

Quality of Life in Hawai'i: 2022 Update





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Department of Business, Economic Development & Tourism Research and Economic Analysis Division

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INTRODUCTION

Overview

In 2008, the Hawai'i Department of Business, Economic Development, and Tourism (DBEDT) contracted the University of Hawai'i Center on the Family (COF) to create a set of community quality of life (QOL) measures for the state to assist economic initiatives, state and county planning, and social service programs to identify trends and critical factors relating to the community's well-being. The result, *Quality of Life in Hawai'i 2009 Report: Framework, Indicators, and Technical Documentation* (Yuan et al.), presented a comprehensive QOL framework and indicators, with the COF focusing on developing indicators that would allow stakeholders to cost-effectively monitor changes in the community's QOL.

Regularly updating QOL indicator data is important to maintaining the usefulness of the QOL framework and reassessing economic initiatives, state and county planning, and social service programs. While some of this can be done via the annual *State of Hawai'i Data Book* from DBEDT, which is rather comprehensive with the statistics it provides, many QOL indicators are not regularly published in the data book, or are published in a fashion that limits the ability to evaluate whether there have been improvements to the QOL. The first update was published in year 2020, the *Quality of Life in Hawai'i: 2019 Update*. Accordingly, this report provides an update to the previous update. This report consists mainly of updates to the indicator data from the 2019 update.

The Concept of Quality of Life

Quality of life is a broad concept that describes and assesses people's well-being. The term, which emerged in the 1960s, questioned the simplistic assumption about the relationship between economic growth and social well-being (Sirgy et al., 2006). Although economic well-being is found to be positively correlated to some QOL aspects such as life expectancy, educational attainment, and human rights, some studies have demonstrated that economic progress does not always guarantee, and may even be inversely related to, other aspects of well-being such as personal happiness, community safety, and a healthy environment (Diener & Suh, 1997; Bognar, 2005).

There is no generally accepted definition of QOL, but the concept is widely considered to be an outcome of the interaction of various conditions in the economic, health, social, and environmental domains that shape the shared experiences of individuals and their families in the community where they live (Myers, 1987; National Research Council, 2002; Ferriss, 2006). In accordance with this ecological perspective, the concept of social cohesion was found to be particularly relevant in assessing the collective well-being of residents at the county and state levels. Social cohesion characterizes relationships among community members and creates constraints and opportunities that affect these relationships and the well-being of the constituent parts of the community. Notions of shared values, common identity, a sense of belonging, trust among individuals and toward institutions, and social inclusion and participation are included in the concept of social cohesion that can be readily related to QOL. Berger-Schmitt (2002) identified two main dimensions in social development – strengthening social ties and

commitments, and reducing disparities and inequalities – which are conceptually linked to social cohesion. From this perspective, a community's success in fostering social ties and commitments, and in reducing disparities and inequalities in various QOL domains, influences the quality of life of the community as a whole.

Hawai'i's Quality of Life Initiatives: 2022 Update

At the turn of the century, concerns about the long-term viability of Hawai'i's economy culminated in various initiatives from 2005 to 2010. For example, Act 8, Special Session Laws of Hawai'i 2005, established the Hawai'i Sustainability Task Force, which was tasked to develop a *Hawai'i 2050 Sustainability Plan*; the Center on the Family (COF) at the University of Hawai'i, in collaboration with the Aloha United Way (AUW), published the first *Quality of Life in Hawai'i* report with county-level data in 2005; and Act 148, Session Laws of Hawai'i 2007, designated DBEDT to conduct research and policy development related to emerging industries. To further assist with economic initiatives, state and county planning, and social service programs, DBEDT contracted the COF to produce a quality-of-life report, which was published in 2009 (*Quality of Life in Hawai'i 2009 Report: Framework, Indicators, and Technical Documentation*, by Yuan et al.).

More recently, Love and Garboden (2019) look for determinants of individual well-being in Hawai'i, focusing on how various individual and community factors might cause or be correlated with an individual's perception of well-being. In addition, the *Hawai'i 2050 Sustainability Plan*, published in 2008, was recently followed by a *Ten-Year Measurement Update* in 2018. In the spirit of evaluating the progress towards the 2050 sustainability plan in the *Ten-Year Measurement Update*, this report presents an update to the 2019 update, allowing stakeholders to assess how the community's QOL has evolved.

Structure of Update

The information in this update is presented in the following order:

- *Measuring Quality of Life* presents the QOL framework, QOL indicators, data collection and analysis methods, and data limitations.
- Summary Findings summarizes findings on QOL in Hawai'i in terms of its relative standing to the national average, progress over time, and variation across counties.
- Sections A to F focuses on one QOL domain per section and begins with the presentation of key findings and a summary table of the most recent indicator data and findings, followed by detailed information on each indicator within the domain. The information for each indicator includes: why the indicator is important, Hawai'i's status on this indicator, trend data for the United States (U.S.) and for the state and counties of Hawai'i, technical notes, and data sources.

MEASURING QUALITY OF LIFE

Quality of Life Framework

This report presents a framework that integrates trend reporting of key QOL conditions, outcome reporting of societal goals, and evaluation of social cohesion to inform broad policy direction and to engage stakeholders in effecting positive changes in their community. From the review of the QOL literature and county QOL reporting in the U.S., six major domains that constitute the well-being of a community were identified: economic, education, environment, health, housing and transportation, and social. Guided by the integrated framework, four major measurement dimensions for each domain (for a total of 24 dimensions across the six domains) that address key living conditions, outcomes of societal goals, and social ties and inequalities in Hawai'i (see Table 1).

Quality of Life Indicators

The selection process for the indicators began with a comprehensive review of the research literature, national and international QOL projects, and previous work undertaken in Hawai'i, which led to the compilation of an initial set of indicators based on the proposed QOL framework. The final set of indicators, which was narrowed down to 68, was screened to meet the following five selection criteria:

- Relevancy measures a concept or issue that is clearly relevant to the community.
- *Validity* accurately reflects or assesses the specific concept or issue that it is measuring.
- Acceptability can be easily understood or accepted by the community.
- Reliability is comparable across time and geographical locations.
- Availability has data available in a timely, efficient, and cost-effective manner over the long term.

As shown in Table 1, there are between two and six indicators in each domain-dimension. Tables 3 to 8 in the following sections of this report contain the list of indicators by the six domains.

Table 1. Quality-of-Life Framework and Indicator Counts

Domain and Dimension	No. of indicators
A. Economic	9
Standard of Living	3
2. Income Inequality	2
3. Employment	2
4. Compensation and Work Hours	2
B. Education	10
1. Attainment	2
2. Performance	4
3. Readiness	2
4. Participation in Higher Education	2
C. Environment	10
1. Pollution	4
2. Conservation	2
3. Consumption	2
4. Recycling	2
D. Health	17
1. Mortality	5
2. Health Status	3
3. Disease Prevention	6
4. Access to Care	3
E. Housing & Transportation	10
 Affordable Housing 	3
2. Unmet Housing Needs	2
3. Housing Characteristics	2
4. Commuting Patterns	3
F. Social	12
1. Public Safety	5
2. Family Relationship	3
3. Community Connectedness	2
4. Social Participation	2
TOTAL	68

Data Analysis

QOL analysis was conducted at the indicator, dimension, and domain levels. Specifically, the relative standing of QOL in Hawai'i is analyzed from three perspectives:

- Compared to the nation: for the same indicator for the most current available year, state data is compared to the national data (usually the mean; median when noted). For positive indicators (e.g., per capita income), a higher value indicates the outcome is better; for negative indicators (e.g., violent crime rate), a higher value indicates the outcome is worse.
- Comparison over time: The average annual growth rate of an indicator is calculated to determine if the state is progressing over time (i.e., an increase for a positive indicator, and a decrease for a negative indicator). Generally, the benchmark year is ten years prior to the latest available data. However, in some cases the data does not go back ten years, and in these cases the earliest data point available is used.

Note: the methodology for calculating the *Comparison over time* from earlier reports was revised for this report. In earlier versions, the total percent change between two periods was reported. However, due to variations in reported time spans for different data sets, the methodology for this report has been updated to calculate the average annual growth rate. The average annual growth rate allows for comparisons across data sets that may have slightly different time spans.

• Comparison across counties: using the most current available year, data are first compared to determine if any county differences exist for an indicator. The counties with the highest and lowest indicator values are then compared to determine ranks. The county with the best outcome on an indicator is ranked on top.

Results of the analysis are presented using the following symbols.

Table 2. Symbols Used in the Report

Compared to the nation	Comparison over time	Comparison across counties	Other symbol
HI better than the nation	↑ HI improved	■ Top-ranked county	·· Data not available
No difference	↔ No change	■ ■ Mid-ranked county	
HI worse than the nation	↓ HI worsened	■ Bottom-ranked county	
		□ No difference	

Two summary QOL scores are calculated for each domain: one for Hawai'i's standing compared to the nation, and one for Hawai'i's change over time.

The methodology for calculating Hawai'i's comparison to the nation and across time were updated from previous reports to:

For compared to the nation summaries, indicators within each domain are counted if better than the nation and then percentages are found from the total comparable indicators (indicators with values for both the state and the nation). Summary results over 50 percent indicate Hawai'i performed better than the nation in the QOL indicators.

For Hawai'i's change over time summaries, indicators within each domain are counted if improved over time and then percentages are found from the total comparable indicators (Hawai'i's indicators with values over time). Summary results over 50 percent indicate Hawai'i improved over time in the QOL indicators within the domain and vice versa.

Limitations

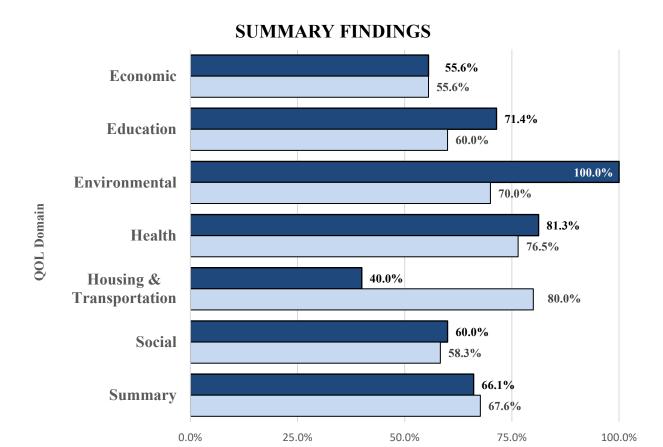
While the selection of indicators emphasized the availability of national, county, and trend data, some indicators that lack one of these dimensions were included because they were the best data available for measuring a specific QOL dimension. When an indicator's national data and county data were not comparable due to the use of different measurements, the latter was focused on to facilitate county comparisons. National data for several indicators were not reported, while other indicators had the closest proxy in the indicator's breakdown (but not in summary tables) to provide an idea of how the state compares to the nation (e.g., voted in elections).

Like other QOL reports, this report is based on data collected from governmental and other public sources, which generally suffer from a lack of positive indicators relating to well-being. Moreover, there is an absence of data on concepts that may play important roles in influencing QOL, such as the *aloha spirit*, as these are difficult to quantify.

Note that there is a time lag between data collection and reporting; therefore, even the most recent available data may not reflect real-time conditions.

Beginning year 2020, the data was impacted by the COVID-19 pandemic. The impacts from the pandemic are still far from being understood, however, shocks in the QOL data for the years beginning in 2020 are noticeable. For example, as for energy consumption, the QOL indicator C08, Hawai'i decreased its energy consumption by about 25 percent from year 2019 to year 2020. This decreased energy consumption was likely due mostly to the consequences of the pandemic and may not reflect long lasting decreases and more likely will return to pre-pandemic levels.

Also, due to the impacts of the COVID-19 pandemic, the U.S. Census Bureau determined the standard 2020 ACS 1-year estimates did not meet its statistical quality standards and decided to ultimately release estimates as an experimental product (Villa Ross, 2021). Unfortunately, even with modifications focusing on known sources of bias, the Census Bureau determined that the estimates did not satisfy statistical quality standards as it became apparent that the data collected overrepresented the population that was more educated, had higher incomes, and lived-in single-family housing units (U.S. Census, 2021). In addition, the experimental 2020 ACS data does not cover all the usual annual ACS indicators and does not include county level data. Due to these reasons, the experimental 2020 ACS data was not used as an alternative source.



■ Compared to the Nation □ Over time

Figure 1. Quality of Life - Summary Scores

Hawai'i's Quality of Life is in good standing compared to the nation and has improved over time.

Hawai'i's QOL Compared to the Nation

There are more quality-of-life indicators in which Hawai'i fared better than the nation. In summary, over 66 percent of Hawai'i's QOL indicators performed better compared to the nation. All except for one of the QOL domains had more than 50 percent of its indicators performing better than the nation. Hawai'i outperformed the nation in all the comparable environmental domain indicators. Also standing out was Hawai'is performance in the health domain indicators, outperforming the nation in over 81 percent of the comparable indicators. Hawai'i underperformed the nation in 40 percent of the housing and transportation domain indicators.

Hawai'i's QOL Over Time

Hawai'i improved over time in about 68 percent of the quality-of-life indicators.

All of the QOL domains had more than 50 percent of its indicators improving over time. Meaning there was improvement over time in all of the QOL domains of economic, education, environment, health, housing and transportation and society. The domains with the most indicators improving over time were housing & transportation (80 percent), health (about 77 percent) and education (60 percent) domains. Although the economic domain grew in the majority of its indicators, it had the least growth over time compared to the other domains at about 56 percent.

Hawai'i's QOL Compared Across Counties

Overall, the City and County of Honolulu ranked highest the most and Hawai'i County ranked worse the most amongst the comparable QOL indicators.

Hawai'i County:

Hawai'i County ranked best in 20 percent of comparable indicators amongst the counties and ranked worse in over 36 percent. Hawai'i County underperformed the other counties the most in the economic domain indicators, performing worse in six of the eight indicators. Alongside Maui County, Hawai'i County matched as performing worse in the education domain indicators. Hawai'i County was the leader amongst the counties in the environmental domain indicators and performed best in five of the eight comparable environmental indicators: solid waste generated, acres of parks and historic sites, water consumption, and solid waste recycled. Hawai'i County performed second worse in the health domain indicators. Hawai'i County performed the best in the most housing and transportation domain indicators compared to the other counties. The county had the highest homeownership rate at over 73 percent, six percentage points higher than the following county. The county also had the lowest rental cost burden at about 44 percent, which was over nine percentage points lower than the next lowest county. Hawai'i County underperformed the other counties in the social domain indicators. Alarmingly, there were almost 200 more domestic abuse cases per 100,000 people in Hawai'i County than in the other counties.

City and County of Honolulu:

The City and County of Honolulu ranked best in about 53 percent of comparable indicators amongst the counties and ranked worse in almost 13 percent. The City and County of Honolulu outperformed the other counties in the economic domain indicators, performing the best in seven of the eight indicators. The City and County of Honolulu performed best in the education domain. The City and County of Honolulu had the most favorable outcomes in the health domain indicators and performed best in six of the 13 comparable indicators. The City and County of Honolulu underperformed in the most housing and transportation domain indicators compared to the other counties. The county had the older housing structures than the next highest county by over 14 percentage points. The City and County of Honolulu outperformed the other counties in the social domain indicators, performing best in six of the eight comparable indicators: accident, homicide, and suicide death rate, drug-related arrest, child abuse and neglect, domestic abuse,

and idle youth. The City and County of Honolulu performed mid-ranked amongst the other counties in the environmental domain indicators.

Kaua'i County:

Kaua'i County ranked best in 20 percent of comparable indicators amongst the counties and ranked worse in over 27 percent. Kaua'i County performed mid-ranked in the economic, education, environmental, housing and transportation, and social domain indicators. Kaua'i County performed the worse in the health domain indicators: cancer death rate, adult frequent mental distress, binge drinking, adult physical activity, adult fruit and vegetable consumption and children without health insurance.

Maui County:

Maui County ranked best in around 15 percent of comparable indicators amongst the counties and ranked worse in over 25 percent. Maui County and Hawai'i County matched in performing worse in the education domain indicators. Maui County performed the worse amongst the counties in the environmental domain and its indicators. Maui County particularly underperformed within the environmental domain in the water consumption (using almost 60 gallons more per day than next highest county) and solid waste recycled (over 15 percentage points less than next lowest county) indicators. Maui County performed second best to the City and County of Honolulu in the health domain indicators. Maui County had the highest life expectancy amongst the counties, reflecting its high performance in the health domain indicators. Maui County performed mid-ranked in the economic, housing and transportation, and social domain indicators.

A. ECONOMIC DOMAIN AND INDICATORS

Hawai'i's economic domain consists of nine indicators within four dimensions: standard of living, income inequality, employment, and compensation and work hours. Based on the QOL economic domain as summarized in Table 3, Hawai'i outperformed the nation in the income inequality dimension indicators, however, these indicators did not improve over time.

Hawai'i fared better than the nation in five of the comparable economic domain indicators. Hawai'i's income was distributed more uniformly and there was less income concentrated in the top 20 percent income group than the nation. Hawai'i had more than three percentage points lower poverty rate than the nation. Hawai'i underperformed the nation in per capita income.

Hawai'i improved over time in five of the comparable indicators. Hawai'i improved the most over time in lowering the poverty rate. Hawai'i worsened the most over time in the percentage of households receiving SNAP/food stamps.

Standard of living: In year 2021, Hawai'i earned about \$3,000 less per capital income than the nation and the per capital average annual growth rate in Hawai'i was about a half a percentage point below that of the nation. In year 2020, Hawai'i had three percentage points less poverty than the nation. Hawai'i's poverty rate also improved the most over time with an average annual growth rate of over two percent. In year 2021, Hawai'i had slightly more households receiving SNAP/food stamps (0.20% more) and this indicator increased over four percent on average annually.

Income inequality: Income was distributed more equally in Hawai'i than for the nation with a three-point lower Gini index and an income share of households in the top 20 percent that was almost three percentage points below the nation. A lower Gini index in Hawai'i points to less income inequality compared to the nation. However, the Gini index in Hawai'i increased at a rate faster than for the nation, at 0.6 percent versus 0.3 percent on average annually over time. Meaning over time, high-income individuals received larger percentages of the population's total income. As the Gini index increased faster in Hawai'i than for the nation, so did Hawai'i's income share of households in the top 20 percent, at 0.5 percent increase versus 0.3 percent annually on average for the nation.

Employment: In year 2021, Hawai'i had a lower dependency ratio than the nation with about two less people who are not economically active per 100 who are in the labor force. The same year, Hawai'i had about the same unemployment rate as the nation. The unemployment rate in Hawai'i was 5.7 percent, compared to 5.3 percent in the nation.

Compensation and work hours: Workers in Hawai'i had about the same median wage as their national counterparts. However, workers in Hawai'i worked about 42 minutes less per week than the national average. In Hawai'i, both median wages and average hours worked per week improved over time.

County comparisons

- Hawai'i County had the least favorable conditions and ranked last in six of the nine economic indicators.
- Among the four counties, the City and County of Honolulu had the most favorable
 conditions for eight of the nine indicators: per capita income, the poverty rate, households
 receiving SNAP/food stamps, Gini index, income share of households in the top 20
 percent, economic dependency ratio, the unemployment rate, and median earnings.
 Unfavorably, the City and County of Honolulu had the most average hours worked per
 week.
- Kaua'i County performed mid-ranked for six of the nine economic indicators. Kaua'i County outperformed the other counties with the lowest economic dependency ratio. Kaua'i County had the least favorable outcomes for its unemployment rate and median earnings.
- For all the economic indicators, Maui County was mid-ranked.

Table 3. Economic Domain: Data and Findings

				Hawaiʻi,	Hawaiʻi:	Over time ⁽¹⁾		Cou	ınty	
Economic Indicators	Year	U.S.	HI	compared to the nation	Average Annual Growth	Improved or Worsened	Hawai'i	Honolulu	Kaua'i	Maui
Standard of Living										
A01. Per capita income, in 2021 dollars	2021(2)	\$64,143	\$60,947	$\overline{\bigcirc}$	1.5%	1	\$48,030	\$65,166	\$56,133	\$53,797
A02. Poverty rate, % of people	2020	11.9%	8.9%	•	-2.2%	1	12.2%	8.0%	9.9%	9.5%
A03. Households receiving SNAP/food stamps, % of households with at least one child under 18	2021	12.4%	12.6%	<u>-</u>	4.3%	4	20.2%	11.1%	14.0%	11.4%
Income Inequality										
A04. Gini index, scale of 0-100	2021	48.5	45.5	•	0.6%	↓	49.5	44.1	45.3	48.3
A05. Income share of households in the top 20% income group, % of total income	2021	51.8%	48.9%	•	0.5%	1	52.7%	47.5%	49.2%	51.6%
Employment										
A06. Economic dependency ratio, number of people in the total population who are not in the labor force per 100 who are	2021	97.3	95.0	•	0.8%	4	115.7	91.5	93.8	94.2
A07. Unemployment rate, % of people who are jobless, looking for a job, and available for work	2021	5.3%	5.7%	<u>-</u>	-1.7%	1	5.5%	5.3%	7.8%	7.3%
Compensation and Work Hours										
A08. Median earnings, people aged 16 and older with earnings in the past 12 months, in 2021 dollars	2021	\$42,151	\$42,129	<u> </u>	0.7%	1	\$37,593	\$43,727	\$33,675	\$38,167
A09. Working hours, Average hours worked per week for 16-64 ages	2021	38.7	38.0	•	-0.2%	1	37.2	38.5	36.0	36.8

Symbols: • Data not available; ○ HI better than the nation, ◎ No difference, ○ HI worse than the nation; ↑ HI improved, ↔ No change, ↓ HI worsened;

 $[\]blacksquare$ Top-ranked county, \blacksquare \blacksquare Mid-ranked county, \blacksquare Bottom-ranked county, \square No difference

⁽¹⁾ Benchmark years annotated in appendix

⁽²⁾ County data reported is for year 2020

A01. Per capita income

Average income per person

Why is this important?

This indicator assesses the economic health of a population. Personal income affects many areas of concern such as access to adequate housing, healthcare, higher education, safety, nutritious food, and clean water. In general, strong economic resources can contribute to a higher quality of life. As an average measure, per capita income tells us how well income growth has kept up with population growth. Changes in per capita income are useful in gauging local economic conditions and trends over time, though it needs to be kept in context with changes in the cost of living.

How are we doing?

Over time, the nation's average annual growth rate in per capita income was over two percent, while Hawai'i grew at under two percent. Since the nation's real per capita income grew faster than Hawai'i over time, this led to an increasing gap in income between the two. By year 2021, Hawai'i's per capita income of \$60,947 was over \$3,000 lower than the nation. The City and County of Honolulu maintained the highest per capital income amongst the counties for year 2020 at \$65,166 and Hawai'i County had the lowest at \$48,030.

Indicator	A01.	Per	canita	income
IIIMICHTOI	TAU I	1 01	Cupicu	

Area / Year	2011	2014	2015	2016	2017	2018	2019	2020	2021
United States	\$51,495	\$53,667	\$55,705	\$56,014	\$56,986	\$58,041	\$59,619	\$62,573	\$64,143
State of Hawai'i	\$52,157	\$53,056	\$54,508	\$54,961	\$55,775	\$55,880	\$57,659	\$59,404	\$60,947
Hawai'i County	\$39,241	\$40,217	\$42,218	\$42,547	\$43,639	\$43,841	\$44,853	\$48,030	••
C&C Honolulu	\$56,717	\$58,050	\$59,607	\$60,335	\$61,265	\$61,562	\$62,539	\$65,166	••
Kaua'i County	\$43,918	\$46,641	\$48,269	\$49,000	\$50,261	\$51,952	\$53,724	\$56,133	••
Maui County	\$44,799	\$46,971	\$48,883	\$49,539	\$50,574	\$51,298	\$53,270	\$53,797	••

Technical notes:

The Bureau of Labor Statistics' CPI-U and CPI-U Urban Hawai'i were used to inflate the data to 2021 dollars for the U.S. and Hawai'i, respectively. Per capita income is calculated by dividing the total income of residents by the total number of residents. Data for years 2012 and 2013 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

- U.S./HI, 2011, 2014–2021
 U.S. Department of Commerce, Bureau of Economic Analysis. (n.d.). SAINC1: Personal income summary: personal income, population, per capita personal income. *Personal income by state*. Retrieved from https://apps.bea.gov/iTable/index regional.cfm
- U.S./HI, 2011, 2014–2020

- U.S. Department of Commerce, Bureau of Economic Analysis. (n.d.). CAINC1: Personal income, population, per capita personal income. *Personal income by county, metro, and other areas*. Retrieved from https://apps.bea.gov/iTable/index_regional.cfm
- U.S./HI, 2011, 2014–2021 U.S. Bureau of Labor Statistics. (n.d.). All urban consumers (current series). *Consumer Price Index (CPI) databases*. Retrieved from https://www.bls.gov/cpi/data.htm

A02. Poverty rate

Percentage of people living below the federal poverty thresholds

Why is this important?

This indicator gauges the percentage of individuals with an inadequate standard of living and limited access to food, clothing, shelter, health care, and education, all of which determine quality of life. Other challenges associated with poverty include stress, strained family relationships, unaffordable childcare, unsafe environment, and transportation difficulties, which are associated with financial insufficiency.

