



REPORT TO THE LEGISLATURE

Housing Market Data Toolkit

As required under RCW 36.70A.610

October 15, 2021

**Washington Center for Real Estate Research
University of Washington**

ACKNOWLEDGEMENTS

University of Washington, College of Built Environments

Renee Cheng, Dean
Carrie Sturts-Dossick, Associate Dean, Research

Special thanks to Brian Vogt, Web Computing Specialist, for the web pages and design

Washington State Office of Financial Management (OFM)

Mike Mohrman, State Demographer

Washington State Housing Finance Commission (WSHFC)

Steve Walker, Executive Director
Rich Zwicker, Senior Policy Advisor

Washington State Department of Commerce

Dave Andersen, Managing Director, Growth Management Services
Anne Fritzel, Senior Planner, Growth Management Services

This report and the associated data are available from the Washington Center for Real Estate Research at <http://wcrer.be.uw.edu/>

Questions about the report and its content should be directed to:

James Young, Director
Washington Center for Real Estate Research (WCRER)
jyoung4@uw.edu



EXECUTIVE SUMMARY

This report is presented in response to RCW [36.70A.610](#) (1) amended in Chapter 173, Laws of 2020, Section 6, Subsection 1(a and b) which requires the Washington Center for Real Estate Research at the University of Washington to produce a series of reports that compile housing supply and affordability metrics for each city planning under RCW [36.70A.040](#) with a population of ten thousand or more.

1. *The Washington center for real estate research at the University of Washington shall produce a series of reports as described in this section that compiles housing supply and affordability metrics for each city planning under RCW [36.70A.040](#) with a population of ten thousand or more.*
 - (a) *The initial report, completed by October 15, 2020, must be a compilation of objective criteria relating to income, employment, housing and rental prices, housing affordability by housing tenure, and other metrics relevant to assessing housing supply and affordability for all income segments, including the percentage of cost-burdened households of each jurisdiction. This report may also include city-specific median income data for those cities implementing the multifamily tax exemption program under chapter [84.14](#) RCW.*
 - (b) *The report completed by October 15, 2021 must include an analysis of the private rental housing market for each area outlining the number of units, vacancy rates, and rents by unit type, where possible. This analysis should separate market rate market rate multifamily rental housing developments and other smaller scale market rental housing. This analysis should also incorporate data from the Washington State Housing Finance Commission on subsidized rental housing in the area consistent with the first report under this subsection.*

This second data compilation includes 156 workbooks and 590 individual spreadsheets for 90 cities and all 39 counties in Washington State, allowing for easier city-to-county and county-to-county comparisons throughout the state. These data will provide a wide range of information for jurisdictions to use in assessing affordable housing supply and demand for both the general market as well as for targeted income and demographic groups. This analysis may include updates for housing elements in comprehensive plans required under RCW 36.70A.070 (2), or the development of housing needs assessments as part of housing action plans described in RCW 36.70A.600. This data will also be useful to the state's Affordable Housing Advisory Board (AHAB) in their ongoing work.

This data is presented in the [Washington Housing Market Data Toolkit](#) hosted on the WCRER's web site. This toolkit will be updated and modified continuously to provide jurisdictions with up-to-date information as it is released or developed. The web site presents seven data elements gathered from the Washington State Office of Financial Management, the Washington Housing Finance Commission, US Census Bureau and other resources developed internally by the WCRER. The web site is organized into seven data groups.

Census Data

Spreadsheets are available for each jurisdiction. For the 2021 report, the latest US Census data available consistently across all specified jurisdictions is the from the American Community Survey (ACS) 5-year estimates 2015-19. Under the 'Economic' tab, the first section outlines household income by income ranges with estimated median income provided below from the



ACS. Employment data can also be found under the ‘Economic’ tab for each jurisdiction further below the income data. This section also contains important information on workers by occupation, workers by industry, and commuting to work with average travel time.

