CITY OF
BAINBRIDGE ISLAND

Green Building Task Force
Regularly Scheduled Meeting
Tuesday, July 21, 2020
3:00 – 5:00 PM
Online meeting via Zoom

The Green Building Task Force (GBTF) will hold this meeting using a virtual, Zoom webinar platform, per Governor Inslee's "Stay Home, Stay Healthy" orders.

Members of the public will be able to call in to the Zoom meeting.
Please click the link below to join the webinar: https://bainbridgewa.zoom.us/j/96334207203

Or iPhone one-tap : US: +12532158782,,96334207203# or +16699009128,,96334207203#

Or Telephone: Dial(for higher quality, dial a number based on your current location):
US: +1 253 215 8782 or +1 669 900 9128 or +1 346 248 7799 or +1 301 715 8592 or +1 312 626 6799 or +1 646 558 8656

Webinar ID: 963 3420 7203
International numbers available: https://bainbridgewa.zoom.us/u/adj6hRla9u

AGENDA

3:00 PM	Call to Order (Attendance, Agenda, Ethics)
3:05 PM	Review & Adoption of Minutes July 7, 2020
3:10 PM	OPMA/PRA/Ethics Questions
3:20 PM	Prior Public Participation & Feedback Related to GB Comprehensive Plan Policies *(materials attached)*
3:40 PM	Road Map & First Steps *(materials attached, or link provided)* - Design For Bainbridge Standards & Guidelines
4:40 PM	Discuss Next Steps & Homework
5:00 PM	Adjourn

For special accommodations, please contact Planning & Community Development
206-780-3750 or at pcd@bainbridgewa.gov

CITY OF
BAINBRIDGE ISLAND

Green Building Task Force
Regularly Scheduled Meeting Minutes
Tuesday, July 7, 2020

Call to Order (Attendance, Agenda, Ethics)
Introductions – Task Force Members & Staff
Policy Briefing
Next Steps & Homework
Open Government & Public Meeting/Records Training
New/Old Business
Adjourn

Call to Order (Attendance, Agenda, Ethics)
Senior Planner Peter Best called the meeting to order at 10:10 AM. Task Force members in attendance were Jason Wilkinson, Jonathan Davis, Kathleen O'Brien, Kathleen Smith, Richard Perlot, Marty Sievertson, Julie Kriegh, and Russ Hamlet. City Council Liaison Joe Deets was present. City Staff present were Planning Director Heather Wright, Deputy City Attorney Robbie Sepler and Administrative Specialists Carla Lundgren and Marlene Schubert who monitored ther remote meeting and prepared minutes.

The agenda was reviewed. There were not any conflicts noted.

Review and Adoption of Minutes
None

Policy Briefing
Discussion led by Senior Planner Peter Best
Presentation by Climate Change Action Committee Chair Mike Cox

Next Steps & Homework
Discussion led by Senior Planner Peter Best

Open Government & Public Meeting/Records
Deputy City Attorney Robbie Sepler conducted training on compliance with the above-mentioned topics

New/Old Business
None

Adjourn
The meeting was adjourned at 12:21 PM.

Green Building Task Force
Disclosure of Potential Conflicts of Interests

Updated July 2020

*To be read at the beginning of **each** meeting.*

As an initial note for the record, this Green Building Task Force consists of individuals with specific professional expertise in green building programs.

Members of the Task Force have provided, or will soon provide, the City with "Conflict of Interest Statements" that will be available via the Task Force's webpage.

In the interests of full disclosure and transparency, we will begin this meeting by asking each member of the Task Force to disclose whether they, or a member of their immediate family, have any direct or indirect contractual employment, financial or private interests, or other potential conflicts of interest in, or related to, any of the green building programs or other agenda items scheduled to be discussed at today's meeting.

[*Each Task Force member must verbally state their disclosure(s)*]

Having heard the disclosure(s) of your colleagues, are there any objections to the members of the Task Force in attendance proceeding with the agenda for today's meeting?

[*Pause for objections*]

[*If no objection*] Hearing no objection, by unanimous consent all members of the Task Force in attendance will fully participate in today's agenda.

[*If objection, the members should discuss their concerns. Individual members could agree to recuse themselves from discussion of specific agenda items, as may be warranted.*] Having discussed the objection(s) raised, all those in favor of proceeding in the manner discussed please signify by saying "aye." All those opposed?

Climate and Energy Forum: Summary and Next Steps to Move Us Forward to Achieve 100% Clean Energy by 2040 (May 2nd, 2019)

On April 20th the Climate and Energy Forum sponsored a community discussion on how Bainbridge Island could achieve 100% clean energy by 2040. There were over 70 participants who listened to three speakers present information on how we can achieve our goal of 100% clean energy by 2040. The three areas were: energy sources; buildings and local generation. The main ideas and next steps for these three areas are presented below.

Section 1: Energy Sources

Randall Samstag a consulting engineer gave a short presentation and provided context on Bainbridge Island's current energy supplier (Puget Sound Energy) and possible areas that could move us towards the 100% clean energy goal (e.g., PSE 50 x 40, PSE Green Power Program, PSE Solar Choice, public power, micro grids, conservation, and local solar). After the presentation, a group of about 20 people identified possible ideas to help us achieve our goal. Bobbie Morgan was the facilitator for this group. The two main ideas generated by the group and next steps were:

1. Explore options available for public power on the Island.

- Meet with several people involved in Island Power and brainstorm what went wrong with the first attempt and what the barriers were.
- Once the major barriers have been identified, pay careful attention and strategize compensatory/alternative ways to success. Include in this meeting some fresh faces, some new potential leaders.
- Re-naming the project is important. As we see with the carbon fee/tax idea, calling the national bill "energy innovation and carbon dividend act" uses the word innovation. Brainstorm new names for the public power project.

2. Engage in a collaborative effort with PSE and others to move us towards 100% clean energy.

- Engage the Climate Change Advisory Committee in this idea to see if there is interest.
- Engage with PSE to discuss how we can green our grid collaboratively.
- Explore potential grant sources to fund it.
- Explore whether the public power concept (reborn, refreshed) could be part of the overall clean energy pilot project.

Section 2: Buildings

Jason Wilkinson from McLennan Design gave a short presentation on reducing the energy used by buildings. Following the presentation, a breakout group with about 20 people met to discuss different ideas to meet our Island goal. Herb Hethcote was the facilitator for this discussion. The three main ideas that emerged from the small groups with specific next steps are provided below.

1. The City of Bainbridge Island should form a task force to develop new green building codes for residential, commercial, and city buildings, schools, and affordable housing.

- New and remodeling construction should be at least LEED Platinum and have incentives to move towards net zero energy.
- The carbon embodied in materials and construction should be considered in the codes.
- The new codes could include incentives and impact fees to encourage smaller homes and affordable housing.
- The task force could work cooperatively with existing city committees such as the Design and Review Board, the Multimodal Transportation Advisory Committee, the Climate Change Advisory Committee, the Environmental and Technical Advisory Committee, the Affordable Housing Task Force, and the Intergovernmental Working Group.

2. The City of Bainbridge Island and School District should lead the movement towards net zero construction in their projects.

- The remodeling done for the police station could serve as an example of construction with a goal of net zero energy use.
- An innovative net zero school building might cost more, but it would be a worthwhile long term investment that would inspire our community.

3. Develop incentives to encourage homes and commercial buildings to reduce their greenhouse gas emissions by improvements such as adding insulation, installing heat exchangers, and retrofitting to eliminate all combustion.

- A creative way to quickly retrofit a large portion of the island's building stock and to educate residents would be to require that before a house could be sold, the owner must do a home energy audit, do a solar site analysis, and convert all fossil fuel combustion equipment to electric.

Section 3: Local Generation

Joe Deets from Sunergy Systems gave a short presentation on his experience with working on designing, developing and implementing Community Solar Projects and some of the challenges with completing these projects. Following the presentation, a breakout group with about 20 people met to discuss different ideas to meet our Island goal. Brian Anderson was the facilitator for this discussion. Two main ideas emerged from the group with several next steps.

1. Complete a thorough Island-wide site assessment to identify the best sites for Community Solar installations.

- The group generated a list of potential sites to evaluate (e.g., Vincent Road, new pool, schools, fire stations, parks, roller hockey rink, Grace Church, St. Cecilia Church, Park Department buildings, the BARN, Fort Ward field, Islandwood, and Pritchard Park).

- A low-cost option for accomplishing this might be to seek the work of an interested student at Western Washington University's Poulsbo's campus.

2. Complete an analysis on how an island-wide Community Solar Program can be created and sustained.

- **Possible Funding**
    - The Washington State Clean Energy Fund: Apply for funds from this state program. There is over $2 million available for solar energy deployment.
    - Puget Sound Energy: Convince PSE to create installations on BI.
    - Investors on Bainbridge Island: Possible but difficult with current regulations
    - PSE's Green Power Program: Ask PSE if we can redirect some of the $125,000 per year that goes to Green Power to use for Community Solar projects on Bainbridge.

- **Explore feasibility, legal, and regulatory issues**
    - Each of these funding sources has potential issues and need to be explored further to determine feasibility.
    - We need to determine which legal entity will be responsible for the creation of our Community Solar installments.
    - Since the regulatory requirements and restrictions are so broad, complex, and cumbersome, we could explore lobbying for legislation which will make this process easier. We could talk with former Sen. Rockefeller and possibly Sen. Rolfes to get up to explore feasibility of this approach.

3. Other Issues

- **PSE purchase of community Solar power**: Will PSE purchase the power generated by the Community Solar installations or how will people on the island receive credit for the power we generate?

- **Energy Storage:** An added benefit of adding local storage to our local generation is the ability to have at least some electricity available in the event that the island's electrical supply is cutoff for a substantial period of time due to a disaster.

Section 4: Summary

The organizers of the Forum will pursue the next steps identified and report back at the next Climate and Energy Forum.

3.3 Buildings

First Session: Saturday December 7th, 2019: City Hall

Facilitator: Jens Boemer Note Taker: Brian Anderson and Sandy Spears

Suggestions climate mitigation and adaptation of buildings on Bainbridge Island

- In the BI carbon inventory, make estimates of energy consumption for BI more accurate.
  - People are concerned that our estimates based on state averages are not specific enough to BI

NEW BUILDINGS

- Make sure the city uses transparent processes/best practices in determining any new building codes. They need to focus on resilience and sustainability.
- Require Net Zero building standard for all new construction
  - Our code should encourage/require 'net zero energy homes' – homes that are so air-tight, well-insulated, and energy efficient that the produce as much renewable energy as they consume over the course of a year, leaving occupants with a net zero energy bill and a carbon-free home. Whole, integrated homes. Look at buildings as systems.
  - Build with 'Advanced Framing' (https://www.energy.gov/energysaver/energy-efficient-home-design/advanced-house-framing) 'Advanced house framing, sometimes called optimum value engineering (OVE), refers to framing techniques designed to reduce the amount of lumber used and waste generated in the construction of a wood-framed house. These techniques boost energy efficiency by replacing lumber with insulation material while maintaining the structural integrity of the home.'
  - Full lifecycle of materials taken into account.
  - CA every new residence has to be net zero by January 1. Focus on building enclosure. Can't have swiss cheese air sealing, more recycled materials less raw material, sustainable buildings, transparencies, how many carcinogens. Transparencies in materials.
  - Living Building Challenge https://living-future.org/lbc/
- Solar ready homes.
- City could provide marketing support for building net zero energy homes.
- Encourage people to live in smaller homes. Discourage building larger homes.
- Use local building materials
- Use carbon neutral building materials
- Reduce use of cement/concrete in construction because of its very high carbon footprint.
- Permeable surfaces in surrounding areas
- Encourage non-flammable roofs due to increased fire risk from global heating in the future
- Don't build near shorelines
- Capture rainwater
- Allow subdivision of existing extra-large houses into separate residences
- Preserve our forest cover. Discourage lawn installations. Encourage replacing disturbed construction sites with grass.

EXISTING BUILDINGS

- The city and/or private entities on Bainbridge, should apply for grants and subsidies for energy efficiency improvements for low-income residents
- The city could publicize best practices and tips for retrofitting homes to be more energy efficient
- City could fund energy audits for private residences

- encourage commercial buildings to self-benchmark their carbon footprints. Building owners can compare costs with other building owners through databases like this. https://www.energy.gov/eere/buildings/building-performance-database-bpd
- Assess energy use and conservation for every household. Many households can't/won't afford such a service. Find a way to facilitate household level energy inventories as input for retrofit prioritization.
- Train workforce around efficiency skills.
- PACE financing of energy efficiency upgrades- means of financing energy efficiency upgrades, disaster resiliency improvements, water conservation measures, or renewable energy installations of residential, commercial, and industrial property owners.
- Try to get PSE to provide monetary incentives for rooftop solar, efficient water heating, & heat pumps.
- Remove those that are on shorelines.
- For energy efficiency renovations we voted on whether we would prefer prioritizing mandates vs. incentives. The vote was about 50-50. Some suggested with use both
- Ask people to disclose their energy bills during the sale/purchase of a home. Publish benchmarks for home efficiency for buyers to compare against.

BOTH NEW AND EXISTING

o Rick Blumenthal said the BI can in fact set stricter energy efficiency guidelines than the state. (Rick is a former building contractor, RePower BI energy assessor, and seems to be all-around expert in building efficiency)
o Encourage residents to use lighter colored roof surfaces when next replacing their roofs
o Require new and retrofitted residences to be built electric vehicle ready
o Require new and retrofitted residences to be built solar ready
o Encourage use of a landscaping standard called SITES (https://www.asla.org/sites/). "The Sustainable SITES Initiative is a set of comprehensive, voluntary guidelines together with a rating system that assesses the sustainable design, construction, and maintenance of landscapes."
o Take equity and affordability into consideration in the plan.
- Use grants to provide funds to support low income retrofits
- City should provide an energy efficiency fund for low income residents
- Investigate county and state as a source of funds
- Hire professional grant writers and fund raisers to get money for this.

- Study the Bloomberg City Climate Action Playbook Brief (10/19) for ides that have been implemented in major US cities. https://data.bloomberglp.com/dotorg/sites/2/2019/10/American-Cities-Climate-Challenge-Climate-Action-Playbook.pdf

NEIGHBORHOODS

- Implement Community Solar projects, use open space on the island for local solar power generation=
- Build more walkable infrastructure within the city
- Coordinate planning with neighboring jurisdictions
- Build more affordable housing on the island, have ambitious targets
- Building density
- Our plan should have targets relative to planning dates – not sure what this means other than possibly – have more interim targets.
- Encourage people to use less stuff ala 'Library of Things', which is 'collections of things other than books that are being loaned like books, for no charge. A library of things can loan out kitchen

appliances, tools, gardening equipment and seeds,[1] electronics,[2] toys and games, art,[3] science kits, craft supplies, musical instruments, recreational equipment, and more.'.

- Energy Star appliances
- Encourage people to not rent storage spaces.
- We need impact fees that reflect carbon generation (should be commensurate with what Poulsbo is doing).
- Break out energy efficiency targets by Residential, Commercial, and Industrial so we can have different target dates for each.

FUNDING

o Kick off another energy Repower BI Program- federal grant program?
o Involve non-profits and get grants
o Better Bainbridge- TARP money was American Resource and Recovery ACT. ARRA funded weatherization programs. $5 million grant. Pile of retrofits
o PACE

3.3 Buildings

Second session Weds December 11, 2019

Facilitator: Mike Cox Note Taker: Herb Hethcote

Energy Conservation

· Start a new Repower Bainbridge energy audits program to encourage energy conservation (insulation etc.)
· Introduce plants inside buildings for better air quality, decoration, and calming
· Encourage thermal shades and drapes to reduce heat loss through windows
· Use batteries to store power for later use in a home or community
· Build solar farms in sunny areas such as eastern Washington to generate power for use on Bainbridge
· Encourage shared homes
· Explore building underground to take advantage of geothermal and energy efficiency
· Remodel large homes by pooling resources
· Is the new building at the High School being built green?
· Encourage geothermal heat pumps
· Use rooftop systems to heat liquids for heating homes and shower water
· Provide community resources for learning about energy efficient methods
· Encourage the use of clothes lines for drying clothes

Green Construction suggestions

· Provide incentives for building smaller homes
· Build a database for benchmarking an Energy Star Portfolio
· Have a depot of recyclable materials that can be reused by others
· Encourage places for recycling building materials
· Encourage use of low carbon materials (engineered wood, CLT, etc.)
· Promote simple ideas for energy efficient homes (smaller homes, lower ceilings, more insulation)
· Create a public list of builders who are good at renewable construction and remodeling
· Publish the environmental impacts of construction choices such as concrete patio vs. gravel or pavers

· Encourage geothermal designs for hot water and heating
· Utilize black-body radiation from sun to heat water and buildings

Added by Deb as this did not belong in ag/shoreline/forest but were relevant suggestions for this section:

- plant trees around athletic fields for shading/heat mitigation.
- educating property owners about use of low-impact lawn and landscape management like mulching over fertilizers, pesticides.
- Realtors should be required to disclose risks of flooding due to SLR and other exacerbated hazards associated with climate change
- No rebuilding in zones at high risk of inundation, hazard

City Code suggestions

· Stop granting waivers for buildings on steep slopes
· no rebuilding in areas of flooding (once and you are out) (flood insurance)
· expand vertically, not horizontally, "up, not out," leaves more room for trees as carbon offsets
· require 100% passive design for all new structures
· require all new buildings to be in tune with the site and the environment
· require new homes to be built green (LEED etc.)
· require solar power on all new construction (residential, commercial, government)
· require all new construction to be carbon neutral
· require new buildings to be 100% electric (no propane) with induction cooking and limited connected load
· require better air tightness and heat recovery ventilation in buildings
· require garden spaces and walking paths in all new developments
· require trees cut on building sites to be used for construction lumber
· require energy efficient windows in new buildings
· require LED lighting in all public buildings
· create incentives and requirements for green construction and use of low carbon materials
· require new homes to have solar panels (or an investment in community solar projects)
· allow gray water plumbing and composting toilets in homes

Offer classes

· Offer classes for builders and contractors to learn green building techniques
· Offer classes for homeowners to learn to manage septic systems

Miscellaneous

· Bainbridge should install island wide car chargers to encourage electric cars
· Allow solar communities such as Grow to pool their excess power into community car chargers
· Put trees and vegetation on every story of a building as in Italian "tree buildings"

Building ideas added by Julie- ideas given directly to her during the workshops

• Partner with local roofing contractors to provide information to home owners about solar options whenever a roof is replaced or significantly repaired
• Require the orientation of new home and commercial building design to be able to accommodate or be consistent with the use of solar panels
• Create and make easily accessible lots of information about how and where to consider home solar panels

- Help home owners do less resource intensive landscaping- provide information and incentives (water, chemicals, native plants, resilience to climate change…)

City Priorities and Policies Applicable to Green Building

2020 Citywide Workplan Priorities

- Support Council consideration of Green Building Initiatives (Q1 – Q4)
    - to include consideration of proposed solar ordinances

Comp Plan Goals & Policies

- Policy LU 5.5 - Implement a green building code.
- LU Action #3 - Amend the City's development code to implement green building codes. Utilize lessons learned from communities of comparable environmental and socio-economic characteristics to implement green building codes which address issues such as site sustainability, water use efficiency, energy use efficiency, indoor environmental quality, and the impact on the atmosphere, materials and resources by buildings.

Applicable to All Types of Buildings

- Policy EC 3.1: Encourage use of green building materials and techniques in all types of construction, as well as design approaches that are responsive to changing conditions.
- Policy EC 10.2: Partner with island architects, landscape architects, builders and related construction professionals to draft development standards and practices that incorporate green building practices and context sensitive design.
- Policy EN 2.3: Use new technologies to reduce environmental impacts such as solar panels, electric and hybrid vehicles, high-efficiency lights and heating systems.
- Goal EN-4: Encourage sustainable development that maintains diversity of healthy, functioning ecosystems that are essential for maintaining our quality of life and economic viability into the future.
- Policy EN 4.1: Employ conservation design methods and principles such as low impact development techniques for managing storm and waste water, green building materials, high-efficiency heating and lighting systems.
- Policy U 14.2: Encourage the conservation of electrical energy, especially during periods of peak usage, and encourage energy saving building code strategies, local renewable energy, and other cost effective approaches to meeting the island's energy needs, including distributed energy systems.

Applicable to City and Public Facilities Only

- GOAL EN-2: Encourage sustainability in City Government operations.
- Policy EN 2.1: In managing City government operations, take reasonable steps to reduce impacts to the environment and ecosystems upon which we depend. This includes recognizing and preparing for the impacts of climate change.
- Policy U 14.5: New taxpayer-funded buildings shall use carbon-neutral energy for heating, cooling, and operational use to the maximum extent practical.
- Policy EN 10.4: Ensure beneficial indoor air quality in all renovations and new construction of City-owned facilities.
- Policy EN 12.6: Promote energy conservation measures by all government entities including:
    - Retrofitting offices, shops and garages with high-efficiency lighting;
    - Converting vehicles to hybrid fuel vehicles as replacement or new vehicles are acquired;

    - Converting traffic signals and lighting to the most energy efficient and spectrum appropriate technology available; and
    - Adopting incentive programs and design standards that encourage the employment of renewable energy sources and energy efficient appliances on the Island.
- Goal CF-4: Public facilities constructed on Bainbridge Island meet appropriate safety, construction, energy conservation, durability and sustainability standards.
- Policy CF 4.4: Require public facilities to incorporate energy generation when and where possible.

Process Improvements

- Policy EN 12.3: Strive for reduced greenhouse gas emissions by, among other actions, integrating climate change into the city planning process, including land use and transportation planning and management, and making climate change considerations and meeting greenhouse gas emission reduction goals a component of city decision making.
- Policy EN 12.4: Establish benchmarks, metrics and targets for reduction of greenhouse gas emissions, assess current conditions and progress in reducing greenhouse gas emissions from municipal, commercial, residential and transportation-related land uses, projects and programs.
- Policy EN 12.5: Support the development of a public education program which informs all citizens on the methods and progress for meeting the Island's greenhouse gas emission goals and ways citizens can assist in reaching the reduction goals.
- Policy HO 6.4: Create a new conservation villages permit process to apply outside of designated centers to increase housing choices including affordable housing and requiring green building practices while better conserving open space.

CITY OF BAINBRIDGE ISLAND

Department of Planning and Community Development

Date: July 13, 2018

To: Gary Christensen, AICP, - Director

From: James Weaver, AICP. CBO, LEED AP - Building Official

Subject: Green Building Incentive Program - 2018

The adoption of the Bainbridge Island Comprehensive Plan Update in 2017 ("Comprehensive Plan Update") included goals and policies (see Attachment A) related to provision of green building within the City of Bainbridge Island. The Planning and Community Development Department began implementation of these Comprehensive Plan goals and policies in July 2016 through the adoption of the International Green Construction Code as an optional regulatory code for new structures. This initial step has proven successful.

This memorandum is intended to serve as an introduction and provide background information on initiating a *Green Building Incentive Program* to foster green building principles and sustainable building efforts. It also summarizes through research the lessons learned from similar green building communities in Puget Sound which have been successful in the implementation of green building incentives; including but not limited to: issues such as site sustainability, water use efficiency, energy use efficiency, indoor environmental quality, and the impact on the atmosphere, materials, and resources through building. In addition, the memorandum describes incentives that have worked in other communities and suggests for further consideration policy choices that may benefit the City of Bainbridge Island.

1. Evaluation of Existing Green Building Certification Programs

The push toward sustainable design increased in the 1990s with the creation of the first green building rating system in the U.K. In 2000, the U.S. Green Building Council developed and released criteria also aimed at improving the environmental performance of buildings through its Leadership in Energy and Environmental Design ("LEED") rating system for new construction. Others also responded to the growing interest and demand for sustainable design including the Green Building Initiative ("GBI"), which was created to assist the National Association of Homebuilders ("NAHB") in promoting its Green Building Guidelines and Built Green local program.

Additional rating systems have been developed that seek to go beyond the limits of current policy and building practices to address broader issues of sustainability or evolving concepts

such as net zero energy and living building concepts that improve the natural environment or model nature's processes.

Green product standards also began to appear in the marketplace in the 1980s and increased in the 1990s. The focus also expanded to include a broader range of environmental issues and the impacts of products during their manufacture, use, and reuse. There is now a proliferation of standards, rating, and certification programs in the marketplace to help guide, demonstrate, and document efforts to deliver sustainable, high-performance buildings. It is estimated that there are nearly 600 green product certifications in the world with nearly 100 in use in the U.S., and the numbers continue to grow.

There are also green building rating programs in use that vary in their approach with some outlining prerequisites and optional credits, while others take a prescriptive approach, and still others suggest performance-based requirements that can be met in different ways for different products and project types. As a result, it can be challenging and time consuming determining which standards, certifications, and rating programs are most credible and applicable to a particular project. For the purpose of a *Green Building Incentive Program* for Bainbridge Island, the most prevalent, commonly used, and widely adopted green building certification processes are discussed in this memorandum.

a) U.S. Green Building Council – LEED Green Building Certification

LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world. Available for virtually all building, community, and home project types, LEED provides a framework to create healthy, highly efficient, and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement. LEED has five main evaluation categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. LEED buildings have the overall goal to save energy, water, and resources, to generate less waste, and to support human health. Over 92,000 projects in 165 countries and territories have used the U.S. Green Building Council LEED certification process. LEED has four certification levels for increasing levels of incorporation of green building: Certified, Silver, Gold, and Platinum.

LEED certification can be processed by third party vendors. LEED certification includes a flat registration fee and a certification fee to the organization, which is based on a project's size and the rating system the project was registered under. Registration fees are due at a project's registration; certification fees are due when an application is submitted for review.

The benefit of LEED certification is that it is a well-known and universal certification process and includes high priority standards that evaluate a given building throughout its lifecycle. The well-known and documented aspects of LEED certification make the process of construction, materials, and green development much more unified and commonplace, with minimal impacts to building construction timetables. Possible disadvantages include that LEED is time consuming, requires abundant documentation, and that LEED does not specifically include adequate community issues or contextual relationships outside the building or development footprint.

A *Green Building Incentive Program* for Bainbridge Island could incorporate, LEED Silver, or higher Gold, or highest Platinum certification levels as the threshold for incorporating U.S. Green Building Council LEED certified buildings as Bainbridge Island green buildings.

b) International Living Futures Institute - Living Building Challenge, Petals, & Zero Energy.

The International Living Future Institute's ("ILFI") Living Building Challenge is the world's most rigorous proven performance standard for buildings. People from around the world use the regenerative design framework to create spaces that, like a flower, give more than they take. The Living Building Challenge is organized into seven performance areas, known as "Petals": Place, Water, Energy, Health & Happiness, Materials, Equity, and Beauty. Each Petal is further subdivided into "Imperatives," which address specific issues through detailed requirements. The ILFI's Zero Energy Building Certification™ was created to allow projects to demonstrate zero energy performance, building an advanced cohort of projects with the integrity of third-party performance certification.

The Living Building Challenge emphasizes the efforts to create buildings that generate more energy than they use, capture and treat all water on site, and are made using healthy materials. The Living Building Challenge has two core rules: (1) all Imperatives assigned to a typology are mandatory; and (2) Living Building Challenge certification requires actual, rather than anticipated, performance demonstrated over twelve consecutive months. The Living Building Challenge recognizes the ideal scale for solutions is not always within a property boundary. Projects are encouraged to register as early in the development/occupancy process as possible.

Similar to LEED, the Living Building Challenge certification can be processed by third party vendors. Living Building Challenge, Petals, and Zero Energy certification includes both a registration fee and a certification fee to the organization. Certification fees are flat fees based upon building type. Documentation for Living Building Challenge certification is audited and is required far beyond the initial occupancy of the structure.

The benefit of the Living Building Challenge certification is a holistic approach to building that requires all project stakeholders to consider the real-life cycle impact of design, construction, and operation. Living Building Challenge certification benefits from the ongoing performance of the building and the context that it operates within as part of the evaluation. If all future buildings were constructed to meet the requirements of all Living Building Challenge Petals, growth in emissions from the building sector would cease, and efforts to improve existing stock could yield real reductions in global carbon emissions. Possible disadvantages include that the strict nature of the Living Building Challenge requires that there are no optional credits and little flexibility with changes that often occur on site, requiring the design team to carefully consider the impact of every design choice no matter how minor. Similar challenges are the time-consuming nature of the certification and documentation. Additionally, the requirement to manage the day-to-day activity and energy usage for the occupants and their use of the space is a component of the certification. This may create contractual challenges where current regulations do not enforce these measures and real estate leases and other ownership transactions may not have the tools to implement the long term Living Building Challenge requirements regarding the building occupants.

The *Green Building Incentive Program* for Bainbridge Island could incorporate any of the Zero Energy, Petals, or the Living Building Challenge certifications as a threshold for incorporating ILFI certified buildings as Bainbridge Island green buildings.

c) National Builders Association (King & Snohomish Counties) – Built Green Program

Built Green is an environmentally-friendly, residential building program of the Master Builders Association of King and Snohomish Counties, developed in partnership with the National Association of Home Builders. The Built Green program specifically optimizes regional requirements in coordination with jurisdictions and other agencies in Washington State, which sets standards of excellence that have a significant impact on housing, health, and the environment and are achievable today. Built Green provides builders and consumers with easy-to-understand rating systems, which quantify environmentally-friendly building practices for remodeling, new home construction, and community and multi-family development projects. Built Green has three major functions: (1) certification of green homes and communities with its tiered rating system and holistic checklist; (2) support of builders and associates through its member network; and (3) education of both the public and those in the building industry on the advantages of green homes and how to support sustainability in the building industry and in our communities.

Like the other green building certification programs, the Built Green certification can be processed by third party vendors. Built Green certification includes both a registration fee and a certification fee to the organization. The *Green Building Incentive Program* for Bainbridge Island could incorporate any of the Built Green three-star, four-star, five star, or Emerald star certification levels to serve as the threshold for incorporating Built Green certified buildings as Bainbridge Island green buildings.

d) Additional Green Building Certification Analysis (EPA Analysis and Evaluation)

In 2017, the U.S. Environmental Protection Agency released an independent analysis and evaluation of the most prevalent Green Building model codes and Green Building Certification systems including the LEED, Living Building Challenge, the National Association of Home Builders, and the International Green Construction Code. A summary of the evaluation is attached to this memorandum (see Attachment B).

2. Analysis of Other Programs Successfully Implemented Throughout Puget Sound

The U.S. Green Building Council ("USGBC") notes that buildings are responsible for almost 40% of annual CO2 emissions nationally, higher than both industrial and transportation contributions. Further, in the U.S., buildings consume approximately 14% of all potable water and contribute millions of tons of construction waste to landfills each year. Numerous cities in Puget Sound are undertaking their own pursuit of working toward sustainability and incorporating green building incentives into their communities. The following information includes programs from Seattle, Issaquah, Redmond, and Shoreline, which have been identified as some of the most progressive and successful programs from communities in Puget Sound

and those that served as source material for much of the proposed *Green Building Incentive Program* for Bainbridge Island.

a) City of Seattle

Seattle is a national leader in sustainable development and energy conservation and has set ambitious targets for reducing building energy use to become a carbon neutral city by 2050. Seattle is also the home to the *Bullitt Center*, constructed as the greenest commercial building in the world, which is celebrating its 5th anniversary this year. Recently, Seattle created the Office of Sustainability and Environment ("OSE"). OSE partners with the community to create strategies to help achieve shared environmental goals and coordinates among City departments, the Mayor's Office, and the City Council to ensure successful implementation of these strategies. OSE integrates equity by elevating opportunities to increase racial, social, and environmental justice throughout Seattle's environmental work.

In 2016—with a revision and clarification in 2017—the City of Seattle adopted a green building standard, a voluntary incentive for buildings that provides additional development capacity, such as extra floor area or height in exchange for meeting a green building standard. The green building standard is meant to improve energy and water conservation beyond the current code requirements, to use resources wisely, and to promote healthy environments, all in exchange for additional development capacity.

Seattle also incorporates a sustainable building policy, originally adopted in 2000 and significantly expanded in scope in 2011, which requires city-funded buildings to be built to green building certification standards. The Seattle policy is discussed further in this memorandum under city-funded buildings.

b) City of Issaquah

In 2017, the Issaquah City Council adopted a sustainable building action strategy. This strategy aims to position Issaquah as a leader in sustainable building through specific, actionable measures focusing on building and infrastructure design, construction, renovation, operation, education, and outreach.

Issaquah's strategy identifies five overarching themes that align with the city's priorities and sustainable building goals:

1. Walk the Talk and Lead the Way: A focus on municipal leadership through demonstrated city actions and commitments is crucial to promote and maintain a culture of sustainable building innovation in Issaquah.
2. Re-Think Car Habitat: Activities that support a reduced reliance on auto-based trips and a parking dominated landscape, and promote walking, biking, transit, transportation services, and other cleaner and more efficient forms of mobility.
3. Toward Carbon Neutral Buildings: In alignment with city goals and the King County-Cities Climate Collaboration commitments, Issaquah must implement large-scale strategies to enhance efficiency and reduce the use of fossil fuels.

4. Connect to the Outdoors: A consistent city goal is protection and promotion of the natural environment through responsible building, development, land use, and transportation practices and policies.
5. Foster Innovation: Innovation is an important driver for development of collaborative and leading solutions to community-wide challenges.

Issaquah has continued to advocate for sustainable building with the establishment of Issaquah's Sustainable Building and Infrastructure Resolution, which promotes environmental responsibility, including requirements for implementation of LEED and Built Green standards for city-owned buildings. More recently, Issaquah has been praised for established partnerships with its school district, seven homebuilders, Port Blakely Communities, Rowley Properties, Microsoft, and Life Care Services. Issaquah offers free expedited permit services for Built Green 5-Star, Built Green Emerald Star, or LEED Gold certified buildings. Over nineteen percent of all Issaquah homes have some form of Built Green certification. Amongst medium sized cities in King County, Issaquah can be considered above average in sustainability practices.

c) City of Redmond

The City of Redmond initiated its Green Building and Green Infrastructure Incentive Program in 2016. The Redmond Green Building and Green Infrastructure Incentive Program encourages developers and homebuilders to incorporate green building and green infrastructure techniques, including low impact development techniques, into new residential developments. Techniques include site planning to better take account of natural site features, achieving LEED or Built Green certification, retaining native vegetation, planting drought-resistant native landscaping, amending soils with compost, reducing impervious (hardscape) surface area, reusing rainwater from roofs, using pervious materials where appropriate, minimizing site disturbance during development, and installing green (vegetated) roofs. Implementing these techniques will result in increased natural resource conservation, lower home operating costs, and better stewardship of Redmond's drinking water aquifer.

The Redmond Green Building and Green Infrastructure Incentive Program gives applicants the option to incorporate elements of green building and green infrastructure into development projects. The program is entirely voluntary, incentive based, and projects may benefit from priority building permit processing, online & print recognition, a sustainable development award from the City, lot size reduction in certain zones for clustering, or alternative road standards.

d) City of Shoreline

In 2017, Shoreline City Council unanimously adopted its Deep Green Incentive Program ("DGIP") to encourage the construction of more sustainable buildings in the city. DGIP provides flexibility in the application of development standards, expedited permitting, and fee reductions to promote construction of green buildings that meet the most stringent levels of available certification programs. Shoreline's adopted green building program included the U.S. Green Building Council's LEED Platinum level; the International Living Future Institute's Living Building Challenge Petal Recognition and Net Zero Energy Building certifications; and the Master Builders Association's Built Green 5-Star and Emerald Star certification levels.

e) Other Puget Sound communities were reviewed for adopted Green Building programs

Additional jurisdictions throughout the Puget Sound Region incorporate the use of electronic permitting to facilitate green building processes and practices within their own building departments. Many jurisdictions were researched, but the most robust programs—those described above—are discussed in this memorandum.

3. Green Building Policy Choices

a) Mandatory Green Building Standards for all City-Owned Buildings

Various Puget Sound cities have required their projects to be built to green building standards. They have, through their own green building programs, become strong advocates for green building construction and have led the way.

The City of Seattle's Sustainable Building Policy calls for new city-funded projects and major renovations with over 5,000 square feet of occupied space to achieve a LEED Gold standard. In addition, such projects must meet additional energy efficiency, water, waste, and bicycle parking requirements. Minor renovation and tenant improvement projects that impact 5,000 square feet or more and involve changes to mechanical, electrical, and plumbing systems must also meet LEED Gold standards, as well as additional requirements for water and waste. Since 2013, 33 LEED certified City buildings have been completed under Seattle's Sustainable Building Policy.

The City of Issaquah's first goal in its Green Action Strategy is similar: "1. Walk the Talk and Lead the Way: A focus on municipal leadership through demonstrated City actions and commitments." Acknowledging the increased costs of city construction (often 30%-40% greater) to incorporate green building is a tradeoff that each City Council is required to undertake in these commitments.

Both the City of Redmond and the City of Shoreline incorporate policies regarding city-owned buildings within their prospective green building incentive programs. These commitments acted as an important tool for furthering implementation of advanced sustainability within the built environment to meet city-wide goals and positions those cities as regional and international leaders.

b) Reduce Plan Check and Building Permit Fees

Consider adding a new subsection to BIMC 15.04.050, authorizing a "Green Building Fee Incentive" in the form of a 25 % reduction on plan check and building permit issuance fees for any structure that is certified as LEED Silver, Evergreen Sustainable Development version 3.0, Built Green 4-Star, or Living Building Challenge Petal. Proof of ongoing certification shall be required during construction and project certification documentation must be completed prior to final occupancy.

c) Provide Expedited Permit Review

Consider adding a new subsection to BIMC 15.04.070, authorizing a "Green Building Priority Processing Incentive" in the form of expedited permit processing for any structure that is certified as LEED Platinum, Evergreen Sustainable Development version 3.0, Built Green Emerald Star, or Living Building Challenge Petal. Proof of ongoing certification shall be required during construction and project certification documentation must be completed prior to final occupancy.

d) Require Commercial Structures to Qualify for Green Building Certifications

Consider adding a new subsection to BIMC 15.04.020 requiring that all occupied commercial structures in excess of 1,000 square feet be certified as LEED silver, Evergreen Sustainable Development version 3.0, Built Green 3-Star, or Living Building Challenge Net Zero or Petal, or any higher certifications. This requirement would be mandatory for all new commercial structures on Bainbridge Island.

e) Create Green Building Program Recognition

Consider adding a new subsection to BIMC 15.04.070, authorizing "Green Building Incentive Program Recognition" to be given by the Director through publication, recognition, and/or issuance of sustainability certificates from the Planning and Community Development Department for any structure that is certified as any of the required green building certifications.

ATTACHMENT A

Policy LU 5.5
Implement a *green building* code.

LU Action #3 Amend the City's development code to implement green building codes. Utilize lessons learned from communities of comparable environmental and socio-economic characteristics to implement green building codes which address issues such as site sustainability, water use efficiency, energy use efficiency, indoor environmental quality, and the impact on the atmosphere, materials and resources by buildings.

Policy EC 3.1
Encourage the use of *green building* materials and techniques in all types of construction, as well as design approaches that are responsive to changing conditions.

Policy EC 10.2
Partner with Island architects, landscape architects, builders and related construction professionals to draft development standards and practices that incorporate *green building* practices and *context-sensitive design*.

Goal EN-4
Encourage sustainable development that maintains diversity of healthy, functioning ecosystems that are essential for maintaining our quality of life and economic viability into the future.

Policy EN 4.1
Employ conservation design methods and principles such as *low impact development* techniques for managing storm and waste water, *green building* materials, high-efficiency heating and lighting systems.

Policy HO 6.4
Create a new *conservation villages* permit process to apply outside of *designated centers* to increase housing choices including *affordable housing* and requiring *green building* practices while better conserving *open space*.

Policy U 14.2
Encourage the conservation of electrical energy, especially during periods of peak usage, and encourage energy saving building code strategies, local renewable energy, and other cost effective approaches to meeting the island's energy needs, including distributed energy systems.

ATTACHMENT B

EPA United States Environmental Protection Agency

Comparison of Green Building Standards

Standard	International Code Council's 2012 *International Green Construction Code* (IgCC), 2012 edition COBI Adopted July 2016	American Society of Heating, Refrigeration, and Air-Conditioning Engineers' ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* (ASHRAE 189.1), 2011 edition	National Association of Home Builders' ICC 700 *National Green Building Standard* (NGBS), 2012 edition	Green Building Initiative's ANSI/GBI 01-2010: *Green Building Assessment Protocol for Commercial Buildings* (Green Globes), 2010 edition	U.S. Green Building Council's *Leadership in Energy and Environmental Design* (LEED®)	The International Living Future Institute's *Living Building Challenge*, version 2.1 (May 2012)
Description	A model code that contains minimum requirements for increasing the environmental and health performance of buildings' sites and structures. Generally, it applies to the design and construction of all types of buildings except single- and two-family residential structures, multifamily structures with three or fewer stories, and temporary structures. For more information, see the 2012 International Green Construction Code. EXIT	A model code that contains minimum requirements for increasing the environmental and health performance of buildings' sites and structures. Generally, it applies to the design and construction of all types of buildings except single-family homes, multifamily homes with three or fewer stories, and modular and mobile homes. For more information, see ASHRAE Standard 189.1. EXIT	A rating and certification system that aims to encourage increased environmental and health performance in residences and residential portions of buildings. Its criteria apply to the design and construction of homes and subdivisions. For more information, see the National Association of Home Builders' "Sustainability" EXIT webpage.	A series of rating and certification systems that encourage improved environmental and health performance for all types of buildings except residential structures. Green Globes is administered in the United States by the Green Building Initiative. For more information, see Green Globes Certification. EXIT	A series of rating systems aimed at increasing the environmental and health performance of buildings' sites and structures and of neighborhoods. LEED® covers the design, construction, and operations of all types of buildings. For more information, see the U.S. Green Building Council's LEED webpage. EXIT	A certification system that advocates for transformation in the design, construction, and operation of buildings. In addition to encouraging improved environmental and health performance, it supports the building of structures that are restorative, regenerative, and an integral component of the local ecology and culture. For more information, see the Living Building Challenge. EXIT
Standard Type[1]	• Model code	• Model code	• Rating and certification system	• Rating and certification system	• Rating and certification system	• Certification system

Standard	International Code Council's 2012 *International Green Construction Code* (IgCC), 2012 edition **COBI Adopted July 2016**	American Society of Heating, Refrigeration, and Air-Conditioning Engineers' ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* (ASHRAE 189.1), 2011 edition	National Association of Home Builders' ICC 700 *National Green Building Standard* (NGBS), 2012 edition	Green Building Initiative's ANSI/GBI 01-2010: *Green Building Assessment Protocol for Commercial Buildings* (Green Globes), 2010 edition	U.S. Green Building Council's *Leadership in Energy and Environmental Design* (LEED®)	The International Living Future Institute's *Living Building Challenge*, version 2.1 (May 2012)
Mandatory/ Voluntary[2]	• Mandatory	• Mandatory	• Voluntary	• Voluntary	• Voluntary	• Voluntary
Building Type(s)	• Commercial: all • Industrial: all but manufacturing systems and equipment • Mixed use: all • Residential: multifamily with more than three stories	• Commercial: all • Industrial: all • Mixed use: all • Residential: multifamily with more than three stories	• Mixed use: residential space • Residential: all except institutional uses	• Commercial: all • Mixed use: all • Residential: multifamily	• Commercial: all • Industrial: all • Mixed use: all • Residential: all	• Commercial: all • Industrial: all • Mixed use: all • Residential: all
Project Type	• New construction • Additions • Alterations	• New construction • Additions	• New construction • Additions • Alterations	• New construction • Additions • Alterations • Existing buildings	• New construction • Existing buildings • Additions	• All
Subject Areas	• Sustainable sites • Energy efficiency • Water efficiency • Materials and resource use • Indoor environmental quality • Emissions • Operations and maintenance	• Sustainable sites • Energy efficiency • Water efficiency • Materials and resource use • Indoor environmental quality • Construction and operations plans	• Sustainable sites • Energy efficiency • Water efficiency • Materials and resource use • Indoor environmental quality • Operations and maintenance • Building owner education	• Sustainable sites • Energy efficiency • Water efficiency • Materials and resource use • Indoor environmental quality • Emissions • Project/enviromental management	• Sustainable sites • Energy efficiency • Water efficiency • Materials and resource use • Indoor environmental quality • Emissions • Operations and maintenance	• Sustainable sites • Energy efficiency • Water efficiency • Materials and resource use • Indoor environmental quality • Equity • Aesthetics

Standard	**International Code Council's 2012 *International Green Construction Code* (IgCC), 2012 edition** **COBI Adopted July 2016**	**American Society of Heating, Refrigeration, and Air-Conditioning Engineers' ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* (ASHRAE 189.1), 2011 edition**	**National Association of Home Builders' ICC 700 *National Green Building Standard* (NGBS), 2012 edition**	**Green Building Initiative's ANSI/GBI 01-2010: *Green Building Assessment Protocol for Commercial Buildings* (Green Globes), 2010 edition**	**U.S. Green Building Council's *Leadership in Energy and Environmental Design* (LEED®)**	**The International Living Future Institute's *Living Building Challenge*, version 2.1 (May 2012)**
Community Adoption/Use	• Designed to be incorporated into a jurisdiction's codes and ordinances and function as an overlay to other International Code Council model codes. • Requires adoption by a governing jurisdiction before it becomes mandatory. • Jurisdictions that do not have other International Code Council codes in place might want to make a detailed review of local building ordinances to ensure that they adequately correlate with this code. • In addition to the mandatory requirements, IgCC offers jurisdictions a range of options for increasing the stringency of the code or encouraging improved levels of performance in areas of particular importance to the community.	• ASHRAE 189.1 is designed to be used and enforced with a jurisdiction's other building codes and ordinances. • Requires adoption by a governing jurisdiction before it becomes mandatory. • Jurisdictions might want to make a detailed review of local building ordinances to ensure that they adequately correlate with this standard.	• Communities could use this standard as the basis for a voluntary program to encourage construction of greener homes.	• Communities could use this protocol as the basis for a voluntary program that encourages construction of greener commercial buildings.	• Communities could use the rating systems to encourage greener construction of commercial buildings, homes, or neighborhoods.	• Communities could use this system as the basis for a green building program.

Standard	International Code Council's 2012 *International Green Construction Code* (IgCC), 2012 edition **COBI Adopted July 2016**	American Society of Heating, Refrigeration, and Air-Conditioning Engineers' ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* (ASHRAE 189.1), 2011 edition	National Association of Home Builders' ICC 700 *National Green Building Standard* (NGBS), 2012 edition	Green Building Initiative's ANSI/GBI 01-2010: *Green Building Assessment Protocol for Commercial Buildings* (Green Globes), 2010 edition	U.S. Green Building Council's *Leadership in Energy and Environmental Design* (LEED®)	The International Living Future Institute's *Living Building Challenge*, version 2.1 (May 2012)
Certification/Compliance Process	• Designed to be incorporated into a jurisdiction's codes and ordinances and enforced by building officials and inspectors. • All provisions of the model code are designed to be mandatory, except those the jurisdiction indicates are not applicable or those designated as project electives. Project electives give jurisdictions the flexibility to encourage the consideration and implementation of beneficial practices without making those particular practices mandatory.	• Designed to be incorporated into a jurisdiction's codes and ordinances and enforced by building officials and inspectors. • Based on mandatory requirements with two compliance path options: Prescriptive Path (considered to be the simpler option with minimal choices and few calculations) and Performance Path (considered to be the more sophisticated option that provides flexibility and more options but also requires greater effort).	• There are four green certification levels for homes: Bronze, Silver, Gold, and Emerald. Land Developments can earn One, Two, Three, or Four Stars. • NGBS contains few minimum criteria but allows the builder or developer great flexibility in selecting green building practices. • Projects receive points in each subject area for reaching certain performance or construction goals. • Certification requires verification by third-party inspectors accredited by the National Association of Home Builders (NAHB) at the rough-in stage and on completion. Inspector verifies that every criterion cited by the builder in the NAHB's online scoring tool has been met.	• Certification to one of four levels (i.e., 1 to 4 globes) requires achieving minimum thresholds of 1,000 points. • Has no minimum criteria (i.e., does not require any specific practices), but instead rates buildings on the green building practices that the builder has chosen to include. • Does not require any ongoing documentation, but it might be required as proof of compliance during the third-party assessment. • Requires third-party review of building documentation and onsite walk-throughs.	• LEED® points are awarded on a 100-point scale, and credits are weighted to reflect their potential environmental impacts. Ten bonus credits are available, four of which address regionally specific environmental issues. A project must satisfy all prerequisites and earn a minimum number of points to be certified. Third-party certification is required. • Includes four levels of certification: Certified, Silver, Gold, or Platinum.	• Projects must meet up to 20 requirements to achieve full certification. However, partial recognition is attainable, including a Net Zero Energy Building Certification. • The certification process involves a review of written elements and a site visit by an independent auditor.

Standard	International Code Council's 2012 *International Green Construction Code* (IgCC), 2012 edition **COBI Adopted July 2016**	American Society of Heating, Refrigeration, and Air-Conditioning Engineers' ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* (ASHRAE 189.1), 2011 edition	National Association of Home Builders' ICC 700 *National Green Building Standard* (NGBS), 2012 edition	Green Building Initiative's ANSI/GBI 01-2010: *Green Building Assessment Protocol for Commercial Buildings* (Green Globes), 2010 edition	U.S. Green Building Council's *Leadership in Energy and Environmental Design* (LEED®)	The International Living Future Institute's *Living Building Challenge*, version 2.1 (May 2012)
Relationship to Other Standards	• ANSI/ASHRAE/USGBC/IES Standard 189.1-2011, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* (ASHRAE 189.1) is an alternate compliance path to IgCC; i.e., in jurisdictions that adopt IgCC, a builder has the option to design and construct a building in accordance with the provisions of ASHRAE 189.1 rather than those of IgCC. • IgCC provides jurisdictions with options for mandating that residential structures comply with the National Association of Home Builders' *National Green Building Standard* (ICC-700). • IgCC is designed to coordinate and integrate with the family of International Code Council codes and complement voluntary green building rating systems. • Some provisions reference standards published by other organizations, e.g., ASTM International, National Science Foundation, and South Coast Air Quality Management District.	• It is an alternate compliance path for the *International Green Construction Code* (IgCC); i.e., in jurisdictions that adopt IgCC, a builder has the option to design and construct a building in accordance with the provisions of 189.1 rather than those of IgCC. • ASHRAE 189.1 is designed to complement voluntary green building rating systems. • Some provisions reference standards published by other organizations, e.g., ASTM International, National Science Foundation, and South Coast Air Quality Management District.	• Includes a separate green rating system for entire subdivisions, similar to the LEED for Neighborhood Development system. • Many of the mandatory measures found in the ICC 700 National Green Building Standard are consistent with the family of International Code Council's codes.	• Modeled after Building Research Establishment Environmental Assessment Method (BREEAM).	• Meeting or achieving ASHRAE standards is necessary for achieving several of the LEED® credits, including ASHRAE 90.1-2007 and 62.1-2007.	

[1] In the building community, there is no consistent use or definition of the terms "standard" or "code." EPA uses the term "standard" here in a broad sense to mean "something established by authority, custom, or general consent as a model or example: CRITERION" (Merriam-Webster). EPA uses it as an umbrella term to encompass model codes, rating systems, and other publications that provide criteria for the design, construction, and maintenance of buildings.

[2] Any standard can be adopted as a voluntary or mandatory program. We indicate here the intent of the authors.

Bainbridge Island Municipal Codes Related to Green Building

Note: This document may not be a comprehensive collection of relevant codes.

Contents

WIP

Attachments

1. 2.16.020(S) - Housing Design Demonstration Projects
2. Chapter 15.04 – Building Code
3. Chapter 17.12 – Subdivision Standards
4. Design for Bainbridge (design review regulations)

Title 2 - ADMINISTRATION, PERSONNEL, AND LAND USE PROCEDURES

Chapter 2.16 - LAND USE REVIEW PROCEDURES

2.16.020(S) - Housing Design Demonstration Projects
Due to length, this section is provided as Attachment 1.
See also HDDP Program Summary and Inventory (provided to GBTF separately).

HDDP is limited to:

- Expires: December 31, 2021
- # of projects: Total of two additional projects
- Geography: Winslow sewer service area/Winslow Master Plan Study Area
- Affordability: 50% of units must be affordable

HDDP currently allows the following GB programs:

- LEED (US Green Building Council)
- BuiltGreen (Master Builders of King and Snohomish Counties)
- Evergreen Sustainable Development Standard (WA Department of Commerce green building requirements for States Housing Trust Fund projects)

The program previously allowed the following GB programs:

- Living Building Challenge (International Living Building Institute)
- Passive House (Passive House Institute US/International)

HDDP offers the following incentives (some are dependent on the zone):

- Reduction in lot size or dimensions
- Increased maximum lot coverage
- More flexible open space requirement
- Reduced parking
- Reduced setbacks
- Increased building height
- Bonus density

2.16.060(D) - Minor Variance Decision Criteria.

1. A minor variance may be approved or approved with conditions if:
   a. The granting of the variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity and zone in which the property is located; and
   b. The variance is requested because of special circumstances related to the size, shape, topography, trees, groundcover, location or surroundings of the subject property, or factors necessary for the successful installation of a solar energy system such as a particular orientation of a building for the purposes of providing solar access; and
   c. The need for a variance has not arisen from previous actions taken or proposed by the applicant; and
   d. The variance is necessary for the preservation and enjoyment of a substantial property right possessed by other property in the same vicinity and zone, but that is denied to the property in question because of special circumstances on the property in question, and will not constitute a

grant of special privilege inconsistent with the limitations upon uses of other properties in the vicinity in which the property is located; and

e. The variance is consistent with all other provisions of this code, except those provisions that are subject to the variance, and is in accord with the comprehensive plan.

2. A variance may be approved with conditions. If no reasonable conditions can be imposed that ensure the application meets the decision criteria in subsection D.1 of this section, then the application shall be denied.

2.16.110(H) - Major conditional use permit - Approval of Additional Height.

1. In the NC zone district a maximum height of 45 feet can be approved through the major conditional use permit process if the director determines that all conditional use permit requirements are met and that: (a) view opportunities are not substantially reduced; (b) fire flow is adequate; and (c) solar access of neighboring lots is not substantially reduced.
2. In the B/I zone district a maximum height of 45 feet can be approved through the major conditional use process if the director determines that all conditional use permit requirements are met and that: (a) view opportunities are not substantially reduced; (b) fire flow is adequate; (c) solar access of neighboring lots is not reduced; and (d) the appearance of the neighborhood will not substantially change.
3. In the WD-I zone district a maximum height of 45 feet can be approved through the major conditional use process if the director determines that all conditional use permit requirements are met and that: (a) view opportunities are not substantially reduced; (b) fire flow is adequate; (c) solar access of neighboring lots is not reduced; and (d) each setback requirement shall be increased one foot for each additional foot of building height allowed. In portions of the WD-I district located within the shoreline jurisdiction regulated by Chapter 16.12 BIMC, a shoreline variance may be needed before additional height can be approved.

2.16.120(E) - Major Variances - Decision Criteria.

1. A major variance may be approved or approved with conditions if:
   a. The variance is consistent with all other provisions of this code, except those provisions that are subject to the variance, and is in accord with the comprehensive plan;
   b. The need for a variance has not arisen from previous actions taken or proposed by the applicant;
   c. The variance is necessary for the preservation and enjoyment of a substantial property right possessed by other property in the same vicinity and zone, but that is denied to the property in question because of special circumstances on the property in question, and will not constitute a grant of special privilege inconsistent with the limitations upon uses of other properties in the vicinity in which the property is located;
   d. The granting of the variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity and zone in which the property is located; and
   e. The variance is requested because of special circumstances related to the size, shape, topography, trees, groundcover, location or surroundings of the subject property, or factors necessary for the successful installation of a solar energy system such as a particular orientation of a building for the purposes of providing solar access.
2. If no reasonable conditions can be imposed that ensure the application meets the decision criteria of the BIMC, then the application shall be denied.

Title 15 - BUILDINGS AND CONSTRUCTION

Chapter 15.04 - BUILDING CODE

Due to length, this section is provided as Attachment 2.

Note the following provisions related to green building:

- 15.04.020(J): The International Green Construction Code (IGCC) is adopted as an optional alternative to the IBC and IRC

Chapter 15.19 - SITE ASSESSMENT REVIEW

A link to this online chapter is provided due to its length and supportive role to the scope of the Green Building Task Force.

Note: This chapter establishes a site assessment review process related to stormwater management to ensure low impact development standards are understood and effectively adhered to as part of the planning related to development or redevelopment of a site prior to:

- The submittal of land use and building permits; and
- Any clearing, grading, or construction activities.

Chapter 15.20 - SURFACE WATER AND STORMWATER MANAGEMENT

A link to this online chapter is provided due to its length and supportive role to the scope of the Green Building Task Force.

Note: This chapter determines the stormwater requirements that must be used for development and redevelopment. The City's surface and stormwater management program has a low-impact development focus.

Title 16 - ENVIRONMENT

Chapter 16.12 - SHORELINE MASTER PROGRAM

16.12.030(C)(7) - General (Island-wide) Regulations - Utilities (Primary and Accessory).

a. Applicability. These provisions apply to services and facilities that produce, convey, store, or process power, gas, sewage, communications, oil, waste, and the like. On-site utility features serving a principal use, such as water, sewer or gas line to a residence, are "accessory utilities" and shall be considered a part of the principal use. Shoreline development and activities will be reviewed under the no net loss provisions of subsection B.2 of this section, Environmental Impacts, and may also be reviewed under subsection A of this section, Regulations – General; subsection B.5 of this section, Water Quality and Stormwater Management; subsection B.3 of this section, Vegetation Management; BIMC 16.12.050, Shoreline modification regulations; BIMC 16.12.060, Critical areas; and Chapter 15.18 BIMC, Land Clearing, when applicable. Other portions of this program may also apply.

WIP

b. Regulations – Prohibited. The following uses associated with utilities shall be prohibited within shoreline jurisdiction: …

iv. Primary power-generating facilities including solar power and wind generation that are not considered accessory structures in Chapter 18.09 BIMC, except public facilities necessary to serve a public system, such as sewer lift stations or similar facilities which must be located within the shoreline area due to the system design of the existing public facility;

16.12.080 - Definitions.

"Accessory structure or building" means a subordinate building or structure that is incidental to the primary or principal building or structure on the same lot, or an abutting lot that meets the requirements in BIMC 18.09.030.I.15.c. Accessory structures include, but are not limited to, solar panels, small wind devices, barns and sheds. Accessory dwelling units are not considered accessory buildings or structures.

Chapter 16.18 - TREE REMOVAL, FOREST STEWARDSHIP, AND VEGETATION MAINTENANCE

16.18.025 - Purposes

This chapter is adopted for the following purposes: …

F. To implement a long-range policy of maintaining the island's forest canopy cover while taking measures to prevent wildfires and protect structures in accordance with recommendations of the Bainbridge Island fire department.

G. To allow limited tree and vegetation removal to provide for solar access, agriculture and gardens.

H. To promote infiltration of stormwater and aquifer recharge; to minimize erosion and prevent pollution; to prevent landslides; to protect the waters of Puget Sound and the quality and quantity of water in wells.

Chapter 16.20 - CRITICAL AREAS

16.20.100 - Aquifer recharge areas

4. ARPA Use Standards. The following developments and activities are allowed within a designated ARPA: …

i. Storm drainage facilities if the applicant can demonstrate that (i) the system meets the low impact design (LID) standards of Chapter 15.20 BIMC, and (ii) construction of the system will not require the use of heavy equipment or removal of significant trees.

j. Accessory solar panels, small wind energy generators, composting bins, rainwater harvesting barrels, and cisterns, as defined in Chapter 18.36 BIMC. …

Title 17 - SUBDIVISIONS AND BOUNDARY LINE ADJUSTMENTS

Chapter 17.12 - SUBDIVISION STANDARDS

Due to length, this chapter is provided as Attachment 3.

Provisions in this chapter related to green building include:

- 17.12.020: Subdivisions must meet “Design for Bainbridge” requirements (see Attachment 4)
- 17.12.030: 4-step process first requires the identification and protection of natural areas; drawing lot lines is the last step
- 17.12.050(9)(h): Solar panels, small wind energy generators, composting bins, rainwater harvesting barrels, cisterns, and rain gardens/swales, as defined in Chapter 18.36 BIMC, may be allowed within a designated natural area
- 17.12.060(A): Homesite area is described
- 17.12.060(B): Homesite location requirements are specified relative to site characteristics
- 17.12.060(C): Clustering is required
- 17.12.070(F): Site disturbance is limited
- 17.12.070(J)(5): Solar access is considered during design of interior street layout
- 17.12.070(K)(3): Consolidated remote/satellite parking is allowed
- 17.12.070(L): Non-motorized facilities are required
- Table 17.12.070-1: Maximum homesite size is specified for all zones; maximum home size (1,600sf total floor area, excluding garage) is specified for R-8 and higher density zones

Table 18.09.020 - Use Table (Excerpts)

Primary utility

"P" = Permitted Use	"A" = Accessory Use	Additional use restrictions for Chapters 16.12 and 16.20 BIMC may apply to shoreline or critical area properties
"C" = Conditional Use	"CA" = Conditional Accessory Use	
Blank = Prohibited Use	"T" = Temporary Use	

ZONING DISTRICT USE CATEGORY/TYPE	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14	Winslow Mixed Use Town Center					HSR I and II	NC	B/I	WD-I	Use-Specific Standards BIMC 18.09.030
											CC	MA	EA	Gate	Ferry [1]					
PRINCIPAL USES																				
Small Wind Energy Generator	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	P/C	P/C	P/C	F-1
ACCESSORY USES																				
Accessory Small Wind Energy Generator	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	I-10
Accessory Solar Panel	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
Accessory Utilities	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	I-11

WIP

18.09.030(F) - Use-specific standards - Utility and Telecommunications.

1. Small Wind Energy Generator. A small wind energy generator is a permitted use in NC, B/I, and WD-I zone districts if it complies with height and width setback requirements of the zone district, and will be a conditional use in the NC, B/I, and WD-I zone districts if it does not comply with height and width setback requirements.
2. Utility, Primary.
    a. Primary utility facilities and equipment are subject to standards in BIMC 16.12.030.C.7, Utilities (Primary and Accessory), and BIMC 16.20.130.C.11, critical areas regulations.
    b. Replacement, maintenance or upgrade of existing poles and equipment within a utility corridor or right-of-way is considered a permitted ("P") use.
        i. Replacement of a distribution utility pole or a transmission utility pole exceeding the height and/or location standards established in Table 18.12.040 shall require minor site plan review approval in accordance with BIMC 2.16.040 prior to installing the replacement pole.

18.09.030(I) - Use-specific standards - Accessory Uses.

9. Accessory Small Wind Generator System. Accessory small wind generator systems are subject to the height and setback requirements of each district, including modifications pursuant to BIMC 18.12.040.
10. Accessory Utilities. Accessory utilities structures within fish and wildlife habitat conservation areas will be subject to utility standards in BIMC 16.20.130.C.11. They are also subject to BIMC 18.12.040, permitted modifications.

Chapter 18.12 - DIMENSIONAL STANDARDS

Table 18.12.040 - Permitted Setback/Height Modifications (Excerpts)

Note: Includes changes proposed in Ord 2020-03 shown in strikeout/underline format

Type of Encroachment	Encroachment Permitted	Conditions
Permitted Setback Modifications		
Chimneys, flues, awnings, bay windows, and greenhouse windows	Up to 18 inches into any required setback	
Eaves	May extend up to 24 inches in any required setback except shoreline structure setback	
Overhead or underground accessory utilities ~~accessory to a single-family residence~~	In any required setback, perimeter or roadside buffer	Must conform to Chapters 16.12 and 16.20 BIMC. Does not apply to above ground utilities such as propane tanks.
Composting bins	In side or rear setback areas	
Bioretention/rain gardens	In any required setback	In accordance with Chapter 15.20 BIMC
Rain barrels/cisterns	In any required setback	In accordance with Chapter 15.20 BIMC

Type of Encroachment	Encroachment Permitted	Conditions
Wall-mounted on-demand hot water heaters	Up to 18 inches into side or rear setbacks	Permitted if buffered or enclosed to prevent noise impacts to neighboring properties
Below-ground geothermal equipment	In any required setback, perimeter or roadside buffer	Must conform to Chapters 16.12 and 16.20 BIMC. Permitted if any excavated areas are promptly re-landscaped after installation is complete
Permitted Height Modifications		
Small wind energy generators	Up to 18 inches above the maximum building height in the district	
Solar panels	Up to 18 inches above the maximum building height in the district	
Distribution utility poles	Up to 55 feet in height above grade	Replacement poles over 55 feet in height, see BIMC 18.09.030.F.2.b. For new distribution utility facilities or corridors, see Table 18.09.020. Poles shall not be moved more than 20 feet from the original location unless permitted under BIMC 18.09.030.F.2.b.
Transmission utility poles	Up to a 25 percent increase above existing pole height above grade with a maximum height of 100 feet	Replacement poles over the 25 percent increase or 100 feet in height, see BIMC 18.09.030.F.2.b. For new transmission utility facilities or corridors, see Table 18.09.020. Poles shall not be moved more than 20 feet from the original location unless permitted under BIMC 18.09.030.F.2.b.
Utility structures existing on the effective date of the ordinance codified in this subsection	Existing height	May also be replaced or modified; provided, that the structure is not larger or taller than the original structure and is not moved more than 20 feet from its original location

18.12.050(K) - Rules of measurement - Lot Coverage.

"Lot coverage" means that portion of the total lot area covered by buildings, excluding up to 24 inches of eaves on each side of the building, any building or portion of building located below predevelopment and finished grade. Any portion of a slatted or solid deck located more than five feet above grade shall be counted towards lot coverage. Also excluded are ground-mounted accessory small wind energy generators, solar panels, composting bins, rain barrels/cisterns, and covers designed to shade ground-mounted heat pumps and air conditioners to increase their efficiency.

