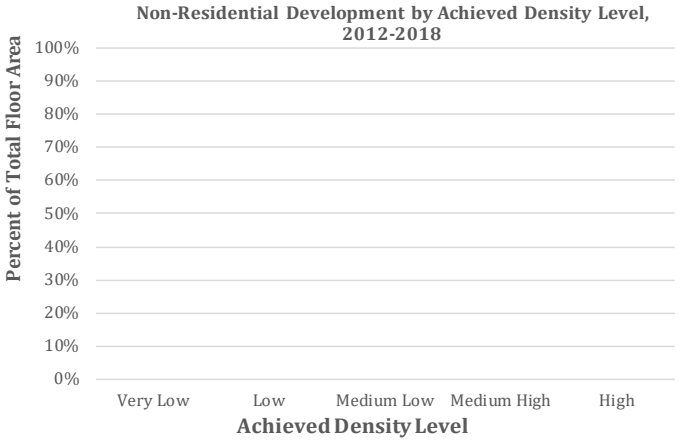
Since 2006, the total number of jobs in Yarrow Point grew by roughly -5%. There is no 2035 jobs growth target.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	0	0	
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	0	0	
High	3.0 & up FAR	0	0	
	Total	**0**	**0**	

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0	0	**0.0**
Low	0	0	**0.0**
Medium Low	0	0	**0.0**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**0**	**0**	**0.0**





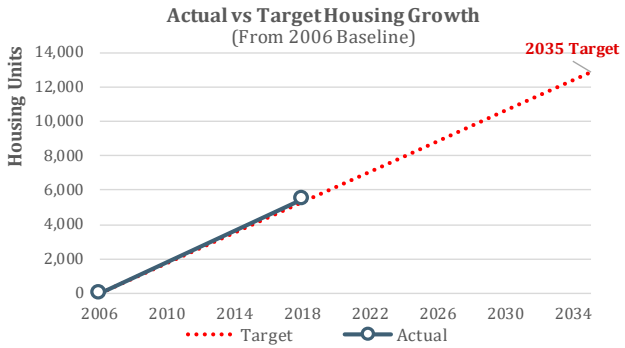
Yarrow Point - Commercial/Industrial Land Supply and Job Capacity

(no job capacity in Yarrow Point)

Urban Unincorporated Areas

Urban Unincorporated King County

Housing Growth and Residential Development Trends



Unincorporated King County Housing Growth Target: 2006-2035	12,837
2006 Estimated Housing Units	35,910
2018 Estimated Housing Units	41,408
Estimated Housing Growth	**5,498**
Remaining 2035 Target	7,339

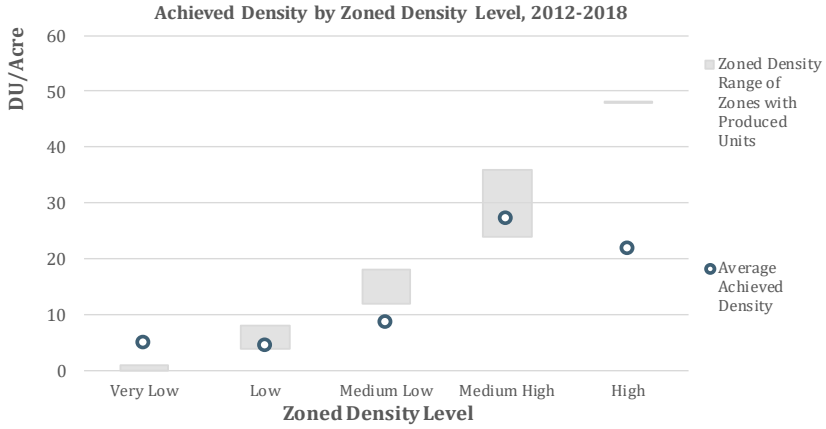
% of Pace Needed to Achieve 2035 Housing Growth Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Needed to Meet 2035 Target
103.5%	1.19%	0.96%

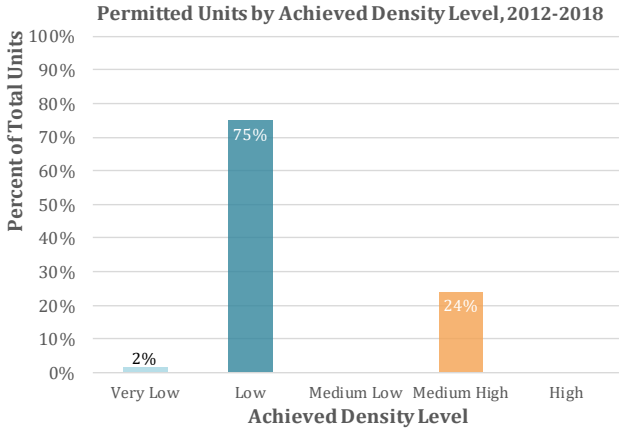
Since 2006, Unincorporated King County has grown at 104% of the pace needed to achieve its 2035 housing growth target of 12,837 units. During this period, the total number of housing units in Unincorporated King County grew by roughly 15%. At this current rate, Unincorporated King County is over the production pace needed to meet its 2035 growth target, and needs to grow at an annual rate of 1% to reach its remaining target by 2035.

Residential Achieved Densities

Zoned Density (du/acre)		Gross Area (acres)	Critical Areas (acres)	Public Purpose (acres)	ROWs (acres)	Net Area (acres)	Total Units	Achieved Density (DU/acre)
Very Low	0 - 4 du/acre	110.3	0.7	0.0	1.7	107.9	526	**4.9**
Low	4 - 10 du/acre	169.4	1.6	0.0	6.0	161.9	732	**4.5**
Medium Low	10 - 24 du/acre	25.9	0.0	0.0	1.9	24.0	208	**8.7**
Medium High	24 - 48 du/acre	17.9	0.0	0.0	0.0	6.6	179	**27.0**
High	48 & up du/acre	17.6	0.0	0.0	0.0	17.6	384	**21.8**
	Total	**341.2**	**2.3**	**0.0**	**9.6**	**318.0**	**2,029**	**6.4**

Achieved Density Level	Net Area (acres)	Total Units
Very Low	36.7	31
Low	268.2	1,520
Medium Low	0.0	0
Medium High	13.5	479
High	0.0	0
Total	**318.4**	**2,030**



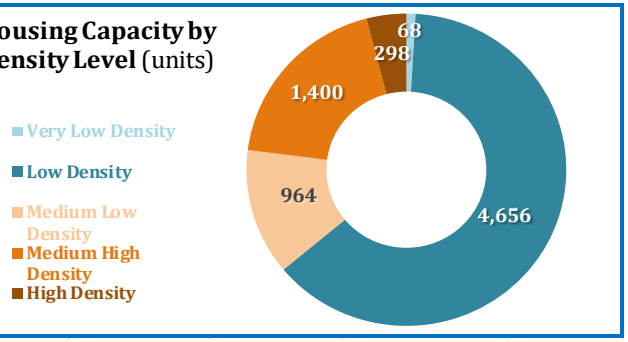


Urban Unincorporated - Residential Land Supply and Capacity

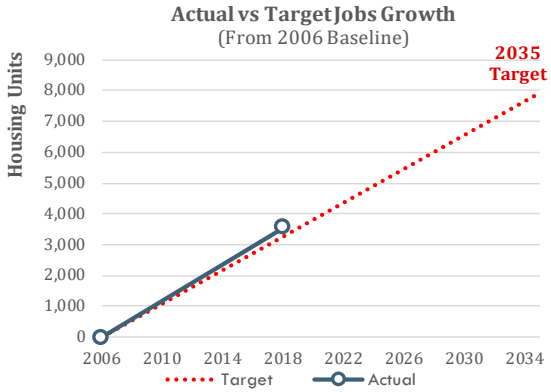
Assumed Density Level	Vacant/ Redevelopable	Gross Acres	Critical Areas	Infrastructure Constrained Area	ROW & Public Purpose Discount	Market Factor (low/high)	Net Available Acres	Assumed Densities (low/high - units/acre)	Net Capacity (units)
Very Low Density	Vacant Subtotal				36.97	0.0% - 20.0%	91.43	0.1 / 0.7	61
	Redev Subtotal				6.63	0.0% - 20.0%	16.95	0.1 / 0.7	7
	Subtotal	1,524.99	324.83	221.63	43.61		108.38		**68**
Low Density	Vacant Subtotal				214.72	0.0% - 50.0%	740.60	4.3 / 9.6	3,813
	Redev Subtotal				43.53	0.0% - 50.0%	180.31	4.3 / 9.6	843
	Subtotal	1,062.74	499.00	139.28	258.25		920.91		**4,656**
Medium Low Density	Vacant Subtotal				2.47	7.0% - 21.0%	18.34	23.5	431
	Redev Subtotal				3.06	7.0% - 21.0%	22.93	23.5	534
	Subtotal	0.00	0.00	0.00	5.53		41.27		**964**
Medium High Density	Vacant Subtotal				2.42	0.0% - 50.0%	13.84	36.0 / 42.1	580
	Redev Subtotal				2.79	0.0% - 50.0%	19.52	36.0 / 42.1	819
	Subtotal	64.78	7.20	0.19	5.21		33.36		**1,400**
High Density	Vacant Subtotal				0.68	10.0% - 21.0%	5.35	49.0	262
	Redev Subtotal				0.10	10.0% - 21.0%	0.77	49.0	36
	Subtotal	0.00	0.00	0.00	0.78		6.12		**298**
All Zones	Vacant Total				257.26		869.57		5,147
	Redev Total				56.11		240.48		2,239
	Total	**2,652.51**	**831.02**	**361.11**	**313.38**		**1,110.05**		**7,386**

Capacity (units)	
Very Low Density Zones	68
Low Density Zones	4,656
Medium Low Density Zones	964
Medium High Density Zones	1,400
High Density Zones	298
Capacity in Pipeline	*0*
Total Capacity (Units)	**7,386**
Remaining Target (2018-2035)	17,586
Surplus/Deficit Capacity (Units)	**-10,200**

Housing Capacity by Density Level (units)



Urban Unincorporated - Employment Growth and Commercial/Industrial Development Trends



Unincorporated King County Jobs Growth Target: 2006-2035	7,900
2006 Jobs (PSRC)	12,843
2018 Jobs (PSRC)	16,400
Total Jobs Growth	**3,557**
Remaining 2035 Target	**4,343**

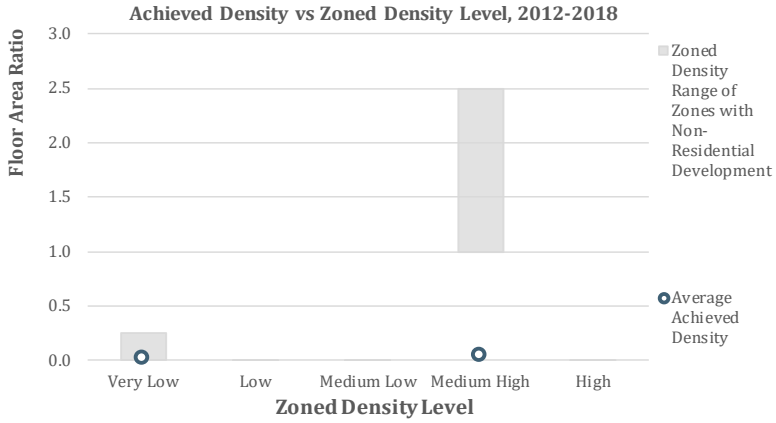
% of Pace Needed to Achieve 2035 Jobs Target	Average Annual 2006-2018 Growth Rate	2018-2035 Avg. Annual Growth Rate Needed to Meet 2035 Target
108.8%	**2.06%**	**1.39%**

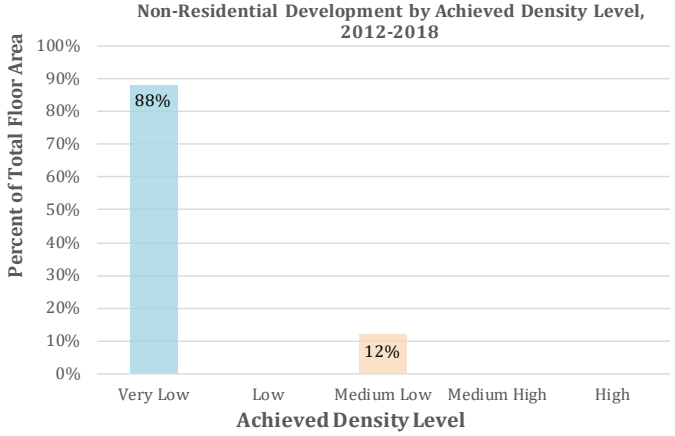
Since 2006, Unincorporated King County has grown at 109% of the pace needed to achieve its 2035 jobs growth target of 7,900 units. During this period, the total number of jobs in Unincorporated King County grew by roughly 28%. At this current rate, Unincorporated King County is over the pace needed to meet its 2035 jobs growth target, and needs to grow at an annual rate of 1.4% to reach its remaining target by 2035.

Non-Residential Achieved Densities

Zoned Density (FAR)		Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	0 - 0.35 FAR	7,294,688	109,974	**0.0**
Low	0.35 - 0.5 FAR	0	0	
Medium Low	0.5 - 1.0 FAR	0	0	
Medium High	1.0 - 3.0 FAR	2,801,955	137,391	**0.0**
High	3.0 & up FAR	0	0	
	Total	**10,096,643**	**247,365**	**0.0**

Achieved Density Level	Net Area (sq. feet)	Total Floor Area (sq. feet)	Average Achieved Density (FAR)
Very Low	10,059,293	218,390	**0.0**
Low	0	0	**0.0**
Medium Low	37,350	28,975	**0.8**
Medium High	0	0	**0.0**
High	0	0	**0.0**
Total	**10,096,643**	**247,365**	**0.0**



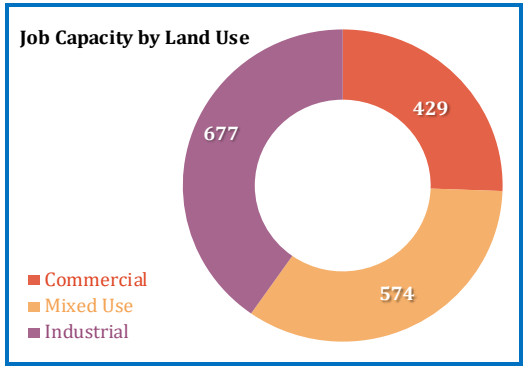


Urban Unincorporated - Commercial/Industrial Land Supply and Job Capacity

Land Supply	Gross Area (acres)	Critical Areas (acres)	ROWs (acres)	Public Purpose (acres)	Initial Land Supply	Market Factor	Buildable Area (acres)
Vacant / Redev.							
Commercial	4.5	1.9	0.1	0.1	2.4	10% - 25%	2.0
Mixed Use	79.3	8.0	3.6	3.6	64.2	0% - 50%	47.3
Industrial	154.4	47.8	5.3	16.0	85.3	0% - 30%	72.8
Non-Res Land Total	**238.2**	**57.6**	**9.0**	**19.7**	**151.9**		**122.1**

Job Capacity by Land Use	Net Buildable Area (mil.sq.ft.)	Assumed Density Range (FAR)	Existing Floor Area (million sq.ft.)	Floor Area Capac. (million sq.ft.)	Sq. ft. per Job	Job Capacity
Commercial						
Vacant	0.09	2.50	0.00	0.21	350 / 500	429
Redevelopable	0.00	2.50	0.00	0.00	350 / 500	0
Commercial Total	**0.09**	**2.50**	**0.00**	**0.21**	**350 / 500**	**429**
Mixed-Use						
Vacant	1.13	0.17 / 0.25	0.00	0.23	0 / 660	505
Redevelopable	0.93	0.17 / 0.25	0.18	0.04	0 / 660	68
Mixed Use Total	**2.06**	**0.17 / 0.25**	**0.18**	**0.27**	**0 / 660**	**574**
Industrial						
Vacant	1.12	0.25	0.00	0.28	0 / 1000	290
Redevelopable	2.05	0.25	0.13	0.38	0 / 1000	387
Industrial Total	**3.17**	**0.25**	**0.13**	**0.67**	**0 / 1000**	**677**
City Total						
Commercial	0.09	2.50	0.69	0.21	350 / 500	429
Mixed Use	2.06	0.17 / 0.25	0.91	0.27	0 / 660	574
Industrial	3.17	0.25	0.26	0.67	0 / 1000	677
Job Capacity in Pipeline						*0*
City Total	**5.32**	**0.17 / 2.50**	**1.86**	**1.15**	**0 / 1000**	**1,680**

Job Capacity by Assumed Density Level	#	%
Very Low Density	1,251	74%
Low Density	0	0%
Medium Low Density	0	0%
Medium High Density	429	26%
High Density	0	0%
Capacity in Pipeline		*0*
Total Capacity (jobs)		**1,680**
Remaining Target (2018-2035)		5,468
Surplus/Deficit Capacity (jobs)		**-3,788**



Technical Appendices

This section contains the guidance documents and methodologies provided to King County jurisdictions throughout this study.

Appendix A: Phase 1 Guidance - Achieved Density

King County 2020 Urban Growth Capacity Study
(Buildable Lands)
Guide for Local Government Reporting Template PART 1

This document describes the data reporting process and template for local governments in King County to use to report consolidated data and analysis results in compliance with the Review and Evaluation/Buildable Lands requirement of the Growth Management Act. Jurisdictions should send complete sections of the reporting template to Rebeccah Maskin, rmaskin@kingcounty.gov, at the King County Office of Performance, Strategy, and Budget, for inclusion in the 2020 Urban Growth Capacity Study (formerly Buildable Lands Report) to the State of Washington.

Standardized reporting is necessary to provide King County (and the state Legislature) with information that is comparable across jurisdictions, and that may be aggregated into a countywide evaluation report. King County and the cities will collaborate to draft a countywide report in 2020. That report will present jurisdiction-by-jurisdiction reporting of recent development and capacity, as well as summaries for the county and UGA as a whole and regional geographies. The template and guide include prompts for standardized technical documentation, which is crucial to making the Buildable Lands analyses both transparent and defensible to public officials, major stakeholders, and the public. An interjurisdictional group of planning and technical staff reviewed the Local Government Reporting Template and Guide in 2019 for both its content and format.

Under the current schedule, data reporting for the 2020 report will be phased over 2019. Reporting for Part 1 should be completed and submitted back to King County by June 1st, 2019. Part 2 will be sent out in mid-2019. Data will be reviewed and compiled by King County staff in coordination with local planning staff on the Interjurisdictional Team, and sent back to cities for review, in late fall 2019.

For staff that has worked on buildable lands reports in the past, this cycle's reporting will be different, particularly for residential development. The King County GIS Center is completing an initial analysis of residential development over the reporting period (2012-18) that aims to provide the bulk of residential reporting data. Cities will review this data, adding local detail from permits or development plans, to accurately calculate achieved densities over the reporting period. The GIS analysis, and further instructions, will be sent out after this guide, in March 2019.

This guidance is organized into two parts covering the three major questions the Urban Growth Capacity Study answers. Part 1 will cover reporting on the first question. Part 2 will cover the second and third questions, and will follow Part 1 reporting. The parts and their different sections are:

PART 1:

- ***I. Are Zoned Densities Being Achieved?***
  - ***A. Achieved Densities 2012-2018 (Reporting Tables 1-7)***
  - ***B. Achieved Density Documentation and Background (Reporting Tables 8-10)***

PART 2:

- ***II. Are Growth Targets Being Met?***
  - ***A. Demand for Development: Remaining Growth Targets***
- ***III. Is there Sufficient Capacity for Remaining Growth Targets?***
  - ***A. Land Supply and Capacity Inventory***

The template tables in the Excel workbook that accompanies this document are to be filled in by all jurisdictions, and returned to King County.[1] This document describes these template tables and instructs on how to fill out the template and provide documentation on data sources and methodology. *Not all tables will apply to every jurisdiction*. Tables for data that are not relevant to local situations should be labeled to indicate "not applicable," with justification, e.g., "No multifamily development during reporting period."

Thank you for your assistance in completing the reporting template!

[1]Please email completed reporting documents to rmaskin@kingcounty.gov. If electronic submission is not possible, please contact Rebeccah Maskin at 206-263-0380.

I. Are Zoned Densities Being Achieved?

A. Measuring Achieved Densities (2012-2018)

Background

Section IA consists of Tables 1-6, and collects data on residential and non-residential development activity for the full 6-year review and evaluation period (2012-2018).[2] This data will come from a parcel-based analysis described below, and building permits for new development between 2012 and 2018. After compiling development data from the parcel-based analysis and building permits, residential units, square footage built, and net land area are aggregated by zone, and the densities achieved over the review period are calculated. These densities will be used in Part 2 to calculate capacity of developable land.

Local reporting on residential data has two steps: 1.) reviewing and supplementing a parcel-based analysis of new residential development, and 2.) reporting on any additional development permitted during the review period. The parcel-based analysis is the starting place for residential data collection in the Urban Growth Capacity Study. It was designed to replace the majority of plat and permit reporting by identifying new residential development on parcels that changed boundaries or added residential units 2012-2018. Permit reporting on single family and multifamily/mixed-use development may still be necessary for developments not identified in the parcel-based analysis data, and to review or supplement the parcel-based analysis with project data (for example, non-buildable critical areas area).

New non-residential development will be addressed through permit reporting.

Any reporting on permitted development should capture new residential units or non-residential space that came online between January 1st, 2012 and December 31st, 2018. Permits finaled or completed between these dates provide the best estimate of completed development. If your jurisdiction does not uniformly track completed permits, issued permits may be used, so long as the development was demonstrably completed between 2012 and 2018. Please document the basis for how permits are selected to cover the review period.

How to fill out the tables

Table 1 should be filled in with zone level data, summarized from the parcel-based analysis. The forthcoming parcel-based analysis packet will contain tables and maps of plat and parcel level (identified by parcel identification number (PIN)) development over the review period. Your review of the gross development area and residential units developed, and the provision of any constrained critical areas data, is essential for accurately estimating the net density achieved by recent development.

Because the source for this analysis is parcel data, public right-of-way, tract parcels, open water, and additional public purpose parcels commonly found in formal plats, have already been removed from the "gross" development site area presented in this analysis. However, additional constrained critical areas outside of tract or public purpose parcels need to be reported, so that they can be removed from the gross site area to calculate the net buildable area. For short plats or other residential development identified in the parcel-based analysis, constrained areas of developed parcels (for example, private roads or retention ponds), in addition to critical areas, *may* need to be reported to subtract from the gross site area.

A general flow for review the parcel-based analysis follows below. More specific instructions will be included with the parcel-based analysis when it is sent in March.

[2] Countywide analysis requires consistency across jurisdictions on the time frame of the development history data. Time frames for growth monitoring activities by individual jurisdictions will vary, based on the adoption date of comprehensive plans and other factors.

1. Review the parcel-based analysis for location, number of units built, and gross site area to verify the amount and location of development over the review period.
    a. The analysis is grouped by plat or parcel PIN.
    b. Shapefiles of the identified parcels are also available.
    c. Review the preliminary achieved densities, unit totals, or locations for anomalies (e.g., a density much higher or lower than expected for its zone)
    d. Correct any of the raw data in the parcel-based analysis (e.g., number of units, gross site area).
    e. If the parcel-based analysis captures development that should not be included (because it did not happen during the review period, or did not add residential units), note the parcels affected, and exclude that development from the reporting in Table 1.
2. Identify if there are other significant developments not included in the parcel analysis, from permit or other development sources.
    a. Add the number of units, gross site area, critical areas, public purpose area, right-of-way area, to the parcel-based analysis via Tables 2 and 3. Instructions follow Table 1 below.
3. Sum the number of residential units and gross area by zone and enter it into Table 1, columns A and B.
4. Calculate the square footage of constrained critical areas on developed plats/parcels included in the parcel-based analysis. Sum by zone and add to column C in Table 1.
5. Calculate the square footage of any other constrained area for developed parcels included in the parcel-based analysis, Sum by zone and add to the "D" columns in Table 1.
    a. Only complete this step as necessary. You do not need to compute public right-of-way and tract parcels that were already removed from the gross area as a part of the parcel-based analysis. Just include any additional constrained areas. Be mindful of short plats or subdivisions that might have private roads or environmentally constrained areas outside of tract parcels.
    b. "Public Purpose Area" refers to drainage/retention areas, open space, or other public facilities, outside of tract parcels.
6. If the zone has mixed-use development, please indicate "yes" in the "mixed-use development" column.
    a. Reporting on the share of mixed use development in residential/non-residential use will be captured the non-residential permit analysis in Table 6.

If the parcel-based analysis does not serve as a helpful starting point for reporting residential development accurately, please contact rmaskin@kingcounty.gov.

Table 1: Residential Parcel-based Analysis Summary

	A	B	C	D1	D2	E		
Zone	**2012-18 Developed Gross Site Area**	**2012-18 Developed Parcel Units**	**Critical Areas**	**Public Purpose Area**	**Right-of-way Area**	**Net Buildable Area**	**Achieved Density**	**Mixed-use Development?**
	Sq Ft	DU	Sq Ft	Sq Ft	Sq Ft	Acres	DU/acre	Y/N
	Summed from parcel-based analysis	Summed from parcel-based analysis	*REPORT HERE*	*REPORT HERE*	*REPORT HERE*	*Calculated:* (A-(C+Ds))/ 43,560	*Calculated: B/E*	

Tables 2 and 3 collect single family and multifamily/mixed-use residential projects, additional to the parcel-based analysis. Use these tables to document development not captured in the parcel-based analysis. Please report new units by zone, gross area from the developed parcels, critical areas, and other public purpose and right-of-way area. Reporting should be by year, by zone when possible.

Table 2: Single-Family Residential Building Permits*

		A	B1	B2	B3	C	D	
Zone	**Permit Year**	**Gross Area**	**Critical Areas**	**Public Purpose Area**	**Right-of-way Area**	**Net Buildable Area****	**Number Units**	**Achieved Density**
		Gross site Acres	Acres	Acres	Acres	Acres (calculated: A-(B1+B2+B3))	DUs	DUs/Acre (calculated: D/C)
Document permit data sources used here.								

* Each line in this table should represent all permits issued in a single year in a zone.
** Net buildable area equals parcel area, less critical areas and other constrained area. Be mindful of short plats and parcel subdivisions with right of way or other public purpose easements. These areas should be removed from the net buildable area.

Table 3 is for reporting on multifamily and mixed-use development. Reporting on multifamily permits is similar to reporting on single family development in Table 2. Mixed-use development refers to developments with both residential and non-residential components, and reporting requires a few more steps:

- Report only on the residential portions of mixed-use development here; non-residential portions will be captured in Table 6.
- To identify a mixed use project, mark "Yes" in the "Mixed-use Project" column.
- To assist with calculating mixed-use capacity later on, it is important to report the share of residential development in the mixed-use development in column A of Table 3.
    - Calculate this by dividing the total built square footage (floor area) of the mixed-use development by the amount of built square feet in residential use.
    - When totaling the development floor area for a mixed-use development, do not include the area of parking structures, public plazas or other amenity spaces in the gross or net floor area/built square feet.
    - It's ok if development is captured in the parcel-based analysis and does not appear in Table 3. The non-residential share will be captured in Table 6.

This table is designed to calculate achieved density in dwelling units per acre. If your city regulates density by Floor Area Ratio (FAR), instead of reporting dwelling units in column E, report the amount of residential floor area constructed, and convert the net buildable area acreage to square feet. Indicate the use of FAR densities in the table documentation.

Table 3: Multifamily Building Permits, Including Residential Portions of Mixed-Use Projects

				A	B	C1	C2	C3	D	E	
Zone	**Permit Year**	**Project Name**	**Mixed-use Project**	**% of Mixed-use in Residential**	**Gross Area**	**Critical Areas**	**Public Purpose Area**	**Right-of-way Area**	**Net Buildable Area**	**Number Units**	**Achieved Density**
		(If applic.)	Y/N	%	Acres	Acres	Acres	Acres	Acres (calc'd: B-(C1+C2+C3))	DUs	DUs/Acre (calc'd: E/D)
Document permit data sources or FAR densities used here.											

Table 4 tallies demolitions, plus accessory dwelling units (ADUs) and conversions. For projects adding units through ADUs or conversion, include the number of units already existing on the parcel and the parcel area, to calculate an achieved density for these types of developments. For demolitions, report the number of units demolished, where no replacement or additional units were constructed.

Table 4: Other New Units and Demolitions*

	A	B	C	D		E	
Zone	**Number of ADUs**	**Number of Units Added through Conversion**	**Pre-existing Units**	**Parcel Area**	**ADU/Convert Achieved Density**	**Number of Demolished Units**	**Net Other New Units**
			For ADUs and Conversions	For ADUs and Conversions	DUs/Acre (calc'd: [A+B+C]/D)		Calc'd: A + B - E

* Each line in this table represents all permits completed in a zone, single year.

Table 5 summarizes the permit data and parcel-based analysis (Tables 1, 2, and 3), and calculates achieved density in each zone.

Table 5: Residential Achieved Densities—Consolidation by Zone*

	A	B	
Zone	**Total Residential Units**	**Total Net Buildable Area**	**Overall Achieved Density**
	Table 1 column B + Table 2 column D + Table 3 column E	Table 1 column E + Table 2 column C + Table 3 column D	A/B

* Aggregate by zone for all years

Table 6 reports data on building permits for employment-based uses by zoning type, including the non-residential components of mixed-use development. The types of uses to include in this table are commercial and industrial developments where employees are located, and are broadly referred to as "commercial" or "non-residential," for simplicity. This includes developments on publicly owned lands, so long as they are employment sites (like a school or office building). Do not report on any tenant improvements or temporary/moveable structures. "Mixed-use" developments include residential and non-residential components. Commercial developments with different non-residential uses (e.g., a hotel and office), are not counted as mixed-use developments.

Purely commercial or industrial developments should be reported by zone, by year, with the gross parcel/site area of the development, constrained critical areas, right-of-way, and public purpose areas, and floor area (the built square footage) of the development. Do not include parking structures, plazas, or amenity spaces as built floor area. The floor area ratio (FAR) is the measure of non-residential density, and is calculated from the floor area and the net site area fields. It expresses the ratio of the amount of built space to the area of the site/parcel.

Mixed-use development requires additional reporting on the portion of development in non-residential use. For mixed-use developments:

- To identify a mixed use project, mark "Yes" in the "Mixed-use Project" column.
- Report the total built square feet for the project in column F1
- Report the non-residential built square feet for the project in column F2
- To assist future mixed-use capacity calculation, report the share of commercial development in the mixed-use development in column A.
    - Divide the total built floor area (F1) of the mixed-use development by the amount of built square feet in commercial use (F2).

Table 6: Commercial and Industrial Building Permits, Including Commercial Portions of Mixed-use Projects

				A	B	C1	C2	C3	D	E	F1	F2	
Zone	**Permit Year**	**Project Name**	**Mixed-use Project**	**% of Mixed-use in Commercial**	**Gross Site Area**	**Critical Areas**	**Public Purpose Area**	**Right-of-way Area**	**Net Site Area**	**Net Site Area**	**MU Floor Area**	**Commercial Floor Area**	**Achieved FAR**
		(If applic.)	Y/N	Calc'd: F2/F1	Acres	Acres	Acres	Acres	Acres (calc'd: B-(C1+C2+C3))	Sq. Ft. (calc'd: D* 640)	Sq. Ft. (MU dev. Only)	Sq. Ft.	Calc'd: F2/E
Document permit data sources used here.													

Table 7 consolidates the annual or project level data from Table 6 by zone. Simply sum the built floor area and net site area from Table 6 by zone to calculate the achieved density for each zone, expressed in floor area ratio (FAR).

Table 7: Non-residential Achieved Densities—Consolidation by Zone*

	A	B	
Zone	**Total Floor Area**	**Total Net Site area**	**Overall Achieved Density (FAR)**
	Table 6, column F2	Table 6, column E	A/B

B. Achieved Density Documentation and Background

Background

Section IA presented data on recent development activity, particularly achieved densities averaged across the six-year review period. Section IB provides a space for further analysis of achieved densities to consider a range of factors responsible for the densities achieved. The objective is to consider on the causes leading to the densities achieved in preparation for Part 2 reporting, where "assumed" densities are selected to apply to vacant and redevelopable land to calculate remaining capacity.

This section provides a space to reflect on the densities achieved in each zone, whether they approximate expected densities, and why they may not.

Buildable lands legislation now requires jurisdictions to review their development regulations for changes during the evaluation period that have significantly affected the supply of developable land (either positively or negatively). Additionally, cities must account for circumstances where zoned densities are not achieved during the evaluation period. Non-achievement of zoned densities may necessitate the adoption of reasonable measures in 2023 comprehensive plans. These requirements will be addressed in Part 2 of reporting, but the context behind the achieved densities will be collected while it is freshly in mind.

How to fill out the tables

For Tables 8 and 9, for each zone, enter the achieved densities (from Tables 5 and 7), or for zones where no development occurred during the review period, enter "0" for achieved density. Then, use the documentation space to supply any information documenting or exploring factors responsible for the achieved density. Is the density higher or lower than expected? Have there been significant recent changes in the zone? Provide any qualitative or quantitative data that helps contextualize the densities achieved.

The following describes some factors that can influence achieved densities.

Inadequate Density Data

Some zones may have had little or no development activity during the review period. If no activity occurred, there is no direct data from which to project future densities. In these situations, describe why development has not occurred. In Part 2 of reporting, when it's time to select an assumed density, development in other similar land use categories, including similar zones from other cities, analysis of not-yet-built development projects, and assumptions from code, can help inform assumed densities. It may be helpful to note these any of these data points at this time.

Planned Development

Issued permits, preliminary plats, or developer agreements for permitted or under-construction development that will come online after the end of the review period (12/31/18) can provide a fuller story of development within a zone. Do these types of development add any detail to the achieved density of a zone? Summary analysis of data on planned development can be provided now.

Changes in Regulations

In several jurisdictions, significant changes to zoning and other land use regulations, like rezones, upzones, changes to setbacks or impervious surface requirements, occurred during the review period. The impacts of such changes will likely be reflected, in part, in the density trends analysis. Note whether any of these circumstances affecting achieved densities apply over the review period.

Shifting Jurisdiction

For cities that annexed large areas during the review period (2012-2018), a significant number of the development projects included Section 1 tables may have been approved under King County's jurisdiction. The type and density of development approved by the county may not be representative of what is likely to occur under municipal jurisdiction in these areas. Density findings that show significant differences between county and city approved development may support alternative future assumptions about the capacity of land that is now incorporated.

Infrastructure Gaps and Limitations

Limited infrastructure availability may keep densities low in the foreseeable future, despite zoning that allows for higher densities. In most cases, this will be reflected in the achieved density data. Alternatively, infrastructure deficits that may have depressed achievable densities during the review period, may be resolved in the near future, allowing for higher density development within the planning horizon. Note if these circumstances apply.

Table 8: Document Achieved Residential Densities

Zone	Achieved DUs/Acre	Reasons/Documentation
	From Table 5	Add any footnotes from Tables 1-5, and any supplemental documentation on the densities achieved in each zone.

Table 9: Document Achieved Non-Residential Densities

Zone	Achieved FAR	Reasons/Documentation
	From Table 7	Add any footnotes from Table 6-7, and any supplemental documentation on the densities achieved in each zone.

Table 10 is similar in intent as tables 8 and 9, but examines the split of uses in zones allowing mixed-use development. Are certain zones experiencing more residential or commercial development than expected? Is mixed-use development tilted towards one use? Have development regulations only recently allowed mixed use? Report any qualitative or quantitative data to describe your city's outcomes.

Table 10: Achieved Shares of Residential and Commercial Development in Mixed-use Zones

Zoning	Achieved % of Floor Area Developed Residential	Achieved % of Floor Area Developed Commercial	Reasons/Documentation for Mixed-use Use Splits
Zones w/ Mixed-use dev. only	calculated: *1- Table 6 column A*	From Table 6 column A	

Appendix B: Phase 2 Guidance - Land Supply

2020 King County Urban Growth Capacity Study
Phase 2 Guidance

I. Overview of the Urban Growth Capacity Study

The Urban Growth Capacity Study, also known as "buildable lands," is a collaboration between cities and King County to analyze recent land use development trends, and to compare those trends to comprehensive plans and growth targets, providing meaningful information on development and capacity for updating growth targets and comprehensive plans. King County coordinates the development of the report, and each city provides and a standardized set development data for their jurisdiction. In phase one of data collection, earlier in 2019, cities collected data on recent development 2012-18, in an effort to determine the zone-based achieved development densities. In phase two of data collection, cities and King County will review their urban land area to identify the supply developable land available over the next 20 years. This document will guide planners and analysts through that process. Phase three of data collection will take place in early 2020 and focus on calculating capacity and new requirements of the buildable lands process.

II. Purpose of Data Collection Phase 2

Phase one of data collection for the Urban Growth Capacity Study focused on calculating the achieved densities of recent development. Phase two will identify developable vacant and redevelopable lands to combine with the achieved density data to ultimately calculate capacity. Phase two also concerns the quantification of the planned density for each zone in your jurisdiction, to understand whether densities are being achieved as planned. Planned densities also help determine whether developable land is redevelopable or not. Planned densities are different from *achieved* densities (calculated in phase 1), in that they are expected densities based on your jurisdiction's code and development regulations. Planned densities will be detailed further in section III below.

This guidance will help you define vacant and redevelopable developable land, and identify the densities being planned for in each zone. Your task is then to use those definitions to quantify developable land and report planned densities. In the following sections we'll describe the details for the types of data to provide to complete phase two of data collection.

Ideally, you'll submit GIS-based zone- or parcel-level data identifying developable residential and non-residential land, and tabular data expressing the planned densities for each zone in your jurisdiction. Tables of data, in lieu of GIS data may be submitted as a last resort. If you do not have GIS to assist in this exercise, King County has resources available to support your efforts. Don't hesitate to request technical support by contacting Rebeccah Maskin, rmaskin@kingcounty.gov or 206-263-0380.

King County is requesting Phase two data to be returned by January 7, 2020.

III. Planned Density Reporting

Planned densities are collected for two reasons. First, as a part of new requirements to the GMA buildable lands statute[1] passed by the State Legislature in 2017, King County jurisdictions are now required to evaluate whether planned densities are being achieved in the 2020 Urban Growth Capacity Study. Achieved densities (evaluated in Phase one reporting) will be compared to planned densities to as one indicator of whether development is occurring as planned.

[1] RCW 36.70A.215

Second, planned densities are used in the identification of redevelopable lands. Since the 2007 Buildable Lands Report, King County has recommended jurisdictions identify redevelopable lands by comparing the existing density of development to its planned, or potential, density, particularly for residential and mixed use lands.

A planned density should be reported for each zone where people live or work in your jurisdiction. The next section will describe how King County is defining "planned densities."

Defining Planned Densities

For the Urban Growth Capacity Study, **planned densities will be defined as the "as-of-right" density granted by code for each zone, that is the maximum allowed density without any bonus or incentive density**. In many communities, residential densities are defined in dwelling units per acre (DU/acre) or by minimum lot size, while non-residential zones use development regulations or Floor Area Ratio (FAR) to define the allowed density. The following sections describe selecting or calculating DU/acre and FAR for each zone. While this guidance will provide instructions for relatively precise calculations, these should be reviewed with your professional judgement for the intent of your comprehensive plan and implementing code.

Residential Densities

For this analysis, we are requesting residential planned densities to be reported in terms of dwelling units per acre (DU/acre), unless your jurisdiction solely uses FAR to define density. Some jurisdictions use minimum lot sizes to define residential densities, particularly in single-family zones. Minimum lot sizes can easily be converted to DU/acre by dividing 43,560 square feet (one acre) by the minimum lot size. The result is the maximum dwelling units/acre allowed. Residential densities for mixed use zones should also be supplied.

Non-residential Densities

Densities in commercial and industrial zones are less frequently defined as explicitly as residential zones, typically relying on bulk, height, and use regulations to define the size or density of a development. Some jurisdictions have used floor area ratio (FAR) to define the density of non-residential development, and this is what is requested for non-residential planned density reporting. If your jurisdiction does not use FAR to define density, Table 1a in the data reporting tables template is a "FAR calculator" table and instructions to assist in determining a FAR-based density. Please provide non-residential densities for mixed use zones as well as residential densities.

Planned Density Template Table

Planned density data should be reported in Table 1: Planned Densities, which has the following format:

	Select:						Optional Fields (to assist with density calculation)						
Zone	Residential	Non-Residential	Mixed-use	Other	DU/acre	FAR	Minimum Lot Size	Maximum Height	Estimated Stories	Maximum Lot Coverage	Front Setback	Rear Setback	Side Setbacks

The following table describes the reporting table with field-level definitions and instructions for completing the table. Note that the optional fields duplicate fields in the FAR calculator. Store the values

used in the FAR calculator in Table 1, or by duplicating the FAR calculator in that tab of the template spreadsheet.

	Zone	Zone name/ID. Include all zones where people live and/or work
Select:	Residential	Characterize the zone by its dominant use, mark with an "x"
	Non-Residential	
	Mixed-use	
	Other	
	DU/acre	Where residential development is allowed, fill in the as-of-right maximum density allowed, per the guidance, in dwelling units per acre
	FAR	Where non-residential development is allowed, fill in the as-of-right maximum density allowed, per the guidance, in FAR. Use the following optional fields or the FAR calculator, as needed.
Optional Fields (to assist with density calculation)	Minimum Lot Size	Residential zones in particular. To convert to dwelling units per acre, divide the minimum lot size by 43,560.
	Maximum Height	Non-residential zones; maximum building height allowed in zone. Estimate a maximum height if "unlimited," not specified, or site specific.
	Estimated Stories	Non-residential zones; estimate from the maximum height. A rule of thumb to approximate: divide by 10 and round down (e.g, 35' = ~3 stories).
	Maximum Lot Coverage	Non-residential zones; as a percentage expressed in code as maximum lot coverage, impervious surface coverage, or a maximum building size/development site (if 1 story only)
	Front Setback	Non-residential zones, in feet
	Rear Setback	Non-residential zones, in feet
	Side Setbacks	Non-residential zones, in feet

IV. Developable Land Supply Reporting

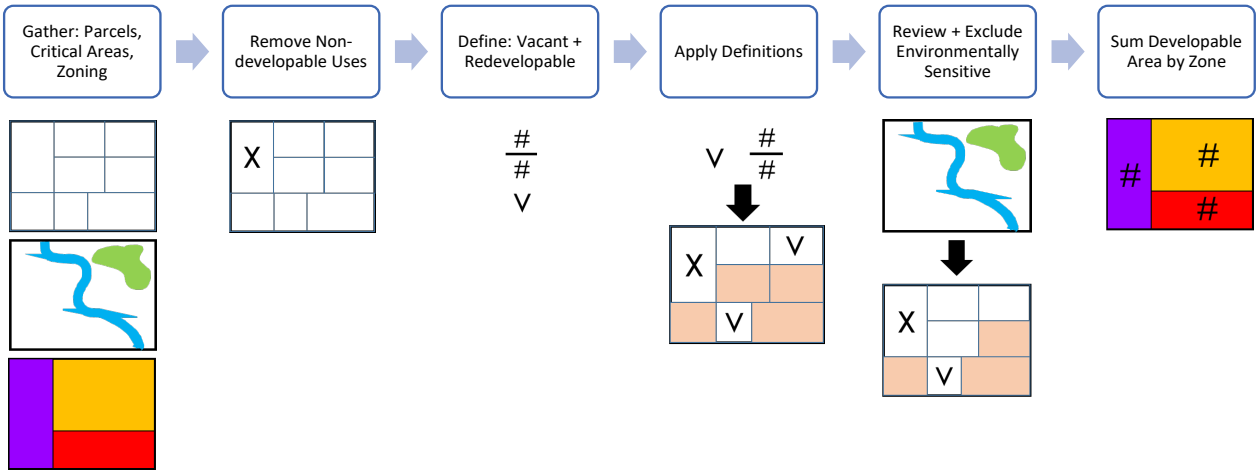
This portion of the analysis involves a jurisdiction-wide scan to quantify all land available for residential or commercial/industrial development for the next 20-year planning period. "Land supply" is the phrase used to refer to an inventory of land "suitable for development." Land supply inventories for each jurisdiction should strive for a snapshot of land with development potential as of January 2019, approximating the end of the most recent evaluation period (2012-2018). The land supply includes vacant and redevelopable lands

To quantify the developable land supply, jurisdictions will:

- Assemble necessary data for the entire jurisdiction, including parcel/assessor data, critical areas, and zoning.
- Define vacant and developable lands using a density and/or value threshold,
- Exclude land uses or parcels that are unlikely to develop for categorical reasons (e.g., parks, schools, public facilities, other institutions),
- Apply vacant and redevelopable land definitions to the parcel data,
- Review and refine the resulting developable land supply,
- Remove area for environmentally sensitive lands,

- Screen for infrastructure gaps, and
- Summarize developable land supply by zone.

The graphic below illustrates the process:



Later on in Phase 3 of data collection, cities will discount lands for area deductions for right-of-way and public purpose uses and apply a "market factor," to quantify capacity for housing and employment.

Data Needs for Identifying Developable Land Supply

King County has supplied cities with a data package including a shapefile and spreadsheet of parcel and assessor data that contains land use, existing development, area, and valuation data. Cities should supply their own zoning and critical areas data to relate to the parcel data. Planned densities from Section II should also be related to the data for use in determining if land is redevelopable. More information on defining redevelopment and vacant land thresholds follows below.

Parcel Data

Parcel data comes from the King County Assessor. It was downloaded in September 2019, to account for lag in data transmission, and approximates valuation and development on the ground in January 2019. This data source was selected because it is comprehensive and relatively consistent across the county, but cities should feel free to supplement it with their own data, if it improves accuracy. King County has related tables from the assessor database and selected fields that will be helpful for the land supply analysis. A field dictionary was included with the initial guidance email and data package. Data fields in the spreadsheet include: (a * indicates key data fields and blue text indicates calculated fields):

Major	PlatName	CurrentZoning*
Minor	Owner	PropType*
PIN*	SqFtLot*	LandValue*
Jurisdiction	PresentUseCode	ImpValue*
PropName	PresentUse*	ILR*

SFunits
CondoUnits
AptUnits
TotalResUnits*
ResDensity*
BldgGrossSqFt*
FARexist*
YrBuilt
Address
CondoFlag*

VacantFlag*
WaterSystem
SewerSystem
Access
TidelandShoreland
PowerLines
Contamination
ErosionHazard
HundredYrFloodPlain
SeismicHazard

LandslideHazard
SteepSlopeHazard
Stream
Wetland
SpeciesOfConcern
SensitiveAreaTract
ParcelGroup*
EconomicUnitName
EconomicUnitPart
EconomicUnitParcelList

To join the assessor data table to the parcel shapefile, use the PIN (parcel identification number) field. If you do not have staffing capacity to perform GIS analysis, please contact King County staff for assistance.

Zoning Data

While a zoning field is present in the parcel data, the value may not be the most current zoning for your jurisdiction. It is recommended that you overlay the parcel data with your current zoning to ensure that each parcel is related to the correct zone. While the parcel data represents early 2019, the zoning used should be the most current and forward looking as possible to reflect a truer picture of future development capacity over the planning period.

Critical Areas Data

Jurisdictions must deduct land from the set of potentially developable parcels that is constrained by environmentally sensitive areas. Environmental features associated with critical areas include wetlands, streams and other water bodies, steep slopes, geologic hazards, shoreline buffers and other features identified in a jurisdiction's update critical areas ordinance or other regulations. Ideally, jurisdictions maintain their own critical areas GIS data, and this should be used in the analysis. As a fallback for some areas of the county, cities may rely on critical areas GIS data provided by King County or state agencies. The parcel data also contains several fields that cities may be used as a backup for critical areas.

Uses to Exclude from Analysis

Certain development types or land uses should be removed from consideration as developable land supply. These include: public lands and facilities, religious institutions, cemeteries, golf courses, schools, landfills and quarries, railroads and utilities, and other miscellaneous institutional uses. These uses can be identified by the existing land use codes and other methods identified in the table below.

While these development types are generally not suitable for future development, exceptions exist, e.g., a churchyard might be planned for housing or a government agency might have plans to sell surplus property, and jurisdictions should use their best judgement to refine the results from a purely rule-based analysis. Red-colored comments in the table below identify cases to watch out for while broadly applying rules.

If your jurisdiction maintains a layer of parks and open space, consider using it to screen out parks or trail properties as well.

Use Type	Identification Methods	Comments
Public facility or public ownership	KC Assessor indicates property tax exemption. PropType = X. KC Assessor. Query Owner field for records containing strings, such as "CITY OF" or "SCHOOL." KC Assessor. Query PresentUse field for codes indicating various public uses (e.g., 184 for public schools). Individual jurisdiction parcel inventories of public facilities and parks.	Ownership may include city, school district, county, or state agencies. Watch out for multiple spellings or abbreviations used for public agency names (e.g., Dept. vs. Department vs. DNR). PropType query will select both "public" parcels as well as a number of additional parcels that fall into one of the categories below (e.g., church land, some railroad land, subsidized housing, and other non-profits). Exclusion of these parcels is consistent with additional categories described below. PropType query will also select some parcels owned by individual homeowners who qualify for tax exemption. Such parcels should not be excluded from the inventory.
Religious institution use or ownership	PropType screen (see above). Query for PresentUseCode = 165 (Church/Welfare/Relig. Srvc.) Query Owner field for records containing strings, such as "CHURCH."	Query for Present Use will select only those parcels in church use; parcels in church ownership will be more completely selected using Owner name query. Parcels in religious institution ownership, but not use, are more likely to be available for future development. Use discretion in selecting or excluding properties. Queries for strings in Owner name field (here and below) will select some parcels not intended for exclusion (e.g., "JOHN CHURCH"). Un-select these records by visually screening selected set.

Use Type	Identification Methods	Comments
Cemeteries	Query for PresentUseCode = 179 (Mortuary/Cemetery/Crematory) PropType screen (see above).	Will identify private mortuaries or other uses that may be redevelopable.
Golf courses	Query for PresentUseCode = 143 (Golf Course)	
Private schools	Query for PresentUseCode = 185 (Private School) Taxpayer name contains the string "SCHOOL"	Not all private school uses should be removed from the inventory. Use best judgment. Large institutions are more likely to be stable uses than small private ones, such as day care centers. PropType query (see above) will likely select many private, non-profit educational institutions, most of which should be excluded from the inventory. Some school uses may appear as vacant per Assessor's records (e.g., playfields).
Landfills and quarries	Query for PresentUseCode = 138 (Mining/Quarry/Ore Processing), or 266 (public utility).	
Other institutional uses and institutional campuses	Query by PresentUseCode (various).	Hospitals (173), nursing homes (59), colleges and universities (185, 184, 56) government services (172), etc.
Railroads and utilities	Query for PresentUseCode = 332 or 261 (Right of Way/Utility, Road, Rail Terminal) and = 266 (Utility, Public). Query Taxpayer Name field for records containing strings, such as "#RR#" or "BURLINGTON"	If not excluded from the inventory, many of these parcels will be misclassified as vacant. There are some parcels along RR ROWs that are of course, redevelopable. Make case-by-case determinations based on local knowledge.

Related Parcels

The parcel/assessor data includes fields titled or beginning with "EconomicUnit." These fields are intended to assist in identifying properties or developments that should be considered as a single development, such as a parking lot and a store on separate parcels, or a large development spanning several parcels. The data are linked by their *EconomicUnitName*. If a parcel is not connected with others, *EconomicUnit* fields will be blank. Economic unit data can be helpful in screening parcels that may be identified as vacant or redevelopable because of a low value or vacant land use, but are not functionally available as such. Conversely, this might identify parcels where aggregation (treating several individual parcels as a single unit) might render a site as redevelopable.

Major Planned Developments

Parcels where large known future developments are located may also be excluded from the land supply analysis. Please **record the parcel PINs, zone, planned number of units and/or square feet, and anticipated year of completion in Table 5: Major Planned Developments**. This step is optional; use only as necessary and supported by data.

Defining and Identifying Redevelopable and Vacant Lands

Jurisdictions' previously used definitions were included in the initial email with this guidance, in a PDF titled: "Past Vacant and Redevelopable Definitions." These definitions were used in the 2007 Buildable Lands Report, which what the last comprehensive compilation of developable land supply. Previous definitions for redevelopable and vacant lands are a good starting place for the 2020 Urban Growth Capacity Study, but jurisdictions should review and update assumptions for current circumstances. Generally, four definitions are recommended: a single definition for vacant lands (of all types), and separate thresholds for redevelopable single family, multifamily, and commercial/mixed-use lands. Fewer definitions are not recommended (unless a use is not applicable in your jurisdiction). **Record your selected definitions in template Table 3: Vacant/Redevelopable Definitions**.

Vacant Land

Vacant lands are devoid of development, or contain only low value accessory structures. King County advises using a two-part test of existing land use and an improvement value limit to define vacant land. Use the *Present Use* and *Improvement Value* fields in the parcel data, for example: *PresentUseCode* = 300, 301, 309, or 316 (Vacant), and/or *ImpValue* <$10,000, to query vacant parcels. A single-part test (only land use or only value) may alternatively be used.

Other undeveloped properties may not be classified with a vacant use code, like parking lots. These properties should be included as vacant land, unless local knowledge informs otherwise. Commercial parking lots have a present use code of 180, parking associated with other development is coded 159.

As another resource, the King County Assessor now includes a vacant lot table in the assessment data. Vacant lots are identified as those without any buildings present. These are identified in the field *VacantFlag* in the parcel data. Including a value-based screen to define vacant lands (to include parcels that are effectively vacant) is still recommended, and at least visually reviewing the results if using the *VacantFlag* field to identify vacant parcels.

After the vacant land definition has been applied to the data, review the results to identify that only vacant land has been included. In addition to reviewing the parcel attributes for identified vacant lands, aerial photography or site visits may be used to validate the results.

Redevelopable Land - Residential

Regardless of use, redevelopable land includes all developments that are not utilizing their full development potential. This can include partly developed land, infill development, properties that have been recently rezoned, or non-conforming uses.

There are multiple ways to classify redevelopable land. For residential lands, King County's preferred method uses a ratio of potential to existing density on a parcel to determine whether land is redevelopable. For example, if a city defined redevelopable land to be where existing development is less than two times the potential density for that property, a single family property on an acre lot is zoned for up to four units per acre, would be considered developable.

Drawing from King County studies of redeveloped land to inform redevelopable thresholds, defining a threshold between 2 and 3.5 is recommended. The threshold your jurisdiction selects may be influenced by development pressure and existing density, i.e., a lower threshold is be more appropriate for denser, rapidly developing jurisdictions. We recommend testing a 0.25-0.5 tolerance around your jurisdiction's past threshold and comparatively reviewing the resulting parcel output.

To use this method, follow these steps, using the provided assessor/parcel data:

1.) Review existing density. This has been calculated for parcels in the field *ResDensity*, by dividing the existing units by the parcel area to approximate the existing density.
2.) Calculate potential density. Using the Planned Density by zone reported in Table 1, and the parcel area from the assessor/parcel data, calculate the approximate potential units allowed on the parcel. Note: for this analysis, this is not the same as capacity. Capacity calculations for the Urban Growth Capacity Study are more refined and will be completed in Phase Three of data collection.
3.) Select a redevelopment threshold. Review the previous threshold, and make adjustments as described above.
4.) Query the results. Using the selected redevelopment threshold, query the parcel data to identify redevelopable lands.
5.) Review the results. Based on your professional judgement, local knowledge, site visits, or other screening factors listed below, exclude parcels that are unlikely redevelopment sites.

Screening Results

Consider the following additional rules and manual data screens to refine and finalize results from the redevelopable residential land supply identification.

Condo ownership. Condominium buildings may be excluded as redevelopable, as complex ownership makes redevelopment unlikely. Condo ownership is identified in the *PropType* field in the assessor data, with a value of "K."

Townhouse Plats. Townhouse plats or unit lot subdivisions are unlikely to redevelop on a parcel by parcel basis, and may be excluded from developable land supply.

Homeowner Association Properties. Covenant protected lands and structures (golf clubs, recreation centers, gyms) are unlikely to redevelop, and may be excluded from the developable land supply. These may be identified by a homeowner's association name in the *Owner* field.

Higher value homes. Crosscheck selected redevelopable parcels against value of single-family home. Highly valued homes may be less likely to subdivide. A recommended cut-off for this secondary screen is between $400,000 and $600,000—depending on the local market conditions. Consider your jurisdiction's, or the county median home value for reference. The King County Assessor's Local Scape tool can quickly provide this information for your jurisdiction.

Recently developed properties. Crosscheck selected parcels against year of construction (*YrBuilt*). Parcels with recently constructed residences are less likely to further subdivide over the remainder of the planning horizon. Year-built date cut-offs for this secondary screen should be made with respect to local development and market conditions.

Building Footprints. Visually inspect the location of existing buildings on smaller parcels (redevelopment ratio between 2 and 3) using GIS data for building footprints.

Ground checks. Spot check selected parcels against aerial imagery and/or field observations.

Redevelopable Land – Non-residential + Mixed Use

Setting redevelopable thresholds for mixed use, commercial, industrial zoned lands should be considered separately from residential lands. While a density-based ratio, as is recommended for residential lands, can be informative in some areas, particularly those facing significant development pressure, an improvement-to-land-value based ratio may also accurately identify properties likely to redevelop.

Value-ratio method. In the parcel/assessor data table, an improvement-to-land-value ratio has been calculated for each parcel (appraised improvement value divided by land value). A low ratio indicates more potential for redevelopment. Theoretically, the ratio reflects the potential profitability of more intensive use of a site relative to the revenue generating potential of the existing use. Typical threshold ratios for determining redevelopability range from 0.25 to 1. A threshold of 0.5 is recommended for most areas within the county. Jurisdictions experiencing more intense development pressure could consider a higher ratio.

Density-ratio method. Since planned densities for all zones are being evaluated for this analysis, using a density based filter is more possible than in the past studies. The existing FAR-based density is calculated and included in the parcel data, in the field *FARexist*. Relate this value to the planned FAR calculated for each zone to create a ratio of potential to existing density. Sorting and reviewing the range of results in GIS will be helpful to get a sense of the range in your jurisdiction. Starting with a ratio of 1.5 (potential-to-existing density), and testing a +/-0.5 tolerance is a good starting place for reviewing the redevelopable land supply that results. Jurisdictions with less non-residential development pressure would be advised to set a higher threshold.

Comparing density- and value-based methods is recommended in GIS, hard copy maps, or by site review.

Screening Results

Consider the following additional rules and manual data screens to refine and finalize results from the non-residential redevelopable land supply identification.

Low-intensity uses. Include additional parcels as redevelopable based on current land uses that are considered low intensity (e.g., surface parking, storage, single-family homes in commercial or industrial zones) relative to parcel size and location, and market demand for more intensive uses of these sites.

Parcel size and shape. Many parcels that turn up as redevelopable present challenges to redevelopment due to factors such as parcel size, shape, and fractured ownership with limited land assembly potential. Parcel data should be queried by size to identify and exclude sites that are too small to be redeveloped. Review maps of identified redevelopable parcels to identify potential parcel shape and assembly issues that warrant taking parcels out of the inventory.

Recently developed properties. Crosscheck selection against year of construction (*YrBuilt*). Parcels with recently constructed development are less likely to redevelop over the remainder of the planning horizon. Year built date cut-offs for this secondary screen should be made with respect to local development and market conditions.

Condo ownership. Condominium buildings may be excluded as redevelopable, as complex ownership makes redevelopment unlikely. Condo ownership is identified in the *PropType* field in the assessor data, with a value of "K."

Site contamination. Identify potentially redevelopable parcels that are constrained by on-site environmental contamination from current or historical land uses. Based on local knowledge, remove such parcels if site conditions effectively preclude further development within the planning horizon. Limited availability of information on the presence and extent of site contamination may hinder the ability of local governments to quantify its impact on future development potential. The *Contamination* field in the assessor data (value of "Y") can help identify contaminated properties.

Remove Environmentally Sensitive Lands

Once vacant and redevelopable parcels have been identified, environmentally constrained land should be deducted from the land supply inventory. Environmentally sensitive areas may include the following:

- Wetlands
- Streams and buffers
- Shoreline buffers
- Slopes and geologic hazards
- Fish and wildlife habitat
- Aquifer recharge areas
- Frequently flooded areas

The precise definitions for each constraint will vary across jurisdictions, depending on provisions of local updated critical areas ordinances and other regulations, local environmental features, and recent development history.

A recommended GIS-based methodology for deducting critical areas is as follows:

1.) Select relevant GIS layers and features (e.g., wetlands, streams).
2.) Apply buffers to these features, based on local ordinances, where applicable. Features should be sorted by type, class, and/or location in order to apply appropriate buffer widths consistent with regulations.
3.) Merge buffered features into a combined "critical areas" layer.
4.) Overlay this layer with selected parcels (vacant, redevelopable, etc.) to delineate and quantify areas that intersect with land subject to development restrictions. Deduct constrained areas from the aggregate supply of developable land within each zoning/land use category.

Reliability of GIS environmental data for the capacity analysis depends on their completeness in representing the extent of features on the ground, as well as the positional accuracy of the mapped features in relation to parcels. GIS data may be deemed so incomplete or inaccurate as to render them unreliable as the sole indicator of the extent of critical areas that constrain the land supply. Insufficient data may still be useful for the Buildable Lands analysis, particularly if utilized as a starting point for enhancements from field surveys, aerial imagery classification, and other secondary approaches.

For the jurisdictions that lack adequate GIS data on environmental features, constrained land may be deducted through the use of assumed % discounts. Due to differences in degree of urbanization, and due to differences in land base, the actual percentage of land constrained within individual cities will vary considerably. Determination of appropriate discounts should rely on best available GIS, hard copy, and other information about the type and extent of critical areas at the zoning district level within jurisdictions.

Screen for Infrastructure Gaps

A new requirement this cycle, jurisdictions must consider how lapses in infrastructure availability affect the amount of developable land supply. The buildable lands statue notes that this review shall include at least transportation, water, sewer, and stormwater infrastructure in the selection of developable land supply. Capital facilities and transportation plans will be key sources for this screen. King County is working with a consultant to recommend an approach for screening out infrastructure constrained, but otherwise developable, land supply. **Our recommended approach will follow in November.** This will be the last step in in identifying developable land supply, so please do not hesitate to begin the other steps first.

Summarize Data by Zone

After you have crafted definitions, queried the data, and screened the results, **summarize parcel-based developable land area by zone in template Table 4: Land Supply**, as illustrated below. Transmit any GIS-based land supply data to King County as well.

						Select:			
Zone	Gross Acres	Critical Areas	Infrastructure Constrained Area	Vacant Area	Redevelopable Area	Residential	Non-Residential	Mixed-use	Other

Field-level definitions and instructions for completing Table 4 follow below:

	Zone	Zone name/ID. Include all zones where people live and/or work
	Gross Acres	Total area of zone, summed from parcels (in acres)
	Critical Areas	Total area of critical or environmentally sensitive areas (in acres)
	Infrastructure Constrained Area	Total area of infrastructure constrained area (in acres) *more information on this field will be provided in November*
	Vacant Area	Total area of vacant land supply (acres) , summed from vacant parcel area
	Redevelopable Area	Total area of redevelopable land supply (acres), summed from redevelopable parcel area
Select:	Residential	Characterize the zone by its dominant use, mark with an "x"
	Non-Residential	
	Mixed-use	
	Other	

V. Wrapping Up and Next Steps

What to send to King County

When your jurisdiction's planned density and developable land supply identification are complete, **please send the completed phase two table template and GIS-based representations of developable land supply to King County**, via the contact information at the beginning of this guidance. If necessary, include any other accompanying materials to document methods or assumptions. King County staff will review your data and follow up with any questions.

What's next?

As laid out in the introduction, phase two data will be combined with achieved density data collected in phase one to calculate capacity in phase three of data collection. Phase three will begin in early 2020.

Stay in touch!

If you need assistance or have questions, get in touch with King County staff anytime. We are available for direct assistance if your jurisdiction does not have GIS software or other resources. King County is planning workshops in November to help with phase two data collection; more information will follow soon.

Thank you for your attention and partnership in completing the 2020 Urban Growth Capacity Study!

King County 2020 Urban Growth Capacity Study
Phase 2 Data Collection - Additional Guidance on Infrastructure Gaps

Background

This guidance supplements previous guidance from October 2019 on Phase 2 data reporting for the Urban Growth Capacity Study. The final step in completing the inventory of vacant and redevelopable land is a consideration of whether infrastructure availability will limit the developable land supply.

Formally identifying "infrastructure gaps" is a new requirement for the Urban Growth Capacity Study. To satisfy this requirement, King County is recommending the following process to identify any land unlikely to be serviced or achieve its planned density in the planning period, based on physical or ownership characteristics of the land, not because of service expense.

What Are Infrastructure Gaps?

For the Urban Growth Capacity Study, an infrastructure gap exists for a property when one or more critical types of infrastructure– transportation, water, sewer, or stormwater– will not be available over the 20-year planning horizon, and will prevent land development. An infrastructure gap can prevent development in two ways:

- A total preemption of development potential e.g., no improvement is planned to deliver necessary urban services to a piece of land
- A reduction of development potential, e.g., an improvement cannot be provided to serve land at its planned density

Process for Determining Gaps

The infrastructure evaluation process includes the following steps to identify parcels with long term infrastructure gaps significant enough to wholly or partially remove the land from the buildable lands supply:

1. Identify system capacity issues – are there gaps within the service area or capacity for water, sewer, or stormwater providers in your city?
2. Identify site-specific infrastructure gaps – are any parcels within a service area unlikely to be served because of their site characteristics?
3. Update developable land supply – remove parcels with infrastructure gaps from the land supply inventory.

Detailed instructions on how to complete these steps is provided in the next section.

Completing the Data Tables

In the reporting template tables spreadsheet, the tab labeled "Table 2: Infrastructure Gaps" provides three tables to complete this assessment. If you determine no infrastructure gaps to exist in your city, this will be indicated by the results of Tables 2.1 and 2.3

Step 1: Identify System Capacity Issues

1.1. Verify and update the data provided in the most recent Comprehensive Plan, documenting major changes in policy, service provision and other relevant details in Table 2.1.

1.2. List the providers serving your jurisdiction with essential infrastructure: water, sewer, and stormwater, in Table 2.1.

1.3. Collaborate with service providers, drawing from sewer and water district and comprehensive plans, to identify out-of-date planning information and any underserved portions of each city or the unincorporated urban area. Jurisdictions are advised to coordinate with public works staff to review, interpret and verify data. Note underserved areas or other gaps in the column "Service Deficiencies."

1.4. Document any future capital facilities investments planned to address these issues in Table 2.1. Determine if specific investments will resolve infrastructure gaps to "unlock" development potential and when it is expected to occur. Record these investments in column "Planned Investments."

1.5. Evaluate each system-wide capacity issue to determine if the issue is expected to stop or delay future development, or limit the types or densities of development that will be feasible. Record determinations in the column "Infrastructure Gap Present?" in Table 2.1

1.6. Preferably using GIS, overlay the service areas of providers with system capacity issues on the set of vacant and redevelopable parcels. Identify affected parcels in Table 2.2, noting the type of gap affecting development, whether it is a full or partial gap, and for partial gaps, the density restricted by the gap.

Example Table 2.1:

Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?
Westedge Water + Sewer District	*Sewer*	*Zone 3 - lift station required*	*Zone 3 lift station in CIP, planned completion by 2030*	*No*
Westedge Water + Sewer District	*Water*	*None*	*None*	*No*
Westedge Water + Sewer District	*Water*	*Comprehensive Plan last updated 2011*	*No update planned*	*No, but land use assumptions need updating*
West City	*Comprehensive Plan*	*Capacity project required to serve West Ridge neighborhood currently on septic*	*None for West Ridge*	*Yes*

Example Table 2.2:

PIN	Area	Infrastructure Type	Partial or Full Gap	Density Constraint	Density Type
1111111111	*0.32*	*Sewer*	*Full*		
1111111114	*1.15*	*Sewer*	*Part*	*2*	*DU/acre*

Step 2: Identify and Document Site-Specific Infrastructure Gaps

2.1. Review remaining vacant and redevelopable parcels to identify parcels with physical characteristics or locations that make them unlikely to be served with water, sewer, stormwater services, or roads, either completely, or to their planned density. Examples could include single parcels without road access, surrounded by other unrelated parcels lacking road access, or a parcel with site characteristics that would prevent sufficient sewer service for the planned highest and best use.

This review is most easily done through GIS. The previously supplied assessor data includes fields indicating whether a parcel currently has water, sewer, and transportation services. Suggested criteria for determining site-specific gaps for each utility are listed below. Jurisdictions may tailor these guidelines to meet local conditions. Please document any additional criteria used below Table 2.3:

- **Sewer:**
  - No pipe within 200'
  - Pipe within 200', but insufficient for highest and best use
  - Lift station required
- **Water:**
  - No pipe within 200'
  - Pipe adjacent, but insufficient for highest and best use
- **Stormwater:**
  - No adjacent public main
  - No available discharge point
  - No on-site infiltration capacity
- **Transportation:**
  - Inaccessible due to geographic constraints
  - No infrastructure to provide physical access to site
  - Infrastructure is aging, fails to meet adopted LOS or is otherwise out of compliance

2.2. Draw from code or adopted policy to determine if the issues are expected to stop or delay future development, or limit the types or densities of development feasible on vacant or redevelopable parcels. Review parcels with multiple gaps, regardless of severity, to consider if their combined impact will stop or delay development.

2.3. In Table 2.3, record identified site-specific infrastructure gaps, by documenting infrastructure constrained parcels in the developable land supply. List the parcel identification number, parcel area, type of infrastructure causing the gap, whether the gap fully removes the parcel from developable land supply or merely limits the density, and for partial gaps, the limit to the density, expressed in dwelling units per acre or floor area ratio. If no gaps exist, please write "NONE" in the table.

Example Table 2.3:

PIN	Area	Infrastructure Type	Partial or Full Gap	Density Constraint	Density Type	Note
1111113462	*0.48*	*Transportation*	*Full*	*(# if part)*	*(FAR or DU/ac)*	*surrounded by parcels without access*

Step 3: Update Developable Land Supply

3.1. Drawing from Tables 2.2 and 2.3, in Table 4 (Land Supply), update the field "Infrastructure Constrained Area" with the area of developable land supply affected by FULL infrastructure gaps. Subtract this area and the critical areas from the gross area for the net buildable redevelopable or vacant land supply.

3.2. For partially constrained parcels, in Table 4 create a new line for each affected zone, noting the infrastructure constraint in the "Zone" field (e.g., for zone R-6, create a row for R-6-constrained, or similar). Include the area of the affected parcels in the "Infrastructure Constrained Area" field.

3.3. Summarize vacant and redevelopable land supply by zone.

Appendix C: Phase 3 Guidance - Initial Capacity

2021 Urban Growth Capacity Report – DRAFT Phase 3 Reporting Guidance
June 2020

Introduction

The Urban Growth Capacity Study, also known as "buildable lands," is a collaboration between cities and King County to analyze recent land use development trends, and to compare those trends to comprehensive plans and growth targets. The study will provide meaningful information to cities and King County on development and capacity for updating growth targets and comprehensive plans. King County coordinates the development of the report, and each city provides a standardized set of development data for their jurisdiction.

In Phase 1 of data collection, conducted in 2019, cities collected data on recent development 2012-2018, in an effort to determine the zone-based achieved development densities. In Phase 2 of data collection, conducted in late 2019 and early 2020, cities collected data to identify the supply of available land over the next 20 years as well as information on planned densities for each zone. Phase 3 of the data collection process will build off the work of previous phases to determine assumed density and calculate an initial capacity for each zone. Phase 3 will also include review and reporting of housing and employment growth relative to cities' growth targets, as well as an opportunity to review achieved densities relative to planned densities. This document will guide planners and analysts through this process.

Cities will submit data for Phase 3 in a separate reporting template table accompanying this document. Due to circumstances and limited capacity caused by the COVID-19 Pandemic, King County is allocating resources and technical support for cities facing challenges meeting this data request. All previously submitted data relevant to Phase 3 has been entered into collection tables for each city (in tables 1, 2, and 4), and gaps in data collection have been noted or left as blank, but reviewing the completeness for the list of zones within your city, supplied densities, and land supply information is a great place to start. Any questions or requests for support can be forwarded to the Rebeccah Maskin rmaskin@kingcounty.gov or Ben Larson blarson@kingcounty.gov.

Reporting for Phase 3 data collection is due August 10th.

About Phase 3 Reporting

Phase 3 data reporting has three key components:

1. Calculating an initial capacity for each zone in your city
2. Reviewing and reporting on housing and employment growth relative to adopted growth targets
3. Reviewing and reporting on achieved densities relative to planned densities

Why "Initial" Capacity?

Phase 3 will work towards calculating capacity, but two assumptions used within the process for calculating capacity are currently being updated to provide more up-to-date information and meet state requirements. In the autumn 2020, jurisdictions will incorporate these assumptions and calculate final capacity for the Urban Growth Capacity Report. The two assumptions are:

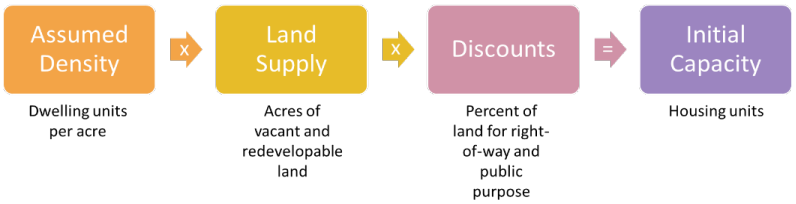
- Market Factor. An assumption that accounts for the amount of land kept out of development because of landowner preference not to develop.
- Square feet per Job Assumptions. These assumptions are used to convert non-residential capacity expressed in square feet to employees.

How Initial Capacity is calculated

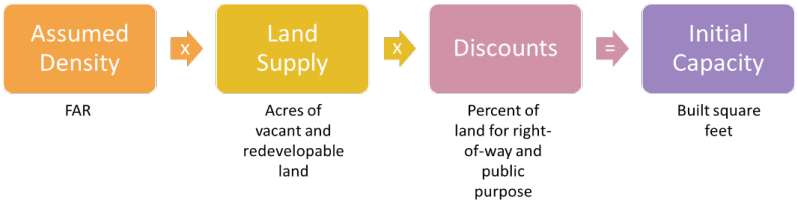
Generally, developable capacity is calculated by zone, and is the product of a zone's assumed density and the area of land supply, minus a percentage accounting for streets, sidewalks, and public purpose land. Achieved densities calculated in Phase 1 of data collection form the basis for the assumed densities, and the land supply was reported by zone in Phase 2. Jurisdictions will select discounts for right-of-way and public purpose lands, informed by recent

development trends, to reduce the land supply for non-buildable, necessary infrastructure. The following graphics illustrate the how capacity is calculated.

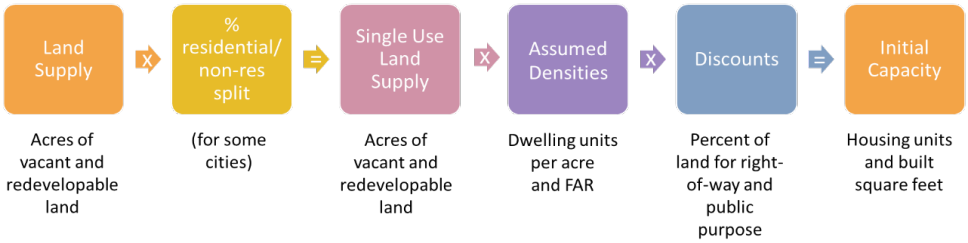
Calculating Residential Capacity



Calculating Non-Residential Capacity



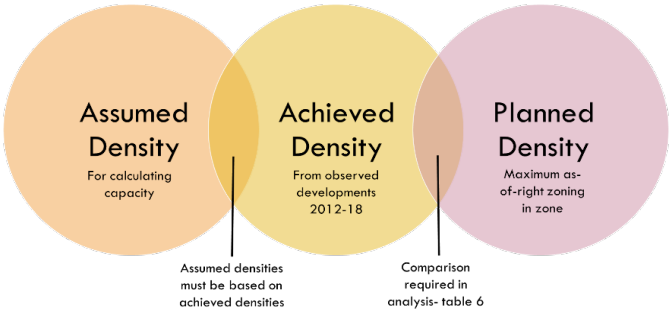
Calculating Mixed-use Capacity



Reviewing Progress toward Targets and Densities

Reviewing and reporting on progress toward growth targets and planned densities provides context on how each jurisdiction is meeting its planning goals. Should a city or the unincorporated urban area of the county be found to not be achieving its growth target or planned densities, reasonable measures may need to be adopted in the 2024 comprehensive plan. Reasonable measures are policy or planning strategies selected by jurisdictions to bring growth or development into alignment with planning goals. This is a new requirement for the buildable lands program, and more information is provided in the guidance below. In Phase 3, we are asking cities to compare adopted targets and growth, and achieved and planned densities, and report on policy, code, or other planning circumstances that may explain or otherwise account for the difference. For reference, the graphic below illustrates the difference between the three types of densities that are referenced in developing the Urban Growth Capacity Report.

Types of Density Reported in the Urban Growth Capacity Report



How to Complete Phase 3 Reporting

There are six tables in the template spreadsheet in the reporting packet that must be filled out to complete Phase 3 reporting. Additional materials in the reporting packet email and reporting template spreadsheet will assist your completion of Phase 3 reporting including:

- Past right of way and public purpose assumptions to discount undevelopable land
- Recommendations on adjusting discounts based on recent development trends
- Your jurisdiction's data provided in Phases 1 and 2

The next sections of this guidance will explain how to fill out the template spreadsheet tables.

Table 1: Assumed Densities

Assumed densities are an essential component to calculating capacity. They are reported for each zone where development can occur. Assumed densities, except in limited circumstances, must be based upon the achieved densities observed in the 2012-2018 evaluation period reported in Phase 1 of Urban Growth Capacity data collection. This is specifically called out in RCW 36.70A.215(3)a, e.

Deviation from achieved density is only permitted for zones in the following circumstances:

- **Insufficient observed development in the evaluation period**. Some zones may have experienced limited or no development to draw reasonable conclusions for anticipated development densities, either in the types of development allowed in a mixed use zone, or in the quantity of development.
- **Changes in regulations**. Densities achieved in development permitted during the 5-year review period may reflect zoning and development regulations that have since changed. Where regulations have changed to effectively increase or decrease achievable net densities, assumed future densities should reflect the impact of those regulatory changes, and the specific changes should be documented.
- **Trends over time**. A trend of increasing dwelling units per acre or FAR over time could justify an assumed future density higher than indicated in the zonal average reported as achieved density in Phase 1. Annual reporting in Phase 1 data would indicate this trend.
- **Infrastructure gaps.** "Partial infrastructure gaps," where infrastructure imitations affected portions of zones from achieving planned densities were identified in Phase 2 data reporting.

In such cases, jurisdictions may look to the planned density to inform the assumed density. Documentation of the specific development circumstances that demand deviation from the achieved density, and the rationale for the selected assumed density are required.

Reporting for this section is completed in table 1, as described below. Rows in table 1 will be populated with jurisdictional data provided in Phases 1 and 2. Depending on the completeness of data provided, achieved or planned densities for some zones may still need to be provided. Please review data provided for completeness vis-à-vis the zones in your jurisdiction.

When filling out table 1 for mixed use zones, create an individual row for each use.

Carrying over from Phase 2 reporting, if a portion of a zone is partly constrained by an infrastructure gap, create a separate row for those subareas, and use the constrained density in the assumed density field, noting the infrastructure gap in the document differences field.

Table 1: Assumed Densities

Zone	Land Use Type	Achieved Density	Planned Density	Assumed Density	Document differences between Assumed and Achieved densities, and rationale for selected density

Table 1 Fields and Reporting Instructions

Field Name	Definition and Reporting Instructions
Zone	Gathered from Phase 2 reporting. Each zone where development may occur must have values for all three densities below. For zones that allow multiple land uses list that zone once for each use.
Land Use Type	Residential, non-residential, mixed use, or Other (e.g. public lands, park zones, etc. that are occasionally recorded).
Achieved Density (both DU/acre and FAR)	From Phase 1 reporting. The achieved density the observed density of development occurring in a zone during the evaluation period 2012-2018. It is expressed in dwelling units per acre (residential) or FAR (non-residential). If no development was observed in a given zone, mark with zero and document in the "Documenting Differences" field.
Planned Density (both DU/acre and FAR)	From Phase 2 reporting. The planned density is the as-of-right density granted by code for each zone, that is the maximum allowed density without any bonus or incentive density.
Assumed Density (both DU/acre and FAR)	The density used to calculate capacity in this zone. In most cases this will be the same as the achieved density. Exceptions to this rule are described in the above section.
Documenting Differences	Use this field to report on the circumstances that warrant deviation from using the achieved density as the assumed density to calculate capacity.

Table 2: Mixed Use Zone Use Splits

Mixed use zones are defined as zones with capacity for both residential and non-residential development. In some cities, mixed use zones require the achieved use splits observed in Phase 1 to apportion area to residential and non-residential uses to calculate capacity, but all cities should report on differences between achieved and planned mixed use development. Some mixed use zones did not see mixed use development in the evaluation period. In these instances, jurisdictions can draw from additional sources:

- Observed splits in zones in comparable zones in or outside of your jurisdiction
- Expressed vision for these areas in comprehensive and neighborhood plan policies, or development regulations
- Local knowledge of market conditions, demand for space, projects in the development pipeline, and developer interest
- Existing development similar to that envisioned for a zone

Be sure to document which sources of information were used to determine assumed mixed use splits. Reporting for this section is completed in table 2, as described below.

Table 2: Mixed Use Zone Use Splits

Zone	Achieved % of Residential Development	Achieved % of Non-residential Development	Assumed % of Residential Development	Assumed % of Non-residential Development	Document differences between Assumed and Achieved Residential/Non-residential %

Table 2 Fields and Reporting Instructions

Field Name	Definition and Reporting Instructions
Zone	Gathered from Phase 2 reporting.
Achieved % of Residential Development	From Phase 1 reporting; zones without observed mixed use development will be zero.
Achieved % of Non-residential Development	From Phase 1 reporting; zones without observed mixed use development will be zero.
Assumed % of Residential Development	The share of residential development that will be used to apportion land to residential use. Assumption is to be based off of achieved splits, unless circumstances described above apply.
Assumed % of Non-residential Development	The share of non-residential development that will be used to apportion land to non-residential use. Assumption is to be based off of achieved splits, unless circumstances described above apply.
Documenting Differences	Use this field to report on the circumstances that warrant deviation from using the achieved development splits as the assumed splits to calculate capacity. In cases where no development was observed, cite the sources used to estimate assumed use splits.

Table 3: Discounts

To more accurately estimate the actual developable capacity, the area of vacant and redevelopable land supply must be reduced or "discounted" to account for land that gets utilized for rights-of-way and other public purpose uses where people do not live or work. Public purpose uses are generally stormwater facilities, parks, or other open space. These amounts vary by type and density of development.

The starting place for approximating these discounts is the observed development data used to calculate achieved densities in Phase 1. Past buildable lands reports provide additional reference points, built from the development observed during those evaluation periods. As development becomes denser and occurs as infill, these discount rates reduce, as right-of-way and public purpose uses are already built into the urban fabric.

To support jurisdictional selection of discounts, King County has performed analysis of developments constructed 2012-2018 that informed Phase 1 reporting. Discounts used in the 2007 Buildable Lands Report are also provided to inform the discount selection for the 2021 report. There may be reasons to deviate from the observed or past discounts, including:

- Increasingly dense or infill development experienced or anticipated in the future, could lend to reduced discounts, as essential infrastructure is already present.
- Changes in development regulations could affect discounts in either direction. Development regulations requiring additional set asides for environmental protection, for example could suggest increased discounts, while upzones or increases in land use intensity would suggest decreased discounts.

While zone-specific discounts are not recommended, additional detail may be provided. Land use or density patterns in some cities may justify a single discount being applied across residential land supply, or for multifamily and mixed uses.

Table 3: Discounts

	Right of Way	**Public Purpose**
Parcel Analysis SF Discount	%	%
Parcel Analysis MF/MU Discount		
BLR 2007 SF Discount		
BLR 2007 MF Discount		
BLR 2007 MU/Comm/Ind Discount		
SF Discount Selected		
MF Discount Selected		
MU/Comm/Ind Discount Selected		

Table 3 Fields and Reporting Instructions

Field Name	Definition and Reporting Instructions
Parcel Analysis SF Discount	Drawing from the comparison of 2012 and 2018 parcels that supplied data for Phase 1 reporting, this is the calculated portion of single family parcels developed during that period that went to right-of-way or public purpose uses.
Parcel Analysis MF/MU Discount	Drawing from the comparison of 2012 and 2018 parcels that supplied data for Phase 1 reporting, this is the calculated portion of multifamily and mixed use parcels developed during that period that went to right-of-way or public purpose uses. Values are not jurisdiction specific, and draw from a sampling of development
BLR 2007 SF Discount	This is the discount used for single family land supply in the 2007 Buildable Lands Report. Note that formatting may differ based on how discounts were applied in 2007 report.
BLR 2007 MF Discount	This is the discount used for multifamily land supply in the 2007 Buildable Lands Report. Note that formatting may differ based on how discounts were applied in 2007 report.
BLR 2007 MU/Comm/Ind Discount	This is the discount used for mixed use, commercial, and industrial land supply in the 2007 Buildable Lands Report. Note that formatting may differ based on how discounts were applied in 2007 report.
SF Discount Selected	Fill in your jurisdiction's selected discount for single family land supply here. Selecting a single discount for multiple land uses is also possible depending on your city's circumstance.
MF Discount Selected	Fill in your jurisdiction's selected discount for multifamily land supply here. Selecting a single discount for multiple land uses is also possible depending on your city's circumstance.
MU/Comm/Ind Discount Selected	Fill in your jurisdiction's selected discount for non-residential and/or mixed-use land supply here. Selecting a single discount for multiple land uses is also possible depending on your city's circumstance.

Table 4: Initial Capacity

In the template spreadsheets, the two tables on the tab titled "Table 4" calculate residential and non-residential capacity. The tables are separated for clarity, but are filled out in a similar way, moving from left to right to calculate initial capacity.

In each table, you'll create separate rows for each zone, and for vacant and redevelopable lands within each zone. Mixed use zones should have rows in both residential and non-residential tables. Be mindful of capacity affected by partial infrastructure gaps identified in Phase 2 reporting. These areas should also have their own rows to reflect the constrained densities of the infrastructure gaps.

About Calculating Mixed Use Capacity

In Phase 1 data collection, achieved densities were separately calculated for the residential and non-residential components of mixed use projects. These achieved densities were generally calculated from the number of residential units or commercial/office square footage over the entire parcel area. Calculating density in this manner factors in a split between residential and non-residential uses into the achieved density, making a separate apportionment of mixed use zoned land before the assumed density is applied unnecessary.

A handful of cities calculated density in a different, but equivalent, way— either expressing density only in FAR, or calculating the achieved densities for each use over a portion of the parcel relegated to individual land uses. Cities that calculated mixed use achieved density in one of these alternative ways will need to use the assumed mixed use shares recorded in Table 2 to apportion mixed use land supply to residential and non-residential use in each zone before applying the achieved densities, and document this approach in notes on table 4.

Table 4: Initial Capacity (Residential)

Zone	Mixed Use Zone	Land Use	Vacant/ Redevelopable	Assumed Density	Land Supply Area	Right of Way %	Public Purpose %	Buildable Area	Initial Residential Capacity	Existing Units on Redevelopable Parcels
Phase 2/ table 1	Y/N	SF/MF/MU	Select	from table 1	Phase 2	from table 3	from table 3	Acres	Housing units	Housing units

Table 4: Initial Capacity (Non-residential)

Zone	Mixed Use Zone	Land Use	Vacant/ Redevelopable	Assumed Density	Land Supply Area	Right of Way %	Public Purpose %	Buildable Area	Initial Non-residential Capacity	Existing construction on Redevelopable Parcels
Phase 2/ table 1	Y/N	Com/Ind/MU	Select	from table 1	Phase 2	from table 3	from table 3	Square Feet	Square feet	Square feet

Table 4 Fields and Reporting Instructions (both sub-tables combined)

Field Name	Definition and Reporting Instructions
Zone	Gathered from Phase 2 reporting, copied from Phase 3, table 1.
Mixed Use Zone	Yes or no- indicate whether this is a mixed use zone. Mixed use zones should have a residential and a non-residential row.
Land Use	Residential or Non-residential.
Vacant/Redevelopable	Indicate whether this is redevelopable or vacant land supply.
Assumed Density	Copied from table 1.
Land Supply Area	Gathered from Phase 2 reporting, table 4.
Right of Way %	Copied from table 3.
Public Purpose %	Copied from table 3.
Buildable Area	Developable land area for zone, from which capacity is calculated. Calculated field: Multiplies the single use land supply by 1-right of way % and 1-public purpose % discount fields. Residential land is expressed in acres (to be multiplied by DU/acre), non-residential land is expressed in square feet (to be multiplied by assumed FAR).

Field Name	Definition and Reporting Instructions
Initial (Non-)Residential Capacity	Initial capacity for zone. Multiply the buildable area by the assumed density in DU/acre.
Existing construction on Redevelopable Parcels	Compile the existing development in housing units or built square feet on land identified as redevelopable.

Table 5: Achieving Growth Targets

The review and evaluation program of the Growth Management Act requires that the county and its cities evaluate how they are achieving urban densities by comparing growth and targets. Further analysis is required where county or city growth targets are not being achieved. This concept has long been a part of the review and evaluation program, but amendments to the statute in 2017 strengthened analysis and reporting requirements, making non-achievement of growth targets a potential trigger for reasonable measures in the subsequent periodic comprehensive plan update.

To achieve this aim, King County is comparing estimated housing unit and employment growth 2006-2018 to growth targets adopted in the 2012 Countywide Planning Policies, extended to 2035. The extended growth targets were first published in a 2013 memo to help develop 2015 comprehensive plans. The extended targets have been adjusted to account for major annexations that have occurred since 2013. The memo and adjusted 2006-2035 targets are included in this Phase 3 data reporting packet.

For the recent estimates used to compare to the growth targets, 2006-2018 housing unit growth is derived from block-level OFM Small Area Population Estimates, using consistent geographic boundaries for cities in 2019. 2006-2018 employment estimates derive from the PSRC Covered Employment estimates. Employment estimates reflect total employment, less construction/resource sector employment, to mirror the targets for this period.

For Phase 3 data reporting, King County is requesting cities review the estimates in comparison to growth targets. This data will support the assessment of whether targets are being achieved. This data is presented in Table 6 of the Phase 3 reporting template. In addition to reviewing this data, jurisdictions are requested to consider the observed growth over the 2006-2018 evaluation period relative to the target, and report mitigating circumstances that have landed to significant differences between growth and the target. Such circumstances may include (but are not limited to):

- Development moratoria
- Timing or financing of infrastructure investments
- Preexisting developer agreements or major planned developments
- Development occurring well below planned densities
- National economic trends or factors outside of local land use control

Reporting for this section is completed in Table 5a and 5b, and described below. Data for all cities is also contained in a Tableau dashboard available here: https://public.tableau.com/profile/arrmask#!/vizhome/CompareTargets2006-35_all

Table 5a: Housing

2006-2035 Extended Housing Target	2006-2018 Target Elapsed	% of Target Period Elapsed	2006-2018 Housing Growth	% of Target Achieved	Discussion

Table 5b: Jobs

2006-2035 Extended Job Target	2006-2018 Target Elapsed	% of Target Period Elapsed	2006-2018 Job Growth	% of Target Achieved	Discussion

Table 5 Fields and Reporting Instructions

Field Name	Definition and Reporting Instructions
2006-2035 Extended Housing/Job Target	This field is supplied by King County, and reflects the adopted 2006-2031 target, extended to 2035 per the memo provided in the Phase 3 reporting packet. Jobs data reflects total employment minus construction/resource sector employment. City geographic boundaries reflect major annexations current through 2019.
2006-2018 Target Elapsed	This field is supplied by King County. It is a time-based estimate of the amount of target that has elapsed from 2006-2018. 41% of the 2006-2035 period has elapsed, so it is equal to 41% of the housing or jobs target. Review this number and compare it to the 2006-2018 growth estimate.
% of Target Period Elapsed	This field is supplied by King County. It is a time-based estimate of the amount of target that has elapsed from 2006-2018. 41% of the 2006-2035 period has elapsed, so it is equal to 41% of the housing or jobs target.
2006-2018 Housing/Job Growth	This field is supplied by King County. Housing unit data is sourced from OFM Small Area Estimates; job data is sourced from PSRC's employment estimates, minus construction/resource sector employment. City geographic boundaries reflect major annexations current through 2019. Review this estimate and compare to the 2006-2018 target elapsed estimate.
% of Target Achieved	This field is supplied by King County, calculated from the housing or job growth estimates divided by the extended target.
Discussion	Use this field for reporting specific events or conditions during the 2006-2018 period that could allow for a slower or quicker rate of target absorption. Examples are described in the preceding section.

Table 6: Achieving Planned Densities

Reporting on densities has always been a part of the review and evaluation program, but the review plays a more prominent role in this iteration of the Urban Growth Capacity Report. Like reporting on growth targets, amendments to the buildable lands statute in 2017 strengthened analysis and reporting requirements, making non-achievement of growth of planned densities a potential trigger for reasonable measures in the subsequent periodic comprehensive plan update.

Phase 3 data reporting will build towards this requirement by requesting your jurisdiction's reflection on differences in the densities achieved during the 2012-2018 evaluation period, and those you are planning for. Achieved densities derive from Phase 1 data reporting. Planned densities were requested in Phase 2 data reporting. Determination of "achieving" planned densities will be made later in 2020 according to countywide standards. Further analysis will be required where cities are determined to not be achieving planned densities.

For this phase of data reporting, King County is requesting jurisdictions compare achieved and planned densities for each zone, and evaluate potential reasons why densities may not have been achieved by development during the evaluation period. Such circumstances may include (but are not limited to):

- Rezones that occurred during the evaluation period
- Significant development regulation changes
- Infrastructure or level of service limitations
- Lack of capacity for new development
- Limited quantity of development to draw a comparison
- National economic conditions or development trends outside of local control

- Development vested under preexisting development regulations
- Development moratoria in specific zones or neighborhoods

Reporting for this section is completed in Table 6, and described below.

Table 6: Density Reporting

Zone	Land Use Type	Planned Density	Achieved Density	Difference	Discussion

Table 6 Fields and Reporting Instructions

Field Name	Definition and Reporting Instructions
Zone	Supplied by King County- please review for completeness. Cities with complex zoning codes may aggregate zones to a more generalized zone category that makes sense for monitoring.
Land Use Type	Indicate the type of use, residential, non-residential, or mixed use. For mixed use zones, include two lines for both the residential and non-residential planned and achieved densities. If your jurisdiction only uses FAR densities, you may report a single FAR value instead of indicating non-residential and residential densities.
Planned Density	From Phase 2 reporting
Achieved Density	From Phase 1 reporting
Difference	Calculated as a percentage: Achieved Density / Planned Density
Discussion	Use this field for reporting specific events or conditions during the 2006-2018 period that could allow for a slower or quicker rate of target absorption. Examples are described in the preceding section.

Wrapping up and Next Steps

Thank you for taking the time to read this guidance and complete Phase 3 reporting. Your partnership is essential to completing the Urban Growth Capacity Report. When your tables have been completed, please email them back to King County, to both rmaskin@kingcounty.gov and blarson@kingcounty.gov. Submissions are due July 13th, 2020.

King County's goal is to have all Phase 1 and 2 data completely submitted in early August 2020. This will facilitate countywide estimates of initial capacity in early September 2020. After Phase 3 is complete, we will follow up with information on calculating final capacity, and determinations on target and density achievement.

If you have questions or need help at any time, do not hesitate to contact Ben and Rebeccah, via the emails above or at 205-263-9590 (Ben) and 206-263-0380 (Rebeccah).

Appendix D: Phase 4 Guidance - Final Capacity

King County 2021 Urban Growth Capacity Report
Phase 4 Guidance

Introduction

The Urban Growth Capacity Study, also known as "buildable lands," is a collaboration between cities and King County to analyze recent land use development trends, and to compare those trends to comprehensive plans and growth targets. The study provides meaningful information to cities and King County on development and capacity for updating growth targets and comprehensive plans. King County coordinates the development of the report, and each city provides a standardized set of development data for their jurisdiction.

In February 2021, King County cities will report on the final assumptions necessary to calculate final capacity for this project. The previous three phases of reporting have cumulatively built upon each other towards the goal of calculating final capacity for each jurisdiction, as shown in Figure 1 below.

FIGURE 1: FLOW OF URBAN GROWTH CAPACITY REPORTING PHASES

Phase 4 of data collection will again build off work from previous phases of data collection to calculate residential and non-residential capacity. Final capacity will be compared to the remaining 2006-2035 growth target to determine whether sufficient capacity exists for targeted growth.

To calculate final capacity, cities will select two assumptions for each zone: *Market Factor* and *Employment Density* (Employment Density applies to mixed use and non-residential zones only). This guidance and set of reporting tables aim to provide the information necessary for each city to select appropriate assumptions for each zone.

Cities will submit data for Phase 4 in a separate reporting table template accompanying this document. King County staff are pursuing an accelerated timeline for Phase 4 data collection to complete capacity data for a draft Urban Growth Capacity Report in March 2021. **Phase 4 data is requested by March 5, 2021**. Resources and direct technical support are available to help meeting this data request. All previously submitted data relevant to Phase 4 has been entered into collection tables for each city and gaps in data collection have been noted or highlighted. Capacity calculations hare been pre-programed to the extent possible to facilitate efficient reporting.

Additionally, staff are encouraged to schedule appointments with Ben Larson to facilitate data collection. Staff are invited to book time via Calendy, an online scheduling website linked to Microsoft Outlook. You can schedule an appointment by clicking the following link: https://calendly.com/kingcounty_ugc/phase-iv. No account is necessary

Any questions or requests for support can be sent to Rebeccah Maskin rmaskin@kingcounty.gov or Ben Larson blarson@kingcounty.gov. As always, we greatly appreciate your assistance and cooperation with this request. Do not hesitate to reach out to let us know how we can facilitate your involvement in completing Urban Growth Capacity reporting.

Background on Phase 4 Data Assumptions

Phase 4 data reporting will build directly upon the data your jurisdiction reported in Phase 3 (initial capacity). Cities will select **Market Factor** assumptions to discount the identified land supply for each developable zone. Then, for zones with non-residential development, cities will select **Employment Densities**, expressed as square feet per job ratios, to convert built space capacity into employment capacity. Through allocated buildable lands grant funding from the Department of Commerce, King County has performed an updated analysis to support recommended assumptions, to comport with new statute requirements and recent development trends. Documents detailing the new analysis are included in the Phase 4 reporting package.

Market Factor

The Market Factor, also known as the Market Supply Factor, is a final adjustment to the developable land supply that follows other deductions that account for critical areas, infrastructure gaps, right-of-way, and future public facilities. It accounts for the percentage of buildable land that, due to market constraints, will not be developed during the 20-year planning period. Traditionally, it has been used as a proxy to account for landowner preference to not develop, or inability to develop property over the planning period. Market Factor will be applied to both residential and non-residential zones to determine final housing and employment capacity for each city.

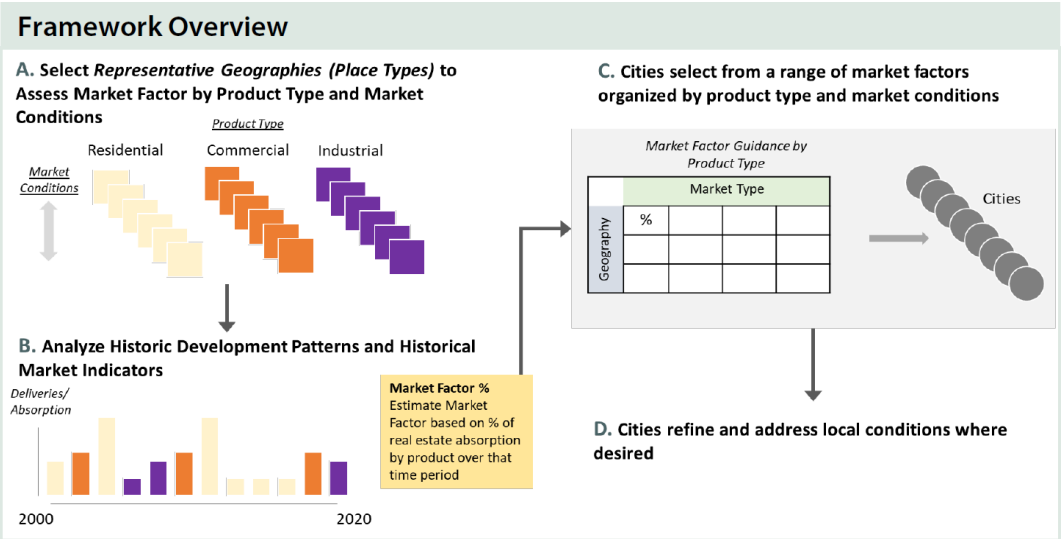
In general, land uses and zones where a *high* level of development or land conversion are expected over the planning period should assume a *low* market factor. Conversely, land uses and zones where development may be more difficult or slower to develop should assume a *high* market factor.

Through an updated analysis[1], recommended market factor ranges have been developed for residential and non-residential zones, varying by Regional Geography and relative market strength (market factor alignment). The analysis behind these recommended ranges compares historical development and land supply identified in the 2021 UGC study. Grouping cities by VISION 2050 Regional Geography, consultants analyzed the amount of development by "product type" (e.g., multifamily/mixed-use residential or industrial development) compared to the amount of capacity in zones linked to that product type, resulting in a distribution of rate of development for cities within a Regional Geography category.

Based on this distribution, cities were grouped into low, medium, and high market factor recommendation, with an associated range of market factors calculated from the relative amount of land left undeveloped in the product type classification. This process is illustrated in Figure 2, and detailed in pages 17-27 of the Market Factor Guidance document included in the reporting package

[1] *King County Urban Growth Capacity Market Factor Guidance* developed by Heartland, LLC and BERK Consulting, 2021. Excerpts from this guidance, including a step by step guide to selecting market factor are included in the reporting package. For the full draft guidance (includes appendices), please contact King County staff.

FIGURE 2: MARKET FACTOR RANGES DEVELOPMENT PROCESS OVERVIEW



The recommended ranges for product types by Regional Geography and market alignment are shown in Figure 3.

FIGURE 3: RECOMMENDED MARKET FACTOR RANGES

City Typology	Residential		Non-Residential	
Market Factor Alignment	Multifamily/ Mixed-Res	Single Family	Commercial (Office/Retail/Mix)	Industrial
Metropolitan Cities				
Low	5%-10%	1%-14%	1%-10%	1%-15%
Core Cities				
Low	5%-10%	1%-14%	1%-10%	1%-15%
Medium	11%-20%	15%-20%	11%-20%	16%-35%
High	21%-35%	21%-30%	21%-50%	36%-50%
High-Capacity Transit Communities				
Low	5%-10%	1%-9%	1%-14%	1%-19%
Medium	11%-15%	10%-20%	15%-25%	20%-30%
High	16%-30%	21%-35%	26%-50%	31%-50%
Cities and Towns				
Low	10%-24%	1%-10%	1%-10%	1%-15%
Medium	25%-35%	11%-40%	11%-20%	16%-35%
High	36%-50%	41%-50%	21%-50%	36%-50%

Selecting Market Factor for Your City

The first task of Phase 4 reporting will be to select the appropriate market factors for your city. For each zone, staff completing reporting will identify a market factor within the recommended ranges and update the reporting table. If the ideal market factor for a zone is determined to be outside of the recommended range, the specific rationale for selecting this market factor must be documented in the reporting table. Cities may vary their selected market factors by the relative complexity of zoning and available land within their jurisdiction. For smaller cities or less complex zoning, a single market factor by land use type may be appropriate, whereas larger cities or more complex development situations may require a more refined identification of appropriate market factors.

The following guidance describes the factors to weigh when selecting a value within the recommended ranges. More detail is included on pages 25-27 of the included Market Factor Guidance document, with the key factors to consider outlined here.

Redevelopable vs. Vacant Land

Cities are welcome to attune their market factors separately for vacant and redevelopable land stock. Be sure to consider how redevelopable lands were identified in calculating the land supply in phase 2 of data reporting. If in identifying the redevelopable land supply, a higher existing-to-planned density ratio or improvement-to-land value ratio was assumed for redevelopable lands, consider whether differentiating between redevelopable and vacant market factors is further required, as that definition already assumes a differentiation between these lands based on market forces.

Traditionally, redevelopable lands have assumed higher market factors than vacant lands to account for the relative ease of converting vacant land to development. As redevelopment takes more of the share of development, it could suggest the remaining vacant land could have significant development challenges that reduce this advantage.

Market Trends

If trends indicate growth in demand for a given product, consider a downward adjustment on market factor to reflect this demand. Alternatively, if the market data for a given product indicates more difficult market conditions, consider selection of a higher market factor within the recommended range.

Upzoned Existing Single-Family Areas

Market factor may be adjusted to account for relative uncertainty regarding how existing single-family zones that have been rezoned for greater intensity may redevelop. The age and value of the housing stock, presence of transit infrastructure, and recent sales or permitting activity can inform how to refine the appropriate market factor for these areas.

Restrictive Covenants

Some areas that have been rezoned or upzoned may still be subject to restrictive covenants that run with the land and limit how development may occur. This is most likely to exist in existing single-family neighborhoods but may also pose a challenge in business parks and other similar commercial districts. A higher market factor can account for this situation.

Fragmented Ownership and Parcel Size

Where capacity for a given product type is largely spread across fragmented or non-contiguous parcels and parcel sizes are generally smaller in size, a higher market factor may be considered to account for difficulties in parcel assemblage for future redevelopment.

Access to Transit

Planned transit infrastructure can greatly improve development feasibility and owner willingness to sell/redevelop land. Market factor assumptions can be tuned to reflect where such improvements exist or are planned in the future.

Infrastructure Cost

In phase 2 of data reporting, we examined the presence or availability of infrastructure in the identification of land supply. Market factor can build on this work, including selecting a higher factor to account for the cost or likeliness of significant infrastructure construction to support planned development.

Employment Densities

Selecting a square feet per job assumption, or employment density, per zone or land use is the last step of calculating non-residential capacity, converting built space capacity to jobs. Cities may vary their selected employment densities by the relative complexity of zoning and available land, or the sectors of employment that are likely to exist within their jurisdiction. Smaller cities or those with less complex zoning may consider a single value or values depending on the land use. Our most basic recommendation is differentiating between commercial and industrial jobs, because of the wide variance in employment density between these types.