Permits and Completions

This tab includes estimated residential building permits issued by each jurisdiction. Estimated completions were calculated based upon the OFM estimates of housing units by type for each year, subtracting each yearly difference by unit type. This section will expand with reports executed under subsections 1(c) and 1(d) in 2022 and 2024.

Rental Markets

Rental price data for each jurisdiction is currently limited to ACS 5-year estimates (2015-2019) provided by the US Census Bureau. Issues relating to rent freezes, evictions moratoria, and logistics prevented the production of reliable survey results for the 2021 report. In consultation with the WSHFC, a housing market survey covering the under 20 multifamily market and including the Puget Sound region will be conducted in March 2022.

Subsidized Housing Market

This part of the report is first phase in updating basic information contained in the WBARS database developed by the WSHFC. One aspect of assessing the need and demand for additional subsidized housing in a particular area is current supply of housing targeting identified submarkets. This part of the toolkit will identify subsidized housing developments and will eventually provide a basis for assessing current housing supply by targeted subgroup.

House Prices

Within the workbook, a tab for each year is provided and median house price data on each jurisdiction by housing type is provided in the table. This data was compiled by the WCRER using information from county assessor’s offices, surveys, and information from local multiple listing service providers.

Household Income by Tenure

The tab “Household Income by Housing Tenure” contains special tabulations of ACS 2015-19 data performed by the US Department of Housing and Urban Development (HUD). For larger counties, information on household income by housing tenure for a mix of substandard housing and cost overburdened measures is also provided. Because the lowest geographic level for the HUD data is the county level, ACS information on cost overburden and incomes can also be found under the “Housing” tab in the Census Data workbooks.

Housing Affordability Index

This index is presented for each jurisdiction analyzing the cost of market rate housing as it relates to household incomes. Using methodology similar to the National Association of Realtors, the relative affordability of housing costs are computed for a period of time using estimated incomes, interest rates, and house prices (or rents relative to market rent).



INTRODUCTION

Background

During the 2019 legislative session, affordable housing and housing supply issues became a primary issue of concern. Inward population migration, economic growth and shortage of new housing supply had led to rapidly rising house prices and rents for the past few years. In that context, HB 1923 was adopted to encourage increasing urban residential building capacity. Local governments were offered up to \$100,000 to adopt options from of a list of potential actions in RCW 36.70A.600 (1), or adopt a Housing Action Plan to facilitate development of housing affordable at all income levels and across housing tenures. Alignment of market conditions with growth targets and housing strategy through data resources emerged as a key issue. Many local governments sought data resources so that housing needs could be objectively identified in a consistent manner.

In the same year, Department of Commerce's [Housing Memorandum](#) (2019) identified the need for coordinated resources to measure the relationship between different house types, density, land use, and housing affordability. A major issue arising from these discussions was accounting for both housing inventory, capacity, and output in a coordinated way. There was also a desire to have the accounting process for measuring housing capacity and output independent of state agencies or other stakeholders (Housing Memorandum, page 8).

The Washington Center for Real Estate Research was chosen by the legislature for compiling and maintaining data resources as well as developing measurement criteria so that an ongoing accounting of housing activity by local governments could be matched with housing units delivered.

While funding for this work is provided through a contract with the Department of Commerce¹, the data elements, measurement criteria, and supply frameworks are developed by the Washington Center for Real Estate Research in consultation with the Washington State Housing Finance Commission (WSHFC) and the Washington State Office of Financial Management (OFM). The data elements are introduced through the first and second reports. Subsequent reports call for the development of housing and land inventory metrics as well as housing capacity measurement through the buildable lands reports prepared under [RCW 36.70A.215](#). The final series of reports will align these inventory, output and capacity metrics to provide the full set of data needed to prepare local housing needs assessments.

This report describes the data resources developed through this project and provides an introduction to the resources available. These resources are meant to be used by local governments to develop Housing Action Plans, Housing Needs Assessments, and other reports needed to assess housing supply and demand at a local level.

