Quality of Life in Hawai‘i: 2019 Update

May 2020

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

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

Tables

Figures

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. Accordingly, this report provides an update to the 2009 report. This report consists mainly of updates to the indicator data from the 2009 report, but also updates indicators that are less relevant or have limited post-2009 data availability and includes new indicators that were not readily available before.

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, Michalos, Ferriss, Easterlin, Patrick, & Pavot, 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: An 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 2009 report, allowing stakeholders to assess how the community's QOL has evolved.

Structure of Report

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

- *Chapter 2* presents the QOL framework, indicator selection criteria, data collection and analysis methods, and data limitations.

- *Chapter 3* summarizes findings on QOL in Hawai‘i in terms of its relative standing to the national average, progress over time, and variation across counties.

- *Chapters 4 to 9* focuses on one QOL domain per chapter 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 U.S. and for the state and counties of Hawai‘i, technical notes, and data sources.

- The *Appendix* presents 27 indicators for which confidence intervals were available from their 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., 6 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, 4 major measurement dimensions for each domain (for a total of 24 dimensions across the 6 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 69, 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 2 and 6 indicators in each domain-dimension. Tables 3 to 8 in the following sections of this report contain the list of indicators by the 6 domains.

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

Domain and Dimension	No. of indicators
A. Economic	**9**
1. 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**
1. 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	***69***

Data Collection

Most of the data comes from datasets and published statistics from governmental agencies and nonprofit organizations. In most cases, the data come from the same source as the 2009 report; however, some agencies update their statistics, so data in this report for earlier years might not have the same values as the data in the 2009 report.

One of the main data sources in the 2009 report, American FactFinder, which contains the Census Bureau's tabulations of the American Community Survey responses, will be discontinued in Spring 2020. The tabulations are being moved to a new website. Unfortunately for comparison

purposes, the new website will not contain 3-year (2005-2007) tabulations as found in the 2009 report. The earliest tabulations are for 2006-2010. There have been no major changes to the 2005-2007 data in American FactFinder, but to facilitate replicability of the results in this report after Spring 2020, the base year for indicators using American Community Survey responses will be 2006-2010.

For two indicators (lifelong learning and idle youth), this report uses the same data source as in the 2009 report – the American Community Survey – but uses calculations tabulated by the Census Bureau instead of author tabulations, in order to obtain individual county-level data for Kauaʻi County and Maui County. However, the tabulations available from the Census Bureau are not directly comparable to the results from the 2009 report, as the age ranges used in the Census Bureau's tabulations are different from the age ranges used in the 2009 report; comparable data are available for 2006-2010 provided, though, and those values are presented to allow for comparisons over time.

Annual data for the indicators were collected for the nation and for the state and counties of Hawaiʻi from 2007 or 2008 (when available), depending on the latest year reported in the 2009 report, to the most current available year. When sample sizes were small for a given year, a five-year average was calculated to minimize unreliability in measurement (e.g., data for Kauaʻi County from the American Community Survey). For some administrative data, the data are for fiscal years or school years, as opposed to calendar years; this is noted for the indicators that are not aggregated by calendar year.

Data Analysis

QOL analysis was conducted at the indicator, dimension, and domain levels. Specifically, the relative standing of QOL in Hawaiʻi 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:* using the earliest available reported year as the benchmark, the percentage change of an indicator from that year to the most current available year 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).

- *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 has improved	■ Top-ranked county	·· Data not available
◎ No difference	↔ No change	■ ■ Mid-ranked county	
◒ HI worse than the nation	↓ HI has worsened	■ Bottom-ranked county	
		□ No difference	

Two summary QOL scores are calculated: one for Hawai‘i’s standing compared to the nation, and one for Hawai‘i’s change over time. The indicator score for a positive outcome is 1, for a negative outcome is -1, and for no difference/no change is 0. Indicator scores within each domain are averaged to obtain domain scores. A summary QOL score is the weighted average of the 6 domain scores. Domain and summary can scores range from -1 (everything is worse/worsened) to +1 (everything is better/improved), while 0 means “on average, there was no difference/no change”.

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.

