

DEMOGRAPHICS & SOCIAL DETERMINANTS OF HEALTH



Demographic data can help communities identify and address current and future health needs, including culturally appropriate and geographically accessible healthcare, public health, and social services. It is also important to understand how social determinants of health — factors such as economic stability, educational attainment, food security, and housing stability — substantially shape the health of our community.¹ Knowledge of demographics and social determinants of health can help us identify and address root causes of health issues and prevent negative health outcomes.

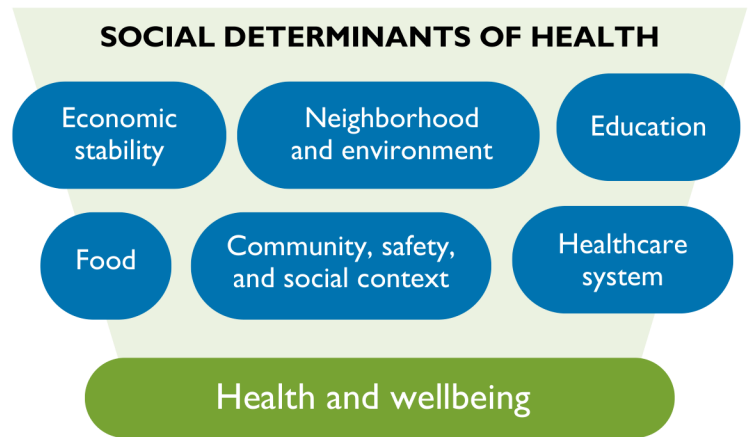
TOPIC OVERVIEW

This chapter provides an overview of key demographic indicators for Kitsap County and also shows how social and economic indicators vary among different parts of the county and among subpopulations by age, race, and other characteristics. It also presents data on social determinants of health (SDOH), the conditions in which people are born, grow, live, work, and age.²

Implementing interventions to improve SDOH is an “upstream” approach that addresses the root causes of health inequities instead of focusing on the “downstream” effects, or the direct health outcomes of inequitable SDOH. An example of “upstream” interventions include creating laws to support access to housing or early childhood education. An example of “downstream” interventions include direct medical care services.

Kaiser Family Foundation’s model (summarized in the diagram to the right) is commonly used to explain SDOH. One key SDOH that is not called out explicitly is racism and other forms of discrimination and power imbalances. There has been a growing body of research demonstrating the adverse physiological changes and symptoms individuals, including children, develop after experiencing racism.³

Just as SDOH are the social factors impacting our health, political determinants of health are the policy choices that led to SDOH in the first place. The political determinants of health involve the systematic process of structuring relationships, distributing resources, and administering power.



Source: Kaiser Family Foundation

The political determinants of health shape opportunities that can advance or worsen health inequities.⁴ For example, systemic racism, like residential segregation, affects communities’ access to healthcare services, communities’ trust in medical and public health systems, and how communities are treated by healthcare and other service providers.

Systemic racism consists of unfair laws, policies, and practices that lead to discrimination within public and private sectors, such as justice, housing, finance, healthcare, and education. It can influence a person’s health throughout their lifespan and affect health from generation to generation. In 2021, the Kitsap Public Health Board joined public health bodies across the country in declaring racism a public health crisis. This declaration committed the Health Board and Kitsap Public Health District to take specific, meaningful action to address systemic racism and inequities.

KEY FINDINGS

Two main priority areas were identified from available public health data; these were selected based on changes over time for Kitsap residents, differences between Kitsap and Washington, and Kitsap resident input. They include:

Housing and homelessness

Decreases in poverty — In 2021, about one in five (19%) Kitsap residents (about 52,000 people) were estimated to live below 200% of the Federal Poverty Level (FPL). In 2021, a family or household of four was below 200% FPL if their yearly income was below \$53,000. From 2013 to 2021, there was a decreasing percentage of residents living in poverty.

Increases in homelessness — From 2014 to 2022, there was an increasing rate of people experiencing homelessness in Kitsap. In January 2022, two in every 1,000 Kitsap residents (about 563 people) were experiencing homelessness.

Cost-burdened renters — In 2021, more than one in two (52%) renter households in Kitsap spent more than 30% of their monthly income on housing costs. This was slightly higher than Washington (49%) in 2021.

Meeting basic needs

Decreases in SNAP recipients — In 2021, an estimated 12% of Kitsap households (about 12,400 households) received SNAP benefits. From 2010 to 2021, there was a decreasing trend in the percentage of Kitsap households receiving SNAP benefits. More research is needed to assess whether this was due to a decrease in needed services, a decrease in households being able to access services, or other factors.

Cost as a barrier — In the 2022 Kitsap Community Resources (KCR) survey, cost was the primary barrier preventing survey participants from meeting basic needs for housing, food, reliable transportation, and childcare. In addition, participants in eight of 10 focus groups reported ongoing challenges to meeting basic needs for themselves and their families for housing, food, transportation, and childcare.

KEY DISPARITIES

While the findings from this report provide evidence of disparities in Kitsap County across multiple indicators, the following were identified as the most significant and are not a complete list of all disparities:

Disparities in economic stability

- Among Bremerton community members nearly one in three (32%) lived below 200% of the Federal Poverty Level (FPL) in 2021, the highest percentage of any county region.
- The estimated median household income by race/ethnicity in 2021 ranged from \$58,854 for American Indian or Alaska Native Kitsap residents to \$90,191 for white community members.

Disparities in food insecurity

- A higher percentage of Kitsap’s youth (younger than 18 years old) experienced food insecurity (11%) than the overall population (8%) in 2021.
- In 2021, Black or African American Kitsap residents were 2.6 times more likely to report experiencing food insecurity than white residents (18% and 7%, respectively). Hispanic or Latino residents were 2.3 times more likely (16%) to report food insecurity than white residents.

Disparities in educational attainment

- The percentage of public school students graduating high school within four years⁶ ranged from 64% in Bremerton to 94% on Bainbridge Island for the 2020-2021 school year.
- Of the 152 public school students recorded as experiencing homelessness, only about half (53%) graduated high school within four years compared to 83% of students not experiencing homelessness for the 2020-2021 school year.

Disparities in housing stability

- Among Bremerton public school students, 156 (or 3.5%) experienced homelessness during the 2021-2022 school year, the highest percentage of any Kitsap region.
- From 2017-2021, differences by region in the percentage of households burdened by the cost of housing (spent more than 30% of their monthly income toward housing costs) were higher among renter-occupied housing units than owner-occupied units. Among renter-occupied units the percentage of households burdened by the cost of housing ranged from 33% in Bainbridge Island to 53% in Bremerton.

COMMUNITY DEMOGRAPHICS

The demographic characteristics of a community are strong predictors of health behaviors and health outcomes. Understanding these characteristics can help us understand existing population health issues and needs as well as predict future outcomes.

A note on population estimates

Population estimates are created from data collected every 10 years in the United States Census, supplemented by data collected annually from the American Community Survey. The farther we are from the last census, population estimates can become increasingly less accurate – especially for subgroups and smaller segments of the population like race and ethnicity – because the census includes all residents (at least theoretically), while the survey samples a smaller subset of the population. Due to U.S. Census Bureau delays in releasing some data from the 2020 Census, the Washington State Department of Health statewide workgroup has recommended adoption of population interim estimates (PIE) developed by Public Health – Seattle & King County which utilize available 2020 data. Final U.S. Census data for 2020 are expected in 2024.

PIE are used in the community demographics section below. Percentages and rates for demographic characteristics may differ from previous and future publications due to these variations in population estimates.

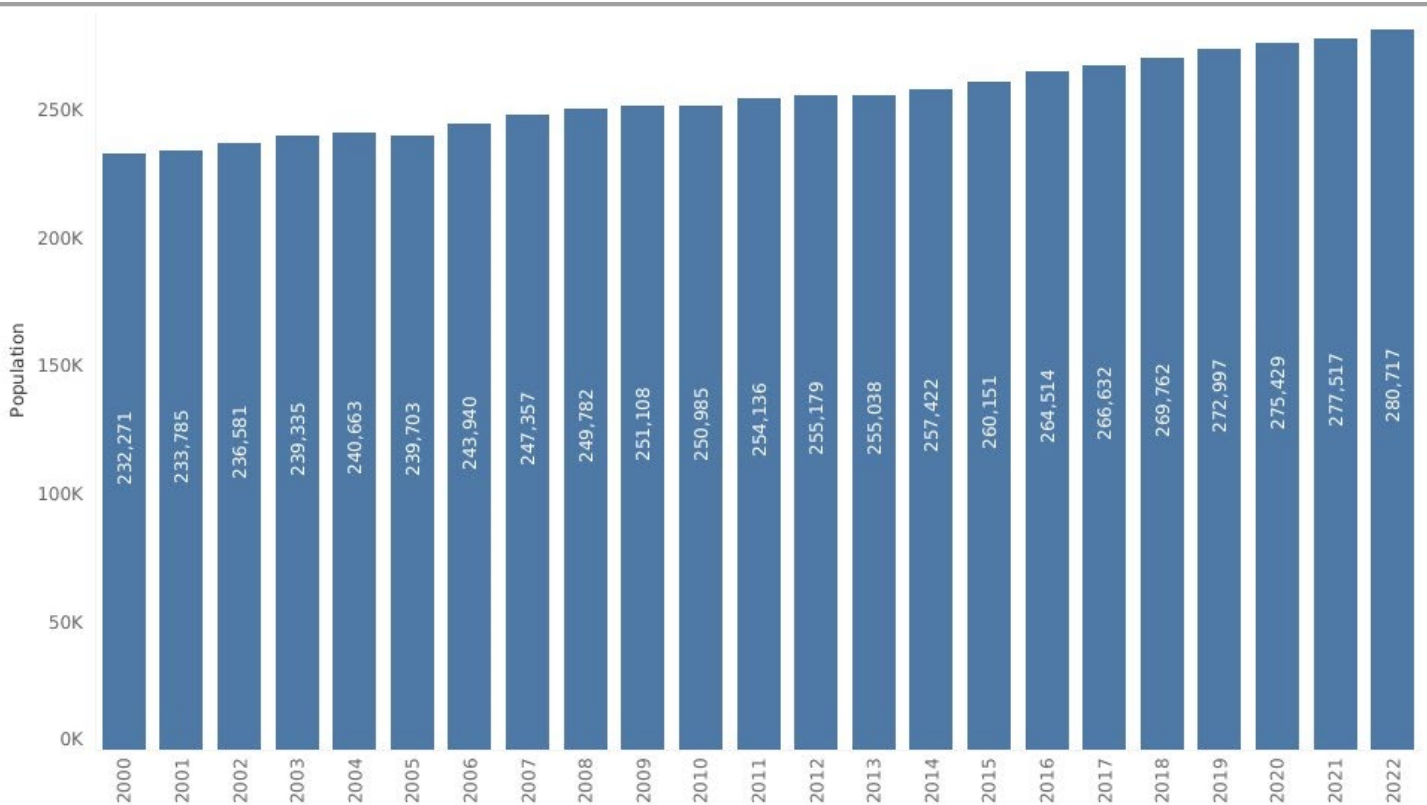


Figure 1: Population of Kitsap County from 2000 to 2022

Data source: Washington State Population Interim Estimates (PIE)

Overall population

In 2022, an estimated 280,717 people lived in Kitsap County (Figure 2). Since 2010, Kitsap’s population has grown at a rate of 12%, which is higher than the U.S. growth rate of 8%, but lower than Washington state (17%) and nearby King County (20%).

Age and sex

Kitsap County has a slightly older population than Washington state as a whole (Figure 3). However, Kitsap did have a higher percentage of 20- to 24-year-old males than Washington state (4% compared to 3%); this trend is likely influenced by the military installations located in the county. Estimates for 2022 indicated:

- 40% of Kitsap residents were 50 years or older, compared to 35% of Washington state residents.
- 43% of Kitsap residents were 15-49, compared to 47% of Washington state residents.