Chapter 18.15 - DEVELOPMENT STANDARDS AND GUIDELINES

18.15.010(K) - Landscaping, screening, and tree retention, protection and replacement - Screening of Certain Facilities

2. Trash Dumpsters and Outdoor Equipment. …
    a. Small wind energy generators do not need to be screened.

18.15.020(B) - Parking and loading - General Requirements. …

5. Residential parcels are encouraged to have two-track driveways (also known as Hollywood or wheel strip driveways).
7. Joint use of required access ways with adjacent properties is encouraged. The director may approve joint access if the applicant demonstrates to the satisfaction of the director that the joint access (a) will promote the orderly development of the surrounding area; or (b) will help reduce or avoid cumulative adverse impacts that would result from each property accessing the right-of-way separately; and (c) will not create a safety hazard.
10. On-street parking created or designated in conjunction with and adjacent to a project may be included in the parking space calculation upon approval of the director.
11. When a new commercial or mixed use development is required to provide parking for more than 25 cars, at least one parking space near the entrance must be reserved and signed for use by a shared-car program or electric vehicle charging station.

Chapter 18.18 - DESIGN STANDARDS AND GUIDELINES

18.18.010 - Applicability

All development, exterior renovation and redevelopment shall comply with the following regulations and guidelines, as applicable. In some cases, design standards in this chapter may be waived or modified through the housing design demonstration program in BIMC 2.16.020.S.

18.18.020 - Promoting sustainable development

The site designs of all new development and redevelopment should accommodate energy-conserving and water-conserving technology and design principles providing for solar or other renewable energy production where possible. Low impact development principles require such measures as minimizing the extent of land disturbing activities and hard surfaces; preserving native vegetation, topography, and natural drainage patterns; and using LID BMPs such as cisterns, bioretention/rain gardens, and permeable pavement where feasible.

18.18.030 - Specific design regulations and guidelines

All development subject to design review shall comply with the requirements of the Bainbridge Island design review regulations, “Design for Bainbridge.” In the event of a conflict between two or more design standards or regulations, the Bainbridge Island design review regulations, “Design for Bainbridge,” shall apply.

[Note: The “Design for Bainbridge” design review regulations is provided as Attachment 4.]

Chapter 18.24 - HISTORIC PRESERVATION PROGRAM

A link to this online chapter is provided due to its length and indirect relationship to green building.

Note: This chapter may interact with green building code provisions with regard to historic buildings, heritage trees, and historic island farms. Historic preservation is voluntary, however once historic

buildings are registered future renovations can be conditioned or denied. Preservation of buildings eligible for the local registry, heritage trees, and historic island farms is encouraged but not enforceable.

Chapter 18.36 – DEFINITIONS

18.36.030 – Definitions

11. "Accessory structure" means a subordinate building or structure that is incidental to the principal structure on the same lot, or an abutting lot if it meets the requirements in BIMC 18.09.030.I.13. Accessory structures include, but are not limited to, solar panels, small wind devices, barns, sheds, and confined feed lots holding less than five chickens (roosters are only allowed on parcels outside of the Mixed Use Town Center districts). Accessory dwelling units are not considered accessory buildings or structures.

241. "Small wind energy generator" means a wind energy generator designed to generate no more than 10 kilowatts of energy.

265. "Utility" means all lines, buildings, easements, passageways, or structures used or intended to be used by any public or private utility related to the provision, distribution, collection, transmission, or disposal of power, oil, gas, water, sanitary sewage, communication signals, or other similar services on a local level and other in-line facilities needed for the operation of such facilities, such as gas regulation stations, power or communication sub-stations, dams, reservoirs, and related power houses. Additionally, a utility facility means any energy device and/or system that generates energy from renewable energy resources including solar, hydro, wind, biofuels, wood, geothermal, or similar sources. Services may be publicly or privately provided. In the Mixed Use Town Center and High School Road commercial zones, a utility or utilities do not include wireless communications facilities.

a. "Utility, primary" means facilities that produce, transmit, carry, store, distribute, or process electric power, gas, water, sewage, or information and do not meet the definition of an accessory utility. Primary utilities include solid waste handling and disposal facilities, wastewater treatment facilities, utility lines, electrical power generating or transfer facilities, radio cellular telephone and microwave towers, and gas distribution and storage facilities.
    i. "Distribution utility pole" means a structure supporting electrical distribution lines carrying less than 55 kV. Distribution utility poles carry power from electrical substations through distribution transformers directly to homes and businesses. Distribution utility poles may support communication lines.
    ii. "Transmission utility pole" means a structure supporting electrical transmission lines carrying 55 kV or higher. Transmission utility poles transport power from generation sources like dams and wind generation facilities to substations. Transmission utility poles may support distribution and/or communication lines.
b. "Utility, accessory" means small-scale distribution systems directly serving a permitted ("P") or conditional ("C") use. Accessory utilities include power, telephone, cable, water, sewer, septic, and stormwater lines, and do not include wind generators (turbines) or solar panels.

[*Note: Small wind devices and solar panels are defined as accessory structures*.]

2.16.020 General provisions.

…

S. Housing Design Demonstration Projects.

1. Purpose and Goals. The purpose of this subsection S is to allow the development of housing design demonstration projects that increase the variety of housing choices available to residents across underserved portions of the socio-economic spectrum, and to promote compact, low-impact development where it is most appropriate. Further, its purpose is to encourage high quality and innovation in building design, site development, and "green" building practices.

The goals of this program are to increase the housing supply and the choice of housing styles available in the community; to promote socio-economic diversity by adding to the stock of income-qualified housing; to encourage development of smaller homes, at reasonable prices, in neighborhoods attractive to a mix of income and age levels; and to demonstrate that innovative design and building techniques (conserving water and energy, using sustainably sourced materials, limiting environmental impacts) are compatible with market considerations.

2. Applicability. This subsection S is applicable to all properties located within the Winslow sanitary sewer system service area. An application for a housing design demonstration project may be applied to single-family residential subdivisions, mixed-use/multifamily and multifamily developments. Since the purpose is to provide housing projects as demonstrations, the city will accept projects for consideration and approval prior to the sunset date of the ordinance codified in this chapter. The city will limit acceptance of projects outlined in this section to two projects after the effective date of the ordinance codified in this section.

3. Review and Approval Process. Housing design demonstration project applications shall be reviewed as specified in the same manner as other applications for the same type of underlying land use permit (see BIMC 2.16.030 through 2.16.210), with additional review steps done in the order below as outlined in this subsection.

a. Conceptual Proposal Review. Applicants proposing a demonstration project shall meet with city staff during the conceptual phase to discuss the goals and evaluation parameters of the proposed project. The conceptual proposal review is an informal discussion between the applicant and city staff regarding a proposed project. There are no required application materials for this stage. Applicants shall contact the planning department staff to request a meeting, and the meeting shall be scheduled by staff for no more than three weeks after the request date. The purpose of the conceptual proposal review is to determine if the proposal is eligible to be considered as an application for a housing design demonstration project and to assist the applicant by identifying (i) requirements for submittal, including types of supplemental materials for application; (ii) compliance with applicable city plans, goals, policies, codes, or guidelines and possible revisions to the project that will enhance the proposal with respect to these requirements; (iii) areas of BIMC Title 17, Subdivisions, and BIMC Title 18, Zoning, where the applicant seeks flexibility; and (iv) required plans, studies, reports, and/or other materials specific to the proposal that will provide necessary information for staff and the design review board, and to review the project under the criteria outlined in subsection S.4 of this section.

b. Public Participation Program. The applicant is required to participate in one or more community meetings, either through (i) the city's public participation program following the procedures outlined in Resolution Nos. 2010-32 and 2001-11, or (ii) an equivalent public meeting that includes participation by city staff, as approved by the director.

c. Preapplication Conference. The applicant shall apply for a preapplication conference pursuant to subsection I of this section. Housing design demonstration projects shall be reviewed by both staff and the design review board, pursuant to subsection F of this section. The applicant shall submit an HDDP proposal consistent with the requirements in the administrative manual. The applicant shall consider input received during the public meetings and conceptual review with city staff in crafting the proposal. The proposal will be evaluated pursuant to subsection S.4 of this section by city staff with the design review board serving in an advisory role, in addition to their review of applicable design guidelines. The director shall prepare written findings of facts, and applicants will receive preliminary notification from the

director whether the proposal will qualify as a housing design demonstration project, or feedback about how to improve the proposal to qualify. If the applicant changes the proposal in any significant manner other than a response to feedback from the public meeting, conceptual review, or the preapplication review, an additional preapplication conference may be required.

d. Application Submittal. An applicant may submit a land use permit application (subdivision, site plan and design review, or conditional use permit) for a housing design demonstration project after completion of a required conceptual and preapplication review and notification by the city that the proposal qualifies as a housing design demonstration project. Upon receipt of an application, the director shall provide notice to the applicant and public in accordance with subsection M of this section and commence the application review process. Housing design demonstration projects that require more than one land use permit must utilize the consolidated project review process outlined in BIMC 2.16.170. All housing design demonstration project applications, including subdivisions, shall be reviewed by the design review board and the planning commission at public meetings. The design review board and the planning commission shall make recommendations on all housing design demonstration projects.

e. Permit Decision. The decision to approve or deny a housing design demonstration project shall be made as part of underlying land use permit approval. The decision shall be based upon the decision criteria of the underlying planning permit, and the decision criteria outlined in subsection S.5 of this section. Housing design demonstration project approval conditions shall be included in the final permit approval and shall address any ongoing compliance requirements, including compliance with approved design plans. The city may require that the applicant record covenants to ensure ongoing compliance or maintenance for required project components.

f. Building Permit. The applicant shall submit a building permit that is consistent with all conditions of the land use permit approval. The applicant shall also submit documentation that the project has applied for required certification by a green building rating system, such as Evergreen Sustainable Development, LEED, or BuiltGreen. Proof of ongoing certification shall be required during construction and project certification must be completed prior to final occupancy.

g. Living Building Challenge. For projects pursuing the Living Building Challenge standard of the International Living Building Institute, the applicant must show proof of pursuing ongoing certification during construction for all required elements. After construction, and prior to issuance of the certificate of occupancy, the applicant must show proof of initial project compliance as to the site, materials, indoor quality and beauty/inspiration components of the Living Building Challenge and that the project is likely to achieve the elements of energy and water following 12 months of occupancy as required under Living Building Challenge certification. For those elements of energy and water that require occupancy of the building for 12 months for Living Building Challenge certification, the applicant must submit a report to the city following 12 months of occupancy, demonstrating its progress towards meeting these remaining elements of the Living Building Challenge standard. If certification of those elements has not been achieved, the applicant must provide quarterly reports of progress towards certification of these elements, including additional steps and timeline that will be taken to achieve certification.

4. Evaluation Method. Each project will be evaluated for innovation and achievement of the goals of this subsection S of this section using a number of factors. The evaluation factors are divided into three categories. Examples of sustainable development methods do not limit other mechanisms of meeting the evaluation factor. Projects that qualify as housing design demonstration projects are eligible to use the flexible development standard incentives outlined in subsections S.6 and 7 of this section, and are eligible for the residential incentives outlined below and in subsection S.8 of this section. Tables 2.16.020.S-1, S-2, and S-3 show how projects are scored to qualify for the housing design demonstration project program.

Table 2.16.020.S-1: Housing Design Demonstration Project Scoring System		
Density Incentives	**Requirements to Receive Incentives**	
	Green Building and Innovative Site Development	**Housing Diversity**
2.5 x Base Density OR Max. Bonus Mixed-Use FAR	• LEED Silver, BuiltGreen 4, or Evergreen Sustainable Development • 25 Points in Innovative Site Development Practices	• 50% affordable housing • Home size not larger than 1,600 sq. ft.
NOTE: For required affordable housing units: o Home ownership projects: 50% of required affordable house units should serve ≤ 80% AMI o Rental projects: 50% of required affordable house units should serve ≤ 60% AMI.		

Table 2.16.020.S-2 Housing Diversity Scoring Method							
	Affordable Housing Project includes a number of housing units that are designated affordable for a period of 99 years to the spectrum of income levels as defined by BIMC 18.36.030.16 and 18.21.020.A. Rental housing is encouraged by awarding more points for the creation of rental housing.			**Unit Size** Project includes a variety of unit sizes, excluding garages, that provide for a broad mix of income levels and family size. In order to score a point in a unit size range, the project shall provide at least 10% of the total number of units in that range. For example, in a 40-unit development, at least 4 units sized between 1,001 and 1,200 ft^2 would be needed to score points in that range.		**Unit Type** Unit type: Project includes a variety of housing unit types (i.e., single-family style, townhouse, flat, age-in-place, ADUs, cottages) or innovative type of housing. In order to score points for different unit types, the project shall provide at least 10% of the total number units of that type. For example, in a 40-unit development of townhomes and duplexes, at least 4 units of townhomes would be needed to score points for having 2 different unit types.	
Total Housing Diversity Points Required	% Affordable Units	Ownership Value	Rental Value	Unit Size Range	Value	Number of Different Unit Types	Value
	10%	10	12	< 800 ft^2	1	2	2
	11 – 15%	12	14	801 – 1,000 ft^2	1	3	3
	16 – 20%	14	16	1,001 – 1,200 ft^2	1	4	4
	21 – 25%	16	18	1,201 – 1,400 ft^2	1	5	5
	More than 25%	20	22	1,401 – 1,600 ft^2	1		
	Minimum % Required			**Size Requirement**	**Min. Pts. Required**	**Min. Pts. Required**	
20 pts	50%			Max. home size 1,600 ft^2	NA	NA	

Table 2.16.020.S-3 Innovative Site Development Scoring Method

Minimum Site Development Point Requirement	**Water Quality and Conservation** Projects use methods to decrease water usage and improve stormwater runoff quality through an integrated approach to stormwater management such as greywater use, stormwater collection in cisterns, green roofs and covered parking. All HDDP projects will follow the stormwater manual adopted in Chapter 15.20 BIMC.			**Landscaping and Open Space** Project provides well-designed common open space, with at least 5 percent of the gross land area set aside as open space and designed as an integrated part of the project rather than an isolated element. The common open space must be outside of critical areas and their buffers and required roadside buffers. Appropriate community amenities such as playgrounds, composting and neighborhood gardens promoting the production of locally grown food are encouraged. Resident neighborhood community gardens can be in common open space areas, and shall be appropriately located for solar exposure, and include water availability, soil amenities, and storage for garden tools. Required growing space for neighborhood gardens is 60 square feet per dwelling unit, not including any existing orchard area. Open space dedicated to the public pursuant to the standards of BIMC 17.12.030.A.1, A.2, A.3, A.6 and A.7 is encouraged.			**Transportation** Project design provides enhanced sensitivity to pedestrian and bicycle travel to promote the people getting around without a car, a reduced carbon footprint, improved health of humans, and lower pollution levels. Project internally preserves existing informal internal connection to external nonmotorized facilities, furthering the Island-wide Transportation Plan (IWTP) and using such solutions as woonerfs, green streets, and natural trails and paths. Project reduces reliance on automobiles and trip counts, and promotes alternative transportation, such as integrating parking and charging facilities for electric cars, or bus shelters.	
25	**Requirement**		**Value**	**% of Open Space**	**Value**	**Value if Public**	**Transportation Components**	**Value**
	Number of dwelling units that integrate greywater reuse components into building design:			5 – 10%	2	4	Project preserves, creates or integrates internal and external nonmotorized connections.	2
		10%	1	11 – 15%	4	6	Provides public walkways, separated paths, or bike lanes. No points for facilities required by IWTP.	3
		11 – 20%	2	16 – 20%	6	8	On-site car sharing program	1 per each car
		21 – 30%	3	21 – 25%	8	10	Electric vehicle charging stations for 3% of vehicle parking capacity	3
		Over 31%	4	Greater than 25%	10	12	Covered consolidated bike	3

<table>
<tr><th colspan="8">Table 2.16.020.S-3 Innovative Site Development Scoring Method</th></tr>
<tr><td rowspan="8">Minimum Site Development Point Requirement</td><td colspan="3">Water Quality and Conservation
Projects use methods to decrease water usage and improve stormwater runoff quality through an integrated approach to stormwater management such as greywater use, stormwater collection in cisterns, green roofs and covered parking.
All HDDP projects will follow the stormwater manual adopted in Chapter 15.20 BIMC.</td><td colspan="3">Landscaping and Open Space
Project provides well-designed common open space, with at least 5 percent of the gross land area set aside as open space and designed as an integrated part of the project rather than an isolated element. The common open space must be outside of critical areas and their buffers and required roadside buffers. Appropriate community amenities such as playgrounds, composting and neighborhood gardens promoting the production of locally grown food are encouraged. Resident neighborhood community gardens can be in common open space areas, and shall be appropriately located for solar exposure, and include water availability, soil amenities, and storage for garden tools. Required growing space for neighborhood gardens is 60 square feet per dwelling unit, not including any existing orchard area. Open space dedicated to the public pursuant to the standards of BIMC 17.12.030.A.1, A.2, A.3, A.6 and A.7 is encouraged.</td><td colspan="2">Transportation
Project design provides enhanced sensitivity to pedestrian and bicycle travel to promote the people getting around without a car, a reduced carbon footprint, improved health of humans, and lower pollution levels. Project internally preserves existing informal internal connection to external nonmotorized facilities, furthering the Island-wide Transportation Plan (IWTP) and using such solutions as woonerfs, green streets, and natural trails and paths. Project reduces reliance on automobiles and trip counts, and promotes alternative transportation, such as integrating parking and charging facilities for electric cars, or bus shelters.</td></tr>
<tr><td colspan="2"></td><td></td><td></td><td></td><td>parking for subdivisions</td><td></td></tr>
<tr><td rowspan="3">Percentage of total roof area qualifying as “green roofs”:</td><td></td><td rowspan="3"></td><td>Incorporates neighborhood garden</td><td>2</td><td></td><td>Bus shelter</td><td>2</td></tr>
<tr><td></td><td>Preserves tree that qualifies as a “heritage tree” under city program. The tree is not otherwise required to be preserved.</td><td colspan="2">2 per tree</td><td colspan="2" rowspan="3"></td></tr>
<tr><td>15 – 30%</td><td>2</td></tr>
<tr><td>Over 31%</td><td>4</td><td>All private yard areas ≤ 20% turf</td><td colspan="2">4</td></tr>
<tr><td rowspan="3">Project integrates cisterns: % of total roof area directed to cisterns:</td><td></td><td rowspan="3"></td><td rowspan="3">Project landscaping integrates at least 60% native or drought tolerant plants</td><td colspan="2" rowspan="3">4</td><td colspan="2" rowspan="3"></td></tr>
<tr><td>15 – 30%</td></tr>
<tr><td>Over 31%</td><td>4</td></tr>
</table>

Table 2.16.020.S-3 Innovative Site Development Scoring Method					
Minimum Site Development Point Requirement	**Water Quality and Conservation** Projects use methods to decrease water usage and improve stormwater runoff quality through an integrated approach to stormwater management such as greywater use, stormwater collection in cisterns, green roofs and covered parking. All HDDP projects will follow the stormwater manual adopted in Chapter 15.20 BIMC.		**Landscaping and Open Space** Project provides well-designed common open space, with at least 5 percent of the gross land area set aside as open space and designed as an integrated part of the project rather than an isolated element. The common open space must be outside of critical areas and their buffers and required roadside buffers. Appropriate community amenities such as playgrounds, composting and neighborhood gardens promoting the production of locally grown food are encouraged. Resident neighborhood community gardens can be in common open space areas, and shall be appropriately located for solar exposure, and include water availability, soil amenities, and storage for garden tools. Required growing space for neighborhood gardens is 60 square feet per dwelling unit, not including any existing orchard area. Open space dedicated to the public pursuant to the standards of BIMC 17.12.030.A.1, A.2, A.3, A.6 and A.7 is encouraged.		**Transportation** Project design provides enhanced sensitivity to pedestrian and bicycle travel to promote the people getting around without a car, a reduced carbon footprint, improved health of humans, and lower pollution levels. Project internally preserves existing informal internal connection to external nonmotorized facilities, furthering the Island-wide Transportation Plan (IWTP) and using such solutions as woonerfs, green streets, and natural trails and paths. Project reduces reliance on automobiles and trip counts, and promotes alternative transportation, such as integrating parking and charging facilities for electric cars, or bus shelters.
	Percentage of total parking spaces that are covered (i.e., parking garage, carport):				
	5 – 20%	1			
	21 – 40%	2			
	41 – 60%	3			
	61 – 80%	4			
	Over 81%	5			

a. Housing Diversity. Evaluation will review:

i. Unit Type. The project includes a variety of unit types, for example, single-family, townhomes, flats, duplex, cottages, age-in-place or accessory dwelling units;

ii. Unit Size. The project includes a variety of housing unit sizes that provide for a broad mix of income levels and family size; and

iii. Affordable Housing. The project includes housing units that are affordable to the spectrum of income levels as described in Chapter 18.21 BIMC, Affordable Housing, and BIMC 18.36.030.16. Designated affordable housing shall remain affordable for 99 years from the time of final inspection on the affordable unit. The applicant shall record covenants that demonstrate how the unit will remain affordable and be managed for 99 years.

b. Innovative Site Development. Evaluation will review:

i. Water Quality and Conservation. Projects use methods to decrease water usage and improve stormwater runoff quality through an integrated approach to stormwater management such as greywater use, stormwater collection in cisterns, vegetated roofs and covered parking. All HDDP projects will follow the Department of Ecology's 2012 Stormwater Management Manual for Western Washington, as amended in December 2014.

ii. Landscaping. The project uses low maintenance landscaping that integrates a high proportion of native plants or drought-tolerant plants that are climate appropriate. The project limits the amount of lawn in private yards in favor of common open space. Projects are encouraged to use cisterns to collect rainwater for irrigation or garden use.

iii. Common Open Space. The project provides connected common open space area set aside as active open space and designed and integrated into the project. The open space could include active elements such as a neighborhood garden/pea patch and composting facilities, or a playground. Critical areas and their buffers and required roadside buffers do not contribute to "common open space" under the housing design demonstration project program.

iv. Transportation. The project (A) uses a design that provides enhanced sensitivity to pedestrian travel; (B) internally preserves existing informal, internal connection to external trail(s), or creates new connections where appropriate, to implement the Island-wide Transportation Plan (IWTP); (C) reduces reliance on automobiles and trip counts, and promotes alternative transportation and public transit; (D) minimizes the visual dominance of automobiles throughout the project; or (E) the project accommodates needs of alternative vehicles through techniques such as parking and charging facilities for electric cars, locating rechargeable electric vehicle (EV) parking in a conspicuous and preferred location close to a main building entrance, and integrating a parking space for a vehicle sharing program, such as Zipcar™.

c. Innovative Building Design. The project is constructed under a green building certification program that requires third-party verification such as the Evergreen Sustainable Development, Living Building Challenge standard of the International Living Building Institute, Passive House Institute US/International, LEED or the BuiltGreen Program of the Master Builders of King and Snohomish Counties.

5. Approval Criteria. In addition to decision criteria required by the underlying planning permit or approval, an application for a housing design demonstration project may be approved if the following criteria are met:

a. The applicant clearly demonstrates evaluation factors listed in subsection S.4 of this section as shown in the housing design demonstration project scoring system as evaluated by the planning department;

b. The applicant has demonstrated how relief from specific development standards, including setback reductions, lot coverage and/or design guidelines, is needed to achieve the desired innovative design and the goals of this chapter;

c. The project does not adversely impact existing public service levels for surrounding properties;

d. The project complies with all other portions of the BIMC, except as modified through this housing design demonstration project process;

e. If a project will be phased, each phase of a proposed project must contain adequate infrastructure, open space, recreational facilities, landscaping and all other conditions of the project to stand alone if no other subsequent phases are developed; and

f. The applicant is meeting required housing diversity standards.

6. Development Standard Incentives for Development Projects in the Mixed-Use Town Center. The applicant may request that development standards from BIMC Titles 17 and 18 be modified as part of a housing design demonstration project. The city will review the request to modify development standards through the project review process outlined in subsection S.3 of this section. Requirements of BIMC Title 16 may not be modified. The following development standards may be modified:

a. Minimum Lot Dimensions and Size. Reductions in lot size or dimensions are subject to approval by Kitsap County health district.

b. Maximum Lot Coverage. Maximum lot coverage can be increased above zoning district requirements with no maximum.

c. Natural Area. For MUTC projects developed under BIMC Title 17, the prescriptive natural area requirements in Table 17.12.070-1 do not apply. Instead, the project shall integrate at least 50 square feet of natural area per unit.

d. Residential Parking. The parking requirements outlined in BIMC 18.15.020 may be modified to require one parking space for homes under 800 square feet and one and one-half parking spaces for homes between 800 and 1,200 square feet. This reduction may not be combined with any other reductions to result in less than one space per unit, and additional guest parking may be required pursuant to Table 18.15.020-1. A limited number of parking spaces may be designed to accommodate alternative fuel or subcompact vehicles such as Smart™ cars, with parking stall dimensional standards reduced from the standards outlined in BIMC 18.15.020.J. The applicants are encouraged to work with neighboring property owners to ensure street parking is not overburdened. If the project is requesting a reduction in required parking through the housing design demonstration project program, then the development shall integrate at least one guest parking space for every five dwelling units.

e. Setbacks. Unless required for public safety purposes, such as sight distance, setbacks may be reduced as described below. This section does not supersede lesser setback requirements in the MUTC/HS Road district zones, as outlined in Tables 17.12.070-1 and 18.12.020-2, as applicable.

i. Zoning Setback Reductions.

(A) Front setback within project: 10 feet.

(B) Rear setback within project: minimum of five feet.

(C) Side setback within project: minimum of five feet.

ii. Subdivision Setback Reductions.

(A) All interior subdivision setbacks: zero feet.

(B) Building to exterior subdivision boundary: five feet.

(C) Building to right-of-way or on-site private access: 10 feet.

f. Building Height. Buildings within the Mixed-Use Town Center or High School Road districts may achieve a maximum building height not to exceed the optional height outlined in Table 18.12.020-2.

7. Development Standard Incentives for Development Projects in Residential Zones. The applicant may request that development standards from BIMC Titles 17 and 18 be modified as part of a housing design demonstration project. The city will review the request to modify development standards through the project review process outlined in subsection S.3 of this section. Requirements of BIMC Title 16 may not be modified. The following development standards may be modified:

a. Minimum Lot Dimensions and Size. Reductions in lot size or dimensions are subject to approval by Kitsap County health district.

b. Maximum Lot Coverage. Maximum lot coverage can be increased above zoning district requirements with no maximum.

c. Natural Area. For residentially zoned projects developed under BIMC Title 17, the prescriptive natural area requirements in Table 17.12.070-1 do not apply. Instead, the project shall integrate at least 400 square feet of natural area per unit.

d. Residential Parking. The parking requirements outlined in BIMC 18.15.020 may be modified to require one parking space for homes under 800 square feet and one and one-half parking spaces for homes between 800 and 1,200 square feet. This reduction may not be combined with any other reductions to result in less than one space per unit, and additional guest parking may be required pursuant to Table 18.15.020-1. A limited number of parking spaces may be designed to accommodate alternative fuel or subcompact vehicles such as Smart™ cars, with parking stall dimensional standards reduced from the standards outlined in BIMC 18.15.020.J. The applicants are encouraged to work with neighboring property owners to ensure street parking is not overburdened. If the project is requesting a reduction in required parking through the housing design demonstration project, then the development shall integrate at least one guest parking space for every five dwelling units.

e. Setbacks. Unless required for public safety purposes, such as sight distance, zoning and subdivision setbacks may be reduced as described below. This section does not supersede lesser setback requirements as outlined in Tables 17.12.070-1 and 18.12.020-1, as applicable. Additional vegetative landscaping screen may be required by the director when reducing setbacks.

i. Zoning Setback Reductions.

(A) Front setback to on-site access: 10 feet.

ii. Subdivision Setback Reductions.

(A) All interior subdivision setbacks: zero feet.

(B) Building to on-site access: 10 feet.

8. Density Bonus Incentives. An increase in residential base density may be permitted as outlined in Table 2.16.020.S-4.

Table 2.16.020.S-4: Housing Diversity Program Project Density Bonuses	
•	2.5 x Base Density
•	OR Max. Bonus Mixed-Use FAR (all residential)

9. Housing Project Visit. In order to learn from the innovative design practices used, all projects completed under this subsection S shall allow city staff to conduct occasional site tours. City staff will make a request of the property owner prior to conducting a tour and will not access the properties for tours more than once every

three months. The site tours will be limited to the exterior and common grounds of the property and conducted during regular business hours. Visits will be coordinated through the staff and property owner, and the owner will receive written notice no less than two weeks in advance of each visit. Any additional access to private property or at alternative times shall be at the permission and cooperation of the individual homeowner only.

10. Demonstration Period. This subsection S and related provisions of BIMC Titles 2, 17, and 18 shall expire on December 31, 2021. (Ord. 2019-32 § 1 (Exh. A), 2019; Ord. 2018-20 § 6, 2018; Ord. 2018-31 § 1, 2018; Ord. 2018-24 § 1, 2018; Ord. 2018-08 §§ 2 – 6, 2018; Ord. 2017-03 § 1, 2017; Ord. 2016-28 §§ 2, 3 (Exh. A), 2016; Ord. 2016-27 §§ 1 – 5, 2016; Ord. 2013-25 §§ 2, 3, 2013; Ord. 2012-09 § 1, 2012; Ord. 2011-02 § 2 (Exh. A), 2011)

Chapter 15.04

BUILDING CODE

Sections:

15.04.010 Title.

This chapter and amendments hereto shall constitute the "city building code" of the city and may be cited as such. (Ord. 89-22 § 1, 1989: Ord. 86-14 § 1, 1986: Ord. 79-28 § 1, 1979)

15.04.015 Definitions.

Repealed by Ord. 2003-22. (Ord. 96-12 § 1, 1996; Ord. 95-02 § 2, 1995)

15.04.020 Codes adopted by reference.

The following codes are adopted by reference subject to the amendments set forth in BIMC 15.04.021 through 15.04.050 and Resolution 99-31:

A. The International Building Code, 2015 Edition, published by the International Code Council, and amended by the State Building Code Council in Chapter 51-50 WAC, together with ICC A117.1 2009, Appendix C (Agricultural Buildings), Appendix E (Supplementary Accessibility Requirements), Appendix J (Grading), and the 2015 International Existing Building Code;

B. The International Residential Code, 2015 Edition, published by the International Code Council, and amended by the State Building Code Council in Chapter 51-51 WAC together with Appendix F (Radon Control Measures), and Appendix J (Existing Buildings and Structures);

C. The Uniform Plumbing Code, 2015 Edition, published by the International Association of Plumbing and Mechanical Officials, and amended by the State Building Code Council in Chapter 51-56 WAC including Appendices A, B and I;

D. The International Mechanical Code, 2015 Edition, published by the International Code Council, and amended by the State Building Code Council in Chapter 51-52 WAC; except that the standards for handling liquefied petroleum gas installations shall be NFPA 58 (Liquefied Petroleum Gas Code) and NFPA 54 (National Fuel Gas Code);

E. The Uniform Code for the Abatement of Dangerous Buildings, 1997 Edition, as published by the International Conference of Building Officials;

F. The International Energy Conservation Code, 2015 Edition, published by the State Building Code Council, and amended in Chapters 51-11C and 51-11R WAC;

G. The Uniform Administrative Code, 1997 Edition, published by the International Conference of Building Officials;

H. The International Fuel Gas Code, 2015 Edition, published by the International Code Council;

I. The Uniform Building Code, 1997 Edition, Table 1-A only, published by the International Conference of Building Officials;

J. The International Green Construction Code (IGCC), 2015 Edition, is adopted by reference as an optional alternative to the 2015 IBC and/or 2015 IRC;

K. The International Swimming Pool and Spa Code, 2015 Edition, published by the International Code Council;

L. The International Property Maintenance Code, 2015 Edition, published by the International Code Council.

In case of conflict among the BIMC and codes adopted in subsections A, B, C, D, E, F, G, H, I, J, K, and L of this section, the BIMC shall govern. (Ord. 2016-14 § 1, 2016: Ord. 2013-10 § 1, 2013: Ord. 2010-17 § 1, 2010: Ord. 2008-10 § 8, 2008: Ord. 2007-17 § 1, 2007: Ord. 2004-14 § 1, 2004: Ord. 98-30 § 2, 1998; Ord. 96-12 § 3, 1996; Ord. 93-20 § 1, 1993: Ord. 91-17 § 1, 1991; Ord. 89-46 § 1, 1989; Ord. 89-22 § 2, 1989; Ord. 87-27 § 1, 1987; Ord. 86-17 §§ 1, 2, 1986; Ord. 86-14 § 2, 1986: Ord. 86-06 § 1, 1986; Ord. 84-02 § 1, 1984: Ord. 81-07 § 1, 1981: Ord. 79-28 § 2, 1979)

15.04.021 Design requirements.

IRC Table R301.2(1) is amended by filling in the blanks of the table as follows:

Snow Load: 25 psf

Wind Speed: 85 mph

Seismic Category: D2

Weathering: Moderate

Frost Line Depth: 12 inches

Termite: Slight to Moderate

Decay: Slight to Moderate

Winter Design Temp: 27 degrees F

Ice Shield Underlayment Required: No

Flood Hazards: Per BIMC 15.16

Air Freezing Index: 113

Mean Annual Temp: 53 degrees F

(Ord. 2016-14 § 2, 2016: Ord. 2013-10 § 2, 2013: Ord. 2010-17 § 2, 2010: Ord. 2007-17 § 2, 2007: Ord. 2004-14 § 2, 2004)

15.04.023 International Building Code, Section 104.6 and International Residential Code, Section R104.6 amended – Right of Entry; International Building Code, Section 114 and International Residential Code, Section R113 amended – Violations; International Building Code, Section 115 and International Residential Code, Section R114 amended – Stop Work Order.

Section 104.6 Right of Entry. The right of entry for the building official shall be as set forth in BIMC 1.26.020.

Section R104.6 Right of Entry. The right of entry for the building official shall be as set forth in BIMC 1.26.020.

Section 114 Violations. The building official may order discontinuance or vacation of a use, structure, building or equipment in accordance with Chapter 1.26 BIMC.

Section R113 Violations. The building official may order discontinuance or vacation of a use, structure, building or equipment in accordance with Chapter 1.26 BIMC.

Section 115 Stop Work Orders. The building official may order work stopped in accordance with Chapter 1.26 BIMC.

Section R114 Stop Work Order. The building official may order work stopped in accordance with Chapter 1.26 BIMC.

(Ord. 2016-14 § 3, 2016: Ord. 2013-10 § 3, 2013: Ord. 2010-17 § 3, 2010: Ord. 2004-14 § 3, 2004; Ord. 96-12 § 2, 1996)

15.04.026 Section 204 deleted.

Section 204 of the Uniform Building Code adopted in BIMC 15.04.020 is repealed. (Ord. 95-02 § 3, 1995)

15.04.030 Violations – Enforcement and penalty.

A. It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy, or maintain any building or structure in the city, or cause or permit the same to be done, contrary to or in violation of any of the provisions of the city building code.

B. It is unlawful for any person to remove or deface any sign, notice, complaint or order required by or posted in accordance with the city building code.

C. It is unlawful to misrepresent any material fact in any application, plans or other information submitted to obtain any permits or authorizations under the city building code.

D. Civil Infraction. Except as provided in subsection E of this section, conduct made unlawful by the city building code shall constitute a civil infraction and is subject to enforcement and fines as provided in BIMC 1.26.035, including payment of a fine of not more than $500.00 per violation for each day of noncompliance and payment of court costs. A civil infraction under this section shall be processed in the manner set forth in Chapter 1.26 BIMC.

E. Misdemeanor. Any person who again violates this section within 12 months after receiving a notice of infraction pursuant to subsection A of this section commits a misdemeanor and any person who is convicted thereof shall be punished as provided in BIMC 1.24.010.A.

F. Civil Penalty. In addition to any civil infraction fine, criminal penalty, and/or other available sanction or remedial procedure, any person engaging in conduct made unlawful by the city building code shall be subject to a cumulative civil penalty in the amount of $1,000 per day for each violation from the date set for compliance until the date of compliance. Any such civil penalty shall be collected in accordance with BIMC 1.26.090.

G. Additional Remedies. In addition to any other remedy provided by this chapter or under the Bainbridge Island Municipal Code, the city may initiate injunction or abatement proceedings or any other appropriate action in courts against any person who violates or fails to comply with any provision of this chapter to prevent, enjoin, abate, and/or

terminate violations of this chapter and/or to restore a condition which existed prior to the violation. In any such proceeding, the person violating and/or failing to comply with any provisions of the city building code shall be liable for the costs and reasonable attorneys' fees incurred by the city in bringing, maintaining and/or prosecuting such action.

H. In the event and to the extent the language of this section conflicts with language of the codes and/or appendices adopted by reference in BIMC 15.04.020, the language of this section shall prevail over the language it conflicts with in any said code and/or appendix. (Ord. 2007-17 § 3, 2007: Ord. 2004-14 § 4, 2004: Ord. 98-05 § 1, 1998; Ord. 96-12 § 4, 1996; Ord. 95-02 § 4, 1995; Ord. 89-22 § 3, 1989; Ord. 86-14 § 3, 1986; Ord. 84-02 § 2, 1984: Ord. 81-18 § 1, 1981: Ord. 79-28 § 3(A), 1979)

15.04.040 Uniform Building Code – Section 106.4 amended – Permits issuance.

A. Permit Required.

1. Issuance Procedure. The application, plans and specifications and other data filed by an applicant for a permit shall be checked by the building official or his/her designee for a determination of completeness. The building permit application shall be considered complete only after:

a. The determination that the official application form is complete.

b. The plans submitted are adequate to evaluate the proposed project.

c. The plan check fees have been paid by the applicant.

The complete application and building plans shall be reviewed by the building official for compliance with codes adopted by this chapter and other pertinent laws and ordinances in effect in the city of Bainbridge Island. When the building official is satisfied that the work as described in the application satisfies the requirements of this code and conforms to other pertinent laws and ordinances, the applicant will be required to pay the calculated building permit fee. A building permit shall then be issued to the applicant for the work described.

2. Compliance with Approved Plans and Permits. When the building official issues a permit, he/she shall endorse the permit in writing or stamp the plans "APPROVED." Such approved plans and permit shall not be changed, modified or altered without authorization from the building official, and all work shall be done in accordance with the approved plans and permit except as the building official may require during field inspection to correct errors or omissions.

3. Permits for Part of a Project. The building official may issue a permit after payment of the required fee for the construction of part of a project before complete plans for the whole project have been submitted or approved; provided, that the proposed project complies with the State Environmental Policy Act and the zoning ordinance (including site plan review); and provided further, that adequate information and plans have been filed and checked to assure compliance with all requirements of this and other pertinent codes.

4. Amendments to the Permit. When substitutions and changes are made during construction, approval shall be secured prior to execution. Substitutions, changes and clarifications shall be shown on two sets of plans which shall be submitted to and approved by the building official, accompanied by redesign fees, prior to occupancy.

5. Cancellation of Permit Application. If a permit is not issued after a period of six months from the date of approval for issuance or date of notification of required corrections, the applicant shall be notified in writing that the permit application will be canceled after one month. After that time, the site shall be inspected to verify that no work has taken place. The application shall be canceled and it and any accompanying plans and specifications destroyed and the portion of the fee paid forfeited. Upon written request of the applicant, prior to cancellation, the building official may extend the life of the permit application for a period not to exceed six months, with no other extensions possible; except that applications may be further extended by the building official where permit issuance is delayed by litigation, appeals or similar problems. Application forms and plans for such canceled permit applications shall not be retained by the city. Any application for a permit for the same structure and/or site for which the original permit was canceled shall be considered a new application

requiring a new application and submittal of a new complete set of plans, recalculations of the fees by the building official and payment of the full fee. All ordinances in effect at the time of the filing of the new completed application shall be complied with.

B. Retention of Plans for Work Under Construction. One set of approved plans shall be retained by the building official for a period of 90 days from the date of the final inspection and one set of approved plans shall be returned to the applicant, which set shall be kept on such building or work site at all times during which the work authorized is in progress for use by the building inspector.

C. Validity. The issuance or granting of a permit or approval of plans shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of this jurisdiction. No permit presuming to give authority to violate or cancel the provisions of this code shall be valid.

The issuance of a permit based upon plans shall not prevent the building official from thereafter requiring the correction of errors in said plans, specifications or other data, or from preventing building operations being carried on thereunder when in violation of this code or of any other ordinances of the city.

The issuance of a building permit shall not prevent the building official from requiring correction of conditions found to be in violation of this code or any ordinance of the city, nor shall the period of time for which any such permit is issued by construed to intend or otherwise affect any period of time for compliance specified in any notice or order issued by the building official or other administrative authority requiring the correction of any such condition.

D. Expiration.

1. Permits and Renewals Where Work is Progressing. Permits shall expire one year from the date that the original permit was issued, except if specifically noted otherwise on the permit. Permits for major construction projects that require more than one year to complete may be issued for a length of time that provides a reasonable time to complete the work, however, in no case to exceed three years. Permits may be renewed and renewed permits may be further renewed by the building official upon application within the 30-day period immediately preceding the date of expiration thereof; provided, that the building official determines that the work permitted has been started and is progressing. If commencement or completion of the work is delayed by litigation, appeals, strikes or other causes beyond the permittee's control, the expiration date will be extended the number of days the work was delayed by such causes. A new permit will be applied for where a permit has expired.

2. Permits and Renewals Where Work is Not Commenced or is Suspended. Permits and renewed permits shall expire 180 days from the date that the original permit or renewed permit was issued if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Permits may be renewed one time for such cases by the building official upon application within the 30-day period preceding expiration of the permit. A new permit will be applied for where a period has expired.

3. Application Process for New Permits and Renewals of Permits. A new permit shall be applied for where a permit has expired. A new application form and complete plans must be filed and a new fee shall be calculated by the building official and paid by the applicant. All ordinances in effect at the time of filing of a completed application shall be complied with. A permit may be renewed under the conditions set forth in this section upon written application for renewal. A renewal fee amounting to one-half the original fee shall be paid by the applicant before the renewal permit is issued.

4. Suspension or Revocation. The building official shall, by written order, suspend or revoke a permit issued under the provisions of this code whenever the permit is issued in error or on the basis of incorrect information supplied, or in violation of any ordinance or regulation or any provisions of this code. The building official may also suspend a permit in whole or in part and stop work pursuant to said permit whenever an appeal from the action of the building official issuing or renewing said permit has been filed pursuant to this chapter or other ordinance of the city of Bainbridge Island. (Ord. 2001-41 § 3, 2001; Ord. 96-12 § 5, 1996; Ord. 89-22 § 3, 1989; Ord. 86-14 § 3, 1986; Ord. 84-02 § 2, 1984: Ord. 81-30 § 1, 1981: Ord. 81-18 § 1, 1981: Ord. 79-28 § 3(B), 1979)

15.04.050 International Building Code, Section 108.2 and International Residential Code, Section R108.2 amended – Fees.

A. Permit Fees. The fee for each permit shall be calculated from the 1997 Uniform Administrative Code, which is adopted by reference, and using the most current building valuation data supplied by the International Code Council times a factor of 1.41. When building valuation data is updated by the International Code Council, the city's fees shall be adjusted as of the first of the month at least 30 days after release of the updated figures from the International Code Council. The calculated fees may be reduced by a percentage discount as determined by resolution of the city council. In no case shall the fees charged for building permits exceed the cost to the city of the building permit regulatory function.

B. Plan Review Fees. When a plan or other data is required to be submitted, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be 65 percent of the building permit fee calculated in subsection A of this section. Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged.

C. Investigation Fees – Work Without a Permit. Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work. An investigation fee, in addition to the permit fee, shall be collected whether a permit is then or subsequently issued. If a permit is not issued, the investigation fee shall be due to the city within 60 days from the date of notification the fee is due. The investigation fee shall be equal to the total permit cost, except the SBCC fee. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this chapter or from any penalty prescribed by law.

D. Renewal Fees. Fees for renewals shall be one-half the amount required for a new permit for the work. Such fee may be waived by the building official following written request for same upon showing that circumstances beyond the control of the applicant prevented work from commencing or action from being taken.

E. Fee Refunds.

1. The building official may authorize the refunding of any fee paid hereunder which was erroneously paid or collected.

2. The building official may authorize the refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

3. The building official may authorize the refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done. The building official shall not authorize the refunding of any fee paid except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

F. Planning Review of Building Permits. When a plan or other data is required to be reviewed for conformity with the environmental or zoning chapters of the Bainbridge Island Municipal Code, a review fee shall be charged in the amount established by the city by resolution. Where plans are incomplete or changed so as to require additional environmental or zoning review, an additional review fee shall be charged. (Ord. 2013-10 § 4, 2013: Ord. 2007-08 § 1, 2007; Ord. 2006-25 § 1, 2006; Ord. 2005-38 §§ 1, 2, 2005; Ord. 2004-14 § 5, 2004: Ord. 97-10 § 4, 1997; Ord. 96-12 § 7, 1996; Ord. 89-22 § 3, 1989; Ord. 86-14 § 3, 1986; Ord. 84-02 § 2, 1984: Ord. 81-18 § 1, 1981: Ord. 79-28 § 3(C), 1979)

15.04.060 Uniform Building Code – Section 204-C (#5) amended – City defined.

Repealed by Ord. 2003-22. (Ord. 96-12 § 8, 1996; Ord. 89-22 § 3, 1989; Ord. 86-14 § 3, 1986; Ord. 84-02 § 2, 1984: Ord. 81-18 § 1, 1981: Ord. 79-28 § 3(D), 1979)

15.04.080 Uniform Plumbing Code – Schedule of fees amended.

Repealed by Ord. 96-12.

15.04.090 Fire protection systems.
Repealed by Ord. 2008-10. (Ord. 96-12 § 10, 1996; Ord. 90-02 §§ 1, 2, 1990; Ord. 89-14 § 4, 1989; Ord. 88-18 § 1, 1988; Ord. 86-17 § 3, 1986)

15.04.095 Fire lanes.
Repealed by Ord. 2008-10. (Ord. 2000-23 § 3, 2000)

15.04.100 Fee schedule – Installation of solid fuel burning appliances.
The city shall charge an appropriate fee for processing and issuing a permit for, or for inspecting, a wood stove or other solid fuel burning appliance in the amount established by the city by resolution. (Ord. 92-24 § 9, 1992: Ord. 87-27 § 2, 1987)

15.04.110 Burning permits.
Repealed by Ord. 2000-27. (Ord. 96-12 § 11, 1996; Ord. 89-63 §§ 2 – 6, 8, 1989: Ord. 89-16 § 1, 1989: Ord. 89-05, 1989)

15.04.120 Administrative variance – Compliance with Americans with Disabilities Act.
A. Application. A property owner may apply for an administrative variance from building setback requirements set forth in this code if the variance is requested solely for the purpose of complying with the Federal Americans with Disabilities Act and any amendments thereto. Administrative variance applicants shall not be required to comply with the procedures for obtaining a variance set forth in BIMC 2.16.060 and 2.16.120.

B. Procedures. The application shall be filed with the department of planning and community development on a form prescribed by the department. The director of planning and community development shall review the application and approve, approve with conditions or disapprove the application pursuant to BIMC 2.16.030.

C. Decision Criteria. The director of planning and community development may approve or approve with conditions an application for an administrative variance if:

1. The administrative variance is requested for the purpose of obtaining relief from building setback requirements set forth in this code;

2. The need for the administrative variance has not arisen from actions taken or proposed by the applicant;

3. The administrative variance is the minimum necessary to fulfill the need of the applicant;

4. The administrative variance is consistent with the purpose and intent of this code and in accordance with the city's comprehensive plan; and

5. The administrative variance is necessary for the property to comply with the Federal Americans with Disabilities Act and any amendments thereto.

D. Expiration. An administrative variance automatically expires and is void if the applicant fails to file for a building permit or other necessary development permit within three years of the effective date of the administrative variance unless:

1. The applicant has received an extension for the administrative variance; or

2. The administrative variance approval provides for a greater time period.

E. Extension. The director of planning and community development may grant one extension to the administrative variance for period not exceed one year if:

1. Unforeseen circumstances or conditions necessitate the extension of the administrative variance;

2. Termination of the administrative variance would result in unreasonable hardship to the applicant, and the applicant is not responsible for the delay; and

3. The extension request is received by the department of planning and community development no later than 30 days prior to the expiration of the administrative variance. (Ord. 96-12 § 12, 1996; Ord. 93-22 § 1, 1993)

15.04.130 Appeals.

A. General. Except for civil infractions, misdemeanors and civil penalties imposed pursuant to BIMC 15.04.030, the hearing examiner shall hear and decide appeals of orders, decisions and/or determinations made by the building official and/or director of planning and community development relative to the application and interpretation of the city building code.

B. Limitations on Authority. An application for appeal shall be based on a claim that the true intent of the city building code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of the city building code do not fully apply or an equally good or better form of construction is proposed. The hearing examiner shall have no authority to waive requirements of the city building code.

C. In the event and to the extent the language of this section conflicts with language of the codes and/or appendices adopted by reference in BIMC 15.04.020, the language of this section shall prevail over the language it conflicts with in any said code and/or appendix. (Ord. 2007-17 § 4, 2007)

Chapter 17.12

SUBDIVISION STANDARDS

Sections:

17.12.010 Applicability.

This chapter sets forth standards for short subdivisions, long subdivisions, large lot subdivisions, and nonresidential and multifamily subdivisions. Specific requirements relevant to each individual type of subdivision are provided throughout various chapters of this title. (Ord. 2019-03 § 5 (Exh. A), 2019)

17.12.020 Subdivision design guidelines.

Subdivision development in all zoning districts shall comply with the requirements of the Bainbridge Island design review regulations – "*Design for Bainbridge*," as amended, as follows:

A. Detached single-family residential subdivision development shall comply with Chapters 1, 2, 3 and 5, as applicable, and Chapter 6;

B. Attached single-family residential and multifamily residential development shall comply with Chapters 1, 2, 3, 4 and 5, as applicable;

C. Commercial subdivision development shall comply with all chapters, as applicable. (Ord. 2019-03 § 5 (Exh. A), 2019)

17.12.030 Four-step design process.

The city's approach to planning for subdivisions requires a four-step process that gives the highest priority to identification and conservation of existing natural site features. This process reverses the conventional site planning approach, which typically begins by laying out the streets, lot lines and building footprints. Instead of first identifying the areas to be cleared for development, the design process begins by analyzing on-site resources and the site's relationship to surrounding properties, in order to identify what resources are most worthy of preservation and what areas can best accommodate development.

This design process is required for all residential subdivisions. The process is further defined in BIMC 2.16.125.D; it consists of four steps: (A) delineate natural area; (B) locate homesites and community space; (C) define access; and (D) draw lot lines. (Ord. 2019-03 § 5 (Exh. A), 2019)

17.12.040 Administrative departures.

A. A departure from existing subdivision standards may be requested only by an applicant to allow use of an alternative standard not listed among the applicable requirements of BIMC 17.12.050 through 17.12.070. Departures are not variances and are not required to meet the criteria associated with a variance application. Rather, departures allow adjustment of existing standards to achieve better outcomes in cases where strict application of the existing standard would result in an inferior subdivision design.

B. Departures from the subdivision standards in BIMC 17.12.050 through 17.12.070 may be permitted as part of the subdivision review process. In order for such a departure to be allowed, it must satisfy the intent of the four-step

design process, and the resulting subdivision must be consistent with the general purpose and intent of the subdivision ordinance and the specific standard(s). A departure shall not be allowed from the following standards:

1. Natural area;

2. Community space;

3. Homesite size.

C. Any request for one or more departures shall be made at the design guidance review meeting as part of the preapplication phase of the project. Departures shall be reviewed concurrently with a preliminary application for subdivision. The design review board may include an administrative departure in its recommendation to the planning commission, if all of the following criteria are met:

1. Because of unusual shape, exceptional topographic conditions, environmental constraints or other extraordinary situation or condition in connection with a specific piece of property, strict adherence to the existing standard would result in practical difficulties or unnecessary hardships inconsistent with the general purpose and intent of the subdivision ordinance as provided in BIMC 17.04.010;

2. The granting of the departure results in a subdivision with greater natural resource conservation value, less adverse impact to adjoining properties, or more practical design because of topography, critical area, or other extenuating circumstance; and

3. All possible efforts to comply with the standard or minimize potential harm or adverse impacts have been undertaken. Economic consideration may be taken into account but shall not be the overriding factor in approval; and

4. The departure is consistent with other applicable regulations and standards; and

5. The granting of any departure will not be unduly detrimental to the public welfare nor injurious to the property or improvements in the vicinity in which the property is located.

D. If the design review board's recommendation is to grant the departure(s), the departure shall be included as a component of the project in subsequent reviews pursuant to BIMC 2.16.110.D.3 and 2.16.110.E. The departure(s) shall be included in the director's recommendation to the hearing examiner unless a deviation from the recommendation is documented in the director's report pursuant to BIMC 2.16.110.E.4.b.

E. For short subdivisions not requiring design review board review, request for departures shall be made at the preapplication conference. The director may approve one or more departures, if the criteria in subsection C of this section are met, as part of their administrative decision for the preliminary subdivision in accordance with BIMC 2.16.070.F. (Ord. 2019-03 § 5 (Exh. A), 2019)

17.12.050 Natural area and community space.

A. Natural Area Required. All residential subdivisions shall provide natural area consistent with Chapter 17.28 BIMC, Definitions, Table 17.12.070-1, and the following standards:

1. Natural Area Objectives. The natural area(s) shall support one or more of the following objectives:

a. Preservation and protection of:

i. Natural resources and ecological functions, including groundwater recharge;

ii. Native soils and topography;

iii. Historic island landscapes including farmland, meadows, pastures, and orchards; and

iv. Scenic views along roads.

b. Promoting interconnected open space, wildlife corridors, and undeveloped areas;

c. Promoting a development pattern consistent with island character.

2. Types of Natural Area. The natural area(s) shall be designated as the first step in the four-step design process defined in BIMC 2.16.125.D. Natural areas consist of primary and secondary natural areas.

a. Primary Natural Areas (PNA). PNAs form the core of the natural area to be protected. PNAs include the following:

i. Critical areas other than critical aquifer recharge areas;

ii. Critical area buffers and setbacks; and

iii. Shoreline buffers.

b. Secondary Natural Areas (SNA). SNAs are noteworthy or significant features of the natural landscape. SNAs include the following:

i. Farmland, pastures, meadows, and orchards;

ii. Mature trees and shrubs;

iii. Wildlife corridors;

iv. Greenways and trails;

v. Scenic viewsheds;

vi. Mature vegetation on ridgelines;

vii. Freestanding landmark trees, as defined in Chapter 16.32 BIMC, and their critical root zone (as identified by a consulting arborist).

3. Amount of Natural Area Required. The natural area requirement shown in Table 17.12.070-1 shall be provided as shown in Figure 17.12.070-1, Natural Area Allocation, and in accordance with the following standards:

a. The area provided for natural area shall be based on and consistent with the existing types of natural areas (listed in subsection A.2 of this section) on the subject property, up to the maximum shown in Table 17.12.070-1, unless additional natural area is required due to the presence of PNAs (listed in subsection A.2.a of this section).

b. All PNAs (listed in subsection A.2.a of this section) are required to be designated as natural area even if this amount exceeds the maximum percent required shown in Table 17.12.070-1. This may result in no subdivision being permitted or a subdivision with less than the maximum number of lots allowed in accordance with Table 17.12.070-1.

c. If the area being subdivided contains less than the percentage of natural area shown in Table 17.12.070-1, then the designated natural area is identified accordingly and community space is required pursuant to subsection B of this section.

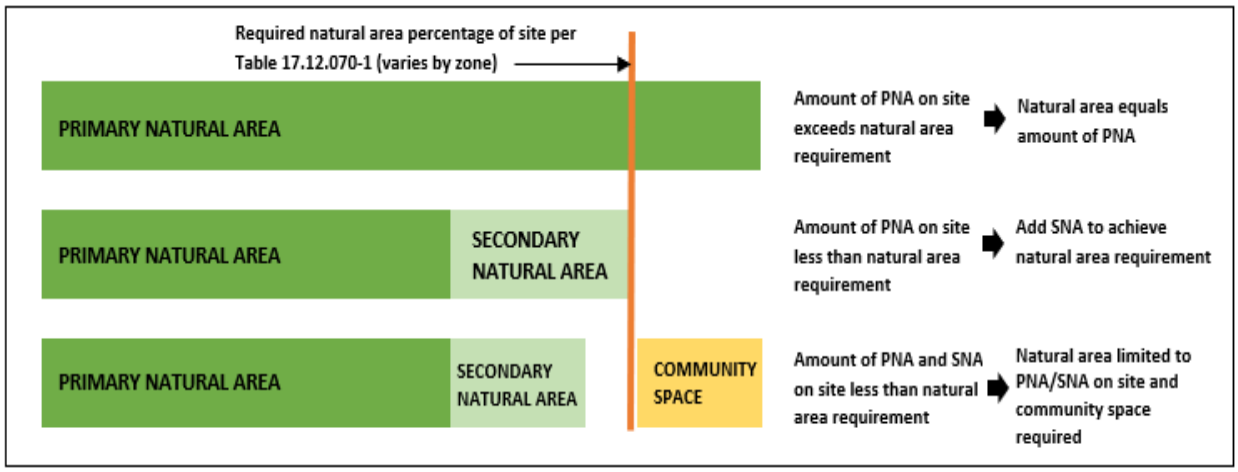
d. All lands subject to critical area regulations by Chapter 16.20 BIMC shall remain subject to those regulations. Buffer modifications or setback reductions may be pursued.

e. Natural areas may be included on individual lots.

f. Natural areas shall not be required to be dedicated to the public, and the owner shall not be required to permit public access to designated natural areas.

g. All natural areas shall be depicted on the face of the preliminary and final plat.

Figure 17.12.050-1 Natural Area Allocation



4. Aquifer Recharge Protection Area (ARPA). Subdivisions in the R-0.4, R-1, and R-2 zoning districts shall meet the requirements of BIMC 16.20.100 and the following standards:

a. If a proposed subdivision includes more than one parcel, the ARPA shall be calculated based on the total square footage of all parcels;

b. If the required ARPA is greater than the required natural area, the natural area shall be increased to achieve the required ARPA area;

c. The 12,500-square-foot development area allowed pursuant to BIMC 16.20.100.E.2.b shall be allocated in aggregate; that is, the total development area within the subdivision shall be determined by the total number of lots allowed multiplied by 12,500;

d. ARPAs within subdivisions shall be consistent with the ARPA development standards listed in BIMC 16.20.100.D.

5. Natural Area Configuration. Designated natural areas shall be configured in a manner that enhances and promotes the natural resource characteristics of the property and development pattern of the surrounding area. Natural area configuration shall satisfy the following guidelines to the extent feasible:

a. Natural area should be concentrated in large, consolidated areas; and

b. Natural area should connect to adjacent off-site open space areas, designated wildlife corridors and trails, and/or critical areas, where feasible; and

c. Natural area should be designed to preserve views from off site of the subject property; and

d. Natural area should be delineated with a low perimeter-to-area ratio;

e. Natural area shall have a minimum width of 50 feet outside of roadside and perimeter buffers; and

f. Natural area may be included as a portion of one or more lots or may be contained in a separate tract, except for critical areas and their buffers and setbacks.

6. Natural Area Fencing and Signage. Fences and/or signs delineating the boundary of natural areas are required. The director shall determine which option (fence or sign) is required, based on the recommendations from the design guidance review meeting.

a. If fencing is required:

i. Low-impact fences are preferred and must be constructed in accordance with the definition in BIMC 17.28.020;

ii. Fencing is not required at the exterior boundary of the subdivision;

iii. Gaps in fencing not exceeding five feet are permitted; and

iv. Gates are permitted if they are consistent with the definition of low-impact fences in BIMC 17.28.020.

b. If signs are required:

i. They shall be constructed in accordance with the definition in BIMC 17.28.020; and

ii. Typically, they shall be spaced at intervals of 50 feet, allowing for variation due to reasons such as topography, configuration of natural area, distance from other features, etc.

c. If signage is required and encroachments into the designated natural area occur, the director may require that the owner install fencing and/or additional signage to prevent future encroachments. Required fencing and signs shall be maintained in good repair, with repair or replacement to occur within 60 days.

7. Natural Area Ownership. Ownership of natural area shall be established consistent with one of the following forms of ownership:

a. Private Ownership. Natural areas may be held in private ownership if established by easements, restrictive covenants, the natural area management plan, or similar legal means; or

b. Common Ownership. Natural areas may be held in common by a home or property owners' association or other similar organization. For the purposes of this title, if a land trust or a similar conservancy maintains ownership or a conservation easement, that shall be considered common ownership. If this ownership pattern is selected, covenant, conditions, and/or restrictions shall be required; or

c. Public Ownership. Designated natural areas shall not be required to be dedicated to the city or other public agency, and the owner shall not be required to permit public access to designated natural areas. However, if the owner offers to dedicate, the city or other public agency may choose to accept ownership of natural areas. Consequently, upon approval and acceptance by the city council, the natural areas shall be dedicated to the public.

8. Natural Area Maintenance. An applicant shall submit a draft natural area management plan (NAMP), as described in the Bainbridge Island administrative manual, for review as part of the preliminary plat application. Final approval of the NAMP will occur at the time of final plat approval. The natural area management plan shall include:

a. A list of all approved uses for the natural areas. Where uses in separate natural areas vary, the specific location of each use shall be depicted graphically.

b. A maintenance plan for natural areas that clearly describes the frequency and scope of maintenance activities for natural areas.

c. The approved NAMP must be filed with the Kitsap County auditor. In the event that the natural area is not maintained consistent with the NAMP, the city shall have the right to enter the property for necessary maintenance, with the cost of such maintenance assessed against the landowner or, in the case of a homeowners' association, the owners of the properties within the subdivision, and shall, if unpaid, become a tax lien on such property or properties.

9. Allowed Uses in Natural Area. The following uses are allowed in those natural areas that are not part of a required roadside or perimeter buffer (unless zoning regulations of BIMC Title 18, provisions of the shoreline master program per Chapter 16.12 BIMC, or critical areas regulations of Chapter 16.20 BIMC, including allowed uses within aquifer recharge protection areas, restrict that use):

a. Passive recreation, including pervious trails;

b. Agricultural uses and fencing necessary for animal control in SNAs only;

c. Potable water wells and well houses;

d. Low-impact fencing or signs marking the natural area boundary or critical area boundary;

e. On-site sewage treatment system use approved by the director for all residential zones, if the applicant can demonstrate that (i) the proposed use will not adversely affect the function or characteristics of the specific natural area, (ii) the system is approved by the Kitsap County health district, and (iii) construction of the system will not require the removal of significant trees, native forests, vegetation within a required buffer for designated critical areas subject to Chapter 16.20 BIMC, or vegetation within areas designated for protection under the shoreline master program pursuant to Chapter 16.12 BIMC;

f. Storm drainage system use approved by the director for all residential zones if the applicant can demonstrate that (i) enhanced vegetation will be provided so that the facility appears as a natural feature, (ii) the proposed use will not adversely affect the function or characteristics of the specific natural area, (iii) the system meets the design standards of Chapters 15.20 and 15.21 BIMC, including low-impact development designs, and (iv) the system design must contribute to the function and characteristics of the natural area feature by providing the following:

i. No above-ground storm detention facilities are permitted; and

ii. Enhanced vegetation will be provided in conjunction with the storm drainage facility in order to make it a more natural feature; and

iii. Pedestrian trails should be considered as part of the design; and

iv. While fencing of designated natural areas or critical areas may be required by the director pursuant to subsection A.8.a of this section, separate fencing of storm drainage facilities or areas shall only be installed if necessary to protect public safety. Where fencing is required, low-impact fencing shall be used, and chain-link fences are prohibited unless superseded by state law.

g. Playgrounds and tot lots, picnic shelters and benches, community gardens, bus shelters, community art, or fountains may be allowed within a designated natural area, provided the proposed use will not adversely affect the function or characteristics of the specific natural area.

h. Solar panels, small wind energy generators, composting bins, rainwater harvesting barrels, cisterns, and rain gardens/swales, as defined in Chapter 18.36 BIMC, may be allowed within a designated natural area, provided the proposed feature will not result in the damage or removal of significant trees.

B. Community Space Required. All residential subdivisions, except short subdivisions and as modified in subsection B.2 of this section, shall provide community space consistent with Chapter 17.28 BIMC, Definitions, Table 17.12.070-1, and the following standards:

1. Community Space Objectives. Community space shall accomplish one or more of the following objectives:

a. Provide a place for residents to gather in shared space.

b. Provide common buildings, open space, or gardens.

c. Provide space for unstructured recreation.

d. Enhance a felt and actual sense of security, identity, and community.

e. Provide a protected, traffic-free environment.

2. Amount of Community Space Required. The minimum community space shown in Table 17.12.070-1 shall be provided and shall be depicted on the face of the plat. Community space is not required in the R-0.4, R-1, and R-2 zoning districts if the maximum natural area is provided.

3. Community Space Configuration. Community space should adjoin the largest practicable number of lots within the development. Nonadjoining lots shall be provided with safe and convenient pedestrian access to community space. Community space shall not include perimeter or roadside buffers.

4. Community Space Ownership. Ownership of community space shall be established consistent with one of the forms of ownership set forth in subsection A.7 of this section.

5. Community Space Maintenance. An applicant shall submit a draft community space management plan (CSMP), as described in the Bainbridge Island administrative manual, for review as part of the preliminary plat application. Final approval of the CSMP will occur at the time of final plat approval. The community space management plan shall include:

a. A list of all approved uses for the community space. Where uses in separate community spaces vary, the specific location of each use shall be depicted graphically.

b. A maintenance plan for community space that clearly describes the frequency and scope of maintenance activities, and that meets all requirements set forth in this subsection B.5 and the Bainbridge Island administrative manual.

c. The approved CSMP must be filed with the Kitsap County auditor within 30 days of final plat approval. In the event that the community space is not maintained consistent with the CSMP, the city shall have the right to enter the property for necessary maintenance, with the cost of such maintenance assessed against the landowner or, in the case of a homeowners' association, the owners of the properties within the subdivision, and shall, if unpaid, become a tax lien on such property or properties.

6. Allowed Uses in Community Space. Community space may include uses such as crop and animal agriculture, meadows, orchards, pastures, turf fields, and common buildings. Prohibited and allowed uses within community space shall be included in the draft terms, conditions, covenants, and agreements proposed for the subdivision, which shall be submitted with the preliminary subdivision application. Final terms, conditions, covenants, and agreements must be filed with the Kitsap County auditor within 30 days of final plat approval. (Ord. 2019-03 § 5 (Exh. A), 2019)

17.12.060 Homesites.

All single-family residential subdivisions require homesites located and designed consistent with Chapter 17.28 BIMC, Definitions, Table 17.12.070-1, and the following standards:

A. Homesite Area.

1. A homesite area no greater than the maximum area shown in Table 17.12.070-1 shall be provided for each lot and shall be depicted on the face of the plat.