¹ [HB 1923](#) (section 3) provided funding for this work from document recording fees. The data requirements were amended by HB 2343 in 2020.



LEGISLATION

[RCW 36.70A.610](#) amended under Chapter 173, Laws of 2020, Section 6 requires the Washington Center for Real Estate Research (WCRER) at the University of Washington produce a series of reports compiling housing supply and affordability metrics for each city planning under [RCW 36.70A.040](#) with a population over 10,000 persons.

1. *The Washington center for real estate research at the University of Washington shall produce a series of reports as described in this section that compiles housing supply and affordability metrics for each city planning under RCW 36.70A.040 with a population of ten thousand or more.*
 - a. *The initial report, completed by October 15, 2020, must be a compilation of objective criteria relating to income, employment, housing and rental prices, and other metrics relevant to assessing housing supply and affordability for all income segments, including the percentage of cost-burdened households of each jurisdiction. This report may also include city-specific median income data for those cities implementing the multifamily tax exemption program under chapter 84.14 RCW.*
 - b. *The report completed by October 15, 2021, must include an analysis of the private rental housing market for each area outlining the number of units, vacancy rates, and rents by unit type, where possible. This analysis should separate market rate multifamily rental housing developments and other smaller scale market rate rental housing. This analysis should also incorporate data from the Washington state housing finance commission on subsidized rental housing in the area consistent with the first report under this subsection.*
 - c. *The report completed by October 15, 2022, must also include data relating to actions taken by cities under chapter 348, Laws of 2019 as well as detailed information on development regulations, levies and fees, and zoning related to housing development.*
 - d. *The report completed by October 15, 2024, and every two years thereafter, must also include relevant data relating to buildable lands reports prepared under RCW 36.70A.215, where applicable, and updates to comprehensive plans under this chapter.*
2. *The Washington center for real estate research shall collaborate with the Washington housing finance commission and the office of financial management to develop the metrics compiled in the series of reports under this section.*
3. *The series of reports under this section must be submitted, consistent with RCW 43.01.036, to the standing committees of the legislature with jurisdiction over housing issues and this chapter.*



HOUSING MARKET DATA TOOLKIT

Because gathering the data to assess housing needs can be time consuming and complex, the legislature mandated the WCRER to gather that data to help planners and housing professionals answer the following types of questions. For example, if a goal is to promote the development of housing affordable to all income segments, then how does a policymaker get reliable access to detailed price information by house type for a local area? How do the economics of supply and demand influence local housing markets? Quality housing market information is required to adequately address important aspects driving affordable housing outcomes in a comprehensive planning framework.

Most of these questions can be addressed by the understanding the relative supply and demand for housing of a particular type in the market. Unlike most asset markets, housing is unique because it is immobile. Its location matters for lots of reasons such as access to schools, amenities, and building social and financial capital. Those locational aspects are reflected in the relative price of housing. Demand for those locational aspects of housing can change quickly. For example, interest rates can move lower very quickly making it possible for homeowners to bid up the price of housing in high amenity areas while maintaining the same monthly repayment. Another example might be the expansion of an employer which can happen quickly while the housing supply response in an area may take a considerable amount of time. Because the desirability of property is tied to location, these spatial monopoly characteristics mean that house prices and rents also reflect the desirability of amenities available in the area at a particular place. The result is that prices often reflect the willingness of households to pay for those amenities rather than the hard costs associated with construction (such as lumber, brick, etc...). With high population growth and shifting demand profiles, the ability to understand and track housing data will help identify where housing production is occurring and identify where challenges to housing affordability are emerging.

With these issues in mind, the Housing Market Data Toolkit has been developed. This toolkit is designed to be a place to access key data sets to help jurisdictions assess housing need and develop strategies to address those needs. In subsequent reports, data sets will be expanded to include detailed market information and information on specific housing types serving marginalized groups. Importantly, future data sets can be compiled so that progress on housing affordability goals set out in plans can be tracked.