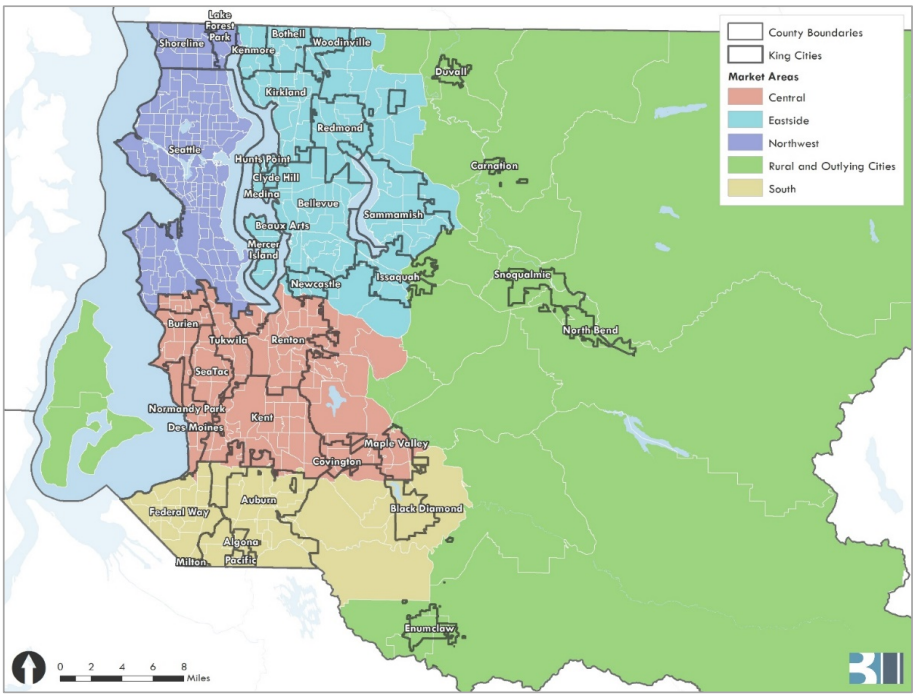
To prepare for the 2021 Urban Growth Capacity Report, an analysis of recent employment densities compared to past densities across King County was performed.[2] The analysis compared the amount of industrial and other commercial jobs to the aggregated amount of similarly classified non-residential built space in subareas covering King County to calculate ranges in employment density. This analysis was performed on 2006 and 2019 data to observe if employment density patterns have changed over time. The recommended ranges by subarea and general land use type (commercial/mixed use or industrial) are shown in Figure 4. A map of cities by subarea is included in Figure 5 below, and a city-specific table is included in the reporting table template and the employment density guidance document.

Figure 4: Recommended Square Feet per Job Ranges by Subarea

Market Area	Average 2006 Employment Density (all zones)	Average 2019 Employment Density (all zones)	Recommended Range for Commercial and Mixed-Use Zones	Recommended Range for Industrial Zones
Central	655	608	300–600	700–1,200
Eastside	398	386	200–400	500–800
Northwest	445	415	200–400	500–800
Outlying Cities	669	630	300–600	700–1,200
South	701	724	300–600	700–1,200

[2] *2021 King County Urban Growth Capacity Report Employment Density Guidance*, BERK Consulting, 2021. Full guidance included in reporting package.

FIGURE 5: EMPLOYMENT DENSITY SUBAREAS



Selecting Employment Density for Your City

The final task for calculating employment capacity will be reporting selected employment densities in the phase 4 reporting tables. Recommended ranges for your city are supplied in the reporting table template. If you select employment density values outside of the recommended range, please record specific rationale or alternative methods for doing so in the reporting table. The employment density guidance contains additional detail on pages 8-9 for refining employment densities within the recommended range for your city.

Guidance for Filling Out the Reporting Tables

About the Reporting Tables

The Phase 4 reporting table template consists of four tables. The reporting tables have been populated with data from previous phases of data reporting and programed with calculations to facilitate completion of this round of reporting. Columns include a header with a description of the calculation used to trace how data is used in across the table. **Columns that require input values are highlighted in yellow.**

City staff completing reporting will input selected market factor values by zone on Table 1, column E; and Table 2, column K. Selected employment densities will be inputted by zone on Table 3, column C. Table 4 includes the final capacity calculation. This calculation is primarily automated from values in the reporting tables, but a few values need to be inserted as indicated in the Table 4 explanation below. **As a final step before submitting your tables, back to King County, please review calculated capacity in Table 4.**

Reporting Tables

The below copies of the tables in the reporting table template include mocked-up examples of completed reporting, but otherwise mirror the versions provided in the table template. Each city has a version unique to their jurisdiction that reflects inputted phase 3 data, and recommended market factor or employment density ranges based on the guidance described in previous sections.

FIGURE 6: REPORTING TABLE 1: MARKET FACTOR

Zone	Zone Type	Market Factor Alignment (Low, Med, High)	Market Factor Range (%) (Based on Place-Type, Zone Type, and Market Factor Alignment) (See Guidance)	Final Market Factor	Comments (if final market factor is outside of the suggested range)
Zone Name	SFR, MFR, MU, Comm, Ind	Selected from Market Factor Guidance	Selected from Market Factor Guidance	To be decided by city staff. Please consult market factor guidance.	Please provide comments if final market factor is outside of the suggested range
Example 1	MU	Med	10% - 20%	15%	N/A
Example 2	Comm	Low	5% - 10%	20%	Owner of only vacant land directly opposed to development

Table 1 includes all zones imported from phases 2 and 3 of data reporting, and their land use type (zone type) classification. Select a market factor within the given range in column D, and provide any documentation if selecting a value outside of the given range.

FIGURE 6: REPORTING TABLE 2: INITIAL CAPACITY

Zone	**Mixed Use Zone**	**Land Use**	**Vacant/ Redevelopable**	**Assumed Density (DU/Acre)**	**Land Supply Area**	**Right of Way %**	**Public Purpose %**	**Final Market Factor %**	**Buildable Area (Acres)**	**Initial Residential Capacity (Housing Units)**
Name of Zone	Y/N	SF/MF/MU	Select Vacant or Redevelopable	From Phase 3	From Phase 3	From Phase 3	From Phase 3	From Table 1	= Column F * (1 - Column G - Column H - Column I)	= Column E * Column J
Example1	N	MF	Vacant	24.2	9.7	15%	10.0%		7	176.6

Existing Units on Redevelopable Parcels (Housing Units)	**Initial Capacity summed by zone (Housing Units)**	**Existing units on redevelopable parcels summed by zone (Housing Units)**
From Phase 3	To help with calculations on Table 4	To help with calculations on Table 4
0	235.8	12.0

Table 2 has two sub-tables, one for initial residential capacity, and one for initial non-residential capacity. Only the residential table is shown above. The non-residential table has an identical format, but is tailored to calculating developable square footage, not housing units.

Table 2 is largely imported from the final table in phase 3 data reporting. It includes almost all the data necessary for calculating capacity. In column I, input the selected market factor by zone from Phase 4 Table 1.

FIGURE 7: REPORTING TABLE 3: EMPLOYMENT DENSITIES

Zone	Zone Type (Ind/Comm/MU)	Square Feet Per Job
Example 1	MU	

If you are uncertain about how many square feet per job should be selected for each zone, please consult our employment densities guidance.

Table 3 also includes the following reference table (nothing to be reported by the city)

Recommended Ranges for City

Recommended Range: Commercial and Mixed-Use Zones	Recommended Range: Industrial Zones
200–300	450–700

For more information on these ranges please consult attached guidance on employment densities.

FIGURE 8: REPORTING TABLE 4: FINAL CAPACITY

Zone	Zone Type	Initial Residential Capacity	Existing Dwelling Units on Redevelopable Parcels	Development in the Pipeline	Final Residential Capacity (Dwelling Units)
Name of the Zone	*SFR/MFR/MU*	*From Table 2*	*From Table 2*	*From Phase 2*	*= Column C + Column E - Column D*
Example 1	MU	1,809	0	0	1,809

Table 4 has two sub-tables, one for residential capacity, and one for non-residential capacity. Please review this table, as it records the final capacity to be compared to the remaining target. As you select market factors, the calculated initial capacity will change. It will be lower than the initial capacity from phase 3 data reporting, as market factor discounts the land supply.

Input values for employment densities selected in Table 3 into Table 4 column G (non-residential table only). Also add any information on major planned developments to their appropriate zones in column E.

Pay special attention to any zones that your city has that are specific to single developments, institutions, or master planned areas. If applicable, we recommend using any capacity values relating to developer agreements, master plans, plats, or any other controlling documents rather than calculating capacity for these types of zones.

Wrapping up

Once you have completed phase 4 reporting, send the completed table and all necessary documentation back to King County staff: Ben Larson blarson@kingcounty.gov and Rebeccah Maskin rmaskin@kingcounty.gov.

Quality capacity data is the central product of the Urban Growth Capacity Report, and we cannot complete it without your support. You have our most esteemed respect and gratitude for completing this portion of King County's growth management journey, and we look forward to continuing to work with you as we compile findings for the report and complete additional analysis on achieved densities and growth targets, in addition to overall capacity findings.

A hearty THANK YOU for reading this guidance and partnering to complete this report. Please schedule time if you need technical assistance, or get in touch if you have any questions.

Appendix E: Market Factor Guidance

King County Urban Growth Capacity Report

Market Factor Guidance

January 2021

King County

BERK STRATEGY ▪ ANALYSIS ▪ COMMUNICATIONS

HEARTLAND

Table of contents

1. Market Factor: Introduction

Market Factor: Introduction

Intro and Purpose

The Market Factor, also known as the Market Supply Factor, is a final adjustment to the buildable land supply that follows other deductions that account for critical areas, infrastructure gaps, right-of-way, and future public facilities. It accounts for the percentage of buildable land that is unavailable or infeasible to develop during the 20-year planning period. Historically, it has been used as a proxy to account for landowner preferences and unwillingness to sell, with various methodologies and approaches employed to develop and inform the assumption. As stated in the Department of Commerce's 2018 Buildable Lands Guidelines:

> *Over a 20-year planning period, not all land will be available for development or redevelopment, no matter how suitable. One key constraint on property availability is market availability, or whether or not land will transact for purpose of development or redevelopment. Owners of property that could be developed or redeveloped may have no interest in selling or developing over an extended period of time for any number of reasons.*

E2SSB-5254 introduced new language regarding the overall buildable lands reporting requirements including new recommendations related to Market Factor assumptions. As part of King County's 2020/2021 updated Land Capacity Analysis the County is seeking guidance on development of Market Factor assumptions for municipalities across the County. King County, as mandated by GMA requirements, now seeks to develop a process and methodology for implementing Market Factors that comport with the revised buildable lands guidelines, and better reflect more current market realities present across the region.

Definition of Market Factor

Department of Commerce Guidelines. Several definitions of Market Factor are discussed in the Department of Commerce's 2018 Guidance Publication (see *Buildable Lands Guidelines, 2018).* Included are several references to the Revised Code of Washington (RCW) as well as the Washington Administrator Code (WAC). Overall, the guidelines describe Market Factor as:

> *Market Supply Factor is the estimated percentage of developable land contained within an urban growth area that is likely to remain unavailable over the course of a 20-year planning period and is, in practice, the final non-developable land deduction when calculating lands suitable for development and redevelopment.*

Process Overview

The following is an overview of the process utilized to develop Market Factor guidance for King County.

- Review Commerce guidance and past studies/methodologies
- Explore and evaluate potential methodologies, data sources and implementation frameworks
- Engage with planners and development community to inform methodology
- Conduct test fit analysis to inform Market Factor guidance (similar to case study examples to test data sources and results of the proposed methodology)
- Develop a framework for each City to evaluate and select a Market Factor assumption
- Recommended Market Factors for application across King County
- Create a "menu" of options organized by geography, product and market typologies
- Provide additional discussion and recommendations related to specific conditions that may impact the Market Factor assumption

Engagement

A critical component of the overall approach was the engagement with the public and private sector planning and development communities. The following groups were engaged throughout the development of the guidance document.

- King County Urban Growth Capacity (UGC) Technical Committee
- External Stakeholders (workshop and survey)
- City of Seattle

Engagement Process to Inform Market Factor

To inform development of a methodology for Market Factor, Heartland and Berk leveraged King County's UGC Technical Committee to discuss and review potential Market Factor methodologies. A survey was also distributed to the group of planners and feedback from the process was used to inform how the methodology and overall framework were developed.

In addition, a stakeholder focus group and survey were conducted to inform the development of the Market Factor Methodology as well as to validate conditions affecting the availability of land. A diverse list of professionals active throughout King County comprised primarily of developers and industry association representatives were invited to attend a discussion of the King County Land Capacity Analysis, and more specially, to discuss Market Factor. In attendance were a mix of representative including:

- Public sector representatives
- Industry/Association advocates
- Representation from both market-rate and income-restricted housing developers
- Developers/professional with expertise in multifamily, mixed use and single-family development
- Affordable Housing Advocacy Organizations

Below are highlights from the discussion. Bolded items are also discussed later in the guidance document.

Single Family Discussion

What We Heard:

- Political environment
- Reevaluate what is redevelopable
- **Issue of up-zones, resulting land price increase and impact on feasibility**
- **Slow turnover rate of SFR in MF or MU zones**
- Anticipate that regulations will only get tougher
- High degree of variability between cities in permit process/timing
- Lack of land zoned for townhomes
- On up zoned parcels, if too slow to convert large SFR lots into higher density, they will be redeveloped into more expensive SFR
- **Pricing expectations**

Multifamily and Mixed-Use Discussion

What We Heard:

- Permitting process and timing impacts matter
- **Access to transit** shapes project feasibility
- Missing/inadequate infrastructure in smaller communities to support higher density housing
- **Restrictive covenants impacts** newly up-zoned areas
- Emphasized need for predictability
- **Consider sale volume and growth as an indicator**
- Discussion of outlier communities:
  - **Mercer Island an example of a high price but limited growth community**
- Consider the existing land use mix and connections to employment centers
- **Consider physical parcel attributes**
- Include additional details for considering unique conditions and associated data sources to further evaluate

Approach

The guidance developed for King County focuses on a real estate product-type framework, wherein Market Factor assumptions/recommendations are organized by major real estate development typologies, also called product-types for the purposes of this report. Market Factor is to be selected by product-type and regional geography and applied to land capacity in areas of where the product type is projected to be the predominant use for a given zoning designation.

The approach to Market Factor for King County considers demonstrated supply, demand and projected capacity (projected for the 2021 UGC study). Demonstrated supply is informed by historical development deliveries. Relative demand for product is measured by both pricing and historical delivery by product type. All deliveries are measured in either residential units or non-residential square feet. The data referenced above were selected after a review of the Department of Commerce Buildable Lands Guidelines, review of former analysis of Market Factor conducted by King County as well as an evaluation of alternative data sources available at a County-wide scale.

This approach evaluates the recent demonstrated delivery rate for a certain product-type applied to a 20-year planning period as a ratio to the current projected capacity. This highlights the relationship between what is being developed by the market historically and the capacity a city is projecting into the future.

Rather than use the ratio to directly calculate a market factor, it is instead used to indicate and inform reasonable ranges of market factors and adjustments that cities in similar geographies and comparable market alignments can then choose to apply. These ranges serve as guidance and are recommended in Step 2 of the Market Factor Guidance Section. Additionally, cities can reference these ratio calculations for other cities to assess their own market factor assumptions and evaluate areas with different market conditions and historical development patterns.

Approach Considerations

The Market Factor assumption as applied in the Land Capacity Analysis framework is designed to account for a myriad of non-physical development conditions that would limit or prohibit the development of certain lands in the future. The approach, methodology and data sources in the guidance document are leveraged to inform the recommended ranges and selection framework, but are not meant to be directly translated to actual Market Factor percentages in a given City's estimates. *For example*, projecting a linear historical delivery trend does not necessarily represent the actual delivery trends for coming 20 years, but rather provides important context for how a City has grown historically versus how it expects to growth in the future.

Approach to City of Seattle

The City of Seattle, as one of two designated Metropolitan Cities in King County and the largest and most diverse City in the region, was analyzed at a more granular level than other Cities in King County. This is due to its geographic scale, total population and relative importance in terms of overall impact on capacity in King County. Seattle's distinct neighborhoods and zoning also allow for a more granular analysis and application of Market Factor. Seattle specific guidance is provided in the Appendix of document on page 40. It is important to note that the methodology for the City of Seattle is the same as the one used across the County, only at a neighborhood scale. The approach and framework herein does allow for more granular application of Market Factor in Cities where it may be appropriate, such as the City of Bellevue.

Market Factor: Approach

Why use this approach?

- Historical deliveries by product-type data is the best proxy for the nexus of real estate market conditions, willingness to sell and other factors that limit the development of land.
- This approach leverages readily available data from the King County Assessor to provide uniform analysis across all jurisdictions on existing supply, new deliveries, units and predominant use breakdowns to provide a historical and current market evaluation.
- The approach considers the demand for development land and attempts to account for the complexities associated with development economics that most often drive development decisions.
- The approach provides an empirical approach to deriving more realistic assumptions but also provides flexibility for Cities to address more qualitative and subjective conditions.
- The framework allows for a zone-by-zone approach for considering and selecting market factors for cities that wish to do so. Some cities may not have the complexity or need to apply Market Factor at that scale and may elect to apply at a City-wide scale.

The exhibit below depicts the overall process for selecting Market Factor deductions to apply to each City's capacity analysis.

Approach Summary

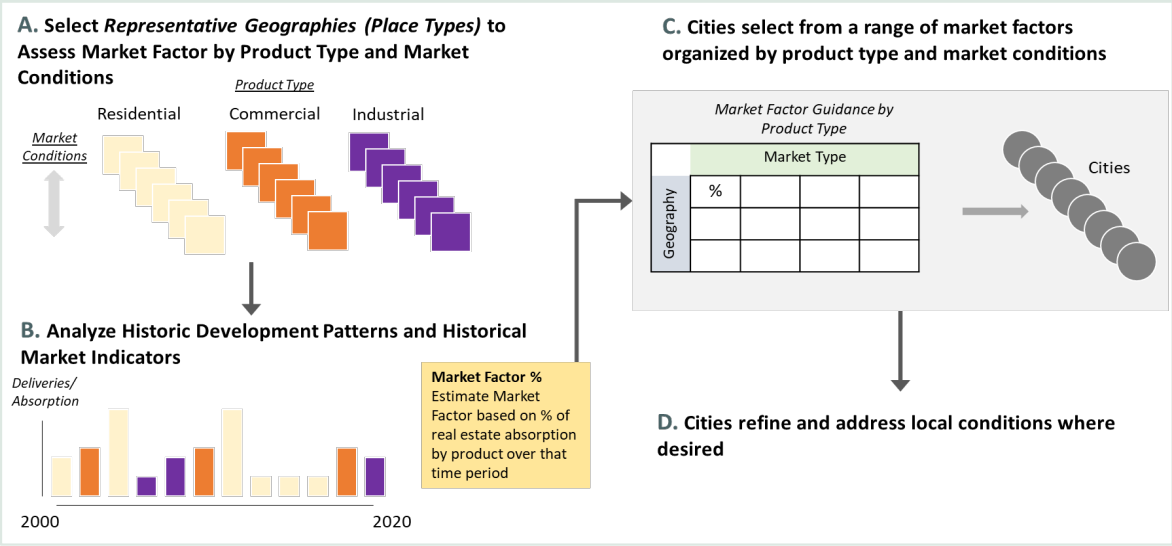
Analyze development patterns over the last 20 years by regional geography and product-type:

- What was delivered over the last 20 years by product type?
- How do historical rates of deliveries align with future capacity planned in the area?
- How does current supply for any given product type align with projected capacity?
- Leverage this data to inform Market Factor recommendations.

Provide recommendations for determining Market Factor based on:

- Product-type
- Regional Geography
- Market conditions
- Other known market constraints

Methodology Overview



Market Factor: Key Definitions and Reference Terms Explained

The following terms and definitions are key to understanding the methodology and using the guidance document.

Product-type:
This refers to the general type of product that new construction would deliver in a particular zone. Using the *Product-type* in this approach serves as a bridge in applying market data to a jurisdiction's capacity data. Detailed *Product-type* definitions are provided in Table 1A under the first step in the Market Factor Guidance Framework.

Regional Geography:
This represents the PSRC *Regional Geographies* outlined in the PSRC Vision 2050 document. These are used to serve as place-type groupings for cities based on shared characteristics.

Market Factor Indicators:
The methodology centers around calculating *Market Factor Indicator* values. These values provide an indication of how capacity would be absorbed based on the annual delivery rate of development (by Product-type) found over the past 5-years. The indicators are not meant to directly translate into market factors but are intended to inform *Market Factor Alignments* and the *Market Factor Ranges* (both defined herein). Note: the analysis evaluated both the 5-year annual average and 20-year annual average historical deliveries.

The *Market Factor Indicator* applies the 5-year average historical delivery rate to the estimated capacity of a given geography over a 20-year planning horizon. This calculation as it relates to the projected capacity is used to indicate what percentage of the capacity is not absorbed over the coming 20 years. The resulting percentage value serves as an indicator of the amount of buildable land that is unavailable or infeasible to develop during the 20-year planning period

Market Factor Alignments:
Three specific groupings for assigning *Market Factor Ranges* (low, medium, and high) are provided. These are assigned by *Product-type* and *Regional Geography.*

The *Market Factor Indicators* for all cities are compared to each other for each *Product-type*. Given the range of *Market Factor Indicator* values, Cities are then grouped into low, medium, or high *Market Factor Alignments* based on how the Cities' *Market Factor Indicator* rankings compared to other cities (see Tables A1-4 in the Appendix). The Cities are then segmented by their respective *Regional Geographies*.

Market Factor Ranges:
Market Factor Ranges represent the range of Market Factors derived for King County organized by *Product-type* and *Regional Geography.* The ranges are informed by *Market Factor Indicators* and available market data (see page 10 to learn more about how the ranges were informed).

- For each *Product-type* and the corresponding *Market Factor Alignment,* a city can use the Table of *Market Factor Ranges* to serve as initial guidance for selecting a Market Factor.
- The discretion to select a value within the informed range or outside the range is left to each individual City. The comparative approach of this methodology is intended to provide flexibility for cities and allow them to make informed assumptions based on this framework but also leverage their unique knowledge of local conditions affecting capacity and future availability of land.

Methodology Overview

A: Establish the Market Factor Indicator through analysis of historical deliveries and the planned capacity for the coming twenty-year planning period.

Measurements:	5-year avg. annual deliveries Cities' Planned capacity
Regional Geographies:	PSRC Regional Geographies classifications.
Data Sources:	- King County Parcel Data - Year 2020 King County Buildable Lands Data - PSRC Regional Geographies
Output:	Market Factor Indicators for all Geographies and product types

Process :

- Assemble and evaluate past deliveries by evaluating the 5-year and 20-year average annual deliveries. These are used to project trends into the future.
- Evaluate Assumed capacity estimated by King County cities using UGC Phase III data. Assign this capacity data by product type based on zoning.
- Create an indicator by extending the 5-year annual delivery trend over the 20-year forward planning period and express as a percent of projected capacity. This gives an indication of what percentage of the planned capacity will be absorbed over the coming years. This indication can also be used to calculate what percentage of capacity does NOT develop over the 20-year planning horizon, which serves in this analysis as an *indicator* for Market Factor. The values from this analysis informed Market Factor recommendations but were not used to directly calculate Market Factors.

B: Establish Market Factor Alignments for all cities and general product types in King County

In the next step, cities were sorted into Low/Med/High Market Factor Alignment categories, based on the relationship of their Market Factor Indicators for each Product-type.

C: Establish Market Factor Ranges for each Regional Geography, Product-type and Market Factor Alignment.

- The Market Factor Indicators from Part A inform a reasonable baseline for the Market Factor Ranges for each city type, product type and Market Factor Alignment – covering every combination of these segments.
- Market price data (rents, median house prices) are used to inform how these ranges should be distributed among Market Factor Alignments (Part B) for each Product-Type.
- The Market Factors used in previous buildable lands analyses (referenced in **Appendix Table A10**) helped inform the maximum market factor (50%) to be found in the menu of ranges and provided useful context when evaluating appropriate ranges for cities to consider.

D: Adjustments – Cities can refine and adjust the Market Factor based on local analysis.

- Cities should adjust their Market Factor within the either the range provided OR the range that aligns most closely with the cities' market conditions.
- Further discussion of these adjustments is provided in step 4 of the Market Factor Guidance Framework.
- Additional data are provided in the appendix to aid cities in adjusting and in potentially re-aligning with another range that may better represent market conditions anticipated over the 20-year planning horizon.

Methodology Summary

A: Establish the Market Factor *Indicators*

B: Establish Market *Alignments* for each City and each Product-Type

C: Establish Market Factor *Ranges* for each Regional Geography , product type and Market Factor Alignment.

D: Refine and Adjust Market Factor

Market Factor: Establishing Market Factor Ranges

Chosen test-fit Market indicators:

Product Type	PSRC Designation	Test Fit City	Test-Fit Market Factor Range Alignment	Market Factor Indicator
Multifamily	Core City	Kirkland	Low	0.08
Multifamily	HCT	Kenmore	Low	0.07
Multifamily	Cities and Towns	Covington	Medium	0.23
Multifamily	Metropolitan	Bellevue	Low	
Single Family	Core City	Kirkland	Medium	0.18
Single Family	HCT	Lake Forest Park	Medium	0.34
Single Family	Cities and Towns	Pacific	Medium	0.5
Single Family	Metropolitan	Bellevue	Low	
COM(off)	Core City	Federal Way	Medium	0.5
COM(off)	HCT	Mercer Island	Medium	0.5
COM(off)	Cities and Towns	Snoqualmie	Medium	0.48
COM(off)	Metropolitan	Bellevue	Low	
Industrial	Core City	Redmond	Medium	0.5*
Industrial	HCT	Woodinville	Low	0.5*
Industrial	Cities and Towns	Enumclaw	High	0.5*
Industrial	Metropolitan	Bellevue	Low	

The table to the left shows each test fit city for each Regional Geography grouped by each Product-type.

**NOTE: the Market Factor upper bound was limited to 0.5, if there was value greater than this value, it was reduced to 0.5*

Process:
This process leverages the calculated *Market Factor Indicators* and identifies a test-fit city in each Regional Geography that has a reasonable alignment of historical deliveries and projected capacity. The test-fit city's indicator value is used as the foundation for the market factor range. The Market Factor Alignment for the test fit geography serves as the starting point for deriving the range, and the bounds for the ranges found under the remaining Market Factor Alignments (low/med/high) are derived through examining market pricing data (median sales price for single-family, and average rents for all other product types as shown in the Appendix Tables A5-9). These adjustments to find the bounds consider both the average price points and the range of prices across cities in King County. With higher ranges of market price data, a wider range of Market Factors generally resulted.

To ensure that the recommended Market Factor Ranges provided in the Guidance Document are reasonable and not overly impactful to a given City's estimated capacity, historical Market Factor assumptions were reviewed to inform an upper limit on the ranges across all product types.

Summary:
In summary, the Market Factor Ranges provided later in this document are informed by a review of calculated Market Factor Indicators and selection from this dataset to establish baseline Market Factor assumptions by Product-type and PSRC Geography. Baseline values were selected from those cities that illustrate relative alignment between historical deliveries and the projected capacity.

Smaller Market Factor Ranges are found where pricing of a given Product-type is more clustered and the overall range of pricing is smaller. Where large differences in pricing for a given Product-type exists, the resulting Market Factor Ranges are larger. These larger Market Factor Ranges reflect the variability in market conditions found for a given Product-type across a particular Regional Geography. This is reflected in Exhibits 1b-3b on the following pages.

Historical Delivery Data

Analysis of historical development patterns across King County began with the compilation and detailed analysis of King County Assessor data. Assessor data provides detailed information on each parcel within the County as well as building specific attributes. Leveraging this information, Heartland established the following:

- Number of residential units by jurisdiction
- A county-wide time-series of delivery data, based upon year of building/unit completion
- Square footage of development by year completed
- Building predominant use, and total square footage of each sectional use.

Product Classifications Assigned to Assessor Data:

Residential	Non-Residential
Single Family	Industrial
Multifamily/Mixed Residential	Office
	Retail
	Commercial (non-industrial)

Exhibits 1 - 3 Charts on the following pages illustrate overall development patterns across the County organized by Regional Geography. The data illustrates overall development patterns by specific Product Type.

The historical delivery data provides a proxy for a number of issues raised in the Buildable Lands Guidelines to which Market Factor is meant to address. These data provide a valuable indicator of:

- Demand for a given product in any given geography.
- The efficiency of the market to deliver the product.
- Willingness to sell.
- Impacts of planned or completed infrastructure.
- Other factors impacting the availability and development of land.

Other Data Analyzed

Capacity Data: Another key data point used to help inform this methodology includes the capacity data projected by each city by zone for the 2021 Buildable Lands Report.

Historical Market Data: Historical pricing data, for each market product-type were also analyzed. Other market data includes rental rates, sale pricing, vacancy, and the growth/trends associated with each of these, which are also previewed in exhibits 1-3.

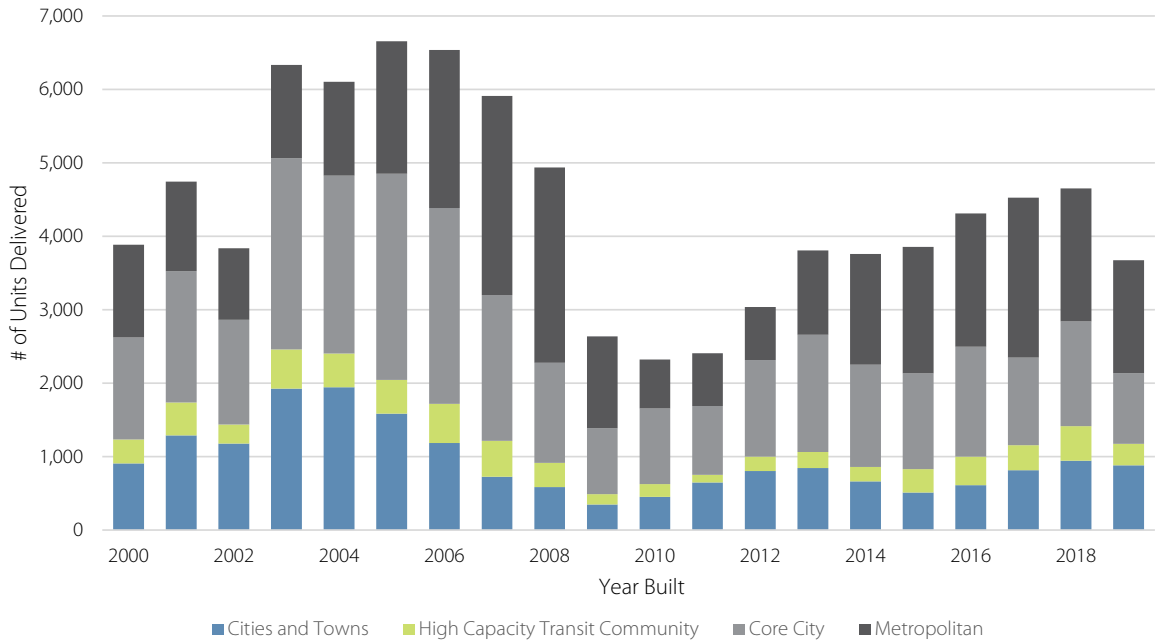
The three data sources combined provide a viewpoint of:

- Historical development deliveries by product type.
- Planned future capacity for a given Product-type.
- Current and past geography specific market conditions for the given product types.

Data Limitations:

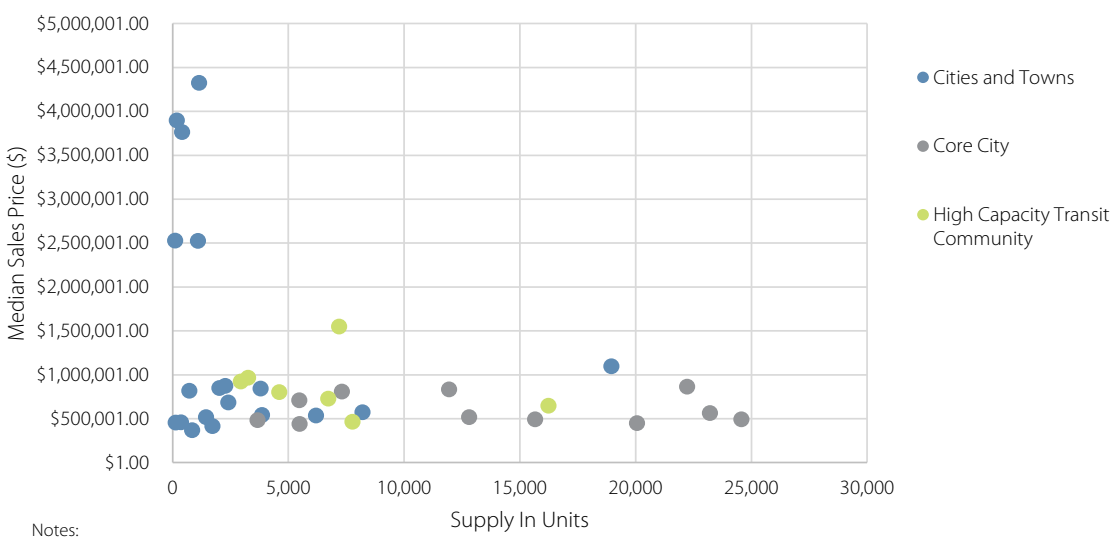
Several limitations exist and are important to acknowledge in the context of their impact to inform the Market Factor assumptions contained later in the Guidance Document. None of the data discussed herein lend themselves to a directly translatable Market Factor value, rather they are used to inform ranges and recommended assignments. In addition, it is important to note that with historical delivery data the year-built attribute may not align directly with a City's permitting data. In addition, for the purposes of the analysis, assumptions were made in classifying the building's product type based upon the predominant uses and overall residential densities.

Exhibit 1a: Single Family Unit Deliveries, 2000-2019



Source: King County Assessor Data

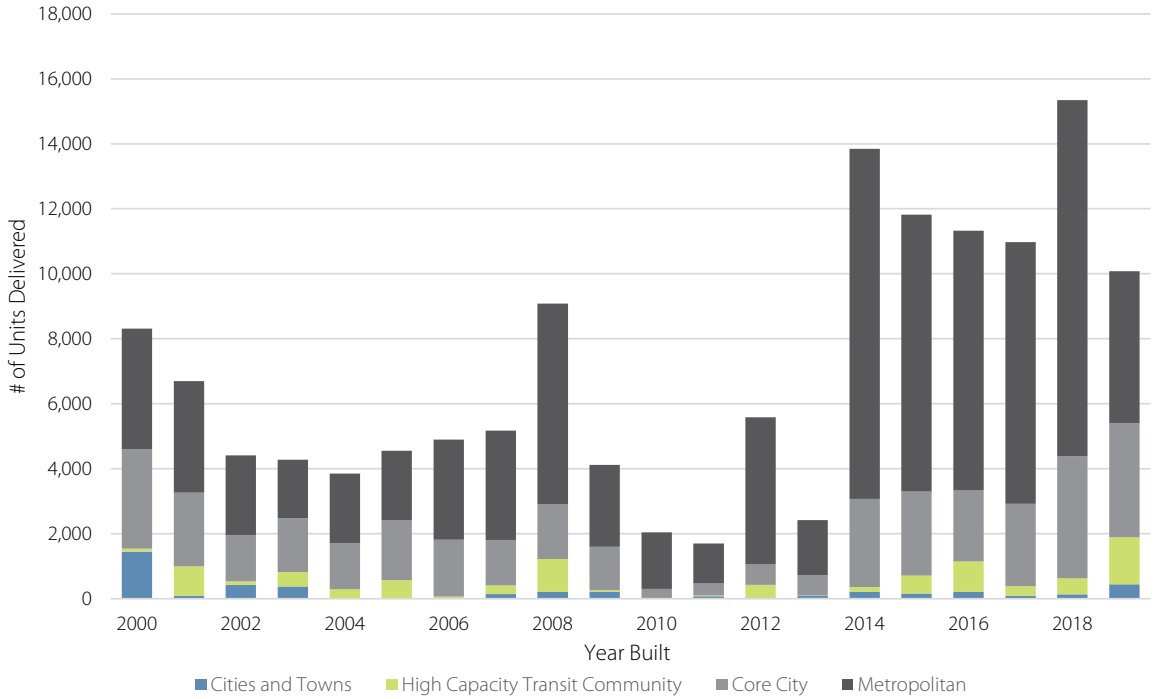
Exhibit 1b: Single Family Unit Supply and Median Sales Price



Notes:
Metro's are excluded from Exhibit 1b for readability, as supply greatly exceeds that of the other cities.
Single family is inclusive of attached single family units and townhomes

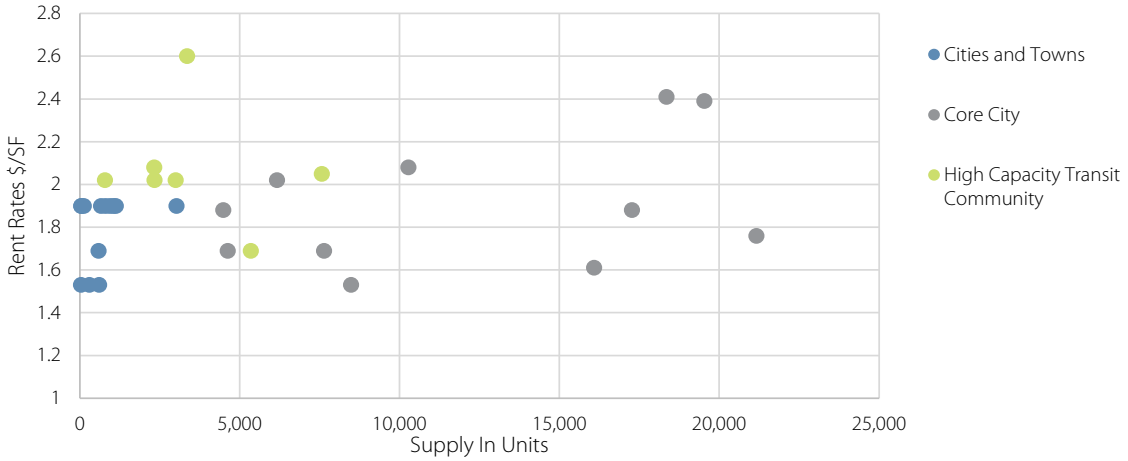
Source: King County Assessor Data, Redfin

Exhibit 2a: Multifamily & Mixed-Use Unit Deliveries 2000-2019



Source: King County Assessor Data

Exhibit 2b: Multifamily & Mixed-Use Supply and Current Rent ($/square foot)



Notes:

- Excludes Cities with Zero Supply; Assessor data completion year can come before actual occupancy and this may be reflected in 2019.
- Metro's are excluded from Exhibit 2b for readability, as supply greatly exceeds that of the other cities.

Source: King County Assessor Data, Costar

Exhibit 3a: Commercial Space (sq ft) Deliveries 2000-2019

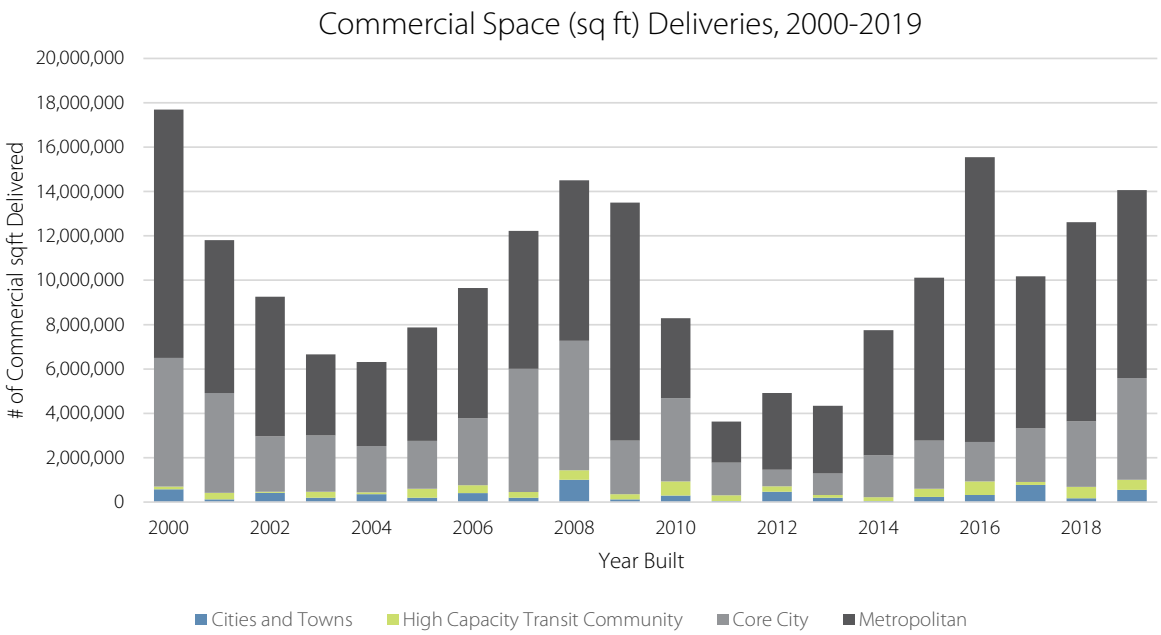
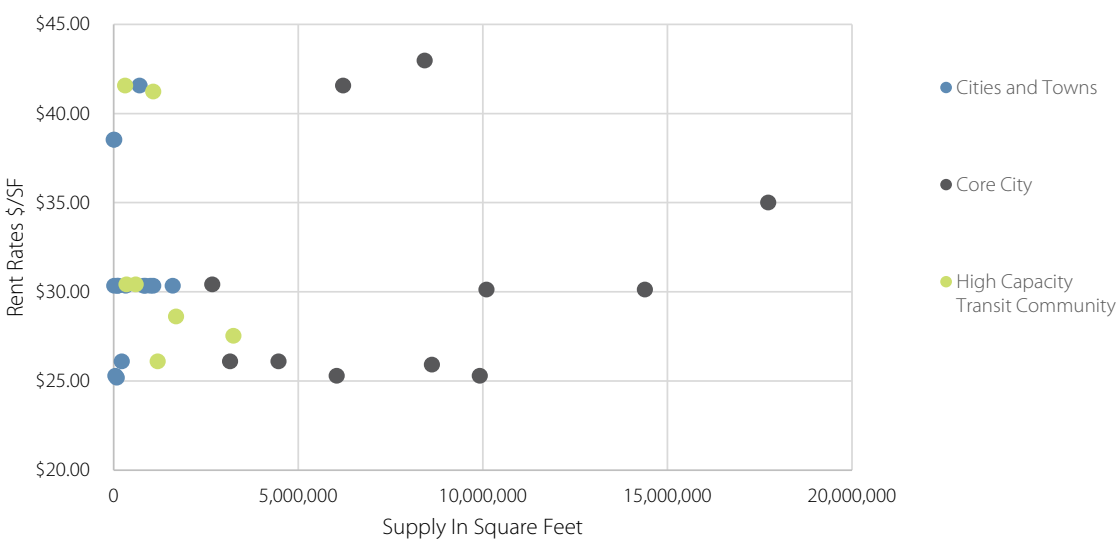


Exhibit 3b: Commercial Supply and Current Rent ($/ sq ft)



Notes:

- Metro's are excluded from Exhibit 3b for readability, as supply greatly exceeds that of the other cities.

Source: King County Assessor Data, Costar

Connecting Market Factor and other UGC Assumptions

Key considerations

Market conditions also enter the capacity analysis through other assumptions in the Urban Growth Capacity analysis. These assumptions can affect the values of selected market factors. Below is additional commentary on other assumptions made within the capacity analysis framework and how these assumptions should be considered when using the Market Factor Guidance document. It is important to note that all of the assumptions discussed are calculated and applied outside of the application of the Market Factor deduction and represent stand alone assumptions estimated by each City.

- **Identifying Redevelopable Lands.** The approach to identifying redevelopable lands and the selected thresholds for determining what could be redeveloped in the future is of great importance to how a City's capacity relates to market conditions and future development economics and conditions. More conservative thresholds, i.e., those that anticipate that less redevelopable lands will develop over the planning period, would result in less redevelopable land being available. Less conservative thresholds would result in more land being available for redevelopment, and may warrant the selection of a market factor at the higher end of the suggested range, depending on market strength. Each City should evaluate how their redevelopment assumptions already incorporate market conditions (or not) when selecting a Market Factor to apply.
- **Assumed Densities.** The density at which property develops in the future is in part dependent on market conditions and greatly impacts overall capacity. Each City has studied historical achieved densities and planned densities to arrive at an assumed density assumption. Where appropriate, each City should evaluate whether their assumptions reflect more aspirational product types and densities versus historical development patterns and achieved densities in a given zone and consider this when selecting a Market Factor to apply.
- **Infrastructure.** Analysis and deductions have been completed to account for deficiencies in infrastructure which could limit the development of land in the future. Jurisdictions may want to consider higher Market Factors for zones or land supply included as capacity, but requiring infrastructure investments to serve the assumed density. This adjustment would be intended to reflect the cost of the infrastructure investment, which was not a component of the previous infrastructure gaps analysis. This would only be a valid consideration where Cities believe the initial applied infrastructure gap deductions do not fully represent the infrastructure challenges in a given area.

2. Market Factor Guidance: *Framework*

Framework Overview

The following provides an overview of the Market Factor guidance framework developed for King County. There are four distinct steps defined within the framework outlined below. Additional details and data are provided on the subsequent pages detailing each step.

Step	Explanation of step	Definitions and Reference	Details
Step 1. Identify Zoning by Predominant Product-Type	Identify the predominant Product-type in each zone of the City where capacity exists	Explanation of each Product-type (Table 1A)	• Select the Product-types that align with the zones within your City that have capacity • The Product-type would be the predominant use expected to develop in each corresponding zone
Step 2. Identify Regional Geography and Market Alignment	Identify and align PSRC Regional Geographies and Market Conditions	Menu of Regional Geographies (PSRC) and Market Factor Alignments (Tables 2A-2D)	• Select applicable Regional Geography based on the Menu • Select appropriate Market Factor Alignment from menu
Step 3. Select from Market Factor Ranges	For each Product-type select a Market Factor Range to apply to the capacity analysis	Market Factor Ranges (Table 3A)	• Find correct table, review and use the selected range to inform Market Factor assumption prior to adjustments in Step 4.
Step 4. Adjustments	Adjust selected Market Factor Range assumptions based on known conditions	Condition Considerations (Table 4A)	•Review known conditions that impact Market Factor (p. 12) •Evaluate applicability in your City •Adjust Market Factor assumption based on on-the-ground conditions in your jurisdiction, and document in table template.

Step 1 : Identify Zoning by Product Type	
Explanation of step	Identify the predominant Product-Type in each zone of the City where capacity exists
Definitions and Reference	• **Table 1A - Product-type Reference** Select applicable Product-types on the following page

Directions

In Step 1, assign the applicable Product-type to each zone based upon the anticipated predominant uses in the corresponding zone.

To better understand the Product-types used in this guidance, reference **Table 1A: Product-Type Reference**

The Product-type assigned to each zone should represent the predominant building typology and use that is likely to occur. This can be based on past buildout within a given zone *OR* the Product-type envisioned and supported by the zoning regulations and requirements.

Example

Zoning Designations

Product-Types

Residential
Single Family
Multifamily/Mixed Residential
Non-Residential
Industrial
Office
Retail
Commercial (non-industrial)

Capacity Tables

Zoning	Mixed use (y/n)	Land Use	Product-type	Mkt Factor
R1	N	SF	Single Family	
R4	N	SF	Single Family	
R6	N	SF	Single Family	
R12	N	MF	Single Family	
R18	N	MF	Multifamily	
R24	N	MF	Multifamily	
R48	N	MF	Multifamily	
(MHC)	N		Single Family	
NB	Y	MU	Mixed Res	
CB	Y	MU	Mixed Res	
DR	Y	MU	Mixed Res	
			TOTALS	

Table 1A – Product-Type Reference

Product-type	Description/Application	Illustrative Examples
Residential		
Single Family	All areas where single family residential product inclusive of any of the following listed as the predominant use: detached, duplex, tri-plex four plex or townhouse plat.	Detached single family homes and subdivisions, attached townhomes and duplexes.
Multifamily/Mixed Residential	All areas where multilevel stacked residential product in the form of rental housing or condominium ownership is the predominant permitted use. Inclusive of high density multifamily and mixed-use developments.	Stacked flat apartment buildings, garden style apartment complexes, mid-rise multifamily podium projects, mid-rise multifamily podium projects with ground floor commercial uses, residential high-rise, residential condominium projects.
Non-Residential		
Industrial	Industrial facilities inclusive of manufacturing, warehousing, distribution and light industrial and facilities	Heavy industrial and manufacturing, warehousing and logistics development, light industrial and flex industrial facilities.
Office	Areas where the predominant use is office and zoning caters to office heavy commercial uses	Business Parks, Downtown CBDs.
Retail	Areas designated for standalone retail development.	Malls, power centers, lifestyle centers.
Commercial (non-industrial)	Inclusive of all nonindustrial commercial uses. Appropriate to apply in mixed use areas where the commercial use is the predominant use inclusive of instances where mixed residential is allowed but commercial component is primary.	Retail and office development (stand alone of mixed). Commercial components of residential mixed-use products.

Step 2 : Identify Regional Geographies mm and Market Factor Alignment	
Explanation of step	Use the following tables to identify the Regional Geography and to align with corresponding market conditions.
Definitions and Reference	• **Table 2A –** Metropolitan • **Table 2B –** High-Capacity Transit Market Factor Alignment Table • **Table 2C –** Core Cities Market Factor Alignment Table • **Table 2D –** Cities and towns Market Alignment Table

Directions

Regional Geography Designation

In addition to Product-type, this guidance segments different jurisdictions into like-kind Regional Geographies using the PSRC Designations. The four designations present in King County are given below:

- Metropolitan
- Core City
- High-Capacity Transit Community (HCT)
- Cities and Towns

Cities in these Regional Geographies share similar characteristics among peers. However, despite similarities amongst these Regional Geographies, market conditions still vary. To account for these variations amongst Regional Geographies peers, different *Market Factor Alignments* (high, medium, low) are be applied to the target cities to segment by these variations.

Use the Tables 2a -2d as a reference in selecting appropriate Market Factor Ranges by product type in Step 3. To review the Market Factor Indicators by City and Product type, refer to the **Appendix Tables A1-A4.** To review the methodology and explanation of Market Factor Indicators see Methodology Overview and Definitions section on page 8.

Market Factor Alignment

Each city's market conditions have been evaluated and *Market Alignment* has been assigned by Product-type. Use the rankings to select a *Market Factors Range* in Step 3.

- **Low** – market data and test fit analysis indicated that a lower Market Factor range is appropriate for the given Product-type.
- **Medium** – market data and test fit analysis indicated that a mid level Market Factor range is appropriate for the given Product-type.
- **High** – market data and test fit analysis indicated that a higher Market Factor range is appropriate for the given Product-type.

Further adjustments to the Market Factor, including how to select within the recommended range are completed in **Step 4**.

Table 2A – Metropolitan Market Alignment Table

City/Regional Geography		Product-Type Market Factor Alignment			
City	*PSRC Designation*	*Multifamily/MU*	*Single Family*	*Office/ Commercial*	*Industrial*
Bellevue	Metropolitan	Low	Low	Low	Low
Seattle*	Metropolitan	NA*	NA*	NA*	NA*

**Reference Appendix (page 40) for City of Seattle specific Market Factor guidance.*

Table 2B – Core Cities Market Factor Alignment Table

City/Regional Geography		Product-Type Market Factor Alignment			
City	*PSRC Designation*	*Multifamily/MU*	*Single Family*	*Office/Commercial*	*Industrial*
Redmond	Core City	Low	Low	Low	Medium
Tukwila	Core City	Low	Medium	Medium	Medium
Bothell	Core City	Low	Low	Low	Low
Issaquah	Core City	Medium	Low	Low	Low
Kirkland	Core City	Low	Medium	Low	Low
Kent	Core City	Medium	Low	High	Low
Burien	Core City	High	Medium	High	Low
SeaTac	Core City	High	Medium	Low	High
Federal Way	Core City	Low	Medium	Medium	Low
Renton	Core City	High	Low	Medium	Low
Auburn	Core City	Low	Medium	Medium	Low

Table 2C– High-Capacity Transit (HCT) Market Alignment Table

City/Regional Geography		Product-Type Market Factor Alignment			
City	*PSRC Designation*	*Multifamily/MU*	*Single Family*	*Office/ Commercial*	*Industrial*
Newcastle	HCT	Low	Medium	Low	High
Woodinville	HCT	Low	Low	Low	Low
Mercer Island	HCT	High	Low	Medium	Medium
Des Moines	HCT	High	Low	Low	Low
Shoreline	HCT	High	Medium	High	High
Kenmore	HCT	Low	Low	Medium	Medium
Lake Forest Park	HCT	High	Medium	High	NA

Table 2D – Cities and towns Market Alignment Table

City/Regional Geography		Product-Type Market Factor Alignment			
City	*PSRC Designation*	*Multifamily/MU*	*Single Family*	*Office/ Commercial*	*Industrial*
North Bend	Cities and Towns	Medium	Low	Medium	High
Maple Valley	Cities and Towns	Low	Low	Medium	High
Snoqualmie	Cities and Towns	Low	Low	Medium	High
Covington	Cities and Towns	Medium	Low	Low	High
Enumclaw	Cities and Towns	High	Low	Medium	High
Sammamish	Cities and Towns	High	Low	High	High
Milton	Cities and Towns	High	High	High	High
Carnation	Cities and Towns	High	Low	Low	High
Duvall	Cities and Towns	High	Low	High	Low
Black Diamond	Cities and Towns	High	Medium	NA	High
Medina	Cities and Towns	High	Low	High	High
Normandy Park	Cities and Towns	Low	High	Medium	High
Pacific	Cities and Towns	High	Medium	High	High
Skykomish	Cities and Towns	High	Medium	High	High
Algona	Cities and Towns	High	Low	High	High
Beaux Arts	Cities and Towns	High	Low	NA	NA
Clyde Hill	Cities and Towns	High	Low	NA	NA
Hunts Point	Cities and Towns	High	Low	NA	NA
Yarrow Point	Cities and Towns	High	Low	NA	NA

Step 3 : Select From Market Factor Ranges	
Explanation of step	For each Product-type select a *Market Factor Range* suitable for your City
Definitions and Reference	• **Table 3A – Market Factor Ranges by Product-type**

Directions

Building upon Steps 1 and 2, Step 3 applies *Market Factor Ranges* by relating each Regional Geography and *Market Factor Alignment* (Step 2) to a specific Product-type which can then be applied to zoning through a given zoning designation's corresponding Product-type, which was identified in Step 1.

The following table contains *Market Factors Ranges* for all combinations of Regional Geographies, *Market factor Alignments, and* product-types.

Table 3A – Market Factor Ranges by Product-Type

	Product-Type			
Regional Geography	**Residential**		**Non-Residential**	
Market Factor Alignment	**Multifamily/ Mixed-Res**	**Single Family**	**Commercial (Office/Retail/Mixed)**	**Industrial**
Core City				
Low	5%-10%	1%-14%	1%-10%	1%-15%
Medium	11%-20%	15%-20%	11%-20%	16%-35%
High	21%-35%	21%-30%	21%-50%	36%-50%
High-Capacity Transit				
Low	5%-10%	1%-9%	1%-14%	1%-19%
Medium	11%-15%	10%-20%	15%-25%	20%-30%
High	16%-30%	21%-35%	26%-50%	31%-50%
Cities and Towns				
Low	10%-24%	1%-10%	1%-10%	1%-15%
Medium	25%-35%	11%-40%	11%-20%	16%-35%
High	36%-50%	41%-50%	21%-50%	36%-50%
Metropolitan				
Low	5%-10%	1%-14%	1%-10%	1%-15%

Methodology Reminder:
These ranges are informed by the Market Factor Indictor test-fit analysis. This relates historical delivery trends to projected capacity. These ranges were then further differentiated among peers in each Regional Geography by evaluating price data including both rents and median sale price (for single family product). Reference Methodology Overview on Page 10 for more detail.

Step 4 : Adjustments	
Explanation of step	Make selected adjustments to suggested *Market Factor Ranges* based on known conditions
Definitions and Reference	• **Table 4A – Adjustment Implementation**

Overview

Step 4 provides a framework for selecting a Market Factor from within the range selected in Step 3. Specific conditions are discussed that would influence future development and impact the Market Factor value assumed by a given City.

The conditions listed below reflect specific topics and questions flagged during the engagement process described earlier in the guidance document. Each city should carefully consider these conditions and how they might impact their assumptions related to Market Factor. The conditions discussed do not represent all the potential conditions and issues that Market Factor may address. Cities should adjust within the given ranges or deviate from it altogether to account for known conditions that impact the development of and availability of land in their jurisdiction. **Table 4A** on the following pages provides more detailed descriptions of theses conditions and how adjustment should be considered. Note that assumptions previously incorporated into the Land Capacity Analysis (see page 15 *UGC Assumptions*) may already account for the adjustments discussed in this section.

- Vacant versus redevelopable lands assumptions
- Strong market growth indicators (Reference appendix market **Tables A5-A9**)
- Single family uses in recently up-zoned areas
- Restrictive Covenants in planned communities
- Parcel size and assemblage challenges
- Transit accessibility

Selecting Within The Range Based on Market Conditions:

A range for each Product-type by each Regional Geography is provided in Step 3. In order to select within this range, each city must review their specific attributes, assumptions and market conditions and consider whether a higher or lower Market Factor is appropriate for that given Product-type (and therefore, applicable zone within the city). It is important to note that additional factors may need to be considered to account for unique circumstances influencing the market availability of land in any given jurisdiction.

Several sets of data may be leveraged to evaluate the adjustments outlined in **Table 4a**:

- **Appendix Tables A1-A4:** *Market Factor Indicators* and supporting data for each jurisdiction in King County (illustrating historical deliveries and planned capacity)
- **Appendix Tables A5-A9:** Market conditions by product-type (key indicators for all applicable jurisdictions within the County)
- **Appendix Table A10**: Past Market Factor assumptions

Table 4A – Adjustment Template

Condition	Explanation	Recommendation on Market Factor Adjustment	
		Select a lower value from the range if:	*Select a higher value from the range if:*
Assumption for Vacant versus Redevelopable Lands			
Where a City has a mix of vacant and redevelopable lands as part of their capacity and it is appropriate to differentiate the Market Factor assumption for vacant and redevelopable lands.	Consider the overall ratio of vacant land versus redevelopable land and the condition of said lands. For example, if >50% of capacity is on vacant land, consider adjusting Market Factor downward on vacant land upward on redevelopable land. The relative location of vacant and redevelopable lands is also an important consideration. Where redevelopable lands are located near or adjacent to important infrastructure and amenities, the need to differentiate between the two is less pronounced.	For vacant lands, select a value that is lower within the given range (or outside the low end of the range if deemed appropriate) when the supply of vacant lands represents a significant portion of overall capacity for a given product and the location and relative attributes of said supply do not represent barriers to redevelopment	For redevelopable lands, select a higher value in the Market Factor range if conditions are known that may limit or impact the turnover and availability of land with existing uses.
Market Trends			
Where recent real estate market trends for a given Product-type indicate more or less challenging conditions for development in the next 20 years.	If trends indicate growth in demand for a given product, consider a downward adjustment on Market Factor to reflect this demand. Such indicators include growth in pricing/lease rates and/or decreases. Alternatively, if the market data for a given product indicates more difficult market conditions in terms of ranking amongst jurisdictions, consider selection of a higher market factor within the given range.	Market trends align with trends amongst peer cities falling in a lower Market Factor Alignment indicates that a lower market factor may be appropriate.	Market trends suggest a downward trend in overall demand or overall rankings amongst peer cities suggesting that a higher market factor may be appropriate.

Table 4A – Adjustment Template

Condition	Explanation	Recommendation on Market Factor Adjustment	
		Select a lower value from the range if:	*Select a higher value from the range if:*
Single Family Up-zoned Areas			
Where significant capacity for higher density single family or multifamily/ mixed-use housing is assumed on existing single family uses	Where capacity exists on lands that currently house single family uses but greater densities are permitted, many cities have cited concern regarding how such areas will redevelop and if a specific Market Factor adjustment should be leveraged. The Cities of Shoreline and SeaTac serve as examples where single family areas were up-zoned around planned or completed transit facilities. The turnover and development of single family areas in these cities is captured in through the analysis of historical deliveries data and may be leveraged for reference or comparison on a county wide scale. Important indicators to consider when adjusting for such a condition include: – Whether home prices are below, on par or above median prices in the region – The age and quality of the housing stock – Recent transaction activity – Recent permitting activity	The conditions of the capacity lands with single family uses reflect the following conditions: – Home prices at or below median prices for the area – The housing stock is aging – There is a higher rate of recent transactions reflecting interest from developers	The conditions of the capacity lands with single family uses reflect the following conditions: – Home prices are above median prices for the area representing a potential market barrier to redevelopment – The housing stock includes recently constructed or updated structures – Recent transactions reflect value in use (meaning the highest and best use of the property is still considered the single family residence)
Restrictive Covenants in Planned Communities			
Where restrictive home-owner associations or other similar covenants may limit the redevelopment at a higher intensity/use	In some cases, areas that have been rezoned or up-zoned are still subject to restrictive covenants that run with the land and limit how development may occur. This is most likely to exist in existing single family neighborhoods but may also pose a challenge in business parks and other similar commercial districts.	If restrictive covenants are not known to exist or would have a limited impact on redevelopment in the future.	If restrictive covenants are known and would need to be removed/eliminated in order for redevelopment per new zoning allowances to occur (at a higher intensity).

Table 4A – Adjustment Template (Continued)

Condition	Explanation	Recommendation on Market Factor Adjustment	
		Select a lower value from the range if:	*Select a higher value from the range if:*
Fragmented Ownership and Parcel Size			
Where capacity in a given neighborhood or zone is fragmented and generally consists of smaller parcels (less than ..25 acres for multifamily site for example)	Where capacity for a given Product-type occurs on largely fragmented or non-contiguous parcels and the parcels are generally smaller in size, a higher market factor may be considered. Such conditions may limit options for parcel assemblage in the future and result in less land being redeveloped in the future.	Vacant and/or redevelopable lands consist of a mix of contiguous and non-contiguous properties and parcel sizes do not appear to represent a challenge to development in the future	Conditions are observed that reflect an abundance of capacity on smaller, non-contiguous properties in a given zone or neighborhood
Access to Transit			
Where planned or recently completed transit facilities may impact develop feasibility in the surrounding neighborhood/zone.	Planned infrastructure like Bus Rapid Transit, Light Rail and other major transportation improvement that improve access and mobility can greatly improve development feasibility and owner willingness to sell/redevelopment land. Market Factor assumptions should reflect where such improvements either exist or are planned in the future (within an impacted area such as a ¼ mile walk shed).	A significant transportation infrastructure investment is completed or planned that will greatly improve transit access in a given zone or neighborhood.	NA

3. Appendix A – Reference Tables

Appendix Tables Summary

The following tables are available for reference and were used to inform the Market Factor alignment for Cities (low, medium or high) by product and the Market Factor range value.

- **Table A1. Supply, Deliveries, & Capacity Table:** *Multifamily + Mixed Res*
- **Table A2. Supply, Deliveries, & Capacity Table:** *Single Family*
- **Table A3. Supply, Deliveries, & Capacity Table:** Non-residential - *Commercial (Office/Retail)*
- **Table A4. Supply, Deliveries, & Capacity Table:** *Non-Residential - Industrial*

Additional Market data is available in the following tables to further inform Market Factor selection and adjustments. Included is an overview of past Market Factor assumptions used across Washington State.

- **Table A5. Market Data – Multifamily Residential Product**
- **Table A6. Market Data – Single Family Product**
- **Table A7. Market Data – Retail Product**
- **Table A8. Market Data – Office Product**
- **Table A9. Market Data – Industrial Product**
- **Table A10. Market Factor – Past Assumptions**

Table A1. Supply, Deliveries, & Capacity Table:

Multifamily + Mixed Res

City	Regional Geography	Market Factor Alignment	Total Supply (Units)	5-yr Average Annual Deliveries (Gross,2015-2019)	Assumed Capacity Estimates from Cities (Gross)	Market Factor Indicator
Algona	**Cities and Towns**	High	36	0	53	100%
Beaux Arts	**Cities and Towns**	High	0	0	0	100%
Black Diamond	**Cities and Towns**	High	41	0	1886	100%
Carnation	**Cities and Towns**	High	45	0	196	100%
Clyde Hill	**Cities and Towns**	High	0	0	0	100%
Duvall	**Cities and Towns**	High	119	0	856	100%
Enumclaw	**Cities and Towns**	High	1,053	0	632	100%
Hunts Point	**Cities and Towns**	High	0	0	0	100%
Medina	**Cities and Towns**	High	0	0	0	100%
Milton	**Cities and Towns**	High	300	23	0	100%
Pacific	**Cities and Towns**	High	599	0	3	100%
Skykomish	**Cities and Towns**	High	0	0	0	100%
Yarrow Point	**Cities and Towns**	High	0	0	0	100%
Sammamish	**Cities and Towns**	High	3,021	25	2157	76%
North Bend	**Cities and Towns**	Med	803	9	390	56%
Covington	**Cities and Towns**	Med	665	65	1689	23%
Maple Valley	**Cities and Towns**	Low	1,121	65	269	0%
Normandy Park	**Cities and Towns**	Low	584	1	12	0%
Snoqualmie	**Cities and Towns**	Low	944	58	148	0%
SeaTac	**Core City**	High	4,626	41	7044	88%
Renton	**Core City**	High	17,274	153	15476	80%
Burien	**Core City**	High	7,635	120	7624	68%
Kent	**Core City**	Med	21,166	278	13077	57%
Issaquah	**Core City**	Med	10,277	426	14172	40%
Kirkland	**Core City**	Low	18,348	427	9327	8%
Tukwila	**Core City**	Low	4,484	126	2551	1%
Auburn	**Core City**	Low	8,481	201	3511	0%
Bothell	**Core City**	Low	6,168	350	3238	0%
Federal Way	**Core City**	Low	16,085	192	617	0%
Redmond	**Core City**	Low	19,531	1,144	20414	0%
Lake Forest Park	**High Capacity Transit Community**	High	786	0	844	100%
Shoreline	**High Capacity Transit Community**	High	7,568	208	24037	83%
Des Moines	**High Capacity Transit Community**	High	5,348	106	6657	68%
Mercer Island	**High Capacity Transit Community**	High	3,352	78	4748	67%
Kenmore	**High Capacity Transit Community**	Low	2,335	53	1147	7%
Woodinville	**High Capacity Transit Community**	Low	2,996	126	2612	4%
Newcastle	**High Capacity Transit Community**	Low	2,330	202	2772	0%
Bellevue	**Metropolitan**	Low	30,707	993	23473	15%

Source: King County Assessor

Table A2. Supply, Deliveries, & Capacity Table:

Single Family

City	Regional Geography	Market Factor Alignment	Total Supply (Units)	5-yr Average Annual Deliveries (Gross,2015-2019)	Assumed Capacity Estimates from Cities (Gross)	Market Factor Indicator Value
Milton	**Cities and Towns**	High	370	0	70	100%
Normandy Park	**Cities and Towns**	High	2,279	9	4931	96%
Skykomish	**Cities and Towns**	Medium	136	0	54	85%
Black Diamond	**Cities and Towns**	Medium	1,442	16	1606	80%
Pacific	**Cities and Towns**	Medium	1,722	12	586	58%
Algona	**Cities and Towns**	Low	847	5	59	0%
Beaux Arts	**Cities and Towns**	Low	116	0	3	0%
Carnation	**Cities and Towns**	Low	725	33	110	0%
Clyde Hill	**Cities and Towns**	Low	1,100	16	0	0%
Covington	**Cities and Towns**	Low	6,195	52	295	0%
Duvall	**Cities and Towns**	Low	2,411	34	446	0%
Enumclaw	**Cities and Towns**	Low	3,867	92	1078	0%
Hunts Point	**Cities and Towns**	Low	181	0	5	0%
Maple Valley	**Cities and Towns**	Low	8,204	87	1314	0%
Medina	**Cities and Towns**	Low	1,147	9	60	0%
North Bend	**Cities and Towns**	Low	2,028	64	893	0%
Sammamish	**Cities and Towns**	Low	18,960	257	994	0%
Snoqualmie	**Cities and Towns**	Low	3,804	55	54	0%
Yarrow Point	**Cities and Towns**	Low	411	7	24	0%
Burien	**Core City**	Medium	12,813	58	8034	85%
SeaTac	**Core City**	Medium	5,489	20	1757	78%
Federal Way	**Core City**	Medium	20,058	50	4082	75%
Tukwila	**Core City**	Medium	3,677	31	1914	67%
Auburn	**Core City**	Medium	15,664	152	6859	56%
Kirkland	**Core City**	Medium	22,231	246	6019	18%
Bothell	**Core City**	Low	5,472	77	1065	0%
Issaquah	**Core City**	Low	7,319	102	1321	0%
Kent	**Core City**	Low	24,572	224	3174	0%
Redmond	**Core City**	Low	11,947	148	153	0%
Renton	**Core City**	Low	23,217	169	2887	0%
Shoreline	**High Capacity Transit Community**	Medium	16,241	51	1926	47%
Newcastle	**High Capacity Transit Community**	Medium	3,267	29	942	38%
Lake Forest Park	**High Capacity Transit Community**	Medium	4,605	36	1084	34%
Des Moines	**High Capacity Transit Community**	Low	7,770	45	549	0%
Kenmore	**High Capacity Transit Community**	Low	6,725	86	307	0%
Mercer Island	**High Capacity Transit Community**	Low	7,200	65	942	0%
Woodinville	**High Capacity Transit Community**	Low	2,945	51	159	0%
Bellevue	**Metropolitan**	Low	30,991	180	1401	0%

Source: King County Assessor

Table A3. Supply, Deliveries, & Capacity Table:

Non-residential - *Commercial (Office/Retail/Mixed-use)*

City	Regional Geography	Market Factor Alignment	Total Supply (square feet)	5-yr Average Annual Deliveries (Gross,2015-2019)	Assumed Capacity Estimates from Cities (Gross)	Market Factor Indicator Value
Algona	**Cities and Towns**	High	82,157	0	1,937,549	100%
Beaux Arts	**Cities and Towns**	High	0	0	0	100%
Black Diamond	**Cities and Towns**	High	112,398	24	0	100%
Carnation	**Cities and Towns**	Low	107,218	3,173	45,869	0%
Clyde Hill	**Cities and Towns**	High	3,943	0	0	100%
Covington	**Cities and Towns**	Low	1,600,545	17,681	21,500	0%
Duvall	**Cities and Towns**	High	329,706	0	0	100%
Enumclaw	**Cities and Towns**	Med	1,069,481	8,426	510,812	67%
Hunts Point	**Cities and Towns**	High	0	0	0	100%
Maple Valley	**Cities and Towns**	Med	1,000,677	6,225	3,034,746	96%
Medina	**Cities and Towns**	High	17,769	0	1,466	100%
Milton	**Cities and Towns**	High	0	0	453,024	100%
Normandy Park	**Cities and Towns**	Med	220,497	912	1,364,473	99%
North Bend	**Cities and Towns**	Med	815,721	5,093	1,816,293	94%
Pacific	**Cities and Towns**	High	44,398	0	986,895	100%
Sammamish	**Cities and Towns**	High	701,175	22,701	0	100%
Skykomish	**Cities and Towns**	High	17,793	0	0	100%
Snoqualmie	**Cities and Towns**	Med	861,700	15,282	589,806	48%
Yarrow Point	**Cities and Towns**	High	0	0	0	100%
Auburn	**Core City**	Med	6,044,887	29,832	3,117,316	81%
Bothell	**Core City**	Low	2,668,767	12,787	49,675	0%
Burien	**Core City**	High	3,154,588	25,970	0	100%
Federal Way	**Core City**	Med	9,915,400	40,014	2,297,392	65%
Issaquah	**Core City**	Low	6,213,142	15,918	22,297	0%
Kent	**Core City**	High	8,619,483	69,824	0	100%
Kirkland	**Core City**	Low	8,423,096	229,860	2,042,751	0%
Redmond	**Core City**	Low	17,730,711	124,991	0	100%
Renton	**Core City**	High	14,388,628	329,953	0	100%
SeaTac	**Core City**	Low	4,465,866	38,001	114,580	0%
Tukwila	**Core City**	Med	10,102,478	10,163	1,847,445	89%
Des Moines	**High Capacity Transit Community**	Low	1,192,091	65,619	1,081,548	0%
Kenmore	**High Capacity Transit Community**	High	599,267	8,177	0	100%
Lake Forest Park	**High Capacity Transit Community**	High	346,900	0	65,635	100%
Mercer Island	**High Capacity Transit Community**	Med	1,072,265	2,133	125,344	66%
Newcastle	**High Capacity Transit Community**	Low	309,937	7,889	12,170	0%
Shoreline	**High Capacity Transit Community**	High	3,240,969	5,866	0	100%
Woodinville	**High Capacity Transit Community**	Low	1,692,157	11,304	6,614	0%
Bellevue	**Metropolitan**	Low	35,827,922	684,660	1,828,205	0%

Source: King County Assessor

*Note: Capacity does not reflect the assumed capacity projected in mixed-use development

Table A4. Supply, Deliveries, & Capacity Table:

Non-Residential - Industrial

City	Regional Geography	Market Factor Alignment	Total Supply (square feet)	5-yr Average Annual Deliveries (Gross,2015-2019)	Assumed Capacity Estimates from Cities (Gross)	Market Factor Indicator Value
Algona	Cities and Towns	High	2,436,435	0	308056	100%
Beaux Arts	Cities and Towns	High	0	0	0	100%
Black Diamond	Cities and Towns	High	71,790	3,520	0	100%
Carnation	Cities and Towns	High	161,286	0	21321	100%
Clyde Hill	Cities and Towns	High	2,430	0	0	100%
Covington	Cities and Towns	High	350,018	40,329	0	100%
Hunts Point	Cities and Towns	High	0	0	0	100%
Maple Valley	Cities and Towns	High	321,719	0	0	100%
Medina	Cities and Towns	High	16,283	0	0	100%
Milton	Cities and Towns	High	1,300	0	0	100%
Normandy Park	Cities and Towns	High	47,284	0	0	100%
North Bend	Cities and Towns	High	852,090	0	0	100%
Pacific	Cities and Towns	High	254,978	0	1931973	100%
Sammamish	Cities and Towns	High	163,595	0	0	100%
Skykomish	Cities and Towns	High	12,385	0	0	100%
Yarrow Point	Cities and Towns	High	0	0	0	100%
Snoqualmie	Cities and Towns	High	1,083,332	6,982	9893940	99%
Enumclaw	Cities and Towns	High	1,028,576	15,684	2248545	86%
Duvall	Cities and Towns	Low	164,303	17,881	125140	0%
Bothell	Core City	High	1,891,744	25,976	0	100%
Kirkland	Core City	High	3,759,313	17,595	0	100%
Renton	Core City	High	13,611,660	175,518	0	100%
SeaTac	Core City	High	4,256,960	91,460	0	100%
Tukwila	Core City	Med	14,963,571	34,945	3397732	79%
Redmond	Core City	Med	10,139,556	19,167	1043760	63%
Auburn	Core City	Low	23,959,569	184,213	3092704	0%
Burien	Core City	Low	1,811,122	141,140	272973	0%
Federal Way	Core City	Low	2,732,946	88,774	1651415	0%
Issaquah	Core City	Low	1,421,025	17,721	327789	0%
Kent	Core City	Low	46,653,264	492,318	7856045	0%
Kenmore	High Capacity Transit Community	High	536,730	2,880	0	100%
Lake Forest Park	High Capacity Transit Community	High	14,757	0	0	100%
Mercer Island	High Capacity Transit Community	High	96,230	0	0	100%
Newcastle	High Capacity Transit Community	High	227,320	0	0	100%
Shoreline	High Capacity Transit Community	High	1,447,694	76,424	0	100%
Des Moines	High Capacity Transit Community	Low	1,892,369	311,055	7619	0%
Woodinville	High Capacity Transit Community	Low	5,868,390	50,850	371356	0%
Bellevue	Metropolitan	Low	4,853,067	32,740	143435	0%

Source: King County Assessor

Table A5. Market Data – Multifamily Residential Product

CITY	Total Product Supply	Total Housing Supply	Product % of total Housing units	Total Unit Deliveries 2000-2019	Average Annual Deliveries 2000-2019 (Units)	Total Deliveries last 5 years (gross, units)	Average Annual Deliveries last 5 years (Gross, Units)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Current average rent, (Monthly $/SF)	Average Rent 2015, (Monthly $/SF)	Average Rent 2010, (Monthly $/SF)
ALGONA	36	884	4.1%	0	0	0	0	0.0%	$1.53	$1.25	$1.02
AUBURN	8,481	24,155	35.1%	2,055	103	1,003	201	9.8%	$1.53	$1.25	$1.02
BEAUX ARTS	0	116	0.0%	0	0	0	0	0.0%	$2.60	$2.30	$1.83
BELLEVUE	30,707	61,914	49.6%	10,231	512	4,964	993	9.7%	$2.60	$2.30	$1.83
BLACK DIAMOND	41	1,828	2.2%	0	0	0	0	0.0%	$1.90	$1.61	$1.27
BOTHELL	6,168	11,742	52.5%	2,841	142	1,750	350	12.3%	$2.02	$1.71	$1.37
BURIEN	7,635	20,456	37.3%	1,124	56	602	120	10.7%	$1.69	$1.39	$1.07
CARNATION	45	779	5.8%	0	0	0	0	0.0%	$1.90	$1.61	$1.27
CLYDE HILL	0	1,100	0.0%	0	0	0	0	0.0%	$2.60	$2.30	$1.83
COVINGTON	665	6,870	9.7%	665	33	326	65	9.8%	$1.90	$1.61	$1.27
DES MOINES	5,348	13,218	40.5%	772	39	532	106	13.8%	$1.69	$1.39	$1.07
DUVALL	119	2,557	4.7%	93	5	0	0	0.0%	$1.90	$1.61	$1.27
ENUMCLAW	1,053	4,928	21.4%	73	4	0	0	0.0%	$1.90	$1.61	$1.27
FEDERAL WAY	16,085	36,149	44.5%	2,357	118	962	192	8.2%	$1.61	$1.33	$1.00
HUNTS POINT	0	181	0.0%	0	0	0	0	0.0%	$2.60	$2.30	$1.83
ISSAQUAH	10,277	17,600	58.4%	5,744	287	2,129	426	7.4%	$2.08	$1.82	$1.40
KENMORE	2,335	9,153	25.5%	521	26	267	53	10.2%	$2.02	$1.71	$1.37
KENT	21,166	45,764	46.3%	3,066	153	1,390	278	9.1%	$1.76	$1.42	$1.09
KIRKLAND	18,348	40,736	45.0%	5,394	270	2,135	427	7.9%	$2.41	$2.07	$1.58
LAKE FOREST PARK	786	5,395	14.6%	1	0	0	0	0.0%	$2.02	$1.71	$1.37
MAPLE VALLEY	1,121	9,332	12.0%	614	31	326	65	10.6%	$1.90	$1.61	$1.27
MEDINA	0	1,148	0.0%	0	0	0	0	0.0%	$2.60	$2.30	$1.83
MERCER ISLAND	3,352	10,556	31.8%	1,983	99	389	78	3.9%	$2.60	$2.30	$1.83
MILTON	300	670	44.8%	300	15	116	23	7.7%	$0.00	$0.00	$0.00
NEWCASTLE	2,330	5,707	40.8%	1,444	72	1,009	202	14.0%	$2.08	$1.82	$1.40
NORMANDY PARK	584	2,864	20.4%	118	6	6	1	1.0%	$1.69	$1.39	$1.07
NORTH BEND	803	2,845	28.2%	308	15	43	9	2.8%	$1.90	$1.61	$1.27
PACIFIC	599	2,321	25.8%	79	4	0	0	0.0%	$1.53	$1.25	$1.02
REDMOND	19,531	31,587	61.8%	8,571	429	5,722	1,144	13.4%	$2.39	$2.12	$1.69
RENTON	17,274	40,576	42.6%	4,771	239	763	153	3.2%	$1.88	$1.56	$1.23
SAMMAMISH	3,021	21,989	13.7%	1,310	66	127	25	1.9%	$1.90	$1.61	$1.27
SeaTac	4,626	10,115	45.7%	1,213	61	207	41	3.4%	$1.69	$1.39	$1.07
SEATTLE	191,061	362,153	52.8%	82,778	4,139	46,027	9,205	11.1%	$0.00	$0.00	$0.00
SHORELINE	7,568	23,906	31.7%	2,053	103	1,042	208	10.2%	$2.05	$1.78	$1.52
SKYKOMISH	0	137	0.0%	0	0	0	0	0.0%	$1.90	$1.61	$1.27
SNOQUALMIE	944	4,748	19.9%	836	42	291	58	7.0%	$1.90	$1.61	$1.27
TUKWILA	4,484	8,298	54.0%	629	31	629	126	20.0%	$1.88	$1.56	$1.23
WOODINVILLE	2,996	6,208	48.3%	1,455	73	630	126	8.7%	$2.02	$1.71	$1.37
YARROW POINT	0	413	0.0%	0	0	0	0	0.0%	$2.60	$2.30	$1.83

Note: all deliveries are gross and measured in units

Source: King County Assessor, Costar

Table A6. Market Data – Single Family Product

CITY	Total Product Supply	Total Housing Supply	Product % of total Housing units	Total Unit Deliveries 2000-2019	Average Annual Deliveries 2000-2019 (Units)	Total Deliveries last 5 years (gross, units)	Average Annual Deliveries last 5 years (Gross, Units)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Median Sale Price 2020	Median Sale Price 2015	Median Sale Price 2012	6-year CAGR	9- year CAGR
ALGONA	847	884	95.8%	223	11	25	5	11%	$371,000	$234,000	$140,000	8.0%	11.4%
AUBURN	15,664	24,155	64.8%	3,545	177	759	152	21%	$493,000	$302,000	$220,000	8.5%	9.4%
BEAUX ARTS	116	116	100.0%	17	1	2	0	12%	$2,530,000	$1,167,000	$660,000	13.8%	16.1%
BELLEVUE	30,991	61,914	50.1%	3,458	173	900	180	26%	$1,098,000	$680,000	$507,000	8.3%	9.0%
BLACK DIAMOND	1,442	1,828	78.9%	216	11	82	16	38%	$519,000	$310,000	$321,000	9.0%	5.5%
BOTHELL	5,472	11,742	46.6%	1,339	67	387	77	29%	$710,000	$449,000	$335,000	7.9%	8.7%
BURIEN	12,813	20,456	62.6%	1,050	53	292	58	28%	$518,000	$288,000	$192,000	10.3%	11.7%
CARNATION	725	779	93.1%	178	9	164	33	92%	$820,000	$352,000	$350,000	15.1%	9.9%
CLYDE HILL	1,100	1,100	100.0%	262	13	81	16	31%	$2,525,000	$2,000,000	$3,130,000	4.0%	-2.4%
COVINGTON	6,195	6,870	90.2%	1,880	94	262	52	14%	$536,000	$323,000	$255,000	8.8%	8.6%
DES MOINES	7,770	13,218	58.8%	685	34	224	45	33%	$467,000	$297,000	$186,000	7.8%	10.8%
DUVALL	2,411	2,557	94.3%	947	47	171	34	18%	$687,000	$497,000	$320,000	5.5%	8.9%
ENUMCLAW	3,867	4,928	78.5%	709	35	462	92	65%	$542,000	$319,000	$277,000	9.2%	7.7%
FEDERAL WAY	20,058	36,149	55.5%	1,814	91	250	50	14%	$450,000	$275,000	$210,000	8.6%	8.8%
HUNTS POINT	181	181	100.0%	41	2	2	0	5%	$3,900,000	$1,450,000	$6,900,000	17.9%	-6.1%
ISSAQUAH	7,319	17,600	41.6%	3,758	188	508	102	14%	$810,000	$500,000	$455,000	8.4%	6.6%
KENMORE	6,725	9,153	73.5%	1,767	88	430	86	24%	$730,000	$506,000	$352,000	6.3%	8.4%
KENT	24,572	45,764	53.7%	5,281	264	1,118	224	21%	$493,000	$316,000	$214,000	7.7%	9.7%
KIRKLAND	22,231	40,736	54.6%	3,955	198	1,230	246	31%	$865,000	$530,000	$407,000	8.5%	8.7%
LAKE FOREST PARK	4,605	5,395	85.4%	387	19	178	36	46%	$803,000	$400,000	$395,000	12.3%	8.2%
MAPLE VALLEY	8,204	9,332	87.9%	3,945	197	436	87	11%	$575,000	$383,000	$290,000	7.0%	7.9%
MEDINA	1,147	1,148	99.9%	250	13	47	9	19%	$4,325,000	$2,884,000	$925,000	7.0%	18.7%
MERCER ISLAND	7,200	10,556	68.2%	1,037	52	327	65	32%	$1,550,000	$1,090,000	$986,000	6.0%	5.2%
MILTON	370	670	55.2%	26	1	0	0	0%	$460,000	$246,000	$139,000	11.0%	14.2%
NEWCASTLE	3,267	5,707	57.2%	1,003	50	147	29	15%	$968,000	$605,000	$465,000	8.1%	8.5%
NORMANDY PARK	2,279	2,864	79.6%	152	8	44	9	29%	$875,000	$555,000	$425,000	7.9%	8.4%
NORTH BEND	2,028	2,845	71.3%	599	30	322	64	54%	$850,000	$439,000	$364,000	11.6%	9.9%
PACIFIC	1,722	2,321	74.2%	468	23	61	12	13%	$415,000	$242,000	$217,000	9.4%	7.5%
REDMOND	11,947	31,587	37.8%	3,089	154	738	148	24%	$834,000	$570,000	$450,000	6.5%	7.1%
RENTON	23,217	40,576	57.2%	7,141	357	847	169	12%	$566,000	$350,000	$295,000	8.3%	7.5%
SAMMAMISH	18,960	21,989	86.2%	5,746	287	1,285	257	22%	$1,099,000	$699,000	$507,000	7.8%	9.0%
SeaTac	5,489	10,115	54.3%	409	20	98	20	24%	$440,000	$262,000	$188,000	9.0%	9.9%
SEATTLE	167,142	362,153	46.2%	26,954	1,348	8,165	1,633	30%	$745,000	$494,000	$368,000	7.1%	8.2%
SHORELINE	16,241	23,906	67.9%	1,023	51	253	51	25%	$650,000	$388,000	$287,000	9.0%	9.5%
SKYKOMISH	136	137	99.3%	8	0	2	0	25%	$455,000	$108,000	$155,000	27.1%	12.7%
SNOQUALMIE	3,804	4,748	80.1%	3,030	152	274	55	9%	$845,000	$462,000	$396,000	10.6%	8.8%
TUKWILA	3,677	8,298	44.3%	619	31	156	31	25%	$485,000	$303,000	$225,000	8.2%	8.9%
WOODINVILLE	2,945	6,208	47.4%	780	39	253	51	32%	$925,000	$517,000	$430,000	10.2%	8.9%
YARROW POINT	411	413	99.5%	118	6	33	7	28%	$3,765,000	$3,260,000	$1,438,000	2.4%	11.3%

Note: all deliveries are gross and measured in units

Source: King County Assessor, Redfin

Table A7. Market Data – Retail Product

CITY	total Product supply (sf)	Total Deliveries 2000-2019 (SF)	Average Annual Deliveries 2000-2019 (SF)	5-yr Total Deliveries last (gross, sf)	5-Yr Average Annual Deliveries (Gross, sf)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Current average rent, (Annual, $/SF)
ALGONA	21,931	7,828	391	0	0	0.0%	$22.84
AUBURN	4,059,789	963,901	48,195	58,083	11,617	1.2%	$22.84
BEAUX ARTS	0	0	0	0	0	0.0%	$42.34
BELLEVUE	9,281,934	2,835,369	141,768	845,558	169,112	6.0%	$0.00
BLACK DIAMOND	70,583	15,023	751	120	24	0.2%	$25.09
BOTHELL	645,440	200,487	10,024	38,065	7,613	3.8%	$25.99
BURIEN	2,123,997	284,126	14,206	38,718	7,744	2.7%	$19.16
CARNATION	74,165	1,380	69	0	0	0.0%	$25.09
CLYDE HILL	3,943	0	0	0	0	0.0%	$33.53
COVINGTON	1,386,194	905,663	45,283	86,947	17,389	1.9%	$25.09
DES MOINES	550,679	60,521	3,026	20,550	4,110	6.8%	$19.16
DUVALL	221,123	124,243	6,212	0	0	0.0%	$25.09
ENUMCLAW	692,328	113,886	5,694	42,129	8,426	7.4%	$25.09
FEDERAL WAY	5,454,100	1,528,960	76,448	157,356	31,471	2.1%	$22.84
HUNTS POINT	0	0	0	0	0	0.0%	$33.99
ISSAQUAH	2,915,049	953,438	47,672	26,190	5,238	0.5%	$34.29
KENMORE	441,307	28,247	1,412	11,529	2,306	8.2%	$25.99
KENT	4,748,839	1,130,023	56,501	66,941	13,388	1.2%	$20.64
KIRKLAND	3,168,063	830,530	41,527	393,796	78,759	9.5%	$33.99
LAKE FOREST PARK	262,736	0	0	0	0	0.0%	$25.99
MAPLE VALLEY	819,030	466,204	23,310	31,127	6,225	1.3%	$25.09
MEDINA	6,178	2,880	144	0	0	0.0%	$33.53
MERCER ISLAND	399,368	85,899	4,295	10,665	2,133	2.5%	$36.89
MILTON	0	0	0	0	0	0.0%	$22.84
NEWCASTLE	260,483	88,934	4,447	39,445	7,889	8.9%	$34.29
NORMANDY PARK	168,528	87,463	4,373	4,561	912	1.0%	$19.16
NORTH BEND	637,612	41,668	2,083	3,586	717	1.7%	$25.09
PACIFIC	39,538	20,924	1,046	0	0	0.0%	$22.84
REDMOND	3,281,259	858,590	42,930	257,075	51,415	6.0%	$35.15
RENTON	4,957,839	1,653,643	82,682	134,623	26,925	1.6%	$30.07
SAMMAMISH	563,210	90,901	4,545	82,688	16,538	18.2%	$34.29
SeaTac	1,006,041	75,568	3,778	5,191	1,038	1.4%	$19.16
SEATTLE	33,123,598	8,284,590	414,230	2,501,582	500,316	6.0%	$0.00
SHORELINE	2,242,072	311,288	15,564	11,152	2,230	0.7%	$26.31
SKYKOMISH	17,121	0	0	0	0	0.0%	$25.09
SNOQUALMIE	381,417	224,072	11,204	65,807	13,161	5.9%	$25.09
TUKWILA	5,036,808	486,846	24,342	25,332	5,066	1.0%	$30.07
WOODINVILLE	1,337,946	273,574	13,679	41,217	8,243	3.0%	$30.46
YARROW POINT	0	0	0	0	0	0.0%	$33.99

Note: all deliveries are gross and measured in square feet. *Source: King County Assessor, Costar*

Table A8. Market Data – Office Product

CITY	total Product supply (sf)	Total Deliveries 2000-2019 (SF)	Average Annual Deliveries 2000-2019 (SF)	5-yr Total Deliveries last (gross, sf)	5-Yr Average Annual Deliveries (Gross, sf)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Current average rent, (Annual, $/SF)	Average Rent 2015, (Annual, $/SF)	Average Rent 2010, (Annual, $/SF)
ALGONA	60,226	10,832	542	0	0	0.0%	$25.18	$20.57	$19.43
AUBURN	1,985,098	452,657	22,633	91,078	18,216	4.0%	$25.29	$20.57	$19.43
BEAUX ARTS	0	0	0	0	0	0.0%	$39.35	$27.55	$24.16
BELLEVUE	26,545,988	9,727,048	486,352	2,577,743	515,549	5.3%	$0.00	$0.00	$0.00
BLACK DIAMOND	41,815	6,017	301	0	0	0.0%	$30.34	$21.92	$18.69
BOTHELL	2,023,327	843,248	42,162	25,872	5,174	0.6%	$30.42	$23.94	$22.86
BURIEN	1,030,591	326,129	16,306	91,131	18,226	5.6%	$26.10	$20.80	$19.44
CARNATION	33,053	17,291	865	15,866	3,173	18.4%	$30.34	$21.92	$18.69
CLYDE HILL	0	0	0	0	0	0.0%	$38.53	$27.33	$23.03
COVINGTON	214,351	106,877	5,344	1,460	292	0.3%	$30.34	$21.92	$18.69
DES MOINES	641,412	390,697	19,535	307,543	61,509	15.7%	$26.10	$20.80	$19.44
DUVALL	108,583	52,756	2,638	0	0	0.0%	$30.34	$21.92	$18.69
ENUMCLAW	377,153	52,076	2,604	0	0	0.0%	$30.34	$21.92	$18.69
FEDERAL WAY	4,461,300	843,481	42,174	42,713	8,543	1.0%	$25.29	$20.57	$19.43
HUNTS POINT	0	0	0	0	0	0.0%	$42.97	$30.26	$25.67
ISSAQUAH	3,298,093	1,359,752	67,988	53,402	10,680	0.8%	$41.57	$29.23	$24.70
KENMORE	157,960	37,573	1,879	29,354	5,871	15.6%	$30.42	$23.94	$22.86
KENT	3,870,644	812,971	40,649	282,178	56,436	6.9%	$25.91	$20.84	$19.60
KIRKLAND	5,255,033	1,862,111	93,106	755,506	151,101	8.1%	$42.97	$30.26	$25.67
LAKE FOREST PARK	84,164	7,846	392	0	0	0.0%	$30.42	$23.94	$22.86
MAPLE VALLEY	181,647	131,502	6,575	0	0	0.0%	$30.34	$21.92	$18.69
MEDINA	11,591	4,929	246	0	0	0.0%	$38.53	$27.33	$23.03
MERCER ISLAND	672,897	34,015	1,701	0	0	0.0%	$41.23	$29.10	$24.47
MILTON	0	0	0	0	0	0.0%	$25.29	$20.57	$19.43
NEWCASTLE	49,454	40,326	2,016	0	0	0.0%	$41.57	$29.23	$24.70
NORMANDY PARK	51,969	6,871	344	0	0	0.0%	$26.10	$20.80	$19.44
NORTH BEND	178,109	55,174	2,759	21,878	4,376	7.9%	$30.34	$21.92	$18.69
PACIFIC	4,860	0	0	0	0	0.0%	$25.29	$20.57	$19.43
REDMOND	14,449,452	5,801,050	290,053	367,880	73,576	1.3%	$35.01	$24.27	$20.58
RENTON	9,430,789	2,250,356	112,518	1,515,142	303,028	13.5%	$30.13	$23.05	$21.03
SAMMAMISH	137,965	56,892	2,845	30,815	6,163	10.8%	$41.57	$29.23	$24.70
SeaTac	3,459,825	1,016,197	50,810	184,812	36,962	3.6%	$26.10	$20.80	$19.44
SEATTLE	104,433,911	37,805,345	1,890,267	14,785,999	2,957,200	7.8%	$0.00	$0.00	$0.00
SHORELINE	998,897	249,497	12,475	18,179	3,636	1.5%	$27.53	$21.73	$20.77
SKYKOMISH	672	0	0	0	0	0.0%	$30.34	$21.92	$18.69
SNOQUALMIE	480,283	290,705	14,535	10,601	2,120	0.7%	$30.34	$21.92	$18.69
TUKWILA	5,065,670	504,792	25,240	25,482	5,096	1.0%	$30.13	$23.05	$21.03
WOODINVILLE	354,211	81,414	4,071	15,305	3,061	3.8%	$28.62	$22.82	$21.90
YARROW POINT	0	0	0	0	0	0.0%	$42.97	$30.26	$25.67

Note: all deliveries are gross and measured in square feet. *Source: King County Assessor, Costar*

Table A9. Market Data – Industrial Product

CITY	Total Product supply (sf)	Total Deliveries 2000-2019 (SF)	Average Annual Deliveries 2000-2019 (SF)	5-yr Total Deliveries last (gross, sf)	5-Yr Average Annual Deliveries (Gross, sf)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Current average rent, (Annual, $/SF)
ALGONA	2,436,435	329,838	16,492	0	0	0.0%	$8.86
AUBURN	23,959,569	8,559,752	427,988	921,067	184,213	2.2%	$8.86
BEAUX ARTS	0	0	0	0	0	0.0%	$18.44
BELLEVUE	4,853,067	520,591	26,030	163,698	32,740	6.3%	$16.64
BLACK DIAMOND	71,790	30,703	1,535	17,602	3,520	11.5%	$14.13
BOTHELL	1,891,744	462,999	23,150	129,880	25,976	5.6%	$17.98
BURIEN	1,811,122	749,988	37,499	705,698	141,140	18.8%	$12.28
CARNATION	161,286	69,076	3,454	0	0	0.0%	$14.13
CLYDE HILL	2,430	0	0	0	0	0.0%	$16.64
COVINGTON	350,018	202,591	10,130	201,646	40,329	19.9%	$14.13
DES MOINES	1,892,369	1,666,085	83,304	1,555,277	311,055	18.7%	$12.28
DUVALL	164,303	89,407	4,470	89,407	17,881	20.0%	$14.13
ENUMCLAW	1,028,576	235,590	11,780	78,418	15,684	6.7%	$14.13
FEDERAL WAY	2,732,946	752,173	37,609	443,868	88,774	11.8%	$12.52
HUNTS POINT	0	0	0	0	0	0.0%	$14.13
ISSAQUAH	1,421,025	317,409	15,870	88,604	17,721	5.6%	$18.44
KENMORE	536,730	32,696	1,635	14,400	2,880	8.8%	$17.98
KENT	46,653,264	6,702,321	335,116	2,461,588	492,318	7.3%	$8.79
KIRKLAND	3,759,313	347,474	17,374	87,975	17,595	5.1%	$15.13
LAKE FOREST PARK	14,757	1,120	56	0	0	0.0%	$17.98
MAPLE VALLEY	321,719	122,379	6,119	0	0	0.0%	$14.13
MEDINA	16,283	9,600	480	0	0	0.0%	$16.64
MERCER ISLAND	96,230	63,910	3,196	0	0	0.0%	$18.44
MILTON	1,300	0	0	0	0	0.0%	$8.38
NEWCASTLE	227,320	3,890	195	0	0	0.0%	$18.44
NORMANDY PARK	47,284	0	0	0	0	0.0%	$12.28
NORTH BEND	852,090	368,109	18,405	0	0	0.0%	$14.13
PACIFIC	254,978	21,038	1,052	0	0	0.0%	$8.86
REDMOND	10,139,556	794,471	39,724	95,833	19,167	2.4%	$15.60
RENTON	13,611,660	2,705,502	135,275	877,590	175,518	6.5%	$10.42
SAMMAMISH	163,595	50,545	2,527	0	0	0.0%	$15.60
SeaTac	4,256,960	1,257,196	62,860	457,299	91,460	7.3%	$12.28
SEATTLE	48,484,934	4,498,050	224,903	2,322,848	464,570	10.3%	$0.00
SHORELINE	1,447,694	590,900	29,545	382,122	76,424	12.9%	$13.35
SKYKOMISH	12,385	0	0	0	0	0.0%	$10.93
SNOQUALMIE	1,083,332	637,305	31,865	34,912	6,982	1.1%	$14.13
TUKWILA	14,963,571	1,015,066	50,753	174,726	34,945	3.4%	$11.95
WOODINVILLE	5,868,390	644,681	32,234	254,252	50,850	7.9%	$12.57
YARROW POINT	0	0	0	0	0	0.0%	$15.13

Note: all deliveries are gross and measured in square feet. *Source: King County Assessor, Costar*

Table A10. Mark Factor – Past Assumptions

			Residential Market Supply Factors				Industrial/Commercial Market Supply Factors			
	Explicit Supply Market Supply Factor		Unincorporated UGA		Cities (Range)		Unincorporated UGA		Cities (Range)	
Buildable Lands County	Owner Intent/ Not Available	Small Town Growth Margin	Vacant	Under-Utilized	Vacant	Under-Utilized (1/)	Vacant	Under-Utilized	Vacant	Under-Utilized (1/)
Clark	✓		10%	30%	0% - 10%	0%-30%	20%	50%	0% - 10%	0% - 10%
King	✓		10%-15%	25%-30%	0% - 50% (2/)	0%-50% (2/)	10% - 15%	25% - 30%	0% - 40%	0% - 40%
Kitsap	✓		5%	15%	5%	10%-90% (3/)	20%	25%	20%	50% - 80% (3/)
Pierce	✓		15%	40%	0% - 50%	0%-50%	20%	50%	0% - 50%	0% - 50%
Snohomish	✓		15%	30%	15%	30%	15%	30%	15%	30%
Thurston (4/)	✓	✓	10% - 37%	10% - 37%	20% - 37% (5/)	20%-37% (5/)	10% - 25%	10% - 25%	10% - 25%	10% - 25%
Whatcom	✓		15%	25%	15% - 70% (6/)	25%-70% (6/)	15%	25%	15%	25%
		Averages/Ranges:	12%	28%	7% - 37%	9% - 55%	16%	33%	8% - 24%	17% - 38%

Source: Buildable Lands Guidelines, Department of Commerce, 2018.

4. Appendix B – City of Seattle Guidance

City of Seattle – Modified Market Factor Guidance Framework

Intro and Purpose

The City of Seattle stands as the employment and population center of the Puget Sound region and largest City in the State of Washington as well as the Pacific Northwest. It also serves an important role in accommodating population and employment growth in King County now and into the future. Seattle is unique in its geographic and economic diversity. The City is home to distinct neighborhoods and commercial districts at a scale not seen elsewhere in the County. As such, Market Factor guidance specific to the City of Seattle has been developed to account for the size, scale and regional importance of the City.

The guidance and recommendations in this section follow the same methodology and framework used for all jurisdictions in King County, but at a neighborhood level rather than at a citywide scale. This allows for a more granular view of historic and projected growth within the City, by Product-type. This also provides the City with a framework allowing for greater flexibility when applying Market Factor assumptions across disparate neighborhoods within the City.

Contents

Following guidance reflects the same guidance framework used across King County, the following pages provide a step-by-step overview of Market Factor recommendations for the City of Seattle followed by supporting data found in **Tables B3-B7**.

Data Sources

- King County Assessor Data
- City of Seattle Draft Capacity Data
- Costar Market Data
- Redfin Residential Sales Data

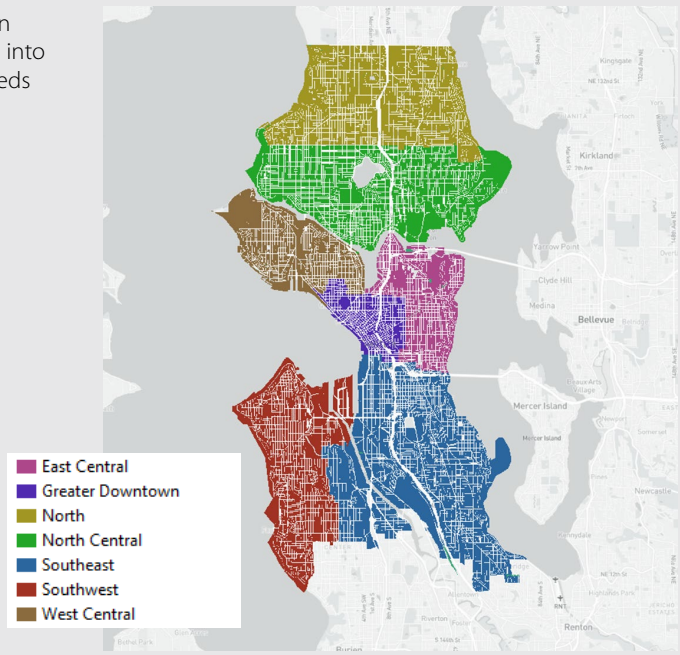
Sub-geographies

The City of Seattle is designated as a metropolitan regional Geography. The City was further divided into seven general areas based upon the Housing Needs Assessment (HNA) boundaries.

These are the following HNA boundaries and are indicated on the map to the right.

- North
- North Central
- West Central
- East Central
- Downtown
- Southwest
- Southeast

HNA Geographic Boundaries



Guidance Framework Modified –

The following diagram outlines key changes made to the overall Market Factor Guidance Framework to establish Market Factor for the City of Seattle. The following changes represent modifications to the Market Factor Guidance Framework set forth earlier in the report (page 17) .

Step	
Step 1. Identify Zoning by Predominant Product-Type	• This step remains largely unchanged for the city of Seattle, with the exception that attached single family units are addressed as their own product type (defined on following page). Reference Product-type definitions provided on page 19 (see **Table 1A**) for all other Product-types.
Step 2. Identify Market Factor Alignment for the Seattle Sub-Geographies	• Instead of using PSRC Regional Geographies to compare and classify Market Factor Indicators, the City of Seattle is broken down into sub-geographies (HNA boundaries, page 41). These sub-geographies are then compared against each other to inform a Market Factor Alignment. • The Market Factor Alignment Table has been updated to reflect these new geographies and their alignments.
Step 3. Select from Market Factor Ranges	• The market factor ranges have been updated to reflect the City of Seattle sub-geographies and the market metrics informing the range of Market Factors by Product-type. • The table has been updated to reflect the changes to the ranges and the additional Product-types.
Step 4. Adjustments	• This step remains unchanged, and the City of Seattle is encouraged to adjust the Market Factor guidance based on the City's perception and knowledge of each Product-type in each sub-geography.

Step 1 – Identify Zoning By Predominant Product Type

See additional Product-Type classification for the City of Seattle below

Product Type	Description/Application	Illustrative Examples
Residential		
Single Family Attached*	This category has been added for the City of Seattle to account for all attached single family dwelling units sharing walls separately.	These include townhouse plats, duplex, triplex and fourplex buildings.

**Note: for the City of Seattle, the single family attached Product-type, is accounted for separate of traditional single family detached product.*

Step 2 – Identify Market Alignment

Seattle Market Factor Alignments

The *Market Factor Alignments* (high/medium/low) identified in this step are applied in step 3 when selecting the appropriate Market Factor Ranges.

Each of the City's sub-geography market conditions have been evaluated and *Market Factor Alignment* has been assigned by Product-type. Use **Table B1** (below) as a reference in selecting appropriate Market Factor Ranges by product-type in Step 3. To review the Market Factor Indicators for the sub-geographies within the City of Seattle, refer to **Tables B3-B5** found later in this section.

Methodology Recap:

The Market Factor Alignments for the sub-geographies in the City of Seattle are informed by the Market Factor Indicators calculated for each sub-geography and Product-type.

Table B1 – Market Factor Alignments for City of Seattle Sub-Geographies

Seattle Sub-geography	**Product-Type Market Factor Indicator**				
City	*Multifamily/MU*	*Single Family Attached*	*Single Family Detached*	*Commercial (Office /Retail/Mixed-use)*	*Industrial*
East Central	Medium	Low	Medium	High	NA
Greater Downtown	Low	Medium	Low	Low	Low
North	High	Medium	High	High	NA
North Central	Low	Low	High	High	High
Southeast	High	High	High	High	High
Southwest	High	High	High	High	Medium
West Central	Low	Low	Medium	Medium	Low

Step 3 - Select from Market Factor Ranges

Market Factor Range

For each of the City's sub-geographies and Product-types, identify the Market Factor Range in the table below (**Table B2**) by using the Market Factor Alignments (low/medium/high) identified in Step 2.