2. The homesite area shall include the primary residential dwelling, accessory buildings, and on-site parking, if provided on each lot within the subdivision.

3. Other allowed uses and structures include residential landscaping, pathways, turf, and fences; individual water, stormwater, and septic infrastructure.

4. Homesites shall not contain any portion of required PNAs. Homesites may include critical aquifer recharge areas but no portion of an aquifer recharge protection area.

B. Homesite Siting. The four-step design process outlined in BIMC 17.12.030 is intended to allow the characteristics of the land to determine the most suitable location of homesites. Homesites shall be sited to meet the following standards:

1. Homesite locations shall be configured to maintain the natural features of the site and minimize topographic alteration and clearing of existing vegetation.

2. Homesite locations shall facilitate the efficient use of land by limiting areas of disturbance, impervious surfaces, utility extensions, and roadways.

3. If clustered pursuant to Table 17.12.060-1, homesites shall be located to minimize adverse impacts to adjacent, previously existing residential development and are not required to be located near any existing home on the property.

C. Homesite Clustering. Clustering, or grouping, of homesites is required in accordance with Table 17.12.060-1. (Ord. 2019-03 § 5 (Exh. A), 2019)

17.12.070 General residential subdivision standards.

All residential subdivisions shall comply with the following standards:

A. Constrained Lots. If, due to site or design constraints, more than one homesite with supporting infrastructure cannot be located on or provided for a subject property, no division of land is permitted. Constrained lots may also result in a subdivision with less than the maximum number of lots allowed in accordance with Table 17.12.070-1.

B. Preexisting Lots. Lots that have previously received final approval from the city, or that have previously received final approval from Kitsap County prior to inclusion within the city boundaries, and that do not comply with standards of this chapter shall be considered existing nonconforming lots, but any future resubdivision of any such lots shall comply with the requirements of this title.

C. Platted Lots. The platted lot defines the extent of private ownership of land within the subdivision. The size, shape and potential uses of a lot depend on many factors that will be considered in the subdivision design process. Establishing lot lines is the last step in the design process, but a desired result will affect decisions throughout the process, and the physical characteristics of the entire property will present both constraints and opportunities. Standards applicable to lots are found in this section and Table 17.12.070-1.

D. The short subdivision process shall not be used, either by a person alone or by persons acting together, at one time or over a period of time, to circumvent compliance with the more stringent requirements that control the subdivision of land into five or more lots. When an application for a short subdivision is filed within five years after the approval of a short subdivision on a contiguous land parcel, presumption of an attempt to circumvent short subdivision requirements may be invoked by the director as a basis for further investigation, to assure compliance with the intent of this provision and the requirements of a long subdivision.

E. Remaining Area. Any area not designated as public or private access, buffers, lots, or utility tracts shall be designated as either natural area or community space, in accordance with the objectives in either BIMC 17.12.050.A.1 or 17.12.050.B.1.

F. Site Disturbance. The extent of land disturbing activities, as defined in BIMC 15.20.020.22, shall be limited to the minimum required for site preparation and construction.

G. Compatibility with Adjacent Development.

1. Subdivisions shall be designed and located to ensure compatibility with existing adjacent development.

2. Views of house lots from exterior roads and abutting properties shall be minimized by preserving the natural topography and existing vegetation to the greatest extent possible.

H. Dimensional Standards.

1. Table 17.12.070-1 sets forth minimum and maximum dimensional standards for single-family residential development. Dimensional standards for multifamily and commercial subdivisions shall be in accordance with Tables 18.12.020-2 and 18.12.020-3.

2. Where a property is located in more than one zone district, units permitted by density calculations within each zone district must be constructed on the portion of the property located within that district and required setbacks for each zone district must be met. Permitted densities are not "blended" across the zone district line.

I. Septic Systems. Locations of individual or community drainfields and associated reserve drainfields shall comply with all applicable standards established by the Kitsap Public Health District or Washington Department of Health. Reserve drainfield areas shall remain undisturbed until such time as their use is required. This standard shall be noted on the face of the preliminary and final plat.

J. Streets and Vehicle Access. Subdivisions shall comply with the following standards unless modified by the city engineer:

1. Subdivisions shall comply with all applicable standards of the "City of Bainbridge Island Design and Construction Standards and Specifications," as amended, and Island-Wide Transportation Plan, as amended. Deviations from the "City of Bainbridge Island Design and Construction Standards and Specifications" may be granted by the city engineer upon evidence that such deviations are in the public interest and that they are based on sound engineering principles and practices. All requirements for safety, function, appearance and maintainability must be fully met. Desired deviations must be requested at the design guidance review meeting during the preapplication phase of the project.

2. Each lot in a residential subdivision shall have direct access to a public or private street, except for those with shared driveways or alternative lot designs that provide shared or clustered parking outside of individual lots.

3. The street system of a proposed subdivision shall be designed to connect with any existing, proposed, or planned streets outside of the subdivision or to create a connection beneficial to the overall circulation of the surrounding area, as determined by the city engineer.

4. Interior street layout shall be oriented on the east/west axis, if feasible, to maximize active and passive solar access.

5. To minimize impervious surfaces, all public rights-of-way, access easements, private streets, and driveways shall not be greater than the minimum dimensions required to meet standards.

6. Street names and traffic regulatory signs shall be provided, and their locations shall be indicated on the plat/plan. The locations of mailboxes and traffic regulatory signs are only required on the plat/plan when other public improvements are required.

7. Transit stops shall be provided as recommended by Kitsap Transit.

K. Parking and Garages.

1. Parking shall be provided consistent with BIMC 18.15.020, except as modified by this subsection.

2. Parking spaces provided on individual lots must be located within the designated homesite.

3. Parking spaces may be located outside of individual lots, consolidated in a remote or satellite parking area, or in individual or shared garages.

4. Consolidated parking areas shall be landscaped in accordance with BIMC 18.15.010.F.

5. Shared garages are limited to five vehicle spaces and shall not exceed 60 feet in length or 1,440 square feet total.

6. Garages, including detached garages, located on individual homesites facing a public street shall be:

a. Limited to two vehicles; and

b. Either accessed from the side or rear or set back from the most front-facing exterior wall of habitable space a minimum of five feet unless the house is not visible from the public street.

L. Circulation and Access.

1. All subdivisions shall include a circulation and access system of walkways, paths, or trails that interconnect lots, commonly owned natural area, community space, and adjacent access facilities. Trails that provide connection to streets, public areas or other trails through the subdivision boundaries shall provide public access.

2. Multimodal facilities shall be consistent with the applicable standards of the "City of Bainbridge Island Design and Construction Standards and Specifications."

3. Subdivisions may be required to provide dedicated access easements if one or more "trail connection zones" are located on the site as shown on Maps C and D (nonmotorized system plan) of the Island-Wide Transportation Plan, as amended.

4. Pursuant to RCW 58.17.110(1), sidewalks or other planning features shall be provided to assure safe walking conditions for students who walk to and from school.

M. Fencing.

1. Sight-obscuring fencing is prohibited at the exterior boundary of a subdivision.

2. Fencing within perimeter or roadside buffers or at the exterior boundary of a subdivision shall meet the requirements of low-impact fencing in accordance with the definition in BIMC 17.28.020.

3. Fencing around surface stormwater ponds shall not exceed three feet, six inches in height unless required by the city engineer for safety reasons.

4. Fencing is prohibited in those roadside areas maintained by the city (e.g., shoulders, ditches, utilities).

N. Landscaping. Individual homeowners are responsible for the maintenance and modification of landscaping on their lots, subject to any rules and guidelines established by a homeowners' association or similar body. Native vegetation on the site should be retained and maintained where possible and landscaping should be responsive to the natural contours of the lot.

O. Perimeter Buffers. The intent of perimeter buffers is to visually and physically separate adjacent land uses and, when necessary, to minimize impacts of new development on adjacent properties. Perimeter buffers are not required along public rights-of-way.

1. Perimeter buffers shall be established at the exterior boundary of all subdivisions with a gross area of one acre or greater. Perimeter buffers shall be maintained as a "no cut/no build zone." Existing native vegetation, including significant trees and tree stands, shall be preserved within perimeter buffers. The tree retention, protection, and replacement requirements of BIMC 18.15.010.C apply to perimeter buffers unless modified by this section.

2. The minimum width of perimeter buffers for single-family subdivisions shall be the width of the minimum homesite boundary to exterior plat boundary required in accordance with Table 17.12.070-1 or as determined by an administrative departure.

3. The minimum width of perimeter buffers for multifamily and commercial subdivisions shall be 25 feet in the R-0.4, R-1, and R-2 zoning districts and 15 feet in all other zoning districts either maintained or planted to achieve the full screen landscape standard provided in BIMC 18.15.010.D.4.a.

4. No additional planting is required in perimeter buffers of single-family subdivisions unless all of the following are met:

a. The width of the homesite boundary to exterior plat boundary is less than the minimum required in accordance with Table 17.12.070-1, as determined by an administrative departure; and

b. Existing vegetation does not provide an effective visual screen; and

c. In the R-0.4, R-1, and R-2 zoning districts, the abutting property is not capable of being subdivided.

5. If additional planting is required, the following standards shall apply:

a. In the R-0.4, R-1, and R-2 zoning districts, additional plant material shall be installed to achieve the full screen landscape standard provided in BIMC 18.15.010.D.4.a along the portion of the exterior plat boundary that has been reduced. Alternatively, the applicant may submit a landscape plan that results in an effective visual screen of the subdivision from off-site properties along the portion of the exterior plat boundary that has been reduced. In either case, any additional plant material shall be native species and no turf or lawn is permitted.

b. In all other zoning districts, additional plant material shall be installed to achieve the full screen landscape standard provided in BIMC 18.15.010.D.4.a along the portion of the exterior plat boundary that has been reduced.

6. No structures, buildings, or parking facilities may be located within perimeter buffers, except that utility lines and trails may be located within perimeter buffers, provided no significant trees are removed.

7. Perimeter buffers may be included as a portion of one or more lots or may be contained in a separate tract.

8. Perimeter buffers may be included as a portion of the natural area required in BIMC 17.12.050.A.

9. The performance and maintenance assurance requirements of BIMC 18.15.010.H apply to perimeter buffers if additional planting is required.

10. The irrigation and maintenance standards of BIMC 18.15.010 apply to perimeter buffers if additional planting is required.

11. Perimeter buffers shall be shown on the face of the preliminary and final plat.

P. Roadside Buffers. The intent of roadside buffers is to enhance or retain Island character through the minimization of disturbance of existing roadside vegetation and to screen new development from more highly traveled roads.

1. Roadside buffers are required for all subdivisions along collector or arterial roads in the R-0.4, R-1, and R-2 zoning designations. The minimum width of roadside buffers is 40 feet.

2. Roadside buffers shall be shown on the face of the preliminary plat. Roadside buffers may be part of individual lots or contained in a separate tract.

3. No structures, buildings, or parking facilities may be located within roadside buffers, except that utility lines and boxes, mailboxes, entry signs, bus shelters, and transit stops may be located within roadside buffers. Local access streets and trails may cross roadside buffers, provided no significant trees are removed.

4. Existing native vegetation, including significant trees and tree stands, shall be retained within roadside buffers. Tree retention, protection, and replacement requirements in BIMC 18.15.010.C apply to roadside buffers.

5. If existing vegetation provides an effective visual screen, or is consistent with existing roadside character, no additional planting is required. If existing vegetation does not provide an effective year-round visual screen, additional plant material shall be installed, consistent with the following:

a. Additional plant material shall be installed to achieve the full screen landscape standard provided in BIMC 18.15.010.D.4.a. Any additional plant material shall be native species and no turf or lawn is permitted;

b. Additional plant material is not required if mature forest or other dense vegetation is not part of the existing roadside character.

6. Roadside buffers may be included as a portion of the natural area or community space required in BIMC 17.12.050.

7. The performance and maintenance assurance requirements of BIMC 18.15.010.H apply to perimeter buffers.

8. The irrigation and maintenance standards of BIMC 18.15.010 apply to perimeter buffers.

9. For subdivisions designating community space that is intended for agricultural use and would be adversely impacted by the addition of screening landscaping, a roadside buffer shall be required to use screening landscaping that does not adversely impact the proposed agricultural use.

10. To accommodate an existing house that is located within 25 feet of the subdivision boundary adjacent to a collector or arterial road, the roadside buffer width shall be reduced to the width adjoining the existing home between the existing house and the subdivision boundary adjacent to the collector or arterial road.

Q. Design Diversity. All single-family residential subdivisions outside the Neighborhood Center, Mixed Use Town Center, High School Road, R-8, and R-14 zoning districts shall avoid a uniform appearance and repetitive building types by incorporating measures that promote design diversity, including:

1. The same model and elevation shall not be built next to each other. Different models are defined as having variations in floor plans.

2. Home designs shall be varied to achieve a minimum of one floor plan for each three homes. Mirrored floor plans to not count as different floor plans. Methods to provide variation include building modulation and secondary building forms (e.g., covered porches, dormers, window bays). The number of floor plans per home is as follows:

a. 1–3 homes: one plan;

b. 4–8 homes: two plans;

c. 9–11 homes: three plans;

d. 12 or more homes: four plans.

3. In long subdivisions, at least 20 percent of the homes must be at least 25 percent smaller than average home size and 20 percent may be up to 25 percent larger than average home size. If 20 percent of the homes is a fraction, round to the nearest whole number.

R. No City Maintenance of Streets in Short Subdivisions. Streets within a short subdivision shall not be maintained by the city unless such streets have been dedicated as a right-of-way, improved to current city standards, and accepted as part of the approved short subdivision. Therefore, unless accepted, the responsibility for maintenance shall lie with the owners of the lots. (Ord. 2019-03 § 5 (Exh. A), 2019)

17.12.080 Multifamily and nonresidential subdivisions.

Subdivisions established for multifamily and nonresidential uses shall comply with all provisions of BIMC Title 18 (Zoning) applicable to the zone district where the property is located, and for the type of development anticipated. This requirement shall include, without limitation, compliance with design guidelines and standards for lot areas, dimensions, mobility and access, landscaping, screening, and vegetative buffers. (Ord. 2019-03 § 5 (Exh. A), 2019)

17.12.090 Special requirements for critical areas and shoreline.

A. Critical Areas. Any portion of any subdivision that contains a critical area as defined in Chapter 16.20 BIMC must conform to all requirements of that chapter.

B. Shoreline. Any portion of any subdivision located within the jurisdiction of the shoreline master program, as defined in Chapter 16.12 BIMC, must conform to all requirements of that chapter. (Ord. 2019-03 § 5 (Exh. A), 2019)

Table 17.12.060-1: Homesite Clustering Requirements

<table>
<tr><td>ZONING DISTRICT

DIMENSIONAL STANDARD</td><td>R-0.4</td><td>R-1</td><td>R-2</td><td>R-2.9</td><td>R-3.5</td><td>R-4.3</td><td>R-5</td><td>R-6</td><td>R-8</td><td>R-14</td><td>NC</td><td>MUTC

HS I and II</td></tr>
<tr><td colspan="13">HOMESITE CLUSTERING REQUIREMENT</td></tr>
<tr><td>Short Subdivisions

2–4 lots with greater than 50% natural area and community space combined</td><td colspan="3">n/a [1]</td><td colspan="9" rowspan="3">25 ft. maximum homesite separation</td></tr>
<tr><td rowspan="2">2–4 lots with less than 50% natural area and community space combined</td><td colspan="3">No maximum homesite separation [1]</td></tr>
<tr><td colspan="2">Site disturbance limited to 35% of site</td><td>n/a [1]</td></tr>
<tr><td>Long Subdivisions

5–9 lots with maximum natural area requirement</td><td colspan="3">No maximum homesite separation [1]
Site disturbance limited to 35% of site</td><td colspan="9" rowspan="5">25 ft. maximum homesite separation</td></tr>
<tr><td rowspan="2">5–9 lots with less than maximum natural area requirement</td><td>50 ft. [2]</td><td colspan="2">25 ft.[2]</td></tr>
<tr><td colspan="3">Maximum homesite separation</td></tr>
<tr><td rowspan="2">10+ lots</td><td>50 ft.</td><td colspan="2">25 ft.</td></tr>
<tr><td colspan="3">Maximum homesite separation</td></tr>
</table>

1. Homesite location needs to meet general requirements (BIMC 17.12.060.B).
2. As an alternative to maximum homesite separation, limit site disturbance to 35 percent of site.
3. Site disturbance includes land disturbing activity as defined in BIMC 15.20.020.22.

(Ord. 2019-03 § 5 (Exh. A), 2019)

Table 17.12.070-1 Subdivision Dimensional Standards

[Numbers in brackets indicate additional requirements listed at the end of the table.]

ZONING DISTRICT DIMENSIONAL STANDARD	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14	NC	MUTC HS I and II
MINIMUM LOT AREA												
Short and Long Subdivision	If the site is not served by a public sewer system, the minimum individual lot area shall be determined by the Kitsap Public Health District in accordance with Section 15 of the Kitsap County Board of Health Ordinance 2008A-01, amended June 7, 2011, *Onsite Sewage System and General Sewage Sanitation Regulations*, as amended. If the site is served by a public sewer system, there is no minimum lot area. Individual lots may contain portions of natural area, community space, and access easements.											
Large Lot Subdivision	5 ac or 1/128th of a section, which-ever is smaller.	N/A										
BASE DENSITY The "base density" of a property means the density designated on the zoning map, exclusive of any density bonuses (see BIMC 18.12.050.A). Irregularly shaped lots and lots containing critical areas may not be permitted to achieve maximum density. Additional regulations on density may apply pursuant to Chapter 16.20 BIMC.												
Short, Long and Large Lot Subdivisions	The maximum number of lots permitted shall be calculated by dividing the total lot area of the property (without deducting areas to be dedicated as public rights-of-way or areas to be encumbered by private road easements) by the square footage shown below as the zone-specific base density.											
Base Density	100,000 sq. ft.	40,000 sq. ft.	20,000 sq. ft. [1]	15,000 sq. ft.	12,500 sq. ft.	10,000 sq. ft.	8,500 sq. ft.	7,260 sq. ft.	5,400 sq. ft.	3,100 sq. ft.	20,000 sq. ft. [2]	See FAR table
Base density pursuant to BIMC 18.12.030.A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3,630 sq. ft.	2,074 sq. ft.	N/A	N/A
NATURAL AREA												
Minimum percentage of total site	55%	45%	30%	25%	25%	20%	15%	N/A	10%	5%	15%	5%
Minimum width	50 ft.			25 ft.				N/A	5 ft.			
COMMUNITY SPACE [x] Instead of providing the required 5% community space, that area may be added to the required natural area if it can be demonstrated that greater conservation area can be achieved. [y] Community space not required if maximum natural area is provided.												

ZONING DISTRICT DIMENSIONAL STANDARD	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14	NC	MUTC HS I and II
Minimum percentage of total site	5% [x][y]	7.5% [y]	10% [y]	15%						10%	15%	10%
HOMESITE Note: Refer to definition of homesite and standards for homesites. [x] Refer to Chapter 16.12 BIMC, special provisions for Point Monroe District – 1,400 sq. ft. maximum development area applies.												
Maximum size	10,000 to 12,000 sq. ft.	7,500 to 10,000 sq. ft.	6,500 sq. ft.	5,500 sq. ft.	4,500 sq. ft.	3,500 sq. ft.	3,500 sq. ft.	N/A [x]	3,000 sq. ft.	2,250 sq. ft.	3,500 sq. ft.	2,250 sq. ft.
HOME SIZE Note: Home size includes all floor area, excluding the garage, consistent with definitions in BIMC 18.12.050.F and 18.36.030.103.												
Maximum size	N/A								1,600 sq. ft.			
MAXIMUM LOT COVERAGE												
Short and Long Subdivision	Same as applied to the entire property that is the subject of the subdivision application, a portion of which shall be assigned to each lot at the time of preliminary plat approval.											
Large Lot Subdivision	10%	15%	20%	25%	25%	25%	25%	N/A	25%	40%	N/A	N/A
MINIMUM SETBACKS Note: Additional setbacks may be required by: (a) Chapter 16.08 or 16.12 BIMC; or (b) Chapter 16.20 BIMC, Critical Areas; or (c) BIMC 18.09.030, Use-specific standards. [x] Attached or zero lot line, or zero homesite boundary, is allowed in all districts if building is 1,600 sq. ft. or less. [y] ADUs do not need to meet TOTAL building to homesite boundary setback – only minimum setback; must be located within homesite.												
Building to homesite boundary Net building size 1,600 sq. ft. or less Minimum/total [x] [y]	5 ft. min., 10 ft. total						3 ft. min., 10 ft. total					
Building to homesite boundary Net building size 1,601 sq. ft. or more Minimum/total [y]	15 ft. min., 50 ft. total	10 ft. min., 25 ft. total	10 ft. min., 20 ft. total					N/A	N/A		N/A	

ZONING DISTRICT DIMENSIONAL STANDARD	R-0.4	R-1	R-2	R-2.9	R-3.5	R-4.3	R-5	R-6	R-8	R-14	NC	MUTC HS I and II
Building outside homesite to exterior plat boundary line Net building size 200 sq. ft. or less	50 ft.	25 ft.		10 ft.		5 ft.						
Building outside homesite to exterior plat boundary line Net building size 201 sq. ft. or more	50 ft.	25 ft.		10 ft.		5 ft.						
Homesite to exterior plat boundary line	50 ft.	25 ft.	15 ft.	10 ft.		0 ft.						
Any building to SR 305 right-of-way	75 ft.	75 ft.	75 ft.	N/A	25 ft.	N/A	N/A	N/A	25 ft.	N/A	25 ft.	25 ft.
Homesite to edge of arterial and collector right-of-way	25 ft.			10 ft.								
Building outside homesite to edge of arterial and collector right-of-way [3]	40 ft.			10 ft.								
Any building, other than shared garage, to subdivision access road	10 ft.						5 ft.					
Shoreline jurisdiction	See Table 16.12.030-2, Dimensional Standards Table, and BIMC 16.12.030.B.3.i, shoreline structure setbacks.											
SHARED GARAGE DIMENSIONAL STANDARDS												
Shared garage to subdivision access road	0 ft.											
Shared garage to shared garage	10 ft.											
Shared garage maximum size	60 ft. long or 1,440 sq. ft.total											
MAXIMUM BUILDING HEIGHT												
Short, Long, and Large Lot Subdivisions	Height requirements for standard lots apply pursuant to Table 18.12.020-2.											

[1] The base density for that parcel in the Lynwood Center special planning area designated as R-2 is one unit per 20,000 sq. ft. but may be increased up to three units per acre; provided, that a public access easement is granted for that portion of the parcel that lies to the south of Point White Drive along the waters of Rich Passage. The base density of some parcels in the Fort Ward historic overlay district may be increased as shown in BIMC 18.24.110.
[2] In the NC district, single-family dwellings must be in accordance with zoning in the R-2 district except that bonus densities may be obtained pursuant to BIMC 18.12.030.D if applicable (see BIMC 18.09.030.B).
[3] Transit shelters allowed in setback subject to city approval.

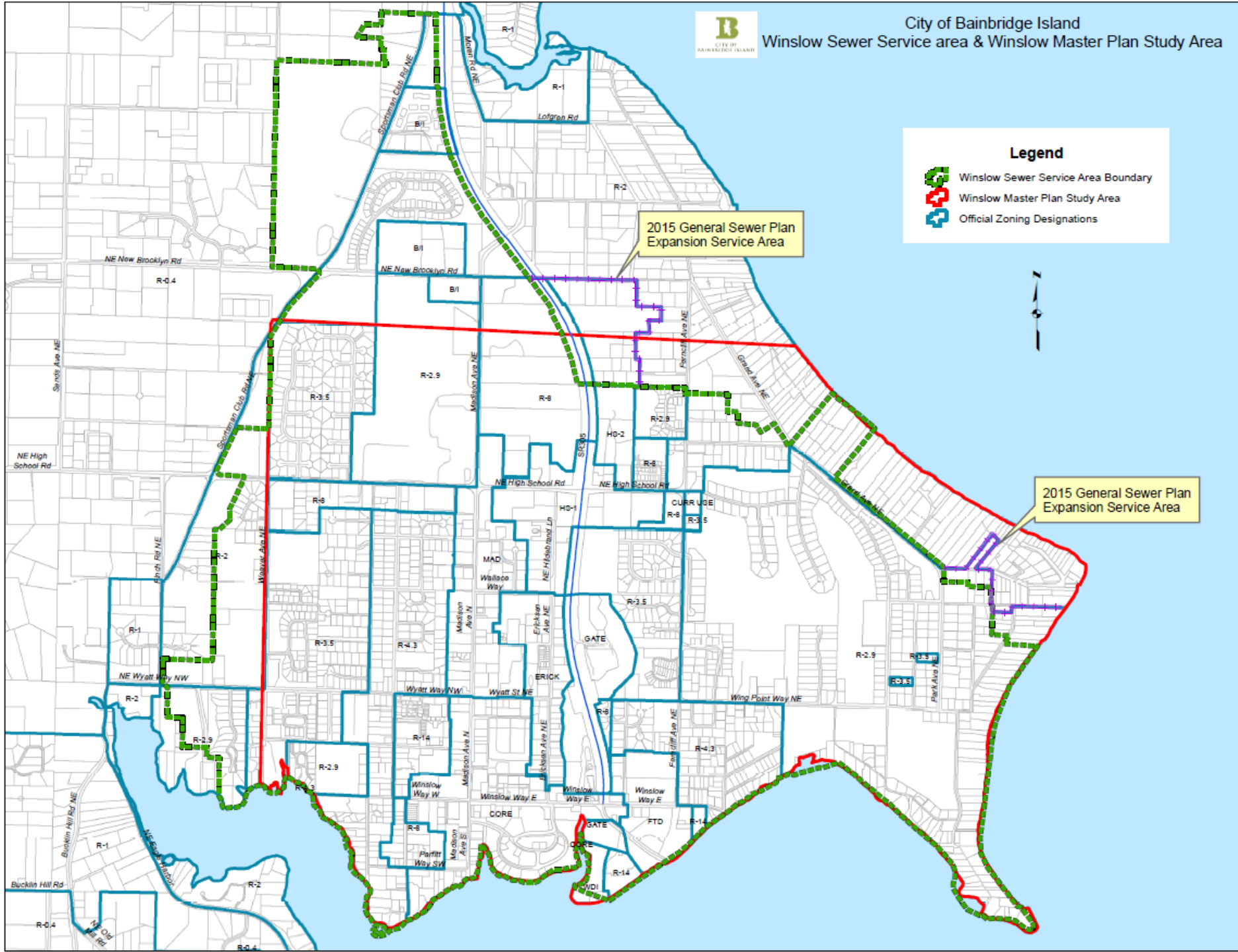
(Ord. 2019-03 § 5 (Exh. A), 2019)

HDDP Program Overview & Inventory

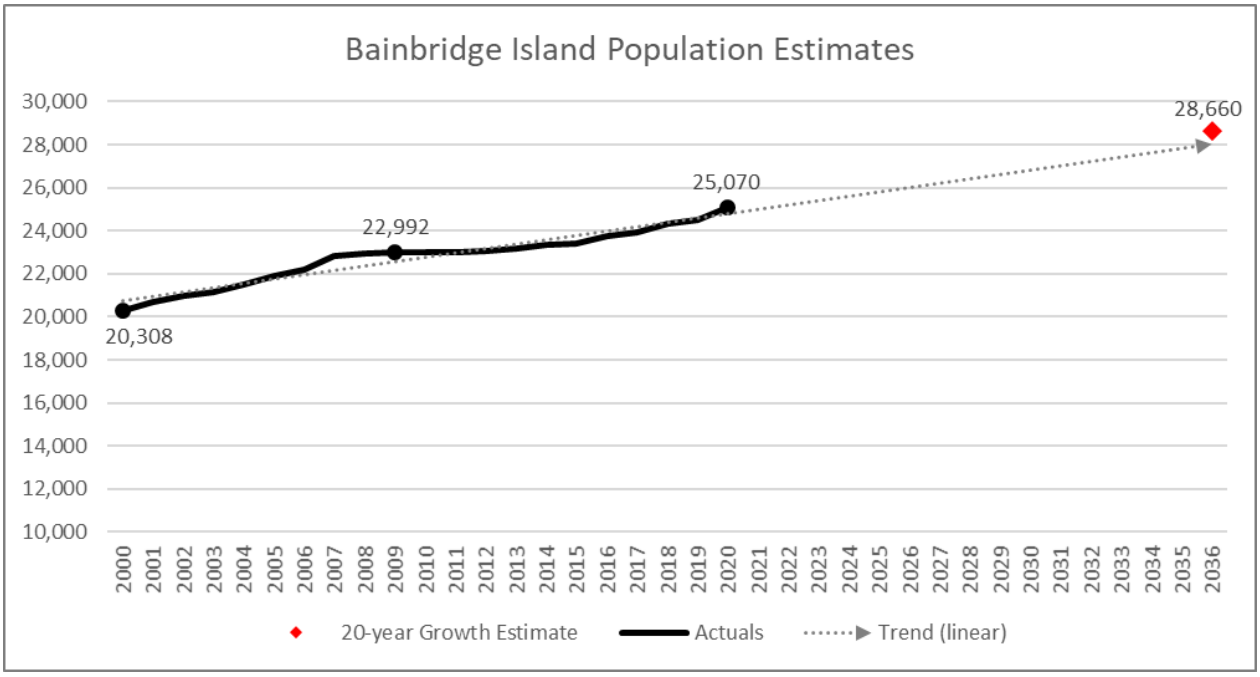
- 2009 3-year Pilot Program applies in the greater Winslow area Revised in 2013; Revised in 2016 to reflect LID requirements, extended until 2019.
- Promotes green building, sustainable site development, and housing diversity & affordability using development standard flexibility & density incentives
- 4 Tiers: Density incentives scaled to amount of Green Building and Infrastructure, and Housing Diversity
- 1,600 square foot maximum dwelling unit size for all HDDP units
- June 2018 recommendation by Planning Commission to Council to suspend program pending subdivision regulation update
- In lieu of suspending, the Council approved Ordinance 2018-31, limiting HDDP to those with 100% affordable housing.
- In 2019, the Council approved Ordinance 2019-32, limiting HDDP to two additional projects and kept only the Tier 3 incentive requirements (e.g at least 50% affordable housing) which removed some Green Building certification programs.

HDDP Program Available to Properties located:

- in the WMP Study Area or
- in the Winslow Sewer Service Area



Summary of HDDP Projects							
HDDP Project	Tier	Zone	Max. Base Density	# & Type of Dwelling units	Green Building Certification Requirement	# of Affordable (AH) Units	Status
**Ferncliff Village *(HRB)*	3	R-3.5	20	40: Single-family (SF) & Townhomes (TH)	Evergreen Sustainable Development	40	Completed
**Grow Community	2	R-14	112	149: SF, Apartments (Apts.), Condos & Townhomes	Built Green 5	0	Mostly Built
Ericksen Urban Cottages	1	MUTC/ Ericksen	0.6 Res. FAR	16 SF	LEED Certified Required, Achieved LEED Platinum	0	Completed
Madrona Townhomes (The Walk)	1	MUTC/ Core	1.0 Res. FAR	52 SF TH & ADUs	LEED Certified	5	Under Construction
Bainbridge Landing	1	MUTC/ Ferry TD	1.1 Res. FAR	140: SF TH, Apts.& Age-in-Place	LEED Certified or Built Green 4	0	Under Construction
**Wallace Cottages	2	R-4.3	10	19 SF & Age-in-Place	LEED Silver or Built Green 4	2	Under Construction
Madison Place	1	MUTC/ Madison	0.6 Res. FAR	18 SF & Duplexes	LEED Certified or Built Green 4	0	Under Construction
Ericksen Gardens	1	MUTC/ Ericksen	0.6 Res. FAR	5 SF (including 1 ADU)	LEED Certified or Built Green 4	0	Under Construction
Total HDDP Units Permitted				439	Total Designated AH Units	47	
**# of Bonus Units Achieved Through HDDP				66			



Sources: Washington State Office of Financial Management (April 1st Population Estimates); Kitsap Countywide Planning Policies (Appendix B1)

Bainbridge Island Employment Growth Estimates (2010-2036)

Commercial Jobs	1,984
Industrial Jobs	823
Total Jobs	2,808

Source: Kitsap Countywide Planning Policies (Appendix B1)

Appendix A – Real Estate Market Analysis

Introduction

The City of Bainbridge Island is evaluating its inclusionary zoning and transfer of development rights (TDR) programs to understand how these programs can be better utilized to support citywide efforts for land conservation and affordable housing development. Many cities use regulatory and financial incentives to realize public benefits. However, designing and implementing incentive programs is a complex process. Primarily, real estate market conditions change over time, which make it a challenge to calibrate incentive programs. In addition, existing "base" zoning requirements, such as parking standards or height limits, may not be aligned with the incentive program, making the program less effective. Lastly, private sector participants have different needs and goals making incentive program utilization inconsistent.

ECONorthwest and Forterra are working for the City of Bainbridge Island to evaluate the City's transfer of development rights (TDR) and inclusionary housing programs, specifically. A key first phase of this effort is understanding the current real estate market conditions, which is critical to designing an effective development incentive program. Key questions for the real estate market assessment include:

- What uses and building types are in demand?
- What building forms and intensities are likely to be built in the current market?
- How much will likely be built on an annual basis?

Understanding the answers to these questions informs the evaluation of the City's existing incentive provisions and informs the policy options the consultant team will analyze in subsequent tasks. The remainder of this memorandum is organized into three main sections.

- **Market Analysis** considers growth and development trends for different housing types and land uses.
- **Recent Development Examples** identifies recent comparable development in Bainbridge Island and their key characteristics.
- **Real Estate Demand Outlook** assesses the market readiness of different land uses and building types and their potential to utilize development incentives.

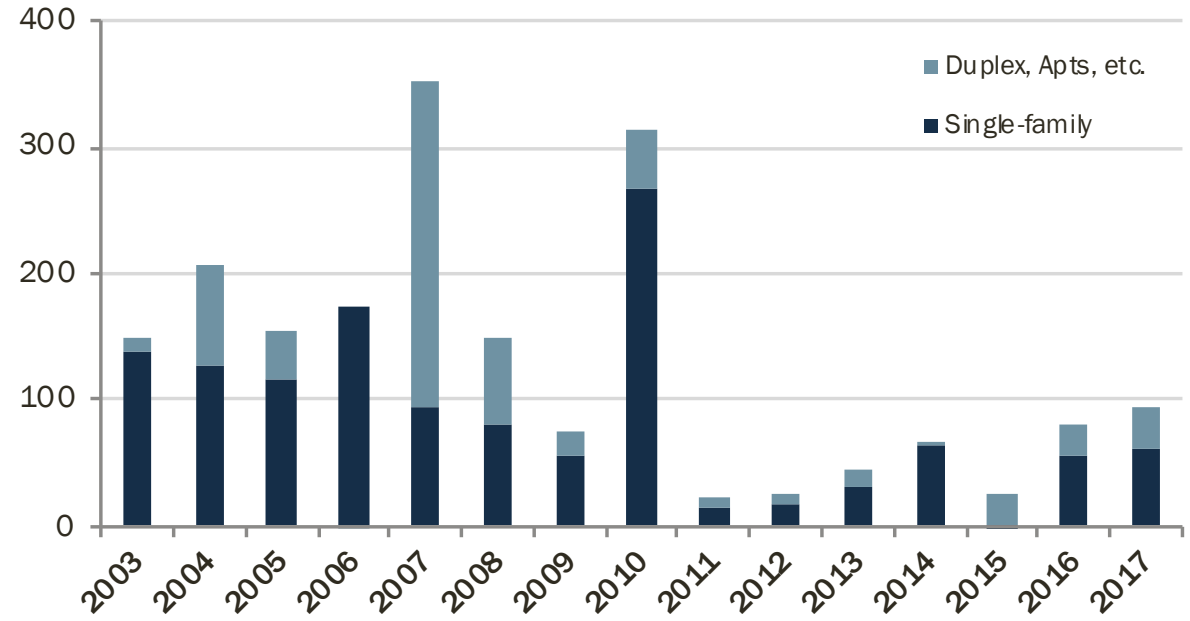
Market Analysis

This section summarizes the changes in real estate fundamentals for housing and office uses in Bainbridge Island.

Improving market conditions have spurred new real estate investment

Bainbridge Island has realized increasing growth and stronger market fundamentals, particularly during the last five years. The annual changes in the number of housing units built has increased over the last seven to eight years. However, the number of housing units built during the last several years is still below the pre-2008 recession averages. Since 2010, the city averaged about 50 new housing units per year. During the five years before the recession (2003-2008) the city averaged over 190 housing new units per year.

Exhibit 16. Annual Housing Units Change for the Last 15 Years, 2003-2017



Source: Washington Office of Financial Management, 2018

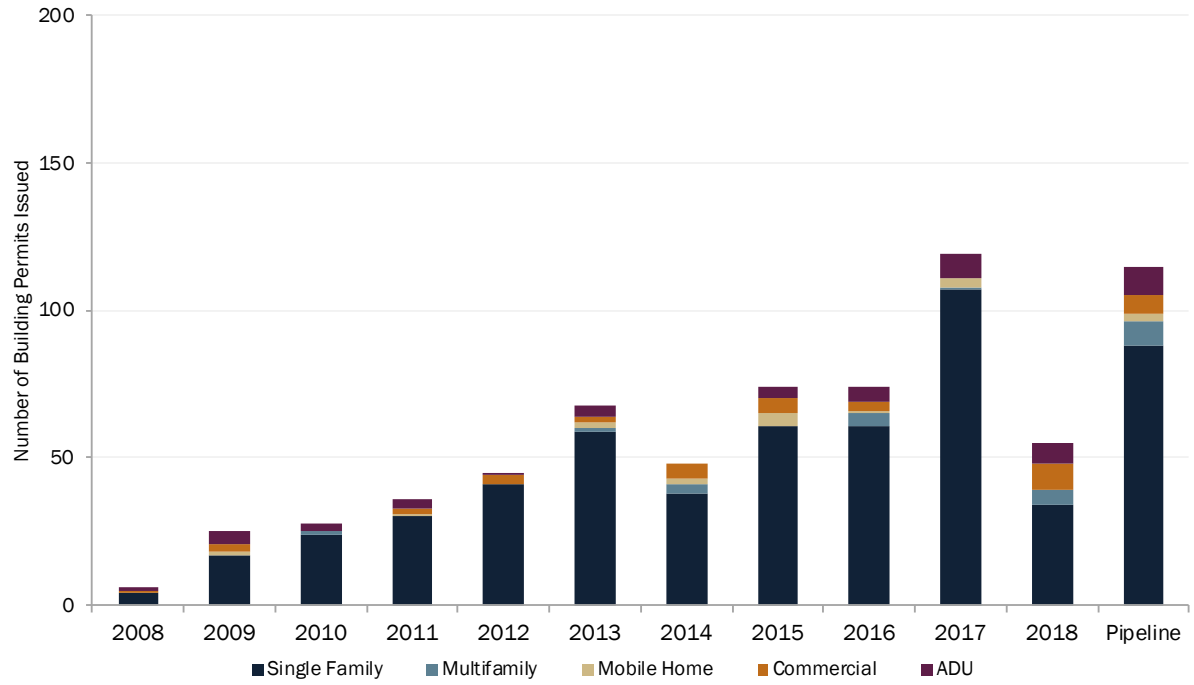
* Note, the 2010 estimate is likely excessively large to account for underestimates in previous years and to match the 2010 Census totals.

Building Permits Activity is Increasing

Building permit activity for new development in the City of Bainbridge has increased since 2008. During this period, the City of Bainbridge Island issued and finalized an average of approximately 58 permits annually, and 120 permits in 2017 alone. As of August 2018, the City has already issued 130 permits and finalized 55 of those permits. As a result, 2018 is likely to exceed the 2017 totals for building permits issued and finaled.

Single-family permits accounted for the greatest number of permits issued and finaled in a given year, with 75 percent of all permits issued. Exhibit 17 shows the number of permits issued for attached dwelling units, commercial, mobile homes, multifamily, and single-family units.

Exhibit 18. Permits Issued and Finaled* for All Uses, 2008-2018

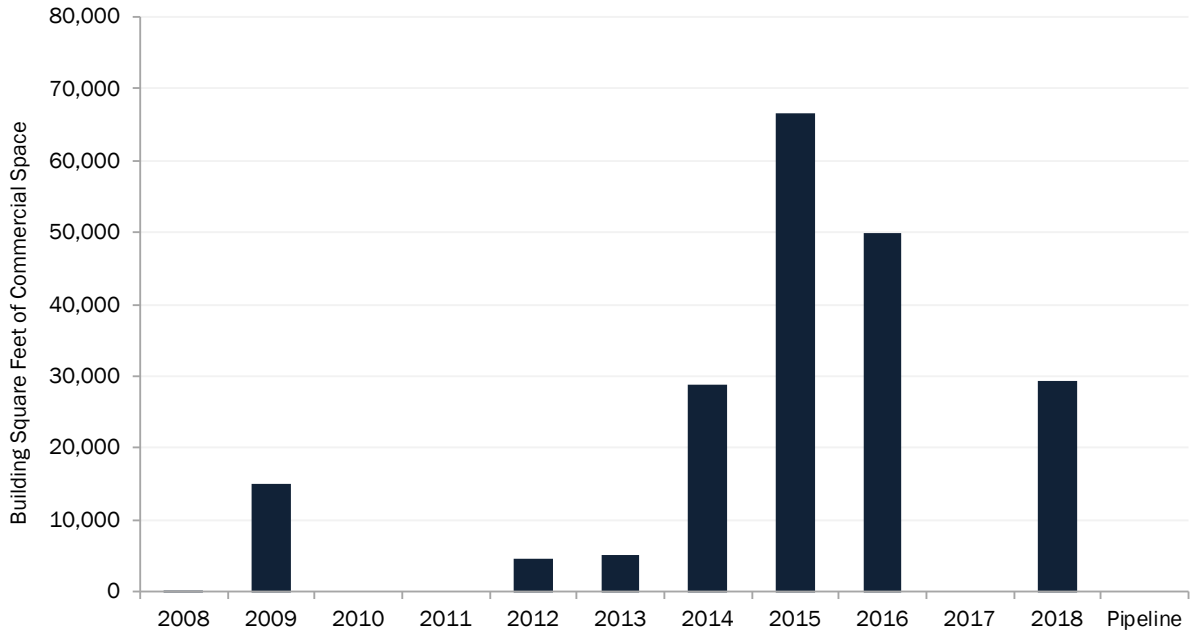


Source: City of Bainbridge Island

*Note: Pipeline includes permits that have been issued but not finaled.

Permits for commercial development increased by over 244,000 square feet since 2008. As of August 2018, 32,732 square feet of commercial square footage has been permitted.

Exhibit 19. Commercial Space Permitted, 2008-2018

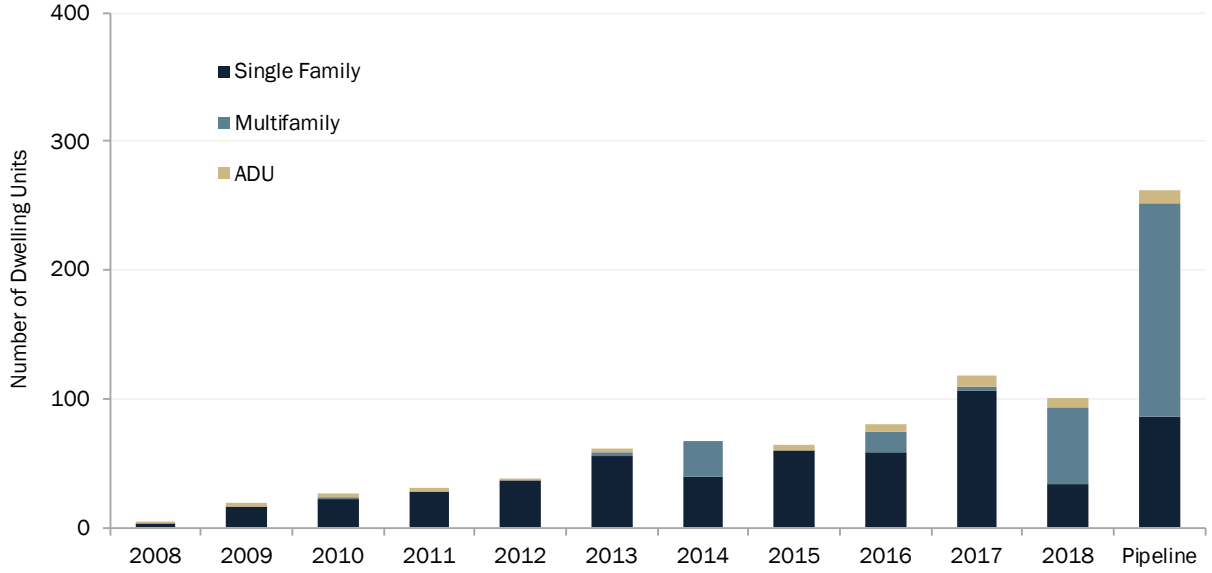


Source: City of Bainbridge Island

Exhibit 20 illustrates the trends for residential permits. Permits for single-family units steadily increased while multifamily dwelling units varied by year. In 2017, 120 housing units were

permitted. As of August 2018, 101 total units have been permitted, and 60 multifamily units have been permitted, exceeding the multifamily total for the previous ten years. Accessory dwelling units (ADUs) have remained consistent with fewer than 10 permits a year. The development pipeline (projects where permits have been issued but not finaled) is sizably larger, particularly for multifamily development, than the number of permits finalized in recent years.

Exhibit 20. Number of Residential Dwelling Unit Permitted, 2008-2018

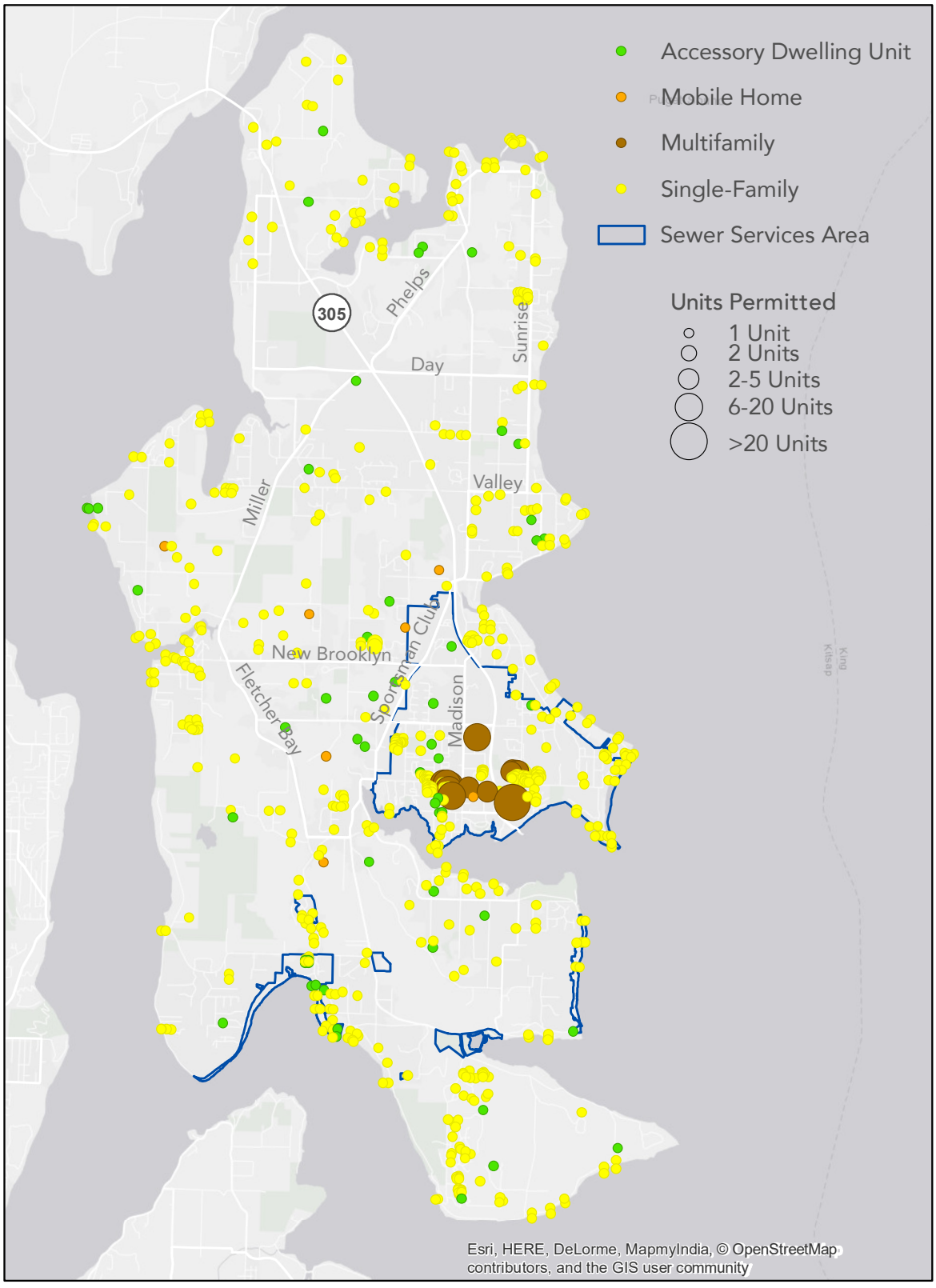


Source: City of Bainbridge Island

Note: Pipeline includes permits that have been issued but not finaled.

Exhibit 21 shows the geographic distribution of residential building permits. Permits for single-family homes and accessory dwelling units are distributed throughout the island. Multifamily permits are concentrated in Winslow where the zoning allows denser residential uses.

Exhibit 21. Location of Building Permits by Type, 2008-2018

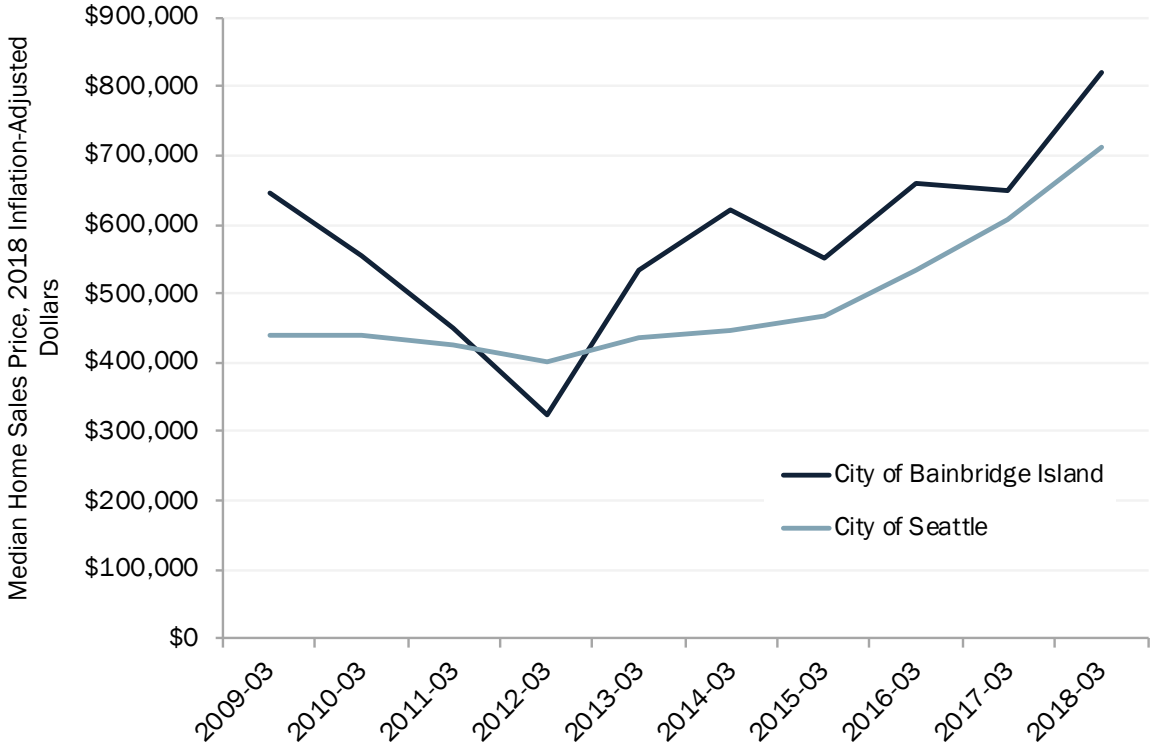


Source: City of Bainbridge Island

Large Increase in Home Prices

In inflation-adjusted dollars, the median sales price for a home in Bainbridge Island has increased 27 percent in the last ten years, from $719,000 in 2009 to $820,000 in 2018. Exhibit 2 compares the changes in adjusted sales prices in the month of March of each year to median sales prices in Seattle. While the adjusted sales price is Seattle is lower, with the exception of 2012, than the annual median sales price for Bainbridge Island, the sales prices in both cities follow a similar trend.

Exhibit 22. Adjusted Sales Prices in Bainbridge Island and Seattle MSA (2018 $)



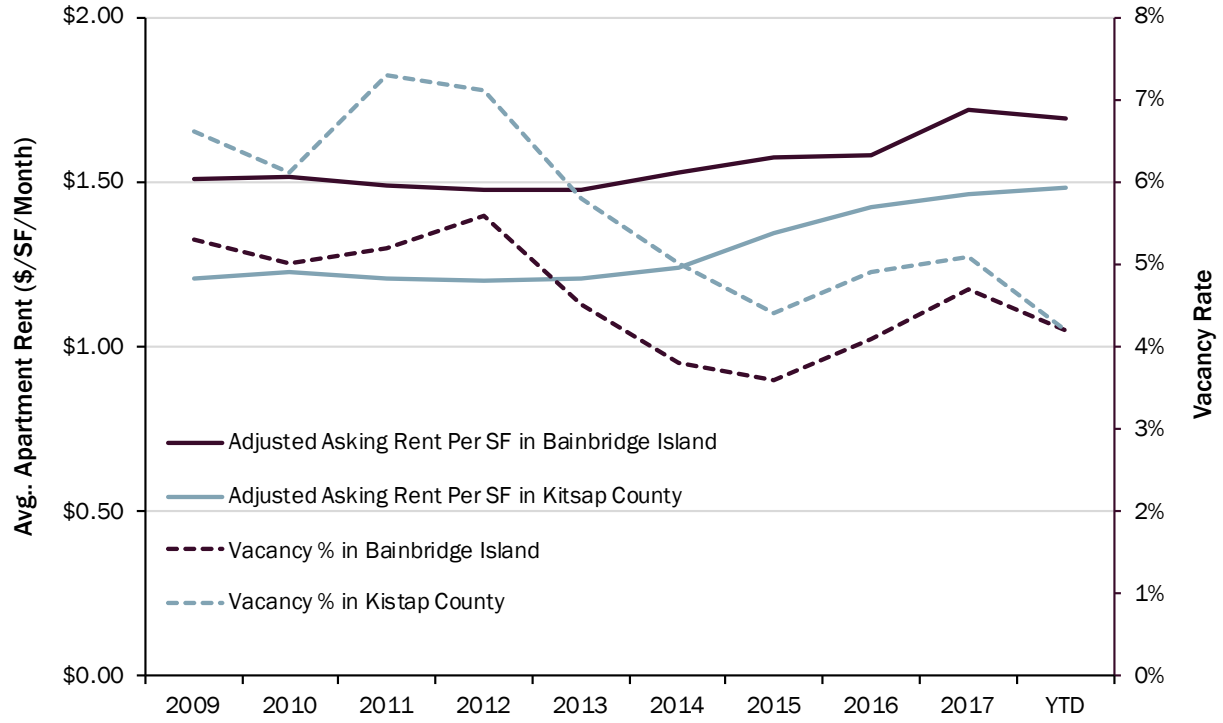
Source: Property Radar, 2018 & Zillow Research, 2018.

Apartment Market has Strong Fundamentals

The market fundamentals for apartments indicate a tightening market as vacancies have declined and average rents have increased. In 2009, the vacancy rates for multifamily housing units in Bainbridge Island and Kitsap County were over five percent and six percent, respectively, but both decreased to 4.2 percent in 2018. As vacancy rates have declined, competition for a limited supply of housing has increased, resulting in a rise in average rents.

In Bainbridge Island, the average asking rent per square foot a month has increased from $1.51 per square foot to $1.69 in 2018 adjusted for inflation. This represents a 12 percent increase in average rents in the last 10 years. A $1.69 per square foot per month rent is equivalent of $1,690 a month for a 1,000 square foot two-bedroom apartment. Average rents in Bainbridge Island are about 15 to 20 percent higher than those in Kitsap County, overall.

Exhibit 23. Average Apartment Rent Per SF and Vacancy, 2009 – 2018 (2018 $)



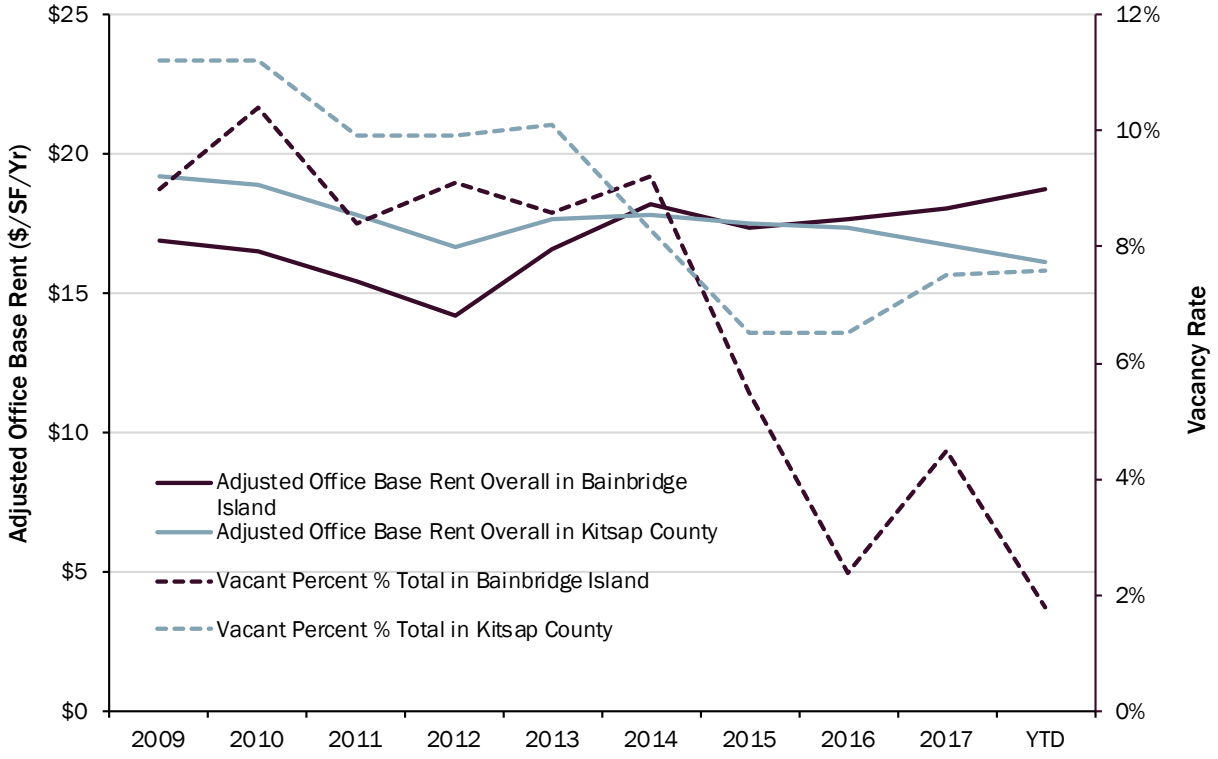
Source: CoStar, 2018

Office Market is Improving

The office market in Bainbridge Island has also shown improving fundamentals. Most notably, the vacancy rate for office units in Bainbridge Island dropped over eight percentage points from 2009 to 2018; the current vacancy rate is less than two percent. In response, average office base rents, as shown in Exhibit 24, have increased from a low of $14.14 per square foot per year in 2012 to $18.70 in 2018.

While the office vacancy rate also fell for Kitsap County, office rents have also declined. As of 2018, average office rents in Kitsap County are $16.08 per square foot, which is now less than in Bainbridge Island.

Exhibit 24. Change in Vacancy and Adjusted Office Base Rent Overall, 2009 – 2018 (2018 $)



Source: CoStar, 2018.

Recent Development Examples

Recent development projects in Bainbridge Island provide a benchmark on the scale and intensity of building the current market can support. Below are examples of projects recently built or currently under construction in Bainbridge Island.

Office Developments

Bainbridge Island CrossFit

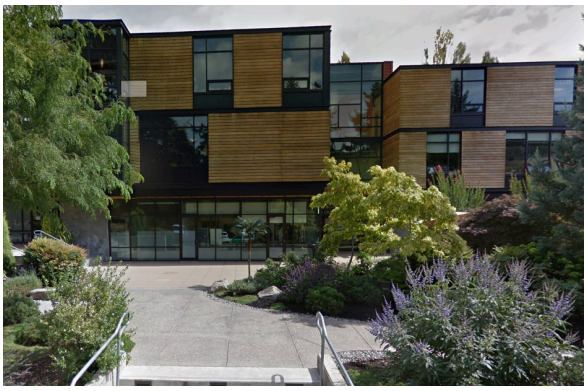
9440 Sportsman Club Rd NE, Bainbridge Island

Year Built: 2017
Stories: 2
Size: 12,000 SF
Rent: $13.00- $16.00 / NNN
Current Tenants: CrossFit

Island Gateway

204 Ravine Ln NE, Bainbridge Island

Year Built: 2010
Stories: 3
Size: 37,626 SF
Rent: $20.00 – 24.00 / SF
Vacancy Rate: 0%
Current Tentants: NA



Multifamily Developments

Bainbridge Landing

259 Ferncliff Ave., Bainbridge Island

Year Built: Under construction (delivers April 2019)
Units: 107
Stories: 4 | Buildings: 8
Parking: Ground-level and surface parking
Total Floor Area: 100,000 SF
Average Unit Size: 763 SF
Unit Mix: 70% (1-Bed)
30% (2-Bed)

Grow Community – Condos (The Tsuga)

221 Wyatt Way NE, Bainbridge Island

Year Built: 2015
Units: 15
Stories: 3 | Buildings: 1
Rent: NA
Total Floor Area: 21,174 SF
Parking: Ground-level and Surface Parking
Average Unit Size: 1,412 SF
Unit Mix: 100% (1-Bed)

Single Family Developments

Grow Community - Townhomes

Ambrose Lane NW, Bainbridge Island

Year Built: 2013
Square Feet: 1,500 – 1,800
Sales Price: $600,000 - $800,000

Winslow Grove

NE Winslow Grove Court, Bainbridge Island

Year Built: 2018
Square Feet: 3,000 – 4,200
Sales Price: + $1.1 million

These project examples indicate:

- Office and commercial developments are likely to be modest in size (both height and total area).
- Current apartment rents and sales prices can support multi-story buildings with a mixture of ground-level and surface parking.
- A variety of single-family home types are in demand from larger single-family homes to smaller, more compact options, such as townhomes.

Demand Outlook

The real estate market trends and recent development examples point to a city that is seeing an increase in demand, primarily for housing development of all types. This uptick in demand has occurred relatively recently. For much of the 2010's the city did not realize much new development following the effects of the recession in 2008. As a result, housing supply has been lagging housing demand and rents and sales prices have been increasing, particularly the over the last five years.

A continuation of these growth trends and historically low vacancies indicate there will likely be demand for more housing (single-family and multifamily) in the future. The resulting increase in population will also drive the demand for additional commercial space to provides goods and services.

Outlook by Use

- **Single-Family Outlook.** Demand for single-family homes in Bainbridge Island is likely to continue. The city has a high quality of life and has direct access to downtown Seattle. As the region continues to grow and home prices in Seattle increase, Bainbridge Island will potentially see even greater demand.

  As land values increase Bainbridge Island, the market for single-family homes will increasingly be for both smaller housing forms (such as townhomes and small-lot homes) and larger, higher-end homes to justify the higher cost of land.

- **Multifamily Outlook.** Low vacancies and increasing rents indicate increasing demand for apartments as well. Recent multifamily developments are three- to four-stories with parking integrated into the ground level. As land values increase, taller apartment or mixed use buildings will likely be viable.

- **Office Outlook.** The office market in Bainbridge Island has also shown improving fundamentals. Office vacancies have decreased sizable from over ten percent in 2010 to less than two percent in 2018. In response, office rents in Bainbridge Island have increased at a rate of 2.1 percent a year to $18.70 per square foot per year by 2018. Future office development will likely not be a primary driver of growth, and it is also likely to oriented to smaller office users. As a result, future projects will likely continue to be small in scale.

Implications for Development Incentives

For a development incentive program to be effective it needs to align with where development is occurring, the uses that are demanded, and the intensity of that development. The real estate market conditions in Bainbridge Island indicate there is an opportunity for the utilization of development incentives.

Winslow has the most potential for future development

Winslow has realized much of the new growth in Bainbridge Island, which aligns with the City's comprehensive plan. Winslow has the infrastructure, specifically water and sewer service, to accommodate future growth. Winslow is also an attractive location for development because of the proximity to the ferry terminal.

Neighborhood Centers have Limited Potential Due to a Lack of Infrastructure

In the comprehensive plan, neighborhood centers are designated for more intense development. With the exception of Lynwood Center, a lack of infrastructure (primarily water and sewer service) limit the development potential of these areas. The capacity and use of development incentives within these areas will be tied to the provision of the necessary infrastructure.

Residential uses have the best opportunity for utilizing development incentives

Most of the recent development and permit activity in Bainbridge Island is for single-family housing. More recently, multifamily housing, particularly in Winslow, is also realizing sizable new developments. As a result, development incentives should focus on leveraging demand for these uses.