SUMMARY FINDINGS

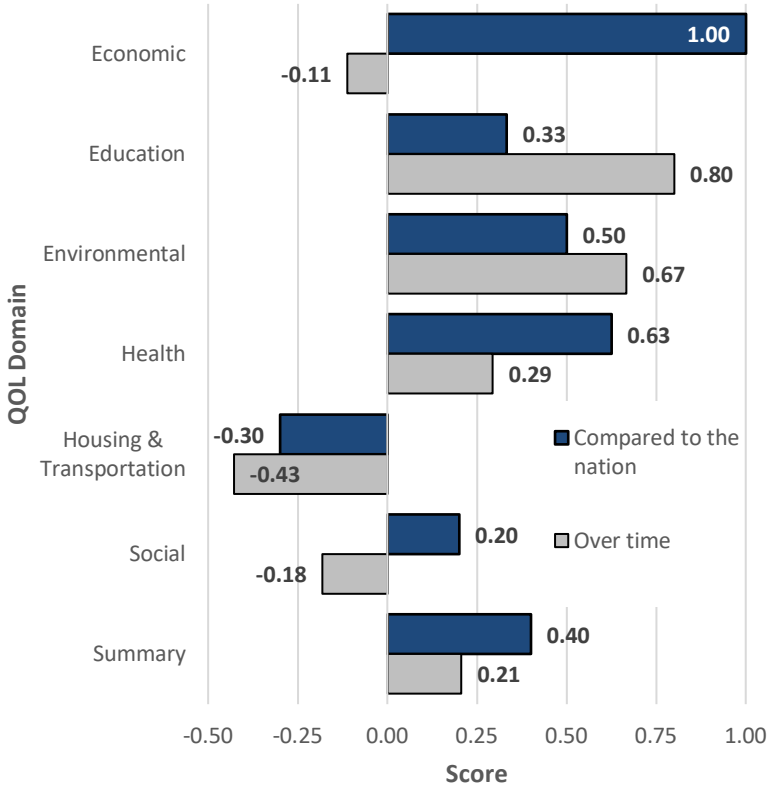

Figure 1. Quality of Life in Hawaii, 2019 - Summary Scores

Hawai‘i fares better than the nation on overall quality of life.
The summary ranking comparing Hawai‘i and the nation increased from the 2009 report, from 0.29 to 0.38. Hawai‘i improved its standing relative to the nation in three of the domains: the education domain increased from 0.00 to 0.33; the environmental domain increased from 0.33 to 0.50, and the health domain increased from -0.08 to 0.63. Hawai‘i did worse in its standing relative to its nation for two domains: the housing and transportation domain decreased from -0.17 to -0.30 and the social domain decreased slightly from 0.17 to 0.10. All of Hawai‘i’s indicators in the economic domain remained better than the national average.

The overall quality of life in Hawai‘i has improved since the 2009 report, but many domains have gotten worse.
While the summary measure of QOL over time has improved for Hawai‘i, this masks the small declines in QOL for half of the domains. The economic, housing and transportation, and social domains scored negatively. The reason for overall improvement since 2009 report is the major improvements in education (0.80) and health (0.29). In contrast to the large improvements in the economic domain in the 2009 report, Hawai‘i has worsened in the economic domain in this report (-0.11). The housing and transportation domain had a score of -0.30, with half of the indicators worsening since 2009.

There is much variation across Hawai‘i’s counties, with only a few indicators showing similar conditions.

The variation across Hawai‘i’s counties has increased since the 2009 report. In the 2009 report, 15% (9 of 61) of the county-level QOL indicators showed no county difference. That has been reduced to 3% (2 of 59) in this report. There are two reasons for this. First, there has been increased variation among the counties in the health domain, from 5 indicators without county-level variation to 2 indicators without county-level variation. Second, the social domain indicators that showed county variation came from new data sources for this report, and the new data sources had very limited county data, thereby not allowing for cross-county comparisons. In most cases, the City and County of Honolulu ranked highest (33 indicators). Hawai‘i County was the lowest ranking county 44% of the time.

A. ECONOMIC DOMAIN AND INDICATORS

Compared to nation: +1.00	Comparison across time: -0.11

Compared to the nation, Hawai‘i fared better on all of the economic indicators. Since the 2009 report, Hawai‘i has improved in 4 indicators, while 5 indicators have gotten worse. Despite an increase in per capita income and median earnings, the poverty rate has increased, as have both measures of income inequality. Even though the unemployment rate has decreased, the economic dependence ratio has increased, possibly due to the aging population.

The free or reduced-cost lunch indicator has changed from the 2009 report. This indicator was used to measure student poverty. However, it was neither comparable to the nation nor was it easily accessible. The Assessment and Accountability Branch of Hawai‘i’s Department of Education (HIDOE) Office of Strategy, Innovation, and Performance no longer publishes this information on the county level. This information is provided at the school level through the Accountability Resource Center of Hawai‘i, as well as the HIDOE Hawai‘i Child Nutrition Programs, but not in a manner that allows for convenient aggregation. To allow for national comparisons and data accessibility, this indicator has changed to the percentage of households with children 18 and younger who receive food stamps/SNAP benefits.

Standard of living: While per capita income has increased in both Hawai‘i and the nation since 2008, poverty rates have increased. Median wages have grown slower than per capita income, suggesting that low wage workers might not be experiencing as robust earnings growth. This could be one reason why poverty rates have increased despite strong increases in per capita income. Hawai‘i's high per capita income compared to the nation means a lower poverty rate; however, after incorporating cost of living and taking into account taxes and government benefits, one measure of economic well-being, the supplemental poverty measure, points to Hawai‘i residents being worse off than their national counterparts.

Income inequality: Income is distributed more equally in Hawai‘i than in the nation; a lower Gini index in Hawai‘i points to less income concentration, and there is a smaller percentage of income shared by the top 20% in Hawai‘i, compared to the nation. Income inequality is growing in Hawai‘i according to both measures of income inequality, though it’s growing slower than in the nation as a whole.

Employment: Hawai‘i consistently has among the lowest rates of unemployment in the nation. In 2018, the unemployment rate in Hawai‘i was 2.4%, compared to 3.9% in the nation. In both Hawai‘i and the nation, the unemployment rate has decreased substantially from its high point during the Great Recession. Hawai‘i also has a lower dependency ratio than the nation. For every 100 people in the labor force, 90.8 people are not economically active in Hawai‘i, compared to 100.5 in the nation.