This update of the Housing Market Data Toolkit is divided into 7 areas based upon data sources and type of information provided. These are:

- Census Data
- Household Income by Housing Tenure
- House Prices
- Rental Markets
- Subsidized Rental Housing
- Residential Building Permits and Completions



- Housing Affordability Index

Each of these sections is discussed in more detail below with screenshots being linked to a sample sheet that can be downloaded for review. The Housing Market Data Toolkit can be accessed [HERE](#)

Census Data

Conducted by the US Census Bureau, the American Community Survey (ACS) is an ongoing survey that provides updated data every year, based on small samples. This provides relatively current information to communities to plan investments and services. The ACS covers a broad range of topics about social, economic, demographic, and housing characteristics of the U.S. population.

The 5-year estimates from the ACS are "period" estimates that represent data collected over a set time frame. The primary advantage of using multiyear estimates is the increased statistical reliability of the data for less populated areas and small population subgroups. Another advantage of using ACS 5-year estimates is also their availability for smaller census areas. Annual ACS data is typically only available for larger jurisdictions (over 65,000 people with supplemental estimates for communities greater than 20,000). One-year estimates typically provided for larger jurisdictions

Given these restrictions, the current ACS 5-year estimates for 2015-19 represent an objective measure for several important aspects of housing markets that is also consistent across jurisdictions. Information is provided both for cities and counties. ACS 5-year estimates are a vital resource for conducting analysis of housing markets across a wide variety of income ranges and tenures Census data can be accessed from [this page](#) in the toolkit.

Demographic – Information on Total Population, Population by Age Cohort, and Population by Race

Economic – Information on Household Income by cohort, Median Household Income, Median Family Income, Employment Characteristics, Workers by Industry Classification, and Commuting Patterns.

Social – Information on Households by Type (Family, Non-Family, Average Household Size), Veteran Status, Disabled Population Characteristics, Grandparents as Caregivers, Residence Location 1-Year ago.

Housing – Information on Housing by Tenure of Householder, Selected Monthly owner costs, and estimated rent. For selected monthly owner costs and rental estimates, the number of cost overburdened households is provided. Information is also available for length of housing tenure, vehicles available, age of housing unit as well as other housing related information.²

² Home values reported in census data do not represent a compilation of market transactions.



Household Income by Housing Tenure

Conducted by the US Department of Housing and Urban Development (HUD), Census data from the ACS 5-year estimates are used to calculate special tabulations in assessing the need for additional affordable and safe housing. These tabulations are conducted at the National, State, CBSA, and County level.

In counties with a population over 65,000, additional analysis of Household Income by Housing Tenure is provided to include households “with selected housing conditions.” This separates households into a category that covers the following criteria: lacking complete plumbing facilities, lacking complete kitchen facilities, more than 1.01 persons per room. Also included are households with selected monthly owner costs higher than 30% of household income (2019) or renters who spend more than 30% of household income (2019) on rent. For counties less than 65,000 people, the special tabulations do not separate households with or without selected housing conditions. There are no special tabulations available for Columbia, Ferry, Garfield, and Wahkiakum Counties due to their low populations. The Household Income by Housing Tenure page within the toolkit can be found [HERE](#).

House Prices

House prices are a key determining factor in housing affordability and in assessing the ability of renter households to transition into homeownership. The Washington Center for Real Estate Research has been conducting housing market surveys at the county and statewide level since 1985. For many cities, county level house price data represents too large an area to conduct useful analysis of housing costs for localized markets.

In order to assist local governments in assessing housing needs across the spectrum of tenure options, median house prices at the jurisdiction level by housing type are provided for the years 2017, 2018, 2019, and 2020. Median prices for one, two, three, and four-bedroom homes are also provided. For housing construction type, only data on detached residential and condominium / townhouse construction have been provided. Inconsistencies in recording common interest ownership properties in transaction records between jurisdictions made a distinction between condominium and townhouse properties difficult. A similar problem occurred with manufactured homes within planned communities and on owned land parcels. As this data set develops, information on manufactured homes and other types of construction will be provided. Data for our sample was obtained through local residential property transaction records in county assessor's offices and multiple listing service providers.