Residential projects will want to maximize density

Future projects may be looking to increase densities (i.e. smaller lots and more units per acre for single-family homes and more height and building area for multifamily projects). This demand can be leveraged to support both the purchase of development rights and the creation of affordable housing as part of a City's development incentive programs.

ECONorthwest
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DATE: March 2020
TO: Kitsap County
City of Bremerton
FROM: ECONorthwest
SUBJECT: KITSAP-BREMERTON AFFORDABLE HOUSING INVENTORY AND MARKET ANALYSIS – APPENDIX B: HOUSING INVENTORY

Background and Purpose

As part of the *Affordable Housing Inventory and Market Analysis* for Kitsap County and the City of Bremerton, this technical memorandum evaluates the current housing inventory, offering a detailed look at the housing in Kitsap County and its jurisdictions, segmented by type, location, price, tenure, and size, among other characteristics. This inventory evaluates the physical characteristics and the financial/economic conditions of housing in the County, and informs a housing needs assessment of the future needs for housing of all types and price points across the County over the next 17 years (Appendix C Housing Needs Assessment). This memorandum is separated into six parts:

A. Physical Characteristics of Housing
B. Housing Tenure Characteristics
C. Housing Costs
D. Housing Affordability
E. Access to Transit and Employment Centers
F. Recent Supply Trends

The findings herein support policy recommendations offered in the *Affordable Housing Inventory and Market Analysis* for the City and County to consider as they continue working to provide housing for all Kitsap residents. This memo is an appendix to the final report.

This assessment uses publicly available data, including from the U.S. Census Bureau, Zillow, CoStar, and the Kitsap County Assessor's data. A seventh section, Methods and Approach, describes the data used and important caveats.

References in this Analysis

Throughout this analysis, we reference and display data for different geographies across Kitsap County. This section steps through the geographic boundaries used, and nomenclature used to address different planning jurisdictions. We also include a few affordable housing terms used herein.

Cities and Census Designated Places vs. Urban Growth Areas

Our analysis uses a variety of data sources. Because the U.S. Census Bureau is the main source of data for this memorandum and Appendix B Housing Inventory, we use its definitions of

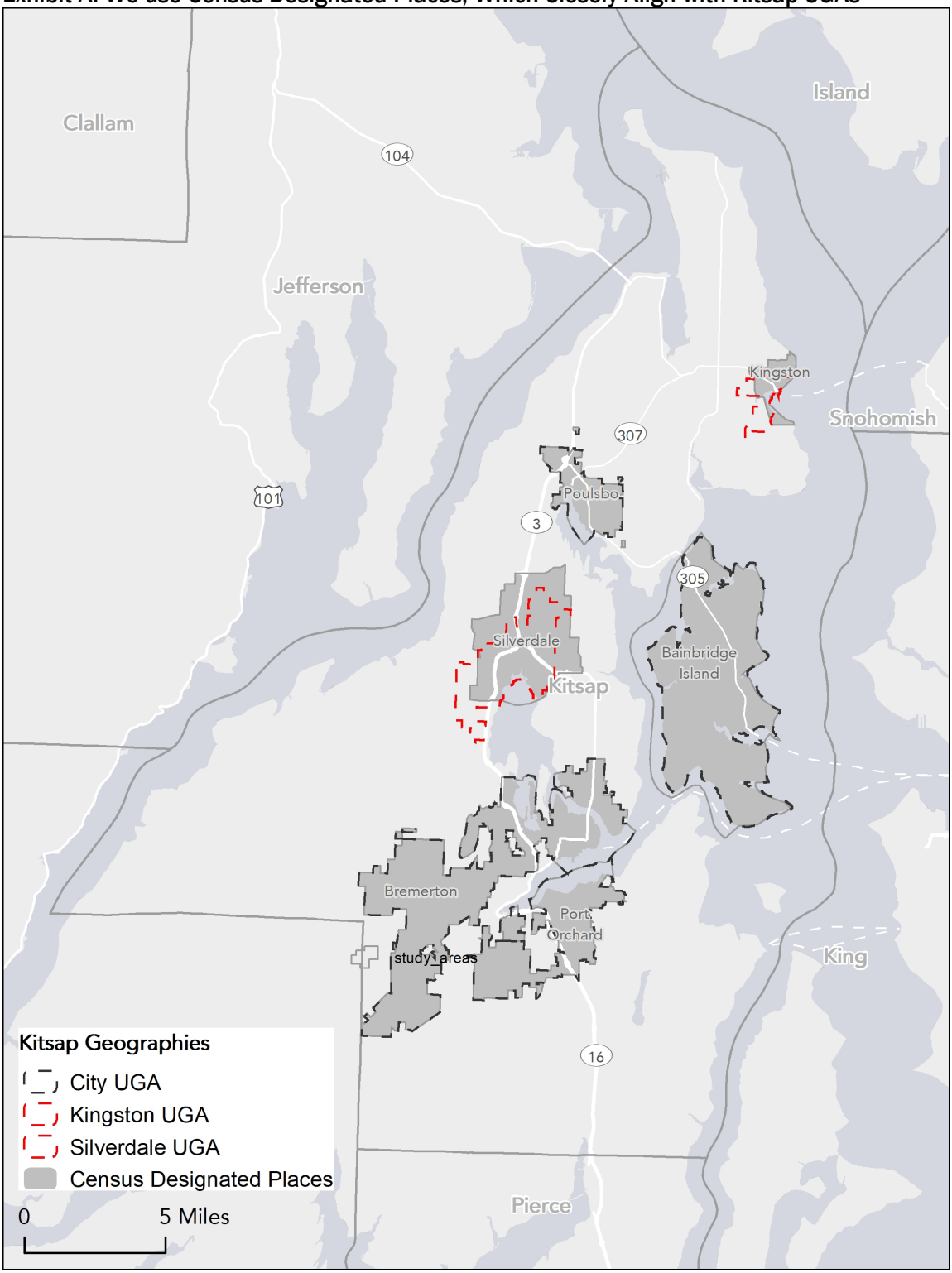
"Places" and "Census Designated Places" (CDPs) to analyze and display the data pertinent to this study. Places typically refer to cities, towns, villages, and boroughs, and are "a concentration of population either legally bounded as an *incorporated* place, or identified as a Census Designated Place."[1] CDPs differ from places in that CDPs are "statistical geographic entities representing closely settled, *unincorporated* communities that are locally recognized and identified by name."[2] CDPs are statistically equivalent to incorporated places and they are the Census Bureau's best approximation for unincorporated areas across the country.

This analysis uses CDP boundaries instead of Urban Growth Areas (UGAs), which are the County's urban planning boundaries for Kingston and Silverdale, because the Census provides more data on these area's population and economic characteristics. The map in Exhibit A below shows the CDP boundaries in grey, the UGA boundaries for Bainbridge Island, Bremerton, Port Orchard, and Poulsbo in black, and the UGA boundaries for Kingston and Silverdale in red. As the map demonstrates, the UGA boundaries for Bainbridge Island, Bremerton, Port Orchard, and Poulsbo are aligned with the CDPs, and the Kingston and Silverdale UGAs have meaningful overlap. As such, they are a good approximation and allow us access to more data.

[1] U.S. Census Bureau, *Place* definition. Retrieved from: https://factfinder.census.gov/help/en/place.htm

[2] U.S. Census Bureau, *Census Designated Place (CDP) Program for the 2010 Census—Proposed Criteria*, 72 Federal Register 17326-17329. April 6, 2007. Retrieved from: https://www.govinfo.gov/content/pkg/FR-2007-04-06/pdf/E7-6465.pdf

Exhibit A. We use Census Designated Places, Which Closely Align with Kitsap UGAs



Source: UGA boundaries come from the Kitsap County Department of Community Development. Census boundaries come from Census GIS files.

In this analysis, references to "Kitsap County," "Kitsap," or "the County" relate to the county as a whole, inclusive of the other planning areas (cities and urban growth areas). For example, if a

statistic shows the average age for Kitsap County residents alongside the average age for residents of the City of Bremerton, the ages of Bremerton residents would be included in the Kitsap County average.

Recognizing the importance of providing data and analysis for the Kitsap County planning jurisdiction, we reference this geographic area as "Unincorporated Kitsap County." This excludes the city planning jurisdictions, and includes urban growth areas. Within this Unincorporated Kitsap County jurisdiction, we often show the Kingston and Silverdale CDPs (not UGAs), and then calculate a third boundary called "all other areas." These are mutually exclusive so the sum of the different CDPs and the "all other areas" will equal the Kitsap County total. The following exhibit demonstrates this math.

Exhibit B. Example Display of Kitsap County Geographies

Year	Kitsap County	Bainbridge Island	Bremerton	Port Orchard	Poulsbo	Unincorporated Kitsap County		
						Kingston	Silverdale	All Other Areas
Total	A	B	C	D	E	F	G	= A – B–C–D–E–F–G

We make every effort to include a note below each table and chart describing the boundaries. Readers should assume that in-text references to "Kitsap County" or "the County" are inclusive of all other jurisdictions within the County. At times, we further clarify this point by referencing residents "across the County" or businesses "throughout the County," or we discuss "Kitsap County as a whole," or a statistic for "the entire County."

Affordable Housing Terms

We refer to "affordable housing" as regulated housing units that have income- or rent-restrictions to ensure the housing is occupied by households earning a certain threshold of Kitsap's area median family income (MFI). Most rent-restricted affordable housing is restricted to be affordable to households earning under 60% MFI, but these restrictions vary.

The term "workforce housing" is often used to describe housing units that are affordable to households earning more than 60% MFI. These can be regulated or unregulated.

Kitsap County MFI

According to HUD, Kitsap County's MFI was $77,119 in 2017.

- 30% of MFI is about $23,135
- 50% of MFI is about $38,559
- 60% of MFI is about $46,271
- 80% of MFI is about $61,695
- 100% of MFI is $77,119
- 120% of MIF is about $92,542

We refer to unregulated housing that is affordable to low income households as "low cost market rentals." These housing units are often "affordable" by nature of their location, condition, age, or the amenities offered nearby or at the property.

"Housing that is affordable" refers to any type of housing, regulated or not, that costs less than 30% of a household's pre-tax income. This definition is a generally accepted definition of affordability.

We use the term "cost burdening" to refer to households who pay more than 30 percent of their income on housing costs. We use the term "severe cost burdening" for households paying more than 50 percent of their income on housing. These terms come from HUD, and include mortgage payments and interest, or rent, utilities, and insurance.

Summary Findings

- Fewer than 3,800 housing units have been built in Kitsap County between 2010 and 2017, and when accounting for demolition or obsolescence of units, the net new units is about 3,600. This compares to household growth of 3,264 over that same time period.
- Port Orchard and Poulsbo led in constructing new housing units since 2010. As these areas are not the biggest cities nor the fastest growing (for households), this demonstrates a commitment to development that will bring price benefits if household demand remains strong in the years to come.
- About 40 percent of Bremerton's housing stock is multifamily. As most of the City's multifamily housing is rentals, the City also has a lower homeownership rate (43 percent) than the County (67 percent), State (63 percent), and the U.S. as a whole (64 percent).
- Kitsap County has a number of small-unit condominium developments in certain locations. The cities and County could try to encourage these types of developments since they have been proven to work via feasibility at certain points in the past.
- Kitsap County has many mobile homes that are not located in mobile home communities, but are a home located on a unique, often large parcel. The average land value for these mobile homes can be pretty high in some areas, reaching up to $240,000 on Bainbridge Island. Rising land values can create pressure to redevelop, which puts these residents at risk of displacement.
- Rent restricted affordable housing is scarce in Kitsap County and is concentrated in a few locations around the County. Bremerton has the most affordable housing and also has the most deeply affordable housing: about 66 percent of all units restricted below 30% MFI are located in Bremerton, likely due to the presence of the Bremerton Housing Authority (housing authorities often operate deeply affordable units) and the presence of extremely low income households needing housing.
- As of 2013–2017, Kitsap County had a shortage of 5,782 units of rental housing affordable to its extremely low-income renter households (those earning less than 30 percent of the median family income or about $23,135 for a family of four). When jurisdictions look at developing the new 25,147 housing units over the next 17 years, it should work to remedy the current deficit available to lower income households.
- Kitsap also has a deficit of rental housing appropriately priced for higher-income households. In this same time period, Kitsap had about 7,000 households earning more than the median family income ($77,119 for a family of four) but only 1,800 units that are "affordably priced" for those households. This means these higher income renter household are competing for available housing stock with lower-income households, putting further pressure on the availability of appropriately priced housing.
- The majority of homes near transit, ferries, and major employment centers is single-family stock (and predominantly for-sale housing). Because of the prevalence of this

housing type, and because homeownership is out of reach for most low-income, minority, or marginalized households, these communities are also locked out of important access to jobs, opportunity, amenities, and services in the region.

- Kitsap has limited employment options with a high number of residents either entering or leaving the County for employment. With multiple ferry routes to Seattle and other Puget Sound cities, households living near a ferry terminal gain immense access to employment, recreation, and amenities in other areas of the Puget Sound. Approximately 1,550 households on Bainbridge live within one mile of a ferry terminal, about 2,110 households live near a ferry in Bremerton, and so do about 1,180 households in Kingston and Southworth combined. In Bremerton, this figure includes 407 households in multifamily housing.

A. Physical Characteristics of Housing

Total Stock and Change Over Time

There are nearly 111,000 total housing units across the entire County as of the 2013–2017 time period[3] (see Exhibit 1 below). Within the Census designated cities, Bremerton has the most housing, followed by Bainbridge Island and then Silverdale. However, the vast majority of the housing units in the County are in unincorporated Kitsap County, which lies outside of the four primary cities.[4]

Exhibit 1. The Total Housing Stock in Kitsap County Has not Grown Much Since 2010

		2000	2010	2013-2017	Difference and (%) 2000 - 2010	Difference and (%) 2010 and 2013-2017	2013-2017 percent of Total Stock
	Kitsap County	92,644	107,367	110,944	14,723 (16%)	3,577 (3%)	100%
Principle Cities	Bainbridge Island	8,517	10,584	10,340	2,067 (24%)	(244) (-2%)	9%
	Bremerton	16,631	17,273	18,541	642 (4%)	1,268 (7%)	17%
	Port Orchard	3,178	4,630	5,460	1,452 (46%)	830 (18%)	5%
	Poulsbo	2,992	4,115	4,312	1,123 (38%)	197 (5%)	4%
Uninc. Kitsap County	Kingston	773	1,092	1,057	319 (41%)	(35) (-3%)	1%
	Silverdale	6,246	8,555	9,051	2,309 (37%)	496 (6%)	8%
	All Other Areas	54,307	61,118	62,183	6,811 (13%)	1,065 (2%)	56%

Source: U.S. Census Bureau, 2000 Census Summary File 1 (100% Data), Table H003; 2010 Decennial Census Summary File 1, Table H3; 2013-2017 ACS 5-Year Estimates, Table DP04.
Notes: Data include vacant housing and show total number of units at points in time. Changes over time will account for demolition. Difference between 2000 and 2010 and 2010-2013-2017 will differ from values in Exhibit 12. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown, and is a rough approximation for the remaining Unincorporated Kitsap County area.

Across the County, net new housing slowed between the 2000–2010 period and the 2010 to 2013–2017 period in every geographic area shown in Exhibit 1. In the lead up to the housing crisis, the County saw about 14,700 net new housing units produced between 2000 and 2010 (16 percent growth), but in the seven years post–2010, net new housing units only grew by 3,600 (about three percent). If the rate of production in these seven years were extrapolated for the full decade (to compare two equal time periods), the growth rate would still only be five percent.

Port Orchard led the way in housing growth in both time periods (46 percent growth in 2000–2010 and 18 percent growth in 2010–2017), but its growth rate fell by more than half. Poulsbo also had strong growth in the 2000–2010 time period, but its growth rate fell even farther.

[3] See the G. Methods and Approach section on page 53 for information on the 2013–2017 time period referenced.

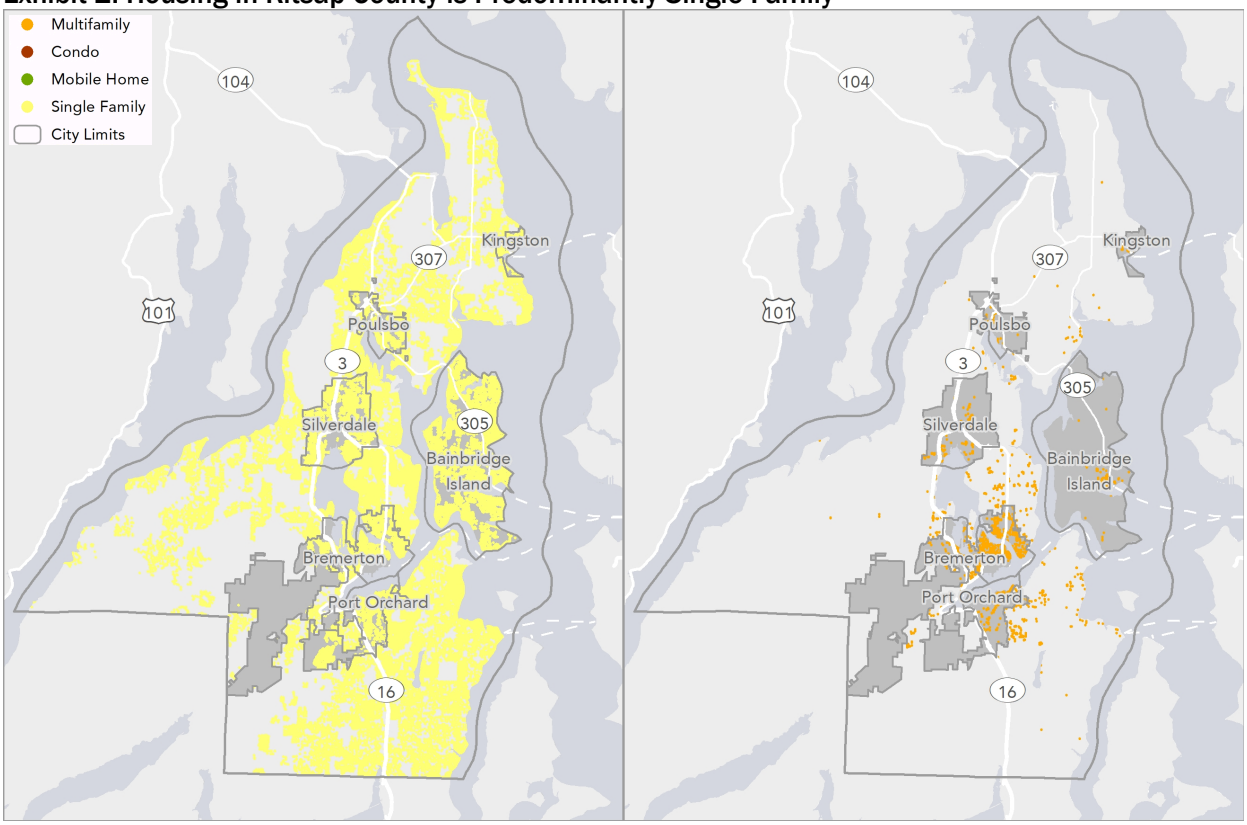
[4] See nomenclature and geographic references on page 1.

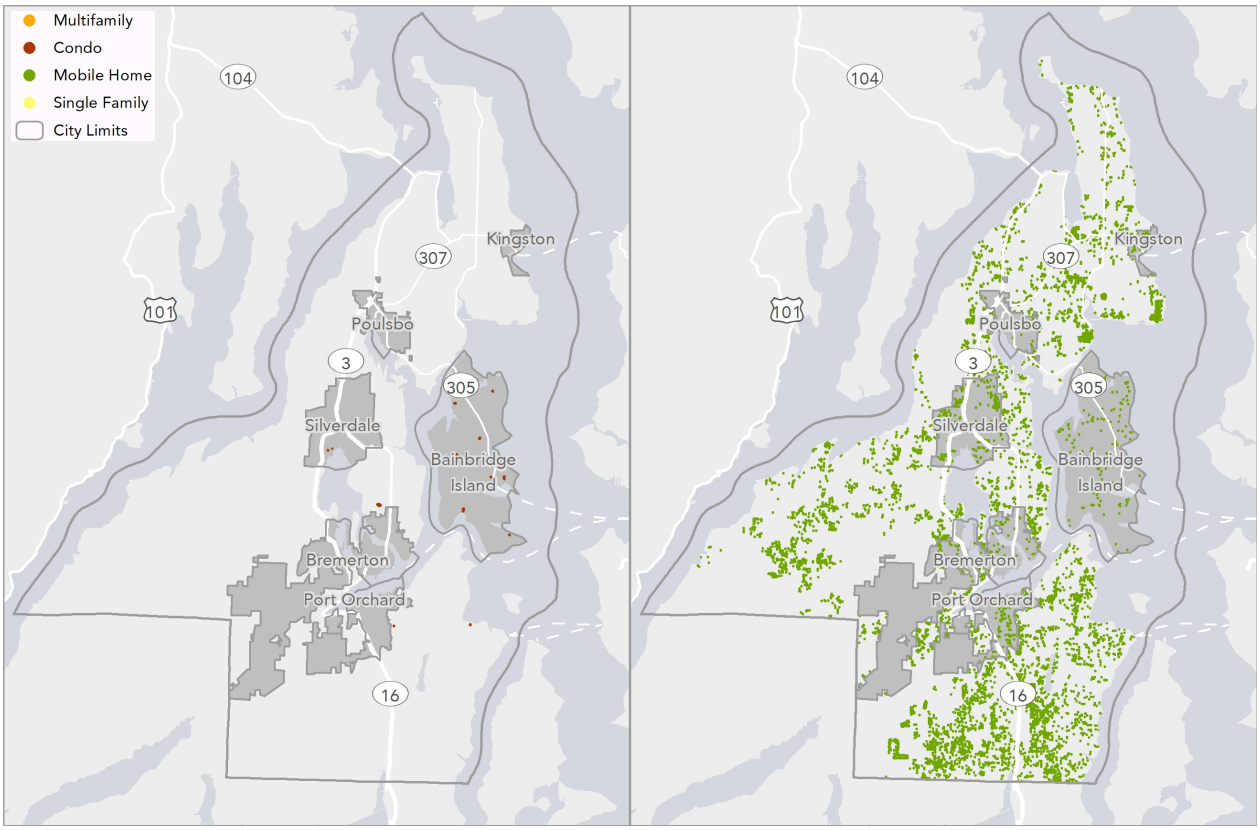
Bainbridge Island saw more demolitions in the 2010–2017 time period than new housing units. All of these declines in production are likely factors in the strong price and rent growth explored in Section C (beginning on page 26).

Housing Type

The majority of Kitsap County's total housing stock consists of single-family homes, as shown in Exhibit 2 and Exhibit 3.

Exhibit 2. Housing in Kitsap County is Predominantly Single Family





Source: Kitsap County Assessor's data, 2019.

This existing supply of housing reflects Kitsap's historic nature as a relatively rural area, past growth and demand for housing near the naval base, and also reflects current regulations governing land use and zoning as the area continues to grow. Exhibit 3 below also demonstrates the following findings about housing across Kitsap County:

- Approximately (74 percent) of the County's approximate 111,000 total housing units are single-family homes.[5]
- Bainbridge Island has the largest share of single-family housing, at about 81 percent of its total inventory.
- Multifamily housing[6] represents about 18 percent of the County's total housing stock, but it is much higher in cities such as Bremerton (about 40 percent of its respective housing stock), Port Orchard (28 percent), and Poulsbo (27 percent).
- Very little multifamily housing is located in unincorporated Kitsap County, with the exception of Silverdale where 36 percent of its housing stock is multifamily. The share of

[5] In this memorandum, single-family homes are the sum of single-family detached and single-family attached homes (e.g., townhomes), unless stated otherwise.

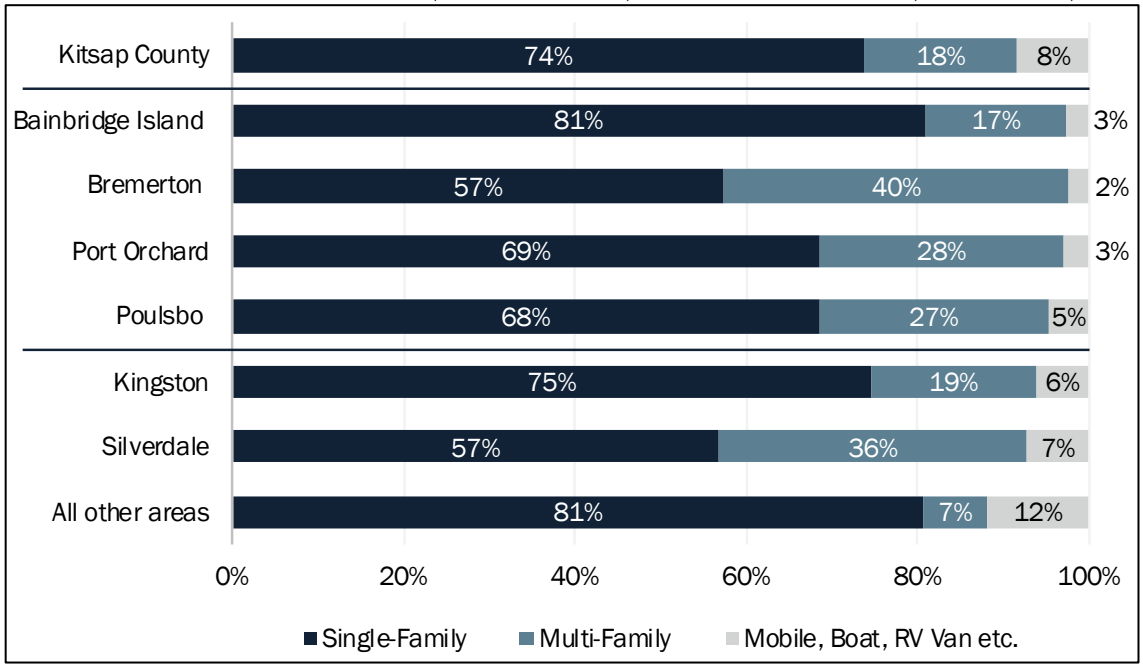
[6] In this memorandum, multi-family refers to all housing that is two or more units, including duplexes, triplexes on through large multi-unit properties.

multifamily housing in "All Other Areas" is quite low at seven percent, which reflects Kitsap's semi-rural nature.

- Mobile homes (as defined by the Office of Financial Management and the American Community Survey) account for about eight percent of the County's total housing stock and they are much more likely to be located outside of principle cities.

Exhibit 3. Housing Units Across Jurisdictions Are Predominantly Single-Family, 2013-2017

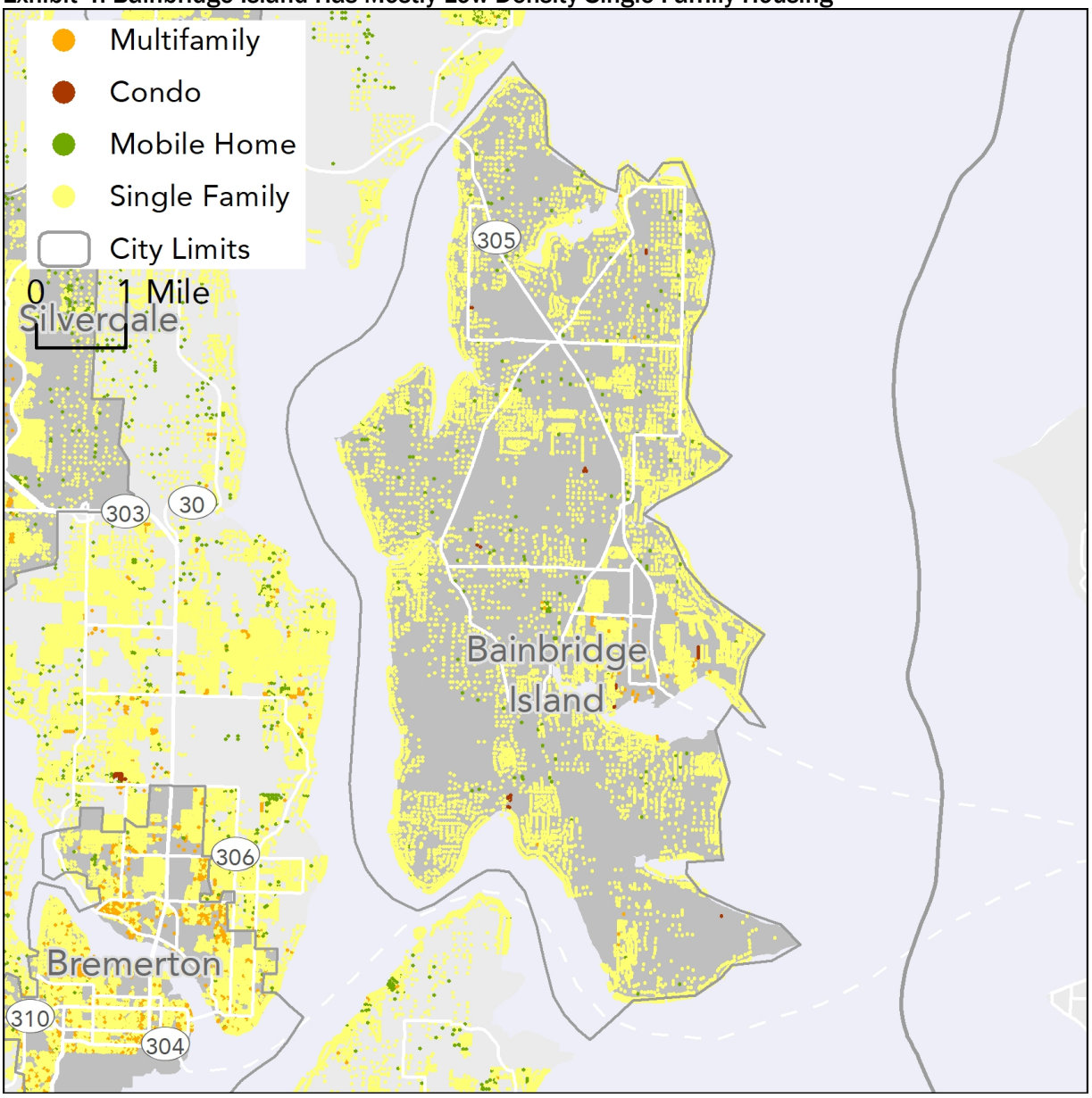
		Single-family	Multi-family	Mobile, Boat, RV Van etc.	Total
	Kitsap County	81,736	19,963	9,245	110,944
Principle Cities	Bainbridge Island	8,355	1,719	266	10,340
	Bremerton	10,633	7,473	435	18,541
	Port Orchard	3,743	1,550	167	5,460
	Poulsbo	2,953	1,152	207	4,312
Uninc. Kitsap County	Kingston	788	203	66	1,057
	Silverdale	5,243	3,313	674	9,230
	All Other Areas	50,021	4,553	7,430	62,004



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates, Table DP04.
Notes: Data includes vacant housing stock. Percent indicates the share of a location's total housing that is each type. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown, and is a rough approximation for the remaining Unincorporated Kitsap County area.

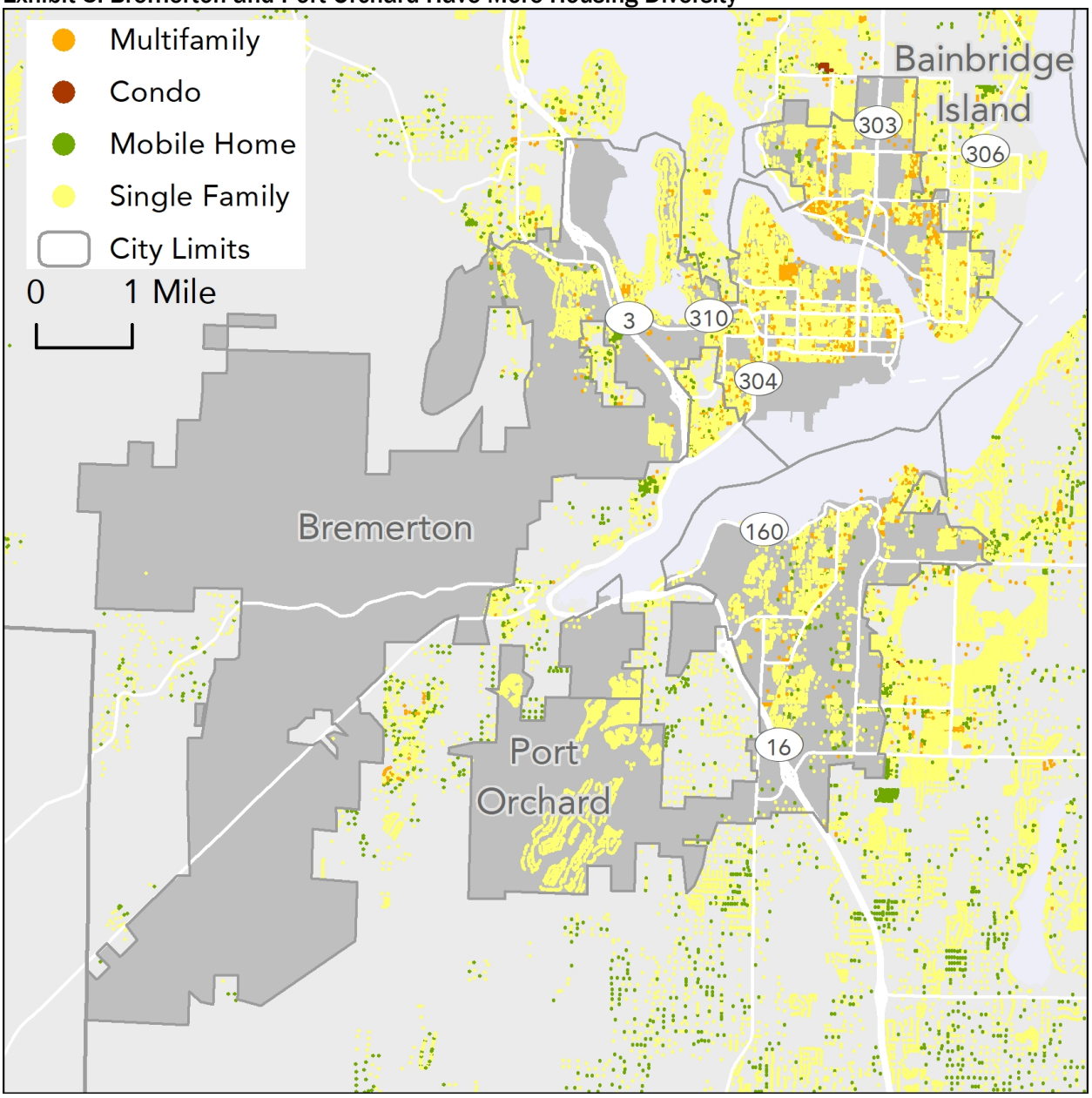
The maps in Exhibit 4 through Exhibit 8 display the predominance of single-family homes on Bainbridge Island, and in Bremerton, Port Orchard, Silverdale, Poulsbo, and Kingston. These maps are also helpful to understand where condos have been found to work with market fundamentals. For the purposes of these maps, "Multifamily" refers to two or more units of rental housing and "Condo" refers to two or more units of ownership housing.

Exhibit 4. Bainbridge Island Has Mostly Low-Density Single Family Housing



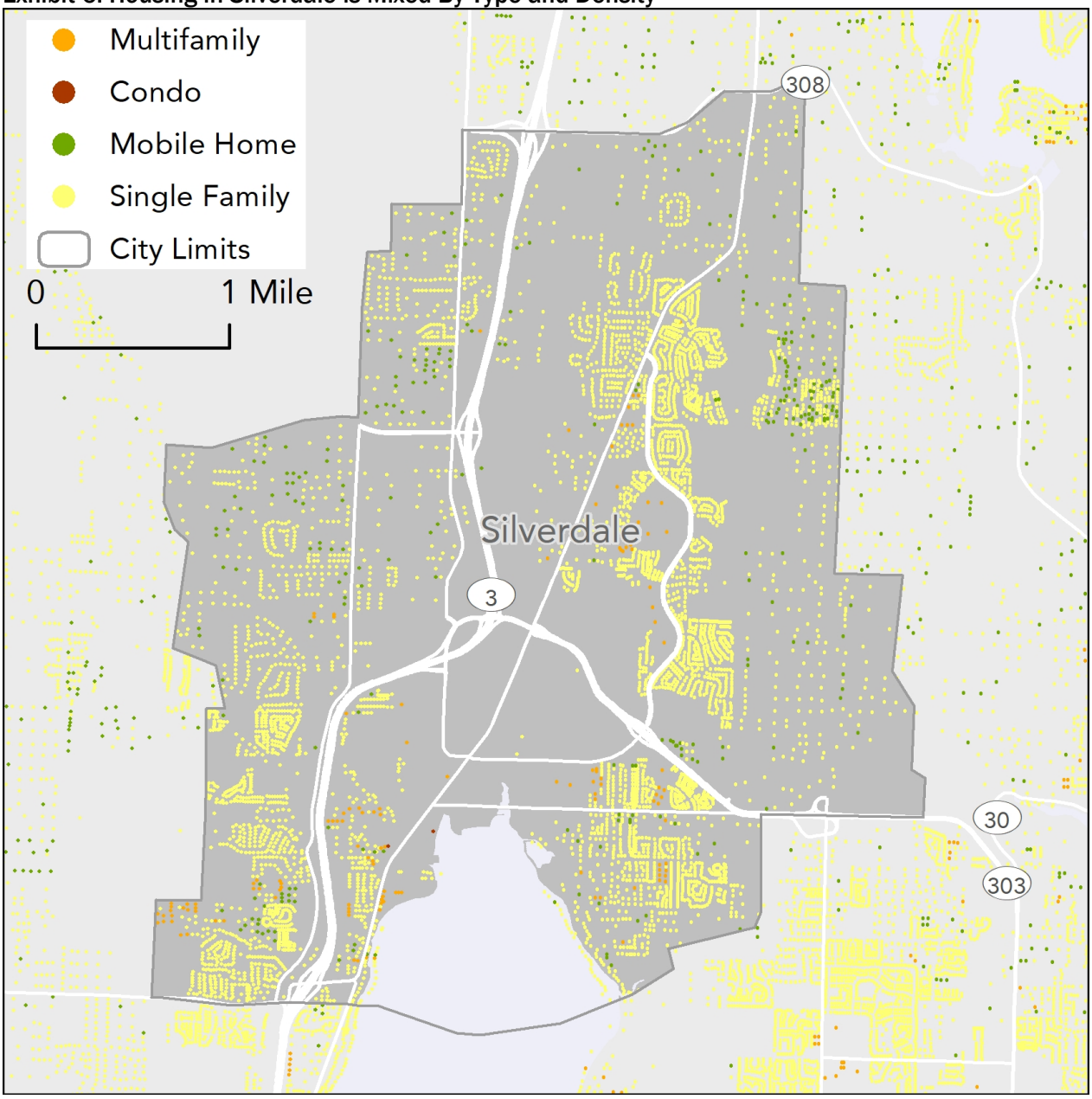
Source: Kitsap County Assessor's data, 2019.

Exhibit 5. Bremerton and Port Orchard Have More Housing Diversity



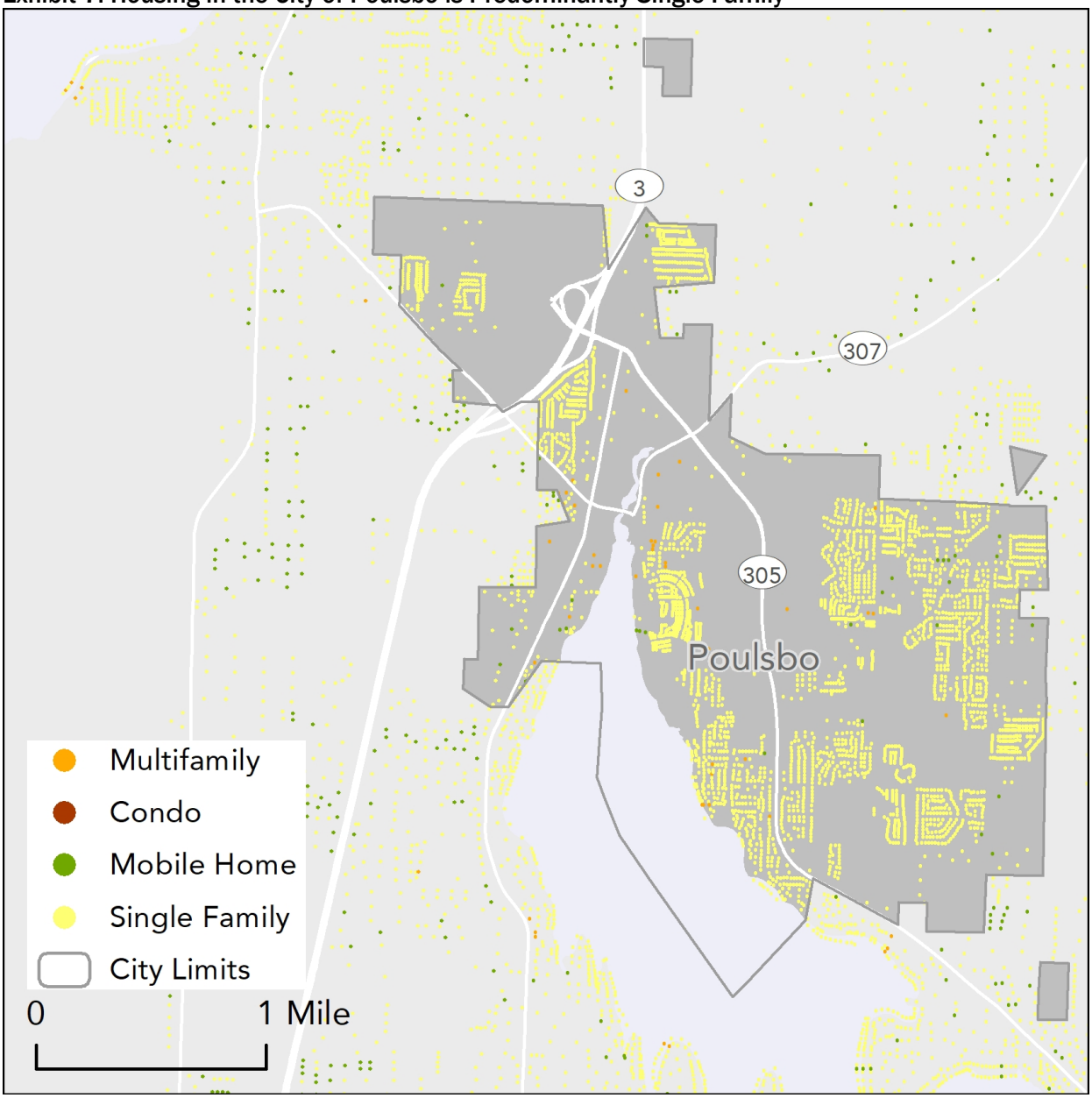
Source: Kitsap County Assessor's data, 2019.

Exhibit 6. Housing in Silverdale is Mixed By Type and Density



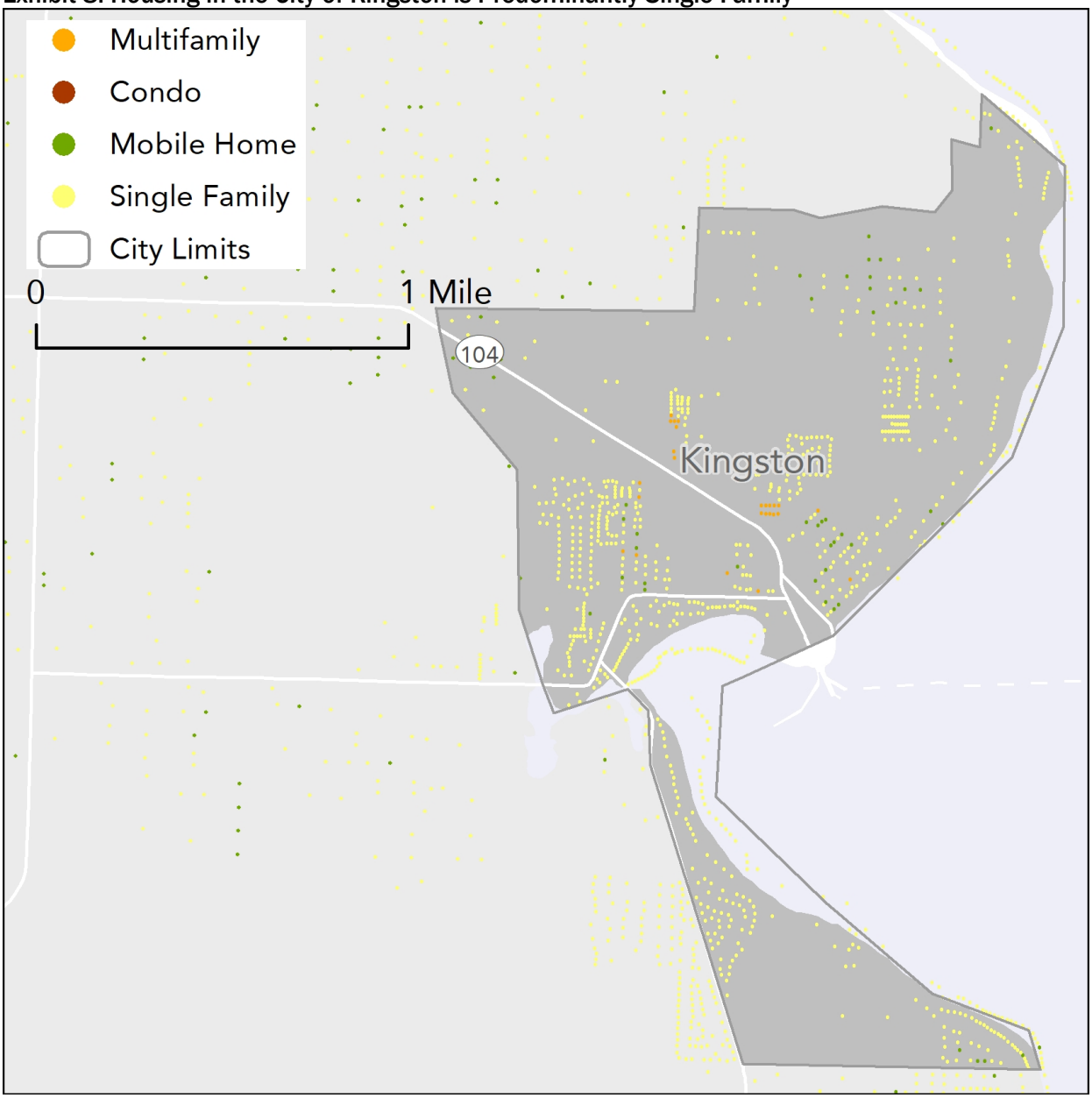
Source: Kitsap County Assessor's data, 2019.

Exhibit 7. Housing in the City of Poulsbo is Predominantly Single Family



Source: Kitsap County Assessor's data, 2019.

Exhibit 8. Housing in the City of Kingston is Predominantly Single Family

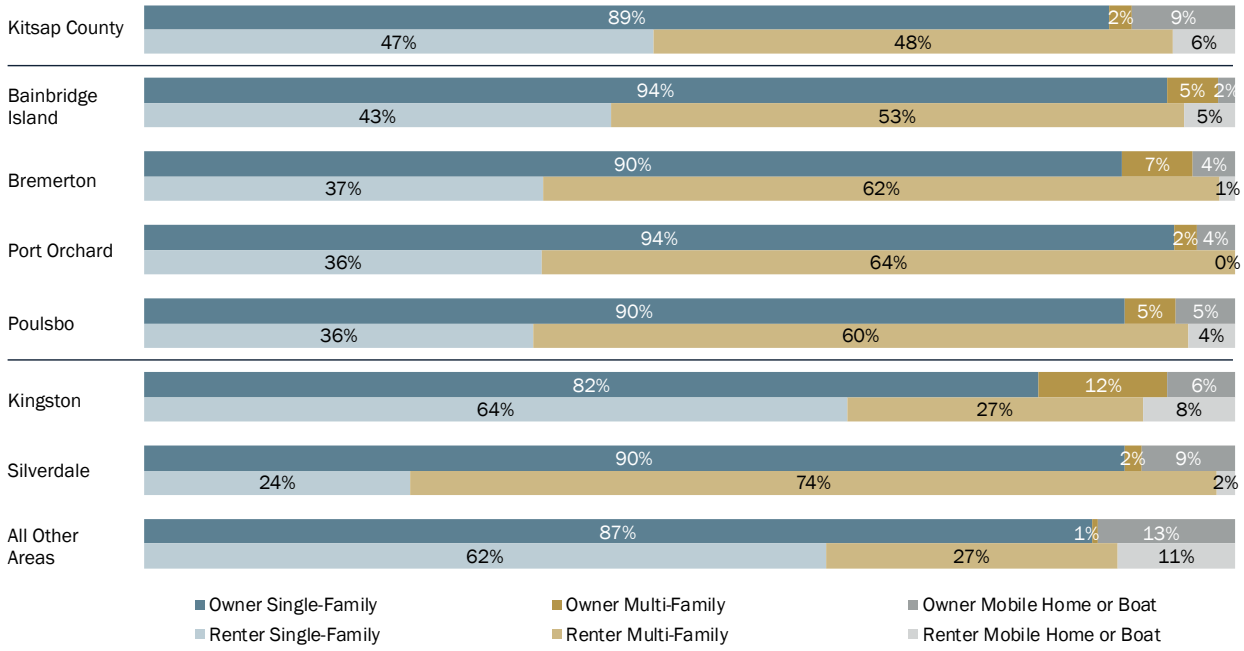


Source: Kitsap County Assessor's data, 2019.

Exhibit 9 below displays the share of each type of housing stock (renter and owner) by size for each city and the entire County. The dark bars (on top of each group) represent ownership housing stock, while the lighter bars (on bottom of each group) represent rental housing stock. In addition, the blue sections of each bar are single-family housing (both attached and detached), the yellow sections are multifamily housing (two or more units), and the grey sections are mobile homes and boats used as housing.

A few examples in reading the chart are as follows: *To compare the composition of all ownership housing, look at the dark bars for each geography. To compare just owned multifamily housing (duplexes, triplexes or condos) look at the dark yellow sections of each group.*

Exhibit 9. Kitsap has Some Single-Family Rental and Some Multifamily Ownership Stock



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates, Table B25032.
Notes: Data excludes vacant housing units. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown, and is a rough approximation for the remaining Unincorporated Kitsap County area.

This chart demonstrates a few findings:

- Nearly half (47 percent) of the single-family housing stock is renter-occupied countywide (light blue sections). Across the County's cities, the percent of single-family homes that are renter-occupied range from 28 percent in Silverdale to 43 percent on Bainbridge Island.
- Further, this chart also demonstrates that Bremerton, Bainbridge Island, Poulsbo, and Kingston have some multifamily housing that is owner-occupied (such as duplexes, triplexes, or condos—see the dark yellow sections). While these are still small shares of the overall housing stock, these condos may offer more affordable homeownership opportunities. Kingston leads with 12 percent of its overall owner-occupied housing stock as ownership multifamily, while Bremerton has seven percent, and Bainbridge Island and Poulsbo have five percent each.
- Interestingly, some areas have mobile homes (and a few boats) that are renter-occupied rather than owner-occupied (light grey bars).

Mobile Homes

Mobile homes are an important part of any county's housing stock, offering lower cost housing for many households that do not want to live in an apartment building or those that may prefer a more rural, low-density type of housing. The locations of these units are shown in the map in Exhibit 2 on page 9.

Exhibit 10 below shows the number of mobile homes in each principle city that are designated as being on "leased property" in the Assessor's data. The majority of these homes are in mobile home communities. As the table demonstrates, 893 of the 1,501 homes (about 60 percent) are located outside of principle cities and are dispersed throughout the County. Of those homes located within the major cities, Port Orchard has the lowest average mobile home value ($18,550). Bremerton has the most homes (155) relative to all other principle cities and it also has the oldest average year built.

Exhibit 10. Mobile Homes In Communities are Lower Value and are Aging

	Location	Total Mobile Homes	Ownership	Average Building Value	Average Year Built
	Kitsap County	2,004	Leased	$29,208	1983
Principle Cities	Bainbridge Island	49	Leased	$34,774	1987
	Bremerton	116	Leased	$27,929	1976
	Port Orchard	5	Kitsap Housing Authorities	-	1968
	Port Orchard	129	Leased	$17,848	1980
	Poulsbo	120	Leased	$28,010	1984
Uninc. Kitsap County	Kingston	0	Leased	-	-
	Silverdale	86	Leased	$30,263	1992
	All Other Areas	1,499	Leased	$30,235	1983

Source: Kitsap County Assessor's data, 2019.
Notes: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown, and is a rough approximation for the remaining Unincorporated Kitsap County area.

The majority of the mobile homes across Kitsap County are not in parks but are mobile units located on their own parcel in rural areas, as demonstrated in Exhibit 11 below. This table displays mobile homes where the Assessor collects taxes for the property as well as the dwelling. Mobile homes on these properties have a much higher value than those that reside in mobile home communities, as they can include manufactured homes (such as doublewide trailers). Many of these properties are rural in nature as well, which is described by the rather large average acreage per unit across the County and in areas like Bainbridge and Port Orchard.

Exhibit 11. Mobile Homes on Unique Parcels Have High Land Values

	Location	Total Mobile Homes	Average Building Value	Average Land Value	Average Year Built	Average Parcel Size
	Kitsap County	7,009	$91,675	$164,210	1988	1.67
Principle Cities	Bainbridge Island	180	$62,589	$240,376	1987	1.32
	Bremerton	355	$70,858	$48,320	1984	0.29
	Port Orchard	100	$69,831	$79,725	1988	0.85
	Poulsbo	30	$81,089	$124,994	1983	1.10
Uninc. Kitsap County	Kingston	26	$81,089	$124,994	1983	0.41
	Silverdale	157	$94,154	$87,819	1988	0.52
	All Other Areas	6,676	$93,940	$70,262	1988	1.80

Source: Kitsap County Assessor's data, 2019.
Notes: Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown, and is a rough approximation for the remaining Unincorporated Kitsap County area.

Because many of these homes are situated on large parcels, the average land value is quite high in some areas, reaching almost $167,900 on Bainbridge Island. Because mobile homes are costly and difficult to move—with moving costs often exceeding the market value of the unit—pressure to sell or redevelop may mount as these units continue to age and as the housing market in Kitsap County continues to rise.

Age of Housing Stock

The housing stock across Kitsap County is a mix of ages, as demonstrated by Exhibit 12. Interestingly, more housing was built in Kitsap County in the 1990s than in the run up to the housing bubble in the 2000s. Almost 40 percent of the total housing stock in the County was built in the last three decades (since 1990).

Exhibit 12. Kitsap County has Built Very Little Housing Since 2010

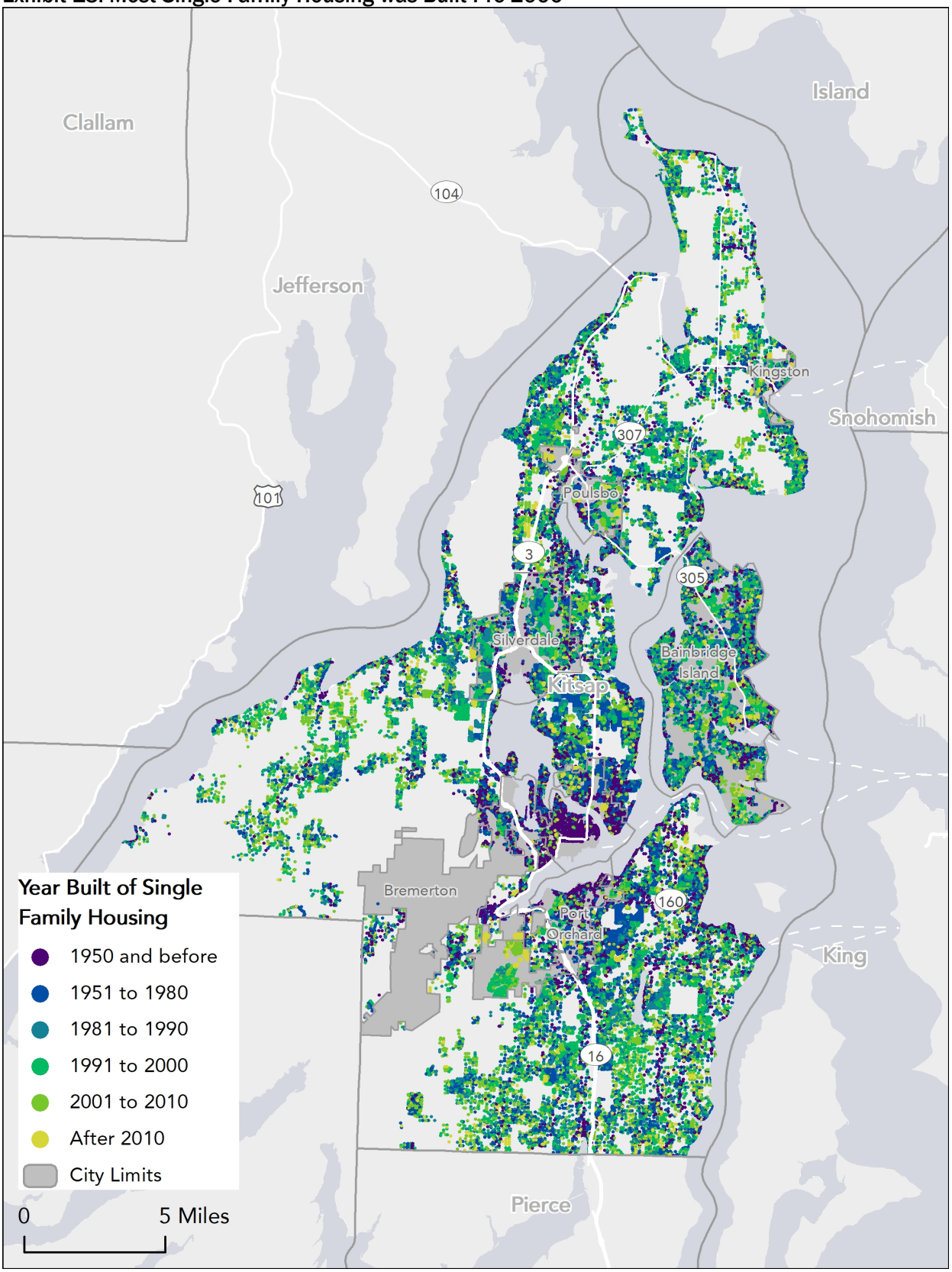
Year	Kitsap County	Bainbridge Island	Bremerton	Port Orchard	Poulsbo	Unincorporated Kitsap County		
						Kingston	Silverdale	All Other Areas
Built 2010 or later	3,791	468	625	680	264	52	128	1,522
Built 2000s	15,382	2,188	1,145	1,073	1,049	197	1,225	8,247
Built 1990s	24,674	2,085	1,452	1,306	1,000	260	3,856	14,087
Built 1980s	18,125	1,398	1,654	460	749	219	1,975	11,185
Built 1970s	20,019	1,660	2,900	569	723	116	944	12,986
Built 1960s	7,643	662	1,862	210	98	66	408	4,144
Built 1950s	5,267	361	1,854	302	166	10	158	2,274
Built 1940s	6,805	495	3,008	351	102	29	123	2,665
Built 1939 or earlier	9,238	1,023	4,041	509	161	108	234	3,151
Total	110,944	10,340	18,541	5,460	4,312	1,057	9,051	60,261

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates, Table B25034.
Notes: Data show number of units built and do not account for demolition; units built 2000-2010 and post-2010 will differ from values in Exhibit 1. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown, and is a rough approximation for the remaining Unincorporated Kitsap County area.

In addition, Kitsap County as a whole has not been building much housing this decade, particularly compared to the booming years of the 2000s. From 2010 to 2013–2017, only 3,791 new units have been built across the entire County. While the housing market has been strong since 2017 and any new units built since 2017 are not captured in this data, this is still far below the 15,382 units built in the 2000s. Since 1990, the County has averaged more than 2,000 new units per year. Of all the cities in Kitsap County, Port Orchard has seen the most unit growth since 2010. This is impressive given that it is not the largest city in the County.

Exhibit 13 below shows a map of single-family homes by age using the Kitsap County Assessor's data (the table above uses Census Data). The map clearly demonstrates Port Orchard's recent single-family developments.

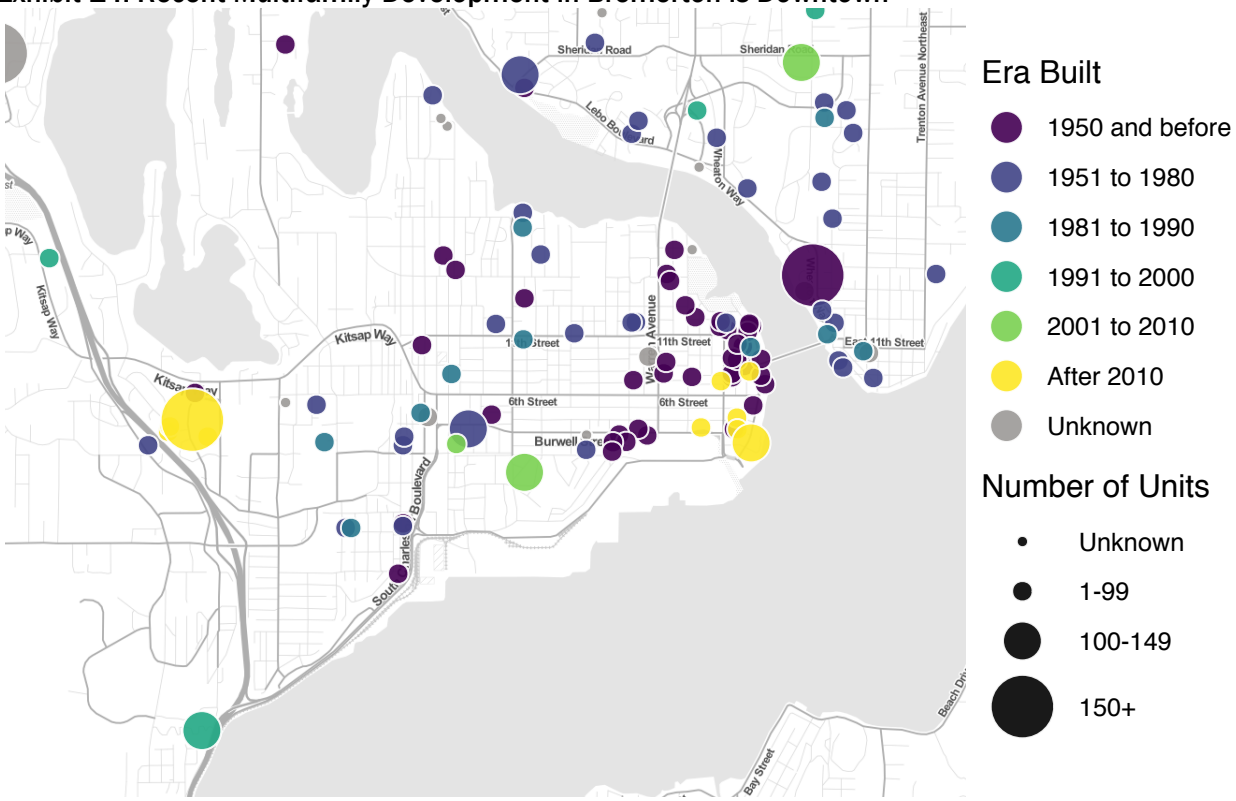
Exhibit 13. Most Single Family Housing was Built Pre-2000



Source: Kitsap County Assessor 2019.

In addition, the map in Exhibit 14 below shows multifamily properties in a portion of the City of Bremerton by era built. The increase in development downtown and the development occurring in the Bay Vista community near Highway 3 are clearly visible in yellow.

Exhibit 14. Recent Multifamily Development in Bremerton is Downtown



Source: ECONorthwest analysis of CoStar data (June 2019).

Vacancy

Overall, about 9.4 percent of the total housing stock in Kitsap County was vacant in 2013–2017. This is similar to the 9.5 percent vacancy rate in 2010, but is higher than that in 2000. The percentage of units that are vacant in Kitsap County is higher relative to Washington State's 8.9 percent vacancy in the 2013–2017 period. Part of this increased vacancy rates in Kitsap County compared to Washington State as a whole, could be explained by the abundant rural and waterfront properties which can be used as second homes.

Exhibit 15. All Vacancy Across Cities in Kitsap County has Remained Relatively Constant

	2000	2010	2013-2017
Kitsap County	6.7%	9.5%	9.4%
Bainbridge Island	6.3%	10.5%	6.4%
Bremerton	9.2%	13.6%	10.9%
Port Orchard	8.7%	7.6%	12.5%
Poulsbo	4.9%	5.6%	4.3%
Kingston	11.4%	12.4%	13.6%
Silverdale	6.1%	8.5%	6.2%

Source: U.S. Census Bureau, 2000 Decennial Census SF1, Table QT-H1; 2010 Decennial Census SF1, Table QT-H1; 2013-2017 ACS 5-Year Estimates, Table B25002.
Note: Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places.

As Exhibit 16 demonstrates, vacancy rates vary by location and by housing type across the County. Because demand for housing is so high on Bainbridge Island, the vacancy rates are incredibly low: the vacancy rate over the 2013–2017 time period was effectively zero for rental housing and under one percent for ownership housing. Owner vacancy rates are low everywhere except for Port Orchard, which built quite a bit of housing in the past decade as shown in Exhibit 12.