Compensation and work hours: Workers in Hawai‘i have a higher median wage and are less likely to work long hours compared to their national counterparts. Median wages have improved since 2006-2010, but at a rate slower than inflation.

County comparisons

- Among the four counties, the City and County of Honolulu had favorable conditions for all but one of the indicators, with Kaua‘i County or Maui County having marginally more favorable values for income inequality (Kaua‘i County was slightly less unequal) and economic dependency (Maui County had a slightly lower dependency ratio). The only indicator that the City and County of Honolulu performed poorly in was working long hours, where it had the highest percentage of people working long hours in the state.
- Hawai‘i County had the least favorable conditions, ranking last in all the categories except for the percentage of people working long hours.

Table 3. Economic Domain: Most Recent Data and Findings

Economic Indicators	Year	U.S.	HI	Hawaii, compared to the nation	Hawaii: Over time[1]		County			
					% change	Improved or Worsened	Honolulu	Hawaii	Kauai	Maui
Standard of Living										
A01. Per capita income, current dollars	2017	$51,640	$52,787	◓	30%	↑	$56,728	$40,188	$46,596	$47,226
A02. Poverty rate, % of people	2017	13.4%	9.5%	◓	12%	↓	8.3%	15.0%	10.1%	10.0%
A03. Households receiving SNAP/food stamps, % of households with at least one child under 18	2013-2017	20.9%	18.5%	◓	70%	↓	15.8%	34.0%	17.4%	17.9%
Income Inequality										
A04. Gini index, scale of 0-100	2013-2017	48.2	44.0	◓	3%	↓	43.0	47.1	42.8	44.5
A05. Income share of households in the top 20% income group, % of total income	2013-2017	51.5%	47.5%	◓	2%	↓	46.8%	49.7%	45.8%	48.2%
Employment										
A06. Economic dependency ratio, number of people in the total population who are not in the labor force per 100 who are	2013-2017	97.9	90.5	◓	4%	↓	87.2	114.8	88.6	85.6
A07. Unemployment rate, % of people in the civilian labor force	2018	3.9%	2.4%	◓	-44%	↑	2.3%	3.0%	2.5%	2.4%
Compensation and Work Hours										
A08. Median earnings, people aged 16 and older with earnings in the past 12 months, current dollars	2013-2017	$32,141	$35,680	◓	13%	↑	$36,705	$30,740	$35,115	$35,186
A09. Working long hours, % of employed people aged 25-64 usually working 41 hours or more per week	2013-2017	25.2%	20.5%	◓	-3%	↑	22.3%	14.6%	••	••

Symbols: •• Data not available; ◓ HI better than the nation, ◎ No difference, ◒ HI worse than the nation; ↑ HI has improved, ↔ No change, ↓ HI has worsened;
■ Top-ranked county, ■ ■ Mid-ranked county, ■ Bottom-ranked county, □ No difference

(1) The benchmark year is as follows. 2007: per capita income, poverty rate. 2006-2010: households receiving SNAP/food stamps, Gini index, income share of households in the top 20% income group, dependency ratio, median earnings, working long hours. 2008: unemployment rate.

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?

In 2017, Hawai‘i’s per capita income of $52,787 was higher than the national average of $51,640 and was up almost 30% from $40,679 in 2007. Adjusting for inflation, per capita income only grew 4.7% over the timespan, slower than the nation’s per capita income growth of 9.6%. The City and County of Honolulu had the highest per capita income, over $15,000 higher than the lowest county, Hawai‘i County.

Indicator A01. Per capita income

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	$39,844	$40,904	$39,284	$40,545	$42,727	$44,582	$44,826	$47,025	$48,940	$49,831	$51,640
State of Hawai‘i	$40,679	$42,160	$41,593	$41,869	$43,475	$44,828	$44,995	$47,188	$49,304	$50,851	$52,787
C&C Honolulu	$43,492	$45,188	$45,184	$45,328	$47,021	$48,308	$48,577	$50,937	$53,027	$54,725	$56,728
Hawai‘i County	$31,420	$32,620	$31,096	$31,613	$32,756	$33,667	$33,672	$35,397	$37,623	$38,644	$40,188
Kaua‘i County	$35,777	$36,845	$35,115	$35,293	$36,653	$37,892	$38,813	$41,005	$42,918	$44,400	$46,596
Maui County	$36,347	$37,230	$34,884	$35,646	$37,361	$39,715	$39,218	$41,181	$43,557	$45,062	$47,226

Indicator A01b. Per capita income, real

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	$47,103	$46,569	$44,884	$45,577	$46,560	$47,597	$47,166	$48,690	$50,613	$50,892	$51,640
State of Hawai‘i	$50,410	$50,109	$49,181	$48,491	$48,542	$48,878	$48,201	$49,831	$51,550	$52,141	$52,787
C&C Honolulu	$53,896	$53,708	$53,427	$52,497	$52,501	$52,673	$52,038	$53,789	$55,442	$56,114	$56,728
Hawai‘i County	$38,936	$38,771	$36,769	$36,613	$36,573	$36,709	$36,071	$37,379	$39,337	$39,625	$40,188
Kaua‘i County	$44,336	$43,792	$41,521	$40,875	$40,925	$41,316	$41,578	$43,301	$44,873	$45,527	$46,596
Maui County	$45,042	$44,250	$41,248	$41,283	$41,715	$43,303	$42,012	$43,487	$45,541	$46,205	$47,226

Technical notes:

Per capita income is calculated by dividing the total income of residents by the total number of residents. The per capita income in this report for 2007 differs from the 2009 report because the Bureau of Economic Analysis updates its income data as new data comes in. The Bureau of Labor Statistics’ CPI-U and CPI-U Urban Hawai‘i were used to inflate the data to 2017 dollars for the U.S. and Hawai‘i, respectively.