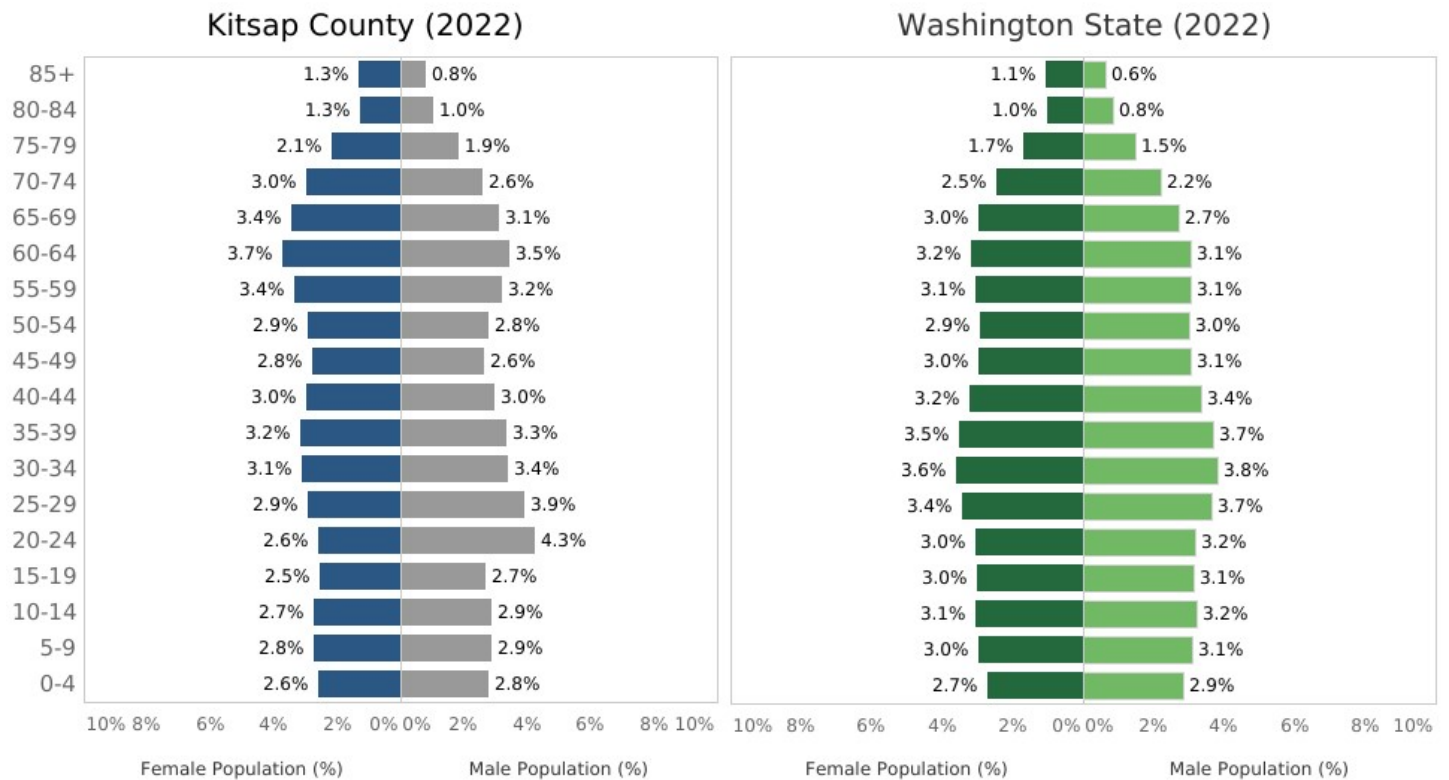


Figure 2. Age and sex distribution of Kitsap County and Washington state, 2022

Data source: Washington State Population Interim Estimates (PIE), December 2022

Race and ethnicity

Kitsap County has less racial and ethnic diversity than Washington state as a whole (Figure 4). Estimates for 2022 indicated about seven in ten (72%) Kitsap residents identified as white, compared to about six in ten (63%) Washington state residents.

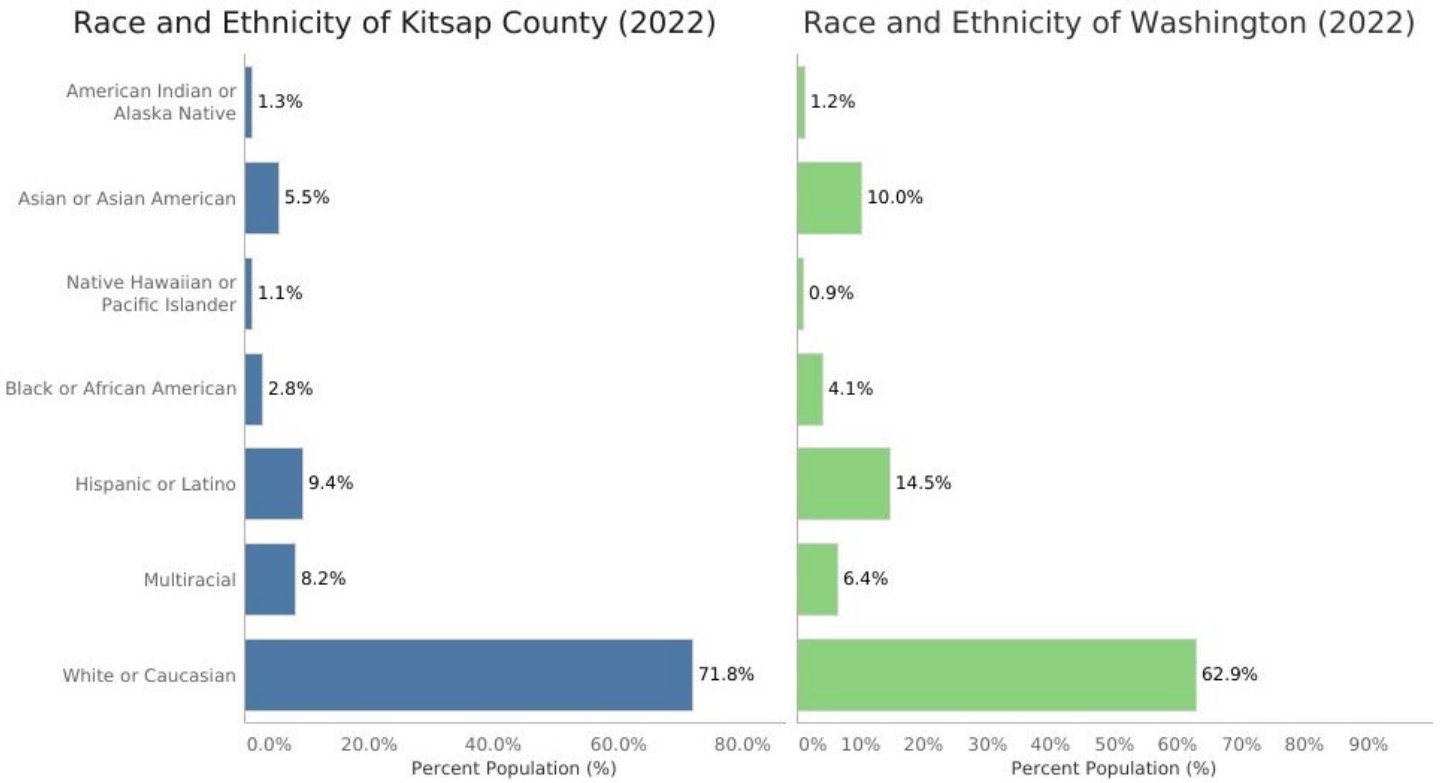


Figure 3: Race/ethnicity distribution of Kitsap County and Washington state, 2022

Data source: Washington State Population Interim Estimates (PIE), December 2022

Geographic Region	Population Estimate (2022)	Percent of Total Kitsap Population	Population Estimate (2020)	Percent Change from 2020 to 2022
Bainbridge Island	25,103	9%	25,070	+0.1%
Bremerton	68,358	24%	64,451	+6.1%
Central Kitsap	61,141	22%	58,976	+3.7%
North Kitsap	51,853	18%	51,318	+1.0%
South Kitsap	74,261	26%	72,194	+2.9%

Figure 4: Geographic region distribution of Kitsap County (based on ZIP code boundaries)

Data sources: Washington State Population Interim Estimates (PIE); Washington State Office of Financial Management

Note: Geographic region is based on ZIP code rollup.

Region

For the purposes of this report, Kitsap County is described as having five geographic regions: Bainbridge Island, Bremerton, Central Kitsap, North Kitsap, and South Kitsap. Depending on the data source, these regions are defined by

the school district boundaries or by the ZIP Code boundaries for the geographic area. See the Methods section for more information.

The Suquamish and Port Gamble S’Klallam tribes and their reservations are located on the Kitsap Peninsula and in the geographic region North Kitsap. Nationally, the U.S. Census Bureau estimates that American Indians and Alaska Natives living on reservations or in Native villages were undercounted by about 5% in the 2010 Census and about 6% in the 2020 Census.⁷

When comparing the interim population estimates for 2022 with previous estimates for 2020 that were developed from 2010 US Census data and the American Community Survey, along with state data inputs (Figure 5), Bremerton had the largest population estimate increase (+6%) of any Kitsap geographic region.

Population with a disability

The Census includes self-reported hearing, vision, cognitive, ambulatory, self-care, and independence disabilities in their population disability estimates.⁸ In Kitsap from 2017 to 2021, the most common disabilities reported were ambulatory (serious difficulty walking or climbing stairs, 7.5%), cognitive (serious difficulty concentrating, remembering, or making decisions 6%), and independence (difficulty doing errands alone such as visiting a doctor’s office or shopping, 6%).

In 2021, an estimated 14.5% of Kitsap residents had a disability (about 37,000 community members, Figure 6), which was slightly higher than the estimated percentage of Washington residents (13%). This difference was statistically significant and is likely impacted by age distribution differences.

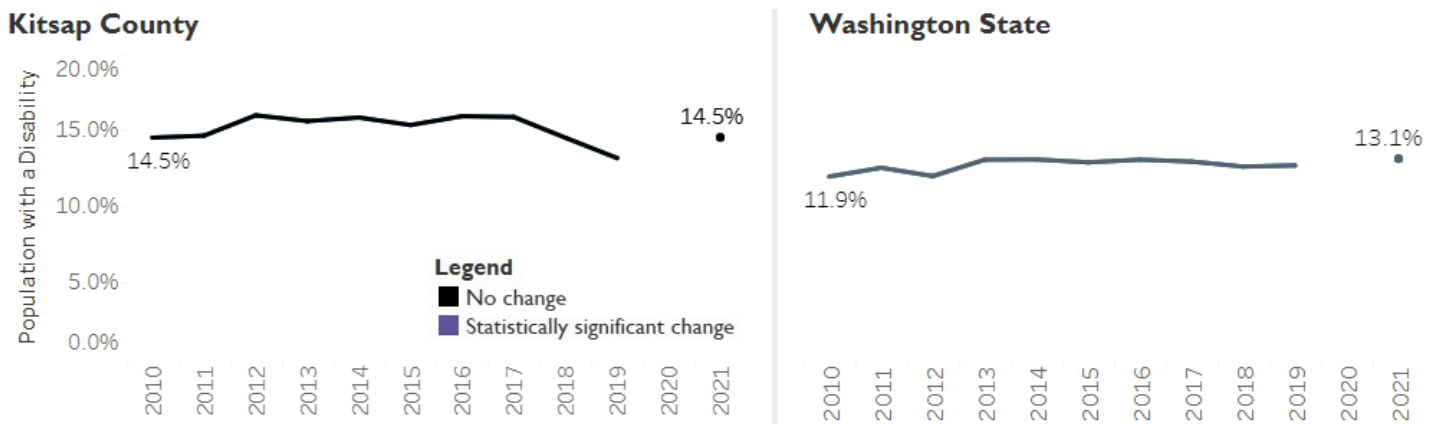


Figure 5. Population with a disability in Kitsap County and Washington state, 2010-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Notes: Kitsap County and Washington trend over time data are from single-year estimates. Data for 2020 is missing because 1-year estimates were not released by the U.S. Census Bureau due to concerns about reliability of data that year.

The estimated percentage of residents living with a disability increased with age. From 2017 to 2021, for those 65 and older, an estimated 32% were living with a disability, the highest percentage of any age group (Figure 7).

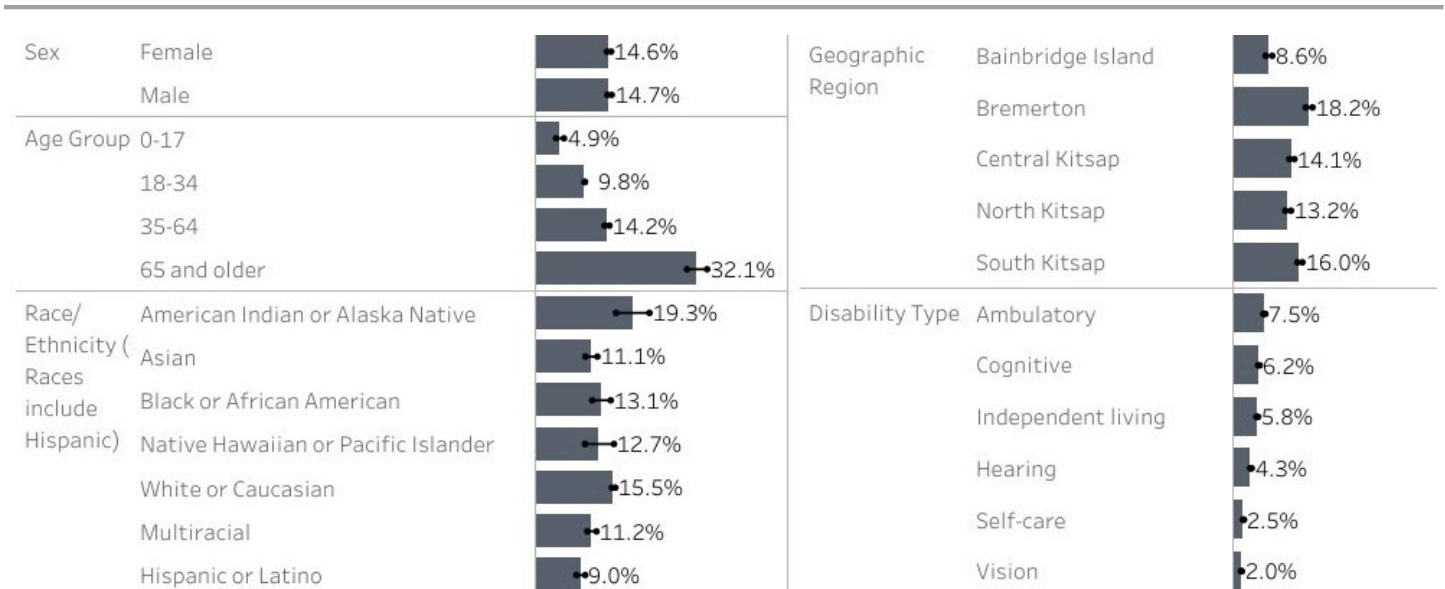


Figure 6. Population with a disability by subgroup in Kitsap County, 2017-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Notes: Geographic regions are based on school district.

Additionally, among participants in the 2022 Kitsap Community Resources’ Community Survey, 17% (731 participants) reported they had a disability that impacted their access to services or facilities in the community. When asked whether they had any barriers to employment, more than one in ten (11%, 363 participants) reported they had a mental or physical disability preventing them from employment.

Kitsap residents born outside the U.S.

More than nine in ten (93%) Kitsap residents were born in the U.S. or born abroad as U.S. citizens and more than two in five (42%) born in the U.S. were born in Washington state. Among Kitsap residents born outside the U.S., an estimated 4% were born in Asia — predominantly Southeast Asia (2%) — and about 1% were born in Central America.