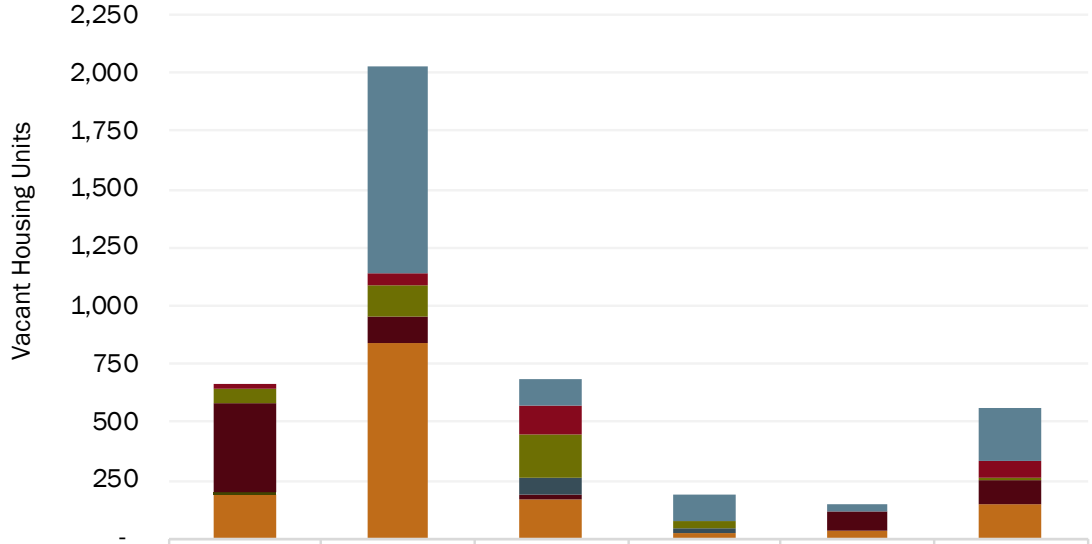
Exhibit 16. Vacancy Rates Are Extremely Low on Bainbridge Island

Housing Tenure	Kitsap County	Bainbridge Island	Bremerton	Port Orchard	Poulsbo	Kingston	Silverdale
Owner Vacancy Rate	1.9%	0.9%	1.9%	6.0%	1.2%	0.0%	0.3%
Renter Vacancy Rate	6.0%	0.0%	8.6%	5.3%	6.3%	7.2%	5.3%

Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates, Table DP04.
Notes: In calculating the vacancy rates, the Census only considers those units that are "for rent" or "for sale only." This differs from the vacancy rates in Exhibit 15 which calculates the share of all unoccupied units. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places.

Exhibit 17 lists the most common reason for vacancies by location. Across the County, most homes are vacant because they are rentals waiting to be occupied. In Bremerton 44 percent of all vacant housing is waiting to be rented. In Poulsbo, this is 57 percent, and in Silverdale, this is 33 percent. The second most common reason for vacancy is that homes have seasonal, recreational, and occasional uses. This is the case for 27 percent of all vacant units across the County, and 57 percent of all vacant units on Bainbridge Island.

Exhibit 17. Most Housing is Vacant Because it is Waiting to be Rented



	Bainbridge Island	Bremerton	Port Orchard	Poulsbo	Kingston	Silverdale
For rent	-	884	115	106	32	222
Rented, not occupied	19	57	117	-	-	76
For sale only	64	135	187	31	-	13
Sold, not occupied	-	-	74	28	-	-
Seasonal, recreational, or occasional use	376	111	27	-	80	101
For migrant workers	9	-	-	-	-	-
Other vacant	193	838	164	21	32	145

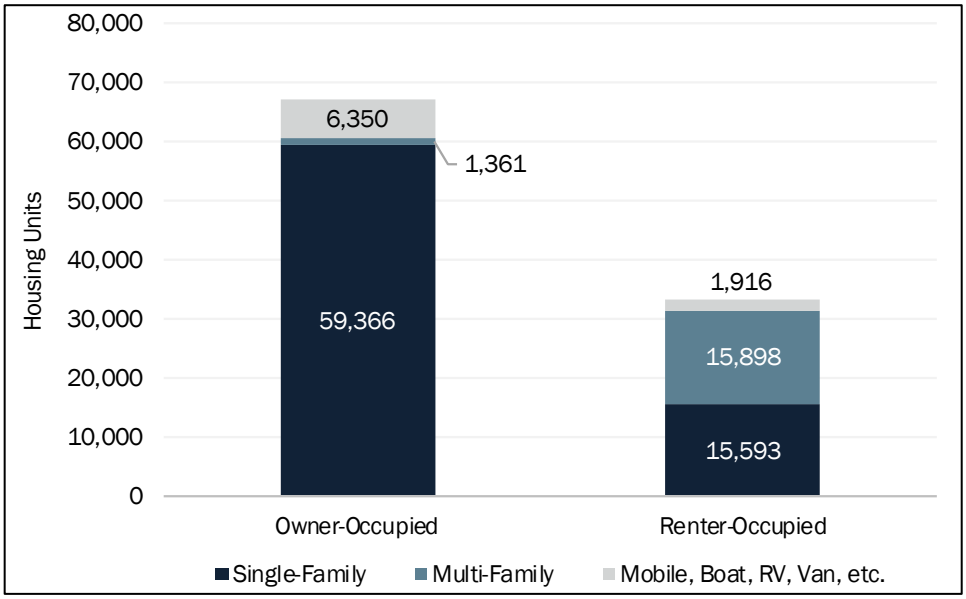
Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates, Table B25004.
Note: "Rented not occupied" and "sold not occupied" mean the unit has a renter/buyer that has yet to move in. "For sale only" indicates the unit is on the market awaiting a buyer. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places.

B. Housing Tenure

Exhibit 18 below demonstrates the split between ownership and rental housing, by housing type. This data excludes vacant housing. The majority of ownership housing is single-family (both attached and detached), but about 21 percent of the single-family housing stock in Kitsap County is rented. In addition, most mobile homes and other types of housing are owned—offering a more affordable housing option for some households. Kitsap County does not have many condos—multifamily housing that is owned.

Exhibit 18. Most Single-Family Housing and Mobile Homes are Owner-Occupied (2013-2017)

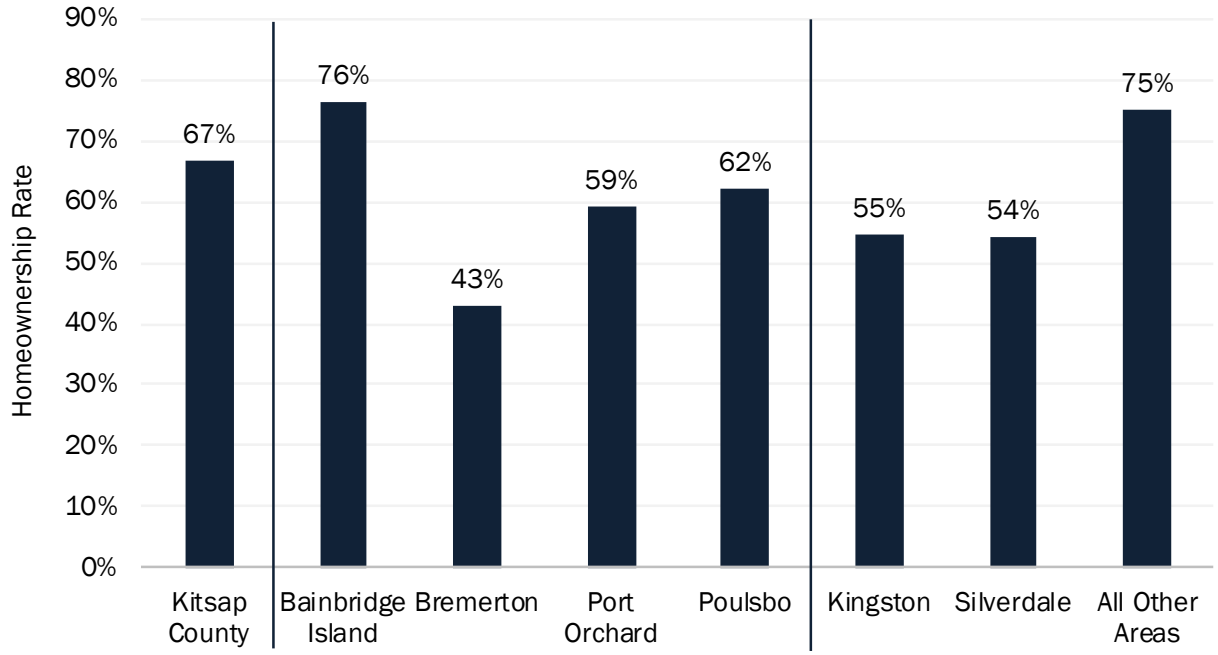
Kitsap County	Total	Owner-Occupied	Renter-Occupied	% Owner-Occupied
Single-Family (attached and detached)	74,959	59,366	15,593	79%
Multifamily	17,259	1,361	15,898	8%
Mobile, Boat, RV van, etc.	8,266	6,350	1,916	77%
Total Units	100,484	67,077	33,407	67%



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates, Table DP04.
Note: Data excludes vacant housing stock.

Exhibit 19 below demonstrates the homeownership rate for all housing types in each city and in Kitsap County as a whole. Across the entire County the homeownership rate is about 67 percent, slightly higher than that of Washington State (63 percent) and the U.S. as a whole (64 percent). However, within the largest cities, the homeownership rate varies dramatically from 76 percent on Bainbridge Island to 43 percent in Bremerton. Bremerton's lower homeownership rate is in line with the fact that it has a greater proportion of multifamily rental housing—almost 40 percent of its entire housing stock.

Exhibit 19. Homeownership Rates Vary by Location, 2013-2017



Source: U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates, Table DP04.
Notes: Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

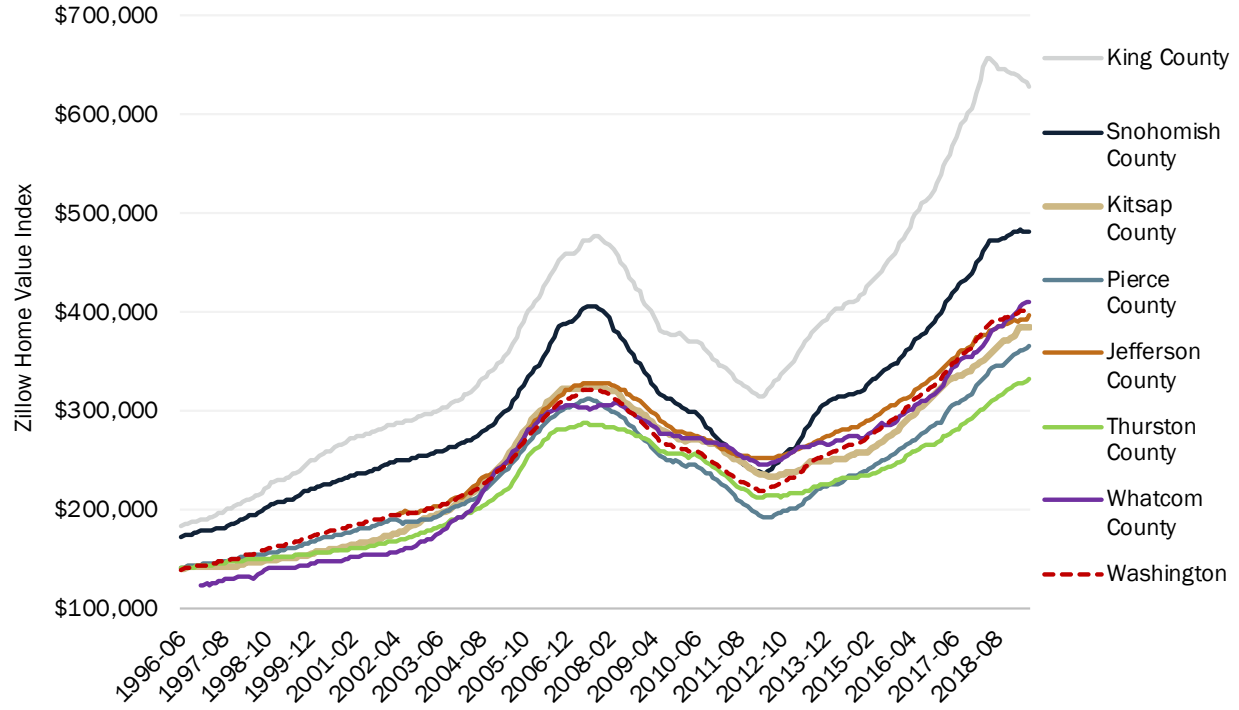
C. Housing Costs

Home Prices

Exhibit 20 below shows the dramatic rise in median home values across select counties, and Washington State over the past 22 years. According to Zillow data, median home values in Kitsap County are higher than in Pierce County and Thurston County, and have been since the run-up to the housing bubble in the early 2000s. Since 2010, the median home values in Jefferson and Whatcom counties have remained above the values in Kitsap County; however, Kitsap County has closely followed the growth trends of these comparison counties.

Housing costs are rising in Kitsap County, largely due to the spillover effects of the strong Puget Sound economy and high housing costs elsewhere, and due to the lack of new housing production.

Exhibit 20. Home Values are Increasing in Numerous Counties[7]



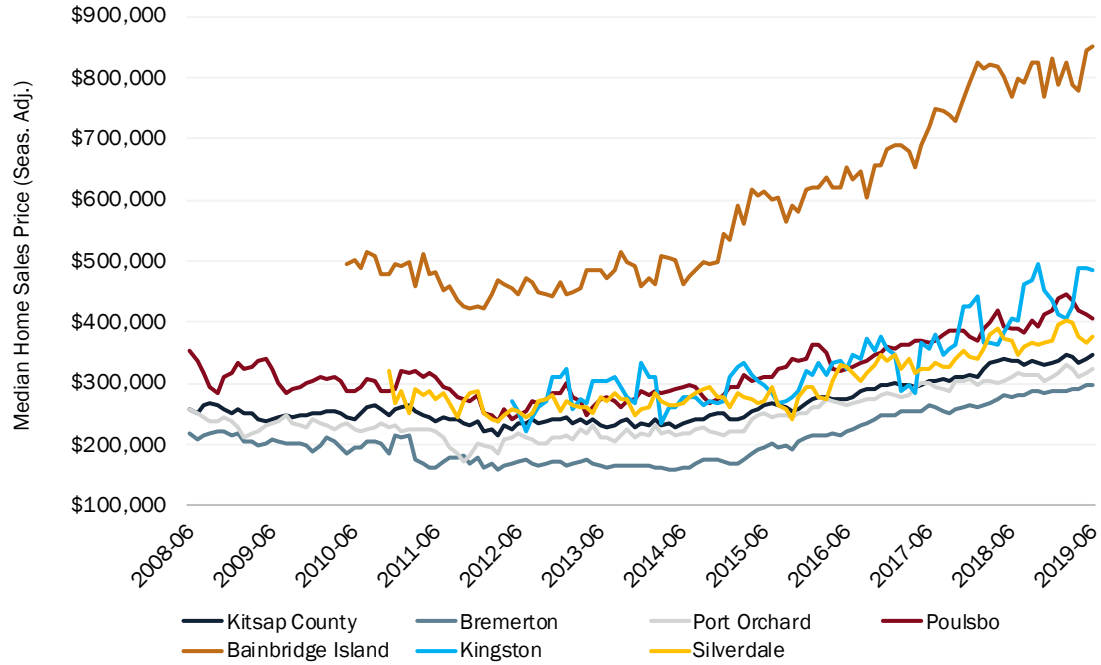
Source: Zillow Home Value Index, June 1996 – June 2019.
Note: Data includes Multifamily, Single-family, and Condo/Co-op Housing.

Exhibit 21 below displays median *home sales prices* for all home types—single-family, condominiums, and co-operative homes, in comparison to median *home values* in Exhibit 20. Of the principle cities listed, Bainbridge Island's median home sales price is the highest (as it has been historically). It also grew the most, increasing from $501,800 in June 2010 to $853,000 in June 2019, or about 70 percent.[8] Bremerton had the next largest increase in median home sales price, growing by 35 percent over the June 2008 to June 2019 period. Countywide, median home sales prices were up 34 percent in June 2019 from their June 2008 values.

[7] Thurston and Whatcom counties are included as comparators to Kitsap County due to their approximately equivalent population sizes. While much less populous than Kitsap County, Jefferson County is included since it neighbors Kitsap and may be experiencing spillover effects from the broader Puget Sound economy.

[8] Note: Zillow data for Bainbridge Island was only available through February 2019, all other areas had data through June 2019.

Exhibit 21. Home Sales Prices are Growing in Kitsap County, June 2008 —June 2019



Source: Zillow, Median Sale Price Seasonally Adjusted.

Bainbridge Island has historically seen higher home prices than the rest of Kitsap County, and tracks closer to Seattle and King County housing markets than the rest of Kitsap County. Since about 2014 the rate of price growth on Bainbridge Island has exceeded that of other areas. Home sales prices topped out at $853,100 on Bainbridge Island in June 2019, the highest point over the analysis period.

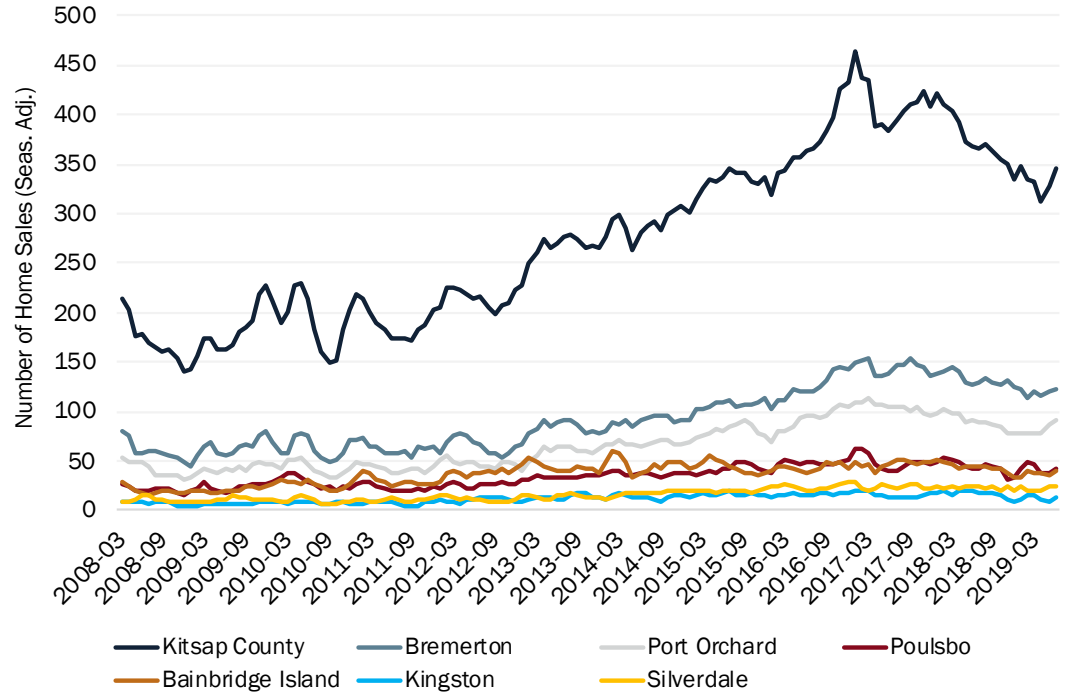
All of the principle cities in Kitsap County have seen significant growth in their home prices. Since June 2008, median home sales prices in Bremerton increased by 35 percent, Port Orchard prices increased by 25 percent, and Poulsbo prices increased by 15 percent. Bainbridge Island's prices increased by 70 percent over the June 2010 to June 2019 period.[9]

The unincorporated cities in Kitsap County also saw significant growth in their home prices over the last several years. Silverdale's home prices increased by 36 percent over the June 2011 to June 2019 period and Kingston's home prices increased by 90 percent over the June 2012 to June 2019 period.

In addition to home prices rising, the number of home sales across Kitsap County has also been rising. Exhibit 22 below displays the seasonally adjusted number of home sales in Kitsap County and several cities over the 2008–2019 time period. The run-up in prices across Kitsap County beginning in about 2012 corresponds with the run-up in home sales county-wide.

[9] Note: Revised Zillow median home sale price data for Bainbridge Island begin with May 2015. We started our analysis with Bainbridge's June 2010 datapoint to be consistent with the starting month for the other cities.

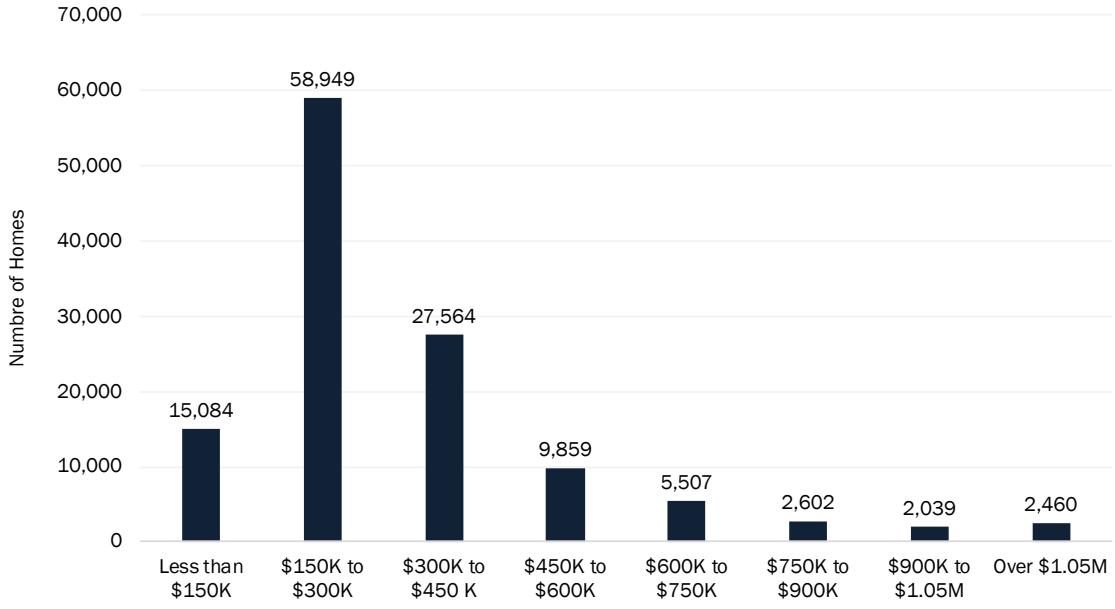
Exhibit 22. Number of Home Sales in Kitsap County, June 2008 – June 2019



Source: Zillow, Number of Sale over Time, Seasonally Adjusted.

Exhibit 23 below shows the distribution of home prices in Kitsap County. The median home price of $345,000 means that 50 percent of all housing in the County is below this amount, while 50 percent is above. Though the majority of homes in Kitsap County have lower prices, there are many in excess of $1 million spread across the County.

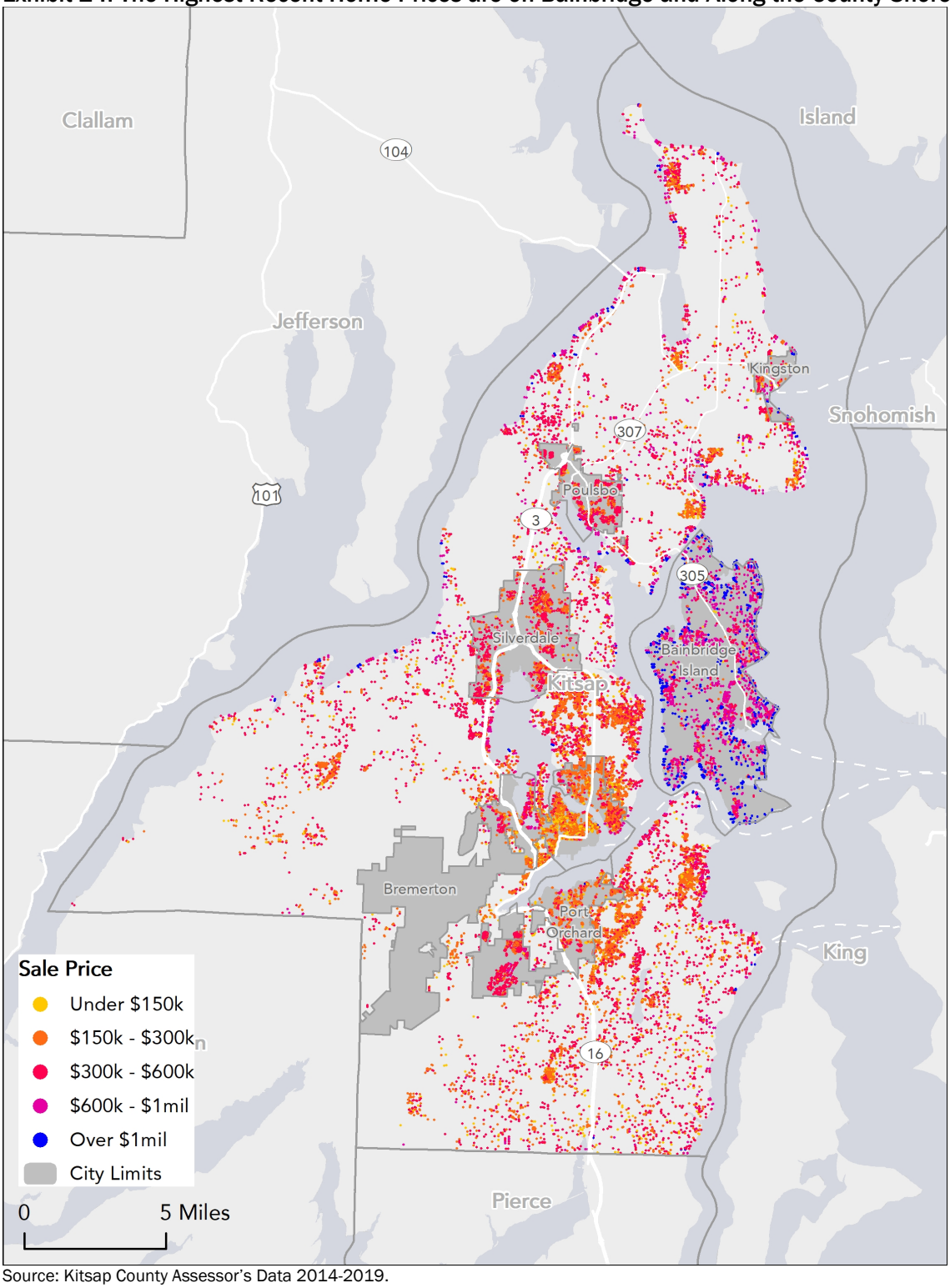
Exhibit 23. Most Home Prices in Kitsap County Are Relatively Affordable, Compared to Other Parts of Puget Sound



Source: Kitsap County Accessor Data, 2019.

Exhibit 24 below displays a map of sales prices from the past five years (2014–2019) demonstrating that the majority of the high-priced housing is located on Bainbridge Island and along the waterfront areas of the County.

Exhibit 24. The Highest Recent Home Prices are on Bainbridge and Along the County Shoreline

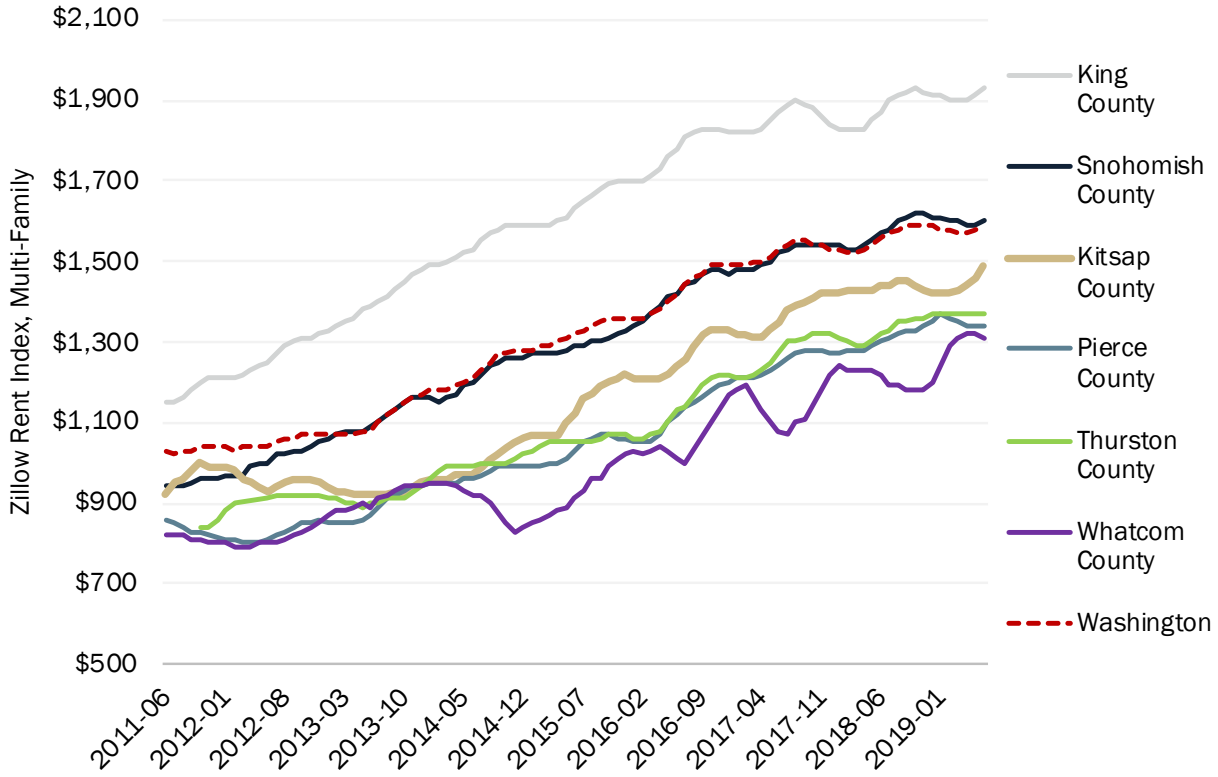


Source: Kitsap County Assessor's Data 2014-2019.

Rents

Median multifamily rents are also rising in Kitsap County and the area's cities. Again, this is likely due to the prosperous economies in other areas of Puget Sound creating strong demand and due to insufficient multifamily housing production to meet that demand. Exhibit 25 displays the increase in median rents in the same select counties and Washington State. According to Zillow data, median rents in Kitsap County are now on par with Snohomish County and Washington State, at about $1,500 to $1,600 per unit (for all unit sizes). Median multifamily rents in Kitsap County have grown approximately 59 percent over the past eight years (June 2011 to June 2019).

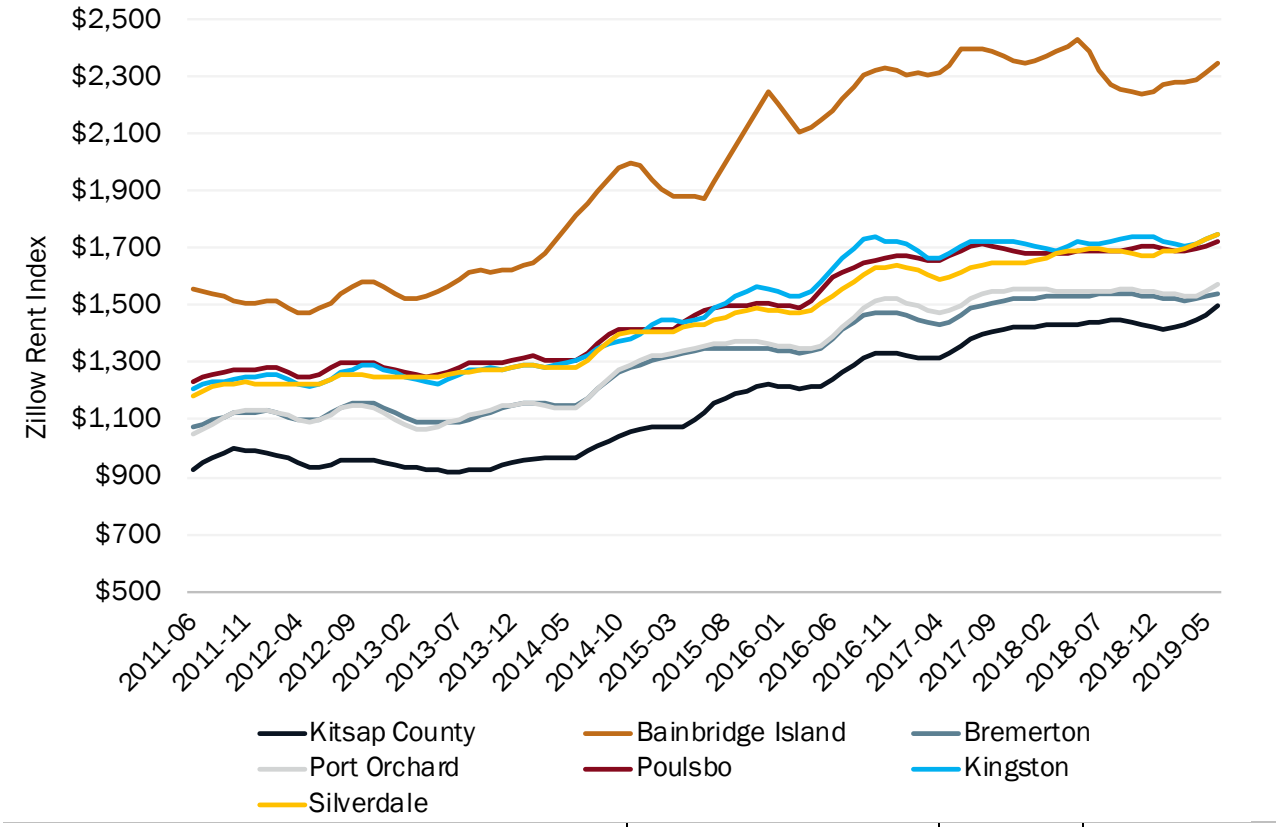
Exhibit 25. Multifamily Rents are Increasing in Puget Sound Counties



Source: Zillow Rent Index (ZRI) – Multifamily, 2019.
Note: There is a small handful of data points that are not computed for some counties. We joined these small gaps with lines for consistency in presentation of the trends. This does not affect the endpoints of the respective trend lines, nor does it affect general insights about how multifamily rents are changing across the counties shown.

Like housing prices, Bainbridge has historically commanded a premium rent over other cities in Kitsap County. Median rents for all unit types on Bainbridge are over $2,340 per month, 52 percent higher than the lowest cost city (Bremerton), where median rents are about $1,543 per month. While this premium has grown over time, it has not grown to the same extent as home prices have. Exhibit 26 below demonstrates that median gross rents in the four principle cities and the two unincorporated areas in Kitsap County have grown a sizable amount since June 2011.

Exhibit 26. Median Gross Rents for all Rental Housing Types are Growing Across Kitsap County



$2,342 Bainbridge Island	$1,543 Bremerton	$1,576 Port Orchard	$1,724 Poulsbo	$1,751 Kingston	$1,748 Silverdale	$1,873 Kitsap County	$1,882 Washington State

Source: Zillow Rent Index (ZRI), June 2019.

Median rents on Bainbridge increased more than 50 percent, rising from $1,553 in June 2011 to $2,342 in June 2019. Port Orchard rents increased 50 percent over the same period, Poulsbo grew by 40 percent, and Bremerton rents increased 44 percent over the past eight years. For unincorporated Kingston and Silverdale, median rents increased by 45 percent and 48 percent, respectively over the eight year time period.

D. Housing Affordability

Given these rising costs in housing prices and rents, housing has become less affordable to most households in Kitsap County. This often means that households are spending a greater share of their gross incomes on housing, leaving less money available for other necessities such as food, transportation, medical expenses, and childcare.

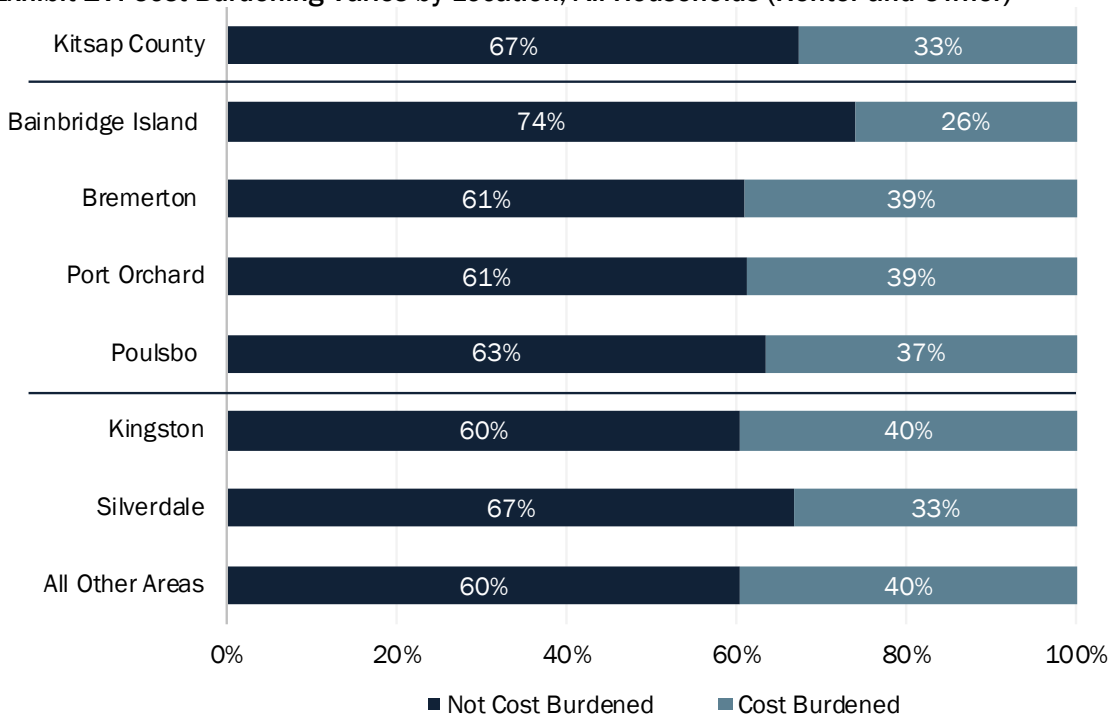
Cost Burdening

When lower-cost housing (such as government subsidized housing) is not available, households can become "cost-burdened" when they pay more than 30 percent of their income on housing costs. This can put low-income households in vulnerable situations and force them to make

trade-offs between housing costs and other essentials like food, medicine, or transportation (see sidebar). This precariousness of being able to afford housing can also lead to rental evictions, job instability, school instability for children, and homelessness.

In the 2013–2017 period, about 33 percent of all Kitsap County households were cost burdened.

Exhibit 27. Cost Burdening Varies by Location, All Households (Renter and Owner)



Source: U.S. Census Bureau, 2013–2017 ACS 5-Year Estimate Table B25095.
Notes: Chart omits renter households with no recorded housing costs. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

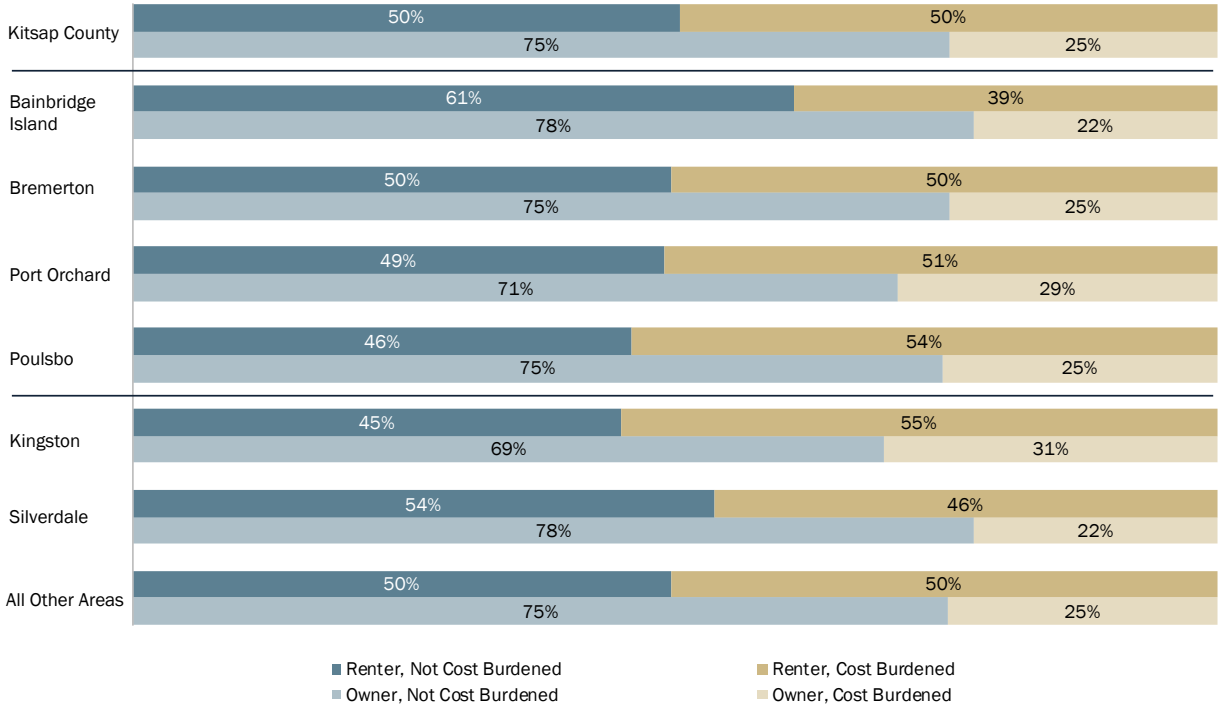
Cost Burdening By Income

A household making **$120,000 per year** has a gross income of $10,000 per month. Housing costs over $3,100 per month would result in cost burdening, but this household would still have $6,900 per month for all other expenses.

In contrast, a household making **$24,000 per year** has a gross income of only $2,000 per month. Housing costs in excess of $620 per month would result in cost burdening, but this household would only have $1,380 remaining for all other expenses. Because housing at this cost is rare, most households in this income range have to pay more. In addition, their remaining income may be insufficient for all other expenses, and force the household to make difficult trade-offs.

During the 2013–2017 period, about 50 percent of all Kitsap County renter households were cost burdened and about 25 percent of all owner households were cost burdened.

Exhibit 28. Cost Burdening Varies by Location, and Owner vs Renter Households



Source: U.S. Census Bureau, 2013–2017 ACS 5-Year Estimate Table B25095.
Notes: Chart omits renter households with no recorded housing costs. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

About half of all renter-occupied households in Kitsap County's jurisdictions are cost burdened, with the exception of Bainbridge Island (39 percent) and Silverdale (46 percent). Kingston had the highest share of cost burdened renter households during the 2013–2017 period at 55 percent, followed by Poulsbo (54 percent), and then Port Orchard (51 percent). Cost burdened owner-occupied units are a rather small share of all owner-occupied units, particularly when compared to renter-occupied units. In general, the share of cost burdened owners is about 25 percent, ranging from a low of 22 percent in Silverdale to a high of 31 percent in Kingston.

Owner Cost Burdening

Exhibit 29 below displays the same cost burdening information for owner-occupied households who have housing costs. While households that own their homes are typically higher income compared to renters, there are still about 15,192 households of all income levels in Kitsap County (23 percent of all owner households) who are cost burdened. Of the 5,319 homeowner households earning less than 30 percent of the County MFI, about 80 percent are cost burdened as are 49 percent of owner-occupied households earning between 31 and 60 percent of MFI.

Exhibit 29. Owner Cost Burdening in Kitsap County by Income Level

		Household Annual Income as a Percent of Kitsap County MFI						
	Cost Burdening	0-30% MFI	31-60% MFI	61-80% MFI	81-100% MFI	100%-120% MFI	>120% MFI	Total
A	Not Cost Burdened	1,068	4,876	5,832	6,164	6,076	27,200	51,216
B	30% Cost Burdened	1,017	2,628	2,597	1,282	848	800	9,172
C	50% Cost Burdened	3,234	2,083	455	114	47	87	6,020
D	Total Households (A+B+C)	5,319	9,587	8,884	7,560	6,971	28,087	66,408
E	Total Cost Burdened (B+C)	4,251	4,711	3,052	1,396	895	887	15,192
F	Percent Cost Burdened (E/D)	80%	49%	34%	18%	13%	3%	23%

Source: HUD 2017 Median Family Income (MFI) for Kitsap County, 2013-2017 ACS, ECONorthwest
Note: This table excludes households with no reported income and no reported housing costs.

Cost burdening for owner-occupied households is not terribly common because mortgage lenders typically ensure that a household can pay its debt obligations before signing off on a loan. However, cost burdening can occur when a household secures a mortgage and then sees its income decline.

Renter Cost Burdening

Renters are more likely to be cost burdened than homeowners because most renters are lower income. Exhibit 30 below demonstrates renter cost burdening according to different MFI levels in Kitsap County. As the table demonstrates, just under 50 percent of all Kitsap renter households (with housing costs) are cost burdened—paying 30 percent or more of their gross income on housing. When looking at severe cost burdening approximately 23 percent of all Kitsap renter households face this cost issue (not shown in the table).

Exhibit 30. Renter Cost Burden in Kitsap County by Income Level, 2013-2017

		Household Annual Income as a Percent of Kitsap County MFI						
	Cost Burdening	0-30% MFI	31-60% MFI	61-80% MFI	81-100% MFI	100%-120% MFI	>120% MFI	Total
A	Not Cost Burdened	944	2,684	2,794	3,005	2,197	4,721	16,345
B	30% Cost Burdened	1,861	4,554	1,306	318	94	23	8,156
C	50% Cost Burdened	5,465	1,782	123	10	-	-	7,380
D	Total Households (A+B+C)	8,270	9,020	4,223	3,333	2,291	4,744	31,881
E	Total Cost Burdened (B+C)	7,326	6,336	1,429	328	94	23	15,536
F	Percent Cost Burdened (E/D)	89%	70%	34%	10%	4%	0%	49%

Source: HUD 2017 Median Family Income (MFI) for Kitsap County; U.S. Census Bureau, 2013-2017 ACS 5-Year Estimates.
Note: This table excludes households with no reported income and no reported housing costs.

As one would expect, rates of housing cost burdening decline as incomes increase—meaning lower income households are more likely to face cost burdening. In the 2013–2017 time period, almost 90 percent of renters earning less than 30 percent of Kitsap's MFI were cost burdened. Households at this income would need a rent less than $578 per month to avoid cost burdening, but with the median rent around $1,570 (in 2017, according to Zillow's Rent Index data) there are very few rentals in the housing stock at that price.

Kitsap County MFI

According to HUD, Kitsap County's MFI was $77,119 in 2017.

- 30% of MFI is about $23,135
- 50% of MFI is about $38,559
- 60% of MFI is about $46,271
- 80% of MFI is about $61,695
- 100% of MFI is $77,119
- 120% of MIF is about $92,542

Exhibit 30 also demonstrates that about 70 percent of renter households earning between 30 and 60 percent of the median family income are cost burdened. These households can afford a monthly rent between about $578 and $1,157 to avoid cost burdening—units between these rent prices are also somewhat scarce in Kitsap County.

The rate of cost burdening declines for higher-income renter households. Further, because there are not many luxury rental apartments in Kitsap County, no high-income renter households were severely cost burdened in the 2013–2017 time period.

Housing Stock and Affordability Mismatch

To take renter cost burdening one step further, we explore the current mismatch in the incomes of renters occupying different priced housing units. Exhibit 31 below displays this mismatch, showing renter households by MFI level across the top, and rental units priced by MFI level down the rows.

The green areas show where renter households are occupying a unit that is priced "affordably" for that income level (using HUD's 30 percent of income threshold). Areas in red indicate that the household is cost burdened (paying more than 30 percent of income on housing). And areas in yellow indicate that the household is "renting down" or paying less than 30 percent of its income on housing. The total column at the right (Column 8) sums all the occupied rental units in each MFI level, while the total row at the bottom (Row H) sums all the renter households in each MFI level.

Exhibit 31. Mismatch in Rental Housing by Affordability Level, Kitsap County, 2013–2017[10]

	1	2	3	4	5	6	7	8
		Unit Occupied by Household Earning…						
A	Unit Rents "Affordably" at…	0-30% MFI	31-60% MFI	61-80% MFI	81-100% MFI	101-120% MFI	>120% MFI	Total Occupied Units
B	0-30% MFI	1,845	503	45	50	0	45	2,488
C	31-60% MFI	4,449	4,171	1,537	1,216	475	934	12,782
D	61-80% MFI	1,388	3,136	1,838	1,240	1,215	1,586	10,403
E	81-100% MFI	320	902	553	669	481	1,468	4,393
F	100-120% MFI	134	177	85	107	83	483	1,069
G	>120% MFI	134	131	165	51	37	228	746
H	Total Households	8,270	9,020	4,223	3,333	2,291	4,744	31,881

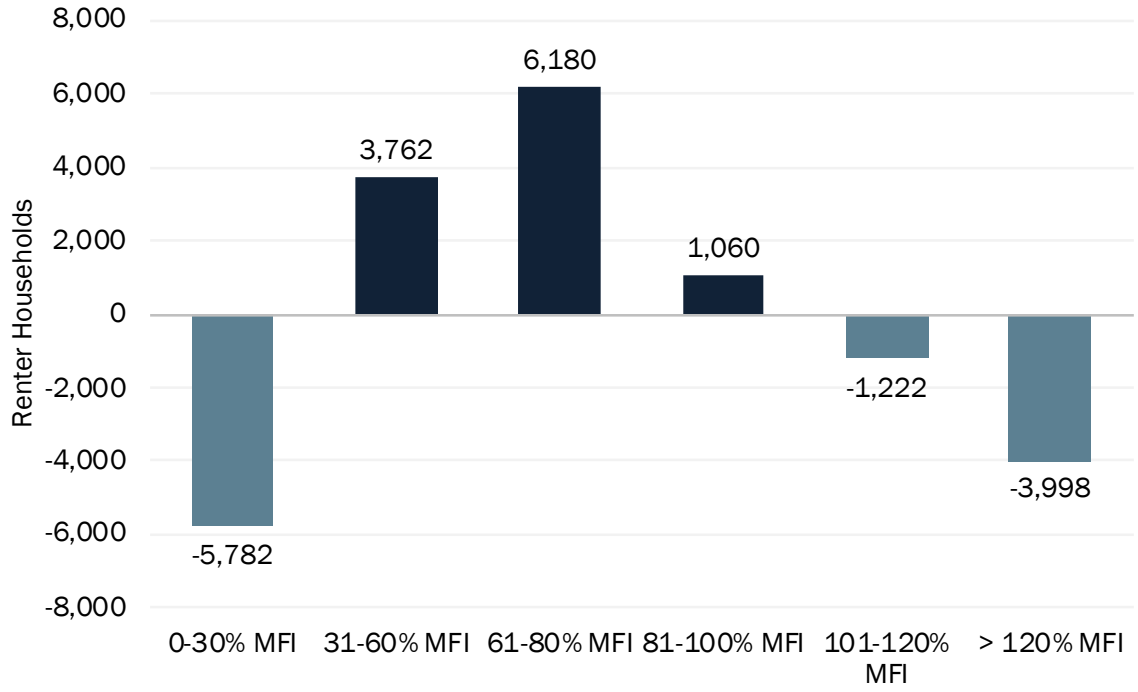
Source: ECONorthwest analysis of 2013-2017 ACS PUMS, HUD 2017 Median Family Income for Kitsap County for a family of four.
Note: Unit affordability by MFI level is calculated assuming 30% of household income goes toward housing. This table excludes households with no reported income and households with no reported housing costs.

As the exhibit demonstrates, there are 8,270 renter households in Kitsap County with incomes under 30 percent of MFI (cell H2), but there are only 2,488 occupied units with rents that would be considered affordable to those households (cell B8). Of these 2,488 affordable units, 1,845 are occupied by renters in this income range (cell B2). The rest of these units are occupied by renter households of higher incomes.

The difference in total units available at the less than 30 percent of MFI income level, 2,488 (cell B8), and the number of households at this income level 8,270 (cell H2), results in a mismatch and deficit of 5,782 units needed affordable to this income level. This mismatch continues across the MFI spectrum, as shown in Exhibit 32 below. This chart demonstrates that some MFI levels have a surplus of housing compared to the numbers of renter households with incomes in that range. We calculate the surplus/deficit as the number of renter households in an income level less the units affordable to that income level.

[10] The estimate of households in each of the renter and income bins is calculated using 2017 Census Public Use MicroSample (PUMS) data and the Department of Housing and Urban Development's 2017 median family income definition for Kitsap County. The PUMS data provide an estimate for the number of households in a geography with certain characteristics, including gross rent, household income, and the number of bedrooms in the housing unit. Using this data, we are able to crosswalk these estimates to the county level and calculate the number of households in each rental affordability bin and income bin. We used the HUD definition of affordability and adjusted median family income to account for the differences in housing units. These data exclude vacant units and exclude renter households where rent is zero or where the household has no recorded housing costs.

Exhibit 32. Surplus or Deficit of Housing by MFI Level, Kitsap County, 2013–2017[11]



Source: ECONorthwest analysis of 2013-2017 ACS PUMS, HUD 2017 Median Family Income for Kitsap County for a family of four.
Note: Unit affordability by MFI level is calculated assuming 30% of household income goes toward housing.

Kitsap County does not have many luxury rental units. This means that higher income households must "rent down," and compete with lower-income households for available rental stock. Landlords may choose higher-income applicants over lower-income applicants since they have a higher rent-to-income ratio and more cushion to pay the rent. Thus, the lack of higher-cost housing for higher-income households can put pressure on lower-income households too. As these exhibits demonstrate, Kitsap County's current housing inventory has:

- A deficit of 5,782 rental units affordable to households earning less than 30 percent of MFI (under $23,135 per year).
- A surplus of 3,762 rental units affordable to households earning between 31 and 60 percent of MFI (between $23,136 and $46,271 per year).
- A surplus of 6,180 rental units affordable to households earning between 61 and 80 percent of MFI (between $46,272 and $61,695 per year).
- A surplus of 1,060 rental units affordable to households earning between 81 and 100 percent of MFI (between $61,696 and $77,119 per year).
- A deficit of 1,222 rental units affordable to households earning between 101 and 120 percent of MFI (between $77,120 and $92,542 per year).
- A deficit of 3,998 rental units affordable to households earning more than 120 percent of MFI (greater than $92,543).

[11] See footnote 10.

Regulated Affordable Housing

A critically important component of any housing stock is the regulated affordable housing that serves the County's lowest income households. This type of housing is rent- or income-restricted so that it is affordable to households making below a certain income level, depending on the type of program. Incomes are generally restricted to 30, 50, 60, or 80 percent of the area median family income (between $23,135 and $65,540 in Kitsap County). There are many types of regulated affordable housing properties and units. However, most areas do not have enough regulated affordable housing to meet all the needs of low-income households; nationally, only one of every four eligible households receives public housing assistance.[12]

Affordable Rental Housing

Nationally, the largest source of affordable housing funding is the Low-Income Housing Tax Credit (LIHTC) program, which is run through the U.S. Internal Revenue Service. Each year, states receive an allocation of tax credits from the IRS and distribute these credits to affordable housing properties through annual applications for funding. These properties then sell the tax credits to entities looking to reduce their tax burdens, like banks or insurance companies. It is a strong public-private-partnership program responsible for creating millions of affordable housing units across the country. In Washington, the housing agency that distributes tax credits is the Washington State Housing Finance Commission (WSHFC).

We combined data received through a public information request from the WSHFC's multifamily housing database with information on the regulated housing stock from the Puget Sound Regional Council (received in November 2019), Kitsap County (updated in March 2018) and the Bremerton Housing Authority (updated in October 2018). We did our best to un-duplicate properties by looking at names, numbers of units, and addresses, and omitted market-rate units to focus solely on regulated affordable units. While we cannot guarantee that the data is complete, it likely captures a robust share of the total rent-restricted affordable housing across Kitsap County. It should be noted that these units are captured in the rest of the inventory describing the housing stock by size, rent price, age, tenure, and vacancy status.

According to this data, there are about 100 regulated affordable housing properties across the County.[13] These 100 properties contain 4,205 units, and range from scattered site homes and duplexes, to large multifamily complexes containing hundreds of units.

[12] National Low Income Housing Coalition (NLIHC). 2019. "HUD Reports that 8.3 Million Very Low Income Households Have Worst Case Housing Needs." Available from: https://nlihc.org/resource/hud-reports-83-million-very-low-income-households-have-worst-case-housing-needs

[13] Two of these properties with 24 units may have had an affordability restriction expire. Data is insufficient to determine whether there are multiple affordability restrictions and whether any still remain.

Exhibit 33. Regulated Affordable Housing Is Largely Found in Bremerton

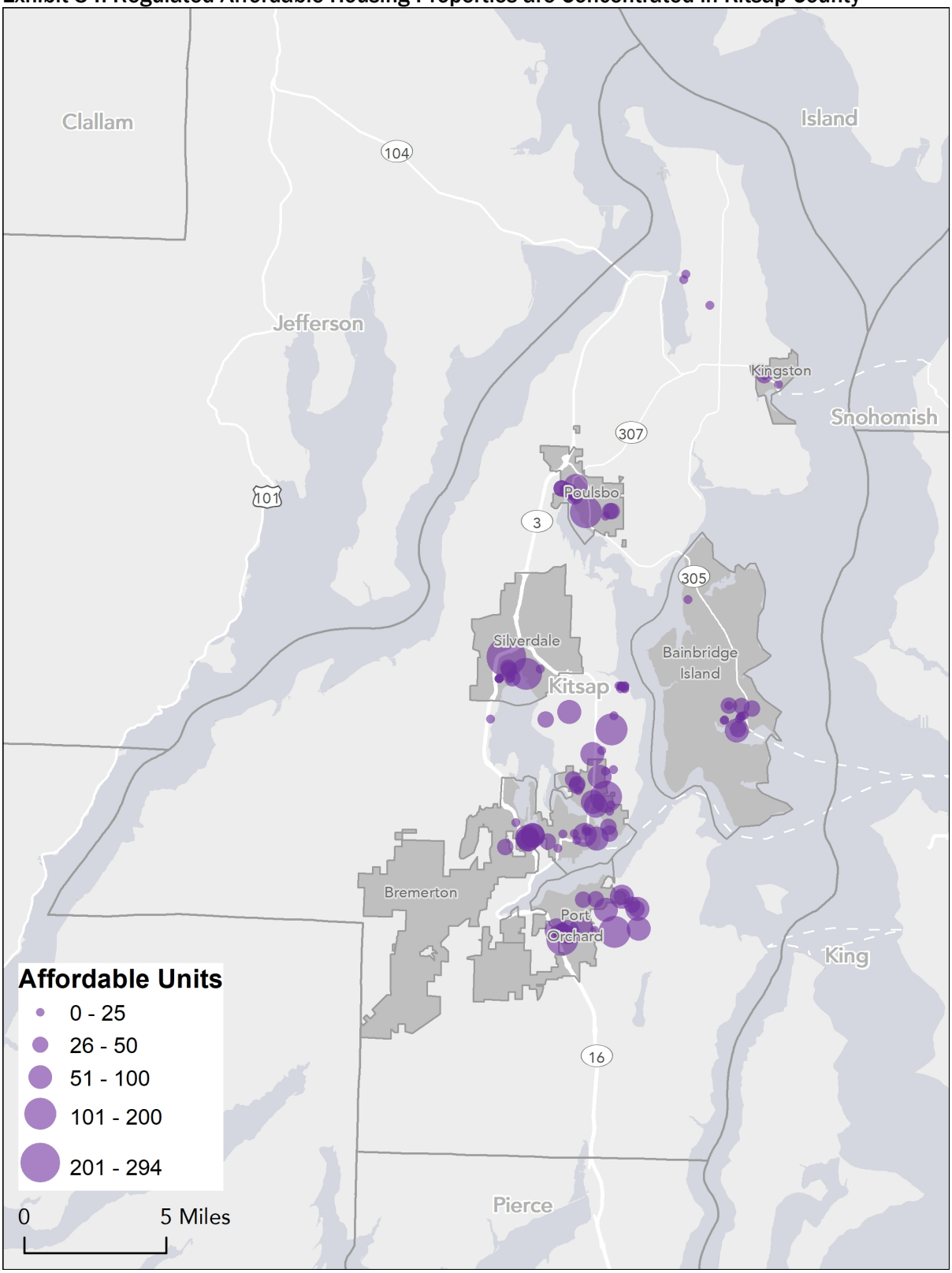
	Location	Number of Properties	Percent of Total	Number of Units	Percent of Total
	County	1	1%	15	~0%
Principle Cities	Bainbridge Island	14	14%	287	7%
	Bremerton	39	39%	1856	44%
	Port Orchard	18	18%	798	19%
	Poulsbo	12	12%	462	11%
Uninc. Kitsap County	Kingston	7	7%	109	3%
	Silverdale	9	9%	678	16%
	Grand Total	100	100%	4,205	100%

Source: ECONorthwest analysis of WSHFC, PSRC, Kitsap County, and Bremerton Housing Authority data.

Exhibit 33 above lists these properties and units by location in Kitsap County and Exhibit 34 displays these properties on a map. Location data was available for all but two properties and 15 affordable homes that are scattered across the county.

The City of Bremerton accounts for about 39 percent of all properties and 44 percent of all units and Silverdale accounts for about nine percent of all units and 16 percent of all units. This means these cities have larger properties than other areas. Bainbridge Island accounts for 14 percent of all properties but only seven percent of all units, and Kingston is seven percent of properties but only three percent of units, meaning properties in these locations are smaller on average. Port Orchard and Poulsbo are nearly equally distributed.

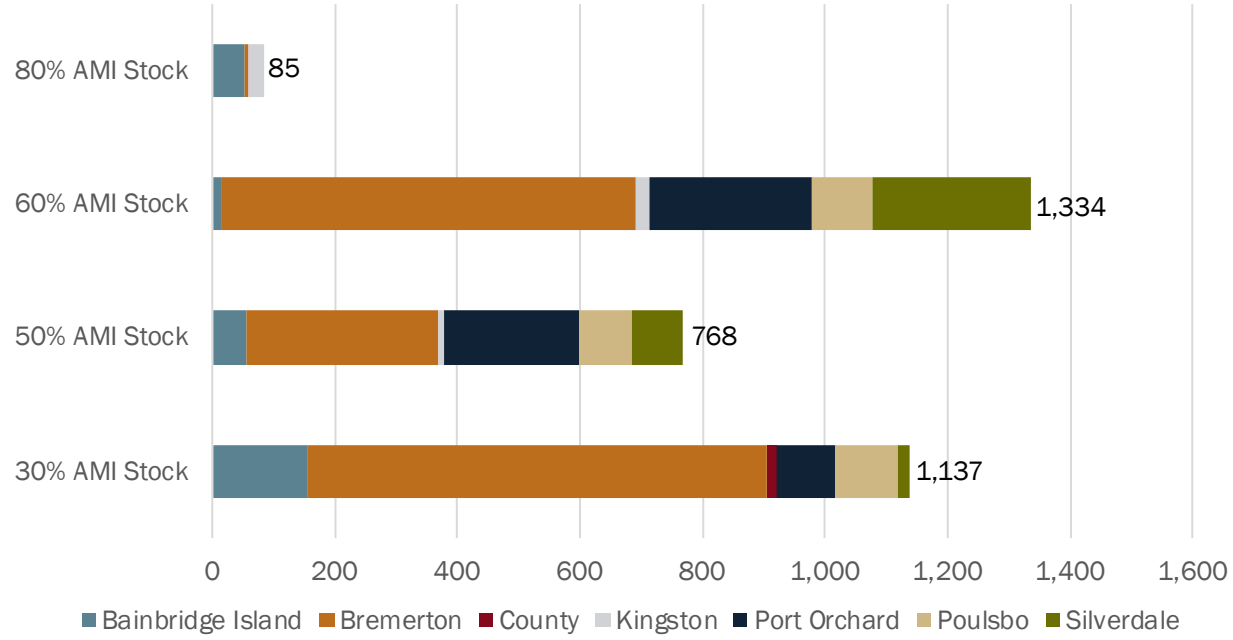
Exhibit 34. Regulated Affordable Housing Properties are Concentrated in Kitsap County



Source: ECONorthwest analysis of WSHFC, PSRC, Kitsap County, and Bremerton Housing Authority data.
Notes: Map does not show properties lacking location data. Data are based on WSHFC, PSRC, Kitsap County, and Bremerton Housing Authority's locations and may not align with the Census Designated Place boundaries used in other exhibits.

As the map above and the data in Exhibit 35 demonstrate, the distribution of affordable housing is not even across the county. The City of Bremerton has the largest share of deeply affordable rental housing stock—that which is restricted to be affordable for households earning 0–30% of MFI, and the largest share of units affordable to 50–60% MFI (the two largest income groups). In contrast, Bainbridge Island has the largest share of housing for households earning 60–80% of MFI, which is the smallest income group. Silverdale and Port Orchard have very little housing at either end of the income spectrum; most of their housing is restricted to be affordable to households earning between 30% and 80% of MFI.

Exhibit 35. Bremerton has the Highest Share of 0–30% MFI Affordable Housing



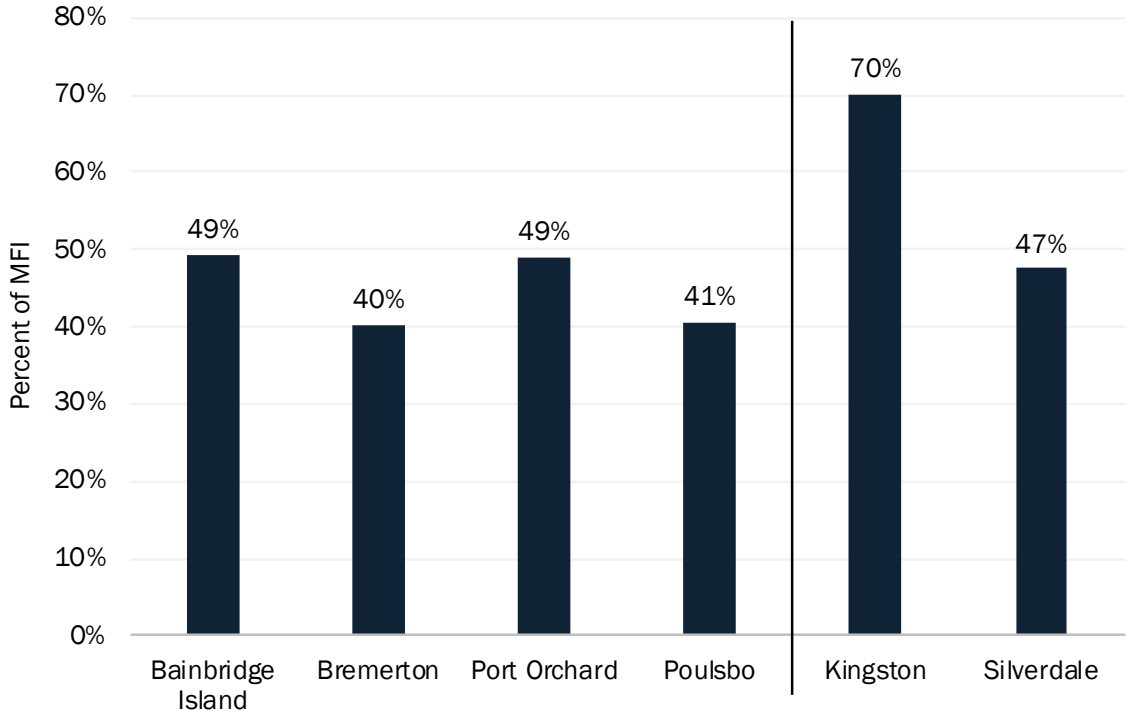
Location	Afford-able Units*	Restrict < 30% MFI	Share of 30% stock	Restrict 31-50% MFI	Share of 31-50% stock	Restrict 51-60% MFI	Share of 51-60% stock	Restrict 61-80% MFI	Share of 61-80% stock
Bainbridge Island	273	153	13%	55	7%	14	1%	51	60%
Bremerton	1,750	752	66%	314	41%	676	51%	8	9%
Kitsap County	15	15	1%	0	0%	0	0%	0	0%
Kingston	58	0	0%	10	1%	22	2%	26	31%
Port Orchard	581	97	9%	218	28%	266	20%	0	0%
Poulsbo	288	102	9%	86	11%	100	7%	0	0%
Silverdale	359	18	2%	85	11%	256	19%	0	0%
Grand Total	3,324	1,137	100%	768	100%	1,334	100%	85	100%

Source: ECONorthwest analysis of WSHFC, PSRC, Kitsap County, and Bremerton Housing Authority data.
Note: *This is the total number of units for which income data was available – total differs from that of Exhibit 33. Percent show each location's share of the total rental housing stock affordable to each income level. Data are based on WSHFC, PSRC, Kitsap County, and Bremerton Housing Authority's locations and may not align with the Census Designated Place boundaries used in other exhibits.