Data source/s:

- U.S./HI, 2007–2017
  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, 2007–2017
  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, 2010, 2017
  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 child care, unsafe environment, and transportation difficulties, which are associated with financial insufficiency.

How are we doing?

Hawai‘i’s poverty rate has consistently been below the nation’s rate since the turn of the century. The poverty rate in Hawai‘i was 9.5% compared to the national rate of 13.4% in 2017, an increase of 8.5% and 13.0% in 2007, respectively. Hawai‘i County regularly had the highest poverty rate among the counties, exceeding the national poverty rate throughout the sample period. The City and County of Honolulu and Maui County usually have the lowest poverty rates, though Kaua‘i had the lowest poverty rate in the state in 2016.

Indicator A02. Poverty rate

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	13.0%	13.2%	14.3%	15.3%	15.9%	15.9%	15.8%	15.5%	14.7%	14.0%	13.4%
State of Hawai‘i	8.5%	9.3%	10.4%	11.1%	12.1%	11.8%	11.2%	11.5%	10.7%	9.5%	9.5%
C&C Honolulu	7.8%	8.5%	9.7%	9.5%	10.3%	10.4%	9.6%	9.8%	9.2%	8.5%	8.3%
Hawai‘i County	13.1%	13.3%	14.5%	18.3%	20.4%	18.9%	19.5%	18.1%	18.3%	15.4%	15.0%
Kaua‘i County	9.0%	9.9%	10.4%	12.1%	12.9%	12.3%	11.8%	12.3%	11.2%	8.1%	10.1%
Maui County	6.8%	9.0%	10.2%	11.9%	12.8%	11.2%	10.7%	13.1%	10.7%	9.5%	10.0%

The federal poverty thresholds do not take into account 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. Hawai‘i’s poverty rate changes drastically when using the supplemental poverty measure, increasing by approximately 4 percentage points to 13.7% on average from 2016-2018. This increase is the third largest and moves Hawai‘i from having the 9th lowest poverty rate to having the 14th highest poverty rate among the 50 states and Washington, D.C.

Indicator A02b. Supplemental poverty measure

Area / Year	2013-2015	2016-2018
United States	15.1%	13.1%
State of Hawai‘i	16.8%	13.7%

Technical notes:
The federal poverty thresholds do not vary across states, but they are updated annually for inflation. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2007–2017
  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, 2013–2018
  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?

During 2013-2017, Hawai‘i had a smaller percentage of households with at least one child under 18 receiving SNAP benefits compared to the nation (18.5% in Hawai‘i versus 20.9% in the nation), though that gap has narrowed since 2006-2010. Hawai‘i’s percentage of households receiving SNAP benefits nearly doubled since 2006-2010 (some of this might be benefit expansion in 2008). Hawai‘i County had by far the highest percentage of households receiving SNAP benefits, at 34.0%. The City and County of Honolulu had the lowest percentage, at 15.8%.

Indicator A03. Households receiving SNAP/food stamps

Area / Year	2006-2010	2013-2017
United States	15.8%	20.9%
State of Hawai‘i	10.9%	18.5%
C&C Honolulu	10.0%	15.8%
Hawai‘i County	18.8%	34.0%
Kaua‘i County	9.9%	17.4%
Maui County	8.6%	17.9%

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. 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. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013–2017
  U.S. Census Bureau. (n.d.). S2201: Food stamps/Supplemental Nutrition Assistance Program (SNAP). *American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.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?

In 2013-2017, income was distributed more uniformly in Hawai‘i compared to the nation, as demonstrated by a lower Gini index (44.0 in Hawai‘i compared to 48.2 in the United States). Income has grown more unequal over time, however, from 43.0 in 2006-2010. In both 2006-2010 and 2013-2017, the City and County of Honolulu and Kaua‘i County had similarly low levels of income inequality and Hawai‘i County had the highest.

Indicator A04. Gini index

Area / Year	2006-2010	2013-2017
United States	46.7	48.2
State of Hawai‘i	43.0	44.0
C&C Honolulu	42.2	43.0
Hawai‘i County	45.8	47.1
Kaua‘i County	42.2	42.8
Maui County	43.1	44.5

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. Income for 2006-2009 was adjusted to 2010 dollars and income for 2013-2016 was adjusted to 2017 dollars before computation. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010,2013–2017
  U.S. Census Bureau. (n.d.). B19083: Gini index of income inequality. *American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.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?
The top 20% households in Hawai'i had a smaller percentage of total income than the top 20% households in the nation in 2013-2017 (47.5% versus 51.5%). For both Hawai'i and the nation, this was an increase from 2006-2010, meaning income has become more concentrated among high income households. This indicator grew fastest in Hawai'i County, increasing the gap between itself and the other counties for this measure of inequality. Kaua'i County had a decrease in the percentage of income shared by households in the top quintile, separating itself from the City and County of Honolulu as the county with the lowest income concentrated in the top quintile households.