An estimated 18,450 Kitsap residents are defined by the U.S. Census as foreign-born people who did not have U.S. citizenship status at birth. Since 2012, there has been a statistically significant increasing trend in the estimated number of foreign-born Kitsap residents.

Among foreign-born Kitsap residents, about half (49%) were reported as Asian or Asian American by the census, more than one in three (36%) graduated from college or technical school, and more than half were:

- naturalized citizens (61%);
- in the U.S. prior to 2000 (63%);
- owners of their home (67%);
- married (72%);

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- living more than 200% above the federal poverty level (77%);
- female (62%).

Language

In 2021, an estimated 91% of Kitsap residents five years and older spoke English at home, which was higher than the estimated percentage of Washington residents overall (79%, Figure 8). In Kitsap, excluding English, the top languages spoken at home were Spanish (3%) and Tagalog/Filipino (2%).

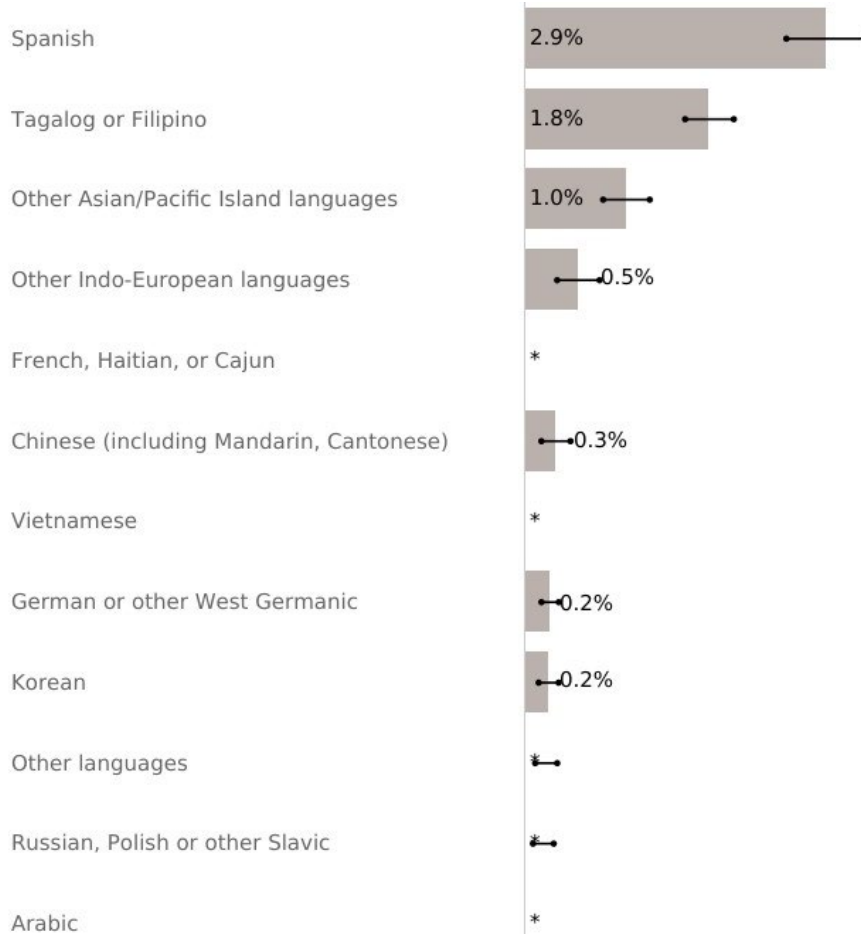


Figure 7. Languages spoken at home in Kitsap County (excluding English), 2017-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Notes: *The estimate has an elevated relative standard error (RSE) greater than 25% and does not meet KPHD reliability standards. Data are from the combined 5-year estimates for 2017 to 2021. For additional information about language categorization in the census, please visit: <https://www.census.gov/topics/population/language-use/about.html>

In 2021, an estimated 3% of Kitsap residents five years and older (about 6,700 community members) spoke a language

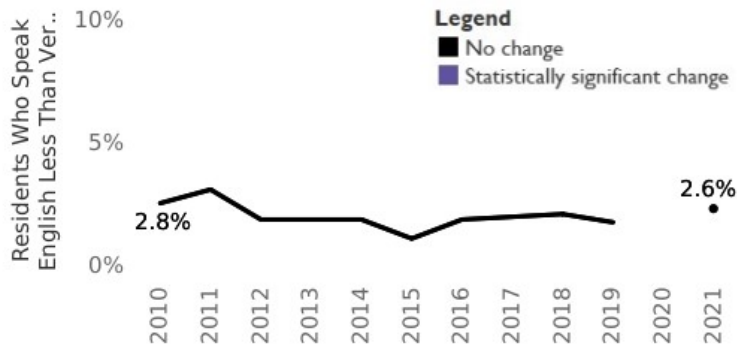
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other than English at home and reported speaking English less than very well, which was lower than the estimated percentage of Washington residents overall (8%, Figure 9).

From 2017 to 2021:

- An estimated 374 residents who spoke Korean at home reported speaking English less than very well.
- An estimated 446 residents who spoke Mandarin or Cantonese at home reported speaking English less than very well.
- An estimated 1,719 residents who spoke Tagalog or Filipino at home reported speaking English less than very well.
- An estimated 2,106 residents who spoke Spanish at home reported speaking English less than very well.

Kitsap County



Washington State

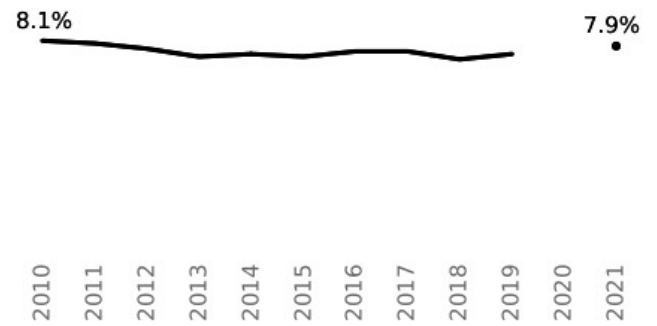


Figure 8. Residents who reported speaking English less than “very well,” 2010-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Notes: Kitsap County and Washington trend over time data are from single-year estimates. Data for 2020 is missing because 1-year estimates were not released by the U.S. Census Bureau due to concerns about reliability of data that year.

SOCIAL DETERMINANTS OF HEALTH

Social and economic characteristics like economic stability, educational attainment, food security, and housing stability provide a foundation for community stakeholders to understand the available resources and potential needs in our community.

“I think the overriding concern for a big part of our county is just poverty. It is basic needs of just food and housing...”

— **Organizational leader**

Economic stability

Poverty is an important social determinant of health that can impact people’s access to necessities (housing, food, education, jobs, and transportation), and is associated with higher incidence and prevalence of illness, and with reduced access to quality health care. Recent research also indicates current poverty is associated with more deaths than other commonly reported causes like accidents, lower respiratory diseases, and stroke.⁹



Figure 9. Population living below 100% FPL in Kitsap County and Washington state, 2010-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Notes: Kitsap County and Washington trend over time data are from single-year estimates. Data for 2020 is missing because 1-year estimates were not released by the U.S. Census Bureau due to concerns about reliability of data that year.

Federal poverty thresholds are set every year by the Census Bureau and vary by size of family and ages of family members.¹⁰ A high poverty rate is an indicator of poor economic conditions. Communities with higher poverty rates often experience challenges in paying for necessities, which can affect local business survival and impact school funding

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and quality due to regressive tax policies. In 2021, a family or household of four was below the federal poverty level (FPL) if their annual income was below \$26,500.

In 2021, an estimated 9% of Kitsap residents (about 23,000 people) lived below 100% of the FPL, which was similar to the estimated percentage of Washington residents overall (10%). From 2010 to 2021, there has been a statistically significant decreasing trend in the estimated percentage of residents living in poverty (Figure 10).

Some of our communities in Kitsap are impacted by poverty at higher percentages. For example, from 2017 to 2021, an estimated two in seven (14%) Bremerton residents lived below 100% of the FPL, which was the highest percentage among Kitsap County regions (Figure 11).



Figure 10. Kitsap population living below 100% FPL by subgroup, 2017-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Note: *The estimate has an elevated relative standard error greater than 25%, which does not meet KPHD reliability standards. Geographic region is based on school district.

Some research indicates that the FPL is far below what is needed to meet individual and family basic needs in Washington.¹¹ Due to Washington's high cost of living, a 200% FPL poverty rate can provide a more realistic measure of financial hardship in our community than the official 100% FPL poverty rate. In 2021, a family or household of four was below 200% FPL if their annual income was below \$53,000.

In 2021, about one in five (19%) Kitsap residents (about 52,000 people) were estimated to live below 200% of the FPL (Figure 12). While the poverty rate remains too high, from 2013 to 2021, there has been a statistically significant decreasing trend in the percentage of Kitsap's population living in poverty.

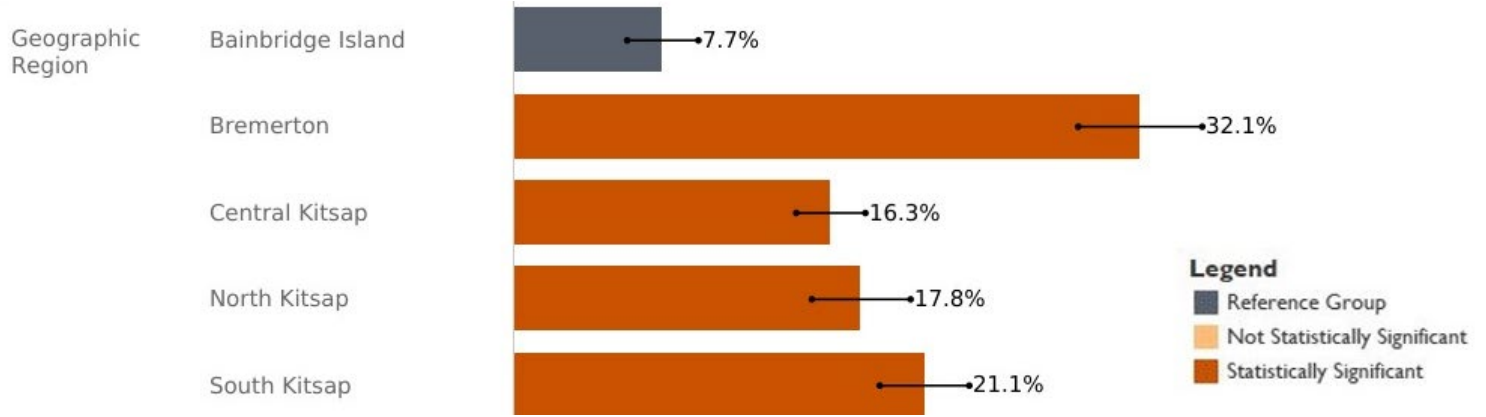


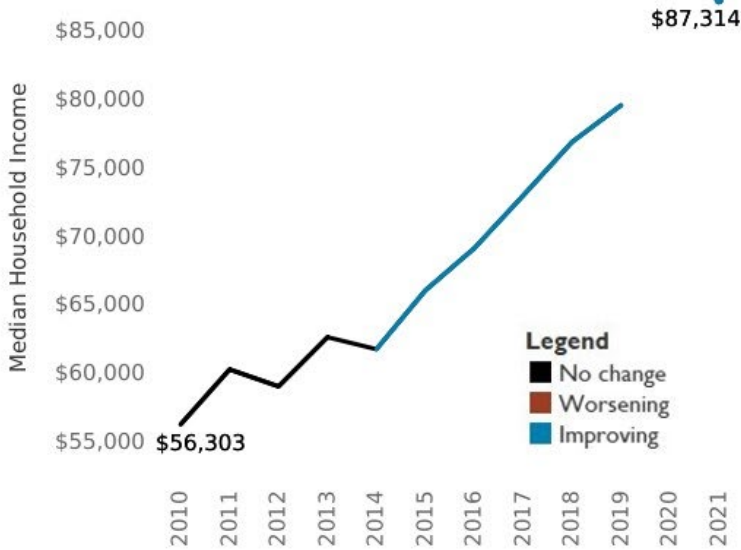
Figure 11. Kitsap population living below 200% FPL by region, 2017-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Note: Geographic region is based on school district.

Median household income — the income where half of households in our county earn more and half of households earn less — is a well-recognized indicator of income and poverty, which have demonstrated impacts on physical and mental health.¹²

Kitsap County



Washington State

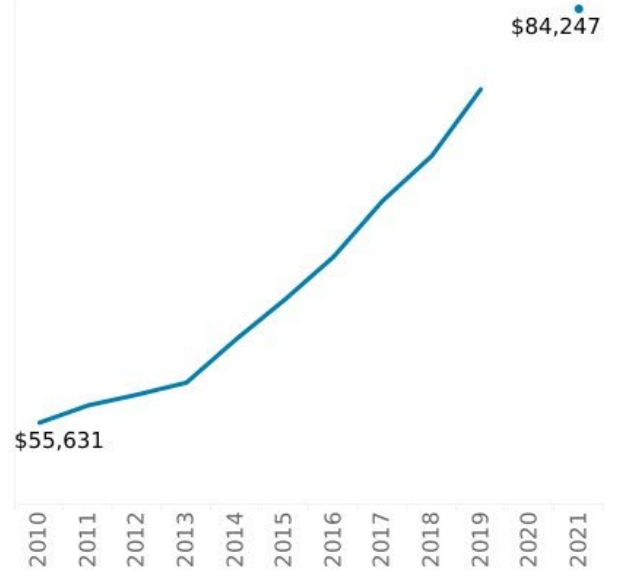


Figure 12. Median household income, 2010-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Notes: Kitsap County and Washington trend over time data are from single-year estimates. Data for 2020 is missing because 1-year estimates were not released by the U.S. Census Bureau due to concerns about reliability of data that year.