[Click here for city level house price data](#)



Rental Markets

Offering greater flexibility of occupancy and requiring less of a financial commitment to enter the market than homeownership, rental housing is a vital part of the housing mix for most communities. The range of rental housing options span low-income and affordable housing, middle-income housing, and housing catering to high-earning professionals. The dynamics and diversity of rental housing markets make them difficult to adequately assess and analyze.

Due to the covid pandemic and logistics issues surrounding implementation, it was not possible to conduct a reliable rental survey prior to the publication of this report. For example, seasonality in rental and vacancy rates is minimized by collecting survey results in March and September. During March 2021, landlords were facing a period of high uncertainty preparing for the possible removal of rental restrictions, the launch of rental arrears programs for tenants, and the possible lifting of an eviction moratorium. Given this period of uncertainty, it was thought conducting a rental housing market survey among the under 20+ unit developments in the state would be problematic. While preparing for a September survey, these issues remained with the added complications in staffing and logistics emerging within key stakeholder organizations. While investigating the possibility of combining licensed data from several private organizations was explored as a substitute, many persistent issues identified above regarding sample size and representativeness became apparent during analysis, particularly within smaller jurisdictions and in communities outside of the Puget Sound region. After consultation with the WSHFC, it was determined that a rental housing market survey focusing on under 20-unit developments and including the Puget Sound be postponed until March 2022.

To provide guidance to planners and housing market analysts in the interim, county level information from the March 2021 Washington State Apartment Market Survey (conducted for the Department of Licensing) covering developments over 20 units outside of the Puget Sound region can be found [here](#). Average gross rent from the ACS 5-year estimates (2015-2019) from the Census Data section have been used to calculate affordability indices for jurisdictions later in the report. The average gross rent from the ACS 5-year estimates will be updated in the toolkit during December 2021 as data is released by the US Census Bureau. The latest ACS rent data can be found [here](#).

Subsidized Rental Housing

One aspect of assessing the need and demand for additional subsidized housing in a particular area is the current supply of housing targeting identified submarkets. For example, the need for additional rental housing for seniors with incomes below 50% area median income is partially dependent upon both the supply of non-subsidized market rate housing available in the market as well as the supply of subsidized housing that might be available. Similarly, supply constraints in a housing market will similarly constrain both the development of subsidized units and market rate units for rent and for purchase. Additionally, the subsidized housing landscape is both highly fragmented and highly specialized. As a result, it is sometimes difficult to identify the extent to which subsidized housing is provided or not provided in any individual market.



In order to start the process of identifying subsidized housing that exists within each jurisdiction, this report updates basic data obtained from the WBARS database developed WSHFC. This list is not a comprehensive listing of all subsidized rental housing available in any jurisdiction. However, this listing is a start of a process through which one will be developed and maintained over time by the WCRER in consultation with the WSHFC. We welcome the input of any housing organizations who wish to contribute information about their developments to this dataset. Over the course of the next 12 months, the WCRER plans to add information on HUD developments, Housing Authority, Multifamily Tax Exemption (MFTE) properties, and other subsidized housing programs. The latest version of this data set can be found [here](#).

Residential Building Permits and Completions

Any analysis of housing markets and development activity must consider new housing supply. Housing strategies revolve around issues such as having enough housing of a certain type in the development pipeline. Since demand for housing can change quickly and supply is slow to respond, planning responses should be based on reviewing what types of construction are being proposed and what has recently been completed. When housing affordability issues arise, these supply considerations take on greater importance.