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

Area / Year	2006-2010	2013-2017
United States	50.2%	51.5%
State of Hawai'i	46.6%	47.5%
C&C Honolulu	46.0%	46.8%
Hawai'i County	48.7%	49.7%
Kaua'i County	45.7%	45.8%
Maui County	47.2%	48.2%

Technical notes:
Data are a 2006–2010 average and 2013-2017 average. Income for 2006-2009 was adjusted to 2010 dollars and income for 2013-2016 was adjusted to 2017dollars before computation. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:
- U.S./HI, 2006-2010, 2013-2017
  U.S. Census Bureau. (n.d.). B19082: Shares of aggregate household income by quintile. *American Community Survey 5-Year Estimates*. Retrieved from http://factfinder.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, from 86.8 in 2006-2010 to 90.8 in 2013-2017 for Hawai'i and 95.9 to 97.9 in the nation over the same time span, meaning the economic responsibility for those who are economically active has grown slightly. Hawai'i's growth masks drastic differences and changes across the counties. The City and County of Honolulu and Kaua'i County experienced small increases in the economic dependency ratio, whereas Hawai'i County and Maui County had larger increases. Hawai'i County went from having more people in the labor force than dependents (93.2 dependency ratio) to having significantly more economically dependent people (114.8 dependency ratio), an increase of about 23%.

Indicator A06. Economic dependency ratio

Area / Year	2006-2010	2013-2017
United States	95.9	97.9
State of Hawai'i	86.8	90.5
C&C Honolulu	86.7	87.2
Hawai'i County	93.5	114.8
Kaua'i County	86.5	88.6
Maui County	79.6	85.6

Technical notes:

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 are a 2006–2010 average and 2013-2017 average.

Data source/s:

- U.S./HI, 2006-2010, 2013–2017
  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 5-Year Estimates.* Retrieved from http://factfinder.census.gov/

A07. Unemployment rate

Percentage of people in the civilian labor force who are jobless and looking 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?

The unemployment rate in Hawai‘i has been lower than the national average since 1980. The 2009 QOL report just missed peak unemployment during the Great Recession, though the longest period of economic growth in the nation has led to historically low unemployment rates (2.4% in Hawai‘i, 3.9% for the nation). The unemployment rate in Hawai‘i decreased by 44% since the 2009 report, but is down by 67% from its high of 7.2% in 2009. The City and County of Honolulu had the lowest unemployment rate, while Hawai‘i County has the highest unemployment rate in the state, at 3.0%.

Indicator A07. Unemployment rate

Area / Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
United States	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%
State of Hawai‘i	4.3%	7.2%	6.9%	6.8%	6.0%	4.9%	4.4%	3.6%	3.0%	2.4%	2.4%
C&C Honolulu	3.8%	6.0%	6.0%	5.9%	5.4%	4.4%	4.1%	3.3%	2.8%	2.3%	2.3%
Hawai‘i County	6.0%	10.2%	9.9%	9.8%	8.3%	6.7%	5.5%	4.4%	3.7%	2.9%	3.0%
Kaua‘i County	4.8%	9.8%	8.8%	8.7%	7.3%	5.7%	4.8%	4.0%	3.2%	2.4%	2.5%
Maui County	4.9%	9.1%	8.5%	7.9%	6.4%	5.2%	4.5%	3.7%	3.1%	2.6%	2.4%

Technical notes:

Data are annual averages of the unemployment rate that is not seasonally adjusted. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- US, 2008–2018
  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, 2008–2018
  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 https://www.hiwi.org/vosnet/gsipub/documentview.aspx?enc=7MXrwdGEM5QCyFqRow46dYKBxacpo5jLYISJ3NeWZBc=

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 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?

In 2013-2017, the median earning for people aged 16 and over with earnings in Hawai'i was $35,680, higher than the national median earnings of $32,141. The City and County had the highest median earnings among the counties, while Hawai'i County had the lowest. While there was a modest increase in median earnings from 2006-2010 in nominal terms, the growth rate was slower than the increase in the cost of living. In 2017 dollars, median wage decreased for the nation and Hawai'i between 2006-2010 and 2013-2017.

Indicator A08. Median earnings

Area / Year	2006-2010 (2010 dollars)	2006-2010 (2017 dollars)	2013-2017 (2017 dollars)
United States	$29,701	$33,387	$32,141
State of Hawai'i	$31,638	$35,735	$35,680
C&C Honolulu	$32,426	$36,625	$36,705
Hawai'i County	$27,501	$31,062	$30,740
Kaua'i County	$30,792	$34,779	$35,115
Maui County	$30,921	$34,925	$35,186

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. Income for 2006-2009 was adjusted to 2010 dollars and income for 2013-2016 was adjusted to 2017 before computation. The margin of error was taken into account in determining the difference between two estimates. The Bureau of Labor Statistics' CPI-U and CPI-U Urban Hawai'i were used to inflate the 2006-2010 data to 2017 dollars for the U.S. and Hawai'i, respectively.