In 2021, the estimated median household income in Kitsap was \$87,314, which was similar to the estimated median income of Washington residents overall (\$84,247). From 2014 to 2021, there has been a statistically significant increasing trend in Kitsap’s median household income (Figure 14).

However, there was a wide range among Kitsap subgroups (Figure 15).

For example:

- The estimated median household income by race/ethnicity ranged from \$58,854 for American Indian or Alaska Native residents to \$90,191 for white residents. Note that householder refers to the person in whose name the home is owned or rented, and the characteristics of the householder are used to describe the household.
- Similar to the poverty rate indicators above, Bremerton residents had the lowest estimated median household income (\$62,673) of any Kitsap region.
- Among age groups, residents 15 to 24 years old had the lowest median household income (\$60,173), closely followed by residents 65 years and older (\$65,534). Both age groups earned considerably lower than 45 to 64 year olds (\$104,123).
- Female-headed households earned dramatically less than other household types.

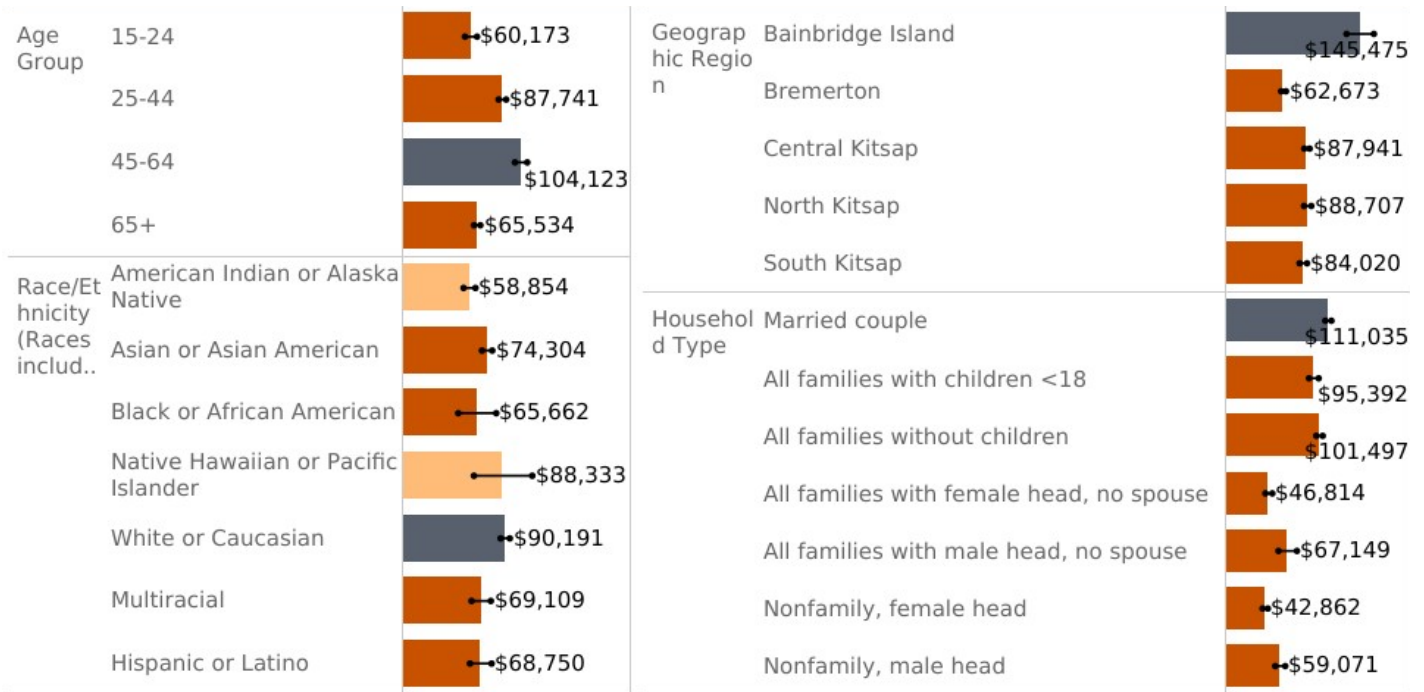


Figure 13. Median household income in Kitsap by subgroup, 2010-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Note: Geographic region is based on school district.

Unemployment — Multiple aspects of employment, including job security, the work environment, organizational culture, benefits and financial compensation, can impact our health.¹³ The labor force includes the estimated number of residents who are 16 years and older who do not have a job, are actively seeking work, and are available to take a job, in addition to those currently employed.

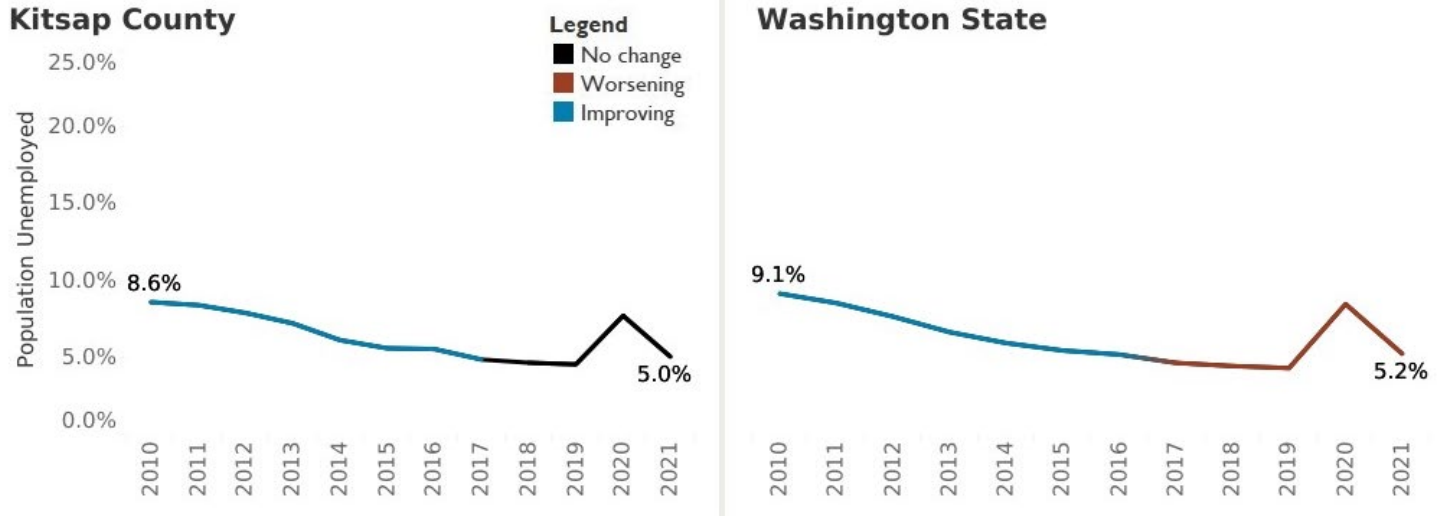


Figure 14. Population unemployed in Kitsap County and Washington state, 2010-2021

Data source: US Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS)

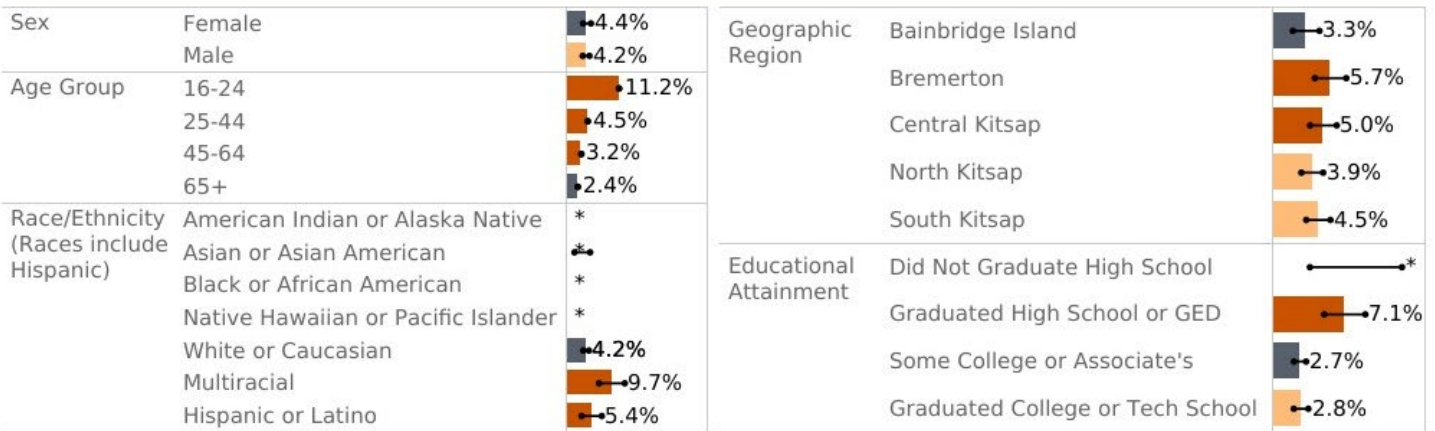


Figure 15. Kitsap population unemployed by subgroup, 2017-2021

Data source: US Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS), Customized Tables

Notes: *The estimate has an elevated relative standard error greater than 25%, which does not meet KPHD reliability standards. Geographic region is based on school district.



In 2021, 5% of the Kitsap County labor force was unemployed, which was the same as the percentage unemployed in Washington state overall (5%). From 2017 to 2021, there was no statistically significant trend observed, despite the rise in unemployment in 2020 due to COVID-19 (Figure 16).

Younger age groups, multiracial residents, and those whose highest level of educational attainment was completing high school or earning a GED reported the highest percentages experiencing unemployment (Figure 17).

Community member experiences meeting basic needs

In the 2022 KCR focus group discussions, community members discussed the challenges they face meeting basic needs in eight of the 10 focus groups. Participants shared ongoing issues with access to reliable transportation, housing, food, and childcare needs.

“In terms of daycare, if you can find someone and afford it, then that's great, but some people can't. It feels like you're just working to pay for daycare, so (you) may as well stay home. You lose a lot of people that are skilled in the workforce because there's no available low-cost daycare.” - Community member

“I live from paycheck to paycheck and try to get things going. My husband's truck's down right now; I'm trying to get it fixed. (I'm) trying to make sure that I have the things I need.” - Community member

“I volunteer at a food bank, and I noticed the food that is being donated and given out to families sometimes mostly consistent of cans and frozen foods. While that might help them get through (for) some time, I don't feel like it is nutritionally beneficial (to) have that diet all the time.” - Community member

“When I'm on 305 going through Poulsbo where they're building another bank, another business, another for-profit, (I'm wondering), ‘Where is our housing on that level?’...We don't need another bank. We don't need another gas station. We need housing for the people.” - Community member

“[We need] affordable housing, transportation, and better shelters, because I was in one and they banned me permanently because I'm incontinent...So I was sleeping outside.” - Community member

Education

High school graduation — Although the avenues through which education impacts health are complex and intersecting, earning a high school diploma has been associated with decreased risk of premature death and increases in employment prospects and lifelong earning potential.¹⁴ In Kitsap County, for example, an estimated 17% of residents who did not graduate high school were living below 100% of the FPL compared to 11% among those who had graduated high school.

In the 2020-21 school year, the percentage of Kitsap public school students who graduated high school within four years was 81%. Overall, from 2010-11 to 2020-21, there has been a statistically significant increasing trend in the percentage of Kitsap students graduating high school within four years (Figure 18).

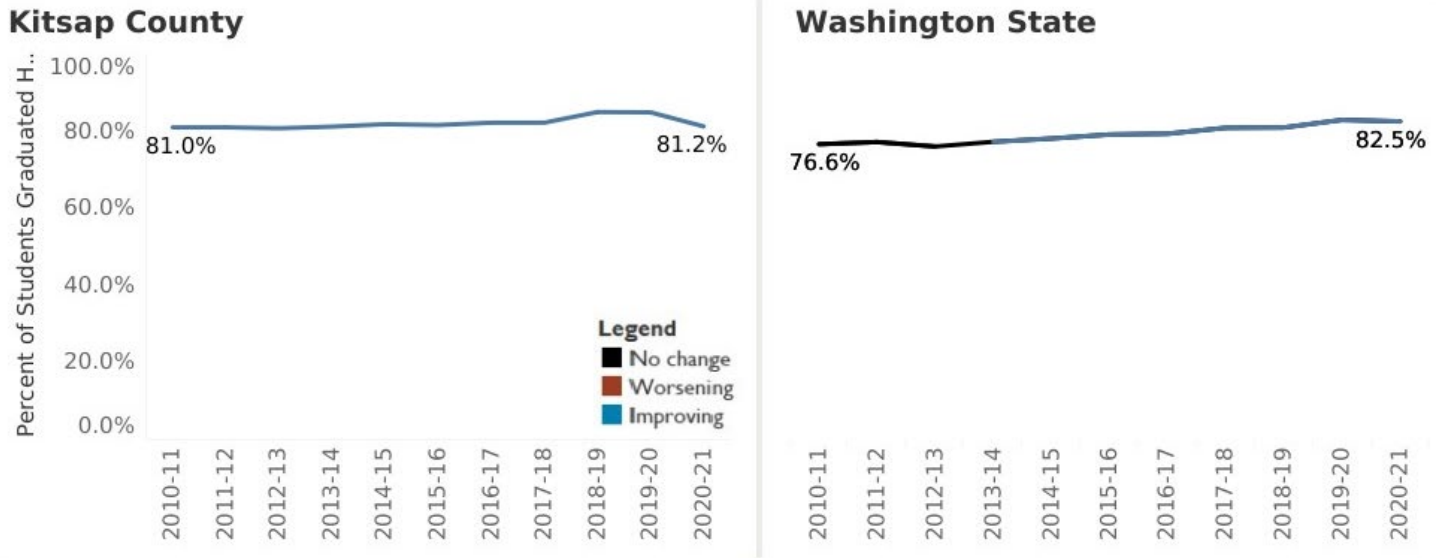


Figure 16. Percentage of public school students who graduated high school within four years, 2010-2021

Data source: Washington State Office of Superintendent of Public Instruction (OSPI)

Although this improving trend is encouraging, there are stark disparities among subpopulations (Figure 19). A student’s ability to graduate from high school may be affected by broader institutional factors, such as family, school, and community factors, including home environment, access to economic and other resources, and school environment.¹⁵ Not completing high school is linked to a variety of factors that can negatively impact health, including limited employment prospects, low wages, and poverty.¹⁶

The most recent Office of Superintendent of Public Instruction data (2020-21) for Kitsap seniors indicate:

- Of the 152 students recorded as experiencing homelessness, only about one in two (53%) graduated high school within four years compared to 83% among students not experiencing homelessness.
- Among English Language Learners, 54% graduated within four years compared to 82% among non-English Language Learners.
- Among students with disabilities, 60% graduate within four years compared to 85% among students without disabilities.
- Across Kitsap County, the percentage of public school students graduating within four years ranged from 64% in Bremerton to 94% in Bainbridge Island.
- Among students of low-income families, families that often have less access to resources, 69% graduated within four years compared to 90% among students who are not from low-income families.