Housing supply is typically estimated in two ways. One is to measure building permit activity and apply an assumption on how many houses are likely to be built in the future. Another is to look at housing completions to provide a timeline in how long the building process takes once the entitlement and construction process is complete. The link below provides data on building permits by jurisdiction (and counties) by housing type estimated by the US Census Bureau. The link also includes estimated housing completions calculated by noting the annual change in the estimated number of housing units recorded by the Washington Office of Financial Management. The data portal in the toolkit for residential building permit data can be found [HERE](#).

Housing Affordability Indices

There are a variety of ways to assess housing affordability depending upon housing tenure and the housing submarket being targeted. Most assessment methods generally fall into two categories. The first is an absolute definition of affordability where a set proportion of income is applied to a distribution of rents or prices. An example of this can be found in the rental market where rent cost burden is defined as paying more than 30% of gross income for rent and utilities. Applying the distribution of incomes to the distribution of prices or rents will reveal the number of households who are cost overburdened.

The second approach is one relative to the market. Rather than revealing how many households are cost-burdened, this method looks at the extent to which prices or incomes must move for housing to become affordable. While a set proportion of household income is used for analysis, this is applied to rental rates or monthly house payments prevalent in the marketplace. In other words, it provides the extent to which householders under different income assumptions are cost overburdened.



The housing affordability indices included in the toolkit reveal the extent to which housing is over- or under-priced when compared to incomes. The indices can be found [here](#). There are four indices included.

1. The composite housing affordability index assumes a median household income, median house prices, a 20% down payment on a 30-year fixed rate mortgage at prevailing rates. The assumption is also made that the lender will not allow principal and interest costs to exceed 25% of gross income.
2. The first-time homebuyer affordability index is based upon the assumption of 70% median household income, 85% of the median house price, a 10% down payment on a 30-year fixed rate mortgage at prevailing rates plus 0.25% added per month for mortgage insurance. The assumption of 25% of gross income for mortgage repayments also applies.
3. The rental affordability index follows the assumption of median income and median market rent with the standard overburden definition of 30% being applied.
4. The transition rental affordability index assumes 70% median income (same as the first-time buyers index) and paying median market rent and the standard 30% overburden definition being applied. This indicates the extent to which rental housing is priced relative to the ability of potential first-time buyers to save for a down payment.



LIST OF CITIES FOR WHICH DATA IS PROVIDED

RCW 36.70A.610 requires this report to include information for all Washington cities planning under the Growth Management Act with a population over 10,000 people. Within the Housing Market Toolkit, the WCRER has included additional cities that are growing and likely to fall within the mandate of the GMA as well as other cities over 10,000 people not planning under the GMA. Data is also provided for all 39 counties in Washington State where available.

Aberdeen	Issaquah	Pullman
Airway Heights	Kelso	Puyallup
Anacortes	Kenmore	Redmond
Arlington	Kennewick	Renton
Auburn	Kent	Richland
Bainbridge Island	Kirkland	Sammamish
Battle Ground	Lacey	SeaTac
Bellevue	Lake Forest Park	Seattle
Bellingham	Lake Stevens	Sedro-Woolley
Bonney Lake	Lakewood	Shelton
Bothell	Liberty Lake	Shoreline
Bremerton	Longview	Snohomish
Burien	Lynden	Snoqualmie
Burlington	Lynnwood	Spokane
Camas	Maple Valley	Spokane Valley
Centralia	Marysville	Sumner
Cheney	Mercer Island	Sunnyside
Covington	Mill Creek	Tacoma
Des Moines	Monroe	Tukwila
DuPont	Moses Lake	Tumwater
East Wenatchee	Mount Vernon	University Place
Edgewood	Mountlake Terrace	Vancouver
Edmonds	Mukilteo	Walla Walla
Ellensburg	Newcastle	Washougal
Enumclaw	Oak Harbor	Wenatchee
Everett	Olympia	West Richland
Federal Way	Pasco	Woodinville
Ferndale	Port Angeles	Yakima
Fife	Port Orchard	Yelm
Gig Harbor	Port Townsend	
Grandview	Poulsbo	