Note: these informed ranges are intended to serve as initial guidance. It is expected that City of Seattle refines or departs from this range to arrive at the most appropriate market factor deduction.

Methodology Recap

A Market Factor Indicator from a test-fit sub-geography within the City of Seattle is selected to inform the market factor ranges.

Market price data is leveraged as the key metric to derive a range from the market factor indicator in the test fit geography. The range of prices among all the City of Seattle's sub-geographies (see **Tables B6-B7**) for each product type inform the magnitude of the market Factor Range for that product-type.

Table B2 – Market Factor Ranges by Product Type

	Residential				
	Multifamily/ Mixed-Res	**Single Family Attached**	**Single Family Detached**	**Commercial (Office/Retail/Mixed)**	**Industrial**
City of Seattle					
Low	4% - 11%	0% - 13%	0% - 9%	5% - 24%	3% - 14%
Medium	12% - 20%	14% - 38%	10% - 26%	25% - 35%	15% - 21%
High	21% - 29%	39% - 50%	27% - 43%	36% - 50%	22% - 27%

Table B3. Supply, Deliveries, & Capacity Table:

Residential – *Single family, Single Family Attached, Multi-family and Residential Mixed-use*

Residential Uses	Neighborhood (HNA boundaries)	Regional Geography	Market Factor Alignment	Total Supply (Units)	5-yr Average Annual Deliveries (Gross Units, 2015-2019)	Assumed Capacity Estimates from Cities (Gross, Units)	Market Factor Indicator
Single Family	East Central	Seattle Sub-type	Low	11,705	48	1,026	7%
Single Family	Greater Downtown	Seattle Sub-type	Medium	595	3	73	23%
Single Family	North	Seattle Sub-type	Medium	26,440	91	2,224	18%
Single Family	North Central	Seattle Sub-type	Low	34,628	150	769	0%
Single Family	Southeast	Seattle Sub-type	High	26,581	109	8,369	74%
Single Family	Southwest	Seattle Sub-type	High	21,135	84	3,105	46%
Single Family	West Central	Seattle Sub-type	Low	10,782	52	511	0%
Single Family	City of Seattle	Metropolitan		131,866	537	16,077	33%
Single Family Attached	East Central	Seattle Sub-type	Medium	5,658	205	5,575	26%
Single Family Attached	Greater Downtown	Seattle Sub-type	Low	1,336	37	462	0%
Single Family Attached	North	Seattle Sub-type	High	4,910	94	6,171	70%
Single Family Attached	North Central	Seattle Sub-type	High	10,421	319	12,871	50%
Single Family Attached	Southeast	Seattle Sub-type	High	4,935	194	12,238	68%
Single Family Attached	Southwest	Seattle Sub-type	High	4,606	152	7,188	58%
Single Family Attached	West Central	Seattle Sub-type	Medium	3,408	94	3,255	42%
Single Family Attached	City of Seattle	Metropolitan		35,274	1,096	47,760	54%
Mixed-use/MF/Condos	East Central	Seattle Sub-type	Medium	15,595	529	15,669	32%
Mixed-use/MF/Condos	Greater Downtown	Seattle Sub-type	Low	74,008	3,669	44,242	0%
Mixed-use/MF/Condos	North	Seattle Sub-type	High	20,285	352	55,225	87%
Mixed-use/MF/Condos	North Central	Seattle Sub-type	Low	35,335	1,442	31,237	8%
Mixed-use/MF/Condos	Southeast	Seattle Sub-type	High	11,607	414	34,660	76%
Mixed-use/MF/Condos	Southwest	Seattle Sub-type	High	12,399	256	13,040	61%
Mixed-use/MF/Condos	West Central	Seattle Sub-type	Low	14,041	492	7,246	0%
Mixed-use/MF/Condos	City of Seattle	Metropolitan		183,270	7,155	201,319	29%

Table B4. Supply, Deliveries, & Capacity Table:
Non-Residential – Industrial

Non-Residential Uses	Neighborhood (HNA boundaries)	Market Factor Alignment	Total Supply (SF)	5-yr Average Annual Deliveries (Gross SF,2015-2019)	Assumed Capacity Estimates from Cities (Gross SF)	Market Factor Indicator
Industrial	East Central	NA	1,071,715	39,800	0	No Capacity
Industrial	Greater Downtown	Low	2,498,938	25,934	184,384	0%
Industrial	North	NA	2,513,041	72,104	0	No Capacity
Industrial	North Central	High	5,481,941	46,781	2,489,843	62%
Industrial	Southeast	High	28,970,357	178,780	10,666,880	66%
Industrial	Southwest	Medium	3,041,201	22,790	685,437	34%
Industrial	West Central	Low	4,907,741	78,381	1,716,513	9%
Industrial	City of Seattle		48,484,934	464,570	15,743,057	41%

Table B5. Supply, Deliveries, & Capacity Table:
Non-Residential – Commercial (Office/Retail/Mixed-use)

Non-Residential Uses	Neighborhood (HNA boundaries)	Market Factor Alignment	Total Supply (SF)	5-yr Average Annual Deliveries (Gross SF,2015-2019)	Assumed Capacity Estimates from Cities (Gross SF)	Market Factor Indicator
Commercial	East Central	High	7,082,265	99,488	6,418,782	69%
Commercial	Greater Downtown	Low	82,200,368	2,632,501	24,041,513	0%
Commercial	North	High	7,780,108	19,480	40,181,095	99%
Commercial	North Central	High	13,670,239	287,330	20,299,610	72%
Commercial	Southeast	High	17,654,728	192,707	34,852,416	89%
Commercial	Southwest	High	3,500,611	44,465	9,158,698	90%
Commercial	West Central	Medium	5,669,190	181,545	5,561,376	35%
Commercial	City of Seattle		137,557,509	3,457,516	140,513,490	51%

Table B6. Market Data – Residential

Residential – Multifamily

Seattle Sub-Geography	Total Product Supply	Total Deliveries 2000-2019	Average Annual Deliveries 2000-2019	Total Deliveries 2015-2019	5-yr Average Annual Deliveries (2015-2019)	5-yr. Total Deliveries over 20-year Total Deliveries (%)	Current average rent, (Monthly $/SF)	Average Rent 2015, (Monthly $/SF)	Average Rent 2010, (Monthly $/SF)
East Central	15,595	4,860	243	2,645	529	54%	$2.58	$2.32	$2.01
Greater Downtown	74,008	38,654	1,933	18,346	3,669	47%	$3.09	$2.77	$2.38
North	20,285	4,983	249	1,759	352	35%	$2.03	$1.82	$1.53
North Central	35,335	15,365	768	7,211	1,442	47%	$2.64	$2.35	$2.03
Southeast	11,607	4,965	248	2,071	414	42%	$1.94	$1.71	$1.53
Southwest	12,399	4,100	205	1,281	256	31%	$2.29	$1.99	$1.70
West Central	14,041	5,042	252	2,462	492	49%	$2.71	$2.39	$2.08
City of Seattle	183,270	77,969	3,898	35,775	7,155	46%			

Residential – Single Family

Seattle Sub-Geography	Total Product Supply	Total Unit Deliveries 2000-2019	Average Annual Deliveries 2000-2019 (Units)	Total Deliveries last 5 years (gross, units)	Average Annual Deliveries last 5 years (Gross, Units)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Median Sale Price 2020	Median Sale Price 2015	Median Sale Price 2012	6-year CAGR	9- year CAGR
East Central	11,705	923	46	239	48	26%	$905,000	$638,000	$502,000	6.0%	4.0%
Greater Downtown	595	41	2	14	3	34%	$575,500	$407,500	$305,000	5.9%	3.9%
North	26,440	1,750	88	457	91	26%	$650,000	$477,500	$333,000	5.3%	3.5%
North Central	34,628	2,067	103	749	150	36%	$816,500	$625,000	$450,000	4.6%	3.0%
Southeast	26,581	2,663	133	546	109	21%	$661,000	$453,000	$284,000	6.5%	4.3%
Southwest	21,135	1,686	84	421	84	25%	$642,000	$450,000	$340,000	6.1%	4.0%
West Central	10,782	867	43	259	52	30%	$823,500	$586,000	$483,000	5.8%	3.9%
City of Seattle	131,866	9,997	500	2,685	537	27%	$679,000	$494,000	$368,000	5.4%	3.6%

Note: all deliveries are gross and measured in square units.

Source: King County Assessor, Costar, Redfin

Table B7. Market Data – Non-Residential

Non-Residential – Industrial

Seattle Sub-Geography	total Product supply (sf)	Total Deliveries 2000-2019 (SF)	Average Annual Deliveries 2000-2019 (SF)	5-yr Total Deliveries last (gross, sf)	5-Yr Average Annual Deliveries (Gross, sf)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Current average rent, (Annual, $/SF)	Average Rent 2015, (Annual, $/SF)	Average Rent 2010, (Annual, $/SF)
East Central	1,071,715	342,132	17,107	199,001	39,800	58%	$15.00	$10.20	$6.58
Greater Downtown	2,498,938	232,009	11,600	129,670	25,934	56%	$22.88	$13.00	$10.61
North	2,513,041	576,139	28,807	360,521	72,104	63%	$16.03	$8.73	$9.22
North Central	5,481,941	572,175	28,609	233,903	46,781	41%	$17.70	$22.30	$8.50
Southeast	28,970,357	1,999,207	99,960	893,898	178,780	45%	$12.41	$8.56	$7.17
Southwest	3,041,201	218,811	10,941	113,949	22,790	52%	$14.13	$9.27	$9.15
West Central	4,907,741	557,577	27,879	391,906	78,381	70%	$13.10	$10.67	$9.09
City of Seattle	48,484,934	4,498,050	224,903	2,322,848	464,570	52%			

Non-Residential – Office

Seattle Sub-Geography	Total Product supply (sf)	Total Deliveries 2000-2019 (SF)	Average Annual Deliveries 2000-2019 (SF)	5-yr Total Deliveries 2015-2019 (gross, sf)	5-Yr Average Annual Deliveries (Gross, sf)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Current average rent, (Annual, $/SF)	Average Rent 2015, (Annual, $/SF)	Average Rent 2010, (Annual, $/SF)
East Central	5,542,044	1,991,909	99,595	277,914	55,583	14%	$39.03	$26.07	$26.72
Greater Downtown	69,906,518	27,176,902	1,358,845	12,159,927	2,431,985	45%	$29.01	$29.05	$22.83
North	2,643,527	410,387	20,519	71,318	14,264	17%	$30.43	$22.86	$20.90
North Central	7,184,334	2,778,142	138,907	918,762	183,752	33%	$30.00	$25.52	$20.58
Southeast	13,407,609	3,195,823	159,791	493,755	98,751	15%	$27.67	$25.05	$18.70
Southwest	1,490,647	329,756	16,488	71,968	14,394	22%	$25.26	$23.67	$20.31
West Central	4,259,232	1,922,426	96,121	792,355	158,471	41%	$33.09	$28.77	$19.12
City of Seattle	104,433,911	37,805,345	1,890,267	14,785,999	2,957,200	39%			

Non-Residential – Retail

Seattle Sub-Geography	Total Product supply (sf)	Total Deliveries 2000-2019 (SF)	Average Annual Deliveries 2000-2019 (SF)	5-yr Total Deliveries last (gross, sf)	5-Yr Average Annual Deliveries (Gross, sf)	5-yr. Total Deliveries as a % of 20-year Total Deliveries (Gross)	Current average rent, (Annual, $/SF)	Average Rent 2015, (Annual, $/SF)	Average Rent 2010, (Annual, $/SF)
East Central	1,540,221	459,411	22,971	219,528	43,906	48%	$30.55	$23.57	$21.02
Greater Downtown	12,293,850	2,920,458	146,023	1,002,576	200,515	34%	$29.01	$29.05	$22.83
North	5,136,581	1,148,079	57,404	26,080	5,216	2%	$22.85	$19.18	$18.11
North Central	6,485,905	1,423,998	71,200	517,888	103,578	36%	$25.94	$25.88	$19.32
Southeast	4,247,119	1,356,028	67,801	469,782	93,956	35%	$25.63	$16.26	$14.96
Southwest	2,009,964	631,893	31,595	150,359	30,072	24%	$32.85	$19.95	$21.13
West Central	1,409,958	344,723	17,236	115,369	23,074	33%	$34.17	$30.55	$24.02
City of Seattle	33,123,598	8,284,590	414,230	2,501,582	500,316	30%			

Note: all deliveries are gross and measured in square feet.

Source: King County Assessor, Costar

Appendix F: Employment Density Guidance

2021 King County Urban Growth Capacity Report

Employment Density Guidance

INTRODUCTION

This document provides guidance on developing assumptions for converting non-residential building area expressed in gross square feet to expected capacity for employment in buildable lands calculations. This is the final step in estimating total capacity for new employment growth in a jurisdiction. Current statutes and regulations (RCW 36.70A.215 and WAC 365.196.315) do not provide specific requirements for these calculations. Jurisdictions have discretion to develop assumptions that are consistent with local circumstances, provided they document the rationale. Therefore, this guidance also includes rationale to draw upon in the process of selecting appropriate assumptions.

While there are various ways to convert land capacity to capacity for new employment, King County has selected to use an approach that converts non-residential development capacity measured in square feet of floor area to capacity for new employment. This conversion requires assumptions for the average number of built square feet of floor area for each job. The lower the square foot per job, the higher the density of use. The calculation is simply:

Total job capacity *= Gross square footage[1] of floor area capacity / gross square footage per job*

Square footage per job can vary widely by building type or employment sector. For example, warehouses devote a great deal of square footage to storing inventory or other goods, and therefore they typically require considerably more square footage per job than office space. Therefore, average employment density assumptions should reflect the types of job growth that are expected in an area.

Many jurisdictions select different employment density assumptions for commercial and industrial zones to reflect different expectations for the type of development and job growth that are expected in those zones. Some jurisdictions even vary employment density assumptions among different commercial zones. For example, a city may assume that average square footage per job is lower in a downtown zone than in other commercial zones further from the core. This decision could reflect expectations that a higher proportion of the downtown floor area capacity will be used as office space, compared to other commercial zones where lower density retail uses may be more common.

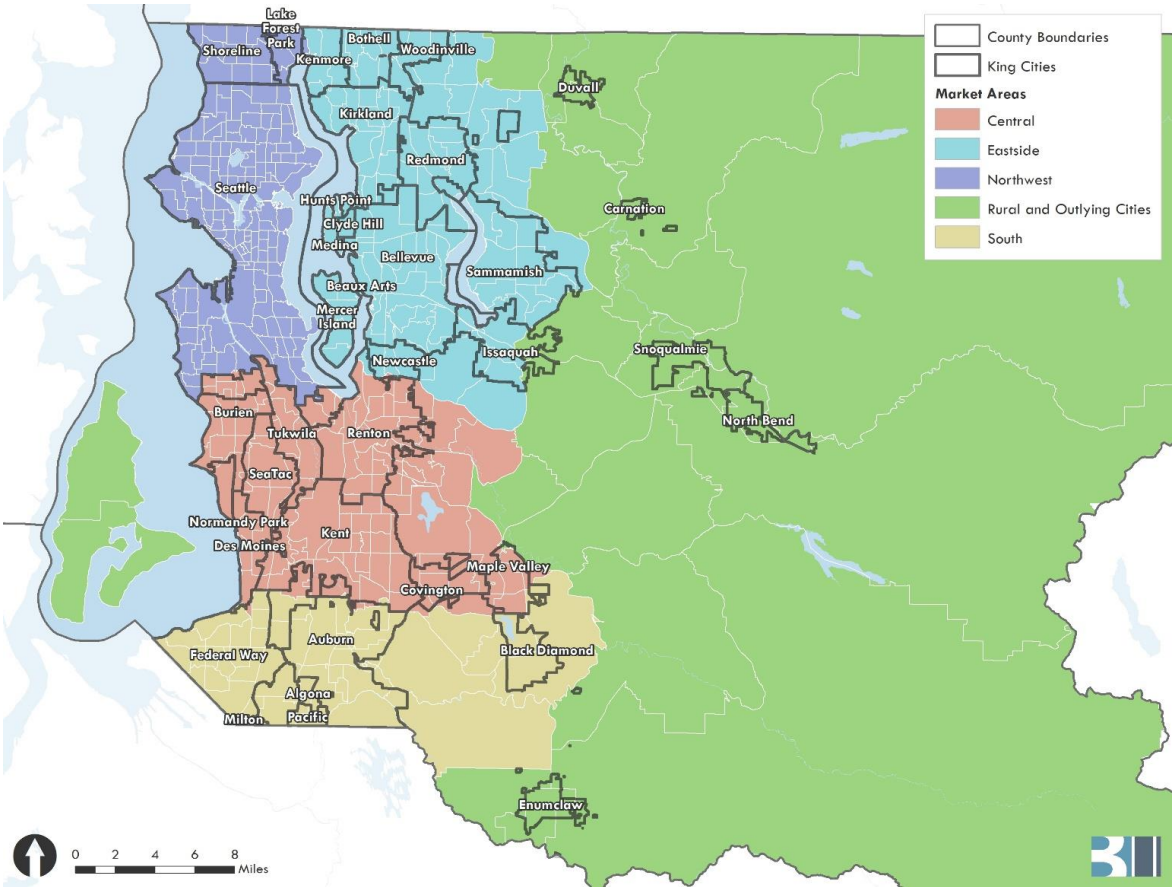
Jurisdictions have the discretion to choose whether to customize employment density assumptions for each zone or select broad assumptions. There is no single correct approach. The choice can depend upon local conditions, staff or consultant capacity for conducting analysis, and access to relevant data. This guidance provides several options for jurisdictions to choose from. Some of these options are grounded in new analysis of current employment density in market areas across King County. For a more detailed description of those findings, see Appendix A.

[1] Gross square footage simply refers to the total square footage of the building, including walls. Gross square footage capacity is calculated as the floor area ratio (FAR) * the parcel size in square feet.

APPROACHES FOR DEVELOPING EMPLOYMENT DENSITY ASSUMPTIONS

This section describes three main approaches for developing and selecting appropriate square feet per job assumptions for use in land capacity analysis calculations. A jurisdiction may choose only one option or a combination of options, depending on their needs and circumstances. The primary options draw upon analysis BERK Consulting conducted to estimate aggregate employment densities in five different market areas across King County. Those market areas are shown in Exhibit 1 for reference.

Exhibit 1. King County Market Areas



Source: BERK, 2020.

1. Select a single average employment density for all non-residential development

The simplest option is to assume the average square feet per job will follow recent trends in your city or market area. To support this option, BERK Consulting calculated average square feet per job in both 2006 and 2019 for most cities and the five market areas. The results for market areas are shown in Exhibit 2.[2] For most individual cities, see Exhibit 6 in Appendix A. Jurisdictions selecting this option can

[2] Details on the calculation of these densities are provided in Appendix A.

apply a single square feet per job assumption to all commercial and industrial zones. This option would be appropriate for jurisdictions that expect future job growth and non-residential development activity to be similar to the growth experienced in the past, or those that have limited non-residential zoning. It may also make sense in jurisdictions with very little diversity in the type of non-residential zoning available (for example: all commercial or all industrial).

The main limitation of this approach is that it does not allow for differentiating employment density assumptions by zone. A single employment density assumption would likely overestimate capacity in industrial areas (which tend to have lower relative employment densities) and underestimating capacity in some commercial zones where employment densities may be higher. This could significantly impact the accuracy of employment capacity estimates by zone and by these two different categories.

2. *Select separate commercial and industrial employment density assumptions*

Many cities select one assumed employment density for commercial zones and another for industrial zones. Others select unique employment density assumptions for each commercial and industrial zone. Either of these approaches is appropriate.

BERK conducted an analysis of recent non-residential development and job growth by market area to develop the recommended ranges shown in Exhibit 2. Jurisdictions should typically choose value within these ranges. When selecting density values, consider the types of uses that are expected to be most common:

- **Commercial and Mixed-Use:** Small-format commercial retail and food services are likely to have lower values for square feet per employee, with commercial office space and services at the middle of the range and large-format retail at the higher end.
- **Industrial:** Certain light manufacturing and flex space are likely to be at the lower end of this range, with heavy manufacturing and logistics in the mid-range and warehousing at the high end. Note that mini-warehouse/self-storage facilities tend to be at the highest end of the range.

Assumptions falling outside of the ranges shown in Exhibit 2 may be appropriate, but would require additional documentation of rationale to justify the variation.

For context, Exhibit 2 also shows the average employment density across all zones in 2006 and 2019. This average is affected by the proportion of total development in commercial or industrial zones, as well as differences in typical employer types and economic conditions. BERK's analysis in Appendix A indicates that employment density has increased somewhat in recent years in most market areas, primarily associated with redevelopment of lower-density commercial and industrial uses and shifts towards more intensive use of these spaces.

A benefit of this approach compared to Option 1 is that it does not presume the same mix of commercial and industrial development observed in the past will continue into the future, or that regional mixes of employment types would be applicable to a local area. This approach also allows jurisdictions to use different assumptions for zones in the city where alternative densities are more likely: differentiating between downtown and neighborhood commercial zones, for example.

Exhibit 2. Recommended Square Foot per Job Assumptions by King County Market Area

Market Area	Average 2006 Employment Density (all zones)	Average 2019 Employment Density (all zones)	Recommended Range for LCA: Commercial and Mixed-Use Zones	Recommended Range for LCA: Industrial Zones
Central	655	608	300–600	700–1,200
Eastside	398	386	200–400	500–800
Northwest	445	415	200–400	500–800
Outlying Cities	669	630	300–600	700–1,200
South	701	724	300–600	700–1,200

Notes: See Exhibit 3 in Appendix A for a map of jurisdictions included in the average density analysis for each market area.
Sources: BERK, 2020 (See Appendix A for details)

Appendix A includes an analysis that provides high-level city estimates for industrial and non-industrial uses using available real estate market data. Note that in this case, available real estate data for the entire county required aggregation of different non-industrial uses. These numbers can be helpful to see how a city compares to the market area as a whole and the ranges provided above.

In addition to the values in Appendix A, there are other sources of information that jurisdictions can use to help inform the selection of appropriate employment density assumptions from within the ranges shown in Exhibit 2. See the section below on using additional sources of information for more details.

3. *Select targeted employment density estimates for known pipeline development*

If a jurisdiction is aware of significant new growth within the development pipeline, such as through development agreements, master planned developments, or recent permit activity, consider applying targeted employment density assumptions for that portion of growth only. This may be particularly useful if this expected growth varies considerably from historic trends or other employment located within the market area.

Additional Sources of Information to Inform Employment Density Assumptions

The main approaches outlined above can be refined with other methods and sources of data. This can provide a more detailed estimate of the land required to accommodate future employment growth in a community. Although not every situation will require a more precise estimate, local trends may require some adjustments to these estimates. Examples of cases like this would include:

- Districts in a city dominated by the campus of a single employer or small number of large employers, where expected future employment growth could be linked to their expected expansion plans.
- Districts where the general types of employment within a category are expected to shift over time. This would include jurisdictions where industrial districts are expected to reflect a greater focus on warehousing and logistics over manufacturing uses.
- Districts where specific new uses are expected with densities different than citywide averages. A recent shift in the types of manufacturing businesses located in an industrial area towards activities requiring less space per employee may require adjustments of required floor area estimates.
- Other broad trends with space utilization may also be relevant: a greater focus of local businesses on online transactions versus physical sales or trends towards increasing employment density in offices may be changing the space needs for current and future businesses in the community, and should be reflected in estimates of future needs.

To this end, this section provides additional sources which could be used for refining calculated densities from the general methods discussed above. Additionally, this section also describes a general framework for considering whether this refinement is necessary for a community, so as to understand when choices should be made to deviate from the broader estimates.

Other Sources for Density Assumptions

Reference published employment density estimates by land use type

This guidance document only provides aggregate employment density estimates based on broad employment and land use categories. Other sources of information, such as the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, provide square feet per job estimates for a detailed list of land use types such as hospitals, schools, or airports. Jurisdictions looking to develop more targeted employment density assumptions may draw upon ITE or other resources to come up with estimated future densities of development.

There are several situations where this approach may make sense:

- Referencing employment density by specific land use types may also be useful for jurisdictions adjusting regional estimates to better reflect the local mix of employment growth expected.
- Employment density assumptions by land use type can also be useful to cities developing separate square feet per job assumptions for different zones. For example, if there is a downtown zone where the vast majority of floor area is expected to be office space, it may be appropriate to use an assumed density that is consistent with the office land use type.

Leverage space planning work by major employers

Another source of information for use in determining employment density may be the programming coordinated by companies or other organizations with larger buildings or campuses and significant space needs. If these needs are identified through facilities planning or as part of subarea plans, the associated numbers could support assumptions about the development necessary to support expected employment growth.

Calculate previous densities achieved in the community

If the same type and format of development will likely continue to be sited in the community, cities could also rely on available data to calculate local employment density across meaningful categories. This can use a range of information sources: County assessor's data, real estate listings websites, discussions with brokers, and other sources can all be used to identify the uptake of new space within a community, while surveys, business license data, and aggregate employment statistics can help to understand the new employment accompanying these uses. Average values for employment density may be aggregated or detailed as required.

Identify potential future changes in densities

The most detailed consideration of future space usage would refine the calculation of previous densities described in Appendix A to focus on expected changes in the future. This would limit the calculations of employment densities to more recent tenants expected to be typical of future employers in an area, and even highlight expected trends that would impact the future use of space, such as the increase in telework or open-format offices. Establishing values in this way needs detailed documentation, especially if the resulting employment density estimates would vary significantly from the figures that would result from other methods.

Process for Evaluating Density Assumptions

When determining the best estimates for employment density in a community, a structured process can include some consideration of the three main methods previously reviewed, as well as the additional sources of information discussed in this section, to determine what assumptions would be best for future projections. Steps in the process can include the following:

- **Select a starting estimate.** Based on assumptions from previous Buildable Lands reporting and/or the estimates provided in this report, select an initial estimate to be used for employment density. This could be an overall estimate for all employment lands or could be divided on broader categories of use.
- **Evaluate densities achieved from a selection of recent development, if possible.** An effective way of determining whether the estimates used have been accurate is to test these assumptions on recent development data. Tax assessment data from the King County Assessor or building permit data on file can determine the effective square footage of new construction, and a survey of current businesses or data from third-party providers can be used to determine employee counts for a representative set of projects. If there are significant and consistent differences between these calculations and broader estimates, there may be a need to examine changes to employment density estimates.

- **Assess the mix of land uses found in recent development and compare to previous expectations.** Additionally, estimates may also be affected by changes in the types of development coming into a community. Significant differences in expected versus actual uses may have substantive impacts on achieved employment density. For example, a significant rise in self-storage facilities or warehouses, more development of larger- or smaller-format retail spaces than expected, a greater proportion of restaurant versus service uses in commercial spaces, and other differences can all impact actual versus expected employment densities, and may point to the need to adjust these assumptions.
- **Identify potential new uses that could challenge employment density assumptions in the future.** Together with generally evaluating the mix of uses in new development, there may also be a need to consider new uses that are starting to become more popular and may require more consideration in the future. An increase in cannabis production or mini warehouse uses in industrial areas, for example, could suggest trends that may change how many employees can be accommodated in these areas. Combined with evaluating the mix of uses in recent development, this should highlight potential changes that could happen with employment densities into the future.
- **Review potential assumptions with other experts in the community.** After identifying potential trends that could impact achieved employment densities, reviewing this information and the resulting revised assumptions with experts from the community can be very useful in testing these conclusions. Discussing changes in space needs with local commercial brokers, developers, large space users, other businesses, and other real estate professionals can be essential in determining if new assumptions reflect their experiences, and whether there are other trends they have identified that should also be considered in these results.

Using some or all of the steps in this process can be useful in determining whether additional detail is required to adjust the starting assumptions to better reflect current and future projections. At minimum, generally establishing whether previous targets were reached and whether these trends will continue will be extremely useful in establishing whether previous assumptions can still be used.

However, beyond the use of currently published figures, either in this report or from other resources, evaluating existing plans and information to calculate alternative local employment densities can be a very data-intensive task. It may also come under scrutiny if calculated employment densities differ significantly from regional averages, especially if these estimates suggest that far less land would be needed to support growth. Refinements to these methods are best considered only if there are specific local situations that could lead to differences in these values, and the results should be thoroughly documented and reviewed to confirm.

NOTES ON CALCULATING EMPLOYMENT DENSITY

If your jurisdiction is considering calculating achieved employment density in an area or specific building or campus, consider these tips for calculating square footage per job.

Generally, the calculation of total gross employment density is calculated as:

Total gross square footage per employee =
(*gross square footage for employment / number of employees*) x (1 + *expected vacancy*)

These calculations include the following variables:

- The **total gross floor area for employment**, calculated as the total amount of building area supporting employment uses, which includes common areas and walls.
- The **number of employees**, which is the total number of employees supported by this gross floor area.
- The **expected vacancy rate**, which is estimated as a target or long-term average vacancy rate in the local market.

For some communities, this could be considered in aggregate across all employment lands. In other cases, however, these assessments can be created by land use categories: office, retail, industrial, warehouse/logistics, mini-warehouse, etc.

Considerations with these calculations include the following:

- **The amount of square footage per employee will change according to type.** Previous research and existing guidance highlight that employment densities vary by use category. Generally, office uses would have different densities of employment than retail spaces or self-storage warehouses, but specifically, medical offices may have different densities than office uses on average.
- **Not all building types are interchangeable.** In addition to different employment densities, building types may be limited in the businesses that can be practically accommodated. Most office spaces are interchangeable, for example, but medical offices have distinct layouts and amenities that would require tenant improvement to be used for other office uses, and manufacturing or industrial uses may have specialized construction dedicated to specific functions.
- **Businesses may not be using their full capacity with the space they occupy.** Whether owner-occupied or leased space, commercial businesses and other organizations may own or lease space to accommodate expected future growth. Because of this, available statistics may include some slack capacity that is not currently occupied, but can be used by the occupying businesses in the future.
- **Vacancies are necessary for the local real estate market to function.** Vacancies are necessary to provide the slack capacity necessary for the space market in a local area to function. Over the long term, some businesses will start, expand, or relocate while others will shut down, downsize, or move out of an area. Even in a market without significant expected long-term growth, natural vacancy rates provide some capacity for the short-term space needs that move around this trend.
- **Employment is not only included in commercial- and industrial-zoned lands.** In addition to the employment found on commercial and industrial lands, there are other employment types that will need to be considered. Certain communities, primarily in rural areas, may need to consider

agricultural and resource uses in the community, such as with aggregate mining. Additionally, home occupation uses, including contractors and self-employed individuals working from home, will also contribute to local employment but will not occupy employment floor space in the community. Note that the PSRC covered employment estimates exclude the self-employed (as well as other types of employees, such as the military and railroad workers).[3]

[3] See https://www.psrc.org/sites/default/files/emp_data_series.pdf for more details on the PSRC covered employment dataset, based on the Quarterly Census of Employment and Wages (QCEW) from the Washington State Employment Security Department (ESD).

APPENDIX A: EMPLOYMENT DENSITY ESTIMATES BY CITY AND MARKET AREA 2006-2019

To support jurisdictions in selecting employment density assumptions, BERK Consulting estimated the average aggregate square foot per job in individual jurisdictions and market areas across King County. The analysis included summarizing non-residential square footage (all commercial, industrial, and public sector buildings that could reasonably accommodate employment) based on King County Assessor data obtained for the years 2006 and 2019. For each jurisdiction with employment data available, BERK calculated the gross square footage per job[4] in 2006 and 2019. The results were then aggregated by five separate market areas (shown in Exhibit 3) that group cities based on geography to reflect variation in local real estate market conditions. This analysis did not consider growth in unincorporated areas due to large variation in geographic context and lack of employment breakdowns for analysis by subarea.

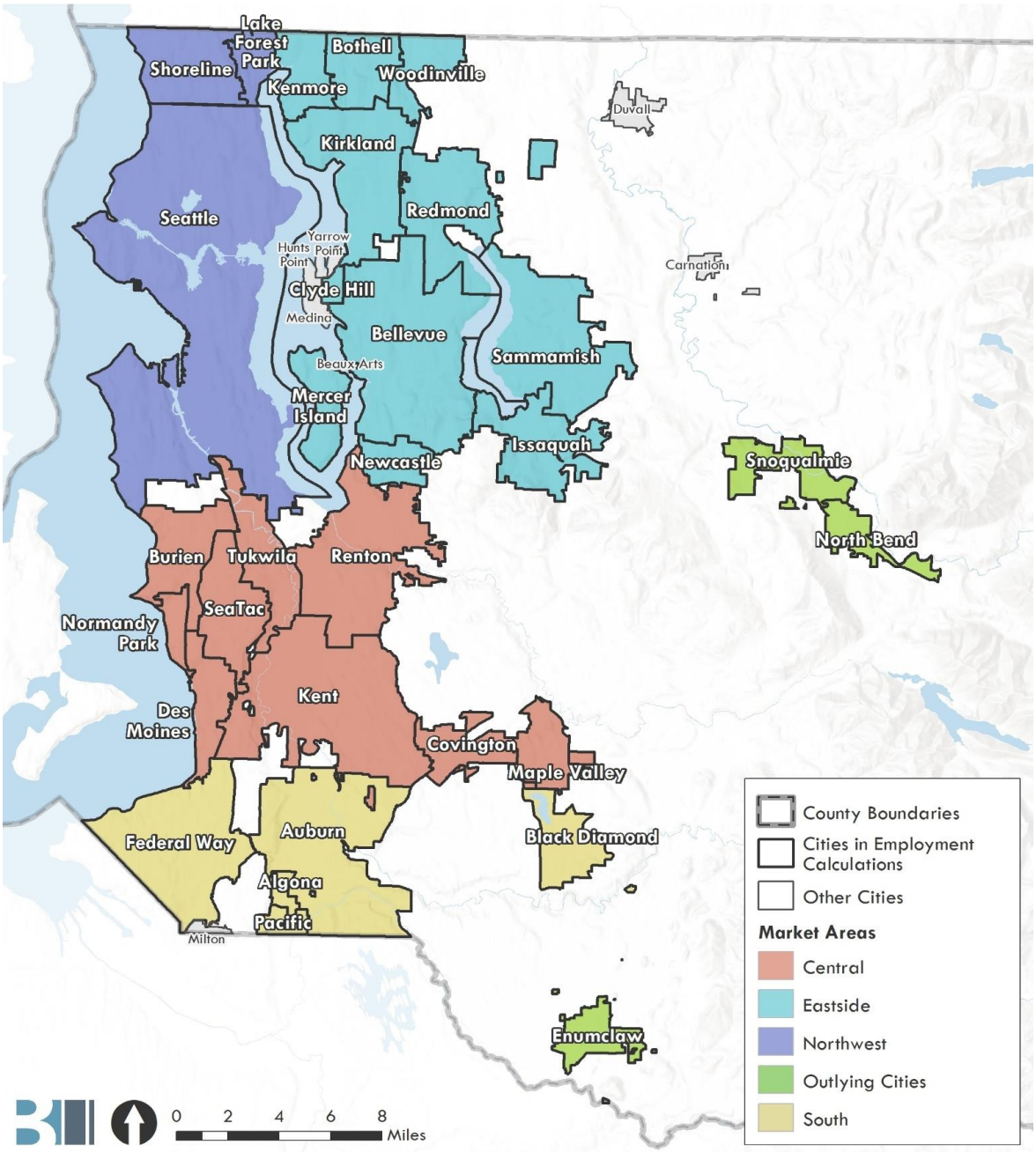
Exhibit 4 shows the total square feet per job in 2006 and 2019 for each of these market areas. While there was some variation between market areas, all areas except for South saw average square feet per job declines during this time period. In other words, employment density has been rising in most of King County. The different outcomes in the South appear to be due to strong gains in jobs associated with warehouse space, which typically require much more space per square foot.

Exhibit 5 adjusts the calculated employment density values on the basis of vacancy rates to determine the actual occupied space in the market and consider that future markets would normally have an average vacancy rate of around 5%. In most market areas, these estimates of square footage per job are somewhat different from the total aggregate square footage per job estimates shown in Exhibit 4. This step is important in cases where vacancy rates in employment areas are significantly higher or lower than expected.

Exhibit 6 provides gross employment density figures by jurisdiction, indicating the range of average densities found in communities across the region in 2006 and 2019. As noted previously, changes between 2006 and 2019 may be due to redevelopment as well as new development that supports employment uses at different densities than existing uses. For example, average densities may change with redevelopment of existing industrial areas for new office and retail uses, or development of new warehousing and distribution sites in communities that have not had these uses in the past.

[4] This analysis excluded construction and resource jobs, many of which are not tied to specific buildings and therefore not as relevant to employment capacity calculations.

Exhibit 3. Cities Included in the Employment Density Calculations by Market Area



Note: Cities with suppressed job counts were not considered in this analysis and therefore not symbolized on this map. Additionally, the 2019 job counts for Enumclaw, North Bend, and Snoqualmie include their respective unincorporated UGAs.
Source: BERK, 2020.

Exhibit 4. Gross Floor Area Square Feet Per Job Calculations, 2006 and 2019

Market Area	2006 Gross Non-Residential Square Feet	2006 Jobs	2006 Gross Square Feet Per Job	2019 Gross Non-Residential Square Feet	2019 Jobs	2019 Gross Square Feet Per Job	Gross Sq. Ft. per job % Change 2006-2019
Central	142,770,591	217,835	655	158,657,104	257,486	616	-6%
Eastside	120,169,602	302,084	398	145,776,209	384,505	379	-5%
Northwest	230,626,549	517,954	445	273,932,690	667,153	411	-8%
Outlying Cities	7,889,576	9,735	669	9,041,389	14,947	605	-10%
South	51,643,062	73,648	701	58,459,588	79,845	731	4%

Notes: See Exhibit 3 for a map of jurisdictions included in the analysis for each market area. Job counts exclude resource and construction jobs, many of which are not tied to specific buildings and therefore less relevant to employment density assumptions. Gross non-residential square footage excludes agricultural uses.
Sources: King County Assessor, 2006 & 2019; PSRC, 2006 & 2019; BERK, 2020.

Exhibit 5. Adjusted Floor Area Per Job Estimates for Non-Residential Buildings in King County, 2006 & 2019

Market Area	Vacancy Rate, 2006	Net Occupied Floor Area, 2006 (sf)	2006 Adjusted Gross sf/ Job	Vacancy Rate, 2019	Net Occupied Floor Area, 2019 (sf)	2019 Adjusted Gross sf/job	Adj. Gross sf per job % Change 2006-2019
Central	6.2%	133,925,953	647	6.3%	148,675,986	608	-6%
Eastside	6.2%	112,769,558	393	3.4%	140,834,396	386	-2%
Northwest	6.0%	216,680,562	440	4.1%	262,816,501	415	-6%
Outlying Cities	8.2%	7,239,633	646	1.1%	8,943,923	630	-3%
South	5.0%	49,080,533	701	6.0%	54,967,212	724	3%

Notes: See Exhibit 3 for a map of jurisdictions included in each market area for calculation purposes. Occupied floor area calculations reflect total floor area exclusive of parking garages adjusted for commercial vacancy estimates from CoStar. This adjustment was made to account for variation in vacancy between 2006 and 2019. Job counts exclude resource and construction jobs, many of which are not tied to specific buildings and therefore less relevant to employment density assumptions. Gross non-residential square footage excludes agricultural uses.
Sources: King County Assessor, 2006 & 2019; PSRC, 2006 & 2019; CoStar, 2020; BERK, 2020.

Exhibit 6. Gross Floor Area Square Feet Per Job Calculations by City, 2019.

City	Market Area	Gross Square Feet Per Job, 2006	Gross Square Feet Per Job, 2019	Gross Sq. Ft. per job % Change 2006-2019
Algona	South	1,349	1,061	-21%
Auburn	South	840	799	-5%
Bellevue	Eastside	374	398	7%
Black Diamond	South	484	762	57%
Bothell	Eastside	494	389	-21%
Burien	Central	536	651	21%
Carnation	Outlying Cities	479	*	*
Clyde Hill	Eastside	430	450	5%
Covington	Central	616	585	-5%
Des Moines	Central	466	818	75%
Duvall	Outlying Cities	547	*	*
Enumclaw	Outlying Cities	653	685	5%
Federal Way	South	516	612	19%
Issaquah	Eastside	420	346	-18%
Kenmore	Eastside	403	566	41%
Kent	Central	908	831	-8%
Kirkland	Eastside	440	366	-17%
Lake Forest Park	Northwest	437	401	-8%
Maple Valley	Central	410	481	17%
Medina	Eastside	*	*	*
Mercer Island	Eastside	332	340	2%
Milton	South	**	**	**
Newcastle	Eastside	454	258	-43%
Normandy Park	Central	493	534	8%
North Bend	Outlying Cities	643	637	-1%
Pacific	South	294	554	89%
Redmond	Eastside	361	327	-10%
Renton	Central	558	493	-12%
Sammamish	Eastside	377	373	-1%
SeaTac	Central	422	375	-11%

Exhibit 6. (continued)

City	Market Area	Gross Square Feet Per Job, 2006	Gross Square Feet Per Job, 2019	Gross Sq. Ft. per job % Change 2006-2019
Seattle	Northwest	444	408	-8%
Shoreline	Northwest	491	503	2%
Skykomish	Outlying Cities	**	**	**
Snoqualmie	Outlying Cities	865	509	-41%
Tukwila	Central	655	630	-4%
Woodinville	Eastside	671	657	-2%
Yarrow Point	Eastside	*	*	*

* *Employment statistics are suppressed for these communities in PSRC statistics.*
** *Densities for Milton and Skykomish not included due to significant variance given the small sample size (<100 jobs).*

Notes: Job counts exclude resource and construction jobs, many of which are not tied to specific buildings and therefore less relevant to employment density assumptions. Gross non-residential square footage excludes parking garages and agricultural uses.
Sources: King County Assessor, 2006 & 2019; PSRC, 2006 & 2019; BERK, 2020.

The analysis described above aggregates all commercial and industrial zones together when measuring employment density. BERK also analyzed assessor data in to help estimate aggregate employment density separately for different types of employment. Exhibit 7 provides estimates of the job densities by city for:

- **Non-industrial employment**, including spaces typically associated with employment in the Finance, Insurance, and Real Estate (FIRE); Retail; Services; Government; and Education major sector categories. This would include both commercial space as well as other public facility uses that may be accommodated elsewhere in land capacity studies but are difficult to distinguish without detailed analysis of individual buildings.
- **Industrial employment**, including Manufacturing and Wholesale Trade, Transportation, and Utilities (WTU) major sector categories.

The allocation of floor space to these categories is based on a classification of both site and building use for non-residential space as recorded in the King County Assessor's tax assessment database. Of course, there may be situations where jobs categorized as non-industrial are located in buildings classified as industrial. The opposite is also true. In most cases we expect this uncertainty would have a minor impact on aggregate calculations by city. However, there are some cases where the calculations in Exhibit 7 may be less reliable for an individual city, and surrounding market area characteristics should be used as a better guide.

Note as well that the non-industrial employment types include a wide range of uses, from recreation to education to government. Each of these types may have very different employment densities. Therefore, care should be used when interpreting these calculations and their relevance to land capacity assumptions.

Exhibit 7. Gross Floor Area Square Feet Per Job Calculations, by City and Job Type, 2019.

City	Market Area	Non-Industrial Employment (jobs)	Non-Industrial Empl. Density (sf per job)	Industrial Employment (jobs)	Industrial Empl. Density (sf per job)
Algona	South	288	1,745	2,146	968
Auburn	South	25,332	699	17,117	1,085
Bellevue	Eastside	129,270	438	12,734	321
Black Diamond	South	346	861	42	**
Bothell	Eastside	13,784	366	2,270	686
Burien	Central	11,198	631	509	2,707
Carnation	Outlying Cities	*	*	*	*
Clyde Hill	Eastside	*	*	*	*
Covington	Central	4,795	574	84	**
Des Moines	Central	6,082	699	454	3,509
Duvall	Outlying Cities	1,177	564	111	1,413
Enumclaw	Outlying Cities	4,148	661	689	1,225
Federal Way	South	26,612	625	1,952	1,130
Issaquah	Eastside	24,093	369	2,988	384
Kenmore	Eastside	3,108	627	448	752
Kent	Central	34,106	679	35,339	1,090
Kirkland	Eastside	42,275	361	4,427	754
Lake Forest Park	Northwest	1,455	465	73	**
Maple Valley	Central	3,634	506	370	770
Medina	Eastside	465	528	21	**
Mercer Island	Eastside	6,306	382	185	421
Milton	South	*	*	*	*
Newcastle	Eastside	2,693	236	127	1,228
Normandy Park	Central	830	581	110	***
North Bend	Outlying Cities	2,649	600	405	1,442
Pacific	South	556	571	134	1,108
Redmond	Eastside	80,377	295	11,852	726
Renton	Central	41,308	565	24,150	454
Sammamish	Eastside	6,884	430	539	262
SeaTac	Central	15,809	685	19,821	166

Exhibit 7. (continued)

City	Market Area	Non-Industrial Employment	Non-Industrial Empl. Density (sf per job)	Industrial Employment	Industrial Empl. Density (sf per job)
Seattle	Northwest	537,538	425	57,858	628
Shoreline	Northwest	15,628	507	430	2,350
Skykomish	Outlying Cities	60	**	-	-
Snoqualmie	Outlying Cities	3,548	633	1,298	736
Tukwila	Central	29,329	565	13,867	875
Woodinville	Eastside	8,206	452	3,839	1,277
Yarrow Point	Eastside	*	-	*	-
	Central	147,091	614	94,704	723
	Eastside	317,461	383	39,430	618
	Northwest	554,621	427	58,361	640
	Outlying Cities	11,582	635	2,503	1,015
	South	53,134	667	21,391	1,077
King County		**1,113,508**	**455**	**221,136**	**725**

* *Employment statistics are suppressed for these communities in PSRC statistics.*
** *Densities are not included due to significant variance given the small sample size (<100 jobs).*
*** *No industrial space was recorded with the classification system used.*

Sources: King County Assessor, 2019; PSRC, 2019; BERK, 2020.

Appendix G: Approach for Identifying Infrastructure Gaps

King County Urban Growth Capacity Study

Recommended Infrastructure Approach

April 5, 2020

Edited June, 2021 for final report

Prepared by:

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Prepared for:

King County

Community Attributes Inc. tells data-rich stories about communities that are important to decision makers.

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INTRODUCTION

Background and Purpose

King County is in the process of beginning its Urban Growth Capacity Study, also known as the buildable lands or review and evaluation program. The purpose of this study is to review how actual recent growth compares with planning assumptions developed for the existing comprehensive plan, recalculate the quantity and capacity of buildable land available during the current planning period, and identify any issues to be addressed during the next comprehensive plan update. The Study must be complete and delivered to the Department of Commerce by June 30, 2021, but King County will complete its report in November 2020 to allow for a longer comprehensive plan update process.

King County completed Urban Growth Capacity Studies in 2007 and 2014. In 2017, several significant changes were made to the State legal requirements for the program. The County has identified two changes that will require additional analysis before the study can move forward. First, the County must include infrastructure gaps in the process of identifying lands available for development. Second, it must address several specific considerations in developing market supply factors applied to buildable lands.

This report recommends an approach to addressing infrastructure gaps in the Urban Growth Capacity Study. These methods reflect both state requirements and King County jurisdictions' infrastructure needs. A second report will recommend updated methods for market factors.

Methods and Approach

The recommendations in this report were developed in partnership with King County staff from the following resources:

- Washington State Department of Commerce "Buildable Lands Guidelines" (2018)
- King County cities' comprehensive plans

Organization of Report

This report includes the following sections:

- **Regulatory Context** explains how State requirements have changed and how King County's existing methods may need to be updated for consistency

- **Existing Infrastructure Conditions** outlines known infrastructure gaps identified within individual Comprehensive Plans to prepare for interjurisdictional coordination
- **Recommended Approaches** identifies how King County's methods could be updated to accommodate any infrastructure gaps

Regulatory Context

State Requirements and Recent Changes

The purpose of the Urban Growth Capacity Study is to review how actual recent growth compares with planning assumptions, recalculate the quantity and capacity of buildable land available during the current 20-year planning period, and identify any issues to be addressed during the next comprehensive plan update. King County's study fulfills the requirements for the "Review and Evaluation Program" as established under RCW 36.70A.215. In general, the State program is structured to allow for counties to use unique approaches to suit local conditions. State law sets basic requirements, and counties may meet those requirements as they see fit, provided their rationale is sound and well-documented.

In 2017, E2SSB 5254 was passed by the Washington State Legislature. This bill included the first revisions to the state review and evaluation requirements since the program began in 1997. These revisions included adding the requirement for counties to incorporate infrastructure gaps into their evaluation and identification of land suitable for development or redevelopment during the planning period. This will entail identifying lands that would otherwise be considered vacant or redevelopable and part of the land supply, but which have infrastructure gaps significant enough that they are deemed unlikely to be developed during the planning period, or that infrastructure development will unlock their capacity at a specific point partway through the planning period.

RCW 36.70A.215(3)(b) clarifies that infrastructure gaps include but are not limited to transportation, water, sewer, and stormwater. This report focuses on top ranking infrastructure systems and challenges that affect most or all cities in King County.

In some cases, infrastructure challenges may not warrant removing land from the developable supply for the 20-year planning period. Per the Department of Commerce's 2018 guidelines, jurisdictions should consider the following factors when evaluating whether or not an infrastructure gap exists:

- Is there a long-term lack of urban development in the area?
- How did the recent comprehensive plan address the needed infrastructure provision, and is that information still valid?
- If the infrastructure is anticipated to be provided later in the planning period, is development likely to occur quickly so that planned development is realized within the planning period, or will some of the area remain undeveloped?

King County's Current Methods

King County's past methods for quantifying its developable land informally addressed infrastructure gaps in land supply identification. The County has identified the following steps to update its process to meet new requirements:

1. Assemble necessary data for the entire jurisdiction, including parcel/assessor data, critical areas, and zoning.
2. Define vacant and redevelopable lands using a density and/or value threshold.
3. Exclude land uses or parcels that are unlikely to develop for categorical reasons (parks, schools, public facilities, other institutions, etc.).
4. Apply vacant and redevelopable land definitions established in Step 2 to the remaining parcel data.
5. Review and refine the resulting developable land supply.
6. Identify and remove environmentally sensitive lands.
7. Adjust for infrastructure gaps (New step to be defined).
8. Summarize developable land supply by zone.

This report will provide recommendations on how to accomplish step seven, adjusting for infrastructure gaps. This will include accommodating any lands which should be entirely removed from the land supply and adjusting for lands that will become "unlocked" at some point during the planning period.

Existing Conditions

This section discusses the Capital Facilities Elements of King County cities to assess high-level infrastructure challenges, summarized in **Exhibit 1**. Most plans were developed in 2014 or 2015, and individual jurisdictions should review these findings for the County's Buildable Lands needs. This review focuses on infrastructure systems most likely to prevent development, including water, sewer service, and stormwater facilities. Site-specific infrastructure issues independent of system capacity might also limit development capacity; cities should identify site-specific concerns, as outlined in the subsequent section of this report, *Recommended Approach*.

Water

In King County, 18 cities acquire all their potable water through agreements with utility districts or other cities. Another 11 cities have their own water system and supply, but also have areas within their limits served by outside water districts or other cities. This leaves 10 out of 39 cities providing all their own water needs. These 10 cities are generally either very large, with systems that serve many other jurisdictions (Seattle and Bellevue), or very small (Five out of 10 have a population under 10,000). Overall, all indicate that these providers had sufficient water supply to accommodate growth through 2035, though Redmond and Woodinville cited a potential need for additional sources. Several cities with sufficient water rights still face other challenges such as in storing water and managing water quality over time, including Bothell, Black Diamond, and Milton. SeaTac's plan notes concerns about Seattle Public Utilities' ability to supply water to regional cities as Seattle continues to grow.

Sewer

Twenty cities receive sewer service from utility districts or another jurisdiction such as the City of Bellevue or King County. Another 8 cities have their own utility, but also have areas within their limits served by utility districts. At least 20 cities report having parcels with septic systems, and Burien reports areas that do not have access to sewer. Auburn and Kenmore are working to provide sewer to all remaining parcels on septic. Most of the sewer providers have capacity for growth through 2035, though Milton and Woodinville expressed capacity concerns.

Stormwater

All jurisdictions except Carnation have public stormwater infrastructure, though some such as Mercer Island rely heavily on natural systems. At the time of the plan update, Enumclaw did not have a public stormwater utility to fund expansion of its system. A common concern was the need for

additional capacity in stormwater pipes and drainage swales. Some communities require that new development install onsite stormwater detention and treatment, and require the use of low impact development techniques in all development. Numerous communities possess natural conditions that make stormwater management difficult, such as flat topography, high water table, and the presence of rivers, streams, and wetlands. Depending on the use and circumstances, such natural conditions can create site-specific infrastructure gaps that could impact land capacity.

Funding Concerns

Several plans note that the gap between projected future revenues and the cost of required future capital facilities will continue to widen without additional taxes or other revenue increases. One plan notes that cuts in services or increases in operating revenues may be necessary. Another states that funding to maintain the system has not changed over the years and that there is no dedicated fund to cover basic operation and maintenance expenses. Multiple plans cite the need to replace aging infrastructure as a future funding concern.

Awareness of the need for future funding does not necessarily limit anticipated growth. Funding concerns therefore, are only presented herein as prohibitive to redevelopment if the city cites the concern in their plan as critical and imminent.

Exhibit 1 summarizes high level water, sewer, and stormwater issues identified in individual cities' last comprehensive plan updates. These are described in greater detail in **Appendix A**. Cities in Exhibit 1 are grouped by geographic area within King County.

Exhibit 1. Infrastructure Issues Identified in 2015-Era Comprehensive Plans

Jurisdiction	Water	Sewer	Stormwater
North King County			
Shoreline	No issues	No issues	No issues
Lake Forest Park	No issues	No issues	**Infrastructure improvements required**
Kenmore	No issues	No issues	No issues
Bothell	**Additional storage required**	No issues	No issues

Jurisdiction	Water	Sewer	Stormwater
Woodinville	**Projected deficiencies**	**Projected deficiencies**	**Areas of insufficient capacity**
Seattle	**Potential reduction in supply by 4% (2025) and 6% (2050) from climate change impacts**	**Need to reduce combined sewer overflow conditions**	**Need to reduce combined sewer overflow conditions**
Eastside King County			
Kirkland	No issues	**Aging Infrastructure**	No issues
Mercer Island	No issues	No issues	No issues
Bellevue	No issues	No issues	No issues
Newcastle	No issues	No issues	No issues
Redmond	**Potential Capacity Issues**	**Potential annexation areas unsewered**	No issues
Issaquah	No issues	No issues	No issues
Sammamish	No issues	No issues	No issues
Medina	No issues	No issues	No issues
Hunts Point	No issues	No issues	No issues
Clyde Hill	No issues	No issues	**Infrastructure improvements required**
Yarrow Point	No issues	No issues	**Infrastructure improvements required**
Beaux Arts Village	No issues	No issues	No issues
Rural East King County			
Duvall	No issues	No issues	No issues
Carnation	No issues	No issues	**On-site infiltration required, may limit**

Jurisdiction	Water	Sewer	Stormwater
			potential on specific sites
Snoqualmie	**Aging Infrastructure**	No issues	No issues
North Bend	**Aging Infrastructure**	**Unsewered area; expansion of wastewater treatment facility required**	**Concern about system being undersized in some areas for storm events**
Skykomish	**Limited or no dedicated funds to cover basic operation and maintenance expenses of services**	**Limited or no dedicated funds to cover basic operation and maintenance expenses of services**	**Limited or no dedicated funds to cover basic operation and maintenance expenses of services**
Enumclaw	No issues	**Infrastructure improvements required**	**No stormwater utility to fund repair and maintenance of existing system**
Central King County			
Burien	No issues	**Unsewered areas**	**Runoff issues in Salmon Creek basin**
Normandy Park	**Aging Infrastructure**	No issues	No issues
Des Moines	No issues	No issues	**On-site infiltration required, may limit potential on specific sites**
SeaTac	**Dependent on Seattle's capacity**	No issues	**Aging infrastructure**
Kent	**Additional storage required**	No issues	No issues
Tukwila	No issues	No issues	No issues
Renton	**Infrastructure improvements required**	**Potential capacity issues closer to 2030**	No issues
Covington	**Capacity limitations for area served by District 111**	**Infrastructure improvements required**	**Funding gaps**
Maple Valley	No issues	**Infrastructure improvements required**	**Infrastructure improvements required**

Jurisdiction	Water	Sewer	Stormwater
South King County			
Federal Way	No issues	No issues	No issues
Milton	**Aquifer constraints**	**Infrastructure improvements required**	**Infrastructure improvements required**
Pacific	**Aging Infrastructure**	**Potential capacity issues for commercial and industrial**	**On-site infiltration required, may limit potential on specific sites with topography challenges**
Auburn	No issues	No issues	No issues
Algona	No issues	No issues	**Infrastructure improvements required**
Black Diamond	**Infrastructure improvements required**	**Infrastructure improvements required**	No issues

Recommended Approach

This section proposes a process for King County and its cities to identify developable parcels with infrastructure gaps, make decisions about those gaps' impact on development potential, and adjust the land supply accordingly. At the beginning of the infrastructure evaluation process, each jurisdiction will have identified a set of vacant and redevelopable parcels. Environmentally sensitive areas and parcels or land uses unlikely to develop for categorical reasons will have already been excluded from this group. This potentially developable land supply will then be evaluated for infrastructure gaps.

An **infrastructure gap** exists for a property when one or more critical types of infrastructure is not available – transportation, water, sewer, or stormwater. Additional types of infrastructure may be critical in certain cases, and this should be assessed by each city. A gap may be temporary, meaning that a project has been identified in the CIP or TIP to address the gap and funding has also been identified. Or a gap may be long-term, meaning that there is no project funded within the planning period.

The infrastructure evaluation process includes the following steps to identify parcels which have long term infrastructure gaps significant enough to be wholly or partially removed from the buildable lands supply:

1. Identify system capacity issues
2. Identify site-specific infrastructure gaps
3. Update developable land supply

In some cases, this process will require the jurisdictions to work together with service providers to make informed decisions about whether or not lands with infrastructure gaps should be considered part of the buildable land supply. In determining whether there is an infrastructure gap, the Department of Commerce recommends that jurisdictions consider the following:

- Has there been a long-term lack of urban development in the area?
- How did the comprehensive plan address how the needed infrastructure would be provided, and is that analysis still valid?
- If the infrastructure is anticipated to be provided later in the planning period, is development likely to occur quickly enough for the planned development to be realized within the planning period, or will some of the area remain undeveloped?

The proposed approach adds additional rigor to Commerce's guidance through a stepwise scan of infrastructure capacity. Cities and King County

should use professional judgement and the best information available to make informed decisions, and clearly document their rationale.

Step 1. Identify System Capacity Issues

1.1. Each jurisdiction will verify and update the data provided in the most recent Comprehensive Plan, documenting major changes in policy, service provision and other relevant details.

1.2. Each jurisdiction will list the providers serving their jurisdiction with essential infrastructure: water, sewer, stormwater.

1.3. Each jurisdiction will collaborate with service providers, drawing from sewer and water district and comprehensive plans, to identify out-of-date planning information and any underserved portions of each city or the unincorporated urban area. Jurisdictions are advised to coordinate with public works staff to review, interpret and verify data.

1.4. Document any future capital facilities investments planned to address these issues. Determine if specific investments will resolve infrastructure gaps to "unlock" development potential and when it is expected to occur.

1.5. Document if funding has been identified for capital facilities investments.

1.6. Evaluate each system-wide capacity issue to determine if the issue is expected to stop or delay future development, or limit the types or densities of development that will be feasible.

1.7. Using GIS, overlay the service areas of providers with system capacity issues on the set of vacant and redevelopable parcels. Update data for impacted parcels to note system capacity issues.

Step 2. Identify and Document Site-Specific Infrastructure Gaps

2.1. Individual jurisdictions will review remaining vacant and redevelopable parcels to identify site-specific gaps. This review is best done with GIS data. **Appendix B** outlines a suggested process for assigning tiers to sites based on infrastructure availability, and using these tiers to identify site-specific gaps.

2.2. Draw from code or adopted policy to determine if the issues are expected to stop or delay future development, or limit the types or densities of development feasible on vacant or redevelopable parcels. Review parcels with multiple gaps, regardless of severity, to consider if their combined impact will stop or delay development. **Appendix B** provides additional guidance on evaluating multiple gaps.

2.3. Update parcel data to note identified site-specific infrastructure gaps, by documenting infrastructure constrained parcels in the developable land supply.

Step 3. Update Developable Land Supply

3.1. Update developable land supply by removing the developable area of fully constrained parcels from consideration. For partially constrained parcels, document the expected development to accurately convey capacity limitations due to infrastructure gaps.

3.2. Summarize developable land supply by zone.

Appendix A. Summary of Infrastructure by City

North King County Jurisdictions

Except for Seattle, North King County's cities are all currently midsize, between 12,400 and 56,400 in population. Woodinville is projected to grow by the largest percentage, while Shoreline and Kenmore will grow the most in absolute terms. There are several utility districts that serve all of these communities in various iterations, particularly the Northshore Utility District, Alderwood Water & Wastewater District, and Woodinville Water District. Seattle, on the other hand, serves as a regional utility provider. Seattle Public Utilities serves communities throughout King County.

Bothell

The City of Bothell's 2015 Comprehensive Plan, called Imagine Bothell, contains a Capital Facilities Element that inventories all of the City's capital facilities. The Element outlines planned improvements to ensure that the facilities have adequate capacity to meet level of service (LOS) standards. The Element also references relevant capital facilities plans, master plans and strategic plans to identify funding sources and other detail.

The City has contracted with Seattle Public Utilities for potable water, and has **sufficient supply to serve growth**. At the time the Plan was updated, the City had identified a **deficiency for water storage**. As of 2015, a project to address this deficiency was underway. In addition to the City water and sewer systems, certain areas are served by the Alderwood Water & Wastewater District, Northshore Utility District, and Woodinville Water District.

Kenmore

Kenmore's utilities and capital facilities elements were last updated in 2015. The City's water is provided by the Northshore Utility District, and it accounts for 31% of the District's connections. The District purchases water from Seattle Public Utilities and has **sufficient capacity to meet growth needs to 2026 and beyond**. At the same time, average day and peak season demands at build out **slightly exceed the SPU supply contract amount**. The city believes this shortfall may be eliminated as conservation measures and water-use habits decrease demand. The District has additional sources for water that it is not yet using.

The Northshore Utility District also provides sewer service. Its policy is to provide public sewer service to areas within its service area, which encompasses Kenmore. It set a goal in 2006 to **provide sewer to the majority of parcels on septic within eight years**. As of 2014, 877 parcels

in the District were on septic systems, and 550 of these had sewer service available but not yet connected.

Lake Forest Park

The Lake Forest Park 2015-2035 Comprehensive Plan was adopted in 2016. Water service is provided by four public water utilities: Lake Forest Park Water District, North City Water Utility District, Northshore Utility District, Seattle Public Utilities. These districts have capital improvement plans that address issues of **aging pump stations and main infrastructure, meter replacements, and reservoir upgrades**, as well as the need for an I-405 transmission main replacement by 2026.

The City owns and operates its sewer utility, though portions of the City are served by the Northshore Utility District. Lake Forest Park manages the City's stormwater drainage system, and has identified $8.7 million dollars in funding for required future projects.

Seattle

The City of Seattle's Comprehensive Plan was updated in 2016. The Capital Facilities Appendix identifies necessary upgrades to police and fire facilities, a need for continuing acquisition of land for parks and open space, demand for new government office and warehousing space, a need for expanding school capacity, and other facility needs that will be necessary to serve a growing city.

The City's utilities will also be taxed by growth. Specifically, Seattle City Light will require **additional resources** to "meet load growth and comply with I-937 over the next twenty years." While maintenance to the water system will be required in perpetuity, particularly for distribution and storage systems and to meet fire flow requirements, Seattle Public Utilities nonetheless indicates that the **water supply is currently sufficient to meet levels of service for anticipated growth in the next twenty years**. Outside of general maintenance, the **sewer system has adequate capacity** to serve the City's full buildout.

Shoreline

Shoreline's capital facilities and utilities elements were last updated in 2012. The elements **do not identify any specific utility gaps.**

Woodinville

Woodinville's Comprehensive Plan was updated in 2015. The Capital Facilities Element indicates that the Woodinville Water District "**projects a deficit** of 200 gpm of source availability for the West service area in 2027 [and] an additional storage capacity deficit of over 900,000 gallons […] in the

West area". The Plan identifies **general deficiencies for the sanitary sewer system**, indicating that the latest Woodinville Water District plans do not include improvements that would be required to meet the current level of service standard. There are also **deficiencies identified for the stormwater system**, with the Comprehensive Plan indicating that "There are areas of insufficient capacity located throughout the City [and] some of the more significant problem areas are within the Woodin Creek basin and in areas upstream of Lake Leota."

Eastside King County Jurisdictions

East King County's large cities are projected to accommodate strong growth, particularly Bellevue and Redmond. More East King County communities own their own utilities compared to other regions, or have service provided by the City of Bellevue.

Bellevue

The City of Bellevue's Comprehensive Plan was last updated in 2015. The Plan indicates that the City has little vacant land, so the focus of the Capital Facilities Element is maintaining and upgrading existing facilities to accommodate anticipated population growth in areas that have already been developed. The Plan provides a detailed inventory of the City's capital facilities and references to several more specific functional plans, which contain detailed information about planned improvements and available funding. While the City anticipates increased demand for services and facilities, the **Plan does not indicate any gaps that would preclude growth.**

Issaquah

The City of Issaquah's Comprehensive Plan was last updated in 2015. It identifies City-managed utilities and capital facilities and provides policy language that requires the City to meet minimum levels of service and provide utilities to serve new growth. **No capacity shortfalls** are identified for water, sewer, or stormwater, though the Capital Facilities Element, indicates that imminent growth may exceed the capacity of police services and parks provision.

Kirkland

Kirkland's capital facilities element was last updated in 2015. The most significant potential gap noted was a need to **replace and/or rehabilitate aging sewer pipelines** to maintain level of service. In addition, some **portions of the city are currently on septic systems** and may need to join the City's system as they become more urbanized. Portions of north

Kirkland have sewer and water service through the Northshore Utility District or Woodinville Water District.

Mercer Island

The City of Mercer Island Comprehensive Plan includes a Capital Facilities Element that identifies capital needs for streets, parks and open spaces, pedestrian and bicycle facilities, stormwater, sewer, water, and schools. The City owns and operates its water, sewer, and stormwater systems. There are **no deficiencies identified for the water system**.

Newcastle

The City of Newcastle's Comprehensive Plan includes a Capital Facilities Element that references several other related plans and advances goals and policies related to level of service, facility financing and other policy issues. The Plan also includes a Capital Facilities Appendix. The Appendix provides a detailed inventory of the City's capital facilities and a comprehensive list of funding mechanisms for capital facility needs. The Appendix also provides a list of needed improvements and anticipated funding levels and sources. Beyond these improvements, **no other gaps are indicated**.

Redmond

The Redmond 2030 Comprehensive Plan was adopted in December 2011. The City of Redmond provides water service to most areas within the City limits. Water is sourced from City wells and the Cascade Water Alliance (CWA). Redmond's well system draws from a shallow aquifer which is **susceptible to contamination**, especially as urbanization of the Aquifer Recharge zone continues. The City has implemented a Wellhead Protection Program to preserve water quality, in addition to implementing conservation measures to decrease demand for a new water supply.

A majority of Redmond is served by a sanitary sewer, however, **some areas still have on-site disposal** such as septic tank systems. King County provides wastewater treatment through the Brightwater facility which has sufficient capacity to meet Redmond's future needs. Most of the **proposed annexation areas lack sewer**. The City manages most stormwater facilities, although there are also some private facilities.

Sammamish

The City of Sammamish's Comprehensive Plan was updated in 2015. The Capital Facilities Element does not contain an inventory of capital facilities but does detail the required levels of service for each type of facility. **No gaps in service provision** are indicated in the Element. Additional background information is contained in another section of the Comprehensive Plan, including an inventory and forecast of future needs. This section identifies

needed improvements to parks, stormwater facilities, transportation facilities, and water and sewer facilities. These capital improvements are **not anticipated to hinder growth** or preclude the City from reaching the buildout envisioned in the Land Use Element.

Additional Comment from City of Sammamish, April 2021:

While the City's 2015 Comprehensive Plan did not include any gaps in service provision, the City's work with service providers as part of the 2021 Urban Growth Capacity Report pointed to several infrastructure gaps that could affect development of property to the full capacity allowed under City of Sammamish zoning. Some of these will be addressed by planned public improvements and/or will be made at the expense of developers. In many cases the effects of reported or identified gaps are difficult to pinpoint on specific properties. If left unaddressed, they could affect the desirability of developing in Sammamish, but the costs and environmental consequences of filling these gaps will also be factors in the decisions of citizens and developers to address them.

Sewer – A significant service capacity gap was identified related to wastewater/sewer in the north portion of the Sammamish Plateau Water service area due to the delay of necessary County regional infrastructure delivery (North Diversion). This capacity gap reduced Sammamish's land capacity by 62% for commercial/mixed use zones and 42% for residential zones. In addition to these capacity gaps, there were a few areas identified where a Lift Station would need to be constructed in order for sewer to become available which would require a capital investment of approximately a million dollars. There were also a few areas that would require a Critical Sewer Link, with multiple easement acquisitions needed as well as difficult construction. As such, the City felt it was unlikely that these areas would be redeveloped during the next planning period.

Traffic - There are several areas where concurrency requirements would trigger the need for additional infrastructure, consistent with the City's Transportation Improvements Program. With such improvements, most parcels could be developed to their zoned capacity. As the City updates its concurrency program to include segments and corridors, they expect to have transportation-related constraints along the two main corridors until funding for improvement is secured. There are also some parcels that could not be developed to their full zoned capacity without access improvements.

Schools - School districts serving the City indicated that most of their facilities in Sammamish are at or over base capacity and have limited capacity for expansion. Even with planned and funded capacity improvements some schools are projected to reach critical capacity within 10 years. While the City coordinates closely with the school districts on data

sharing, forecasting and reviewing Capital Facilities Plans, there are a limited number of vacant parcels in the city large enough to accommodate new schools. This means that building additional capacity in the future will be expensive and could involve using land zoned for other purposes. The costs of adding schools could affect future school tax levies, and overcrowding could affect the desirability of schools in the future.

Beaux Arts Village

The Town of Beaux Arts Village's Comprehensive Plan was **last updated in 2015**. The capital facilities element notes that urban facilities and services are in place and **there are adequate water, sewage and drainage systems to meet the foreseeable needs of a stable population**. The Town's water supply comes from a well within its limits. The Town operates the well and maintains the water delivery system. The City of Bellevue provides sewer service to all Beaux Arts residences. The Town manages and maintains a system of stormwater catch basins, storage and transmittal pipes, and outfalls. No future projects were identified in the Plan. The Transportation element notes that the only local transportation issues relate to road surface maintenance, all addressed in the Town's Capital Improvement Plan.

Clyde Hill

The Clyde Hill Comprehensive Plan was last updated in 2015. Potable water and sanitary sewer service are provided by the City of Bellevue. The Plan states that **all future needs can be accommodated** by the existing systems.

The City owns and maintains a storm drainage system but indicates that as remaining vacant parcels are developed and surface water runoff has increased, **existing underground development has made installation of new stormwater infrastructure more difficult**. The City indicates that a long-term goal is to develop a system able to collect and treat storm water generated by a 10-year average storm event.

While no immediate infrastructure deficiencies were identified in the City's Capital Facilities element, the Plan notes that due to a range of circumstances, there is a **growing gap between operating revenues and expenses** in the City, and that it may be necessary to initiate cuts in services or increases in operating revenues in the future.

Hunts Point

The Hunts Point Comprehensive Plan was last updated in 2015. The City of Bellevue provides both potable water and sanitary sewer service. The Town provides a stormwater system that connects non-shoreline properties to

drainage pipes that discharge to Lake Washington. Properties along the lakeshore have private systems that discharge directly to the Lake.

The Plan **does not identify any water, sewer, or stormwater projec**ts in the six-year plan contained in its capital facilities element.

Medina

The Medina Comprehensive Plan was last updated in 2015. Water and sewer services are provided by the City of Bellevue, and King County maintains a sewage pumping station at the corner of NE 8th Street and 82nd Avenue. Bellevue has **adequate capacity to continue water and sewer service**. Non-potable water used at the golf course is pumped from Lake Washington under a "grandfathered" water use rights agreement with the State Department of Natural Resources.

Medina operates and maintains its own storm drainage system. **A range of deficiencies** have been identified in the system, attributed to poor on-site management of stormwater runoff on individual properties. The City adopted requirements for property owners to implement best management practices to control runoff and to better manage private stormwater facilities. In addition, the **City identified a number of upgrades to the municipal stormwater system** to increase flow capacity of individual sections of the system, recondition some of the open ditches, correct old or undersized lines, and to install pollution control devices (e.g., catch basins, oil separators). Current projects are identified in the annual six-year Capital Improvement Plan.

Yarrow Point

The Comprehensive Plan for the Town of Yarrow Point was adopted in 2015. Potable water service is provided by the City of Bellevue, which **can accommodate Yarrow Point's planned growth**. The sanitary sewer system is also operated by the City of Bellevue. New connections to the sewer main require a right of way permit from the Town and a sewer connection permit from the City of Bellevue.

The Town Stormwater Utility was developed in 2011. A comprehensive stormwater inventory and assessment identified several capital projects necessary to accommodate the Town's full land-use build out, supported in part through property tax, Real Estate Excise Tax and other fees. Five projects identified in the 2015 Capital Improvement Plan totaled $688,000. The Town is exempt from the National Pollution Discharge Elimination Permit System (NPDES) Phase II Permit.

Rural Eastside King County Jurisdictions

Rural Eastside King County jurisdictions are generally located further east and are more geographically separate from other Eastside jurisdictions. All have generally strong growth projections, particularly North Bend, which is projected to grow by nearly 45% by 2040. Each jurisdiction generally provides its own utility services.

Carnation

The City of Carnation's Comprehensive Plan was last updated in 2015. The City owns and operates its water system. Its **water rights and capacity are sufficient** to serve forecasted demand. The City's sewer system was completed in 2008, previously the City was dependent on private septic systems. The sewer system currently has **excess capacity**, with a wastewater treatment plant design to serve a population greater than the project buildout for the City (and currently operating at only 25% of capacity). However, some capital facilities in Carnation appear to have capacity challenges. Specifically, the City has **no public stormwater system** and only two drainage basins. The Plan indicates that "stormwater from impervious surfaces must be infiltrated on-site, which can sometimes be difficult to achieve given localized areas of poorly drained soils and/or seasonal high-water tables."

Duvall

The City of Duvall's Comprehensive Plan was last updated in 2015. The Comprehensive Plan **does not identify any gaps in facility provision** and includes goal and policy language that supports the provision of utilities to support future growth. The City owns and operates its water, sewer, and stormwater systems. It purchases its water from Seattle Public Utilities. Most of the detailed analysis of capacity for each utility is contained in the individual facility and capital improvement plans, rather than the Comprehensive Plan. However, the Comprehensive Plan specifically indicates that the sewer system currently has **capacity to serve 9,000 residents, with expansion capacity up to 13,000 residents**.

North Bend

The City of North Bend's Comprehensive Plan was last updated in 2015. The Plan indicates that about **34% of the City's water pipe is nearing the end of its useful life,** and the City served by different water suppliers in its eastern and western areas. It also identifies several near-term and high-priority investments in the City's water and sewer systems, including expansion of the wastewater treatment plant and the resolution of water supply issues in Sallal. The Plan also indicates that flooding may occur due to several factors, including **"inadequate storm drain infrastructure in certain areas"**. No other capital facilities gaps are indicated, including to police, fire, school and other municipal facilities.

Skykomish

The most recent Skykomish Comprehensive Plan was completed in 2015. The Town owns, maintains, and operates its own water distribution system. The Comprehensive Water Plan for the Town was adopted in 1993, and the Town has responded to the new laws and regulations to the best of its abilities, using grants and loans to provide maintenance and upgrades to the system. Any updates to the plan made since 1993 have not been reviewed or approved by the County or state.

The Town of Skykomish provides municipal water service through two wells located east of town. The water system was originally constructed in the early 1900s, however the town has continued to upgrade the system over the years. Water quality levels, fire flow, and storage facilities are **all adequate at this time**, however a 1993 Water Comprehensive Plan identified numerous improvements and service upgrades that were necessary. Funding has been identified for some of the needed upgrades, and some projects have been completed since 1993.

The General Sewer and Facilities Plan prepared for the Town in 2007 identified a strategy for developing a centralized wastewater collection, treatment, and disposal system that would replace the substandard septic systems used in Skykomish. That **system was planned to be complete** in 2015.

The Skykomish Stormwater Management Plan was adopted in 2014. The **town's system has nearly doubled since 2006**, and has benefitted greatly by the BNSF cleanup, the design of the Town's sewer system, and the Maloney Creek Rehabilitation project. Funding to maintain the system has not changed over the years, and while the Plan identified financing alternatives, there is **no dedicated fund to cover basic operation and maintenance expenses**.

Snoqualmie

The City of Snoqualmie's Comprehensive Plan was updated in 2014. The plan indicates the following needs, based on anticipated 2010-2032 population growth and a more immediate six-year growth forecast:

- Satellite fire station if areas of the UGA are annexed into the City
- Water distribution pipe (about 10% of system) **nearing the end of its useful life**, particularly in the Canyon Springs area
- Energy efficiency and other upgrades to the sewer system, though **no expansions due to capacity constraints** are anticipated
- Improvements to stormwater infrastructure in older City areas, where infrastructure is less robust, with older pipes, and some sections lacking stormwater conveyance

Central King County Jurisdictions

Central King County is home to two cities of over 100,000 residents, and several midsize jurisdictions that are growing rapidly. While some of its cities own their utility services, there is a high level of utility district overlap between cities, even those with their own services. There is also a higher number of utility districts active in this area.

Burien

Burien's capital facilities element was last updated in 2015. Its water is provided by Seattle; King County Water Districts 20, 125, and 40; and the Highline Water District. Water supply is **currently sufficient**, though some improvements are required to improve fire flow. All of these districts purchase water from Seattle Public Utilities. The majority of Burien's sewer service is provided by the Southwest Suburban Sewer System, with other areas served by the Midway Sewer District and Rainier Vista/Val Vue Sewer District. The City has experienced some stormwater challenges in its Salmon Creek basin. The area is almost fully developed, and has experienced erosion and pollution tied to undetained runoff and lack of treatment in some areas.

The City's utilities are provided by utility districts with **extensions and improvements funded by users and local improvement districts**. As a result, to the extent there are utility gaps specific to developable sites, they depend on market conditions to justify extension costs.

Covington

Covington's capital facilities and utilities elements were last updated in 2016. The City's water is provided by the Covington Water District, King County Water District 111, and Ham Water Company. Sewer is provided by Soos Creek Water and Sewer District. **District 111 has minimal capacity for new growth compared to other providers**, but only serves a limited number of properties. Soos Creek has identified capital projects within City limits, but it is not clear if these projects could "unlock" capacity. The element has identified a $**76.4 million funding gap for parks, stormwater, and transportation**. The land use plan may need to be revisited if no new funding sources are identified and LOS standards are not revised.

Des Moines

The Des Moines 2035 Comprehensive Plan was adopted in 2015. Potable water and sanitary sewer service are provided to the city by water and sewer districts (Water: King County Water District 54, Highline Water District, and Lakehaven Utility District; and sewer: Midway, Southwest Suburban, and Lakewood Utility Districts). A **portion of the City is still served by**

septic systems, although future development is required to provide sanitary service.

The City provides stormwater management and requires new development to install onsite stormwater detention and treatment. No specific projects are identified in the Comprehensive Plan.

Kent

Kent's capital facilities element was last updated in 2015. **No infrastructure gaps** were identified. The City's municipal water system does not cover the entire incorporated area. Areas outside the system boundary are served by Water District 111, the Soos Creek District, and the City of Renton. There are several new streets planned which could enhance development potential.

Maple Valley

The City of Maple Valley Comprehensive plan was adopted in 2015. Potable water is provided by **two independent water districts**: the Covington Water District and the Cedar River Water and Sewer District, **plus one Group-A private water system**, Cherokee Bay Community Club, Inc. Both the Covington Water District and the Cedar River Water and Sewer District are seeking to update their intertie and partnership agreements, and in 2015, the Covington Water District identified $41.3 million dollars in projects to upgrade and maintain their facilities. They anticipate **only moderate water system improvements** within the ten-year planning horizon of the Comprehensive Plan.

Most of the City's sewer service is provided by the Soos Creek Water and Sewer District (SCWSD). The Plan prioritized $2.6 million in repairs to aging sewers and mains, some of which date back to the 1950s. **Annexing rural areas in the future could cause a significant impact** on the ability of the SCWSD to meet demand (e.g., through the County's 4-to-1 program that converts adjacent rural lands to urban).

The City of Maple Valley manages the majority of the City's stormwater system, which comprises catch basins, manholes, pipes, ditches, infiltration tanks, detention/retention vaults, and detention/retention ponds. The City continues to identify projects to resolve **chronic stormwater problems**, including areas where there is ongoing recurrent flooding.

Normandy Park

The Normandy Park Comprehensive Plan was adopted in 2016. Water service is provided by three separate large water districts: Highline Water District, Water District 49, and Water District 54. Service is **adequate for**

current needs and capable of responding to anticipated growth. At the time of the City's Comprehensive Plan development, the Highline Water District Capital Improvement Plan identified one project to replace old Asbestos-Concrete water mains, in part, to reduce the potential for water line breaks.

The City does not own or maintain any sanitary sewer system components. Sanitary sewer conveyance services are provided by the Southwest Suburban Sewer District (SWSSD) and the Midway Sewer District. Treatment from both these systems is treated by the Miller Creek Wastewater Treatment Plant (WWTP) in the City. The latest SWSSD plan was developed in 2014, and Midway's latest plan was developed in 2008. These plans indicate that the **current system has sufficient capacity** to accommodate forecasted growth.

A portion of the city, estimated to include 459 persons, **does not receive sewer service**. The Capital Facilities Element notes that it is a priority to provide service in this area, either through expansion of sewer district boundaries, or building of infrastructure and reaching agreement with one of the districts about its construction and maintenance. Capital projects identified by the two districts focus on increasing capacity of the conveyance system, but it is noted that the **proposed improvements may be unrelated to growth** in Normandy Park.

The City has adopted a current Stormwater Management Plan (SWMP). The City is coordinating with surrounding jurisdictions to evaluate surface water management for two contiguous basins, and beyond projects identified for 2015 and 2016, had not identified any new stormwater facilities or projects for 2022-2035 (as of the 2016 Comprehensive Plan adoption date).

Renton

Renton's capital facilities and utilities elements were last updated in 2015. The City provides water, wastewater, and surface water services to the City and some additional areas outside its boundaries. Some **recently annexed areas are currently served by other utility providers**, particularly in the southeast portion of the City. Additional water providers active in Renton are the Soos Creek Water and Sewer District, Cedar River Water and Sewer District, King County Water District 90, and the Coal Creek Utility District.

The City provides water to a 16 square-mile area. Of the City's water, 95% comes from City water sources and 5% from an agreement with Seattle Public Facilities to serve Boeing facilities. The Element states that future infrastructure projects developed to accommodate growth are identified in the Water System Plan Update.

Much of the City's wastewater infrastructure is **reaching the end of its useful life**. City models do not indicate any current capacity deficiencies, but **capacity may be an issue at various locations closer to 2030**.

SeaTac

The SeaTac Comprehensive Plan 2035 was adopted in 2015. Five water districts provide service to SeaTac: Sea-Tac Airport Water System; King County Water District #125; King County Water District #20; King County Water District #49; and Highline Water District #75.

The Plan indicates that the availability of water may be a concern in the future. Since water districts serving SeaTac have historically obtained their water largely from Seattle Public Utilities, the population and employment **growth anticipated in Seattl**e over the next 20 years will affect their continued ability to supply water. This future is further complicated by the impacts that climate change is likely to have as snowpack and warmer temperatures will likely mean drier summers and more stress on water resources. SeaTac has adopted a policy to work with water districts to ensure that other water sources are developed to address future water needs.

Four sewer districts provide service to SeaTac: Valley View Sewer District; Midway Sewer District; Southwest Suburban Sewer District; and Kent Sewer District. In addition, some developed areas of the City are **not connected to sanitary sewers**. Sewer treatment is provided through the SeaTac Airport, the Southwest Suburban Sewer District, and King County's secondary wastewater treatment facilities in Renton. Historically, the City has not required connection to sanitary sewer service even when it is available, although adopted policy requires new development to connect when service is available within 300 feet.

The City indicated that being served by multiple water and sewer districts **complicates interjurisdictional coordination and the ability to assess system capacity** in terms of forecast population and employment growth.

SeaTac owns and operates a surface water utility. The City has adopted a 2013 Surface Water Utility Plan, and a 2012 Stormwater Management Plan. The Comprehensive Plan notes that City's stormwater infrastructure is aging, with **some sections well beyond their expected lifespan**. The Surface Water Utility is evaluating this infrastructure with the goal of repairing or replacing it as appropriate.

Tukwila

The Tukwila Comprehensive Plan was adopted in 2015. Slightly more than 50 percent of Tukwila is served by the City's water system. The remainder is served by the King County Water Districts #125 and #20, Highline Water

District, the City of Seattle, and the City of Renton. The City purchases its water from the Cascade Water Alliance under a contract through the year 2064. Cascade's current primary source of water is through a contract with Seattle. Tukwila's Comprehensive Water Plan (2015) identifies areas of water supply and distribution deficiency, and the six-year Capital Improvement Plan proposes corrective improvements. A **citywide pipeline replacement program** is planned to extend over a 50-year period.

Similar to water service, slightly more than 50 percent of the City is served by the its sewer utility. The remining providers include the City of Seattle, City of Renton, and Valley View Sewer District, or the area is unserved by sewer. The Tukwila sewer system is exclusively a collector system with no treatment component. King County DNRP Wastewater Treatment Division provides Regional wastewater treatment at the South Treatment Plant in Renton. The 2014 Comprehensive Sewer Plan identifies deficiencies in the system, and corrective improvements are proposed in the six-year Capital Improvement Plan. The plan notes that, in order to provide infrastructure in the unserved portions of the City, **additional revenue is needed to extend service** to these areas.

Tukwila's surface water drainage system consists of both drainage improvements, public and private, and natural drainage. Except for a small area in the Ryan Way neighborhood, drainage is ultimately to the Green/Duwamish River. The 2013 Surface Water Comprehensive Plan evaluates the current inventory of existing facilities and identifies deficiencies and planned improvements. A range of surface water issues (**drainage, water quality, and aquatic habitat**) were identified and prioritized, and proposed improvements are included in the City's Six-Year Capital Improvement Program.

South King County Jurisdictions

South King County jurisdictions are generally less populous compared to Central King County, though Federal Way is projected to surpass 100,000 residents by 2040. Some communities are growing rapidly, particularly Black Diamond, which is projected to grow by 57%. While some of its cities own their utility services, there is a high level of utility district overlap between cities, even those with their own services. Several communities are served by Tacoma Public Utilities.

Algona

The Infrastructure and Public Services and Transportation elements of the Algona Comprehensive Plan were **last updated in 2015**. The plan noted that existing services in Algona fall within **acceptable levels of service**

and that future development projected through 2035 will be adequately served provided a systematic approach to facility maintenance is employed.

The City has an interlocal agreement with Auburn for water service and has identified **2.5 million dollars in needed reservoir and water main projects**. The City owns and maintains the local collection system for the sewer system, and the trunk lines and treatment facility are owned by King County Metro. The City bills customers for King County charges, as well as for local maintenance and operation costs. The County trunk line has capacity to 2035. Facility improvements are addressed in Metro's Capital Improvement Program

The City's 2010 stormwater documents identified the need to increase stormwater pipe sizes to 36" in several areas to better handle storm flows, as well as a need for drainage swales sized to address a 25-year/24-hour storm events, to be provided by development.

Auburn

Auburn's capital facilities element was **last updated in 2015**. The Element describes currently utility service but does not identify specific gaps or planned projects. The City provides **water, sewer, and stormwater service** to its limits and several external areas. The City's watershed sources are **supplemented by wells** and **two connections to Tacoma Public Utilities'** regional water system. There are **significant areas in the sewer service area which are currently on septic**, with plans to expand service in the Comprehensive Sewer Plan.

Black Diamond

The City of Black Diamond's Comprehensive Plan was **adopted in 2019**. The City provides water to most of its limits, while the Covington Water District serves its northeast corner. City water is sourced from springs which have **adequate supply** to serve growth, though the City has long term concerns about impacts to **water quality and reliability** due to erosion and steep slopes. It is working to address these concerns while also seeking a supplementary water source. The City otherwise has **sufficient water rights to serve future growth**. System infrastructure improvements will be required to accommodate growth, outlined in the City's Capital Improvement Plan.

Similar to water, the City serves most of its limits with sewer, while the northeast corner is served by the Soos Creek Sewer District. The sewer system must grow to accommodate significant growth anticipated in two planned developments, but these **improvements have been addressed with development agreements**. The Plan does not identify gaps related to stormwater, and reports no major flooding problems. The current Capital

Improvement Plan (2019-2024) identifies funded improvements for all City-operated utilities.

Enumclaw

Enumclaw's capital facilities element was last updated in 2015. The City owns and operates its water system, including its water sources. The City's sewer system requires **improvements to accommodate future capacity**, but the planned timing of these improvements is not noted. While the City has a stormwater system, it **does not currently have a stormwater utility to fund repair and maintenance of that system**. No gaps were otherwise noted for water or stormwater. There are several new roads planned which could enhance development potential in part of the City's unincorporated UGA.

Federal Way

Federal Way's Comprehensive Plan was last updated in 2015. Most of Federal Way's water and sewer service is provided by the Lakehaven Utility District. Small parts of the City receive water from Tacoma Public Utilities, Highline Water District, and the City of Milton. For sewer, small areas are served by the Midway Sewer District, Metro/King County, Pierce County, and the City of Tacoma. Lakehaven Utility District has sufficient resources to fund its capital projects along with current operations.

Milton

The majority of Milton's potable water supply is provided through **six City groundwater wells** located in the City's service area. Existing interties with the Lakehaven Utility District and an agreement with the Mt. View-Edgewood Water Company can provide fire flow.

Milton has **sufficient water rights** available to serve future projected populations, however **aquifer constraints** prevent the City from being able to provide that volume. The City's wells are operated at a volume output level at or near aquifer capacity production limits. Projected maximum day demands are **likely to exceed well and aquifer capacity by 2022**. The City will need to develop additional source capacity before this time. Coordination with Lakehaven Utility District and the Mt. View-Edgewood Water Company may help augment supply if needed.

The majority of Milton's sanitary sewer service is provided by Pierce County Public Works and Utilities, with small areas served by the Lakehaven Utility District, and septic systems. Over the next 20 years, it is anticipated that **improvements will be needed to the conveyance system in order to meet demand**, especially in the Hylebos area. Milton wastewater is treated at the Tacoma Central Wastewater Treatment Plant treats wastewater from

the City. Capacity at this facility is adequate to manage future needs, however commercial and industrial uses would be required to comply with industrial pretreatment and prohibited discharges regulations of the city's two wastewater utilities.

The City of Milton operates a small municipal separated storm sewer system. The City **routinely experiences flooding** during high flow events, most notably in the Hylebos Creek area. To address this, the City has purchased flood prone properties, and has identified projects to improve aging facilities and open channels that are better managed in pipes.

Pacific

Pacific's Comprehensive Plan was last updated in 2015, and its capital facilities element was based on information from the 2010 Sanitary Sewer Plan and the 2009 Water System Plan. The capital facilities element indicates that the City's potable water distribution system consists of **aging and undersized asbestos cement pipe**, buried at shallow levels now considered nonstandard; these conditions are slowly being remedied by the City. Sanitary sewer service and treatment is provided by King County Metro downstream from the main pump stations. The element notes that **industrial and commercial users may require higher levels of service** than currently provided. The element notes that **new sanitary facilities will be needed** to provide service to several infill sub-basins in areas along SR 167 and Valley West Highway

The City of Pacific's storm drainage system is challenged by topography, a high ground water table, and low soil permeability, which have created **drainage issues**, especially in the winter months. To avoid burdening City infrastructure, the City requires new development to incorporate low impact development approaches, on-site storm water management, and other drainage management techniques.

Appendix B. Infrastructure Tiering

This framework provides a system of assigning tiers to sites for each essential infrastructure category. (Water, sewer, stormwater, and transportation.). The intent is to filter buildable sites to identify only those at risk of not being developable during the planning period due to infrastructure gaps. Once identified, cities should review the sites to determine which ones should be removed from the buildable land supply and document their rationale.

For commercial and industrial sites, including larger multifamily developments, the bar for infrastructure capacity can be higher. **Appendix C** offers a more technical assessment, in the event that this process is not sufficient.

Infrastructure Tiers

A. Infrastructure exists and has the capacity to accommodate planned development.
   - Requires affirmation from local public works departments and utility districts, as applicable

B. Infrastructure does not currently exist, but plans to add necessary improvements exist and funding is identified.
   - Requires affirmation from local public works departments and utility districts, as applicable
   - Requires affirmation from finance departments

C. Infrastructure does not currently exist, but plans to add necessary improvements exist. Funding is uncertain.

D. Infrastructure does not currently exist. No plans have been adopted to add necessary improvements.

Interpreting Tiers

If a site ranks A-B in all categories, it is likely to be available for development within the planning period. If a site has any C rankings, the city should evaluate whether the funding uncertainties are likely to be resolved during the planning period. If they are not, an infrastructure gap could exist. If funding is not likely to be resolved for an extended period, capacity assumptions for the site should reflect development delays. If a site is ranked D in any category, an infrastructure gap is likely. Unless there are likely scenarios under which the gap could be resolved during the planning period, sites with D rankings should be removed from the developable land supply.

Appendix C. Advanced Infrastructure Tiers

Some uses, such as large industrial and commercial developments, will have more substantial infrastructure requirements than others. When a potential infrastructure gap has been identified in these cases, a more detailed review may be warranted. This section describes suggested standards for major industrial and commercial development. If a site ranks A-B in all categories, it is likely to be available for development within the planning period.

If a site is ranked C in any category, the City should evaluate whether a gap exists that will limit development during the planning period. This evaluation process can begin with identifying any existing plans and funding to address the gap, as outlined in **Appendix B.**

Sewer Tier Standards

- **A:** ≥ 8" main located adjacent to or stubbed to site or within ~200 ft of site with depth allowing gravity flow. No downstream pipe/treatment capacity issues.
- **B:** ≥ 8" main located within ~1,000 ft, with no downstream deficiencies. Private lift station may be needed.
- **C:** No nearby pipe and/or significant lift station and force main needed. Downstream deficiencies may be present.

Water Tier Standards

- **A:** ≥ 12" main adjacent or within ~200 ft, preferred loop system existing. No low-pressure issues.
- **B:** ≥ 8" adjacent, or ≥ 12" main within ~1,000 ft. No pump station or pressure/treatment deficiencies.
- **C:** No nearby pipe. System deficiencies present.

Stormwater Tier Standards

- **A:** ≥ 12" public main adjacent or within ~200 ft, or ability to discharge to managed surface waters or on-site infiltration. No capacity issues.
- **B:** ≥ 12" main within ~500 ft; possible outfall to nearby regulated surface channel or wetland, or limited on-site infiltration capacity.
- **C:** No adjacent public storm, no available discharge point to surface water, or no on-site infiltration capacity.

Transportation Tier Standards

Transportation infrastructure is evaluated based on two metrics: local access and system mobility.

Local Access

- **GOOD:** Property has direct connection and no off-site improvements or minor frontage improvements are necessary.
- **POOR:** Property does not have a direct connection and/or significant improvements are necessary to gain local access.

Transportation System Mobility

- **GOOD:** Mobility of adjacent system has a PM peak two-hour volume-to-capacity ratio (v/c) ≤ 0.99 (an approximate Level of Service [LOS] F or better).
- **POOR:** Mobility of adjacent system has a PM peak hour v/c ratio > 0.99 (an approximate LOS F or worse).

Combined Transportation Grade

- **A:** Highway Access and Transportation System Mobility are good.
- **B:** Highway Access is good and Transportation System Mobility is poor or highway access is poor and transportation system mobility is good.
- **C:** Highway Access and Transportation System Mobility are poor.

Appendix H: Documentation of Market Factor and Infrastructure Assumptions

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Market Factor

This appendix documents specific assumptions on market factors used to calculate capacity and infrastructure gaps uncovered through the identification of land supply for development. The market factor table includes only jurisdictions and zones where the selected market factor deviates from the range suggested by the guidance in Appendix E. The infrastructure assumptions table includes identified infrastructure gaps by jurisdiction and service provider, as well as planned resolutions where known. Identified infrastructure gaps are intended to demonstrate jurisdictions' due diligence in identifying infrastructure-constrained lands, whether or not the constraint affected development potential.

Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	Auburn	EP	MU	Low	1% - 10%	5%	This zone is no longer mapped
Unincorporated	Auburn PAAs	I	Ind	-	-	8%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Auburn PAAs	R-4	SFR	-	-	15%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Auburn PAAs	R-8	SFR	-	-	20%	Market Factor matches most closely related zone in affiliated city
Metro	Bellevue	EH-A	SFR	Low	1%-14%	0%	There is no land in this zoning category
Metro	Bellevue	EH-B	Ind/Comm	Low	1%-15%	0%	There is no land in this zoning category
Metro	Bellevue	EH-C	Ind/Comm	Low	1%-15%	0%	There is no land in this zoning category
Metro	Bellevue	EH-D	Ind/Comm	Low	1%-15%	15%	This is only 5 parcels in Northeast Bellevue
Unincorporated	Bellevue PAAs	R-1	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Bellevue PAAs	R-4	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Cities and Towns	Black Diamond	B/IP	Comm/Ind	High	21% - 50%	70%	Conversion from mining to other forms of commercial development expected to take a long time.
Cities and Towns	Black Diamond	I	Ind	High	36% - 50%	70%	Uncertainty about the development of this zone. No development currently in industrial parcels.
Cities and Towns	Black Diamond	MDR8	MFR	High	36% - 50%	30%	Most of these parcels developed or have to plans to develop soon.
Unincorporated	Black Diamond PAAs	R-1	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Unincorporated	Black Diamond PAAs	R-4	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Black Diamond PAAs	UR	SFR	-	-	20%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Carnation PAAs	R-4	SFR	-	-	0%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Carnation PAAs	UR	SFR	-	-	0%	Market Factor matches most closely related zone in affiliated city
Cities and Towns	Covington	MHO	MU	Medium	25% - 35%	10%	Avoid negative unit balance; there has been interest in zone with Development Pipeline.
Cities and Towns	Covington	MR	MFR	Medium	25% - 35%	0%	Lakepointe - added as pipeline/has development agreement/infrastructure is going in (Covington Connector).
Cities and Towns	Covington	R-1	SFR	Low	1% - 10%	10%	In range: Constrained, limited development
Cities and Towns	Covington	R-12	MFR	Medium	25% - 35%	0%	Lakepointe - added as pipeline/has development agreement/infrastructure is going in (Covington Connector).
Cities and Towns	Covington	R-4	SFR	Low	1% - 10%	1%	In range: Unlocked area with transportation investments
Cities and Towns	Covington	RCMU	MU	Medium	25% - 35%	0%	Lakepointe - added as pipeline/has development agreement/infrastructure is going in (Covington Connector).
Cities and Towns	Covington	TC	MU	Medium	25% - 35%	20%	Reduce due to investment in Civic Campus, SoCo Park, and developer purchase (Oakpointe).
Unincorporated	Covington PAAs	R-1	SFR	-	-	1%	Market Factor matches most closely related zone in affiliated city
HCT	Des Moines	RS-15,000	SFR	Low	1% - 9%	20%	Med - City understands properties, owners and potential to sell/develop

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Market Factor

Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
HCT	Des Moines	RS-4,000	SFR	Low	1% - 9%	20%	Med - City understands properties, owners and potential to sell/develop
HCT	Des Moines	RS-7,200	SFR	Low	1% - 9%	20%	Med - City understands properties, owners and potential to sell/develop
HCT	Des Moines	RS-8,400	SFR	Low	1% - 9%	20%	Med - City understands properties, owners and potential to sell/develop
HCT	Des Moines	RS-9,600	SFR	Low	1% - 9%	20%	Med - City understands properties, owners and potential to sell/develop
HCT	Des Moines	R-SE	SFR	Low	1% - 9%	20%	Med - City understands properties, owners and potential to sell/develop
HCT	Des Moines	R-SR	SFR	Low	1% - 9%	20%	Med - City understands properties, owners and potential to sell/develop
HCT	Des Moines	W-C North	Comm	Low	1% - 14%	20%	Med - local trends show lower market demand
Cities and Towns	Duvall	LI	Ind	Low	1% - 15%	15%	Only 1 lot left
Cities and Towns	Duvall	MT	MU	High	21% -50%	40%	mostly developed
Cities and Towns	Duvall	MUI	MU	High	21% -50%	50%	economic reality along BRR
Cities and Towns	Duvall	OT	MU	High	21% -50%	50%	Economy of Scale/cost issues / code
Cities and Towns	Duvall	R12	MFR	High	36% - 50%	40%	Most of zone is built out
Cities and Towns	Duvall	R20	MFR	High	36% - 50%	20%	There are 5 adjacent parcels zoned R20 that are yet to develop. It is likely that in the next planning horizon that most parcels will be developed. If one parcel did not develop, that would be 20% of the lots. We believe there is strong probability that all lots will develop in the planning horizon.
Cities and Towns	Duvall	R4	SFR	Low	1% - 10%	5%	Short plats

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Market Factor

Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Cities and Towns	Duvall	R4.5	SFR	Low	1% - 10%	10%	Large lot estates with critical areas
Cities and Towns	Duvall	R6	SFR	Low	1% - 10%	10%	Mostly built-out - some individual infill
Cities and Towns	Duvall	R8	SFR	Low	1% - 10%	5%	area of high development activity/interest
Cities and Towns	Duvall	UT1	MU	High	21% -50%	50%	Economy of Scale/cost issues / code issues
Unincorporated	Duvall PAAs	CB	MU	-	-	50%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Duvall PAAs	R-4	SFR	-	-	5%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Duvall PAAs	UR	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Cities and Towns	Enumclaw	R-4	MU	High	36% - 50%	50%	*Low interest and historical performance in MFR in Enumclaw. 2021 Planning Commision is considering Multi-Famliy Tax Exemption to increase development in MFR. Amrket Factor may change over time.
Unincorporated	Enumclaw PAAs	NB	MU	-	-	50%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Enumclaw PAAs	UR	SFR	-	-	5%	Market Factor matches most closely related zone in affiliated city
HCT	Federal Way PAAs	CB	MU	Low	5% - 15%	15%	same as FW
HCT	Federal Way PAAs	NB	MU	Low	5% - 15%	15%	same as FW
HCT	Federal Way PAAs	O	Comm	Medium	11% - 20%	15%	same as FW

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Market Factor

Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
HCT	Federal Way PAAs	R-1	SFR	Medium	15% - 20%	20%	High end of range for FW. Some adjustment from FW's 18% to reflect that some residential areas of FW are unsewered and this may impact potential rate of development, redevelopment coming forward. Within range applied in Auburn for SFR (15% and 20%) Much lower than proposed range for Pacific (11-40%) Higher than Newcastle (HCT - 14%)
HCT	Federal Way PAAs	R-12	MFR	Low	5% - 15%	10%	High end of range c/f FW (L-5-10% for Core Cities, not 5-15%) to reflect potential for some limited unsewered areas? (Need to check) This may impact potential rate of development, redevelopment coming forward. Market Factor is same as Newcastle (HCT). Suggested range for Pacific (cities and towns) though is High at 36% - 50%. (Is likely redevelopment of MFR in Federal Way more in line with Pacific future MFR development assumptions?)
Core	Issaquah	CBD	MU	Medium	11% - 20%	25%	Recently adopted regulations make it more difficult to develop in the CBD
Core	Issaquah	C-RES	SFR	Low	1% - 14%	25%	Access to these parcels is difficult. In order to build out entire parcels, bridges need to be constructed.
Core	Issaquah	UV-EV	Development Agreement	Medim	11% - 20%	NA	This Development Agreement sunsetted in 2017
Unincorporated	Issaquah PAAs	R-1	SFR	-	-	14%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Issaquah PAAs	R-24	MFR	-	-	15%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Issaquah PAAs	UR	SFR	-	-	12%	Market Factor matches most closely related zone in affiliated city

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	Kent	CC	MU	Medium	11% - 20%	11%	More likely to redevelop in the future, if financial incentives and revised commercial standards.
Core	Kent	CC-MU	MU	Medium	11% - 20%	11%	More likely to redevelop
Core	Kent	CM-1/I1	Comm/Ind	Low	1% -15%	5%	***** Note. Now I1 *****
Core	Kent	CM-2/ CM	Comm/Ind	Low	1% -15%	15%	***** Note. Now only CM ***** Mostly developed with properties unlikely to redevelop.
Core	Kent	DC	MU	Medium	11% - 20%	20%	Small one block (Historic) area of town that is not likely to redevelop without significant investment.
Core	Kent	DCE	MU	Medium	11% - 20%	20%	Downtown, unlimited height, MFTE but has not seen significant development.
Core	Kent	DCE-T	MU	Medium	11% - 20%	20%	Small transitional zone, less likely to see redevelopment.
Core	Kent	GC	MU	Medium	11% - 20%	11%	More likely to redevelop
Core	Kent	GC-MU	MU	Medium	11% - 20%	11%	More likely to redevelop
Core	Kent	M1/ I1	Ind	Low	1% -15%	5%	****** Note, now I1******
Core	Kent	M1-C/ I1	Ind	Low	1% -15%	5%	****** Note, now I1******
Core	Kent	M2/ I2	Ind	Low	1% -15%	5%	****** Note, now I2******
Core	Kent	M3/ I2	Ind	Low	1% -15%	5%	****** Note, now I3******
Core	Kent	MCR	MU	Medium	11% - 20%	11%	Midway, Gracious height limit, MFTE, Sound transit, most likely to see redevelopment
Core	Kent	MHP	SFR	Low	5% - 10%	10%	Mobile home parks require one year notice and other land use designations to be redeveloped. Existing parks are maxed out on density.
Core	Kent	MR-D	MFR	Medium	11% - 20%	15%	Possible increased density after middle housing ordinance
Core	Kent	MR-G	MFR	Medium	11% - 20%	20%	Minimal Redevelopable multifamily left.
Core	Kent	MR-H	MFR	Medium	11% - 20%	20%	Minimal Redevelopable multifamily left.
Core	Kent	MR-M	MFR	Medium	11% - 20%	20%	Minimal Redevelopable multifamily left.
Core	Kent	MR-T12	MFR	Medium	11% - 20%	15%	Possible increased density after middle housing ordinance
Core	Kent	MR-T16	MFR	Medium	11% - 20%	15%	Possible increased density after middle housing ordinance

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	Kent	MTC-1	MU	Medium	11% - 20%	11%	Midway, Gracious height limit, MFTE, Sound transit, most likely to see redevelopment
Core	Kent	MTC-2	MU	Medium	11% - 20%	11%	Midway, Gracious height limit, MFTE, Sound transit, most likely to see redevelopment
Core	Kent	NCC	Comm	High	21% - 50%	50%	Very Minimal NCC land left to redevelop and little vacancy. Requiring full redevelopment.
Core	Kent	SR-1	SFR	Low	1-14%	14%	Lots of large rural properties and critical areas with not a high redevelopment potential. Market Guidance states 1-14% for LOW alignment is acceptable for Core Cities. Assuming 14% of land is not Redevelopable due to hold outs and large lots that are not Redevelopable without tearing down the main home.
Core	Kent	SR-3	SFR	Low	1-14%	14%	Lots of large rural properties and critical areas with not a high redevelopment potential. Market Guidance states 1-14% for LOW alignment is acceptable for Core Cities. Assuming 14% of land is not Redevelopable due to hold outs and large lots that are not Redevelopable without tearing down the main home.
Core	Kent	SR-4.5	SFR	Low	1-14%	10%	Most likely to redevelop and have increased density after middle housing ordinance
Core	Kent	SR-6	SFR	Low	1-14%	10%	Most likely to redevelop and have increased density after middle housing ordinance
Core	Kent	SR-8	SFR	Low	1-14%	5%	Possible increased density after middle housing ordinance, likely less than SR 4.5 and SR 6 due to the smaller minimum lot sizes.
Unincorporated	Kent PAAs	I	Ind	-	-	5%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Kent PAAs	M	Nat Res	-	-	0%	Market Factor matches most closely related zone in affiliated city

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Unincorporated	Kent PAAs	NB	MU	-	-	11%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Kent PAAs	R-1	SFR	-	-	14%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Kent PAAs	R-12	MFR	-	-	15%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Kent PAAs	R-4	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Kent PAAs	R-6	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Kent PAAs	RA-5	SFR	-	-	14%	Market Factor matches most closely related zone in affiliated city
Cities and Towns	Maple Valley	REC	Ind/Comm	High	36% - 50%	20%	We are seeing applications & preapplications for projects in this zone
HCT	Mercer Island	B	Comm	Medium	15% - 25%	18%	Middle of range; little development activity in this zone, but few properties are in this zone.
HCT	Mercer Island	MF-2L	MFR	High	16% - 30%	20%	Little redevelopment in recent years; however, there are periodic inquiries and pre-application meetings regarding redevelopment.
HCT	Mercer Island	R-8.4	SFR	Low	1% - 9%	3%	Middle of range; redevelopment is consistent.
HCT	Mercer Island	TCMF-3	MU	High	26% - 50%	10%	There has been a recent uptick in inquiries, pre-application meetings, and building permits for new development in the TC zones, which staff attribute to the planned opening of the light rail station in 2023. The light rail station is proposed to be adjacent to and within walking distance of the Town Center zone.
Cities and Towns	Milton	RM	SFR	High	41% - 50%	0%	Last few places likely to develop over the next 20 years
Cities and Towns	Milton	RS	SFR	High	41% - 50%	0%	Last few places likely to develop over the next 20 years

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Unincorporated	Milton PAAs	R-4	SFR	-	-	0%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Milton PAAs	R-6	SFR	-	-	0%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Newcastle PAAs	R-1	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Cities and Towns	North Bend	CLDR	SFR	Low	1% - 10%	30%	North Bend saw no CLDR develop in the past 10 years, and there has been little to no interest to date. The combination of lower density with the same infrastructure costs of other residential means redevelopment may not pencil. Also, these properties tend to already be ones with larger omes on larger lots, owners may be less interested to subdivide.
Cities and Towns	North Bend	EP-1	Comm/Ind	High	36% - 50%	25%	Sewer ULID is coming to these lands, increasing interest in properties
Cities and Towns	North Bend	EP-2	Comm/Ind	High	36% - 50%	25%	Large tracts of industrial lands near an interstate are unique for King County
Unincorporated	North Bend PAAs	RA-2.5	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	North Bend PAAs	UR	SFR	-	-	4%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Pacific PAAs	R-4	SFR	-	-	30%	Market Factor matches most closely related zone in affiliated city
Core	Redmond	AP	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Core	Redmond	BC	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Core	Redmond	BP	Comm	Low	1%-10%	5%	Higher demand for office, medium market factor
Core	Redmond	EH	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Core	Redmond	GC	Comm	Low	1%-10%	5%	Higher demand for office, medium market factor
Core	Redmond	I	Ind	Medium	16%-35%	35%	Preserve industrial and lower interest, high market factor

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	Redmond	MDD1	MU	Low	5%-10%	7%	SE Redmond/Station Area, high demand, lower market factor
Core	Redmond	MDD2	MU	Low	5%-10%	7%	SE Redmond/Station Area, high demand, lower market factor
Core	Redmond	MDD3	MU	Low	5%-10%	7%	SE Redmond/Station Area, high demand, lower market factor
Core	Redmond	MDD4	Comm	Low	1%-10%	10%	MDD4: manufcaturing, existing uses, higher market factor
Core	Redmond	MDD5	MU	Low	5%-10%	10%	MDD5: longer time horizon for buildings to turn over, higher market factor
Core	Redmond	MP	Ind	Medium	16%-35%	35%	Preserve manufacturing and lower interest, high market factor
Core	Redmond	OBAT	MU	Low	5%-10%	5%	Overlake more likely to redevelop, lower market factor
Core	Redmond	OT	MU	Low	5%-10%	10%	Historic area, higher market factor
Core	Redmond	OV 1	MU	Low	5%-10%	5%	Overlake more likely to redevelop, lower market factor
Core	Redmond	OV 2	MU	Low	5%-10%	5%	Overlake more likely to redevelop, lower market factor
Core	Redmond	OV 3	MU	Low	5%-10%	5%	Overlake more likely to redevelop, lower market factor
Core	Redmond	OV 4	MU	Low	5%-10%	5%	Overlake more likely to redevelop, lower market factor
Core	Redmond	OV 5	MU	Low	5%-10%	5%	Overlake more likely to redevelop, lower market factor
Core	Redmond	R-1	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	R-12	MFR	Low	5%-10%	7%	Multifamily: interest in redevelopment, medium
Core	Redmond	R-18	MFR	Low	5%-10%	7%	Multifamily: interest in redevelopment, medium
Core	Redmond	R-2	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	R-20	MFR	Low	5%-10%	7%	Multifamily: interest in redevelopment, medium

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	Redmond	R-3	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	R-30	MFR	Low	5%-10%	7%	Multifamily: interest in redevelopment, medium
Core	Redmond	R-4	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	R-5	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	R-6	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	R-8	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	RA-5	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	RIN	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	RVBD	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Core	Redmond	SMT	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Core	Redmond	TR	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Core	Redmond	TSQ	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Core	Redmond	TWNC	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Core	Redmond	UR	SFR	Low	1%-14%	10%	Single family zones less likely to redevelop, higher market factor
Core	Redmond	VV	MU	Low	5%-10%	7%	Downtown, higher demand, lower market factor
Unincorporated	Redmond PAAs	R-1	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Redmond PAAs	R-24	MFR	-	-	7%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Redmond PAAs	R-4	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Redmond PAAs	R-6	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Unincorporated	Redmond PAAs	R-8	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Core	Renton	CA	Comm	Medium	11%-20%	11%	Predominant use is expected to be commercial and office
Core	Renton	CO	Comm	Medium	11%-20%	15%	Predominant use is expected to be commercial and office
Core	Renton	CO (TOD)	MU	High	21%-35%	20%	Expect slightly higher demand over the twenty year horizon than specified in suggested range
Core	Renton	COR	Comm	Medium	11%-20%	15%	High demand already expressed; including multiple entitled applications
Core	Renton	IH	Ind/Comm	Low	1%-15%	30%	Not a lot left; what is built is well utilized; not likely to redevelop
Core	Renton	IL	Ind/Comm	Low	1%-15%	20%	Available properties do not allow warehouse distribution thereby limiting demand
Core	Renton	IM	Ind/Comm	Low	1%-15%	25%	Available properties do not allow warehouse distribution thereby limiting demand
Core	Renton	R-10	MFR	High	21%-35%	20%	Townhomes allowed in zone; expect higher market demand as a result
Core	Renton	R-14	MFR	High	21%-35%	15%	Townhomes allowed in zone; expect higher market demand as a result
Core	Renton	UC	Comm	Medium	11%-20%	15%	Restrictive standards apply to properties for sale; properties do not allow residential
HCT	Renton PAAs	I	Ind	Low	1% - 15%	30%	very little land available
HCT	Renton PAAs	O	Comm	Medium	11% - 20%	10%	only one parcel in this zone
Unincorporated	Sammamish PAAs	R-1	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Sammamish PAAs	R-4	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Sammamish PAAs	RA-5	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Sammamish PAAs	UR	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	SeaTac	AVC (Outside Urban Center)	Ind	High	10% -20%	50%	Parcels in this zoning are controlled by the Port of Seattle. While larger contiguous parcels outside of the flight path are more likely to be develop for lease at higher densities, much of this space has additional restrictions.
Core	SeaTac	AVO	Other	N/A	N/A	100%	This zone is specifically for Port of Seattle operational uses related to the SeaTac International Airport. Due to this use of land is not directly tied to number of jobs or residential units. Much of this land encompassess runways, and other operations areas that are unbuildable or have no direct relationship with job locations.
Core	SeaTac	CB-C	MU	High	21%-35%	50%	This zoning district has several factors creating a perceived higher market factor than the suggested range. These include Airport Related parking lots that remain extremely lucrative with minimal investment, Historic Under Investment tied to airport proximity and overall trends within South King County, Small groups of property owners controlling large amounts of land with conservative development history, long-term land leases of 30-50 years taking up large swatches of land, FAA height restrictions that are based project to project creating development uncertainty, and lack of financial comparables in the immediate area for denser developments.
Core	SeaTac	HDS-OZ	SFR	Medium	15%-20%	20%	Only 9 unit capacity

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	SeaTac	I	Ind	High	36%-50%	10%	There is relatively little vacant or redevelopable industrial land in SeaTac. One potential area has a project in the early stages of development, and another has seen increased interest, in line with regional trends. Desire for industrial land has been perceived as high based on recent inquiries to staff.
Core	SeaTac	MHP	SFR	Medium	15%-20%	100%	We do not expect any MHP developments going forward based on comp plan designations and minimum park sizes for new developments.
Core	SeaTac	NB	Comm	Low	11%-20%	40%	This is a very small number of redevelopable parcels contingent upon future lot consolidations, and is expected to see less redevelopment due to the increased complexity and profitable non-conforming airport parking uses.
Core	SeaTac	O/C/MU	MU	High	21%-35%	35%	Many smaller parcels, and existing single-family would require substantial consolidation.
Core	SeaTac	OCM	MU	High	21%-35%	75%	This represents almost exclusively the single-family areas adj to Cedarbrook Hotel, and behind the Masterpark Garage. Any redevelopment will require substantial consolidation and demo of SF units.
Core	SeaTac	P	Other	N/A	N/A	100%	Parcels zoned "Parks" are anticipated as solely for this purpose and do not anticipate
Core	SeaTac	RBX (North of SR 509 ext)	MU	High	21%-35%	11%	This area contains a large amount of surface parking adjacent to a light rail station, has the potential for high density mixed use and commercial uses and eligiblity for a MFTE should facilitate desirability for redevelopment.

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	SeaTac	RBX (South of SR 509 ext)	Ind	High	36%-50%	40%	A significant consolidation underway in about 1/2 of single-family residential parcels for future project. However, a significant amount of overall redevelopable land area exists within single-family parcels that would require a significant consolidation, of which no efforts to date are known.
Core	SeaTac	T (In Urban Center)	MFR	High	21%-35%	50%	Almost entirely single-family residential parcels. Significant lot consolidation would be required for redevelopment. Staff not aware of any major efforts to do so.
Core	SeaTac	T (Outside Urban Center)	MFR	High	21%-35%	50%	Almost entirely single-family residential parcels. Significant lot consolidation would be required for redevelopment. Staff not aware of any major efforts to do so.
Core	SeaTac	UH-1,800	MFR	High	21%-35%	35%	A decent chunk of redevelopable land in this zone is adjacent to SR 509 extension, will likely limit density slightly.
Core	SeaTac	UH-900	MFR	High	21%-35%	35%	Segale (steep slope area), Angle Lake MHP and S. IB (historically low-density development area) are primary areas of redevelopment capacity.
Core	SeaTac	UH-UCR	MFR	High	21%-35%	50%	Much the redevelopable land in this zone exists in single-family parcels on lots ~10,000 sqft making redevelopment at expected density difficult.
Core	SeaTac	UL-15,000	SFR	Medium	15%-20%	40%	40% of parcels do not yet have immediate sewer access.

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Core	SeaTac	UL-7,200	SFR	Medium	15%-20%	60%	About 20% of original capacity was removed based on minimum lot sizes (see UL, ShortPlatExercise Spreadsheet), not distinguishing between left over squarefootage in potential short plats vs. land area that would be contiguous and usuable for additional SF parcels. Market Factor was also increased based on likelihood of existing home placement requiring a teardown to complete short plat to max number of lots.
Core	SeaTac	UL-9,600	SFR	Medium	15%-20%	60%	12 of 22 potential lots don't have immediate sewer access.
Metro	Seattle	C (commercial)	MU	Low	5%-10%	10% - 40%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Metro	Seattle	D (downtown)	MU	Low	5%-10%	10% - 40%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Metro	Seattle	HR (highrise multi-family)	MF	Low	5%-10%	5% - 25%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Metro	Seattle	I (industrial)	IND	Low	1%-15%	25%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Metro	Seattle	L (lowrise multi-family)	MF	Low	5%-10%	10% - 40%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev

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Regional Geography	Jurisdiction	Zone	Zone Type	Suggested Market Factor (Description)	Suggested Market Factor (Range)	Selected Market Factor	Rationale for selected market factor, Notes
Metro	Seattle	MR (midrise multi-family)	MF	Low	5%-10%	5% - 25%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Metro	Seattle	NC (neighborhood commercial)	MU	Low	5%-10%	10% - 40%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Metro	Seattle	RSL (residential small lot)	SF	Low	1%-14%	10% - 40%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Metro	Seattle	SF (single-family)	SF	Low	1%-14%	20% - 35%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Metro	Seattle	SM (seattle mixed)	MU	Low	5%-10%	10% - 40%	varies across 10 maket areas for 5 product types with each zone assigned a single type; applied to the capacity, not the land; no differentiation between vacant and redev
Cities and Towns	Snoqualmie	Business Office (BO)	Comm	Medium	11% - 20%	15%	Slow turnover of mostly existing homes
Cities and Towns	Snoqualmie	Business Retail 1 (BR)	Comm	Medium	11% - 20%	25%	We've not seen any redevelopment in the last 20 years
Cities and Towns	Snoqualmie	Constrained Residential	SFR	Low	1% - 10%	75%	Significant vacant land in floodway
Cities and Towns	Snoqualmie	Office Park (OP)	Comm	Medium	11% - 20%	45%	Owned by Snoqualmie Tribe, significant redevelopment not anticipated
Cities and Towns	Snoqualmie	Planned Commercial/ Industrial (PCI)	Comm/Ind	High	36% - 50%	40%	Per DEIS

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Cities and Towns	Snoqualmie	R-1-10	SFR	Low	1% - 10%	35%	Accessibility issues on only parcel with redevelopment potential. Other parts of zone contain new homes
Unincorporated	Snoqualmie PAAs	RA-10	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Snoqualmie PAAs	RA-5	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Snoqualmie PAAs	UR	SFR	-	-	10%	Market Factor matches most closely related zone in affiliated city
Unincorporated	Tukwila PAAs	R-1	SFR	-	-	20%	Market Factor matches most closely related zone in affiliated city
HCT	Woodinville	CBD (Central Business District)	MU	Low	5% - 10%	1%	Lots of future development expected in this zone. All vacant properties currently under development.
HCT	Woodinville	GB (General Business)	Comm	Low	1% - 14%	20%	Lots of critical areas and barriers to development. Minimal turnover of properties in the last 20 years. Lots of industrial development currently, little interest in conversion to commercial.
HCT	Woodinville	O (Office)	Comm	Low	1% - 14%	50%	Already very built out. Remaining parcel have barriers to development
HCT	Woodinville	P/I (Public Institutional)	Other	Low	N/A	N/A	Fire department might move, may become vacant over theplanning period
HCT	Woodinville	R-18	MFR	Low	5% - 10%	5%	Built out
HCT	Woodinville	R-24	MFR	Low	5% - 10%	80%	Built out
HCT	Woodinville	R-48	MFR	Low	5% - 10%	100%	Built out, entriely senior housingg development
Cities and Towns	Yarrow Point	R12	SFR	Low	1% - 10%	0%	All land is expected to be developed by 2044
Cities and Towns	Yarrow Point	R15	SFR	Low	1% - 10%	0%	All land is expected to be developed by 2044

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Bellevue	City of Bellevue	Sewer	Sewer line capacity for potential growth anticipated in Wilburton subarea	Sewer capacity improvements for future growth CIP projects Wilburton sewer capacity upgrade	No	
Bellevue	City of Bellevue	Sewer	Pump station, pipeline, monitoring and minor projects for renewal and replacement throughout the city	Sewer infrastructure renewal and replacement CIP projects - Sewer Pump Station Improvements - Midlakes Pump Station - Sewer System Pipeline Major Repairs - Lake Washington Sewer Lake Line Assessment Program - Sewer System Pipeline Replacement - Lakeline Sewer Replacement - Minor (Small) Capital Improvement Projects - I&I Investigations and Flow Monitoring	No	
Bellevue	City of Bellevue	Sewer	Portions of the Bridle Trails and Lakemont neighborhoods on septic.	Areas are currently designated for low density residential allowing for development to occur by septic. Only if a parcel is located within 200 feet of a sewer main is parcel required to hook up to the sewer system.	No	
Bellevue	City of Bellevue	Water	Water storage, supply and facilities for future growth in West Operating Area and BelRed	Water capacity improvements for future growth CIP projects - Increase Drinking Water Storage Availability for West Operating Area - New Water Inlet Station - Water Facilities for NE Spring Blvd Multi Modal Corridor - NE 40th and Enatai Inlet Water Supply Station Improvements	No	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Bellevue	City of Bellevue	Water	Water infrastructure renewal and replacement throughout the city	Water infrastructure renewal and replacement CIP projects - Small Diameter Water Main Replacement - Pressure Reducing Valve (PRV) Rehabilitation - Minor (Small) Water Capital Improvement Projects - Fire Hydrant Standardization - Reservoir Rehabilitation or Replacement - Water Pump Station Rehabilitation or Replacement - Replacement of Large Commercial Water Meters - Water Service Line & Saddle Replacement Program	No	
Bellevue	City of Bellevue	Stormwater	Stormwater infrastructure renewal and replacement	Stormwater infrastructure renewal and replacement CIP projects - Minor (Small) Storm Capital Improvement Projects - Storm System Conveyance Repairs and Replacement - Replace Coal Creek Pkwy Culvert at Coal Creek - Replace NE 8th St Culvert at Kelsey Creek - Stormwater Video Inspection Enhancement	No	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Bellevue	City of Bellevue	Stormwater	Stormwater projects for environmental preservation throughout the city with specific projects around Coal Creek and Kelsey Creek	Stormwater infrastructure for environmental preservation CIP projects - Fish Passage Improvement Program - Stream Channel Modification Program - Flood Control Program - Stream Restoration for Mobility & Infrastructure Initiative - Lower Coal Creek Flood Hazard Reduction Phase 1 - Storm Water Quality Retrofit in Kelsey Creek	No	
Bellevue	City of Bellevue	Transportation	Level of Service standards are projected to fail in three mobility management areas (2, 6 and 9) in the future if no adjustments are made to capacity, transportation demand managment or to how levels of transportation services are measured.	The Mobility Implementation Plan is getting underway in 2020 to explore best practices for integration of multi-modal planning. Adoption is anticipated in 2021. Adjustments to planning along with CIP investments anticipated to accommodate future capcity for growth.	No	
Black Diamond	City of Black Diamond	Water	Supplemental water source currently being sought	System improvements to accommodate growth	Only where designated restricted	
Black Diamond	Covington Water District	Water	Supplemental water source currently being sought	System improvements to accommodate growth	Only where designated restricted	
Black Diamond	Soos Creek Sewer District	Sewer	Capacity for 2 future planned developments	System improvements to accommodate growth	Only where designated restricted	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Black Diamond	City of Black Diamond	Stormwater	None	None	No	
Burien	Southwest Suburban Sewer District	Sewer	Gaps is distances to sewer connections	Developer extensions	Yes	
Burien	Valley View Sewer District	Sewer	Gaps is distances to sewer connections	Developer extensions	Yes	
Burien	Midway Sewer District	Sewer	None identified	None identified	None identified	
Burien	Water District 20	Water	None identified	Water main improvement on 1st Avenue South under construction	None identified	
Burien	Water District 49	Water	None identified	Reservoir under construction	None identified	
Burien	Water District 125	Water	None identified	None identified	Very minimal land in Burien	
Burien	Highline Water District	Water	None identified	None identified	None identified	
Burien	Seattle Public Utilities	Water	None identified	None identified	Area is genrally built out	
Burien	City of Burien Stormwater	Storm Water	None identified	Captical Facilities Plan	None identified	
Covington	Covington Water District	Water	None identified	see attached summary document and maps	No	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Covington	Lake Meridian Water District (Dist 111)	Water	None identified	see attached summary document and maps	No	
Covington	City of Covington	Stormwater	None identified	see attached summary document and maps	No	
Covington	Multiple Jurisdictions	Transportation	None identified	see attached summary document and maps	No	
Covington	Soos Creek Sewer and Water	Sewer	Some parcels not within 200ft of a sewer line also have on-site septic, and could need upgrading should redevelopment occur, however conversations with Covington Planning Staff indicate that this is unlikely to be a constraint for development in these areas.	see attached summary document and maps	No	
Duvall	City of Duvall - Public Works	Sewer	WWTP Capacity	Fourth treatment train capacity project	No	
Duvall	City of Duvall - Public Works	Water	None	Continued system upgrades/improvements	No	
Duvall	City of Duvall - Public Works	Stormwater	None	Continued system upgrades/improvements	No	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Enumclaw	The City of Enumclaw	Sewer	424 Sewer Basin	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	Takoba	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	Willogate	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	436th	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	440th	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	448th	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer/Storm	452nd	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	Newakum	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	420th	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	Chinook	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	470th	Lift station necessary	Yes	
Enumclaw	The City of Enumclaw	Sewer	452nd	Lift station necessary	Yes	
Kenmore	Northshore Utility District (NUD)	Water	Kenmore & Kirkland's planned urban core densification may increase water usage/demand slightly beyond NUD's current capacity	M-17: 366 ZONE RESERVOIR AND BOOSTER STATION (10-YEAR) --The District plans to construct a new 4 MG reservoir and booster station at the site of Evergreen Hospital to serve planned urban development	No	
Kenmore	Northshore Utility District	Sewer/Wastewater	Wastewater Comprehensive Plan last published in 2006 and amended in 2018	No update planned	No	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Kenmore	Northshore Utility District	Sewer/Wastewater	As of 2006, around 600 units in NUD's service area were served by on-site septic systems.	NUD created a sewer extension program charged with enabling all developed properties with the capacity to connect to the sewer system. This program was concluded as of the most recent wastewater comprehensive plan amendment published in 2018.	No	
Kenmore	City of Kenmore: Public Works	Stormwater/ Surfacewater	There exist environmental challenges in Kenmore's management of stormwater/surfacewater. These challenges do not impact systemwide development potential.		No	
Kent	City of Kent Water System	Water	529 and 590 Zone Storage	New 587 Zone Reservoir on the West Hill to serve 587, 575, and 529 Zones		
Kent	City of Kent Water System	Water	271 Alvord: Limited by 8-inch main downstream of PRV, which was installed in 2012. Fire flow in zone limited to approximately 1,300 gpm due to this piping.			
Kent	City of Kent Water System	Water	339 Seattle: Limited by 6-inch main downstream of PRV, which was installed in 2006. Fire flow in zone limited to approximately 750 gpm due to this piping.			

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Kent	City of Kent Water System	Water	368 Weiland: Limited by 6-inch main upstream and downstream of PRV, which was installed in 1993. Fire flow in zone limited to approximately 680 gpm due to this piping.			
Kent	City of Kent Water System	Water	485 Zone: South of SR 516: 6-inch main throughout neighborhood limiting fire flow to approximately 1,100 gpm. North of 234th Street: limited by 8-inch main on either side of the 234th and 96th PRV. Fire flow in vicinity limited to 1,000 to 1,400 gpm.			
Kent	City of Kent Water System	Water	590 and 640 Zones: Fire flow limitations largely localized issues at dead-ends, or as a result of 6-inch main within neighborhoods.			
Kent	City of Kent Water System	Water	West Hill Zones: Fire flow limitations largely localized issues at dead-ends, or as a result of 6-inch main within neighborhoods.			

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Kent	City of Kent Water System	Water	Approximately 23% of City's water main is cast iron pipe; some are more than 50 years old (beyond life expectancy).	Replace aging water mains with ductile iron, per City's water system standards.		
Kent	City of Kent Water System	Water	366 Stetson: Limited by 6-inch main downstream of PRV, which was installed in 2012. Fire flow in zone limited to approximately 750 gpm due to this piping.			
Medina	City of Bellevue	Water	None	None	No	
Medina	City of Bellevue	Sewer	None	None	No	
Medina	City of Medina	Stormwater	None	None	No	
Mercer Island	City of Mercer Island	Sewer	None	None	No	
Mercer Island	Seattle Public Utilities	Water	None	None	No	
Newcastle	Coal Creek Utility District	Sewer	None	n/a	No	
Newcastle	Coal Creek Utility District	Water	None	n/a	No	
Normandy Park	Southwest Suburban Sewer District	Sewer	Portion of unsewered households available	None	No	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Normandy Park	Midway Sewer District	Sewer	Portion of unsewered households available	None	No	
Normandy Park	Highline Water District	Water	None	None	No	
Normandy Park	King County Water District #49	Water	None	None	No	
Normandy	King County	Water	None	None	No	
Normandy Park	City of Normandy Park	Stormwater	None	None	No	
North Bend	City of North Bend	Water	No major deficiencies. Leak detection should be strengthened. More aggressive water meter replacement program is needed.	Expansion of water mitigaiton portfolio. Continued removal and replacement of AC watermains.	None	
North Bend	Sallal Water Association	Water	In 2018 Sallal reached capacity for water for their water right and has several infrastructure issues that manifested most recently in a month-long e-coli outbreak (Fall 2019).	Sallal and North Bend are currently formulating an agreement to sell each other water. Per 2015 City of North Bend Comprehensive Plan (Goal CF-5.3), the City's Plan is to eventually take over water service areas within the City's UGA.	Yes, but it will be alleviated. Sallal is at capacity, but this is not seen as a 20-year-long constraint considering Comp Plan Goal CF-5.3 and the City's drive to alleviate this issue.	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
North Bend	City of North Bend	Sewer	The City's wastewater treatment plant is nearing capacity. The City is still accepting commercial applications through the 2019 WWTP Concurrency Ordinance, but is not currently accepting residential subdivision applications. Approximately 30% of the City uses septic drainfields and is not connected to the City sewer system.	Treatment Plant expansion - Phase I is under construction and will be completed by the end of 2020. Phase II expansion is planned to begin in early 2021 and will hopefully be complete in approximately 2022 or 2023. One Sewer ULID is being planned for the NW portion of City and is in the conceptual design phase, expanding use to a mixed use and recreational section of the City.	Yes, the treatment plant is almost to capacity. Some parts of the City are currently not served by City sewer.	
North Bend	City of North Bend	Stormwater	High groundwater table, ponding in flat areas, no large centralized retention facilities. Special Flood Hazard Area covers the western third of the City.	The City has aspirations for centralized regional stormwater retention facilities, specifically near our downtown commercial area.	Yes, due to the design of a bridge on SR202 the adjacent lands are artificially frequently flooded inhibiting development. The bridge is a choke point that exacerbates flooding.	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
North Bend	City of North Bend	Transportation	None currently	Several Roundabouts are planned for construction. Road connections planned in CIP. City intends to follow their 6-year TIP which includes several improvements to existing roads.	None	
North Bend	WSDOT	Transportation	There is an LOS failure at SR202 and North Bend Way, but this does not limit development.	WSDOT's new policy is to end funding pavement overlays on state routes with posted speed limits less than 45mph due to funding constraints (SR202 in downtown). The City will need to find funding to maintain this road.	None	
Pacific	City of Pacific	Sewer		None	No	
Pacific	City of Pacific	Storm	On-site infiltration may be required, however there are not topography issues in the LI/Commercial areas with the exception of 2 parcels (see Table 2.3)	None	No	
Pacific	Lakehaven Utility District	Sewer, Water	Lakehaven will be the purveyor if future development occurs.	Possible future Potential Annexation Area (PAA)	Lots size minimums may be set to 15,000 sq ft for on-site infiltration requirements due to soil quality in this area.	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Redmond	City of Redmond	Stormwater		Overlake Facility #3 Village Stormwater Infiltration Vault NE 40th Street Stormwater Trunk Extension Class II Stream Improvements (High School Creek and Monticello Creek) City Center Groundwater Protection - 90th Street Pond Retrofit Smith Woods Stream and Pond Rehabilitation SE Redmond Pond C - Property Acquisition Evans Creek Relocation	No	Redmond Stormwater Facility Plan and Municipal Code
Redmond	Cascade Water Alliance	Water			No	Water service area identified in the Water System Plan
Redmond	City of Redmond Wells	Water		Pressure Reducing Valve & Meter Replacement Infiltration Retrofit Program	No	
Redmond	City of Redmond via Brightwater Wastewater treatment plant	Sewer	Proposed annexation areas lack sewer. Some areas still rely on septic systems. However, King County has sufficient capacity to meet Redmond's future demand (Comp Plan) No sewer hook up+ CARA area pose potential contamination issues.	Marymoor Village NE 70th Street Force Main Control System and Telemetry Upgrades	Yes	Service area shown in City's adopted General Sewer Plan.

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Redmond	Puget Sound Energy	Electric & Natural Gas	none			Electrical Facilities Plan (PSE) to be consistent with Redmond Land Use goals
Redmond	King County	Solid Waste	none			Adequate landfill capacity until 2018 (Comp Plan)
Renton	City of Renton Water District	Water	None	None	No	
Renton	City of Renton Sewer Service District	Sewer	None	None	No	
Renton	Cedar River Water & Sewer District	Sewer, Water	None	None	No	
Renton	Coal Creek Utility District	Sewer, Water	None	None	No	
Renton	King County Water District #90	Water	None	None	No	
Renton	Soos Creek Water & Sewer District	Sewer, Water	None	None	No	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Sammamish	Sammamish Plateau Water District	Sewer	Sewer connection or crossing needed	Louis Thompson Rd (CL-3), CIP	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Sewer connection or crossing needed	Pine Lake Creek & 212th Ave Crossing, ULID or DEA	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Sewer connection or crossing needed	Ebright Creek Park Crossing, ULID or DEA	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Sewer connection or crossing needed	Upper Waverly Connecting Sewer (CL-2), ULID or DEA	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Sewer connection or crossing needed	SE 32nd to SE 30th Connection, ULID or DEA	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Sewer connection or crossing needed	Beaver Lake Park Crossing, ULID or CIP	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Sewer connection or crossing needed	SE 32nd near Beaver Lake Middle School, ULID or CIP	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Lift station needed	Broadmoore Estates Lift Station (LS-10), ULID or DEA	Yes	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Sammamish	Sammamish Plateau Water District	Sewer	Lift station needed	Treefarm East Lift Station (LS-11), ULID	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Lift station needed	Tiburon Lift Station (LS-7), CIP	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Lift station needed	223rd Lift Station (LS-13), DEA	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Lift station needed	Loree Estates Lift Station (LS-14), ULID	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Lift station needed	Water's Edge Lift Station (LS-3), CIP	Yes	
Sammamish	Sammamish Plateau Water District	Sewer	Regional Wastewater conveyance improvement needed	King County Diversion Project (not currently funded)	Yes	
Shoreline	Seattle City Light	Electric Power	2-Phase Power to 3-Phase Power	185th Street Corridor Project - Raodway redesign with multi-modal access, sidewlaks, and undergrounding of utilities	No	
Snoqualmie	Snoqualmie Public Works	Transportation	2032 LOS E anticipated at SR 202 & Newton St. Intersection	Full Traffic signal when volumes meet signal warrant.	No	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Snoqualmie	Snoqualmie Public Works	Water	A study on securing water rights is planned. If new rights are secured, the main line from Canyon Springs will need to be secured & enhanced.	Source of Supply Investments - Improvements (Canyon Springs water line stabilization and spring boxes)	Yes	
Snoqualmie	Snoqualmie Public Works	Water	Adequate Water Main supply across the Snoqualmie River	SR 202 Bridge Water Main Replacement (part); and 705 to 599 Zone Conversion	Yes	
Snoqualmie	Snoqualmie Public Works	Sewer	Adequate Sewer Main supply across the Snoqualmie River	SR 202 Bridge Sewer Main Replacement (part).	Yes	
Snoqualmie	Snoqualmie Public Works	Sewer	TSS filtration(processing capacity)	Oxidation Ditch Improvements, Third Secondary Clarifier and Reclaimed Water Filters Replacement.	Yes	
Woodinville	Woodinville Water	Water	Projects a deficit of 200 gpm of source availability for the West service area in 2027 and an additional storage capacity deficit of over 900,000 gallons in the 3 West areas.	Yes	Yes	
Woodinville	Woodinville Water	Sewer	General deficiencies for the sewer system.	No	Yes	
Woodinville	City of Woodinville	Stormwater	Insufficient capacity located throughout the City and some of the more significant problem areas are within the Woodin Creek basin and in areas upstream of Lake Leota	Yes	Yes	
Algona	N/A	Individual Parcels	No system gaps present, infrastructure constrained parcels identified		Yes	

Appendix H: Documentation of Market Factor and Infrastructure Assumptions - Infrastructure

Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Auburn	N/A	Individual Parcels	No system gaps present, infrastructure constrained parcels identified		Yes	
Beaux Arts	N/A	N/A	No gaps identified	None	No	
Bothell	N/A	N/A	No gaps identified	None	No	
Carnation	N/A	Individual Parcels	No system gaps present, infrastructure constrained parcels identified		Yes	
Clyde Hill	N/A	N/A	No gaps identified	None	No	
Des Moines	N/A	N/A	No gaps identified	None	No	
Federal Way	N/A	N/A	No gaps identified	None	No	
Hunts Point	N/A	Individual Parcels	No system gaps present, infrastructure constrained parcels identified		Yes	
Issaquah	N/A	N/A	No gaps identified	None	No	
Kirkland	N/A	N/A	No gaps identified	None	No	
Lake Forest Park	N/A	Individual Parcels	No system gaps present, infrastructure constrained parcels identified		Yes	
Maple Valley	N/A	N/A	No gaps identified	None	No	
Milton	N/A	Individual Parcels	No system gaps present, infrastructure constrained parcels identified		Yes	
SeaTac	N/A	N/A	No gaps identified	None	No	
Skykomish	N/A	Individual Parcels	No system gaps present, infrastructure constrained parcels identified		Yes	
Tukwila	N/A	N/A	No gaps identified	None	No	
Urban Unincorporated King County	N/A	Individual Parcels	No major system gaps present, infrastructure constrained parcels identified, parcels on septic		Yes	

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Jurisdiction	Service Provider	Infrastructure Type	Service Deficiencies	Planned Investments	Infrastructure Gap Present?	Additional Notes
Yarrow Point	N/A	Individual Parcels	No system gaps present, infrastructure constrained parcels identified		Yes	

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Required hardware and software

Operating Systems:	Windows® 2000, Windows® XP, Windows Vista®; Mac OS® X
Browsers:	Final release versions of Internet Explorer® 6.0 or above (Windows only); Mozilla Firefox 2.0 or above (Windows and Mac); Safari™ 3.0 or above (Mac only)
PDF Reader:	Acrobat® or similar software may be required to view and print PDF files
Screen Resolution:	800 x 600 minimum

Enabled Security Settings:	Allow per session cookies

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1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

King County

KING COUNTY

Signature Report

Ordinance 19384

Proposed No. 2021-0254.3 **Sponsors** Dembowski

AN ORDINANCE relating to adoption and ratification of the 2021 King County Countywide Planning Policies.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. **Findings:**

A. On October 29, 2020, the Puget Sound Regional Council General Assembly adopted VISION 2050 and the Multicounty Planning Policies.

B. The Multicounty Planning Policies call for the Countywide Planning Policies to be updated, where necessary, before December 31, 2021.

C. On June 23, 2021, the Growth Management Planning Council approved Motion 21-1 recommending the 2021 King County Countywide Planning Policies to the King County council.

D. Technical changes made by the King County council streamline and strengthen the 2021 King County Countywide Planning Policies.

E. Workplan items relating to the Affordable Housing Committee and Growth Management Planning Council review of the four-to-one program implement VISION 2050 and the Countywide Planning Policies.

F. Changes to city of Sammamish growth targets reflect updated conditions that impact capacity in the jurisdiction.

SECTION 2. The 2021 King County Countywide Planning Policies, Attachment A to this ordinance, is hereby adopted by King County and ratified on behalf of the population of unincorporated King County.

SECTION 3.

A. Growth Management Planning Council Motion 21-1 included a workplan item for the Affordable Housing Committee of the Growth Management Planning Council. The County shall submit to the Affordable Housing Committee the following workplan items for review, consideration, and recommendation:

1. Monitor and report jurisdictional housing supply, housing affordability, housing needs and income-restricted housing levels, including disparities between subregions and comparisons to established subregional or jurisdictional affordable housing needs, through the Regional Affordable Housing dashboard and reporting;

2. Establish subregional or jurisdictional affordable housing needs, informed by local data and the data and methodology provided by the Washington state Department of Commerce;

3. Recommend to the Growth Management Planning Council an accountability and implementation framework for equitably meeting affordable housing needs across the region. The Affordable Housing Committee will consider, at a minimum, the range of development patterns chapter and housing chapter amendments proposed by Growth Management Planning Council members in June 2021 regarding understanding and accommodating housing need, holding jurisdictions accountable and allocating resources; and

4. Recommend to the Growth Management Planning Council any Countywide Planning Policy amendments necessary to implement their recommendations.

B. Complete its housing needs work by the end of 2022 and submit a staff report to the Growth Management Planning Council quarterly in 2022 to provide an update the on its progress.

SECTION 4.

A. The county's four-to-one program has been effective in implementing Growth Management Act goals to reduce sprawl and encourage retention of open space. There have been previous efforts to update the four-to-one program as part of the 2020 King County Comprehensive Plan update and 2021 Countywide Planning Policies update. There is a need to comprehensively review the Countywide Planning Policies ("the CPPs"), King County Comprehensive Plan ("KCCP") and King County Code ("KCC") to ensure the three documents are consistent and reflect countywide growth management goals, including collaboration with cities affected by the program.

B. The executive shall review the four-to-one program as follows:

1. Analyze all projects approved under the four-to-one program and evaluate the performance of those projects against the program's goals of reducing sprawl and preserving open space;

2. Consider the following potential amendments to the four-to-one program. The review shall also include proposed procedural improvements to make it clearer how four-to-one program projects are applied for, reviewed, approved and monitored after approval. The potential amendments to be considered include, but are not limited to:

a. whether the four-to-one program should require projects be contiguous with the 1994 urban growth area boundary, later adopted boundaries through subsequent joint planning processes between the county and cities, or some combination thereof;

b. whether the four-to-one program should allow reduced open space dedication if a proposal contains lands with high ecological value, such as lands that could provide for high-value floodplain restoration, riparian habitat or working resource lands;

c. whether the four-to-one program should allow for noncontiguous open space preservation;

d. whether the four-to-one program should allow facilities, such as roads or stormwater, that serve the new urban area to be located in the Rural Area;

e. whether the four-to-one program should allow nonresidential and multifamily residential projects; and

f. whether the four-to-one program should allow projects that are not likely to be annexed in a timely manner;

3. Develop and recommend to the county council changes to the CPPs, KCCP and KCC, in consultation with the IJT and based on Growth Management Planning Council review identified in subsection B.4 of this section; and

4. Submit to the Growth Management Planning Council in 2022 the following items for review, consideration and recommendation:

a. previously adopted goals and criteria of the four-to-one program;

b. findings of the analyses in subsection B.1. and 2. of this section; and

c. potential changes to the CPPs, KCCP and KCC necessary to implement improvements to the four-to-one program.

C. Executive staff shall regularly update and consult with the offices of the councilmembers representing the county on the GMPC, the chair and vice-chair of the local services committee, or its successor, and the chair and vice-chair of the mobility and environment committee, or its successor, throughout the process.

D. The executive recommended CPPs, KCCP and KCC changes and a GMPC motion that makes recommendations on the four-to-one program shall be completed no later than January 1, 2023, shall be included in the public review draft and State Environmental Policy Act environmental impact statement for the 2024 Comprehensive Plan Update, and shall be transmitted to the council as part of the 2024 Comprehensive Plan update.

SECTION 5. **Severability**. If any provision of this ordinance or its application to

any person or circumstance is held invalid, the remainder of the ordinance or the application of the provision to persons or circumstances is not affected.

Ordinance 19384 was introduced on 7/27/2021 and passed as amended by the Metropolitan King County Council on 12/14/2021, by the following vote:

Yes: 9 - Ms. Balducci, Mr. Dembowski, Mr. Dunn, Ms. Kohl-Welles, Ms. Lambert, Mr. McDermott, Mr. Upthegrove, Mr. von Reichbauer and Mr. Zahilay

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

DocuSigned by:
Claudia Balducci
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Claudia Balducci, Chair

ATTEST:

DocuSigned by:
Angel Allende
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Melani Pedroza, Clerk of the Council

APPROVED this _____ day of 12/27/2021, _____.

DocuSigned by:
Dow Constantine
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Dow Constantine, County Executive

Attachments: A. 2021 King County Countywide Planning Policies, dated November 30, 2021, updated 12/14/2021

Ordinance 19384

19384 Attachment A, updated 12/14/2021

2021 King County Countywide Planning Policies

November 30, 2021

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CONTENTS

LAND ACKNOWLEDGMENT

The Countywide Planning Policies guide how King County jurisdictions work together and plan for growth that will occur on the ancestral lands of the Coast Salish peoples. In respect for and acknowledgment of their legacy, the Countywide Planning Policies seek to create a livable, equitable, and sustainable home for current and future generations.

INTRODUCTION

The King County Countywide Planning Policies

The Countywide Planning Policies (CPPs) create a shared and consistent framework for growth management planning for all jurisdictions in King County in accordance with RCW 36.70A.210, which requires the legislative authority of a county to adopt a countywide planning policy in cooperation with cities located in the county. The comprehensive plan for King County and the comprehensive plans for cities and towns in King County are developed from the framework that the CPPs establish. The 2021 Countywide Planning Policies were designed to provide guidance in advance of the 2024 statutory update of comprehensive plans to incorporate changes to the regional policy framework and to reflect new priorities addressing equity and social justice within our communities

The CPPs implement VISION 2050, which is the region's plan for growth. VISION 2050 is a product of a regional planning process led by the Puget Sound Regional Council (PSRC), an association of cities, towns, four counties (King, Kitsap, Pierce, and Snohomish), ports, tribes, and state agencies. By 2050, the region's population is projected to reach 5.8 million people. The region's vision for 2050 is to provide exceptional quality of life, opportunity for all, connected communities, a spectacular natural environment, and an innovative, thriving economy.

King County is home to 39 cities, all of which have a role in accommodating the approximately 660,000 people and 490,000 jobs projected to come to King County by 2044.

The Growth Management Planning Council

The Growth Management Planning Council (GMPC) brings together elected officials from King County and the cities and develops and recommends the CPPs to the King County Council. The GMPC is chaired by the King County Executive and includes members from the King County Council, the Mayor of Seattle, members from the Seattle City Council, representatives from the other 38 cities in King County through the Sound Cities Association, and ex-officio membership from special purpose districts, school districts, and the Port of Seattle.

The GMPC is supported by the Interjurisdictional Staff Team (IJT), which reflects the membership of the GMPC. The IJT is comprised of senior planning staff from King County and the cities. The IJT operates on a consensus basis and prepares all documents for GMPC review and consideration.

The Countywide Planning Policies and all amendments to the CPPs become effective following approval by the GMPC, adoption by the King County Council, and ratification by King County cities.

About the 2021 Update

With the update to VISION 2050 and the approaching 2024 statutory update of comprehensive plans, King County jurisdictions updated the Countywide Planning Policies for the next decade. Recognizing the existing Countywide Planning Policies as a starting place for the update, the Growth Management Planning Council approved Guiding Principles to establish the context and parameters for the update. The Guiding Principles call for a limited scope to the update based on the following:

- 2012 Countywide Planning Policies
- Centering social equity and health
- Integrating regional policy and legislative changes
- Providing clear, concise, and actionable direction for comprehensive plans
- Implementing the Regional Growth Strategy with 2044 growth targets that form the land use basis for periodic comprehensive plan updates

Equity and Social Justice

The GMPC approved the guiding principle of "centering social equity and health" in the Countywide Planning Policies. As noted in VISION 2050, historical land use and housing policies have played a role in creating and maintaining racial inequities. While some explicitly discriminatory laws have been overturned, their legacy and effects have remained, preventing Black, Indigenous, and other People of Color communities from sharing the recent prosperity of the county. Centering equity and health in the CPPs will continue through improvements to policies and resource allocation that explicitly counter and remedy disparities in determinants of equity and are informed by those most affected by these disparities. The policies' collective vision for the county's shared future will have a significant effect on local plans that shape how jurisdictions allocate public resources and set policy to achieve a future where everyone enjoys a safe and healthy place to live, work, and play.

King County Demographics and Geography

King County is the most populous county in Washington State and the 13th most populous county in the nation. In 2021, King County is home to about 2.3 million people and 1.5 million jobs. King County's population continues to diversify each year. In 2019, People of Color communities comprised 40 percent of the population, 23 percent of the population was born outside the United States, and 28 percent of people over age five spoke a language other than

English at home. People under 18 comprise 20 percent of the population, while seniors over 65 comprise about 14 percent of the population.

King County's land area is 2,130 square miles and is characterized by cities large and small, by beautiful scenery and geographic variety, stretching from the Puget Sound in the west to the crest of the Cascade Mountains in the east. King County has a variety of working farms and forestlands, as well as a significant open space network.

VISION AND FRAMEWORK

Vision for King County 2050

It is the year 2050 and our county has changed significantly in the roughly 60 years that have elapsed since the first Countywide Planning Policies were adopted in 1992. In 2050,

- Communities across King County are welcoming places where every person can thrive.
- All residents have access to opportunity and displacement from development is lessened.
- The cities are vibrant and inviting hubs for people with a safe, affordable, and efficient transportation system that connects people to the places they want to go.
- Housing is characterized by a full range of options that are healthy, safe, affordable, and open to all.
- The county's critical areas are protected and have been restored.
- Open spaces are well distributed and inviting to all users.
- The Rural Area is viable and permanently protected with a clear boundary between urban and rural areas.
- The county boasts of bountiful agricultural areas and productive forest lands.
- The economy provides opportunities to everyone and includes Black, Indigenous, and other People of Color-owned businesses; immigrant- and women-owned businesses; locally owned businesses; and global corporations.

Framework Policies

Unless otherwise noted, the Countywide Planning Policies apply to the Growth Management Planning Council, King County, and all cities within King County.

Amendments

While much has been accomplished, the Countywide Planning Policies were never intended to be static and will require amendment over time to reflect changed conditions. While the formal policy development is done by the Growth Management Planning Council, ideas for new policies begin in a variety of areas including individual jurisdictions. Policy FW-1 below describes the process for amending the Countywide Planning Policies.

FW-1 Maintain the currency of the Countywide Planning Policies through periodic review and amendment. Initiate and review all amendments at the Growth Management Planning Council through the process described below:

a) Only the Growth Management Planning Council may propose amendments to the Countywide Planning Policies except for amendments to the Urban Growth Area that may also be proposed by King County in accordance with policies DP-16 through DP-18;

b) Growth Management Planning Council recommends amendments to the King County Council for consideration, possible revision, and approval; proposed revisions by the King County Council that are of a substantive nature may be sent to the Growth Management Planning Council for their consideration and revised recommendation based on the proposed revision;
c) A majority vote of the King County Council both constitutes approval of the amendments and ratification on behalf of the residents of Unincorporated King County;
d) After approval and ratification by the King County Council, amendments are forwarded to each city and town for ratification. Amendments cannot be modified during the city ratification process; and
e) Amendments must be ratified within 90 days of King County approval and require affirmation by the county and cities and towns representing at least 70 percent of the county population and 30 percent of those jurisdictions. Ratification is either by an affirmative vote of the city's or town's council or by no action being taken within the ratification period.

Monitoring

Periodically evaluating the effectiveness of the Countywide Planning Policies is key to continuing their value to the region and local jurisdictions. In 1994 King County and cities established the current Benchmarks program to monitor and evaluate key regional indicators.

FW-2 Monitor and benchmark the progress of the Countywide Planning Policies towards achieving the Regional Growth Strategy inclusive of the environment, development patterns, housing, the economy, transportation, and the provision of public services, as well as reducing disparities in equity and health outcomes for King County residents. Identify corrective actions to be taken if progress toward benchmarks is not being achieved.

Investment

Key to ensuring the success of the Countywide Planning Policies is investment in regional infrastructure and programs. Balancing the use of limited available funds between regional, countywide, and local needs is extremely complex.

FW-3 Work collaboratively to identify and seek regional, state, and federal funding sources to invest in infrastructure, strategies, and programs to enable the full implementation of the Countywide Planning Policies. Balance needed regional investments with countywide and local needs when making funding determinations.

FW-4 Support fiscal sustainability of Rural Areas. Rural Areas provide an overall benefit for all residents of King County and strategies to fund infrastructure and services in Rural Areas may be needed to support a defined rural level of service.

Consistency

The Countywide Planning Policies provide a common framework for local planning and each jurisdiction is required to update its comprehensive plan to be consistent with the Countywide Planning Policies. The full body of the Countywide Planning Policies is to be considered for decision-making within the context of each city's needs and situations.

FW-5 Adopt comprehensive plans that are consistent with the Countywide Planning Policies as required by the Growth Management Act.

Equity

The Countywide Planning Policies coordinate planning for a more equitable future where all King County residents have access to housing, transportation, education, employment choices, and open space amenities regardless of their race, social, or economic status. Through their comprehensive plans, jurisdictions will create targeted policies and strategies unique to their local circumstances to achieve this goal.

FW-6 Enable culturally and linguistically appropriate equitable access to programs and services and help connect residents to service options, particularly for those most disproportionately cost-burdened or historically excluded.

FW-7 Develop and use an equity impact review tool when developing plans and policies to test for outcomes that might adversely impact Black, Indigenous, and other People of Color communities; immigrants and refugees; people with low incomes; people with disabilities; and communities with language access needs. Regularly assess the impact of policies and programs to identify actual outcomes and adapt as needed to achieve intended goals.

FW-8 Involve community groups especially immigrant, Black, Indigenous, and other People of Color communities continuously in planning processes to promote civic engagement, government accountability, transparency, and personal agency.

ENVIRONMENT

Overarching Goal: *The quality of the natural environment in King County is restored and protected for future generations.*

Environmental Sustainability

Local governments have a key role in shaping sustainable communities by integrating sustainable development and business practices with ecological, social, and economic concerns. Local governments also play a pivotal role in ensuring environmental justice by addressing environmental impacts on frontline communities and by pursuing fairness in the application of policies and regulations.

EN-1 Incorporate environmental protection and restoration efforts including climate action, mitigation, and resilience into local comprehensive plans to ensure that the quality of the natural environment and its contributions to human health and vitality is sustained now and for future generations.

EN-2 Develop and implement environmental strategies using integrated and interdisciplinary approaches to environmental assessment and planning, in coordination with local jurisdictions, tribes, and other stakeholders.

EN-3 Ensure public and private projects incorporate locally appropriate, low-impact development approaches developed using a watershed planning framework for managing stormwater, protecting water quality, minimizing flooding and erosion, protecting habitat, and reducing greenhouse gas emissions.

EN-4 Encourage the transition to a sustainable energy future by reducing demand through efficiency and conservation, supporting the development of energy management technology, and meeting reduced needs from sustainable sources.

EN-5 Ensure all residents of the region regardless of race, social, or economic status have a clean and healthy environment. Identify, mitigate, and correct for unavoidable negative impacts of public actions that disproportionately affect those frontline communities impacted by existing and historical racial, social, environmental, and economic inequities, and who have limited resources or capacity to adapt to a changing environment.

Earth and Habitat

Healthy ecosystems and environments are vital to the sustainability of all plant and animal life, including humans. Protection of biodiversity in all its forms and across all landscapes is critical

to continued prosperity and high quality of life in King County. The value of biodiversity to sustaining long-term productivity and both economic and ecological benefits is evident in fisheries, forestry, and agriculture. For ecosystems to be healthy and provide healthful benefits to people, local governments must prevent negative human impacts and work to ensure that this ecosystem remains diverse and productive over time. With the impending effects of climate change, maintaining biodiversity becomes even more critical to the preservation and resilience of resource-based activities and many social and ecological systems. Protection of individual species, including Chinook salmon, also plays an important role in sustaining biodiversity and quality of life within the county. Since 2000, local governments, citizens, tribes, conservation districts, non-profit groups, and federal and state fisheries managers have cooperated to develop and implement watershed-based salmon conservation plans, known as Water Resource Inventory Area plans, to conserve and restore habitat for Chinook salmon today and for future generations.

EN-6 Locate development and supportive infrastructure in a manner that minimizes impacts to natural features. Promote the use of traditional and innovative environmentally sensitive development practices, including design, materials, construction, and ongoing maintenance.

EN-7 Coordinate approaches and standards for defining and protecting critical areas, especially where such areas and impacts to them cross jurisdictional boundaries.

EN-8 Use the best available science when establishing and implementing environmental standards.

EN-9 Develop and implement an integrated and comprehensive approach to managing fish and wildlife habitat to accelerate ecosystem recovery, focusing on enhancing the habitat of salmonids, orca, and other threatened and endangered species and species of local importance.

EN-10 Ensure that new development, open space protection efforts, and mitigation projects support the State's streamflow restoration law. Promote robust, healthy, and sustainable salmon populations and other ecosystem functions working closely within Water Resource Inventory Areas and utilizing adopted watershed plans.

EN-11 Enhance the urban tree canopy to provide wildlife habitat, support community resilience, mitigate urban heat, manage stormwater, conserve energy, protect and improve mental and physical health, and strengthen economic prosperity. Prioritize places where Black, Indigenous, and other People of Color communities; low-income populations; and other frontline community members live, work, and play.

Flood Hazards

Flooding is a natural process that affects human communities and natural environments in King County. Managing floodplain development and conserving aquatic habitats are the main challenges for areas affected by flooding. The King County Flood Control District exists to protect public health and safety, regional economic centers, public and private property, and transportation corridors. Local governments also have responsibility for flood control within their boundaries.

EN-12 Coordinate and fund holistic flood hazard management efforts through the King County Flood Control District.

EN-13 Work cooperatively to meet regulatory standards for floodplain development as these standards are updated for consistency with relevant federal requirements including those related to the Endangered Species Act.

EN-14 Cooperate with federal, state, and regional agencies and forums to develop and implement regional levee maintenance standards that ensure public safety and protect habitat.

Water Resources

The flow and quality of water are impacted by water withdrawals, land development, stormwater management, and climate change. Since surface and ground waters do not respect political boundaries, cross-jurisdictional coordination of water is required to ensure its functions and uses are protected and sustained. The Puget Sound Partnership was created by the Washington State Legislature as the state agency responsible for assuring the preservation and recovery of Puget Sound and the freshwater systems flowing into the Sound. King County plays a key role in these efforts because of its large population and its location in Central Puget Sound.

EN-15 Encourage basin-wide approaches to wetland protection, emphasizing preservation and enhancement of the highest quality wetlands and wetland systems.

EN-16 Collaborate with the Puget Sound Partnership to implement the Puget Sound Action Agenda and to coordinate land use and transportation plans and actions for the benefit of Puget Sound and its watersheds.

EN-17 Manage natural drainage systems to improve water quality and habitat functions, minimize erosion and sedimentation, protect public health, reduce flood risks, and moderate peak stormwater runoff rates. Work cooperatively among local, regional, state, national, and

tribal jurisdictions to establish, monitor, and enforce consistent standards for managing streams and wetlands throughout drainage basins.

EN-18 Support and incentivize environmental stewardship on private and public lands to protect and enhance habitat, water quality, and other ecosystem services, including the protection of watersheds and wellhead areas that are sources of the region's drinking water supplies.

EN-19 Establish a multijurisdictional approach for funding and monitoring water quality, quantity, biological conditions, and outcome measures and for improving the efficiency and effectiveness of monitoring efforts.

Open Space

EN-20 Identify and preserve regionally significant open space networks in both Urban and Rural Areas through implementation of the Regional Open Space Conservation Plan. Develop strategies and funding to protect lands that provide the following valuable functions:

a) Ecosystem linkages and migratory corridors crossing jurisdictional boundaries;
b) Physical or visual separation delineating growth boundaries or providing buffers between incompatible uses;
c) Active and passive outdoor recreation opportunities;
d) Wildlife habitat and migration corridors that preserve and enhance ecosystem resiliency in the face of urbanization and climate change;
e) Preservation of ecologically sensitive, scenic, or cultural resources;
f) Urban green space, habitats, and ecosystems;
g) Forest resources; and
h) Food production potential.

EN-21 Preserve and restore native vegetation and tree canopy, especially where it protects habitat and contributes to overall ecological function.

EN-22 Provide parks, trails, and open space within walking distance of urban residents. Prioritize historically underserved communities for open space improvements and investments.

Restoration and Pollution

EN-23 Reduce the use of toxic pesticides, chemical fertilizers, and other products and promote alternatives that minimize risks to human health and the environment.

EN-24 Restore the region's freshwater and marine shorelines, watersheds, estuaries, and other waterbodies to a natural condition for ecological function and value, where appropriate and feasible.

EN-25 Prevent, mitigate, and remediate harmful environmental pollutants and hazards, including light, air, noise, soil, and structural hazards, where they have contributed to racialized health or environmental disparities, and increase environmental resiliency in frontline communities.

EN-26 Adopt policies, regulations, and processes, related to new or existing fossil fuel facilities, which are designed to:

a) Protect public health, safety, and welfare from all impacts of fossil fuel facilities;
b) Mitigate and prepare for any impacts of fossil fuel facility disasters on all communities;
c) Protect and preserve natural ecosystems from the construction and operational impacts of fossil fuel facilities;
d) Manage impacts on public services and infrastructure in emergency management, resilience planning, and capital spending;
e) Ensure comprehensive environmental review, and extensive community engagement, during initial siting, modifications, and on a periodic basis; and
f) Reduce climate change impacts from fossil fuel facility construction and operations.

Climate Change

Greenhouse gas emissions are resulting in a changing and increasingly variable climate. King County's snow-fed water supply is especially vulnerable to a changing climate. Additionally, the patterns of storm events and river and stream flow patterns are changing and our shorelines are susceptible to rising sea levels. Carbon dioxide reacts with seawater and reduces the water's pH, also threatening the food web in Puget Sound. While local governments can individually work to reduce greenhouse gas emissions, more significant emission reductions can only be accomplished through countywide coordination of land use patterns and promotion of transportation systems that provide practical alternatives to single-occupancy vehicles. Efficient energy consumption is both a mitigation and an adaptation strategy. Local governments can improve energy efficiency through the development of new infrastructure as well as the maintenance and updating of existing infrastructure.

EN-27 Adopt and implement policies and programs to achieve a target of reducing countywide sources of greenhouse gas emissions, compared to a 2007 baseline, by 50% by 2030, 75% by 2040, and 95%, including net-zero emissions through carbon sequestration and other strategies, by 2050. Evaluate and update these targets over time in consideration of the latest international climate science and statewide targets aiming to limit the most severe impacts of climate change and keep global warming under 1.5 degrees Celsius.

EN-28 Plan for development patterns that minimize air pollution and greenhouse gas emissions, including:

a) Directing growth to Urban Centers and other mixed-use or high-density locations that support mass transit, encourage non-motorized modes of travel, and reduce trip lengths;
b) Facilitating modes of travel other than single-occupancy vehicles including transit, walking, bicycling, and carpooling;
c) Incorporating energy-saving strategies in infrastructure planning and design;
d) Encouraging interjurisdictional planning to ensure efficient use of transportation infrastructure and modes of travel;
e) Encouraging new development to use low emission construction practices, low or zero net lifetime energy requirements, and green building techniques; and
f) Reducing building energy use through green building methods in the retrofit of existing buildings.

EN-29 King County shall assess and report countywide greenhouse gas emissions associated with resident, business, and local government buildings, vehicles, and solid waste at least every two years. King County shall update its comprehensive greenhouse gas emissions inventory that quantifies all direct local sources of greenhouse gas emissions as well as emissions associated with local consumption at least every five years. King County shall also develop city-specific emissions inventories and data, in partnership with cities.

EN-30 Promote energy efficiency, conservation methods, sustainable energy sources, electrifying the transportation system, and limiting vehicle miles traveled to reduce air pollution, greenhouse gas emissions, and consumption of fossil fuels to support state, regional, and local climate change goals.

EN-31 Address rising sea water by siting and planning for relocation of hazardous industries and essential public services away from the 500-year floodplain.

EN-32 Protect and restore natural resources such as forests, farmland, wetlands, estuaries, and the urban tree canopy, which sequester and store carbon.

EN-33 Support the production and storage of clean renewable energy.

DEVELOPMENT PATTERNS

The policies in this chapter address the location, type, design, and intensity of land uses that are desired in King County and its cities. They guide implementation of the vision for physical development within the county. The policies also provide a framework for how to focus multimodal improvements to transportation, public services, the environment, and affordable housing, as well as how to incorporate concerns about climate change, social equity, and public health into planning for new growth. Development patterns policies are at the core of growth management efforts in King County. They further the goals of VISION 2050 and recognize the variety of local communities that will be taking action to achieve those goals.

Overarching Goal: *Growth in King County occurs in a compact, centers-focused pattern that uses land and infrastructure efficiently, connects people to opportunity, and protects Rural and Natural Resource Lands.*

The Countywide Planning Policies designate land as Urban, Rural, or Natural Resource. The Generalized Land Use Categories Map in Appendix 1 shows the Urban Growth Area boundary and Urban, Rural, and Natural Resource Lands within King County. Further sections of this chapter provide more detailed descriptions and guidance for planning within each of the three designations.

DP-1 Designate all lands within King County as one of the following. In each of these designations, critical areas may exist and these are to be conserved through regulations, incentives, and programs.

a) Urban land within the Urban Growth Area, where new growth is focused and accommodated;
b) Rural land, where farming, forestry, and other resource uses are protected, and very low-density residential uses and small-scale non-residential uses are allowed; or
c) Natural Resource land, where permanent regionally significant agricultural, forestry, and mining lands are preserved.

Urban Growth Area

The Urban Growth Area encompasses all urban designated lands within King County. These lands include all cities as well as a portion of unincorporated King County. Consistent with the Growth Management Act and VISION 2050, urban lands are intended to be the focus of future growth that is compact, includes a mix of uses, and is well-served by public infrastructure.

The pattern of growth within the Urban Growth Area implements the Regional Growth Strategy through the allocation of targets to local jurisdictions. The targets create an obligation to plan

and provide zoning for future potential growth, but do not obligate a jurisdiction to guarantee that a given number of housing units will be built or jobs added during the planning period.

Several additional elements in the Development Patterns chapter reinforce the vision and targeted growth pattern for the Urban Growth Area. Procedures and criteria for amending the Urban Growth Area boundary address a range of objectives and ensure that changes balance the needs for land to accommodate growth with the overarching goal of preventing sprawl within the county. A review and evaluation program provides feedback for the county and cities on the effectiveness of their efforts to accommodate and achieve the desired land use pattern. Joint planning facilitates the transition of governance of the Urban Growth Area from the county to cities, consistent with the Growth Management Act, and helps ensure equitable governance and service provision.

Urban form and development within the Urban Growth Area are important settings to provide people with access to jobs and housing, choices to engage in more physical activity, eat healthy food, and minimize exposure to harmful environments and substances. Access to sidewalks and pathways, healthy food, and open space is not shared equally across the urban area. Historical underinvestment in neighborhoods where Black, Indigenous, and other People of Color communities have been concentrated and exclusion of these communities from high-opportunity areas persists today. The stability and sustainability of the Urban Growth Area depend on fostering development patterns that provide access to opportunity for all.

Goal Statement: *The Urban Growth Area boundary is stable and capacity within it shall increase over time to accommodate growth consistent with the Regional Growth Strategy and growth targets through land use patterns and practices that create vibrant, equitable, and sustainable communities.*

Urban Lands

DP-2 Prioritize housing and employment growth in cities and centers within the Urban Growth Area, where residents and workers have higher access to opportunity and high-capacity transit. Promote a pattern of compact development within the Urban Growth Area that includes housing at a range of urban densities, commercial and industrial development, and other urban facilities, including medical, governmental, institutional, and educational uses and schools, and parks and open space. The Urban Growth Area will include a mix of uses that are convenient to and support public transportation to reduce reliance on single-occupancy vehicle travel for most daily activities.

DP-3 Develop and use residential, commercial, and manufacturing land efficiently in the Urban Growth Area to create healthy, vibrant, and equitable urban communities with a full range of urban services, and to protect the long-term viability of the Rural Area and Natural Resource

Lands. Promote the efficient use of land within the Urban Growth Area by using methods such as:

a) Directing concentrations of housing and employment growth to high opportunity areas like designated centers and transit station areas, consistent with the numeric goals in the Regional Growth Strategy;
b) Encouraging compact and infill development with a mix of compatible residential, commercial, and community activities;
c) Providing opportunities for greater housing growth closer to areas of high employment to reduce commute times;
d) Optimizing the use of existing capacity for housing and employment;
e) Redeveloping underutilized lands, in a manner that considers equity and mitigates displacement; and
f) Coordinating plans for land use, transportation, schools, capital facilities and services.

DP-4 Focus housing growth in the Urban Growth Area within cities, designated regional centers, countywide centers, locally designated local centers, areas of high employment, and other transit supported areas to promote access to opportunity. Focus employment growth within designated regional and countywide manufacturing/industrial centers and within locally designated local centers.

DP-5 Reduce greenhouse gas emissions through land use strategies that promote a mix of housing, employment, and services at densities sufficient to encourage walking, bicycling, transit use, and other alternatives to auto travel, and by locating housing closer to areas of high employment.

DP-6 Adopt land use and community investment strategies that promote public health and address racially and environmentally disparate health outcomes and promote access to opportunity. Focus on residents with the highest needs in providing and enhancing opportunities for employment, safe and convenient daily physical activity, social connectivity, protection from exposure to harmful substances and environments, and housing in high opportunity areas.

DP-7 Plan for street networks that provide a high degree of connectivity to encourage walking, bicycling, transit use, and safe and healthy routes to and from public schools.

DP-8 Increase access to healthy and culturally relevant food in communities throughout the Urban Growth Area by encouraging the location of healthy food purveyors, such as grocery stores, farmers markets, urban agriculture programs, and community food gardens in proximity to residential uses and transit facilities, particularly in those areas with limited access to healthy food.

DP-9 Designate Urban Separators as permanent low-density incorporated and unincorporated areas within the Urban Growth Area. Urban Separators are intended to protect Natural Resource Lands, the Rural Area, and environmentally sensitive areas, and create open space and wildlife corridors within and between communities while also providing public health, environmental, visual, and recreational benefits. Changes to Urban Separators are made pursuant to the Countywide Planning Policies amendment process described in policy FW-1. Designated Urban Separators within cities and unincorporated areas are shown in the Urban Separators Map in Appendix 3.

DP-10 No new Fully Contained Communities shall be approved in unincorporated King County.

DP-11 When large mixed-use developments are proposed adjacent to the Rural Area, permitting cities shall collaborate with King County during the review process to avoid and mitigate impacts on the surrounding Rural Area and Natural Resource Lands.

Growth Targets

Under the Growth Management Act, King County, in coordination with the cities in King County, adopts growth targets for the ensuing 20-year planning period. Growth targets are policy statements about the amount of housing and employment growth each jurisdiction is planning to accommodate within its comprehensive plan. Growth targets are adopted for each jurisdiction and unincorporated urban King County in the Countywide Planning Policies. Growth targets for the cities in the rural area include the incorporated area and the associated Potential Annexation Area, as shown in the map in Appendix 2.

DP-12 GMPC shall allocate residential and employment growth to each city and urban unincorporated area in the county. This allocation is predicated on:

a) Accommodating the most recent 20-year population projection from the state Office of Financial Management and the most recent 20-year regional employment forecast from the Puget Sound Regional Council, informed by the 20-year projection of housing units from the state Department of Commerce;
b) Planning for a pattern of growth that is consistent with the Regional Growth Strategy including focused growth within cities and Potential Annexation Areas with designated centers and within high-capacity transit station areas, limited development in the Rural Area, and protection of designated Natural Resource Lands;
c) Efficiently using existing zoned and future planned development capacity as well as the capacity of existing and planned infrastructure, including sewer, water, and stormwater systems;
d) Promoting a land use pattern that can be served by a connected network of public transportation services and facilities and pedestrian and bicycle infrastructure and amenities;

e) Improving jobs/housing balance consistent with the Regional Growth Strategy, both between counties in the region and within subareas in the county;
f) Promoting opportunities for housing and employment throughout the Urban Growth Area and within all jurisdictions in a manner that ensures racial and social equity;
g) Allocating growth to Potential Annexation Areas within the urban unincorporated area proportionate to their share of unincorporated capacity for housing and employment growth.

DP-13 The Growth Management Planning Council shall:
a) Update housing and employment targets periodically to provide jurisdictions with up-to-date growth allocations to be used as the land use assumption in state-mandated comprehensive plan updates;
b) Adopt housing and employment growth targets in the Countywide Planning Policies pursuant to the procedure described in policy FW-1;
c) Create a coordinated countywide process to reconcile and set growth targets that implements the Regional Growth Strategy through countywide shares of regional housing and jobs, allocations to Regional Geographies, and individual jurisdictional growth targets;
d) Ensure that each jurisdiction's growth targets are commensurate with their role in the Regional Growth Strategy by establishing a set of objective criteria and principles to guide how jurisdictional targets are determined;
e) Ensure that each jurisdiction's growth targets allow it to meet the need for affordable housing for households with low-, very low-, and extremely low-incomes; and
f) Adjust targets administratively upon annexation of unincorporated Potential Annexation Areas by cities. Growth targets for the planning period are shown in Table DP-1.

DP-14 All jurisdictions shall accommodate housing and employment by:
a) Using the adopted growth targets as the land use assumption for their comprehensive plan;
b) Establishing local growth targets for regional growth centers and regional manufacturing/industrial centers, where applicable;
c) Ensuring adopted comprehensive plans and zoning regulations provide capacity for residential, commercial, and industrial uses that is sufficient to meet 20-year growth targets and is consistent with the desired growth pattern described in VISION 2050;
d) Ensuring adopted local water, sewer, transportation, utility, and other infrastructure plans and investments, including special purpose district plans, are consistent in location and timing with adopted targets as well as regional and countywide plans; and
e) Transferring an accommodating unincorporated area housing and employment targets as annexations occur

Table DP-1: King County Jurisdiction Growth Targets 2019-2044			
		Net New Units and Jobs	
	Jurisdiction	2019-2044 Housing Target	2019-2044 Job Target
Metro Cities	Bellevue	35,000	70,000
	Seattle	112,000	169,500
	Metropolitan Cities Subtotal	**147,000**	**239,500**
Core Cities	Auburn	12,000	19,520
	Bothell	5,800	9,500
	Burien	7,500	4,770
	Federal Way	11,260	20,460
	Issaquah	3,500	7,950
	Kent	10,200	32,000
	Kirkland	13,200	26,490
	Redmond	20,000	24,000
	Renton	17,000	31,780
	SeaTac	5,900	14,810
	Tukwila	6,500	15,890
	Core Cities Subtotal	**112,860**	**207,170**
High Capacity Transit Communities	Des Moines	3,800	2,380
	Federal Way PAA	1,020	720
	Kenmore	3,070	3,200
	Lake Forest Park	870	550
	Mercer Island	1,239	1,300
	Newcastle	1,480	500
	North Highline PAA	1,420	1,220
	Renton PAA - East Renton	170	0
	Renton PAA - Fairwood	840	100
	Renton PAA - Skyway/West Hill	670	600
	Shoreline	13,330	10,000
	Woodinville	2,033	5,000
	High Capacity Transit Communities Subtotal	**29,942**	**25,570**
Table DP-1: King County Jurisdiction Growth Targets 2019-2044			
		Net New Units and Jobs	

	Jurisdiction	2019-2044 Housing Target	2019-2044 Job Target
Cities and Towns	Algona	170	325
	Beaux Arts	1	0
	Black Diamond	2,900	680
	Carnation	799	450
	Clyde Hill	10	10
	Covington	4,310	4,496
	Duvall	890	990
	Enumclaw	1,057	989
	Hunts Point	1	0
	Maple Valley	1,720	1,570
	Medina	19	0
	Milton	50	900
	Normandy Park	153	35
	North Bend	1,748	2,218
	Pacific	135	75
	Sammamish	*	*
	Skykomish	10	0
	Snoqualmie	1,500	4,425
	Yarrow Point	10	0
	Cities and Towns Subtotal	**15,483**	**17,163**
Urban Unincorporated	Auburn PAA	12	0
	Bellevue PAA	17	0
	Black Diamond PAA	328	0
	Issaquah PAA	35	0
	Kent PAA	3	300
	Newcastle PAA	1	0
	Pacific PAA	134	0
	Redmond PAA	120	0
	Sammamish PAA	194	0
	Unaffiliated Urban Unincorporated	448	400
	Urban Unincorporated Subtotal	**1,292**	**700**
Urban Growth Area Total		**306,577**	**490,103**

* Growth Management Planning Council (GMPC) Motion 21-4 established a process to revise the 2019-2044 growth targets for the City of Sammamish to reflect updated sewer capacity.

Sammamish shall submit final growth targets to the GMPC by June 1, 2021 for action by the GMPC and recommendation to the King County Council.

Amendments to the Urban Growth Area

The following policies guide the decision-making process by both the GMPC and King County regarding proposals to amend the Urban Growth Area.

DP-15 Review the Urban Growth Area at least every ten years. In this review consider monitoring reports and other available data. As a result of this review and based on the criteria established in policies DP-16 through DP-19, King County may propose and then the Growth Management Planning Council may recommend amendments to the Countywide Planning Policies and King County Comprehensive Plan that make changes to the Urban Growth Area boundary.

DP-16 Allow amendment of the Urban Growth Area only when the following steps have been satisfied:

a) The proposed amendment is under review by the County as part of an amendment process of the King County Comprehensive Plan;
b) King County submits the proposal to the Growth Management Planning Council for the purposes of review and recommendation to the King County Council on the proposed amendment to the Urban Growth Area;
c) The King County Council approves or denies the proposed amendment; and
d) If approved by the King County Council, the proposed amendment is ratified by the cities following the procedures set forth in policy FW-1.

DP-17 Allow expansion of the Urban Growth Area only if at least one of the following criteria is met:

a) A countywide analysis determines that the current Urban Growth Area is insufficient in size and additional land is needed to accommodate the housing and employment growth targets, including institutional and other non-residential uses, and there are no other reasonable measures, such as increasing density or rezoning existing urban land, that would avoid the need to expand the Urban Growth Area; or
b) A proposed expansion of the Urban Growth Area is accompanied by dedication of permanent open space to the King County Open Space System, where the acreage of the proposed open space:
    1) Is at least four times the acreage of the land added to the Urban Growth Area;
    2) Is contiguous with the Urban Growth Area with at least a portion of the dedicated open space surrounding the proposed Urban Growth Area expansion; and
    3) Preserves high quality habitat, critical areas, or unique features that contribute to the band of permanent open space along the edge of the Urban Growth Area; or

c) The area is currently a King County park being transferred to a city to be maintained as a park in perpetuity or is park land that has been owned by a city since 1994 and is less than thirty acres in size.

DP-18 Add land to the Urban Growth Area only if expansion of the Urban Growth Area is warranted based on the criteria in DP-17(a) or DP-17(b), and it meets all of the following criteria:

a) Is adjacent to the existing Urban Growth Area;
b) For expansions based on DP-17(a) only, is no larger than necessary to promote compact development that accommodates anticipated growth needs;
c) Can be efficiently provided with urban services and does not require supportive facilities located in the Rural Area;
d) Follows topographical features that form natural boundaries, such as rivers and ridge lines and does not extend beyond natural boundaries, such as watersheds, that impede the provision of urban services;
e) Is not currently designated as Resource Land;
f) Is sufficiently free of environmental constraints to be able to support urban development without significant adverse environmental impacts, unless the area is designated as an Urban Separator by interlocal agreement between King County and the annexing city; and
g) Is subject to an agreement between King County and the city or town adjacent to the area that the area will be added to the city's Potential Annexation Area. Upon ratification of the amendment, the Countywide Planning Policies will reflect both the Urban Growth Area change and Potential Annexation Area change.

DP-19 Allow redesignation of Urban land currently within the Urban Growth Area to Rural land outside of the Urban Growth Area if the land is not needed to accommodate projected urban growth, is not served by public sewers, is contiguous with the Rural Area, and:

a) Is not characterized by urban development;
b) Is currently developed with a low-density lot pattern that cannot be realistically redeveloped at an urban density; or
c) Is characterized by environmentally sensitive areas making it inappropriate for higher density development.

Review and Evaluation Program

The following policies guide the buildable lands program conducted by the GMPC and King County.

DP-20 Conduct a buildable lands program that meets or exceeds the review and evaluation requirements of the Growth Management Act. The purposes of the buildable lands program are:

a) To collect and analyze data on development activity, including land supply, zoning, development standards, land uses, critical areas, and capacity for residential, commercial, and industrial land uses in urban areas;
b) To determine whether jurisdictions are achieving urban densities and planned growth consistent with comprehensive plans, countywide planning policies, and multicounty planning policies; and
c) To evaluate the sufficiency of land capacity to accommodate growth for the remainder of the planning period.

DP-21 The County and the cities, through the Growth Management Planning Council, will collaboratively determine whether reasonable measures other than amending the Urban Growth Area are necessary to ensure sufficient additional capacity if a countywide urban growth capacity report, informed by local data and analysis where appropriate, determines that:

a) The current Urban Growth Area is insufficient in capacity to accommodate the housing and employment growth targets; or
b) Any jurisdiction:
    1) Contains insufficient capacity to accommodate the housing and employment growth targets;
    2) Has significant differences between development assumptions and growth targets and actual housing and employment growth; or
    3) Has not achieved urban densities consistent with the adopted comprehensive plan.

DP-22 Jurisdictions shall adopt any necessary reasonable measures into their comprehensive plans to promote growth consistent with planned urban densities and adopted housing and employment targets. Reasonable measures should help implement local targets in a manner consistent with the Regional Growth Strategy. Jurisdictions shall report adopted reasonable measures to the GMPC and shall collaborate to provide data periodically on the effectiveness of those measures.

Joint Planning and Annexation

DP-23 Coordinate the preparation of comprehensive plans with adjacent and other affected jurisdictions, military facilities, tribal governments, ports, airports, and other related entities to avoid or mitigate the potential cross-border impacts of urban development and encroachment of incompatible uses.

DP-24 Designate Potential Annexation Areas in city comprehensive plans and adopt them in the Countywide Planning Policies. Affiliate all Potential Annexation Areas with adjacent cities to ensure they do not overlap or leave urban unincorporated islands between cities. Except for parcel or block-level annexations that facilitate service provision, commercial areas and residential areas shall be annexed holistically rather than in a manner that leaves residential urban unincorporated islands. Annexation is preferred over incorporation.

DP-25 Cities and the County shall work to establish timeframes for annexation of roadways and shared streets within or between cities, but still under King County jurisdiction.

DP-26 Facilitate the annexation of unincorporated areas that are already urbanized and are within a city's Potential Annexation Area to increase the provision of urban services to those areas. Utilize tools and strategies such as service and infrastructure financing, transferring permitting authority, or identifying appropriate funding sources to address infrastructure and service provision issues in Potential Annexation Areas.

DP-27 Cities with Potential Annexation Areas and the County shall work to establish pre-annexation agreements that identify mutual interests and ensure coordinated planning and compatible development until annexation is feasible.

DP-28 Allow cities to annex territory only within their designated Potential Annexation Area as shown in the Potential Annexation Areas Map in Appendix 2. Phase annexations to coincide with the ability of cities or existing special purpose districts to coordinate the provision of a full range of urban services to areas to be annexed.

a) For areas that have received approval for annexation from the King County Boundary Review Board, the City shall include a process that includes collaboration with King County for annexation in the next statutory update of their comprehensive plan.
b) Jurisdictions may negotiate with one another regarding changing boundaries or affiliations of Potential Annexation Areas and may propose such changes to GMPC as an amendment to Appendix 2. In proposing any new or revised PAA boundaries or city affiliation, jurisdictions should consider the criteria in DP-30. In order to ensure that any changes can be included in local comprehensive plans, any proposals resulting from such negotiation shall be brought to GMPC for action no later than two years prior to the statutory deadline for the major plan update.

DP-29 Strive to establish alternative non-overlapping Potential Annexation Area boundaries within the North Highline unincorporated area, where Potential Annexation Areas overlapped prior to January 1, 2009, through a process of negotiation. Absent a negotiated resolution, a city may file a Notice of Intent to Annex with the Boundary Review Board for King County for territory within its designated portion of a Potential Annexation Area overlap as shown in the

Potential Annexation Areas Map in Appendix 2 and detailed in the city's comprehensive plan after the following steps have been taken:

a) The city proposing annexation has, at least 30 days prior to filing a Notice of Intent to annex with the Boundary Review Board, contacted in writing the cities with the PAA overlap and the county to provide notification of the city's intent to annex and to request a meeting or formal mediation to discuss boundary alternatives, and;
b) The cities with the Potential Annexation Area overlap and the county have either:
   1) Agreed to meet but failed to develop a negotiated settlement to the overlap within 60 days of receipt of the notice, or
   2) Declined to meet or failed to respond in writing within 30 days of receipt of the notice.

DP-30 Evaluate proposals to annex or incorporate urban unincorporated land based on the following criteria, as applicable:

a) Conformance with Countywide Planning Policies including the Urban Growth Area boundary;
b) The ability of the annexing or incorporating jurisdiction to efficiently provide urban services at standards equal to or better than the current service providers;
c) The effect of the annexation or incorporation in avoiding or creating unincorporated islands of development;
d) The ability of the annexing or incorporating jurisdiction to serve the area in a manner that addresses racial and social equity and promotes access to opportunity; and
e) Outreach to community, the interest of the community in moving forward with a timely annexation or incorporation of the area.

Centers and Station Areas

A centers strategy is the foundation for King County to achieve the Regional Growth Strategy as well as a range of other objectives, including providing a land use framework for an efficient and effective regional transit system, and guiding growth to locations planned for greater access to opportunity. Regionally designated centers, countywide centers, local centers, and the areas surrounding high-capacity transit stations provide areas of mixed-use zoning, infrastructure, and concentrations of services and amenities to accommodate both housing and employment growth.

Regionally designated centers include regional growth centers and regional manufacturing/industrial centers. There are two types of regional growth centers - metro growth centers and urban growth centers - and two types of regional manufacturing/industrial centers - industrial employment and industrial growth centers. Regional growth centers are focal points for investment and development. Manufacturing/industrial centers preserve lands

for middle-wage jobs in basic industries and trade and provide areas where that employment may grow in the future.

Countywide growth centers serve important roles as places for concentrating jobs, housing, shopping, and recreational opportunities. These are often smaller downtowns, high-capacity transit station areas, or neighborhood centers that are linked by transit, provide a mix of housing and services, and serve as focal points for local and county investment. Countywide industrial centers serve as important local industrial areas. These areas support living wage jobs and serve a key role in King County's manufacturing/industrial economy.

The King County Centers Designation Framework in Appendix 6 provides designation processes and timelines, minimum existing and planned density thresholds, and subarea planning expectations for regional and countywide centers. Regionally designated centers are shown on the Generalized Land Use Categories Map in Appendix 1.

Goal Statement: *King County grows in a manner that reinforces and expands upon a system of existing and planned high-capacity transit in central places within which concentrated residential communities and economic activities can flourish.*

Regional Growth Centers

DP-31 Focus housing and employment growth into designated regional growth centers, at levels consistent with the Regional Growth Strategy, and at densities that maximize high-capacity transit.

DP-32 Designate regional growth centers in the Countywide Planning Policies where city-nominated locations meet the criteria in the King County Centers Designation Framework, as adopted in Appendix 6. Regional growth centers should be limited in number and located on existing or planned high-capacity transit corridors to provide a framework for targeted private and public investments that support regional land use and transportation goals.

DP-33 Establish subarea plans for designated regional and countywide centers that meet the criteria in the King County Centers Designation Framework, as adopted in Appendix 6.

DP-34 Evaluate the potential physical, economic, and cultural displacement of residents and businesses in regional growth centers and high-capacity transit station areas, particularly for Black, Indigenous, and other People of Color communities; immigrants and refugees, low-income populations; disabled communities; and other communities at greatest risk of displacement. Use a range of strategies to mitigate identified displacement impacts.

Manufacturing/ Industrial Centers

DP-35 Designate and accommodate industrial employment growth in a network of regional and countywide industrial centers to support economic development and middle-wage jobs in King County. Designate these centers based on nominations from cities and after determining that:

a) The nominated locations meet the criteria set forth in the King County Centers Designation Framework and the criteria established by the Puget Sound Regional Council for regional manufacturing/industrial centers;
b) The proposed center's location will promote a countywide system of manufacturing/ industrial centers with the total number of centers representing a realistic growth strategy for the county; and
c) The city's commitments will help ensure the success of the center.

DP-36 Minimize or mitigate potential health impacts of the activities in manufacturing/industrial centers on residential communities, schools, open space, and other public facilities.

Countywide and Local Centers

DP-37 Designate countywide centers in the Countywide Planning Policies where locations meet the criteria in the King County Centers Designation Framework, as adopted in Appendix 6. Countywide centers shall have zoned densities that support high-capacity transit and be located on existing or planned transit corridors.

DP-38 Support the designation of local centers, such as city or neighborhood centers, transit station areas, or other activity nodes, where housing, employment, and services are accommodated in a compact form and at sufficient densities to support transit service and to make efficient use of urban land.

DP-39 Evaluate the potential physical, economic, and cultural displacement of residents and businesses in countywide and local centers, particularly for Black, Indigenous, and other People of Color communities; immigrants and refugees, low-income populations; disabled communities; and other communities at greatest risk of displacement. Use a range of strategies to mitigate identified displacement impacts.

Urban Design and Historic Preservation

The countywide vision includes elements of urban design and form intended to integrate urban development into existing built and natural environments in ways that enhance urban and natural settings to create vibrant places. These elements promote public health, include high

quality design, context sensitive infill and redevelopment, historic preservation, and cultural awareness, as well as the interdependence of urban and rural and agricultural lands and uses.

Goal statement: *The built environment in both urban and rural settings achieves high quality design that recognizes and enhances, where appropriate, existing natural and urban settings and human health and dignity.*

DP-40 Plan for neighborhoods or subareas to encourage infill and redevelopment, reuse of existing buildings and underutilized lands, and provision of adequate public spaces, in a manner that enhances public health, existing community character, and mix of uses. Neighborhood and subarea planning should include equitable engagement with Black, Indigenous, and other People of Color communities; immigrants and refugees; people with low-incomes; people with disabilities; and communities with language access needs.

DP-41 Promote a high quality of design and site planning throughout the Urban Growth Area. Provide for connectivity in the street network to accommodate walking, bicycling, and transit use to promote health and well-being.

DP-42 Preserve significant historic, visual, archeological, cultural, architectural, artistic, and environmental features, especially where growth could place these resources at risk. Support cultural resources and institutions that reflect the diversity of the community. Where appropriate, designate individual features or areas for protection or restoration. Encourage land use patterns and adopt regulations that protect historic resources and sustain historic community character while allowing for equitable growth and development.

DP-43 Create and protect systems of green infrastructure, such as urban forests, parks, green roofs, and natural drainage systems, in order to reduce climate-altering pollution and increase resilience of communities to climate change impacts. Prioritize neighborhoods with historical underinvestment in green infrastructure.

DP-44 Design communities, neighborhoods, and individual developments using techniques that reduce heat absorption, particularly in regional and countywide centers and residential neighborhoods with less tree canopy and open spaces.

DP-45 Adopt flexible design standards, parking requirements, incentives, or guidelines that foster green building, multimodal transportation, and infill development that enhances the existing or desired urban character of a neighborhood/community. Ensure adequate code enforcement so that flexible regulations are appropriately implemented.

Rural Area and Natural Resource Lands

The Rural Area and Natural Resource Lands encompass all areas outside of the Urban Growth Area and include Vashon Island in Puget Sound and the area just east of the Urban Growth Area all the way to the crest of the Cascade Mountains.

Rural Area

The Rural Area is characterized by low density development with a focus on activities that are dependent on the land such as small-scale farming and forestry. The Rural Area also provides important environmental and habitat functions and is critical for salmon recovery. The location of the Rural Area, between the Urban Growth Area and designated Natural Resource Lands, helps to protect commercial agriculture and timber from incompatible uses. The Rural Area, outside of the Cities in the Rural Area, is to remain in unincorporated King County and is to be provided with a rural level of service.

Goal Statement: *The Rural Area geography is stable and the level and pattern of growth within it provide for a variety of landscapes and open space lands, maintains diverse low-density communities, and supports rural economic activities based on sustainable stewardship of the land.*

DP-46 Provide opportunities for residential and employment growth within Cities in the Rural Area at levels consistent with adopted growth targets. Growth levels should not create pressure for conversion of nearby Rural or Natural Resource lands, nor pressure for extending or expanding urban services, infrastructure, and facilities such as roads or sewer across or into the Rural Area. Transit service may cross non-urban lands to serve Cities in the Rural Area.

DP-47 Limit growth in the Rural Area to prevent sprawl and the overburdening of rural services, minimize the need for new rural infrastructure, maintain rural character, and protect open spaces and the natural environment.

DP-48 Limit residential development in the Rural Area to housing at low densities that are compatible with rural character and comply with the following density guidelines:

a) One home per 20 acres where a pattern of large lots exists and to buffer Forest Protection Districts and Agricultural Districts;
b) One home per 10 acres where the predominant lot size is less than 20 acres; or
c) One home per five acres where the predominant lot size is less than 10 acres.

Allow limited clustering within development sites to prevent development on environmentally critical lands or on productive forest or agricultural lands, but not to exceed the density guidelines cited in (a) through (c).

DP-49 Limit the extension of urban infrastructure improvements through the Rural Area to only cases where it is necessary to serve the Urban Growth Area and where there are no other

feasible alignments. Such limited extensions may be considered only if land use controls are in place to restrict uses appropriate for the Rural Area and only if access management controls are in place to prohibit tie-ins to the extended facilities.

DP-50 Establish rural development standards and strategies to ensure all development protects the natural environment, including farmlands and forest lands, by using seasonal and maximum clearing limits for vegetation, limits on the amount of impervious surface, surface water management standards that preserve natural drainage systems, water quality and groundwater recharge, and best management practices for resource-based activities.

DP-51 Mitigate negative impacts of industrial-scale development that occurs within the Rural Area.

DP-52 Except as provided in Appendix 5 (March 31, 2012 School Siting Task Force Report), limit new nonresidential uses located in the Rural Area to those that are demonstrated to serve the Rural Area, unless the use is dependent upon a rural location. Such uses shall be of a size, scale, and nature that is consistent with rural character.

DP-53 Allow cities that own property in the Rural Area to enter into interlocal agreements with King County to allow the cities to provide services to the properties they own as long as the cities agree to not annex the property or serve it with sewers or any infrastructure at an urban level of service. The use of the property must be consistent with the Rural Area policies in the Countywide Planning Policies and the King County Comprehensive Plan.

Natural Resource Lands

Natural Resource Lands are designated areas with long-term commercial significance for agriculture, forestry, and mining. The use and designation of these lands are to be permanent, in accordance with the Growth Management Act. King County has maintained this base of agriculture and forest lands despite the rapid growth of the previous decades. The Natural Resource Lands are to remain in unincorporated King County but their benefit and significance is felt throughout the county into the cities. Within cities, farmers markets are becoming important and sought-after neighborhood amenities.

The forests of the Pacific Northwest are some of the most productive in the world and King County has retained two-thirds of the county in forest cover. Large scale forestry is a traditional land use in the eastern half of King County and remains a significant contributor to the rural economy. In addition, forests provide exceptional recreational opportunities, including downhill and cross-country skiing, mountain biking, hiking, and backpacking.

Goal Statement: *Natural Resource Lands are valuable long-term assets of King County and are renowned for their productivity and sustainable management.*

DP-54 Promote and support forestry, agriculture, mineral extraction, and other resource-based industries outside of the Urban Growth Area as part of a diverse and sustainable regional economy. Avoid redesignating Natural Resource Lands to Rural.

DP-55 Conserve commercial agricultural and forestry resource lands primarily for their long-term productive resource value and for the open space, scenic views, wildlife habitat, and critical area protection they provide. Limit the subdivision of land so that parcels remain large enough for commercial resource production.

DP-56 Encourage best practices in agriculture and forestry operations for long-term protection of the natural resources and habitat.

DP-57 Prohibit annexation of lands within designated Agricultural Production Districts or within Forest Production Districts by cities.

DP-58 Retain the Lower Green River Agricultural Production District as a regionally designated resource that is to remain in unincorporated King County.

DP-59 Prevent incompatible land uses adjacent to designated Natural Resource Lands to avoid interference with their continued use for the production of agricultural, mining, or forest products.

DP-60 Support agricultural, farmland, and aquatic uses that enhance the food system, and promote local production and processing of food to reduce the need for long distance transport and to increase the reliability and security of local food. Promote activities and infrastructure, such as farmers markets, farm worker housing and agricultural processing facilities, that benefit both cities and farms by improving access to locally grown agricultural products.

DP-61 Support institutional procurement policies that encourage purchases of locally grown food products.

DP-62 Ensure that extractive industries and industrial-scale operations on resource lands maintain environmental quality, minimize negative impacts on adjacent lands, and that an appropriate level of reclamation occurs prior to redesignation.

DP-63 Use a range of tools, including land use designations, development regulations, level-of-service standards, and transfer or purchase of development rights to preserve Rural and Natural Resource Lands and focus urban development within the Urban Growth Area.

DP-64 Use transfer of development rights to shift potential development from the Rural Area and Natural Resource Lands into the Urban Growth Area, consistent with the Regional Growth Strategy. Implement transfer of development rights within King County through a partnership between the County and cities that is designed to:

a) Identify rural and resource sending sites that satisfy countywide conservation goals and are consistent with regionally coordinated transfer of development rights efforts;
b) Preserve rural and resource lands of compelling interest countywide and to participating cities;
c) Identify appropriate transfer of development rights receiving areas within cities;
d) Identify incentives for city participation in regional transfer of development rights (i.e. county-to-city transfer of development rights);
e) Develop interlocal agreements that allow rural and resource land development rights to be used in city receiving areas;
f) Identify and secure opportunities to fund or finance infrastructure within city transfer of development rights receiving areas; and
g) Be compatible with existing within-city transfer of development rights programs.

HOUSING

The Countywide Planning Policies in the Housing Chapter support a range of affordable, accessible, and healthy housing choices for current and future residents. Further, they respond to the legacy of discriminatory housing and land use policies and practices (e.g. redlining, racially restrictive covenants, exclusionary zoning, etc.) that have led to significant racial and economic disparities in access to housing and neighborhoods of choice. These disparities affect equitable access to well-funded schools, healthy environments, open space, and employment.

The policies reflect the region's commitment to addressing the 2018 findings of the Regional Affordable Housing Task Force (Task Force). Key findings include:

- Dramatic housing price increases between 2012 and 2017 resulted in an estimated 156,000 extremely low-, very low-, and low-income households spending more than 30 percent of their income on housing (housing cost burdened); and
- Black, Hispanic, Indigenous, and extremely low-income households are among those most disproportionately impacted by housing cost burden.

While significant housing market activity is needed to reach overall King County housing growth targets, the ability of the region's housing market to address the housing needs of low-income households is limited. A large majority of the need will need to be addressed with units restricted to income-eligible households – both rent-restricted units and resale restricted homes ("income-restricted units").

Building on the Task Force's work, this chapter establishes a countywide need for affordable housing defined as the additional housing units needed in King County by 2044 so that no household at or below 80 percent of Area Median Income (AMI) is housing cost burdened. While the need is expressed in countywide terms, housing affordability varies significantly across jurisdictions. In addressing housing needs, less affordable jurisdictions will need to take significant action to increase affordability across all income levels while more affordable jurisdictions will need to take significant action to preserve affordability. To succeed, all communities must address housing need where it is greatest - housing affordable to extremely low-income households.

When taken together, all the comprehensive plans of King County jurisdictions must "plan for and accommodate" the existing and projected housing needs of the county (RCW 36.70A.020 and 36.70A.070). The policies below set a framework for individual and collective action and accountability to meet the countywide need and eliminate disparities in access to housing and neighborhoods of choice. These policies guide jurisdictions through a four-step process:

1. Conduct a housing inventory and analysis;
2. Implement policies and strategies to meet housing needs equitably;
3. Measure results and provide accountability; and
4. Adjust strategies to meet housing needs.

Overarching Goal: *Provide a full range of affordable, accessible, healthy, and safe housing choices to every resident in King County. All jurisdictions work to:*

- *preserve, improve, and expand their housing stock;*
- *promote fair and equitable access to housing for all people; and*
- *take actions that eliminate race-, place-, ability-, and income-based housing disparities.*

H-1 All comprehensive plans in King County combine to address the countywide need for housing affordable to households with low-, very low-, and extremely low-incomes, including those with special needs, at a level that calibrates with the jurisdiction's identified affordability gap for those households and results in the combined comprehensive plans in King County meeting countywide need. The countywide need for housing in 2044 by percentage of AMI is:

30 percent and below AMI (extremely low)	15 percent of total housing supply
31-50 percent of AMI (very low)	15 percent of total housing supply
51-80 percent of AMI (low)	19 percent of total housing supply

Table H-1 provides additional context on the countywide need for housing.[1]

[1] Table H-1 includes both homeownership and rental units.

Table H-1: King County Affordable Housing Need	30% AMI	31% - 50% AMI	51% - 80% AMI	80% AMI
Housing Units by Affordability (2019)				
Number of Units	44,000	122,000	180,000	346,000
As Share of Total Units	5%	13%	19%	36%
Additional Affordable Housing Units Needed (2019-2044)				
Additional Housing Units Needed to Address Existing Conditions[2]	105,000	31,000	23,000	159,000
Housing Units Needed to Address Growth Through 2044[3]	39,000	32,000	33,000	104,000
Total Additional Affordable Housing Units Needed	**144,000**	**63,000**	**56,000**	**263,000**
Total Affordable Housing Units Needed by 2044 (Includes Current Housing Units)				
Number of Units	188,000	185,000	236,000	609,000
As Share of Total Units	15%	15%	19%	49%

Refer to Appendix 4 for the methodology used to calculate countywide need and 2019 jurisdictional affordability levels as compared to countywide need.

H-2 Prioritize the need for housing affordable to households at or below 30 percent AMI (extremely low-income) by implementing tools such as:

a) Increasing capital, operations, and maintenance funding;
b) Adopting complementary land use regulations;
c) Fostering welcoming communities, including people with behavioral health needs;
d) Adopting supportive policies; and
e) Supporting collaborative actions by all jurisdictions.

H-3 Update existing and projected countywide and jurisdictional housing needs using data and methodology provided by the Washington State Department of Commerce, in compliance with state law.

[2] Estimates of additional affordable units needed to address existing cost burden and provide housing for persons experiencing homelessness. The estimates are based on a model in which adding units for households within a given low-income category (e.g., < 30% AMI) allows those households to vacate units affordable within the next income category (e.g., greater than 30% AMI and less than or equal to 50% of AMI), in turn addressing needs of cost-burdened households in that income level. (Estimates shown assume that housing units equal to 1/25th of cost burdened households in each category are added annually in each income category until cost burden is eliminated; a range of estimates is possible depending on inputs to this model.)

[3] Estimates of housing units needed to address growth assume income distribution of households added through growth is the same as existing income distribution.

Conduct a Housing Inventory and Analysis

The Growth Management Act requires an inventory and analysis of existing and projected housing needs as part of each jurisdiction's comprehensive plan housing element. The inventory and needs analysis, together with an evaluation of recent progress to address housing needs, helps cities identify the greatest needs and prioritize strategies to address them. Understanding the impact of discriminatory housing and land use practices and current disparities in access to housing and neighborhoods of choice helps focus policies and programs to achieve equitable housing outcomes. For example, understanding disparities in access to opportunity areas (i.e. areas with high quality schools, jobs, transit and access to parks, open space, and clean air, water, and soil) can identify a need for increased affordability in those areas. Appendix 4 provides further guidance on conducting a housing inventory and analysis.

H-4 Conduct an inventory and analysis in each jurisdiction of existing and projected housing needs of all segments of the population and summarize the findings in the housing element. The inventory and analysis shall include:

a) Affordability gap of the jurisdiction's housing supply as compared to countywide need percentages from Policy H-1 (see table H-3 in Appendix 4) and needs for housing affordable to moderate income households;
b) Number of existing housing units by housing type, age, number of bedrooms, condition, tenure, and AMI limit (for income-restricted units);
c) Number of existing emergency housing, emergency shelters, and permanent supportive housing facilities and units or beds, as applicable;
d) Percentage of residential land zoned for and geographic distribution of moderate- and high-density housing in the jurisdiction;
e) Number of income-restricted units and, where feasible, total number of units, within a half-mile walkshed of high-capacity or frequent transit service where applicable and regional and countywide centers;
f) Household characteristics, by race/ethnicity:
    1) Income (median and by AMI bracket)
    2) Tenure (renter or homeowner)
    3) Size
    4) Housing cost burden and severe housing cost burden;
g) Current population characteristics:
    1) Age by race/ethnicity;
    2) Disability
h) Projected population growth;
i) Housing development capacity within a half-mile walkshed of high-capacity or frequent transit service, if applicable;
j) Ratio of housing to jobs in the jurisdiction;

k) Summary of existing and proposed partnerships and strategies, including dedicated resources, for meeting countywide housing need, particularly for populations disparately impacted;
l) The housing needs of people who need supportive services or accessible units, including but not limited to people experiencing homelessness, persons with disabilities, people with medical conditions, and older adults;
m) The housing needs of communities experiencing disproportionate harm of housing inequities including Black, Indigenous, and People of Color (BIPOC); and
n) Areas in the jurisdiction that may be at higher risk of displacement from market forces that occur with changes to zoning development regulations and public capital investments.

H-5 Evaluate the effectiveness of existing housing policies and strategies to meet a significant share of countywide need. Identify gaps in existing partnerships, policies, and dedicated resources for meeting the countywide need and eliminating racial and other disparities in access to housing and neighborhoods of choice.

H-6 Document the local history of racially exclusive and discriminatory land use and housing practices, consistent with local and regional fair housing reports and other resources. Explain the extent to which that history is still reflected in current development patterns, housing conditions, tenure, and access to opportunity. Identify local policies and regulations that result in racially disparate impacts, displacement, and exclusion in housing, including zoning that may have a discriminatory effect, disinvestment, and infrastructure availability. Demonstrate how current strategies are addressing impacts of those racially exclusive and discriminatory policies and practices. The County will support jurisdictions in identifying and compiling resources to support this analysis.

Collaborate Regionally

Housing affordability is important to regional economic vitality and sustainability. Housing markets do not respect jurisdictional boundaries. For these reasons, this section promotes cross-sectoral and interjurisdictional coordination and collaboration to identify and meet the housing needs of households with extremely low-, very low-, and low-incomes. Collaborative efforts, supported by the work of the Affordable Housing Committee, the Puget Sound Regional Council and other bodies, contribute to producing and preserving affordable housing and coordinating equitable, sustainable development in the county and region. Where individual jurisdictions lack sufficient resources, collective efforts to fund or provide technical assistance for affordable housing development and preservation, and for the creation of strategies and programs, can help to meet the housing needs identified in comprehensive plans. Jurisdictions with similar housing characteristics tend to be clustered geographically. Therefore, there are opportunities for efficiencies and greater impact through interjurisdictional cooperation. Such

efforts are encouraged and can be a way to meet a jurisdiction's share of the countywide affordable housing need.

H-7 Collaborate with diverse partners (e.g., employers, financial institutions, philanthropic, faith, and community-based organizations) on provision of resources (e.g., funding, surplus property) and programs to meet countywide housing need.

H-8 Work cooperatively with the Puget Sound Regional Council, subregional collaborations and other entities that provide technical assistance to local jurisdictions to support the development, implementation, and monitoring of strategies that achieve the goals of this chapter.

Implement Policies and Strategies to Meet Housing Needs Equitably

VISION 2050 encourages local jurisdictions to implement strategies to preserve, improve, and expand their housing stock to provide a range of affordable, accessible, healthy, sustainable, and safe housing choices to every resident. This section supports equitably meeting housing needs through strategies and actions that promote:

- *Distributional equity:* An individual's income race, ethnicity, immigration status, sexual orientation, ability, or income doesn't impact their ability to access housing in the neighborhood of their choice;
- *Cross-generational equity:* The impact of the housing policies we create result in fair and just distribution of benefits and burdens to future generations;
- *Process equity:* The housing policy development, decision-making, and implementation process is inclusive, open, fair, and accessible to all stakeholders; and
- *Reparative policies:* The policies implemented will actively seek to repair harms caused by racially biased policies.

The strategies are grouped by theme:

- Equitable processes and outcomes;
- Increased housing supply, particularly for households with the greatest needs;
- Expanded housing options and increased affordability accessible to transit and employment;
- Expanded housing and neighborhood choice for all residents; and
- Housing stability, healthy homes, and healthy communities

Further detail on the range of strategies for equitably meeting housing needs is contained in Table H-4 in Appendix 4.

Equitable Processes and Outcomes

Working together with households most impacted by the affordable housing crisis helps to tailor solutions to best meet their needs. Taking intentional action to overcome past and current discriminatory policies and practices helps to reduce disparities in access to housing and neighborhoods of choice.

H-9 Collaborate with populations most disproportionately impacted by housing cost burden in developing, implementing, and monitoring strategies that achieve the goals of this chapter. Prioritize the needs and solutions articulated by these disproportionately impacted populations.