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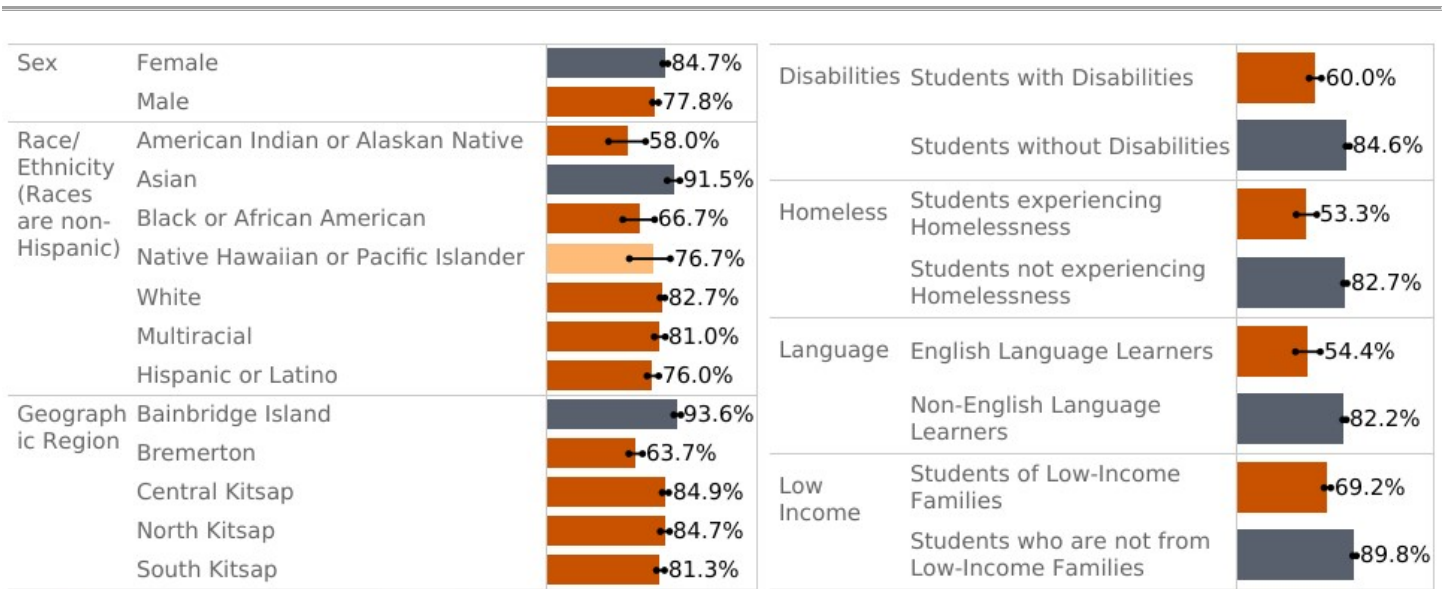


Figure 17. Percentage of Kitsap public school students who graduated high school within four years by subgroup, 2020-2021

Data source: Washington State Office of Superintendent of Public Instruction (OSPI)

Note: Geographic region is based on school district.

Legend

- Reference Group
- Not Statistically Significant
- Statistically Significant

Postsecondary education is education after high school (12th grade), including two-year colleges (community college), four-year colleges (bachelor programs), graduate programs, and professional programs.

Increased educational attainment has been associated with higher incomes, which can lead to increased access to healthcare services, better living conditions, and healthier foods.¹⁷ Access to higher education remains a challenge for many people, however, and can be affected by factors such as availability of college preparation at high schools, family support of or experiences with higher education, access to financial resources, and prohibitive college costs or admission requirements.¹⁸

In 2021, an estimated 75% of Kitsap residents 25 years and older reported they had more than a high school education (Figure 20). Overall, from 2012 to 2021, there has been a statistically significant increasing trend in this indicator, although estimates vary across communities. For example, residents in South Kitsap and Bremerton reported the lowest percentages of residents with more than a high school education, with 69% and 70%, respectively.

In the U.S., the share of the population with a high school diploma has risen over time for Hispanic, Black, white, and Asian residents, while the gap in Bachelor’s degree attainment has widened for both Black and Hispanic adults compared to white adults.¹⁹ In Kitsap in 2021, the percentage of residents 25 years and older with more than a high school education was lowest among residents who identified as Native Hawaiian or Pacific Islander, American Indian or Alaska Native, and Hispanic or Latino (Figure 21). All race/ethnicity groups except multiracial were statistically significantly lower than white.

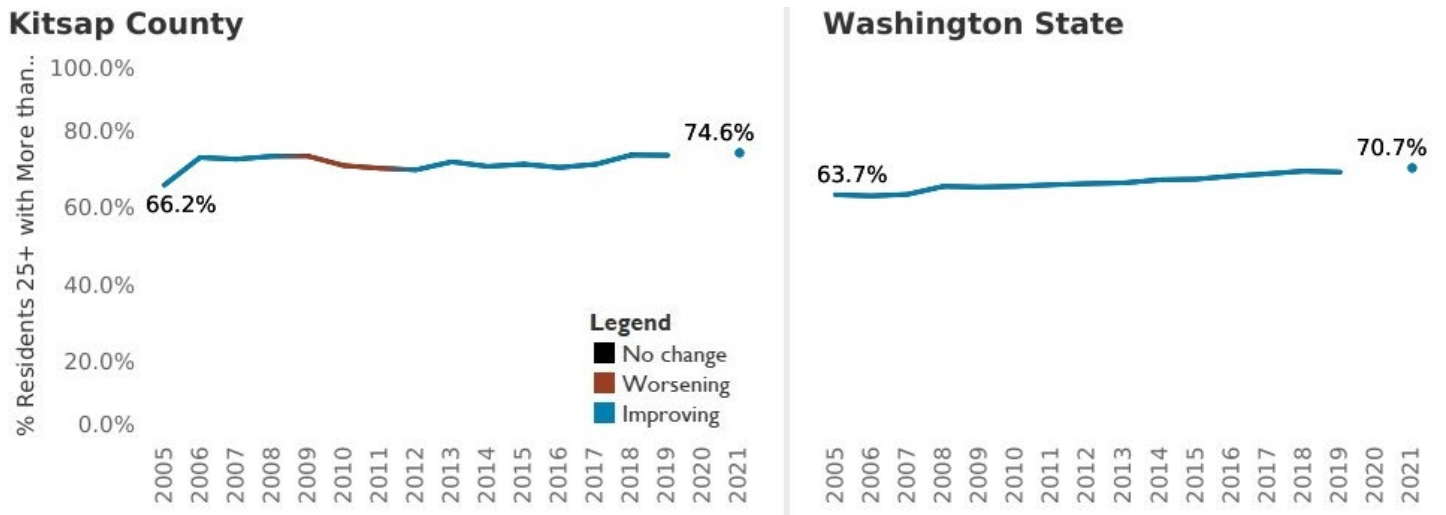


Figure 18. Percentage of residents 25 years and older with more than a high school education, 2005-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Notes: Kitsap County and Washington trend over time data are from single-year estimates. Data for 2020 is missing because 1-year estimates were not released by the U.S. Census Bureau due to concerns about reliability of data that year.

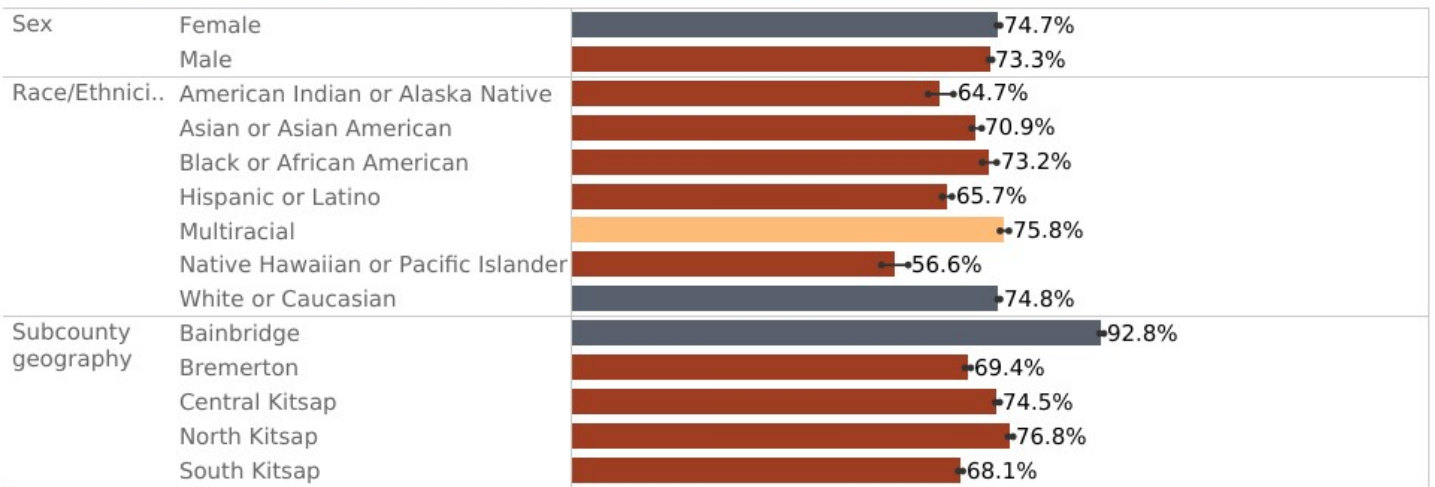


Figure 19. Percentage of Kitsap residents 25 years and older with more than a high school education, 2017-2021

Data source: U.S. Census Bureau, American Community Survey (ACS)

Note: Geographic region is based on school district.



Food security

Population experiencing food insecurity — The United States Department of Agriculture (USDA) defines food insecurity

DEMOGRAPHICS & SOCIAL DETERMINANTS OF HEALTH

as lack of access, at times, to enough food for an active, healthy life for all household members as well as the limited or uncertain availability of nutritionally adequate foods.

To generate estimated food insecurity rates, Feeding America analyzes the relationships between food insecurity and its determinants including unemployment, poverty, disability, homeownership, and median income. The latest Feeding America data estimate 8% of Kitsap residents were food insecure in 2021 (Figure 22). This means about 22,000 individuals in Kitsap struggled to afford enough food for an active, healthy life in 2021.

While food insecurity remains too high, encouragingly, from 2015 to 2021, there has been a statistically significant decreasing trend in the percentage of Kitsap’s population experiencing food insecurity.

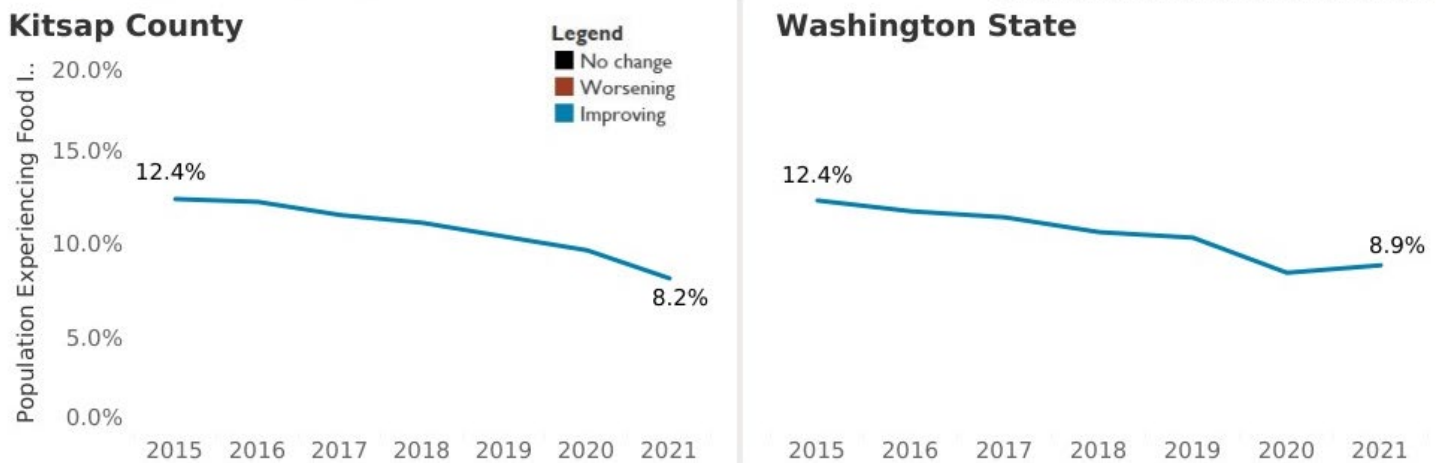


Figure 20. Population experiencing food insecurity, 2015-2021

Data source: Feeding America

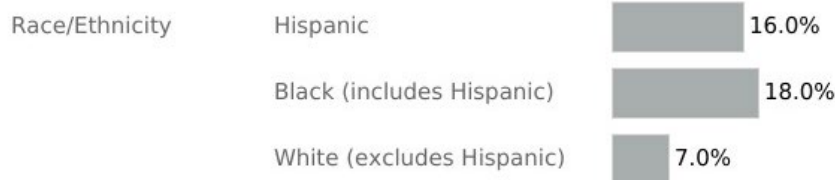


Figure 21. Kitsap population experiencing food insecurity by race/ethnicity, 2021

Data source: Feeding America

Due to long-standing structural racism and discrimination influencing the locations and accessibility of grocery stores and access to culturally significant and appropriate foods, people of color have disproportionately faced food insecurity. Data indicates this disproportionate impact is seen in Kitsap, where Kitsap residents who identified as Black or African American (18%) and Hispanic or Latino (16%) had higher percentages of people experiencing food insecurity than those

who identified as white (7%, Figure 23).