Data source/s:

- U.S./HI, 2006-2010, 2013–2017
  U.S. Census Bureau. (n.d.). S2001: Earnings in the past 12 months. *American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.census.gov/
- U.S./HI, 2010, 2017
  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. Working long hours

Percentage of employed people aged 25-64 who usually work 41 hours or more per week

Why is this important?

This indicator addresses the effects of long working hours on fatigue, health, and safety outcomes and work-life balance. Employees feel the strain of working long hours. Every hour spent at work is one less hour that can be spent with family or friends, or pursuing personal interests. Moreover, there is a tangible downside to overwork, from mental-health problems to physical ailments and job injuries that fatigue and stress cause. Too many hours at the office can also lead to less productivity since employees who are overtired or preoccupied with neglected personal issues are unlikely to perform at their peak. At the same time, workers who work longer hours may have difficulty in maintaining a healthy lifestyle, and obesity has become more prevalent as work hours have increased for some.

How are we doing?

In both the U.S. and Hawai‘i, the percentage of workers working more than 40 hours a week has seen little change from 2006-2010 to 2013-2017; the nation has just over a quarter of workers aged 25-64 working long hours compared to over 20% in Hawai‘i. The state average masks significant changes across the counties, however. While there’s generally been a decrease in the percentage of workers working long hours, the City and County of Honolulu experienced a slight increase from 2006-2010 to 2013-2017. The decrease in workers working long hours in Hawai‘i, Kaua‘i, and Maui County has been modest, by three to four percentage points.

Indicator A09. Working long hours

Area / Year	2006-2010	2013-2017
United States	25.7%	25.2%
State of Hawai‘i	21.1%	20.5%
C&C Honolulu	21.9%	22.3%
Hawai‘i County	18.3%	14.6%
Unidentified	20.0%	17.3%

Technical notes:

County-level data for Kaua‘i County and Maui County were not available. Some respondents are in “unidentified” counties; this likely means they are from either Kaua‘i County or Maui County, though some unidentified-county respondents could be in the City and County of Honolulu or Hawai‘i County.

Data source/s:

- U.S./HI, 2006-2010, 2013-2017
  Ruggles, S., Flood, S. , Goeken, R., Grover, J., Meyer, E., Pacas, J., and Sobek, M. (n.d.) Integrated Public Use Microdata Series. *American Community Survey: Version 9.0 [dataset]*. Minneapolis, MN: IPUMS, 2019. Retrieved from https://usa.ipums.org/usa/index.shtml

B. EDUCATION DOMAIN AND INDICATORS

Compared to nation: +0.33	Comparison across time: +0.80

Hawai‘i’s education indicators are somewhat mixed when compared to the nation. Hawai‘i has a higher percentage of people aged 25 and over who have a high school/college degree. However, educational performance is generally lacking; 8th graders in Hawai‘i show less proficiency in mathematics and reading according to the National Assessment of Educational Progress (NAEP).

The indicators measuring performance in meeting state math and reading standards have changed since the 2009 report, with the implementation of the Smarter Balanced Assessment (SBA) in the 2015-2016 school year. The SBA replaced the Hawai‘i State Reading and Mathematics Assessments. While both assessments measure students’ ability to meet Hawai‘i standards in math and reading, the standards and the grades that are tested are different. Results across the two assessments should not be compared.

Two indicators from the 2009 report, 8th grade proficiency in writing and readiness to learn, were removed for this report. For 8th grade proficiency in writing, the NAEP has not published writing assessment results since 2007. Even more so, a new NAEP framework for writing was developed in 2011 and 2017, to assess students using word processing software, and no conclusion has yet been reached on the ability to compare results from prior years. For readiness to learn, the State of Hawai‘i Department of Education no longer assesses kindergarten students’ readiness for elementary school.

The methodology of calculating on-time graduation have been aligned across states following final regulations from the U.S. Department of Education. The realignment in the definition of on-time graduation was required as of the 2010-2011 school year. Thus, the methodology is now consistent across states, allowing for a comparison between state and national figures. Results from the 2009 report might not be comparable because of the change in definition.

The indicator for lifelong learning has changed slightly from the 2009 report. The 2009 QOL report tabulated values for people aged 25-44; that has changed 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 County and Maui County data.

Attainment: With regards to educational attainment, Hawai‘i is well-educated; a higher percentage of people aged 25 and over have 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. Since the 2009 QOL report, a higher percentage of people have received a high school/college degree.

Performance: All measures of performance have improved since their base year, indicating that a higher percentage of Hawai‘i students are meeting proficiency levels in math and reading/language arts. Hawai‘i’s 8th grade students are less proficient than their national counterparts in both math and reading, though the gap has narrowed.

Readiness: Hawai‘i students have also improved their college readiness since the base year, as more students are graduating high school on time and SAT scores have improved recently. Historically, Hawai‘i students have not scored as high on SAT scores as the national average, but in 2017, Hawai‘i students increased their SAT scores to levels higher than the national average. Hawai‘i’s on-time graduation rate has generally been lower than the national graduation rate.

Participation in higher education: University/college attendance among people aged 25-34 is higher in Hawai‘i than in the nation. College attendance has been unchanged since the base year among graduating seniors and people age 25-34.