How are we doing?

Hawai'i's poverty continued to be below the nations since the turn of the century. In year 2020, Hawai'i's poverty rate was 8.9 percent compared to the nations at 11.9 percent. Since year 2010, this was a decrease of about 20 percent for Hawai'i and 22 percent for the nation. Hawai'i County regularly had the highest poverty rate amongst the counties and exceeded the national poverty rate throughout the years analyzed. Still, Hawai'i County made the most improvement over time compared to the other counties with the percentage of people living below the federal poverty thresholds declining over 33 percent since year 2010. The City and County of Honolulu had the lowest poverty rates across the years analyzed.

Indicator A02. Poverty rate

Area / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	15.3%	15.9%	15.9%	15.8%	15.5%	14.7%	14.0%	13.4%	13.1%	12.3%	11.9%
State of Hawai'i	11.1%	12.1%	11.8%	11.2%	11.5%	10.7%	9.5%	9.5%	9.0%	9.0%	8.9%
Hawai'i County	18.3%	20.4%	18.9%	19.5%	18.1%	18.3%	15.4%	15.0%	15.6%	13.1%	12.2%
C&C Honolulu	9.5%	10.3%	10.4%	9.6%	9.8%	9.2%	8.5%	8.3%	7.7%	7.9%	8.0%
Kaua'i County	11.9%	12.8%	11.2%	10.7%	13.1%	10.7%	9.5%	10.0%	8.5%	9.3%	9.9%
Maui County	12.1%	12.9%	12.3%	11.8%	12.3%	11.2%	8.1%	10.1%	8.6%	10.7%	9.5%

The federal poverty thresholds do not consider various factors that affect people's economic wellbeing; it does not incorporate cost of living, which can offset high incomes or improve purchasing power of low-income people, nor does it incorporate taxes or certain government benefits. The U.S. Census Bureau attempts to enhance the poverty measure with the supplemental poverty measure, which incorporates cost of living, taxes, and government benefits into its estimation. For the 2019 to 2021 period, Hawai'i was about one percent below the nation according to the supplemental poverty measure. For the periods analyzed, while this measure decreased for both Hawai'i and the nation, Hawai'i improved less.

Indicator A02b. Supplemental poverty measure

Area / Year	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2018- 2020	2019- 2021
United States	15.1%	13.7%	12.9%	13.1%	11.5%	11.2%	11.20%
State of Hawai'i	16.8%	10.3%	10.2%	13.7%	9.4%	9.5%	10.10%

Technical notes:

The federal poverty thresholds do not vary across states, but they are updated annually for inflation.

Data source/s:

- U.S./HI, 2010–2020
 - U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE). (n.d.). Poverty and median household income estimates counties, states, and national. *SAIPE state and county estimates, various years*. Retrieved from https://www.census.gov/programs-surveys/saipe/data/datasets.html
- U.S./HI, 2013–2021
 U.S. Census Bureau. (n.d.). Number and percentage of people in poverty by state using 3-year average. The Supplemental Poverty Measure, various years. Retrieved from https://www.census.gov/topics/income-poverty/supplemental-poverty-measure/library/publications.html

A03. Households receiving SNAP/food stamps

Percentage of households with at least one child under 18 receiving SNAP or food stamps

Why is this important?

This indicator measures child poverty. Families are eligible for Supplemental Nutrition Assistance Program (SNAP) benefits if their monthly net income falls below 100% of the poverty level, monthly gross income falls below 130% of the poverty level, or monthly income falls below 200% of the poverty level and the family has high expenses. Households where all members receive or are authorized to receive TANF or SSI cash assistance are categorically eligible for SNAP. Research shows that children from low-income families are more likely to lack the resources needed to meet daily-living needs, perform poorly academically, and be at risk for child abuse or neglect.

How are we doing?

Hawai'i had 12.6 percent of households with at least one child under 18 receiving SNAP benefits. This was just above the national average of 12.4 percent. However, the percent of Hawai'i's households receiving SNAP grew faster than for the nation. Hawai'i grew over four percent on average annually, while the nation grew about two percent on average annually. In year 2021, Hawai'i County continued to have the highest percentage of households receiving SNAP benefits, at over 20 percent. The same year, the City and County of Honolulu had the lowest percentage, at about 11 percent.

Indicator	A03.	Households	receiving	SNAP/food stamps
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Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	10.2%	12.4%	13.0%	13.2%	13.0%	12.6%	11.3%	10.7%	12.4%
State of Hawai'i	8.3%	10.2%	10.9%	11.3%	11.6%	11.4%	10.0%	10.4%	12.6%
Hawai'i County	12.9%	16.8%	17.9%	18.7%	19.5%	19.5%	19.1%	18.7%	20.2%
C&C Honolulu	7.3%	8.6%	9.2%	9.7%	9.9%	10.0%	8.3%	9.0%	11.1%
Kaua'i County	8.0%	9.9%	9.9%	10.2%	10.1%	9.4%	8.8%	9.9%	14.0%
Maui County	8.2%	11.5%	12.7%	11.8%	11.9%	10.5%	8.4%	7.7%	11.4%

Technical notes:

U.S. Census Bureau, American Community Survey (ACS) annual data for year 2020 was not available. The food stamp program's name was changed to the Supplemental Nutrition Assistance Program (SNAP) in 2008. Benefits and eligibility were expanded at this time, as well. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

 U.S./HI, 2011, 2013-2019, 2021
 U.S. Census Bureau. (n.d.). S2201: Food stamps/Supplemental Nutrition Assistance Program (SNAP). *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/

A04. Gini index

Gini index (0-100) of income distribution

Why is this important?

The Gini index, ranging from 0 to 100, provides a summary measure of income inequality within a population and indicates how much the income distribution differs from a perfectly equal income distribution. A measure of 100 indicates perfect inequality, i.e., one person has all the income while the rest has none. A measure of 0 indicates a perfect equal-sharing of income among all people. This index is also useful in measuring relative changes in income inequality over time. A decreasing Gini index indicates an improvement in income equality.

How are we doing?

Across all periods analyzed, income was distributed more uniformly in Hawai'i compared to the nation, as demonstrated by a lower Gini index (45.5 in Hawai'i compared to 48.5 in the U.S. for year 2021). This was true except for Hawai'i County which had a Gini index one point higher than the national average at 49.5. In year 2021, the City and County of Honolulu and Kaua'i County had lower levels of income inequality (44.1 and 45.3, respectively).

Indicator A04. Gini index

Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021
United States	47.0	47.6	47.4	47.6	47.9	48.0	48.2	48.5	48.1	48.5
State of Hawai'i	42.8	45.5	43.1	43.2	43.2	43.7	44.0	44.5	44.0	45.5
Hawai'i County	45.2	49.5	46.1	46.5	46.5	47.2	47.1	50.7	46.2	49.5
C&C Honolulu	42.1	44.1	42.0	42.0	42.1	42.6	43.0	43.0	43.5	44.1
Kaua'i County	41.0	45.3	42.1	42.6	42.0	42.3	42.8	43.1	41.6	45.3
Maui County	43.2	48.3	44.4	44.2	43.9	44.2	44.5	44.0	43.3	48.3

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available.

Data source/s:

U.S./HI, 2011-2019, 2021
 U.S. Census Bureau. (n.d.). B19083: Gini index of income inequality. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

A05. Income share of households in the top 20% income group

Percentage of income shared by households in the top 20% income group

Why is this important?

Income allows various means for meeting one's needs and goals. However, income also enables individuals to accumulate wealth, power, and influence, which may have important implications in a democratic society. The Gini index is a broad measure of income distribution and (in)equality; the income share of households in the top quintile is a narrower measure of income concentration, measuring how much of total income is concentrated in households in the top 20% income group. An increasing concentration of income suggests greater inequality in a community. This also reflects changes in the distribution of most other income sources. Therefore, a decreasing percentage of income-share of the top 20% income households reflects a reduction in income inequality.

How are we doing?

Hawai'i's top 20 percent of households in income share had a smaller percentage of total income than the nation during year 2021 (48.9 percent versus 51.8 percent). For both Hawai'i and the nation, this was an increase from year 2011, meaning income has become more concentrated among high income households. This indicator grew fastest in Hawai'i County and increased the gap between itself and the other counties for this measure of inequality. The City County of Honolulu and Kaua'i County typically had the lowest income concentrated in the top quintile households.

Indicator A05.	Income share o	f households in t	op 20% income group
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Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	50.4%	50.7%	50.9%	51.2%	51.4%	51.5%	51.8%	51.6%	51.8%
State of Hawai'i	46.4%	46.7%	46.8%	46.8%	47.2%	47.5%	48.0%	47.5%	48.9%
Hawai'i County	48.1%	48.8%	49.0%	48.9%	49.6%	49.7%	53.4%	49.1%	52.7%
C&C Honolulu	45.8%	45.7%	45.8%	45.9%	46.4%	46.8%	46.7%	47.3%	47.5%
Kaua'i County	44.5%	45.7%	46.2%	45.6%	45.8%	45.8%	46.5%	45.4%	49.2%
Maui County	47.3%	48.4%	48.1%	47.8%	48.1%	48.2%	48.2%	47.2%	51.6%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013-2019, 2021
 U.S. Census Bureau. (n.d.). B19082: Shares of aggregate household income by quintile.
 American Community Survey 1-Year Estimates. Retrieved from https://data.census.gov/.

A06. Economic dependency ratio

Number of people in the total population who are not in the labor force per 100 of those who are

Why is this important?

The economic dependency ratio measures the extent of a community's population that is not participating in the labor force, and is an indicator of the economic responsibility of those who are economically active in providing for those who are not. An economic dependency ratio of less than 100 means there are more economically active people than non-economically active people. Economic dependency is directly related to the number of children (17 years and below) and older adults (65 years and over), and to some degree, the health of the economy and workforce. More people will be active in the labor force (employed or looking for a job) if the economy is growing or if the workforce is educated and/or experienced.

How are we doing?

The economic dependency ratio grew in Hawai'i and in the nation, at 0.8 percent on average annually for Hawai'i and at 0.1 percent on average annually in the nation. The means that the economic responsibility for those who are economically active grew more for Hawai'i than for the nation. The City and County of Honolulu had the lowest economic dependency ratio in year 2021, at about 92 people who are not in the labor force per 100 people who are. The same year, Hawai'i County continued to have the most people who are not in the labor force at about 116 people per 100 of those who are in the labor force.

Indicator	A06.	Economic	depend	lencv	ratio

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	96.0	99.8	100.3	100.6	100.9	100.8	100.4	99.1	97.3
State of Hawai'i	87.6	93.3	93.5	93.1	92.5	91.2	91.7	92.6	95.0
Hawai'i County	98.2	109.5	116.2	118.9	119.6	119.3	111.8	111.9	115.7
C&C Honolulu	87.0	91.4	90.2	89.6	88.5	86.9	87.4	88.8	91.5
Kaua'i County	89.5	99.6	101.1	96.6	95.0	91.5	104.2	107.3	93.8
Maui County	78.8	85.1	87.2	86.6	87.4	88.1	90.2	87.9	94.2

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. The total population includes the Armed Forces and children. The number of people in the labor force includes those who are either employed or unemployed but willing and able to work and looking for a job. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

• U.S./HI, 2011, 2013–2019, 2021 U.S. Census Bureau. (n.d.). B23001: Sex by age by employment status for the population 16 years and over; B01003: Total population. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

A07. Unemployment rate

Percentage of people who are jobless, looking for a job, and available for work

Why is this important?

This indicator, which is a basic measure of the unutilized labor supply of a community, reflects the availability of jobs and opportunities. Because the unemployment rate only considers those who are jobless and looking for work, the unemployment rate tends to understate the unemployment situation of a region, as it does not include underemployed workers or those who have given up job-seeking because they believe no jobs are available to them. Prolonged unemployment may lead to difficulty in meeting the basic necessities of daily living and can make it increasingly difficult to find a job.

How are we doing?

Until year 2020, the unemployment rate in Hawai'i had been lower than the national average. From year's 2011 to 2019, Hawai'i had the general trend of a decreasing unemployment rate. In year 2020, the COVID-19 pandemic resulted in large increases. By year 2021, the unemployment rate recovered to 5.7 percent in Hawai'i and 5.3 percent for the nation. Across the years analyzed, the City and County of Honolulu had the lowest unemployment rate amongst the counties and by year 2021 was at 5.3 percent unemployed.

Indicator	A07.	Unemploy	vment rate

Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
United States	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%	3.7%	8.1%	5.3%
State of Hawai'i	6.8%	6.0%	4.9%	4.4%	3.6%	3.0%	2.4%	2.4%	2.5%	12.0%	5.7%
Hawai'i County	9.8%	8.3%	6.7%	5.5%	4.4%	3.7%	2.9%	2.8%	3.1%	11.7%	5.5%
C&C Honolulu	5.9%	5.4%	4.4%	4.1%	3.3%	2.8%	2.3%	2.3%	2.3%	10.5%	5.3%
Kaua'i County	8.7%	7.3%	5.7%	4.8%	4.0%	3.2%	2.4%	2.4%	2.4%	16.6%	7.8%
Maui County	7.9%	6.4%	5.2%	4.5%	3.7%	3.1%	2.6%	2.3%	2.4%	18.2%	7.3%

Technical notes:

Data are annual averages of the unemployment rate that is not seasonally adjusted.

Data source/s:

- US, 2011–2021
 - U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). Employment status of the civilian noninstitutional population, 1948 to date. *Labor force statistics from the Current Population Survey*. Retrieved from https://www.bls.gov/cps/cpsaat01.htm
- HI, 2011–2021
 State of Hawai'i Department of Labor and Industrial Relations, Research and Statistics Office. (n.d.). Not seasonally adjusted LAUS data. Current and historical labor force estimates and unemployment rate. Retrieved from <a href="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc="https://www.hiwi.org/wosnet/gsipub/documentview.aspx."https://www.hiwi.org/wosnet/gsipub/documentview.aspx.

A08. Median earnings

Median earnings for people aged 16 and over with earnings in the past 12 months

Why is this important?

This indicator measures how well people's work provides access to food, clothing, shelter, and transportation—all of which determine quality of life. An increase in earnings indicates greater discretionary income for the purchase of goods and services, and plays a significant role in ensuring that individuals can be financially independent and more economically secure in the future.

How are we doing?

For year 2021, the median earnings for people aged 16 and over in Hawai'i was \$42,129, almost equal to the national median earnings. The City and County of Honolulu had the highest median earnings amongst the counties at \$43,727, more than \$1,500 over the national average. While Kaua'i County had the lowest median earnings at \$33,675, about \$10,000 less than the City and County of Honolulu.

Indicator A08. Median earnings

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	36,451	36,041	35,843	35,398	35,823	36,287	39,013	39,408	42,151
State of Hawai'i	39,319	38,542	38,610	38,279	38,841	39,921	40,304	43,107	42,129
Hawai'i County	33,915	32,382	31,963	32,817	34,075	34,394	35,261	35,429	37,593
C&C Honolulu	40,855	40,879	40,784	40,633	40,815	41,068	42,370	44,388	43,727
Kaua'i County	38,086	36,852	36,841	36,804	36,778	39,289	37,836	41,010	33,675
Maui County	38,381	36,981	36,913	36,870	36,825	39,369	39,229	41,515	38,167

Technical notes:

Median earnings were adjusted to 2021 dollars. The Bureau of Labor Statistics' CPI-U and CPI-U Urban Hawai'i were for the U.S. and Hawai'i, respectively. U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

- U.S./HI, 2011, 2013–2019, 2021 U.S. Census Bureau. (n.d.). S2001: Earnings in the past 12 months. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.
- U.S./HI, 2021
 U.S. Bureau of Labor Statistics. (n.d.). All urban consumers (current series). Consumer Price Index (CPI) databases. Retrieved from https://www.bls.gov/cpi/data.htm

A09. Usual hours worked

Mean usual hours worked in the past 12 months for workers 16 to 64 years

Why is this important?

This indicator addresses the effects of working hours on fatigue, health, and safety outcomes and work-life balance. Every hour spent at work is one less hour that can be spent with family or friends, or pursuing personal interests.

In previous reports, working long hours, "percentage of employed people aged 25-64 who usually work 41 hours or more per week," was used instead of usual hours worked. This indicator was updated to usual hours worked due to availability of data.

How are we doing?

Usual hours worked per week decreased for both Hawai'i and the nation since year 2011. In year 2021, workers aged 16 to 64 in Hawai'i worked about 48 minutes less per week than workers had in the five previous years. The City and County of Honolulu reported usually working the most hours amongst Hawai'i's counties at 38.5 hours per week. While Kaua'i County reported usually working the least at 36 hours per week.

Indicator A09.	Usual hours	worked	per week
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Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021
United States	38.7	38.4	38.4	38.4	38.5	38.6	38.7	38.7	38.8	38.7
State of Hawai'i	38.8	38.7	38.5	38.5	38.7	38.8	38.8	38.8	38.8	38.0
Hawai'i County	37.4	36.7	36.4	36.3	36.6	36.8	36.8	37.0	37.3	37.2
C&C Honolulu	39.3	39.4	39.2	39.2	39.3	39.3	39.3	39.2	39.2	38.5
Kaua'i County	37.6	37.0	37.4	37.4	37.5	37.7	38.0	38.2	38.2	36.0
Maui County	38.1	38.7	37.4	37.3	37.8	37.8	38.1	38.3	38.4	36.8

Technical notes:

Usual hours worked per week worked in the past 12 months was asked of people 16 years old and over who indicated that they worked during the past 12 months. The respondent was to report the number of hours worked per week in the majority of the weeks they worked in the past 12 months. If the hours worked per week varied considerably during the past 12 months, the respondent was to report an approximate average of the hours worked per week. This indicator changed from the previous reports and thus should not be compared. U.S. Census Bureau, ACS annual data for year 2020 was not available.

Data source/s:

U.S./HI, 2011–2019, 2021
 U.S. Census Bureau. (n.d.). B23020: Mean usual hours worked in the past 12 months for workers 16 to 64 years. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

B. EDUCATION DOMAIN AND INDICATORS

Hawai'i's education domain consists of ten indicators within four dimensions: attainment, performance, readiness, and participation in higher education. As summarized in Table 4, Hawai'i outperformed the nation in the education attainment dimension indicators and underperformed in the performance dimension indicators.

Hawai'i fared better than the nation in five of the seven comparable indicators. Hawai'i performed particularly well compared to the nation with a higher percentage of people aged 25 and over who have high school degrees, higher percentage of eighth grade students at or above proficiency in reading according to the National Assessment of Educational Progress (NAEP), and more lifelong learners. Hawai'i had higher combined average SAT math and critical reading scores of college-bound seniors than the nation. Hawai'i did not perform as well as the nation with eight graders in Hawai'i showing lower proficiency in mathematics according to NAEP and less on-time high school graduation.

Hawai'i's education indicators improved over time in seven of the ten indicators. Hawai'i improved the most over time with more students graduating high school on time and a higher percentage of people aged 25 and over who have high school degrees. Hawai'i declined the most over time in the life-long learners, college going rate, and meeting the state's standards in mathematics.

Attainment: With regards to education attainment, Hawai'i is well-educated with a higher percentage of people aged 25 and over with a high school degree or equivalent compared to the nation. A higher percentage of people aged 25 and older in Hawai'i have a bachelor's degree, as well. Both education attainment indicators improved over time with the percentage of people aged 25 and over without a high school degree decreasing over three percent on average annually.

Performance: Hawai'i had about 52 percent of its students meeting the states standards in language arts and about 38 percent of its students meeting the states standards in mathematics. Over time, Hawai'i's percentage of students meeting the states standards in language arts grew over one percent on average annually, while the percentage of students meeting the states standards in math declined over one percent on average annually. Hawai'i underperformed the nation in the percentage of eighth grade students who scored at or above NAEP proficiency in mathematics, however, overperformed the nation by two percentage points in those who scored at or above NAEP proficiency in reading. Over time Hawai'i improved in NAEP proficiency in reading, though, did not improve over time in NAEP proficiency in mathematics.

Readiness: Hawai'i students have also improved their college readiness since the last report, as more students are graduating high school on time and SAT scores continued to improve.

Participation in higher education: Participation in higher education lowered over time in Hawai'i with decreases in the percentage of high-school seniors going to college and life-long learners. Each participation in higher education indicator decreased about a two percent on average annually.

County comparisons

- Hawai'i County underperformed in the education domain, scoring mid ranked for four and lowest in three of the seven comparable indicators amongst the counties. Hawai'i County performed the lowest in the percentage of its students meeting Hawai'i's standards in language arts and mathematics, and in the rate of high-school seniors going to college.
- The City and County of Honolulu performed well in the education domain ranking highest in five of the seven comparable indicators and mid-ranked for the remaining two. The City and County of Honolulu had the highest percentage of people aged 25 and over who received a bachelor's degree or higher. The City and County of Honolulu had the highest percentage of students meeting Hawai'i's standards in math and language arts. Honolulu also had the highest percentage of college-going seniors and people between the ages of 25-35 who are enrolled in college or graduate school, likely due to the prevalence of postsecondary schools on the island of O'ahu.
- Kaua'i County had the highest percentage of high school students graduating on time compared to the other counties. Performing worse than the other counties, Kaua'i County had the highest percentage of people aged 25 and older without a high school degree and had the lowest rate of college-bound high-school seniors.
- Maui County outperformed Hawai'i's other counties with the lowest percentage of people aged 25 and older without a high school degree. Maui County ranked lowest in the percentages of high school students graduating on-time, people aged 25 and older with a bachelor's degree or higher, and lifelong learners.

Table 4. Education Domain: Data and Findings

				Hawaiʻi,	Hawaiʻi: (Over time ⁽¹⁾		Cou	ınty	
Education Indicators	Year	U.S.	ні	compared to the nation	Average Annual Growth	Improved or Worsened	Hawai'i	Honolulu	Kauaʻi	Maui
Attainment										
B01. Less than high school degree, % of people aged 25 and over	2021	10.6%	7.1%	•	-3.1%	↑	7.1%	7.2%	7.5%	6.0%
B02. Bachelor's degree or higher, % of people aged 25 and over	2021	35.0%	35.3%	•	1.8%	1	30.7%	37.1%	36.2%	30.0%
Performance										
B03. Meeting Hawai'i standards in math, % of students	21-22(3)	• •	38.0%	••	-1.1%	4	24.0%	42.0%	33.0%	28.0%
B04. Meeting Hawai'i standards in language arts, % of students	21-22(3)	• •	52.0%	••	1.2%	1	39.0%	56.0%	46.0%	43.0%
B05. At or above 8th-grade proficiency in math, % of 8th-grade students	20-21(3)	26.0%	22.0%	<u>-</u>	-3.0%	1	••	••	••	••
B06. At or above 8th-grade proficiency in reading, % of 8th-grade students	20-21(3)	29.0%	31.0%	•	1.7%	1	• •	••	• •	••
Readiness										
B07. On-time graduation, % of high school students	2019(2)	86.0%	85.0%	<u>-</u>	0.6%	1	85.0%	87.0%	91.0%	82.0%
B08. SAT score of college-bound seniors, combined average scores of math and critical reading	2022	1,050	1,124	•	0.4%	1	••	••	••	••
Participation in Higher Education										
B09. College-going rate, seniors	2021(4)	••	51%	••	-1.5%	↓	39.0%	50.0%	39.0%	47.0%
B10. Lifelong learning, % of people aged 25-35 enrolled in college or graduate school	2021	10.6%	13.6%	•	-1.8%	4	9.2%	16.0%	6.8%	4.5%

Symbols: • Data not available; ● HI better than the nation, ◎ No difference, ← HI worse than the nation; ↑ HI improved, ← No change, ↓ HI worsened;

[■] Top-ranked county, ■ ■ Mid-ranked county, □ Bottom-ranked county, □ No difference

⁽¹⁾ Benchmark years annotated in appendix

⁽²⁾ County data year 2021

⁽³⁾ School Years

⁽⁴⁾ Class of 2021

Education Domain Attainment

B01. Less than high school degree

Percentage of people aged 25 and over with less than a high school degree

Why is this important?

This indicator provides information on the status of the education system in a community. High school education lays the foundation for a community's economic growth and competitiveness and expands access for learning and job opportunities for individuals. Having less than a high school education is associated with lower personal income, less favorable working conditions, and lower civic participation. It is also associated with higher unemployment rates and higher participation rates in public assistance programs. A decreasing percentage of people with less than high school education indicates an improving education system, which leads to better quality of life of the community.

How are we doing?

Hawai'i performed better than the nation with a lower percentage of people aged 25 and over with less than a high school degree in year 2021 (7.1 percent) compared to the nation (10.6 percent). Both the nation and Hawai'i had improvements over time for this indicator, with average annual decreases of 3.1 percent for the nation and 3.3 percent for Hawai'i. In year 2021, Maui County had the lowest percentage of people aged 25 and over with less than a high school degree at six percent, while Kaua'i County had the most at 7.5 percent.