A higher percentage of Kitsap’s youth (younger than 18 years old) experienced food insecurity (11%) than the overall population (8%) in 2021. High prevalence of food insecurity among youth is particularly concerning as it is linked with several negative health outcomes, such as long-term neurological damage and behavioral and mental health issues.²⁰

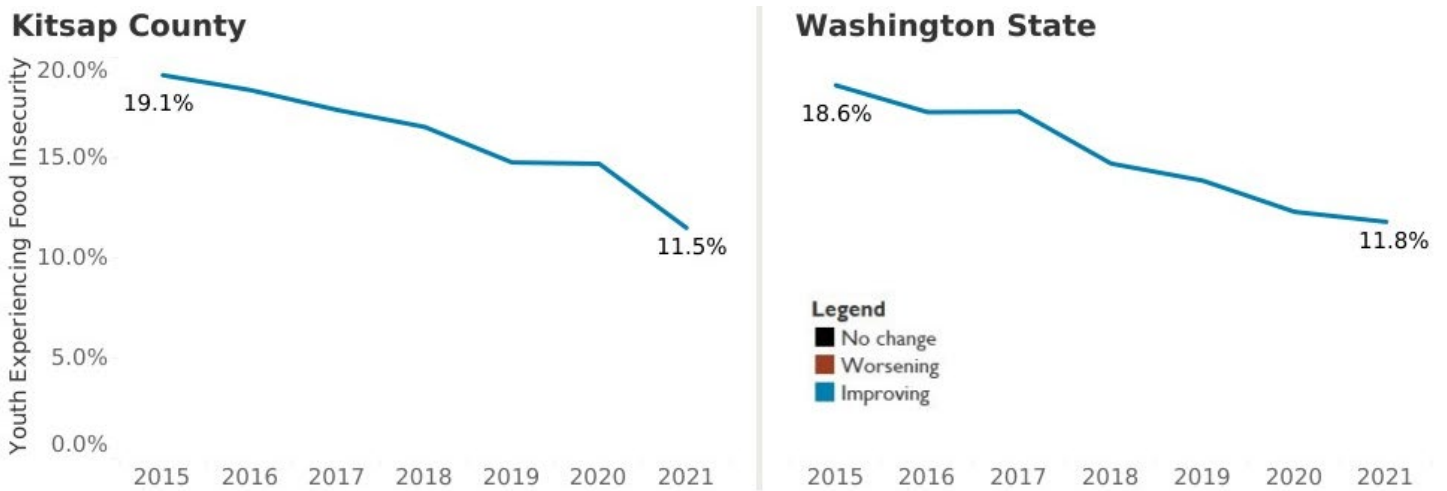


Figure 22. Youth experiencing food insecurity, 2021

Data source: Feeding America

Encouragingly, the estimated percentage of youth experiencing food insecurity in Kitsap has been decreasing annually from 19% in 2015 to 11% in 2021 (Figure 24). The sharp, one-year decline from 2020 (15%) to 2021 (11%) may be due in part to COVID-19 pandemic-related policies. There is growing evidence that the expanded Child Tax Credit, which went into effect in 2021, mitigated food hardship among those who received it.²¹

Additionally, in the 2022 KCR survey, cost was the primary barrier to getting food, followed by lack of alternative food sources (e.g., food banks) and transportation. Among all participants who answered the question, “Do you have barriers getting food? Choose all that apply:” 10% (327 participants) said not enough income to purchase food, 6% (193 participants) said not enough alternative food sources (e.g., food banks) available, and 6% (187 participants) said lack of transportation to grocery stores, markets, or food banks.

- Not surprisingly, about one in three (32%, 76 participants) with a household income of less than \$15,000 said they did not have enough income to purchase food, a higher proportion than any other income level. The majority of participants at this income level said they worry about running out of food often or sometimes (60%, 148 participants) and one in two said that their mental or physical disability was a barrier to employment (50%, 120 participants), a higher proportion than any other income level.
- About one in eight (13%, 25 participants) who identified as Hispanic/Latino/Latinx reported not enough alternative food sources available as a barrier to getting food, a higher proportion than those who did not identify as Hispanic/Latino/Latinx (5%, 168 participants).

Access to SNAP benefits

The Supplemental Nutrition Assistance Program (SNAP) is a federal program that provides food-purchasing assistance for low- and no-income households. Anyone who qualifies on the basis of income and assets can obtain benefits, and enrollments typically rise and fall with changes in the poverty rate.²²

In 2021, an estimated 12% of Kitsap households (about 12,400 households) received SNAP benefits (Figure 25). From 2010 to 2021, there has been a statistically significant decreasing trend in the percentage of Kitsap households receiving SNAP benefits. When comparing the percentage of residents receiving SNAP in 2021 to previous years, consider changes in policy during the COVID-19 pandemic.



Figure 23. Percentage of population receiving SNAP benefits, 2010-2021

Data Source: U.S. Census Bureau, American Community Survey (ACS)

Notes: Congress made temporary changes to SNAP during the COVID-19 pandemic, which may impact comparisons between 2021 and previous years. Kitsap County and Washington trend over time data are from single-year estimates. Data for 2020 is missing because 1-year estimates were not released by the U.S. Census Bureau due to concerns about reliability of data that year.

Access to SNAP benefits is critical in reducing households’ hunger and risk of food insecurity, as well as racial disparities in food insecurity. The most recent Census data (2017-21, Figure 26) for Kitsap indicate:

- Among households with a single female head of household, an estimated 31% received SNAP benefits — the highest percentage of any household type.
- Among households where at least one person had a disability, an estimated 21% received SNAP benefits compared to 6% among households where no one had a disability.
- Among Bremerton households, about one in five (19%) received SNAP benefits — the most of any region.

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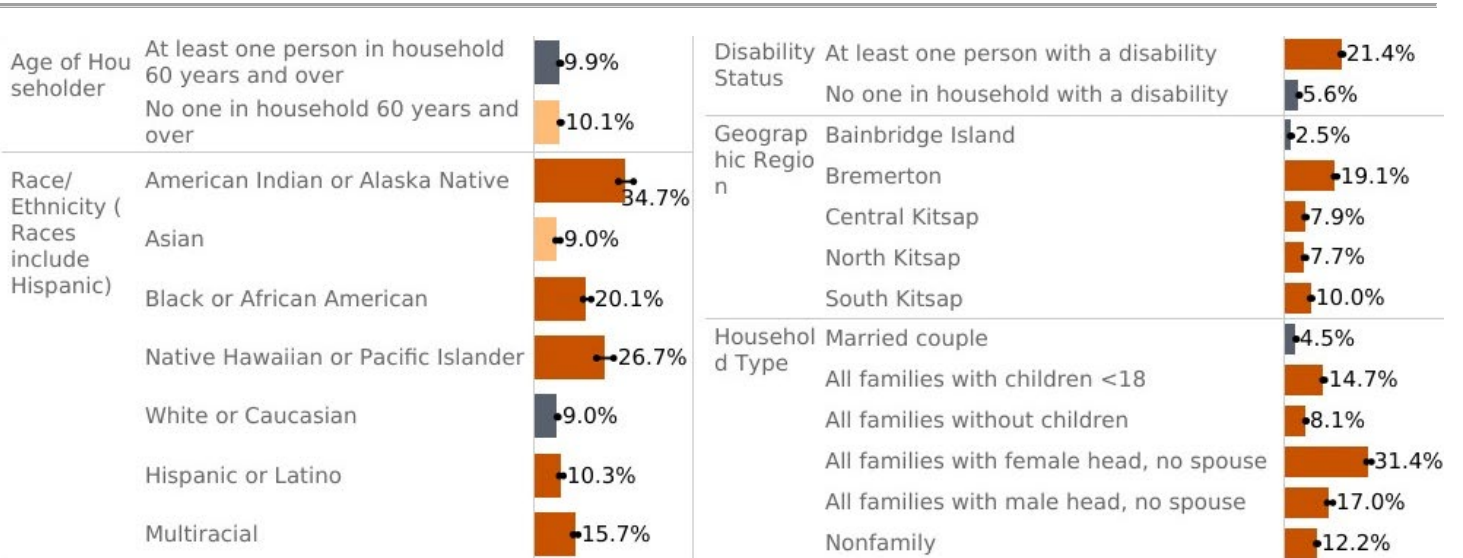


Figure 24. Kitsap population receiving SNAP benefits by subgroup, 2017-2021

Data Source: U.S. Census Bureau, American Community Survey (ACS)

Note: Geographic region is based on school district.

Legend

- Reference Group
- Not Statistically Significant
- Statistically Significant

HOUSING STABILITY

“If you don't have a place to stay, it affects everything: your mental health, your stress level, your physical health.”

— COMMUNITY MEMBER

Owner-/renter-occupied housing units

In 2021, 30% of occupied housing units in Kitsap were renter-occupied and 70% were owner-occupied. Sociodemographic characteristics by householder among Kitsap renters from 2017-2021 are presented below in Figure 27. Note that the householder refers to the person whose name the housing unit is owned or rented. If the house is owned or rented jointly, the householder may be either person.

- Among householders aged 0-34, 61% were renters — the highest percentage of any age group.
- Among Black or African American householders, 69% were renters — the highest percentage of any race/ethnicity.
- Among Bremerton householders, 47% were renters — the highest percentage of any Kitsap region.

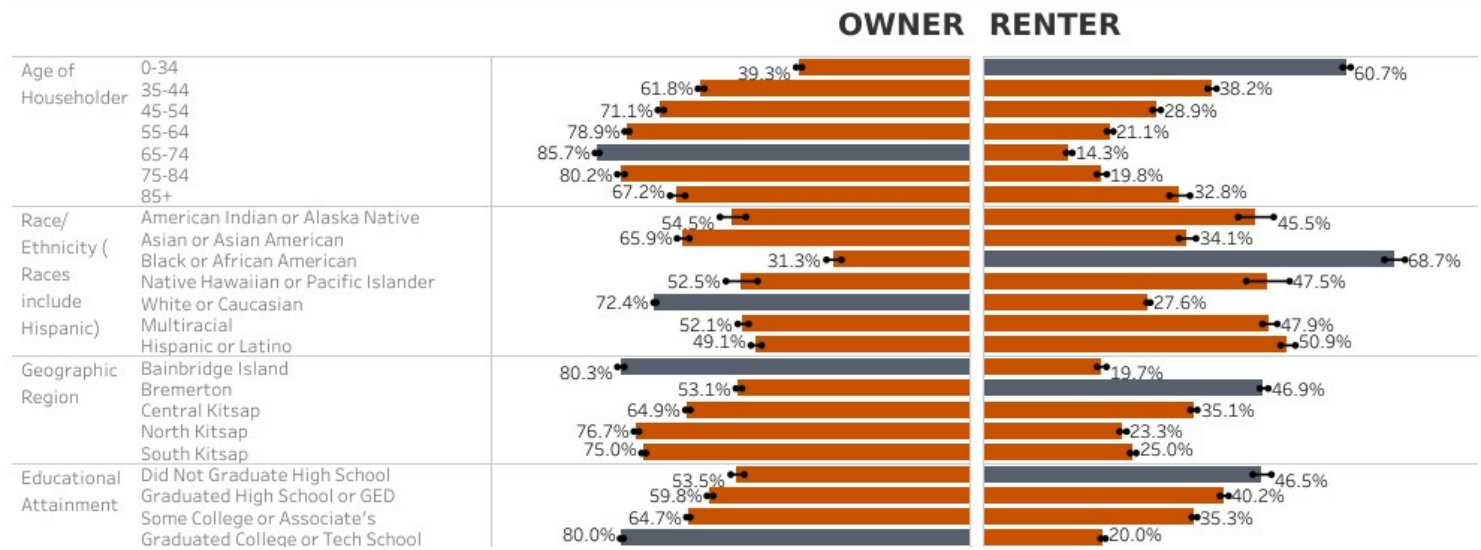


Figure 25. Demographic characteristics of Kitsap owners and renters, 2017-2021

Data Source: U.S. Census Bureau, American Community Survey (ACS)

Note: Geographic region is based on school district.

Legend
 ■ Reference Group
 ■ Not Statistically Significant
 ■ Statistically Significant

In 2021, the median gross rent in Kitsap was \$1,484, which was the same as the median gross rent in Washington state (Figure 28). The American Community Survey (ACS) measures gross rent as the contract rent plus the estimated average monthly cost of utilities (electricity, gas, water, and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else). From 2010 to 2021, there has been a statistically significant increasing trend in the median gross rent in Kitsap.