County comparisons

- The City and County of Honolulu, interestingly, has both the highest percentage of people aged 25 and over who have not received a high school degree and the highest percentage of people aged 25 and over who have received a bachelor’s degree or higher. Honolulu also has the highest percentage of 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. Honolulu had the highest percentage of students meeting Hawai‘i’s standards in math and language arts.
- Hawai‘i County had the lowest percentage of adults aged 25 and over who received a high school degree, but also the lowest percentage of students meeting Hawai‘i’s standards in math and language arts. Despite the lowest percentage of adults with a high school degree, Hawai‘i County also had the lowest percentage of high school students graduating on time and the lowest percentage of college goers.
- Kaua‘i County had the highest percentage of high school students graduating on time and shared the highest college-going rate with the City and County of Honolulu. Despite this, Kaua‘i County has the lowest percentage of lifelong learners, and the second lowest percentage of high school degree and bachelor’s degree earners.
- Maui County is the inverse of the City and County of Honolulu with regards to degree attainment; despite having the second lowest percentage of people aged 25 and older without a high school degree, it has the lowest percentage of people aged 25 and older with a bachelor’s degree or higher.

Table 4. Education Domain: Most Recent Data and Findings

Education Indicators	Year	U.S.	HI	Hawaii, compared to the nation	Hawaii: Over time[1]		County			
					% change	Improved or Worsened	Honolulu	Hawaii	Kauai	Maui
Attainment										
B01. Less than high school degree, % of people aged 25 and over	2013-2017	12.7%	8.4%	◓	-18%	↑	8.6%	7.7%	8.2%	7.9%
B02. Bachelor's degree or higher, % of people aged 25 and over	2013-2017	30.9%	32.0%	◓	9%	↑	34.0%	28.6%	28.2%	26.3%
Performance										
B03. Meeting Hawai'i standards in math, % of students	2018-19[2]	••	44%	••	5%	↑	47%	33%	40%	37%
B04. Meeting Hawai'i standards in language arts, % of students	2018-19[2]	••	55%	••	11%	↑	58%	44%	48%	51%
B05. At or above 8th-grade proficiency in math, % of 8th-grade students	2017	34%	27%	◒	29%	↑	••	••	••	••
B06. At or above 8th-grade proficiency in reading, % of 8th-grade students	2017	35%	30%	◒	50%	↑	••	••	••	••
Readiness										
B07. On-time graduation, % of high school students	2018[3]	••	84%	••	2%	↑	85%	81%	89%	84%
B08. SAT score of college-bound seniors, combined average scores of math and critical reading	2018	1068	1099	◓	12%	↑	••	••	••	••
Participation in Higher Education										
B09. College-going rate, seniors	2018[3]	••	55%	••	0%	↔	55%	49%	55%	50%
B10. Lifelong learning, % of people aged 25-35 enrolled in college or graduate school	2013-2017	12.1%	13.7%	◓	-4%	↔	15.5%	9.7%	6.6%	8.3%

Symbols: •• Data not available; ◓ HI better than the nation, ◎ No difference, ◒ HI worse than the nation; ↑ HI has improved, ↔ No change, ↓ HI has worsened;
■ Top-ranked county, ■ ■ Mid-ranked county, ■ Bottom-ranked county, □ No difference

(1) The benchmark year is as follows. 2006-2010: less than high school degree, bachelor's degree or higher, life-long learning. SY 2006-2007: at or above 8th grade proficiency in math, at or above the 8th grade proficiency in reading. 2008: SAT score of college-bound seniors. Class of 2015: on-time graduation rate, college going rate. SY 2014-2015: meeting Hawai'i standards in math, meeting Hawai'i standards in language arts.
(2) School year 2018-2019.
(3) Class of 2018.

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 basic 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 had a lower percentage of people aged 25 and over with less than a high school degree in 2013-2017 (8.4%) compared to the national average of 12.7%. Both the nation and Hawai‘i had improvements since 2006-2010 for this indicator, with decreases of 15% for the nation and 18% for Hawai‘i. The City and County of Honolulu had the highest percentage of people without a high school degree. Maui County and Hawai‘i County had the lowest percentage of people without a high school degree.

Indicator B01. Less than high school degree

Area / Year	2006-2010	2013-2017
United States	15.0%	12.7%
State of Hawai‘i	10.2%	8.4%
C&C Honolulu	10.1%	8.6%
Hawai‘i County	9.5%	7.7%
Kaua‘i County	11.7%	8.2%
Maui County	11.3%	7.9%

Technical notes:

“Less than high school education” includes all levels below a high school diploma or its equivalent. Data are a 2006–2010 average and 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013–2017
  U.S. Census Bureau. (n.d.). B15002: Sex by educational attainment for the population 25 years and over. *American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.census.gov/

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?

On average, a higher percentage of people aged 25 and over in Hawai‘i had a Bachelor's degree or higher education (32.0%) compared to the nation (30.9%) in 2013–2017, an increase for both Hawai‘i and the U.S. since 2006-2010. Compared to the other counties, the City and County of Honolulu had a significantly higher percentage of people with higher levels of educational attainment, and is driver of the state's high percentage of people with a Bachelor's degree or higher relative to the nation; the other three counties have a lower percentage of people with a Bachelor's degree or higher compared to the national average.