Indicator	B01.	Less	than	high	school	degree
IIIuicatoi	DUI.		LIIGHI	111611	SCHOOL	uczicc

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	14.6%	14.0%	13.7%	13.3%	13.0%	12.7%	11.7%	11.4%	10.6%
State of Hawai'i	9.9%	9.6%	9.3%	9.0%	8.7%	8.4%	8.0%	7.6%	7.1%
Hawai'i County	9.1%	9.0%	9.0%	8.7%	8.4%	7.7%	7.6%	7.4%	7.1%
C&C Honolulu	9.7%	9.7%	9.3%	9.1%	8.9%	8.6%	8.2%	7.4%	7.2%
Kaua'i County	11.5%	9.9%	9.0%	8.4%	8.1%	8.2%	8.0%	7.2%	7.5%
Maui County	10.8%	9.8%	9.4%	8.5%	8.2%	7.9%	7.6%	9.4%	6.0%

Technical notes:

"Less than high school education" includes all levels below a high school diploma or its equivalent U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013–2019, 2021
 U.S. Census Bureau. (n.d.). B15002: Sex by educational attainment for the population 25 years and over. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

Education Domain Attainment

B02. Bachelor's degree or higher

Percentage of people aged 25 and over with a Bachelor's degree or a higher degree

Why is this important?

This indicator provides information on the intellectual capital of a community, which is critical to both the development of an innovative economy and a strong civic society. Higher education plays a crucial role in equipping the workforce with necessary skills to translate ideas into new technologies, products, and services. At the individual level, education beyond high school is becoming crucial in ensuring employment at a livable wage. Furthermore, people with higher levels of education are more likely to engage in behaviors that improve their health. The community as a whole benefits as higher levels of education correspond to higher rates of volunteering, voting, and other community-based activities and lower unemployment, poverty, and crime rates.

How are we doing?

In year 2021, a slightly higher percentage of people aged 25 and over in Hawai'i had a bachelor's degree or higher education (35.3 percent) compared to the nation (35.0 percent), an increase for both Hawai'i and the nation over time. Compared to the other counties and the nation overall, the City and County of Honolulu and Kaua'i County had a higher percentage of people with higher levels of educational attainment, at about 37 percent and 36 percent respectively. Hawai'i and Maui County's had the lowest percentage of people with a Bachelor's degree or higher compared to the other counties, both around 30 percent of people aged 25 and over.

Indicator B02. Bachelor's deg	gree or	mgner
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Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	28.2%	28.8%	29.3%	29.8%	30.3%	30.9%	32.6%	33.1%	35.0%
State of Hawai'i	29.5%	30.1%	30.5%	30.8%	31.4%	32.0%	33.5%	33.6%	35.3%
Hawai'i County	25.9%	25.6%	25.9%	26.8%	27.6%	28.6%	29.6%	30.0%	30.7%
C&C Honolulu	31.2%	32.1%	32.5%	32.7%	33.4%	34.0%	35.2%	35.8%	37.1%
Kaua'i County	24.3%	25.1%	26.9%	28.0%	27.8%	28.2%	31.4%	28.6%	36.2%
Maui County	25.7%	25.7%	25.6%	26.1%	25.7%	26.3%	29.5%	27.7%	30.0%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013–2019, 2021
 U.S. Census Bureau. (n.d.). B15002: Sex by educational attainment for the population 25 years and over. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

B03. Meeting Hawai'i standards in math

Percentage of students meeting Hawai'i standards in mathematics

Why is this important?

This indicator provides a measure of the knowledge and capabilities of Hawai'i's public-school students on the mastery of mathematics. Reflecting the quality of the community's public schools in preparing students for the future workforce and civic participation, this indicator is one measure of the community's concern for the children and the future. In general, a quality education is needed to advance the social and economic conditions of a community, which underpins its quality of life.

How are we doing?

The percentage of students who are proficient in math according to the Smarter Balanced Assessment has been recovering since the impact of the COVID pandemic. By school year 2021 to 2022, Hawai'i had 38 percent of its public schools' students meeting Hawai'i's standards in math. This was still two percentage points below pre-pandemic levels, however, an almost 19 percent recovery from school year 2020 to 2021. For school year 2021 to 2022, the City and County of Honolulu reported the highest at 42 percent and Hawai'i County had the lowest at 24 percent of its public schools' students meeting Hawai'i's standards in math.

Indicator B03. Mee	ting Hawai'	i standar	ds in	math
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Area / Year	SY 2014-2015	SY 2015-2016	SY 2016-2017	SY 2017-2018	SY 2018-2019	SY 2020-2021	SY 2021-2022
State of Hawai'i	41%	42%	42%	42%	43%	32%	38%
Hawai'i County	32%	32%	31%	30%	30%	18%	24%
C&C Honolulu	43%	44%	45%	46%	46%	35%	42%
Kaua'i County	35%	36%	37%	38%	38%	28%	33%
Maui County	35%	31%	31%	31%	30%	20%	28%

Technical notes:

Data is for school years (SY). All students in public schools who attended grades 3, 8 and 11 are included in these data. Charter schools are not included in the calculations. During the 2014 to 2015 school year, Hawai'i adopted the Common Core State Standards that is tested with the Smarter Balanced Assessment. Thus, previous years' results are not comparable. Test-takers are considered "proficient" if they earn a 3 or 4 out of 4 on the assessment. National data are unavailable. No tests were taken during school year 2019 to 2020.

Data source/s:

HI, School Year 2014-2015 to 2021-2022
 State of Hawai'i Department of Education. (n.d.) Smarter Balanced Assessment. Smarter Balanced Assessment results, various years. Retrieved from http://www.hawaiipublicschools.org/TeachingAndLearning/Testing/StateAssessment/Pages/home.aspx

B04. Meeting Hawai'i standards in language arts

Percentage of students meeting Hawai'i standards in language arts

Why is this important?

This indicator measures the knowledge and capabilities of Hawai'i's public-school students on the mastery of English and language arts. It reflects the quality of the community's public schools in preparing students for the future workforce and civic participation and is one measure of the community's concern for its children and the future. In general, a quality education is needed to advance the social and economic conditions of a community, which underpins its quality of life.

How are we doing?

In Hawai'i, the percentage of students who are proficient in language arts, according to the Smarter Balanced Assessment, improved four percentage points since it was first implemented in the 2014 to 2015 school years, from 48 percent to 52 percent for school years 2021 to 2022. For school years 2021 to 2022, the City and County of Honolulu continued to have the most public-school students meeting Hawai'i standards in language arts (56 percent), while Hawai'i County had the least (39 percent).

Area / Year	SY 2014-2015	SY 2015-2016	SY 2016-2017	SY 2017-2018	SY 2018-2019	SY 2020-2021	SY 2021-2022
State of Hawai'i	48%	51%	50%	54%	51%	47%	52%
Hawai'i County	40%	43%	40%	43%	43%	38%	39%
C&C Honolulu	51%	54%	53%	57%	57%	53%	56%
Kaua'i County	40%	47%	47%	49%	47%	45%	46%
Maui County	42%	42%	41%	45%	40%	40%	43%

Technical notes:

Data is for school years (SY). All students in public schools who attended grades 3 to 8 and 11 are included in these data. Charter schools are not included in the calculations. In the 2014 to 2015 school years, Hawai'i adopted the Common Core State Standards that is tested with the Smarter Balanced Assessment. Thus, previous years' results are not comparable. Test-takers are considered "proficient" if they earn a 3 or 4 out of 4 on the assessment. National data are unavailable. No tests were taken during school year 2019 to 2020.

Data source/s:

HI, School Year 2014-2015 to 2021-2022
 State of Hawai'i Department of Education. (n.d.) Smarter Balanced Assessment. Smarter Balanced Assessment results, various years. Retrieved from http://www.hawaiipublicschools.org/TeachingAndLearning/Testing/StateAssessment/Pages/home.aspx

B05. At or above 8th-grade proficiency in math

Percentage of 8th grade students who scored at or above NAEP proficiency in mathematics

Why is this important?

This indicator measures whether Hawai'i's public-school 8th-grade students are mastering the basic knowledge and skills in math required for high school. At the same time, proficiency in mathematics is an indicator of the schools' success in developing higher academic standards for their students. The National Assessment of Educational Progress (NAEP) is the only assessment that has been administered uniformly across the nation and over time; thus, it serves as a benchmark to determine the academic competence of Hawai'i's students and the academic progress of the state over time.

How are we doing?

Hawai'i's percentage of eighth grade students who scored at or above NAEP proficiency in mathematics was consistently below the national average. For school years 2020 to 2021, Hawai'i's rate stood at 22 percent compared to the national average of 26 percent. Over time, both Hawai'i and the nation decreased in the percentage of students who scored at or above NAEP proficiency in mathematics by about three percent on average annually.

Indicator B05. At or above 8th-grade proficiency in math

Area / Year	SY 2010-2011	SY 2012-2013	SY 2014-2015	SY 2016-2017	SY 2018-2019	SY 2020-2021
United States	35%	35%	33%	34%	34%	26%
State of Hawai'i	30%	32%	30%	27%	28%	22%

Technical notes:

Data is for school years (SY). Data include public school students only. County data were unavailable.

Data source/s:

• U.S./HI, SY's 2010-2011, 2012-2013, 2014-2015, 2016-2017, 2018-2019, 2020-2021 U.S. Department of Education. Mathematics, grade 8, all students. *NAEP Date Explorer*. Retrieved from https://www.nationsreportcard.gov/ndecore/xplore/NDE

B06. At or above 8th-grade proficiency in reading

Percentage of 8th grade students who scored at or above NAEP proficiency in reading

Why is this important?

This indicator measures whether Hawai'i's public-school 8th-grade students are mastering the basic knowledge and skills in reading required for high school. At the same time, proficiency in reading is an indicator of the schools' success in developing higher academic standards for their students. The National Assessment of Educational Progress (NAEP) is the only assessment that has been administered uniformly across the nation and over time; thus, it serves as a benchmark to determine the academic competence of Hawai'i's students and the academic progress of the state over time.

How are we doing?

Hawai'i outperformed the nation in eighth grade reading proficiency in the 2020 to 2021 school years for the first-time across the years analyzed. For school year's 2020 to 2021, Hawai'i had 31 percent of its students who scored at or above NAEP proficiency in reading, which was two percentage points above the national average at 29 percent. Over time, Hawai'i's percentage of eighth grade students' proficiency in reading improved about two percent on average annually, while there was a decline of about two percent on average annually for the nation.

Indicator B06. At or above 8th-grade proficiency in reading

Area / Year	SY 2010-2011	SY 2012-2013	SY 2014-2015	SY 2016-2017	SY 2018-2019	SY 2020-2021
United States	34%	35%	32%	32%	32%	29%
State of Hawai'i	26%	28%	26%	30%	29%	31%

Technical notes:

Data is for school years (SY). Data include public school students only. County data were unavailable.

Data source/s:

U.S./HI, SY's 2010-2011, 2012-2013, 2014-2015, 2016-2017, 2018-2019, 2020-2021
 U.S. Department of Education, National Center for Education Statistics. Reading, grade 8, all students. *NAEP Data Explorer*. Retrieved from https://www.nationsreportcard.gov/ndecore/xplore/NDE

Education Domain Readiness

B07. On-time graduation

Percentage of students who graduated within four years of entering the 9th grade

Why is this important?

This indicator is significant in assessing the success of the educational system in providing education, preparing students academically, and encouraging completion of its requirements. Ontime graduates are associated with better outcomes in work, employment, civic life, and health compared to high school dropouts and late completers.

How are we doing?

In Hawai'i, the Class of 2021 graduated 86 percent of its students on time. This was about a six percent increase for Hawai'i since the Class of 2011. Kaua'i County had the highest percent of their public-school students graduating on-time (91 percent) for Class of 2021. While Maui County graduated the lowest percentage, with 82 percent of their public-school students graduating on-time.

Indicator B07	On-time	graduation
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Area / Year	Class of 2011	Class of 2014	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019	Class of 2020	Class of 2021
United States	80%	83%	83%	84%	85%	85%	86%	••	••
State of Hawai'i	81%	82%	82%	83%	83%	85%	85%	86%	86%
Hawai'i County	••	••	79%	79%	78%	81%	82%	85%	85%
C&C Honolulu	••	••	83%	83%	84%	85%	86%	87%	87%
Kaua'i County	••	••	86%	89%	88%	89%	92%	93%	91%
Maui County	••	••	79%	81%	80%	84%	83%	80%	82%

Technical notes:

Each year's on-time graduation rate is based on a cohort of first-time 9th graders in the school year represented by the graduating year minus three. Students who transfer out, emigrate, or die during the four years are not used in either county's rate calculation. Students who transfer-in after the official enrollment rosters are established in the 9th grade cohort's year are added to the cohort.

Data source/s:

- U.S./HI, Class of 2011 to Class of 2021
 National Center for Education Statistics. (n.d.). Table 219.46. Public high school 4-year adjusted cohort graduation rate (ACGR), by selected student characteristics and state: 2010-2011 through 2020-2021. *Digest of Education Statistics, Current*. https://nces.ed.gov/programs/digest/2018menu_tables.asp
- HI, Class of 2011 to Class of 2021 Hawai'i P-20 Partnerships for Education, Hawai'i Data eXchange Partnership. (n.d). Special tabulation for the Department of Business, Economic Development, and Tourism. On-time graduation rate, class of 2011 to class of 2021.

Education Domain Readiness

B08. SAT score of college-bound seniors

Combined average SAT math and critical readings scores of college-bound seniors

Why is this important?

The SAT (originally called the Scholastic Aptitude Test, then later called Scholastic Assessment Test, then the SAT Reasoning Test) is a standardized test that measures college-bound seniors' knowledge and skills in math and reading that are necessary for college success. The SAT is used for admission to most four-year universities. Likewise, this indicator reflects the schools' priorities in providing resources that prepare students for college work and careers. In general, students' admission to college improves the prospects for future employment and economic success.

How are we doing?

The average SAT combined math and critical reading scores of college-bound seniors had historically been below that of the nation until year 2016. Since year 2017, Hawai'i's SAT scores have exceeded the national average. In year 2022, Hawai'i's SAT scores exceeded the national average by 74 points.

Indicator B08. SAT score of college-bound seniors

Area / Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
United States	1010	1010	1010	1006	1002	1060	1068	1059	1051	1061	1050
State of Hawai'i	978	985	988	995	1002	1085	1099	1100	1095	1144	1124

Technical notes:

An average SAT score is the sum of the average mathematics score and the average critical-reading score. Data year refers to the year of the graduating senior class; data include all SAT scores for college-bound seniors who are graduating in the data year. County data were unavailable. The state profile reports provide historical scores for the nation; for some years, the scores changed from one report to another. The most recent report's historical scores were used for this table.

Data source/s:

• U.S./HI, 2012–2022

The College Board. (n.d.) *College-bound seniors: State profile report: Hawai'i, various years.* Retrieved from https://research.collegeboard.org/programs/sat/data/archived

Education Domain Readiness

B09. College-going rate

Percentage of high school seniors who are enrolled in any college nationwide

Why is this important?

This indicator provides information in assessing how adequately the education system prepares students academically and provides encouragement and other support to foster students' aspiration to pursue and succeed in higher education. In its own right, the college-going rate of high school graduates is a measure of the schools' performance. This is also an indicator of the community's social capital and economic future.

How are we doing?

Hawai'i's college-going rate for seniors decreased about nine percent from the Class of 2015 to the Class of 2021. Most of this decrease was due to the COVID-19 pandemic impacts during the Class of 2020. For the Class of 2021, most counties began to recover, however, the rate has yet to recover to 2019 levels. Hawai'i County was the only county to see continued declines in the college-going rate by the Class of 2021. The City and County of Honolulu and Maui County had the highest rates of going to college in the fall semester after graduation. Hawai'i County and Kaua'i County both had the lowest college-going rate at 39 percent.

Indicator	B09.	Colle	ge-going	rate

Area / Year	Class of 2015	Class of 2016	Class of 2017	Class of 2018	Class of 2019	Class of 2020	Class of 2021
State of Hawai'i	56%	55%	55%	55%	55%	50%	51%
Hawai'i County	49%	47%	47%	49%	46%	35%	39%
C&C Honolulu	56%	57%	56%	57%	53%	49%	50%
Kaua'i County	57%	59%	59%	55%	51%	44%	39%
Maui County	54%	53%	55%	50%	54%	43%	47%

Technical notes:

The percent of graduating Hawai'i Department of Education (HIDOE) high school seniors who were enrolled in college the first fall after their graduation from high school. Statewide figures are derived from National Student Clearinghouse aggregate data. County-level figures are calculated from student-level records, which exclude information for students who have requested privacy and include DXP confirmed matches based on HIDOE/University of Hawai'i records.

Data source/s:

HI, Class of 2015 to Class of 2021
 Hawai'i P-20 Partnerships for Education, Hawai'i Data eXchange Partnership (DXP).

 (2019). Special tabulation for the Department of Business, Economic Development, and Tourism. College-going rate, class of 2015 to class of 2021.

Education Domain Readiness

B10. Lifelong learning

Percentage of people aged 25-34 enrolled in college or graduate school

Why is this important?

This indicator reflects the success of working-age adults and students attending higher education and learning new skills and perspectives, which contributes to a high quality of life. On a broader scale, this indicator is significant in examining the capacity of a community's educational system in helping adults improve their skills, update their knowledge, meet their personal and academic goals, and promote lifelong learning activities.

How are we doing?

In year 2021, a higher percentage of people aged 25-34 in Hawai'i participated in lifelong learning than the nation (13.6 percent versus 10.6 percent). However, strong variation in participation rates was observed at the county level. The City and County of Honolulu had the highest rate at 16 percent, while Maui County had the lowest highest rate at under five percent. For the years analyzed, all counties, except for Hawai'i County, experienced decreasing lifelong learners.

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Indicator	K I II	Litalana	laarnina
HIIUICALUI	DIV.	LAIGIUNE	icai iiiiiz

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	12.8%	13.2%	13.1%	12.8%	12.4%	12.1%	11.1%	11.0%	10.6%
State of Hawai'i	14.7%	14.2%	14.2%	13.9%	13.6%	13.7%	12.2%	12.2%	13.6%
Hawai'i County	7.9%	8.1%	7.4%	8.5%	9.6%	9.7%	7.7%	9.6%	9.2%
C&C Honolulu	17.0%	16.3%	16.4%	15.9%	15.4%	15.5%	14.5%	13.4%	16.0%
Kaua'i County	9.6%	8.4%	8.2%	7.5%	7.0%	6.6%	2.8%	13.1%	6.8%
Maui County	8.9%	9.2%	8.9%	8.7%	7.7%	8.3%	5.0%	6.0%	4.5%

Technical notes:

This indicator changed from people aged 25-44 in the 2009 QOL report to 25-34 in this report to take advantage of the Census Bureau's tabulations, which makes tabulations for all counties in Hawai'i. The previous report was unable to separate Kaua'i and Maui data. The figures from the 2009 QOL report and this report are not directly comparable. U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

• U.S./HI, 2011, 2013–2019, 2021 U.S. Census Bureau. (n.d.). B14004: Sex by college or graduate school enrollment by type of school by age for the population 15 years and over. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

C. ENVIRONMENT DOMAIN AND INDICATORS

Hawai'i's environmental domain consists of ten indicators within four dimensions: pollution, conservation, consumption, and recycling. Hawai'i performed well compared to the nation and over time within the environmental domain and its indicators. Hawai'i outperformed the nation in all of the four comparable indicators. Standing out, Hawai'i released over eight pounds less per person in toxic releases and consumed lower energy at over 120 million BTU less per person than the nation. Hawai'i improved over time in six of the ten environmental indicators. Hawai'i improved the most in surface water advisory days, renewable energy and in energy consumption. Hawai'i worsened the most in solid waste generated, and solid waste recycled.

Pollution: Hawai'i outperformed the nation in the two comparable pollution indicators: unhealthy air quality days and in toxic releases. Hawai'i performed worse over time in pounds of solid waste generated per person per day.

Conservation: Hawai'i performed better than the nation in renewable energy. Over time, there were improvements in both conservation indicators with renewable energy the most improved at ten percent on average annually.

Consumption: Over time, Hawai'i consumed less water and energy, per capita. Hawai'i also consumed less energy, per capita, compared to the nation.

Recycling: Over time in Hawai'i, solid waste recycling worsened almost three percent on average annually, while wastewater reused improved one percent on average annually.

County comparisons

- Hawai'i County was the leader amongst the counties in the environmental domain and its indicators. Hawai'i County ranked first in five of the eight comparable environmental indicators. The county had the most favorable conditions for solid waste generated, acres of parks and historic sites, water consumption, and solid waste recycled. All counties performed the best in healthy air quality days. On the other hand, Hawai'i County had the least amount of wastewater reused.
- The City and County of Honolulu outperformed the other counties in wastewater reused by more than eight million gallons per day. However, the City and County of Honolulu performed worse with the highest number of surface water advisory days and the highest number of pounds per person of toxic releases.
- Kaua'i County had the most favorable conditions amongst the counties in toxic releases. Like the other counties, Kaua'i County had zero unhealthy air quality days. Kaua'i County had the least number of acres of parks and historic sites compared to the other counties.
- Maui County performed the worse amongst the counties in the environmental domain and its indicators. Maui County had the highest water consumption amongst the counties, consuming over 42 percent more than the next highest county. Maui County had the most solid waste generated, and the least amount of solid waste recycled (over 53 percent less than the next lowest county). However, Maui County had the most favorable conditions amongst the counties in surface water advisory days.

Table 5. Environmental Domain: Most Recent Data and Findings

				Hawaiʻi,	Hawaiʻi: (Over time ⁽¹⁾		Cou	nty	
Environment Indicators	Year	U.S.	HI.	compared to the nation	Average Annual Growth	Improved or Worsened	Hawai'i	Honolulu	Kauaʻi	Maui
Pollution										
C01. Unhealthy air quality days, number of days	2021	1.1	0.0	•	0.0%	\leftrightarrow	0.0	0.0	0.0	0.0
C02. Surface water advisory days, number of days	2021	• •	1,706.4	••	-17.4%	↑	281.0	970.5	307.0	147.9
C03. Solid waste generated, number of pounds per day per person	2021	• •	9.8	••	3.0%	4	7.9	10.0	9.4	10.6
C04. Toxic releases, number of pounds per person	2021	9.9	1.8	•	-1.2%	↑	1.5	2.1	0.2	1.4
Conservation										
C05. Acres of parks and historic sites, per 1,000 acres of total area	2021	••	101.1	• •	0.1%	↑	131.0	42.5	42.1	65.4
C06. Renewable energy, % of total electricity produced from renewable sources	2020	12.5%	12.7%	•	10.0%	↑	••	••	• •	••
Consumption										
C07. Water consumption, number of gallons per day per person	2021	••	135.8	••	-0.7%	↑	120.4	128.2	140.5	199.6
C08. Energy consumption, million BTU per person	2020	284.4	163.7	•	-2.8%	1	••	••	• •	••
Recycling										
C09. Solid waste recycled, % of total solid waste	2021	••	27.1%	••	-2.6%	+	32.8%	28.4%	30.1%	13.2%
C10. Wastewater reused, million gallons of wastewater reused per day	2021	• •	19.0	••	1.0%	1	1.0	11.7	2.5	3.7

Symbols: • Data not available; ● HI better than the nation, ◎ No difference, ← HI worse than the nation; ↑ HI improved, ← No change, ↓ HI worsened;

[■] Top-ranked county, ■ ■ Mid-ranked county, □ Bottom-ranked county, □ No difference

⁽¹⁾ Benchmark years annotated in appendix

C01. Unhealthy air quality days

Number of days that the EPA declared the air quality unhealthy for sensitive groups or worse

Why is this important?

This indicator measures how many days the air quality is unhealthy by the national air quality standard set by the Environmental Protection Agency (EPA). The Air Quality Index (AQI) measures five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution, carbon monoxide, sulfur dioxide, and nitrogen dioxide. AQI values range from 0 to 500, with higher values indicating greater levels of air pollution, and therefore greater levels of health concern. An AQI value of 100 or higher is considered "unhealthy"; residents, particularly sensitive groups like older adults or people with asthma, may begin to experience some adverse health effects.

How are we doing?

In year 2021, Hawai'i had no unhealthy air quality days compared to about one day of unhealthy air quality for the nation. Periodically across the years, Hawai'i had the highest number of unhealthy air quality days, compared to the nation, due to the volcanic emissions in Hawai'i County. Outside of Hawai'i County, however, Hawai'i's air quality is very good with mostly no days of unhealthy air quality.

Indicator C01.	Unhealthy	v air o	ıualitv	davs
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Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
United States	7.6	9.4	4.2	3.4	3.9	3.9	4.5	5.1	2.5	4.8	1.1
State of Hawai'i	1.0	2.0	0	4.0	6.0	6.0	0	14.0	4.0	11.0	0
Hawai'i County	1.0	2.0	0	2.0	5.0	5.0	0	14.0	4.0	11.0	0
C&C Honolulu	0	0	0	1.0	0	0	0	0	0	0	0
Kaua'i County	0	0	0	0	0	0	0	0	0	0	0
Maui County	0	0	0	1.0	1.0	1.0	0	0	0	0	0

Technical notes:

EPA updated their historical data files and data for year's 2013 to 2018 changed considerably from the previous QOL report. Air Quality Index (AQI) value 100 or higher includes AQI categories "unhealthy for sensitive groups" (101-150), "unhealthy" (151-200), "very unhealthy" (201-300), and "hazardous" (301-500). Data is reported at the county level. State total is calculated as the number of days with an AQI above 100 in the county with the highest number of days with an AQI above 100 in the calendar year. United States data is the U.S. county average of 50 states and the District of Columbia.