Figure 26. Median gross rent, 2010-2021

Data Source: U.S. Census Bureau, American Community Survey (ACS)

Notes: Kitsap County and Washington trend over time data are from single-year estimates. Data for 2020 is missing because 1-year estimates were not released by the U.S. Census Bureau due to concerns about reliability of data that year.

Cost-burdened households

Cost-burdened households are those that spend more than 30% of their monthly income toward housing costs. When households spend more than 30% of their income on housing, they are often forced to make difficult decisions in prioritizing purchases for other necessities such as food, healthcare, and childcare. This can be especially problematic for households with lower incomes, where higher housing costs can impact the household’s ability to meet basic needs. ²³

In 2021 (Figure 29):

- More than one in two (52%) renter-occupied housing units in Kitsap were cost-burdened.
- About one in four (26%) owner-occupied housing units with a mortgage in Kitsap were cost-burdened.
- About one in seven (13%) owner-occupied housing units without a mortgage in Kitsap were cost-burdened.
- Across Kitsap County from 2017-2021, differences by sub-county area in the percentage of households burdened by the cost of housing were higher among renter-occupied housing units than owner-occupied units and ranged from 33% of households burdened by the cost of housing in Bainbridge Island to 53% in Bremerton.

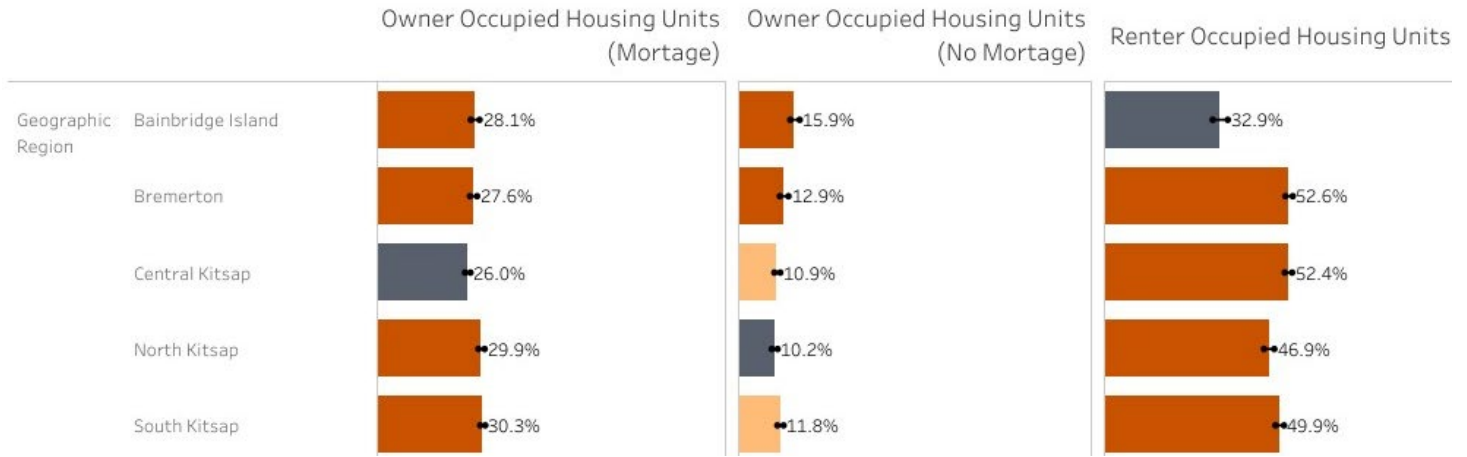


Figure 27. Monthly housing costs 30% or more of household income by Kitsap subgroups, 2017-2021

Data Source: U.S. Census Bureau, American Community Survey (ACS)

Note: Geographic region is based on school district.

Legend
 ■ Reference Group
 ■ Not Statistically Significant
 ■ Statistically Significant

Additionally, in the 2022 KCR survey, cost was reported as the primary housing concern with 35% (1,197 participants) reporting cost of rent or house payment is a major housing concern.

About two in five (42%, 350 participants) Bremerton residents said cost of rent or house payment is a major concern — a higher proportion than any other Kitsap County region.

Not surprisingly, about three in five (59%, 144 participants) with a household income less than \$15,000 said the cost of rent or house payment is a major housing concern— a higher proportion than any other income level. More than one-third (39%, 75 participants) of participants at this income level said they were unsure who to contact for housing assistance; nearly half (46%, 133 participants) said they did not know how the Section 8 Program works.

Point-in-time homelessness counts

People experiencing homelessness often face higher rates of poor health outcomes than people with more stable housing.²⁴

Each year, the U.S. Department of Housing and Urban Development (HUD) and Washington State Department of Commerce require communities to conduct a one-day Point-In-Time (PIT) count to survey individuals experiencing homelessness. The count attempts to provide a consistent set of data from around the country on “sheltered” and “unsheltered” homelessness. Sheltered homelessness refers to people living in a supervised publicly or privately operated temporary shelter, including congregate shelters, transitional housing and hotels and motels paid for by charitable organizations or federal, state or local government programs. Unsheltered homelessness refers to those with a primary nighttime residence that is a public or private place not designated as a regular sleeping accommodation for human beings, such as a car, park, abandoned building, bus or train station, airport, or campground.

In January 2022 during the one-day PIT, two in every 1,000 Kitsap residents (563 people) were experiencing

homelessness (sheltered and unsheltered), lower than Washington’s rate of three in every 1,000 Washington residents (Figure 30). From 2014 to 2022, there has been a statistically significant increasing trend in the rate of people experiencing homelessness in Kitsap.

Additionally, of the 563 community members who were experiencing homelessness in 2022, one in three were unsheltered.

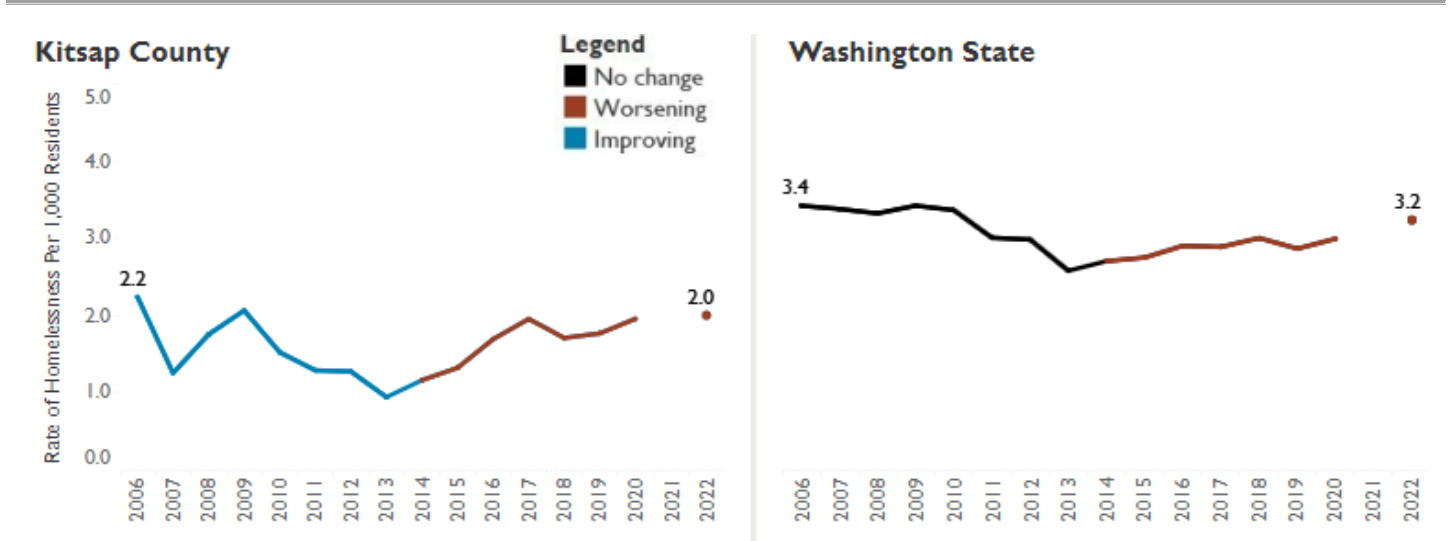


Figure 28. Rate of homelessness per 1,000 residents in Kitsap County and Washington state

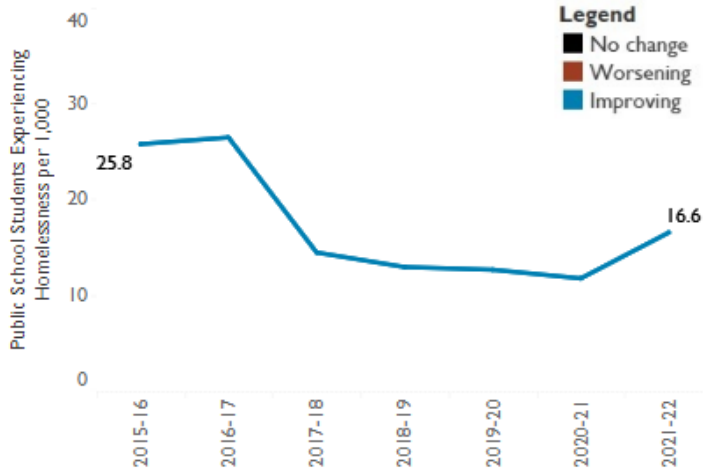
Data Source: Washington State Department of Commerce, Point in Time Count Results, 2006-2022, Kitsap County Department of Human Services, 2022

Note: Data for 2021 is missing because the 2021 PIT count was not conducted due to the COVID-19 pandemic.

Students experiencing homelessness

In the 2021-22 school year, 576 Kitsap public school students experienced homelessness, a rate of 17 per 1,000 public school students, which was lower than the rate in Washington state overall (27 per 1,000, Figure 31). From the 2015-16 to 2021-22 school years, there has been a statistically significant decreasing trend in the rate of students experiencing homelessness in Kitsap.

Kitsap County



Washington State

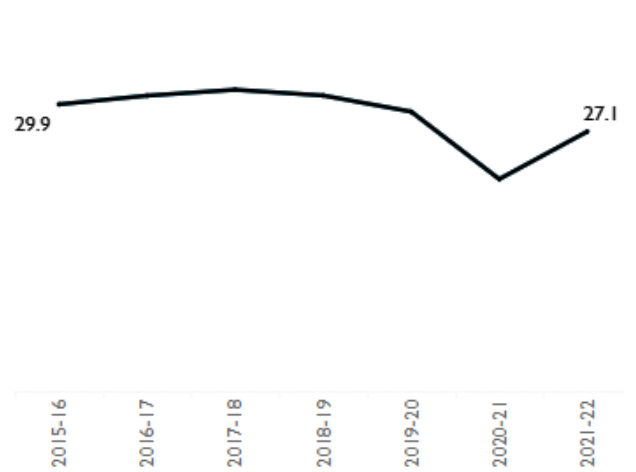
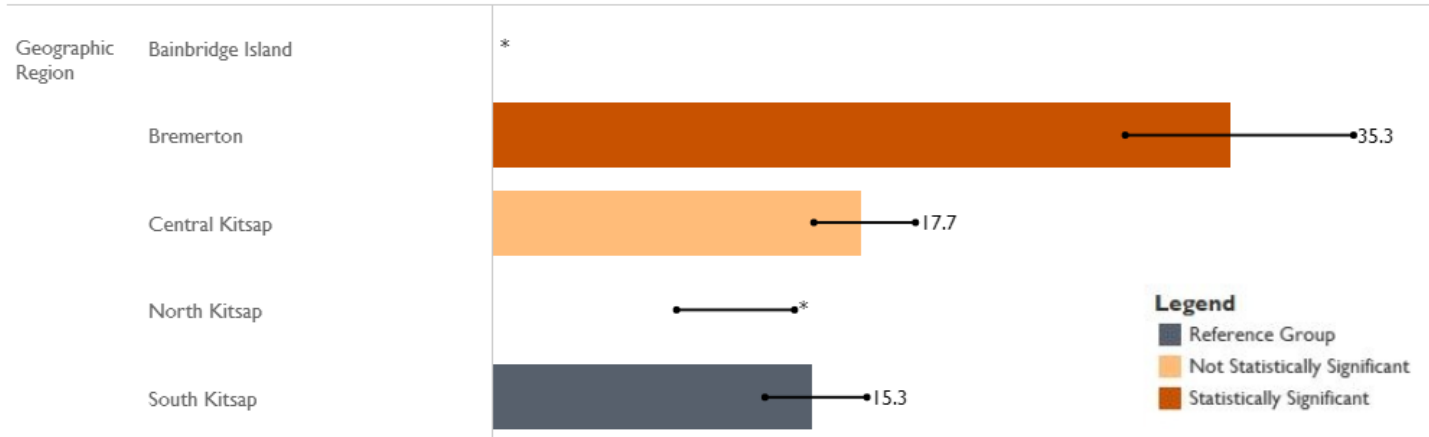


Figure 29. Public school students experiencing homelessness per 1,000 in Kitsap County and Washington state

Data Source: Washington State Office of Superintendent of Public Instruction (OSPI)

Rates vary across Kitsap County (Figure 32). For example, among Bremerton public school students, 35 per 1,000 students experienced homelessness — the highest rate of any Kitsap County region.



Notes:
 *The estimate is less than 10, which does not meet KPHD small number guidelines. When one subgroup is suppressed, the second smallest subgroup will also be suppressed.
 1. Geographic region is obtained by school district.
 2. Subgroup data (excluding by region) is not available for students experiencing homelessness.

Figure 30. Public school students experiencing homelessness per 1,000 by Kitsap subgroups, 2021-2022

Data Source: Washington State Office of Superintendent of Public Instruction (OSPI)

COMMUNITY ASSETS

There are many community members and organizations working to improve conditions that support the health of Kitsap residents.

General needs

[211](#) is a free confidential community service and one-stop connection to the local services you need: utility assistance, food, housing, health, child care, after school programs, elder care, crisis intervention and much more.