H-10 Adopt intentional, targeted actions that repair harms to Black, Indigenous, and other People of Color households from past and current racially exclusive and discriminatory land use and housing practices (generally identified through Policy H-6). Promote equitable outcomes in partnership with communities most impacted.

Increased Housing Supply, Particularly for Households with the Greatest Needs

VISION 2050 encourages local cities to adopt best practices and innovative techniques to meet housing needs. Meeting the countywide affordable housing need will require actions, including commitment of substantial financial resources, by a wide range of private for profit, non-profit, and government entities. Multiple tools will be needed to meet the full range of needs in any given jurisdiction.

H-11 Adopt policies, incentives, strategies, actions, and regulations that increase the supply of long-term income-restricted housing for extremely low-, very low-, and low-income households and households with special needs.

H-12 Identify sufficient capacity of land for housing including, but not limited to income-restricted 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, duplexes, triplexes, and townhomes.

H-13 Implement strategies to overcome cost barriers to housing affordability. Strategies to do this vary but can include updating development standards and regulations, shortening permit timelines, implementing online permitting, optimizing residential densities, reducing parking requirements, and developing programs, policies, partnerships, and incentives to decrease costs to build and preserve affordable housing.

H-14 Prioritize the use of local and regional resources (e.g., funding, surplus property) for income-restricted housing, particularly for extremely low-income households, populations with special needs, and others with disproportionately greater housing needs. Consider projects that promote access to opportunity, anti-displacement, and wealth building for Black, Indigenous, and People of Color communities to support implementation of policy H-10.

Expanded Housing Options and Increased Affordability Accessible to Transit and Employment

The Regional Growth Strategy accommodates growth in urban areas, focused in designated centers and near transit stations, to create healthy, equitable, vibrant communities well-served by infrastructure and services. As the region invests in transit infrastructure, it must also support affordability in transit areas.

Lack of housing affordability negatively impacts the region's resilience to climate change as people are forced to live far from work, school, and transit, which contributes to climate change through increased transportation emissions and sprawl.

H-15 Increase housing choices for everyone, particularly those earning lower wages, that is co-located with, accessible to, or within a reasonable commute to major employment centers and affordable to all income levels. Ensure there are zoning ordinances and development regulations in place that allow and encourage housing production at levels that improve jobs-housing balance throughout the county across all income levels.

H-16 Expand the supply and range of housing types, including affordable units, at densities sufficient to maximize the benefits of transit investments throughout the county.

H-17 Support the development and preservation of income-restricted affordable housing that is within walking distance to planned or existing high-capacity and frequent transit.

Expanded Housing and Neighborhood Choice for All Residents

Extremely low-, very low-, and low-income residents often have limited choices when seeking an affordable home and neighborhood. The King County Consortium's Analysis of Impediments to Fair Housing Choice found that many Black, Indigenous, and other People of Color communities and immigrant groups face disparities in access to opportunity areas with high quality schools, jobs, transit and access to parks, open space, and clean air, water, and soil. Some of the same groups are significantly less likely to own their home as compared to the countywide average, cutting them off from an important tool for housing stability and wealth building. Further, inequities in housing and land use practices as well as cycles of public and private disinvestment and investment have also resulted in communities vulnerable to

displacement. Intentional actions to expand housing choices throughout the community will help address these challenges.

H-18 Adopt inclusive planning tools and policies whose purpose is to increase the ability of all residents in jurisdictions throughout the county to live in the neighborhood of their choice, reduce disparities in access to opportunity areas, and meet the needs of the region's current and future residents by:

a) Providing access to affordable housing to rent and own throughout the jurisdiction, with a focus on areas of high opportunity;
b) Expanding capacity for moderate-density housing throughout the jurisdiction, especially in areas currently zoned for lower density single-family detached housing in the Urban Growth Area, and capacity for high-density housing, where appropriate, consistent with the Regional Growth Strategy;
c) Evaluating the feasibility of, and implementing, where appropriate, inclusionary and incentive zoning to provide affordable housing; and
d) Providing access to housing types that serve a range of household sizes, types, and incomes, including 2+ bedroom homes for families with children and/or adult roommates and accessory dwelling units, efficiency studios, and/or congregate residences for single adults.

H-19 Lower barriers to and promote access to affordable homeownership for extremely low-, very low-, and low--income, households. Emphasize:

a) Supporting long-term affordable homeownership opportunities for households at or below 80 percent AMI (which may require up-front initial public subsidy and policies that support diverse housing types); and
b) Remedying historical inequities in and expanding access to homeownership opportunities for Black, Indigenous and People of Color communities.

H-20 Adopt policies and strategies that promote equitable development and mitigate displacement risk, with consideration given to the preservation of historical and cultural communities as well as investments in low-, very low-, extremely low-, and moderate-income housing production and preservation; dedicated funds for land acquisition; manufactured housing community preservation, inclusionary zoning; community planning requirements; tenant protections; public land disposition policies; and land that may be used for affordable housing. Mitigate displacement that may result from planning efforts, large-scale private investments, and market pressure. Implement anti-displacement measures prior to or concurrent with development capacity increases and public capital investments.

H-21 Implement, promote, and enforce fair housing policies and practices so that every person in the county has equitable access and opportunity to thrive in their communities of choice, regardless of their race, gender identity, sexual identity, ability, use of a service animal, age,

immigration status, national origin, familial status, religion, source of income, military status, or membership in any other relevant category of protected people.

Housing Stability, Healthy Homes, and Healthy Communities

H-22 Adopt and implement policies that protect housing stability for renter households; expand protections and supports for low-income renters and renters with disabilities.

H-23 Adopt and implement programs and policies that ensure healthy and safe homes.

H-24 Plan for residential neighborhoods that protect and promote the health and well-being of residents by supporting equitable access to parks and open space, safe pedestrian and bicycle routes, clean air, soil and water, fresh and healthy foods, high-quality education from early learning through K-12, affordable and high-quality transit options and living wage jobs and by avoiding or mitigating exposure to environmental hazards and pollutants.

Measure Results and Provide Accountability

Each jurisdiction has a responsibility to address its share of the countywide housing need. The county and cities will collect and report housing data to help evaluate progress in meeting this shared responsibility. The county will help coordinate a transparent data collection and sharing process with cities. Further detail on monitoring procedures is contained in Appendix 4.

H-25 Monitor progress toward meeting countywide housing growth targets, countywide need, and eliminating disparities in access to housing and neighborhood choices. Where feasible, use existing regional and jurisdictional reports and monitoring tools and collaborate to reduce duplicative reporting.

a) Jurisdictions, including the county for unincorporated areas, will report annually to the county using guidance developed by the County on housing AMI levels:
    1) In the first reporting year, total income-restricted units, by tenure, AMI limit, address, and term of rent and income restrictions, for which the city is a party to affordable housing covenants on the property title created during the reporting period. In future years, report new units created and units with affordability terms that expired during the reporting period.
    2) Description and magnitude of land use or regulatory changes to increase zoned residential capacity including, but not limited to, single-family, moderate-density, and high-density.
    3) New strategies (e.g. land use code changes, dedicated fund sources, conveyance of surplus property) implemented during the reporting period to increase housing diversity or increase the supply of income-restricted units in the jurisdiction; and

b) The county where feasible consolidate housing data across jurisdictions to provide clarity and assist jurisdictions with housing data inventory will report annually:
   1) Countywide housing inventory of:
      i. Total housing units, by affordability to AMI bands;
      ii. Total income-restricted units, by AMI limit;
      iii. Number of units lost to demolition, redevelopment, or conversion to non-residential use during the reporting period;
      iv. Of total housing units, net new housing units created during the reporting period and what type of housing was constructed, broken down by at least single-family, moderate-density housing types, and high-density housing types; and
      v. Total income-restricted units by tenure, AMI limit, location, created during the reporting period, starting in 2021.
      vi. Total net new income-restricted units and the term of rent and income restrictions created during the reporting period, starting in December 2022;
      vii. Share of households by housing tenure by jurisdiction; and
      viii. Zoned residential capacity percentages broken down by housing type/number of units allowed per lot;
   2) The county's new strategies (e.g., dedicated fund sources, conveyance of surplus property) implemented during the reporting period to increase the supply of restricted units in the county, including geographic allocation of resources;
   3) The county's new strategies implemented during the reporting period to reduce disparate housing outcomes and expand housing and neighborhood choice for Black, Indigenous, and other People of Color households and other population groups identified through policy H-6.
   4) Number of income-restricted units within a half mile walkshed of a high-capacity or frequent transit stations in the county;
   5) Share of households with housing cost burden, by income band, race, and ethnicity;
   6) Tenant protection policies adopted by jurisdiction; and
   7) Number of individuals and households experiencing homelessness, by race and ethnicity.

c) Where feasible, jurisdictions will also collaborate to report:
   1) Net new units accessible to persons with disabilities.

H-26 The county will provide guidance to jurisdictions on goals for housing AMI levels annually provide transparent, ongoing information measuring jurisdictions' progress toward meeting countywide affordable housing need, according to H-25, using public-facing tools such as the King County's Affordable Housing Dashboard.

Adjust Strategies to Meet Housing Needs

H-27 Review and amend countywide and local housing strategies and actions when monitoring in Policy H-25 and H-26 indicates that adopted strategies are not resulting in adequate affordable housing to meet the countywide need. Consider amendments to land use policies and the land use map where they present a significant barrier to the equitable distribution of affordable housing.

ECONOMY

Overarching Goal: *All people throughout King County have opportunities to prosper and enjoy a high quality of life through economic growth and job creation.*

The Countywide Planning Policies in the Economy Chapter support the economic growth and sustainability of King County's economy. A strong and healthy economy results in business development, job creation, and investment in our communities. The Economy Chapter reflects and supports the Regional Economic Strategy and VISION 2050's economic policies, which emphasize the economic value of business, people, and place.

The Regional Economic Strategy is the region's comprehensive economic development strategy and serves as the VISION 2050 economic functional plan. VISION 2050 integrates the Regional Economic Strategy with growth management, transportation, and environmental objectives to:

- Support critical economic foundations, such as education, infrastructure, technology, and quality of life; and
- Promote the region's specific industry clusters: aerospace, advanced manufacturing, clean technology, information technology, life sciences, logistics and international trade, military, and tourism.

Each local community will have an individual focus on economic development, while the region's prosperity will benefit from coordination between local plans and the regional vision that take into account the county's and the region's overall plan for growth.

EC-1 Coordinate local and countywide economic policies and strategies with VISION 2050 and the Regional Economic Strategy.

EC-2 Support economic growth that accommodates employment growth targets (see Table DP-1) through local land use plans, infrastructure development, and implementation of economic development strategies. Prioritize growth of a diversity of middle-wage jobs and prevent the loss of such jobs from the region.

EC-3 Support industry clusters and their related subclusters that are integral components of the Regional Economic Strategy and King County's economy. Emphasize support for clusters that are vulnerable or threatened by market forces, provide middle-wage jobs, play an outsized role in the local economy, or have significant growth potential.

EC-4 Evaluate the performance of economic development policies and strategies in business development and middle-wage job creation. Identify and track key economic metrics to help

jurisdictions and the county as a whole evaluate the effectiveness of local and regional economic strategies.

Business Development

Business creation, retention, expansion, and recruitment are the foundations of a strong economy. The success of the economy in the county depends on opportunities for business formation and growth. Our communities play a significant role through local government actions, such as by making regulations more predictable, by engaging in public-private partnerships, and by nurturing a business-supportive culture, particularly for Black, Indigenous, and other People of Color; immigrant and refugee; LGBTQIA+; disabled; and women-owned businesses.

These policies seek to integrate the concept of healthy communities as part of the county's economic objectives by calling for support of the regional food economy, including production, processing, wholesaling, and distribution of the region's agricultural food and food products.

EC-5 Help businesses thrive through:

- Transparency, efficiency, and predictability of local regulations and policies;
- Communication and partnerships between business, government, schools, civic and community organizations, and research institutions; and
- Government contracts with local businesses.

EC-6 Foster the retention and development of businesses and industries that manufacture goods and provide services for export.

EC-7 Promote an economic climate that is supportive of business formation, expansion, and retention, and that emphasizes the importance of small businesses, locally owned businesses, women-owned businesses, and businesses with Black, Indigenous, and other People of Color; immigrant and refugee; LGBTQIA+; disabled; and women-owned or -led businesses, in creating jobs.

EC-8 Foster a broad range of public-private partnerships to implement economic development policies, programs, and projects, including partnerships with community groups. Ensure such partnerships share decision-making power with and spread benefits to community groups.

EC-9 Use partnerships to foster connections between employers, local vocational and educational programs, and community needs.

EC-10 Identify, support, and leverage key regional and local assets to the economy, including assets that are unique to our region's position as an international gateway, such as major

airports, seaports, educational facilities, research institutions, health care facilities, long-haul trucking facilities, and manufacturing facilities.

EC-11 Support the regional food economy including the production, processing, wholesaling, and distribution of the region's agricultural food and food products to all King County communities. Emphasize improving access for communities with limited healthy, affordable, and culturally relevant food options.

People

People, through their training, knowledge, skills, and cultural background, add value to the region's economy. Creating an economy that provides opportunities for all, particularly with a focus on those communities historically most disadvantaged, can help to alleviate problems of poverty and income disparity.

A diversity of jobs at a variety of wages, skill levels, and educational requirements ensure a robust economy that provides access to opportunity for everyone. Jobs that can support a household or family without significant educational requirements often referred to as "middle-wage" jobs, play a unique role in advancing equity. Given the barriers in access throughout the educational, banking, and other institutional systems, these middle-wage jobs provide key avenues for financial self-sufficiency and wealth building. Jobs in this range predominate in more locally held, smaller- and medium-sized businesses and manufacturers, such as accountants, machinists, or technicians. King County seeks to encourage new small business formation whenever possible and prevent displacement of industries and businesses that have a diversity of occupations or concentrations in those middle skills most associated with middle wage.

To support middle-wage jobs and career training for residents of economically distressed areas, priority hire policies require developers to hire local workers and businesses when development projects are above a certain budget threshold and receive public funding.

EC-12 Work with schools and other institutions to increase graduation rates and sustain a highly educated and skilled local workforce. This includes aligning job training and education offerings that are consistent with the skill needs of the region's industry clusters. Identify partnership and funding opportunities where appropriate. Align and prioritize workforce development efforts with Black, Indigenous, and other People of Color communities; immigrant and refugees; and other marginalized communities.

EC-13 Promote the local workforce through priority hire programs that create middle-wage employment opportunities in historically disadvantaged communities.

EC-14 Celebrate the cultural diversity of local communities as a means to enhance social capital, neighborhood cohesion, the county's global relationships, and support for cultural and arts institutions.

EC-15 Eliminate and correct for historical and ongoing disparities in income, employment, and wealth building opportunities for Black, Indigenous, and other People of Color; women; and other intersecting marginalized identities.

EC-16 Direct investments to community and economic development initiatives that elevate equitable economic opportunity for those communities most marginalized and impacted by disinvestment and economic disruptions.

Places

Economic activity in the county predominantly occurs within the Urban Growth Area, including regional growth centers and manufacturing/industrial centers, which tend to be where middle-wage jobs predominate. Continuing to guide local investments to these centers will help provide the support needed to sustain the economy and provide greater predictability to businesses about where capital improvements will be located, as well as meet other goals related to supporting equitable growth. In addition to making productive use of urban land, economic activity adds to the culture and vitality of our local communities.

While King County moves towards an economy dominated by high-tech and medical services, subregions within the County are hosts to concentrations in other sectors and have experienced job growth in the construction, warehousing, and transportation sectors as real estate pricing recalibrates the geography of jobs. Even as Seattle's share of manufacturing sector jobs has fallen since 2008, South King County's cities such as Kent, Auburn, and Renton have seen commensurate increases in manufacturing—and are competing with neighboring Snohomish and Pierce County to retain this critical industry. The policies below take a proactive approach to maintaining King County's role as the home to internationally significant manufacturing and industrial centers and the industries and businesses that make them what they are.

The Rural Area and Natural Resource Lands are important for their contribution to the regional food network, mining, timber, and craft industries, while Cities in the Rural Area are important for providing services to and being the economic centers for the surrounding Rural Area.

EC-17 Concentrate economic and employment growth in designated regional, countywide, and local centers through local investments, planning, and financial policies.

EC-18 Make local investments to maintain and expand infrastructure and services that support local and regional economic development strategies. Focus investment where it encourages growth in designated centers and helps achieve employment targets.

EC-19 Add to the vibrancy and sustainability of our communities and the health and well-being of all people through safe and convenient access to local services, neighborhood-oriented retail, purveyors of healthy food (e.g., grocery stores and farmers markets), and transportation choices.

EC-20 Promote the natural environment as a key economic asset and work to improve access to it as an economic driver. Work cooperatively with local businesses to protect and restore the natural environment in a manner that is equitable, efficient, predictable, and complements economic prosperity.

EC-21 Encourage private, public, and non-profit sectors to incorporate environmental stewardship and social responsibility into their practices. Encourage development of established and emerging industries, technologies and services that promote environmental sustainability, especially those addressing climate change and resilience.

EC-22 Maintain an adequate supply of land within the Urban Growth Area to support economic development. Inventory, plan for, and monitor the land supply and development capacity for, manufacturing/industrial, commercial, and other employment uses that can accommodate the amount and types of economic activity anticipated during the planning period.

EC-23 Support manufacturing/industrial centers with land use policies that protect industrial land, retain and expand industrial employment, support a diverse regional economy, and provide for the evolution of these Centers to reflect industrial business trends, including in technology and automation. Prohibit or limit non-supporting or incompatible activities that may interfere with the retention and operation of industrial businesses while recognizing that a wider mix of uses, in targeted areas and circumstances, may be appropriate when designed to be supportive of and compatible with industrial employment.

EC-24 Facilitate redevelopment of contaminated sites through local, county, and state financing and other strategies that assist with planning, site design, and funding for environmental remediation.

EC-25 Encourage economic activity within Cities in the Rural Area, at an appropriate size, scale, and type compatible with these communities and that does not create adverse impacts to the surrounding Rural Area and Natural Resource Lands.

EC-26 Encourage commercial and mixed-use development that provides a range of job opportunities throughout the county to create a closer balance between the location of jobs and housing.

EC-27 Develop and implement systems that provide a financial safety net during economic downturns and recovery. Direct resources in ways that reduce inequities and build economic resiliency for those communities most negatively impacted by asset poverty.

EC-28 Ensure public investment decisions protect culturally significant economic assets and advance the business interests of Black, Indigenous, and other People of Color communities; immigrant and refugees; and other marginalized communities.

EC-29 Stabilize and prevent the economic displacement of small, culturally relevant businesses and business clusters during periods of growth, contraction, and redevelopment. Mitigate displacement risks through monitoring and adaptive responses.

TRANSPORTATION

The Regional Growth Strategy identifies a network of walkable, compact, and transit-oriented communities that are the focus of urban development, as well as industrial areas with major employment concentrations. In the Countywide Planning Policies, these communities include countywide designated Urban Centers and Manufacturing/ Industrial Centers, and locally designated local centers. An essential component of the Regional Growth Strategy is an efficient transportation system that provides multiple options for moving people and goods into and among the various centers. Transportation system, in the context of this chapter, is defined as a comprehensive, integrated network of travel modes (e.g., airplanes, automobiles, bicycles, buses, feet, ferries, freighters, trains, trucks) and infrastructure (e.g. sidewalks, trails, streets, arterials, highways, waterways, railways, airports) for the movement of people and goods on a local, regional, national and global scale.

Goals and policies in this chapter build on the 1992 King County Countywide Planning Policies and the Multicounty Planning Policies in VISION 2050. Policies are organized into three sections:

- Supporting Growth – focusing on serving the region with a transportation system that furthers the Regional Growth Strategy;
- Mobility – addressing the full range of travel modes necessary to move people and goods efficiently within the region and beyond; and
- System Operations – encompassing the design, maintenance, and operation of the transportation system to provide for safety, efficiency, and sustainability.

Overarching Goal: *The region is well served by an integrated, multimodal transportation system that supports the regional vision for growth, efficiently moves people and goods, and is environmentally and functionally sustainable over the long term.*

Supporting Growth

An effective transportation system is critical to equitably achieving the Regional Growth Strategy and ensuring that centers are functional and appealing to the residents and businesses they are designed to attract. The policies in this section reinforce the critical relationship between development patterns and transportation and they are intended to guide transportation investments from all levels of government to effectively support local, county, and regional plans to accommodate growth. Policies in this section take a multimodal approach to serving growth, with additional emphasis on transit and non-motorized modes to support planned development in centers.

Goal Statement: *Local and regional development of the transportation system is consistent with and furthers realization of the Regional Growth Strategy.*

T-1 Work cooperatively with the Puget Sound Regional Council, the state, and other relevant agencies to finance and develop an equitable and sustainable multimodal transportation system that enhances regional mobility and reinforces the countywide vision for managing growth. Use VISION 2050, including the Regional Growth Strategy, and the Regional Transportation Plan as the policy and funding framework for creating a system of regional, countywide, local centers connected by a multimodal network including high-capacity transit, bus service, and an interconnected system of roadways, freeways and high-occupancy vehicle lanes.

T-2 Avoid construction of major roads and capacity expansion on existing roads in the Rural Area and Natural Resource Lands. Where increased roadway capacity is warranted to support safe and efficient travel through the Rural Area, appropriate rural development regulations and effective access management should be in place prior to authorizing such capacity expansion in order to make more efficient use of existing roadway capacity and prevent unplanned growth in the Rural Area.

T-3 Increase the share of trips made countywide by modes other than driving alone through coordinated land use planning, public and private investment, and programs focused on centers and connecting corridors, consistent with locally adopted mode split goals.

T-4 Reduce the need for new roadway capacity improvements through investments in transportation system management and operations, pricing programs, and transportation demand management strategies that improve the efficiency of and access to the current system.

T-5 Prioritize transportation investments that provide and encourage alternatives to single-occupancy vehicle travel and increase travel options, particularly to and within centers and along corridors connecting centers.

T-6 Develop station area plans for high-capacity transit stations and mobility hubs based on community engagement. Plans should reflect the unique characteristics, local vision for each station area including transit-supportive land uses, transit rights-of-way, stations and related facilities, multimodal linkages, safety improvements, place-making elements and minimize displacement.

T-7 Support countywide growth management and climate objectives by prioritizing transit service and pedestrian safety in areas where existing housing and employment densities support transit ridership and to designated regional and countywide centers and other areas planned for housing and employment densities that will support transit ridership.

T-8 Implement transportation programs and projects that address the needs of and promote access to opportunity for Black, Indigenous, and other People of Color, people with low and no-incomes, and people with special transportation needs.

T-9 Implement transportation programs and projects that prevent and mitigate the displacement of Black, Indigenous, and other People of Color, people with low and no- incomes, and people with special transportation needs.

T-10 Integrate transit facilities, services, and active transportation infrastructure with public spaces and private developments to create safe and inviting waiting and transfer environments to encourage transit ridership countywide.

T-11 Advocate for state policies, actions, and capital improvement programs that promote equity and sustainability, and that are consistent with the Regional Growth Strategy, VISION 2050, and the Countywide Planning Policies.

T-12 Prioritize funding transportation investments that support countywide growth targets and centers framework, and that enhance multimodal mobility and safety, equity, and climate change goals.

Mobility

Mobility is necessary to sustain personal quality of life and the regional economy. For individuals, mobility requires an effective transportation system that provides safe, reliable, and affordable travel options for people of all ages, incomes, and abilities. While the majority of people continue to travel by personal automobile, there are growing segments of the population (e.g., urban, elderly, teens, low-income, no-income, minorities, and persons with disabilities) that rely on other modes of travel such as walking, bicycling, and public transportation to access employment, education and training, goods and services.

The movement of goods is also of vital importance to the local and regional economy. International trade is a significant source of employment and economic activity in terms of transporting freight, local consumption, and exporting goods. The policies in this section are intended to address use and integration of the multiple modes necessary to move people and goods within and beyond the region. The importance of the roadway network, implicit in the policies of this section, is addressed more specifically in the System Operations section of this chapter.

Goal Statement: *A well-integrated, multimodal transportation system moves people and goods effectively and efficiently to destinations within the region and beyond.*

T-13 Advocate for and pursue new, innovative, and sustainable, funding methods including user fees, tolls, and other progressive pricing mechanisms that reduce the volatility of transit funding and fund the maintenance, improvement, preservation, and operation of the transportation system.

T-14 Promote the mobility of people and goods through a multimodal transportation system based on regional priorities consistent with VISION 2050 and local comprehensive plans.

T-15 Determine if capacity needs can be met from investments in transportation system operations and management, pricing programs, transportation demand management, public transportation, and system management activities that improve the efficiency of the current transportation system, prior to implementing major roadway capacity expansion projects. Focus on investments that are consistent with the Regional Growth Strategy and produce the greatest net benefits to people, especially communities and individuals where needs are greatest, and goods movement that minimize the environmental impacts of transportation.

T-16 Support effective management, maintenance, and preservation of existing air, marine and rail transportation capacity and infrastructure to address current and future capacity needs in cooperation with responsible agencies, affected communities, and users.

T-17 Promote coordinated planning and effective management to optimize the movement of people and goods in the region's aviation system in a manner that minimizes health, air quality, and noise impact to the community, especially frontline communities. Consider demand management alternatives as future aviation growth needs are analyzed, recognizing capacity constraints at existing facilities and the time and resources necessary to build new ones. Support the ongoing process of development of a new commercial aviation facility in Washington State.

T-18 Develop and implement freight mobility strategies that strengthen, preserve, and protect King County's role as a major regional freight distribution hub, an international trade gateway, and a manufacturing area while minimizing negative impacts on the community.

T-19 Address the needs of people who do not drive, either by choice or circumstances (e.g., elderly, teens, low-income, and persons with disabilities), in the development and management of local and regional transportation systems.

T-20 Consider mobility options, connectivity, active transportation access, and safety in the siting and design of transit stations and mobility hubs, especially those that are serviced by high-capacity transit.

T-21 Make transportation investments that improve economic and living conditions so that

industries and workers are retained and attracted to the region and the county.

T-22 Respond to changes in mobility patterns and needs for both people and goods, encouraging partnerships with nonprofit providers and the private sector where applicable.

System Operations

The design, management, and operation of the transportation system influence the region's growth and mobility and they have significant impacts on equity, addressing historical inequities, and our environment. Policies in this section stress the need to make efficient use of existing infrastructure, serve the broad needs of the users, address safety and public health issues, and design facilities that are a good fit for the surroundings. Implementation of the policies will require the use of a wide range of tools including, but not limited to:

- Technologies such as intelligent transportation systems and alternative fuels;
- Demand management programs for parking, commute trip reduction and congestion; and
- Incentives, pricing systems, and other strategies to encourage choices that increase mobility while improving public health and environmental sustainability.

Goal Statement: *A transportation system that is well-designed and managed to protect public investments, promote equitable access, provide mobility, promote public health and safety, and achieve optimum efficiency.*

T-23 Prioritize essential maintenance, preservation, and safety improvements of the existing transportation system to protect mobility, extend useful life of assets, and avoid costly replacement projects.

T-24 Design and operate transportation facilities in a manner that is compatible with and integrated into the natural and built environments in which they are located. Incorporate features such as natural drainage, native plantings, and local design themes that facilitate integration and compatibility.

T-25 Reduce stormwater pollution from transportation facilities and improve fish passage through retrofits and updated design standards. When feasible, integrate with other improvements to achieve multiple benefits and cost efficiencies.

T-26 Develop a resilient transportation system (e.g., roadway, rail, transit, sidewalks, trails, air, and marine) and protect against major disruptions and climate change impacts. Develop prevention, adaptation, mitigation, and recovery strategies and coordinate disaster response plans.

T-27 Promote the use of pricing strategies and transportation system management and operations tools to effectively manage the transportation system and provide an equitable, stable, and sustainable transportation funding source to improve mobility.

T-28 Promote road and transit facility design that includes well-defined, safe, and appealing spaces for pedestrians and bicyclists.

T-29 Design roads, including retrofit projects, to accommodate a range of travel modes within the travel corridor in order to reduce injuries and fatalities, contribute to achieving the state goal of zero deaths and serious injuries, and encourage physical activity.

T-30 Develop a transportation system that minimizes negative health and environmental impacts to all communities, especially Black, Indigenous, and other People of Color communities and low-income communities, that have been disproportionately affected by transportation decisions.

T-31 Provide equitable opportunities for an active, healthy lifestyle by integrating the needs of pedestrians and bicyclists in local transit, countywide, and regional transportation plans and systems.

T-32 Plan and develop a countywide transportation system that supports the connection between land use and transportation, and essential travel that reduces greenhouse gas emissions by advancing strategies that shorten trip length or replace vehicle trips to reduce vehicle miles traveled.

T-33 Apply technologies, programs, and other strategies (e.g., intelligent transportation systems (ITS), first and last mile connections) to optimize the use of existing infrastructure and support equity; improve mobility; and reduce congestion, vehicle miles traveled, and greenhouse gas emissions.

T-34 Promote the expanded use of alternative fuel and zero emission vehicles by the general public with measures such as converting transit, public, and private fleets; applying incentive programs; and providing for electric vehicle charging stations.

PUBLIC FACILITIES AND SERVICES

Overarching Goal: *County residents in both Urban and Rural Areas have timely and equitable access to the public services needed to advance public health and safety, protect the environment, and carry out the Regional Growth Strategy.*

Urban and Rural Levels of Service

The Growth Management Act directs jurisdictions and special purpose districts to provide public facilities and services to support development. The Growth Management Act distinguishes between urban and rural services and states that land within the Urban Growth Area should be provided with a full range of services necessary to sustain urban communities while land within the Rural Area should receive services to support a rural lifestyle. Certain services, such as sanitary sewers, are allowed only in the Urban Growth Area, except as otherwise authorized. The Growth Management Act also requires jurisdictions to determine which facilities are necessary to serve the desired growth pattern and how they will be financed, to ensure timely provision of adequate services and facilities.

PF-1 Provide a full range of urban services in the Urban Growth Area to support the Regional Growth Strategy and adopted growth targets and limit the availability of urban services in the Rural Area consistent with VISION 2050. Avoid locating urban serving facilities in the Rural Area.

Collaboration Among Jurisdictions

More than 100 special purpose districts, including water, sewer, flood control, stormwater, fire, school, and other districts, provide essential services to the residents of King County. While cities are the primary providers of services in the Urban Growth Area, in many parts of the county special purpose districts also provide essential services. Coordination and collaboration among all of these districts, the cities, King County, the tribes, and neighboring counties is key to providing efficient, high-quality, and reliable services to support the Regional Growth Strategy.

PF-2 Provide affordable and equitable access to public services to all communities, especially the historically underserved. Prioritize investments to address disparities.

PF-3 Provide reliable and cost-effective services to the public through coordination among jurisdictions and special purpose districts.

PF-4 Recognize cities as the appropriate providers of services to the Urban Growth Area, either directly or by contract. Extend urban services through the use of special districts only where there are agreements with the city in whose Potential Annexation Area the extension is

proposed. Within the Urban Growth Area, as time and conditions warrant, cities will assume local urban services provided by special service districts.

Utilities

Utilities include infrastructure and services that provide water, sewage treatment and disposal, solid waste disposal, energy, telecommunications, and human and community services. Providing these utilities in a cost-effective way is essential to maintaining the health and safety of King County residents and to implementing the Regional Growth Strategy.

Water Supply

Conservation and efficient use of water resources are vital to ensuring the reliability of the region's water supply, the availability of sufficient water supplies for future generations, and the environmental sustainability of the water supply system.

PF-5 Develop plans for long-term water provision to support growth and to address the potential impacts of climate change and fisheries protection on regional water resources.

PF-6 Ensure that all residents have access to a safe, reliably maintained, and sustainable drinking water source that meets present and future needs.

PF-7 Coordinate water supply among local jurisdictions, tribal governments, and water purveyors to ensure reliable, sustainable, and cost-effective sources of water for all users and needs, including residents, businesses, fire districts, and aquatic species.

PF-8 Plan and locate water systems in the Rural Area that are appropriately sized for rural uses and densities and that do not increase development potential in the Rural Area.

PF-9 Recognize and support agreements with water purveyors in adjacent cities and counties to promote effective conveyance of water supplies and to secure adequate supplies for emergencies.

PF-10 Implement water conservation and efficiency efforts to protect natural resources, reduce environmental impacts, and support a sustainable long-term water supply to serve the growing population.

PF-11 Require water reuse and reclamation, where feasible, especially for high-volume non-potable water users such as parks, schools, and golf courses.

Sewage Treatment and Disposal

Within the Urban Growth Area, connection to sanitary sewers is necessary to support the Regional Growth Strategy and to accommodate urban densities. Alternatives to the sanitary sewer system and the typical septic system are becoming more cost effective and therefore, more available. Alternative technology may be appropriate when it can perform as well or better than sewers in the Urban Growth Area. Septic systems are not considered to be alternative technology within the Urban Growth Area.

In the Rural Area and Natural Resource Lands, which are characterized by low-density development, sewer service is not typically provided. In cases where public health is threatened, sewers can be provided in the Rural Area but only if connections are strictly limited. Alternative technology may be necessary to substitute for septic systems in the Rural Area.

PF-12 Require all development in the Urban Growth Area to be served by a public sewer system except:

a) Single-family residences on existing individual lots that have no feasible access to sewers may utilize individual septic systems on an interim basis; or
b) Development served by alternative technology that:
   1) Provide equivalent performance to sewers;
   2) Provide the capacity to achieve planned densities; and
   3) Will not create a barrier to the extension of sewer service within the Urban Growth Area.

PF-13 Prohibit sewer service in the Rural Area and on Natural Resource Lands except:

a) Where needed to address specific health and safety problems threatening existing structures; or
b) As allowed by Countywide Planning Policy DP-49; or
c) As provided in Appendix 5 (March 31, 2012 School Siting Task Force Report).

Sewer service authorized consistent with this policy shall be provided in a manner that does not increase development potential in the Rural Area.

Solid Waste

King County and the entire Puget Sound region are recognized for successful efforts to collect recyclable waste. Continuing to reduce and reuse waste will require concerted and coordinated efforts well into the future. It is important to reduce the waste stream going into area landfills to extend the usable life of existing facilities and reduce the need for additional capacity.

PF-14 Reduce the solid waste stream and encourage reuse and recycling.

Energy

While King County consumers have access to electrical energy derived from hydropower, there are challenges for securing long-term reliable energy and for becoming more energy efficient.

PF-15 Reduce the rate of energy consumption through efficiency and conservation as a means to lower energy costs and mitigate environmental impacts associated with traditional energy supplies.

PF-16 Invest in and promote the use of low-carbon, renewable, and alternative energy resources to help meet the county's long-term energy needs, reduce environmental impacts associated with traditional energy supplies, and increase community sustainability.

Telecommunications

A telecommunications network throughout King County is essential to fostering broad economic vitality and equitable access to information, goods and services, and opportunities for social connection.

PF-17 Plan for the equitable provision of telecommunication infrastructure and affordable, convenient, and reliable broadband internet access to businesses, and to households of all income levels, with a focus on underserved areas.

Human and Community Services

Public services beyond physical infrastructure are also necessary to sustain the health and quality of life of all King County residents. In addition, these services play a role in distinguishing urban communities from rural communities and supporting the Regional Growth Strategy.

PF-18 Provide human and community services to meet the needs of current and future residents in King County communities through coordinated, equitable planning, funding, and delivery of services by the county, cities, and other agencies.

Locating Facilities and Services

VISION 2050 calls for a full range of urban services in the Urban Growth Area to support the Regional Growth Strategy, and for limiting the availability of services in the Rural Area. In the long term, there is increased efficiency and cost-effectiveness in siting and operating facilities and services that serve a primarily urban population within the Urban Growth Area. At the same time, those facilities and services that primarily benefit rural populations provide a greater benefit when they are located within neighboring cities and rural towns.

PF-19 Locate schools, institutions, and other community facilities and services that primarily serve urban populations within the Urban Growth Area, where they are accessible to the communities they serve, except as provided in Appendix 5 (March 31, 2012 School Siting Task Force Report). If possible, locate these facilities in places that are well served by transit and pedestrian and bicycle networks.

PF-20 Jurisdictions shall work collaboratively with school districts to ensure the availability of sufficient land and the provision of necessary educational facilities within the Urban Growth Area through compliance with PF-22 and PF-23 and through the land use element and capital facilities element of local comprehensive plans.

PF-21 Locate new schools and institutions primarily serving rural residents in neighboring cities and rural towns, except as provided in Appendix 5 (March 31, 2012 School Siting Task Force Report). Locate new community facilities and services that primarily serve rural residents in neighboring cities and rural towns, with the limited exceptions when their use is dependent upon a rural location and their size and scale supports rural character.

Public school facilities to meet the needs of growing communities are an essential part of the public infrastructure. Coordination between each jurisdiction's land use plan and regulations and their respective school district[s] facility needs are essential for public school capacity needs to be met. The following policy applies countywide and requires engagement between each school district and each city that is served by the school district. The policy also applies to King County as a jurisdiction for areas of unincorporated King County that are within a school district's service boundary. The policy initiates a periodic procedure to identify if there are individual school district siting issues and if so, a process for the school district and jurisdiction to cooperatively prepare strategies for resolving the issue.

PF-22 Plan, through a cooperative process between jurisdictions and school districts, that public school facilities are available, to meet the needs of existing and projected residential development consistent with adopted comprehensive plan policies and growth forecasts. Cooperatively work with each school district located within the jurisdiction's boundaries to evaluate the school district's ability to site school facilities necessary to meet the school district's identified student capacity needs. Use school district capacity and enrollment data and the growth forecasts and development data of each jurisdiction located within the school district's service boundaries.

Commencing in January 2016 and continuing every two years thereafter, each jurisdiction and the school district(s) serving the jurisdiction shall confer to share information and determine if there is development capacity and the supporting infrastructure to site the needed school facilities.

If not, cooperatively prepare a strategy to address the capacity shortfall. Potential strategies may include:

a) Shared public facilities such as play fields, parking areas and access drives;
b) School acquisition or lease of appropriate public lands;
c) Regulatory changes such as allowing schools to locate in additional zones or revised development standards; and
d) School design standards that reduce land requirements (such as multi-story structures or reduced footprint) while still meeting programmatic needs.

In 2017, and every two years thereafter, King County shall report to the GMPC on whether the goals of this policy are being met. The GMPC shall identify corrective actions as necessary to implement this policy.

PF-23 Coordinate and collaborate with school districts to build new and expand existing school facilities within the Urban Growth Area. Jurisdictions and school districts should work together to employ strategies such as:

a) Identifying surplus properties and private properties that could be available for new school sites;
b) Creating opportunities for shared use of buildings, fields, and other facilities;
c) Reviewing development regulations to increase the areas where schools can be located and to enable challenging sites to be used for new, expanded, and renovated schools;
d) Prioritizing and simplifying permitting of schools;
e) Considering the feasibility of locating playfields on land in the rural area directly adjacent to school sites located within the urban area and with direct access from the urban area;
f) Partnering with school districts in planning and financing walking and biking routes for schools; and
g) Encouraging more walking, biking, and transit ridership for students, teachers, and staff.

Strategies should recognize the school district's adopted educational program requirements, established and planned school service areas, limited availability of developable sites, and established and planned growth patterns and enrollment projections.

Siting Public Capital Facilities

While essential to growth and development, regional capital facilities can disproportionately affect the communities in which they are located. It is important that all jurisdictions work collaboratively and consider environmental justice principles when siting these facilities to foster the development of healthy communities for all.

PF-24 Site or expand essential public facilities or facilities of regional importance within the county using a process that incorporates broad public involvement, especially from historically marginalized and disproportionately burdened communities, and that equitably disperses impacts and benefits while supporting the Countywide Planning Policies.

PF-25 Consider climate change, economic, equity, and health impacts when siting and building essential public services and facilities.

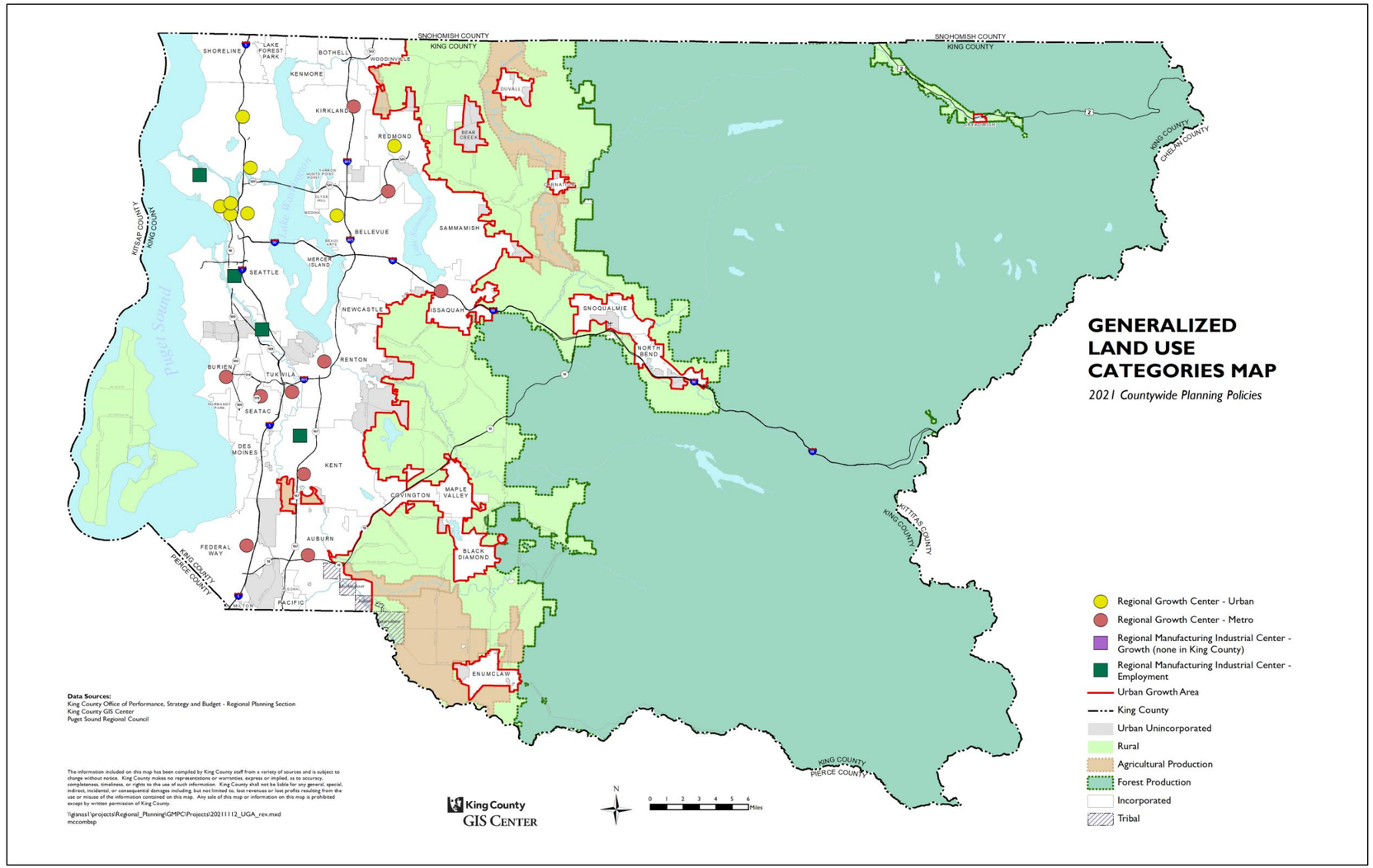
Public Facility and Disaster Preparedness

Community resilience is the ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions. The King County Regional Hazard Mitigation Plan, which was approved in 2020, assesses natural and human-caused hazards that can impact the county. Coordinated planning across all jurisdictions and agencies in King County is the best way to establish broad community resilience. Lack of planning for resilience leads to disproportionate impacts on vulnerable populations.

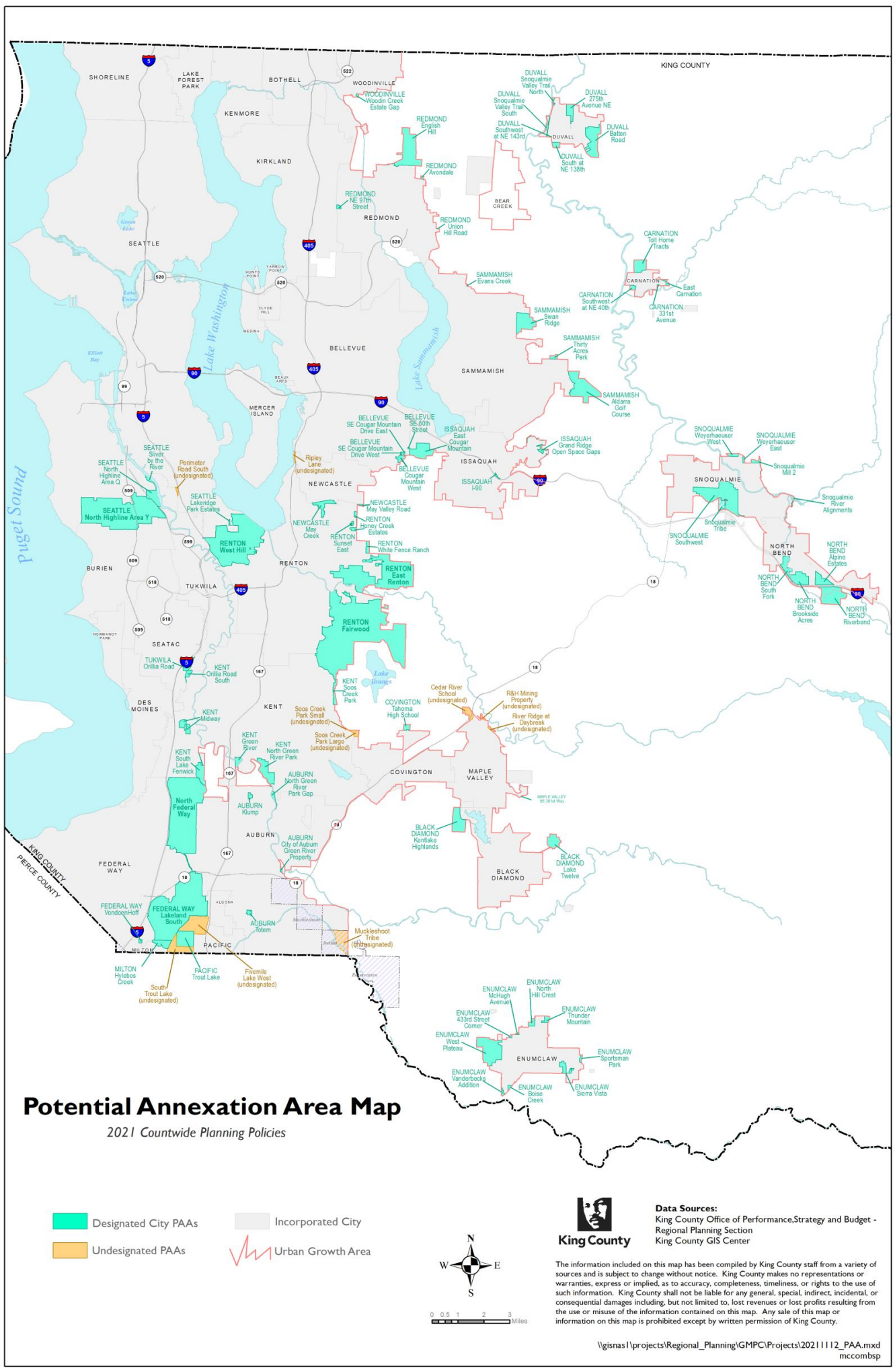
PF-26 Support coordinated planning for public safety services and programs, including emergency management, in partnership with frontline communities.

PF-27 Establish new or expanded sites for public facilities, utilities, and infrastructure in a manner that ensures disaster resiliency and public service recovery.

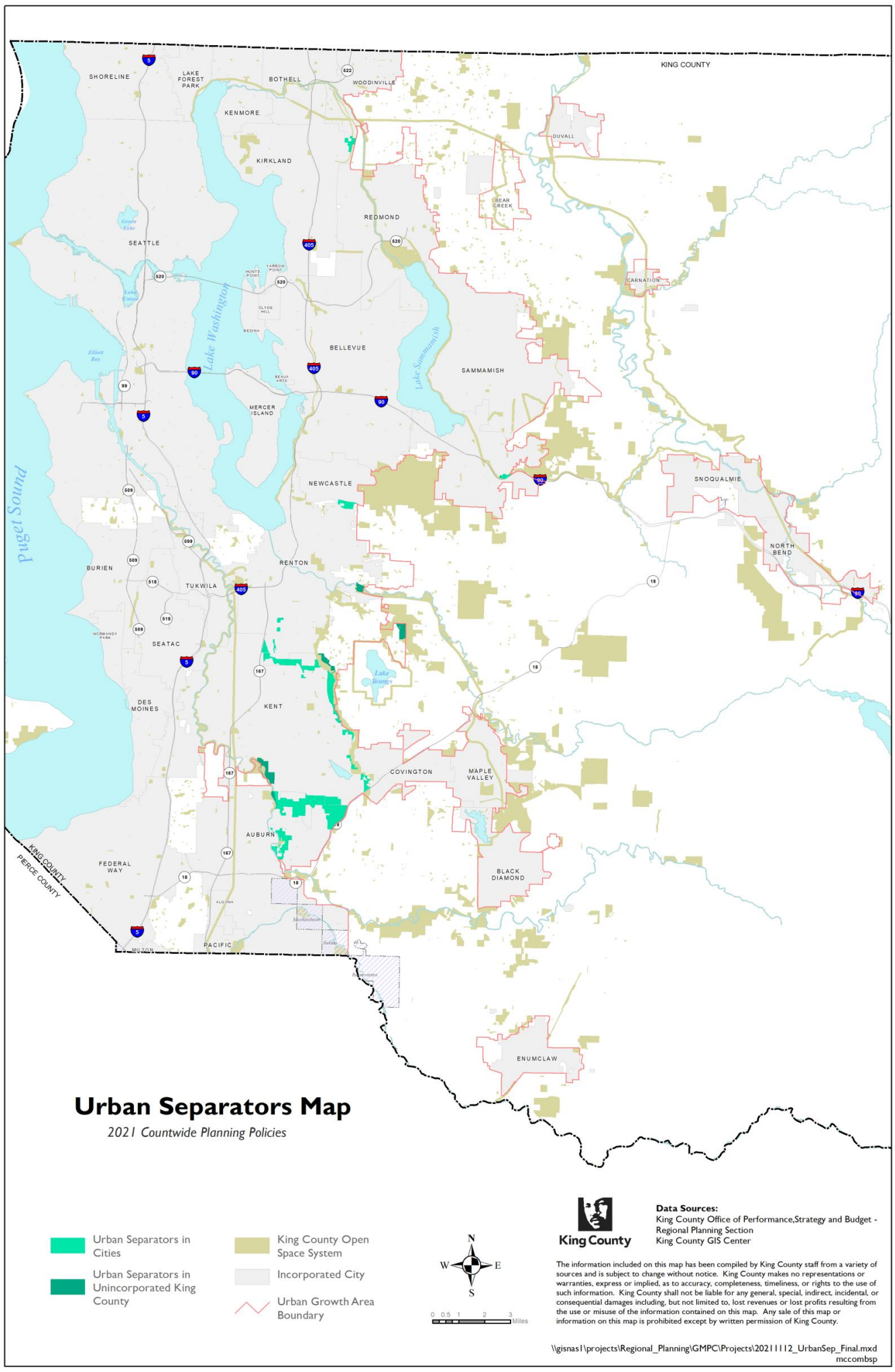
Appendix 1: Generalized Land Use Categories Map



Appendix 2: Potential Annexation Areas Map



Appendix 3: Urban Separators Map



Appendix 4: Housing Technical Appendix

Policy H-1: Countywide Need

Each jurisdiction, as part of its Comprehensive Plan housing analysis, will need to address affordability and the condition of existing housing supply as well as its responsibility to accommodate its share of the countywide need for affordable housing as defined in policy H-1. In order for each jurisdiction to address its share of the countywide housing need for extremely low-, very low-, and low-income housing, a four-step approach should be followed:

1. Conduct a housing inventory and analysis;
2. Implement policies and strategies to equitably meet housing needs;
3. Measure results and provide accountability; and
4. Adjust strategies to meet housing needs.

Countywide need, also called the countywide affordable housing need, is the number of additional, affordable homes needed by 2044 so that no household at or below 80 percent AMI spends more than 30 percent of their income on housing. The countywide need for housing is estimated at 263,000 affordable homes affordable at or below 80 percent AMI that need to be built or preserved by 2044 as shown in Table H-1. The countywide need estimate includes both homeownership and rental units and accounts for people experiencing homelessness. The estimates are based on a model in which adding units for households within a given low-income category (e.g., < 30 percent AMI) allows those households to vacate units affordable within the next highest income category (e.g., greater than 30 percent AMI and less than or equal to 50 percent of AMI) each year, in turn addressing needs of cost-burdened households in that income level. The estimates in Table H-1 assume that housing units equal to 1/25th of the cost burdened households in each category in 2019 are added annually in each income category until cost burden is eliminated, which occurs in different years for different income categories due to the vacating unit process described earlier. The estimates of housing units needed to address growth also assume income distribution of households added through growth is the same as existing income distribution.

Estimating Local Housing Need

While the CPPs do not prescribe a jurisdictional share of countywide affordable housing need, per RCW 36.70A.070 jurisdictions must include in the housing element of their comprehensive plan:

> an inventory and analysis of existing and projected housing needs that identifies the number of housing units necessary to manage projected growth, as provided by the department of commerce, including:
> (i) Units for moderate, low, very low, and extremely low-income households;

Countywide housing need, housing affordability, and income-restricted housing unit data provided in Tables H-1 and H-2 and through the King County Regional Affordable Housing Dashboard can assist jurisdictions in estimating their local affordable housing needs. Sample calculations using a simplified methodology and potential policy responses for three jurisdictions of varying size and affordability are provided below. As a reminder, Policy H-1 and Table H-1 provides that the countywide need for housing in 2044 by percentage of AMI is:

30 percent and below AMI (extremely low)	15 percent of total housing supply
31-50 percent of AMI (very low)	15 percent of total housing supply
51-80 percent of AMI (low)	19 percent of total housing supply

The sample jurisdictional calculations use fictional data from Table H-3.

Table H-2: Fictional Jurisdictional Data

Jurisdiction	Current Housing Units (HU) (2013-2017)								
	0-30% AMI		31-50% AMI		51-80% AMI		Over 80% AMI		All Incomes
	# of HU	% of Total HU	# of HU	% of Total HU	# of HU	% of Total HU	# of HU	% of Total HU	Total HU
Jurisdiction A	2,000	3%	3,000	4%	7,000	10%	58,000	83%	70,000
Jurisdiction B	2,500	4%	20,000	33%	18,000	30%	20,000	33%	60,500
Jurisdiction C	300	3%	600	6%	1,600	17%	7,000	74%	9,500
Source: 2013 - 2017 CHAS									

Jurisdiction	Income-Restricted Housing Units (HU) (2019)					
	0-30% AMI		31-50% AMI		51-80% AMI	
	# of HU	% of Total HU	# of HU	% of Total HU	# of HU	% of Total HU
Jurisdiction A	300	0.4%	500	0.7%	2,100	3.0%
Jurisdiction B	300	0.5%	1,200	2.0%	1,800	3.0%
Jurisdiction C	0	0.0%	70	0.7%	80	0.8%
Source: King County Income-restricted Housing Database						

Jurisdiction	**Future Affordable Housing Need** (2044 total units * Countywide Housing Need)								
	0-30% AMI		31-50% AMI		51-80% AMI		Current Housing Units	2044 Housing Growth Target	Total Housing Units in 2044
	# of HU	% of Total HU	# of HU	% of Total HU	# of HU	% of Total HU			
Jurisdiction A	15,750	15%	15,750	15%	19,950	19%	70,000	35,000	105,000
Jurisdiction B	10,875	15%	10,875	15%	13,775	19%	60,500	12,000	72,500
Jurisdiction C	1,710	15%	1,710	15%	2,166	19%	9,500	1900	11,400
Note: This applies the countywide need for affordable housing to each jurisdiction's projected total housing units in 2044									

Jurisdiction	Difference from Current Housing Units to 2044 Need		
	0-30% AMI	31-50% AMI	51-80% AMI
	# of HU	# of HU	# of HU
Jurisdiction A	13,750	12,750	12,950
Jurisdiction B	8,375	-9,125	-4,225
Jurisdiction C	1,410	1,110	566
Note: This table shows the gap or overage between the 2044 Housing Unit Need and Current Housing Units			

Jurisdiction	Difference from Current Income-Restricted Housing Units to 2044 Need		
	0-30% AMI	31-50% AMI	51-80% AMI
	# of HU	# of HU	# of HU
Jurisdiction A	15,450	15,250	17,850
Jurisdiction B	10,575	9,675	11,975
Jurisdiction C	1,710	1,640	2,086
Note: This shows the gap or overage between the 2044 Housing Unit Need and Current Income-Restricted Housing Units			

Jurisdiction A: Large, generally unaffordable

Analysis: Jurisdiction A is a larger jurisdiction with a relatively limited supply of housing affordable to households at or below 80 percent AMI (3 percent, 4 percent, and 10 percent of housing units for 0-30 percent, 31-50 percent, and 51-80 percent AMI respectively). Based on its housing growth target, to meet a proportional share of countywide housing need by 2044, the jurisdiction will need 15,750 units affordable to 0-30 percent AMI, 15,750 units affordable to 31-50 percent AMI and 19,950 units affordable to 51-80 percent AMI. This is a sizeable need compared to current levels of affordability.

Potential Policy Response: Given the low levels of currently affordable and income-restricted housing in the community, the jurisdiction will need to employ a diversity of tools – from public subsidy to policy tools like increasing the amount of land zoned for multifamily housing to meet affordability needs. For example, currently, only 3 percent, or 2,000 units, in the jurisdiction are affordable to households at or below 30 percent AMI. Of these units, only 300 are income-restricted. This means the jurisdiction will need to focus significant attention on creating new deeply affordable units as well as preserving any currently affordable units that are not income-restricted. Given the scale of the affordability gap, however, the jurisdiction's primary focus should be on income-restricted housing production strategies. This could also include purchasing currently unaffordable housing units and holding rents relatively steady until they are affordable, a strategy recently employed by the King County Housing Authority. As the

impact of overall housing supply increases on prices are uncertain, the jurisdiction should monitor affordability levels as overall supply of unrestricted housing units increases.

Jurisdiction B: Medium, currently affordable to all but the lowest incomes

Analysis: Jurisdiction B is a medium-sized jurisdiction with a large supply of housing affordable to households at 31-80 percent of AMI. If that housing was preserved at current affordability levels, it would more than provide a proportional share of housing to meet countywide affordable housing need. However, the jurisdiction lacks housing affordable to households at the lowest income level (0-30 percent AMI) and only a small portion of its housing is income-restricted, leaving prices vulnerable to market forces and residents vulnerable to displacement.

Potential Policy Response: Given the current levels of affordability in the community, Jurisdiction B should focus on rehabilitation and preservation of both income-restricted housing at or below 80 percent AMI and unrestricted housing affordable at all income levels, and production of housing affordable to households at or below 30 percent AMI. Preservation may entail supporting affordable housing providers in the purchase of housing units that are currently affordable to households at or below 80 percent AMI, as well as investing in programs that improve the quality and safety of existing housing stock.

Jurisdiction C: Small, moderately affordable, low growth target, limited transit, large lot sizes

Analysis: Jurisdiction C is a smaller jurisdiction with some existing housing affordable to households at or below 80 percent AMI, but very little income-restricted housing. Compared to jurisdictions A and B, it has a low growth target, meaning that its future need for affordable housing is much larger than its projected growth. In addition, the jurisdiction lacks significant plans for transit investment and most of the current housing is on very large-sized lots, as prescribed by current zoning.

Potential Policy Response: Jurisdiction C will need to explore preservation and production tools appropriate to its context to increase its supply of affordable housing, particularly income-restricted housing. Likely, it will need to use land use policies to increase the diversity of housing types in the jurisdiction, as well as use public resources to support affordable housing production. The jurisdiction may also wish to engage with neighboring jurisdictions with better transit and employment access to determine if it makes sense to contribute to affordable housing production elsewhere in its sub-region in order to support job and service access for residents of affordable housing. However, this approach should be balanced with attention to providing equitable access to high opportunity areas, such as areas with quality schools and open space, to low-income residents and residents of color.

Policy H-2: Extremely Low-Income Households
The countywide need is the greatest for households at or below 30 percent AMI (extremely low-income). It will take significant cross-sector and cross-jurisdictional collaboration and resources to effectively and equitably meet the needs of these households. Jurisdictions are encouraged to explore emerging best practices to effectively meet the needs of extremely low-income households, including but not limited to:

- mitigating environmental concerns for compromised properties with proposed permanent supportive housing (PSH) projects;
- prioritizing vacant lands for PSH over other uses;
- making surplus publicly-owned lands suitable for 0-30 percent AMI housing development available for long-term lease or purchase at a reduced cost for extremely low-income housing;
- creating a unique dwelling type for PSH coupled with cost reduction strategies for this housing type;
- reducing fees, taxes, permit and hookup fees for PSH projects;
- streamlining design and permit review for PSH projects;
- increasing buildable height and/or floor area ratio for PSH; and
- reducing or removing cost requirements such as vehicular parking requirements for PSH.

Policy H-3: Housing Supply and Needs Analysis
As set forth in policy H-4, each jurisdiction must include in its comprehensive plan an inventory of the existing housing stock and an analysis of both existing housing needs and housing needed to accommodate projected population growth over the planning period. This policy reinforces requirements of the Growth Management Act for local Housing Elements. The housing supply and needs analysis is referred to in this appendix as the housing analysis. As is noted in policy H-1, H-2, and H-4, the housing analysis must consider local as well as countywide housing needs because each jurisdiction has a responsibility to address its share of the countywide affordable housing need.

The purpose of this section is to provide further guidance to local jurisdictions on the subjects to be addressed in their housing analysis. Additional guidance on carrying out the housing analysis is found in the Puget Sound Regional Council's report, "Housing Element Guide: A PSRC Guidance Paper (July 2014)," Washington State Department of Commerce's report, "Guidance for Developing a Housing Needs Assessment" (March 2020); and the Washington Administrative Code, particularly 365-196-410 (2)(b) and (c). The Washington State Department of Commerce also provides useful information about housing requirements under the Growth Management Act in the "Growth Management Planning for Housing - Washington State Department of Commerce" portion of their website

Housing Supply

Understanding the mix and affordability of existing housing is the first step toward identifying gaps in meeting future housing needs.

Table H-3 shows the current housing supply by jurisdiction and affordability levels, using data from 2013-2017 CHAS broken out by different income segments and 2019 housing unit data estimated by the Washington State Office Financial Management (OFM) which OFM does not break out by income segments. The 2019 OFM data serves as the base year for each jurisdiction's 2044 housing growth targets and appears in Table H-1. The OFM housing units were allocated to different AMI bands by applying the percent share of total housing supply in each income segment as reported in the 2013-2017 CHAS data to the total housing units reported by OFM for 2019. These 2019 current housing units in each income segment are added to the countywide need (the total additional affordable housing units needed between 2019-2044) by AMI reported in Table H-1 to determine the Total Affordable Housing Units Needed by 2044.

Figures in Table H-3 include both rental and ownership units. Note that while some jurisdictions have an adequate supply of housing affordable to low-income households (51 to 80 percent of AMI) and very low-income households (31-50 percent of AMI), no jurisdiction in the county has sufficient housing affordable to extremely low-income households (0 to 30 percent of AMI) to meet a proportional share of existing needs as shown in Table H-1. This is where the greatest need exists and should be a focus for all jurisdictions.

Table H-3 will be updated annually and will be made publicly available on the Regional Affordable Housing Dashboard. While Table H-3 provides a starting point for understanding current housing supply by jurisdiction, other metrics are required to fully measure housing need. Jurisdictions may choose to supplement the data in Table H-3 with other data sources, such as PUMS, ACS, or their own housing inventories that may be more current or use different underlying assumptions. Because data sources vary in the time period they measure, the assumptions required to analyze the data, and the sampling techniques they use, they may produce results that do not perfectly align with Table H-3. Jurisdictions should use the methodology documented here to explain the causes and implications of differences between alternative methodologies and the information presented in Table H-3.

The methodology used to calculate current housing units in Table H-3 is summarized as follows:

1. CHAS data is downloaded from the HUD website. Select the most recent vintage of data (in this instance it was 2013-2017 ACS 5-year average data") for the data year, select the "Counties split by Place" Geographic Summary Level, which provides data at a

jurisdictional level, select "csv" for the file type, and then download the data. This will download all the CHAS tables, as well as a data dictionary.

2. Tables 17A, 17B, 18A, 18B, and 18C have data on housing units and what AMI brackets they are affordable at. Tables 17A and 17B include data on vacant units for ownership and rental units respectively. These vacant units are included in the totals, because while vacant units are not currently being rented, they are still a part of a jurisdiction's housing supply, and many vacant units are available to rent or buy. Tables 18A, 18B, and 18C include data on occupied ownership units with a mortgage, occupied ownership units without a mortgage, and occupied rental units respectively. All these units are also included in the totals in Table H-3.
3. To calculate how many units are in each jurisdiction at each AMI band, calculate those totals for tables 17A, 17B, 18A, 18B, and 18C and then sum them all together. To calculate total numbers of units by AMI, use the subtotal columns of the CHAS data. The data dictionary that comes with the CHAS tables shows which columns are subtotal columns. Multiple subtotal columns must be added together to get the total number of units affordable at a certain AMI. For example, in Table 18A, to get the total number of units affordable at 0-50 percent AMI, the columns T18B_est3, T18B_est28, T18B_est53, T18B_est78 must be summed, as each column represents a different number of units in the structure. The columns that must be summed together differ slightly based on the table. Refer to the data dictionary to ensure that the correct columns are chosen, as these may change slightly year to year.
4. CHAS uses RHUD for rental units and VHUD for ownership units as measures of affordability that correspond to AMI. For example, units that have a value of "less than or equal to RHUD30" are marked as being affordable at 0-30 percent AMI. Unlike with rental units, for the home ownership units found in tables 17A, 18A, and 18B, CHAS does not differentiate between VHUD0 to VHUD30 units and VHUD 30 to VHUD50 units. It instead combines them all into a "Value less than or equal to VHUD50" category. Since affordability is measured at 0-30 percent AMI and 30-50 percent AMI separately in Table H-3, assume that all units in the "Value less than or equal to VHUD50" are actually only affordable at 30-50 percent AMI, and are included in that column. Thus, all 0-30 percent AMI units in Table H-3 are rental units. This assumption is made because of the distribution of home prices in King County, where almost no homes are affordable to households making 0-30 percent AMI.
5. Once each of Tables 17A, 17B, 18A, 18B, and 18C have been totaled to get the number of units available at each AMI band, and the home ownership units in the "Value less than or equal to VHUD50" category have been recoded to be equal to 30-50 percent AMI, combine the totals of each table to get countywide totals. RHUD and VHUD

categories should now line up for all categories up to 80 percent AMI and can thus be combined and re-labeled with the AMI categories seen in Table H-3. While categories above 80 percent don't align between renter and ownership tables, they can all be combined into one over 80 percent AMI category.

6. Then take the sum of each AMI band to get the value in the "All Incomes" column. These values may differ slightly from the total units calculated using the CHAS "Total" columns, as individual "Subtotal" columns round units in the "Subtotal" columns (see here for more information on CHAS's rounding methodology). This has only a minimal impact on overall totals. Then, calculate what percentage of each jurisdiction's housing supply is in each AMI band by dividing the number of units in each AMI band by the total number of units. Note that the totals included in the "% of Total HU" columns in table H-3 are rounded. The actual, unrounded percentages are used in the following steps. To calculate the unrounded percentages, in the "Housing Units (HU) 2017" section of the table divide the "# of HU" column amounts by the "Total HU" column amount for each jurisdiction.
7. To find the "All Housing" units data in the "2019 HU" column refer to the King County rows in the "2019 Postcensal Estimate of Total Housing Units" column in the Washington State Office of Financial Management's (OFM) April 1 postcensal estimates of housing: 1980, 1990-present. Sum these values to get the total estimated housing units for 2019 countywide.
8. To break out OFM's reported total countywide housing unit number, apply the percent share of housing units by AMI found in the "% of Total HU" columns to the total housing units reported by OFM for each jurisdiction in the "Total HU" column in the "HU 2019" section of the table for each jurisdiction and each AMI band. Then sum all jurisdictions totals together for each AMI band, then round the total to the nearest thousandth. This will give you the total units reported in "Countywide Total HU, 2019" row.
9. Add the current "Countywide Total HU, 2019" totals by AMI with the "Total Additional Affordable Housing Units Needed" (2019-2044) by AMI reported in Table H-1 to determine the Total Affordable Housing Units Needed by 2044 in Table H-1, which includes current housing units.

Table H-3: Housing Affordability for King County Jurisdictions by Regional Geographies

Regional Geography and Jurisdiction	Housing Units (HU) 2017[4]									HU 2019[5]
	0-30% AMI		31-50% AMI		51-80% AMI		Over 80% AMI		0-30% AMI	31-50% AMI
	# of HU	% of Total HU	# of HU	% of Total HU	# of HU	% of Total HU	# of HU	% of Total HU	Total HU	Total HU
Metropolitan Cities										
Bellevue	1,750	3%	2,814	5%	6,363	11%	46,400	81%	57,327	62,372
Seattle	19,330	6%	32,655	10%	55,910	17%	212,875	66%	320,770	367,806
Core Cities										
Auburn	1,335	5%	9,400	38%	6,590	26%	7,660	31%	24,985	27,391
Bothell	390	4%	1,200	11%	2,075	19%	7,215	66%	10,880	12,208
Burien	985	5%	4,879	26%	5,155	27%	8,003	42%	19,022	20,793
Federal Way	1,430	4%	9,170	26%	12,450	35%	12,695	36%	35,745	37,257
Issaquah	715	5%	845	6%	1,770	12%	11,750	78%	15,080	16,801
Kent	1,970	4%	11,195	25%	14,769	33%	16,720	37%	44,654	48,228
Kirkland	1,125	3%	2,325	6%	4,775	13%	28,405	78%	36,630	39,312
Redmond	640	3%	1,325	5%	2,705	11%	20,365	81%	25,035	28,619
Renton	1,720	4%	7,285	19%	10,160	26%	20,133	51%	39,298	42,855
SeaTac	350	3%	3,400	34%	3,460	35%	2,799	28%	10,009	10,855
Tukwila	385	5%	2,150	30%	2,680	38%	1,909	27%	7,124	8,445
High Capacity Transit Communities										
Des Moines	585	5%	3,015	25%	2,999	25%	5,244	44%	11,843	12,898
Kenmore	255	3%	1,070	12%	1,190	14%	6,135	71%	8,650	9,485
Lake Forest Park	105	2%	344	7%	419	8%	4,325	83%	5,193	5,494
Mercer Island	270	3%	380	4%	400	4%	9,015	90%	10,065	10,506
Newcastle	60	1%	115	3%	480	11%	3,699	85%	4,354	5,214
Shoreline	1,180	5%	2,090	9%	4,440	20%	14,425	65%	22,135	24,127
Woodinville	150	3%	280	6%	495	10%	3,825	81%	4,750	5,450
Cities & Towns										
Algona	8	1%	404	43%	350	38%	169	18%	931	1,053
Beaux Arts	-	0%	8	6%	4	3%	114	90%	126	119
Black Diamond	40	2%	350	21%	230	14%	1,070	63%	1,690	1,808
Carnation	34	5%	119	19%	134	21%	354	55%	641	817
Clyde Hill	10	1%	39	3%	15	1%	1,055	94%	1,119	1,100
Covington	160	2%	790	11%	2,280	33%	3,770	54%	7,000	7,102
Duvall	50	2%	200	8%	250	10%	2,085	81%	2,585	2,684
Enumclaw	265	6%	1,469	31%	1,495	32%	1,515	32%	4,744	5,228
Hunts Point	4	3%	12	8%	4	3%	139	87%	159	186
Maple Valley	220	2%	530	6%	1,450	16%	6,650	75%	8,850	9,280
Medina	15	1%	19	2%	10	1%	1,125	96%	1,169	1,233
Milton	20	6%	99	28%	59	17%	175	50%	353	608
Normandy Park	150	5%	235	8%	220	8%	2,200	78%	2,805	2,876
North Bend	95	4%	340	14%	390	16%	1,565	65%	2,390	2,783
Pacific	40	2%	934	39%	840	35%	600	25%	2,414	2,460
Sammamish	180	1%	365	2%	853	4%	19,615	93%	21,013	22,159
Skykomish	4	6%	23	34%	8	12%	33	49%	68	173
Snoqualmie	45	1%	169	4%	293	7%	3,664	88%	4,171	4,748
Yarrow Point	4	1%	4	1%	8	2%	419	96%	435	416
Urban Unincorporated & Rural										
Unincorporated King County	2,465	3%	7,287	10%	12,223	17%	48,920	69%	70,895	93,179
Countywide Total HU, 2017[5]	**38,539**	**5%**	**109,333**	**13%**	**160,401**	**19%**	**538,834**	**64%**	**847,107**	**956,128**
Countywide Total HU, 2019[6]	**44,000**	**5%**	**122,000**	**13%**	**180,000**	**19%**	**610,000**	**64%**	**956,000**	
Countywide Total HU Needed by 2044	**188,000**	**15%**	**185,000**	**15%**	**236,000**	**19%**	**644,000**	**51%**	**1,253,000**	

[4] Source: CHAS 2013-2017 (released August 25, 2020)

[5] Source: 2019 data from Office of Financial Management's April 1 postcensal estimates of housing: 1980, 1990-present. Percentages are rounded.

[6] Extrapolated using the percent share of total housing units from CHAS 2013-2017 and 2019 total housing unit data from Washington State Office of Financial Management's April 1 postcensal estimates of housing: 1980, 1990-present. Figures are rounded, see methodology above for how to recreate unrounded totals.

Housing Needs

The housing needs part of the housing analysis should include demographic data related to existing population, household and community trends that could impact future housing demand (e.g. aging of population). This data will be derived from a mixture of jurisdictional records, county datasets, state datasets, and federal datasets. The identified need for future housing should be consistent with the jurisdiction's population growth and housing targets. Combined with the results of the needs analysis, these data can provide direction on appropriate goals and policies for both the housing and land use elements of a jurisdiction's comprehensive plan.

The following guidance is offered to ensure the housing inventory and analysis data is consistently utilized and reported by all jurisdictions in King County:

- *Affordability gap* means the comparison of a jurisdiction's housing supply as compared to the countywide need percentages expressed in policy H-1. 2013-2017 housing supply is included in table H-3 in this appendix. The County will update this table annually and make it available online.
- *Age* means built in 2014 or later, built 2010 to 2013, built 2000 to 2009, built 1990-1999, built 1980 to 1989, built 1970 to 1979, built 1960 to 1969, built 1950 to 1959, built 1940 to 1949, built 1939 or earlier.
- *Number of bedrooms* means no bedroom, 1 bedroom, 2 or 3 bedrooms, and 4 or more bedrooms.
- *Condition* means lacking complete plumbing facilities, lacking complete kitchen facilities, and/or no telephone service available.
- *Tenure* means renter-occupied and owner-occupied.
- *Income-restricted units* should be reported by AMI limit (i.e. ≤ 30 percent AMI, ≤ 50 percent AMI, and ≤ 80 percent AMI).
- *Moderate-density housing* means the following housing types: 1-unit attached; 2 units; 3 or 4 units; 5 to 9 units; 10 to 19 units. High-density housing means the following housing types: 20 or more units.
- *Household income by AMI* means equal to or less than 30 percent AMI, above 30 percent to 50 percent AMI; above 50 percent to 80 percent AMI, above 80 percent to 100 percent AMI, above 100 percent to 120 percent AMI, and above 120 percent AMI.
- *Housing cost burden* means a household spends more than 30 percent of its household income on housing costs.
- *Severe housing cost burden* means a household spends more than 50 percent of its household income on housing costs.

- *Displacement risk* means where residents and businesses are at greater risk of displacement based on PSRC's index or equivalent composite set of risk indicators such as: socio-demographics, transportation qualities, neighborhood characteristics, housing, and civic engagement.

Policy H-5: Evaluate Effectiveness

Prior to updating their comprehensive plan, a jurisdiction must evaluate the effectiveness of existing housing policies and strategies to meet a significant share of countywide need. This will help a jurisdiction identify the need to adjust current policies and strategies or implement new ones. Where possible, jurisdictions are encouraged to identify actual housing units created, by affordability level, since their last comprehensive plan update.

This evaluation must also identify gaps in existing partnerships, policies, and dedicated resources for meeting the countywide need and eliminating racial and other disparities in access to housing and neighborhoods of choice. This exercise helps a jurisdiction understand what other strategies it should pursue beyond updating the comprehensive plan to meet the goals of this chapter. Some strategies, like inclusionary housing or new dedicated resources, will be easier to evaluate a quantitative impact and for others, it may be more qualitative. Jurisdictions without the ability to identify the impact of each policy may wish to describe the policies and programs that contributed to creating or preserving a given number of income-restricted units, special needs housing units, etc.

Policy H-6: Racial Exclusion and Discrimination

To inform a comprehensive plan strategy, a jurisdiction must also document the local history of racially exclusive and discriminatory land use and housing practices, consistent with local and regional fair housing reports and other resources.

A jurisdiction must also explain the extent to which that history is still reflected in current development patterns, housing conditions, tenure, and access to opportunity. Examples of suitable data include, but are not limited to:

- homeownership rates by race/ethnicity and age;
- concentration or dispersion of affordable housing or housing choice voucher usage within the jurisdiction;
- affordability of housing in the jurisdiction to the median income household of different races and ethnicities;
- racial demographics by neighborhood, e.g. degrees of integration and segregation;

- access to areas of opportunity by race and ethnicity;
- demographics of residents in areas of high displacement risk; and
- results of fair housing testing performed or fair housing complaint data within a jurisdiction.

Jurisdictions must also identify local policies and regulations that result in racially disparate impacts, displacement, and exclusion in housing, including but not limited to:

- zoning that may have a discriminatory effect;
- disinvestment; and
- infrastructure availability.

Racially restrictive housing covenants, unrecognized treaties with tribes, current exclusionary zoning, and lack of investment in affordable housing are examples of discriminatory practices or policies a jurisdiction could include in an assessment. Jurisdictions should not limit their review to local policies and regulations. The region should share resources and work together to develop a shared understanding of how racist or discriminatory housing practices and disparities were perpetuated by all levels of government as well as the private sector. While each jurisdiction's assessment will be unique, King County jurisdictions are encouraged to identify federal, state, and regional practices as well as local.

Finally, a jurisdiction must demonstrate how current strategies are addressing impacts of those racially exclusive and discriminatory policies and practices. Using this information jurisdictions should identify and implement policies and regulations to address and begin to undo racially disparate impacts, displacement, and exclusion in housing caused by local policies, plans, and actions consistent with the policies in the "Implement Policies and Strategies to Equitably Meet Housing Needs" section.

Jurisdictions are encouraged to refer to the 2019 King County Analysis of Impediments to Fair Housing Choice (Analysis of Impediments) to understand current barriers to fair housing choice. In addition to the guidance offered in this technical appendix, the County will support jurisdictions in identifying and compiling resources, such as University of Washington reports and databases, to support this analysis.

Policy H-7: Collaborate Regionally

The lack of homes affordable to low-income households is a regional problem that requires regional solutions. Jurisdictional collaboration with diverse partners is key to an effective regional response. Jurisdictions in their collaboration are encouraged to:

- address the countywide housing need;
- engage and collaborate with other entities in efforts to fund, site, and build affordable housing;
- join resources;
- raise public and private resources together to provide the additional subsidies required to develop housing at deeper levels of affordability;
- support affordable housing development or preservation in each other's jurisdictions; and
- take other collaborative action to address the countywide housing need.

Partners collaborating with jurisdictions are encouraged to support the following needs:

- technical assistance;
- organizational capacity building;
- land donations;
- financial contributions for operating and capital needs to support affordable housing development, maintenance and operations needs;
- funding for other needs such as data and monitoring infrastructure; and
- advocate for efforts to fund, site, and build affordable housing.

Policies H-9 through H-24: Implement Policies and Strategies to Meet Housing Needs Equitably

Jurisdictions need to employ a range of policies, incentives, strategies, actions, and regulations tailored to equitably meet their housing need. The Puget Sound Regional Council's Housing Innovations Program[7] presents a range of strategies. The strategies can be filtered by objective, project type, and affordability level. Strategies marked with an asterisk include more detail and are proven to be particularly effective at meeting regional housing goals. The Municipal Research and Services Center (MSRC) and Washington State Department of Commerce also offers affordable housing-related resources on their websites, including information about techniques and incentives for encouraging and planning for housing affordability.

Local jurisdictions may also refer to this table for suitable strategies, largely derived from recommendations from the December 2018 Regional Affordable Housing Task Force Final Report and Recommendations. King County's Department of Community and Human Services

[7] PSRC Housing Innovations Program https://www.psrc.org/hip

will work to periodically update these suggestions on the King County website if new strategies and best practices emerge.

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
H-9 Collaborate with populations most disproportionately impacted by housing cost burden in developing, implementing and monitoring strategies that achieve the goals of this chapter. Prioritize the needs and solutions articulated by these disproportionately impacted populations.	Suggested strategies to ensure the process to plan for meeting countywide housing need is equitable include: • Providing capacity grants to organizations representing target communities to support engagement • Providing other support to ensure those most disproportionately impacted have equitable access to participate in planning discussions (e.g. evening meetings, translation services, food, and childcare or travel stipends) • Establishing clear decision-making structures that ensures disproportionately impacted populations' needs and solutions are prioritized and community members and leaders, organizations, and institutions share power, voice, and resources
H-10 Adopt intentional, targeted actions that repair harms to Black, Indigenous, and People of Color (BIPOC) households from past and current racially exclusive and discriminatory land use and housing practices (generally identified through Policy H-6). Promote equitable outcomes in partnership with communities most impacted.	A suggested approach to identifying reparative strategies includes: • Looking at how current policies are working to undo past racially exclusive and discriminatory land use and housing practices or where they might be perpetuating that history • When current policies are perpetuating the harm, implementing equitable countermeasures to remove those policies and their impacts and mitigate disparate impacts on housing choice, access, and affordability • Using PSRC's Regional Equity Strategy and associated tools and resources to center equity in comprehensive planning processes and intended outcomes Specific policies and strategies include:

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
	• Reduce or eliminate exclusionary zoning • Implement anti-displacement strategies, which include addressing housing stability for low-income renters and owners as well as preserving cultural diversity of the community • Implement policies that increase affordable homeownership opportunities for Black, Indigenous, and People of Color communities • Distribute affordable housing throughout a jurisdiction, with a focus on areas of opportunity • Consider environmental health of neighborhoods where affordable housing exists or is planned and plan for environmentally healthy neighborhoods • Support and prioritize projects that promote access to opportunity, anti-displacement, and wealth-building opportunities for Black, Indigenous, and People of Color communities Strategies for promoting equitable outcomes in partnership with communities most impacted include: • Utilize an equity impact review tool when developing or implementing policies or strategies • Create and utilize a community engagement toolkit • Intentionally include and solicit engagement from members of communities of color or low-income households in policy decision-making and committees
H-11 Adopt policies, incentives, strategies, actions, and regulations that increase the supply of long-term income-restricted housing for extremely low-, very low-, and low-income households and households with special needs.	Suggested strategies to help meet the need at these affordability levels include: • Increase financial contributions to build, preserve, and operate long-term income-restricted housing

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
	• Increase the overall supply and diversity of housing throughout a jurisdiction, including both rental and ownership • Provide housing suitable for a range of household types and sizes, including housing suitable and affordable for households with special needs, low-, very low-, and extremely low-incomes Implement policies that incentivize the creation of affordable units, such as Multifamily Tax Exemption, inclusionary zoning, and incentive zoning, and density bonus • Coordinate with local housing authorities to use project-based rental subsidies with incentive/ inclusionary housing units to achieve deeper affordability • Implement policies that reduce the cost to develop affordable housing • Implement universal design principles to ensure that buildings and public spaces are accessible to people with or without disabilities • Support sustainable housing development • Promote units that accommodate large households and/or multiple bedrooms • Prioritize strategies for implementation that will result in the highest impact towards addressing the affordable housing gap at the lowest income levels
H-12 Identify sufficient capacity of land for housing including, but not limited to: income-restricted 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, duplexes, triplexes, and townhomes.	An approach to identifying sufficient capacity for housing types is: • Consider the local and regional housing needs and available land capacity identified in H-4. For example, a jurisdiction that doesn't have any unhoused people may still need to provide sufficient capacity for this population if unmet need exists within the county or subregion

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
	• Determine if current capacity is sufficient to meet future needs. For example, most permanent supportive housing will require multifamily zoning Collaborate with other jurisdictions to identify the subregional or countywide capacity needed for these housing types if current need within a jurisdiction is substantially less than the countywide need for that housing type
H-13 Implement strategies to overcome cost barriers to housing affordability. Strategies to do this vary but can include updating development standards and regulations, shortening permit timelines, implementing online permitting, optimizing residential densities, reducing parking requirements, and developing programs, policies, partnerships, and incentives to decrease costs to build and preserve affordable housing.	Suggested strategies to overcome cost barriers to housing affordability to consider addressing include: • Reduce vehicular parking requirements • Reduce permitting timelines • Increase the predictability of the permitting process • Reduce sewer fees for affordable housing • Reduce utility, impact and other fees for affordable housing and Accessory Dwelling Units (ADUs) • Streamline permitting process for affordable housing development and ADUs • Update building codes to promote more housing growth and innovative, low-cost development • Explore incentives similar to the Multifamily Tax Exemption for the development of ADUs for low-income households • Maximize and expand use of the Multifamily Tax Exemption • Offer suitable public land at reduced or no cost for affordable housing development • Before implementing a policy, consider how it will impact the cost to build affordable homes
H-14 Prioritize the use of local and/ regional resources (e.g. funding, surplus property) for income-restricted housing, particularly for	Suggested strategies to effectively prioritize the use of resources include:

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
extremely low-income households, populations with special needs, and others with disproportionately greater housing needs. Consider projects that promote access to opportunity, anti-displacement, and wealth-building for Black, Indigenous, and People of Color communities to support implementation of policy H-10.	• Partner with communities most disproportionately impacted by the housing crisis, including extremely low-income households and Black, Indigenous, and People of Color (BIPOC) communities to inform resource design and allocation decisions. These decisions should prioritize strategies that reduce and undo disproportionate harm to these communities consistent, recognizing that specific needs of these communities may vary based on location • Identify and prioritize underutilized publicly owned land and nonprofit/ faith communities for the creation of income-restricted housing, both rental and homeownership • Prioritize sites near transit, quality schools, parks and other neighborhood amenities • Fund acquisition and development of prioritized sites • Prioritize public funding resources in a manner consistent with policy H-9 • Consider the countywide median income levels of BIPOC households when designing affordable homeownership programs and set the affordability levels such that they are accessible to the median BIPOC households considered
H-15 Increase housing choices for everyone—particularly those earning lower wages—that is co-located with, accessible to, or within a reasonable commute to major employment centers and affordable to all income levels. Ensure there are zoning ordinances and building policies in place that allow and encourage housing production at levels that improve jobs-	Strategies to increase housing choice near employment and affordable to all include but are not limited to[8]: • Update zoning and land use regulations (including in single-family low-rise zones) to increase density and diversify housing choices, including but not limited to:

[8] PSRC's Housing Innovations Program (HIP) website provides a searchable database of dozens of suggested strategies. Please refer to their database for a more comprehensive list of strategies.

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
housing balance throughout the county across all income levels.	○ Accessory Dwelling Units (ADU) and Detached Accessory Dwelling Units (DADUs) ○ Duplex, Triplex, Four-plex ○ Zero lot line townhomes, row houses, and stacked flats ○ Micro/efficiency units ○ Manufactured housing preservation ○ Group homes ○ Foster care facilities ○ Emergency housing ○ Emergency shelters ○ Permanent supportive housing ○ Low-rise and high-density multifamily development ○ Housing development that accommodates large households and/or multiple bedrooms • Implement strategies that provide for affordable housing near employment centers, such as: ○ Project-level tools like affordability covenants when funding income-restricted units or development agreements ○ Incentives such as density bonuses, incentive zoning, or Multifamily Tax Exemption ○ Other regulatory tools such as commercial linkage fees, inclusionary zoning, or TOD overlays ○ Other financial tools such as public land for affordable housing
H-16 Expand the supply and range of housing types—including affordable units—at densities sufficient to maximize the benefits of transit investments throughout the county.	Suggested zoning, regulation, and incentive strategies to be applied near transit station areas and transit corridors served by high-capacity or frequent transit include: • Requiring minimum densities in these areas • Providing enough multifamily zoning to accommodate a significant amount of

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
	the jurisdictional share of affordable housing in these areas • Implementing comprehensive inclusionary/ incentive housing policies in existing and planned frequent transit service areas to achieve the deepest affordability possible through land use incentives, which may include increased density; reduced parking requirements, reduced permit fees, exempted impact fees, Multifamily Tax Exemption, and programmatic Environmental Impact Statements • Evaluate and update zoning in transit areas in advance of transit infrastructure investments • Evaluate the impact of development fee reductions in transit areas and implement reductions if positive impact • Implement comprehensive inclusionary/incentive housing policies in all existing and planned frequent transit service to achieve the deepest affordability possible through land use incentives • Coordinate with local housing authorities to use project-based rental subsidies with incentive/ inclusionary housing units to achieve deeper affordability near transit
H-17 Support the development and preservation of income-restricted affordable housing that is within walking distance to planned or existing high-capacity and frequent transit.	Preservation strategies to consider include: • Identify areas that may be at higher risk of displacement from market forces that occur with changes to zoning development regulations and public capital investments and establish anti-displacement policies, with consideration given to the preservation of historical and cultural communities as well as: ○ investments in low-, very low-, and extremely low-income housing equitable development initiatives

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
	○ inclusionary zoning ○ community planning requirements; tenant protections ○ public land disposition policies ○ consideration of land that may be used for affordable housing • Collect data to better understand the impacts of growth, and the risks of residential, economic, and cultural displacement. Verify this data with residents at the greatest risk of displacement, particularly those most disproportionately impacted by housing cost burden and neighborhood-based small business owners. Supplement this information with regional data about displacement risk and ongoing displacement trends that can inform and drive policy and programs. • Prioritize affordable housing investments, incentives, and preservation tools in areas where increases in development capacity and new public capital investments are anticipated to allow current low-income residents to stay • Support the acquisition, rehabilitation, and preservation of income-restricted and naturally occurring affordable housing in areas with a high displacement risk, for long-term affordability serving households at or below 80 percent AMI • Leverage new development to fund affordable housing in the same geography using zoning tools such as incentive/ inclusionary zoning • Implement anti-displacement policies (e.g. community preference, tenant opportunity to purchase, no net loss of affordable units, right-to-return, community benefits agreements)

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
	• Prioritize publicly owned land for affordable housing in areas at high risk of displacement • Support community land trust and other permanent affordability models • Identify, preserve, and improve cultural assets • Increase education to maximize use of property tax relief programs to help sustain homeownership for low-income individuals • Expand targeted foreclosure prevention • Preserve manufactured housing communities and improve the quality of the housing and associated infrastructure to improve housing stability and health for the residents while also expanding housing choices affordable to these residents, including opportunities to cooperatively own their communities • Encourage programs to help homeowners access support needed to participate in and benefit from infill development
H-18 Adopt inclusive planning tools and policies whose purpose is to increase the ability of all residents in jurisdictions throughout the county to live in the neighborhood of their choice, reduce disparities in access to opportunity areas, and meet the needs of the region's current and future residents by: a. providing access to affordable housing to rent and own throughout the jurisdiction, with a focus on areas of high opportunity; b. expanding capacity for moderate-density housing throughout the jurisdiction, especially in areas currently zoned for lower density single-family detached housing in the Urban Growth Area, and capacity for high-density housing, where	Other inclusive planning tools and policies that increase neighborhood choice include: • Plan for moderate or high-density housing and complete neighborhoods within a half-mile walkshed of high-capacity or frequent transit service in areas already zoned for residential housing and where exposure to air pollution and particulate matter is low to moderate. • Plan for complete neighborhoods around existing and planned essential services throughout a jurisdiction • Establish a designation that allows more housing types within single-family zoned areas near parks, schools, and other services

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
appropriate, consistent with the Regional Growth Strategy; c. evaluating the feasibility of, and implementing, where appropriate, inclusionary and incentive zoning to provide affordable housing; and d. providing access to housing types that serve a range of household sizes, types, and incomes, including 2+ bedroom homes for families with children and/or adult roommates and accessory dwelling units, efficiency studios, and/or congregate residences for single adults.	• Housing types to allow development that is compatible in scale with existing housing • Revise parking regulations to prioritize housing and public space for people over space to park cars • Allow the conversion of existing houses into multiple units • Allow additional units on corner lots, lots along alleys and arterials, and lots on zone edges • Incentivize the retention of existing houses by making development standards more flexible when additional units are added • Provide technical and design resources for landowners and communities to redevelop and maintain ownership. • Reduce or remove minimum lot size requirements • Create incentives for building more than one unit on larger than average lots • Limit the size of new single-unit structures, especially on larger than average lots • Retain and increase family-sized and family-friendly housing • Remove the occupancy limit for unrelated persons in single-family zones, if applicable
H-19 Lower barriers to and promote access to affordable homeownership for extremely low-, very low-, and low--income, households. Emphasize: a. supporting long-term affordable homeownership opportunities for households at or below 80 percent AMI (which may require up-front initial public subsidy and policies that support diverse housing types); and b. remedying historical inequities in and expanding access to homeownership	Suggested strategies to increase access to affordable homeownership for lower-income households include: • Support alternative homeownership models that lower barriers to ownership and provide long-term affordability, such as community land trusts, and limited or shared equity co-ops • Encourage programs to help homeowners, particularly low-income homeowners, access financing, technical support or other tools needed to

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
opportunities for Black, Indigenous and People of Color communities.	participate in and benefit from infill development opportunities • Increase educational efforts to ensure maximum use of property tax relief programs to help sustain homeownership for low-income individuals • Expand targeted foreclosure prevention • Preserve existing manufactured housing communities through use-specific zoning or transfer of development rights

H-20 Adopt policies and strategies that promote equitable development and mitigate displacement, with consideration given to the preservation of historical and cultural communities as well as investments in low-, very low-, extremely low-, and moderate-income housing production and preservation; dedicated funds for land acquisition; manufactured housing community preservation, inclusionary zoning; community planning requirements; tenant protections; public land disposition policies; and land that may be used for affordable housing. Mitigate displacement that may result from planning efforts, large-scale private investments, and market pressure. Implement anti-displacement measures prior to or concurrent with development capacity increases and public capital investments.	Suggested equitable development and anti-displacement strategies include:
	• Consider and plan for socioeconomic diversity and cultural stability
	• Encourage homeownership opportunities for low-income households
	• Acquire and preserve manufactured housing communities to prevent displacement
	• Acquire land for affordable housing ahead of planned infrastructure investments or other investments that may increase land and housing costs
	• Implement a community preference policy that allows housing developments to prioritize certain applicants when leasing or selling units in communities at high risk of displacement.
	• Implement tenant protections that increase stability such as:
	  ○ Notice of rent increase
	  ○ Right to live with family
	  ○ Just cause eviction for tenants on termed leases
	  ○ Tenant relocation assistance
	• Establish programs to invest in underrepresented communities to promote community-driven development and/ or prevent displacement

H-21 Implement, promote and enforce fair housing policies and practices so that every person in the county has equitable access and	Suggested fair housing policies and practices include:

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
opportunity to thrive in their communities of choice, regardless of their race, gender identity, sexual identity, ability, use of a service animal, age, immigration status, national origin, familial status, religion, source of income, military status, or membership in any other relevant category of protected people.	• Invest in programs that provide fair housing education for both renters and landlords, enforcement, and testing • Engage underrepresented communities on an ongoing basis to better understand Remove barriers to housing and increase access to opportunity • Provide more housing for vulnerable populations • Provide more housing choices for people with large families • Support efforts to increase housing stability. • Preserve and increase affordable housing in communities at high risk of displacement • Review and update zoning to increase housing options and supply in urban areas • Work with communities to guide investments in historically underserved communities. • Report annually on fair housing goals and progress
H-22 Adopt and implement policies that protect housing stability for renter households; expand protections and supports for low-income renters and renters with disabilities.	Tenant protection policies to consider include: • Just cause eviction for tenants with termed leases • Increase time periods for notice of rent increases • Prohibit discrimination in housing against tenants and potential tenants with arrest records, conviction records, and criminal history • Tenant relocation assistance • Increase access to legal services • Rental inspection programs Supports for landlords that promote tenant stability include:

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
	• Establish a fund that landlords can access to make repairs so costs are not passed on to low-income renters • Increase education for tenants and property owners regarding their respective rights and responsibilities Supports for low-income renters and people with disabilities to consider include: • Shallow and deep rent subsidies • Emergency rental assistance • Services to address barriers to housing, including tenant screening reports and civic legal aid • Increased funding for services that help people with disabilities stay in their homes and/or age in place
H-23 Adopt and implement programs and policies that ensure healthy and safe homes.	Strategies to improve the quality and safety of housing include: • Establish and promote healthy housing standards • Provide home repair assistance for households earning at or below 80 percent AMI • Implement proactive rental inspection programs • Implement just cause eviction to protect tenants from landlords retaliating if they request basic maintenance and repairs to maintain a healthy and safe living environment • Partner with Aging & Disability organizations to integrate accessibility services See the King County Board of Health Guideline and Recommendation on Healthy Housing for additional guidance.[9]

[9] See link: https://kingcounty.gov/depts/health/board-of-health/~/media/depts/health/board-of-health/documents/guidelines/guideline-recommendation-18-01-attachment-A.ashx

Table H-4 Suggested Strategies for Achieving Policy Goals	
Policy	**Suggested Strategies**
H-24 Plan for residential neighborhoods that protect and promote the health and well-being of residents by supporting equitable access to parks and open space, safe pedestrian and bicycle routes, clean air, soil and water, fresh and healthy foods, high-quality education from early learning through K-12, affordable and high-quality transit options and living wage jobs and by avoiding or mitigating exposure to environmental hazards and pollutants.	When planning for residential neighborhoods that protect and promote health and well-being of residents, suggested strategies include: • Plan for housing in conjunction with other infrastructure investments to support equitable access to opportunity for households with a range of incomes and ensure the siting of homes is not in close to environmental hazards and pollutants • Analyze disparities in access to amenities and invest in affordable housing in areas with high access to these amenities while providing services and investment in areas where low-income people live

Policies H-25 and H-26: Measure Results and Provide Accountability
Success at meeting a community's need for housing can only be determined by measuring results and evaluating changes to housing supply and need. Cities and the County will collaborate to monitor basic information annually, as they may already do for permits and development activity. Annual tracking of information such as new policies, new units, and zoning changes will make periodic assessments easier and more efficient. A limited amount of annual monitoring will also aid in providing timely information to decision makers

The purpose of "measuring results and providing accountability" is to motivate and enhance learning, collaboration, and progress. While some CPPs clearly lend themselves to quantitative measures and straightforward evaluation, some do not. This is often true when factors like the result of engagement with disproportionately impacted community members significantly shape implementation or where quantitative data is lacking. In these cases, jurisdictions have the liberty to make any reasonable interpretation of the policy and report as completely and honestly as possible how well the policy has been met.

Policy H-25 requires cities and the County to collaborate in this monitoring to ensure continual review of the effectiveness of local strategies at meeting the countywide need. The information will be collected by King County and reported annually in a public-facing, interactive regional affordable housing dashboard.

Policy H-27: Adjust Strategies to Meet Housing Needs
The data collected annually provides an opportunity for cities and the County to adapt to changing conditions and new information when monitoring finds that the adopted strategies

are insufficient for meeting the countywide need or result in the perpetuation of the inequitable distribution of affordable housing. Adaptation strategies can occur before the next comprehensive planning cycle during annual comprehensive plan updates, updates to the land use map, and/or a jurisdiction's urban growth strategy (buildable lands) reporting process. The King County Affordable Housing Committee can serve as a venue for discussing regional progress and challenges jurisdictions face. The results of these conversations and recommended actions to meet countywide need more effectively can be shared with the Growth Management Planning Council.

Appendix 5: King County School Siting Task Force Report

On March 31, 2012 the School Siting Task Force issued the following report and recommendations related to 18 undeveloped school sites in King County, and future school siting. Countywide Planning Policies DP-52, PF-13, PF-19, and PF-21 contain references to this report, and in particular the Site Specific Solutions table found on pages 15-19 of the School Siting Task Force Report.

The complete report and associated documents can be found on the Countywide Planning Policies website at:

- https://www.kingcounty.gov/depts/executive/performance-strategy-budget/regional-planning/CPPs.aspx

Appendix 6: King County Centers Designation Framework

	Metro Growth Centers	Urban Growth Centers	Countywide Growth Centers	Industrial Employment Centers	Industrial Growth Centers	Countywide Industrial Centers
1. Purpose of Center	Regional Metro Growth Centers have a primary regional role. They have dense existing jobs and housing, high-quality transit service, and are planning for significant, equitable growth and opportunity. They serve as major transit hubs for the region and provide regional services and serve as major civic and cultural centers.	Regional Urban Growth Centers play an important regional role, with dense existing jobs and housing, high-quality transit service, and planning for significant, equitable growth and opportunity. These centers may represent areas where major investments – such as high-capacity transit –offer new opportunities for growth.	Countywide growth centers[12] serve important roles as places for equitably concentrating jobs, housing, shopping, and recreational opportunities. These are often smaller downtowns, high-capacity transit station areas, or neighborhood centers that are linked by transit, provide a mix of housing and services, and serve as focal points for local and county investment.	Regional Industrial Employment Centers are highly active industrial areas with significant existing jobs, core industrial activity, evidence of long-term demand, and regional role. They have a legacy of industrial employment and represent important long-term industrial areas, such as deep-water ports and major manufacturing and can be accessed by transit. Designation is to, at a minimum, preserve existing industrial jobs and land use and to continue to equitably grow industrial employment and opportunity in these centers where possible.	Regional Industrial Growth Centers are clusters of industrial lands that have significant value to the region and potential for future equitable job growth. These large areas of industrial land serve the region with international employers, industrial infrastructure, concentrations of industrial jobs, evidence of long- term potential, and can be accessed by transit. Designation will continue growth of industrial employment and preserve the region's industrial land base for long-term growth and retention.	Countywide industrial centers serve as important local industrial areas. These areas support equitable access to living wage jobs and serve a key role in the county's manufacturing/industrial economy.
2. Distribution of Centers	Centers are designated to achieve the countywide land use vision and are based on meeting the expectations of the framework. No arbitrary limit on the number of centers will be established.	Same	Same	Same	Same	Same
PART 1. DESIGNATION PROCESS AND SCHEDULE						
A. Designation Process						
1. jurisdiction ordinance, motion, or resolution authorizing submittal of application	Yes	Yes	Yes	Yes	Yes	Yes
2. Fill out Form	Yes	Yes	KC to have an application form and process.	Yes	Yes	KC to have an application form and process.
3. Submit for eligibility review. Staff review and report	Yes	Yes	IJT staff to review and present to GMPC.	Yes	Yes	IJT staff to review and present to GMPC.

[12] King County does not yet have designated countywide centers, although many jurisdictions have local centers that may be equivalent. Local centers are eligible for regional and countywide funding, and this funding is distributed based on criteria and formula.

	Metro Growth Centers	Urban Growth Centers	Countywide Growth Centers	Industrial Employment Centers	Industrial Growth Centers	Countywide Industrial Centers
4. GMPC recommendation to PSRC	Yes	Yes	KC to have an application form and process.	Yes	Yes	KC to have an application form and process.
B. Schedule						
1. Applications limited to major updates. Call for new application approx. every 5 years.	Yes	Yes	Yes. KC to have a 5-year cycle or consider following PSRC major plan updates.	Yes	Yes	Yes. KC to have a 5 year cycle or consider following PSRC major plan updates.
C. Redesignation						
1. Follows PSRC re-designation process	Yes	Yes	Yes	Yes	Yes	Yes
PART 2: CENTER ELIGIBILITY						
A. Local and Countywide Commitment						
1. center identified in Comprehensive Plan	Yes	Yes	Yes	Yes	Yes	Yes
2. demonstrate center is local priority for growth and investments	Yes	Yes	Yes	Yes	Yes. And, commitment to protecting and preserving industrial uses, strategies, and incentives to encourage industrial uses in the center, and established partnerships with relevant parties to ensure success of manufacturing/industrial center.	Yes. And area has important county role and concentration of industrial land or jobs with evidence of long-term demand.
B. Planning						
1. completed center plan meeting Plan Review Manual specifications [13]	Yes	Yes	Yes[14]	Yes	Yes. And, in consultation with public ports and other affected government entities.	Yes [10]
2. environmental review shows area appropriate for density	Yes	Yes	Yes	Yes	Yes	Yes
3. assessment of housing need and cultural assets, including displacement of residents and businesses	Yes	Yes	Yes, as part of subarea plan or in dedicated Comprehensive Plan chapter	Not applicable	Not applicable	Not applicable

[13] The PSRC *Center Plan Checklist* defines key concepts and provisions jurisdictions should use in planning for the designated centers. This includes the following: establishing a vision, considering natural and built environment topics, establishing geographic boundaries and growth targets, planning for a mix of land uses, addressing design standards, planning for a variety of housing types including affordable housing in growth centers, addressing economic development, and providing for public services and facilities, including multimodal transportation, all as appropriate and tailored to the center type and function.

[14] For Countywide Centers the topics in the *Center Plan Checklist* should be addressed, except that growth targets are not required, and they can be met through inclusion of a dedicated chapter in the Comprehensive Plan that specifies how each required topic is addressed for each countywide center, rather than in stand-alone subarea plans.