Data source/s:

U.S./HI, 2011-2021
U.S. Environmental Protection Agency. (n.d.) Annual summary data, AQI by country. *Air quality index report*. Retrieved from https://aqs.epa.gov/aqsweb/airdata/download_files.html#Annual

C02. Surface water advisory days

Number of days surface water advisories were posted due to water pollution

Why is this important?

This indicator provides information on the quality of surface water by measuring the number of days that water pollution warning signs were posted. Surface water includes recreational waters, other shorelines, streams, and lagoons. Sewage, chemical spills, storm water runoff, and other releases into surface waters have a negative impact on the daily lives of residents and visitors, as well as on aquatic life. Warning signs are posted by personnel from the counties, the military, private parties, or the Department of Health when surface water is unsafe due to water pollution.

How are we doing?

In Hawai'i, the number of surface water advisory days decreased since year 2017. In year 2021, the City and County of Honolulu had the highest surface water advisory days amongst the counties, while Maui County had the least.

Indicator C02. Surface water advisory days

Area / Year	2017	2018	2019	2020	2021
State of Hawai'i	3,669.0	3,132.8	1,154.4	894.2	1,706.4
Hawai'i County	415.5	389.4	157.2	129.9	281.0
C&C Honolulu	2,033.7	1,013.9	611.4	196.7	970.5
Kaua'i County	459.6	1,351.5	292.2	450.0	307.0
Maui County	760.3	378.0	93.6	117.6	147.9

Technical notes:

County total is calculated by adding the number of days of sewage spills, brown water advisories, and beach notification's that were posted within a county. The beach advisory protocol was revised in late 2016, with a change to different fecal indicators. Thus, surface water advisories prior to 2017 cannot be directly compared. National data were unavailable.

Data source/s:

• HI, 2013–2021 State of Hawai'i Department of Health, Environmental Management Division, Clean Water Branch. (n.d.). Environmental Health Portal. *Advisories*. Retrieved from https://eha-cloud.doh.hawaii.gov/cwb/#!/event/list

C03. Solid waste generated

Pounds of solid waste generated per person per day

Why is this important?

This indicator provides information on the amount of solid waste generated in Hawai'i. Solid waste includes everything that is generated from agricultural, industrial, mining, construction and demolition activities, as well as municipal solid waste produced by households and offices. The majority of the solid waste is disposed in landfills. The island state faces many challenges on solid waste management, particularly the availability of new land for landfills. This indicator reflects the need to improve awareness of the consequences of waste generation in Hawai'i when dealing with limited land space and related costs of solid waste management.

How are we doing?

In fiscal year 2021, Hawai'i produced just under ten pounds of solid waste per person per day. Solid waste generated in Hawai'i grew three percent on average annually, with growth concentrated in the City and County of Honolulu, at almost four percent growth on average annually. Hawai'i County usually generated the lowest amount of solid waste per capita and grew the slowest amongst the counties at under one percent on average annually. As of fiscal year 2021, Maui County generated the most solid waste.

Area / Year	FY 2011	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
State of Hawai'i	7.3	9.6		9.3	8.6	9.0	9.2	8.8	8.3	9.9
Hawai'i County	7.2	6.7	6.3	6.8	4.2	6.9	7.6	8.5	6.7	8.0
C&C Honolulu	7.0	10.0	10.1	10.0	8.7	8.7	9.1	8.5	8.9	10.3
Kaua'i County	8.5	10.3	10.3	11.4	14.5	14.4	16.3	10.0	9.6	9.6
Maui County	8.5	10.5		7.2	10.5	10.4	8.8	10.5	6.6	10.4

Technical notes:

Solid waste generated per day per person is calculated by dividing the annual total amount of solid waste (disposed and diverted) by 365 days, and then dividing the daily average by total population. The City and County of Honolulu reported data by calendar year, while other counties reported data by state fiscal year. Data for fiscal year 2012 was not included due to space limitations, however, are not needed for comparison over time estimations.

- HI, FY 2011, 2013-2021
 State of Hawai'i Department of Health, Office of Solid Waste Management. (n.d.). Waste Diversion Statistics. Report to the legislature, pursuant to Section 342g-15, Hawai'i Revised Statutes, requiring the Office of Solid Waste Management to give an annual report on solid waste management, various years. Retrieved from https://health.hawaii.gov/shwb/solid-waste/
- HI, 2011, 2013-2021, Denominator

State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.). Table 1.06: Resident population by county: 2000 to 2021. 2021 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

C04. Toxic releases

Pounds of toxic releases per person

Why is this important?

A critical amount of toxic release can result in serious damage to public health and the environment. Toxic release include those released on-site (into the air or water, and via underground injection, landfills, and other forms of land disposal) and those transferred off-site for disposal. Although "release" should not be directly equated with "risk," it is important to be aware of the amount of toxic release in the community. This indicator enables the community to have more leverage in holding companies accountable to their activities, and in encouraging them to focus on practicing better chemical management.

How are we doing?

Hawai'i had lower levels of toxic releases compared to the nation. In year 2021, Hawai'i released toxic chemicals at 1.8 pounds per person, compared to the national average of 9.9 pounds per person. Among Hawai'i's counties and across the years analyzed, Kaua'i County had the lowest level of toxic releases (0.2 pounds). In year 2021, the City and County of Honolulu had the highest toxic releases compared to the other counties, at 2.1 pounds per person.

Indicator	C04.	Toxic	releases
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Area / Year	2011	2013	2014	2015	2016	2017	2018	2020	2021
United States	13.2	13.1	12.4	10.7	10.7	11.3	10.3	9.3	9.9
State of Hawai'i	2.1	2.0	2.1	2.0	2.3	2.1	2.0	1.8	1.8
Hawai'i County	1.6	2.4	2.4	2.4	2.7	1.0	1.4	1.2	1.5
C&C Honolulu	2.3	1.3	1.7	1.2	1.5	2.6	2.3	2.1	2.1
Kaua'i County	0.4	0.1	0.4	0.2	0.1	0.1	0.3	0.1	0.2
Maui County	2.1	1.5	1.5	1.4	1.5	1.3	1.7	1.3	1.4

Technical notes:

Data includes both toxic releases disposed on site and those transferred to waste broker for disposal. Toxic releases per person are calculated by dividing the annual total amount of toxic releases by the number of resident population. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

- U.S./HI, 2011, 2013–2021
 U.S. Environmental Protection Agency. (n.d.). Release geography report. *EPA Toxic Release Inventory (TRI) Explorer*. Retrieved from https://enviro.epa.gov/triexplorer/tri release geography
- HI, 2011, 2013–2021, Denominator State of Hawai'i Department of Business, Economic Development, and Tourism. (2022). Table 1.06: Resident population by county: 2000 to 2021. 2021 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

C05. Acres of parks and historic sites

Acres of parks and historic sites per 1,000 acres of total land area

Why is this important?

This indicator measures the acres of national, state, and county parks, as well as historic sites available in Hawai'i. Parks and historic sites provide opportunities for residents and visitors to enjoy outdoor activities, leisure recreation, and cultural heritage. National, state, and county parks also preserve green coverage and protect natural vegetation essential in improving air quality and overall quality of life.

How are we doing?

Over time, the state's parks and historic sites acreage per 1,000 acres of total area was relatively stable. In year 2021, Hawai'i County had the most acres of parks and historic sites at 131 acres per 1,000 acres of total land area compared to the other counties. While Kaua'i County and the City and County of Honolulu had the least.

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2020	2021
State of Hawai'i	100.1	100.0	100.0	100.0	100.0	101.0	101.4	101.4	101.1	101.1
Hawai'i County	129.8	130.0	130.0	130.0	130.0	130.0	131.5	131.5	131.0	131.0
C&C Honolulu	44.4	44.0	43.0	43.0	40.0	43.0	42.5	42.5	42.4	42.5
Kaua'i County	40.2	40.0	41.0	41.0	40.0	42.0	42.1	42.1	42.1	42.1
Maui County	64.1	76.0	77.0	77.0	77.0	77.0	65.3	65.3	65.3	65.4

Technical notes:

Parks include national, state, and county parks. The Honouliuli National Historic Site added 154 acres of park lands in the City and County of Honolulu in 2018; however, the land is currently inaccessible to the public, as the designation as a national monument was only in 2015, and the site is still being developed. However, this site accounts for less than 1% of park acreage in the City and County of Honolulu. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

- HI, 2011, 2013-2021
 - State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.). Section 7, Table: National parks; state parks and historic sites; and county parks by island. *State of Hawai'i data book: A statistical abstract, various years*. Retrieved from http://dbedt.hawaii.gov/economic/databook/
- HI, 2011, 2013-2021, Denominator State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.). Table 6.04: Estimated acreage of land use districts, by island. *State of Hawai'i data book:* A statistical abstract, 2021. Retrieved from http://dbedt.hawaii.gov/economic/databook/

C06. Renewable energy

Percentage of total electricity produced from renewable energy sources

Why is this important?

This indicator measures the extent to which renewable energy is produced in the state to conserve fuel and natural resources. Fossil fuels – coal, oil, and natural gas – cannot be recreated at the same rate that they are used. When the supply of fossil fuels continues to be depleted, their prices go up. The use of renewable (e.g., hydropower, wind, geothermal, biomass, and solar) energy sources reduce the state's dependency on fossil fuel, increases energy self-sufficiency and security, and protects the environment and public health by avoiding or reducing emissions of gases and suspended particles.

How are we doing?

The percentage of electricity produced from renewable sources in Hawai'i was 0.2 percentage points more than the nation in year 2020, where all previous year's, Hawai'i's percentage was below the nations. Over time, the percentage of electricity produced from renewable sources in Hawai'i grew ten percent on average annually while the nation grew only about one percent on average annually.

Indicator C06. Renewable energy

Area / Year	2010	2013	2014	2015	2016	2017	2018	2019	2020	2021
United States	11.1	12.0	11.0	11.0	12.0	12.8	12.1	11.5	12.5	12.6
State of Hawai'i	4.9	8.7	9.6	9.9	10.8	10.4	10.2	9.7	12.7	••

Technical notes:

Renewable energy sources include hydroelectric power, biomass, and geothermal, wind, photovoltaic, and solar thermal energy. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

• U.S./HI., 2011, 2013-2021

U.S. Energy Information Administration. (n.d.). Table 1.2: Primary energy production by source. *Annual energy review: energy overview*. Retrieved from https://www.eia.gov/totalenergy/data/annual/

C07. Water consumption

Daily water consumption per person, in gallons

Why is this important?

As a scarce and limited resource, water poses many challenges for all the Hawaiian Islands. This indicator shows how many gallons of water are consumed in Hawai'i per person per day. It aims to raise awareness about water consumption routines in daily lives, and to preserve scarce resources in the long run. Using less water also reduces the strain on the environment by consuming less energy that is associated with water use, and lessens the possibility of surface-spillage of untreated sewage.

How are we doing?

Over time, Hawai'i's per capita daily water consumption decreased one percent on average annually. The City and County of Honolulu and Hawai'i County consumed the lowest amount of per capita daily water consumption compared to the other counties. Maui County consistently consumed the most water.

Indicator C07. Water consumption

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2020	2021
State of Hawai'i	150.3	143.6	148.5	141.0	141.4	140.5	139.2	140.0	136.5	135.8
Hawai'i County	128.9	132.0	128.4	128.5	132.9	132.6	121.8	125.9	119.5	120.4
C&C Honolulu	142.3	132.6	143.6	133.6	133.3	132.6	132.8	133.6	129.0	128.2
Kaua'i County	172.0	177.2	155.7	155.0	153.6	153.7	152.5	148.6	143.1	140.5
Maui County	215.8	210.3	198.9	195.1	194.7	191.5	192.5	191.0	198.6	199.6

Technical notes:

Water consumption per day per person in gallons is calculated by dividing the annual total amount of water consumed by 365 days and then dividing the daily average by total population. For leap year's 2016 and 2020, 366 days were used to calculated daily water consumption per day. Maui County year 2013 and Kaua'i County year's 2017 and 2021 data estimated based on assumption water consumption at same level as previous year consumption and used these estimates to find State of Hawai'i estimate for the corresponding years. National data were unavailable. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

- HI, 2011, 2013–2021
 - State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.). Table 5.25: Water services and consumption, for county waterworks. *State of Hawai'i data book: A statistical abstract, various years*. Retrieved from http://dbedt.hawaii.gov/economic/databook/
- HI, 2011, 2013–2021, Denominator State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.). Table 1.06: Resident population by county: 2011 to 2021. 2021 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

C08. Energy consumption

Energy consumption per person, in million BTU

Why is this important?

This indicator measures the amount of energy consumed, which reflects the awareness and concern of the people in using scarce energy resources, the level of energy dependence of a community, and the related costs to the environment. Energy consumption can be lowered through improved energy efficiency, such as in appliances, building design, and industrial machinery; and through behavioral change that involve using less energy, such as driving less or not using the air conditioning as much.

How are we doing?

People in Hawai'i consistently consumed less energy than their national counterparts. In year 2019, Hawai'i consumed about 217 million BTU versus the national consumption of about 306 million BTU. The next year during the COVID pandemic, there were declines in energy consumption for both Hawai'i and the nation, at almost 25 percent for Hawai'i and seven percent for the nation. Per capita energy consumption decreased over time for both Hawai'i and across the nation, more so for Hawai'i.

Indicator C08. Energy consumption

Area / Year	2010	2013	2014	2015	2016	2017	2018	2019	2020
United States	315.3	307.0	309.0	304.0	301.0	300.0	309.3	305.7	284.4
State of Hawai'i	218.1	198.0	197.0	199.0	198.0	199.0	215.7	217.4	163.7

Maui County had the highest annual electricity consumption per person and Hawai'i County had the lowest. Over time, there were declines in annual per capita electricity consumption across all counties in Hawai'i.

Indicator C08b. Annual per capita electricity consumption, in 1,000 kWh

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2020	2021
State of Hawai'i	7.2	6.7	6.6	6.6	6.5	6.4	6.4	6.5	6.0	6.0
Hawai'i County	5.9	7.0	6.9	6.8	6.7	6.6	5.3	5.2	4.9	5.1
C&C Honolulu	7.5	5.6	5.5	5.4	5.4	5.2	6.7	6.7	6.3	6.2
Kaua'i County	6.4	6.2	6.1	6.1	6.1	6.2	6.3	6.4	5.8	5.9
Maui County	7.5	7.0	6.9	6.9	6.7	6.6	6.6	6.7	5.8	6.4

Technical notes:

Energy consumption per person is calculated by dividing the annual total amount of energy consumed by resident population estimates. Data for year's 2011 and 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

• U.S./HI, 2011, 2013-2020

- U.S. Energy Information Administration. Consumption, price, expenditure, and production estimates. *State Energy Data System: data files*. Retrieved from https://www.eia.gov/state/seds/seds-data-fuel.php?sid=US
- HI, 2011-2021
 State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.).
 Table 17.10: Electricity utilities, by island; Table 17.16: liquid fuel tax base, by county.
 State of Hawai'i data book: A statistical abstract, various years. Retrieved from http://dbedt.hawaii.gov/economic/databook/
- HI, 2010-2021, Denominator
 State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.).
 Table 1.06: Resident population by county: 2000 to 2021. 2022 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

C09. Solid waste recycled

Percentage of solid waste diverted from landfills (reused or recycled)

Why is this important?

This indicator measures the extent to which solid waste is diverted from landfills for recycling or reuse in Hawai'i. Reuse and recycling can reduce the impacts of solid waste on our environment. Recycling offers a number of benefits: it saves energy and reduces water and air pollution by replacing the use of virgin materials with recyclables; it reduces the consumption of natural resources to produce new goods; it saves crucial space that would be used for waste disposal pits and landfills; and it makes economic development sustainable.

How are we doing?

Solid waste diversion rates have generally decreased since fiscal year 2011; across the State, diversion rates have decreased from about 35 percent to about 27 percent in fiscal year 2021. In fiscal year 2021, Hawai'i County had the highest percentage of solid waste diverted from landfills (about 33 percent) and Maui County had the least at about 13 percent.

Indicator C09. Solid waste recycled

Area / Year	FY 2011	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
State of Hawai'i	35.1%	36.6%	36.8%	43.0%	32.8%	30.0%	23.7%	19.4%	25.4%	27.1%
Hawai'i County	28.9%	34.1%	24.7%	26.7%	50.5%	22.9%	19.5%	18.9%	25.4%	32.8%
C&C Honolulu	36.9%	37.1%	40.3%	48.4%	28.7%	28.1%	20.0%	16.2%	19.7%	28.4%
Kaua'i County	23.8%	43.5%	42.4%	44.9%	55.5%	54.2%	57.3%	30.4%	30.4%	30.1%
Maui County	36.6%	32.9%	NA	14.4%	30.8%	30.6%	18.4%	30.4%	67.9%	13.2%

Technical notes:

The City and County of Honolulu reported data by calendar year, while other counties reported data by state fiscal year. Reuse calculations are likely underestimated, as some reuse activities, such as regularly reusing plastic containers for storage, is impossible to accurately measure. Data for fiscal year 2012 was not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

• HI, 2011, 2013-2021

State of Hawai'i Department of Health, Office of Solid Waste Management. (n.d.). Diversion Rates. Report to the legislature, pursuant to Section 342g-15, Hawai'i Revised Statutes, requiring the Office of Solid Waste Management to give an annual report on solid waste management, various years. Retrieved from https://health.hawaii.gov/shwb/solid-waste/

C10. Wastewater reused

Treated wastewater reused, million gallons per day

Why is this important?

This indicator measures the extent to which treated wastewater is reused to help meet Hawai'i's water needs. Treated wastewater is not suitable for drinking but is safe for other purposes such as industrial processing and irrigation. Reusing water has two important benefits: it reduces the demand for more water; and it minimizes environmental pollution by diverting part of the wastewater to be treated and reused. The Hawai'i Fresh Water Initiative goal is to be reusing 30 million gallons of treated wastewater a day by year 2030.

How are we doing?

From year 2015 to year 2021, Hawai'i increased its daily amount of recycled water used by five percent. The growth was primarily from increased usage of treated wastewater in the City and County of Honolulu with approximately two percent growth on average annually. Hawai'i County consistently had the lowest amount of wastewater reused compared to the other counties.

Indicator C10. Wastewater reused

Area / Year	2015	2016	2017	2018	2019	2020	2021
State of Hawai'i	18.1	18.9	19.5	19.2	18.2	19.0	19.0
Hawai'i County	1.6	1.7	1.5	1.3	1.2	0.7	1.0
C&C Honolulu	10.4	11.1	12.1	12.1	11.8	12.3	11.7
Kaua'i County	2.4	2.1	2.1	2.7	1.8	2.1	2.5
Maui County	3.6	4.0	3.9	3.1	3.3	3.9	3.7

Technical notes:

Wastewater is measured in million gallons per day. The State of Hawai'i Department of Health Wastewater Branch changed its methodology for collecting treated wastewater usage in 2015; data prior to 2015 is thus not comparable.

Data source/s:

• HI, 2015-2021

State of Hawai'i Department of Health Wastewater Branch. (n.d.). Recycle water use (million gallons per day). *Recycled water program*. Retrieved from http://health.hawaii.gov/wastewater/home/reuse/

D. HEALTH DOMAIN AND INDICATORS

Hawai'i's health domain consists of 17 indicators within four dimensions: mortality, health status, disease prevention, and access to care. Based on the QOL health domain, as summarized in Table 6, Hawai'i was healthier than the nation as it performed better than the nation in the majority of indicators. Hawai'i also improved over time in most of health domain indicators.

Hawai'i performed better than the nation in 13 of the 16 comparable QOL health indicators. Hawai'i performed considerably better than the nation in life expectancy, cardiovascular, cancer, and diabetes disease death rates, adult obesity, and health insurance rates. Hawai'i underperformed the nation in two indicators (infant mortality and home- and community-based service expenditures) and was the same for another (binge drinking).

Hawai'i improved over time in the majority of indicators within each dimension. Over time, 13 of the 17 health indicators improved, with greatest gains seen in a decreased percentage of adults reporting 14 of more days of physical distress (improved 13 percent on average annually), decreased adult smokers (improved four percent on average annually) and more adults with health insurance (improved almost four percent on average annually).

Mortality: Hawai'i both performed well compared to the nation and improved over time for the majority of the mortality indicators. Compared to the nation, the people of Hawai'i live about three years longer and have a much less chance of death from cardiovascular disease, cancer and diabetes death rates. Hawai'i performed worse than the nation in infant mortality.

Hawai'i improved over time in four of the five indicators within the mortality dimension. Hawai'i improved in life expectancy at birth, infant mortality, cardiovascular disease death rate and in the cancer death rate. In Hawai'i, the diabetes death rate grew about one percent since year 2010, therefore performed worse across time.

Health status: Hawai'i's health status performed well compared to the nation and in general improved. Hawai'i's health status indicators all performed more than two percentage points better than the nation. Hawai'i had improvements in health status with a much smaller percentage of people reporting frequent physical distress (decreased about 13 percent on average annually) and an increase in the percentage of adults reporting good or better health (about a half percent on average annually). Despite these gains, there was an increase of about two percent on average annually in the percentage of adults with 14 or more poor mental health days.

Disease prevention: Hawai'i performed better than the nation in disease prevention and all six except for two of the disease prevention indicators improved over time. Hawai'i had fewer adult obese (about seven percentage points less) and smokers (about four percentage points less) as a percentage of adults, compared to the nation. Hawai'i had more children who are fully immunized than the national average. Hawai'i adults exercise more than the national average. Over time in Hawai'i, adult obesity and fruit and vegetable consumption are doing worse.

Access to care: Hawai'i continues to have better health insurance coverage compared to the nation. Hawai'i saw strong improvements in health insurance coverage for children (improved

almost three percent on average annually) and adults (improved almost four percent on average annually). A higher percentage of Medicaid spending was spent on long-term care for aged and disabled persons, via home- and community-based service (HCBS), in the nation compared to the state. HCBS improved slightly in Hawai'i at about one percent on average annually.

County comparisons

- Hawai'i County had the most favorable outcomes for two of the 15 comparable health indicators: diabetes death rate and fruit and vegetable consumption. Hawai'i County had the least favorable outcomes for five of the 15 comparable health indicators: life expectancy at birth, cardiovascular disease death rate, adult good or better health status, adult frequent physical distress (match worse results with Maui County), and adult smoking.
- The City and County of Honolulu had the most favorable outcomes for six of the 15 comparable health indicators: adult frequent mental and physical distress, adult smoking and binge drinking, and adult and children without health insurance. The City and County of Honolulu had the worst outcomes amongst the counties for the diabetes death rate.
- Kaua'i County performed the worse compared to the other counties in the health domain and indicators. Kaua'i County had the most favorable outcomes for only two of the 15 comparable health indicators: infant mortality and adult obesity. Kaua'i County had the least favorable outcomes for six of the 15 comparable health indicators: cancer death rate, adult frequent mental distress, binge drinking, adult physical activity, adult fruit and vegetable consumption and children without health insurance.
- Maui County had the most favorable outcomes for five of the 15 comparable health indicators: life expectancy at birth, cardiovascular disease death rate, cancer death rate, adult good or better health status, and adult physical activity. Maui County had the least favorable outcomes for four of the 15 comparable health indicators: infant mortality, adult frequent physical distress (match worse results with Hawai'i County), adult obesity and adults without health insurance.