Exhibit 36 below displays this information another way, by calculating the weighted average rent restriction for all the properties in each location. Again, it is clear that Bremerton has the

most deeply affordable rent-restricted housing, in addition to having the most rent-restricted units. For all the properties located in Bremerton, their weighted average rent restrictions average to only 40% of MFI. Most of the affordable housing stock across Kitsap County is restricted to very low incomes, with Kingston as the exception. There are only 58 units of rent restricted affordable housing in Kingston: 26 units are available to 80% MFI, 22 units to 60% MFI, and 10 units to 50% MFI, which skews its average upward.[14]

Exhibit 36. Weighted Average Rent Restrictions are Lowest in Bremerton



Source: ECONorthwest analysis of WSHFC, PSRC, Kitsap County and Bremerton Housing Authority data.
Notes: Data only captures properties for which income data was available. Values shown are location averages of property weighted average rent restriction. Data are based on WSHFC, PSRC, Kitsap County, and Bremerton Housing Authority's locations and may not align with the Census Designated Place boundaries used in other exhibits.

Exhibit 37 below displays the data available by owner/operator. Data on owner/operator was unavailable for about eight percent of the properties in the combined dataset. Housing Kitsap is the largest provider of affordable housing in the County, operating 29 percent of all properties (26 percent of all units), followed by the Bremerton Housing Authority with 12 percent of all properties (13 percent of all units).

[14] Weighted average rent restriction calculation is: [(# of 30% units * 0.3) + (# of 50% units * 0.5) + (# of 60% units * 0.6) + (# of 80% units * 0.8)] / [total restricted units]

Exhibit 37. Housing Kitsap is the Largest Provider of Regulated Affordable Housing in Kitsap County

Organization	Number of Properties	Number of Units	Average Weighted Average Restriction
Housing Kitsap (KCCHA)	29	1,091	43%
Bremerton Housing Authority	12	544	36%
Housing Resources Bainbridge	10	189	55%
Kitsap Community Resources	6	36	33%
Hearthstone Housing Foundation	3	555	59%
Port Gamble S'Klallam Housing Authority	3	18	70%
Paul Garcia Investments	2	77	57%
Low Income Housing Institute	2	108	46%
Shelter Resources	2	72	56%
Olympic Management Company	2	160	43%
Bonaventure Senior Living	1	28	50%
Episcopal Retirement Communities	1	16	63%
Kitsap Mental Health Services	1	16	34%
Village Green Kingston Assoc	1	35	N/A
Inland Empire Residential Resources	1	8	50%
Viewcrest Alliance Apartments	1	300	57%
Agape Unlimited	1	24	50%
Mercy Housing Northwest	1	42	N/A
Gilbarg & Oschin (Ogo Associates)	1	51	30%
Catholic Housing	1	78	37%
Marion Court Associates	1	35	N/A
Northwest Association for Housing Affordability	1	40	55%
Assisted Living Concepts	1	8	50%
Kitsap Commercial Group	1	24	59%
Catholic Community Services of Western Wa.	1	25	30%
Waterside Properties	1	50	30%
West Sound Treatment Center	1	8	50%
Ron Montplaisir	1	29	30%
Foundation Property Management	1	38	30%
Group Action for Peninsula People	1	6	30%
Community Housing Assistance Program	1	120	56%
None Listed	*8*	*399*	55%
Grand Total	100	4,205	45%

Source: ECONorthwest analysis of WSHFC, PSRC, Kitsap County and Bremerton Housing Authority data.
Note: Data only captures properties for which income data was available. Values shown are owner/operator averages of property weighted average rent restriction.

The table in Exhibit 37 also shows the weighted-average rent restriction, averaged for each owner/operator. As can be seen, Kitsap Community Resources and Bremerton Housing Authority have very deeply affordable properties with weighted average rent restrictions of 33% of MFI and 36% of MFI, respectively. As the table shows, there are also a number of

providers with just one rent-restricted property in the county that is deeply affordable (weighted average rents affordable to 30% MFI). These include Catholic Community Services of Western Washington, Kitsap Mental Health Services, Group Action for Peninsula People, Waterside Properties, Foundation Property Management, Waterside Properties, and sponsors Ron Montplaisir and Ogo Associates.

We also used data from the U.S. Department of Housing and Urban Development (HUD) which evaluates HUD programs across all these housing providers and locations in the County. According to HUD, there are 342 units of public housing serving approximately 763 people in Kitsap County. HUD programs serve some of the lowest income households in the country and are structured so tenants pay very little of their incomes on housing, as shown in Exhibit 38.

Exhibit 38. HUD-Funded Programs Serve Extremely Low Incomes

Program	Average Annual Income	Average Monthly HUD Expenditure	Average Monthly Tenant Expenditure
Public Housing	$16,500	$686	$369
Housing Choice Vouchers	$13,530	$718	$352
Project-Based Section 8	$12,790	$600	$290

Source: U.S. Department of Housing and Urban Development (HUD), 2019.

Affordable Homeownership Housing

In addition to rental housing, lower-income households in Kitsap County have some opportunities for homeownership. Homeownership opportunities for lower income households can be limited. This is because, depending on the type of assistance, households may need incomes high enough to qualify for a traditional mortgage from a private bank, but low enough to qualify for assistance, which may exclude a large share of would-be homeowners.

According to data provided by the County and service providers, affordable homeownership programs are offered by Housing Kitsap, the Bremerton Housing Authority, the Housing Resources Board, Habitat for Humanity, and Community Frameworks. These programs can help lower-income households access the wealth building opportunities traditionally offered via homeownership. Exhibit 39 below offers details of a few of these programs.

Exhibit 39. Affordable Homeownership Programs in Kitsap County

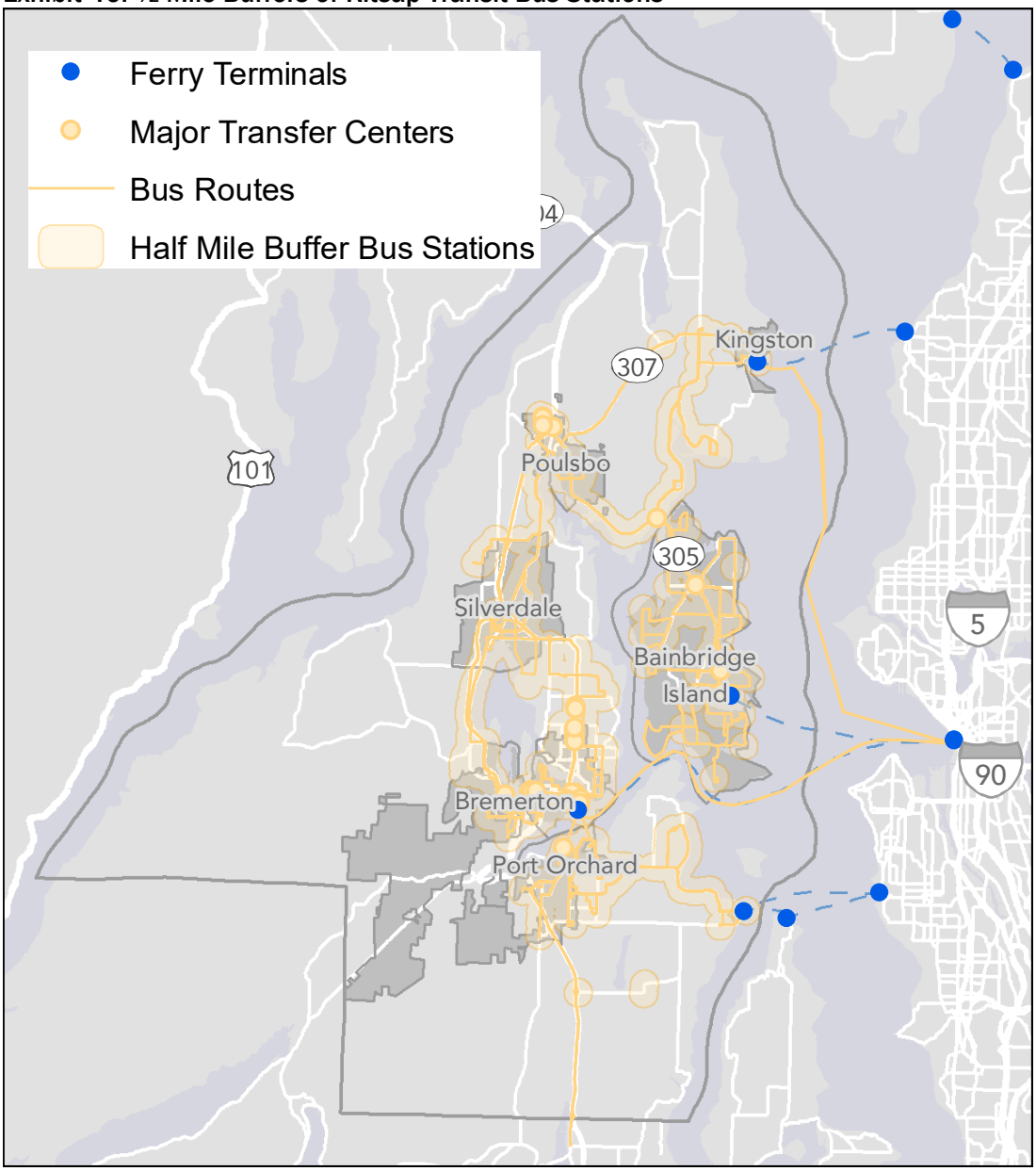
Organization	Types of Assistance	Participant Details
Housing Kitsap	In conjunction with USDA mortgage assistance via low-interest loans, Housing Kitsap provides Technical Assistance for Construction and down payment assistance.	▪ Serves 22 households per year ▪ Must earn below 80% of MFI ▪ Loans are about $225,000 with some down payment assistance (max 20% of the loan amount)
Bremerton Housing Authority	Mortgage payment assistance for voucher holders for up to 15 years, participants must be enrolled in the Family Self Sufficiency Program.	▪ 8 households in the past four years ▪ Most earn below 30% of MFI ▪ Average home sale was $180,000
Community Frameworks	Down payment assistance for five years and deferred, low-interest loans for the duration of the mortgage. Payments are deferred until the loan sale. Also offer sweat equity for rehabilitated housing programs.	▪ 26 households since 2013 ▪ Most earn below 80% of MFI ▪ Assistance totaling over $952,000 since 2013; average of $36,600 per household

Sources: Staff commentary from each organization

E. Access to Transit and Employment Centers

Kitsap County is auto-centric. Kitsap Transit operates countywide bus service and ferry service to Seattle and Port Orchard. There are a few other private transit shuttles focused on shipyard and navy workers. However, the public transit system, particularly buses, is highly geared toward commuters and has long headways outside of peak commuting hours. Buses do not run on Sundays, and many routes do not run on Saturdays either. Furthermore, as seen in Exhibit 40 Kitsap Transit essentially serves the urban population centers in Kitsap County with essentially no service provided to Eastern Kitsap.

Exhibit 40. ½ Mile Buffers of Kitsap Transit Bus Stations



Source: Kitsap Transit 2019, Washington State Department of Transportation.

Exhibit 41 demonstrates there are 48,574 housing units across Kitsap County located within a half mile of a Kitsap Transit bus stop.

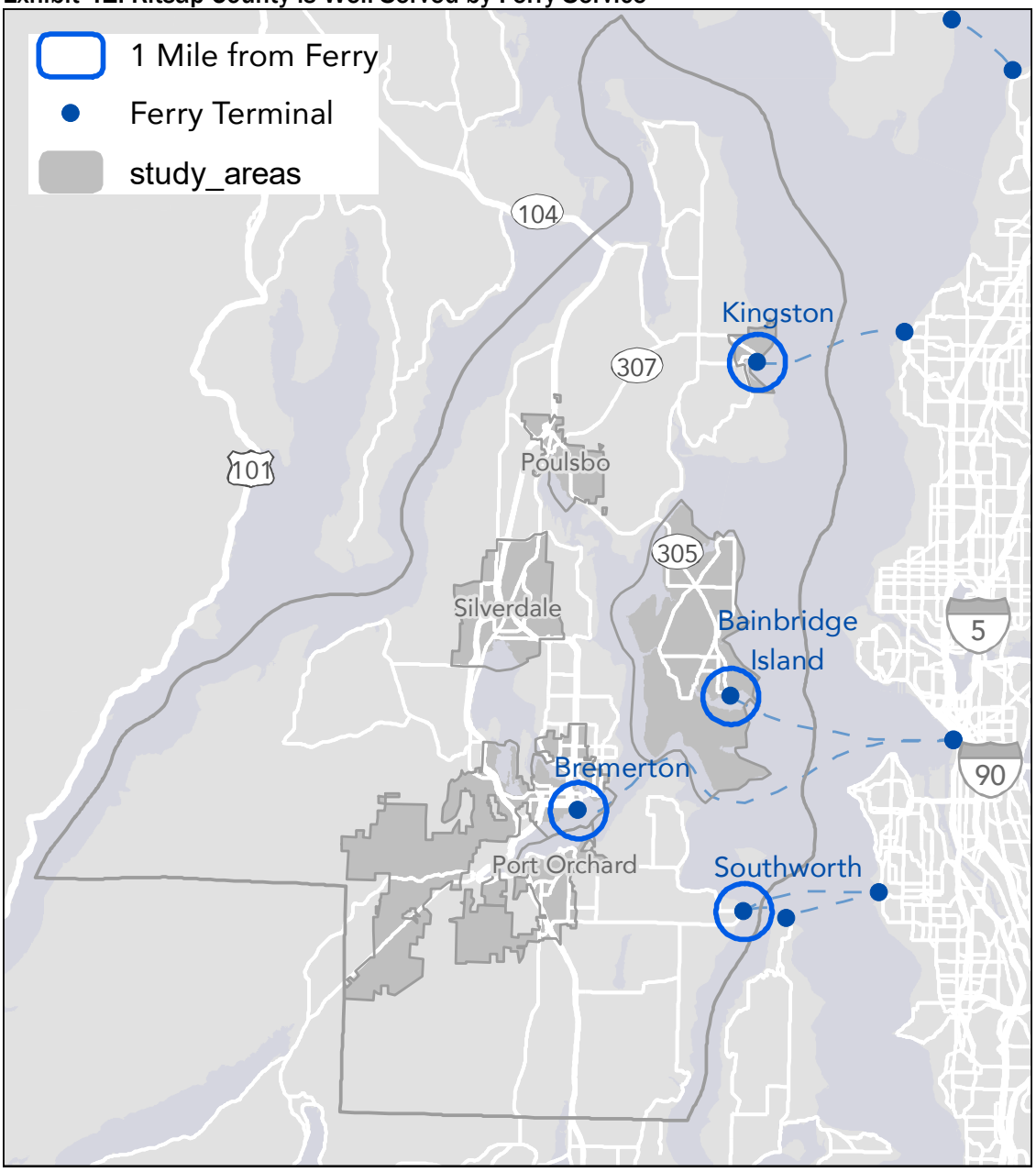
Exhibit 41. Most Housing Within 1/2 Mile buffer of Transit is Single Family

	Location	Unit Type	Number of Units Near Transit
	Kitsap County Total		48,574
Kitsap County	Bainbridge Island	Mobile Home	137
		Multifamily	119
		Single-Family	6,420
	Bremerton	Mobile Home	131
		Multifamily	1339
		Single-Family	8,151
	Port Orchard	Mobile Home	120
		Multifamily	142
		Single-Family	2,336
	Poulsbo	Mobile Home	32
		Multifamily	32
		Single-Family	2,789
Unincorporated Kitsap County	Silverdale CDP	Mobile Home	99
		Multifamily	86
		Single-Family	3,603
	Kingston	Mobile Home	30
		Multifamily	27
		Single-Family	479
	Other Areas	Mobile Home	1,707
		Multi-Family	520
		Single-Family	20,523

Source: Washington State Department of Transportation, Kitsap County Assessor 2019.
Note: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown, and is a rough approximation for the remaining Unincorporated Kitsap County area.

As Exhibit 42 demonstrates, Kitsap Transit operates foot ferries across Sinclair Inlet (between Bremerton and Port Orchard), and "fast ferries" to Seattle from Kingston and from Bremerton. The Washington State Department of Transportation operates commuter ferries to Seattle from Bainbridge Island and from Bremerton, and from Kingston to Edmonds. Households near these ferry terminals have greater access to jobs, amenities, and retail and commercial services throughout Puget Sound.

Exhibit 42. Kitsap County is Well-Served by Ferry Service



Source: Washington State Department of Transportation, 2019.

Exhibit 43 below demonstrates that there are 4,837 housing units across Kitsap County located within one mile from a ferry terminal. The recent expansion of the "fast ferry" service by Kitsap Transit has increased the development of multifamily residences, especially considering the current development happening in Downtown Bremerton as discussed in Exhibit 13 and Exhibit 14. The immense access that living near a ferry creates is benefiting 1,547 households on Bainbridge, 2,113 households in Bremerton, and 1,177 in Kingston and Southworth combined. Bremerton sees the most benefit to households living in multifamily housing.

Exhibit 43. Most Housing Within One Mile of Ferry Terminals is Single-Family

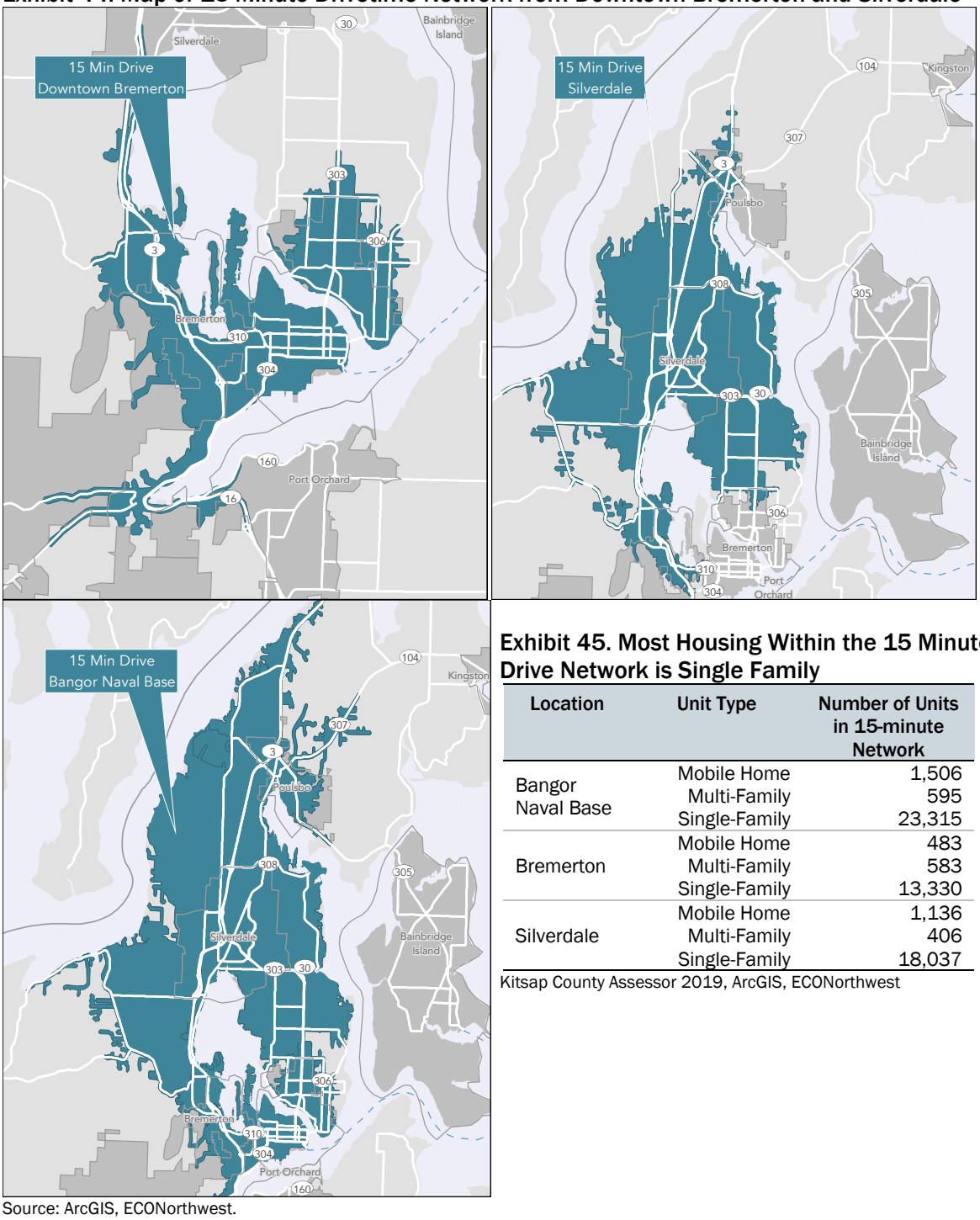
Location	Unit Type	Number of Units Near Ferries
Bainbridge Island	Mobile Home	9
	Multifamily	111
	Single-Family	1,427
Bremerton	Mobile Home	6
	Multifamily	407
	Single-Family	1,700
Other Areas	Mobile Home	57
	Multifamily	32
	Single-Family	1,088
Kitsap County Total		4,837

Source: Washington State Department of Transportation 2019; Kitsap County Assessor, 2019.
Note: Bainbridge Island Ferry Terminal, top-left; Kingston Ferry Terminal, top-right; Bremerton Ferry Terminal, bottom-left; Southworth Ferry Terminal, bottom-right. "All other areas" is the difference between the County total and the five primary cities.

Exhibit 44 display maps and lists the number of housing units within the 15-minute network drive time from the three major employment centers: Downtown Bremerton (including the Naval Shipyard), Downtown Silverdale, and Bangor Naval Station. This analysis takes into consideration the road networks leading to major employment and activity hubs as if travel was occurring on a Friday evening commute. However, drive times are known to have seasonal fluctuations and Kitsap County also experiences increased stress on road networks when Naval

ships come to port. Housing units located within this network have increased access to the jobs and retail amenities in Kitsap's economic centers.

Exhibit 44. Map of 15 Minute Drivetime Network from Downtown Bremerton and Silverdale



Source: ArcGIS, ECONorthwest.

Exhibit 45. Most Housing Within the 15 Minute Drive Network is Single Family

Location	Unit Type	Number of Units in 15-minute Network
Bangor Naval Base	Mobile Home	1,506
	Multi-Family	595
	Single-Family	23,315
Bremerton	Mobile Home	483
	Multi-Family	583
	Single-Family	13,330
Silverdale	Mobile Home	1,136
	Multi-Family	406
	Single-Family	18,037

Kitsap County Assessor 2019, ArcGIS, ECONorthwest

As demonstrated in Exhibit 45, the vast majority of housing surrounding these major employment centers is single-family stock. Due to its rural nature, the Bangor Naval Base has

the largest footprint of the drivetime basins and as a result has the most units. Furthermore, the characteristics of the units in the basin fit the distribution of unit types throughout the County since largely, the Eastern portion of Kitsap County is more rural single-family residences. These areas are also not as easily serviced by Kitsap Transit as explained in Exhibit 40. As such, a reliance on single occupant travel in automobiles is much more likely here. These travel costs can often reflect a 'hidden cost' of housing.

Because the majority of homes near transit, ferries, and major employment centers is single-family stock (and predominantly for sale), and because homeownership remains out of reach for most low-income households and marginalized communities, these households are also locked out of important access to jobs, opportunity, amenities, and services in the region.

F. Recent Supply Trends

Data from PSRC demonstrates that Kitsap County and its jurisdictions are seeing new housing development, albeit slowly. PSRC collects residential building permit records that authorize new construction and demolition. As demonstrated in Exhibit 46 below, in the year 2017, a total of 1,008 *net new units* were added across the entire County.

Exhibit 46. Net New Housing Units by Location and Type, 2017

	Kitsap County	Bainbridge Island	Bremerton	Port Orchard	Poulsbo
Total New units permitted	1,165	124	143	78	195
Total units lost through demolition	-157	-22	-6	-16	0
Net New Units	**1,008**	**102**	**137**	**62**	**195**
Permits by Type					
Net Single-Family units	753	44	103	60	102
Net Accessory Dwelling Units and Duplex Units	46	14	6	0	2
Net 3- and 4-family units	3	3	0	0	0
Net units in 5- to 9-family structure	14	14	0	0	0
Net units in 10- to 19-family structure	59	18	0	0	0
Net units in 20- to 49- family structure	118	0	27	0	91
Net units in a 50+ family structure	0	0	0	0	0
Net Mobile and Modular home units	15	9	1	2	0

Source: Puget Sound Regional Council, 2017.

Unsurprisingly, the majority of this newly built housing is single-family. Across the whole County, around 74 percent of net new units built are single-family units. In Port Orchard, about 97 percent of net new units are single-family units. This percentage is lower on Bainbridge Island, and Poulsbo, but single-family units still made up 43 percent and 53 percent of net new units, respectively.

Single Family Development

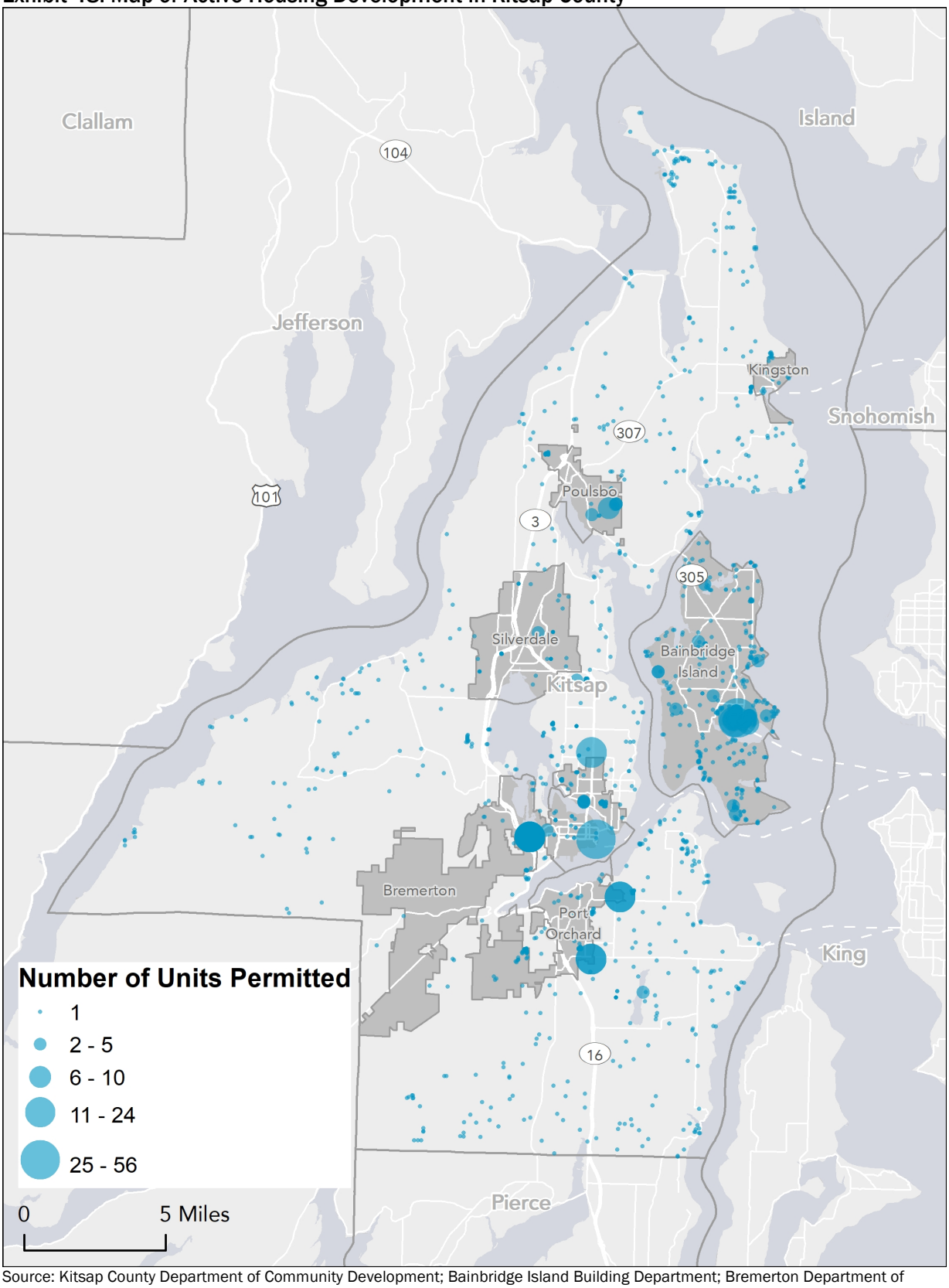
As for current housing construction, Exhibit 47 shows that active construction as of 2019 is still lower than the pace of the 2000s. An expected 1,345 units should be completed in the near future with about 56 percent as single-family residences. Multifamily residences are largely being constructed in Bremerton, which accounts for over 90 percent of all the units being constructed within the city. The map in Exhibit 48 displays where multifamily units are planned or under construction.

Exhibit 47. Active Permits by Type and Location

Location	Unit Type	Number of Permits	Number of Units
Bainbridge Island	Mobile Home	9	9
	Multifamily	18	223
	Single-Family	401	423
	TOTAL	428	655
Bremerton	Mobile Home	0	0
	Multifamily	11	273
	Single-Family	114	119
	TOTAL	125	392
Port Orchard	Mobile Home	0	0
	Multifamily	4	79
	Single-Family	78	78
	TOTAL	82	157
Poulsbo	Mobile Home	0	0
	Multifamily	1	6
	Single-Family	33	37
	TOTAL	34	43
Kingston	Mobile Home	0	0
	Multifamily	0	0
	Single-Family	15	15
	TOTAL	15	15
Silverdale	Mobile Home	4	5
	Multifamily	0	0
	Single-Family	77	78
	TOTAL	81	83
KITSAP COUNTY TOTAL	Mobile Home	13	14
	Multifamily	34	581
	Single-Family	718	750
	TOTAL	765	1,345

Source: Kitsap County Department of Community Development; Bainbridge Island Building Department; Bremerton Department of Community Development; Poulsbo Building Department; Port Orchard Department of Community Development.
Note: "All other areas" is the difference between the County total and the five primary cities.

Exhibit 48. Map of Active Housing Development in Kitsap County



Source: Kitsap County Department of Community Development; Bainbridge Island Building Department; Bremerton Department of Community Development; Poulsbo Building Department; Port Orchard Department of Community Development.

Multifamily Development

In the last five and a half years, fourteen multifamily developments were built in Kitsap County. Thirteen of these developments were built in the primary cities. Bremerton had the most developments with five, followed by Bainbridge Island with four, Port Orchard with three, and Poulsbo with one. The remaining multifamily development was built in the City of Kingston, in north Kitsap County. No new developments have been built in Silverdale in the past five and a half years. Exhibit 49 provides details on the newer multifamily developments that have data available from CoStar as of October 2019.[15]

Exhibit 49. Newer Multifamily Developments in Kitsap County

Bainbridge Island

Blis – 747 Hanami Ln. NE – Wing Point Submarket

Year built: June 2019
Total units: 114
Vacancy rate: 68.4%
Parking spaces: Unknown

Beds	Units	Avg. Sq. Ft.	Rent per Sq. Ft.	Average Rent
Studio	13	517	$3.28	$1,700
1-Bed	65	770	$3.06	$2,350
2-Bed	24	991	$2.73	$2,700
3-Bed	12	1,601	$2.56	$4,100

The Juniper – 221 Wyatt Way NE – Winslow Submarket

Year built: 2015
Total units: 12
Vacancy rate: 8.3%
Parking spaces: Unknown

Beds	Units	Avg. Sq. Ft.	Rent per Sq. Ft.	Average Rent
1-Bed	12	1,380	$2.50	$3,450

[15] CoStar is a provider of commercial real estate information.

Bremerton

606 Apartments – 606 Burwell St. – Downtown Bremerton

Year built: 2016
Total units: 71
Vacancy rate: 2.8%
Parking spaces: Unknown

Beds	Units	Avg. Sq. Ft.	Rent/Sq. Ft.	Avg. Rent
Studio	4	369	$3.39	$1,250
1-Bed	56	600	$2.42	$1,450
2-Bed	11	769	$2.41	$1,850

Spyglass Hill Apartments – 646 Highland Ave. – Downtown Bremerton

Year built: 2017
Total units: 87
Vacancy rate: 4.6%
Parking spaces: 48 covered spaces

Beds	Units	Avg. Sq. Ft.	Rent/Sq. Ft.	Avg. Rent
Studio	5	512	$2.52	$1,290
1-Bed	65	652	$2.46	$1,604
2-Bed	17	1,367	$1.77	$2,420

Insignia Apartment Homes – 1060 Insignia Loop – Northeast Bremerton

Year built: 2017
Total units: 162
Vacancy rate: 1.2%
Parking spaces: Unknown

Beds	Units	Avg. Sq. Ft.	Rent/Sq. Ft.	Avg. Rent
1-Bed	78	707	$2.08	$1,470
2-Bed	84	907	$1.83	$1,660

Port Orchard

The Sinclair – 414 SW Hayworth Dr. – South Sidney Plaza

Year built: November 2014
Total units: 126
Vacancy rate: 7.1%
Parking spaces: 220 surface spaces
Parking ratio: 1.75

Beds	Units	Avg. Sq. Ft.	Rent/Sq. Ft.	Avg. Rent
1-Bed	54	667	$1.89	$1,260
2-Bed	54	933	$1.53	$1,430
3-Bed	18	1,101	$1.41	$1,560

The Sidney – 487 Mansfield Ct. SW – Sidney Plaza

Year built: April 2014
Total units: 105
Vacancy rate: 1.0%
Parking spaces: Unknown

Beds	Units	Avg. Sq. Ft.	Rent/Sq. Ft.	Avg. Rent
1-Bed	36	728	$1.70	$1,240
2-Bed	63	977	$1.44	$1,400
3-Bed	6	1,288	$1.11	$1,430

Poulsbo and Kingston

Arendal Apartments – 21044 Viking Way NW, Poulsbo

Year built: October 2018
Total units: 91
Vacancy rate: 3.3%
Parking spaces: 174 surface spaces
Parking ratio: 1.91

Beds	Units	Avg. Sq. Ft.	Rent/Sq. Ft.	Avg. Rent
1-Bed	28	770	$2.11	$1,625
2-Bed	55	1,015	$1.78	$1,800
3-Bed	8	1,375	$1.54	$2,100

Village Green Senior Apartments – 26150 Dulay Rd. NE, Kingston

Year built: 2015
Total units: 34
Vacancy rate: 5.9%
Parking spaces: Unknown

Beds	Units	Avg. Sq. Ft.	Rent per Sq. Ft.
1-Bed	17	546	$1.31
2-Bed	17	761	$1.11

Source: CoStar.

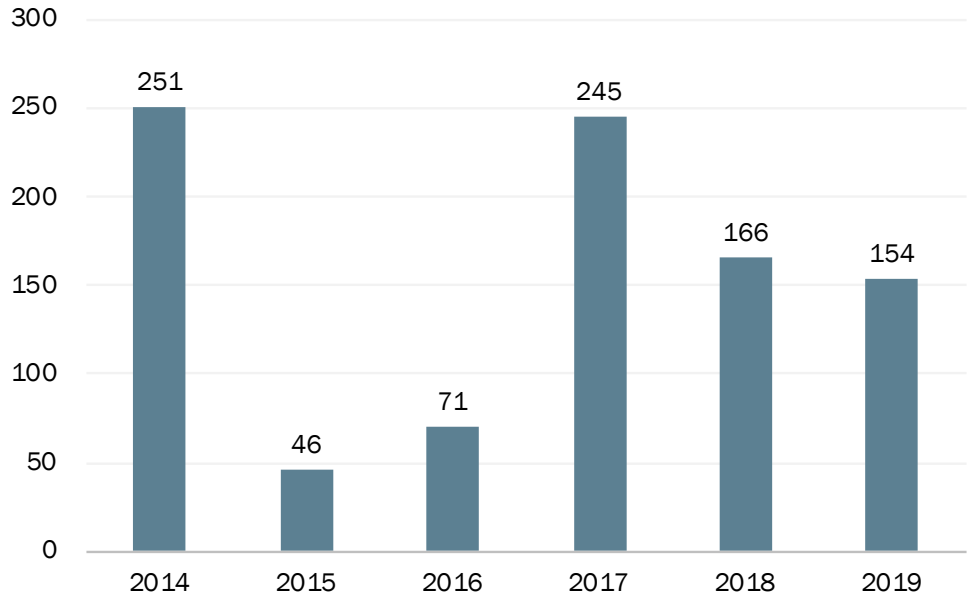
Additional properties that have been constructed lately but lacked full details in CoStar include the following:

- **Grow Community** on Bainbridge Island. Twelve units were completed in 2018 with another 18 units proposed at a date to be determined.
- **Apartments** at 390 Root Path on Bainbridge Island. Twenty units completed in 2014.
- **B Flat Apartments** in Downtown Bremerton. Twenty-five units delivered in July 2018.
- **Griffin Glen II** in Bremerton. Forty 1-bed affordable apartments have been built but the property is still under construction.
- **Olympic View Apartment Homes** in Port Orchard. Thirty-eight units built in October of 2018.

In total, over the past five years about 933 units were delivered in multifamily housing developments across Kitsap County.

Exhibit 50 below shows new multifamily units that have been delivered to the market in the past five years in Kitsap County through October 2019. The year 2019 was a slowdown from a big increase in deliveries in 2017.

Exhibit 50. Multifamily Unit Deliveries, Kitsap County, 2014–2019



Source: CoStar.

Exhibit 51 lists multifamily buildings with anticipated delivery in late 2019, 2020, or 2021. In the last three months of 2019, it is expected that 272 multifamily units will be delivered in Bremerton. There are several developments proposed across Kitsap County, on Bainbridge Island and in Poulsbo, but their delivery dates are not known. Among all anticipated deliveries, the majority are 4-star apartments of varying types such as low-rise, mid-rise, and garden.

Exhibit 51. Multifamily Unit Delivery by Anticipated Delivery Date, Late 2019, 2020, and 2021

City	Address	Units	Anticipated Delivery	Type
Bainbridge Island	304-306 Shepard Way NW	10	Proposed	4-Star Low-Rise Apts.
Bainbridge Island	428 Grow Ave. NE	18	Proposed—Phase 2	4-Star Low-Rise Apts.
Bremerton	4520-4568 Bay Vista Blvd.	216	October 2019	4-Star Garden Apts.
Bremerton	242 Burwell St.	56	October 2019	4-Star Mid-Rise Apts.
Bremerton	280 Washington Ave.	120	February 2021	4-Star Mid-Rise Apts.
Poulsbo	2068 NE Hostmark St.	69	October 2020	3-Star Garden Apts.
Poulsbo	367 NE Hostmark St.	25	Proposed	4-Star Low-Rise Apts.

Source: CoStar.
Note: CoStar provides star-rankings of commercial residential real estate on a 1-5 scale, generally based on amenities and quality of finishes.

G. Methods and Approach

Data Used in this Analysis

This analysis uses data from multiple sources, focusing on those that are well-recognized and reliable. One of the key sources for housing and household data is the U.S. Census. This memorandum primarily uses data from two Census sources:

- The **Decennial Census**, which is completed every ten years and is a survey of all households in the U.S. The Decennial Census is considered the best available data for information such as demographics (e.g., number of people, age distribution, or ethnic or racial composition), household characteristics (e.g., household size and composition), and housing occupancy characteristics. As of 2010, the Decennial Census does not collect more detailed household information, such as income, housing costs, housing characteristics, and other important household information. Decennial Census data is available for 2000 and 2010.
- The **American Community Survey (ACS)**, which is completed every year and is a *sample* of households in the U.S. From 2013 to 2017, the ACS sampled an average of 3.5 million households per year, or about 2.9% of the households in the nation. The ACS collects detailed information about households, including demographics (e.g., number of people, age distribution, ethnic or racial composition, country of origin, language spoken at home, and educational attainment), household characteristics (e.g., household size and composition), housing characteristics (e.g., type of housing unit, year unit built, or number of bedrooms), housing costs (e.g., rent, mortgage, utility, and insurance), housing value, income, and other characteristics.
- **Kitsap County Assessor,** which provides descriptive data on the housing stock in the County as well as recent sales data.
- **CoStar,** which provides data on multifamily units development over years.
- **PSRC,** which provided data for 1) Affordable Housing Units managed in the Puget Sound Metro and 2) completed building permits up to 2017.
- **Permits**, provide the active building permits within the last 5 years for each jurisdiction in Kitsap County including: Kitsap County Department of Community Development; Bainbridge Island Building Department; Bremerton Department of Community Development; Poulsbo Building Department; Port Orchard Department of Community Development.
- **Housing Kitsap and the Bremerton Housing Authority,** which provides data on the housing stock and rental prices for publicly subsidized housing in the County.
- **Washington State Housing Finance Commission,** which is the state agency responsible for funding and monitoring Washington's regulated affordable housing stock. The Commission provided data through a public information request, detailing past and

current regulated affordable housing properties that had received low-income housing tax credit financing from the Commission.

This memorandum uses data from the 2013–2017 ACS for Kitsap County. Where information is available and relevant, we report information from the 2000 and 2010 Decennial Census. Among other data points, this memorandum includes population, income, and housing price data from the Washington Office of Financial Management, the United States Department of Housing and Urban Development, the U.S. Bureau of Labor Statistics, and Zillow.

It is worth commenting on the methods used for the American Community Survey.[16] The American Community Survey (ACS) is a national survey that uses continuous measurement methods. It uses a sample of about 3.54 million households to produce annually updated estimates for the same small areas (census tracts and block groups) formerly surveyed via the decennial census long-form sample. It is also important to keep in mind that all ACS data are estimates that are subject to sample variability. This variability is referred to as "sampling error" and is expressed as a band or "margin of error" (MOE) around the estimate.

This memorandum uses Census and ACS data because, despite the inherent methodological limits, they represent the most thorough and accurate data available to assess housing needs. We consider these limitations in making interpretations of the data and have strived not to draw conclusions beyond the quality of the data.

[16] A thorough description of the ACS can be found in the Census Bureau's publication "What Local Governments Need to Know." https://www.census.gov/library/publications/2009/acs/state-and-local.html

ECONorthwest
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DATE: March 2020
TO: Kitsap County
City of Bremerton
FROM: ECONorthwest
SUBJECT: KITSAP-BREMERTON AFFORDABLE HOUSING INVENTORY AND MARKET ANALYSIS – APPENDIX C: HOUSING NEEDS ANALYSIS

Background and Purpose

As part of the *Affordable Housing Inventory and Market Analysis* for Kitsap County and the City of Bremerton, this technical memorandum provides a needs assessment for housing in Kitsap County and its major jurisdictions. Taken together with an overview of the housing providers in Kitsap County (Appendix A Housing Landscape Overview) and an assessment of the current housing inventory (Appendix B Housing Inventory), this memorandum steps through the drivers of housing supply, drivers of housing demand, and the future needs for housing of all types and price points across the county over the next 17 years. This memorandum is broken down into three sections:

1. **Part I** projects forecasted housing demand and capacity and discusses the gaps in housing supply versus projected need at different price points and geographies across the County.
2. **Part II** steps through the drivers of housing supply and drivers of housing demand in Kitsap County.
3. **Part III** steps through the methods, data, and approaches used in this analysis.

The findings herein support policy recommendations offered in the *Affordable Housing Inventory and Market Analysis* for the City and County to consider as they continue working to provide housing for all Kitsap residents. This memo is an appendix to the final report.

References in this Analysis

Throughout this analysis, we reference and display data for different geographies across Kitsap County. This section steps through the geographic boundaries used, and nomenclature used to address different planning jurisdictions. We also include a few affordable housing terms used herein.

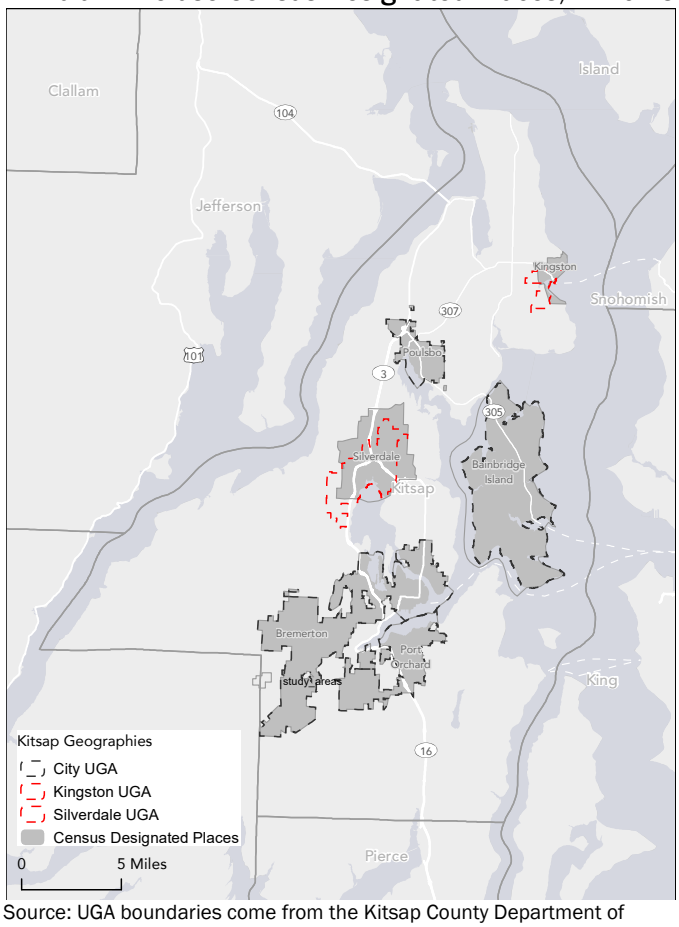
Cities and Census Designated Places vs Urban Growth Areas

Our analysis uses a variety of data sources. Because the U.S. Census Bureau is the main source of data for this memorandum and Appendix B Housing Inventory, we use its definitions of "Places" and "Census Designated Places" (CDPs) to analyze and display the data pertinent to this study. Places typically refer to cities, towns, villages, and boroughs, and are "a concentration of population either legally bounded as an *incorporated* place, or identified as a

Census Designated Place."[1] CDPs differ from places in that CDPs are "statistical geographic entities representing closely settled, *unincorporated* communities that are locally recognized and identified by name."[2] CDPs are statistically equivalent to incorporated places and they are the Census Bureau's best approximation for unincorporated areas across the country.

This analysis uses CDP boundaries instead of Urban Growth Areas (UGAs), which are the County's urban planning boundaries for Kingston and Silverdale, because the Census provides more data on these area's population and economic characteristics. The map in Exhibit A below shows the CDP boundaries in grey, the UGA boundaries for Bainbridge Island, Bremerton, Port Orchard, and Poulsbo in black, and the UGA boundaries for Kingston and Silverdale in red. As the map demonstrates, the UGA boundaries for Bainbridge Island, Bremerton, Port Orchard, and Poulsbo are aligned with the CDPs, and the Kingston and Silverdale UGAs have meaningful overlap. As such, they are a good approximation and allow us access to more data.

Exhibit A. We use Census Designated Places, Which Closely Align with Kitsap UGAs



Source: UGA boundaries come from the Kitsap County Department of Community Development. Census boundaries come from Census GIS files.

[1] U.S. Census Bureau, *Place* definition. Retrieved from: https://factfinder.census.gov/help/en/place.htm

[2] U.S. Census Bureau, *Census Designated Place (CDP) Program for the 2010 Census—Proposed Criteria*, 72 Federal Register 17326-17329. April 6, 2007. Retrieved from: https://www.govinfo.gov/content/pkg/FR-2007-04-06/pdf/E7-6465.pdf

Kitsap County Inclusive vs Kitsap County Jurisdiction

In this analysis, references to "Kitsap County," "Kitsap," or "the County" relate to the county as a whole, inclusive of the other planning areas (cities and urban growth areas). For example, if a statistic shows the average age for Kitsap County residents alongside the average age for residents of the City of Bremerton, the ages of Bremerton residents would be included in the Kitsap County average.

Recognizing the importance of providing data and analysis for the Kitsap County planning jurisdiction, we reference this geographic area as "Unincorporated Kitsap County." This excludes the city planning jurisdictions, and includes urban growth areas. Within this Unincorporated Kitsap County jurisdiction, we often show the Kingston and Silverdale CDPs (not UGAs), and then calculate a third boundary called "all other areas." These are mutually exclusive so the sum of the different CDPs and the "all other areas" will equal the Kitsap County total. The following exhibit demonstrates this math.

Exhibit B. Example Display of Kitsap County Geographies

Year	Kitsap County	Bainbridge Island	Bremerton	Port Orchard	Poulsbo	Unincorporated Kitsap County		
						Kingston	Silverdale	All Other Areas
Total	A	B	C	D	E	F	G	= A – B–C–D–E–F–G

We make every effort to include a note below each table and chart describing the boundaries. Readers should assume that in-text references to "Kitsap County" or "the County" are inclusive of all other jurisdictions within the County. At times, we further clarify this point by referencing residents "across the County" or businesses "throughout the County," or we will discuss "Kitsap County as a whole," or a statistic for "the entire County."

Housing, Finance, and Development Terms Used

Affordable Housing. Regulated affordable housing that is income- or rent-restricted to ensure the housing is occupied by households earning a certain income. Regulations are set according to the types of funding used to develop the housing, such as the Low-Income Housing Tax Credit, or U.S. Housing and Urban Development (HUD) funding. Most rent-restricted affordable housing is restricted to be affordable to households earning under 60% MFI, but these restrictions vary. We refer to regulated affordable housing and rent-restricted affordable housing interchangeably in this memorandum.

Cost Burdened. We use the term "cost burdening" to refer to households who pay more than 30 percent of their income on housing costs. We use the term "severe cost burdening" for households paying more than 50 percent of their income on housing. These terms come from HUD, and include mortgage payments and interest, or rent, utilities, and insurance.

Housing Affordability. "Housing that is affordable" refers to any type of housing, regulated or not, that costs less than 30% of a household's pre-tax income. This definition is a generally accepted definition of affordability.

Low Cost Market Rentals. We refer to housing that is affordable to low income households but not regulated or restricted by a funding source, as "low cost market rentals." These housing units are often affordable by nature of their location, condition, age, or the amenities offered nearby or at the property.

Median Family Income (MFI). The U.S. Housing and Urban Development (HUD) produces an area median family income each year to measure affordability thresholds against. Affordable housing deals, loans, and other HUD requirements will be assigned to a percentage of the MFI (see sidebar).

Severely Cost Burdened. See Cost Burdened.

Unregulated or Unrestricted Housing. See Low Cost Market Rentals.

Kitsap County MFI

According to HUD, Kitsap County's MFI was $77,119 in 2017.

- 30% of MFI is about $23,135
- 50% of MFI is about $38,559
- 60% of MFI is about $46,271
- 80% of MFI is about $61,695
- 100% of MFI is $77,119
- 120% of MIF is about $92,542

Workforce Housing. The term "workforce housing" is often used to describe housing units that are affordable to households earning more than 60% MFI. These can be regulated or unregulated.

Summary Findings

- Kitsap County is expected to need an additional 25,147 housing units over the next 17 years. The majority of these housing units are expected to be single-family detached, similar to current development trends. Kitsap County jurisdictions will need to almost triple their annual housing production to accommodate these new units in the next 17 years.
- Kitsap County has not been building enough housing to meet the needs of its residents. Over the 2010 to 2017 time period, it only built 42 new housing units for every 100 new households formed. This is one of the main drivers behind recent home price and rent increases seen in the past decade.
- Kitsap County appears to be gaining households at the lowest income levels (earning under $20,000 per year) and at higher income levels (earning more than $80,000) since 2010. There were fewer households earning between $20,000 and $60,000 in 2017 than in 2010, and there was very little change in the number earning between $60,000 and $80,000. When looking at the expected 25,147 new housing units, jurisdictions should plan for these trends to continue.
- Like the nation, Kitsap County is aging and seeing older households account for a larger share of the total population. This is most pronounced on Bainbridge Island, in Port Orchard, and in Kingston. Bainbridge saw a seven percentage point increase in the number of residents over age 44 between the year 2000 and the years 2013-2017, while Port Orchard saw a 10 percentage point increase over that time. In Kingston, the share of residents over age 65 grew by 11 percentage points, while the share of residents under age 20 declined in the same timeframe.
- Due to Kitsap's increasing diversity, the future housing stock consisting of primarily single-family homes could be mismatched with the housing needs of non-white residents. This coupled with Kitsap's growing baby-boomer population looking to "age in place," could mean that competition for housing may continue to put upward pressure on housing prices.
- Port Orchard has been building the most housing of any of the jurisdictions in Kitsap County. In the 2013-2017 timeframe, Port Orchard had the near-highest average sizes for both owner-occupied and renter-occupied households. However, Port Orchard also has a very high share of non-family households, and family households without children at 41 percent and 44 percent respectively.
- In this time period, the City of Bremerton and Kingston had the smallest average household size for renter households. Bremerton also has a high share of non-family households and lower homeownership rate. This housing composition could be due to the high share of shipyard workers and Olympic College students renting individually or with roommates.

- Kitsap's economy is very strong, in line with national and regional trends. In 2018, total covered employment reached almost 90,000 jobs. Kitsap County passed its pre-recession job peak of 84,400 jobs back in 2015. Since the recession, the fastest growing sectors include management jobs, manufacturing, construction and transportation/warehousing jobs, and accommodation/food service jobs. That the fastest growing sectors have moderate to high wages is a sign for continued purchasing power for future housing demand.
- A high share of Kitsap's workers do not live in the county, which could be an opportunity when planning for future housing growth. In 2017, more than 46,300 people commuted out of Kitsap County for work, 23,750 people commuted into the county, and about 43,300 people stayed put (work and live in the county). As demonstrated in the Inventory Memo, most of the housing near transit (particularly ferries) is single family. This limits access to jobs and economic opportunity for lower income households who may not be able to purchase homes.

Part I. Forecasted Housing Needs

This section explores forecasted housing needs in the next twenty years in Kitsap County. The results of the housing needs analysis are based on: (1) the official population forecast for growth from the U.S. Census Bureau adopted by Kitsap County Ordinance in 2015, (2) information about Kitsap County's current housing market, and (3) the demographic composition of Kitsap's existing population and expected long-term changes.

Forecast for Housing Growth

We consider the following key assumptions to present an estimate of new housing units needed across Kitsap County between 2019 and 2036.

- **Population.** According to Census population growth forecasts adopted by Kitsap County Ordinance in 2015,[3] the entire County's population is expected to reach 331,571 people in 2036. Since Census data is not yet available for 2019, we use the Washington Office of Financial Management's 2019 population estimate for Kitsap County: 272,274 people. Thus, the total population increase from 2019 to 2036 is estimated to be 59,297 people.
- **Persons in Group Quarters.**[4] Persons in group quarters do not consume standard housing units: thus, any forecast of new people in group quarters is typically derived from the population forecast for the purpose of estimating housing demand. Group quarters can have a big influence on housing in cities with colleges (dorms), prisons, or a large elderly population (nursing homes). In general, any new requirements for these housing types will be met by institutions (colleges, military or government agencies, health-care corporations) operating outside what is typically defined as the housing market.

  The 2013-2017 American Community Survey shows that 2.7 percent of Kitsap's total population was in group quarters. For the 2019 to 2036 period, we use this same assumption that 2.7 percent of Kitsap's new population, approximately 1,601 people, will be in group quarters.
- **Household Size.** According to the 2013-2017 American Community Survey, the average household size in Kitsap County was 2.51 people. Thus, for the 2019 to 2036 period, we assume the average household size stays the same at 2.51 persons.

[3] Kitsap County. 2015. "Kitsap Countywide Planning Policies, Appendix B-1." Available from: compplan.kitsapgov.com/Documents/Complete+Amended+CPPs+-+2015+v.10-16-15.pdf

[4] The Census Bureau defines group quarters as follows: A group quarters is a place where people live or stay, in a group living arrangement, that is owned or managed by an entity or organization providing housing and/or services for the residents. The Census Bureau classifies all people not living in housing units (house, apartment, mobile home, rented rooms) as living in group quarters. There are two types of group quarters: (1) Institutional, such as correctional facilities, nursing homes, or mental hospitals and (2) Non-Institutional, such as college dormitories, military barracks, group homes, missions, or shelters.

While Kitsap County is diversifying, and the growing number of Hispanic and non-white households tend to have larger household sizes, Kitsap County is also aging, with a greater share of Baby-Boomer households. This analysis does not dive deep enough into these trends to merit a deviation from the standard assumption that average household sizes will remain roughly the same over the next 17 years.

- **Vacancy Rate.** The Census defines vacancy as: "unoccupied housing units are considered vacant. Vacancy status is determined by the terms under which the unit may be occupied, e.g., for rent, for sale, or for seasonal use only." Vacancy rates are cyclical and represent the lag between demand and the market's response to demand for additional dwelling units. Vacancy rates for rental and multifamily units are typically higher than those for owner-occupied and single-family dwelling units.

  According to the 2013-2017 American Community Survey, Kitsap County's vacancy rate was 9.4 percent. For the 2019 to 2036 period, we assume a vacancy rate of 9.4 percent. This is a conservative assumption, given that the Census estimate of vacancy is higher than anecdotal evidence, and varies according to housing tenure and type. If the assumed future vacancy rate were lower, the number of new dwelling units needed would be higher.

Exhibit 1 displays the estimated new housing units based on these assumptions. Kitsap County will have demand for 25,147 new dwelling units over the next 17 years, needing to produce about 1,480 new units per year.

Exhibit 1. Forecast of Demand for New Dwelling Units, Kitsap County, 2019–2036

Variable	New Dwelling Units (2019-2036)
Change in persons	59,297
Minus Change in persons in group quarters	1,601
Equals Persons in households	57,696
Average household size	2.51
New occupied DU	22,986
Times Aggregate vacancy rate	9.40%
Equals Vacant dwelling units	2,161
Total new dwelling units (2019-2036)	25,147
Annual average of new dwelling units	1,479

Source: U.S. Census Bureau, 2013–2017 ACS.

In Exhibit 12 in the Inventory memo, we calculated that across all of Kitsap County, about 3,790 units were produced between 2010 and 2017. This translates to 541 units per year. Kitsap County jurisdictions will need to almost triple their annual housing production to accommodate the new 25,147 units needed in the next 17 years.

In the rest of this section, we explore these expected new housing units by tenure, type, location and price across the whole County. Data is not nuanced enough to parse out each location's needs by price, tenure, or type. However, the County and its jurisdictions will need to encourage the development that has been missing and where demand is expected. We will explore strategies to encourage this development in the Recommendations Task and the final report.

Housing Needs by Tenure

To determine the expected number of housing units by tenure (rental vs ownership stock) Exhibit 2 below evaluates whether the homeownership rate stays the same, grows or declines over time.

Exhibit 2. Scenarios of Expected New Units by Tenure

Variable	New Dwelling Units (2019-2036)		
	Current Home-Ownership Rate	Rate Increases	Rate Decreases
Needed New Dwelling Units (2019-2036)	25,147	25,147	25,147
Units Needed Annually	1,479	1,479	1,479
Owner-Occupied Housing			
Percent Owner-Occupied DU	67%	70%	65%
Equals Total New Owner-Occupied DU	16,847	17,602	16,344
Units Needed Annually	991	1,035	961
Renter-Occupied Housing			
Percent Renter-Occupied DU	33%	30%	35%
Equals Total New Renter-Occupied DU	8,298	7,544	8,801
Units Needed Annually	488	444	518

Source: ECONorthwest Analysis
Note: These scenarios are theoretical and not forecasts for Kitsap's housing market.

If the current homeownership rate remains at 67 percent, 16,847 of the 25,147 new units expected over the next 17 years will be ownership-stock of any type (single-family attached, single-family detached, condos, or mobile homes). The remaining 8,298 units will be renter-occupied of any type. This translates to 991 units of ownership housing and 488 units of rental housing need to be developed per year throughout the six Kitsap County jurisdictions. These rates of production are significantly higher than the development pace seen in the 2010-2017 timeframe.

Housing Needs by Type

To determine the expected number of housing units by type (single-family denoted "SF" vs multifamily denoted "MF"), Exhibit 3 below displays three scenarios for Kitsap's housing composition and the future split between single-family and multifamily housing.

Exhibit 3. Scenarios of Expected New Units by Type

Variable	New Dwelling Units (2019-2036)		
	Current Split (SF vs MF)	Skew Toward SF	Skew Toward MF
Needed New Dwelling Units (2019-2036)	25,147	25,147	25,147
Units Needed Annually	1,479	1,479	1,479
Single-family Housing			
Percent Single-Family DU	74%	78%	70%
Equals Total New Single-Family DU	18,608	19,613	17,602
Units Needed Annually	1,095	1,154	1,035
Multifamily Housing			
Percent Multifamily DU	26%	22%	30%
Equals Total New Multifamily	6,538	5,532	7,544
Units Needed Annually	385	325	444

Source: ECONorthwest Analysis
Note: These scenarios are theoretical and not forecasts for Kitsap's housing market.

If the current split between single-family and multifamily housing stock remains at 74 percent, 18,608 of the 25,147 new units expected over the next 17 years, will be single-family (detached and attached) housing and 6,538 units will be multifamily. This translates to 1,095 units of single-family housing and 385 units of multifamily development per year. Given than this forecasted estimate for needed single family homes is higher than the forecasted estimate of ownership stock, many of these single family homes will be rentals, as they are today. These rates of production are significantly higher than the development pace seen in the 2010-2017 timeframe.

Housing Needs by Price

To determine the projected number of housing units needed by income level, Exhibit 4 below displays two scenarios for the composition of households by income across Kitsap County, and the expected new units for each income level. We also translate these income levels into the affordable rents, assuming 30% of income goes to rent.

Exhibit 4. Scenarios of Expected New Units by Income Level

Household Income Level	Monthly Rent	Same Distribution		More High & Low-Income	
		Current Share	New Dwelling Units	New Share	New Dwelling Units
New Dwelling Units			25,147		25,147
$0 – $24,999	$0 – $625	16%	3,993	18%	4,526
$25,000 – $49,999	$626 – $1,250	20%	4,931	18%	4,526
$50,000 – $74,999	$1,251 – $1,875	19%	4,765	15%	3,772
$75,000 – $99,999	$1,876 – $2,500	16%	3,938	15%	3,772
$100,000 - $124,999	$2,501 – $3,125	11%	2,783	12%	3,017
$125,000 or more	$3,126 or more	19%	4,736	22%	5,532

Source: ECONorthwest Analysis
Note: Monthly rent is calculated assuming 30% of household income goes toward housing. These scenarios are theoretical and not forecasts for Kitsap's housing market. Rents are as of 2019; they are not inflation adjusted to 2036.

The first scenario assumes the current distribution of incomes across the County remains the same. The second scenario looks at the current trends of more high-income households and more low-income households moving to Kitsap County, and assumes that the income distribution skews farther along these lines (see Exhibit 29).

Housing Needs by Location

Recalling Exhibit 12 from the Inventory memo, Exhibit 5 below displays new development in the 2010-2017 timeframe by location (row A) and the total housing stock in 2017 by location (row C). We calculate each area's share of new development and share of total housing stock to see which areas saw disproportionately higher development over the 2010-2017 time frame (an area has disproportionately higher development if its share of new development (row B) exceeds its share of the total housing stock (row D)).