	Metro Growth Centers	Urban Growth Centers	Countywide Growth Centers	Industrial Employment Centers	Industrial Growth Centers	Countywide Industrial Centers
4. documentation of tools to provide range of affordable and fair housing	Yes	Yes	Yes, as part of subarea plan or in dedicated Comprehensive Plan chapter	Not applicable	Not applicable	Not applicable
5. documentation of community engagement, including with priority populations [15]	Yes	Yes	Yes, as part of subarea plan or in dedicated Comprehensive Plan chapter	Yes	Yes	Yes
C. Jurisdiction and Location						
1. new Centers should be in cities	Yes	Yes	Cities or Unincorporated Urban[16]	Yes	Yes	Cities or Unincorporated Urban[12]
2. if unincorporated area: a. it has link light rail and is affiliated for annexation	Not allowed in unincorporated urban area	Not allowed in unincorporated urban area	Encouraged	Not allowed in unincorporated urban area	Not allowed in unincorporated urban area	Encouraged
b. joint planning is occurring	Not allowed in unincorporated urban area	Not allowed in unincorporated urban area	Encouraged	Not allowed in unincorporated urban area	Not allowed in unincorporated urban area	Encouraged
c. plans for annexation or incorporation are required	Not applicable (center type does not exist in unincorporated area).	Not applicable (center type does not exist in unincorporated area).	Encouraged	Not allowed in unincorporated urban area	Not allowed in unincorporated urban area	Encouraged
D. Existing Conditions						
1. infrastructure and utilities can support growth	Yes	Yes	Yes	Yes. Must include presence of irreplaceable industrial infrastructure such as working maritime port facilities, air and rail freight facilities.	Yes. Access to relevant transportation infrastructure including freight.	Yes
2. center has mix of housing and employment	Yes	Yes	Yes	Not applicable	The center has an economic impact.	Not applicable.
E. Boundaries						
1. justification for center boundaries	Yes	Yes	Yes	Yes	Yes	Yes
2. boundary generally round or square	Yes	Yes	Compact, walkable size	Not applicable	Not applicable	Not applicable
F. Transportation						
1. center has bicycle and pedestrian infrastructure and amenities	Yes	Yes	Yes. Supports multimodal transportation, including pedestrian infrastructure and amenities, and bicycle infrastructure and amenities.	Defined transportation demand management strategies in place.	Defined transportation demand management strategies in place.	Defined transportation demand management strategies in place

[15] King County's "Fair and Just" Ordinance 16948, as amended, identifies four demographic groups, including: low-income, limited English proficiency, people of color, and immigrant populations.

[16] For multi-jurisdiction centers, please describe the manner and structure (e.g. interlocal agreement, memorandum of understanding) with which the jurisdictions will plan together over the long-term.

	Metro Growth Centers	Urban Growth Centers	Countywide Growth Centers	Industrial Employment Centers	Industrial Growth Centers	Countywide Industrial Centers
2. center has street pattern supporting walkability	Yes	Yes	Yes. Supports multimodal transportation, including street pattern that supports walkability.	Not applicable	Not applicable	Not applicable
3. freight access	Yes	To be addressed in subarea plan	To be addressed in subarea plan	Access to relevant transportation infrastructure including freight.	Same	To be addressed in subarea plan
PART 3: CENTER CRITERIA						
A. Purpose						
1. Compatibility with VISION centers concept, Regional Growth Strategy and Multicounty Planning Policies	Yes	Yes	Yes	Yes	Yes	Yes
B. Activity level/Zoning [17]						
1. existing activity [18]	60 activity unit density	30 activity unit density (AUs refer to combined jobs and population)	18 activity unit density	10,000 jobs	4,000 jobs	1,000 existing jobs and/or 500 acres of industrial land
2. planned activity	Above 120 activity unit density	60 activity unit density	30 activity unit density	20,000 jobs	10,000 jobs	4,000 jobs
3. sufficient zoned capacity	Yes. Should be higher than target and supports a compact, complete, and mature urban form.	Yes. Should be higher than target.	Should have capacity and be planning for additional growth	Yes. Should be higher than target.	Yes. Should be higher than target.	Should have capacity and be planning for additional growth.
4. planning mix of housing types and employment types	Planning for at least 15% residential and 15% employment activity	Planning for at least 15% residential and 15% employment activity	Planning for at least 20% residential and 20% employment, unless unique circumstances make these percentages not possible to achieve.	At least 50% of the employment must be industrial employment. Strategies to retain industrial uses are in place.	At least 50% of the employment must be industrial employment. Strategies to retain industrial uses are in place.	At least 50% of the employment must be industrial employment. Strategies to retain industrial uses are in place.
C. Geographic Size						
1. minimum size	320 acres	200 acres	160	No set threshold; size based on justification for the boundary.	2000 acres	1,000 existing jobs and/or 500 acres of industrial land
2. maximum size	640 acres (larger if internal HCT)	640 acres (larger if internal HCT)	500 acres	No set threshold; size based on justification for the boundary.	No set threshold; size based on justification for the boundary.	No set threshold; size based on justification for the boundary.
D. Transit						

[17] PSRC's 2015 guidance on *Transit Supportive Densities and Land Uses* cites an optimal level of 56-116 activity units per acre to support light rail, dependent on transit costs per mile. The guidance indicates an optimal threshold of at least 17 activity units per acre to support bus rapid transit. Note: the existing threshold in the CPPs is roughly equivalent to 85 AUs existing activity for King County Urban Centers.

[18] For existing centers, not meeting existing activity unit thresholds is not grounds for de-designation or re-designation by the Growth Management Planning Council.

	Metro Growth Centers	Urban Growth Centers	Countywide Growth Centers	Industrial Employment Centers	Industrial Growth Centers	Countywide Industrial Centers
1. existing or planned transit service levels	Major transit hub, has high quality/high-capacity existing or planned service including existing or planned light rail, commuter rail, ferry, or other high-capacity transit with similar frequent service as light rail. (18 hours, 15-minute headways)	Fixed route bus, regional bus, Bus Rapid Transit or frequent all-day bus service (16 hours, 15 minute headways). High-capacity transit may substitute for fixed-route bus.	Yes, has frequent, all-day, fixed-route bus service (16 hours, 15-minute headways).	Must have existing or planned frequent, local, express, or flexible transit service. Should have documented strategies to reduce commute impacts through transportation demand management that are consistent with the Regional TDM Action Plan.	Same.	Should have local fixed-route or flexible transit service.
2. transit-supportive infrastructure	Provides transit priority (bus lanes, queue jumps, signal priority, etc.) within the right-of-way to maintain speed and reliability of transit service. Provides infrastructure (i.e. pedestrian and bicycle) that improves rider access to transit service and increases amenities to make transit an inviting option.	Provides transit priority (bus lanes, queue jumps, signal priority, etc.) within the right-of-way to maintain speed and reliability of transit service. Provides infrastructure (i.e. pedestrian and bicycle) that improves rider access to transit service and increases amenities to make transit an inviting option.	Supports connection/transfers between routes and other modes. Provides infrastructure (i.e. pedestrian and bicycle) that improves rider access to transit service and increases amenities to make transit an inviting option.	Provides transit priority (bus lanes, queue jumps, signal priority, etc.) within the right-of-way to maintain speed and reliability of transit service. Provides infrastructure (i.e. pedestrian and bicycle) that improves rider access to transit service and increases amenities to make transit an inviting option.	Supports connection/transfers between routes and other modes, and increases amenities to make transit an inviting option.	Supports connection/transfers between routes and other modes, and increases amenities to make transit an inviting option.
E. Market Potential						
1. Evidence of future market potential to support target and planned densities	Yes, with Market Study required	Yes, with Market Study required	Market Study encouraged	Yes, with Market Study required	Yes, with Market Study required	Market Study encouraged
2. Market data will inform adoption of land use, housing, economic development, and investment strategies, including equitable development strategies.[19]	Required within Market Study	Required within Market Study	Encouraged within Market Study	Required within Market Study, tailored for industrial employment.	Required within Market Study, tailored for industrial employment.	Encouraged within Market Study, tailored for industrial employment.
F. Role						
1. Evidence of regional or countywide role by serving as important destination	Yes	Yes	Yes	Yes	Yes	Yes
2. Planning for long-term, significant, and equitable growth	Yes	Yes	Yes	Yes	Yes	Yes
G. Zoning						

[19] For residential development, strategies and tools could include mandatory inclusionary housing, multifamily tax exemption, or others. For commercial and industrial development, strategies and tools could include priority hire policies, incentives for affordable commercial space, or others.

	Metro Growth Centers	Urban Growth Centers	Countywide Growth Centers	Industrial Employment Centers	Industrial Growth Centers	Countywide Industrial Centers
1. specific zones required	No	No	No	At least 75% land area zoned for core industrial uses. This includes manufacturing, transportation, warehousing and freight terminals.	Same	At least 75% of land area zoned for core industrial uses.
2. specific zones prohibited	No	No	No	Commercial uses within core industrial zones shall be strictly limited.	Same	Same

GLOSSARY

Affordable Housing: Housing that is affordable at 30 percent or less of a household's monthly income. This is a general term that may include housing affordable to a wide range of income levels and includes income-restricted and non-income units.

Affordable Housing Committee: A committee of the King County Growth Management Planning Council chartered to recommend actions and assess regional progress to advance affordable housing solutions and function as a point of coordination and accountability for affordable housing efforts across King County.

Agricultural Production District: A requirement of the Growth Management Act for cities and counties to designate, where appropriate, agricultural lands that are not characterized by urban growth, have soils suitable for agriculture, and that have long-term significance for commercial farming. The King County Comprehensive Plan designates Agricultural Production Districts where the principal land use should be agriculture.

Area Median Income: The annual household income for the U.S. Department of Housing and Urban Development calculates median income for each metropolitan region. These are used to determine income limits for government affordable housing programs.

Buildable Lands Program: A requirement of the Growth Management Act for certain counties in western Washington to report on a regular basis the amount of residential and commercial development that has occurred, the densities of that development, and an estimate of each jurisdiction's ability to accommodate its growth target based on the amount of development that existing zoning would allow.

Clean Renewable Energy: Includes the production of electricity from wind, solar and geothermal and does not include production of energy created by combustion of fuel that causes greenhouse gas emissions or produces hazardous waste.

Climate Change: The variation in the earth's global climate over time. It describes changes in the variability or average state of the atmosphere. Climate change may result from natural factors or processes (such as change in ocean circulation) or from human activities that change the atmosphere's composition (such as burning fossil fuels or deforestation.)

Climate Change Adaptation refers to actions taken to adapt to unavoidable impacts as a result of climate change. Climate Change Mitigation refers to actions taken to reduce the future effects of climate change.

Comprehensive Plan: A plan prepared by a local government following the requirements of the Washington Growth Management Act, containing policies to guide local actions regarding land use, transportation, housing, utilities, capital facilities, and economic development in ways that will accommodate at least the adopted 20-year targets for housing and employment growth.

Cost Burden: When a household spends more than 30 percent of their gross monthly income on housing costs.

Countywide Need: Also called the countywide affordable housing need, this is the number of additional, affordable homes needed in King County by 2044 so that no household earning at or below 80 percent of area median income is housing cost burdened. The countywide need for housing is estimated at 263,000 affordable homes affordable at or below 80 percent area median income built or preserved by 2044 as shown in Table H-1.

Displacement: The involuntary relocation of current residents or businesses from their current residence. This is a different phenomenon than when property owners voluntarily sell their interests to capture an increase in value. Physical displacement is the result of eviction, acquisition, rehabilitation, or demolition of property, or the expiration of covenants on rent- or income-restricted housing. Economic displacement occurs when residents and businesses can no longer afford escalating housing costs. Cultural displacement occurs when people choose to move because their neighbors and culturally related businesses have left the area.

Environmental Justice: The fair distribution of costs and benefits, based on a consideration for social equity. Environmental justice is concerned with the right of all people to enjoy a safe, clean, and healthy environment, and with fairness across racial, social, and economic groups in the siting and operation of infrastructure, facilities, or other large land uses.

Equitable Development: Public and private investments, programs, and policies in neighborhoods, characterized by high levels of chronic and recent displacement; a history of racially driven disinvestment; and significant populations of marginalized communities. This work is conducted in partnership with community stakeholders to meet the needs of marginalized people and reduce disparities, taking into account history and current conditions, so that quality of life outcomes such as access to quality education, living wage employment, healthy environment, affordable housing, and transportation, are equitably distributed for the people currently living and working there, as well as for new people moving in.

Extremely Low-Income Households: Households earning 30 percent of the area median income or less for their household size.

Fossil Fuels: Petroleum and petroleum products, coal, and natural gas such as methane, propane, and butane, derived from prehistoric organic matter and used to generate energy. Fossil fuels do not include:

a) Petrochemicals that are used primarily for non-fuel products, such as asphalt, plastics, lubricants, fertilizer, roofing, and paints;
b) Fuel additives, such as denatured ethanol and similar fuel additives, or renewable fuels, such as biodiesel or renewable diesel with less than five percent fossil fuel content; or
c) Methane generated from the waste management process, such as wastewater treatment, anaerobic digesters, landfill waste management, livestock manure and composting processes.

Fossil Fuel Facility: A commercial facility used primarily to receive, store, refine, process, transfer, wholesale trade or transport fossil fuels, such as, but not limited to, bulk terminals, bulk storage facilities, bulk refining and bulk handling facilities. Fossil fuel facilities do not include individual storage facilities of up to thirty thousand gallons and total cumulative facilities per site of sixty thousand gallons for the purposes of retail or direct-to-consumer sales, facilities or activities for local consumption; noncommercial facilities, such as storage for educational, scientific or governmental use; or uses preempted by federal rule or law.

Forest Production District: A requirement of the Growth Management Act for cities and counties to designate, where appropriate, forest lands that are not characterized by urban growth and that have long-term significance for the commercial production of timber. The King County Comprehensive Plan designates Forest Production Districts where the primary use should be commercial forestry.

Frequent Transit: Transit service that is “show-up and go,” that comes frequently enough that passengers do not require a schedule.

Frontline Communities: Those communities that are disproportionately impacted by climate change due to existing and historical racial, social, environmental, and economic inequities, and who have limited resources and/or capacity to adapt. These populations often experience the earliest and most acute impacts of climate change, but whose experiences afford unique strengths and insights into climate resilience strategies and practices. Frontline communities include Black, Indigenous, and People of Color (BIPOC) communities, immigrants and refugees, people living with low incomes, communities experiencing disproportionate pollution exposure, women and gender non-conforming people, LGBTQIA+ (lesbian, gay, bisexual, transgender, queer, intersex, asexual, + other) people, people who live and/or work outside, those with existing health issues, people with limited English skills, and other climate-vulnerable groups.

Growth Management Act: State law (RCW 36.70A) that requires local governments to prepare comprehensive plans (including land use, transportation, housing, capital facilities and utilities) to accommodate 20 years of expected growth. Other provisions of the Growth Management Act require developing and adopting countywide planning policies to guide local comprehensive planning in a coordinated and consistent manner.

Growth Targets: The number of residents, housing, or jobs that a jurisdiction is expected to use as the land use assumption in its comprehensive plan. Growth targets are set by countywide planning groups for counties and cities to meet the Growth Management Act requirement to allocate urban growth that is projected for the succeeding twenty-year period (RCW 36.70A.110). Countywide growth targets are articulated in the Development Patterns chapter.

Greenhouse Gas: Components of the atmosphere that contribute to global warming, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Human activities have added to the levels of most of these naturally occurring gases.

Health Disparity: A gap or difference in health status between different groups of people, including race, income, education, and geographic location. This health difference is closely linked with social, economic, and/or environmental disadvantage.

Healthy Housing: Housing that protects all residents from exposure to harmful substances and environments, reduces the risk of injury, provides opportunities for safe and convenient daily physical activity, and assures access to healthy food and social connectivity.

High-Capacity Transit: Transit modes that operate principally on exclusive rights-of-way which provides a substantially higher level of passenger capacity, speed, and service frequency than traditional public transportation systems operating principally in general purpose roadways, including light rail, streetcar, commuter rail, ferry terminals, and bus rapid transit stations.

High-Density Housing: Multifamily housing of a certain density that is considered to be more intensive than moderate-density housing. This designation includes housing types of 20 or more units.

Historically Underserved Communities: Groups of people living in places that have experienced a long-term pattern of lacking investment in public services and amenities relative to neighboring communities or an expected standard.

Housing Affordability: Refers to the balance (or imbalance) between incomes and housing costs within a community or region. A common measurement compares the number of households in certain income categories to the number of units in the market that are affordable at 30 percent of gross income.

Industry Clusters: Specific economic segments and industry clusters that are the focus of the Puget Sound Regional Council's Regional Economic Strategy.

Incentive Zoning: Incentive zoning is a broad regulatory framework for encouraging and stimulating development that provides a desired public benefit as established in adopted planning goals. An incentive zoning system is implemented on top of an existing base of development regulations and works by offering developers regulatory allowances in exchange for public benefits.

Income-Restricted Affordable Housing Units: Housing units that provide lower-income people with an affordable place to live. To be eligible to live in one of these units, a prospective tenant's gross monthly income must be below a certain income threshold. The unit is also limited in price so as to be affordable to households at certain income levels.

Inclusionary Zoning: Inclusionary zoning stipulates that new residential development in certain zones includes some proportion or number of affordable housing units or meets some type of alternative compliance. Inclusionary zoning taps into economic gains from rising real estate values to create affordable housing for lower-income households. This mandatory approach can create more affordable housing in neighborhoods with access to transportation and quality jobs.

Jobs-Housing Balance: A planning concept which advocates that housing and employment be located closer together, with an emphasis on matching housing options with nearby jobs, so workers have shorter commutes or can eliminate vehicle trips. Improving balance means adding more housing to job-rich areas and more jobs to housing-rich areas. It also means ensuring a variety of housing choices available to a people earning variety of incomes in proximity to job centers to provide opportunities for residents to live close to where they work regardless of their income.

King County Open Space System: A regional system of *county-owned* parks, trails, natural areas, working agricultural and forest resource lands, and flood hazard management lands.

Low-Income Households: Households earning between 51 percent and 80 percent of the Area Median Income for their household size.

Manufacturing/Industrial Centers: Designated locations within King County cities meeting criteria detailed in the King County Centers Designation Framework.

Mixed-Use Development: A building or buildings constructed as a single project which contains more than one use, typically including housing plus retail and/or office uses.

Moderate-Density Housing: Housing of a certain density that bridges a gap between single-family housing and more intense multifamily and commercial areas and provides opportunities for housing types that are inclusive to people of different ages, life stages, and incomes. Moderate-density housing includes but is not limited to duplexes, townhomes, and low-rise apartments and range in unit count from 1-unit attached up to 19 units.

Moderate-Income Households: Households earning between 81 percent and 120 percent of the Area Median Income for their household size.

Monitoring: An organized process for gathering and assessing information related to achieving established goals and policies. The process uses performance indicators to show progress toward, movement away from, or static state in policy implementation or policy achievement. Implementation monitoring tracks whether agreed-upon actions are taking place. Performance monitoring assesses whether desired results are achieved.

Natural Resource Lands: Designated areas within King County that have long-term significance for agricultural, forestry, or mining. See Appendix 1: Generalized Land Use Categories Map.

Open Space: A range of green places, including natural and resource areas (such as forests), recreational areas (such as parks and trails), and other areas set aside from development (such as plazas).

Opportunity Areas: Areas with high quality schools, jobs, transit; access to parks, open space, and clean air, water, and soil; and other key determinants of social, economic, and physical well-being.

Populations Disproportionately Impacted by Housing Cost Burden: When a household spends more than 30 percent of their income on their housing, they are considered cost burdened. Black, Indigenous, and Latinx households, as well as many immigrant and refugee households, are disproportionately represented both among households earning less than 80 percent of AMI as well as among cost burdened households, in part due to the legacy of structural racism and discrimination in housing and land use policies and practices. Households earning at or below 30 percent are also more disproportionately impacted by housing cost burden than higher income households.

Potential Annexation Area: A portion of the urban unincorporated area in King County that a city has identified it will annex at some future date. See Appendix 2: Potential Annexation Areas Map.

Purchase of Development Rights: Programs that buy and then extinguish development rights on a property to restrict development and limit uses exclusively for open space or resource-based activities such as farming and forestry. Covenants run with the land in perpetuity so that the property is protected from development regardless of ownership.

Regional Growth Strategy: The strategy defined in VISION 2050 that was developed by the Puget Sound Regional Council to help guide growth in the four-county region that includes King, Kitsap, Pierce, and Snohomish counties. VISION 2050 directs most of the region's forecasted growth into designated Urban Areas, and concentrates growth within those areas in designated centers planned for a mix of uses and connection by high-capacity transit

Regional Transportation Plan: A 30-year action plan, adopted by the Puget Sound Regional Council, for transportation investments in the central Puget Sound region intended to support implementation of VISION 2050.

Renewable Energy: Energy created from sources that can be replenished in a short period of time. The five renewable sources used most often are biomass (such as wood and biogas), the movement of water, geothermal (heat from within the earth), wind, and solar.

Rural Area: Designated area outside the Urban Growth Area that is characterized by small-scale farming and forestry and low-density residential development. See Appendix 1: Generalized Land Use Categories Map.

Cities in the Rural Area: Cities that are surrounded by Rural Area or Natural Resource Lands. Cities in the Rural Area are part of the Urban Growth Area.

Special Needs Housing: Housing arrangements for populations with special physical or other needs. These populations include the elderly, disabled persons, people with medical conditions, homeless individuals and families, and displaced people.

Stormwater Management: An infrastructure system that collects runoff from storms and redirects it from streets and other surfaces into facilities that store and release it – usually back into natural waterways.

Sustainable Development: Methods of accommodating new population and employment that protect the natural environment while preserving the ability to accommodate future generations.

Tenure: The legal status by which people have the right to occupy their accommodation. Common housing tenure are renting (which includes public and private rented housing) and homeownership (which includes owned outright and mortgaged).

Transfer of Development Rights: Ability to transfer allowable density, in the form of permitted building lots or structures, from one property (the "sending site") to another (the "receiving site") in conjunction with conservation of all or part of the sending site as open space or working farm or forest.

Transportation Demand Management: Various strategies and policies (e.g., incentives, regulations) designed to reduce or redistribute travel by single occupancy vehicles in order to make more efficient use of existing facility capacity.

Transportation System: A comprehensive, integrated network of travel modes (e.g., airplanes, automobiles, bicycles, buses, feet, ferries, freighters, trains, trucks) and infrastructure (e.g., sidewalks, trails, streets, arterials, highways, waterways, railways, airports) for the movement of people and goods on a local, regional, national and global scale.

Universal Design: A system of design that helps ensure that buildings and public spaces are accessible to people with or without disabilities.

Urban Growth Area: The designated portion of King County that encompasses all cities as well as other urban land where the large majority of the county's future residential and employment growth is intended to occur. See Appendix 1: Generalized Land Use Categories Map.

Very Low-Income Households: Households earning between 30 to 50 percent of the Area Median Income for their household size.

VISION 2050: The integrated, long-range vision for managing growth and maintaining a healthy region—including the counties of King, Kitsap, Pierce, and Snohomish. It contains an environmental framework a numeric Regional Growth Strategy, the Multicounty Policies, and implementation actions and measures to monitor progress.

Walkshed: The area around a transit center typically measured as one half-mile radius used to measure the area in which walking or biking can serve as viable way to access a transit facility.

Water Resource Inventory Area: Major watershed basins in Washington identified for water-related planning purposes.

Workforce Housing: Housing that is affordable to households with one or more workers. Creating workforce housing in a jurisdiction implies consideration of the wide range of income levels that characterize working households, from one person working at minimum wage to two or more workers earning the average county wage or above. There is a particular need for

workforce housing that is reasonably close to regional and sub-regional job centers and/or easily accessible by public transportation.

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City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: Northshore Utility District Interlocal Agreement for the NE 190th St Culvert Replacement Project	**For Council Meeting Agenda of:** February 28, 2022 **Department:** Public Works/Engineering **Prepared by:** Terri Bielenberg, CE
	Initial & Date **Approved by Department Head:** JFV 2/7/2022 **Approved by City Attorney:** NA **Approved by Finance Director:** N/A **Approved by City Manager:** RGK 2/3/2022
Proposed Council Action/Motion: Authorizing the City Manager to enter into an Interlocal Agreement with the Northshore Utility District to Construct the District's Water Main Replacement Project.	**Exhibits/Attachments:** NA

RECOMMENDATION:
City staff recommends authorizing the City Manager to enter into an interlocal agreement with the Northshore Utility District to construct the district's water main replacement project.

PROJECT UPDATE:
The NE 190th St Culvert Replacement (Project) design phase is complete and final plans are under review. Several permits are still under review by their respective agencies and staff continues to work towards securing all permitting for the culvert. All property rights have been acquired for the project, SEPA has been completed, and the project is under review by the Army Corps of Engineers and Department of Fish and Wildlife. Staff is prepared to advertise this Project for construction in March; however permit review by the outside agencies is likely to delay construction to 2023 due to potentially missing the fish window in July of this year.

DISCUSSION:
During the pre-design phase, City of Kenmore (COK)reviewed Northshore Utility District (NUD) and existing facilities and it was determined that they needed to be relocated. NUD approached the City with a request to include their water main replacement work into the City's Project. The benefits to this partnership include a cost savings to NUD and a reduction in disruption to City traffic by avoiding two construction periods. Staff agreed to include NUD's work into the Project. NUD contracted separately with the City's engineering design firm, Osborn Consulting, to design the water main replacement and incorporated those plans into the Project.

FISCAL CONSIDERATION:
NUD contracted separately for the design work for the water main replacement which resulted in no increase in cost to the City. The interlocal agreement would require NUD to reimburse the City the full cost of the water main replacement work including a proportional share of inspection, documentation, traffic control and other general construction costs associated with completing the water main work.

City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: **A Regional Coalition for Housing (ARCH): 2022 Work Program & Budget; Fall 2021 Housing Trust Fund Projects; Resolution No. 22-378 Approving Amendment 1 to the Amended and Restated Interlocal Agreement for ARCH**	**For Council Meeting Agenda of: 28 February 2022** **Department: Executive** **Prepared by: Nancy Ousley, Assistant City Manager** **Initial & Date** **Approved by Department Head: NKO 2/9/22** **Approved by City Attorney: _____** **Approved by Finance Director: _____** **Approved by City Manager: RK 2/10/22**
Proposed Council Actions/Motions: • Motion to Approve the ARCH 2022 Budget and Work Program • Motion to Approve Recommended Fall 2021 Housing Trust Fund Projects • Approve Resolution No. 22-378 Amendment No. 1 to the Amended and Restated Interlocal Agreement for ARCH	**Exhibits/Attachments:** 1. 2022 ARCH Work Program and Budget 2. Fall 2021 Housing Trust Fund Projects 3. Resolution No. 22-378 Amendment No. 1 to the Amended and Restated Interlocal Agreement for ARCH

INFORMATION/BACKGROUND:

A Regional Coalition for Housing (ARCH) is comprised of fifteen East King County cities and King County. Through the technical assistance to its members on housing policy and plan development, combined with ARCH Housing Trust Fund investments, ARCH helps local jurisdictions meet the obligations of the Growth Management Act to provide for housing opportunities that are affordable to a wide range of incomes.

Under the terms of the ARCH Interlocal Agreement, each member jurisdiction must annually approve the ARCH Administrative Budget. Each member jurisdiction contributes annually to ARCH to provide administrative and technical support for the organization's housing activities. The ARCH Executive Board has approved the 2022 Administrative Budget proposal (see Attachment) and has forwarded it to members for adoption. This year's ARCH proposed administrative budget is $1,490,462, an increase of 29% from the 2020 adopted budget of $1,155,261. Kenmore's share of the 2022 ARCH Administrative Budget is $49,257 which is a 10% increase from the 2021 Kenmore share.

A detailed organizational assessment prepared by the Cedar River Group in 2021 noted the need for additional staff capacity, and the 2022 Budget includes two new staff positions.

Under the terms of the ARCH Interlocal Agreement, each member jurisdiction must annually approve the ARCH Work Program. The ARCH Executive Board has approved the 2022 Work Program (see Attachment) and forwarded to the members for approval. Elsa Kings, ARCH Housing Trust Fund Manager, will be present to brief the Council and answer questions.

Staff recommends Council approval of the ARCH 2022 Administrative Budget and Work Program.

ARCH staff will also discuss Housing Trust Fund Projects that were approved for funding by the Executive Board. Based on the recommendations of the ARCH Citizen Advisory Board, the Executive Board approved funding recommendations for $3,175,000 for four projects in late 2021. On February 10, 2022 the ARCH Executive Board approved reserving funding up to $3 Million for the proposed Kenmore Affordable Housing Project in downtown Kenmore, subject to review by the ARCH Community Advisory Board, a final review by the Executive Board , and development of appropriate funding conditions.

Staff recommends Council approval of the project funding recommendations.

Resolution No. 22-378 amends the ARCH Interlocal Agreement to: 1) Change the name of the Citizen Advisory Board to Community Advisory Board; 2) temporarily allow up to four additional members to serve on the Advisory Board in order to enhance the diversity and breads of skills and experience on the Advisory Board; and 3) revise language throughout the Agreement consistent with these changes.

FISCAL CONSIDERATION:

The adopted budget for 2022 can accommodate this amount. Please note that in 2019, the Kenmore City Council approved directing revenue provided by Affordable and Supportive Housing State Shared Tax authorized by SHB 1406 to ARCH.

COUNCIL GOAL/BUDGET OBJECTIVE BEING ADDRESSED:

Goal #1: Increase and preserve the options for affordable housing stock

A Regional Coalition for Housing

Together Center Campus
16307 NE 83rd St., Suite 201
Redmond, WA 98052
425-861-3677

MEMORANDUM

Date: September 7, 2021

From: Lindsay Masters, ARCH Executive Manager
To: ARCH Member Councils

Subject: ARCH 2022 Budget and Work Program, and Trust Fund Parity Goals

Please find attached the 2022 ARCH Budget and Work Program, which was adopted by a unanimous vote of the ARCH Executive Board in June of 2021. This memo provides an overview of the final budget and work program, including a description of the assessment conducted by Cedar River Group to inform the Board's decision-making. The memo also shares the Board's recent discussion regarding regional Parity Goals for local investment in affordable housing.

Review of ARCH Capacity and Work Program Growth

Early in 2021, ARCH engaged consulting firm Cedar River Group to help the Executive Board through an in-depth assessment of ARCH's current organizational capacity, and growth in the organization's work program over time. This opportunity was made possible through a grant intended to explore options for other north and east King County cities to join ARCH, or form new types of housing partnerships.

Cedar River Group has since prepared a detailed report, which is attached to this memo. Their report offers the following conclusions:

- There is a dramatic need for more housing – specifically affordable housing – and the need is growing.
- ARCH has a proven record of building affordable housing, helping cities implement best policies, and maintaining those assets over time.
- ARCH is well-regarded by member cities, outside stakeholders and developers.
- Staff capacity has not grown sufficiently to keep up with member's needs and requests.
- New staff capacity recommended by the ARCH Board is essential to help catch up with longstanding shortages and meet members' most pressing existing and near-term needs. However, even with this capacity, the need for ARCH's services will likely continue to outstrip capacity, given the anticipated growth in the work program, and potential requests from other north and east King County cities.

Eastside cities are increasingly taking actions to respond to the growing need for affordable housing, and ARCH expects that momentum to continue building. Recent actions taken by ARCH members include: Kirkland's zoning changes to reduce barriers to building ADUs, duplexes and triplexes in single family zones; Bothell's adoption of a Multifamily Tax Exemption (MFTE) program; Bellevue's expansion of its existing MFTE program; thirteen member cities' adoption of a local affordable housing sales tax; and Redmond and Kirkland's use of fee in lieu funds to support major local affordable housing developments. In the next two to three years, cities will also undertake Comprehensive Plan Updates that present pivotal opportunities to accommodate and shape new housing.

2022 Administrative Budget and Work Program

The final recommended 2022 ARCH Administrative Budget and Work Program are shown in **Attachments 1 and 2.** Following are highlights from each document.

Administrative Budget Highlights

- **Two new staff positions** are included to address gaps in current staff capacity. These positions will focus on administration of local incentive programs, monitoring the expanding portfolio of Housing Trust Fund investments, and assisting with administration of a new funding sources, including new affordable housing sales tax resources.
    - Revenue from new administrative fees are used to free up funds for one new position.
    - A **new tier of member dues** is created to cover the second new position. These dues are allocated to the member cities that utilize ARCH for incentive program administration.
- Board members agreed a **third new staff position is warranted**, but given current fiscal constraints, this position will not be included in ARCH's budget until 2023.
- King County will contribute an additional $50,000 in dues intended to support activities that advance the Regional Affordable Housing Task Force Action Plan.
- The Board will continue to evaluate ARCH's monitoring and stewardship workload to ensure sufficient staff capacity to keep up with growth.

Work Program Highlights

ARCH's Work Program continues to maintain core services in five key areas: affordable housing investment, housing policy and planning, housing program administration, education and outreach, and general administration.

The Board established the following priorities for ARCH's Work Program in 2022:

- **Provide a housing needs analysis** for all member cities in support of Comprehensive Plan Updates
- Report on **measurable goals for production and preservation of affordable housing** in the ARCH region
- Continue to **support proposals for dedicated revenue sources** for affordable housing

- **Expand ARCH's capacity** to accomplish its broader mission
- Continue to **provide excellent stewardship** of affordable housing assets, and develop new compliance tools to meet evolving program, property and tenant needs
- Seek opportunities to **advance projects and programs with high potential impact** and facilitate projects in the pipeline to the greatest extent possible
- Develop a **strategic planning process** to guide the ARCH coalition into 2023 and beyond

While ARCH is continuing to expand its services and capacity to meet members' needs, our organization also remains committed to efficient and effective administration made possible by the pooling of local resources.

Housing Trust Fund Contributions / Parity Goals

Each year, ARCH member cities are encouraged to contribute on a voluntary basis toward the ARCH Housing Trust Fund, a foundational program in East King County that has produced more affordable housing than any other program. ARCH members have utilized "Parity Goals" to establish a set of investment goals for each member cities' voluntary contribution, allocating a total goal across communities based on local population, housing and job targets. The last set of 2020 goals ranged from a collective total of $1.9 to $3.9 million.

City	2020 Parity Goals		2020 Contributions			2020 Total	2016 - 2020
	Low Goal	High Goal	CDBG	General Fund	Other*		Annual Average
Beaux Arts Village	$53	$1,816	$135			$135	$137
Bellevue	$681,807	$1,054,164		$413,213	$603,718	$1,016,931	$1,288,273
Bothell	$173,394	$314,235	$34,983	$78,000	$31,845	$144,828	$93,616
Clyde Hill	$0	$18,431	$826	$15,000	$1,977	$17,803	$23,521
Hunts Point	$0	$2,542	$197	$2,500	$58	$2,755	$2,886
Issaquah	$170,941	$348,067	$23,970	$65,156	$2,092	$91,218	$142,749
Kenmore	$53,297	$179,420	$19,090	$40,000	$26,103	$85,193	$72,466
Kirkland	$343,916	$528,052	$139,322	$415,000	$3,861,072	$4,415,394	$2,309,630
Medina	$0	$19,642	$1,349	$12,340		$13,689	$14,650
Mercer Island	$17,766	$146,903	$14,048	$33,768		$47,816	$79,469
Newcastle	$13,058	$75,116	$6,889	$27,000		$33,889	$59,892
Redmond	$296,200	$613,357	$126,244	$500,000	$4,256,672	$4,882,916	$2,138,603
Sammamish	$31,978	$384,176	$15,559	$100,000	$43,186	$158,745	$174,212
Woodinville	$56,589	$151,633	$9,163	$51,500	$33,263	$93,926	$44,948
Yarrow Point	$0	$6,446	$378			$378	$5,063
Total	$1,839,000	$3,844,000	$392,153	$1,753,477	$8,859,986	$11,005,616	$6,450,115

*Includes Fee in Lieu funds, 1406 sales tax funds, loan repayments, etc.

In recent years, ARCH cities have collectively exceeded these goals, with an average annual contribution of $6.4 million in the last five years. Contributions in 2020 reached an all-time high, with significant one-time funding coming from Kirkland and Redmond. At the same

time, the cost of acquiring land and developing housing in East King County has also increased rapidly, while competition for housing resources at the state and local level has been increasing.

In June, the ARCH Executive Board discussed a potential change in the method of calculating parity goals to reflect the significant real estate appreciation occurring in East King County. This change would have the effect of raising the collective goal closer to recent contribution levels. However, **the Board did not come to a consensus on a final set of parity goals for 2021**, committing to engage ARCH members on the topic more deeply at a later date.

Currently, ARCH is preparing to receive applications for our current $5 million funding round, which for the first time includes pooled contributions of most members' affordable housing sales tax revenues authorized under HB 1406. In addition, we are assisting the City of Bellevue with a Request for Proposals offering $6 million in sales tax funds for projects located in Bellevue. We are excited to continue building on our track record of carefully vetting local proposals, leveraging local resources ten to one, and successfully executing on financing that results in meaningful new housing opportunities on the Eastside.

Conclusion

As the disparate impacts of the pandemic continue to ripple deeply through the community, our work to provide safe, decent and affordable housing has become only more urgent. The coming year will be another important step for ARCH to continue growing our capacity to serve the community, and finding ways to magnify our impact. We look forward to opportunities to engage with you, as the ARCH Board prepares for a broader strategic planning process. Thank you for your continued support and commitment to affordable housing.

Attachments:

1. 2022 ARCH Administrative Budget
2. 2022 ARCH Work Program
3. Analysis of ARCH Staff Capacity and Options for Meeting Members Affordable Housing Needs (Cedar River Group, September 2021)

2022 ARCH Administrative Budget

Final Recommended Budget June 2021

	2021 Budget	Final 2022 Recommended Budget	
	2021 Approved Budget	2022 Recommended Budget	% Change
I. TOTAL EXPENSES	**$ 1,155,261**	**$ 1,490,462**	**29%**
A. Personnel	**$ 1,039,302**	**$ 1,307,088**	**26%**
Salary and Benefits - Existing Staff	$ 1,039,302	$ 1,047,088	0.7%
Salary and Benefits - Potential New Staff		**$ 260,000**	
Incentive Programs Administrator		$ 130,000	
HTF/Loan Program Officer		$ 130,000	
B. Operating	**$ 76,456**	**$ 86,394**	**13.0%**
Rent & Utilities	$ 24,780	$ 24,780	
Telephone	$ 5,500	$ 6,145	
Travel/Training	$ 2,730	$ 2,600	
Auto Mileage	$ 3,605	$ 3,000	
Postage/Printing Costs	$ 3,468	$ 2,500	
Office Supplies/Furnishing	$ 3,255	$ 4,353	
Internet/Website Fees	$ 2,326	$ 3,090	
Periodical/Membership	$ 4,317	$ 11,400	
Misc. (events,etc.)	$ 2,100	$ 2,000	
Equipment Replacement	$ 3,000	$ 7,000	
Database/software licensing	$ 18,375	$ 19,526	
Relocation Costs	$ 3,000	$ -	
C. In-Kind Admin/Services	**$ 19,503**	**$ 26,980**	**38%**
Insurance	$ 9,660	$ 15,000	
IT Services	$ 9,843	$ 11,980	
D. Grants and Consultant Contracts	**$ 20,000**	**$ 70,000**	**250%**
Consultant Contracts	$ 20,000	$ 20,000	
Special Projects/Programs - RAHTF Support		$ 50,000	

	2021 Approved Budget	2022 Recommended Budget			% Change
	City Per Capita $1.98 KC Per Capita $0.93		City Per Capita $2.04 KC Per Capita $1.70	Add'l $0.32 Per Capita	
II. TOTAL INCOME	**$ 1,155,261**	**$1,490,462**			**29%**
		TOTAL	BASE	ADD'L	
A. Member Contributions	**$ 1,103,897**	**$1,334,162**	**$1,204,162**	**$130,000**	**21%**
Beaux Arts Village	$ 2,000	$2,060	$2,060		3%
Bellevue	$ 281,876	$344,457	$293,949	$50,508	22%
Bothell	$ 89,384	$93,127	$93,127	$0	4%
Clyde Hill	$ 6,551	$6,777	$6,777		3%
Hunts Point	$ 2,000	$2,060	$2,060		3%
Issaquah	$ 72,244	$90,561	$77,282	$13,279	25%
Kenmore	$ 44,921	$49,257	$46,257	$3,000	10%
Kirkland	$ 175,946	$213,344	$182,061	$31,283	21%
Medina	$ 6,523	$6,650	$6,650		2%
Mercer Island	$ 50,222	$55,264	$52,264	$3,000	10%
Newcastle	$ 23,006	$26,918	$23,918	$3,000	17%
Redmond	$ 123,104	$156,381	$133,451	$22,930	27%
Sammamish	$ 127,494	$134,651	$131,651	$3,000	6%
Woodinville	$ 23,673	$25,207	$25,207	$0	6%
Yarrow Point	$ 2,401	$2,447	$2,447		2%
King County	$ 75,000	$125,000	$125,000		67%
Bellevue Detail	**$ 281,876**	**$ 344,457**			**22%**
Cash Contributions	$ 86,173	$ 141,353			
In-Kind Contributions	$ 195,703	$ 203,103			
Personnel	$ 176,200	$ 176,123			
Insurance	$ 9,660	$ 15,000			
IT Services	$ 9,843	$ 11,980			
B. Other Income	**$ 51,364**	**$ 156,300**			**204%**
Homeownership Program Fees	$ 45,064	$ 150,000			
Existing Administrative Fees	$ 4,200	$ 4,200			
Interest Earned	$ 2,100	$ 2,100			
III. RESERVES, CONTINGENT INCOME AND EXPENSES					
Note: This section expresses intended use of any excess revenues above levels needed to cover basic operating costs.					
A. Contingent Expenses					
Replenish operating reserves	$ -	$ -			
Staffing/Administrative Expenses	$ 150,000	$ 150,000			0%
Other Staffing/Services	$ 150,000	$ 150,000			0%
B. Contingent Revenue					
Excess Administrative Fees	$ 150,000	$ 150,000			0%
Service Fees	$ 150,000	$ 150,000			0%

ARCH WORK PROGRAM: 2022

2022 Priorities

In 2022, ARCH will elevate the following priorities in its Work Program:

- Provide a housing needs analysis for all member cities in support of Comprehensive Plan Updates
- Report on measurable goals for production and preservation of affordable housing in the ARCH region
- Continue to support proposals for dedicated revenue sources for affordable housing
- Expand ARCH's capacity to accomplish its broader mission
- Continue to provide excellent stewardship of affordable housing assets, and develop new compliance tools to meet evolving program, property and tenant needs
- Seek opportunities to advance projects and programs with high potential impact and facilitate projects in the pipeline to the greatest extent possible
- Develop a strategic planning process to guide the ARCH coalition into 2023 and beyond

I. AFFORDABLE HOUSING INVESTMENT

A. ARCH Housing Trust Fund

Parity Goals. Develop updated goals for member investments through the ARCH HTF.

Annual Funding Round. Develop funding priorities and evaluation criteria for the annual funding round. Advertise available funds and manage a competitive process on behalf of member cities. Review funding applications and develop recommendations through the Citizen Advisory Board (CAB), with input from member staff. Develop final recommendations by the ARCH Executive Board and facilitate final funding allocations through member councils.

Public Funding Coordination. Work collaboratively with public funders at the State and local levels to promote shared affordable housing goals and equitable geographic distribution of resources. Review and provide input to other funders for Eastside projects that apply for County (HOF, RAHP, HOME, TOD, etc.) and State (Tax Credit, State Housing Trust Fund) resources. Provide input to the King County Joint Recommendations Committee (JRC) on behalf of participating Eastside jurisdictions. Assist N/E consortium members with evaluating and making a recommendation to the County regarding CDBG allocations to affordable housing.

Private Funding Coordination. Work with private investors and lenders to maximize leverage of public investment into affordable housing. Negotiate maximum public benefits from investment of housing funds into private projects.

Project Pipeline Management. Work with member cities and project sponsors to develop a robust pipeline of projects to be funded over the next five years (see related work on Transit Center sites, below). Actively vet potential HTF projects, and lead funding policy and prioritization discussions with the ARCH Executive Board to facilitate planning and decision-making.

Contract Development and Administration. Prepare contract documents in consultation with legal counsel, and facilitate approval of contracts with the Administering Agency. Review and approve disbursement of funds to awarded projects in accordance with executed contracts.

Centralized Trust Fund Reporting. Work with Administering Agency (Bellevue) to maintain records and produce regular financial reports for the ARCH Trust Fund accounts.

HB 1406 Sales Tax. Develop systems and procedures to manage contributions, commitments and expenditures of pooled sales tax revenue authorized by HB 1406. Work with the Department of Commerce to ensure timely and complete reporting in compliance with state requirements.

B. Special Projects

Transit-Oriented Development Sites. Assist cities with advancing and coordinating affordable housing projects near transit. Partner with Sound Transit, King County Metro and other public agencies to maximize opportunities on public property. Current opportunities include sites in Bel-Red, Overlake, Downtown Redmond, Issaquah, Kirkland, Bothell, and Kenmore.

Surplus Property/Underdeveloped Property. Assist with evaluation of public surplus or underutilized private property (e.g. faith community properties) for suitability of affordable housing. Provide technical assistance to property owners interested in supporting affordable housing. Develop an inventory of promising public and nonprofit property and begin to engage owners to gauge interest in disposition for housing.

Eastside Shelter Capacity. Support efforts by Eastside shelter providers, Eastside Human Services Forum, and member cities to implement an East King County sub-regional strategic approach to shelter and related services for homeless adults and families. Support the construction of a permanent year-round men's shelter, and support efforts by member jurisdictions to fund long-term operations of shelter for men, women, families, youth and young adults.

Preservation of At Risk Affordable Housing. Work with member cities to facilitate acquisitions or other strategies to preserve existing housing where affordability is at risk of being lost, including at-risk manufactured housing communities. As needed, assist with responding to notices of sale of HUD assisted properties received by member cities, or other information indicating an impending loss of existing affordable housing.

Strategic Predevelopment Investment. With approval of the Executive Board, invest in predevelopment studies to investigate feasibility and financial efficiency of special projects.

II. HOUSING POLICY AND PLANNING

A. Local Policy, Planning and Code Development

ARCH provides assistance directly to member cities on a range of local planning efforts. Local planning efforts with individual member cities may be found in *Attachment A*. These efforts may take different forms, such as:

- **Housing Element Updates**. Work with members to update comprehensive plan housing elements.
  - Assist with understanding and complying with new housing-related requirements under the Growth Management Act and Countywide Planning Policies.
  - Prepare an east King County housing needs analysis with focused analyses for each city—including projected affordable housing needs—to fulfill GMA requirements.
  - Coordinate local and ARCH affordable housing goals with King County Affordable Housing Committee and Countywide Planning Policies.
  - Assist with policy writing, outreach, presentations, etc. as needed.
- **Housing Strategy Plans**. Assist members to prepare housing strategies to implement housing elements and create council work plans. Cities with recently completed strategy plans include Bellevue, Issaquah, Kenmore, Bothell, Kirkland, Redmond, and Sammamish.
- **Incentive Program Design.** Provide economic analysis and policy and program development support to design housing incentive programs, including land use, property tax, impact fee waivers and other incentives.
- **Land Use Code Amendments.** Assist city staff on land use and other code amendments in order to implement comprehensive plan policies.
- **Other Support.** Other areas in which ARCH could provide support to member cities include preservation of valuable community housing assets, assistance to households displaced by development activity, or negotiation of agreements for specific development proposals. ARCH views this as a valuable service to its members and will continue to accommodate such requests to the extent they do not jeopardize active work program items.

B. Inter-Local / Eastside Planning Activities

Interlocal planning activities are coordinated by ARCH for the benefit of multiple members.

<u>ARCH Regional Affordable Housing Goals and Reporting</u>. Work with member staff and the ARCH Executive Board to report on adopted goals for production and preservation of affordable housing across ARCH member communities.

<u>Eastside Equitable Transit-Oriented Development Plan</u>. Partner with transit agencies and other stakeholders to plan for equitable transit-oriented development on the Eastside. Define shared policy goals and strategies, establish numerical goals for affordable unit production, advance specific site opportunities and manage the affordable housing funding pipeline.

<u>Long-Term Funding/Dedicated Revenue Strategy</u>. Continue work on a long-term funding strategy for the ARCH Trust Fund. Facilitate conversations with member cities on identifying and exploring dedicated sources of revenue for affordable housing at the local and regional level (e.g., REET, property tax levy, 0.1% sales tax, etc.). Provide relevant data and develop options for joint or individual revenue approaches across ARCH member cities and determine any shared state legislative priorities to authorize local options for funding.

Eastside Housing Data Analysis. On an annual basis, provide local housing and demographic data as available. Make information available to members for planning efforts and incorporate into ARCH educational materials.

Housing Diversity/Accessory Dwelling Units (ADUs). Continue to support a diversity of housing options among member cities:

- "Missing Middle" Housing: Facilitate sharing of best practices for encouraging a greater diversity of housing types in single family/low density neighborhoods, including duplexes, triplexes, etc.
- Accessory Dwelling Units (ADUs): Explore outreach and other ways to promote ADU development (e.g., improve online resources, provide connections to financing options, adopt pre-approved plans, etc.). Explore partnership with eCityGov Alliance to increase accessibility of ADU permitting (e.g., update tip sheets and create streamlined portal through MyBuildingPermit.com). Explore a centralized system for tracking ADU production.
- Help jurisdictions develop strategies and codes to address emerging housing types, like micro-housing, small efficiency dwelling units, and others.

C. State Legislative Activities

The ARCH Executive Board will discuss and explore shared legislative priorities for advancing affordable housing in the region. ARCH staff will track relevant state (and, where feasible, federal) legislation. As needed, staff will report to the Executive Board and members, and coordinate with relevant organizations (e.g., AWC, SCA, WLIHA, HDC) to advance shared legislative priorities.

D. Regional/Countywide Planning Activities

ARCH participates in regional planning efforts to advance Eastside priorities and ensure that perspectives of communities in East King County are voiced in regional housing and homelessness planning.

King County GMPC Affordable Housing Committee / Housing Inter-Jurisdictional Team (HIJT). Support efforts to advance the five-year action plan developed by the Regional Affordable Housing Task Force (RAHTF) in 2018. ARCH will help staff the HIJT, which provides support to the Growth Management Planning Council's Affordable Housing Committee (AHC).

Regional Affordable Housing Task Force Action Plan. In addition to staffing the GMPC committee, pursue other opportunities to advance strategies called for in the RAHTF Action Plan. Facilitate discussions as needed with members and the Executive Board to consider actions recommended in the five-year plan.

King County Regional Homelessness Authority / Eastside Homeless Advisory Committee (EHAC). Play a role in regional homelessness efforts, as appropriate and as resources allow. Collaborate with KCRHA, EHAC and other relevant organizations and initiatives to advance shared work on homelessness. Coordinate allocation of resources, and work on specific initiatives (e.g., coordinated entry and assessment for all populations).

Explore Collaboration with Cities in North and East King County. As requested, engage cities interested in supporting affordable housing in north and east King County that are not currently members of ARCH. Explore collaboration that provides benefits for additional cities and current ARCH member cities.

III. HOUSING PROGRAM IMPLEMENTATION

A. Administration of Housing Incentive and Inclusionary Programs

ARCH partners with member cities to administer local housing incentive and inclusionary programs, including mandatory inclusionary, voluntary density bonus, multifamily tax exemption (MFTE) and other programs. Specific programs administered by ARCH include:

Jurisdiction	Incentive/Inclusionary Programs
Bellevue	Voluntary density bonuses, MFTE, impact fee waivers.
Bothell	Inclusionary housing.
Issaquah	Development agreements, voluntary and inclusionary programs, impact and permit fee waivers.
Kenmore	Voluntary density bonuses, MFTE, impact fee waivers.
Kirkland	Inclusionary program, MFTE.
Mercer Island	Voluntary density bonus.
Newcastle	Inclusionary program, impact fee waivers.
Redmond	Inclusionary program, MFTE.
Sammamish	Inclusionary and voluntary density bonuses, impact fee waivers.
Woodinville	MFTE.
King County	Development agreements.

ARCH roles and responsibilities will typically include:

- Communicate with developers/applicants and city staff to establish applicability of codes and policies to proposed developments
- Review and approve proposed affordable housing (unit count, location/distribution, bedroom mix, and quality)
- Review and recommend approval of MFTE applications.
- Review and recommend approval of alternative compliance proposals
    - For fee in lieu projects, provide invoices and receipts for developer payments
- Develop contracts and covenants containing affordable housing requirements
- Ensure implementation of affordable housing requirements during sale/lease-up
- Register MFTE certificates with County Assessor and file annual MFTE reports with state Commerce.
- On-going compliance monitoring (see Stewardship, below).

Coordinate Shared Policy, Program and Procedure Improvements. Work with member city staff and legal counsel to align incentive and inclusionary programs with a unified set of policies, practices and templates for legal agreements. Coordinate changes across member jurisdictions to adapt programs to new knowledge and best practices (for example, implementing fee strategies to create sustainable revenue for monitoring).

MyBuildingPermit.com. Explore feasibility of using MyBuildingPermit.com to take in, review, and process projects (covenants) using land use and/or MFTE programs.

B. Stewardship of Affordable Housing Assets

ARCH provides long-term oversight of affordable housing created through city policies and investment to ensure stewardship of these critical public assets for residents, owners and the broader community.

ARCH Rental Program (Incentive and Inclusionary Projects). Monitor and enforce compliance in rental housing projects with incentive and inclusionary housing agreements. Administer a robust compliance monitoring program, including:

- Ensure compliance with rent and income restrictions through timely annual report reviews and supplemental on-site file audits
- Provide training and technical assistance for property managers
- Maintain written standards for eligibility, leasing and other program requirements
- Implement standard remedies for non-compliance
- Respond to tenant issues and questions

ARCH Trust Fund Projects. Oversee contracts and regulatory agreements with owners of projects supported through the direct assistance from members, including:

- Monitor project income and expenses to determine cash flow payments
- Conduct long-term sustainability monitoring of projects and owners
- Proactively problem-solve financial and/or organizational challenges in partnership with project owners and other funders
- Work with legal counsel to review and approve requests for contract amendments, subordination and other agreements
- Pursue formal MOUs with other funders to govern shared monitoring responsibilities that streamline processes for owners and funders.
- Collect annual compliance data and evaluate program beneficiaries

ARCH Homeownership Program. Provide effective administration to ensure strong stewardship of resale restricted homes in the ARCH Homeownership Program. Ensure ongoing compliance with affordability and other requirements, including enforcement of resale restrictions, buyer income requirements, and owner occupancy requirements. Implement adopted policies and procedures for monitoring and work with cities to address non-compliance.

Continue to implement long-term recommendations in the 2019 Program Assessment from Street Level Advisors and make other program improvements that support the program objective of creating and preserving long-term affordability, including:

- Work with member planning and legal staff to make improvements to boilerplate legal documents, in consultation with key stakeholders and outside counsel, as needed
- Develop strategies to preserve homes at risk of foreclosure
- Preserve expiring units and pursue strategies to re-capture lost affordability
- Pursue offering brokerage services or developing partnerships with realtors to provide cost-savings to homebuyers and sellers, diversify program revenue, and expand ARCH's marketing reach
- Plan for additional staff capacity as the number of ARCH homes continues to grow.
- Implement program fees to ensure program financial sustainability

Database/Systems Development. Continue to utilize the new ARCH Homeownership Program database to collect critical program data and evaluation, compliance monitoring, communication with program participants, and other key functions. Continue to improve and streamline data systems for ARCH Rental Program and Trust Fund Program.

IV. EDUCATION AND OUTREACH

A. Housing 101/Education Efforts

Housing 101. Develop educational tools and conduct or support events to inform councils, member staff and the broader community of current housing conditions, and of successful housing programs. Build connections with community groups, faith communities, developers, nonprofits and others interested in housing issues. Plan and conduct a Housing 101 event to occur no later than the end of 2021.

Private Sector Engagement. Support efforts by ARCH member cities to engage employers and private sector entities in discussions around the need for more affordable housing and identifying options for public-private partnerships.

B. Information and Assistance for the Public

ARCH Website. Update information on the ARCH website on a regular basis, including information related to senior housing opportunities. Maintain the ARCH web site and update the community outreach portion by incorporating information from Housing 101 East King County, as well as updated annual information, and links to other sites with relevant housing information (e.g. All Home, HDC). Add information to the website on ARCH member affordable incentive programs and fair housing.

Assist Community Members Seeking Affordable Housing. Maintain up-to-date information on affordable housing in East King County (rental and ownership) and distribute to people looking for affordable housing. Continue to maintain a list of households interested in affordable ownership and rental housing and advertise newly available housing opportunities.

Work with other community organizations and public agencies to develop appropriate referrals for different types of inquiries received by ARCH (e.g., rapid re-housing, eviction prevention, landlord tenant issues, building code violations, fair housing complaints, etc.).

C. Equitable Access to Affordable Housing in East King County

Collect and analyze data on existing programs to determine potential gaps in access by different populations, such as communities of color, immigrant and refugee communities, homeless individuals and families, and workers in EKC commuting from other communities. Pursue strategies to increase access to affordable housing in EKC by underserved communities. Develop outreach and marketing efforts to maximize awareness of affordable housing opportunities in East King County, and build partnerships with diverse community organizations.

V. ADMINISTRATION

A. Administrative Procedures

Maintain administrative procedures that efficiently and transparently provide services to both members of ARCH and community organizations utilizing programs administered through ARCH. Activities include:

- Prepare the Annual Budget and Work Program and ensure equitable allocation of administrative costs among ARCH members.
- Prepare quarterly budget performance and work program progress reports, Trust Fund monitoring reports, and monitor expenses to stay within budget.
- Manage the ARCH Citizen Advisory Board, including recruiting and maintaining membership that includes broad geographic representation and a wide range of housing and community perspectives.
- Staff the Executive Board.
- Work with Administering Agency to streamline financial systems.
- Review and update bylaws and ensure timely renewal of the ARCH Interlocal Agreement.

B. Organizational Assessment and Planning

The ARCH Executive Board will continue to evaluate ARCH's organizational capacity to accomplish its Work Program and broader mission. The Board will review ARCH's organizational structure, staffing resources, capital resources and other foundational aspects of the organization to determine any gaps, and assess options for expanding organizational capacity. The assessment will inform recommendations for the following year's work program and budget. In 2022, ARCH will outline a strategic planning process to be initiated by 2023 that will establish a shared framework for the organization's mission, values and work program going forward.

Attachment A
Local Planning Efforts by City

ARCH staff will assist members' staff, planning commissions, and elected councils with local policy, planning and special projects and initiatives, as described below. Member city staff may make adjustments to the proposed actions identified below as individual city work plans are updated.

Bellevue

Support 3-4 actions to implement Bellevue's Affordable Housing Strategy, such as:

- Facilitate development on affordable housing on suitable land owned by public agencies, faith-based groups, and non-profits housing entities.
- Analysis of affordable housing density incentives in the Wilburton and East Main neighborhood plans.
- Developing funding strategy for affordable housing on suitable public lands in proximity to transit hubs including 130th TOD parcels.

Provide initial and ongoing support to implement investment of funds authorized by HB 1590, or other city funds as directed.

Implement newly authorized affordable housing incentives; develop boilerplate agreements and procedures for ongoing monitoring.

Provide advice on a Housing Needs Assessment, including coordination on scope/methodology, and potentially provide supplemental data.

Assist City with implementation of affordable housing agreements at the TOD project adjacent to Sound Transit's Operating and Maintenance Facility East (OMFE).

Bothell

Support actions to implement the city's Housing Strategy Plan.

Complete implementation of an MFTE program; develop boilerplate agreements and procedures for ongoing monitoring.

Support affordable housing opportunities in the Downtown/Canyon Park GDC overlay areas, such as any proposals for affordable housing on the Civic Center property or other city-owned property.

Evaluate affordable housing incentives such as parking reductions, and implement those adopted.

Assist with compliance with new requirements under HB 1220.

Support updates to policies and codes for affordable housing options, including ADUs, micro-housing, small efficiency dwelling units, and "missing middle" housing.

Issaquah

Assist with preparing the annual Affordable Housing Report Card/Analysis.

Support updates and consolidation of Title 18 and Central Issaquah Development and Design Standards. Review the affordable housing chapter to evaluate the efficacy of existing policies, and potentially revisit density bonus provisions.

Support reporting on the current Housing Strategy, and potentially further updates to the Housing Strategy.

Help to evaluate and, as needed, implement development standards and regulations related to the housing policies adopted in the Central Issaquah Plan and Central Issaquah Standards, including inclusionary zoning.

Help to evaluate potential projects/opportunities that arise under current or amended Development Agreements.

Coordinate marketing efforts to maximize awareness of affordable housing opportunities in Issaquah.

Support implementation and funding of the city's TOD project.

Kenmore

Assist with implementing a high priority item identified in the Housing Strategy Plan, as requested.

Continue support of the Preservation of Affordable Housing/Mobile Home Park project started in 2018.

Assist with the Comprehensive Plan Housing Element update, including help with a housing assessment/background information and statistics.

Provide technical support, data and best practices to assist with potential code changes, such as for "missing middle" housing.

Advance opportunities to site affordable housing in Kenmore, such as near ST3 transit investments, or on other public, nonprofit and faith-based community property. Help evaluate and identify potential partners and financing strategies.

Evaluate potential expansion of TOD overlay and refinement of affordable housing requirements in the overlay zone.

Kirkland

Continue to support efforts to create affordable housing within a transit-oriented development at the Kingsgate Park and Ride.

Support development of housing policies in connection with the I-405/NE 85th Street Station Area Plan, such as evaluation of a commercial linkage fee, and inclusionary housing requirements.

Assist with scoping and stakeholder discussions of a potential affordable housing levy.

Assist with implementing programs to encourage construction of more ADUs, such as pre-approved ADU plans.

Evaluate housing-related issues in ongoing neighborhood plan updates, such as Moss Bay and Everest.

Help review the effectiveness and value of the current MFTE program.

Mercer Island

Assist with data and scoping for a housing needs analysis and review draft housing policies and goals for the City's Comprehensive Plan update.

Newcastle

Assist with potential investment of fee-in-lieu payments, first exploring opportunities to site affordable housing within Newcastle.

Assist with updating the City's Housing Strategy Plan.

Redmond

Provide advice and technical support to evaluate and refine existing inclusionary and incentive programs, and impact fee waiver provisions.

Assist with scoping and stakeholder discussions regarding potential opportunities to increase revenue options to support affordable housing, and help with advocacy for expanded funding options.

Help evaluate programmatic approaches to support greater affordable homeownership opportunities.

Support partnerships with transit agencies to advance affordable housing within transit-oriented developments, including at Overlake and Southeast Redmond.

Support City efforts to identify suitable projects for preservation as a mechanism to advance affordable housing objectives.

Sammamish

Assist with data and scoping for a housing needs analysis, and review draft housing policies and goals for the City's Comprehensive Plan Update.

Assist with development of incentives within Phase 3 development regulations to encourage greater housing diversity.

Help explore development of educational or promotional materials to encourage developers and property owners to consider more diverse housing types, such as duplexes.

As opportunities arise, support development of affordable homeownership options like the Sammamish Cottages developed by Habitat for Humanity.

Woodinville

Provide advice on scope and data collection in support of the City's efforts to adopt a Housing Strategy Plan.

King County

Provide monitoring and stewardship services for affordable housing in the Northridge/Blakely Ridge and Redmond Ridge Phase II affordable housing development agreements.

Help advance the King County Regional Affordable Housing Task Force Action Plan.

Analysis of ARCH Staff Capacity and Options for Meeting Members Affordable Housing Needs

September 2, 2021
Prepared by: Cedar River Group

Table of Contents

Executive Summary

Building more housing – and specifically more affordable housing – is an urgent and growing challenge for cities. To address this challenge, East King County cities have worked together for nearly 30 years through A Regional Coalition for Housing (ARCH) and have a proven track record of building and preserving affordable housing across the eastside. Other cities in north and east King County are exploring how to increase affordable housing capacity, including the possibility of joining ARCH. However, before that option can be evaluated, the ARCH Board wanted to know: ***What is ARCH's existing capacity to meet the current and near-term affordable housing needs of its current members?*** This study provides that analysis by reviewing data and regional growth trends, ARCH's accomplishments, its current work plan, trends in ARCH workload and staffing capacity, and interviewing ARCH members, ARCH staff and housing developers.

The study concludes with options, conclusions and recommendations for ARCH staffing to effectively meet the needs of its current members.

There is a dramatic need for more housing – specifically affordable housing – and the need is growing.

The Puget Sound area has gone through tremendous recent population and economic growth. In the past decade, King County with a net increase of 321,000 people was the third fastest growing county in the country, and jobs – particularly high-paying jobs – have grown even faster. The Puget Sound Regional Council (PSRC) predicts another 1.8 million residents and 1.2 million jobs coming to the Puget Sound region by 2050.

Fundamentally, housing production – especially of affordable housing – has not kept up with the area's growing economy and population. While adding 12 percent more population and 21 percent more jobs, King County has only added 8 percent more houses. In addition, a study found that over the past 10 years, as King County added 67,000 new rental units, it lost more than 112,000 units of housing affordable to those living below 80 percent Area Median Income (AMI).

These factors have combined to leave an estimated 124,000 households severely cost-burdened in King County (paying over 50% of income on housing), with the vast-majority being households at 0 to 30% AMI, and close to 60% renters. Not surprisingly, the burden falls disproportionately upon Black, Indigenous, and People of Color. Households that are American

Indian and Alaskan Native, or Black are roughly twice as likely to be severely cost burdened as White households.

There are new resources and opportunities to face these growing challenges. Local cities have used new authority to create dedicated funding for affordable housing. Local employers have committed new funding resources to affordable housing and local light rail expansion creates new transit-oriented development opportunities. The new State budget includes almost $300 million for the Housing Trust Fund. And the American Rescue Plan includes billions to help create affordable housing, with more funds possibly available in the pending infrastructure bill.

ARCH has a proven record of building affordable housing, helping cities implement best policies, and maintaining those assets over time.

In the nearly thirty years ARCH has been in existence, its members have achieved a lengthy list of accomplishments. The following provides a brief description of just some of the ARCH's accomplishments:

- Produce or preserve 5,166 units of affordable housing by raising nearly $80 million for the Housing Trust Fund and leveraging more than $880 million in other funding.
- Helped ten member cities adopt local incentive or inclusionary programs for developers, including six cities who have offered property tax exemptions. These programs and incentives have yielded more than 2,800 additional affordable units built or in development.
- Established monitoring systems and procedures to ensure continued affordability of units, and compliance with loan terms and conditions.
- Worked on more than 50 policies, plans, code amendments, or regulations for cities, geared toward creating more affordable housing units.
- Created a single point of contact for developers interested in creating affordable units in eastside cities and serves as a central portal for homebuyers and renters looking for affordable homes.
- Supported hundreds of low and moderate income households to achieve homeownership, with ARCH homes creating over $90 million in appreciation for owners.
- Regularly provides information, education and updates for elected and appointed officials.

ARCH is well-regarded by member cities, outside stakeholders and developers.

In interviews with member cities, stakeholders, and staff, there was widespread agreement that ARCH is doing well at leveraging member resources to achieve results, administering existing programs (with some known gaps), and raising awareness about the need for affordable housing.

Developers echoed these sentiments – viewing ARCH as a good partner that helps developers navigate local processes and work effectively with city staff where projects are located. ARCH was also viewed as an important funder who is comparatively easy to work with and whose initial money helps bring other dollars to projects. Most concerns expressed by developers were structural: ARCH's limited resources limit their impact, and their governance by multiple cities limits their flexibility and their ability to advocate.

Staff capacity has not grown sufficiently to keep up with member's needs and requests.

While there has been some recent growth in staff to address the monitoring of affordable units, interviews and analysis of ARCH's staffing trends and workload show that staff capacity has not grown with the increase in demands from member cities.

Overall staffing: When ARCH was created, 2.5 FTE were hired to provide support to the original 4 member jurisdictions and to manage the Housing Trust Fund. As ARCH membership increased to 16 cities, the number of FTE's increased to 5 FTE by 2008, where it remained until 2019.

Monitoring & reporting: In 2019, two FTE were added to address the needs of monitoring rental and home ownership units. These hires help meet current obligations for compliance and monitoring, but new units are being added quickly. Keeping a proper staff to unit ratio may ultimately require additional FTE.

Housing Trust Fund: Since 1993 the number of projects funded by the Trust Fund has averaged 4 per year, but the trust fund's ever-growing portfolio (over 100 contracts) requires more active monitoring than the current one FTE can provide. In addition, the trust fund work is facing increasing demands from both growing opportunity (new funding sources, new TOD sites, more special projects) and growing complexity (higher loan amounts, use of multiple funding sources.)

Planning and programs: In ARCH's first twenty years (through 2011), ARCH staff completed 26 planning activities for member. There were 91 development projects with city affordable housing incentives or requirements. In the past 9 years, ARCH staff have completed 56 planning activities and there were 111 projects created through local incentives or requirements. Despite this growth, ARCH has not added additional planning capacity since one FTE was created in 2002. Upcoming requested work will place still greater demands on the staff capacity for ARCH.

Additional work items: In conversations with ARCH members and staff and after a review of the ARCH workplan, a number of items were identified that are not getting completed, including:

- Proactive monitoring of project financial sustainability (cash flow, vacancy rates, maintenance needs) for developments created using ARCH funds
- More support implementing cities Housing Strategies / Housing Action Plans
- Providing proactive policy development, planning, research and best practices work

- Conducting Housing 101 and educational/outreach work with elected and appointed officials
- Making affordable housing accessible to diverse communities.
- Updating administration and systems, including implementing new monitoring fees, revising rental covenant documents, and updating internal tracking technology.

Conclusions and Recommendations

Overall Assessment: Member cities clearly value ARCH for the affordable units created and the range of services and supports provided. However, there is demand among ARCH members for creating more affordable units and for additional technical assistance in creating affordable housing policies and programs.

ARCH Work Plan Needs: Based on the interviews with member cities, and discussions with the ARCH Board, the following themes emerged regarding ARCH's annual work plan, and the needs and interests of members.

- All ARCH cities will rely on ARCH staff for support with Comp Plan Updates and tracking data to comply with Countywide Planning Policies (CPP) reporting requirements.
- Several cities are counting on ARCH support to implement actions from their housing strategy, to facilitate TOD projects or other special projects.
- Some cities had aspirational ideas about expansion of ARCH's services/role: e.g. facilitating collaboration on homelessness policy/practice, proactive encouragement of best practices.
- In general, smaller jurisdictions with little or no planned growth will not use ARCH for planning services.

Staff Capacity and Staffing Trends: Staff from member cities agreed that ARCH staff are fully utilized and have no additional capacity for new work requests. ARCH staffing has stayed relatively flat, even as the workload has grown.

Revenue Opportunities: There is an opportunity to utilize some existing revenue sources to increase staff capacity. ARCH now has a sustainable source of income from home ownership program fees to support 1 FTE. In addition, King County has expressed a willingness to increase its contribution to ARCH annual operations.

Executive Board Recommendations

Phased Approach to Adding New Staff Capacity: Balancing the different needs expressed by member cities, and the budget challenges facing many cities, the Executive Board recommended a phased approach to increasing staffing.

In 2022, current member dues from all jurisdictions should be used to support the 2021 base staffing level, and new revenue should be used to support two new full time ARCH staff positions:

- A Program Officer working on the Housing Trust fund (paid for from membership dues which would be offset by home ownership fees), and
- An Incentives Program Administrator (paid for by a new tiered-dues structure – see below)

In 2023 one additional position should be added:

- A Housing Programs, Special Projects Manager

Use New Revenues and Create a New Tiered Dues Structure Based on the Level of Program Activity: The Program Officer can be paid for with existing fee revenues that have been collected by ARCH. The Incentive Program Officer presents an opportunity for ARCH to implement a tiered dues structure based on the number of projects each city has in their incentive program. (See Chapter 8 for further details about the tiered structure.)

Conclusion

The changes proposed by the Board are essential actions to help ARCH staff capacity catch-up with long-standing shortages in staffing and meet member's most pressing existing and near-term needs.

This new capacity will make a significant difference, but the need for ARCH's services will likely continue to outstrip capacity, given the anticipated growth of the work program, and potential future requests from other cities in north or east King County to join ARCH.

Finally, there are structural tensions within the organization that were not possible to address in this evaluation (such as the desire from external stakeholders for us to be stronger advocates, or the disparate level of commitment to housing across our member councils). A strategic planning process is needed in 2022 that can address these and other pressing issues outside the normal course of operations and budget cycles.

Introduction

In east King County and across the entire Puget Sound region, building more housing – and specifically more affordable housing – is an urgent and growing challenge for cities. Housing costs in the central Puget Sound region are some of the highest in the country – for both renters and home buyers. Even through the pandemic, housing costs remained at historic highs.

In the face of these challenges, many cities in King County (and elsewhere) have found value in sharing staff and funding resources in an organized collaboration. For nearly 30 years, East King County cities have worked together through A Regional Coalition for Housing (ARCH) and have a proven track record of building and preserving affordable housing across the eastside. The ARCH model has been so successful that it is now being replicated in South King County and Pierce County.

Over the years, ARCH member cities have found that there are challenges both for developers hoping to construct more affordable homes and for the cities that want more affordable units in their community. In recent years one of the challenges that everyone faces is rapidly escalating costs – the rising costs of land, construction materials, labor, planning. Developers must also navigate the individual zoning restrictions, building codes, permitting processes, and affordable housing incentives or requirements for each city to find a suitable location to efficiently build a project that meets both the future tenants' needs and is supported by the community. At the same time, cities have been exploring, and adopting, strategies to increase affordable development and preservation, including expedited permitting, local zoning or other land use incentives or requirements, and new funding sources for the ARCH Housing Trust Fund.

To successfully build affordable housing requires willing and supportive elected leadership; a suitable site with the right zoning and location; a variety of funders; and skilled technical knowledge to help cities facilitate both the building and financing of affordable units. This combination asks a lot of local cities and their staff. ARCH staff have provided housing-specific technical assistance and support for its members, that many cities do not have the capacity to create on their own.

Purpose of Study

As the need for more affordable housing increases in every community, those cities that are part of the ARCH collaboration are exploring how they can create more affordable housing, and those cities who are not ARCH members are considering their options for strengthening their work on affordable housing.

In the King County 2019-2020 biennial budget, funding was approved to examine how cities that are not currently ARCH members may collaborate more effectively with one another. There are currently two cities – Shoreline and Lake Forest Park – in north King County that are outside of the ARCH service area (referred to as the "ARCH Sphere of Influence"). There are also several cities in east King County that are located within the ARCH service area that are not ARCH members – Carnation, Duvall, North Bend, and Snoqualmie.

One of the options being considered by several of those cities in north and east King County is the possibility of joining ARCH. However, before that option can be evaluated, the ARCH Board requested an analysis of ARCH's existing capacity to meet the affordable housing needs of its current members. This study provides that analysis by reviewing data and regional growth trends, ARCH's accomplishments, its current work plan, trends in ARCH workload and staffing capacity, and interviewing ARCH members, ARCH staff and housing developers.

The study concludes with recommendations for ARCH staffing to effectively meet the needs of its current members.

Landscape Analysis

A number of factors influence both the need and opportunities for affordable housing units in ARCH member cities. The following provides a description of several of the strongest influencing factors.

Rapid Regional and Local Growth in Population and Jobs

Rapid Population Growth: The Puget Sound area has gone through tremendous recent growth. In the past decade (2011- 2020), King County had a net increase of 321,000 people, and was the third fastest growing county in the country – increasing in population by 12 percent. [1] [2] And much of that growth was centered in the Eastside. Looking at either absolute population growth or growth rate, 7 of the top 25 fastest growing cities in the Puget Sound region were Eastside cities (although annexation accounted for some of that growth).[3] And with this growth, the Eastside has become more diverse – both Bellevue and Redmond have become over 50% people of color – including significant increase in Asian, Hispanic and multiracial populations.[4] This growth is projected to continue – with Puget Sound Regional Council (PSRC) predicting another 1.8 million residents coming to the four-county region by 2050.[5] The population growth has created unprecedent demand for available housing units.

Even Faster Economic Growth: This growth in population has been matched with tremendous economic growth. Large employers, particularly those focused in technology, along with smaller companies, have helped drive the local growing economy, and fueled a growth in high-paying jobs. In fact, jobs grew even faster than population – in the past decade, the number of jobs in King County grew by 21 percent.[6] The result has been a steady growth in income – from 2000 to 2018, King County's median household income increased from $53,157 in 2000 to $95,009 in 2018, an increase of over 78%.[7] Some significant portion of that rise in income is driven by the information and technology sector in two ways. First – the new jobs and new households were

[11] https://www.seattletimes.com/seattle-news/data/king-county-had-decades-third-largest-population-growth-among-u-s-counties
[2] https://www.mckinsey.com/industries/public-and-social-sector/our-insights/why-does-prosperous-king-county-have-a-homelessness-crisis#
[3] https://www.psrc.org/sites/default/files/trend-population-202010.pdf
[4] https://www.heraldnet.com/northwest/decade-in-demographics-top-5-changes-in-the-seattle-area/
[5] https://www.psrc.org/sites/default/files/2050_macro_forecast_web.pdf
[6] https://www.mckinsey.com/industries/public-and-social-sector/our-insights/why-does-prosperous-king-county-have-a-homelessness-crisis#
[7] https://kingcounty.gov/independent/forecasting/King%20County%20Economic%20Indicators/Household%20Income.aspx

disproportionately higher-income: "Sixty percent of the new households in King County between 2006 and 2016 earned $125,000 or more per year, while 18 percent earned less than $50,000," Second - the wages for these new information jobs grew at a faster rate: "[between 2005 and 2018], average annual wages for an information worker increased 127%."[8] As with population, the growth in jobs is projected to continue – with average annual predicted 1.3 percent growth leading to another 1.2 million jobs coming to the Puget Sound region by 2050.[9]

Changes in Housing

Falling Behind on Housing: Fundamentally, housing production – especially of affordable housing – has not kept up with the area's growing economy and population. While adding 12 percent more population and 21 percent more jobs, King County has only added 8 percent more houses. Looking at the Puget Sound region: for every 1 new housing unit, the region added 3 new residents (2010 to 2019) and 4 new jobs (2010 to 2016).[10] The types of housing has changed to try and meet the new demands. While production of single-family homes has remained relatively steady at 6,000 – 8,000 per year, multi-family housing has shown tremendous growth in the Puget Sound. In 2010, less than 5,000 homes were in multi-family developments; in 2019, almost 20,000 new homes were built in multi-family developments.[11]

And in addition to the challenges stemming from new production failing to keep pace with the new demand, the region is also losing previously affordable housing units. McKinsey & Company found that over the past 10 years, as King County added 67,000 new rental units, it lost more than 112,000 units of housing affordable to those living below 80 percent Area Median Income (AMI). The McKinsey study cited the two largest drivers as: rents on units rising faster than incomes and lower-cost units being demolished to make way for more expensive units.[12]

The Net Result – A Squeeze on Housing: As a result of these factors, the cost of homeownership and rental have risen dramatically in the area. Just recently, *the Seattle Times* reported that for November, the year over year price for Seattle-area homes grew by 12.7 percent, the second highest growth in home prices in the nation.[13] And this is not new – the King County Regional Affordable Housing Task Force Final Report cites that in King County "from 2012 to 2017, median home sale prices increased 53 percent and average rents increased 43 percent.[14]" For east King County, the average cost of either homeownership or renting an apartment now exceeds the cost-burden thresholds for even a family earning 100 percent of area median

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[8] https://kingcounty.gov/independent/forecasting/King%20County%20Economic%20Indicators/Household%20Income.aspx

[9] https://www.psrc.org/sites/default/files/rhna_early_findings_20201009_stakeholder_event.pdf

[10] https://www.psrc.org/sites/default/files/rhna_early_findings_20201009_stakeholder_event.pdf

[11] https://www.psrc.org/sites/default/files/rhna_early_findings_20201009_stakeholder_event.pdf

[12] https://www.mckinsey.com/industries/public-and-social-sector/our-insights/why-does-prosperous-king-county-have-a-homelessness-crisis#

[13] https://www.seattletimes.com/business/real-estate/seattle-home-prices-still-climbing-at-second-fastest-rate-in-nation/#

[14] https://www.kingcounty.gov/~/media/initiatives/affordablehousing/documents/report/RAH_Report_Final.ashx?

income.[15] As of 2018, the median purchase price of a home in East King County was $813,000, [16] corresponding to an income of over $125,000 needed. As of October 2020, the average rent for most Eastside cities was over $2,000 a month, requiring a median income of over $80,000 to avoid being cost-burdened.[17]

A Growing and Inequitable Number of Cost-burdened Families: Households that spend more than 30% of their income on housing are considered "cost-burdened," and "severely cost-burdened" if spending more than 50% of their income on housing. In King County, it is estimated that over 124,000 households are severely cost-burdened, with the vast-majority focused at 0 to 30% AMI, and close to 60% of those being renters. Not surprisingly, the burden falls disproportionately upon Black, Indigenous, People of Color (BIPOC) communities: households with head of households who are American Indian and Alaskan Native or Black are roughly twice as likely to be severely cost burdened as White households.[18] Across the county (as of 2015), 45% of renters and 29% of homeowners were cost-burdened (including severely-cost burdened). On the Eastside, 36% of renters and 29% of homeowners were cost-burdened or severely cost-burdened.[19]

New Growth, New Funds, New Opportunities

The Eastside has new resources and opportunities for Affordable Housing: As the issue of affordable housing has exploded into a local, regional, statewide and even national issue, more resources are emerging to support affordable housing. Two recent state measures (HB 1406 & HB 1590) have created dedicate funding streams for cities and counties to work on affordable housing. Large local employers, most notably Microsoft and Amazon, have both made recent national news with commitments to funding more affordable and middle-income housing. Regionally, the new expansion of light rail to the Eastside creates new, important locations for equitable transit-oriented development. At the State level, the 2021- 2023 budget includes $175 million for the Housing Trust Fund and an additional $120.9 million in investments in housing and shelters. And nationally, this spring's American Rescue Plan includes an allocation of nearly $5 billion in funds to help communities across the country create affordable housing, and more funds may be available in the pending infrastructure bill.

In the face of all the challenges outlined above, all of these new resources (and more) will be needed., Based on what ARCH has learned administering the Housing Trust Fund, it will take

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15 https://www.kingcounty.gov/~/media/initiatives/affordablehousing/documents/report/RAH_Report_Final.ashx?la=en

16 https://www.kingcounty.gov/~/media/initiatives/affordablehousing/documents/report/RAH_Report_Final.ashx?la=en

17 Source: Rent Café Market Trends, October 2020 (From HDC presentation)

18 https://www.kingcounty.gov/~/media/initiatives/affordablehousing/documents/Meetings/rah-posters-FINAL-PRINT.ashx?

19 https://www.kingcounty.gov/~/media/initiatives/affordablehousing/documents/Meetings/CAI-RAH-Deck1031.ashx?la=en

dedicated and skilled staff with capacity to help ensure these new resources best meet the ever-growing affordable housing needs.

ARCH Accomplishments

The ARCH collaborative structure was created in 1992, with four initial members. Since that time ARCH has grown to include 16 member jurisdictions. Its staff conduct work in six broad areas:

- Affordable housing investment using the ARCH Housing Trust Fund
- Policy and Planning support for member jurisdictions
- Incentive Program Administration for cities that have adopted affordable housing incentives
- Stewardship of affordable housing units created via new development, rehabilitation
- Outreach and education to member cities and the public
- Program Administration

The following provides a brief summary of ARCH's major accomplishments to date.

Affordable Housing Investment

Units Created Using the ARCH Housing Trust Fund

Between 1993 – 2020 the Trust Fund was used to create 5,166 units of affordable housing. The majority of those units were for families (nearly 3500 units), but housing was also created for homeless, seniors and special needs populations. Projects funded with the Trust Fund are located in 10 ARCH-member cities. ARCH staff work with municipal officials, developers and other funders to create these units.

ARCH Funds Raised and Other Sources Leveraged

ARCH members have raised nearly $80 million for the Housing Trust Fund since its inception. That includes financial contributions from members, land donated and fee waivers for affordable housing projects. Those ARCH funds are used to leverage a variety of other sources to build or preserve affordable units, including:

- Low Income Housing Tax Credits ($310 million)
- Tax Exempt Bonds ($244 million)
- State of Washington Funds ($61 million)
- King County Funds ($80 million)

- Other Funding ($186 million)

In total ARCH has leveraged more than $880 million in other funding sources for affordable housing projects in East King County cities. In other words, for every $1 dollar contributed by ARCH, more than $10 is leveraged from other sources for creation of affordable units.

Policy and Planning Support

ARCH staff provide support as requested by member jurisdictions. The level of support varies from member to member. In some cases, the support may include research on best practices, data analysis, financial modeling, and technical advice. For other members it may include drafting policies or code/regulatory proposals. ARCH staff have worked on more than 50 policies, plans, code amendments, or regulations for member cities, geared toward creating more affordable housing units in those local communities.

Between 2015 – 2020 seven cities asked for assistance from ARCH in creating housing elements for their comprehensive plans, and/or local housing action strategies. In addition, three more cities will soon be developing housing action strategies that will utilize some level of assistance from ARCH staff.

Incentive Program Administration

Cities may offer a variety of land use incentives to help reduce the cost of housing development, and in return a developer commits to providing a certain number of units at affordable rates. Incentives could include offering increased height or density in return for including affordable units in a development, zoning that allows for smaller lot sizes, smaller unit sizes, use of alternative housing types, or waiving or reducing permit/impact fees. ARCH staff work with local cities to create the incentive programs.

In addition, ARCH staff have provided technical support and assistance to cities that adopt the Multi-Family Property Tax Exemption (MFTE) program as allowed by state law. Developers can receive a tax exemption in exchange for creation of income- and rent-restricted units. This has become an important tool for many developers building affordable housing.

Between 1992 – 2021 more than 2800 affordable units have been created or are in development. Ten (10) ARCH-member cities now offer different types of incentive programs for developers. Historically incentives have been used by ARCH member cities to create units for moderate income households making 80 – 120% of Area Median Income (AMI). More than half of all incentive units created or in development (1515) are for households making 80% of AMI. In more recent years cities have begun to use the incentives to create units for lower income households, those making between 50 – 70% of AMI.

Stewardship of Affordable Units

There are now nearly 8,000 income- or rent-restricted units created through the Housing Trust Fund and the various incentive programs across ARCH-member jurisdictions. Roughly 7,000 of these are rental units and 1,000 are homeownership units. Once developers commit to creating

affordable units, ARCH staff ensure the creation of those units and monitor and report on the continued affordability of those units over time.

Outreach and Education

ARCH staff regularly provide information, education, and updates for elected and appointed officials in member jurisdictions. Staff provide updates about ARCH activities, state and federal program/funding opportunities, information about local and Eastside affordable housing needs, goals and strategies, and generally serve as a resource for City Councils, Planning Commissions, city staff, and local residents interested in affordable housing issues.

Administration

ARCH has done a great deal to share resources across jurisdictions, create consistency in practices and procedures, and create efficient processes. Their work includes:

- Creating a single point of contact for all developers interested in creating affordable units in eastside communities, which greatly increases efficiencies for developers
- Using standard guidelines for income verification for all ARCH-funded projects, across all cities
- Create and use common rent/income/pricing guidelines for all ARCH-funded projects
- Serve as a central portal for homebuyers looking for affordable homes
- Create a centralized affordable housing data base that all member jurisdictions can use
- Conduct routine project audits

Summary of Interviews with ARCH Staff, Members, and Stakeholders

In February and March 2021 ten interviews with ARCH members and outside stakeholders were conducted, along with a group discussion with ARCH staff. The following provides a summary of the discussion about ARCH staff capacity and how ARCH staff are meeting the needs of member jurisdictions.

Overall Assessment

- **There was widespread agreement that ARCH is generally doing well at administering existing programs** (with some known staffing gaps), but that staff seem to be fully utilized.
- **The organization doesn't currently have capacity at the staff or board level to become a driver for more proactive strategies** (increasing funding, advocating for new policies, expanding partnerships, etc.), or to expand its services to new members/geographic areas.
- **There was a sense from outside stakeholders that ARCH should be scaling up its activities** to meet the dramatic growth and need for affordable housing in east King County. It was not clear that member cities feel the same way.

Trust Fund Program Opportunities and Challenges

- **ARCH has been highly successful in administering and leveraging local funds** with minimal staff resources (1 staff position).
- **The trust fund's large portfolio requires active monitoring** to collect loan repayments and restructure agreements as projects age program, as it now encompasses over 100 contracts and tens of millions of dollars in funding – and growing. Other public funder agencies have shifted to creating dedicated asset management staff.
- **Significant opportunities lie ahead** as ARCH members have begun to increase their level of investment and adopt new funding sources, plus new TOD opportunities and other special projects.

Work on Policy/Planning/Regulatory Recommendations

- **Planning activity has been steadily increasing in recent years,** even as ARCH role in policy/planning work varies from year to year and city to city, and a lack of clarity in ARCH's ongoing role makes it difficult to plan for needed capacity/skillsets.
    - Between 1992 – 2014 ARCH staff supported approximately 1.5 housing strategy plans, housing comp plan elements or code amendments per year for member cities.
    - Between 2015 – 2020 ARCH staff completed 8.0 strategies, plans or code amendments per year.
- **ARCH hired one Planner in 2002 and has added no additional planning capacity since.**
- **Some member cities are doing their own work on affordable housing policies or plans**, and ARCH staff have a sense this may be because the members don't believe ARCH has the capacity to complete high priority policy development in a timely manner.
- **ARCH's primary planner is also responsible for administering city incentive programs** (preparing developer agreements and covenants for MFTE, inclusionary and bonus programs). This increasingly competes with ARCH's role in supporting new policy/program development.
- **The upcoming work will place greater demands on the planning staff capacity for ARCH,** including on TOD, station area planning, and comp plan revisions.

Additional Staff-Identified Capacity Shortages

- **Proactive policy development, planning, research and best practices work would require more staff** capacity, to the extent ARCH members would like staff to be more involved.
- **Conducting regular Housing 101 and educational/outreach work is not being done regularly** with members and communities to create and sustain deeper understanding about affordable housing issues and the work ARCH does.
- **Making affordable housing accessible to diverse communities would require additional capacity** for marketing and outreach. This was a recent addition to ARCH's work program, but no new staff capacity was created for this work.

Internal Organizational Capacities

- **The recent addition of 2 FTEs has provided the level of staffing needed to meet current obligations for compliance and monitoring for the Homeownership and Rental programs**.

- **However, new units are being added quickly**, and the organization needs to be mindful of the metrics recommended in 2019 about the number of units per FTE.
- **ARCH staff is getting good utilization from interns, but it is an uncertain source of labor** that comes with the internalized cost of replacing and training. They could be using consultants to meet some of the capacity gaps but there are not resources to hire consultants.
- **ARCH can no longer use some homegrown excel sheet to track 1000s of units.** There is a need to update, but there are not the time, staff or funding resources to do so.

Adding a New ARCH Member

- **Staff believe that adding a new city as an ARCH member would require additional staff capacity in the areas where shortages already exist** (policy, planning and regulatory work, as well as trust fund project-related work).

Interviews with Eastside Developers for ARCH Capacity Assessment - Spring 2021

As part of the process, seven developers were interviewed – they were deliberately chosen to cover a variety of perspectives – smaller and larger, nonprofit vs. for profit, those that had received ARCH funding vs. those that had not yet. Below are some of the highlights from the conversations.

Developers Interviewed:

- **Len Brennan** (Shelter Resources)
- **Allen Dauterman** (Imagine Housing)
- **Kim Faust** (Main St. Property Group)
- **John Fisher** (Inland Group)
- **Kim Loveall Price** (DASH)
- **Emily Thompson** (GMD Development)
- **Kevin Wallace** (Wallace Properties)

1. What has been your past experience with ARCH and how would you describe that experience? What was best about working with ARCH? What was most challenging? If you have not worked with ARCH, why not?

- **ARCH is seen by many as a good partner:** *"They will strategize with developers;" "Under the new leadership the work on compliance is easier and more collaborative"*
- **But there is some concern about flexibility/responsiveness:** *"Process is cumbersome because of the number of councils they have to report to." "The more flexible ARCH can be the better the chances of getting to their end goal."*
- **ARCH's limited resources limit their impact:** *"Their leadership is good, but there is not enough resource available for new development or rehab." "The amount of money that ARCH has available is not enough to make a big difference in each project."*
- **Some express concern that ARCH is doing less advocacy for Eastside than in the past:** *"Don't think ARCH acts as much of an advocate as in the past;"*

- **Some developers want ARCH to be more of a partner:** *"For affordable housing, has to be a collaboration between ARCH and developers." "Need to be more of an advocate, understanding and supportive of developers."*

2. In your experience, how does working with ARCH compare to working with other sources of funding for affordable housing? For those working with ARCH on affordable housing incentive programs, how does that work compare with other locations or jurisdictions?

- **Compared to other partners, ARCH is seen as comparatively easy:** *"They are the best of the three (between county, state and ARCH)."; "Conditions in contracts very easy compared to other funders.";*
- **Developers appreciate their insight:** *"Good feedback quickly on your project," "They are reasonable and they work in partnership."*
- **ARCH is helpful navigating cities:** *"Staff typically take the lead in working with local governments. That is helpful – so the developer doesn't have to work with each individual city."*

3. Stepping back and thinking regionally - what would you describe as the most important accomplishments for ARCH?

- **Developers value the creation of the coalition and focus on the issue:** *"Getting cities to work together to solve affordable housing was a good one." "ARCH has done a good job raising visibility with cities on affordable housing."*
- **ARCH is also an important advocate to cities**: *"They have also helped with advocacy… talking with Mayors and Council members to create support for and action around affordable housing."*
- **ARCH is a valuable finance partner:** *"They have helped provide small amounts of gap financing for 9% projects that have lower income targeting."*

4. What do you think of as ARCH's most important role in helping developers build affordable housing: funder of affordable units, technical assistance on understanding local regulations and ordinances, helping find additional funding, helping find tenants, providing ongoing monitoring?

- **Developers value the funding, especially as an initial money that brings other dollars:** *"As the first funder to commit money they showed local commitment that was important with other funders." "ARCH is effective at leveraging other funds and bringing other funders along."*
- **Some smaller developers value their technical assistance:** *"The technical assistance in understanding local development regulations and ordinances."*

5. What are the primary obstacles to constructing affordable housing in East King County cities?

- **There simply needs to be more dedicated funding: "***More resources are needed, particularly in the 4% pool of projects." "There is not enough availability of state and local resources to make projects happen."*
- **Several developers pointed to costs – particularly of land, but also of permitting:** *"The cost of land is out of reach;" "Permitting is starting to get bad; 1 year process is a bit of overkill."*
- **There is interest in cities streamlining permitting and easing zoning**: *"All cities have extraordinarily expensive: permitting; regulations; etc. "ARCH could find a way to make zoning/rezoning more achievable and predictable."*
- **Several also mentioned need to ease parking requirements: "***Parking ratio reductions would help." "Parking regulations are an obstacle in some jurisdictions."*
- **There is also interest in a more unified voice/approach from the Eastside cities:** "*Each city has its own agenda, own strategy." "What are cities going to do collaboratively?"*
- **There are concerns that requirements and funding for low-income are making middle-income housing unaffordable: "***Need to kick-in money for nonprofits to produce less than 60% AMI housing, but don't make it not viable to produce middle income housing to pay for it." "Putting the full burden on developers is not fair."*
- **There are few "competitive sites":** "*If you are not competitive you won't get a resource allocation from the state…. sites score well that have access to services and transit, but there are minimal transit corridors on the Eastside compared to Seattle."*

6. What could ARCH do more of, less or, or do differently – either for developers or for member cities – to support the building of more affordable housing on the Eastside? Any other final thoughts?

- **Some want more advocacy within cities for individual projects:** *"Advocating for projects, funding and expending." Maybe ARCH could hire a planner to work with all cities to interface with cities to make sure projects are going through process efficiently. "ARCH could have a seat at the table on behalf of developers. Lots more they could do to help with zonings and site approvals."*
- **And some want more advocacy across cities on policy:** "*Build the coalition and advocacy to the cities;" "Unify voices and policy"; "Can HDC provide some capacity to ARCH to do advocacy work?"*
- **A few expressed interest in ARCH using more private/public partnerships: "***Why not take advantage of profit/nonprofit joint ventures, as for profits have experience, liquidity,*

can bring capital, etc." "The tax credits were meant to be private/public partnerships…In WA there is a sense that private developers are not as good as nonprofits."

- **A few had specific ideas:**
  - *"ARCH could act as a clearinghouse for surplus properties across cities."*
  - *"Cities that are choosing to do parallel funding paths-- that makes no sense. Give ARCH more money to do more work. The beauty of ARCH is the single point of contact for East King County."*
  - *"The For Sale ARCH program is inequitable and needs to be fixed… [providing a giant benefit to one family, but nothing to others…]*

ARCH Work and Staffing Trends

One of the foundational principles behind ARCH is that member jurisdictions pool resources to build or preserve affordable units across the Eastside, and to create a shared staff resource with specialized expertise in affordable housing that provides support to all members. Many member cities rely on ARCH's expertise to help them analyze and develop projects, interact with developers, draft policies and regulations to promote the development of affordable housing, and monitor affordable units within cities that have been created as a result of city policies and programs. The history of ARCH has been to apply resources efficiently and to increase the capacity of the organization incrementally as it has grown.

History and Background

ARCH began in 1992 with 4 initial member jurisdictions. Three years later there were 8 members, and by 2008 there were 16 members (which is today's membership). Over time the demands on staff have increased for several reasons:

1) As the number of ARCH members increased the requests for staff time and support also increased,

2) Both the growing ARCH Housing Trust Fund and new city affordable housing programs (e.g., MFTE and inclusionary zoning) have created an increasing portfolio of units with more work required to create, monitor and report on those units in the expanding portfolio,

3) Affordable housing has become a priority issue for many cities and interest in creating developer incentives or new land use policies that promotes affordable housing has increased dramatically, and

4) The need for affordable housing across King County and in Eastside cities has increased significantly as housing costs and demand for units have soared.

Growth in Program Activity

Growth of Housing Trust Fund

Since 1993 the number of projects funded by the Trust Fund has averaged 4 per year. Although annual funding (cash contributions and land donations) has fluctuated significantly from year to year, in general the funding provided by members to the Trust Fund has been relatively flat. The highest number of projects in any given year was 9. However, while the annual number of projects has been relatively constant, the projects funded by ARCH have become more complex,

with higher loan amounts and use of multiple funding sources. Many of the projects require specialized staff expertise to analyze and evaluate project proposals.

Growth of Planning Activities

ARCH staff provide a variety of affordable housing planning activities for member jurisdictions, including development of local housing strategy plans, housing elements of comprehensive plans, code amendments, or regulatory proposals. In ARCH's first twenty years (1992 – 2011) ARCH staff completed 26 planning activities for member jurisdictions. In the past 9 years (2012 – 2020) ARCH staff have completed 56 projects for members. There has been a pronounced increase in activity since 2015. This has been due to several factors, including the increase in affordable housing needs across ARCH cities and the county, the heightened interest on the part of many jurisdictions to develop strategies that will address local affordable housing needs, and an increase in requests from member cities to assist in the creation of state-required housing elements in local comprehensive plans. It is anticipated that there will be a number of new requests for support as local comprehensive plans are updated between 2021 – 2024.

Growth in the Number of Affordable Units Monitored

In addition to creating affordable units through use of the Housing Trust Fund, ARCH member cities also use a variety of land use and policy incentives and requirements to create new units. When those units are created, the city's programs typically place a cap on the price of units to be sold or rented (to ensure affordability), and require that the income of renters or buyers cannot exceed certain limits (to make sure only households with limited incomes occupy those units). When the units are initially completed, and over time as they change hands, ARCH staff monitors those units to make sure that the pricing and owner/renter income restrictions are being met.

There has been a considerable increase in the number of incentive programs adopted by ARCH member cities. Ten cities now offer incentives to create more affordable housing. In ARCH's first 20, years there were 91 projects that were required to meet a city's local affordable housing incentive of requirement. In the past 9 years, there have been 111 projects. With each new project the total grows, and there are now more than 2800 units (owner occupied and rental) that ARCH staff monitors to insure they are in compliance with local requirements.

Regional Affordable Housing Need

As mentioned in the Landscape Analysis earlier in this report, across east King County cities 36% of renters and 29% of homeowners were considered either cost burdened (spending more than 30% of their household income on their housing costs) or severely cost burdened (spending more than 50% of their income on housing). Given the trends in increasing rents and home prices, these numbers are not likely to change soon.

Staff Capacity and Staffing Trends

When ARCH was created, 2.5 FTE were hired to provide support to the 4 member jurisdictions and to manage the Housing Trust Fund. As ARCH membership increased the number of FTE's

increased to 5 FTE by 2008. Staff capacity remained at approximately 5 FTE between 2008 – 2019. In 2019 two FTE were added to address the needs of monitoring the rental and home ownership units. At the time, the number of rental and ownership units created by ARCH resulted in their staffing ratios (for the number of units each staff member had to track, monitor and report on) being far below the best practices standards established by other cities around the region and the country. The two additional FTE brought ARCH into compliance with those best practices standards.

What's Not Getting Done

In conversations with ARCH members, ARCH staff and after conducting a review of the annual ARCH workplan, a number of projects and tasks were identified that are not getting completed with the existing staff capacity. The following are some of the topics identified:

Housing Trust Fund

- Funding policy
  - Provide options to ARCH members and conduct analysis on those options for the potential creation of a dedicated funding source for Eastside cities.
  - Revisiting parity goals (work started in 2017-2018)
- Oversight of existing investments:
  - Be more proactive in monitoring project financial sustainability (cash flow, vacancy rates, maintenance needs) for developments created using ARCH funds
  - Loan monitoring (ensuring timely loan repayments)
- Conduct more proactive work and technical support to generate special projects (TOD, preservation, surplus property, faith community property, etc.)

Policy, Planning, Incentive Programs

- Work with cities that have adopted Housing Strategies/Housing Action Plans to implement more of the strategies identified
- Work with cities who have yet to create and adopt Housing Strategies/Housing Action Plans
- Work with ARCH members to establish Eastside housing production and preservation targets
- Do more work to coordinate across cities – sharing best practices, program evaluations
- Streamlining interface for developers who utilize incentive programs

Rental Program Monitoring and Administration

- Work with member cities to establish a monitoring fee that would help defray the cost to monitor ARCH units
- Create new rules for parking charges for ARCH rental units
- Review ARCH Rental Covenant for needed updates
- Explore centralized application portal for all properties with ARCH rental units

Education, Outreach and Administrative Procedures

- Update ARCH bylaws
- Improve and enhance data bases used to monitor ARCH-funded units
- Improve the ARCH website, making it more interactive and useful for all users
- Conduct more Housing 101/outreach events with member cities
- Building partnerships to market new housing to households in need

Conclusions

Based on the interviews with ARCH members, staff and outside partners, and review of workload trends and the annual ARCH work plan, several conclusions were reached regarding ARCH staff capacity.

- The **existing staff are fully utilized** and have no additional capacity for growth. ARCH member cities are reluctant to ask ARCH staff to take on new projects because the staff are fully booked.
- Gaps have begun to emerge, and **elements of the work program are not being accomplished**. Some tasks have been on the work plan for several years because there is not the capacity to move the work forward.
- Trends suggest that **workload will continue to grow**. This applies to the continued growth of the Housing Trust Fund, and the continued demand for planning, research and data analysis services.
- **Deficiencies will grow** as new projects and units come online. As the number of Trust Fund units and incentive units are built, it will be difficult to update practices and policies that are already in need of improvement.
- **Additional staff are needed** to catch up to current demands and to absorb the expected near-term growth in work.

Staff Capacity Options

After conducting the analysis described in the earlier chapters, the ARCH board was presented with three options for different approaches to addressing staff capacity issues. Several conclusions and themes were highlighted to inform the deliberations about the staffing/budget options.

Funding Models

Two funding models were presented to the ARCH Board for consideration:

- Per capita allocation to all members, except King County (same as the existing model)
  - In addition, this model could add optional on-call consulting services paid based on actual services used
- Tiered membership:
  - Base membership: Would include administration of the Housing Trust Fund, program administration/monitoring, and outreach activities, all allocated on a per capita basis
  - Optional tier for policy/planning services, and/or or incentive program support provided by ARCH staff that would only be paid by those cities expecting to utilize those services.

Other Revenue Factors

In addition to the two funding models, there are other revenue sources that were identified for consideration by the board.

Fee Revenue

- Current fee revenue collected by ARCH will cover the cost of at least 1.0 FTE
- Cash reserves up to $150k as of YE2020, will continue growing as fees accumulate
- Additional revenue could be generated as cities work toward authorizing ARCH to collect administrative fees from rental projects
- Offering fee for services to other cities not currently ARCH members (as is currently being done with the City of Duvall) may be an opportunity in the future, but is not an immediate factor.

King County Revenue

- King County has expressed interest in increasing dues from $75,000 up to $125,000.

Staffing/Budget Options

Three staffing options were identified to add new staff capacity to ARCH. The first option would add 1 FTE, the second option 2 FTE, and the third option 3 FTE. In preliminary conversations the Board indicated that doing nothing, not adding any new capacity, was not an option they wanted to consider.

Option 1 – Baseline budget, 1 FTE covered by fees

- Member dues continue to pay for existing staff positions (increase in combined dues no more than 4% increase)
- City member dues are distributed on per capita basis; King County dues remain close to $75k
- Use fee revenue to add 1.0 FTE:
    - Incentive Program Administrator – This new position would be responsible for working with developers and preparing agreements for projects using land use/tax incentives
- Could use available reserve funds to hire temporary staff position or other support for loan monitoring
- Evaluate areas of the work program that can be reduced in the future

Option 2 – Address Immediate Gaps (Add 2 FTE, 1 with fees, 1 with dues – from some or all members)

- Base member dues continue to pay for existing staffing levels
    - King County dues increase to $125k
- Fee revenue pays for Homeownership staffing, frees up base member dues to add 1 FTE:
    - Trust Fund Program Officer – This new position would be responsible for managing the ARCH loan portfolio, and would enable ARCH to absorb an increase in transactional work (could include assisting Bellevue with allocation of additional funds).
- Additional services above the base membership could be paid by cities that use ARCH for incentive program administration, or by all cities:
    - Incentive Programs Administrator – This new position would be responsible for working with developers and preparing agreements for projects using land use/tax incentives

- Explore shared contract for on-call consulting services on policy/planning, financial analysis and modeling, special project management and other services.

Options 3 – Plan for Growth (Add 3 FTE, 2 from dues, 1 from fee revenue)

- Base member dues pay for 1 additional FTE:
    - 1 FTE: Trust Fund Program Officer (described in Option 2)
- 1 FTE paid by dues above base member dues – paid by cities actively using ARCH for incentive program administration:
    - 2 FTE: Incentive Program Administrator (described in Options 1 and 2)
- Fee revenue pays for 1 FTE
    - 3 FTE: Housing Programs/Special Projects Manager – This new position would oversee stewardship and monitoring activities, take on special policy/project work
- Explore shared contract for on-call consulting services on policy/planning, financial analysis and modeling, special project management and other services.

Conclusions and Recommendation

Overall Assessment

Member cities clearly value ARCH for the range of services provided: technical and policy support, units created from the pooled resources, addressing the monitoring and reporting requirements on affordable units, and for serving as a single voice and resources on the issue of affordable housing in the eastside. However, given the depth of the affordable housing need in most eastside communities, there is demand among ARCH members for creating more affordable units and for additional technical assistance and support in creating affordable housing policies and programs.

The level of ARCH support needed or desired varies among member cities and generally depends on two factors:

- The size of the city and their ability to devote internal staff resources to affordable housing issues, and
- The level of commitment on the part of a city's elected leadership to aggressively pursue affordable housing strategies.

It is also important to note that when asked if there is work ARCH staff are doing that could be eliminated in order to create additional capacity, there were no suggestions from members for work that ARCH should do less of or drop entirely.

ARCH Work Plan Needs

Based on the interviews with member cities, and discussions with the ARCH Board, the following themes emerged regarding ARCH's annual work plan, and the needs and interests of members.