Table 6. Health Domain: Most Recent Data and Findings

				Hawaiʻi,	Hawaiʻi:	Over time ⁽¹⁾		Cour	ıty	
Health Indicators	Year	U.S.	ні	compared to the nation	Average Annual Growth	Improved or Worsened	Hawai'i	Honolulu	Kauaʻi	Maui
Mortality			<u>'</u>							
D01. Life expectancy at birth, years	2018- 2020	78.5	82.3	•	0.04%	↑	81.0	82.4	82.4	82.9
D02. Infant mortality , per 1,000 live births	2017- 2019	4.2	5.2	<u></u>	-1.0%	↑	5.2	5.5	4.2	5.8
D03. Cardiovascular disease death rate, per 100,000 people	2018- 2020	217.9	173.3	•	-1.1%	↑	185.9	170.6	175.7	170.0
D04. Cancer death rate, per 100,000 people	2020	144.1	119.4		-1.3%	↑	121.9	119.7	124.8	113.2
D05. Diabetes death rate, per 100,000 people	2020	24.8	16.8	•	0.1%	↓	14.9	17.9	••	16.5
Health Status				·						
D06. Good or better health, % of adults	2020	86.5%	88.8%	•	0.5%	↑	86.4%	89.2%	89.3%	90.8%
D07. Frequent mental distress, % of adults with 14 or more poor mental health days	2020	13.2%	10.7%	•	1.9%	4	11.0%	10.3%	11.9%	10.5%
D08. Frequent physical distress, % of adults with 14 or more poor physical health days	2020	9.9%	7.3%	•	-13.2%	1	7.9%	6.9%	7.3%	7.9%
Disease Prevention										
D09. Obesity, % of adults	2020	31.9%	24.5%	lacksquare	1.3%	↓	25.2%	24.7%	22.0%	25.9%
D10. Smoking, % of adults	2020	15.5%	11.6%	•	-4.0%	↑	14.0%	11.1%	11.4%	11.8%
D11. Binge drinking, % of adults	2020	15.7%	15.7%	0	-3.4%	1	16.8%	15.0%	17.4%	16.1%
D12. Immunization rate, % of children aged 19-35 months	2018	75.4%	77.6%	•	2.1%	1	••	••	••	••
D13. Physical activity, % of adults meeting 150 minute/week aerobic exercise and 2+ days muscle strengthening recommendation	2019	23.2%	24.8%	•	0.6%	1	25.5%	24.0%	23.6%	26.7%
D14. Fruit and vegetable consumption, % of adults who consume 5 or more daily servings	2019	••	17.5%	••	-1.5%	4	18.6%	17.3%	14.4%	17.7%

			ні	Hawaiʻi, compared to the nation	Hawai'i: Over time(1)		County			
Health Indicators	Year	U.S.			Average Annual Growth	Improved or Worsened	Hawai'i	Honolulu	Kauaʻi	Maui
Access to Care										
D15. Adults without health insurance, % of adults	2020	13.9%	8.2%	•	-3.6%	1	9.9%	7.6%	8.2%	8.9%
D16. Children without health insurance, % of children aged 17 and younger	2021	5.4%	2.8%	•	-2.5%	1	3.5%	2.5%	4.4%	3.0%
D17. Home- and community-based service expenditures, % of Medicaid long-term care spending for aged and disabled persons	FY 2019	34.0%	26.0%	<u></u>	0.6%	1	••	••	••	••

Symbols: · Data not available; ● HI better than the nation, ◎ No difference, ● HI worse than the nation; ↑ HI improved, ↔ No change, ↓ HI worsened;

[■] Top-ranked county, ■ ■ Mid-ranked county, □ Bottom-ranked county, □ No difference

⁽¹⁾ Benchmark years annotated in appendix

D01. Life expectancy at birth

Average number of years a newborn infant is expected to live

Why is this important?

This key indicator of health summarizes the mortality pattern that prevails across all age groups from infants to children and adolescents to adults and the elderly. This indicator provides insight into whether a community has a healthy population, adequate public health infrastructure, and an efficient and effective health care system.

How are we doing?

In the recent National Vital Statistics Reports, Hawai'i ranked first in year 2020 amongst the 50 states and D.C. for the total, male, and female populations, with life expectancies at birth of 80.7, 77.6, and 83.8 years, respectively (Arias et al., 2022). Hawai'i and the four counties had a higher life expectancy than the nation for all periods analyzed. Hawai'i County reported the lowest of all the counties in life expectancy for year's 2018 to 2020, at 81 years. The remaining counties all reported around 82 years of age.

Indicator D01. Life expectancy at birth

Area / Year	2015-2017	2016-2018	2017-2019	2018-2020
United States	79.1	79.1	79.2	78.5
State of Hawai'i	82.2	82.3	82.3	82.3
Hawai'i County	80.1	80.5	80.6	81.0
C&C Honolulu	82.5	82.5	82.5	82.4
Kaua'i County	82.0	82.1	82.0	82.4
Maui County	82.7	83.3	82.9	82.9

Technical notes:

To reduce fluctuation due to small numbers of deaths occurring at the county level, multiple years of deaths were used in the calculation.

Data source/s:

U.S./HI, 2015–2020
 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. *Life Expectancy*. Retrieved from https://www.hawaiihealthmatters.org/

D02. Infant mortality

Number of infant deaths per 1,000 live births

Why is this important?

This indicator measures how well the state serves some of its most vulnerable populations—pregnant women and infants. Infant mortality is often related to preterm birth, which in turn is related to the health status and overall situation of the mother. A declining trend in infant mortality suggests improved health care for mothers and babies, new developments in the care of high-risk pregnancies and sick newborns, and technological advances in the care of premature infants. The federal Office of Disease Prevention and Health Promotion's Healthy People 2030 target is 5.0 infant deaths per 1,000 live births.

How are we doing?

For year's 2017 to 2019, Hawai'i had more infant deaths per 1,000 live births than the nation and was higher than the desired Healthy People 2030 target. County rates are variable, sometimes fluctuating drastically between years. For year's 2017 to 2019, Maui County and the City and County of Honolulu had the highest infant mortality rates, while Kaua'i had the lowest.

indicator Doz. infant mortant	Indicator	D02.	Infant	mortality
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Area / Year	2007- 2009	2008- 2010	2013- 2011	2013- 2012	2013- 2013	2013- 2014	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019
United States	6.6	6.4	6.2	6.1	6.0	5.9	4.2	6.5	6.2	5.8	4.2
State of Hawai'i	5.7	5.6	5.4	5.1	5.3	5.1	3.6	5.3	5.4	5.7	5.2
Hawai'i County	6.3	5.5	6.4	4.6	3.9	2.6	3.6	5.3	5.4	5.7	5.2
C&C Honolulu	5.7	5.6	5.5	5.5	5.6	5.6	5.5	5.2	5.3	6.1	5.5
Kaua'i County	7.4	7.0	3.6	3.6	2.4	3.1	4.2	6.5	6.2	5.8	4.2
Maui County	5.1	4.9	4.8	3.1	5.5	5.6	6.4	4.5	5.7	4.5	5.8

Technical notes:

The rates for the state and county are based on the place of residence of the deceased infants and live births.

- U.S., 2007-2019
 - Centers for Disease Control and Prevention. (2019). Table 5. Infant mortality rate: United States and each state. Infant mortality in the United States, 2019. Data from the period linked birth/infant death file. Retrieved from https://www.cdc.gov
- U.S./HI, 2007–2019 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. *Infant Mortality Rate*. Retrieved from https://www.hawaiihealthmatters.org/

D03. Cardiovascular disease death rate

Number of deaths due to cardiovascular disease per 100,000 people, adjusted for age

Why is this important?

Death rates due to cardiovascular disease are important in identifying specific health behaviors, risk factors, and environmental surroundings attributable to deaths. Since 2000, cardiovascular disease has regularly been the leading cause of death both in the nation and in Hawai'i. People suffering from cardiovascular diseases are especially affected by the lack of health insurance and access to care. However, patients and primary care physicians can work together prevent, delay, and manage cardiovascular disease through proper personal care, diet, and exercise. In many cases, the causes of cardiovascular disease are personal health-damaging behaviors practiced on a daily basis over the course of a lifetime.

How are we doing?

Compared to the nation, Hawai'i had less cardiovascular disease deaths per 100,000 people across all periods analyzed. A decreasing trend was observed for both Hawai'i and the nation since the 2008 to 2010 period. The City and County of Honolulu and Maui County had the lowest cardiovascular disease death rate for year's 2018 to 2020, at about 170 deaths per 100,000 residents; Hawai'i County had the highest, at about 186 deaths per 100,000 residents.

Indicator	D03	Cardiovas	cular disea	se death rate
		Valuuvas	WILLIAH WINCA	SC UCALII LAIC

Area / Year	2008- 2010	2009- 2011	2010- 2012	2011- 2013	2012- 2014	2013- 2015	2014- 2016	2015- 2017	2016- 2018	2017- 2019	2018- 2020
United States	241.5	233.6	228.4	224.3	221.4	221.0	219.8	219.7	217.8	216.3	217.9
State of Hawai'i	194.4	187.1	180.5	181.6	182.4	183.7	179.1	178.3	175.5	174.5	173.3
Hawai'i County	208.1	192.7	193.5	196.5	195.3	198.6	202.8	209.3	195.6	191.2	185.9
C&C Honolulu	191.6	185.9	178.4	177.6	179.6	181.1	177.1	175.8	175.2	172.6	170.6
Kaua'i County	196.7	188.5	182.2	186.6	184.2	183.1	170.1	165.7	164.4	172.9	175.7
Maui County	189.9	184.7	176.1	181.9	180.3	180.8	169.7	163.4	161.1	166.5	170.0

Technical notes:

Cardiovascular diseases include diseases of the heart, stroke, and other cerebrovascular diseases. The ICD-10 codes that are classified as cardiovascular disease are major cardiovascular diseases as for the National Vital Statistics, I00-I78. State and county data are based on the place of residence of the deceased persons.

Data source:

• U.S./HI, 2008–2020

National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. (n.d.). Interactive Atlas of Heart Disease and Stroke, 1999-2020. Retrieved from https://www.cdc.gov/dhdsp/maps/atlas/index.htm.

D04. Cancer death rate

Number of deaths due to cancer per 100,000 people, adjusted for age

Why is this important?

This indicator reflects critical aspects of health in Hawai'i and is helpful in providing information on specific health behaviors, risk factors, and environmental surroundings attributable to deaths due to malignant neoplasms (cancer). Since 2000, cancer has regularly been the second leading cause of death in Hawai'i and the nation; some demographics have a higher cancer death rate than cardiovascular death rate. People suffering from cancer can be especially hindered by a lack of health insurance and access to care. However, patients and primary care physicians can work together prevent, delay, and manage cancer through proper personal care, diet, and exercise.

How are we doing?

On average across year's 2010 to 2020, Hawai'i had about 19 percent less cancer deaths than the nation. In year 2020, Hawai'i had a cancer death rate of about 119 deaths per 100,000 people, compared to around 144 deaths per 100,000 people in the nation. Both the nation and Hawai'i's cancer death rates have a decreasing trend since year 2010.

Indicator	D04.	Cancer	death	rate
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Area / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	171.8	168.8	166.5	163.4	161.5	159.0	156.1	152.7	149.2	149.1	144.1
State of Hawai'i	136.7	136.0	132.5	131.7	135.5	130.5	123.7	125.2	120.6	123.4	119.4
Hawai'i County	145.5	148.7	136.4	139.0	141.4	138.4	138.3	155.3	130.3	128.0	121.9
C&C Honolulu	135.8	133.3	131.1	127.4	135.2	127.4	121.6	120.3	118.9	120.6	119.7
Kaua'i County	144.2	151.8	144.5	134.9	119.1	127.7	118.5	127.4	122.6	124.2	124.8
Maui County	131.0	133.7	131.3	150.1	136.5	138.7	115.3	119.0	119.2	133.2	113.2

Technical notes:

Cancer includes all malignant neoplasms, ICD-10 codes C00-C97. State and county data are based on the place of residence of the deceased persons.

- U.S./HI, 2010–2020
 National Center for Chronic Disease Prevention and Health Promotion, Division for Heart Disease and Stroke Prevention. (n.d.). Interactive Atlas of Heart Disease and Stroke, 1999-2020
- U.S./HI, 2010–2020 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. Cancer Death Rate. Retrieved from https://www.hawaiihealthmatters.org/

D05. Diabetes death rate

Number of deaths due to diabetes mellitus per 100,000 people, adjusted for age

Why is this important?

This indicator provides information on vital aspects of health in Hawai'i as it reflects the specific health behaviors, risk factors, and environmental surroundings attributable to deaths due to diabetes mellitus. Diabetes is correlated with other health issues. According to Centers for Disease Control and Prevention, diabetes is likely to be underreported as the underlying cause of death, and the risk for death among people with diabetes is about twice that of people without diabetes. This indicator is especially important in light of the increasing diabetes rate in Hawai'i.

How are we doing?

In year 2020, Hawai'i had a diabetes death rate of 17 deaths per 100,000 people, compared to around 25 deaths per 100,000 people in the U.S. For each year from 2010 to 2020, Hawai'i had around five less diabetes deaths per 100,000 people than the nation. The diabetes death rate increased for both the nation and Hawai'i for year's 2010 to 2020.

Indicator D05. Diabetes death rate

Area / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	20.8	21.6	21.2	21.2	20.9	21.3	21.0	21.5	21.4	21.6	24.8
State of Hawai'i	16.6	15.5	16.2	15.5	15.4	14.5	15.1	15.9	16.1	15.8	16.8
Hawai'i County	14.3	15.0	16.0	14.4	16.1	14.8	11.7	16.2	16.9	16.4	14.9
C&C Honolulu	16.5	15.3	15.7	15.0	14.9	15.0	15.3	15.3	16.0	14.5	17.9
Kaua'i County	••	••	••	••	••	••	20.4	22.2	••	••	••
Maui County	19.4	18.7	21.3	19.9	18.1	13.2	16.3	17.5	18.2	22.8	16.5

Technical notes:

Diabetes mellitus is ICD-10 code E10-E14. Data from Kaua'i County is blank due to unreliability of measures from small sample sizes. State and county data are based on the place of residence of the deceased persons.

- U.S./HI, 2010–2020
 - Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.). Underlying cause of death, 1999-2020. *ICD-10 Codes E10-E14 (Diabetes mellitus)*. CDC Wonder. Retrieved from https://wonder.cdc.gov/
- U.S./HI, 2010–2020 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. *Diabetes Death Rate (Multiple Cause of Death)*. Retrieved from https://www.hawaiihealthmatters.org/

Health Domain Health Status

D06. Good or better health

Percentage of adults who reported good, very good, or excellent health

Why is this important?

This indicator provides information on the health status of the population based on the self-reported health status of respondents. As such, it complements the traditional measures of morbidity and mortality, with some research demonstrating that self-reported health status is correlated to morbidity and mortality. Thus, self-perceived health condition is useful as a proxy measure for the perceived symptom burden of both acute and chronic health conditions and as predictive indicator of the future burden on the health care delivery system.

How are we doing?

In year 2020, around 89 percent of Hawai'i adults reported that their health was good, very good, or excellent, compared to around 87 percent of U.S. adults. For year 2020, Maui County had the highest percent of Hawai'i adults, at around 91 percent, who reported that their health was good, very good, or excellent. While Hawai'i County had the lowest at around 86 percent.

Indicator D06	Good or	better	health
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Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	83.1%	83.1%	83.3%	83.2%	83.6%	83.6%	82.4%	82.7%	81.8%	86.5%
State of Hawai'i	85.0%	85.2%	86.2%	85.5%	86.4%	85.2%	85.2%	83.7%	83.8%	88.8%
Hawai'i County	83.6%	84.6%	85.0%	82.2%	85.9%	81.6%	83.4%	82.8%	81.9%	86.4%
C&C Honolulu	85.5%	85.2%	86.5%	85.7%	86.2%	86.1%	85.2%	84.0%	84.2%	89.2%
Kaua'i County	81.8%	83.5%	86.7%	84.3%	85.8%	83.6%	86.3%	83.5%	84.3%	89.3%
Maui County	85.4%	86.6%	85.2%	86.0%	87.3%	85.6%	85.3%	84.1%	85.9%	90.8%

Technical notes:

Adult respondents were asked: "Would you say that in general your health is excellent, very good, good, fair, or poor?" A "good or better" health status refers to one of the following response categories: "good," "very good," and "excellent." The national average is the median of 50 states and District of Columbia. Due to methodology changes, BRFSS results from 2011 forward should not be directly compared with previous years.

- U.S./HI, 2011-2020
 - Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.). Health status, overall health, all available years for all states and DC (median) and Hawai'i. *Behavioral Risk Factor Surveillance System: Prevalence and Trends Data*. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/
- U.S./HI, 2011–2020
 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard.
 Adults with Health Status of Good or Better. Retrieved from https://www.hawaiihealthmatters.org/

Health Domain Health Status

D07. Frequent mental distress

Percentage of adults reporting 14 or more poor mental health days per month

Why is this important?

Measuring healthy days complements the overall health status by providing a measure of how frequently a respondent feels healthy and distinguishing between mental and physical health. Number of healthy days is inversely related to both self-reported chronic diseases and their risk factors; thus, it can help determine the burden of preventable disease, injuries, and disabilities, and provide valuable insights into the relationships between health related QOL and risk factors such as body mass index, physical inactivity, and smoking status. Fourteen days is set as the cutoff for frequent distress because a strong relationship has been demonstrated between clinically diagnosed disorders and a minimum 14-day period.

How are we doing?

Hawai'i had a smaller percentage of adults reporting 14 or more days of poor mental health per month compared to the nation (10.7 percent versus 13.2 percent). Both Hawai'i and the nation have had an increase in the percentage of adults experiencing frequent mental distress. In year 2020, Kaua'i County had the highest amongst the counties at almost 12 percent.

Area / Year	2018	2019	2020
United States	13.0%	13.8%	13.2%
State of Hawai'i	10.3%	11.6%	10.7%
Hawai'i County	13.4%	13.8%	11.0%
C&C Honolulu	11.0%	10.4%	10.3%
Kaua'i County	11.5%	11.1%	11.9%
Maui County	11.8%	12.2%	10.5%

Technical notes:

Adult respondents were asked: "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" In 2018, the survey methodology for the Behavioral Risk Factor Surveillance System updated their modeling procedure for producing small-area estimates, so results before and after 2018 may not be comparable. The national average is the median of 50 states and District of Columbia.

- HI, 2018-2020
 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. Adult Poor Mental Health: 14+ Days. Retrieved from https://www.hawaiihealthmatters.org/
- U.S./HI, 2018-2020 America's Health Ranking analysis of Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System (BRFSS) Prevalence & Trends Data. (n.d.). Annual report, various years. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/

Health Domain Health Status

D08. Frequent physical distress

Percentage of adults reporting 14 or more poor physical health days per month

Why is this important?

Measuring healthy days complements the overall health status by providing a measure of how frequently a respondent feels healthy and distinguishing between mental and physical health. Number of healthy days is inversely related to both self-reported chronic diseases and their risk factors; thus, it can help determine the burden of preventable disease, injuries, and disabilities, and provide valuable insights into the relationships between health-related QOL and risk factors such as body mass index, physical inactivity, and smoking status. Fourteen days is set as the cutoff because it constitutes a substantial level of physical impairment.

How are we doing?

Hawai'i had a smaller percentage of adults reporting 14 or more days of poor physical health per month compared to the nation (7.3 percent versus 9.9 percent). Both Hawai'i and the nation had a decrease in the percentage of adults experiencing frequent physical distress. In year 2020, Hawai'i Maui County reported the highest percentage of adults experiencing frequent physical distress at almost eight percent, while the City and County of Honolulu had the lowest at under seven percent.4estg

Indicator D08. Frequent physical distress	Indicator 1	D08.	Freq	uent	phy	ysical	distress
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Area / Year	2018	2019	2020
United States	11.0%	12.6%	9.9%
State of Hawai'i	9.7%	10.6%	7.3%
Hawai'i County	12.0%	13.9%	7.9%
C&C Honolulu	10.9%	9.8%	6.9%
Kaua'i County	11.2%	9.1%	7.3%
Maui County	10.7%	11.2%	7.9%

Technical notes:

Adult respondents were asked: "Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" In 2018, the survey methodology for the Behavioral Risk Factor Surveillance System updated their modeling procedure for producing small-area estimates, so results before and after 2018 may not be comparable. The national average is the median of 50 states and District of Columbia.

- U.S./HI, 2018-2020
 America's Health Ranking analysis of Centers for Disease Control and Prevention
 Behavioral Risk Factor Surveillance System (BRFSS) Prevalence & Trends Data. (n.d.).
 Annual report, various years. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/
- HI, 2018-2020 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. *Adult Poor Physical Health: 14+ Days.* Retrieved from https://www.hawaiihealthmatters.org/

D09. Obesity

Percentage of adults who are obese

Why is this important?

This is an important measure in determining health status and whether adult residents are maintaining body weight at a level that lowers their risk for certain chronic illnesses. Obesity is associated with increased risk of heart disease, diabetes, mental health, physical mobility, respiratory problems, and other health problems. At the same time, there are economic consequences both directly (e.g., preventive, diagnostic, and treatment services) and indirectly (e.g., decreased productivity, restricted activity, absenteeism, bed days, and premature death) related to obesity. The federal Office of Disease Prevention and Health Promotion's Healthy People 2020 target is reducing obesity among adults to lower than 30.5%.

How are we doing?

From 2011 to 2020, Hawai'i had on average around seven percent less obese adults than the nation. Following the national trend, adult obesity increased in Hawai'i since year 2011, with a small decrease in year 2020 (24.5 percent). Maui and Hawai'i counties had the highest adult obesity amongst the counties at over 25 percent. Kaua'i County had the lowest at 22 percent of its adults who were obese.

Indicator D09. Obesity

Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	27.8%	27.6%	29.4%	29.6%	29.8%	29.9%	31.3%	30.9%	31.4%	31.9%
State of Hawai'i	21.9%	23.6%	21.8%	22.1%	22.7%	23.8%	23.8%	24.9%	25.0%	24.5%
Hawai'i County	24.0%	24.8%	22.8%	20.3%	25.0%	26.9%	23.3%	27.9%	26.3%	25.2%
C&C Honolulu	21.7%	24.0%	21.6%	22.3%	22.4%	23.3%	24.4%	24.7%	24.9%	24.7%
Kaua'i County	18.8%	20.8%	17.4%	22.6%	21.2%	24.0%	21.5%	25.3%	24.7%	22.0%
Maui County	22.0%	21.3%	24.3%	23.5%	22.7%	24.3%	23.0%	24.4%	24.8%	25.9%

Technical notes:

Obesity is assessed by using body mass index (BMI), defined as the weight (in kilograms) divided by the square of the height (in meters). A BMI of 30 or above is obese. BMI does not measure body fat directly but has been shown to be moderately correlated with more direct measures of body fat. The national average is the median of 50 states and District of Columbia. Due to methodology changes, BRFSS results from 2011 forward should not be directly compared with previous years.

Data source/s:

• U.S./HI, 2011-2020

Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.). Overweight and obesity (BMI), BMI categories, all available years for all states and DC (median) and Hawai'i. *Behavioral Risk Factor Surveillance System: Prevalence and Trends Data*. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/

• HI, 2011-2020

Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. *Adults Who Are Obese*. Retrieved from https://www.hawaiihealthmatters.org/

D10. Smoking

Percentage of adults who report smoking cigarettes

Why is this important?

The 2004 U.S. Surgeon General's report on the health effects of smoking stated that tobacco use remains the leading preventable cause of disease and death in the United States. In addition to the harmful effects of tobacco use on individual smokers, secondhand smoke exposure is proven to cause disease and premature death in children and adults who do not smoke. Any level of exposure to secondhand smoke is considered to increase health risks. On the other hand, substantial risks from smoking can be reduced and health status can be improved by successfully quitting smoking at any age. The health of the community will also have immediate and long-term benefit from a reduced smoking prevalence. The federal Office of Disease Prevention and Health Promotion's Healthy People 2030 goal is to reduce the percentage of current smokers among adults to 5 percent.

How are we doing?

On average for year's 2011 to 2020, Hawai'i had about four percent fewer adult smokers than the nation. Also, across these years, there was a reduction of adults who smoke for both the nation and Hawai'i, except for an uptick for Hawai'i in year 2018 (13.4 percent). Although there was progress, Hawai'i did not met the Healthy People 2030 target. Hawai'i County had the highest percentage of adult smokers for all years analyzed. From year's 2011 to 2020, Kaua'i County improved the most amongst the counties in lowering adult smoking.

Indicator D10. Smoking

Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	21.2%	19.6%	19.0%	18.1%	17.5%	17.1%	17.1%	16.1%	16.0%	15.5%
State of Hawai'i	16.8%	14.6%	13.3%	14.1%	14.1%	13.1%	12.8%	13.4%	12.3%	11.6%
Hawai'i County	19.2%	16.3%	17.6%	20.3%	16.2%	16.3%	14.9%	17.0%	15.5%	14.0%
C&C Honolulu	16.3%	14.1%	12.1%	13.4%	13.5%	11.9%	12.3%	12.3%	11.3%	11.1%
Kaua'i County	20.1%	17.6%	12.1%	14.6%	14.1%	15.1%	13.1%	14.8%	11.5%	11.4%
Maui County	14.8%	14.0%	15.3%	12.4%	15.9%	15.2%	12.5%	15.2%	14.6%	11.8%

Technical notes:

Adult respondents were asked: "Have you smoked at least 100 cigarettes in your entire lifetime?" and "Do you now smoke cigarettes every day, some days, or not at all?" Those who responded that they have smoked over 100 cigarettes and who smoke "every day" or "some days" are smokers. The national average is the median of 50 states and District of Columbia. Due to methodology changes, BRFSS results from 2011 forward should not be directly compared with previous years.

Data source/s:

U.S./HI, 2011-2020
 Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.).
 Tobacco use, current smoker status, all available years for all states and DC (median) and

Hawai'i. *Behavioral Risk Factor Surveillance System: Prevalence and Trends Data*. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/

• HI, 2011-2020 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. *Adults Who Smoke Cigarettes*. Retrieved from https://www.hawaiihealthmatters.org/

D11. Binge drinking

Percentage of adults who report binge drinking

Why is this important?

This indicator measures the potential burden of preventable disease, injuries, and disabilities due to excessive drinking. Binge drinking, or getting drunk, typically results in acute intoxication, which can be detrimental to the health and well-being of the users and others in the family and community. The negative consequences include, but are not limited to, impaired brain function; increased risk of certain cancers, stroke, and liver diseases; damage to a developing fetus if consumed by pregnant women; and increased risks of motor-vehicle traffic crashes, suicides, violence, other injuries, unintended pregnancies, coma, and death. The federal Office of Disease Prevention and Health Promotion's Healthy People 2030 goal is to reduce binge drinking among adults to lower than 25.4%.

How are we doing?