[Gather Together Grow Together](#) serves the community through transportation, food service, job readiness, and mentorship.

[Helpline House](#) provides food, housing, utilities, legal, medical equipment loans, and other assistance on Bainbridge Island.

[Kitsap Community Resources](#) is a nonprofit service organization creating hope and opportunity for low-income residents by promoting self-sufficiency through housing, employment, financial, and family resources.

[North Kitsap Fishline](#) provides food, rental assistance, eviction protection, utility assistance, health, legal and financial services, and employment and education services.

[ShareNet](#) provides food, rental assistance, and emergency power/utility assistance.

[Salvation Army](#) in Bremerton provides housing, food, poverty, and substance use treatment resources.

[ShareNet and Goodwill](#) provide clothing and household goods thrift stores, while [Abraham's House, New Beginnings Closet, Kids Kloset and Taking It to the Streets Ministry](#) provides clothing, furniture, and other items at no cost to people in need.

[St. Vincent de Paul in Bremerton](#) provides shelter, food, clothing, financial resources, and other assistance.

[Washington State Department of Social and Health Services](#) has a Community Services Office in Bremerton and can assist with food stamps, cash, identification card vouchers, and more.

Civil and human rights

[Kitsap Council for Human Rights](#) advises county government and the Kitsap County community on issues related to discrimination, violence and harassment based on race or national origin, religion, age, gender, gender expression, sexual orientation, disability, or economic status.

[NAACP Bremerton Unit 1134](#) advances policies and practices that expand human and civil rights, eliminate discrimination, and accelerate the wellbeing, education, and economic security of Black people and all persons of color. The NAACP can help provide resources and advocacy for individuals who have experienced discrimination.

Educational attainment

Olympic Educational Services District 114's free [Pathways to Success](#) program helps eligible young adults, ages 16-24, explore and reach their educational and employment goals in Kitsap, Jefferson, and Clallam Counties.

Kitsap Strong's [Future Bound workgroup](#) consists of many partner organizations and community volunteers who develop and implement strategies to create opportunities for students to explore their future bound pathways, including career exploration, financial literacy, dual credit enrollment, applying for post-secondary options, and financial

aid and scholarships.

[Kitsap Black Student Union](#) provides a safe space to celebrate culture, learn and preserve Black history while empowering youth leadership through mentoring and community service.

Mt. Zion Missionary Baptist Church's [Partnering for Youth Achievement Program](#) along with Emmanuel Apostolic Church seek to serve at risk youth by providing positive role models through mentoring circles that assist youth to achieve their full academic, civic, social, and spiritual potential.

[OURGEMS and OURGENTS](#), through mentorship and community service, provides young women and young men with opportunities to reach their fullest potential by building self-esteem, promoting the value of education and instilling leadership skills by exposing them to diverse experiences and perspectives.

[Voices of Pacific Island Nation](#) is committed to inspiring Pasefika (Pacific Islander) students and families by providing high-quality, culturally responsive services and resources to eliminate educational and opportunity inequities.

[Empowering Youth Mentor Program](#) is a community-based one-to-one mentoring program that matches volunteer mentors with mentees ages 8-21. Mentees are matched with trained mentors based on common interests and location. Mentors serve as positive role models and provide friendship and support for youth referred by professionals working in the juvenile justice system, schools, and social services.

[West Sound Tech](#) provides advanced career and technical programming preparing students ages of 16 to 21 or in grades 11 or 12 for career and college at no cost to the student. Students learn the technical knowledge and skill to prepare them for advanced placement in apprenticeships, technical schools, two-and-four-year colleges and universities or go directly to entry-level employment in their career interest area.

[Washington Youth Challenge Academy](#), an alternative education experience for youth, provides a highly disciplined, safe and professional learning environment that empowers at-risk youth to improve their educational levels and employment potential and become responsible and productive residents of Washington state.

[NW Hopeful Horizons](#) empowers and advocates for at-risk youth and families, particularly those in LGBTQIA and BIPOC communities as they face unique challenges and often lack access to the resources they need to thrive.

Employment

Goodwill has a [Job Training and Education Center](#) in Bremerton that provides free training and job assistance.

[WorkSource](#) connects people to employment-related resources and assistance.

Through the [WA State Employment Security Department \(ESD\) Self-Employment Assistance Program \(SEAP\)](#), the Northwest Business Center provides a discounted [online business bootcamp](#).

[YouthBuild Kitsap](#) is a Department of Labor funded grant that reengages students who have dropped out academically and teaches construction trades. Participants must be 17-21 years old, Kitsap County residents, & looking to obtain their GED or diploma.

[Trillium](#) connects people with disabilities to employment opportunities.

Food insecurity

Food banks and food-related resources can be found at:

- [North Kitsap Fishline](#)
- [Bremerton Foodline](#)
- [Sheryl McKinley Food Pantry at Olympic College](#)
- [Bremerton Backpack Brigade](#)
- [Taking It to the Streets Ministry](#)
- [Central Kitsap Food Bank](#)
- [ShareNet \(Kingston and surrounding areas\)](#)
- [The Salvation Army](#)
- [St. Vincent de Paul](#)
- [Bainbridge Island Helpline House](#)
- [South Kitsap Helpline](#)
- [Kitsap Food Bank Coalition](#)
- [Spirit of Life Lutheran Church Food bank](#)
- [Silverdale United Methodist Church Food bank](#)
- [Kitsap Immigrant Assistance Center](#)

The U.S. Department of Agriculture [Supplemental Nutrition Assistance Program](#), or SNAP, called Basic Food in Washington, helps people with low incomes make ends meet by providing monthly benefits to buy food.

Housing and homelessness

Kitsap County [Housing and Homelessness Division](#) supports a crisis response system in which the experience of homelessness is rare, brief and one-time. Our funding comes from federal, state and local sources.

Kitsap Community Resources' [Housing Solutions Center](#) coordinates placement for shelters, provides short-term rental assistance, and makes referrals for housing and community programs.

[Housing Kitsap](#) provides quality affordable housing and homeownership opportunities to families and individuals.

[Bremerton Housing Authority](#) (BHA) is a public corporation providing affordable housing opportunities for people with limited financial means, primarily within the City of Bremerton. They also administer the Section 8 Housing Choice Voucher program throughout Kitsap and Mason counties.

[Housing Resources Bainbridge](#) is the nonprofit affordable housing provider and advocate on Bainbridge Island.

[Coffee Oasis](#) youth programs offer friendship, belonging, resources and opportunity to homeless and street-oriented youth ages 13 to 25.

[Kitsap Rescue Mission](#) and the [Kitsap Housing and Homelessness Coalition](#) advocate for and provide resource information, such as [free meals calendar](#), [Sally's Guide](#) and the [Resource Guide for Pet Owners](#), and services to homeless residents, while [Homes for All Leadership Group](#) provides innovative leadership toward ending homelessness.

[Northwest Hospitality](#) – provides resources, such as access to supportive resources to journey back into housing, employment, and overall stability from homelessness, through hospitality kits, dental care vouchers, mobile supply closet, and hospitality cards.

[Foundation for Homeless and Poverty Management](#) breaks the pattern of generational poverty and homelessness for parents and their children by providing programs, such as life skills training, time management, Father’s Program, financial literacy, employment and Honor You Program for veterans, and resources like utility and rental assistance for renters impacted by COVID-19, who are behind on rent and are at risk of losing their housing.

[Northwest Justice Project](#) has an office in Bremerton and “provides free legal assistance to address fundamental human needs such as housing, family safety, income security, health care, education and more,” such as eviction and rental assistance.

[Kitsap Legal Services](#) provides attorney services to low-income tenants in eviction proceedings in Kitsap.

[Catholic Community Services](#) provides “shelter & homeless services, housing, Supportive services for veteran families, housing and essential needs (HEN), and home care.” They also provide transportation and home help for seniors and people with disabilities.

Specific populations

[Hearing, Speech & Deaf Center \(HSDC\)](#) has been serving the Puget Sound area for over 80 years and offers a comprehensive array of programs including interpreting for the deaf and hard of hearing, bilingual preschool services with instruction in American Sign Language and English, audiology and hearing aids, and speech and language therapy.

[Easterseals Washington](#) helps children and adults with disabilities and their families reach their full potential by enriching education, enhancing health, expanding employment, and elevating community.

The [Kitsap County Accessible Communities Advisory Committee](#) supports disability awareness and access for people with disabilities through technical assistance and other resources.

[Kitsap County Division of Aging and Long-Term Care](#) serve the needs of older or disabled adults, their families and caregivers residing in Kitsap County, providing services like the Senior Information and Assistance Line, Family Caregiver Support Program and resources listings, such as the [Kitsap Peninsula Senior Resources Guide](#).

[Kitsap County Veterans Assistance program](#) works cooperatively with the Veterans Advisory Board to host events, offer services, and create opportunities to get involved and support local Veterans and their families in need.

[Kitsap Immigrant Assistance Center](#) is the only organization providing immigrant-centric family, immigration legal, and tax and business services in the West Salish/Puget Sound Region.

[Kitsap County Department of Human Services](#) provides essential services and resources that address individual, and community needs to promote health and wellbeing, such as a link to the [Developmental Disabilities Resource Guide](#).

[The Arc of the Peninsulas](#) provides information and referrals to individuals with developmental disabilities and their families, parent to parent and parent education programs, Friday Night Social, Recreation and Resident camp and adult classes.

[Island Volunteer Caregivers](#) provides rides to older adults and adults with disabilities, community outreach navigator services, and hosts both a Caregivers’ Support Group and Grief Support Group on Bainbridge Island.

[Poulsbo Cares Initiative](#), a partnership between City of Poulsbo, NK Fishline, Gateway Fellowship and Empact Northwest, helps older adults and adults with disabilities residing in Poulsbo with free rides to run errands or get home deliveries, free meals twice a day and meals, showers, internet, and laundry for people who are homeless or transient.

[Agape Unlimited](#) provides housing, case management and childcare programs for people in their outpatient substance use disorder treatment program.

[Scarlet Road](#) offers the hope of freedom to those who have been sexually exploited by working to intervene and educate to prevent victimization, providing solutions and resources to exit the industry, and journey alongside survivors to find full healing from exploitation.

[YWCA](#) provides emergency shelter, supportive housing, civil and criminal court navigation and accompaniment, legal advocacy services, family advocacy services, support groups, case management, resources and referrals, prevention programming, education and community outreach to survivors of domestic violence and provides prevention programming to halt the generational cycle of violence.

ENDNOTES

¹ Healthy People 2030: Social Determinants of Health, Office of Disease Prevention and Health Promotion, <https://health.gov/healthypeople/priority-areas/social-determinants-health>

² About Social Determinants of Health, World Health Organization, http://www.who.int/social_determinants/sdh_definition/en/

³ Williams DR, Mohammed SA. Racism and Health I: Pathways and Scientific Evidence. *Am Behav Sci.* 2013 Aug 1;57(8):10.1177/0002764213487340. doi: 10.1177/0002764213487340. PMID: 24347666; PMCID: PMC3863357

⁴ Daniel E. Dawes (2020), *The Political Determinants of Health*, Johns Hopkins University Press.

⁵ Kitsap Public Health Board, Resolution 2021-01, <https://kitsappublichealth.org/about/equity.php>

⁶ Graduation rate is based on a cohort of students. The cohort is made up of all students who start 9th grade together. Students who transfer into or out of a school are added or removed from the cohort. If students stop attending school, they are counted as 'drop outs'. If students have met graduation requirements, they are counted as 'graduates'. If students don't graduate but are still attending, they are considered 'continuing'. Students are tracked through their 7th year in high school.

⁷ Census Bureau Releases Estimates of Undercount and Overcount in the 2020 Census, United States Census Bureau, <https://www.census.gov/newsroom/press-releases/2022/2020-census-estimates-of-undercount-and-overcount.html>

⁸ How Disability Data are Collected from The American Community Survey, United States Census Bureau, <https://www.census.gov/topics/health/disability/guidance/data-collection-ac.html>

⁹ Brady D, Kohler U, Zheng H. Novel Estimates of Mortality Associated With Poverty in the US. *JAMA Intern Med.* 2023;183(6):618–619. doi:10.1001/jamainternmed.2023.0276, https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2804032?utm_campaign=articlePDF&utm_medium=articlePDFlink&utm_source=articlePDF&utm_content=jamainternmed.2023.0276

¹⁰ This is the official measurement of poverty used by the Federal Government. The Department of Health and Human Services (HHS) produces simplified - but very similar - versions of these poverty thresholds called "poverty guidelines" that are used to assess eligibility for income-based programs such as Medicaid. For more information on measures of poverty, please see the detailed description provided by HHS: <http://aspe.hhs.gov/poverty/faq.cfm>

¹¹ The Self-Sufficiency Standard for Washington State 2020, Diana Pearce and the Workforce Development Council of Seattle-King County, https://selfsufficiencystandard.org/wp-content/uploads/2021/11/WA2020_SSS.pdf

¹² Galea S, Tracy M, Hoggatt KJ, DiMaggio C, Karpati A. Estimated deaths attributable to social factors in the United States. *American Journal of Public Health.* 2011;101(8):1456-1465.

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- ¹⁴ Oreopoulos, P. Do dropouts drop out too soon? Wealth, health and happiness from compulsory schooling. *Journal of Public Economics*. 2007;91(11–12), 2213–2229.
- ¹⁵ Healthy People 2030: High School Graduation, Office of Disease Prevention and Health Promotion, <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/high-school-graduation>
- ¹⁶ Hahn, R. A., Knopf, J. A., Wilson, S. J., Truman, B. I., Milstein, B., Johnson, R. L., Fielding, J. E., Muntaner, C. J. M., Jones, C. P., Fullilove, M. T., Moss, R. D., Ueffing, E., & Hunt, P. C. Programs to increase high school completion. *American Journal of Preventive Medicine*. 2015;48(5).
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