- All ARCH cities will rely on some level of ARCH staff for support with Comp Plan Updates (at a minimum - housing needs data, some would benefit from housing element review or drafting). Some had questions/concerns about the impact of HB 1220, and interest in ARCH capacity to assist with new requirements.
- All cities are interested in ARCH tracking data on an ongoing basis to comply with Countywide Planning Policies (CPP) reporting requirements.
- Several cities are counting on ARCH support to implement actions from their housing strategy (Bellevue, Bothell, Kenmore, Kirkland, Issaquah, Redmond)

- Several cities would like help to facilitate TOD projects or other special projects in their jurisdiction, such as finding faith-owned properties for new development.
- Many cities described a distinct set of skills/knowledge that ARCH staff provide to members.
- Some cities had aspirational ideas about an expansion of ARCH's services/role:
    - Facilitating Eastside collaboration on homelessness policy/practice
    - Providing more technical assistance/support to faith-based communities for housing development
    - More proactive steps to encourage best practices on housing policies, for example on ADUs – outreach/marketing, financing, pilot programs, etc.
    - Stronger role in legislative advocacy
- Smaller jurisdictions with little to no planned growth will not use ARCH for planning services.
- There is interest among some members in shifting to a fee for service model when it comes to policy/planning work, and potentially other areas where workload is growing, such as incentive programs.
- King County is interested in investing more in ARCH capacity that will catalyze projects or policies toward the Regional Affordable Housing Task Force Action Plan goal of 44,000 units.

Staff Capacity and Staffing Trends

Staff from member cities agreed that ARCH staff are fully utilized and have no additional capacity for growth. Members also identified gaps that have begun to emerge, and elements of the annual work program that are not being accomplished.

As described earlier in this report, while ARCH staffing capacity has been relatively flat, requests for ARCH staff services have increased. As the Trust Fund loan portfolio has grown, there is a need to increase staff capacity to actively monitor those loans and address the current backlog of loans that have not been actively monitored.

There has also been a significant increase in the requests for planning assistance from cities that want to adopt or amend policies, codes, and local housing programs. Currently, ARCH's planning assistance is provided by the same Senior Planner who also oversees member cities' incentive programs. ARCH will need additional planning/policy staff to continue overseeing the growing portfolio of members incentive programs while helping cities update local comprehensive plan housing elements, respond to the County's Countywide Planning Policies, and respond to the growth in requests for planning and policy assistance.

Two new positions were added in 2019 to monitor the affordability of units created by the ARCH Trust Fund. Those positions increased the level of staffing to industry standards for the size of the portfolio and the number of units that need to be monitored for compliance with affordability requirements.

The growth of ARCH activities also suggests the need to create additional management capacity, to both oversee staff stewarding the growing portfolio of affordable housing created in the Homeownership and Rental Programs, and work on special initiatives – such as expanding marketing efforts to diverse populations or promoting partnerships to develop affordable housing with faith-based communities. The new capacity would both increase management oversight and free capacity for the Executive Director.

Revenue Opportunities

There is an opportunity to utilize some existing revenue sources to increase staff capacity. ARCH has been collecting fees from the homeownership program and now has a sustainable source of income. Those fee revenues would support 1 FTE. In addition, King County has expressed a willingness to increase its contribution to ARCH annual operations. This could be part of the revenues used to increase ARCH staff capacity.

Most cities are facing budget challenges, so even for the larger and mid-sized cities a phased approach to increasing staff capacity should be considered.

Executive Board Recommendations

Based on the review described above, and discussion with the ARCH Executive Board over several months, the Board recommended to their respective Councils the following actions to increase ARCH staff capacity.

Phased Approach to Adding New Staff Capacity

Balancing the different needs expressed by member cities, and the budget challenges facing many cities, ARCH should adopt a phased approach to increasing staffing.

In 2022, current member dues from all jurisdictions should be used to support the 2021 base staffing level, and an additional two new full time ARCH staff positions should be created:

- A Program Officer working on the Housing Trust fund – Paid for using increase in revenues from program fees. No dues increases needed to pay for this position.
- An Incentives Program Administrator – Paid for using a new tiered dues structure (see below)

In 2023 one additional position should be added:

- A Housing Programs, Special Projects Manager

The Board has not decided how to pay for the 2023 staff position. It will likely be some level of new dues, but no pre-commitment was made about how the dues will be allocated.

Create a New Tiered Dues Structure Based on the Level of Program Activity

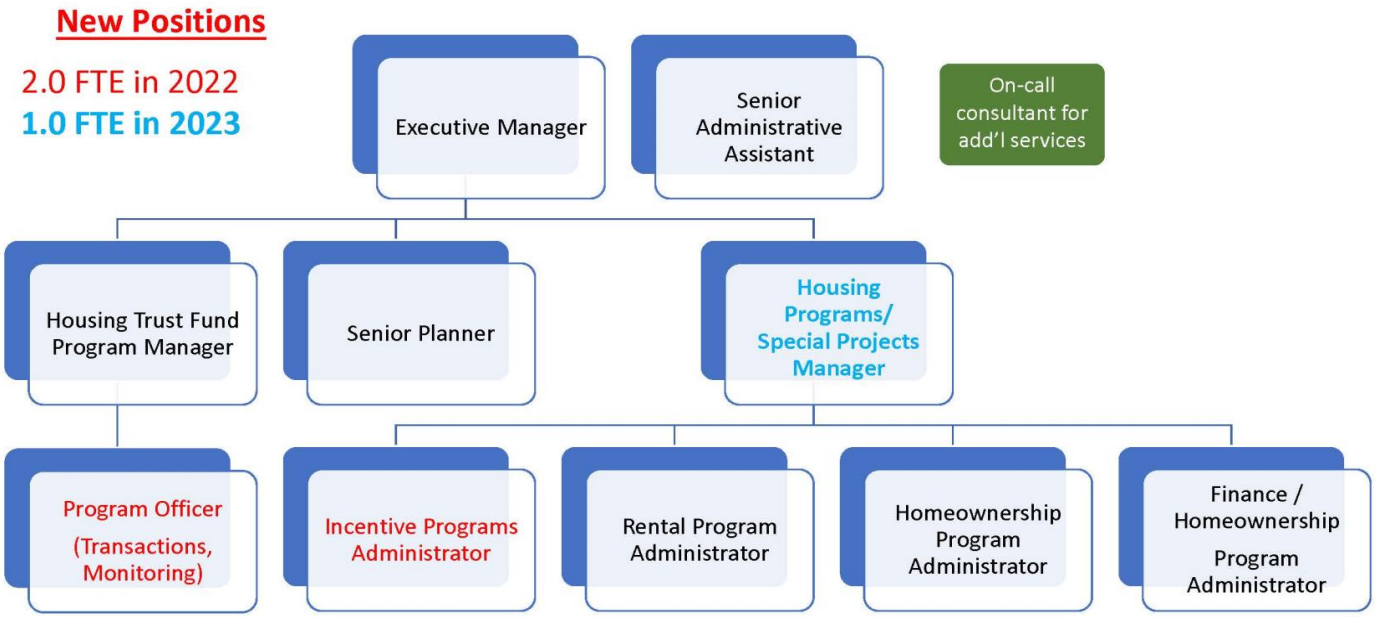
Revenues for the two new positions can come from several sources. One FTE (the Program Officer) can be paid for using fee revenues to pay for Homeownership staffing, which frees up base member dues to add 1 FTE. The second position, that would focus on the administration of local housing incentive programs, presents an opportunity for ARCH to implement a tiered dues structure, based on the number of projects each city has in their incentive program.

- Cities with active incentive programs (either more than 10 completed projects or 3+ projects in the pipeline) pay on a per capita basis (Bellevue, Issaquah, Kirkland, Redmond)
- Cities with less active programs (fewer than 10 completed projects, and less than 3 projects in the pipeline) pay a minimum contribution of $3,000 (Kenmore, Newcastle, Sammamish, Mercer Island)
- Cities with adopted programs that do not yet have participating projects do not yet contribute additional dues (Bothell, Woodinville).
- Cities without incentive programs do not contribute additional dues (Beaux Arts, Clyde Hill, Hunts Point, Medina, Yarrow Point).

(See next page for graphic summary of Executive Board recommendations.)

Executive Board Recommendations: ARCH Proposed Staff Structure

Address Most Urgent Gaps and Plan for Growth in Next 3-5 Years



Implications:

* Absorbs significant growth from incentive programs, frees up some capacity for Comp Plan and housing strategy support.
* Catches up to backlog of loan monitoring, creates some capacity to transact more loans.
* Could add on-call consulting to support other services.
* Create new tiered dues structure to pay for Incentive Programs Administrator
* Plans for anticipated growth in member services and supports

Conclusion

Based upon review of the ARCH workplan, discussion with cities about their near-term plans, and assessment of ARCH staff responsibilities and workload, the changes proposed by the ARCH Executive Board are essential actions to help ARCH staff capacity to catch-up with long-standing shortages in staffing and meet member's most pressing existing and near-term needs. The new capacity will be particularly helpful in administering the Trust Fund, helping cities in planning and policy work, and accommodating the growth in special projects.

Nevertheless, ARCH's work is likely to continue to grow, and the board was unable to identify any work that ARCH staff could eliminate. In addition, cities in north and east King County may consider requesting membership in ARCH. In the coming years additional capacity may be needed as the portfolio of projects increases in size and complexity, and the planning and policy work expands.

Finally, there are structural questions and tensions within the organization regarding the capacity, direction and services offered by ARCH that were not possible to address in this evaluation (such as the desire from external stakeholders for ARCH to be stronger advocates, or the disparate level of commitment to housing across member councils). Given these range of questions, ARCH's Executive Board committed to a strategic planning process in 2022 that can address these and other pressing issues outside the normal course of operations and budget cycles.

A Regional Coalition for Housing

Together Center Campus
16307 NE 83rd St, Suite 201
Redmond, WA 98052
425-861-3677

MEMORANDUM

TO: City of Bellevue Council Members
City of Clyde Hill Council Members
City of Issaquah Council Members
City of Kirkland Council Members
City of Mercer Island Council Members
City of Redmond Council Members
City of Woodinville Council Members
City of Bothell Council Members
Town of Hunts Point Council Members
City of Kenmore Council Members
City of Medina Council Members
City of Newcastle Council Members
City of Sammamish Council Members
Town of Yarrow Point Council Members

FROM: Kurt Triplett, Chair, ARCH Executive Board

DATE: December 9, 2021

RE: Fall 2021 Housing Trust Fund (HTF) Recommendation

The 2021 ARCH Housing Trust Fund round confirmed the increasing demand for funding to support affordable housing development in East King County. ARCH received five applications representing requests for just over $3.8 million dollars in local funds to develop 344 units of affordable housing. After careful deliberation, the ARCH Executive Board concurred with the recommendations of the ARCH Citizen Advisory Board (CAB), and is recommending funding of $3,175,000 for four projects, including supplemental funding of $1.5 million to cover cost increases to a project that received an award in 2020.

These recommendations advance projects that meet urgent local priorities, including mixed income workforce housing, transitional and emergency housing for victims of domestic violence, affordable housing for youth seeking to further their career and education, and much needed affordable housing for individuals with developmental disabilities to be integrated into a transit-oriented development.

In the last three decades, the ARCH Trust Fund has supported nearly 4,500 units of affordable housing and shelter beds, more than any other program in East King County, notably creating housing for those with the greatest needs and the fewest opportunities to live in our community. As rents continue to rise in our region, so does the need for affordable housing. Your investment in the ARCH Housing Trust Fund, leveraged with millions of dollars from other sources, will provide this much needed housing to hundreds of underserved members of our community.

Below is a description of the applications received, the Executive Board recommendation and rationale, and proposed contract conditions for the proposals recommended for funding at this time. Also enclosed is the proposed funding sources and an economic summary of the projects recommended for funding.

Attachments:
1. Proposed Funding Sources
2. Project Economic Summaries

Note that bolded text in proposed conditions shows unique conditions in otherwise standard text.

1. LifeWire – Hope Starts Here

Funding Request:	$750,000 (Secured Grant) 25 Affordable Units
Executive Board Recommendation:	$750,000 (Secured Grant) See attached Proposed Funding Sources for distribution of City Funds

Project Summary:
The proposed project is the rehabilitation of an existing three building site in Bellevue currently owned by LifeWire into 25 one and two-bedrooms units of affordable housing plus the new construction of a building for providing services to domestic violence (DV) survivors. The project is the culmination of several years of planning by LifeWire to consolidate two existing programs located in less-than-ideal facilities, plus add capacity with five additional units to serve the overwhelming need among DV survivors.

The project will serve single women and women with children impacted by domestic violence who do not have other options for housing. The project will contain 15 emergency housing units and 10 transitional housing units. The ten transitional units will serve survivors who are also recovering from substance abuse and are parenting. Nine apartments will be renovated to accommodate survivors with mobility issues. The project will serve residents earning 0-50% AMI.

The scope of the rehabilitation includes system and finish upgrades, new roofs, new secure entry door systems, sewer lines, flooring, and where needed, new cabinets, countertops, appliances, and fixtures. Due to the nature of the population the exact location of the project must be kept confidential.

Funding Rationale:
The Executive Board supports the intent of this application for the following reasons:

- The project aligns with the local Affordable Housing Strategy and would further the City of Bellevue's goals to achieve 2,500 affordable units over 10 years.
- The project serves a special needs population (domestic violence survivors).

- The project will prioritize survivors with the greatest safety risks and highest barriers to housing and services.
- The project will allow a dependable, long standing non-profit service provider the ability to consolidate its resources and provide more efficient services to residents.
- The project provides significant financial leverage of other resources.
- Site has convenient access to transit, shopping, and services.

Proposed Conditions:

Standard Conditions: Refer to list of standard conditions found at end of this memo.

Special Conditions:

1. The funding commitment continue for **twelve (12) months** from the date of Council approval and shall expire thereafter if all conditions are not satisfied. An extension may be requested to ARCH staff no later than sixty (60) days prior to the expiration date. At that time, the Agency will provide a status report on progress to date and expected schedule for start of construction and project completion. ARCH staff will consider a twelve-month extension only on the basis of documented, meaningful progress in bringing the project to readiness or completion. At a minimum, the Agency will demonstrate that all capital funding has been secured or is likely to be secured within a reasonable period of time.

2. Funds shall be used by Agency toward **soft costs, design, permits and construction**. Funds may not be used for any other purpose unless ARCH staff has given written authorization for the alternate use. If after the completion of the project there are budget line items with unexpended balances, ARCH and other public funders shall approve adjustments to the project capital sources, including potentially reductions in public fund loan balances.

3. Funds will be in the form of a **secured grant with no repayment,** so long as affordability and target population is maintained, and the service funds necessary to provide services to this population are available.

4. The net developer fee shall be established at the time of finalizing the Contract Budget and will follow ARCH Net Developer Fee Schedule. Net developer fee is defined as that portion of the developer fee paid out of capital funding sources and does not include the deferred portion which is paid out of cash flow from operations after being placed in service.

5. A covenant is recorded ensuring affordability for at least 50 years, with size and affordability distribution per the following table. Limited changes to the matrix may be considered based on reasonable justification as approved by ARCH staff.

Affordability	1-bedroom	2-bedroom	Total
30%	14	6	20
50%	3	2	5
Total	17	8	25

6. Based on the availability of adequate support services, the project will contain 15 emergency housing units and 10 transitional housing units, unless otherwise approved by ARCH. LifeWire will work with the DV Coordinated Entry system, known as the Domestic Violence Coordinated Housing Access Point (DVCHAP) for referrals, or other referral system as approved by ARCH.

7. ARCH shall review and approve the services budget and services plan for consistency with application.

2. Life Enrichment Options – LEO at Trailhead

Funding Request:	$250,000 (Secured Grant) 5 affordable rental units; 1 manager unit
Executive Board Recommendation:	$250,000 (Secured Grant) See attached Proposed Funding Sources for distribution of City Funds

Project Summary:
The LEO at Trailhead project will provide 5 units of affordable housing for individuals with developmental disabilities (DD units) with an additional studio unit for a 24/7 live-in care provider, fully integrated into a mixed-income, mixed-use Transit Oriented Development (TOD) in Central Issaquah. All of the DD units are single room occupancy (SRO), and all will serve residents at or below 30% of area median income (AMI). LEO is partnering with King County Housing Authority (KCHA), Spectrum Development Solutions and the City of Issaquah to accomplish this project.

LEO will be situated on the first residential floor within the Trailhead building, above two levels of commercial and parking, and will be integrated into the rest of the affordable housing units operated by KCHA. KCHA is serving as LEO's development consultant and will sell the completed units to LEO upon completion. In addition, the Central Issaquah TOD Project will have spaces for other supportive services like a health center (Health Point), a behavioral health clinic (Valley City), and an Opportunity Center, which will be owned and operated by the city.

The project will include shared amenities dedicated to LEO including a living room, laundry, lounge / entertainment space, and kitchen. LEO tenants will have access to rest of the amenity spaces offered in the Trailhead building.

LEO's model is based on contracting with licensed long-term care professionals who live on-site in homes owned and managed by LEO. Care providers must adhere to minimum standards of care and provide 24- hour care to our residents, under the supervision of Department of Social and Health Services (DSHS) and the Developmental Disabilities Administration (DDA). LEO will serve as the landlord for the project and will enter into an agreement signed by a care provider chosen by LEO.

Funding Rationale:
The Executive Board recommends funding with conditions listed below for the following reasons:

- The project aligns with the City of Issaquah Housing Strategy and fulfills a key component of a larger project that has been a longstanding City priority.
- The project is part of a larger partnership with King County Housing Authority, Spectrum Development Solutions and the City of Issaquah which will create significant affordable housing.
- The TOD project is expected to act as a catalyst for the whole neighborhood economic development in an area within the City's Regional Growth Center.
- The project is sited at an excellent location, across the street to Tibbetts Valley Park, a thirty-acre active recreational community park, directly next to a light rail site is planned to open in 2041, and next to the Issaquah Transit Center which offers frequent, all-day transit service.
- The project serves a special needs population (developmentally disabled individuals).

Proposed Conditions:

Standard Conditions: Refer to list of standard conditions found at end of this memo.

Special Conditions:

1. **Funds shall be used by the Agency for the acquisition of the completed units.**

2. ARCH's funding commitment shall continue for **thirty-six (36) months** from the date of Council approval and shall expire thereafter if all conditions are not satisfied. An extension may be requested to ARCH staff no later than sixty (60) days prior to the expiration date. At that time, the Agency will provide a status report on progress to date. ARCH staff will consider up to a 12-month extension only on the basis of documented, meaningful progress in bringing the project to readiness or completion. At a minimum, the Agency will demonstrate all capital funding is likely to be secured within a reasonable period of time.

3. Funds will be in the form of a **secured grant with no repayment**, so long as affordability and target population is maintained, and the service funds necessary to provide services to this population are available.

4. A covenant is recorded ensuring affordability for at least 50 years, with affordability generally as shown in the following table. Limited changes to the matrix may be considered based on reasonable justification as approved by ARCH staff.

Affordability	Beds	Total
30% AMI	5	5
manager unit	1	1
TOTAL	6	6

5. The net developer fee shall be established at the time of finalizing the Contract Budget and will follow the schedule established by ARCH. Net developer fee is defined as that portion of the developer fee paid out of capital funding sources and does not include the deferred portion which is paid out of cash flow from operations after being placed in service.

6. Based on the availability of adequate support services, the project will contain 5 units or beds for residents with Developmental Disabilities, unless otherwise approved by ARCH. LEO will work with Medicaid for referrals, or other referral method as approved by ARCH.

3. Inland Group/Horizon Housing Alliance – Horizon at Totem Lake

Initial Funding Request:	$1,500,000 (Deferred, Contingent Loan) in addition to $4,000,000 awarded from the 2020 funding round.
Executive Board Recommendation:	$1,500,000 (Deferred, Contingent Loan) See attached Proposed Funding Sources for distribution of City Funds

Project Summary:
Based on their successful proposal for the Together Center redevelopment, Inland/Horizon seek to create a similarly configured affordable development comprising 300 income-restricted units supplemented by an additional 168 workforce rental units in the redeveloping Totem Lake neighborhood of Kirkland.

The proposed project is located at the site of a former new car dealership will consist of three residential towers with level 1 of sub-grade parking and 2 levels of above grade parking. The first floor will consist of common areas/commercial space and the majority of the residential units will be on the third floor and above. The project proposes to utilize 9% tax credits in 40 units affordable at 30% and 50% AMI, of which 30 would be set aside for those exiting homelessness. Another 260 units is proposed at 50% and 60% AMI, which will be funded through 4% tax credits and tax-exempt bond financing. The project includes a partnership with Hopelink to provide services to the formerly homeless households.

In the most recent ARCH funding round, $4 million was approved for the project, which applied for but was unsuccessful in its first effort to obtain Low Income Housing Tax Credits. To ensure the project is able to move forward and compete again for tax credits, additional funding is needed to meet cost increases that have occurred in the last year. Separately, the City of Kirkland has already provided an early commitment to release $2.5 million for site acquisition, and Microsoft has provided $18 million in initial funding through the ELAP program which is administered by the Washington State Finance Commission for the acquisition of the property. The property acquisition will be completed in December 2021.

Funding Rationale:
The Executive Board recommends funding with conditions listed below for the following reasons:

- The project has the opportunity to deliver mixed income housing on a significant scale in a location with access to transit and other amenities.
- The project leverages a significant amount of tax credit and other public and private financing.
- If successful in obtaining a 9% allocation, the project would provide housing for homeless families as well as other low-income families and individuals.
- If unsuccessful in obtaining a 9% allocation, the project would still deliver a significant amount of housing affordable to a range of incomes.
- The project will deliver a large amount of family-sized, 3-bedroom units.

- The developer is vertically integrated and able to bring cost efficiencies to the development. The project will be co-located with workforce housing creating a project of around 470 units built simultaneously, bringing an economy of scale.
- The project would allow timely investment of in lieu fees collected from a downtown Kirkland development to invest in another redeveloping neighborhood.
- The project maximizes utilization of the site per zoning.

Proposed Conditions:

Standard Conditions: Refer to list of standard conditions found at end of this memo.

Special Conditions:

1. The funding commitment shall continue for **twelve (12) months** from the date of Council approval and shall expire thereafter if all conditions are not satisfied. An extension may be requested to ARCH staff no later than sixty (60) days prior to the expiration date. ARCH staff will grant up to a 12-month extension.

2. Funds shall be used by the Agency towards **acquisition, soft costs, and construction.** Funds may not be used for any other purpose unless ARCH staff has given written authorization for the alternate use.

3. Funds will be in the form of a **deferred, contingent loan**. Loan terms will account for various factors, including loan terms from other fund sources and available cash flow. Final loan terms shall be determined prior to release of funds and must be approved by ARCH Staff. **It is anticipated that loan payments will be based on a set repayment schedule and begin after repayment of deferred developer fee** with 1% interest. The terms will also include a provision for the Agency to a defer payment if certain conditions are met (e.g. low cash flow due to unexpected costs). Any requested deferment of loan payment is subject to approval by ARCH Staff, and any deferred payment would be repaid from future cash flow or at the end of the amortization period.

5. The net developer fee shall be established at the time of finalizing the Contract Budget and will follow the ARCH Net Developer Fee Schedule. Net developer fee is defined as that portion of the developer fee paid out of capital funding sources and does not include the deferred portion which is paid out of cash flow from operations after being placed in service.

6. A covenant is recorded ensuring affordability for at least 50 years, with affordability generally as shown in the following table. **Limited changes to the unit mix may be considered based on reasonable justification as approved by ARCH staff. If the project is unsuccessful in securing 9% tax credits in the current round, the project may shift the allocation of units set aside at 30% AMI to either 50% or 60% AMI. The total number of units affordable up to 60% AMI may not be decreased by more than 10%. The total number of units affordable up to 50% AMI may also not be decreased by more than 10%.**

Affordability	Studio	1 BR	2BR	3BR	Total
30%		8	8	4	20
50%	5	23	49	19	96
60%	12	38	97	47	184
Total	17	69	154	60	300

7. The combined final loan amount shall be up to $5.5 million, subject to approval by ARCH staff based on a documented funding gap. ARCH reserves the right to reduce its total loan amount based on changes to the project sources and uses, and unit mix.

8. The Agency shall submit evidence of private funding commitments for all components of the project, including the workforce housing. In the event commitment of funds cannot be secured consistent with the timeframe identified in the application, the Agency shall immediately notify ARCH, and describe the actions it will undertake to secure alternative funding and the timing of those actions subject to ARCH review and approval.

9. Agency must submit for ARCH staff approval a management and services plan which includes coordination of services with outside providers and parking management.

10. Agency shall submit a marketing plan for approval by ARCH staff. The plan should include how the Agency will do local targeted marketing outreach to local, media business and community organizations.

11. The Agency shall work with the city to minimize required parking and to provide alternative transportation options for the residents that reduce reliance on private automobiles, such as provision of public transit passes, bike storage, car sharing programs and other incentives. The Agency may charge for parking, subject to approval by ARCH staff, provided that the Agency has minimized the overall cost burden on residents with the lowest incomes.

12. In the interest of discouraging segregation of residents by income within the project, the Agency shall look for ways to integrate the population across the project with shared amenities, unifying esthetics and other programmatic features to build community within the project.

13. The Agency will establish a services reserve account in the amount of no less than $1.6M to be used for services expenses to fill gaps in operating income, unless other ongoing resources for supportive services is identified, as approved by ARCH. A services reserve budget must be approved by ARCH at the close of permanent finance and will be monitored on an annual basis for consistency with the services plan. Any deviation from the services budget must be pre-approved by ARCH.

4. Friends of Youth New Ground Kirkland Redevelopment

Funding Request:	$675,000 additional to previously invested $250,000 awarded in 2005 (Secured Grant) 14 total affordable bedrooms/suites replacing existing 8 units
Executive Board Recommendation:	$675,000 (Secured Grant)

Project Summary:
Friends of Youth (FOY) proposes to redevelop a site currently in their portfolio in the Houghton neighborhood of Kirkland into 14 bedrooms/suites of affordable housing at 30% AMI for youth between the ages of 18 to 24. The existing building would be extensively rehabbed including an alteration to accommodate four additional bedrooms. The target population would be clients who are ready for independent living, likely pursuing education or entry level employment, including young adults who are not current clients of the agency. The renovation supports FOY goals to diversify housing options across its portfolio and create projects that are economically sustainable and not dependent on annual fundraising.

Funding Rationale:
The Executive Board supports the intent of this application for the following reasons:

- This project represents an opportunity to rehab and extend the useful life of a vacant building within an agency current portfolio.
- The project would increase the number of young adults that it can serve at this property by adding two more bedrooms/suites.
- The project is well located in a neighborhood with transit, amenities and access to educational and job opportunities for young adults.
- The project leverages a significant amount of other public funding.
- The project helps to advance the City of Kirkland's recently adopted affordable housing targets, which aim to achieve over 12,000 affordable units by 2044.
- The project serves a special needs population (young adults).

Special Conditions:

1. The funding commitment continue for **twelve (12) months** from the date of Council approval and shall expire thereafter if all conditions are not satisfied. An extension may be requested to ARCH staff no later than sixty (60) days prior to the expiration date. At that time, the Agency will provide a status report on progress to date and expected schedule for start of construction and project completion. ARCH staff will consider a twelve-month extension only on the basis of documented, meaningful progress in bringing the project to readiness or completion. At a minimum, the Agency will demonstrate that all capital funding has been secured or is likely to be secured within a reasonable period of time.

2. Funds shall be used by Agency toward **soft costs, design, permits and construction**. Funds may not be used for any other purpose unless ARCH staff has given written authorization for the alternate use. Spending of construction contingency must be approved in advance by ARCH. If after the

completion of the project there are budget line items with unexpended balances, ARCH and other public funders shall approve adjustments to the project capital sources, including potentially reductions in public fund loan balances.

3. Funds will be in the form of a **secured grant with no repayment,** so long as affordability and target population is maintained, and the service funds necessary to provide services to this population are available.

4. The net developer fee shall be established at the time of finalizing the Contract Budget and will follow ARCH Net Developer Fee Schedule. Net developer fee is defined as that portion of the developer fee paid out of capital funding sources and does not include the deferred portion which is paid out of cash flow from operations after being placed in service.

5. A covenant is recorded ensuring affordability for at least 50 years, with size and affordability distribution per the following table. Limited changes to the matrix may be considered based on reasonable justification as approved by ARCH staff.

Affordability	1-bedroom/suite	Total
30%	14	14
Total	14	14

6. ARCH shall review and approve the services budget and services plan for consistency with application.

7. Agency must provide a parking plan which will encourage minimal parking and include within the project design bike facilities to inspire less vehicle use.

8. Agency must review the project design in an effort to maximize private space and security of private space and minimize common space. Design must propose security measures to encourage privacy such as locks in private areas.

9. If not included within the proposed design, Agency shall evaluate and consider permanent mini fridge/mini kitchen in each room to improve privacy and independence.

10. Agency shall evaluate and consider the maximization of sustainability features such as in efficient building envelope, heat pumps and propose a plan for the maximization of sustainability.

11. Agency shall present a plan to ARCH for managing the leasing and use of the common space that will explain how Agency will match residents, delineate the responsibilities for the lease/sub-lease, and handle management of each suite and common spaces.

12. Agency shall provide to ARCH for review a Capital Needs Assessment for all buildings in ARCH's portfolio.

5. Attain Housing – Totem Six Plex

Funding Request: $650,000 (Secured Grant)
6 new housing units

Executive Board Recommendation: $0

Project Summary:
The proposed project is the new construction of a three-story structure with six two-bedroom units of transitional housing for homeless families earning up to 30% of area median income (AMI). The property currently contains of an existing four plex building owned and managed by Attain Housing. Attain also manages the four plex on the lot next to the proposed construction site. The proposed new building will sit in what is currently a lawn between the two four plex buildings. The project represents an expansion of existing programs operated by Attain, with overall capacity growing from 8 to 14 units across the three buildings.

Funding Rationale:
The Executive Board potentially supports the concept of the Attain Housing proposal but does not recommend funding at this time. The Executive Board would welcome an application in the next round. This would provide an opportunity for Attain Housing to address the issues identified below:

- Further development of building design, siting and parking and conformance with zoning requirements.
- Identification of other public funding sources included in the development budget.
- Identification of adequate project management capacity, including recommended engagement of a development consultant who will assist with the financing and project management of the project through construction completion.
- Definition of agency priorities including a rehab which the agency has indicated is its other top priority.
- Development of an updated development budget and operating budget which addresses in increases in construction costs based on and updated cost estimate and funding to address the additional cost increases.
- Development of a project schedule consistent with the proposed funding and local permitting requirements.
- Further discussion of long-term strategy for funding supportive services for transitional housing.

Standard Conditions (Apply to all projects):

1. The Agency shall provide revised development and operating budgets based upon actual funding commitments, which must be approved by ARCH staff. If the Agency is unable to adhere to the budgets, ARCH must be immediately notified and (a) new budget(s) shall be submitted by the Agency for ARCH's approval. ARCH shall not unreasonably withhold its approval to (a) revised budget(s), so long as such new budget(s) does not materially adversely change the Project. This shall be a continuing obligation of the Agency. Failure to adhere to the budgets, either original or as amended may result in withdrawal of ARCH's commitment of funds.

2. The Agency shall submit evidence of funding commitments from all proposed public sources. In the event commitment of funds identified in the application cannot be secured in the time frame identified in the application, the Agency shall immediately notify ARCH, and describe the actions it will undertake to secure alternative funding and the timing of those actions subject to ARCH review and approval.

3. In the event federal funds are used, and to the extent applicable, federal guidelines must be met, including but not limited to: contractor solicitation, bidding and selection; wage rates; and Endangered Species Act (ESA) requirements. CDBG funds may not be used to repay (bridge) acquisition finance costs.

4. The Agency shall maintain documentation of any necessary land use approvals and permits required by the city in which the project is located.

5. The Agency shall submit monitoring quarterly reports through completion of the project, and annually thereafter, and shall submit a final budget upon project completion. If applicable, Agency shall submit initial tenant information as required by ARCH.

6. Agency shall maintain the project in good and habitable condition for the duration of period of affordability.

Attachment 1: Proposed Funding Sources

	Recommended Projects				
	Horizon at Totem Lake	Hope Starts Here	LEO at Trailhead	New Ground Kirkland	Total 2021 Recommended Funding
Total Recommended Award	$1,500,000	$750,000	$250,000	$675,000	$3,175,000
Bellevue	$192,900	$16,100	$32,200	$86,800	$328,000
Bothell	$54,900	$4,600	$9,200	$24,700	$93,400
Clyde Hill	$10,000	$800	$1,700	$4,500	$17,000
Hunts Point	$1,000	$100	$200	$400	$1,700
Issaquah	$66,200	$5,500	$11,000	$29,800	$112,500
Kenmore	$36,200	$3,000	$6,000	$16,300	$61,500
Kirkland	$635,200	$53,000	$105,900	$285,900	$1,080,000
Medina	$7,800	$700	$1,300	$3,500	$13,300
Mercer Island	$19,700	$1,600	$3,300	$8,900	$33,500
Newcastle	$17,200	$1,400	$2,900	$7,700	$29,200
Redmond	$337,000	$28,100	$56,000	$151,600	$572,700
Sammamish	$71,200	$5,900	$11,900	$32,000	$121,000
Woodinville	$47,000	$3,900	$7,800	$21,200	$79,900
Yarrow Point	$3,700	$300	$600	$1,700	$6,300
Total Local Funds	$1,500,000	$125,000	$250,000	$675,000	$2,550,000
CDBG Funds		$627,869*			$627,869
Prior Award	$4,000,000				
Total Award	$5,500,000				

*Final CDBG award to be finalized based on actual HUD grant numbers

Attachment 2: Project Economic Summaries

Applicant: LifeWire
Project Name: Hope Starts Here
Location: Bellevue (confidential)
Project Description: Acquisition rehab with 25 units for domestic violence survivors

Financing Sources:

Source Name	Proposed Amount	Status
ARCH	$750,000	
KC Housing Finance Program	$2,000,000	$4,300,000 committed
WA State Commerce HTF	$3,500,000	Estimated up to $1,000,000 award
City of Bellevue	$2,000,000	Up to $3,200,000 recommended
Capital Campaign/LifeWire Equity	$4,133,733	
Total Sources	**$12,383,733**	
Bridge Financing:		
King County Bridge Loan	$4,000,000	Committed
REDI Fund	$5,000,000	Committed

Development Budget:

Proposed Use	Estimated Amount
Acquisition:	$8,848,194
Construction:	$2,293,396
Soft Costs:	$445,869
Permanent Financing	$135,048
Capitalized Reserves	$260,525
Other Development Costs	$400,701
Total Uses	**$12,383,733**

Applicant: Life Enrichment Options (LEO)
Project Name: LEO at Trailhead
Location: 1515 NW Maple St, Issaquah WA
Project Description: Acquisition of 5 units/beds for persons with developmental disabilities plus 1 caregiver unit within the new construction Trailhead TOD development

Financing Sources

Source Name	Proposed Amount	Status
ARCH	$250,000	
KC Housing Finance Program	$250,000	Proposed – anticipate State funds may cover
WA State Commerce HTF	$299,694	Application anticipated spring 2022
Total Sources	**$799,694**	

Development Budget

Proposed Use	Estimated Amount
Acquisition:	$799,694
Total Uses	**$799,694**

Applicant: Inland Group/Horizon Housing Alliance
Project Name: Horizon at Totem Lake
Location: 12335 120th Ave NE, Kirkland, WA
Project Description: New construction of mixed use affordable and workforce housing project with 300 affordable units and 178 workforce units

Financing Sources

Source Name	Proposed Amount	Status
ARCH	$5,500,000	$4 million committed in 2020 funding round; $2.5 million approved for December 2021 acquisition
KC Housing Finance Program	$6,222,808	Committed
9% LIHTC Equity	$9,992,576	Application submitted
4% LIHTC Equity	$42,220,944	Application March 2022
Tax Exempt Bonds	$49,220,000	Application March 2022
Deferred Developer Fee	$10,476,847	Committed
Total Sources	**$123,633,175**	

Development Budget

Proposed Use	Estimated Amount
Acquisition:	$14,436,693
Construction:	$75,915,129
Soft Costs:	$16,014,352
Permanent Financing	$8,237,423
Capitalized Reserves	$2,982,281
Other Development Costs	$6,047,297
Total Uses	**$123,633,175**

Applicant: Friends of Youth
Project Name: New Ground Kirkland Redevelopment
Location: 11005 NE 68th Street, Kirkland WA
Project Description: Redevelopment of existing structure for 14 affordable beds for young adults

Financing Sources

Source Name	Proposed Amount	Status
ARCH	$675,000	
KC Housing Finance Program	$1,171,800	Recommended $1,806,800
WA State Commerce HTF	$635,000	Not anticipating any HTF award
2021 State Leg. Appropriation	$258,000	Committed
Capital Campaign	$27,500	
Friends of Youth	$15,000	
Total Sources	**$2,782,300**	

Development Budget

Proposed Use	Estimated Amount
Acquisition:	$0
Construction:	$1,939,813
Soft Costs:	$632,500
Permanent Financing	$36,236
Capitalized Reserves	$42,000
Other Development Costs	$131,751
Total Uses	**$2,782,300**

City of Kenmore Resolution 22-378

Amendment No. 1

To

Amended and Restated Interlocal Agreement for ARCH

A Regional Coalition for Housing

WHEREAS, the Cities of Bellevue, Kirkland, Redmond, Bothell, Woodinville, Issaquah, Mercer Island, Newcastle, Beaux Arts, Clyde Hill, Hunts Point, Medina, Yarrow Point, Kenmore and Sammamish, municipal corporations organized under the laws of the State of Washington, and King County, a subdivision of state government (the "Parties"), entered into an Amended and Restated Interlocal Agreement for ARCH, a Regional Coalition for Housing, pursuant to the Interlocal Cooperation Act, chapter 39.34 RCW, and effective as of July 1, 2010 ("Amended and Restated Agreement"); and

WHEREAS, the Parties wish to amend the Amended and Restated Agreement to adopt more contemporary and inclusive language related to the name and makeup of the advisory board providing advice and recommendations to the ARCH Executive Board while also helping increase the diversity and breadth of skills and experience serving on such advisory board over time.

NOW, THEREFORE, the Parties to the Amended and Restated Agreement do hereby agree to this Amendment No. 1 as follows:

Section 1 is amended to read as follows:

1. PURPOSE. All Parties to this Agreement have responsibility for local and regional planning for the provision of housing affordable to people that work and/or live in East King County. The Parties desire to act cooperatively to formulate affordable housing goals and policies and to foster efforts to provide affordable housing by combining public funding with private-sector resources. The Parties further intend that this interlocal agreement serve as a legal framework for all communities within the ARCH sphere of influence (See Exhibit A) to cooperate in planning for and providing affordable housing; the Parties therefore encourage other cities in East King County to join the Parties in this endeavor.

Section 2 is amended to read as follows:

2. STRUCTURE. To accomplish the purposes of this Agreement, the Parties hereby create a joint and cooperative undertaking responsible for administering the activities described herein, to be called A Regional Coalition for Housing ("ARCH"). ARCH shall be governed by an Executive Board composed of members as provided for in section 4.a of this Agreement. The Executive Board shall constitute a "joint board" as that term is used in RCW 39.34.030(4). The Executive Board shall be assisted by an administrative staff and by a Community Advisory Board.

Section 4.d(10) is amended to read as follows:

(10) appoint Community Advisory Board Members;

Section 7 is amended to read as follows:

7. COMMUNITY ADVISORY BOARD. A Community Advisory Board is hereby created to provide advice and recommendations to the Executive Board on land and/or money resource allocation for affordable housing projects and to provide public relations and educational outreach services. The Community Advisory Board shall consist of not more than fifteen (15) and not less than twelve (12) community members; provided, however that the size of such board may be temporarily increased by the Executive Board through the appointment of up to an additional four (4) members in order to enhance such board diversity and breadth of skills and experience; provided further, that such additional temporary appointments may continue to serve on such board as standing members over time through attrition, thereby eventually reducing the size of the board back to not more than fifteen (15) and not less than twelve (12) members. The Executive Board shall appoint members to the Community Advisory Board. Community members appointed to the Community Advisory Board must have a knowledge and understanding of affordable housing and be committed to the furtherance of affordable housing on the Eastside. Appointments shall be for a four-year term with service limited to a total of two consecutive terms. The Executive Board shall adopt procedures for the convening and administration of the Community Advisory Board. A community member may be removed from the Community Advisory Board by the Executive Board with or without cause upon a majority vote of membership of the Executive Board.

Section 8 is amended to read as follows:

8. MEETINGS OF THE COMMUNITY ADVISORY BOARD.

a. Frequency. The Community Advisory Board shall meet as often as it deems necessary, but not less than quarterly.
b. Quorum. A quorum at any meeting of the Community Advisory Board shall consist of the Board members who represent a simple majority of the Board's membership, including any temporary appointments made pursuant to Section 7.
c. Action. No action may be taken except at a meeting where a quorum exists. Action by the Community Advisory Board requires an affirmative vote by a majority of those members attending a Board meeting where a quorum exists. No action shall be taken except at a meeting open to the public.

This Amendment No. 1 to the Amended and Restated Interlocal Agreement for ARCH shall be effective when approved in accordance with Section 16 of the Agreement and may be executed in counterparts in accordance with Section 28 of the Agreement.

*****

[Signature Pages Follow]

Approved and executed this ___ day of _____, 202_.

Name of Party: _____

_____

By: _____

Its: _____

Approved as to form

_____

City Attorney

A Regional Coalition for Housing

Kenmore City Council

February 22, 2022

Lindsay Masters, Executive Manager

Elsa Kings, Trust Fund Manager

Agenda

- ARCH Consultant Assessment Summary
- 2022 ARCH Administrative Budget and Work Program
  - Staff positions
  - Dues structure
  - Work Program Priorities
  - Parity Update
- ARCH Interlocal Agreement Amendment
- 2021 Trust Fund Recommendations

ARCH Assessment

- Purpose
  - Evaluate existing staff capacity and work to inform discussions on expanding membership or services to other communities in north and east King County.
- Approach
  - Interviews with ARCH board and staff, member city staff, for profit and nonprofit developers and other stakeholders
  - Review of trends in work levels and activity

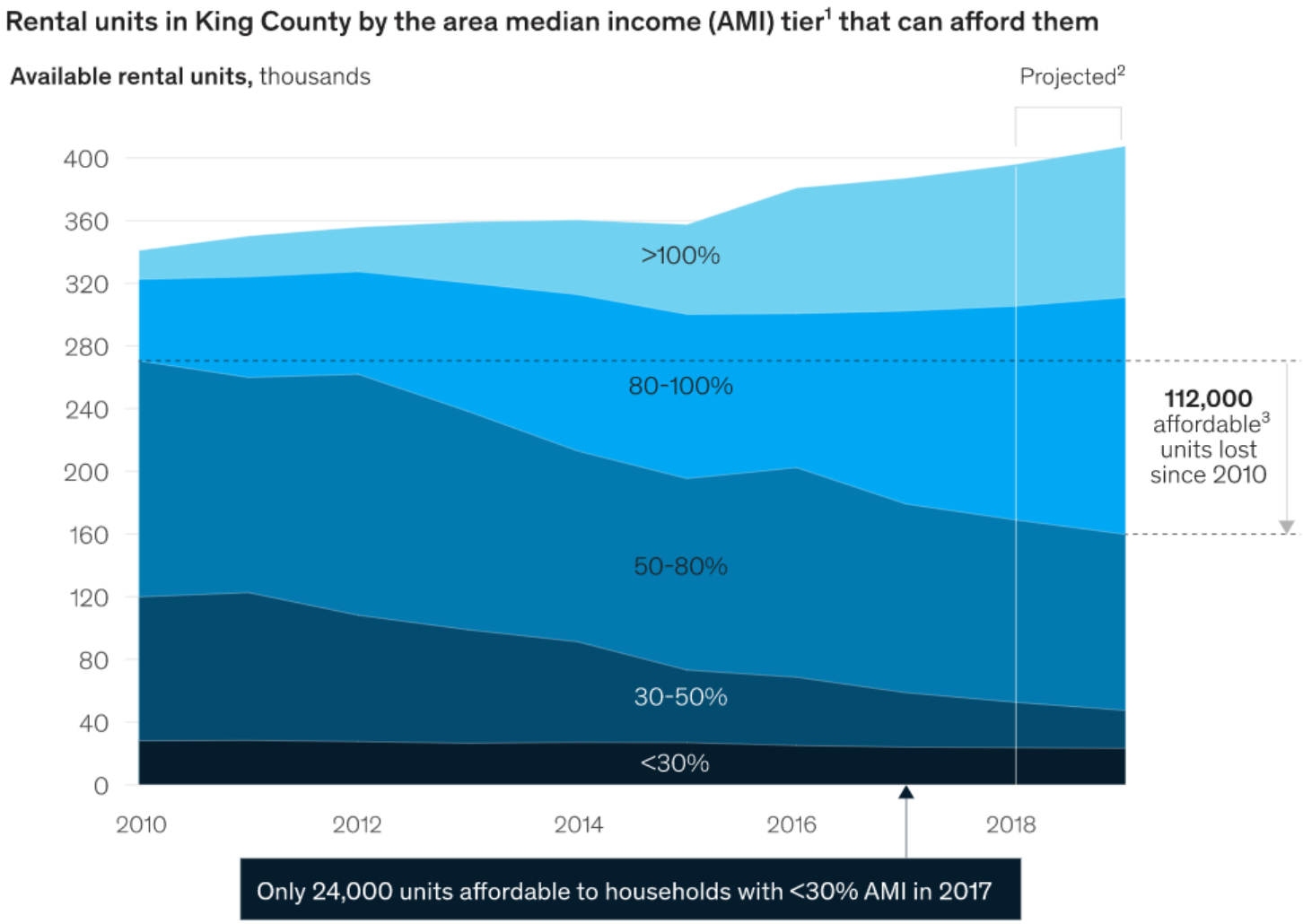
ARCH

Analysis of ARCH Staff Capacity and Options for Meeting Members Affordable Housing Needs

September 2, 2021
Prepared by: Cedar River Group

There is a dramatic need for more housing – specifically affordable housing – and the need is growing.

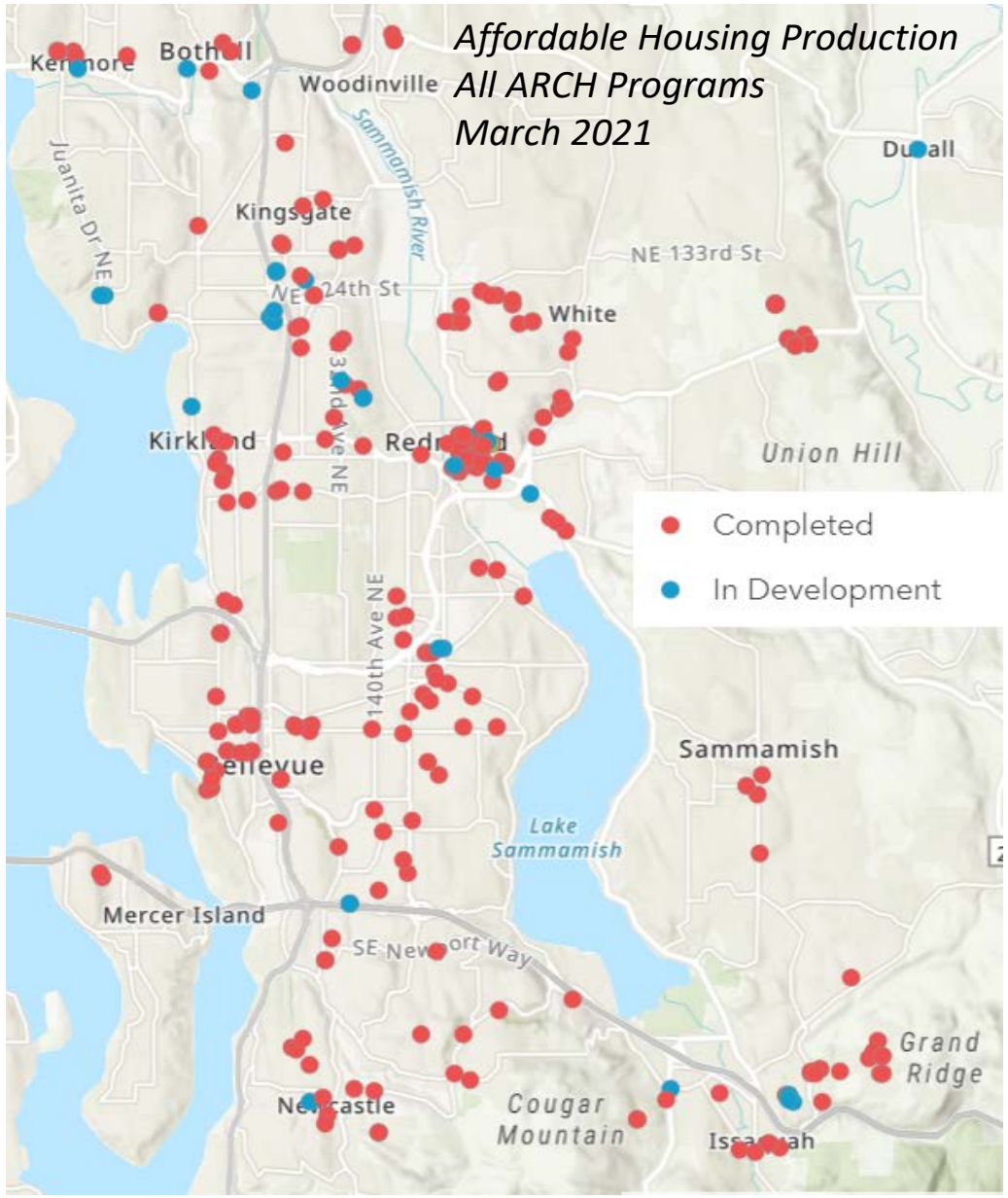
- Population growth of 12% in King County and job growth of 21% versus 8% growth in housing.
- New jobs and households are disproportionately higher income.
- Another 1.2 million jobs estimated in Puget Sound by 2050
- 124,000 severely cost-burdened households in King County



McKinsey & Co, Jan. 2020

ARCH has a proven record of building affordable housing, helping cities implement best policies, and maintaining those assets over time.

- Produced or preserved over 5,000 units with $80 million in local investment through the Housing Trust Fund, leveraging more than $880 million in other funding
- Assisted ten cities adopt local incentive or inclusionary programs, yielding more than 2,800 affordable units built or in the pipeline
- Established monitoring systems and procedures to ensure continued affordability and compliance.
- Helped hundreds of low and moderate income households achieve homeownership, creating over $90 million in appreciation for owners.
- Worked on more than 50 policies, plans, code amendments or regulations for cities aimed at creating more housing.



ARCH is well-regarded by member cities, outside stakeholders and developers.

Members and other stakeholders believe ARCH is doing well at administering existing programs, but staff are fully utilized.

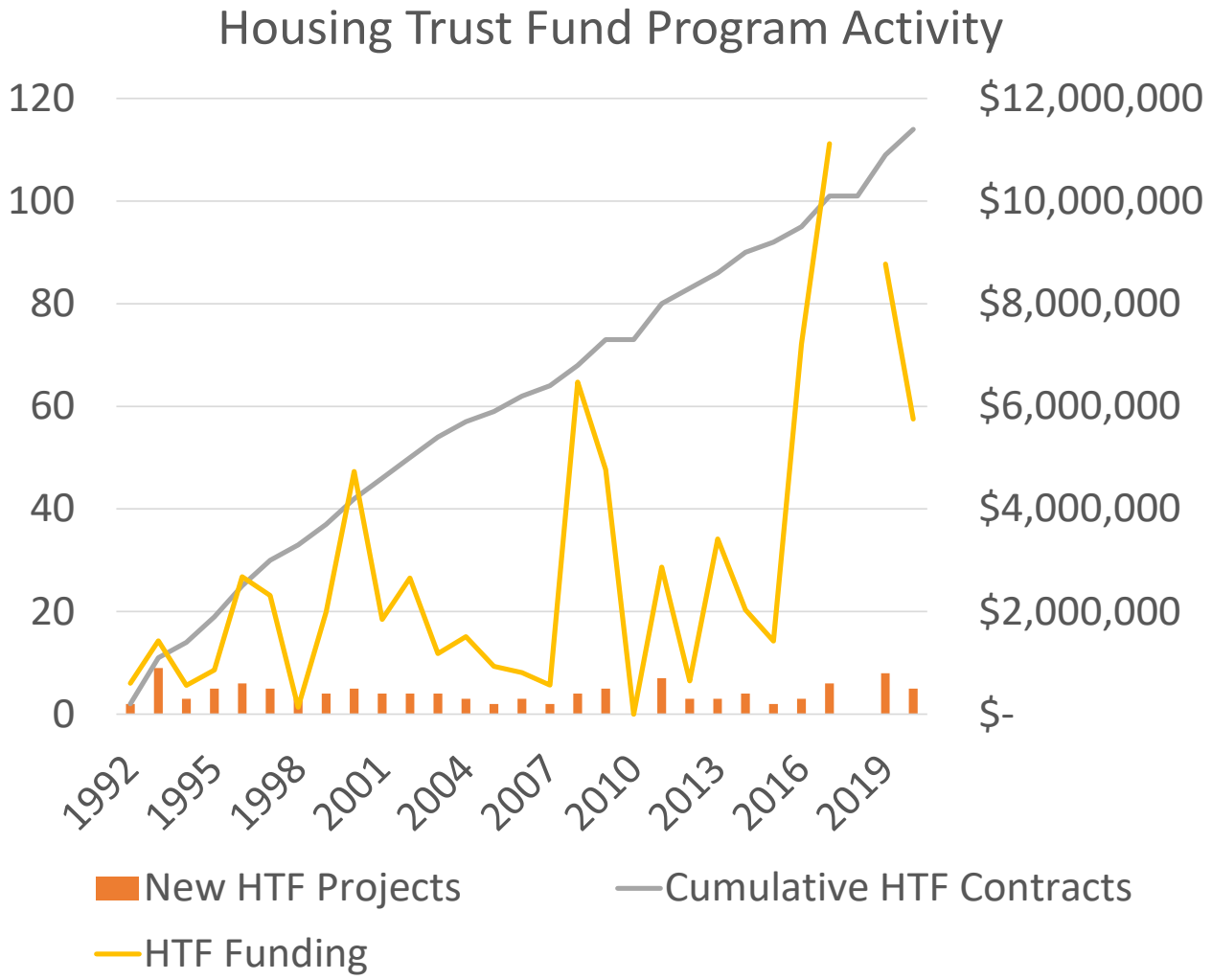
Developers view ARCH as a good partner that helps navigate local processes and work effectively with city staff where projects are located.

ARCH is viewed as an important funder who is comparatively easy to work with and whose initial money helps bring other dollars to projects.

Outside stakeholders believe ARCH should be scaling up its activities to meet the dramatic growth and need for affordable housing in east King County.

Staff capacity has not grown sufficiently to keep up with member's needs and requests.

- 2000:
  - Two cities with incentive programs, none citywide
  - 40 Trust Fund contracts
- 2021:
  - Ten cities with incentive programs
  - Seven cities with local housing strategies
  - Over 100 Trust Fund contracts

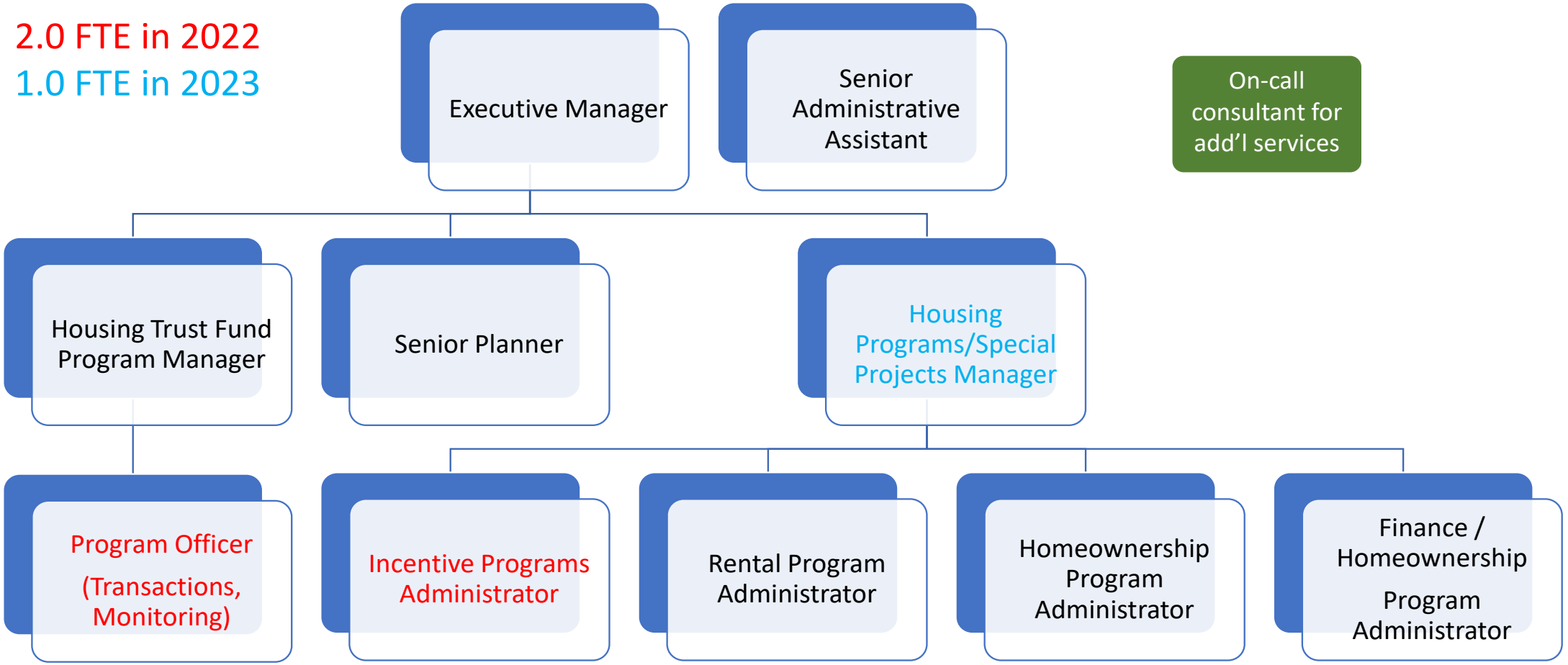


ARCH Executive Board Recommendation:

Address most urgent gaps and plan for growth in next 3-5 years:

2.0 FTE in 2022

1.0 FTE in 2023



2022 Administrative Budget: Structure for New Dues

- New fee revenue frees up dues to pay for 1 FTE
- New tier of member dues pay for 1FTE for incentive program administration:
  - Cities with active incentive programs pay on a per capita basis (Bellevue, Issaquah, Kirkland, Redmond)
  - Cities with less active programs pay a minimum contribution of $3,000 (Kenmore, Newcastle, Sammamish, Mercer Island)
  - Cities with adopted programs that do not yet have participating projects do not yet contribute additional dues (Bothell, Woodinville).
  - Cities without incentive programs do not contribute additional dues (Beaux Arts, Clyde Hill, Hunts Point, Medina, Yarrow Point).

ARCH Work Program

Affordable Housing Investment

- Housing Trust Fund
- Special Projects

Policy and Planning

- Local Policy, Planning and Code Development
- Interlocal/ Eastside Planning
- State Legislative
- Regional/ Countywide Planning

Incentive Program Administration

- Inclusionary Programs
- Voluntary Bonus Programs
- MFTE Programs

Stewardship of Affordable Housing

- Homeownership Program
- Rental Program

Outreach and Education

- Housing 101 / Education
- Assisting the Public with Housing Search
- Marketing Affordable Housing

Administration

- Executive Board, Citizen Advisory Board
- Quarterly Reporting
- Administering Agency Coordination
- Local Policy, Planning and Code Development

2022 Work Program Priorities

- Provide a housing needs analysis for all member cities in support of Comprehensive Plan Updates
- Report on measurable goals for production and preservation of affordable housing in the ARCH region
- Continue to support proposals for dedicated revenue sources for affordable housing
- Expand ARCH's capacity to accomplish its broader mission
- Continue to provide excellent stewardship of affordable housing assets, and develop new compliance tools to meet evolving program, property and tenant needs
- Seek opportunities to advance projects and programs with high potential impact and facilitate projects in the pipeline to the greatest extent possible
- Develop a strategic planning process to guide the ARCH coalition into 2023 and beyond

ARCH Trust Fund and Parity Goals

- ARCH members created “Parity” to establish a metric to encourage voluntary local investment in affordable housing through a variety of means (direct funding, land contributions, fee waivers, etc.)
  - Resulted in approximately $80 million invested, over $880 million leveraged.
- A total high and low goal for the region is distributed equitably amongst cities based on population, employment and housing targets.
- The totals are based on original goals set in 1998, adjusted for inflation – previous goals ranged from $1.8 million to $3.8 million.
- Recent investment has far exceeded the goals.

City	2020 Parity Goals		2020 Contributions			2020 Total	2016 - 2020
	Low Goal	High Goal	CDBG	General Fund	Other*		Annual Average
Beaux Arts Village	$53	$1,816	$135			$135	$137
Bellevue	$681,807	$1,054,164		$413,213	$603,718	$1,016,931	$1,288,273
Bothell	$173,394	$314,235	$34,983	$78,000	$31,845	$144,828	$93,616
Clyde Hill	$0	$18,431	$826	$15,000	$1,977	$17,803	$23,521
Hunts Point	$0	$2,542	$197	$2,500	$58	$2,755	$2,886
Issaquah	$170,941	$348,067	$23,970	$65,156	$2,092	$91,218	$142,749
Kenmore	$53,297	$179,420	$19,090	$40,000	$26,103	$85,193	$72,466
Kirkland	$343,916	$528,052	$139,322	$415,000	$3,861,072	$4,415,394	$2,309,630
Medina	$0	$19,642	$1,349	$12,340		$13,689	$14,650
Mercer Island	$17,766	$146,903	$14,048	$33,768		$47,816	$79,469
Newcastle	$13,058	$75,116	$6,889	$27,000		$33,889	$59,892
Redmond	$296,200	$613,357	$126,244	$500,000	$4,256,672	$4,882,916	$2,138,603
Sammamish	$31,978	$384,176	$15,559	$100,000	$43,186	$158,745	$174,212
Woodinville	$56,589	$151,633	$9,163	$51,500	$33,263	$93,926	$44,948
Yarrow Point	$0	$6,446	$378			$378	$5,063
Total	$1,839,000	$3,844,000	$392,153	$1,753,477	$8,859,986	$11,005,616	$6,450,115

*Includes Fee in Lieu funds, 1406 sales tax funds, loan repayments, etc.

Parity Update – Look Ahead

Previous goals do not reflect increases in land and construction costs in the last two decades

ARCH Executive Board discussed raising the investment goal for the region but did not come to consensus.

Further engagement with member cities is needed to collect input on how to establish local investment goals.

ARCH Interlocal Agreement Amendment

- ARCH ILA establishes a 12-15 member Citizen Advisory Board to advise the Executive Board on funding/resource allocation
- ILA Amendment replaces “Citizen Advisory Board” with “Community Advisory Board”, and allows appointments above 15 members to enhance board diversity, skills and experience
- Amendment was recommended by a unanimous vote of the ARCH Executive Board

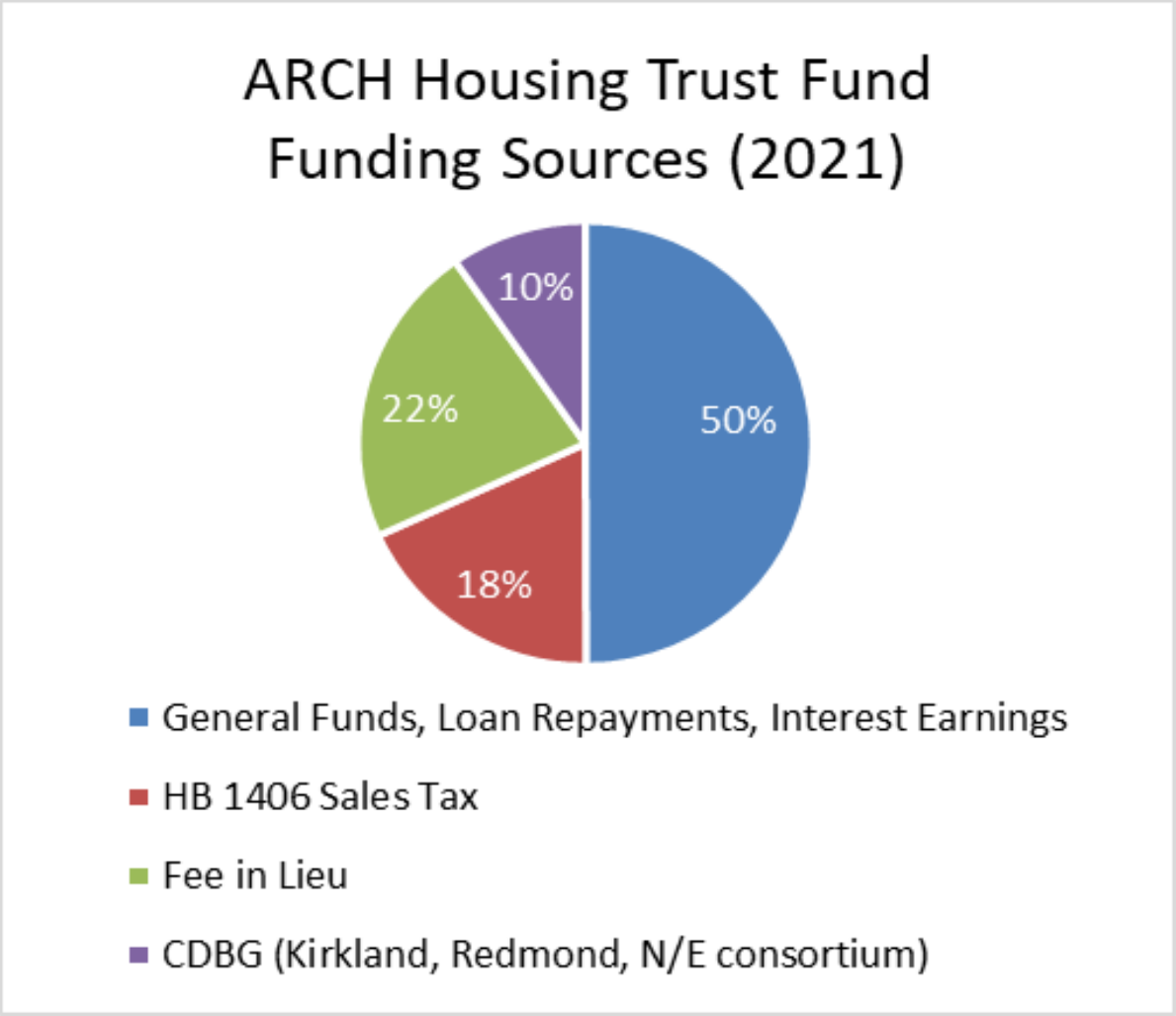
2021 ARCH Trust Fund: Total Requests

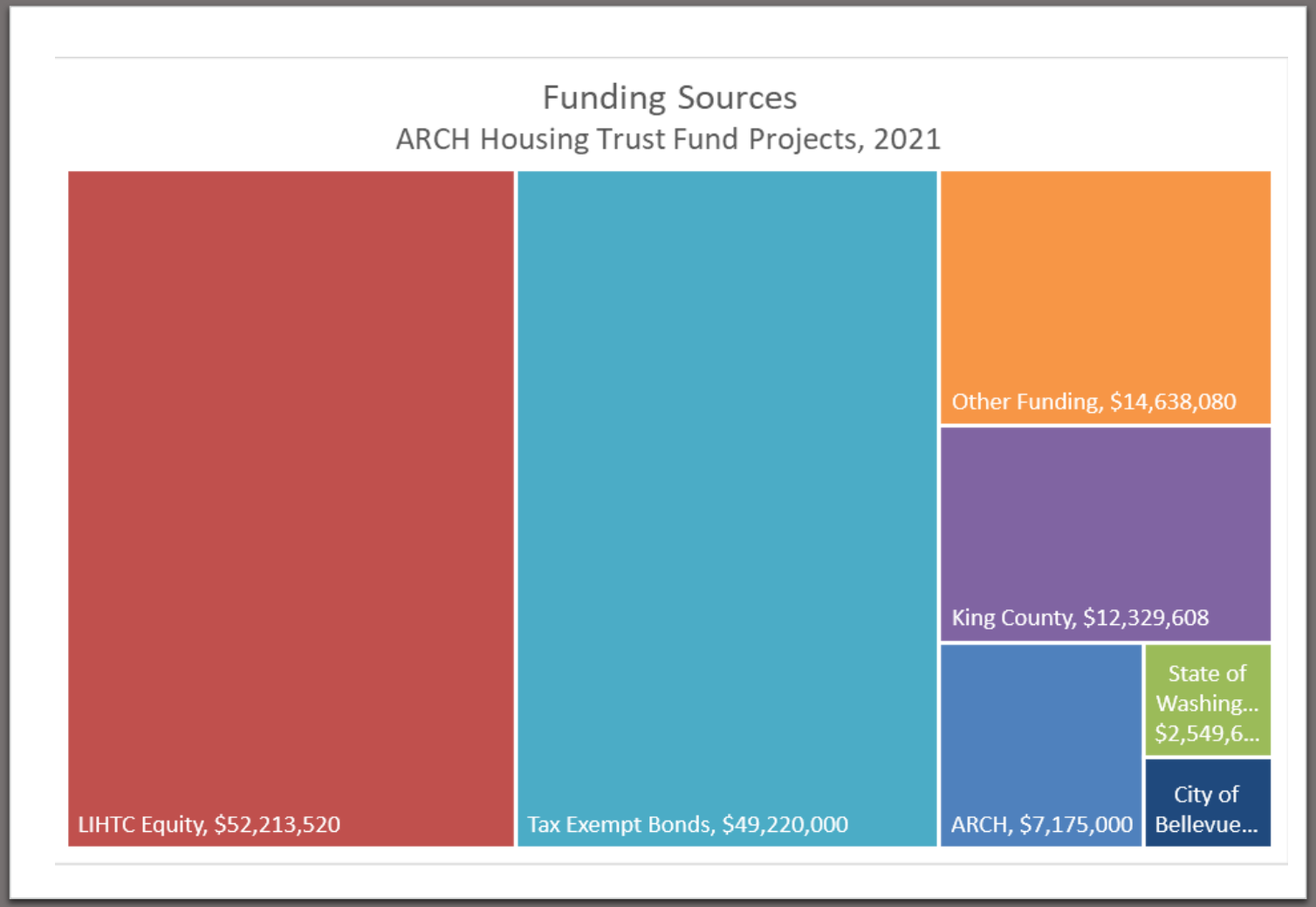
- Five applications requesting a total of $3,825,000
  - One additional application for $2.5 million was withdrawn
- Submitted projects include 351 total affordable units
  - One project was previously funded in the 2020 round
- Projects also applied for King County and State funds

Applicant / Project	Funds Requested	Project Location
Horizon/Inland Totem Lake Development	$1,500,000	Kirkland
Friends of Youth New Ground Kirkland Rehab	$675,000	Kirkland
LEO Trailhead	$250,000	Issaquah
LifeWire Hope Starts Here	$750,000	Bellevue
Attain Housing Totem Lane 6 Plex	$650,000	Kirkland
SRM Bellevue Mixed Income	$2,500,000 WITHDRAWN	Bellevue

Available Funds

- Approximately $6 million total
  - General Funds
    - $1.8 million in 2021 contributions
    - Plus prior balances and returned funds
  - HB 1406 sales tax funds
    - 2020 actual plus 2021 estimated
  - Kirkland fee in lieu funds
  - CDBG funds
    - Kirkland, Redmond and N/E subregion





Leverage of Local Funding

- *$14 in other public and private funds for every $1 of local funds*


Horizon at Totem Lake
12335 120th Ave NE
120th Ave

Applicant / Project	Inland/Horizon Housing Alliance Horizon at Totem Lake
Funds Requested (Grant/Loan)	$1,500,000 Contingent/Deferred Loan (in addition to $4m award in 2020 Funding Round)
Housing Type/ # of units/ bedrooms	300 units, including 30 for homeless families Studio, 1BR, 2BR, 3BR
Income Served	20 at 30% AMI 76 at 50% AMI 184 at 60%AMI
Project Location	12335 120th Ave NE, Kirkland
Estimated completion	Winter 2024

Friends of Youth New Ground Kirkland Rehabilitation

Applicant / Project	Friends of Youth New Ground Kirkland Rehab
Funds Requested (Grant/Loan)	$675,000 Secured Grant (in addition to $250,000 provided in 2005 Funding Round)
Housing Type/ # of units/ bedrooms	14 SRO units for Young Adults
Income Served	14 at 50% AMI
Project Location	11005 NE 68th St Kirkland
Estimated completion	Summer 2022


LEO at Trailhead

Applicant / Project	Life Enrichment Options LEO at Trailhead
Funds Requested (Grant/Loan)	$250,000 Secured Grant (part of Trailhead TOD project funded in 2017 Funding Round)
Housing Type/ # of units/ bedrooms	5 SRO units for Developmentally Disabled plus 1 manager unit
Income Served	5 units at 30% AMI
Project Location	1525 NW Maple St. Issaquah
Estimated completion	Winter 2024

Applicant / Project	LifeWire Hope Starts Here
Funds Requested (Grant/Loan)	$750,000 Secured Grant
Housing Type/ # of units/ bedrooms	25 units of Emergency and Transitional Housing for Domestic Violence Survivors 1BR, 2BR
Income Served	20 at 30% AMI 5 at 50% AMI
Project Location	Bellevue
Estimated completion	Winter 2022


Hallway & Unit Entrance


Living Room

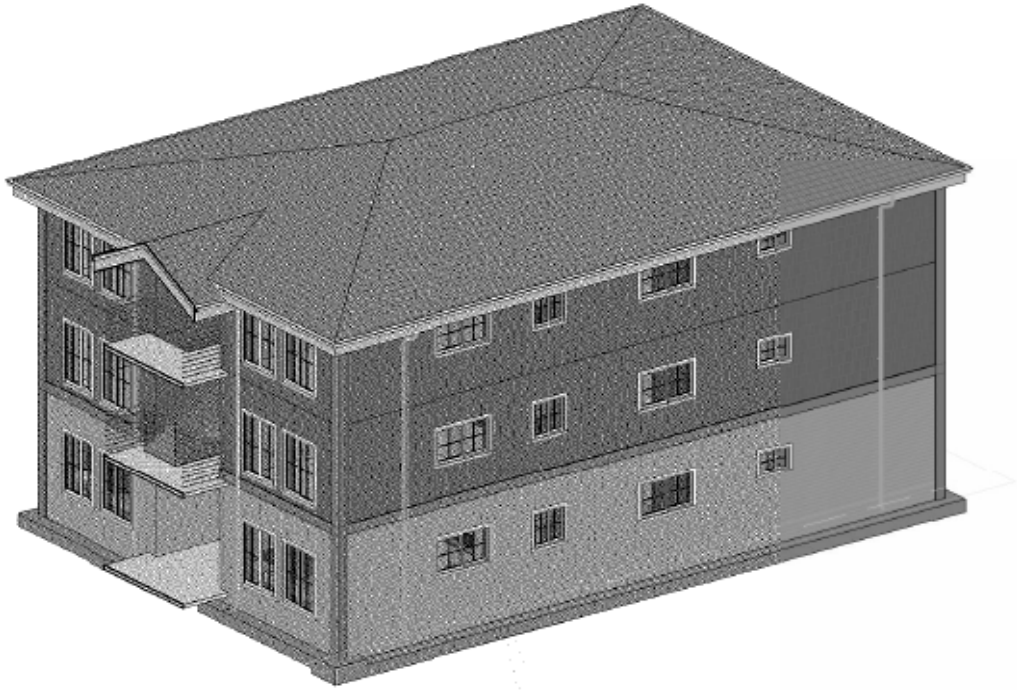

Kitchen


Bathroom


Bedroom


Deck

Attain Totem Lane Six-plex



Applicant / Project	Attain Housing Totem Lane Six-plex
Funds Requested (Grant/Loan)	$650,000 Contingent/Deferred Loan
Housing Type/ # of units/ bedrooms	Transitional Housing for Homeless Families 6 2BR units
Income Served	6 at 30% AMI
Project Location	12601 NE 132nd, Kirkland
Estimated completion	Winter 2022

	Recommended Projects					
	Horizon at Totem Lake	LifeWire Hope Starts Here	LEO at Trailhead	New Ground Kirkland		Total 2021 Recommended Funding
Total Recommended Award	$1,500,000	$750,000	$250,000	$675,000		$3,175,000
Bellevue	$192,900	$16,100	$32,200	$86,800		$328,000
Bothell	$54,900	$4,600	$9,200	$24,700		$93,400
Clyde Hill	$10,000	$800	$1,700	$4,500		$17,000
Hunts Point	$1,000	$100	$200	$400		$1,700
Issaquah	$66,200	$5,500	$11,000	$29,800		$112,500
Kenmore	$36,200	$3,000	$6,000	$16,300		$61,500
Kirkland	$635,200	$53,000	$105,900	$285,900		$1,080,000
Medina	$7,800	$700	$1,300	$3,500		$13,300
Mercer Island	$19,700	$1,600	$3,300	$8,900		$33,500
Newcastle	$17,200	$1,400	$2,900	$7,700		$29,200
Redmond	$337,000	$28,100	$56,000	$151,600		$572,700
Sammamish	$71,200	$5,900	$11,900	$32,000		$121,000
Woodinville	$47,000	$3,900	$7,800	$21,200		$79,900
Yarrow Point	$3,700	$300	$600	$1,700		$6,300
Total Local Funds	$1,500,000	$125,000	$250,000	$675,000		$2,550,000
CDBG Funds		$627,869*				$627,869

City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: Kenmore Automated Photo Enforcement program.	**For Council Meeting Agenda of:** 02/28/2022 **Department:** Engineering – Public Works **Prepared by:** Tobin Bennett-Gold, Traffic Engineer
Proposed Council Action/Motion: Adopt Ordinance 22-0542 for Implementation of the Automated Photo Enforcement Program and Amendment to Chapter 10 of the Kenmore Municipal Code.	**Initial & Date** **Approved by Department Head:** JFV 2/1/2022 **Approved by City Attorney:** 01/06/22 **Approved by Finance Director:** N/A **Approved by City Manager:** RGK 2/2/2022 **Exhibits/Attachments:** Attachment A: Changelog for Photo Enforcement Technical Memorandum Attachment B: Photo Enforcement Technical Memorandum Attachment C: Ordinance 22-0542 Attachment D: KMC Code Language Attachment E: Crash Data Memorandum Attachment F: Violation Data Memorandum Attachment G: Court Data Memorandum

STAFF RECOMMENDATION:

1) Implement an auto enforcement program based upon the Photo Enforcement Technical Memorandum (Attachment B) at the following locations:
   - 73rd Ave NE in the Kenmore Elementary School Zone for school zone speed violations,
   - Juanita Dr NE in the Arrowhead Elementary school zone or school zone speed violations, and
   - 61st Ave NE and NE Bothell Way (SR522) for eastbound-to-northbound left-turn red-light violations
2) Implement a fine schedule for infractions detected by automated photo enforcement as follows:
   - Automated Red-Light Enforcement

     $100 Failure to Stop at a Red Light
   - Automated School-Zone Enforcement

     $100 Exceeding the School Zone Speed Limit by 6+ MPH When School Zone is Active

     $250 Exceeding the Regulatory Speed Limit 6+ MPH When School Zone is Active

3) The schedule for implementation of photo enforcement as follows:

Apr ’22	Installation of advanced warning signs for photo enforcement locations, installation of photo enforcement cameras
Apr ’22	Start of warning period: photo enforcement cameras become active and warnings are issued in lieu of notices of infraction.
Summer ’22	Automated red-light enforcement warning period ends no sooner than 2 months after cameras become active. School-zone speed enforcement cameras not active during summer.
Fall ’22	Automated speed enforcement warning period ends, cameras begin issuing fines at start of school year. Photo enforcement program is now fully implemented.

INFORMATION/BACKGROUND:

Kenmore City Council included automated photo enforcement as part of the 2020 Financial Sustainability Plan (FSP), and photo enforcement was a safety recommendation of the 2014 Pedestrian and Bicycle Safety Task Force. In the state of Washington, automated photo enforcement is permitted for use only to enforce red-light violations and school zone speeding violations. If implemented correctly, photo enforcement can be an effective tool for reducing crash risk for all road users as well as providing a stable, long-term revenue source for investment in our transportation infrastructure. Careful attention to the details of program implementation can help create a program that not only reduces crash risk in areas where photo enforcement is implemented, but also promotes equity and travel safety city-wide through judicious application of the revenue generated.

On November 8th, 2021, staff presented the program goals for photo enforcement in Kenmore. In addition to increased traffic safety and providing funding for safety and maintenance investment in our roads, a successful photo enforcement program must solicit public buy-in from Kenmore residents through practices which are transparent, fair, and equitable for all residents and road users affected by the program.

On December 6th, 2021, staff responded to comments and questions submitted by council based on the information presented in the November 8th presentation as well as the accompanying technical memorandum detailing program and policy proposals, and relevant supporting information. Staff provided discussion and examples of how fair and equitable program practices were reflected in the proposed fine schedule as well as travel speed and red-light violation trigger thresholds. The proposed warning period for school zone photo enforcement was revised to better accommodate driver expectations with the start-and-stop nature of photo enforcement which follows the school year cycle. Site selection criteria was also presented in detail, and it was recommended by staff that the initial photo enforcement locations be 73rd Av in the Kenmore Elementary school zone, Juanita Dr in the Arrowhead Elementary school zone, and 61st Av and SR 522 intersection for eastbound-to-northbound left-turn red-light violations.

On January 24th, 2022, a public hearing was held to receive public comment and solicit additional questions and comments from council regarding the proposed Kenmore Automated Photo Enforcement program. Based on requests received from council following the public hearing, staff has provided additional information regarding crash data, violation data, and court processes for reduced payment requests.

FISCAL CONSIDERATION: Low-range for estimates based on the recommended locations are projected to meet or exceed $1.7M net revenue annually, meeting or exceeding estimates included in the 2020 Financial Sustainability Plan approved by Council. Exclusion of photo enforcement revenue from the City budget would leave a $1.7M shortfall in revenue proposed in the Financial Sustainability Plan for traffic engineering, traffic safety, and pavement preservation budgets.
COUNCIL GOAL/BUDGET OBJECTIVE BEING ADDRESSED: Goal #6: Focus on and emphasize multimodal transportation in the City of Kenmore with a specific focus on pedestrian, bicycle, and other means of travel.

City Of Kenmore, Washington

Technical Memorandum

TO: City of Kenmore City Council

FROM: Tobin Bennett-Gold, PE
City of Kenmore Traffic Engineer

DATE: January 31, 2022

SUBJECT: Changelog for Photo Enforcement Technical Memorandum

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11/19/2021

- P1 Date of memorandum updated to November 19, 2021
- P12 Bullet and footnote added regarding warning period at beginning of school year

1/31/2022

- P6 Updated crash table to reflect correct time period
  (previously reflected 2016-2020, now correctly reflects 2015-2019)
- P13 Footnote formatted to span one page only
- P14 Photo Enforcement Timeline updated to reflect council vote in Feb ’22
  (Separate from the public hearing in Jan ’22)

City Of Kenmore, Washington

Technical Memorandum

TO: City of Kenmore City Council

FROM: Tobin Bennett-Gold, PE
City of Kenmore Traffic Engineer

DATE: January 31, 2022

SUBJECT: Proposed Photo Enforcement Policy and Program Structure

Executive Summary

Kenmore City Council included automated photo enforcement as part of the 2020 Financial Sustainability Plan (FSP), and photo enforcement was a safety recommendation of the 2014 Pedestrian and Bicycle Safety Task Force. In the state of Washington, automated photo enforcement is permitted for use only to enforce red-light violations and school zone speeding violations[1]. If implemented correctly, photo enforcement can be an effective tool for reducing crash risk for all road users as well as providing a stable, long-term revenue source for investment in our transportation infrastructure. Careful attention to the details of program implementation can help create a program that not only reduces crash risk in areas where photo enforcement is implemented, but also promotes equity and travel safety city-wide through judicious application of the revenue generated.

Historically the largest obstacle to photo enforcement programs is lack of public buy-in, and so the implementation of a successful and long-lived photo enforcement program will require explicit measures to promote fair practices, transparency, and communication. If done well, the photo enforcement program can be an instrument of positive public safety and equity in the City as a whole. If done poorly, the City is at risk of implementing a program that is unpopular, short-lived, and closes the door to future attempts at photo enforcement when trust is lost between City Hall and Kenmore residents.

The proposed photo enforcement timeline includes extensive council discussion and input before voting whether to approve a proposed photo enforcement program. The activation of photo enforcement cameras can be completed by April of 2022, followed by a warning period during

[1] Other use-cases are permitted for conditions which do not exist the City of Kenmore, e.g. railroad crossings.

which warnings will be issued in lieu of notices of infraction. After the conclusion of the warning period, notices of infraction will be issued and revenue will be generated from fines consistent with projections made in the FSP. Every step of program implementation will be accompanied by extensive public outreach and communication.

Legal Framework and Regional Precedent for Photo Enforcement

The restrictions and requirements of the use of photo enforcement in the State of Washington are set forth by the Revised Code of Washington (RCW) 46.63.170 which restricts use of photo enforcement ("traffic safety cameras" in the language of the RCW) for issuance of notices of infraction for red-light violations at signalized intersections of two or more arterial streets, and for issuance of notices of infraction for school speed zone violations. Other requirements that a program must meet are the following:

- The city must prepare an analysis of the locations where automated photo enforcement is proposed to be located.
- The city must enact an ordinance allowing for the use of traffic safety cameras.
- Locations where photo enforcement is to be installed must be clearly marked thirty days prior to activation of cameras.
- The city must post an annual report which at minimum states the number of notices of infraction issued and the number of crashes which occurred for each location where traffic safety cameras are in use.
- For automated red-light enforcement, yellow-phase intervals must be at least as long as the minimums set by the Manual on Uniform Traffic Control Devices, and the interval may not be shortened after photo enforcement is implemented.

Per the process outlined in the RCW, all violations must be reviewed by a law enforcement officer, and it is the law enforcement officer who then issues the notice of infraction. The RCW additionally states that the notice of infraction is to be mailed to the registered owner of the vehicle within 14 days of the violation, and includes requirements for what documentation will be provided to the registered owner of the vehicle. The RCW also stipulates the process by which the vehicle's registered owner may overcome presumption of fault[2]. Though it is not stated in the RCW, instructions for contesting the violation or for overcoming the presumption of fault are

[2] Primarily, reference is made to RCW 46.63.075(2) which states "This presumption may be overcome only if the registered owner states, under oath, in a written statement to the court or in testimony before the court that the vehicle involved was, at the time, stolen or in the care, custody, or control of some person other than the registered owner."

often included in the documentation provided to the vehicle's registered owner along with the notice of infraction.

The RCW additionally states that Infractions generated by photo enforcement may not become part of a driver or vehicle owner's driving record, and must be processed in the manner of parking fines. The implications of this are that red-light violations and speeding violations are not treated as moving violations when identified through a photo enforcement program, and as such do not contribute to the suspension of a person's drivers license. Additionally, collections of outstanding fines and reporting of outstanding fines for the purpose of placing a hold on vehicle registration are at the discretion of the city[3] and may be subject to the city's policy on reporting outstanding tickets to the Department of Licensing.

Although not mentioned in the RCW with regards to photo enforcement, flashing school zone beacons (which are active exclusively during times when the school-zone speed limit is in effect) have become established regional precedent for signaling drivers when automated enforcement is active for school zones (in addition to standard signing which is required by the RCW).

Cities with Photo Enforcement	School Zone Hours per Day
Bellevue	1.50
Issaquah	9.00
Kenmore	**3.00**
Kent	2.00
Kirkland	2.00
Lake Forest Park	8.50
Renton	3.25
Seattle	2.75

Hours during which school-zone speed limits are active are the discretion of the city, and school-zone speed limit hours vary widely across the region. School zone hours for Kenmore are currently 75 minutes before start of classes until 15 minutes after start of classes, and 15 minutes before dismissal until 75 minutes after dismissal, for a total of 90 minutes twice per day. These cover 15 minutes of school commute activity before the start of the earliest campus activities until 15 minutes after most after-school campus activities have ended.

Fines for violations detected by photo enforcement and threshold speed for issuing a notice of infraction are also at the discretion of the city, as is the fine structure (fixed value or graduated by speed). The RCW states that the

City	Speed Threshold	Fine Schedule	Fine Amount
Bellevue	28 mph	Fixed	$124
Des Moines	26 mph	26-30 31+	$210 $250
Edgewood	24 mph	24-30 31+	$166 $250
Federal Way	26 mph	26-30 31+	$210 $250
Issaquah	27 mph	Fixed	$124
Kent	26 mph	26-30 31+	$136 $248
Kirkland	26 mph	26-30 31+	$136 $250
Lake Forest Park	26 mph	Fixed	$136
Lynwood	26 mph	26-35 36+	$124 $250
Renton	28 mph	26-35 36+	$124 $250
Seattle	26 mph	Fixed	$237

[3] The jurisdictional agency for a photo enforcement program in the State of Washington is not required to be a city, but for the sake of brevity the jurisdictional agency will be referred to as "the city" for the purposes of this memorandum.

maximum permissible fine for infractions issued by photo enforcement may not exceed the value of fines issued for parking infractions[4], although regionally fines do not typically exceed $250.

The city operating the photo enforcement program retains 100% of all fines collected. The contractor selected to install and operate the photo enforcement system will be paid a fixed fee; the RCW explicitly prohibits compensation paid to contractors based upon a portion of the revenue generated. Although not paid directly from the fine amount, the increase in court services amounts to a cost of approximately $30 per infraction processed, on average. Across programs regionally, a non-payment rate of roughly 30% is typical, either through failure to respond to a notice of infraction, or through successful contestation of the infraction, or by overcoming the presumption of fault. The cost of court services related to forms of non-payment are included in the estimated cost of court services per notice of infraction issued.

The following is the proposed fine schedule for an automated photo enforcement program in Kenmore:

<u>Automated Red-Light Enforcement</u>

$100 Failure to Stop at a Red Light

<u>Automated School-Zone Enforcement</u>

$100 Exceeding the School Zone Speed Limit by 6+ MPH When School Zone is Active

$250 Exceeding the Regulatory Speed Limit 6+ MPH When School Zone is Active

In this graduated fine structure, the lower tier fine would be triggered when traveling at 26+ mph through any active school zone with photo enforcement[5], and the higher tier fine would be triggered by traveling 31+ mph through an active school zone on a road with a 25 mph regulatory speed limit, 36+ mph on a road with a 30 mph regulatory speed limit, and 41+ mph on a road with a 35 mph regulatory speed limit. Speed limits in the City of Kenmore are representative of land use, mobility, and infrastructure context, and thereby serve well as relative-risk indicators for determining what constitutes reckless and egregious speeding behavior. By contrast, the lower tier fines for speeding at 6+ mph in excess of the school zone speed limit and for failing to stop at a red light (which most frequently occurs shortly after the yellow-light phase) correspond to more commonly occurring violations and violations associated with inattention to speed control, poor judgment of signal control, or low respect for compliance with signal control. Setting a relatively low value for the fines which impact the most drivers reduces the risk of placing undue financial burden on individuals belonging to economically vulnerable households. Lower values for the fines which will impact most drivers will also be more favorable for soliciting buy-in from residents and road users, and help to explicitly demonstrate the intention of the City

[4] In Kenmore, the highest fine for a parking infraction is $450, which corresponds to “Parking in a Disabled Zone without a Disabled Placard/Plate”.
[5] All school zones speed limits are 20 mph per the RCW.

to minimize the impact and the burden placed on drivers who are issued notices of infraction by the photo enforcement system.

Low-end revenue estimates for implementing automated photo enforcement at three locations within Kenmore indicate that the revenue expectations set in the FSP and the biennium budget are met under the proposed fine schedule even given conservative assumptions for number of notices of infraction issued and rates of non-payment.

Crash Risk Reduction

Crash Risk Reduction from Automated Speed Enforcement

Reducing the mean speed of travel on a roadway is directly effective at reducing the risk of crashes occurring and reducing the risk of injury in crashes that do occur. Lower travel speeds result in drivers having more time to perceive and react to hazards or conflicts in order to avoid or reduce the severity of crashes, and vehicles traveling at lower speeds carry less kinetic energy, which in turn reduces the distance and braking power required to bring a vehicle to a stop and reduces the amount of energy dissipated destructively by vehicles and victims in the event that a crash does occur. A substantial body of research exists which shows that reducing the mean speed of a roadway will result in a proportional reduction in expected crash frequency, a reduced risk of crash injury proportional to the square of the speed reduction, and a reduction in risk of fatal crash injury even more substantially.[6] A reduction in mean speed from 35 mph to 20 mph (approximately a speed reduction of 40%) for example would result in roughly a 40% reduction in expected crash frequency, a 70% reduction in expected frequency of injury crashes, and a 90% reduction in expected frequency of fatal crashes.

This reduction in crash risk and risk of crash injury is a benefit to the safety of all road users traveling in a reduced speed environment, but the road users most vulnerable to severe and fatal injury during a crash are cyclists and pedestrians, and young students walking or biking to and from school are more vulnerable still. In crashes where a pedestrian is stuck by a vehicle, the pedestrian will suffer fatal injury in roughly two out of three crashes when the vehicle is traveling 35 mph, but a pedestrian will suffer fatal injury in roughly only one out of ten crashes when the vehicle is traveling 20 mph.

Although the safety benefit of photo enforcement is most appropriately described in terms of reduced mean travel speed, the criteria by which photo enforcement programs are measured is most commonly in terms of the reduction in violations in the enforcement area. The typical effectiveness of automated speed enforcement regionally is that school zones in which photo enforcement is implemented experience a 40% reduction in school-zone speeding violations in the first year of implementation, and then a further 40% reduction in school-zone speeding

[6] Elvik, R. (2005). Speed and Road Safety: Synthesis of Evidence from Evaluation Studies. Transportation Research Record, 1908(1), 59–69.

violations over the following several years, resulting in an overall long-term reduction in school-zone speeding violations of around 64%.

To estimate the safety benefit of a specific site, a conservative assumption is that the mean speed is reduced only enough to reduce the frequency of school-zone speeding violations by 64%, and only for the vehicles which would exceed the threshold for enforcement, while the speed of other vehicles is assumed to remain unchanged. It is proposed that sites in Kenmore should be considered for automated speed enforcement if they meet at least one of two criteria: school zones which are on arterial or collector streets, and school zones which have experienced at least one crash in the past five years. The safety benefit of implementing photo enforcement at these sites is expressed as the estimated absolute reduction in expected crashes per year. The sites that would meet these criteria for consideration and the estimated safety benefit of implementing automated speed enforcement are as follows:

Location	Current Mean Speed	Estimated Mean Speed Reduction	Estimated Reduction in Crash Risk All / Injury / Fatal	Historical Observed Annual Crashes[7]	Expected Annual Crash Reduction[8]
Juanita Dr near 153rd Pl	37.0 mph	20%	5% / 7% / 11%	1.6	0.06
153rd Pl east of Juanita Dr	29.9 mph	10%	3% / 4% / 6%	0.4	0.00
84th Av north of 150th St	32.7 mph	14%	4% / 5% / 9%	0.2	0.01
71st Av south of Kenmore Elem.	24.0 mph	3%	2% / 3% / 6%	0.2	0.00
73rd Av south of 192nd St	30.4 mph	11%	3% / 4% / 7%	1.8	0.02
192nd St east of 73rd Av	24.0 mph	3%	2% / 3% / 6%	0.2	0.00
202nd St west of 68th Av	34.7 mph	18%	4% / 6% / 10%	0.6	0.01

Based on total crash reduction, it is proposed that automated speed enforcement be implemented initially at two locations:

1. Arrowhead Elementary school zone on Juanita Drive near Arrowhead Drive
2. Kenmore Elementary school zone on 73rd Avenue near 71st Avenue

It is worth noting that school-zone speed limits are in effect only during a short number of hours per day, only during weekdays, and only during the school year. Most school zones in Kenmore are active a total of three hours per school day, which amounts to just below 7% active time overall annually, affecting approximately 20% of daily traffic volume on school days and approximately 10% of the traffic volume traversing the facility each year. Current school zone

[7] Based on crashes which occurred within school-zone extents in the 5 year period from 2015 through 2019.
[8] In the case of automated speed enforcement, the safety benefit of speed reduction is prorated according to the hours when school zone speed limits are in effect.

hours are scheduled to cover times when parent and student school commute traffic is most likely to be present in the school zone, but adjusting the active times for school-zone speed limits can have dramatic effects on the safety benefit provided to other road users, and to vulnerable road users that may be present in the facility outside of school commute hours.

Also worth noting is that speed reduction measures during times of high traffic volumes have a magnified effect: Unless passing is possible, drivers can only travel as fast as the vehicle in front of them. In this case, successfully slowing one vehicle can slow an entire platoon of vehicles and extend the speed reduction effects far beyond the immediate area where the speed reduction treatment has been applied. The estimates for speed reduction and crash reduction do not factor in magnified effects of speed reduction during higher volume hours and so these estimates are likely to be conservative with regards to the geographic area which will benefit from speed reduction and crash risk reduction.

Crash Risk Reduction from Automated Red-Light Enforcement

A red-light violation occurs when a driver enters a signalized intersection after the traffic signal controlling their lane has turned red. Vehicles which already occupy the intersection when the signal transitions from yellow to red are not committing a red-light violation. The most common types of red-light violations are ones in which queued traffic continues to enter the intersection through the yellow-light phase and continuing into the red-light phase (sometimes with multiple consecutive vehicles continuing to enter the intersection into the red-light phase), and ones which happen very shortly after the signal transition from yellow to red (within 2 seconds or less) when drivers attempting to enter during a yellow phase misjudge the timing and instead enter during the red phase. Crashes caused by red-light violations are often angle-crashes and turning-crashes, both of which carry the highest risk of severe and fatal injury of any crash by type (compared to, for example, rear-end crashes and side-swipe crashes, which have very low relative risk of fatal and serious injury compared to crashes of other types).

The specific geometry and signal phasing of an intersection can also affect the crash risk associated with red-light violations. In the case of 61st Avenue and Bothell Way, a high frequency of red-light violations for left-turn traffic on eastbound Bothell Way presents a high frequency of conflicts with pedestrians entering the crosswalk during the protected pedestrian crossing phase on the north leg of the intersection. A pedestrian conflict is defined as when a legally-crossing pedestrian must alter their path to avoid a vehicle (either by stopping in their path or accelerating to clear the conflict area). Pedestrian conflicts represent “near-misses” which, in unluckier circumstances, may have escalated to pedestrian crashes; in areas where pedestrian conflicts are frequent, the risk of pedestrian crashes is high. A pedestrian conflict study conducted in 2019 at the intersection of 61st Avenue and Bothell Way indicated that during peak volume hours pedestrian conflicts were experienced by over 80% of pedestrians crossing the north leg of the intersection. The baseline rate for pedestrian conflicts at a signalized or stop controlled intersection is very low – other studies conducted in the City of Kenmore typically show pedestrian crossing conflicts at a rate of 0% to 5% during the peak volume hours.

Automated red-light enforcement has been shown to be very effective at reducing red-light violations, varying from a 40% reduction in red-light violations that occur within 0.5 seconds of the light transitioning to an 86% reduction in red-light violations which occur 1.5 seconds or more after the light transitioning. Although studies show that automated red-light enforcement unequivocally reduces the frequency of red-light violations and the frequency of crashes related to red-light violations, there is also consistent evidence showing that automated red-light enforcement increases the frequency of rear-end crashes (as might be related to sudden braking to avoid a red-light violation). The safety value of implementing red-light cameras therefore is based on the difference between the value of the crashes prevented and the cost of the crashes which may be introduced. For this reason, automated red-light enforcement is not a one-size-fits-all solution for improving intersection safety, and careful engineering analysis is required to determine where and how automated red-light enforcement can be applied to best improve intersection safety. The following criteria must be assessed when considering whether automated red-light enforcement is appropriate for a given location:

- Whether or not there an elevated risk of crashes associated with red-light violations.
- To what degree is the implementation of automated red-light enforcement likely to increase rear-end collisions.
- To what degree are the types of red-light violations observed at this location likely to be correctable by photo enforcement.

In the case of the 61st Avenue and Bothell Way intersection, although there is a high frequency of pedestrian conflicts observed directly relating to right-light violations, the crash history of the intersection does not suggest that red light violations are contributing to other types of crash risk. Observation of the intersection indicates that red light violations occur almost exclusively due to queueing in the eastbound left-turn lane when drivers continue to make eastbound-to-northbound left-turns even after the signal has changed. When police presence was dispatched to address the concern, the occurrence of red-light violations stopped completely, though only when police were conspicuously present. Based on these factors, there is an opportunity to precisely right-size photo enforcement for this intersection by applying automated red-light enforcement only to the eastbound-to-northbound left-turn lane where the occurrence of red-light violations is high, but because of the nature of queued traffic being slow-moving the risk of increasing the frequency of rear-end crashes is very low. Because of the driver response to conspicuous enforcement, it is expected that photo enforcement at this location would be near-completely effective at eliminating pedestrian conflicts, providing substantial safety value and greatly reducing the risk of a pedestrian crash due to red-light violations occurring at this location in the future.

Based on these factors, it is proposed that automated red-light enforcement be initially implemented for east-bound left-turn movements at the intersection of 61st Avenue and Bothell Way (SR 522).

Other locations in Kenmore may also be suitable for implementation of automated red-light enforcement, for the purposes of reducing risk to vulnerable road users, to motor vehicle traffic, or both. The changes to traffic patterns and travel volumes which accompanied the COVID-19 pandemic, however, have made it impossible to determine where these problems may be occurring under normal traffic conditions.[9] As travel volumes continue to recover other locations suitable for automated photo enforcement may become apparent through continued study and observation of signalized intersections in the City of Kenmore.

Fairness, Transparency, and Public Buy-In

The single characteristic which is almost universally prevalent in failed photo enforcement programs is lack of public buy-in. Either through working with their council or legislature representation or through voter-driven initiatives, countless photo enforcement programs regionally and nationally have been ended by grass-roots political action spearheaded by residents who feel that photo enforcement does not serve their interests or impacts them unfairly. In some cases the residents taking issue with photo enforcement programs may have well-founded concerns with how the program is being delivered, but many well-intentioned programs have also been toppled by misinformation, poor communication, and insufficient transparency. If the City of Kenmore is to put in place a photo enforcement program that is well intentioned and well implemented, it is still critical that communication with residents address the concerns that residents have and communicate the benefits they receive in order for the program to have the public buy-in required for its long-term success.

One of the most ubiquitous criticisms of photo enforcement is that it is used as a fundraising tool while disingenuously being presented as a traffic safety program. The traffic safety benefits of photo enforcement programs are well documented regionally, nationally, and world-wide, and the benefits of implementing a photo enforcement program in Kenmore will be evident in the changes in driver behavior and reduction in crash frequency in the years following implementation. The minimum reporting requirements by state law are that a city using photo enforcement publish the number of crashes and number of notices of infractions issued in photo enforcement areas annually. Above and beyond this requirement, city staff has already created a website detailing the timeline and progress leading up to photo enforcement implementation,

[9] Important to note is that under pandemic traffic conditions the extensive queueing and high frequency of red-light violations and subsequent pedestrian conflicts at 61st Avenue and Bothell Way has all but evaporated. Because the volume of traffic has been the only change to this intersection, however, it is reasonable to expect that when higher traffic volumes return the problematic behavior will return as well.

and this website will serve as the nexus for all information related to photo enforcement within the City. Information available on this website will include at least the following:

- Detailed explanation of site selection process
- Annual frequency of speeding and red-light violations beginning at the time of photo enforcement implementation
- Travel speed statistics for school zones, including historical speed statistics from before the implementation of photo enforcement, and speed statistics from school zones not receiving photo enforcement
- Annual crash frequency and number of notices of infractions issued for photo enforcement areas per RCW reporting requirements
- Annual revenue generated by each photo enforcement location
- High-level overview accounting for how photo enforcement revenues are used
- List of projects planned and delivered using photo enforcement revenue

The revenue generated by photo enforcement can be substantial even when fines are modest, but implementation of photo enforcement as a means of generating revenue is a common thread in negative sentiment surrounding photo enforcement programs. There is evidence that Kenmore residents are open to a photo enforcement program part of the City's revenue plan; during the development of the Financial Sustainability Plan (FSP), the "Balancing Act Budget Simulator Tool" available on the City's website showed photo enforcement as the single most popular revenue enhancement strategy. This sentiment can be built upon – tying photo enforcement specifically to the maintenance of public roads and improvement of transportation safety throughout the City is an important facet of soliciting public buy-in and addressing concerns about photo enforcement as a revenue-generating tool by committing that revenue to furthering the goal of providing a safe and effective transportation environment for all road users. Covering these expenditures is the purpose for which the photo enforcement program was introduced into the FSP, and clear and consistent messaging can underscore the transportation safety and operational benefit residents are receiving from photo enforcement revenue.

The goal of effective photo enforcement is to reduce red-light violations or to reduce dangerous speeding behavior, but enforcement (including photo enforcement) is the tool of last resort for achieving these goals. When public buy-in is critical to the success of a program, it is important that drivers have every opportunity to avoid or self-correct problematic behavior or be otherwise deterred before being penalized with a fine. If photo enforcement is perceived to "create" the problem it is solving, for example by suddenly reducing the speed limit immediately before

issuing a fine for not traveling at the reduced speed, then photo enforcement will not be viewed as a tool for improving transportation safety but rather as a deceitful method of extracting revenue from drivers. The paradox of creating a photo enforcement program which solicits public buy-in is that the photo enforcement program must take all reasonable steps to minimize the number of violations issued by the program. In service of this goal, it is proposed that the City of Kenmore photo enforcement program take the following steps to allow drivers to self-correct problematic driving behavior before they are issued a notice of infraction by the photo enforcement program:

For all photo enforcement locations:

- New photo enforcement locations will be advertised widely using the City's available outreach tools, including but not limited to the City website, social media accounts, and quarterly newsletters.

- Advance signing will be present for all locations clearly indicating the presence of photo enforcement on the upcoming facility. Signing will be installed at least thirty days before equipment is activated (as required by the RCW) and will be marked with high-visibility flags for a period of at least thirty days after photo enforcement becomes active.

- After installation of photo enforcement devices, each new photo enforcement location will issue warning letters to violators in lieu of notices of infraction for a period of at least two months before notices of infraction and associated fines are issued to violators. For the initial implementation of photo enforcement in the City of Kenmore, warning periods will be substantially longer.

- All traffic movements which are detected as likely violations will be reviewed by Kenmore police officers before a notice of infraction is issued for the violation.

For automated school zone speed enforcement:

- All school zones with automated speed enforcement will be delimited with flashing school-zone beacons, and photo enforcement will be active exclusively at times during which the beacons are active.