In year 2020, Hawai'i caught up with the nation and for the first year did not have a higher percentage of adults in Hawai'i reporting binge drinking compared to the nation. In year 2020, Kaua'i County reported the highest prevalence of adult binge drinking amongst Hawai'i's counties at over 17 percent. While the City and County of Honolulu reported the lowest at 15 percent.

Indicator	D11	Ringe	drin	kino
Inuicator	$\boldsymbol{\nu}_{11}$.	Dillec	uiiii	KIIIZ

Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	18.3%	16.9%	16.8%	16.0%	16.3%	16.9%	17.4%	16.2%	16.8%	15.7%
State of Hawai'i	21.5%	18.2%	18.3%	19.7%	18.9%	18.6%	19.5%	19.2%	17.3%	15.7%
Hawai'i County	22.5%	21.1%	15.5%	20.0%	20.3%	20.5%	19.0%	19.2%	17.5%	16.8%
C&C Honolulu	21.3%	17.6%	18.7%	19.2%	18.4%	18.0%	19.0%	19.4%	16.8%	15.0%
Kaua'i County	17.7%	21.4%	18.2%	19.5%	19.4%	20.8%	21.8%	20.9%	18.4%	17.4%
Maui County	22.6%	17.6%	18.4%	23.4%	19.4%	18.9%	20.5%	18.9%	20.4%	16.1%

Technical notes:

The definition of binge drinking is males having five or more drinks on one occasion and females having four or more drinks on one occasion. The national average is the median of 50 states and District of Columbia. Due to methodology changes, BRFSS results from 2011 forward should not be directly compared with previous years.

- U.S./HI, 2011-2020
 - Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.). Alcohol consumption, binge drinking, all available years for all states and DC (median) and Hawai'i. *Behavioral Risk Factor Surveillance System: Prevalence and Trends Data*. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/
- HI, 2011-2020 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. *Adults Who Binge Drink*. Retrieved from https://www.hawaiihealthmatters.org/

D12. Immunization rate

Percentage of children by 35 months old who are immunized

Why is this important?

This indicator assesses the current and future health of the children in Hawai'i. Timely immunization for childhood diseases is a crucial part of preventing the spread of infectious diseases among children and preserving the public health of the general population.

How are we doing?

A higher percentage of children in Hawai'i are vaccinated compared to the nation, at 77.6 percent in Hawai'i compared to about 75.4 percent in the U.S. for year 2018.

Indicator D12. Immunization rate

Area / Year	2011	2012	2013	2014	2015	2016	2017	2018
United States	74.4	75.9	74.8%	74.1%	74.9%	75.3%	74.9%	75.4%
State of Hawai'i	67.2	79.4	80.5%	74.3%	75.0%	80.4%	70.7%	77.6%

Technical notes:

Previous reports use data to find the percentage of children 19-35 months old who are immunized with the childhood combined 6-vaccine series. This report uses data to find the percentage of children by age 35 months who are immunized with the childhood combined 7-vaccine series. Thus, this indicator is not directly comparable to the previous reports. The childhood combined seven-vaccine series consists of diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine; measles, mumps and rubella (MMR) vaccine; poliovirus vaccine; Haemophilus influenzae type b (Hib) vaccine; hepatitis B (HepB) vaccine; varicella vaccine; and pneumococcal conjugate vaccine (PCV). County data were unavailable.

Data source/s:

• U.S./HI. 2011-2018

Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.). ChildVaxView – Vaccination Coverage among Young Children (0 – 35 Months). Retrieved from https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/interactive-reports/index.html

D13. Physical activity

Percentage of adults who meet the 150-minute-per-week aerobic exercise and 2 or more days of muscle strengthening recommendation

Why is this important?

This indicator measures the extent to which the adult population is maintaining a healthy lifestyle by engaging in regular physical activity. Physically active residents enjoy significant health benefits; for example, substantially lower risks in developing or dying from heart disease, diabetes, colon cancer, and high blood pressure; better physical and emotional health; and better memory, concentration, and energy levels. The U.S. Department of Health and Human Services recommends at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity aerobic exercise and at least 2 days of muscle strengthening exercise a week. Engaging in moderate physical activity at least 5 days a week for 30 minutes or more each time provides health benefits associated with calorie consumption and weight control.

How are we doing?

A higher percentage of adults in Hawai'i met the physical activity recommendation (24.8 percent) compared to the nation as a whole (23.2 percent), which had been the case across all survey years. Besides year 2015, when it had the lowest rate, Maui County had the highest percentage of adults meeting the physical activity recommendation. In year 2019, Kaua'i County had the lowest percentage of adults meeting the physical activity recommendation.

Indicator D13.	Physical	activity
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Area / Year	2011	2013	2015	2017	2019
United States	••	20.5%	20.3%	20.3%	23.2%
State of Hawai'i	23.7%	26.5%	23.6%	24.6%	24.8%
Hawai'i County	23.3%	26.0%	22.8%	22.0%	25.5%
C&C Honolulu	23.4%	26.3%	23.4%	24.2%	24.0%
Kaua'i County	25.1%	26.4%	27.8%	25.2%	23.6%
Maui County	25.8%	28.4%	21.8%	28.2%	26.7%

Technical notes:

The national average is the median of 50 states and District of Columbia. Due to methodology changes, BRFSS results from 2011 forward should not be directly compared with previous years.

- U.S./HI, 2011, 2013, 2015, 2017, 2019
 Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.).
 Physical activity. Behavioral Risk Factor Surveillance System: Prevalence and Trends Data. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/
- HI, 2011, 2013, 2015, 2017, 2019
 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard.
 Adults Who Meet Aerobic and Strengthening Activity Guidelines. Retrieved from https://www.hawaiihealthmatters.org/

Health Domain Disease Prevention

D14. Fruit and vegetable consumption

Percentage of adults who consumer 5 or more daily servings of fruits and vegetables

Why is this important?

This indicator assesses the extent to which the adult population maintains a healthy eating lifestyle to optimize nutrition, reduce disease risk, and maximize good health. Maintaining a healthy diet is one of the key factors in the promotion and maintenance of good health. As an important component of a healthy diet, sufficient daily consumption of fruits and vegetables tend to prevent and reduce the risk of chronic diseases, such as obesity, stroke, diabetes, some cancers, cardiovascular diseases, and hypertension. The "sufficient" amount varies by individuals, and it increases as the daily calorie requirements increase. According to the 2020-2025 Dietary Guidelines for Americans, a 2,000-calorie diet requires about 2 cup-equivalents of fruits and 2.5 cup-equivalents of vegetables.

How are we doing?

Since year 2011, a higher percentage of Hawai'i adults consumed five or more daily servings of fruit and vegetables than the nation. In year 2019, over three percent less Hawai'i adults consumed the five or more daily servings of fruit and vegetables than in year 2017. In year 2019, Kaua'i County reported the lowest percentage of fruit and vegetable consumption at around 14 percent. This was a considerable decrease of 23.4 percent from year 2017.

Indicator	D14.	Fruit	and	vegetable	consum	ption

Area / Year	2011	2013	2015	2017	2019
State of Hawai'i	19.7%	18.1%	19.8%	20.7%	17.5%
Hawai'i County	19.8%	20.6%	22.9%	22.8%	18.6%
C&C Honolulu	18.5%	16.4%	18.4%	19.3%	17.3%
Kaua'i County	26.5%	20.5%	22.8%	23.4%	14.4%
Maui County	23.4%	24.4%	21.2%	23.7%	17.7%

Technical notes:

National data not available. Due to methodology changes, BRFSS results from 2011 forward should not be directly compared with previous years.

- HI, 2011, 2013, 2015, 2017, 2019
 Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.).
 Fruit and Vegetable Consumption. *Behavioral Risk Factor Surveillance System:*Prevalence and Trends Data. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/
- HI, 2013, 2015, 2017, 2019
 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. Adult Fruit and Vegetable Consumption. Retrieved from https://www.hawaiihealthmatters.org/

Health Domain Access to Care

D15. Adults without health insurance

Percentage of adults without health insurance

Why is this important?

Health insurance provides access to health care, which directly influences the well-being of individuals and the community. Individuals who have health insurance are more likely to seek preventive health screening and services than those without such coverage, leading to a healthier population and more cost-effective health care. Adults without health insurance are susceptible to a risky combination of health and financial crises. In addition, a high level of uninsured adults may hurt the economy of the state.

How are we doing?

Hawai'i had more of its adults with insurance than the nation. For year 2020, 8.2 percent of Hawai'i adults had no health insurance compared to 13.9 percent of adults in the nation. The City and County of Honolulu had the lowest adult uninsured rate, 7.6 percent uninsured, while Hawai'i County had the highest uninsured rates at 9.9 percent.

Indicator	D15	Adults	without	health	insurance

Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	15.1%	14.7%	14.4%	11.5%	9.1%	9.0%	9.1%	9.4%	14.5%	13.9%
State of Hawai'i	11.4%	12.7%	10.0%	9.8%	8.8%	8.3%	7.8%	8.1%	8.6%	8.2%
Hawai'i County	13.4%	16.0%	13.1%	11.6%	8.7%	10.0%	8.0%	9.9%	9.4%	9.9%
C&C Honolulu	9.9%	12.1%	8.8%	8.6%	8.6%	7.3%	7.4%	6.5%	7.5%	7.6%
Kaua'i County	11.6%	11.0%	15.0%	11.9%	9.7%	10.8%	9.9%	10.9%	8.7%	8.2%
Maui County	16.0%	12.3%	12.1%	11.0%	9.5%	10.0%	9.1%	12.6%	11.8%	8.9%

Technical notes:

The national average is the median of 50 states and District of Columbia. Due to methodology changes, BRFSS results from 2011 forward should not be directly compared with previous years.

- U.S./HI, 2011-2020
 - Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.). Alcohol consumption, binge drinking, all available years for all states and DC (median) and Hawai'i. *Behavioral Risk Factor Surveillance System: Prevalence and Trends Data*. Retrieved from https://www.cdc.gov/brfss/brfssprevalence/
- HI, 2013–2020 Hawai'i State Department of Health, Vital Statistics. (n.d.). Community Dashboard. *Adults without Health Insurance*. Retrieved from https://www.hawaiihealthmatters.org/

Health Domain Access to Care

D16. Children without health insurance

Percentage of children aged 17 and younger without health insurance

Why is this important?

Health insurance provides access to health care services and directly influences the well-being of children and the community. Children who have health insurance are more likely to receive preventive health care and early treatment than those without, leading to a healthier population and more cost-effective health care. Children without health insurance but who may need medical care are susceptible to health crises.

How are we doing?

Across all years analyzed, Hawai'i insured more of its children. In year 2017, Hawai'i had just under three percent of its children without health insurance, while the nation had over five percent. There have been improvements for both the nation and Hawai'i over time. The City and County of Honolulu had the lowest percent of children without health insurance (2.5 percent) amongst Hawai'i's counties, while Hawai'i County had the highest (3.5 percent).

Indicator D16. Children without health insurance

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	7.5%	7.1%	6.0%	1.6%	4.5%	4.3%	5.2%	5.7%	5.4%
State of Hawai'i	3.6%	3.0%	3.1%	4.8%	2.2%	2.2%	2.6%	2.8%	2.8%
Hawai'i County	4.4%	4.6%	1.6%	2.0%	1.7%	2.9%	4.1%	2.3%	3.5%
C&C Honolulu	2.8%	2.4%	3.4%	1.4%	2.3%	1.8%	1.9%	2.4%	2.5%
Kaua'i County	7.6%	4.9%	1.8%	1.2%	2.6%	0.7%	5.1%	4.4%	4.4%
Maui County	5.7%	4.5%	3.7%	2.9%	2.5%	4.3%	3.5%	5.3%	3.0%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013-2019, 2021
 U.S. Census Bureau. (n.d.). B27001: Health insurance coverage status by sex by age.
 American Community Survey 1-Year Estimates. Retrieved from https://data.census.gov/.

Health Domain Access to Care

D17. Home- and community-based service expenditures

Percentage of Medicaid long-term care spending for aged and disabled persons allocated to homeand community-based services

Why is this important?

This indicator measures the extent to which the state is supporting access to home- and community-based services among the elderly and people with disabilities. There is a strong preference among the frail elderly to age in their own home; however, the majority of public financial support for long-term care is spent on nursing facility care, making home- and community-based care inaccessible to many. In addition, home- and community-based care is a cost-effective alternative to nursing home care. It thus provides access to more people with long-term care needs. Medicaid, as the major payer of long-term care services in the nation, plays an important role in re-balancing the long-term care delivery system by financing an adequate choice of community and institutional options.

How are we doing?

In Hawai'i during fiscal year 2019, home- and community-based service expenditures were eight percentage points less than for the nation. This gap between Hawai'i and the nation narrowed over time with it being as large as about 20 percentage points below the nation in fiscal year 2015. One reasoning for this narrowing gap is that while the nation had seen declining expenditures from fiscal year 2011, Hawai'i's home- and community-based service expenditures increased about five percent.

Indicator D17. Home- and community-based service expenditures

Area / Year	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
United States	38.2%	38.8%	40.2%	41.1%	43.8%	45.2%	31.8%	32.2%	34.0%
State of Hawai'i	24.8%	21.8%	21.9%	24.5%	23.9%	26.0%	23.0%	26.0%	26.0%

Technical notes:

Medicaid long-term-care spending includes expenditures for nursing homes, regardless of participants' type of disability or reason for admission; and all 1915(c) waivers for older people and adults with physical disabilities, and personal care services, if any. Populations with developmental disabilities, behavioral health services, and services received through managed care programs are not included in the data. County data were unavailable.

Data source/s:

• U.S./HI, FY 2013-2019

Center for Medicare and Medicaid Services. (n.d). Percentage of long-term services and supports for HCBS: Services for older adults and people with physical disabilities. *Medicaid expenditures for long-term services and supports, various years*. Retrieved from https://www.medicaid.gov/medicaid/ltss/reports-and-evaluations/index.html.

E. HOUSING & TRANSPORTATION DOMAIN AND INDICATORS

Hawai'i's housing and transportation domain consists of ten indicators within four dimensions: affordable housing, unmet housing needs, housing characteristics, and commuting patterns. Hawai'i underperformed the nation within the affordable housing and unmet housing needs indicators. Even though Hawai'i underperformed the nation, there was growth for these indicators over time. Hawai'i's performance in the housing characteristics indicators was mixed compared to the nation, however, all improved over time. Hawai'i outperformed the nation in the commuting patterns indicators.

Based on the housing and transportation domain, as summarized in Table 7, Hawai'i fared worse off than the nation in six of the ten indicators. Standing out was Hawai'i's homeowner housing cost burden. Hawai'i had about 41 percent of its homeowners with mortgages accounting for over 30 percent of their household income on selected monthly owner costs. Hawai'i's homeowners housing cost burden was almost 14 percentage points worse than the national average. Also standing out, was that Hawai'i had about 277 more homeless per 100,000 people than the nation.

Despite many of Hawai'i's housing and transportation indicators performing below the nation, most improved over time. Though, five of the improved indicators did not have an average annual growth rate of more than one percent. The largest improvements were seen in Hawai'i's homelessness numbers, with an average annual decline of almost five percent. The public transportation indicator was the only indicator to worsen over time. Yet, these declines may turn around quickly; in year 2020, public transportation was impacted by the COVID-19 pandemic and will likely recover in year's 2021 and 2022.

Affordable housing: Hawai'i is considered one of the most expensive states in the nation when it comes to housing, and the three indicators in this subsection continued to confirm that. The financial burden for both Hawai'i's renters and homeowners was higher than for the nation, and a lower percentage of people own a home, compared to the nation overall. Hawai'i's housing cost burden and home ownership indicators improved over time, while the rental cost burden remained unchanged over time.

Unmet housing needs: Hawai'i underperformed the nation in its unmet housing needs indicators, however, both improved over time. Hawai'i had over five percentage points more overcrowded dwellings than the nation.

Housing characteristics: Hawai'i had about the same percentage of housing structures built after year 1980 as the nation and this indicator had about one percent average annual growth in Hawai'i. Hawai'i continued to have more internet access than the nation and internet access grew almost two percent on average annually.

Commuting patterns: Hawai'i performed better than the nation in all three of the commuting patterns indicators. These indicators were impacted by the COVID-19 pandemic and may continue to recover to levels seen in year 2019. This would mean a reversal in Hawai'i's performance compared to the nation in long-commute times, and increases in those driving alone to work and in using public transportation.

County comparisons

- Hawai'i County had favorable outcomes in four of the nine comparable housing and transportation indicators: rental cost burden, home ownership, overcrowded dwellings, and age of structure. Hawai'i County had unfavorable outcomes for two of the nine comparable housing and transportation indicators: long commute time and public transportation usage.
- The City and County of Honolulu had the most favorable outcomes for homeowner housing cost burden, public transportation usage and workers driving alone to work. The City and County of Honolulu had unfavorable outcomes for three of the nine comparable housing and transportation indicators: rental cost burden, homeownership, and age of structure.
- Kaua'i County had favorable outcomes for three of the nine comparable housing and transportation indicators: overcrowded dwellings, internet access, and commute time. Kaua'i County had the worse outcomes for two of the nine comparable housing and transportation indicators: homeowner cost burden and driving alone to work.
- Maui County was mid-ranked for most and worse for two of the nine comparable indicators: overcrowded dwellings, and internet access.

Table 7. Housing & Transportation Domain: Most Recent Data and Findings

				Hawaiʻi,	Hawaiʻi: 0	Over time ⁽¹⁾		Cou	ınty	
Housing & Transportation Indicators	Year	U.S.	ні	compared to the nation	Average Annual Growth	Improved or Worsened	Hawai'i	Honolulu	Kaua'i	Maui
Affordable Housing	,									
E01. Rental cost burden, % of renters spending over 30% of household income on rent	2021	47.4%	53.4%	<u>-</u>	0.0%	\leftrightarrow	43.9%	54.8%	53.4%	52.9%
E02. Housing cost burden, % of owners with mortgage spending over 30% of household income on selected monthly owner costs	2021	27.4%	41.3%	<u> </u>	-1.7%	↑	42.3%	40.6%	45.7%	42.4%
E03. Home ownership, % of occupied housing units	2021	65.4%	62.6%	<u>-</u>	0.6%	↑	73.4%	59.3%	65.5%	67.1%
Unmet Housing Needs										
E04. Overcrowded dwellings, % of occupied housing units with 1.01 or more occupants per room	2021	3.4%	8.7%	<u> </u>	-0.2%	↑	7.3%	8.7%	7.3%	11.1%
E05. Homelessness, point-in-time count, per 100,000 people	2020	178	455	0	-4.8%	↑	••	454	••	••
Housing Characteristics										
E06. Age of structure, % of total housing units built after 1980	2021	49.6%	49.4%	<u>-</u>	0.9%	↑	64.2%	43.2%	57.8%	60.4%
E07. Internet access, % of households with internet access at home	2021	92.6%	94.1%	•	1.6%	↑	92.3%	95.0%	95.2%	90.8%
Commuting Patterns										
E08. Long commute time, % of commuting workers traveling 60 minutes or more to work	2021	7.7%	7.2%	•	-1.0%	↑	9.5%	7.0%	4.7%	7.2%
E09. Driving alone to work, % of workers	2021	67.8%	65.3%	•	-0.2%	↑	69.7%	63.7%	70.2%	69.0%
E10. Public transportation usage, per capita annual unlinked trips	2020	17.7	37.2	•	-5.1%	\	2.8	50.9	9.0	10.2

Symbols: · Data not available; ○ HI better than the nation, ② No difference, ○ HI worse than the nation; ↑ HI improved, ↔ No change, ↓ HI worsened;

[■] Top-ranked county, ■ ■ Mid-ranked county, □ Bottom-ranked county, □ No difference

⁽¹⁾ Benchmark years annotated in appendix

E01. Rental cost burden

Percentage of renter-occupied housing units spending 30% or more of household income on rent

Why is this important?

Affordable housing is a significant factor in quality of life and attracting workers to a community. Affordable rental housing is an indicator of the households' ability to pay for one of the basic necessities of life. When rental housing becomes unaffordable – commonly defined as renters' spending more than 30% of their income on housing – renters may have inadequate funds available for other basic necessities and amenities, including food, clothing, transportation, and health care. On a greater scale, the lack of affordable housing leads to higher rental costs and makes home ownership inaccessible for most residents. At the same time, unaffordable housing may also lessen the ability of employers to recruit and retain employees and cause long commutes for workers.

How are we doing?

Over time, the percentage of renter-occupied housing units that spend 30 percent or more of household income on rent in Hawai'i and the nation had remained stable. In year 2021, Hawai'i's rental cost burden was about 53 percent and was about 47 percent for the nation. Hawai'i County had the lowest rental cost burden compared to the other counties at about 44 percent. The City and County of Honolulu had the highest rental cost burden at about 55 percent of its renter-households. Kaua'i County had the lowest rental cost burden across all year's analyzed except for year 2021 when Maui County had the lowest at under 53 percent.

In	dicator	EA1	Rental	anat	hurdon
ın	aucsiar		Renisi	CUSI	nuraen

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	49.3%	47.6%	47.9%	46.8%	46.1%	46.0%	46.2%	45.1%	47.4%
State of Hawai'i	53.5%	50.8%	52.6%	52.4%	51.5%	51.7%	48.5%	49.7%	53.4%
Hawai'i County	50.3%	48.8%	46.7%	45.5%	42.2%	41.1%	42.8%	46.2%	43.9%
C&C Honolulu	54.4%	53.5%	55.1%	55.4%	54.5%	55.2%	51.1%	52.0%	54.8%
Kaua'i County	46.8%	38.3%	43.8%	33.3%	45.3%	45.0%	38.3%	34.9%	53.4%
Maui County	53.5%	41.2%	46.3%	46.4%	44.3%	44.0%	42.3%	44.2%	52.9%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011,2013-2019, 2021
 U.S. Census Bureau. (n.d.). B25070: Gross rent as a percentage of household income in the past 12 months. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

E02. Housing cost burden

Percentage of owners with a mortgage spending 30% or more of household income on select monthly owner costs

Why is this important?

Affordable housing is an indicator of the households' ability to pay for one of the basic necessities of life, shelter. When housing becomes unaffordable – commonly defined as owners with a mortgage spending more than 30% of their income on housing – homeowners may have inadequate funds for other basic necessities and amenities, including food, clothing, transportation, and health care. The lack of affordable housing makes home ownership inaccessible for most residents. Further, it may lessen the ability of employers to recruit and retain employees and cause long commutes for workers.

How are we doing?

The housing cost burden was over 14 percentage points more prevalent among Hawai'i's homeowners who have a mortgage than their national counterparts. Both experienced declining rates over time, however, one percentage point more so for the nation on average annually. For year 2021, over 41 percent of Hawai'i's homeowners with a mortgage spent 30 percent or more of their household income on selected monthly owner costs. The City and County of Honolulu and Hawai'i County had the lowest rates, and Kaua'i County had the highest (45.7 percent).

Indicator E 0	2. Ho	using	cost	of	burden
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Area / Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021
United States	36.6%	33.7%	31.6%	30.7%	29.4%	28.1%	27.4%	27.6%	26.5%	27.2%
State of Hawai'i	49.1%	47.9%	43.5%	40.3%	39.8%	37.9%	38.8%	38.6%	40.9%	41.3%
Hawai'i County	49.9%	48.8%	47.6%	31.1%	35.9%	41.7%	38.1%	36.9%	37.2%	42.3%
C&C Honolulu	47.5%	45.8%	40.6%	40.5%	39.2%	37.0%	37.7%	38.0%	40.6%	40.6%
Kaua'i County	59.0%	54.4%	54.9%	51.2%	43.8%	42.9%	43.8%	37.5%	45.6%	45.7%
Maui County	52.4%	56.2%	49.3%	45.3%	46.0%	35.4%	43.7%	43.8%	45.8%	42.4%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available.

Data source/s:

• U.S./HI, 2011-2019, 2021

U.S. Census Bureau. (n.d.). B25091: Mortgage status by selected monthly owner costs as a percentage of household income in the past 12 months. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

E03. Home ownership

Percentage of owner-occupied housing units

Why is this important?

Home ownership is an important measure of personal assets and self-sufficiency for families and the community. A high proportion of home ownership improves neighborhood stability and community well-being. Stable home ownership requires a balance between (a) family income and (b) housing prices and financing costs.

How are we doing?

In Hawai'i, the home ownership rate was lower than in the nation by about three percentage points. However, the gap between the two narrowed as the nation saw decreasing home ownership rates and Hawai'i experienced rising rates at almost one percent average annual growth. The City and County of Honolulu had the lowest home ownership rate while Hawai'i County had a home ownership rate that was about nine percentage points higher than the state average.

Indicator E03. Home ownership

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	66.1%	64.9%	64.4%	63.9%	63.6%	63.8%	63.9%	64.1%	65.4%
State of Hawai'i	58.7%	57.6%	57.1%	56.9%	57.5%	58.1%	58.3%	60.2%	62.6%
Hawai'i County	65.9%	65.7%	65.8%	66.4%	66.6%	67.0%	66.2%	69.8%	73.4%
C&C Honolulu	56.9%	55.5%	54.9%	54.4%	55.0%	55.6%	55.4%	57.4%	59.3%
Kaua'i County	63.6%	62.6%	62.7%	61.6%	63.3%	63.0%	59.2%	67.4%	65.5%
Maui County	58.3%	58.1%	57.3%	57.7%	58.3%	59.3%	63.9%	60.8%	67.1%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013-2019, 2021
 U.S. Census Bureau. (n.d.). B25003: Tenure. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

E04. Overcrowded dwellings

Percentage of occupied housing units with 1.01 or more occupants per room

Why is this important?