Exhibit 5. Kitsap County Jurisdictions Producing Disproportionate Housing 2010-2017

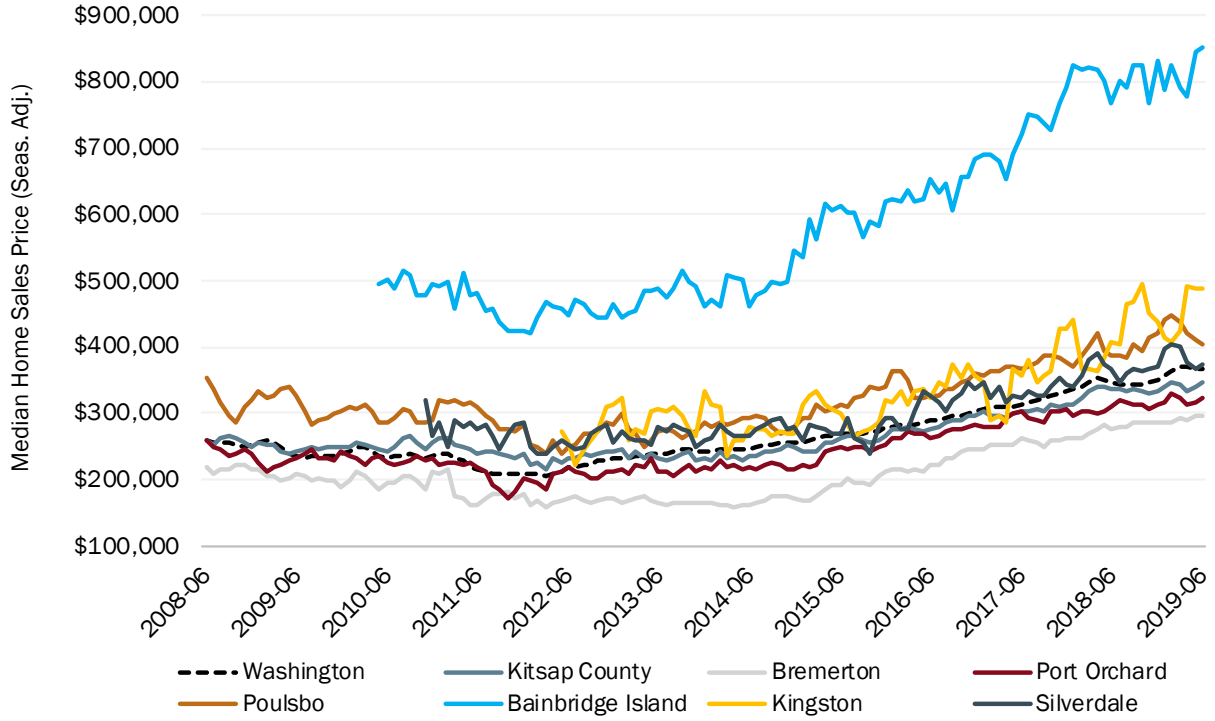
		Kitsap County	Bainbridge Island	Bremerton	Port Orchard	Poulsbo	Kingston	Silverdale	All other Areas
A	Total Units Built 2010 - 2017	3,791	468	625	680	264	52	128	1,574
B	*Percent of all new units built*	*100%*	*12%*	*17%*	*18%*	*7%*	*1%*	*3%*	*42%*
C	Total Housing Stock in 2017	110,944	10,340	18,541	5,460	4,312	1,057	9,051	62,183
D	*Percent of total housing stock*	*100%*	*9%*	*17%*	*5%*	*4%*	*1%*	*8%*	*56%*
E	Disproportionate? (B>D?)	N/A	Yes	No	Yes	Yes	No	No	No

Source: 2013-2017 ACS Table DP04
Notes: Data includes vacant housing. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

As the exhibit demonstrates, Bainbridge Island, Port Orchard and Poulsbo each produced more housing in the 2010-2017 time period than they have historically – Bainbridge and Poulsbo by three percentage points, and Port Orchard by 13 percentage points. Bremerton's development over this timeframe was as on par with its share of all housing, while Silverdale and the "other areas" of the county all underproduced relative to their share of the 2017 total housing stock.

When looking at these rates of development in conjunction with recent rates of home price appreciation (see Exhibit 6 below), we can infer that areas seeing less development and strong price growth (Bainbridge, Bremerton) need larger shares of the 25,147 new housing units over the next 17 years.

Exhibit 6. Home Price Appreciation, Select Jurisdictions and Kitsap County



Source: Zillow, Median Home Sales Price, Seasonally Adjusted.

Part II. Housing Needs Analysis

Housing needs are influenced by the supply and demand for housing – both of which are influenced by macroeconomic factors and individual-level decisions. This section discusses the imbalance in the supply and demand of housing in Kitsap County over time, listing factors constraining new housing supply and the factors influencing strong demand for houses in the area. This analysis includes information from research and data, but also includes commentary from the Task 1 Housing Coordination interviews and review of local planning documents. Data herein support the key findings of the Forecasted Housing Needs in Part I.

A. Drivers of Housing Supply

The Puget Sound regional economy has grown at an astounding rate in the past decade, influenced by strong population growth as new residents move to the area seeking economic and educational opportunities, and the area's natural beauty. According to the Bureau of Labor Statistics, total employment in the four-county region (King, Kitsap, Snohomish and Pierce Counties) grew 23 percent from 2010 to 2018, while total population in these four counties grew approximately 12 percent.[5]

Hampered by the housing market crash and economic recession, however, the regional housing market did not produce enough new housing in response to this growing demand, particularly at prices affordable to the majority of incomes. The Puget Sound Regional Council (PSRC) estimates that housing units in the four-county region (King, Kitsap, Snohomish and Pierce Counties) only grew by 6.7 percent over the same period of strong economic growth.[6]

Housing markets operate regionally: housing prices and availability in one location may influence housing demand in another area, as households seek affordable options. Seattle's strong economic growth and own housing underproduction has led to rising prices there, forcing many households to decide whether to stay put and face increasing cost burdens, or try to find lower cost housing in other parts of the region and beyond.

These regional trends have strong implications for Kitsap County and its cities, which have relatively cheaper housing compared to the Eastern part of Puget Sound, and sits close to the economic engine of Seattle. However, housing markets in Kitsap County have also underproduced housing and is dealing with the spillover effects from the region's economic growth.

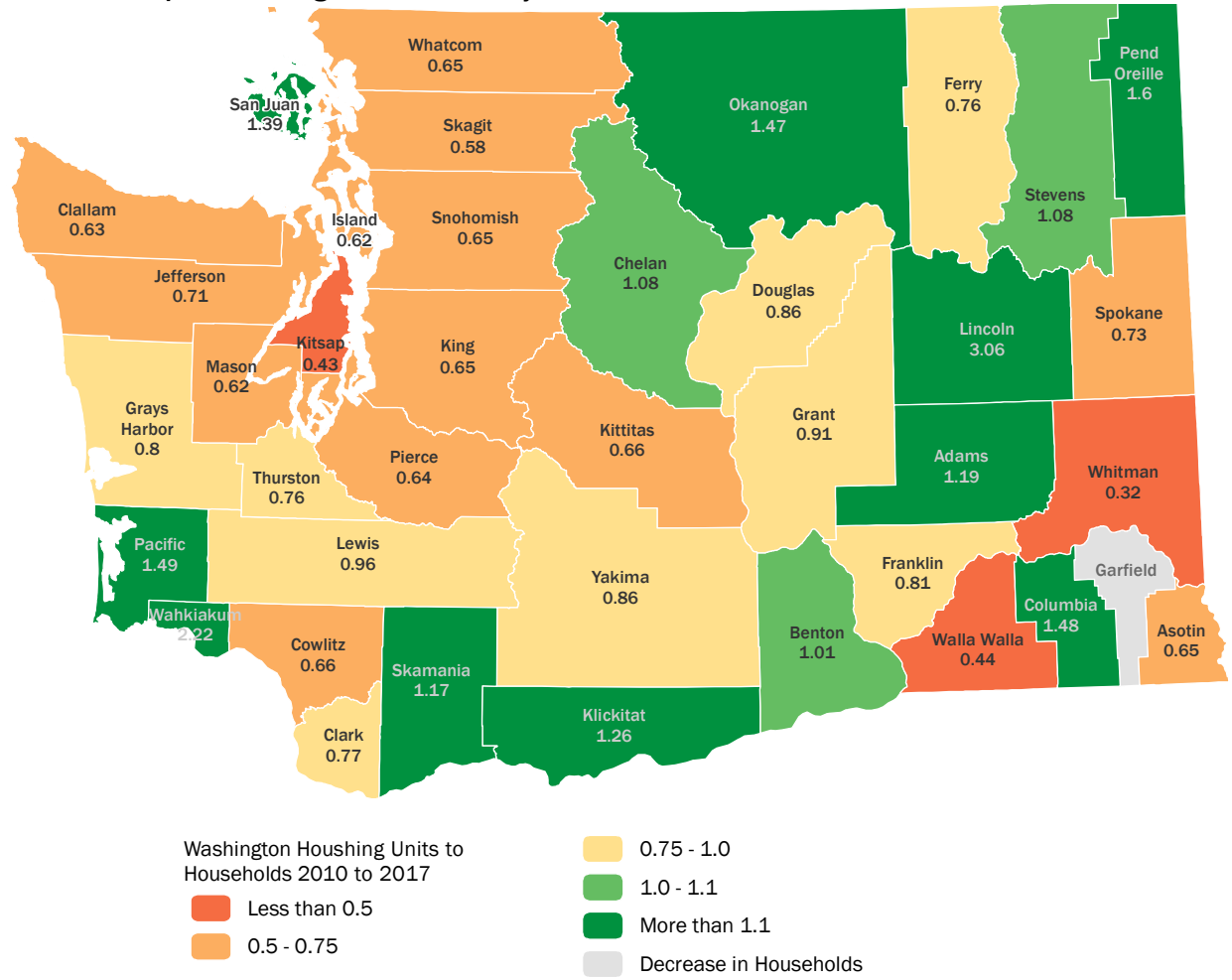
[5] Bureau of Labor Statistics. 2018 Quarterly Census of Employment and Wages for the four-county region (King, Kitsap, Snohomish and Pierce Counties). Available from: https://www.bls.gov/cew/downloadable-data-files.htm (edited)

[6] Current Population: Region. Estimates from U.S. Census Bureau and the Washington State Office of Financial Management. Available from: https://www.psrc.org/rdp-population

Housing Shortage: Imbalance in Supply and Demand

Exhibit 7 below, displays a map showing that the counties surrounding Puget Sound have not produced enough housing (measured here as housing starts) to keep up with new household formation (which includes people moving out of parental homes, roommates splitting up, or new residents moving in) over the 2010-2017 time period. Historically across the country, the housing market has produced 1.10 units for each new household formed–enough to accommodate vacancy, demolition, obsolescence and second homes or vacation homes.[7]

Exhibit 7. Map of Washington State County Ratios of Household Formation to Unit Production



Source: Up For Growth Research on Housing Underproduction in Washington State, ECONorthwest analysis of data come from U.S. Census Bureau, Washington Office of Financial Management and Moody's Analytics.

As Exhibit 7 demonstrates, the four counties in the Puget Sound vastly underproduced housing over this time period, with Kitsap County producing the fewest of them all: Kitsap County in total saw only 43 units built per 100 new households formed compared with 65 in King County and Snohomish County, and 64 in Pierce County. This means that, in Kitsap County, 57 out of 100 new households formed in this time period had to compete for the existing stock of

[7] Up For Growth. 2020. *Housing Underproduction in Washington State.*

housing. This competition, as described in the Drivers of Demand section on page 20, pushes prices up for all types of housing.

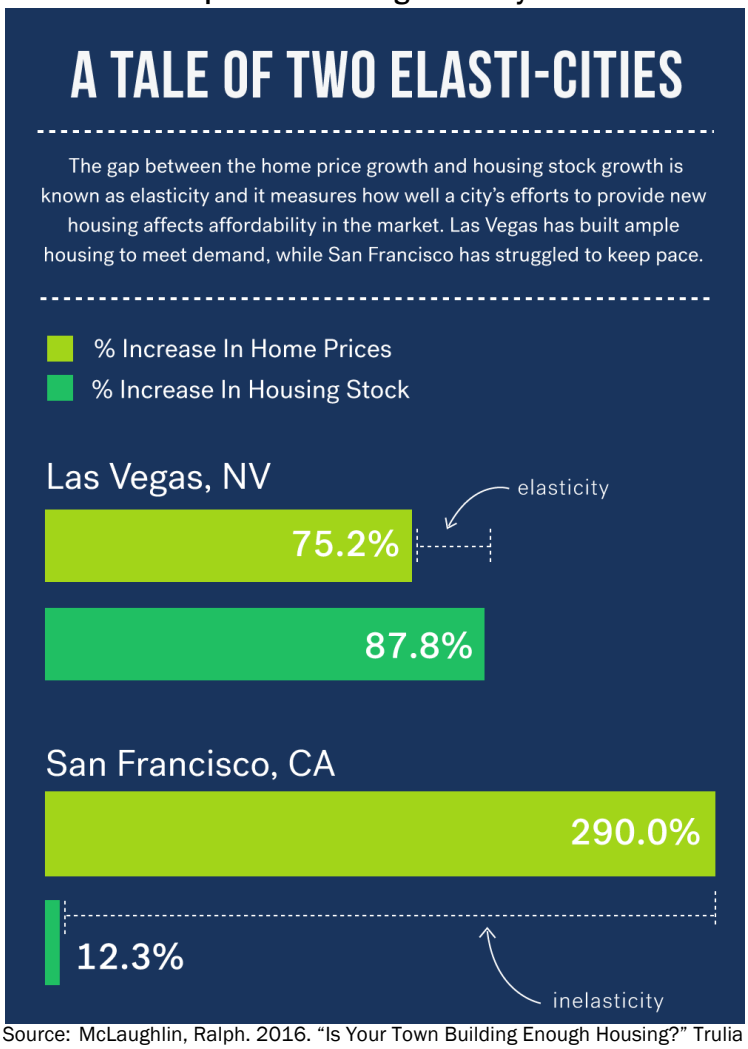
Ultimately, the region – including Kitsap County – has not been able to supply enough housing to meet rising demand. This imbalance is the product of numerous forces, including supply restraints such as restrictive land use policies governing development, lengthy entitlement processes, or increased construction costs, and increased demand for housing such as investment buyer competition and rising home prices reducing middle-income households' buying power for housing.

Housing Supply Has Many Constraints

Like other "free markets" the housing market is governed by economic fundamentals of supply and demand that are influenced by government regulation. Private sector development is the driving force behind almost all housing supply (less the small share of publicly funded housing for low-income households). However, housing markets are often considered somewhat *inelastic* – meaning that as prices rise, supply does not rise as fast.[8] In Exhibit 8, Trulia Research describes how the percent change in home prices relative to the percent change in housing stock creates elasticity, and how this can vary from one metro area to another. Factors such as long lead times for supply, bureaucracy, restrictive zoning, and anti-growth sentiments reduce the ability for development supply to catch up with demand.[9]

As shown in Exhibit 9, private sector development occurs at the

Exhibit 8. Description of Housing Elasticity



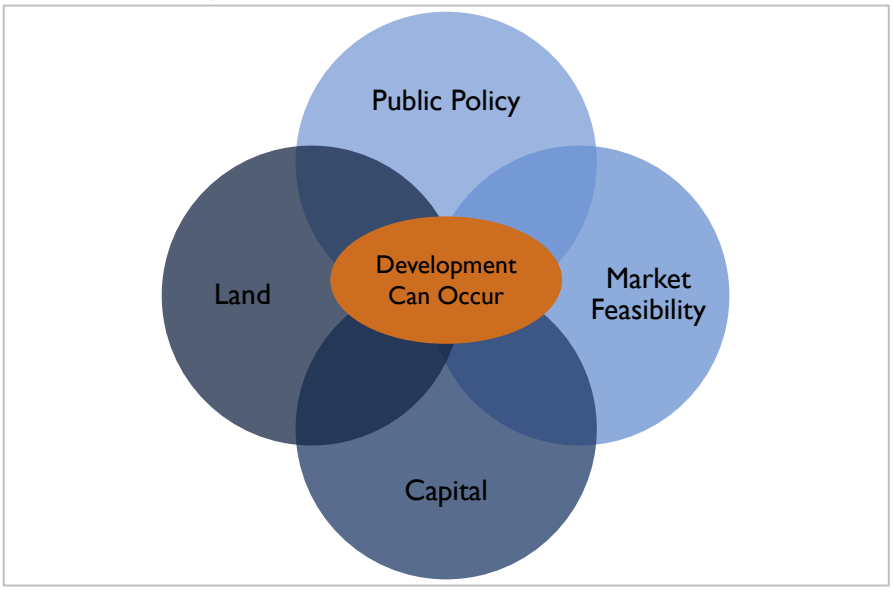
Source: McLaughlin, Ralph. 2016. "Is Your Town Building Enough Housing?" Trulia Research.

[8] McLaughlin, Ralph. 2016. "Is Your Town Building Enough Housing?" Trulia Research. Available from: https://www.trulia.com/research/elasticity-2016/

[9] Ibid.

intersection of land, public policies, market feasibility, and capital. Housing development relies on inputs set by numerous interrelated markets and players – from the cost of land to the cost of labor and materials to the price of rents – each input to development is its own market with supply and demand factors constantly in flux.

Exhibit 9. Development Fundamentals



Source: ECONorthwest.

- On a **parcel of land**, for-profit (which are the majority) landowners and property developers will evaluate a site for its highest and best use potential, be that office, residential, commercial, or vacant land.
- **Public policies**, like land use restrictions or zoning, limit the development allowed in certain parts of the city, usually for aesthetic, health, safety, or economic reasons.
- **Market feasibility** assesses the demand for development, comparing the expected prices against the costs (e.g. labor and materials), for the desired types of development.
- **Capital** is necessary to pay for the costs of development and influences market feasibility due to the expected return on investment. Capital seeking return on investment can flow to other sectors – stocks, bonds, etc. – when development cannot meet return requirements.

Land: Natural and Artificial Constraints

Jurisdictions in Kitsap County face constraints on the availability of land to develop new housing, which contributes to supply limitations.

1. **Natural Constraints.** Kitsap County has many natural constraints due to bodies of water, forestlands, and steep slopes. This makes some land less suitable to housing development.

2. **Regulatory Land Use Constraints.** In addition, the public sector puts additional constraints on land that regulates its use, where growth can occur, and zoning for the types of housing that can be built. According to U.S. Census Bureau data, as of 2017, 69 percent of housing units in Kitsap County were low-density, single-family detached housing. While some of these units may be zoned from higher density, the majority are likely in line with their zoning, which limits the number of housing units that the city can see developed.

These limitations on the supply of land suitable and eligible for housing development put upward pressure on land prices when demand for housing and development sites are strong. Higher land prices limit both housing affordability and availability as developers need to meet financial feasibility requirements and may not be able to build as many units.

Public Policy: Development Regulations

Another major factor affecting housing supply (and thus prices) is restrictive regulations governing housing development such as permitting and environmental, or design review requirements and development standards. Recent research has demonstrated the link between housing affordability and availability to development regulations in place in a given jurisdiction.[10]

While intended to ensure design and uses are compatible with an existing neighborhood context, these policies can also act as a barrier to new development. Regulations such as low-density zoning, minimum lot sizes, limits on buildable area, minimum off-street parking requirements, or landscape buffers can increase development complexity, time to completion, and total costs.[11] Our analysis of current planning documents in Task 1 found that most of the planning goals in Kitsap County and the City of Bremerton are favorable toward housing development. While goals and visions may be favorable, the reality on the ground for developers and builders is that new supply is hard to deliver, particularly at moderate or affordable price points.

Market Feasibility: Limited by Increases in Development Costs

One of the biggest factors limiting the development of multifamily residential housing and lower-cost single-family housing in Kitsap County is market feasibility. For housing

[10] See for example, Glaeser, Edward L., Joseph Gyourko, and Raven E. Saks, R. 2005. "Why is Manhattan so expensive? Regulation and the Rise in Housing Prices." Journal of Law and Economics 48(2): 331–69;

Glaeser, Edward L., and Bryce A. Ward. 2009. "The Causes and Consequences of Land Use Regulation: Evidence from Greater Boston." Journal of Urban Economics 65: 265–78. https://doi.org/10.1016/j.jue.2008.06.003;

Ihlanfeldt, Keith R. 2007. "The Effect of Land Use Regulation on Housing and Land Prices." Journal of Urban Economics 61: 420–35.https://doi.org/10.1016/j.jue.2006.09.003;

Jackson, Kristoffer. 2016. "Do Land Use Regulations Stifle Residential Development? Evidence from California Cities." Journal of Urban Economics 91: 45-56. http://dx.doi.org/10.1016/j.jue.2015.11.004

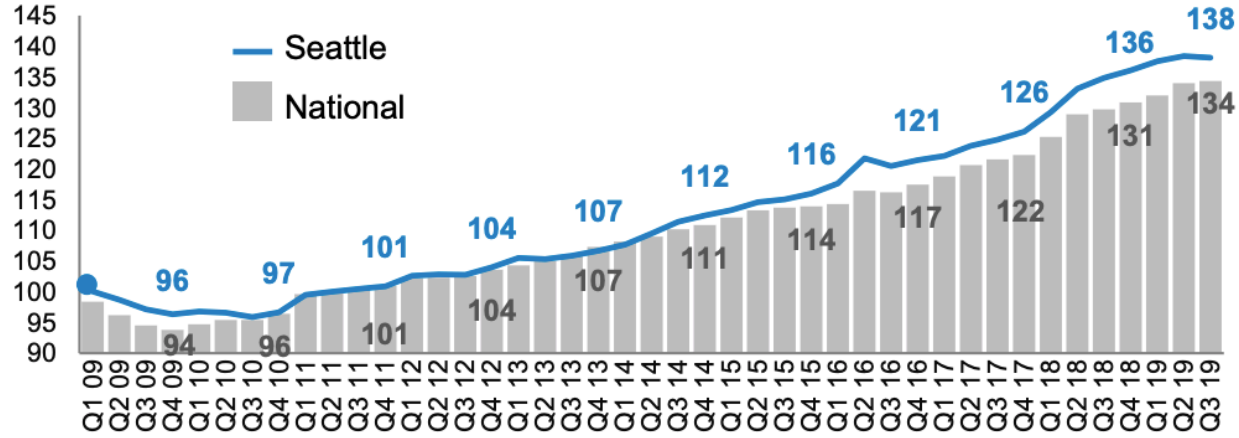
[11] Vanessa Brown Calder. 2017. "Policy Analysis: Zoning, Land-Use Planning, and Housing Affordability." CATO Institute. Available at https://www.cato.org/publications/policy-analysis/zoning-land-use-planning-housing-affordability Accessed April 19, 2019.

development to occur, market rents and prices need to be high enough to offset the costs of land, construction, and development. While land is cheaper in Kitsap County, many other development costs are only marginally less expensive and have seen increases in recent years. Higher development costs must be offset by increased home prices and rents, reducing overall housing affordability. Where rents or home prices are not high enough to cover the costs of construction, this leads to a limit on new supply of housing, which also leads to higher prices as households compete and outbid one another for limited quantity.

RISING CONSTRUCTION COSTS HURT AFFORDABILITY

The costs of construction materials can limit supply and affordability. According to the third quarter 2019 Construction Cost Index from Mortenson Construction, construction costs increased 38 percent in the Seattle area from January 2009 to September 2019.[12] Construction materials like lumber and steel (necessary for framing high-rise residential towers) have also been impacted by new tariffs and trade disruptions in the past two years.

Exhibit 10. Seattle and National Construction Cost Index Q1 2009 to Q3 2019



Source: Mortenson Q1 2019 Construction Cost Index Report for the City of Seattle. (January 2009 is indexed to 100)

LIMITED AVAILABILITY OF CONSTRUCTION LABOR INCREASES COSTS

In the aftermath of the housing market crash of 2008, many firms in the development and construction sector faced layoffs. As a result, architects, contractors, and laborers retired or found new professions. The construction sector was hit particularly hard and saw nationwide employment declines of 19 percent from a peak in 2007 to 2015.[13]

Despite some recovery post-recession, a lack of available trained construction and trade workers and subcontractors continues to be a drag on the housing market.[14] Limited labor

[12] Mortenson Construction Cost Index – City of Seattle, 3rd Quarter 2019.

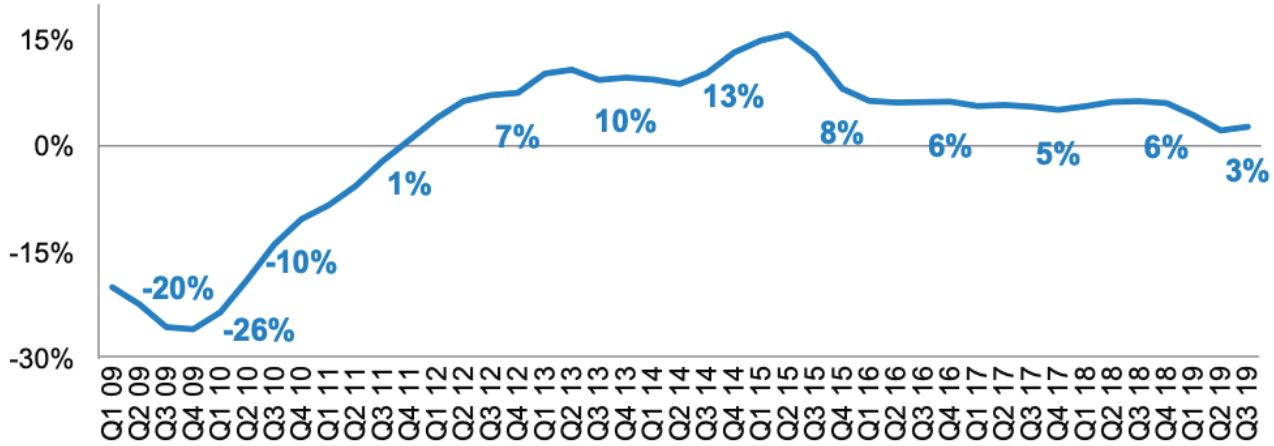
[13] Alana Semuels.2015. "Where have all the Construction Workers Gone?" The Atlantic Magazine. https://www.theatlantic.com/business/archive/2015/02/where-have-all-the-construction-workers-gone/385417/ Data reported by the Bureau of Labor Statistics.

[14] Karissa Neely. 2017. "Construction Industry Struggles with Labor Shortages." The Associated Press. https://www.seattletimes.com/nation-world/construction-industry-struggles-with-labor-shortage/

availability increases competition, bids up prices, increases time to completion, and consequently limits overall housing production. Each of these factors hurts housing affordability.

Mortenson Construction shows that construction employment in the Seattle area grew only three percent from last year—a decline from earlier growth that signals a tight labor market and higher wages in the sector (see Exhibit 11).[15] The firm expects material costs to remain stable, but expects total costs to grow 3.5 percent to 4.5 percent through 2020, driven by tight employment and higher labor costs.

Exhibit 11. Seattle Construction Employment Growth Year-over-Year, Q1 2009 to Q3 2019



Source: Mortenson Q1 2019 Construction Cost Index Report for the City of Seattle. (January 2009 is indexed to 100)

Capital: Development Has Numerous Constraints in Kitsap County

Capital is a necessary component of housing development. Most developers incur debt or issue equity to pay for the construction of new housing (particularly for multifamily development).[16] Developers need to generate sufficient revenues (rents or home prices) to pay for the costs of developing and (for rentals) operating a property. Revenues less expenses equals net operating income, which needs to meet a required debt service coverage ratio for banks to lend to the developer.

Although land costs vary, the total cost of developing different types of housing may not vary much across a metropolitan area. However, rents and home prices do vary, and these revenues greatly influence the amount of debt a project can have to get off the ground. In areas where rents or home prices are low, but the costs of development costs are roughly equivalent to other places, new development can be difficult to build. In this way, housing development in Kitsap

[15] Mortenson Construction Cost Index – City of Seattle, 3rd Quarter 2019.

[16] Net operating income is rent revenue less operating expenses. A project must have sufficient income left after paying operating expenses to cover its monthly debt payments. See Part III for more information on the typical real estate development process.

County competes with development in other parts of the region, which have higher prices and rents to offer better returns for developers.

Exhibit 12. Some Capital Constraints Affect Developers Differently

Capital Factor	For-profit developer building market rate housing	Non-profit developer building rent-restricted housing
Interest rates	Not generally an issue, market rate rents can cover market-rate interest on loans	Difficult to find, lower rents need lower interest rates on loans
Loan terms	Not generally an issue, need to find short term limits on debt or equity since properties are sold after completion	Difficult to find, need longer-term loans, since affordability periods can be 15, 20, 30, or up to 99 years
Required return on investment	Difficult, for-profit developers need higher returns on investment to develop a property. This makes development competitive – areas with higher rents or prices will attract more development	Not generally an issue, rent-restricted properties have low or no required return on investment

INSUFFICIENT CAPITAL FOR RENT-RESTRICTED HOUSING

Rent-restricted affordable housing development faces different capital constraints. In this type of development, rents are restricted, so they are affordable to lower-income households. This means that the property has less operating income and can take on less debt to build the property. But since development costs are equivalent (or sometimes higher) to build rent-restricted housing than market rate housing, a gap exists between the funding needed to build the property and the funding available to pay for that development. Thus, developers need to find low-cost or free sources of capital to make rent-restricted development feasible.

Across the country, there is an insufficient amount of this low-cost capital to build rent-restricted affordable housing. Numerous Federal, state, and local programs exist to help bridge the development gap, but since funding is limited, these programs and funding sources are competitive. Affordable housing developers and Kitsap County staff note that the County is often uncompetitive for these programs because costs to build are as high as other parts of the region, but Kitsap jurisdictions do not have enough local funding to leverage against the funding awards. Kitsap's rent-restricted affordable housing is described in Appendix B Housing Inventory.

B. Drivers of Housing Demand

Housing demand is determined by the *preferences* for different types of housing (e.g., single-family detached or apartment), and the *ability to find* that housing (the ability to exercise those preferences in a housing market by purchasing or renting housing). Preferences for housing are related to demographic characteristics and changes, in addition to personal preferences. The ability to find housing is based on income, housing costs, and housing availability. The following two sections analyze and discuss these factors.

Macroeconomic and National Trends Affecting Housing Demand[17]

Kitsap County and its jurisdictions will be affected by the same macroeconomic demographic and economic forces that are occurring across the country. This section provides a summary of national housing trends built on previous work by ECONorthwest, reports from the Urban Land Institute (ULI), and conclusions from *The State of the Nation's Housing, 2019* report by the Joint Center for Housing Studies of Harvard University. Localized commentary on the demographic and economic trends in Kitsap County can be found on pages 24 and 37.

While the housing market has strong fundamentals including low mortgage rates, rising household incomes, growing homebuying interest for the Millennial generation[18] and nearly full unemployment rates, challenges to the housing market remain. In addition to rising housing costs, most household wages were stagnant for about a decade and have only recently began to rise, worsening affordability pressures. Single-family and multifamily housing supplies remain tight, which also compound affordability issues. *The State of the Nation's Housing* report emphasizes the importance of government assistance and intervention to keep housing affordable. Several challenges and macroeconomic trends shaping the housing market are summarized below:

- **Moderate new construction and tight housing supply, particularly for affordable housing.** New construction experienced a modest growth in 2018: an annual growth rate at 2.8 percent. This is the slowest annual growth rate since 2012. The State of the Nation's Housing report cites lack of skilled labor, higher building costs, scarce developable land, and the cost of local zoning and regulation as impediments to new construction.
- **Demand shift from renting to owning.** After years of decline, the national homeownership rate increased from a 50-year low of 62.9 percent in 2016 to 64.4 percent in 2018. The largest increase came from the age group from 25 to 39. Trends suggest homeownership among householders aged 65 and older have remained strong and homeownership rates among young adults have begun stabilizing after years of decline.
- **Housing affordability.** In 2017, more than one-third of American households spent more than 30 percent of their income on housing. Low-income households face an especially dire hurdle to afford housing. With such a large share of households exceeding the traditional standards for affordability, policymakers are focusing efforts on the severely cost burdened. Among those earning less than $15,000, more than 70 percent of households paid more than half of their income on housing.

[17] These trends are based on information from: (1) The Joint Center for Housing Studies of Harvard University's publication "The State of the Nation's Housing 2018," (2) Urban Land Institute, "2018 Emerging Trends in Real Estate," and (3) the U.S. Census.

[18] According to the Pew Research Center, Millennials were born between the years of 1981 to 1996 (inclusive). Read more about generations and their definitions here: http://www.pewresearch.org/fact-tank/2018/03/01/defining-generations-where-millennials-end-and-post-millennials-begin/. Note: To generalize, and because there is no official definition of millennial, we define this cohort as individuals born between 1980 and 2000.

- **Long-term growth and housing demand.** The Joint Center for Housing Studies forecasts that nationally, demand for new homes could total as many as eight million units between 2018 and 2028. Much of the demand will come from Baby Boomers, Millennials, and immigrants. The Urban Land Institute cites the trouble of overbuilding in the luxury sector while demand is in mid-priced single-family houses affordable to a larger buyer pool.
- **Growth in rehabilitation market.**[19] Aging housing stock, rising sales prices, and poor housing conditions are growing concerns for jurisdictions across the United States. As housing rehabilitation becomes the go-to solution to address housing conditions, the home remodeling market has grown more than 50 percent since the recession ended—generating 2.2 percent of national economic activity (in 2017). These trends will face headwinds from rising construction costs and complex regulatory requirements. In addition, lower-income households or households on fixed-incomes may defer maintenance for years due to limited financial means, escalating eventual rehabilitation costs. This expected growth in the rehabilitation market means corresponds to lower turnover in housing, which can have a further tightening effect on housing markets.
- **Changes in housing preference.** Housing preference will be affected by changes in demographics; most notably, the aging of the Baby Boomers, housing demand from Millennials, and growth of immigrants.
    - *Baby Boomers.* The housing market will be affected by continued aging of the Baby Boomers, aged between fifty and seventy in 2019. Baby Boomers' housing choices will affect housing preference and homeownership rates and will require developing a range of housing opportunities such as low-income housing, multigenerational housing, smaller walkable housing, or increased age-restricted retirement communities and nursing homes. In addition, Boomers' desires to age-in-place will also affect the housing market.
    - *Millennials.* Although delayed due to the 2007-2009 recession, Millennials are driving much of the growth in new households today, albeit at slower rates than previous generations. In 2019, the oldest Millennials were in their late-30s and the youngest were in their late-teens. By 2040, Millennials will be between 40 and 60 years old. From 2015 to 2018, millennials formed an average of 200,000 net new households each year. Some research estimates that, "over the next 15 years, nearly $24 trillion will be transferred in bequests," presenting new opportunities for Millennials (as well as Gen Xers) to enter the homebuying market. [20]
    - *Immigrants.* Immigration and increased homeownership among minorities could also play a key role in accelerating household growth over the next 10 years, if

[19] These findings are copied from: Joint Center for Housing Studies. (2019). Improving America's Housing, Harvard University. https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Improving_Americas_Housing_2019.pdf

[20] Srinivas, Val and Goradia, Urval (2015). The future of wealth in the United States, Deloitte Insights. https://www2.deloitte.com/insights/us/en/industry/investment-management/us-generational-wealth-trends.html

Federal policies about immigration do not further reduce inflow trends. The Census Bureau's estimates of net immigration in 2017–2018 indicate that 1.2 million immigrants moved to the U.S. from abroad, down from 1.3 million immigrants in 2016-2017 but higher than the average annual pace of 850,000 during the period of 2009–2011.

- *Diversity.* The growing diversity of American households will have a large impact on domestic housing markets. Over the coming decade, minorities will make up a larger share of young households and constitute an important source of demand for both rental housing and small homes. Although homeownership rates are increasing for some minorities, large shares of minority households are more likely to live in high-cost metro areas, reducing their buying power in the housing market. In addition, expectations of the average square footage needed per person per house may change as the country continues to diversify. For example, as of 2017, Hispanic/Latinx households were generally larger in size than non-Hispanic/Latinx families.[21] Growing Hispanic and Latinx populations have implications for the types and sizes of housing needed in the future.

- **Changes in housing characteristics.** Several long-term trends in the characteristics of housing are evident from the U.S. Census Bureau's 2018 New Housing Report:[22]
  - *Larger single-family units on smaller lots.* Between 1999 and 2018, the median size of new single-family dwellings increased by 17.5 percent nationally, reaching approximately 2,400 sq. ft. while the percentage of new units smaller than 1,400 sq. ft. decreased from 15 percent in 1999 to seven percent in 2018. Almost 28 percent of new one-family homes completed in 2018 were larger than 3,000 sq. ft.
  - *Smaller multifamily units.* Between 1999 and 2018, the median size of new multiple family dwelling shrank by -2.1 percent in the Western region, compared to a 5.4 percent increase nationally. This is not surprising given the hot housing markets in Western states; high land and development costs require more units – meaning smaller sizes total – to make a deal feasible.
  - *Household amenities.* Across the U.S., new housing also comes with new amenities, including air-conditioning, two or more bathrooms, or one or more garages. Amenities are a source of competition for homebuilders, and also factor into increased costs.

[21] U.S. Census Bureau. 2017. Current Population Survey (CPS). Retrieved from: www.census.gov/programs-surveys/cps.html

[22] U.S. Census Bureau, Highlights of Annual 2017 Characteristics of New Housing. Retrieved from: https://www.census.gov/construction/chars/highlights.html.

- *Shared amenities.* In addition, housing with shared amenities are growing in popularity. Single-Room Occupancies (SROs)[23] Cottage Clusters, co-housing developments, and multifamily products are common housing types that take advantage of this trend. Shared amenities may take many forms and include shared: bathrooms; kitchens and other home appliances (e.g., laundry facilities, outdoor grills); security systems; outdoor areas (e.g., green space, pathways, gardens, rooftop lounges); fitness rooms, swimming pools, and tennis courts; and free parking.[24]

Kitsap County Trends

Kitsap County will see many of the same macroeconomic demographic and economic forces that influence housing demand across the country. This section discusses the demographic and economic changes specific to Kitsap County that influence housing demand.

Demographic Changes

As Exhibit 13 demonstrates, Kitsap County's total population grew by 39 percent over the almost three decades between 1990 and 2017, adding nearly 74,000 new residents. This translates to an average annual growth rate (AAGR) of 1.5 percent. Of the cities shown in the table, Bainbridge Island experienced the largest population increase in the past three decades. This period saw Bainbridge Island change from a mostly rural and remote island to almost a suburb of the Seattle metro area. Bainbridge Island's population grew by 677 percent between 1990 and 2017 from just over 3,000 residents to just under 24,000. This is an average annual growth rate of more than 25 percent. Population growth at this level is difficult to accommodate since the culture and perspectives of existing residents generally change slower than the population base.

[23] Single-room occupancies are residential properties with multiple single room dwelling units occupied by a single individual. From: U.S. Department of Housing and Urban Development. (2001). *Understanding SRO.* https://www.hudexchange.info/resources/documents/Understanding-SRO.pdf

[24] Urbsworks. (n.d.). Housing Choices Guide Book: A Visual Guide to Compact Housing Types in Northwest Oregon. https://www.oregon.gov/lcd/Publications/Housing-Choices-Booklet_DIGITAL.pdf

Saiz, Albert and Salazar, Arianna. (n.d.). Real Trends: The Future of Real Estate in the United States. Center for Real Estate, Urban Economics Lab.

Exhibit 13. Population, Kitsap County, and Selected Geographies 1990-2017

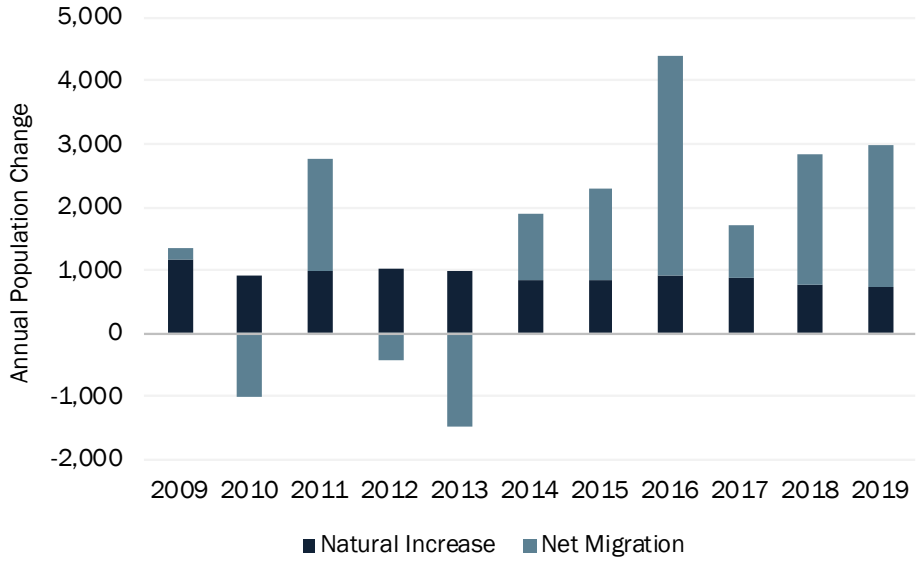
Geography		Population				Change 1990 to 2017		
		1990	2000	2010	2017	Number	Percent	AAGR
	Kitsap County	189,731	231,969	251,133	264,300	74,569	39%	1.5%
Principle Cities	Bainbridge Island	3,081	20,308	23,025	23,950	20,869	677%	25.1%
	Bremerton	38,142	37,259	37,729	40,630	2,488	7%	0.2%
	Port Orchard	4,984	7,693	11,157	13,990	9,006	181%	6.7%
	Poulsbo	4,848	6,813	9,200	10,510	5,662	117%	4.3%
Uninc. Kitsap County	Kingston*	--	1,611	2,099	1,875	--	--	--
	Silverdale*	7,660	15,816	19,204	20,664	13,004	170%	6.3%
	All Other Areas	131,016	142,469	148,719	152,681	21,665	17%	0.6%

Source: Washington State Office of Financial Management, Forecasting Division, U.S. Census Bureau.
Notes: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six jurisdictions shown and is a rough approximation for the remaining Unincorporated Kitsap County area.
Table Notes:
[1] Population estimates for Kitsap County, Bainbridge Island, Bremerton, Port Orchard, and Poulsbo for all years come from the Washington Office of Financial Management Forecasting Division.
[2] * Population estimates for Kingston and Silverdale for 1990, 2000, and 2010 are from the Decennial Census and estimates for 2017 are 2013-2017 American Community Survey 5-year estimates.

As Exhibit 14 below demonstrates, the majority of Kitsap County's population growth in the past six years came from in-migration (people moving into a new area) as opposed to natural increase (births outweighing deaths of current residents). In-migration spiked in 2016 and has since tapered off while natural increases have declined slightly over time.

Kitsap County's population increase in 2016 was the largest in the last ten years. Most of this population increase was due to in-migration into Kitsap County.

Exhibit 14. Annual Population Change, Net Migration, and Natural Increase, Kitsap County, 2009–2019



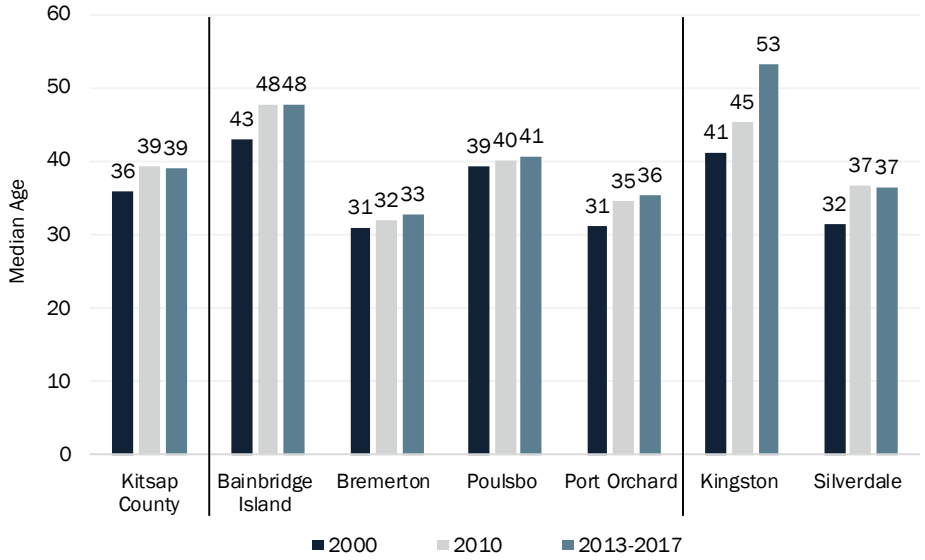
Source: Washington State Office of Financial Management, April 2019.

AGE

The following exhibits display median ages across the county and changes in the age composition of Kitsap County residents. As Exhibit 15 demonstrates, the median age in Kitsap County increased from age 36 to 39 between 2000 and 2010 and remained at age 39 from 2013-2017. Cities in Kitsap County reveal roughly the same trend with bigger increases between 2000 and 2010 and smaller increases between 2010 and 2013-2017. Bainbridge Island has the oldest median age at 48, while Bremerton has the youngest median age at only 33.

Kingston's median age is greater than all the other selected cities.

Exhibit 15. Median Age, Kitsap County and Selected Cities, 2000, 2010, and 2013-2017



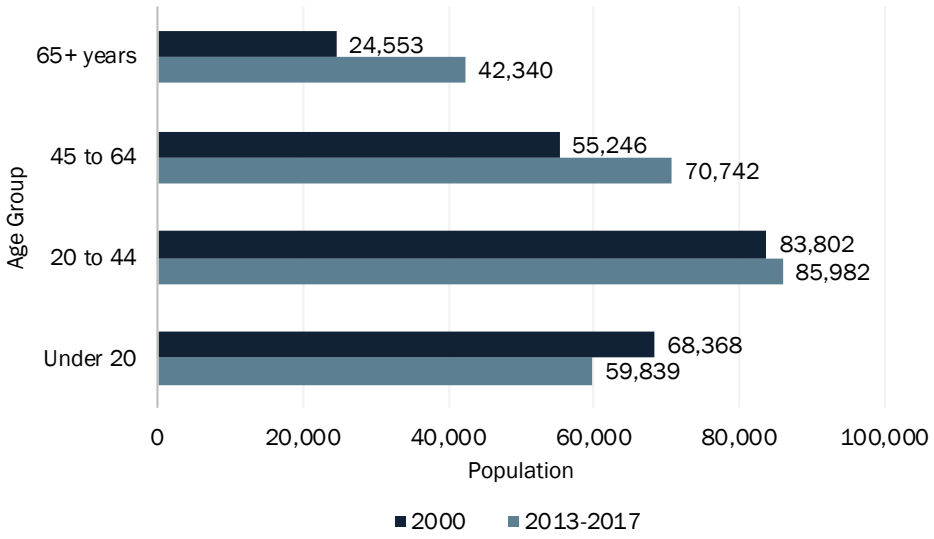
Source: 2000 Decennial Census Table P013, 2010 Decennial Census Table P13, and 2013-2017 ACS Table DP05.

Note: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places.

Although the different cities across Kitsap County have some variation in median ages, the next two exhibits demonstrate that the County as a whole is aging and following the same national trends largely due to the aging Baby-Boomer cohort. Exhibit 16 demonstrates that across the whole County, each age group except the "under 20" had more people in 2013-2017 than in the year 2000. While some of this is due to nominal population growth, Exhibit 17 shows that each city has a greater share of its population in the older age groups in the more recent time periods.

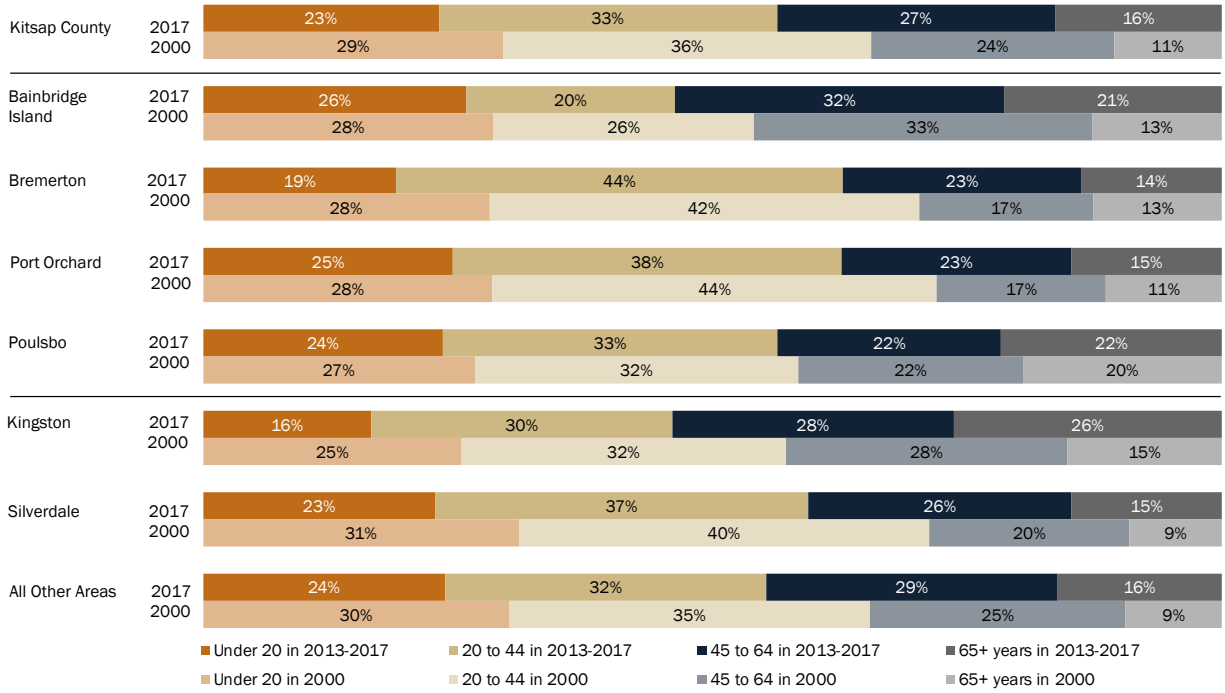
Between 2000 and the 2013-2017 time period, the number of people aged over 20 increased. The number of adults in over 44 age group increased. Though the 20-44 age group still makes up the largest population in the county, the increase has been minimal.

Exhibit 16. Population Growth by Age, Kitsap County, 2000 and 2013-2017



Source: U.S. Census Bureau, 2000 Decennial Census Table P012 and 2013-2017 ACS Table DP05.

Exhibit 17. Share of Age Groups, Kitsap County and Selected Cities, 2000 and 2013-2017



Source: 2000 Decennial Census, Table P012 and American Community Survey, 2013-2017 5-Year Estimates, Table DP05.
Notes: Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

This chart demonstrates each age group (orange: under 20, tan: 20 to 44, blue: 44 to 64, and grey: over 65) and compares each group's share of the total population in 2000 (light bars) and in 2013-2017 (dark bars). In looking at Kitsap County as a whole, one can see that in the year 2000, about 11 percent of Kitsap County residents were over 65 years old (the light grey segment), but in the year 2017 this number increased to 16 percent (the dark grey segment). The chart demonstrates the following findings about the age breakdown of different areas:

- *Kitsap County as a whole, is aging.* Inclusive of the cities, Kitsap County's share of residents over age 44 increased eight percentage points, from 35 percent in the year 2000 to 43 percent in the 2013-2017 period.
- *Bremerton's population skews youngest.* In Bremerton the increase was seven percentage points, from 30 percent to 37 percent. Bremerton skews youngest of all the principle cities, with only 14 percent of residents over 64. However, between 2000 and 2013-2017, the share of Bremerton residents under age 20 fell from 28 percent to only 19 percent.
- *Bainbridge Island's population skews oldest.* Bainbridge Island is the only jurisdiction where more than half of residents were over age 44 in 2013-2017. This increased from 46 percent in 2000 to 53 percent in 2013-2017.
- *Port Orchard's population is aging faster than the county as a whole.* In Port Orchard, the share of residents over 44 increased ten percentage points, from 28 percent in 2000 to 38

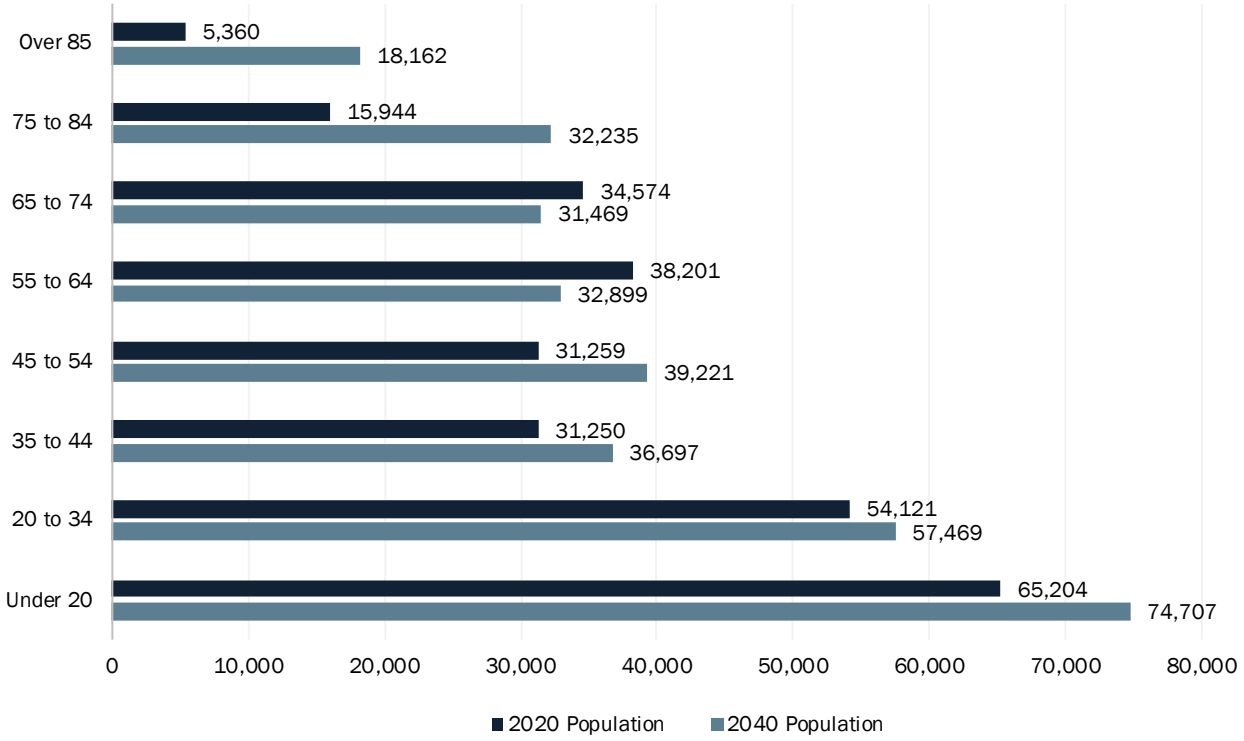
percent in 2013-2017. This is a bigger increase (10 percentage points) compared to the County as a whole (eight percentage points).

- *Kingston's population is aging the quickest relative to the County as a whole as well as its jurisdictions*. The share of residents 65 and older in Kingston grew by 11 percentage points, the largest increase relative to all comparators. Over this same timeframe, the share of residents younger than 20 years decreased by nine percentage points and those aged 20 to 44 decreased by two percentage points.
- *Poulsbo's population is evenly distributed across age groups.* In Poulsbo, the share of residents over age 44 increased two percentage points, from 42 percent to 44 percent. Poulsbo has an almost even distribution across these four age groups. Almost one in four residents in Poulsbo are over age 64.
- *Silverdale's population is aging quicker than the county as a whole.* In Silverdale the share of residents over age 45 years old increased by 12 percentage points, compared to an eight percentage point increase countywide. The share of Silverdale residents over 65 years of age increased from nine percent in 2000 to 15 percent in 2013-2017.

In Exhibit 18, population projections from the Washington State Office of Financial Management, indicates that from 2020 to 2040, Kitsap County as a whole will see the largest increases in the number of people over age 75. During this period, people over 85 years old will add the most individuals to the population, at over 12,000 people between 2020 and 2040.

Projections also indicate that 52 percent of population growth between 2020 and 2040 will be those aged 75 years and older. This is an increase of over 29,000 seniors. People aged 20 years and younger are projected to increase by over 9,500, but this age group remains the largest proportion of the whole population. The number of people between 55 and 69 is projected to decrease from 2020 to 2040, as well as their proportions.

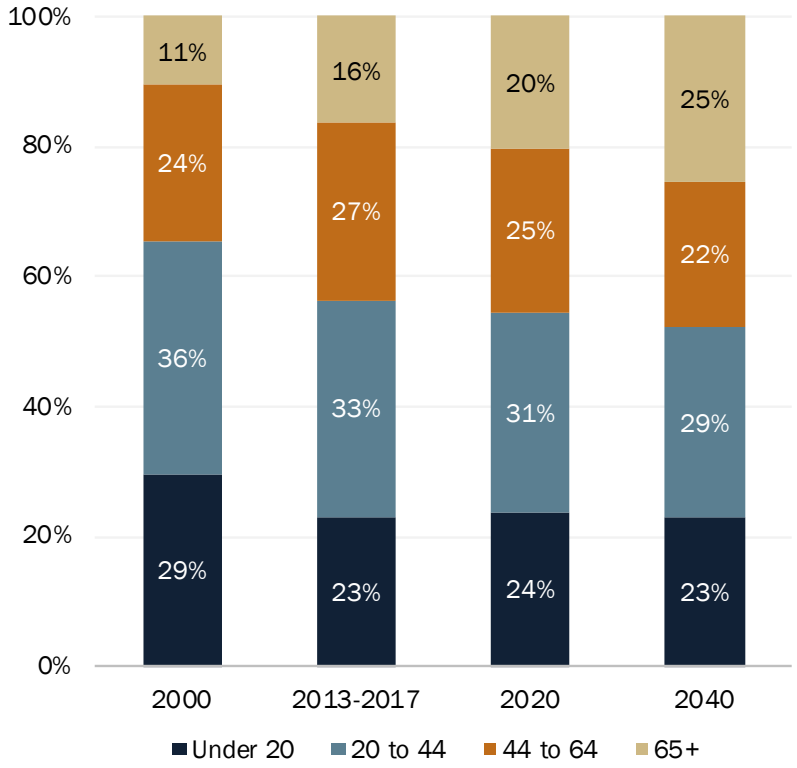
Exhibit 18. Kitsap County's Total Population Projection by Age Group, 2020 to 2040



Source: Washington State Office of Financial Management, Forecasting Division.

Exhibit 19 combines the data in Exhibit 17 and Exhibit 18 to demonstrate the changing demographic age makeup of Kitsap County from 2000 to 2040. According to the projections from the Washington Office of Financial Management, by 2040 almost 50 percent of Kitsap residents will either be under 20 years old or over 65 years old. These cohorts largely do not participate in the labor force, which could have profound effects on the economy.

Exhibit 19. Kitsap County's Aging Population, 2000 through 2040



Source: Washington State Office of Financial Management, Forecasting Division, 2000 Decennial Census, Table P012 and American Community Survey, 2013-2017 5-Year Estimates, Table DP05.

Increasingly, the Baby Boomer cohort has expressed interest in "aging in place" or staying in their existing housing as long as possible.[25] Historically, the process of older households moving into retirement homes or in with younger family members has freed up important housing stock for the next round of buyers. But according to Freddie Mac, this process is breaking down with the desire to age in place, causing delays and higher prices for younger generations looking to join the housing market.[26] Kitsap's aging population looking to age in place, coupled with the increasing demand in the future, mean that greater numbers of housing units will likely be demanded in the future.

DIVERSITY

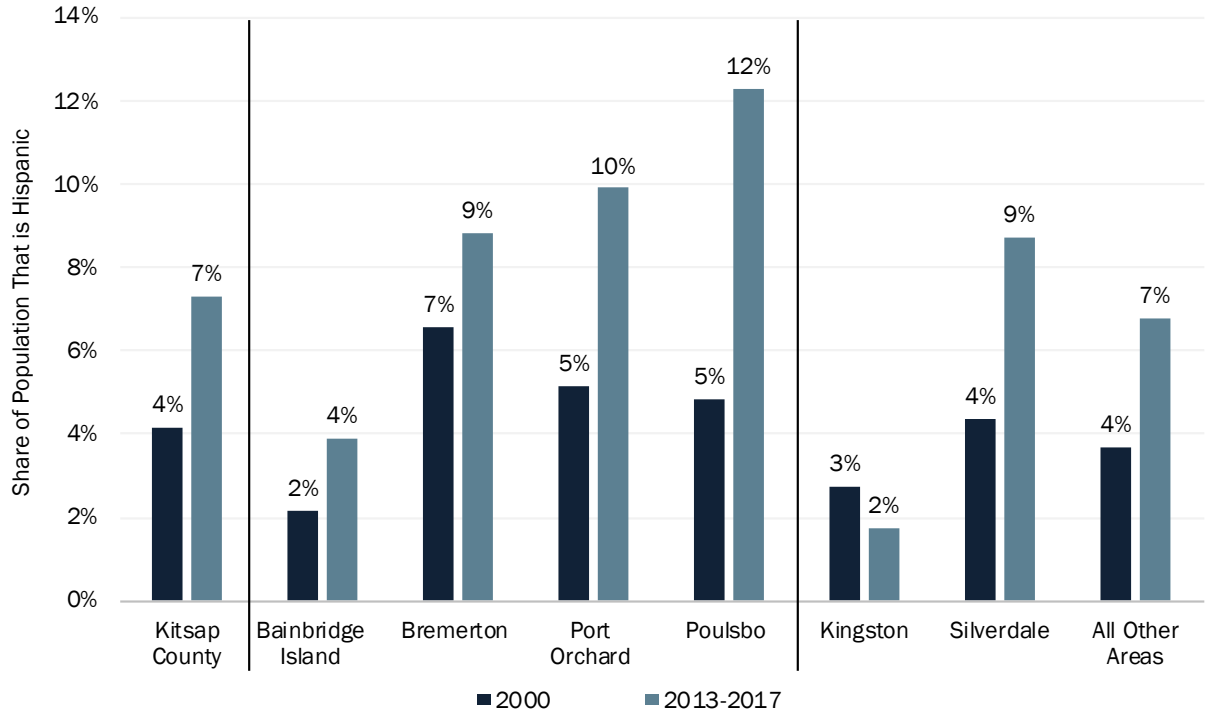
As a whole, Kitsap County is becoming more ethnically diverse. Exhibit 20 demonstrates that the Hispanic or Latinx population almost doubled from four percent of Kitsap County's total population in 2000, to seven percent of the population in the 2013–2017 period. The population of Kitsap County is less ethnically diverse than Washington State, where 12 percent of the population is Hispanic/Latinx. Bremerton, Port Orchard, and Poulsbo are more ethnically diverse than the Kitsap County average, with the Hispanic/Latinx population making up nine

[25] AARP. 2018. "2018 Home and Community Preferences: A National Survey of Adults Age 18-Plus." Available from: www.aarp.org/research/topics/community/info-2018/2018-home-community-preference.html?

[26] Freddie Mac. 2019. "While Seniors Age in Place, Millennials Wait Longer and May Pay More for their First Homes." Available from: www.freddiemac.com/research/insight/20190206_seniors_age_millennials_wait.page

percent, ten percent, and 12 percent of residents, respectively. Bainbridge Island has the lowest share of Hispanic/Latinx residents, although the proportion doubled across the 2000 to 2013-2017 period. Port Orchard's Hispanic/Latinx population also doubled over the analysis period.

Exhibit 20. Hispanic or Latinx Population as a Percent of the Total Population, Kitsap County, and Census Designated Cities, 2000 and 2013–2017



Source: 2000 Decennial Census Table P008 and American Community Survey, 2013-2017 5-Year Estimates, Table DP05.
Notes: Hispanic/Latinx and non-Hispanic/Latinx households are of any race. Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

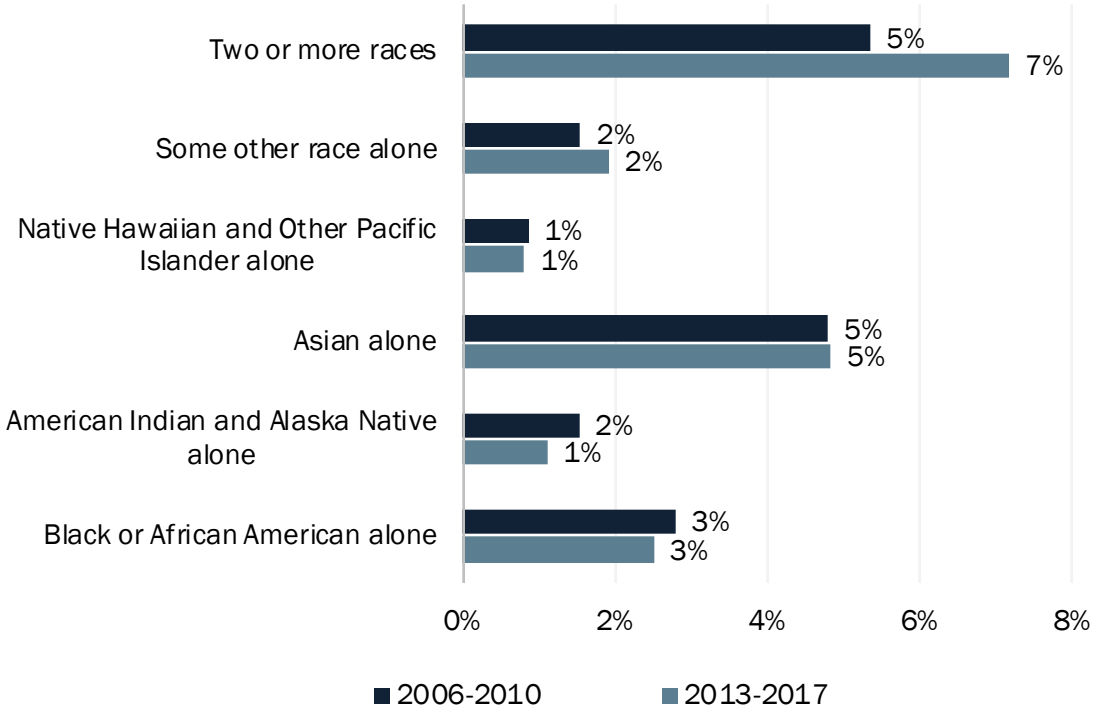
According to the 2017 Current Population Survey (CPS), households that are Hispanic/Latinx are generally larger in size than non-Hispanic/Latinx families. Across the entire U.S. population, 2017 household sizes varied:

- Hispanic households of any race averaged 3.25 people,
- Non-Hispanic Asian households averaged 2.91 people,
- Non-Hispanic households of all other races averaged 2.70 people,
- Non-Hispanic Black households averaged 2.47 people, and
- Non-Hispanic White households averaged 2.37 people.

The racial mix of Kitsap County residents have also diversified over the 2006-2010 to 2013-2017 period. As shown in Exhibit 21, those who reported being two or more races grew the most relative to all other racial groups, from five percent in 2006-2010 to seven percent in 2013-2017. Other racial groups that increased in proportion over this period include those who reported

being some other race as well as those who reported being Asian alone. White alone individuals are not included in Exhibit 21 as their population share makes it difficult to see the changes in other racial groups. The size of this group is detailed in the note beneath the exhibit.