- Speed feedback signs will be present in advance of school zones to notify drivers of their current speed and allow drivers to moderate their speed before approaching an automated enforcement area.

- A graduated fine system will issue a fine of $100 for exceeding the school zone speed limit by more than 5 mph (i.e. fines beginning at 26 mph), and a $250 fine for exceeding the regulatory speed limit by more than 5 mph (i.e. beginning at 41 mph if the regulatory

speed limit is 35 mph). The tiered fine structure allows for only moderate fines for "accidental" or "inattentive" speeding in school zones in order to facilitate driver awareness, while still allowing punitive fines for reckless speeding more in line with what would be issued by in-person enforcement for school zone offenses.

- Automated school zone speed enforcement will issue warnings for the calendar week which includes the first day of school for the Fall semester each year.[10]

For automated red-light enforcement:

- Stop bars for photo-enforced lanes will be clearly marked.

- Actuation zones for red-light violations will be set at the point where the photo-enforced lane would enter a conflict with opposing traffic. In the case of eastbound left-turn traffic this is roughly one car-length past the stop bar, and in a case where there is a crosswalk present, this would include encroachment in the crosswalk. This allows for a more forgiving stop location than if enforcement were triggered just past the stop bar.

- The photo enforcement program will issue a fixed fine of $100 for red-light violations, a value moderately lower than what would be issued by in-person enforcement for a first-time offense.

Providing substantial warning periods and public outreach, advanced signing indicating the presence of photo enforcement, advanced flashing beacons and speed feedback signs at entry to automated speed enforcement zones, forgiving enforcement zoning for red-light enforcement, police review before notices of infraction are issued, and moderate values for fine amounts will help underscore the position that revenue generated from photo enforcement is in support of creating a safe and effective traffic environment and not for the sole purpose of extracting fines from drivers.

Driver Impact and Equity

It is critical that the photo enforcement program clearly and unequivocally support the City of Kenmore's social and economic equity values and goals in each way that it interacts with individuals as well as social and governance systems, including but not limited to the financial impact on drivers, driver interaction with law enforcement and court systems, and infrastructure

[10] The first day of school is typically the first Wednesday in September; this accommodation means that notices of infraction would not be issued for the Wednesday, Thursday, and Friday of the week when school starts for the Fall semester. Notices of infraction will be issued per normal beginning the following week. This special warning period will recur each year, and is not limited to the year the site first received automated photo enforcement.

investment from revenue generated by photo enforcement. The nature of photo enforcement has several intrinsic characteristics which are positive for equity:

- Road users most likely to incur fines are drivers of personal vehicles, a group which has disproportionately low representation of individuals belonging to economically vulnerable households.[11]

- Detection of violations and issuance of notices of infraction are done based on objective criteria and without access to personally identifying information, removing the most substantial avenues for introduction of implicit bias into enforcement practices.

- Notices of infraction are processed in the manner of parking tickets, rather than moving violations; photo enforcement therefore will not contribute to a driver's license suspension and risk impacting that driver's access to transportation and mobility.

In addition to these characteristics which are intrinsic to any photo enforcement program which meets the requirements stated in the RCW, other practices which support equity can be explicitly included in the City of Kenmore's photo enforcement policies and practices.

- The fine schedule can be set such that fines most commonly incurred by drivers are set at a level that does not present undue financial burden for individuals belonging to economically vulnerable households.

- The revenue generated by photo enforcement can be used to provide traffic safety improvements in areas which do not directly benefit from the crash reduction effect of photo enforcement.
- For city expenses which must be funded and which may be funded by photo enforcement revenue, photo enforcement revenue can replace the need to enact other fundraising measures which may have regressive impacts on lower-income households.

[11] Puget Sound Regional Council (PSRC) Spring 2019 Travel Survey. As a percentage of trips, households with an income of $25,000 or less have the lowest rate of personal vehicle usage by percent-of-trips, with 75% of trips made by car, compared to 85% of trips made by car for households with an income of $25,000 to $74,999, and 80% of trips by car made by households with an income of $75,000+. Although this still represents a high percent of trips completed by personal vehicle for lower- and middle-income groups, higher-income households (with household income of $100,000 or more) are responsible for approximately 50% of all trips made regionally, and responsible for more than three times the number of trips as lower-income households (with household income less than $50,000). On a statistically representative road, it can be expected that slightly more than half of all personal vehicle trips are made by drivers belonging to households with incomes of $100,000 or more, and less than 20% of personal vehicle trips are made by drivers with incomes below $50,000. Households with incomes of $100,000 or more make up 40% of the households included in the PSRC Travel Survey, while households with incomes less than $50,000 make up 24% of households included in the survey, indicating that in addition to being the majority share of personal vehicle drivers on the road, higher-income households are also over-represented in personal vehicle travel (50% of car trips made by 40% of households), while lower-income households are under-represented (20% of car trips made by 24% of households).

Importantly, the substantial revenue generated by photo enforcement is a lever for implementing traffic safety and infrastructure maintenance throughout the City, and the application of that revenue can be employed dynamically as the equity needs of the City shift and evolve throughout the life of the photo enforcement program. If careful attention is given to the direct impact on drivers by the inception of the photo enforcement program, and continued attention is given to equitable use of the revenue generated by photo enforcement, then the proposed photo enforcement program can be an instrument of positive public safety and equity in the City as a whole.

Proposed Photo Enforcement Timeline and Public Outreach

The proposed timeline for implementation of photo enforcement is as follows:

Nov ’21 – Dec ’21	Council begins discussion on proposed new traffic photo enforcement program
Jan ’22	Public hearing
Feb ‘22	Council vote to approve photo enforcement program
Feb ’22 – Mar ’22	RFP and selection of contractor for lease and operation of cameras
Mar ’22	Council award of photo enforcement contract
Mar ’22	Installation of advanced warning signs for photo enforcement locations, installation of photo enforcement cameras
Apr ’22	Start of warning period: photo enforcement cameras become active and warnings are issued in lieu of notices of infraction.
Summer ’22	Automated red-light enforcement warning period ends no sooner than 2 months after cameras become active. School-zone speed enforcement cameras not active during summer.
Fall ’22	Automated speed enforcement warning period ends, cameras begin issuing fines at start of school year. Photo enforcement program is now fully implemented.

Each step in the proposed timeline will be accompanied by updates to the photo enforcement website which will reflect the most current photo enforcement news and timeline. Public hearing and council approval will be accompanied by a press release. A city-wide mailer describing photo enforcement program and schedule will be sent out prior to cameras becoming active. The beginning of warning period, end of warning period for automated red-light enforcement, and

end of warning period for automated speed enforcement will each be accompanied by social media release. Each monthly E-news and Kenmore Quarterly will have updates regarding the state of photo enforcement information. Already, several photo enforcement updates have been released in E-news and Kenmore Quarterly publications this year, and a social media release was made regarding the launch of the photo enforcement website.

The website for photo enforcement was created in May ’21 and is currently active; the website is updated frequently with changes to the photo enforcement timeline. In addition to the estimated timeline, the website contains frequently-asked-questions (FAQ) regarding the City’s purpose for photo enforcement, ticketing practices, site selection, and common concerns addressing misinformation about photo enforcement programs. The FAQ will continue to be updated as more common concerns are brought to the City. Details on site selection will be available on the website after they are presented to council. Once cameras are active, the photo enforcement website will also describe the process for responding to a notice of infraction. Once the program is active, information will be available for each photo enforcement location including at the least information about crash frequency and number of notices of infractions issued.

CITY OF KENMORE
WASHINGTON
ORDINANCE NO. 22-0542

AN ORDINANCE OF THE CITY OF KENMORE, WASHINGTON, ADOPTING A NEW CHAPTER 10.45 OF THE KENMORE MUNICIPAL CODE TO ESTABLISH AN AUTOMATED TRAFFIC SAFETY CAMERAS ENFORCEMENT PROGRAM AND REGULATIONS RELATING TO THE SAME; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, RCW 46.63.170 authorizes the City Council, as the local legislative body, to adopt an ordinance establishing an automated traffic safety cameras program and the regulations relating to the same; and

WHEREAS, pursuant to RCW 46.63.170, the City has prepared an analysis of the locations within the City of Kenmore where automated traffic safety cameras are proposed to be located; and

WHEREAS, in 2014 the Ad Hoc Committee on Pedestrian and Bicycle Safety recommended the implementation of automated traffic safety cameras enforcement; and

WHEREAS, revenue from automated traffic safety cameras enforcement was included in the 2020 Financial Sustainability Plan adopted by City Council; and

WHEREAS, City staff has proposed the adoption of use of automated traffic safety cameras for enforcement of red light violations and school zone speed violations; and

WHEREAS, on November 8, 2021, the City Council was presented with and considered the proposed automated traffic safety cameras enforcement program, entitled "Proposed Photo Enforcement Policy and Program Structure" ("Program"); and

WHEREAS, on December 6, 2021, the City Council was presented with and considered the Program and proposed new Chapter 10.45 KMC, which includes, among other things, the restrictions and provision of public notice and signage as set forth in RCW 46.63.170; and

WHEREAS, on January 24, 2022, the City Council held a public hearing in order to take public testimony regarding the adoption of proposed Chapter 10.45 KMC; and

WHEREAS, the City Council finds it in the interest of the public welfare to adopt this ordinance and implement the proposed Program in the City of Kenmore;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF KENMORE, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Findings. The City Council adopts the recitals set forth above, incorporated herein by reference, as findings in support of this ordinance.

Section 2. Adoption. The City Council adopts a new Chapter 10.45 to the Kenmore Municipal Code, entitled "Automated Traffic Safety Cameras" as set forth in Attachment A, attached hereto and incorporated herein by reference.

Section 3. Annual posting. Pursuant to RCW 46.63.170, the City Manager, or designee, is directed to post an annual report of the number of the traffic accidents that occurred at each location where an automated traffic safety camera is located as well as the number of notices of infraction issued for each camera and any other relevant information about the automated traffic safety cameras that the City deems appropriate on the City's website.

Section 4. Severability. If any provision of this ordinance or its application to any person or circumstance is held invalid or unconstitutional by a court of competent jurisdiction, the remainder of the ordinance, or the application of the provision to other persons or circumstances, is not affected.

Section 5. Effective Date. This Ordinance shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after the date of publication.

PASSED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON THE ___TH DAY OF _____, 2022.

CITY OF KENMORE

_____
Nigel Herbig, Mayor

ATTEST/AUTHENTICATED:

_____
Anastasiya Warhol, City Clerk

Approved as to form:

_____
Dawn Reitan, City Attorney

Filed with the City Clerk:
Passed by the City Council:
Ordinance No.:
Date of Publication:
Effective Date:

Chapter 10.45

AUTOMATED TRAFFIC SAFETY CAMERAS

Sections:

10.45.001 Purpose.

The City recognizes the value of implementing an automated traffic enforcement program in furtherance of city goals of creating safer environment for its citizens. Consistent with the council's direction and intent in adopting the policy and procedures of the photo enforcement program, the department is hereby authorized to develop public rules and make minor changes to the policies and procedures of the photo enforcement program, in order to better implement photo enforcement and as needed to stay current with changing technology and methods.

10.45.010 Authorized use of automated traffic safety cameras.

A. Pursuant to RCW 46.63.170, law enforcement officers of the City of Kenmore and persons commissioned by the police chief are authorized to use automated traffic safety cameras and related automated systems to detect one or more of the following:

1. Stoplight violations; and

2. School speed zone violations.

B. The use of automated traffic safety cameras is subject to the following restrictions:

1. Use of automated traffic safety cameras is restricted to intersections of two or more arterials, and school speed zones.

2. Automated traffic safety cameras may only take pictures of the vehicle and vehicle license plate and only while an infraction is occurring. Pictures taken by the automated traffic safety camera may not reveal the face of the driver or of passengers in the vehicle.

C. The City shall clearly mark all locations where automated safety cameras are in use by placing signs in locations that clearly indicate to a driver that the driver is entering a zone where traffic laws are enforced by an automated traffic safety camera.

10.45.020 Notice of infraction.

A. Whenever any vehicle is photographed by an automatic traffic safety camera, a notice of infraction shall be mailed to the registered owner of the vehicle within 14 days of the violation, or to the renter of the vehicle within 14 days of establishing the renter's name and address under subsection (B) of this section.

B. If the registered owner of the vehicle is a rental car business, the law enforcement agency shall, before a notice of infraction is issued, provide a written notice to the rental car business that a notice of infraction may be issued to the rental car business if the rental car business does not, within 18 days of receiving the written notice, provide to the issuing agency by return mail:

1. A statement under oath stating the name and known mailing address of the individual driving or renting the vehicle when the infraction occurred; or

2.A statement under oath that the business is unable to determine who was driving or renting the vehicle at the time the infraction occurred because the vehicle was stolen at the time of the infraction. A statement provided under this subsection must be accompanied by a copy of a filed police report regarding the vehicle theft; or

3. In lieu of identifying the vehicle operator, the rental car business may pay the applicable penalty. Timely mailing of this statement to the issuing law enforcement agency relieves a rental car business of any liability under this chapter for the notice of infraction.

C. The law enforcement officer issuing the notice of infraction shall include with it a certificate or facsimile thereof, based upon inspection of photographs, microphotographs, or electronic images produced by an automated traffic safety camera, stating the facts supporting the notice of infraction. This certificate or facsimile is prima facie evidence of the facts contained in it and is admissible in a proceeding charging a violation under this chapter.

D. All photographs, microphotographs, or electronic images, or any other personally identifying data prepared under this chapter are for the exclusive use of law enforcement in the discharge of duties under this chapter and, as provided in RCW 46.63.170(1)(g), are not open to the public and may not be used in a court in a pending action or proceeding unless the action or proceeding relates to a violation under this chapter. No photograph, microphotograph, or electronic image, or any other personally identifying data may be used for any purpose other than enforcement of violations under this chapter nor retained longer than necessary to enforce this chapter.

10.45.030 Adjudication of infraction – Procedures.

A. A person receiving a notice of infraction based on evidence detected by an automated traffic safety camera may respond to the notice by mail or request a hearing. The King County District Court shall adjudicate all requests for a hearing to mitigate or contest the notice of infraction.

B. The photographs, microphotographs, or electronic images evidencing the violation must be available for inspection and admission into evidence in a proceeding to adjudicate the liability for the infraction.

10.45.040 Violation - presumption.

A. In a traffic infraction case involving an infraction detected though the use of an automated traffic safety camera under this chapter and/or RCW 46.63.170, proof that the particular vehicle described in the notice of traffic infraction was in violation of this chapter and/or RCW 46.63.170, together with proof that the person named in the notice of traffic infraction was at the time of the violation the registered owner of the vehicle, constitutes in evidence a prima facie presumption that the registered owner of the vehicle was the person in control of the vehicle at the point where, and for the time during which, the violation occurred.

B. This presumption may be overcome only if the registered owner states, under oath, in a written statement to the court or in testimony before the court that the vehicle involved was, at the time, stolen or in the care, custody, or control of some person other than the registered owner.

10.45.050 Infractions processed.

Infractions detected through the use of automated traffic safety cameras are not part of the registered owner's driving record under RCW 46.52.101 and 46.52.120. Additionally, infractions generated by the use of automated traffic safety cameras under this chapter shall be processed in the same manner as parking infractions, including for the purposes of RCW 3.50.100, 35.20.220, 46.16A.120, and 46.20.270(2) .

10.45.060 Nonexclusive enforcement.

Nothing in this chapter prohibits a law enforcement officer from issuing a notice of traffic infraction to a person in control of a vehicle at the time a violation occurs under RCW 46.63.030(1)(a), (b), or (c).

10.45.070 Definition of automated traffic safety camera.

For the purposes of this ordinance, "automated traffic safety camera" means a device that uses a vehicle sensor installed to work in conjunction with an intersection traffic control system, or a speed measuring device, and a camera synchronized to automatically record one or more sequenced photographs, micro-photographs, or electronic images of the rear of a motor vehicle at the time the vehicle fails to stop when facing a steady red traffic control signal, or exceeds a speed limit in a school zone as detected by a speed measuring device.

10.45.080 Penalties.

A. The penalty for red-light infractions committed pursuant to the provisions of this chapter shall be $100.00.

B. The penalty for school speed zone infractions committed pursuant to the provisions of this chapter shall be as follows:

Speed of Violation	Fine Amount
Exceeding the School Zone Speed Limit by 6+ MPH	$100.00
Exceeding the Regulatory Speed Limit 6+ MPH	$250.00

C. Fees and penalties for failure to respond shall follow the standard court schedule for infractions.

10.45.090 Authorization for use of electronic signatures.

In connection with the traffic safety camera program, the police chief, or his or her designee, is authorized to utilize electronic signatures in accordance with the provisions of Kenmore Resolution No. 20-351, and the Uniform Electronic Transactions Act.

City Of Kenmore, Washington

Technical Memorandum

TO: City of Kenmore City Council

FROM: Tobin Bennett-Gold, PE
City of Kenmore Traffic Engineer

DATE: January 31, 2022

SUBJECT: School Zone Crash Data for 2015 through 2019

Description of Crash Data

Two sets of crash data are attached to this memorandum:

- Crashes which occurred within the spatial limits of school zones in the City of Kenmore during the years of 2015 through 2019.
- Crashes which occurred at the intersection of 61st Av and SR 522 during the years of 2015 through 2019.

The crash data is recorded by King County Sheriff's Office when an officer or deputy responds to a crash, and the data is then reported to the Washington Department of Transportation (WSDOT). After the data is processed by WSDOT, the formatted crash data is made available to the City of Kenmore, where it is retained for use in City-wide crash risk assessment.

Brief Summary of Crash Risk Assessment Methodology for School Zones

Because school zones are so small, and the periods during which school zones are active are so short, it is not likely that crashes will occur frequently enough in school zones during active school zone hours to allow a sample large enough to assess crash risk. For this reason, the baseline crash risk was estimated using the set of all crashes which occurred in a school zone at any time in a five year period, and that baseline crash risk was then used to assess the risk of crashes occurring during the school commute time period. The city-wide number of school zone, school-commute crashes estimated using this methodology was in fact less than the number of crashes which actually occurred during the school commute periods historically, so it is reasonable to assume that the estimated risk of crashes occurring in school zones during school commute periods using this methodology is a conservative underestimate.

Report Number	Associated School Zone	Date of Crash	Time of Crash	Maximum Injury Severity	Number of Injuries	Number of Vehicles	Number of Pedestrians	Number of Bicycles	Total Persons Involved	Description of Primary Collision	Location of Primary Collision in Roadway
E395863	Moorlands Elementary SZ on 84th Av	1/27/2015	21:25	No Apparent Injury	0	2	0	0	2	From same direction - one left turn - one straight	Lane of Primary Trafficway
E413868	Kenmore Elementary SZ on 73rd Av	4/5/2015	15:44	Possible Injury	2	3	0	0	3	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E432055	Moorlands Elementary SZ on 155th St	6/9/2015	9:57	Suspected Minor Injury	1	1	0	1	1	Vehicle - Pedalcyclist	Lane of Primary Trafficway
E432198	Moorlands Elementary SZ on 155th St	6/10/2015	7:10	No Apparent Injury	0	2	0	0	2	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
3678876	Moorlands Elementary SZ on 155th St	6/18/2015	16:16	No Apparent Injury	0	2	0	0	2	From same direction - both going straight - both moving - rear-end	Lane of Primary Trafficway
E444286	Arrowhead Elementary SZ on 153rd Pl	7/20/2015	10:42	No Apparent Injury	0	2	0	0	2	Entering at angle	Lane of Primary Trafficway
E450394	Moorlands Elementary SZ on 155th St	8/6/2015	18:27	No Apparent Injury	0	2	0	0	2	Entering at angle	Lane of Primary Trafficway
E453735	Moorlands Elementary SZ on 155th St	8/20/2015	6:25	No Apparent Injury	0	1	0	0	1	Roadway Ditch	Past the Outside Shoulder of Primary Trafficway
E476054	Kenmore Elementary SZ on 73rd Av	10/28/2015	15:43	No Apparent Injury	0	2	0	0	2	Entering at angle	Lane of Primary Trafficway
E487692	Kenmore Middle SZ on 202nd St	11/28/2015	22:02	Unknown	0	1	0	0	1	Utility Pole	Past the Outside Shoulder of Primary Trafficway
E504185	Moorlands Elementary SZ on 155th St	1/10/2016	18:00	Suspected Minor Injury	1	1	0	0	1	Tree or Stump (stationary)	Past the Outside Shoulder of Primary Trafficway
E523505	Kenmore Middle SZ on 202nd St	3/9/2016	14:15	No Apparent Injury	0	2	0	0	2	Entering at angle	Lane of Primary Trafficway
E524330	Kenmore Elementary SZ on 192nd St	3/11/2016	15:53	Unknown	0	1	0	0	1	Retaining Wall (concrete, rock, brick, etc.)	Past the Outside Shoulder of Primary Trafficway
E526902	Kenmore Elementary SZ on 73rd Av	3/21/2016	15:51	No Apparent Injury	0	2	0	0	2	One parked--one moving	Outside Shoulder of Primary Trafficway
E529555	Arrowhead Elementary SZ on 153rd Pl	3/29/2016	17:35	Suspected Serious Injury	1	1	0	0	1	Guide Post	Past the Outside Shoulder of Primary Trafficway
E552337	Moorlands Elementary SZ on 155th St	6/7/2016	11:38	No Apparent Injury	0	2	0	0	2	Entering at angle	Lane of Primary Trafficway
E563014	Kenmore Elementary SZ on 73rd Av	7/13/2016	4:30	No Apparent Injury	0	2	0	0	2	One parked--one moving	Outside Shoulder of Primary Trafficway
E564131	Moorlands Elementary SZ on 155th St	7/15/2016	14:30	No Apparent Injury	0	2	0	0	2	Entering at angle	Lane of Primary Trafficway
E580694	Arrowhead Elementary SZ on Juanita Dr	9/1/2016	9:20	No Apparent Injury	0	2	0	0	2	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E581556	Moorlands Elementary SZ on 155th St	9/4/2016	9:00	No Apparent Injury	0	2	0	0	2	One parked--one moving	Past the Outside Shoulder of Primary Trafficway
E613455	Kenmore Elementary SZ on 73rd Av	11/28/2016	17:00	Suspected Minor Injury	1	2	0	0	2	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E616684	Arrowhead Elementary SZ on Juanita Dr	12/6/2016	17:20	Possible Injury	1	3	0	0	3	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E627583	Moorlands Elementary SZ on 155th St	1/2/2017	1:24	Unknown	0	1	0	0	1	Tree or Stump (stationary)	Past the Outside Shoulder of Primary Trafficway
E640703	Arrowhead Elementary SZ on Juanita Dr	2/8/2017	16:14	Possible Injury	1	2	0	0	2	From same direction - both going straight - both moving - rear-end	Lane of Primary Trafficway
E647055	Arrowhead Elementary SZ on Juanita Dr	2/28/2017	9:05	No Apparent Injury	0	2	0	0	2	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E712613	Kenmore Middle SZ on 202nd St	9/15/2017	20:35	No Apparent Injury	0	2	0	0	2	Entering at angle	Lane of Primary Trafficway
E749869	Arrowhead Elementary SZ on Juanita Dr	12/20/2017	21:51	No Apparent Injury	0	2	0	0	2	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E751903	Arrowhead Elementary SZ on Juanita Dr	12/24/2017	17:30	No Apparent Injury	0	2	0	0	2	One parked--one moving	Past the Outside Shoulder of Primary Trafficway
E757158	Arrowhead Elementary SZ on Juanita Dr	1/10/2018	18:39	No Apparent Injury	0	2	0	0	2	From opposite direction - one left turn - one straight	Lane of Primary Trafficway
E786728	Moorlands Elementary SZ on 155th St	3/22/2018	7:30	No Apparent Injury	0	2	0	0	2	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E865162	Arrowhead Elementary SZ on Juanita Dr	11/10/2018	20:28	No Apparent Injury	0	3	0	0	3	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E880656	Moorlands Elementary SZ on 155th St	1/6/2019	20:34	No Apparent Injury	0	2	0	0	2	From same direction - both going straight - one stopped - rear-end	Lane of Primary Trafficway
E892870	Kenmore Elementary SZ on 73rd Av	2/5/2019	15:06	No Apparent Injury	0	2	0	0	2	From opposite direction - one left turn - one straight	Lane of Primary Trafficway
E903537	Moorlands Elementary SZ on 84th Av	3/17/2019	0:12	No Apparent Injury	0	1	0	0	1	Fire Hydrant	Past the Outside Shoulder of Primary Trafficway
E920790	Kenmore Elementary SZ on 73rd Av	5/13/2019	15:20	No Apparent Injury	0	2	0	0	2	From same direction - all others	Lane of Primary Trafficway
E920792	Kenmore Elementary SZ on 73rd Av	5/14/2019	18:18	No Apparent Injury	0	2	0	0	2	One car leaving parked position	Lane of Primary Trafficway
E927611	Kenmore Elementary SZ on 71st Av	5/29/2019	8:40	Possible Injury	1	2	0	0	2	One parked--one moving	Lane of Primary Trafficway
EA06011	Moorlands Elementary SZ on 155th St	12/31/2019	13:30	No Apparent Injury	0	2	0	0	2	Entering at angle	Lane of Primary Trafficway

Highlight indicates crash occurred during school zone active hours

Report Number	Primary Trafficway	Date of Crash	Time of Crash	Maximum Injury Severity	Number of Injuries	Number of Vehicles	Number of Pedestrians	Number of Bicycles	Total Persons Involved	Relationship to Intersection	Description of Primary Collision	Location of Primary Collision in Roadway
E395862	522	1/27/2015	17:34	No Apparent Injury	0	2	0	0	2	At Driveway within Major Intersection	From opposite direction - one left turn - one straight	Lane 1 Decreasing Milepost
E398145	522	2/4/2015	22:18	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 2 Decreasing Milepost
E399258	522	2/5/2015	22:14	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - both moving - rear-end	Lane 2 Decreasing Milepost
E399257	522	2/8/2015	13:18	Possible Injury	1	2	0	0	2	At Intersection and Related	From same direction - all others	Intersecting Road Increasing Milepost
E406513	522	3/9/2015	14:50	No Apparent Injury	0	2	0	0	2	At Intersection and Not Related	From same direction - both going straight - both moving - rear-end	Lane 1 Increasing Milepost
E410045	522	3/18/2015	14:40	No Apparent Injury	0	2	0	0	2	At Intersection and Not Related	From same direction - both going straight - both moving - rear-end	Lane 2 Increasing Milepost
E416316	522	4/14/2015	9:35	No Apparent Injury	0	2	0	0	2	At Driveway within Major Intersection	Entering at angle	Intersecting Road Decreasing Milepost
E425610	522	5/17/2015	19:37	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - both moving - rear-end	Lane 2 Increasing Milepost
E428338	522	5/29/2015	0:04	No Apparent Injury	0	1	0	1	1	At Intersection and Related	Vehicle - Pedalcyclist	Lane 2 Increasing Milepost
E433646	522	6/13/2015	17:20	No Apparent Injury	0	2	0	0	2	At Intersection and Related	Entering at angle	Intersecting Road Decreasing Milepost
E490564	522	12/5/2015	14:39	Suspected Minor Injury	1	2	0	0	2	At Intersection and Related	Temporary Traffic Sign, Barricade or Construction Materials	Intersecting Road Decreasing Milepost
E516157	522	2/14/2016	6:00	No Apparent Injury	0	2	0	0	2	At Intersection and Related	Entering at angle	Lane 3 Decreasing Milepost
E529186	522	3/26/2016	19:25	No Apparent Injury	0	1	0	0	1	At Intersection and Not Related	Temporary Traffic Sign, Barricade or Construction Materials	Lane 1 Increasing Milepost
3199996	522	3/27/2016	15:40	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 2 Increasing Milepost
E537195	522	4/23/2016	8:25	Possible Injury	1	2	0	0	2	At Intersection and Related	From same direction - both going straight - both moving - rear-end	Intersecting Road Decreasing Milepost
E546052	522	5/20/2016	17:52	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Intersecting Road Increasing Milepost
E549651	522	6/2/2016	21:12	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - both moving - sideswipe	Lane 1 Decreasing Milepost
E565147	522	7/20/2016	13:10	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 2 Increasing Milepost
E580695	522	9/1/2016	15:40	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - both moving - sideswipe	Lane 3 Increasing Milepost
E613454	522	11/29/2016	9:05	No Apparent Injury	0	2	0	0	2	At Intersection and Related	Entering at angle	Lane 1 Decreasing Milepost
E618013	522	12/9/2016	17:10	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Intersecting Road Decreasing Milepost
E629670	522	1/7/2017	13:44	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - both moving - sideswipe	Lane 3 Decreasing Milepost
E629673	522	1/8/2017	17:33	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - both moving - rear-end	Lane 2 Increasing Milepost
E630680	522	1/11/2017	10:15	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - sideswipe	Intersecting Road Decreasing Milepost
E635984	522	1/27/2017	9:48	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Intersecting Road Decreasing Milepost
E647060	522	2/14/2017	11:30	No Apparent Injury	0	2	0	0	2	At Intersection and Related	Entering at angle	Lane 2 Decreasing Milepost
E653959	522	3/21/2017	15:43	No Apparent Injury	0	3	0	0	3	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Left Turn Lane Increasing Milepost
E657336	522	4/1/2017	12:30	Suspected Serious Injury	1	2	0	0	2	At Intersection and Related	From opposite direction - one left turn - one straight	Lane 2 Decreasing Milepost
E659872	522	4/9/2017	20:55	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 2 Increasing Milepost
E671353	522	5/16/2017	6:41	No Apparent Injury	0	2	0	0	2	Intersection Related but Not at Intersection	From same direction - both going straight - one stopped - rear-end	Lane 2 Increasing Milepost
E674080	522	5/22/2017	19:04	No Apparent Injury	0	2	0	0	2	At Intersection and Related	Entering at angle	Lane 2 Decreasing Milepost
E677873	522	6/5/2017	8:20	Suspected Minor Injury	1	2	0	0	2	Intersection Related but Not at Intersection	From same direction - both going straight - one stopped - rear-end	Lane 3 Increasing Milepost
E691971	522	7/16/2017	9:59	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 3 Decreasing Milepost
E701041	522	8/11/2017	9:45	No Apparent Injury	0	2	0	0	2	At Intersection and Related	Entering at angle	Lane 1 Decreasing Milepost
E712621	522	9/2/2017	7:36	No Apparent Injury	0	2	0	0	2	At Intersection and Related	Entering at angle	Lane 2 Decreasing Milepost
E713151	522	9/17/2017	15:20	No Apparent Injury	0	1	0	0	1	At Intersection and Related	Signal Pole	Decreasing Other Location
E717916	522	9/25/2017	9:03	No Apparent Injury	0	2	0	0	2	At Intersection and Related	Same direction -- both turning left -- both moving -- sideswipe	Lane 3 Decreasing Milepost
E731747	522	11/3/2017	20:08	No Apparent Injury	0	3	0	0	3	Intersection Related but Not at Intersection	From same direction - both going straight - one stopped - rear-end	Lane 1 Increasing Milepost
E732210	522	11/4/2017	19:00	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From opposite direction - all others	Lane 2 Decreasing Milepost
E790271	522	4/8/2018	18:39	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 3 Decreasing Milepost
E788818	522	4/10/2018	16:04	Possible Injury	1	2	0	0	2	Intersection Related but Not at Intersection	From same direction - both going straight - one stopped - rear-end	Lane 2 Increasing Milepost
E803034	522	4/24/2018	15:45	No Apparent Injury	0	1	0	0	1	At Intersection and Related	Linear Curb	Right Shoulder Decreasing Milepost
E806947	522	6/4/2018	15:54	No Apparent Injury	0	2	0	0	2	At Intersection and Not Related	From same direction - both going straight - both moving - sideswipe	Lane 1 Increasing Milepost
E835308	522	8/29/2018	21:31	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 4 Increasing Milepost
E835309	522	9/2/2018	13:05	No Apparent Injury	0	2	0	0	2	Intersection Related but Not at Intersection	From same direction - both going straight - one stopped - rear-end	Lane 2 Increasing Milepost
E863204	522	11/6/2018	18:27	Possible Injury	1	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 2 Increasing Milepost
E885359	522	1/11/2019	6:35	Possible Injury	1	2	0	0	2	Intersection Related but Not at Intersection	From same direction - both going straight - one stopped - rear-end	Lane 3 Decreasing Milepost
E928726	522	6/2/2019	10:40	Possible Injury	1	2	0	0	2	Intersection Related but Not at Intersection	From same direction - both going straight - one stopped - rear-end	Lane 3 Increasing Milepost
E928725	522	6/4/2019	23:47	Possible Injury	1	1	0	0	1	At Intersection and Related	Fixed object	Decreasing Other Location
E950279	522	8/13/2019	18:32	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 2 Decreasing Milepost
E961340	522	9/14/2019	13:40	No Apparent Injury	0	2	0	0	2	At Intersection and Related	From same direction - both going straight - one stopped - rear-end	Lane 1 Decreasing Milepost
E984617	522	11/18/2019	17:15	Possible Injury	1	1	1	0	2	At Intersection and Related	Vehicle turning right hits pedestrian	Lane 1 Increasing Milepost

City Of Kenmore, Washington

Technical Memorandum

TO: City of Kenmore City Council

FROM: Tobin Bennett-Gold, PE
City of Kenmore Traffic Engineer

DATE: January 31, 2022

SUBJECT: School Zone Speed Violation and Red Light Violation Data for 2015 through 2019

Description of Violation Data

The attached data represents the total number of notices of infraction issued for school zone speeding violations by Kenmore Police in the five-year period of time from 2015 through 2019. This data was recorded by Kenmore Police and made available by Kenmore Police Chief Brandon Moen. During the period of time represented by this data set, 518 notices of infraction (NOI) were issued in school zones throughout Kenmore, roughly three NOIs per week while school was in session.

Although requested, data for red-light violations at 61st Av and SR 522 was not available, and it was confirmed by Chief Moen that no notices of infraction had been issued for failure to stop at a red light for this intersection in the five-year period.

Considerations Regarding the Frequency of Violations and Enforcement

The frequency with which Kenmore Police are able to respond to a specific violation is not necessarily indicative of the frequency with which violations of that type occur. A statement by Chief Moen offers some explanation for the discrepancy between violations detected by non-conspicuous engineering studies and conspicuous police enforcement:

> *Traffic enforcement is conducted by Kenmore Police Officers as time allows, in-between 911 calls for service, as well as proactive policing efforts directed at competing non-traffic related issues. KPD has the second lowest staffed (per capita) police agency in King County, at less than half the state average. The lone traffic dedicated Officer position was eliminated in 2014 due to budget and staffing constraints.*
>
> *The presence of a marked patrol vehicle reduces the likelihood that a violation will occur. If drivers see a patrol car parked at an intersection monitoring traffic, or running radar in a school zone, it is less likely that a driver will choose to violate a traffic law.*

> *For those drivers that are not observant, Officers are able to stop and issue infractions. This whole process can take between 10-15 minutes per traffic stop, limiting the number of violators that can be contacted (especially during the narrow school zone window). The logistics of traffic stops in certain areas (i.e. areas of heavy traffic, or where there are few safe places to stop) makes it challenging to safely make traffic stops for Officers.*
>
> *Leveraging technology to assist in traffic enforcement will help Kenmore Police more efficiently and effectively address specific traffic concerns on roadways and intersections in Kenmore. – Brandon Moen, Kenmore Chief of Police*

Because of the effect of conspicuous enforcement, violations are less likely to occur when police are present than when they are not. When police are present, the number of violations they respond to is limited by the time it takes to perform a traffic stop and issue a notice of infraction, and if violations occur more frequently than police are able to respond to them, then those additional violations will not be reflected by the number of NOIs issued.

Number	Agency	Ticket_Number	Incident_date	Primary_Trafficway
313	Kenmore PD	7Z0473695	10/2/2017	73RD AVE NE
314	Kenmore PD	7Z0473694	10/2/2017	73RD AVE NE
54	Kenmore PD	5Z0020345	6/17/2015	73 AV NE
90	Kenmore PD	5Z0020367	11/4/2015	73 AV NE
104	Kenmore PD	6Z0090455	1/7/2016	73 AV NE
105	Kenmore PD	6Z0090453	1/7/2016	73 AV NE
112	Kenmore PD	6Z0090464	1/21/2016	73 AV NE
118	Kenmore PD	6Z0090468	1/29/2016	73 AV NE
119	Kenmore PD	6Z0090470	1/29/2016	73 AV NE
156	Kenmore PD	6Z0090508	5/12/2016	73 AV NE
259	Kenmore PD	7Z0600313	4/17/2017	73 AVE NE
1	Kenmore PD	5Z0038304	1/6/2015	73 AVE NE
2	Kenmore PD	5Z0038310	1/12/2015	73 AVE NE
3	Kenmore PD	5Z0160233	1/14/2015	73 AVE NE
8	Kenmore PD	5Z0056561	1/22/2015	73 AVE NE
10	Kenmore PD	5Z0160249	1/30/2015	73 AVE NE
11	Kenmore PD	5Z0038339	2/3/2015	73 AVE NE
13	Kenmore PD	5Z0148180	2/23/2015	73 AVE NE
14	Kenmore PD	5Z0038367	2/24/2015	73 AVE NE
15	Kenmore PD	5Z0038366	2/24/2015	73 AVE NE
16	Kenmore PD	5Z0056566	2/27/2015	73 AVE NE
17	Kenmore PD	5Z0038385	3/10/2015	73 AVE NE
19	Kenmore PD	5Z0038400	3/13/2015	73 AVE NE
21	Kenmore PD	5Z0378758	3/16/2015	73 AVE NE
22	Kenmore PD	5Z0394791	3/19/2015	73 AVE NE
23	Kenmore PD	5Z0378763	3/24/2015	73 AVE NE
28	Kenmore PD	5Z0394806	4/2/2015	73 AVE NE
29	Kenmore PD	5Z0394820	4/10/2015	73 AVE NE
30	Kenmore PD	5Z0056576	4/21/2015	73 AVE NE
31	Kenmore PD	5Z0394826	4/23/2015	73 AVE NE
34	Kenmore PD	5Z0056577	4/27/2015	73 AVE NE
36	Kenmore PD	5Z0394846	5/15/2015	73 AVE NE
37	Kenmore PD	5Z0546733	5/19/2015	73 AVE NE
40	Kenmore PD	5Z0546739	5/27/2015	73 AVE NE
42	Kenmore PD	5Z0607597	5/29/2015	73 AVE NE
43	Kenmore PD	5Z0546743	6/2/2015	73 AVE NE
44	Kenmore PD	5Z0546742	6/1/2015	73 AVE NE
46	Kenmore PD	5Z0663908	6/3/2015	73 AVE NE
47	Kenmore PD	5Z0663913	6/4/2015	73 AVE NE
48	Kenmore PD	5Z0678695	6/5/2015	73 AVE NE
49	Kenmore PD	5Z0689653	6/8/2015	73 AVE NE
50	Kenmore PD	5Z0689665	6/10/2015	73 AVE NE
51	Kenmore PD	5Z0710209	6/17/2015	73 AVE NE
52	Kenmore PD		6/17/2015	73 AVE NE
56	Kenmore PD	5Z0779891	9/2/2015	73 AVE NE
57	Kenmore PD	5Z0952626	9/8/2015	73 AVE NE

58	Kenmore PD	5Z0918972	9/9/2015	73 AVE NE
59	Kenmore PD	5Z0918973	9/9/2015	73 AVE NE
61	Kenmore PD	5Z0148232	9/10/2015	73 AVE NE
63	Kenmore PD	5Z0779902	9/10/2015	73 AVE NE
65	Kenmore PD	5Z0996288	9/15/2015	73 AVE NE
66	Kenmore PD	5Z0779916	9/17/2015	73 AVE NE
67	Kenmore PD	5Z0779915	9/17/2015	73 AVE NE
68	Kenmore PD	5Z0148241	9/18/2015	73 AVE NE
69	Kenmore PD	5Z0779918	9/18/2015	73 AVE NE
70	Kenmore PD	5Z1025666	9/21/2015	73 AVE NE
71	Kenmore PD	5Z1025667	9/21/2015	73 AVE NE
72	Kenmore PD	5Z1025671	9/23/2015	73 AVE NE
73	Kenmore PD	5Z1025672	9/23/2015	73 AVE NE
74	Kenmore PD	5Z1025677	9/24/2015	73 AVE NE
75	Kenmore PD	5Z1025680	9/25/2015	73 AVE NE
76	Kenmore PD	5Z0148242	9/25/2015	73 AVE NE
77	Kenmore PD	5Z0779925	9/25/2015	73 AVE NE
78	Kenmore PD	5Z0952637	9/29/2015	73 AVE NE
83	Kenmore PD	5Z0779936	10/8/2015	73 AVE NE
84	Kenmore PD	5Z0779940	10/9/2015	73 AVE NE
86	Kenmore PD	5Z1060156	10/13/2015	73 AVE NE
87	Kenmore PD	5Z0779944	10/15/2015	73 AVE NE
88	Kenmore PD	5Z1060159	11/3/2015	73 AVE NE
89	Kenmore PD	5Z1123234	11/3/2015	73 AVE NE
91	Kenmore PD	5Z1123238	11/6/2015	73 AVE NE
92	Kenmore PD	5Z1155724	11/9/2015	73 AVE NE
93	Kenmore PD	5Z1060161	11/10/2015	73 AVE NE
94	Kenmore PD	5Z1155733	11/13/2015	73 AVE NE
95	Kenmore PD	5Z1155739	11/20/2015	73 AVE NE
96	Kenmore PD	5Z1180511	11/30/2015	73 AVE NE
97	Kenmore PD	5Z1155744	12/1/2015	73 AVE NE
98	Kenmore PD	5Z1155746	12/3/2015	73 AVE NE
101	Kenmore PD	5Z1214863	12/11/2015	73 AVE NE
102	Kenmore PD	5Z1060171	12/11/2015	73 AVE NE
103	Kenmore PD	5Z1060172	12/17/2015	73 AVE NE
109	Kenmore PD	6Z0140587	1/12/2016	73 AVE NE
111	Kenmore PD	6Z0140591	1/20/2016	73 AVE NE
113	Kenmore PD	6Z0006570	1/22/2016	73 AVE NE
116	Kenmore PD	6Z0140595	1/27/2016	73 AVE NE
117	Kenmore PD	6Z0220773	1/28/2016	73 AVE NE
120	Kenmore PD	6Z0006580	1/29/2016	73 AVE NE
121	Kenmore PD	6Z0006582	2/2/2016	73 AVE NE
122	Kenmore PD	6Z0265023	2/1/2016	73 AVE NE
123	Kenmore PD	6Z0258845	2/3/2016	73 AVE NE
124	Kenmore PD	6Z0006586	2/4/2016	73 AVE NE
125	Kenmore PD	6Z0006600	2/11/2016	73 AVE NE
132	Kenmore PD	6Z0006619	3/3/2016	73 AVE NE

133	Kenmore PD	6Z0258866	3/4/2016	73 AVE NE
134	Kenmore PD	6Z0374601	3/8/2016	73 AVE NE
136	Kenmore PD	6Z0374614	3/16/2016	73 AVE NE
138	Kenmore PD	6Z0374621	3/21/2016	73 AVE NE
139	Kenmore PD	6Z0423870	3/23/2016	73 AVE NE
142	Kenmore PD	6Z0006633	3/28/2016	73 AVE NE
143	Kenmore PD	6Z0006638	4/1/2016	73 AVE NE
144	Kenmore PD	6Z0423890	4/5/2016	73 AVE NE
145	Kenmore PD	6Z0006654	4/18/2016	73 AVE NE
146	Kenmore PD	6Z0006656	4/19/2016	73 AVE NE
147	Kenmore PD	6Z0517740	4/22/2016	73 AVE NE
148	Kenmore PD	6Z0006668	4/26/2016	73 AVE NE
149	Kenmore PD	6Z0140612	5/2/2016	73 AVE NE
150	Kenmore PD	6Z0006672	5/2/2016	73 AVE NE
151	Kenmore PD	6Z0140614	5/3/2016	73 AVE NE
152	Kenmore PD	6Z0006674	5/3/2016	73 AVE NE
153	Kenmore PD	6Z0517756	5/9/2016	73 AVE NE
154	Kenmore PD	6Z0006680	5/10/2016	73 AVE NE
155	Kenmore PD	6Z0006681	5/10/2016	73 AVE NE
157	Kenmore PD	6Z0588792	5/20/2016	73 AVE NE
158	Kenmore PD	6Z0006690	5/26/2016	73 AVE NE
159	Kenmore PD	6Z0006699	6/2/2016	73 AVE NE
163	Kenmore PD	6Z0006708	6/15/2016	73 AVE NE
165	Kenmore PD	6Z0926127	9/8/2016	73 AVE NE
166	Kenmore PD	6Z0140627	9/12/2016	73 AVE NE
167	Kenmore PD	6Z0090523	9/14/2016	73 AVE NE
168	Kenmore PD	6Z0926136	9/16/2016	73 AVE NE
169	Kenmore PD	6Z0742679	9/15/2016	73 AVE NE
170	Kenmore PD	6Z0140631	9/19/2016	73 AVE NE
171	Kenmore PD	6Z0694018	9/19/2016	73 AVE NE
173	Kenmore PD	6Z0140632	9/20/2016	73 AVE NE
175	Kenmore PD	6Z0926142	9/26/2016	73 AVE NE
176	Kenmore PD	6Z0926141	9/26/2016	73 AVE NE
177	Kenmore PD	6Z0090529	9/26/2016	73 AVE NE
180	Kenmore PD	6Z0694030	10/4/2016	73 AVE NE
183	Kenmore PD	6Z1023129	10/10/2016	73 AVE NE
184	Kenmore PD	6Z0694045	10/10/2016	73 AVE NE
185	Kenmore PD	6Z1044766	10/11/2016	73 AVE NE
186	Kenmore PD	6Z0090533	10/12/2016	73 AVE NE
188	Kenmore PD	6Z1006578	10/14/2016	73 AVE NE
189	Kenmore PD	6Z1006577	10/14/2016	73 AVE NE
190	Kenmore PD	6Z1044782	10/17/2016	73 AVE NE
191	Kenmore PD	6Z1055209	10/18/2016	73 AVE NE
197	Kenmore PD	6Z1044792	10/25/2016	73 AVE NE
198	Kenmore PD	6Z1044796	10/27/2016	73 AVE NE
199	Kenmore PD	6Z1089091	10/31/2016	73 AVE NE
200	Kenmore PD	6Z1083502	11/1/2016	73 AVE NE

202	Kenmore PD	6Z1089104	11/8/2016	73 AVE NE
203	Kenmore PD	6Z1089105	11/8/2016	73 AVE NE
204	Kenmore PD	6Z0985760	11/10/2016	73 AVE NE
205	Kenmore PD	6Z1083507	11/14/2016	73 AVE NE
207	Kenmore PD	6Z1083509	11/15/2016	73 AVE NE
208	Kenmore PD	6Z1089113	11/15/2016	73 AVE NE
212	Kenmore PD	6Z0985764	11/21/2016	73 AVE NE
213	Kenmore PD	6Z0985766	11/28/2016	73 AVE NE
214	Kenmore PD	6Z1083518	11/30/2016	73 AVE NE
215	Kenmore PD	6Z1089134	12/2/2016	73 AVE NE
216	Kenmore PD	6Z1089137	12/6/2016	73 AVE NE
220	Kenmore PD	7Z0055608	1/3/2017	73 AVE NE
221	Kenmore PD	7Z0055609	1/4/2017	73 AVE NE
224	Kenmore PD	7Z0034088	1/12/2017	73 AVE NE
229	Kenmore PD	7Z0250860	1/27/2017	73 AVE NE
231	Kenmore PD	7Z0319536	2/13/2017	73 AVE NE
237	Kenmore PD	7Z0466512	3/7/2017	73 AVE NE
238	Kenmore PD	7Z0459131	3/7/2017	73 AVE NE
240	Kenmore PD	7Z0464531	3/9/2017	73 AVE NE
242	Kenmore PD	7Z0466516	3/10/2017	73 AVE NE
244	Kenmore PD	7Z0459137	3/14/2017	73 AVE NE
245	Kenmore PD	7Z0466518	3/15/2017	73 AVE NE
246	Kenmore PD	7Z0459146	3/20/2017	73 AVE NE
247	Kenmore PD	7Z0459148	3/21/2017	73 AVE NE
249	Kenmore PD	7Z0466524	3/23/2017	73 AVE NE
250	Kenmore PD	7Z0466523	3/23/2017	73 AVE NE
251	Kenmore PD	7Z0466522	3/23/2017	73 AVE NE
253	Kenmore PD	7Z0459151	3/27/2017	73 AVE NE
257	Kenmore PD	7Z0459160	4/4/2017	73 AVE NE
258	Kenmore PD	7Z0459161	4/6/2017	73 AVE NE
261	Kenmore PD	7Z0464543	4/24/2017	73 AVE NE
265	Kenmore PD	7Z0459166	5/1/2017	73 AVE NE
266	Kenmore PD	7Z0600331	5/4/2017	73 AVE NE
268	Kenmore PD	7Z0668447	5/5/2017	73 AVE NE
269	Kenmore PD	7Z0668452	5/15/2017	73 AVE NE
271	Kenmore PD	7Z0669969	5/18/2017	73 AVE NE
281	Kenmore PD	7Z0459180	6/1/2017	73 AVE NE
282	Kenmore PD	7Z0772518	6/5/2017	73 AVE NE
287	Kenmore PD	7Z0772523	6/9/2017	73 AVE NE
288	Kenmore PD	7Z0459186	6/9/2017	73 AVE NE
289	Kenmore PD	7Z0772527	6/12/2017	73 AVE NE
290	Kenmore PD	7Z0668464	6/13/2017	73 AVE NE
307	Kenmore PD	7Z1035479	9/22/2017	73 AVE NE
318	Kenmore PD	7Z0993754	10/9/2017	73 AVE NE
319	Kenmore PD	7Z1131499	10/11/2017	73 AVE NE
320	Kenmore PD	7Z1131498	10/11/2017	73 AVE NE
321	Kenmore PD	7Z1131497	10/11/2017	73 AVE NE

337	Kenmore PD	7Z1214653	11/1/2017	73 AVE NE
340	Kenmore PD	7Z1214663	11/13/2017	73 AVE NE
341	Kenmore PD	7Z1214662	11/13/2017	73 AVE NE
342	Kenmore PD	7Z1248264	11/16/2017	73 AVE NE
343	Kenmore PD	7Z1248267	11/17/2017	73 AVE NE
344	Kenmore PD	7Z1248266	11/17/2017	73 AVE NE
345	Kenmore PD	7Z1248269	11/20/2017	73 AVE NE
346	Kenmore PD	7Z1248268	11/20/2017	73 AVE NE
347	Kenmore PD	7Z1248273	11/22/2017	73 AVE NE
351	Kenmore PD	7Z1288912	12/7/2017	73 AVE NE
352	Kenmore PD	7Z1288913	12/7/2017	73 AVE NE
354	Kenmore PD	7Z1288919	12/11/2017	73 AVE NE
355	Kenmore PD	7Z1232690	12/14/2017	73 AVE NE
356	Kenmore PD	7Z1232693	12/15/2017	73 AVE NE
358	Kenmore PD	8Z0042606	1/2/2018	73 AVE NE
361	Kenmore PD	8Z0109005	1/9/2018	73 AVE NE
362	Kenmore PD	8Z0109004	1/9/2018	73 AVE NE
363	Kenmore PD	8Z0109010	1/11/2018	73 AVE NE
365	Kenmore PD	8Z0042612	1/19/2018	73 AVE NE
366	Kenmore PD	8Z0039572	1/22/2018	73 AVE NE
369	Kenmore PD	8Z0039575	1/25/2018	73 AVE NE
370	Kenmore PD	8Z0039574	1/25/2018	73 AVE NE
371	Kenmore PD	8Z0039573	1/25/2018	73 AVE NE
374	Kenmore PD	8Z0039580	1/26/2018	73 AVE NE
375	Kenmore PD	8Z0039579	1/26/2018	73 AVE NE
376	Kenmore PD	8Z0039578	1/26/2018	73 AVE NE
377	Kenmore PD	8Z0109020	1/31/2018	73 AVE NE
379	Kenmore PD	8Z0192103	2/6/2018	73 AVE NE
380	Kenmore PD	8Z0192101	2/6/2018	73 AVE NE
381	Kenmore PD	8Z0109027	2/8/2018	73 AVE NE
382	Kenmore PD	8Z0109026	2/8/2018	73 AVE NE
384	Kenmore PD	8Z0109033	2/16/2018	73 AVE NE
385	Kenmore PD	8Z0109032	2/16/2018	73 AVE NE
389	Kenmore PD	8Z0109044	3/15/2018	73 AVE NE
393	Kenmore PD	8Z0302630	3/19/2018	73 AVE NE
405	Kenmore PD	8Z0384564	5/1/2018	73 AVE NE
406	Kenmore PD	8Z0384563	5/1/2018	73 AVE NE
412	Kenmore PD	8Z0372824	5/17/2018	73 AVE NE
414	Kenmore PD	8Z0384571	5/18/2018	73 AVE NE
418	Kenmore PD	8Z0372827	5/22/2018	73 AVE NE
422	Kenmore PD	8Z0384575	5/31/2018	73 AVE NE
426	Kenmore PD	8Z0609671	6/8/2018	73 AVE NE
429	Kenmore PD	8Z0384582	6/14/2018	73 AVE NE
434	Kenmore PD	8Z0785241	9/24/2018	73 AVE NE
435	Kenmore PD	8Z0785240	9/24/2018	73 AVE NE
438	Kenmore PD	8Z0636918	9/28/2018	73 AVE NE
439	Kenmore PD	8Z0384597	10/1/2018	73 AVE NE

442	Kenmore PD	8Z0384598	10/8/2018	73 AVE NE
444	Kenmore PD	8Z1002111	10/9/2018	73 AVE NE
445	Kenmore PD	8Z1002110	10/9/2018	73 AVE NE
446	Kenmore PD	8Z1002113	10/11/2018	73 AVE NE
448	Kenmore PD	8Z1002115	10/16/2018	73 AVE NE
449	Kenmore PD	8Z1002117	10/22/2018	73 AVE NE
450	Kenmore PD	8Z1022782	10/23/2018	73 AVE NE
451	Kenmore PD	8Z1002120	10/29/2018	73 AVE NE
452	Kenmore PD	8Z1002121	11/1/2018	73 AVE NE
453	Kenmore PD	8Z1002122	11/5/2018	73 AVE NE
454	Kenmore PD	8Z1022785	11/9/2018	73 AVE NE
455	Kenmore PD	8Z1002123	11/13/2018	73 AVE NE
456	Kenmore PD	8Z1002125	11/27/2018	73 AVE NE
457	Kenmore PD	8Z1002129	12/7/2018	73 AVE NE
458	Kenmore PD	9Z0118815	1/4/2019	73 AVE NE
459	Kenmore PD	9Z0155588	1/8/2019	73 AVE NE
461	Kenmore PD	9Z0155590	1/14/2019	73 AVE NE
462	Kenmore PD	9Z0155593	1/17/2019	73 AVE NE
464	Kenmore PD	9Z0155595	1/31/2019	73 AVE NE
465	Kenmore PD	9Z0155596	2/1/2019	73 AVE NE
466	Kenmore PD	9Z0155600	2/26/2019	73 AVE NE
467	Kenmore PD	9Z0155601	3/4/2019	73 AVE NE
470	Kenmore PD	9Z0118828	3/11/2019	73 AVE NE
473	Kenmore PD	9Z0118830	3/19/2019	73 AVE NE
475	Kenmore PD	9Z0155604	3/20/2019	73 AVE NE
476	Kenmore PD	9Z0426109	4/4/2019	73 AVE NE
477	Kenmore PD	9Z0155607	4/23/2019	73 AVE NE
478	Kenmore PD	9Z0155608	4/29/2019	73 AVE NE
479	Kenmore PD	9Z0155610	5/6/2019	73 AVE NE
480	Kenmore PD	9Z0155611	5/7/2019	73 AVE NE
482	Kenmore PD	9Z0155612	5/21/2019	73 AVE NE
483	Kenmore PD	9Z0155615	5/23/2019	73 AVE NE
484	Kenmore PD	9Z0581753	5/30/2019	73 AVE NE
485	Kenmore PD	9Z0155617	5/31/2019	73 AVE NE
487	Kenmore PD	9Z0077270	6/4/2019	73 AVE NE
489	Kenmore PD	9Z0077274	6/10/2019	73 AVE NE
493	Kenmore PD	9Z0155635	9/24/2019	73 AVE NE
494	Kenmore PD	9Z0892611	9/23/2019	73 AVE NE
495	Kenmore PD	9Z0155636	9/30/2019	73 AVE NE
496	Kenmore PD	9Z0973678	10/1/2019	73 AVE NE
498	Kenmore PD	9Z0973681	10/7/2019	73 AVE NE
499	Kenmore PD	9Z0892617	10/3/2019	73 AVE NE
500	Kenmore PD	9Z0892619	10/9/2019	73 AVE NE
501	Kenmore PD	9Z0892618	10/9/2019	73 AVE NE
502	Kenmore PD	9Z0973682	10/15/2019	73 AVE NE
503	Kenmore PD	9Z0973684	10/17/2019	73 AVE NE
504	Kenmore PD	9Z0973683	10/17/2019	73 AVE NE

505	Kenmore PD	9Z0892621	10/23/2019	73 AVE NE
506	Kenmore PD	9Z0077305	10/28/2019	73 AVE NE
507	Kenmore PD	9Z0973687	11/6/2019	73 AVE NE
509	Kenmore PD	9Z0973694	11/21/2019	73 AVE NE
510	Kenmore PD	9Z0973693	11/21/2019	73 AVE NE
511	Kenmore PD	9Z1124651	12/2/2019	73 AVE NE
512	Kenmore PD	9Z0077311	12/3/2019	73 AVE NE
513	Kenmore PD	9Z0973695	12/5/2019	73 AVE NE
514	Kenmore PD	9Z0973697	12/12/2019	73 AVE NE
515	Kenmore PD	9Z0973699	12/13/2019	73 AVE NE
517	Kenmore PD	9Z0077319	12/18/2019	73 AVE NE
518	Kenmore PD	9Z0973701	12/19/2019	73 AVE NE
81	Kenmore PD		10/1/2015	73 AVE NE 19100
82	Kenmore PD	5Z1043886	10/1/2015	73 AVE NE 19100
468	Kenmore PD	9Z0086678	3/1/2019	73RD AVE
39	Kenmore PD	5Z0514745	5/20/2015	73RD AVE NE
99	Kenmore PD	5Z0919990	12/4/2015	73RD AVE NE
100	Kenmore PD	5Z0919993	12/10/2015	73RD AVE NE
137	Kenmore PD	6Z0109230	3/17/2016	73RD AVE NE
160	Kenmore PD	6Z0109259	6/6/2016	73RD AVE NE
209	Kenmore PD	6Z0465108	11/16/2016	73RD AVE NE
210	Kenmore PD	6Z0465109	11/16/2016	73RD AVE NE
217	Kenmore PD	6Z0465118	12/8/2016	73RD AVE NE
218	Kenmore PD	6Z0465119	12/8/2016	73RD AVE NE
219	Kenmore PD	6Z0465120	12/8/2016	73RD AVE NE
222	Kenmore PD	7Z0166803	1/5/2017	73RD AVE NE
232	Kenmore PD	7Z0331156	2/14/2017	73RD AVE NE
233	Kenmore PD	7Z0331157	2/14/2017	73RD AVE NE
234	Kenmore PD	7Z0331158	2/14/2017	73RD AVE NE
239	Kenmore PD	7Z0475157	3/8/2017	73RD AVE NE
248	Kenmore PD	7Z0475158	3/22/2017	73RD AVE NE
252	Kenmore PD	7Z0475160	3/27/2017	73RD AVE NE
254	Kenmore PD	7Z0475161	3/29/2017	73RD AVE NE
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463	Kenmore PD	9Z0086677	1/18/2019	73RD AVE NE
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195	Kenmore PD	6Z0981598	10/26/2016	NE 190TH ST

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397	Kenmore PD	8Z0192116	3/26/2018	NE 192 ST
64	Kenmore PD	5Z0020361	9/11/2015	84 AV NE

City Of Kenmore, Washington

Memorandum

TO: City of Kenmore City Council

FROM: Tobin Bennett-Gold, PE
City of Kenmore Traffic Engineer

DATE: January 31, 2022

SUBJECT: King County Court Photo Enforcement Violations Practices and Records

Availability of King County Courts Records

On Wednesday January 26th, 2022 King County District Court was contacted in order to informally request records relating to the processing and outcomes of photo enforcement notices of infraction (no public records request was made at this time). Court staff investigated the feasibility of providing this information and responded with the following considerations:

- A request for records pertaining to another contract city's photo enforcement program would have to be made to that city, who would in turn make the request to King County Courts.
- In 2020 King County Court switched record keeping systems from the system administered by Washington State to a system administered by the County, and all court records which predate this system change have been archived with the state in physical storage.
- If a request is made by a contract city to retrieve these records, they would have to be entered into the court's new system before they could be queried, which would require additional time and accrue additional expense, and a guarantee could not be made that the desired data is retrievable. Altogether the time to deliver this information would be on the scale of months.

Furthermore, the nature of the data which would be available is "a snapshot in time" of the status of active court cases at that moment, e.g. on this date how many cases are on extended payment plans, or how many cases are requesting reduced payment but have not yet been processed. Once the City of Kenmore received the case data, it would require an additional level of analysis to extract information about relative frequency of case outcomes.

Data from 2020 and onward would still be available in the current court records system, however that information is expected to be of limited utility as schools have been closed for most of the available data period, virtually eliminating all school zone speed violations, and traffic volumes during pandemic

periods have plummeted, substantially reducing the frequency of red light violations. Because of the dissimilarity of pandemic conditions to future conditions (in type and frequency of violations, financial circumstances for violators, and court policies and practices specific to pandemic periods), any data taken exclusively from pandemic-influenced years is poorly suited for forecasting future outcomes.

Informal Process Description

Although the data requested was not readily available, court representatives were able to offer an informal description of court processes and typical outcomes. Regarding relief for financial hardship and / or financial difficulty with making payment of fines, two options are available: reduced payment, and extended payment plan[1]. Persons owing fines may request one or both of these accommodations, and nearly all requests for either or both accommodations are approved. The frequency with which these requests are made, however, is difficult to estimate. The decision of whether and to what degree accommodation is granted is ultimately the responsibility of a court judge, and the person requesting accommodation may visit the court in person or may submit a written request, either method is equally acceptable.

In addition to the availability of reduced payment or payment plan accommodations, in the cases where non-response or non-payment results in additional cost (e.g. accrued interest, or collections), both of these options remain open to the person should they seek accommodation from the court. That is to say, at any time, regardless of the history of non-response or non-payment, accommodations for financial hardship are always available upon request.

[1] Although a payment plan does not increase the amount of the fine owed, the collections vendor does collect a one-time $15 set-up fee and a monthly $5 payment processing fee, resulting in an increase in total amount paid if the amount is spread over a larger number of payments.

City of Kenmore
Automated Photo Enforcement Program

Proposed Policy and Program Structure

February ~~14th~~ 28th, 2022

Valentine's Day Edition

KENMORE BY THE LAKE

TARGET ZERO A SAFER KENMORE

2013 & 2014 Bicycle and Pedestrian Crashes

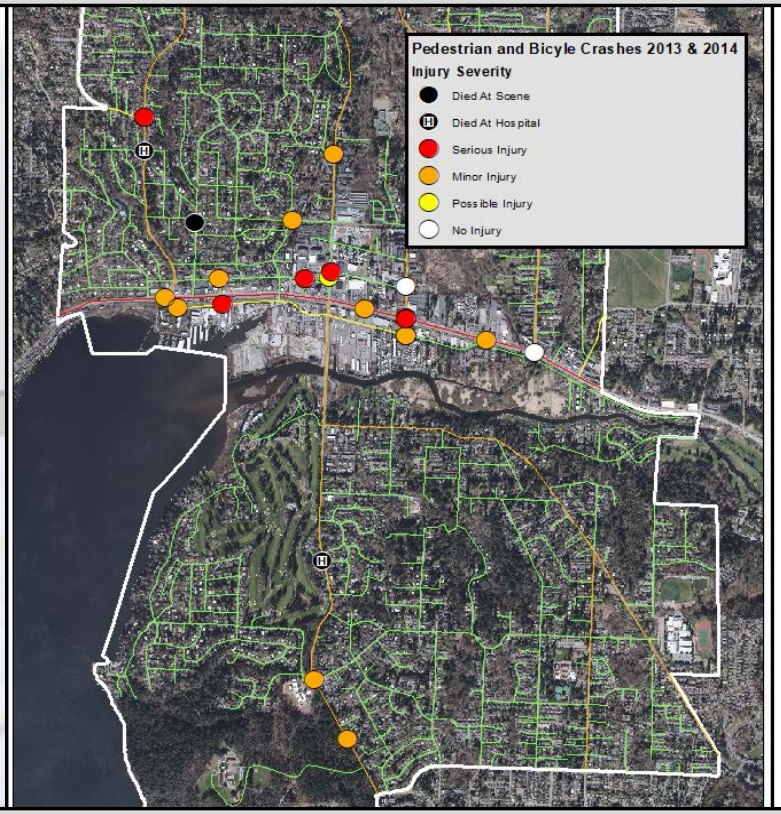
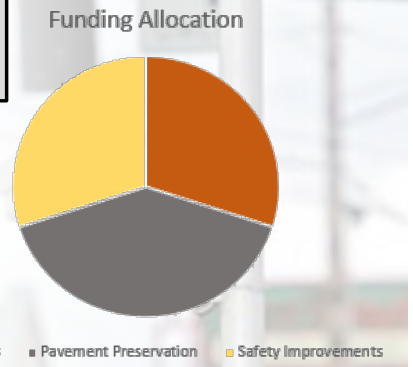
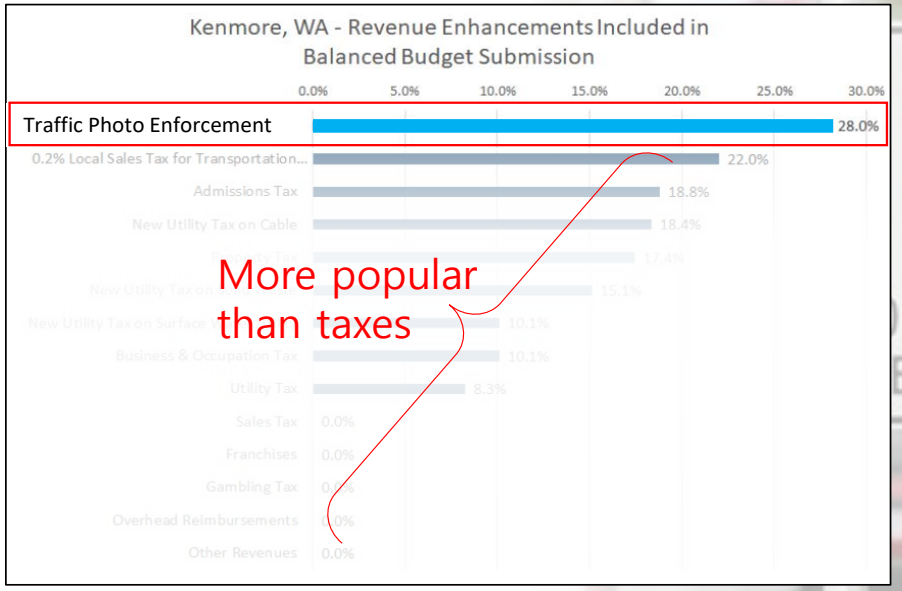


Photo Enforcement Recommended by Ad Hoc Committee on Pedestrian and Bicycle Safety

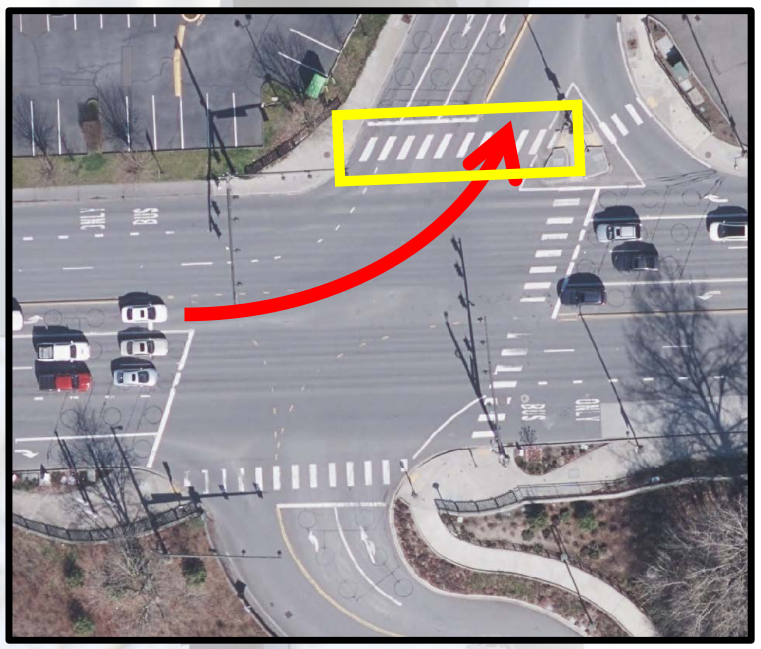
Photo Enforcement Included in Financial Sustainability Plan

Revenue included in 2022 Budget



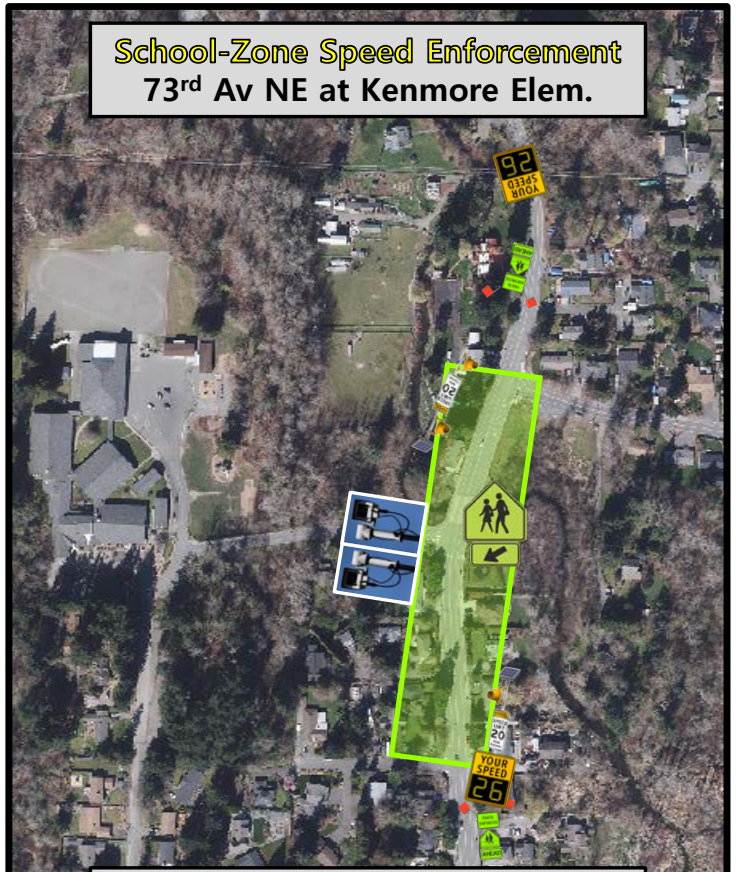


Red-Light Enforcement
61st Av NE & Bothell Wy



Pedestrian Conflicts During Peak Volume Hours:
70%+ of Legal Crossings

School-Zone Speed Enforcement
73rd Av NE at Kenmore Elem.



School Zone Speeding 10+ MPH Over School Zone Speed Limit:
87% of Drivers

School-Zone Speed Enforcement
Juanita Dr at Arrowhead Elem.

School Zone Speeding 10+ MPH Over School Zone Speed Limit:
98% of Drivers

What Tobin Said

November 8th Council Meeting

- **What happens in the case of non-payment?**

  Notices of Infraction issued by automated enforcement are non-moving violations which leaves flexibility based on City policy.

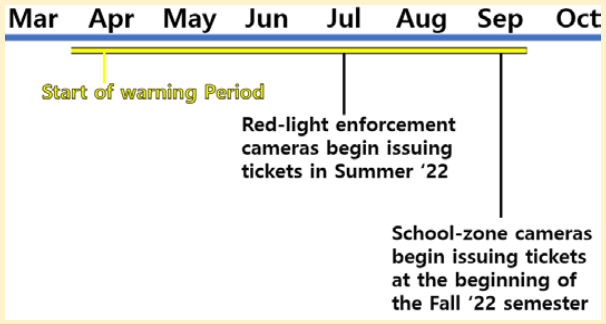
What Is Correct

- **What happens in the case of non-payment?**

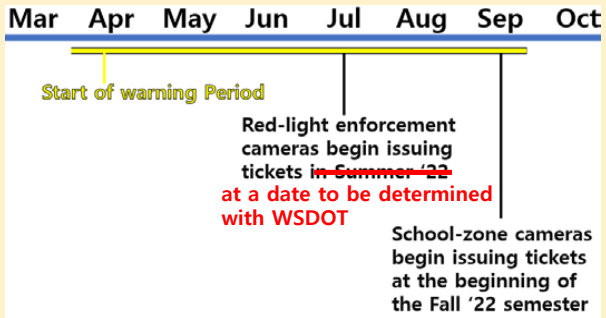
  Notices of Infraction issued by automated enforcement are non-moving violations which leaves flexibility ~~based on City policy.~~ based on judicial discretion

What Tobin Said

November 8th Council Meeting



What Is Correct



- Little or no impact on revenue
- Safety concern is dependent on congestion
- Timeline can be flexible
- Warning period unaffected

What Tobin Said

December 6th Council Meeting

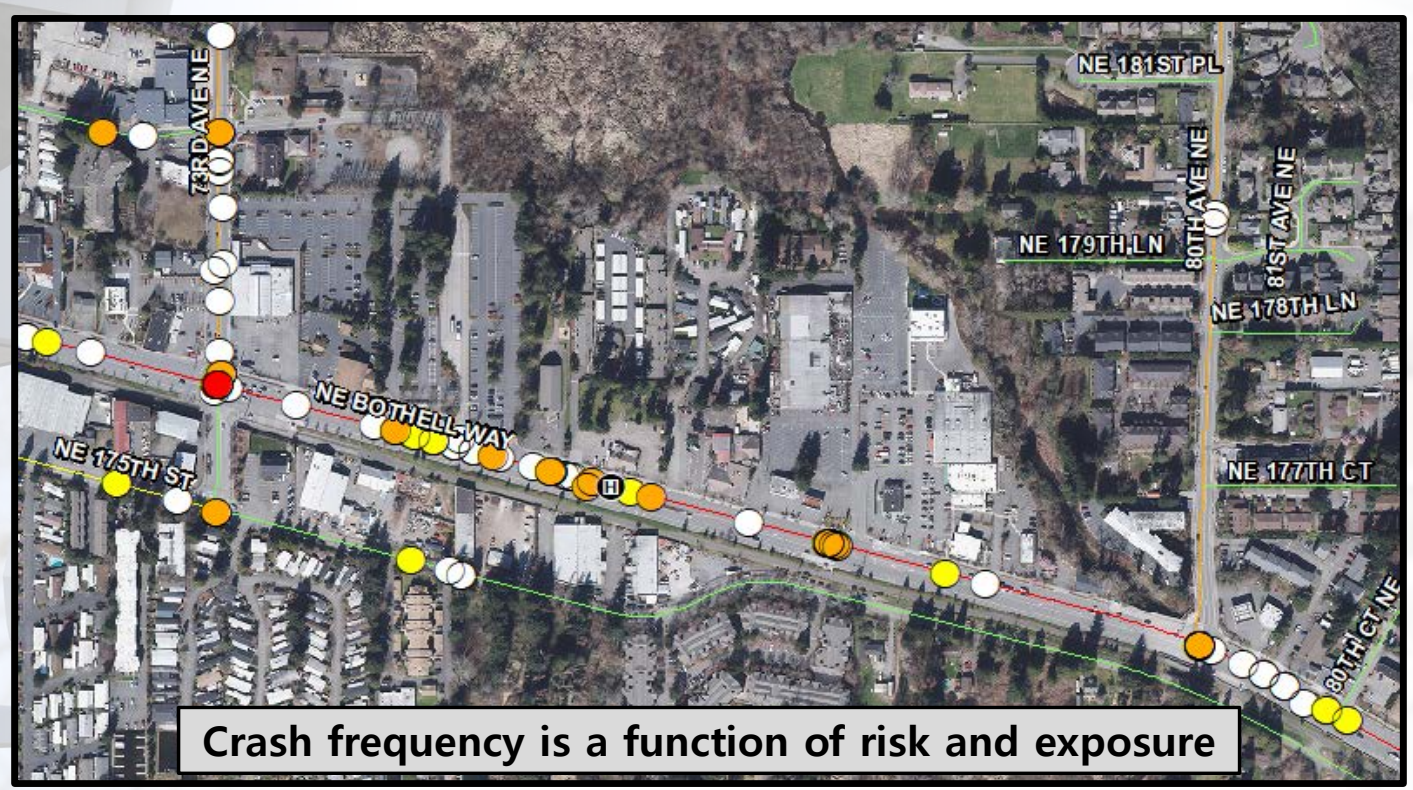
- **The crashes that you list there, are they mostly during school hours or not?**

The crashes that were used in this analysis were only crashes which occurred during our previous active school zone hours

What Is Correct

- All of the crashes used in the analysis were within physical school zone extents
- Only **four** of the crashes occurred during school zone active hours
- The total crashes (regardless of school zone active hours) were used to establish a baseline crash risk
- School zone hours crash frequency was higher than the baseline would predict
- Crash **reduction** reported in the memorandum is based on safety benefit during school zone hours only

Crashes Are Rare and Random Events



Crash frequency is a function of risk and exposure

A high frequency of crashes requires a high frequency of opportunities for crashes

Crashes Are Rare and Random Events

For high-severity, low frequency crashes, the first crash may be the fatal crash

City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: Threshold Determination for MainStreet Property Group's Development Agreement	**For Council Meeting Agenda of:** February 28, 2022
	Department: Development Services
	Prepared by: Bryan Hampson
Proposed Council Action/Motion: Motion to Approve Further Review of the MainStreet Property Group Development Agreement for the Project Located at 7520 NE Bothell Way	**Initial & Date** **Approved by Department Head:** BH 2/18/22 **Approved by City Attorney:** DR 2/18/22 **Approved by Finance Director:** LS 2/18/22 **Approved by City Manager:** RK 2/18/22
	Exhibits/Attachments: Attachment 1: MainStreet Property Group – Development Agreement Request Package

INFORMATION/BACKGROUND:

MainStreet Property Group proposes a 150-160 multifamily unit catalyst project in the City's TOD Overlay. The proposed multifamily building will replace underutilized land with a new project with high-quality design and materials and right-of-way improvements. The proposal will create an attractive and inclusive place, where residents can walk to transit and afford where they live.

To achieve this project, MainStreet is requesting a development agreement to allow flexibility from specific zoning code regulations pursuant to Chapter 18.110 of the Kenmore Municipal Code (KMC).

The City may consider and enter into a development agreement with the owners of real property within the City, or with persons having control of real property within the City if the owners of such real property execute an authorization for such real property to be subject to and bound by the development agreement.

A development agreement may allow for development standards that are different from those standards otherwise imposed under the zoning code in order to provide flexibility to achieve public benefits, respond to changing community needs, or authorize modifications which provide the functional equivalent or adequately achieve the purposes of otherwise applicable development standards.

Per KMC 18.110.050.B, the city council must make a threshold decision on each application for a development agreement at a regular meeting of the city council. If a majority of the whole council approves further review of the development agreement, the agreement shall be processed as described in Chap. 18.110 KMC.

To clarify, this is the threshold decision to move forward on processing the application for development agreement, not a decision to approve or deny a development agreement.
FISCAL CONSIDERATION: May provide an opportunity for the City to contribute to affordable housing
COUNCIL GOAL/BUDGET OBJECTIVE BEING ADDRESSED: 1. Increase and preserve the options for affordable housing stock

ATTACHMENT 1

Main Street Property Group - Development Agreement Request Package

Detailed project narrative

The City of Kenmore wants to encourage multifamily housing in its TOD Overlay. To date, the desired multifamily housing has not occurred, and the City enacted a moratorium in response to townhouse development proposals in the TOD Overlay.

Main Street Property Group proposes a 150-160 multifamily unit catalyst project in the City's TOD Overlay. The proposed multifamily building will replace underutilized land with a new project with high-quality design and materials and right-of-way improvements. The proposal will create an attractive and inclusive place, where residents can walk to transit and afford where they live.

More specifically, the proposed project is a single multifamily residential building with five floors of type VA R2 construction over 2 floors of type IA construction. Onsite parking to be provided. The project will participate in the City's MFTE program, provide affordable housing, and offer additional opportunities for City investment in affordable housing. The proposal may also include limited ground floor commercial elements to further activate the street front, depending on market viability.

Code Deviations

To encourage catalyst projects that provides public benefits, the City Code authorizes development agreements to provide certainty and flexibility. The proposal will rely on the interim zoning regulations, the pending replacements regulations, and the following code deviations if not addressed in the pending replacement regulations:

- **18.29.070 Parking: reduction in minimum requirements**
  - Commercial parking only for onsite commercial elements
  - 0.7 parking spaces/market-rate dwelling unit minimum requirement
  - 0.6 parking spaces/affordable dwelling unit minimum
  - guest parking based on demand and a parking study
- **18.29.050 Zoning Standards - Height**
  - Maximum height increase to 75'
- **18.30.100 lot divided by zone boundary**
  - Deviation from standards to support one single set of zoning requirements for the lot after the BLA
- **18.57.060 Tree density requirement**
  - Flexibility on the minimum 30 tree units/net buildable area
    - Deviation to lower the minimum tree units to maximize net rentable SF
- **18.29.080 Design Requirements**
  - Deviation on relational setback requirement
    - interior ground-level setback of 10' for property facing residential zone
  - Flexibility on low impact design requirements
- **18.25.040 Zoning Standards**
  - Deviation of the minimum 20' interior setback rule to reduce this minimum to 10'

        - Parcel #011410-0905 has underlying zoning UC East. The western property line is adjacent to a residential zone, and per code, must have a minimum interior setback of 20'. We are proposing to reduce this minimum setback to 10'.
- **18.52.310 Upper-level step backs, mass, and bulk**
    - Flexibility on 6' step backs on upper floors to maximize net rentable SF.
- **15.30.135 Applications and Permits**
    - Deviation to expedite approvals and permits for this project
- **18.30.130.A Common Area Recreation Open Space**
    - Deviation to reduce the minimum SF of common recreation open space
- **18.77.030 Affordable – TOD District**
    - Deviation from the tiered system to determine affordability level

As required by code, the proposal does not request any code deviations from KMC Titles 15 and 16 and KMC Chapters 18.55, 13.35, 13.45.

Public Benefits

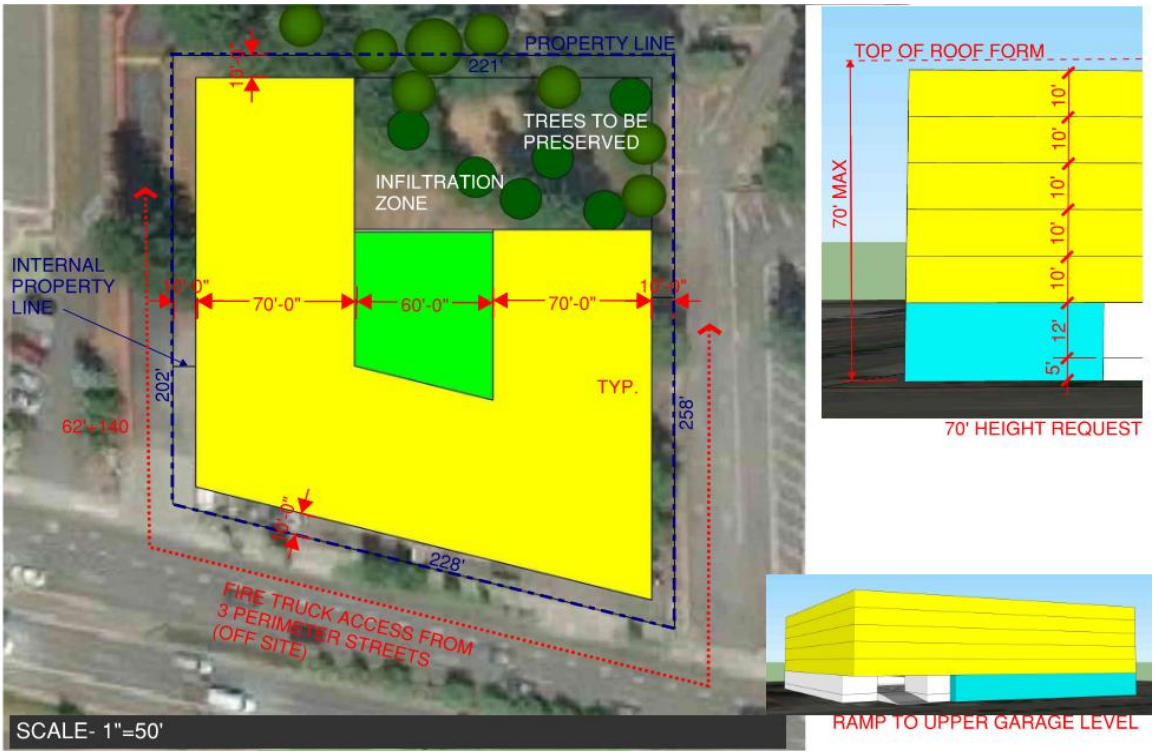
The public benefits are identified in the project narrative above. To summarize, the project provides:

1. A catalyst TOD project that will provide a "proof of concept" and market comparables. Thus, the proposal will encourage additional multifamily development in the TOD overlay.
2. Create a walkable and inclusive place to complement the City's TOD vision and downtown core.
3. Converts vacant property into an activated multifamily development that complies with current energy, surface water, and water quality codes.
4. High-quality design and materials.
5. Affordable housing.
6. Right-of-way improvements.
7. Tree preservation where feasible, coupled with an environmentally conscious design.

Conceptual Site Plan / Preliminary Massing

A conceptual site plan and preliminary massing is attached as Exhibit A.

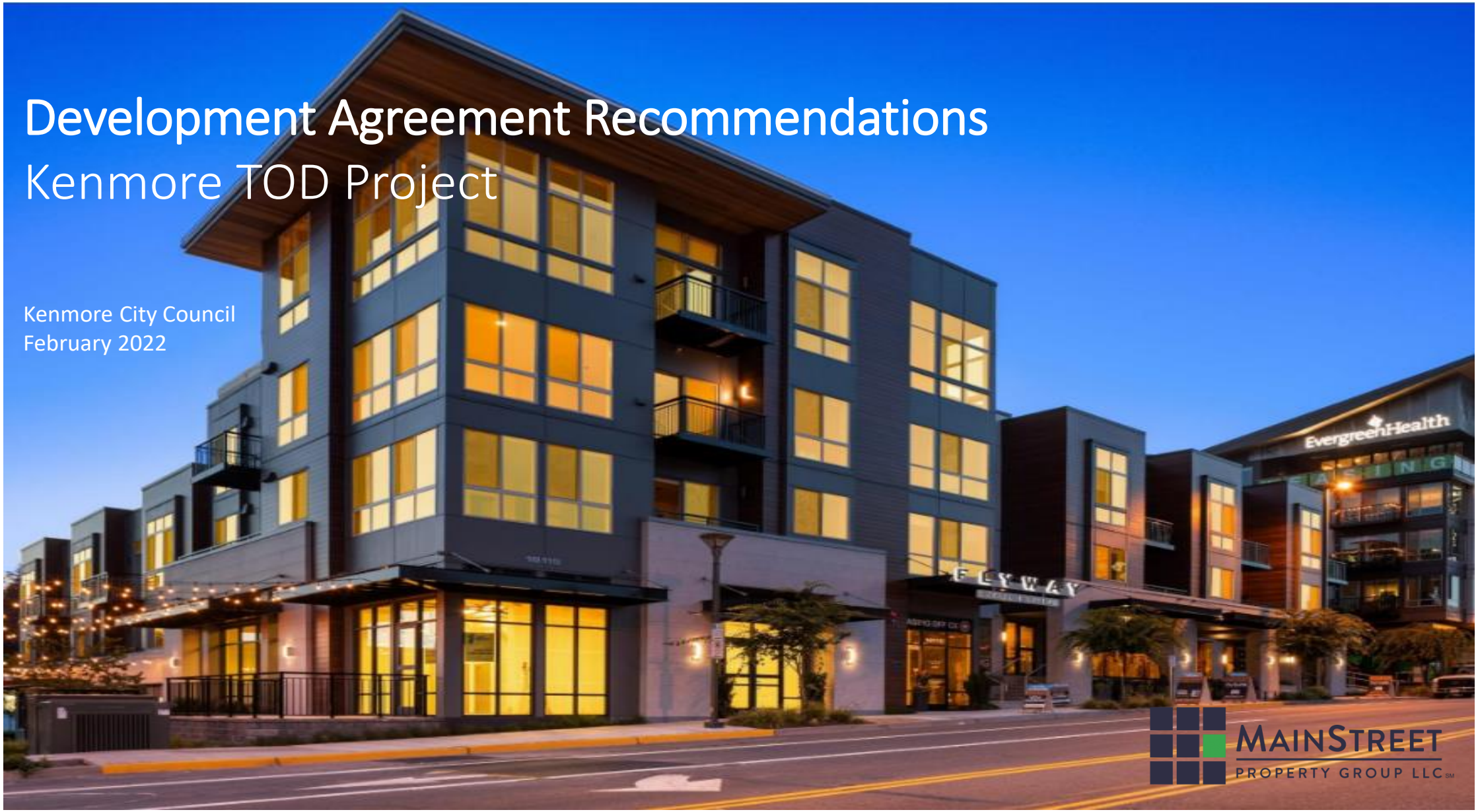
Exhibit A


PROPERTY LINE
221'
TREES TO BE PRESERVED
INFILTRATION ZONE
INTERNAL PROPERTY LINE
10'-0"
70'-0"
60'-0"
70'-0"
10'-0"
202'
258'
TYP.
62'-140
228'
FIRE TRUCK ACCESS FROM 3 PERIMETER STREETS (OFF SITE)
SCALE- 1"=50'
TOP OF ROOF FORM
70' MAX
10'
10'
10'
10'
10'
12'
5'
70' HEIGHT REQUEST
RAMP TO UPPER GARAGE LEVEL

Development Agreement Recommendations

Kenmore TOD Project

Kenmore City Council
February 2022



Introduction

Proposed Use: Multifamily Residential

Current Zoning: UC East & R-24

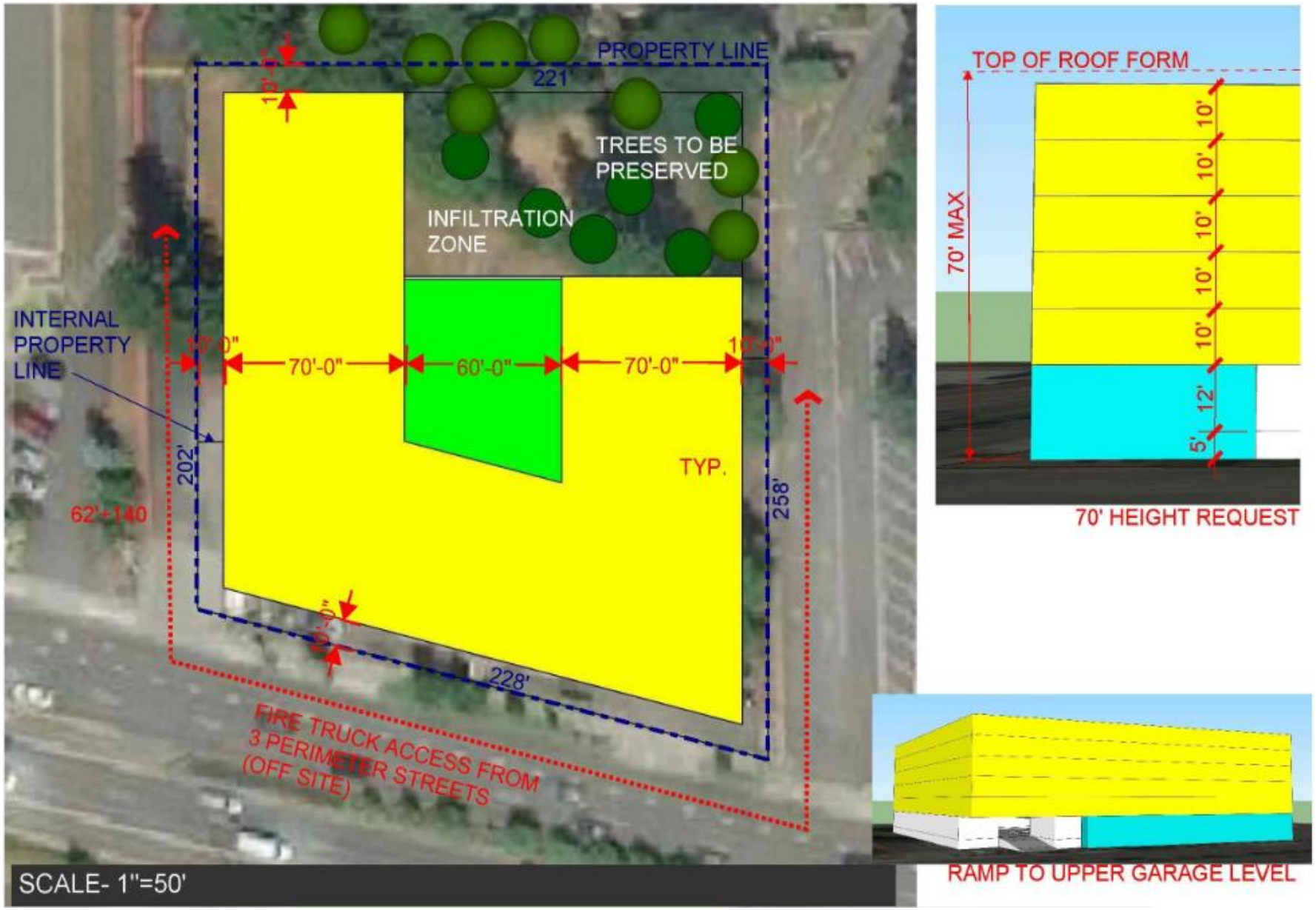
Proposed Zoning: TOD

Potential catalyst project for the TOD Overlay

Total Units: 150-160

Affordable Units? YES

Site Plan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RAMP TO UPPER GARAGE LEVEL

Code Deviations

18.29.070 Parking: Reduction in minimum requirements

- 0.7 parking spaces/market-rate dwelling unit
- 0.6 parking spaces/affordable dwelling unit

18.29.050 Height: Increase maximum height to 75’

- Maximize density
- Keep the parking structure above the water table

18.30.100 Zoning Boundary:

- Deviation to allow a single set of zoning requirements for the proposed lot after BLA

18.57.060 Tree Density:

- Flexibility to lower the minimum tree unit requirement to maximize net rentable SF

Code Deviations

18.29.080 Design Requirements:

- Deviation on the relational setback requirement
  - to allow interior ground-level setback of 10’ for property facing a residential zone
- Flexibility on low impact design requirements

18.25.040 Zoning Standards:

- Parcel #011410-0950 currently zoned UC East and the western property line is adjacent to a residential zone, need a deviation to allow 10’ minimum setback (per code minimum is 20’)

18.52.310 Upper-level Step back:

- Flexibility on 6’ step back requirement on upper floors

18.30.130 Common area open space:

- Deviation to reduce the minimum SF of common area recreation open space.

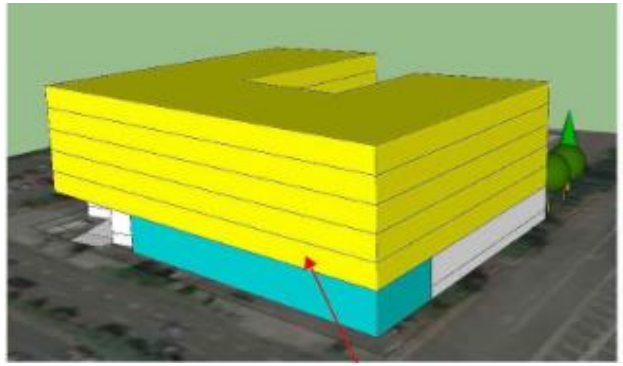
Code Deviations

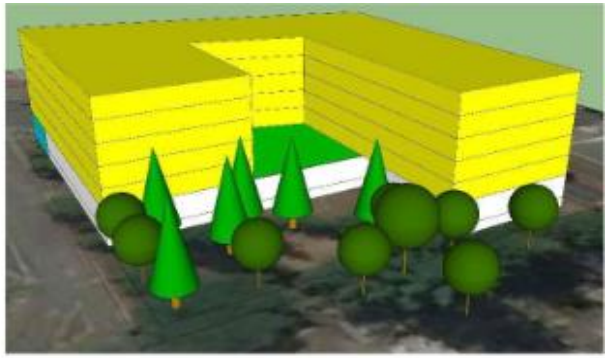
18.77.030 Affordability – TOD District:

- Deviation from the tiered system to determine affordability level

15.30.135 Application and Permits:

- Deviation to expediate approvals and permits for this TOD project





City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: American Rescue Plan Act Direct Cash Assistance (*Kenmore Cares*) Update	For Council Meeting Agenda of: February 28, 2022 **Department**: City Manager **Prepared by**: Stephanie Lucash, Assistant City Manager/ARPA Administrator
Proposed Council Action/Motion: No Motion. Staff is recommending we continue the program as is through March 2022.	Initial & Date Approved by Department Head: SL, 2/10/22 Approved by City Attorney: n/a Approved by Finance Director: LS, 2/15/22 Approved by City Manager: RGK, 2/17/22 **Exhibits/Attachments**: None

SUMMARY:

The American Rescue Plan Act (ARPA) is a federal law that was signed into effect on March 11, 2021. The purpose of ARPA is to provide $1.9 trillion to help the U.S. respond to and recover from the COVID-19 pandemic. The City of Kenmore will receive $6.4 million in ARPA funds; half was received in mid-2021with the rest to come in mid-2022. All funds need to be allocated by the end of 2024 and spent by the end of 2026.

At its September 13, 2021 meeting, the Kenmore City Council approved a $1 million contract with the Northshore Schools Foundation (NSF) to provide direct cash assistance to Kenmore residents in need under the moniker *Kenmore Cares*, and targeting eligibility for those at or below 30% of our Area Median Income (AMI). At its December 13, 2021 meeting, the Council approved an expansion of the program to include those at or below 50% AMI and increase the amount distributed to each primary applicant to $2,000. Since it began, the *Kenmore Cares* program has served 296 households, 585 individuals, and disbursed more than $664,000 in funds.

As the program draws to a close by the end of March, the team wanted to come back to Council to give an update on the numbers served (including those served from Mary's Place, per Councilmember request). Given there are still new applications being processed and other community needs to be addressed, staff recommend we stay the course with the program until the end of March 2022. Given current application trends, and the fact that more than $94,000 of the funds are in follow up status, the program team expects to expend all of the remaining *Kenmore Cares* funds by the end of March. The *Kenmore Cares* team will come to Council in April with a final report and close out of the program.

FISCAL CONSIDERATION:

On June 28, 2021, the City Council established by ordinance a special revenue fund known as the "ARPA Fiscal Recovery Fund." One million dollars in ARPA funds were designated for direct cash assistance at the May 24, 2021 City Council meeting; that work is underway, via a partnership with the Northshore Schools Foundation.

COUNCIL GOAL/BUDGET OBJECTIVE BEING ADDRESSED:

Goal #4: Respond to the Pandemic. The purpose of Kenmore's ARPA funds are to help the City respond to and recover from the COVID-19 pandemic.

City Council Business Agenda Item
City of Kenmore, WA

Subject/Topic: Supporting the City's Wellness Day Off Program Proposed Council Action/Motion: Approve a Wellness Day Floating Holiday	For Council Meeting Agenda of: Department: City Manager's Office Prepared by: Leonora Palaña, Tela Gardner and Tobin Bennett-Gold Initial & Date Approved by Department Head: ___LP__ Approved by City Attorney: ___KW____ Approved by Finance Director: ___LS___ Approved by City Manager: ___RK_____ Exhibits/Attachments: Proposed Resolution with attached Wellness Policy, Resolution No. _____ ATTACHMENT A: Resolution 22-379 Personnel Policy Amendments ATTACHMENT B: Example Wellness Day Off Checklist

INFORMATION/BACKGROUND:
In November 2010 and June 2003, the Kenmore City Council passed Resolutions No. 10-184 and 03-078, respectively, establishing and supporting a Wellness Program per Association of Washington Cities (AWC) requirements.

The City of Kenmore would like to update the Personnel Policy to restructure the accrual of the Wellness Day Floating Holiday to reflect current law, while continuing to promote a healthy work environment through the incentive of an award of a Wellness Day off to eligible full-time employees who participate in the Annual Wellness Program during a calendar year. If all eligibility and participation requirements are met by December 31 of a calendar year, eight (8) hours will be added the to the full-time participating employee's holiday leave balance for the following calendar year.

Eligibility requirements:

Submit a completed form (Wellness Day Off Checklist) to Human Resources.

The Wellness Day Off Checklist must reflect completion of the following:

- Providing Human Resources proof of earned and redeemed AWC Wellness Reward points (via Health Central). For full-time employees who are not covered under AWC Trust medical insurance, an alternative approved requirement may be substituted.

- Participation in four (4) Wellness-sponsored activities:
  - Two (2) Healthy Habits events that take place over multiple days/weeks
  - Two (2) Wellness Events single day activities

Our hopes in implementing this policy change are to promote a health-conscious culture and environment within the City of Kenmore.

CITY OF KENMORE
WASHINGTON
RESOLUTION NO. 22-379

A RESOLUTION OF THE CITY COUNCIL OF KENMORE, WASHINGTON, AMENDING THE CITY'S ATTENDANCE POLICY AND ESTABLISHING A NEW WELLNESS DAY OFF POLICY.

WHEREAS, since their original adoption, the City's Personnel Policies have been updated on several occasions to modify policies as the City Council has determined necessary and/or appropriate; and

WHEREAS, the City desires to update its Attendance Policy to reflect current law; and

WHEREAS, the City also desires to simultaneously establish a new Wellness Day Off Policy to continue to promote and incentivize a healthy work environment through the award of a Wellness Day off to eligible full-time employees who participate in the Annual Program during a calendar year.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF KENMORE, WASHINGTON, DOES HEREBY RESOLVE AS FOLLOWS:

1. Elimination of Attendance Floating Holiday Incentive. Section 2.4.5 of the City's Personnel Policy Manual is hereby repealed and shall have no further force and effect. Staff is directed to strike Section 2.4.5 from the Personnel Policy Manual and to notify all impacted City employees of this change in policy.

2. Adoption of Wellness Day Off Policy. The Board hereby adopts a new Section 6.14 of the Personnel Policy Manual, as set forth in "Attachment A" hereto. Staff is directed to insert the newly-adopted Section 6.14 into the Personnel Policy Manual and to notify all impacted City employees of this new policy.

3. No Further Revisions. Except as expressly amended by this Resolution, the remainder of the City's policies set forth in the City Personnel Policy Manual shall remain unaltered and in full force and effect.

Floating Holiday Revision:
Wellness Day Off

Proposed Policy:

6.14 Wellness Day Off

6.14.1 **Purpose.**
Regular full-time employees who participate in the City's Annual Wellness Program during a calendar year will have 8 hours added to their floating holiday leave balance for the following calendar year. The purpose of the Wellness Day Off is to offer employees an incentive that promotes a health-conscious work culture, and

that incentivizes and recognizes employee participation in the City's Annual Wellness Program. The purpose of the Annual Wellness Program is to encourage healthy lifestyle choices, with the objective of increasing employee health and wellness and reducing the overall need for taking sick days.

6.14.2 **Eligibility for Wellness Day Off**

Only regular full-time employees are eligible to earn a Wellness Day Holiday. Eligible employees must demonstrate their participation in the City's Annual Wellness Program throughout the calendar year. Such participation in the program shall be tracked by the employee on a form to be provided by Human Resources. The requirements listed on the form will be updated based on the AWC WellCity requirements for the coming year, but will include at least the following:

- **Earn and redeem AWC Wellness Reward (via Health Central)**
  For those eligible employees who are not covered under AWC Trust medical plan, the AWC wellness reward is not available and therefore will not be required as a condition to earning the Wellness Day Holiday; provided, however, that an alternative requirement (as approved by the Wellness Committee in conjunction with Human Resources and the Leadership Team) will be substituted and stated on the requirements form.

- **Participation in four (4) Wellness-sponsored activities**

  - Healthy Habits (two (2) required) events that take place over multiple days/weeks (examples include but are not limited to "Wondr" Program, Fall & Spring AWC Campaigns, or program run by EAP, AWC or other program or activity as approved by Human Resources Manager *(the employee must request approval before beginning program).*

- Wellness Events (two (2) required) single day activities (examples include but are not limited to flu shots, blood pressure checks, benefit fair participation, participating at a City of Kenmore Wellness event, or participating in a program run by EAP or AWC or other program as approved by Human Resources Manager *(employee must request approval before beginning program)*.

- Any such other requirements that the Wellness Committee, in conjunction with Human Resources and the Leadership Team may determine necessary or appropriate.

Employees must submit their completed participation form to Human Resources no later than December 31 of each calendar year to be considered for the Wellness Day Holiday. Human Resources may request additional or clarifying information, in the City's discretion.

6.14.3 **Use of Wellness Day Holiday**

If earned, the Wellness Day Holiday must be used in the year issued and may not be cashed out or carried over.

Wellness Day Off Checklist 2022

Return to Human Resources by 12/31/22

Healthy Habits Activities (Required any 2 of the following):	Date Completed	Wellness Events (Required any 2 of the following):	Date Completed
☐ Spring Steps Challenge	_____	☐ Preventative Care Visit	_____
☐ Fall Steps Challenge	_____	☐ Annual Flu Vaccine	_____
☐ Wondr	_____	☐ Flourless Sugarless Cookie Workshop	_____
☐ Marathon-A-Day	_____	☐ Wellness Field Day	_____
☐ Castlight Healthy Habits	_____	☐ Bastyr Nutrition Lecture	_____
☐ Other: _____	_____	☐ Other: _____	_____
☐ Other: _____	_____	☐ Other: _____	_____

Castlight Wellness Reward (Required)	Date Completed
☐ I have earned and redeemed my wellness reward through the Castlight app	_____

By signing below, I certify that the information on this checklist is true and correct to the best of my knowledge. I understand that the "Wellness Day" will be awarded before the end of first quarter of the ensuing calendar year as 8 hours of floating holiday leave, and that the policies and procedures listed in the personnel policy apply to any requested leave.

Employee Signature: _____ HR Initials: _____

Employee Name: _____ Date Submitted: _____