This measure indicates the degree of overcrowding in housing units. Although there is no official definition of crowded units, people in the U.S. generally consider units with more than one occupant per room to be crowded. Overcrowded dwellings reflect a lack of affordable housing options relative to residents' income, which hinders quality of life.

How are we doing?

Hawai'i had over two times the percentage of overcrowded dwellings compared the nation at almost nine percent of occupied housing units. While the nation increased slightly in the percentage of overcrowded dwellings since year 2011 (0.2 percentage points), Hawai'i saw a slight decrease of 0.2 percentage points by year 2021. In year 2021, Kaua'i County had the lowest percentage of overcrowded dwellings (7.3 percent), while Maui County had the highest (11.1 percent).

Indicator E04. Overcrowded dwellings

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	3.2%	3.3%	3.3%	3.3%	3.3%	3.3%	3.4%	3.3%	3.4%
State of Hawai'i	8.9%	8.8%	8.8%	9.0%	9.0%	9.0%	8.6%	8.5%	8.7%
Hawai'i County	8.3%	8.0%	7.7%	7.4%	6.7%	6.4%	7.2%	7.5%	7.3%
C&C Honolulu	8.7%	8.6%	8.6%	9.0%	9.2%	9.4%	8.9%	8.5%	8.7%
Kaua'i County	8.9%	8.2%	8.0%	7.3%	7.8%	7.8%	10.1%	9.6%	7.3%
Maui County	11.1%	11.2%	11.4%	11.5%	11.2%	10.7%	8.1%	9.9%	11.1%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013-2019, 2021
 U.S. Census Bureau. (n.d.). B25014: Tenure by occupants per room. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

E05. Homelessness

Number of people who are homeless on a given day per 100,000 people

Why is this important?

This indicator assesses the capacity of individuals and families to have safe, decent, and affordable housing. Homelessness denies individuals and families the ownership and maintenance of home space and thus directly affects their lifestyle and quality of life. In general, homelessness is associated with risks that have negative consequences for personal well-being. At the same time, this indicator provides information on how the degree of homelessness in the community has changed over time and, therefore, provides crucial information on how the community raises social awareness of displacement as well as the availability of services and programs to prevent and alleviate homelessness.

How are we doing?

In year 2020, Hawai'i had 455 homeless per 100,000 people on any given day. That was 277 more homeless per 100,000 people on any given day than the nation. Hawai'i's number of homeless per 100,000 people on any given day decreased 18 percent since year 2016.

Indicator E05. Homelessness

Area / Year	2016	2017	2018	2019	2020
United States	170	169	169	173	178
State of Hawai'i	554	506	460	453	455
Neighbor Islands	684	515	462	452	457
C&C Honolulu	498	502	459	453	454

Technical notes:

There was a methodology change in the reporting Hawai'i's homelessness number at the county level and data prior to year 2016 is not directly comparable. The number of homeless people is a point-in-time count, which is an estimate of how many people are homeless at a given time. There are far more people who are homeless over the course of the year. The rate is calculated based on resident population.

- U.S., 2016-2020
 U.S. Department of Housing and Urban Development. (2018). 2007-2018 point-in-time estimates by CoC. *Annual homeless assessment report to Congress*. Retrieved from https://www.huduser.gov/portal/datasets/ahar.html
- HI, 2007–2020, Denominator State of Hawai'i Department of Business, Economic Development, and Tourism. (2019). Table 1.06: Resident population by county: 2000 to 2018. 2018 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

E06. Age of structure

Percentage of total housing units built after 1980

Why is this important?

Newer housing tends to have better amenities and are less costly to maintain. Importantly, several laws were enacted in the 1970's to improve the safety of residential buildings. Multifamily structures built before year 1980 in the City and County of Honolulu might not have a fire sprinkler system, as sprinklers only became mandatory for apartments in year 1975. Fire sprinklers can reduce the possibility of fires spreading from one apartment to another. At the federal level, the Toxic Substances Control Act (1976) allowed the Environmental Protection Agency to place restrictions on certain chemicals such as asbestos and lead-based paint, which were commonly used in homes. Asbestos is strongly linked to lung cancer and low levels of exposure to lead through ingestion can lead to learning disabilities and behavioral problems in children.

How are we doing?

In year 2021, Hawai'i had marginally fewer housing units built after year 1980 than the national average (49.4 percent compared to 49.6 percent). The City and County of Honolulu had smallest percentage of total housing units built after year 1980, at about 43 percent, while Hawai'i County had the highest at over 64 percent. Meaning, the City and County of Honolulu had more older housing units compared to the other counties, while Hawai'i County had the newest housing units.

Indicator E06. Age of structure

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	43.3%	44.3%	44.4%	45.1%	45.8%	46.4%	46.9%	47.4%	49.6%
State of Hawai'i	45.3%	45.7%	46.3%	46.3%	46.2%	46.9%	47.5%	45.8%	49.4%
Hawai'i County	62.7%	64.0%	62.3%	63.2%	63.9%	63.8%	65.8%	58.8%	64.2%
C&C Honolulu	37.2%	37.9%	37.9%	38.0%	38.7%	38.4%	40.4%	39.2%	43.2%
Kaua'i County	61.0%	55.4%	63.9%	61.7%	55.4%	65.2%	53.0%	58.8%	57.8%
Maui County	56.6%	57.2%	59.4%	59.8%	57.2%	58.6%	57.3%	55.6%	60.4%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013–2019, 2021
 U.S. Census Bureau. (n.d.). CP04: Comparative housing characteristics. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

E07. Internet access

Percentage of households with internet access at home

Why is this important?

Expanding internet access can lead to higher economic growth through improving connectivity among people, sharing of information and knowledge, and allowing faster and more convenient access to services. Internet access at home means household members can benefit from the internet at any time, without relying on accessing the internet at work, school, or other public spaces like the library. For example, with access to the internet at home, adults have the convenience of communicating via e-mail and paying bills online after business hours, while children can take advantage of online resources to help with homework.

How are we doing?

A higher percentage of households had internet access in Hawai'i than in the nation across the periods analyzed. Kaua'i County had the highest percentage of households with internet access amongst the counties. Maui and Hawai'i County's had lower internet access than the national average at 90.8 percent and 92.3 percent, respectively.

Indicator E07. Internet access

Area / Year	2013	2014	2015	2016	2017	2018	2019	2021
United States	78.6%	79.9%	81.5%	84.8%	86.7%	88.0%	89.1%	92.6%
State of Hawai'i	82.8%	84.0%	85.9%	87.6%	87.9%	88.5%	90.5%	94.1%
Hawai'i County	78.5%	77.6%	81.3%	82.1%	82.6%	79.7%	87.0%	92.3%
C&C Honolulu	84.2%	85.7%	87.1%	88.6%	89.0%	90.6%	91.8%	95.0%
Kaua'i County	80.1%	81.8%	85.0%	86.0%	85.7%	89.3%	92.7%	95.2%
Maui County	81.0%	82.9%	85.4%	89.5%	89.0%	87.7%	86.4%	90.8%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. There was no ACS data available for years prior to 2013.

Data source/s:

• U.S./HI, 2013–2019, 2021

U.S. Census Bureau. (n.d.). B28002: Presence and types of internet subscriptions in household. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

E08. Long commute time

Percentage of commuting workers who travel 60 minutes or more to work

Why is this important?

Commuting patterns play a major role in understanding the mobility and accessibility of residents and workers within the community. Increased travel time or long commutes may adversely affect personal lives (e.g., spending less time with families and volunteering in the community, or not getting the health benefits of walking or biking) and worker productivity due to the time lost in transit. Housing is intricately connected to the commuting patterns of households. People may choose a longer work commute in exchange for lower housing costs, to live in a preferred location, or to have specific housing amenities.

How are we doing?

In year 2021, for the first time since year 2013, the percentage of commuting workers who travel 60 minutes or more in Hawai'i was less than for the nation. Since year 2019 and due impacts from the COVID-19 pandemic, long commute times have declined. From year 2019 to year 2021, Hawai'i's long commute time fell by almost three percentage points. Hawai'i County had the longest commute times amongst the counties at almost ten percent of commuting workers who travel 60 minutes or more. While Kaua'i County reported the lowest percentage of long commute times.

Indicator E08. Long commute time

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	8.1%	8.1%	8.3%	8.5%	8.7%	8.9%	9.5%	9.8%	7.7%
State of Hawai'i	8.0%	8.0%	8.7%	9.3%	9.9%	10.1%	9.8%	10.3%	7.2%
Hawai'i County	9.8%	9.5%	9.7%	9.3%	10.1%	9.3%	9.3%	13.3%	9.5%
C&C Honolulu	8.5%	8.7%	9.4%	10.4%	11.0%	11.5%	11.1%	11.3%	7.0%
Kaua'i County	2.6%	3.8%	4.1%	4.5%	4.6%	4.7%	3.0%	2.4%	4.7%
Maui County	4.9%	4.3%	4.8%	5.0%	4.8%	4.9%	5.1%	4.1%	7.2%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013-2019, 2021
 U.S. Census Bureau. (n.d.). S0801: Commuting characteristics by sex. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

E09. Driving alone to work

Percentage of commuting workers who drive alone to work

Why is this important?

This indicator provides insight on automobile dependency in terms of driving alone to work. Taking public transportation, carpooling, walking, and cycling are alternative modes of transportation to driving alone, which can save money, relieve congestion, and improve air quality by taking cars off the road.

How are we doing?

In year 2021, Hawai'i had a lower percentage of workers who drove alone to work (65.3 percent) compared to the nation (67.8 percent). Due to impacts from the COVID-19 pandemic, from year 2019 to year 2021, driving along to work fell over 11 percent for the nation and almost six percent for Hawai'i. In year 2021, Kaua'i County had the highest percentage of people driving alone to work amongst the counties and the City and County of Honolulu had the least.

Indicator E09. Driving alone to work

Area / Year	2011	2013	2014	2015	2016	2017	2018	2019	2021
United States	76.1%	76.3%	76.5%	76.4%	76.4%	76.4%	76.3%	75.9%	67.8%
State of Hawai'i	66.6%	66.6%	66.4%	66.7%	66.6%	67.1%	67.3%	69.3%	65.3%
Hawai'i County	69.0%	71.4%	74.2%	74.4%	74.0%	73.8%	71.5%	69.6%	69.7%
C&C Honolulu	64.8%	64.7%	63.3%	64.0%	63.6%	64.0%	65.5%	67.2%	63.7%
Kaua'i County	77.6%	75.7%	83.2%	78.1%	79.0%	80.0%	69.4%	80.5%	70.2%
Maui County	70.2%	69.7%	69.7%	71.0%	72.2%	73.3%	72.8%	76.5%	69.0%

Technical notes:

U.S. Census Bureau, ACS annual data for year 2020 was not available. Data for year 2012 were not included due to space limitations, however, are not needed for comparison over time estimations.

Data source/s:

U.S./HI, 2011, 2013-2019, 2021
 U.S. Census Bureau. (n.d.). S0801: Commuting characteristics by sex. *American Community Survey 1-Year Estimates*. Retrieved from https://data.census.gov/.

E10. Public transportation usage

Annual unlinked trips, per person

Why is this important?

A robust public transportation system provides an alternative to private vehicle transportation. Without a robust public transportation system, those who are unable to afford a car or who cannot drive are limited in their ability to get to work, run errands, and engage in leisure activities. Public transportation can also help relieve traffic congestion and improve air quality by taking cars off the road.

How are we doing?

Hawai'i used public transportation more often than the national average for each year reported. During the COVID-19 pandemic from year 2019 to year 2020, there was about a 41 percent decline in public transportation usage for the nation and 22 percent decline for Hawai'i. The City and County of Honolulu was the main driver of Hawai'i's public transportation use, with about 51 unlinked passenger trips per person annually. Hawai'i County had the lowest unlinked passenger trips per person in year 2020, at about three unlinked passenger trips per person annually.

Indicator E10. Public transportation usage

Area / Year	2013	2014	2015	2016	2017	2018	2019	2020
United States	32.7	32.7	31.7	31.7	31.1	29.8	30.1	17.7
State of Hawai'i	••	51.0	46.8	46.8	49.7	48.9	47.7	37.2
Hawai'i County	••	5.6	4.8	4.8	4.8	4.6	3.3	2.8
C&C Honolulu	71.2	68.3	66.3	66.3	67.5	66.9	65.7	50.9
Kaua'i County	••	12.7	9.1	9.1	11.3	10.8	10.6	9.0
Maui County	17.6	17.2	12.0	12.0	14.4	13.3	12.4	10.2

Technical notes:

An unlinked passenger trip is the number of passengers who board public transportation vehicles; passengers are counted each time they board a vehicle, no matter how many transfers to other vehicles they use to travel to their destination. The national data includes all forms of public transportation, such as ferries and trains, whereas Hawai'i currently only has buses for public transportation. Because of this, state and national data might not necessarily be comparable. There is no data available prior to year 2016.

Data source/s:

• U.S., 2013-2020

U.S. Department of Transportation, Federal Transit Administration. (n.d.). Exhibit 2: Operating expenses and unlinked passenger trips: time series (includes rural and tribe data). *National transit summary and trends, various years*. Retrieved from https://www.transit.dot.gov/ntd/annual-national-transit-summaries-and-trends

- HI, 2013-2020
 - U.S. Department of Transportation, Federal Transit Administration. (n.d.). City and County of Honolulu Department of Transportation Services, County of Hawai'i Mass Transit Agency, County of Maui Dept. of Transportation, County of Kaua'i Transportation Agency, 2020 Annual agency profile. *NTD transit agency profiles, various years*. Retrieved from https://www.transit.dot.gov/ntd/transit-agency-profiles
- HI, 2013-2020, Denominator
 State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.).
 Table 1.06: Resident population by county: 2016 to 2020. 2021 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

F. SOCIAL DOMAIN AND INDICATOR

Hawai'i's social domain consists of 12 indicators within four dimensions: public safety, family relationships, community connectedness, and social participation.

In the social domain, Hawai'i fared better than the nation in six of the ten comparable indicators: violent crime rate, property crime, accident, homicide, and suicide death rate, drug related arrests, child abuse and neglect, and families regularly eating together. Hawai'i fared worse off than the nation in four of the ten comparable indicators: safe neighborhoods, idle youth, talking regularly with neighbors, and participation in volunteer activities.

For Hawai'i, eight of the twelve social domain indicators improved over time. The most improved indicator was the property crime rate, decreasing over five percent on average annually over time. The next two most improved social domain indicators at about two percent growth on average each year across time were: voted in elections and participated in volunteer activities. The regularly talking with neighbor's indicator worsened across time the most at about three percent on average per year.

Public safety: Hawai'i performed better than the nation in four of the five public safety indicators. Hawai'i had lower violent and property crimes, lower accident, homicides, and suicide deaths, and lower drug-related arrests compared to the nation. The largest gains over time were for decreased property crime. The largest losses over time were for accident, homicides, and suicide deaths, which grew almost two percent on average annually.

Family relationship: Hawai'i performed better than the nation within the family relationship indicators, with fewer unique and confirmed reports of child abuse and neglect compared to the nation and more families eating together regularly. Domestic abuse rates could not be compared to the nation, however, overtime Hawai'i decreased its domestic abuse rate by about 12 percent.

Community connectedness: Hawai'i was worse than the nation for both indicators in the community connectedness dimension, however worse by only about one percentage point for each. Regularly talking with neighbors in Hawai'i decreased around 23 percent since year 2008.

Social participation: Hawai'i participated in volunteer activities slightly less than the nation; however, participating in volunteer activities improved across time for both Hawai'i and the nation. In Hawai'i, registered voters who voted in elections grew over two percent on average annually over time.

County comparisons

- Hawai'i County performed mostly mid-ranked for the social domain indicators. Hawai'i
 County fared poorly in three of the eight comparable indicators: violent crime rate,
 accident, homicide, and suicide death rate, and domestic abuse. There were almost 200
 more domestic abuse cases per 100,000 people in Hawai'i County than in the other
 counties.
- The City and County of Honolulu outperformed the other counties in the social domain indicators and ranked highest amongst the counties for six of the eight comparable

- indicators: violent crime, accident, homicide, and suicide death rate, drug-related arrest, child abuse and neglect, domestic abuse, and idle youth. The City and County of Honolulu ranked lowest amongst the counties in property crime.
- Kaua'i County had the lowest property crime rate and the highest percentage of registered voters voting in the most recent election. Kaua'i County fared poorly compared to the other counties in two of the eight comparable indicators: child abuse and neglect, and idle youth.
- Maui County had more than 200 more drug-related arrests per 100,000 people than the other counties. Maui County had the lowest voter turnout amongst the counties.

Table 8. Social Domain: Most Recent Data and Findings

				Hawaiʻi,	Hawaiʻi: (Over time ⁽¹⁾		Cou	ınty	
Social Indicators	Year	U.S.	HI	compared to the nation	Average Annual Growth	Improved or Worsened	Hawai'i	Honolulu	Kauaʻi	Maui
Public Safety										
F01. Violent crime rate, per 100,000 people	2020	398.5	254.2		-0.4%	1	305.4	240.8	270.1	••
F02. Property crime rate, per 100,000 people	2020	2,025	1,958	•	-5.2%	1	1,986	2,538	1,474	
F03. Accident, homicide, and suicide death rate, per 100,000 people	2020	78.3	55.3	•	1.9%	4	59.4	54.5	59.2	57.6
F04. Drug-related arrests, per 100,000 people	2019	710.9	213.3	lacksquare	0.2%	↓	305.2	134.6	284.0	529.3
F05. Safe neighborhoods, % of families with children under 18 years old	2019- 2020	94.6%	94.0%	<u></u>	-0.5%	↓	• •	••	• •	• •
Family Relationship										
F06. Child abuse and neglect, per 1,000 children aged 17 and younger	2020	8.4	4.4	•	-1.3%	↑	7.2	3.0	7.4	5.7
F07. Domestic abuse, per 100,000 people	2020	••	343.5	• •	-1.2%	1	569.0	292.6	311.8	376.2
F08. Families eating together regularly, % of families with children under 18 years old	2019- 2020	75.2%	77.1%	•	1.8%	1	• •	••	••	• •
Community Connectedness										
F09. Idle youth, % of people aged 16-19	2016- 2020	5.0%	6.1%	<u></u>	-0.2%	↑	6.4%	5.2%	9.7%	9.6%
F10. Regularly talking with neighbors, % of people	2017	55.3%	55.2%	<u></u>	-2.9%	↓	••	••	••	••
Social Participation										
F11. Participated in volunteer activities, % of people 15 and older	2017	29.6%	28.3%	-	1.9%	1	••	••	••	• •
F12. Voted in elections, % of registered voters	2020	• •	48.4%	• •	-2.4%	↓	49.3%	48.9%	51.0%	45.7%

Symbols: · Data not available; ● HI better than the nation, ◎ No difference, ← HI worse than the nation; ↑ HI improved, ↔ No change, ↓ HI worsened;

[■] Top-ranked county, ■ ■ Mid-ranked county, □ Bottom-ranked county, □ No difference

⁽¹⁾ Benchmark years annotated in appendix

F01. Violent crime rate

Number of violent crimes per 100,000 people

Why is this important?

An important aspect of quality of life for every resident is being and feeling safe at home and in the community. Violent crimes not only cause physical, mental, economic, and psychological costs to the victims and the community, but also pose threats to public safety and individual freedom. Moreover, the presence of violent crimes reflects the lack of economic opportunities and the prevalence of lower education within the community, as well as the ineffectiveness of the public safety strategies that community and police authorities employ to prevent crimes. Lower violent crime rate indicates better public safety.

How are we doing?

Hawai'i is much safer than the nation when it comes to violent crime. Hawai'i's violent crime rate in year 2020 was about 254 violent crimes per 100,000 people, while the nation's violent crime rate was about 399 violent crimes per 100,000 people. In year 2020, Hawai'i County had the highest violent crime rate amongst the counties at about 305 violent crimes per 100,000 people. While the City and County of Honolulu had the lowest violent crime rate, at about 241 violent crimes per 100,000 people.

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Indicator	нин	Violont	crima	rata
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Area / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	404.5	387.1	387.8	369.1	361.6	373.7	397.5	394.9	383.4	380.8	398.5
State of Hawai'i	264.1	251.2	242.1	244.0	241.6	248.1	241.6	250.9	256.8	267.2	254.2
Hawai'i County	277.3	262.4	222.5	285.6	235.8	204.5	235.2	253.5	245.2	180.5	305.4
C&C Honolulu	266.4	245.0	238.8	230.7	230.1	245.7	238.3	247.2	257.4	280.7	240.8
Kaua'i County	366.0	347.6	305.8	236.9	257.4	190.0	236.1	254.7	275.3	325.5	270.1
Maui County	190.2	234.9	258.4	279.2	311.9	339.5	271.6	267.8	259.7	267.6	

Technical notes:

The violent crime index is comprised of homicide, rape, robbery, and assault. Please note that in 2013, the FBI's Uniform Crime Reporting (UCR) Program revised its definition of rape. For consistency, this table uses the legacy definition of rape.

- U.S., 2010-2020
 - U.S. Department of Justice, Federal Bureau of Investigation. (n.d.). Table 1: Crime in the United States by volume and rate per 100,000 inhabitants, 2010–2020. *Crime in the United States*, 2020. Retrieved from <a href="https://ucr.fbi.gov/crime-in-the-u.s/2020/cr
- HI, 2010–2019, Numerator State of Hawai'i Department of the Attorney General, Crime Prevention and Justice Assistance Division. (n.d.). Uniform Crime Reporting Program data: state of Hawai'i

1975-2019. *Crime in Hawai'i – Uniform crime reports*. Retrieved from http://hawaii.gov/ag/cpja/main/

- HI, 2010-2020, Denominator
 State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.).
 Table 1.06: Resident population by county: 2000 to 2021. 2021 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

F02. Property crime rate

Number of property crimes per 100,000 people

Why is this important?

This indicator measures the security of residents and has a direct impact on the overall perceived "livability" of a community. Property crime causes people to feel violated and insecure. It is also an indicator of social and economic stress in the community. A lower property crime rate makes citizens feel safer and more secure and also attracts business and residential development. However, the increase in property crime rate results in a negative perception of the safety of the community, which in turn makes residents feel more anxious and decreases property values.

How are we doing?

In contrast to violent crime, property crime in Hawai'i for year's 2010 to 2019 occurred at a higher rate than the national average. This trend reversed in the year 2020, when Hawai'i's property crime rate declined to 1,958 property crimes per 100,000 people. Amongst the counties, the City and County of Honolulu had the highest property crime rate in year 2020. Kaua'i County had the lowest property crime rate at 1,479 property crimes per 100,000 people.

Indicator	F02.	Pro	nerty	crime	rate
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Area / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	2946	2905	2868	2734	2574	2501	2452	2363	2210	2110	2025
State of Hawai'i	3348	3180	3082	3189	3179	3177	2967	2844	2893	2855	1958
Hawai'i County	2835	2517	2808	2727	3429	3374	2459	2673	2453	2099	1989
C&C Honolulu	3311	3164	2985	3193	3092	3132	3054	2804	2978	3017	2538
Kaua'i County	3684	3866	3723	3693	2875	2227	2068	2513	2649	2466	1479
Maui County	4041	3774	3725	3495	3535	3631	3453	3426	3035	2991	

Technical notes:

The property crime index includes crimes that only involves the taking of money or property, and does not involve force or threat of force against a victim. Property crimes include burglary, larceny, theft, motor vehicle theft, arson, shoplifting, and vandalism. Robbery is classified as a violent crime due to the use or threat of violence.

- U.S. HI, 2010-2020
 - U.S. Department of Justice, Federal Bureau of Investigation. (n.d.). Table 1: Crime in the United States by volume and rate per 100,000 inhabitants, 2010–2020. *Crime in the United States*, 2020. Retrieved from <a href="https://ucr.fbi.gov/crime-in-the-u.s/2020/cr
- HI, 2010–2019, Numerator State of Hawai'i Department of the Attorney General, Crime Prevention and Justice Assistance Division. (n.d.). Uniform Crime Reporting Program data: state of Hawai'i 1975-2019. *Crime in Hawai'i – Uniform crime reports*. Retrieved from http://hawaii.gov/ag/cpja/main/
- Kaua'i HI, 2020, Numerator

State of Hawai'i Department of the Attorney General, Research & Statistics Branch Crime Prevention & Justice Assistance Division. (2021). *Crime In Kauai County, 2020: A Review Of Uniform Crime Reports*. Retrieved from https://ag.hawaii.gov/cpja/files/2021/11/Crime-in-Kauai-County-2020.pdf

- HI, 2020, Denominator
 State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.).
 Table 1.06: Resident population by county: 2000 to 2021. 2021 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

F03. Accident, homicide, and suicide death rate

Number of deaths by accident, homicide, or suicide per 100,000 people

Why is this important?