Exhibit 21. Changes in Race, Kitsap County, 2006-2010 and 2013-2017



Source: U.S. Census Bureau, 2006-2010 ACS 5-Year Estimates, Table B02001, and 2013-2017 ACS 5-Year Estimates, Table B02001.

Notes: For the 2006-2010 period, the White alone population in Kitsap County was 83 percent; during the 2013-2017 period, it was 82 percent. The bars for the White alone group are excluded from the exhibit as it makes it difficult to see the change in other racial groups.

Another important influence that Kitsap's increasing diversity may have on its housing stock relates to homeownership. On average, non-white households have lower homeownership rates than non-Hispanic white households.[27] Given that the majority of Kitsap's housing stock is single-family ownership, housing is rising in value due to seniors aging in place, there is a lack of development, and there is continued rising demand, this could become a bigger mismatch in the available housing and the ability to own or rent that housing.

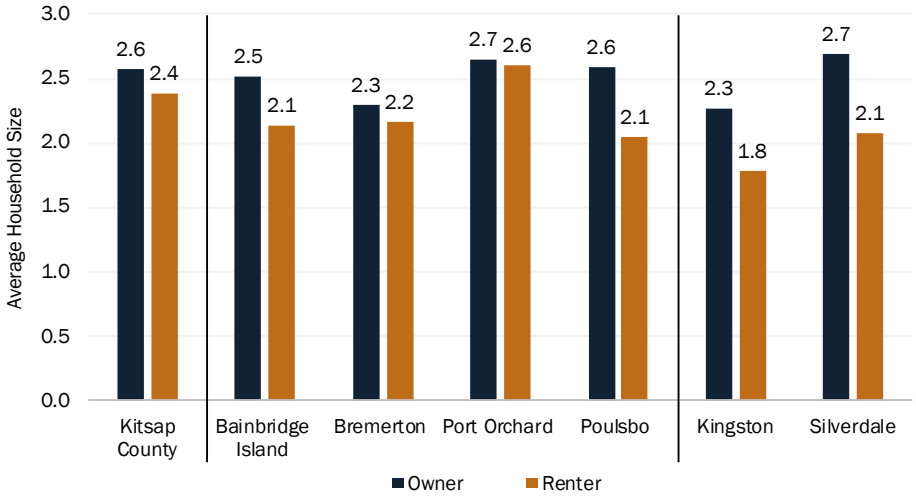
[27] Urban Institute. 2019. "Mapping the Hispanic Homeownership Gap." Available from: www.urban.org/urban-wire/mapping-hispanic-homeownership-gap

HOUSEHOLD FORMATION

Exhibit 22 displays the average household size of renter- and owner-occupied households across Kitsap County and its Census designated cities during the 2013-2017 period. Renter-occupied households in Kitsap County and its cities tend to have fewer occupants than owner-occupied households. While this trend is consistent with national household sizes, both owner-occupied and renter-occupied households in Kitsap County as a whole are smaller than the U.S. average (which is 2.70 people in owner-occupied households on average, and 2.52 in renter-occupied households). Port Orchard differs from other cities in that the average household size between renters and owners is approximately the same. Renter-occupied households in Port Orchard are larger than the national average.

The average size of owner-occupied households varies little across Kitsap County.
Renter households are smaller than owner-occupied households countywide.

Exhibit 22. Average Household Size of Owner and Renter-Occupied Units, Kitsap County and Selected Cities, 2013-2017



Source: ACS 2013-2017 5-Year Estimates, Table DP04.
Notes: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places.

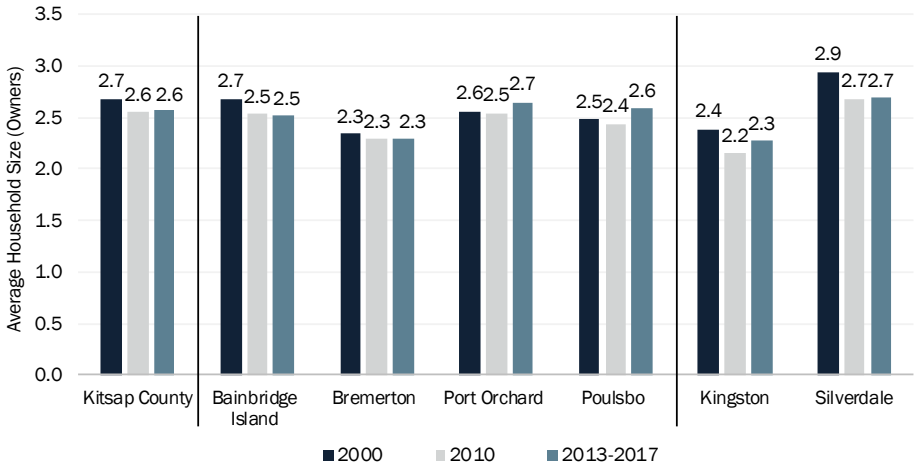
The following exhibits demonstrate that Kitsap County households are becoming smaller and that larger households are more concentrated in a few cities.

Exhibit 23 below shows the average household size of owner-occupied households for Kitsap County and its Census designated cities. The County's average owner-occupied household size shrunk from 2.7 in the year the 2000 (dark blue bar) to 2.6 in 2013-2017 (teal bar). Different cities saw different changes over time:

- Bainbridge Island's average owner-occupied household size shrank.
- Bremerton's, Kingston's and Silverdale's average household sizes fell for owner-occupied households.
- Port Orchard's and Poulsbo's average household size increased for owner-occupied households.

Kitsap County's average owner-occupied household size is similar among selected cities.
Bremerton has a slightly smaller average household size.

Exhibit 23. Average Household Size Owner-Occupied Units, Kitsap County and Selected Cities, 2000, 2010, and 2013-2017



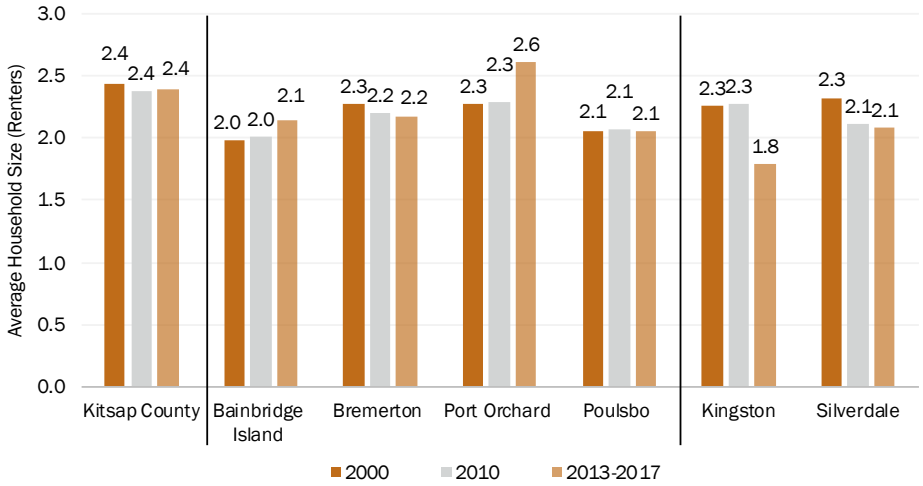
Source: 2000 Decennial Census Table H012, 2010 Decennial Census Table H12, and ACS 2013-2017 5-Year Estimates, Table DP04.
Notes: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places.

Exhibit 24 below shows the average household size of renter-occupied households for Kitsap County and its Census designated cities. The average renter-occupied household size for the whole County shrunk from 2.44 (dark orange bar) in the year 2000, to 2.39 (light orange bar) in 2013-2107. Different cities saw different changes over time:

- Bainbridge Island's renter-occupied households increased in size slightly.
- Bremerton's, Kingston's and Silverdale's average household sizes fell for renter-occupied households.
- Port Orchard's average household size increased for renter-occupied households.
- Poulsbo's average renter-occupied household size remained steady.

Kitsap County's average renter-household size is on par with other selected cities.

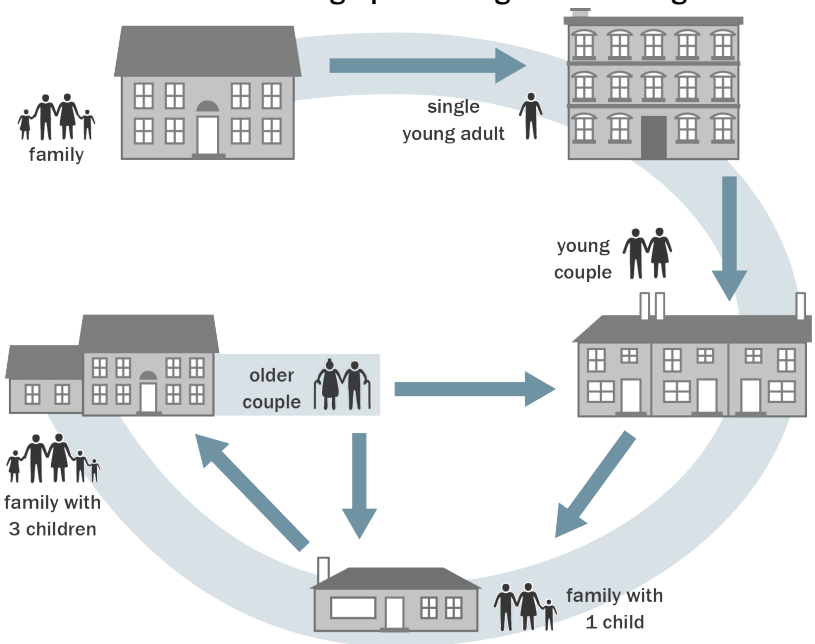
Exhibit 24. Average Household Size Renter-Occupied Units, Kitsap County and Selected Cities, 2000, 2010, and 2013-2017



Source: 2000 Decennial Census Table H012, 2010 Decennial Census Table H12, and ACS 2013-2017 5-Year Estimates, Table DP04.
Notes: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places.

Housing needs change based on household size and life stage. Exhibit 25 demonstrates how housing needs change as people go through different life stages as the household size changes. The second and third steps represent when a young couple might search for more space, when roommates form separate households, or when a young family seeks more bedrooms and outdoor space. As described in the next section, many renters looking to buy houses in Kitsap County are being priced out.

Exhibit 25. Effect of Demographic Changes on Housing Need

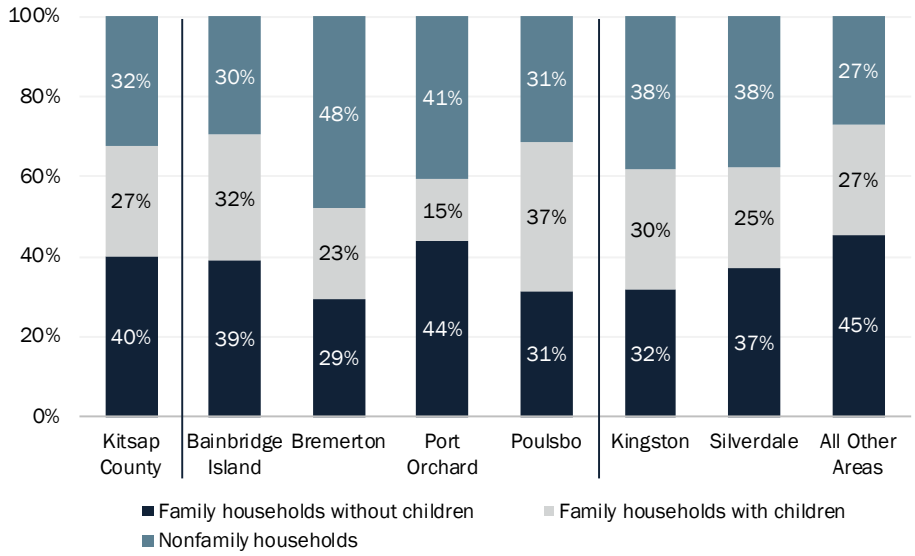


Source: ECONorthwest, adapted from Clark, William A.V. and Frans M. Dieleman. 1996. Households and Housing. New Brunswick, NJ: Center for Urban Policy Research.

Exhibit 26 below displays the current household composition of households across Kitsap County and in its Census designated cities. The fact that only 27 percent of all Kitsap County households have children is likely influenced by its large share of older adults, and by the heavy influence of shipyard or military workers, who may disproportionately be living in non-family households, such as with roommates.

Forty percent of households in Kitsap County are family households without children.

Exhibit 26. Household Composition, Kitsap County and Selected Cities, 2013-2017



Source: 2013-2017 ACS Table DP02.
Notes: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

Exhibit 28 also shows some interesting findings about the different cities in Kitsap County.

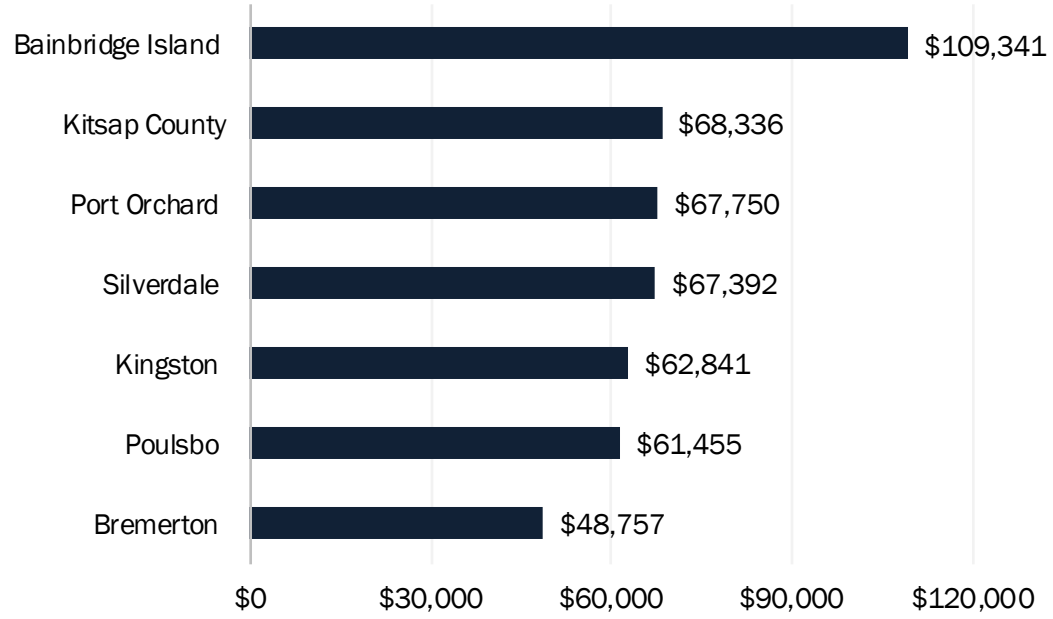
- Poulsbo currently has the greatest share of households that are families with children – about 37 percent of all households. This is evidenced by the fact that Port Orchard had the highest average household sizes for both owner-occupied and renter-occupied households. This also aligns with a key finding from the Housing Inventory memorandum that Port Orchard has been building a large share of all of the new housing in Kitsap County in recent years. Clearly, this new housing is helping to attract households with children.
- Bremerton has the largest share of nonfamily households at 48 percent. This aligns with a key finding in the Housing Inventory memorandum that Bremerton has the most multifamily housing and the highest share of renter households. It is fitting that Bremerton's housing stock and population align. Multifamily housing is an important piece of any area's housing stock and will continue to grow in importance as demographic and living preferences change. This could likely be due to the high presence of military-sector workers who rent housing and have roommates.

- Bainbridge Island has almost an even one-third split between non-family households, family households with children, and households without children. That households without children is higher than the other groups speaks to Bainbridge's higher average age (48 - see Exhibit 15). Perhaps these households are empty-nesters.
- Poulsbo and the "all other areas" across the county have similar household compositions as Bremerton's. These areas are close to the other military bases (Bangor Naval Submarine Base and Keyport Base).

INCOME

Income is another key determinant in housing choice, as a households' ability to afford housing largely dictates where the household will live, the type of house it can afford (size, number of bedrooms), the quality of the housing, and homeownership opportunities. Exhibit 27 displays the median household incomes in Kitsap County and select cities in the 2013-2017 timeframe. Across the county, the median income is just over $68,300 and ranges from about $49,000 in Bremerton to $109,000 on Bainbridge Island.

Exhibit 27. Median Household Income, Kitsap County and Selected Cities, 2013-2017

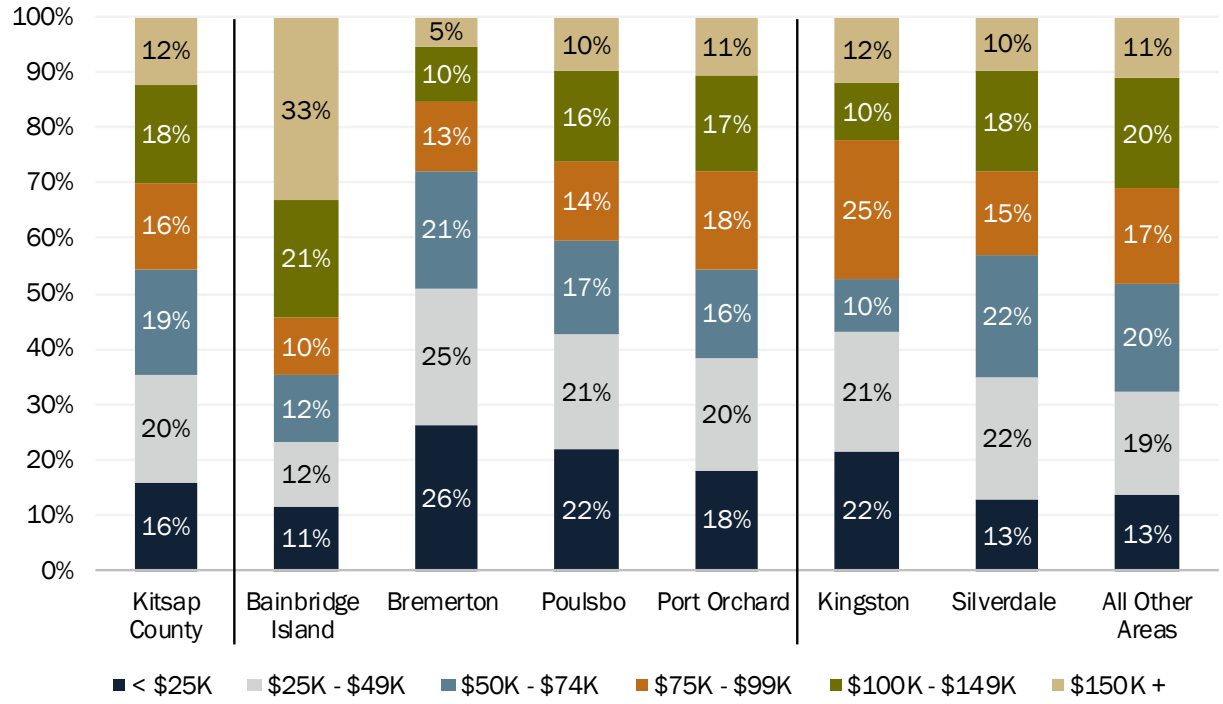


Source: American Community Survey, 2013-2017 5-Year Estimates, Table B02511.
Notes: Data shown for Kitsap County are the entire county, inclusive of the other areas shown. Data shown for Bainbridge Island, Bremerton, Port Orchard, Poulsbo, Kingston, and Silverdale are for the Census Designated Place (City) boundaries.

Exhibit 28 demonstrates the income distribution in Kitsap County and its Census designated cities as of the 2013-2017 time period. In this point-in-time, about 36 percent of all Kitsap County households made less than $50,000 per year, compared with 41 percent of households in Washington State. The county has a higher portion of households with an income over $150,000 than does Washington State with almost 12 percent compared to eight percent, respectively.

Kitsap County's higher income residents (and growth in this population bracket) skew its median income, which has consequences for programs relating to affordable housing and anti-poverty efforts.

Exhibit 28. Share of Households by Income in Kitsap County and Cities, 2013-2017



Source: American Community Survey, 2013-2017 5-Year Estimates, Table B19001.
Notes: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six cities shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

Of the cities evaluated, Bainbridge Island has the highest share of households earning more than $150,000 (33 percent) while Bremerton has the highest share of households earning less than $25,000 (26 percent). More than 50 percent of Bremerton households earned less than $50,000 in the 2013-2107 time period compared to only 23 percent on Bainbridge Island.

While there is substantial variation in the distributions of incomes in these geographies, we also look at changing incomes over time. From 2006-2010 to 2013-2017 the entirety of Kitsap County gained about 4,700 households (an increase of five percent). Exhibit 29 below shows this growth by different income brackets. This exhibit shows the number of households in each income bracket in the 2016-2010 (dark blue) and 2013-2017 (light blue) time periods. To compare incomes over time, we used the Bureau of Labor Statistics' calculations of inflation to adjust the income brackets in each year. [28]

As the exhibit demonstrates, the County as a whole appears to be gaining households at the lowest income levels and at the highest income levels over time. The number of households with incomes below $20,000 grew by 23 percent from 10,450 households in 2010 to 12,850 households in 2017, while the number of households with incomes greater than $80,000 grew by

[28] According to the Bureau of Labor Statistics' inflation calculator, inflation from June 2010 to June 2017 was 1.12.

ten percent from 36,500 in 2010 to 40,300 in 2017. The number of households with incomes between $20,000 to $80,000 shrank by about three percent over this time period.

Exhibit 29. Change in Household Incomes, Kitsap County, 2006-2010 and 2013-2017

Source: 2006-2010 and 2013-2017 ACS Public Use Micro Sample (PUMS) Data.

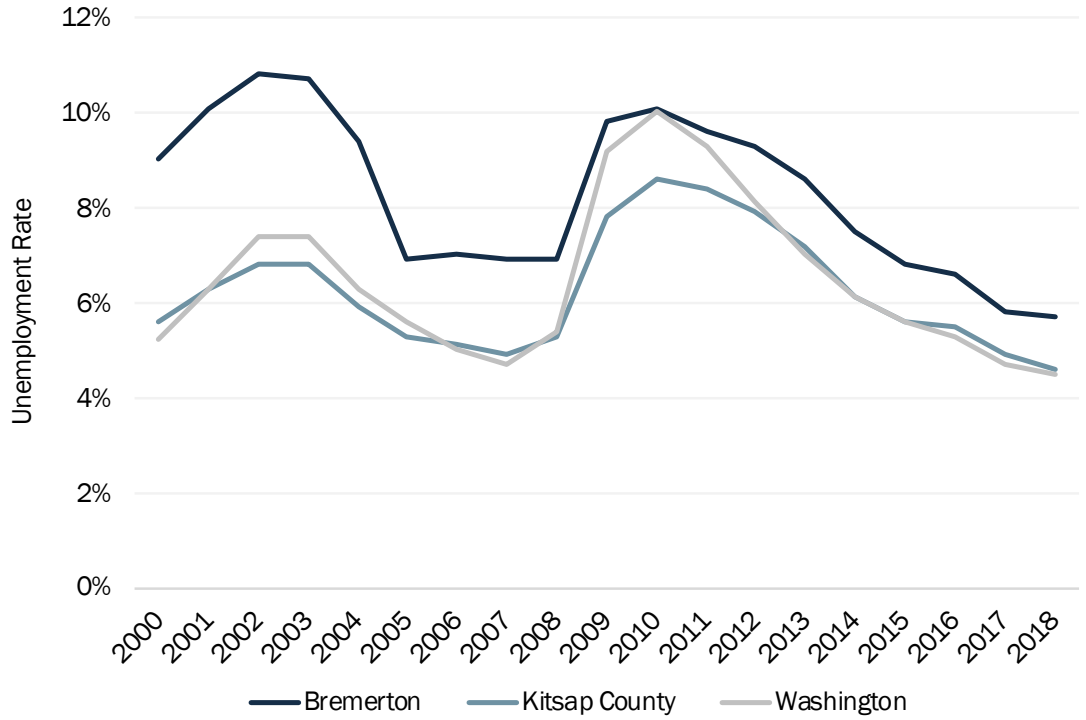
Kitsap County Economic Trends

Economic trends are another major driver of housing demand. A strong local economy can drive competition for labor as employers hire and expand, increase competition for land as offices and retail markets grow, and increase demand for housing as wages grow and disposable incomes rise. Kitsap County is undoubtedly influenced by the strong economy across the entire Puget Sound.

Employment Growth

Since 2000, Bremerton's unemployment rate has remained consistently above the entire County's rate, though in recent years the gap has closed. In 2018, Bremerton's unemployment rate was 5.7 percent. Comparatively, unemployment across the whole County (including Bremerton) was 4.6 percent, and 4.5 percent in Washington (including Kitsap and Bremerton).

Exhibit 30. Unemployment Rate, Washington State, Kitsap County, City of Bremerton



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics.

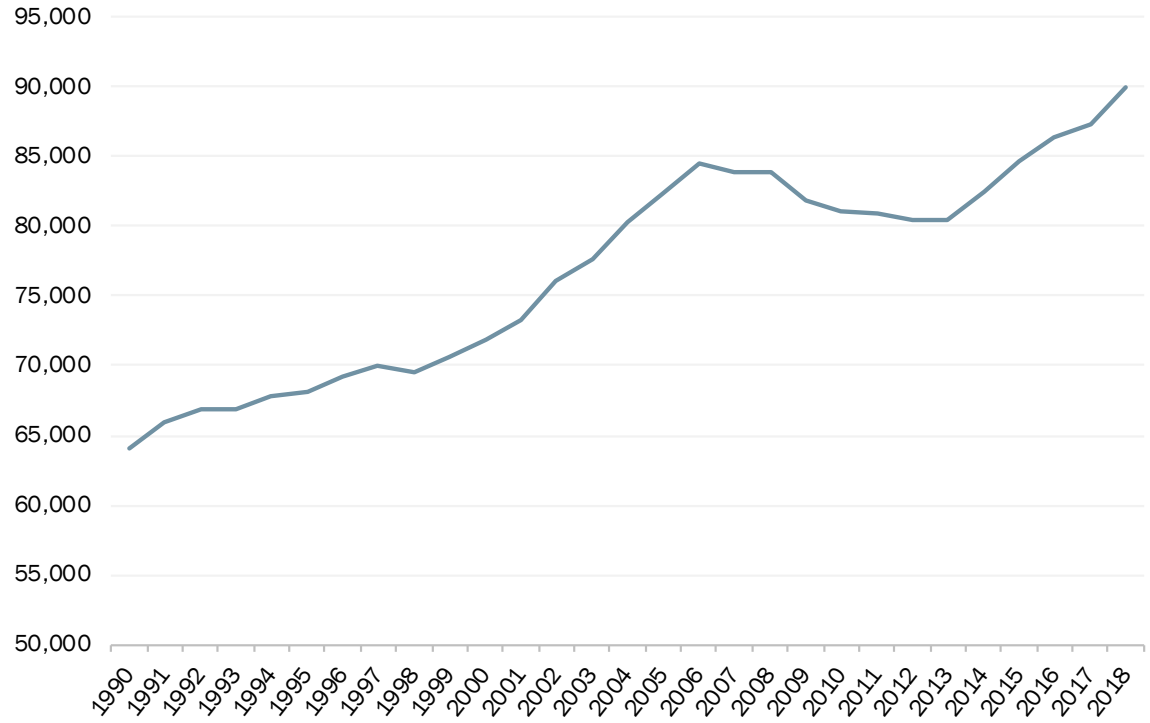
Job Growth

According to the Quarterly Census of Employment and Wages from the Bureau of Labor Statistics, there were nearly 90,000 covered jobs across Kitsap County in 2018 (the latest available for all sectors). Covered employment is a job that is covered by State Unemployment Insurance laws or Unemployment Compensation for Federal Employees (UCFE).[29]

Exhibit 31 displays the growth in total covered employment since 1990. Covered employment for the entire County has been growing steadily over time. It grew more than 10 percent from 1990 to 1999, just over 14 percent from 2000 to 2009, and about 11 percent from 2010 to 2018. The exhibit displays the steady employment increase leading up to the Great Recession, some job loss through about 2013, and the recent growth post-2013. In 2015, total jobs throughout the County exceeded the pre-recession peak (which occurred in 2006) and by 2018 total jobs in the County were at their highest in these past three decades.

[29] It's important to note that the QCEW does not account for every job in a given region. Examples of jobs not accounted for in QCEW include proprietors, self-employed workers, the majority of agricultural workers on small farms, railroad employees, unpaid family workers, some domestic workers, and some state and local government workers.

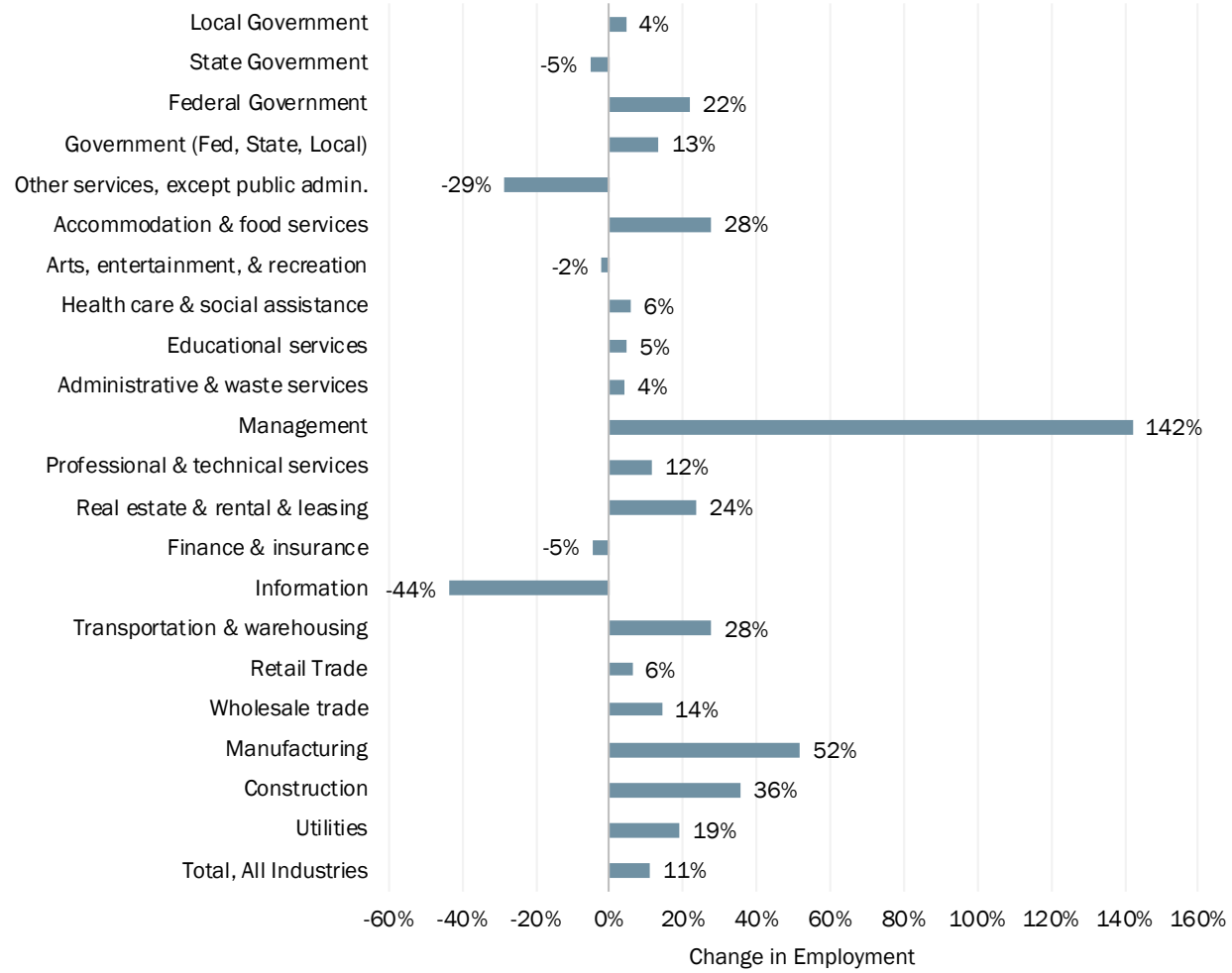
Exhibit 31. Total Covered Employment, Throughout Kitsap County, 1990 – 2018



Source: Bureau of Labor Statistics' Quarterly Census of Employment and Wages, 1990-2018.

Of course, this growth differs by sector. Exhibit 32 below displays this change in employment by sector (excluding sectors with zero jobs) from 2010 to 2018. As the exhibit demonstrates, the entire County has seen wide variation in job growth by sector. The 2010 to 2018 timeframe is the U.S.'s longest running expansion in modern history and Kitsap has seen strong job growth in line with national trends.

Exhibit 32. Change in Covered Employment by Sector, Kitsap County, 2010-2018

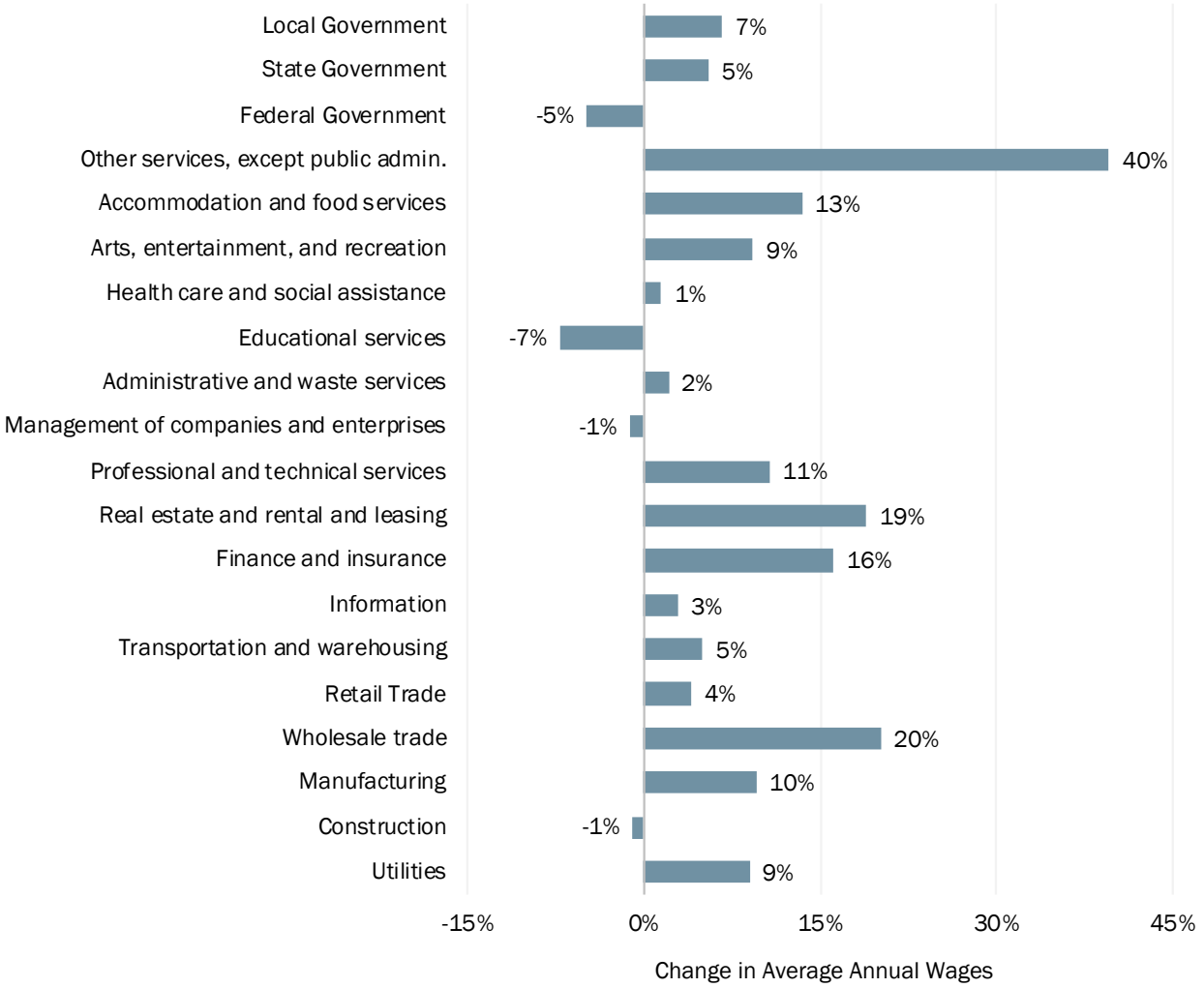


Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2010 and 2018.

- The top five gaining sectors are management (142 percent growth), manufacturing (52 percent growth), construction (36 percent growth), transportation and warehousing (28 percent growth), and food service jobs (28 percent growth).
- Only five sectors saw declines in covered employment, including information jobs (44 percent decline), other service jobs (29 percent decline), state government jobs (5 percent decline), finance/insurance jobs (5 percent decline), and arts/entertainment jobs (2 percent decline).

There are clear implications for housing demand as it relates to the growth of different employment sectors. Of the top five growing sectors, most are relatively well-paying jobs, with the exception of accommodation and food service jobs. Jobs in the management sector had an average annual pay of $90,130 in 2018, while the average pay for the manufacturing sector was $53,340, construction was $53,300, transportation/warehousing was $38,430, and the food service sector was $19,680. Exhibit 33 below displays the inflation-adjusted average annual pay growth in each of these sectors since 2010.

Exhibit 33. Average Annual Wage Growth by Sector, Kitsap County, 2010-2018



Source: Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages, 2010 and 2018.
Note: Before calculating the change in average annual pay, we used the Bureau of Labor Statistics' Consumer Price Index (U.S. city average) to adjust 2010 dollars to 2018 dollars.

The inflation-adjusted average annual pay in all but four sectors in the County increased over the 2010 to 2018 period.[30] Jobs in the "other services" category saw the biggest increase of almost 40 percent, followed by wholesale trading with 20 percent wage growth and real estate/rental/leasing with 19 percent wage growth.

Largest Employers

Naval Base Kitsap, located throughout the county, is the largest employer in Kitsap County. When only looking at the top ten largest employers, Naval Base Kitsap accounts for 74 percent of all employees. As Exhibit 34 demonstrates, Naval Base Kitsap has 13.5 times more employees

[30] To make accurate wage comparisons across time, we adjusted Kitsap County's annual average wages in 2000 for inflation via the Bureau of Labor Statistics' Consumer Price Index (CPI).

than the next largest employer, Harrison Medical Center. Among the top ten employers, only three are private organizations.

Exhibit 34. Top Ten Employers in Kitsap County

Employers	Categories	Total
Naval Base Kitsap	Public	33,800
Harrison Medical Center	Private	2,500
Washington State	Public	2,000
Central Kitsap School District	Public	1,550
North Kitsap School District	Public	1,200
South Kitsap School District	Public	1,150
Kitsap County	Public	1,140
Port Madison Enterprises	Private	925
Bremerton School District	Public	750
Haselwood Auto Group	Private	710

Source: Kitsap Economic Development Alliance.

Exhibit 35 displays the top ten for both public and private employers across the County. Half of the top ten private employers are in the healthcare industry, which is followed by the retail industry and includes three grocery store chains and an auto dealership. The public employers fall into four major categories: military, school districts, public sector, and county services.

Exhibit 35. Top Ten Private and Public Employers

Private Employers	Categories	Total	Public Employers	Categories	Total
Harrison Medical Center	Healthcare	2,500	Naval Base Kitsap (NBK)	Department of Defense	23,903*
Port Madison Enterprises	Hospitality	925	Washington State	(other) Public	2,000
Haselwood Auto Group	Retail	710	Central Kitsap School District	School Districts	1,550
Fred Meyer	Retail	584	North Kitsap School District	School Districts	1,200
Kitsap Mental Health Services	Healthcare	489	South Kitsap School District	School Districts	1,150
Martha and Mary	Healthcare	477	Kitsap County	County Services	1,140
Town & Country Markets	Retail	472	Bremerton School District	School Districts	750
YMCA	Family Services	435	Bainbridge Island School District	School Districts	629
Safeway	Retail	434	Kitsap Transit	County Services	432
The Doctors Clinic	Healthcare	424	Olympic College	School Districts	384

Source: Kitsap Economic Development Alliance and US Department of Defense, *Defense Spending by State*, Fiscal Year 2017.
*Note: We use the Department of Defense's estimate of total employees in Kitsap County instead of the Kitsap Economic Development Alliance's figure here. Data from the Department of Defense are close to that from Bureau of Labor Statistics and are reliable sources.

Average annual pay (in 2018) and recent pay change (2010-2018 inflation-adjusted) in the industries with the most employers across Kitsap County are:

- Healthcare and Social Assistance: $44,580 average annual pay; one percent growth
- Retail: $32,233 average annual pay; four percent growth
- Local Government: $53,230 average annual pay; seven percent growth
- Federal Government: $82,056 average annual pay; five percent decrease
- Education: $31,034 average annual pay; seven percent decrease

Kitsap's Military Presence

The presence of Naval Base Kitsap has a significant influence on the local economy and housing need. The Naval Base employs about 24,000 people, 19 percent of which are in active duty.

The military provides active duty soldiers and officers a Basic Allowance for Housing (BAH) for rent or a home purchase off base. These allowances are shown by rank and position in Exhibit 37. The red line is the 2019 median rent in Kitsap County. The BAH for most officers exceeds the median rent, and most enlisted soldiers with dependents have a BAH that on par with the median rent.

Exhibit 36. Top U.S. DOD Contractors in Washington State

Company	Contract
Boeing	$8.0B
PacMed Clinics	$150M
TrailStone Group	$90M
Chugach Alaska Corp.	$70M
Walsh Group	$60M
General Dynamics	$42M
Rore	$38M
Nova Group	$38M
Pacific Ship Repair & Fabrication	$37M

Source: US Department of Defense, *Defense Spending by State*, Fiscal Year 2017

Exhibit 37. Basic Allowance for Housing (BAH) Rates, 2019

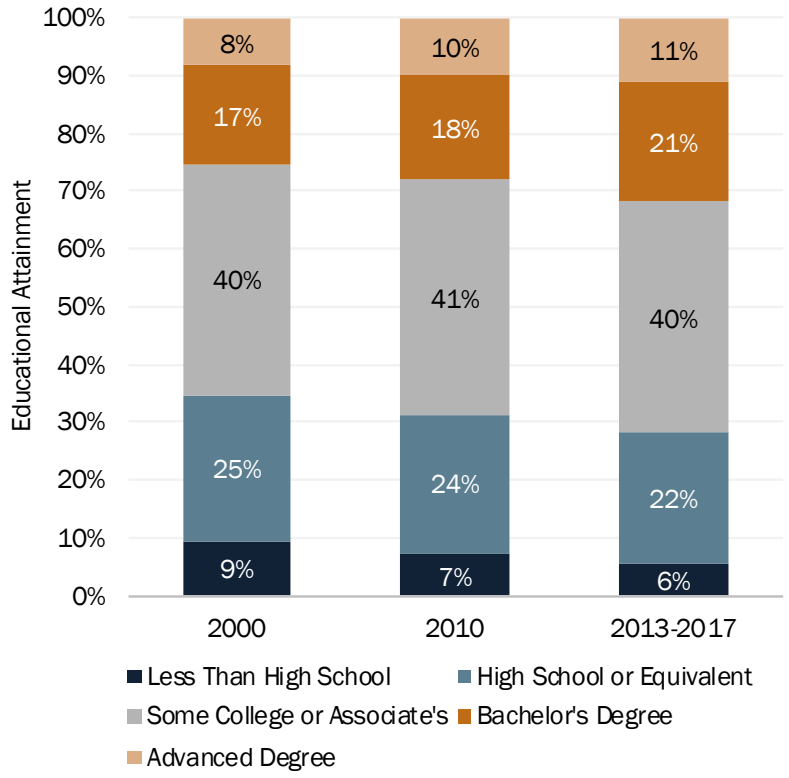
Source: NB Kitsap-Bangor, WA Housing & Relocation Information; Zillow 2019 Rent Index

Naval Base Kitsap is a port for Navy aircraft carriers – some of which can house up to 4,500 people. Due to military secrecy, the schedules for docking aircraft carriers at ports around the country are not published in advance. As Exhibit 37 demonstrates, certain ranks of enlisted soldiers and officers have basic housing allowances that exceed the median gross rent in Kitsap County. The sudden arrival of thousands of military personnel and their families with higher-than-market housing allowances can dramatically skew the housing markets of local cities.

Educational Attainment

Across Kitsap County, residents have become more educated since 2000. Exhibit 38 shows the change in educational attainment from 2000 to the 2013-2017 period across the County. During this time, the share of residents with only a high school degree decreased by three percentage points, from 25 percent in 2000 to 22 percent in 2013-2017. At the same time, the share of Kitsap County residents holding a Bachelor's degree increased from 17 percent in 2000 to 21 percent in 2013-2017, a four percentage point growth. In 2000, the share of residents with a high school diploma or less exceeded that of residents holding at least a Bachelor's degree (35 percent compared to 25 percent). However, in the 2013-2017 period, this share shifted. Approximately 32 percent of County residents held at least a Bachelor's degree and 28 percent held a high school diploma or had less education.

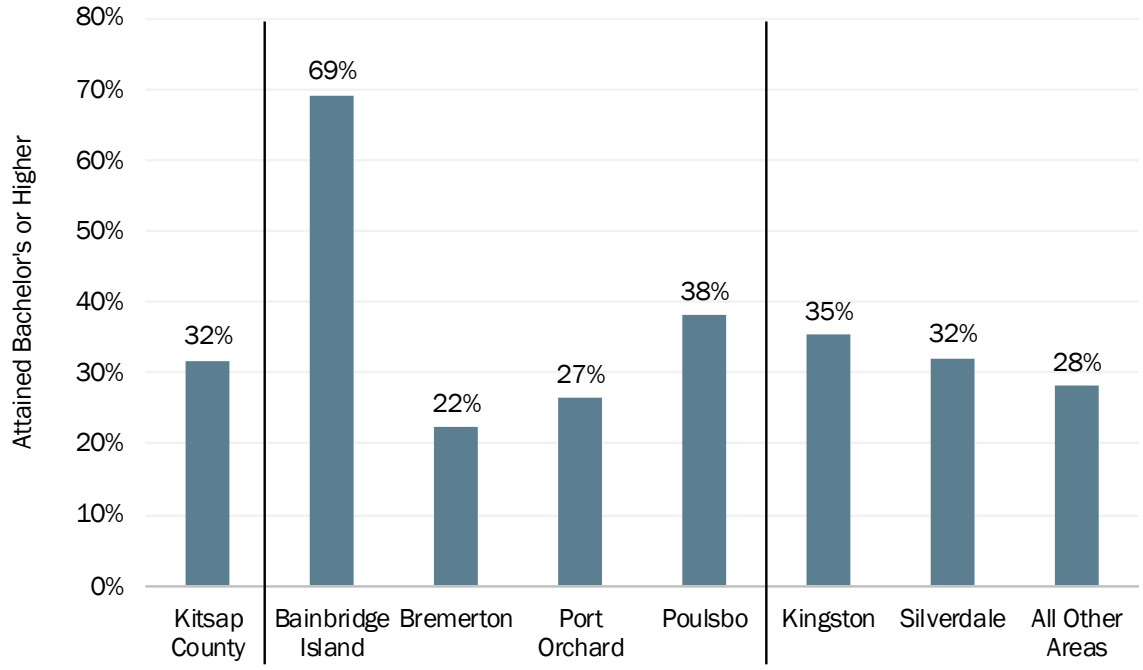
Exhibit 38. Change in Educational Attainment, Kitsap County, 2000, 2010, and 2013-2017



Source: U.S. Census Bureau, 2000 Decennial Census Summary File 3, Table DP-2; American Community Survey 2006-2010 5-Year Estimates, Table DP02; and American Community Survey 2013-2017 5-Year Estimates, Table S1501.

Of the jurisdictions analyzed in Kitsap County, Bainbridge Island residents had the highest share of Bachelor's or advanced education in 2013-2017. Exhibit 39 shows that Bainbridge Island exceeded Kitsap County's share of educated residents by more than double. Of the other principle jurisdictions, Poulsbo has the second highest share of educational attainment (38 percent), followed by Port Orchard (27 percent), and then Bremerton (22 percent). In unincorporated Kitsap County, both Kingston and Silverdale have educational attainment rates similar to that of the County as a whole.

Exhibit 39. Share of Residents 25 Years or Older Holding a Bachelor's Degree or Higher, 2013-2017



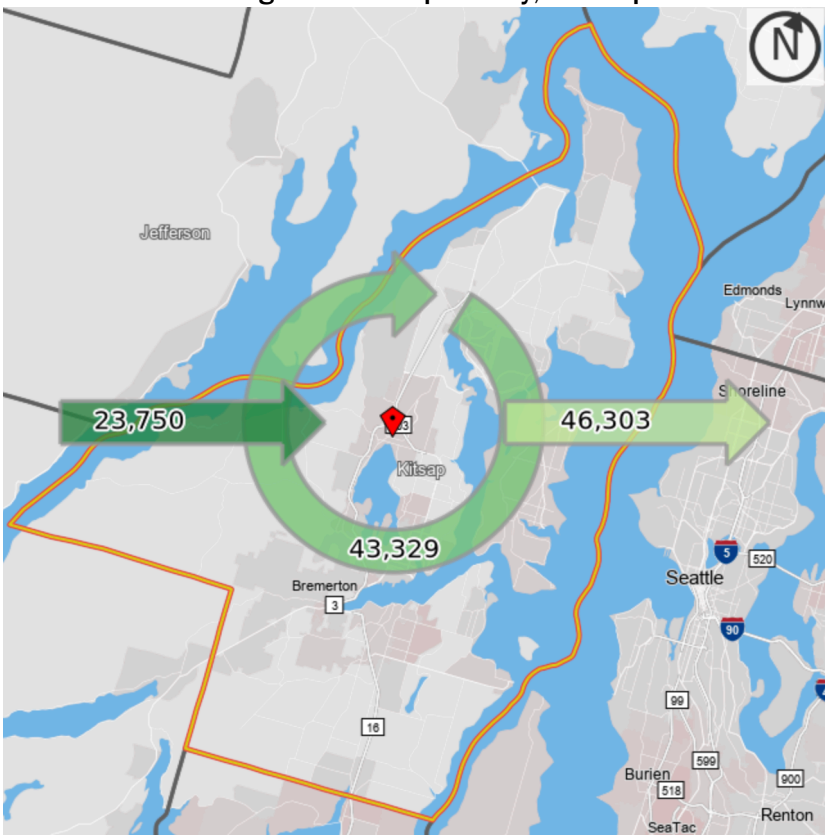
Source: American Community Survey, 2013-2017 5-Year Estimates, Table S1501.
Notes: Data are shown for the city boundaries of Bainbridge Island, Bremerton, Port Orchard, and Poulsbo, as well as the boundaries of the Kingston and Silverdale Census Designated Places. Data for the "All Other Areas" is equal to the Kitsap County total less the six jurisdictions shown and is a rough approximation for the remaining Unincorporated Kitsap County area.

Commuting Trends

Commuting trends are important to consider when thinking about housing demand. Kitsap County is part of the complex, interconnected economy of the Northwest Washington region. According to the U.S. Census Bureau, in 2017, more than 46,300 people commuted out of Kitsap County for work and about 23,750 people commuted into Kitsap County for work.

About 43,300 people both worked and lived in Kitsap County in 2017. Of the approximate 23,750 people who commuted to Kitsap County for work, about 26 percent traveled from King County, 22 percent traveled from Pierce County, and 11 percent traveled from Snohomish County. The remaining 41 percent traveled from counties across Washington as well as some in northern Oregon, like Multnomah County and Washington County.

Exhibit 40. Commuting Flows Kitsap County, and Top Five Commuting Origins, 2017



66% **Kitsap**
9% **King**
8% **Pierce**
4% **Snohomish**
3% **Mason**

Source: U.S. Census Bureau, Census On the Map.

When workers in Kitsap County do not find adequate housing to meet their needs (size, location, price, character, etc.) they may choose to live outside of the County and commute in for work. However, long commutes can negatively impact the environment, household incomes, and community well-being. According to the 2013-2017 ACS, the mean commute time for all modes of transportation in Kitsap County was 30.2 minutes. Exhibit 41 below shows the share of commuters who use each mode to get to work.

Exhibit 41. Mean Commute Time by Transportation Mode, Kitsap County, 2013-2017

Transportation Mode	Percent Commuting by Mode
Car - drove alone	70.6%
Car - carpooled	8.4%
Public transportation	9.1%
Walked	2.7%
Taxicab motorcycle bicycle or other means	2.8%
Worked at home	6.3%

Source: 2013-2017 ACS, table DP03.

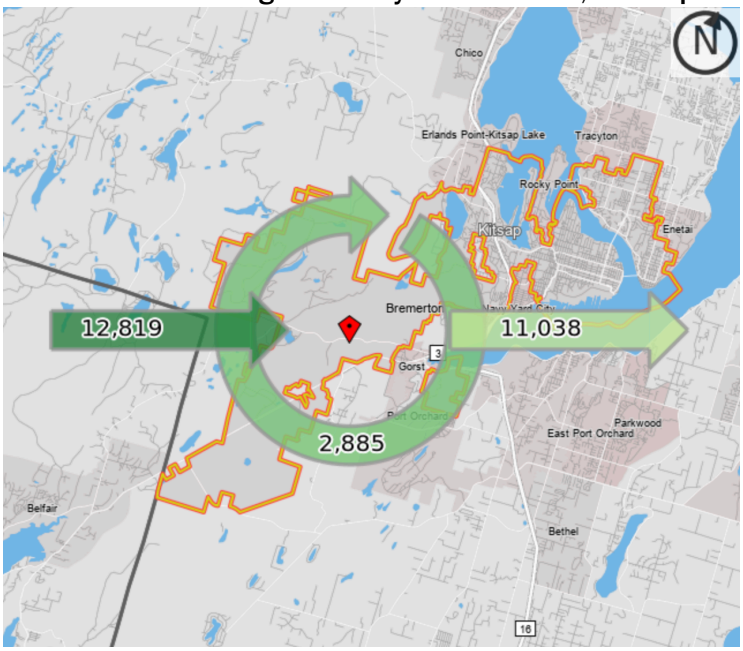
Exhibit 42. Commuting Flows Bainbridge Island, and Top Five Commuting Origins, 2017

34%	**Bainbridge Island**
12%	**Seattle**
4%	**Poulsbo**
3%	**Suquamish**
3%	**Bremerton**

Source: U.S. Census Bureau, Census On the Map.

Approximately 34 percent of Bainbridge Island's workforce, or 2,557 workers, both live and work in the City. Of those workers who commute to Bainbridge Island for work, the largest share come from Seattle, followed by Poulsbo. During the 2013-2017 period, the mean travel time to work for Bainbridge Island workers was about 42.1 minutes, approximately 12 minutes longer than the countywide average. Additionally, a sizable proportion of Bainbridge Island workers work from home (17.1 percent) compared to Kitsap County as a whole (6.3 percent).

Exhibit 43. Commuting Flows City of Bremerton, and Top Five Commuting Origins, 2017

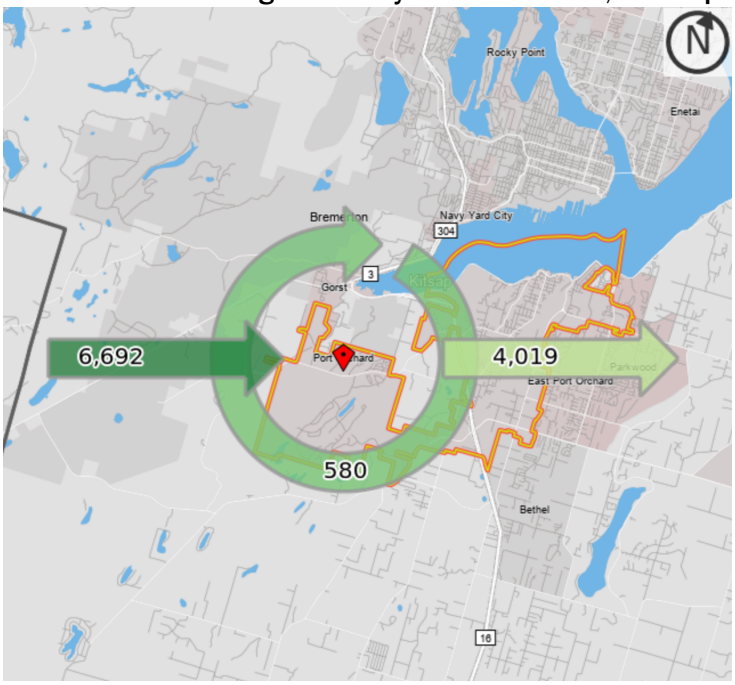


18%	**Bremerton**
5%	**Silverdale**
3%	**Port Orchard**
3%	**Tracyton**
2%	**Seattle**

Source: U.S. Census Bureau, Census On the Map.

About 18 percent of Bremerton workers, or 2,885 persons, are both employed and live in the City. Although this proportion is roughly half that of Bainbridge Island (34 percent), it is a few hundred more employees. This lower rate is likely due to the presence of Naval Base Kitsap Shipyard, which draws employees from outside of the City. In 2017, five percent of workers in Bremerton commuted from Silverdale, three percent commuted from Port Orchard, and two percent commuted from Seattle. Bremerton employees also commuted from Pierce, King, and Mason counties. The mean travel time to work for Bremerton workers was about 26.2 minutes in the 2013-2017 period, four minutes less than the countywide average.

Exhibit 44. Commuting Flows City of Port Orchard, and Top Five Commuting Origins, 2017



8% **Port Orchard**
8% **Bremerton**
4% **Parkwood**
3% **East Port Orchard**
3% **Silverdale**

Source: U.S. Census Bureau, Census On the Map.

In 2017, about eight percent, or 580 workers, both worked and lived in Port Orchard. A similar proportion of workers commuted from Bremerton, as shown in Exhibit 45. The mean commute time of Port Orchard residents who work is about 27.9 minutes, similar to the countywide average.

Exhibit 45. Commuting Flows City of Poulsbo, and Top Five Commuting Origins, 2017

11% **Poulsbo**
7% **Silverdale**
6% **Bremerton**
4% **Bainbridge Isl.**
3% **Lofall**

Source: U.S. Census Bureau, Census On the Map.

In 2017, about 11 percent, or 723 persons, both lived and worked in Poulsbo. Silverdale and Bremerton were the cities with the largest share of commuters making up Poulsbo's workforce at seven percent and six percent, respectively. Relative to countywide averages, Poulsbo residents who work have an average commute time of 27.4 minutes, a few minutes shy of Kitsap County, and approximately 4.9 of residents work from home, compared to 6.3 for Kitsap County.

Exhibit 46. Commuting Flows of Kingston CDP, and Top Five Commuting Origins, 2017

8%	**Kingston**
7%	**Hansville**
6%	**Indianola**
5%	**Poulsbo**
4%	**Silverdale**

Source: U.S. Census Bureau, Census On the Map.

In 2017, approximately eight percent, or 39 persons, both lived and worked in Kingston. Kingston, Hansville, Indianola, and Poulsbo were the jurisdictions that made up the largest share of Kingston's workforce. Kingston residents spent approximately 42.3 minutes travelling to work during the 2013-2017 period, or 12 minutes longer than the countywide average. Approximately eight percent of Kingston residents worked from home during the 2013-2017 period, about two percentage points higher than Kitsap County.

Exhibit 47. Commuting Flows of Silverdale CDP, and Top Five Commuting Origins, 2017

10%	**Silverdale**
9%	**Bremerton**
3%	**Seattle**
2%	**Poulsbo**
2%	**Port Orchard**

Source: U.S. Census Bureau, Census On the Map.

In 2017, about 10,490 persons commuted to Silverdale for work. About 10 percent of workers (nearly 1,200 persons) both lived and worked in Silverdale. Of those that work in Silverdale, nine percent commuted from Bremerton, three percent commuted from Seattle, and two percent commuted from Poulsbo. The proportion of Silverdale resident workers working from home is comparable to that of the 2013-2017 countywide average (5.9 percent compared to 6.3 percent countywide).

The commuting trends of the individual jurisdictions are generally comparable to that of Kitsap County as a whole. Residents in each city tend to have an average commute time that is shorter than the countywide average, though the differences are typically on the scale of three to five minutes. The one exception, however, is Bainbridge Island. Commute times in Bainbridge Island are about twelve minutes longer than the countywide average, but at the same time, the City has the largest proportion of residents who work from home when compared to other jurisdictions. The longer commute times are likely due to a large proportion of residents who travel to Seattle for work (35 percent in 2017).

Housing demand is driven, in part, by how close or how far people want to be from their jobs. Some will prefer their homes to be near their place of work so they can use modes of transportation that do not require a private passenger vehicle, such as walking, biking, or public transit. Others will prefer to live a suburban lifestyle, living further from a city's center for reasons such as housing affordability. With housing made more readily available in and around job centers (i.e., where jobs are most concentrated), commute times can be reduced. This in turn mitigates wear and tear on roads and transfers more commuters from private passenger vehicles to public transit.

Part III. Methods and Approach

Data Used in this Analysis

This analysis uses data from multiple sources, focusing on those that are well-recognized and reliable. One of the key sources for housing and household data is the U.S. Census. This report primarily uses data from two Census sources as well as several other non-Census sources:

- The **Decennial Census**, which is completed every ten years and is a survey of all households in the U.S. The Decennial Census is considered the best available data for information such as demographics (e.g., number of people, age distribution, or ethnic or racial composition), household characteristics (e.g., household size and composition), and housing occupancy characteristics. As of 2010, the Decennial Census does not collect more detailed household information, such as income, housing costs, housing characteristics, and other important household information. Decennial Census data is available for 2000 and 2010.
- The **American Community Survey (ACS)**, which is completed every year and is a *sample* of households in the U.S. From 2012 to 2016 and 2013 to 2017, the ACS sampled an average of 3.5 million households per year, or about 2.6 percent and 2.9 percent of the households in the nation. The ACS collects detailed information about households, including demographics (e.g., number of people, age distribution, ethnic or racial composition, country of origin, language spoken at home, and educational attainment), household characteristics (e.g., household size and composition), housing characteristics (e.g., type of housing unit, year unit built, or number of bedrooms), housing costs (e.g., rent, mortgage, utility, and insurance), housing value, income, and other characteristics.
- **Kitsap County Assessor,** which provides descriptive data on the housing stock in the county as well as recent sales data.
- **Kitsap Economic Development Alliance,** which provides data and insights on Kitsap County's workforce, such as the County's largest employers.
- The Longitudinal Employer-Household Dynamics (LEHD) **Origin Destination Employment Statistics (LODES)**, which we access via the Census's mapping tool, OnTheMap, is a dataset that shows where workers are employed and where those workers also live.
- The Bureau of Labor Statistics' **Quarterly Census of Employment and Wages (QCEW)**, which provides employment and average annual pay estimates of covered jobs, and their **Local Area Unemployment Statistics (LAUS)**, which provides monthly unemployment and labor force statistics for states, metropolitan areas, counties, and cities 25,000 persons or larger.
- The **Washington Office of Financial Management (OFM),** which provides research and data related to Washington state's demographics, economy, labor force, population projections, and more.

- **Zillow**, which provides economic data such as median home sale prices, monthly home sales, rent indices, and many other statistics for the U.S., metropolitan areas, as well as populous counties and cities.

This memorandum uses data from the 2013-2017 ACS for Kitsap County. Where information is available and relevant, we report information from the 2000 and 2010 Decennial Census. Among other data points, this report includes population, income, and housing price data from the Washington Office of Financial Management, the United States Department of Housing and Urban Development, the U.S. Bureau of Labor Statistics, The U.S. Department of Defense, and Zillow.

The foundation of the housing needs analysis is the population forecast for Kitsap from the OFM forecasting and research. Vacancy rate and household size come from the American Community Survey (ACS).

It is worth commenting on the methods used for the American Community Survey.[31] The American Community Survey (ACS) is a national survey that uses continuous measurement methods. It uses a sample of about 3.54 million households to produce annually updated estimates for the same small areas (census tracts and block groups) formerly surveyed via the decennial census long-form sample. It is also important to keep in mind that all ACS data are estimates that are subject to sample variability. This variability is referred to as "sampling error" and is expressed as a band or "margin of error" (MOE) around the estimate.

This report uses Census and ACS data because, despite the inherent methodological limits, they represent the most thorough and accurate data available to assess housing needs. We consider these limitations in making interpretations of the data and have strived not to draw conclusions beyond the quality of the data.

Assumptions/Caveats

- **HUD Median Family Income & adjusting for household size.** In several exhibits we look at the share of housing units affordable to different MFI levels that are occupied by renter households in those MFI levels. A limit to this method is that we are not able to adjust the data to account for household size. The HUD MFI is designated for a family of four. Clearly, not all households in Kitsap County are families of four, and not all units are appropriately sized for a family of four. In addition, HUD income limits are adjusted for household size, and the rents that would be affordable would thus vary by household size. In these ways, this matching exercise is rough and theoretical.
- **U.S. Census Bureau ACS Public Use MicroSample (PUMS).** PUMS are microdata, or person-level responses to the ACS questionnaire. Each record (or row) describes one person's responses to the questionnaire and these are numerically codified for statistical

[31] A thorough description of the ACS can be found in the Census Bureau's publication "What Local Governments Need to Know." https://www.census.gov/library/publications/2009/acs/state-and-local.html

analysis. Every individual is assigned a statistical weight, which indicates how many persons in the population are represented by the sampled response. We make use of these weights to create accurate estimates of populations and their characteristics in Kitsap County.

- **U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW).** It's important to note that QCEW data are limited to workers that are covered by State Unemployment Insurance (UI) laws and the Unemployment Compensation for Federal Employees (UCFE). This means that QCEW data do not account for every job worked. Important employment exclusions include proprietors, self-employed workers, the majority of agricultural workers on small farms, railroad employees, unpaid family workers, some domestic workers, and some state and local government workers.

  The Census Bureau's **OnTheMap** tool uses data from several sources, including Unemployment Insurance (UI) wage records, the Office of Personnel Management (OPM), and the QCEW. It's important to note that OnTheMap is a synthetic dataset, meaning statistical noise is injected into the original dataset to protect employer confidentiality. This is worth noting because it explains, in part, why employment numbers provided in the OnTheMap tool do not line up exactly with QCEW employment estimates.