This indicator measures premature deaths caused by accidents, homicides, and suicides. A lower rate reflects the effectiveness of public safety programs, such as roadway safety, home safety, neighborhood watch, drug control, and gun control. The major cause of accident deaths is motor vehicle accidents; other common causes are overdoses of medicine or drugs, falls, fire, and drowning. Homicide events reflect social and economic conditions of a community, including poverty, social isolation, availability of alcohol establishments and drugs, and firearm accessibility. Major risk factors for suicide are mental and substance-abuse disorders. Over half of the homicides and suicides occur through the use of firearms.

How are we doing?

The likelihood of dying from accident, homicide, or suicide was lower in Hawai'i compared to the nation (about 55 deaths versus over 78 deaths per 100,000). In both Hawai'i and the nation, this figure increased since year 2010 by about 20 percent and 43 percent, respectively. Hawai'i County had the highest count at over 59 deaths per 100,000 and City and County of Honolulu had the lowest at under 55 deaths per 100,000.

Indicator F03. Accident, homicide, and suicide death rates

Area / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	54.8	56.1	56.3	56.5	57.9	61.5	66.4	68.9	67.6	68.7	78.3
State of Hawai'i	46.0	47.5	44.3	43.8	45.5	47.3	49.7	52.6	52.1	56.7	55.3
Hawai'i County	49.5	56.0	61.2	62.3	48.8	56.5	58.0	60.1	69.9	68.3	59.4
C&C Honolulu	44.4	44.0	39.5	40.9	42.2	44.4	47.4	50.6	48.2	52.9	54.5
Kaua'i County	58.0	47.8	49.7	29.8	46.4	45.3	64.3	65.6	63.8	62.8	59.2
Maui County	45.6	60.5	52.3	47.3	62.2	58.7	51.3	53.0	50.6	65.0	57.6

Technical notes:

ICD-10 codes for accidents, homicides, and suicides are V01-V99 (transport accidents), W00-X59 (other external causes of accidental injury), X60-X84 (intentional self-harm), and X85-Y09 (assault). State and county data are based on the place of residence of the deceased persons.

Data source/s:

• U.S./HI, 2007–2020

Centers for Disease Control and Prevention, National Center for Health Statistics. (n.d.). Underlying cause of death, 1999-2020. *Detailed mortality*. CDC Wonder. Retrieved from https://wonder.cdc.gov/

F04. Drug-related arrests

Number of drug-related arrests per 100,000 people

Why is this important?

This indicator measures the number of arrests for drug-related violations, including drug manufacturing, sale, illicit possession of drugs, and drug trafficking for both adults and juveniles. The number of arrests is an indicator of the police response to drug law violations, and the extent and prevalence of drug use within a community. This indicator is also vital in assessing the effort of the state in implementing effective drug-use prevention and early intervention programs within the community. Drug dependency is often associated with various public health problems and safety concerns such as suicide, homicide, burglary, theft, and property crimes.

How are we doing?

Hawai'i consistently had around 500 less drug-related arrests than the nation each year reported. In year 2019, Hawai'i had 213 drug-related arrests per 100,000 people, while there were 711 drug-related arrests per 100,000 people for the nation. Also, for year 2019, Maui County had the highest drug-related arrests at 529 per 100,000 people, while the City and County of Honolulu had the lowest at 135 drug-related arrests per 100,000 people.

Indicator	F04.	Drug-rel	ated	arrests
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Area / Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	835	812	748	766	789	765	711	774	813	815	711	• •
State of Hawai'i	208	205	201	210	120	120	208	250	192	217	213	••
Hawai'i County	362	351	369	295	312	294	309	264	342	315	305	329
C&C Honolulu	129	132	126	132	117	120	107	100	98	145	135	96
Kaua'i County	266	247	308	266	234	242	263	324	242	260	284	254
Maui County	490	467	418	561	675	687	668	497	544	503	529	• •

Technical notes:

Data include drug-related arrests due to drug manufacturing, sale, illicit possession of drugs, and drug trafficking for both adults and juveniles.

- U.S., 2010-2020
 - U.S. Department of Justice, Federal Bureau of Investigation. (n.d.). Table 1: Crime in the United States by volume and rate per 100,000 inhabitants, 2010–2020. *Crime in the United States*, 2020. Retrieved from <a href="https://ucr.fbi.gov/crime-in-the-u.s/2020/cr
- HI. 2010–2019
 - State of Hawai'i Department of the Attorney General, Crime Prevention and Justice Assistance Division. (n.d.). Uniform Crime Reporting Program data: state of Hawai'i 1975-2019. *Crime in Hawai'i Uniform crime reports*. Retrieved from http://hawaii.gov/ag/cpja/main/
- Kaua'i HI, 2020, Numerator

State of Hawai'i Department of the Attorney General, Research & Statistics Branch Crime Prevention & Justice Assistance Division. (2021). *Crime In Kauai County, 2020: A Review Of Uniform Crime Reports*. Retrieved from https://ag.hawaii.gov/cpja/files/2021/11/Crime-in-Kauai-County-2020.pdf

- HI, 2020, Denominator
 State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.).
 Table 1.06: Resident population by county: 2000 to 2021. 2021 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

F05. Safe neighborhoods

Percentage of families with children under 18 years old who report living in a safe neighborhood

Why is this important?

This indicator provides a measure of the general sense of safety and concern of families about their neighborhoods. Living in a safe neighborhood is crucial to one's quality of life in a community. It influences families' decision to engage in community activities and allow children to play outdoors. On the other hand, crime rates are low in neighborhoods where residents participate in community activities and where social ties are tight. A strong neighborhood identity gives a sense of belonging, a shared respect for neighborhood rules, a greater web of acquaintances, more capacity for collective action, and an increased sense of safety in public places. As a result, these families have a better overall quality of life, a better sense of control, and an effective outlet for concerns.

How are we doing?

For year's 2019 to 2020, the percentage of families with children under 18 years old who reported living in a safe neighborhood was slightly lower in Hawai'i than in the nation, 94.4 percent compared to 94.6 percent.

Indicator F05. Safe neighborhoods

Area / Year	2016-2017	2017-2018	2018-2019	2019-2020
United States	94.5%	95.3%	95.0%	94.6%
State of Hawai'i	95.3%	96.2%	95.0%	94.0%

Technical notes:

The National Survey of Children's Health (NSCH) was redesign in 2016, data prior to 2016 is thus not comparable. County data not available.

Data source/s:

• U.S./HI, 2016-2020

Data Resource Center for Child and Adolescent Health. (n.d.) *National Survey of Children's Health (2016 - present) (NSCH)*. Interactive data query. Retrieved from https://www.childhealthdata.org/browse/survey/

F06. Child abuse and neglect

Number of unduplicated, confirmed reports of child abuse and neglect per 1,000 children

Why is this important?

This indicator provides information on the well-being of children, who represent the community's future. Child abuse and neglect have intense, long-term impacts on the lives of children resulting in emotional, learning, and behavioral problems. It also adversely affects the community by increasing strain on police time and medical resources; and creating potential dangers in the community, since children who experience abuse are more likely to repeat the cycle of violence into the next generation. The abuse and neglect of children is often linked to parental drug and alcohol abuse, social isolation, domestic violence, and family's financial stress. A higher rate indicates a need for more resources for early intervention strategies targeting substance abuse, mental health concerns, family violence, and poverty.

How are we doing?

Hawai'i's child abuse and neglect rate was lower than the national average by almost half. In year 2020, Hawai'i had 4.4 unduplicated and confirmed reports of child abuse and neglect per 1,000 children, compared to 8.4 nationwide. The rate was relatively stable for both Hawai'i and the nation. The City and County of Honolulu had the lowest rate in the state of child abuse and neglect, at 3 reports per 1,000 children. Hawai'i and Kaua'i County's had the highest child abuse and neglect rate at over 7 reports per 1,000 children.

Indicator	F06.	Child	abuse	and	neglect
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Area / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
United States	9.3	9.2	9.2	8.8	9.1	9.2	9.1	9.1	9.2	8.9	8.4
State of Hawai'i	5.0	4.6	4.4	4.2	4.4	4.9	4.3	4.2	4.2	4.5	4.4
Hawai'i County	7.2	7.6	7.1	6.6	7.9	9.8	8.0	8.4	8.0	10.7	7.2
C&C Honolulu	4.2	3.6	3.4	3.5	3.3	3.5	3.3	2.8	3.0	3.3	3.0
Kaua'i County	5.3	5.8	6.3	5.1	6.7	6.8	6.1	4.8	5.8	5.5	7.4
Maui County	7.4	6.0	6.4	5.6	6.2	7.2	5.6	6.7	5.7	4.0	5.7

Technical notes:

Rate is calculated based on annual unduplicated and confirmed reports for children under age 18.

- U.S., 2010–2020
 - U.S. Department of Health and Human Services, Administration for Children and Families. (n.d.). Child victims. *Child maltreatment, various years*. Retrieved from https://www.childtrends.org/publications/state-level-data-for-understanding-child-welfare-in-the-united-states
- HI, 2010–2020 State of Hawai'i Department of Human Services; Audit, Quality Control and Research Office. (n.d.). Intakes and children reported by disposition, by county. *A statistical report* on child abuse and neglect in Hawai'i, various years. Retrieved from https://humanservices.hawaii.gov/reports/child-abuse-and-neglect-reports/

• U.S., 2010–2020, Denominator State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.). Research & Economic Analysis. *Economic Data Warehouse*. Retrieved from https://dbedt.hawaii.gov/economic/datawarehouse/

F07. Domestic abuse

Number of domestic abuse protective orders filed per 100,000 people

Why is this important?

This indicator measures domestic abuse as reflected in the number of protective orders filed with family courts. Domestic abuse is a behavior (emotional, verbal, physical, or sexual) of establishing power and control over a spouse, domestic partner, or intimate partner through fear, intimidation, and use of violence. Domestic abuse has negative impacts on people in the community, especially women and children. Children in abusive relationships may have difficulty in their daily activities and interactions, personal relationships, and poor physical and mental health. In general, domestic abuse endangers the physical and emotional well-being of victims and can have lasting negative effects. This can also lead to homelessness and poverty if the abused flees the dangerous environment.

How are we doing?

For years 2010 through 2020, domestic abuse in Hawai'i trended downward. Each year analyzed, Hawai'i County had the highest rate of domestic abuse protective orders filed with the courts per 100,000 people, with 569 filed in year 2020. The City and County of Honolulu regularly had the lowest domestic abuse with about 293 domestic abuse protective orders filed in year 2020.

Indicator F07. Domestic abuse

Area / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
State of Hawai'i	387.7	374.7	374.2	376.0	382.7	382.0	368.8	378.3	364.9	350.6	343.5
Hawai'i County	708.4	683.2	710.0	718.1	746.4	733.4	644.0	632.6	593.3	560.4	569.0
C&C Honolulu	309.6	300.6	295.1	292.2	299.6	294.3	300.4	325.5	312.3	296.6	292.6
Kaua'i County	486.5	462.5	430.9	396.2	409.5	405.2	448.5	398.4	419.1	418.3	311.8
Maui County	443.2	425.7	436.8	473.2	442.8	481.6	415.4	378.0	373.8	382.1	376.2

Technical notes:

Court data for the City and County of Honolulu include the island of O'ahu and the settlement of Kalawao on Moloka'i. National data were unavailable.

- HI, 2010–2020
 Hawai'i State Judiciary. (n.d.). Annual report statistical supplement, various years.
 Retrieved from
- https://www.courts.state.hi.us/news_and_reports/reports/annual_report_stat_sup_archive
- HI, 2010–2020, Denominator
 State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.).
 Table 1.06: Resident population by county: 2010 to 2021. 2021 State of Hawai'i data book: A statistical abstract. Retrieved from http://dbedt.hawaii.gov/economic/databook/

F08. Families eating together regularly

Percentage of families with children under 18 years old eating together 4 or more days each week

Why is this important?

This indicator assesses the quality time that families spend together. Regular mealtimes present opportunities for learning and communicating. They also strengthen family ties by providing family members with time to listen and contribute to discussions and allowing children to practice new language and communication skills. Eating together regularly also promotes a sense of stability and harmony by allowing family members to discuss concerns or develop strategies to tackle issues they are facing, coordinate plans, and share good news. In addition, regular family mealtimes create a sense of routine for children and youth, and are associated with positive outcomes such as high school achievement and reduced risk for substance use and delinquent behaviors.

How are we doing?

Over three quarters of Hawai'i's families (77.1 percent) regularly ate together four or more days each week during year's 2019 to 2020. Families eating together regularly increased for both Hawai'i and the nation, more so for Hawai'i.

Indicator F08. Families eating together regularly

Area / Year	2016-2017	2017-2018	2018-2019	2019-2020
United States	73.0%	73.3%	73.6%	75.2%
State of Hawai'i	73.0%	77.2%	75.9%	77.1%

Technical notes:

The National Survey of Children's Health (NSCH) was redesign in 2016, data prior to 2016 is thus not comparable. The NSCH asked parents: "During the past week, on how many days did all the family members who live in the household eat a meal together?" The responses were separated into four intervals: no days, 1-3 days, 4-6 days, and every day. Responses of 4-6 days and everyday were considered "eating together regularly".

Data source/s:

• U.S./HI, 2016-2020

Child and Adolescent Health Measurement Initiative NSCH interactive data query. *National Survey of Children's Health, various years*. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved www.childhealthdata.org.

F09. Idle youth

Percentage of people aged 16-19 who are not attending school and not in the labor force

Why is this important?

This indicator assesses one aspect of the disconnected youth by measuring youth who do not finish school as well as youth who finish school but cannot attach to the labor force. The weak links between school and work that lead to idle youth have negative impacts on individuals as well as the wider community, such as lower lifetime earnings, increased poverty, homelessness, and criminal activity. Idle youth are often found in disadvantaged communities and among the youth who lack positive adult role models in their lives. This indicator also reflects the unavailability of jobs in the community and the weaknesses of the educational system in preparing and encouraging youth with general high school backgrounds for employment or college education.

How are we doing?

Compared to the nation, Hawai'i had a higher percentage of youth age 16 to 19 who are not in school or in the labor force. For year's 2016 to 2020, about six percent of 16 to 19-year-olds in Hawai'i were idle compared to five percent in the nation. During the same period, Kaua'i and Maui County's had the highest percentage of idle youth at almost ten percent of people aged 16-19. The City and County of Honolulu had the least percent of idle youth at about five percent.

Indicator F09. Idle youth

Area / Year	2006- 2010	2007- 2011	2008- 2012	2009- 2013	2010- 2014	2011- 2015	2012- 2016	2013- 2017	2014- 2018	2015- 2019	2016- 2020
United States	5.4%	5.4%	5.4%	5.3%	5.2%	5.0%	4.9%	4.8%	4.8%	4.8%	5.0%
State of Hawai'i	6.2%	6.3%	7.0%	6.8%	6.6%	6.2%	6.1%	6.2%	5.6%	5.4%	6.1%
Hawai'i County	3.2%	5.4%	8.2%	8.0%	10.7%	10.5%	10.7%	9.3%	8.0%	5.5%	6.4%
C&C Honolulu	6.4%	6.6%	6.9%	6.8%	6.1%	5.5%	4.8%	4.9%	4.3%	5.4%	5.2%
Kaua'i County	5.9%	7.1%	5.8%	5.4%	6.4%	7.7%	8.7%	11.3%	11.2%	11.6%	9.7%
Maui County	9.0%	5.9%	6.2%	5.8%	4.6%	4.6%	7.2%	8.4%	8.4%	8.2%	9.6%

Technical notes:

Data are 5-year averages.

Data source/s:

• U.S./HI, 2006-2020

U.S. Census Bureau. (n.d.). B14005: Sex by school enrollment by educational attainment by employment status for the population 16 to 19. *American Community Survey 5-Year Estimates*. Retrieved from https://data.census.gov/.

F10. Regularly talking with neighbors

Percentage of respondents who talk with neighbors at least a few times a month

Why is this important?

This indicator provides information on the availability of social interaction in neighborhoods, reflecting a sense of social connectedness, security, and trust. Personal happiness and perceived quality of life are closely connected to the level of community social connectedness and trust. Families that lack a sense of social trust tend to be isolated and more vulnerable to stress and often cope poorly when problems occur.

How are we doing?

The percentage of respondents who talk with their neighbors at least a few times a month was similar in Hawai'i and the nation, at about 55 percent in year 2017. There was a decline in the percentage of people who regularly talk with their neighbors for both Hawai'i and the nation.

Indicator F10. Regularly talking with neighbors*

Area / Year	2008	2009	2010	2011	2013	2017
United States	71.4%	68.3%	67.9%	68.1%	65.8%	55.3%
State of Hawai'i	71.8%	65.1%	67.6%	66.5%	65.5%	55.2%

Technical notes:

The data comes from the civic engagement supplement from the Current Population Survey. The survey question is administered to somewhat different populations for different years, so the indicator might not be directly comparable across multiple years. The 2008 data are for all persons age 15 and older. Data for 2009 to 2013 are for adults age 18 and older, though the question is not necessarily distributed to all households. The 2017 data are for persons age 16 and older. There has not been updated data since year 2017.

Data source/s:

U.S./HI, 2008, 2009, 2010, 2011, 2013, 2017
 Flood, S., King, M., Rodgers, R., Ruggles, S., and Warren, J.R. (n.d.). Integrated Public Use Microdata Series. *Current Population Survey: Version 6.0 [dataset]*. Minneapolis, MN: Minnesota Population Center. Retrieved from https://cps.ipums.org/cps/

F11. Participated in volunteer activities

Percentage of people age 15 and older who participated in volunteer activities

Why is this important?

This indicator provides information on how residents extend themselves outside of their social systems and express their social responsibility in contributing their time and money to the church, charity, or community through unpaid, voluntary service. Volunteerism meets many important needs in the community. On a greater scale, volunteer activities promote a sense of belonging for everyone in the community as they engage residents in the productive use of their leisure time and strengthen their values of responsibility to and trust in others. The more people feel connected to the community, the more likely they will give to and share with the community. Moreover, parents engaging in volunteer work convey to their children the significance of civic duty and of contributing to the well-being of the community.

How are we doing?

The percentage of people age 15 and older in Hawai'i who participated in volunteer activities was regularly below the national average. For year 2017, about 28 percent of people age 15 and older volunteered in Hawai'i, compared to about 30 percent for the nation. Volunteering declined for both Hawai'i and the nation.

Indicator F11. Participated in volunteer activities

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2017
United States	28.3%	28.4%	28.8%	28.0%	28.4%	28.1%	27.0%	26.8%	26.0%	29.6%
State of Hawai'i	23.5%	23.3%	25.9%	22.9%	21.0%	25.9%	22.6%	23.5%	21.5%	28.3%

Technical notes:

Data includes all people aged 15 and older who indicated they spent time doing volunteering activities for any organization in the past year. The data come from the volunteer supplement of the Current Population Survey. There has not been updated data since year 2017.

Data source/s:

• U.S./HI, 2007-2015, 2017

Flood, S., King, M., Rodgers, R., Ruggles, S., and Warren, J.R. (n.d.). Integrated Public Use Microdata Series. *Current Population Survey: Version 6.0 [dataset]*. Minneapolis, MN: Minnesota Population Center. Retrieved from https://cps.ipums.org/cps/

F12. Voted in elections

Percentage of registered voters voting

Why is this important?

This indicator reflects community participation and is often associated with other forms of good citizenship and community engagement, such as philanthropy and community activism. As an element of political participation, exercising the right to vote is one of the most important rights available to citizens in a democratic society that measures civic interest and involvement and the public's optimism regarding their impact on governmental decision-making.

How are we doing?

In year 2022, about 48 percent of registered voters voted in Hawai'i during the mid-term elections, this was about an eight percent decrease from the previous mid-terms in year 2018. Kaua'i County regularly had the highest turnout rates each election year amongst the counties and by year 2020 turnout was at about 72 percent. Maui County had the lowest turnout rates at about 66 percent.

Indicator F12. Voted in elections

Area / Year	2012	2014	2016	2018	2020	2022
State of Hawai'i	61.9%	52.3%	58.4%	52.7%	69.6%	48.4%
Hawai'i County	61.2%	47.7%	52.4%	51.5%	69.6%	49.3%
C&C Honolulu	62.9%	52.8%	58.5%	52.5%	70.1%	48.9%
Kaua'i County	62.9%	57.4%	61.4%	58.1%	72.1%	51.0%
Maui County	56.8%	52.7%	56.4%	52.4%	66.4%	45.7%

National election turnout rates from the U.S. Census Bureau and other nongovernmental sources used different methodology and are not comparable with the official election data. Hawai'i data provided county-level data, but national data did not. A similar measure of voter participation, voting-eligible population turnout, shows that Hawai'i's turnout of about 41 percent in 2022 was about two percentage points higher than the previous mid-term elections in year 2018. Compared to the nation in year 2022, Hawai'i had about five percentage points less eligible population voter turnout.

Indicator F12b. Voting-eligible population turnout

Area / Year	2012	2014	2016	2018	2020	2022
United States	58.6%	36.7%	60.1%	49.4%	66.8%	46.4%
State of Hawai'i	44.5%	36.5%	43.2%	38.7%	57.5%	40.8%

Technical notes:

Data are based on certified, official, or final records. The voting-eligible population is the voting-age population less the non-citizen population and ineligible felon population.

- HI, 2012, 2014, 2016, 2018, 2020, 2022 State of Hawai'i Office of Elections. (n.d.). General election, final summary report, statewide and county summaries. *Results, general election, certified reports*. Retrieved from https://elections.hawaii.gov/election-results/
- U.S./HI, 2012, 2014, 2016, 2018, 2020, 2022 United States Elections Project. (n.d.) Voter turnout. *General election state turnout rates, various years*. Retrieved from https://www.electproject.org/home

APPENDIX: QOL INDICATORS OVER TIME ANALYSIS

Table	Indicator	Over-time Benchmark Year	Over-time Ending Year
A01	Per capita income	2011	2021
A02	Poverty rate	2010	2020
A02b	Supplemental poverty measure	2013-2015	2019-2021
A03	Households receiving SNAP/food stamps	2011	2021
A04	Gini index	2011	2021
A05	Income share of households in top 20% income group	2011	2021
A06	Economic dependency ratio	2011	2021
A07	Unemployment rate	2011	2021
A08	Median earnings	2011	2021
A09	Usual hours worked per week	2011	2021
B01	Less than high school degree	2011	2021
B02	Bachelor's degree or higher	2011	2021
B03	Meeting Hawai'i standards in math	SY 2014-2015	SY 2021-2022
B04	Meeting Hawai'i standards in language arts	SY 2014-2015	SY 2021-2022
B05	At or above 8th-grade proficiency in math	SY 2010-2011	SY 2020-2021
B06	At or above 8th-grade proficiency in reading	SY 2010-2011	SY 2020-2021
B07	On-time graduation	Class of 2011	Class of 2021
B08	SAT score of college-bound seniors	2012	2022
B09	College-going rate	Class of 2015	Class of 2021
B10	Lifelong learning	2011	2021
C01	Unhealthy air quality days	2011	2021
C02	Surface water advisory days	2017	2021
C03	Solid waste generated	FY 2011	FY 2021
C04	Toxic releases	2011	2021
C05	Acres of parks and historic sites	2011	2021
C06	Renewable energy	2011	2021
C07	Water consumption	2011	2021
C08	Energy consumption	2010	2020
C08b	Annual per capita electricity consumption	2011	2021
C09	Solid waste recycled	FY 2011	FY 2021
C10	Wastewater reused	2015	2021
D01	Life expectancy at birth	2015-2017	2018-2020
D02	Infant mortality	2007-2009	2017-2019
D03	Cardiovascular disease death rate	2008-2010	2018-2020
D04	Cancer death rate	2010	2020
D05	Diabetes death rate	2010	2020
D06	Good or better health	2011	2020
D07	Frequent mental distress	2018	2020

Table	Indicator	Over-time Benchmark Year	Over-time Ending Year
D08	Frequent physical distress	2018	2020
D09	Obesity	2011	2020
D10	Smoking	2011	2020
D11	Binge drinking	2011	2020
D12	Immunization rate	2011	2018
D13	Physical activity	2011	2019
D14	Fruit and vegetable consumption	2011	2019
D15	Adults without health insurance	2011	2020
D16	Children without health insurance	2011	2021
D17	Home- and community-based service expenditures	FY 2011	FY 2019
E01	Rental cost burden	2011	2021
E02	Housing cost burden	2011	2021
E03	Home ownership	2011	2021
E04	Overcrowded dwellings	2011	2021
E05	Homelessness	2016	2020
E06	Age of structure	2011	2021
E07	Internet access	2013	2021
E08	Long commute time	2011	2021
E09	Driving alone to work	2011	2021
E10	Public transportation usage	2013	2020
F01	Violent crime rate	2010	2020
F02	Property crime rate	2010	2020
F03	Accident, homicide, and suicide death rate	2010	2020
F04	Drug-related arrests	2009	2019
F05	Safe neighborhoods	2016-2017	2019-2020
F06	Child abuse and neglect	2010	2020
F07	Domestic abuse	2010	2020
F08	Families eating together regularly	2016-2017	2019-2020
F09	Idle youth	2006-2010	2016-2020
F10	Regularly talking with neighbors	2007	2017
F11	Participated in volunteer activities	2009	2019
F12	Voted in elections	2010	2020
F12b	Voting-eligible population turnout		

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