Indicator B02. Bachelor's degree or higher

Area / Year	2006-2010	2013-2017
United States	27.9%	30.9%
State of Hawai‘i	29.4%	32.0%
C&C Honolulu	31.1%	34.0%
Hawai‘i County	26.6%	28.6%
Kaua‘i County	22.7%	28.2%
Maui County	25.7%	26.3%

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013–2017
  U.S. Census Bureau. (n.d.). B15002: Sex by educational attainment for the population 25 years and over. *American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.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 improved slightly since it was first implemented in the 2014-2015 school year. The City and County of Honolulu has seen the most improvement, going from 44% of students who are proficient in math to 47% in the 2018-2019 school year, and has consistently had the highest percentage of proficient students. Hawai‘i County consistently had the lowest percentage of students proficient in math. Both Hawai‘i County and Maui County experienced small declines in the percentage of students who are proficient in math since the 2014-2015 school year.

Area / Year	SY 2014-2015	SY 2015-2016	SY 2016-2017	SY 2017-2018	SY 2018-2019
State of Hawai‘i	42%	43%	43%	43%	44%
C&C Honolulu	44%	46%	46%	47%	47%
Hawai‘i County	34%	34%	34%	34%	33%
Kaua‘i County	38%	38%	39%	40%	40%
Maui County	38%	36%	35%	37%	37%

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 2014-2015 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.

Data source/s:

- HI, School year 2014-2015 to 2018-2019
  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?

The percentage of students who are proficient in language arts according to the Smarter Balanced Assessment has improved since it was first implemented in the 2014-2015 school year, going from 49% in the 2014-2015 school year to 55% in the 2018-2019 school year. Moreover, all counties experienced strong improvements, particularly Kaua‘i County. The City and County of Honolulu consistently had the highest percentage of students proficient in language arts, followed by Maui County and Kaua‘i County.

Area / Year	SY 2014-2015	SY 2015-2016	SY 2016-2017	SY 2017-2018	SY 2018-2019
State of Hawai‘i	49%	52%	51%	55%	55%
C&C Honolulu	51%	55%	54%	58%	58%
Hawai‘i County	40%	44%	43%	46%	44%
Kaua‘i County	41%	47%	48%	50%	48%
Maui County	46%	46%	45%	51%	51%

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 2014-2015 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.

Data source/s:

- HI, School year 2014-2015 to 2018-2019
  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 8th-grade students who scored at or above NAEP proficiency in mathematics was consistently below the national average. For the 2016-2017 school year, Hawai‘i’s rate stood at 28% compared to the national average of 34%. Both the nation and Hawai‘i have seen improvements in the percentage of students who score at or above NAEP proficiency in mathematics; Hawai‘i has improved more than the nation, closing the gap.

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

Area / Year	SY 2006-2007	SY 2008-2009	SY 2010-2011	SY 2012-2013	SY 2014-2015	SY 2016-2017
United States	31%	32%	34%	34%	32%	34%
State of Hawai‘i	21%	25%	30%	32%	30%	28%

Technical notes:

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

Data source/s:

- U.S./HI, School year 2006-2007 to 2016-2017
  U.S. Department of Education, National Center for Education Statistics. 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’s percentage of 8th-grade students who scored at or above NAEP proficiency in reading was consistently below the national average. In 2017, Hawai‘i’s rate stood at 30% compared to the national average of 35%. Both the nation and Hawai‘i have seen improvements in the percentage of students who score at or above NAEP proficiency in reading; Hawai‘i has improved more than the nation, closing the gap.

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

Area / Year	SY 2006-2007	SY 2008-2009	SY 2010-2011	SY 2012-2013	SY 2014-2015	SY 2016-2017
United States	29%	30%	32%	35%	32%	35%
State of Hawai‘i	20%	22%	26%	28%	26%	30%

Technical notes:

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

Data source/s:

- U.S./HI, School year 2006-2007 to 2016-2017
  U.S. Department of Education, National Center for Education Statistics. Reading, grade 8, all students. *NAEP Date Explorer*. Retrieved from https://www.nationsreportcard.gov/ndecore/xplore/NDEk

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. On-time 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?
The Class of 2018 graduated 84% of its students on time, and improvement from the class of 2015. All the counties had similarly modest improvements. Though on-time graduation rates in Hawai‘i could not be compared to the national average for the class of 2018, the State of Hawai‘i has usually had lower on-time graduation rates compared to the nation. Kaua‘i County had the highest on-time graduation rate in the State, a rate that has historically been higher than the national average.

Area / Year	Class of 2015	Class of 2016	Class of 2017	Class of 2018
United States	83%	84%	85%	..
State of Hawai‘i	82%	83%	83%	84%
C&C Honolulu	83%	83%	84%	85%
Hawai‘i County	79%	79%	78%	81%
Kaua‘i County	86%	89%	88%	89%
Maui County	79%	81%	80%	84%

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., Class of 2015 to Class of 2018
  National Center for Education Statistics. (2019). Table 219.46. Public high school 4-year adjusted cohort graduation rate (ACGR), by selected student characteristics and state: 2010-2011 through 2016-207. *Digest of Education Statistics, 2018*.
  https://nces.ed.gov/programs/digest/2018menu_tables.asp
- HI, Class of 2015 to Class of 2018
  Hawai‘i P-20 Partnerships for Education, Hawai‘i Data eXchange Partnership. (2019). Special tabulation for the Department of Business, Economic Development, and Tourism. *On-time graduation rate, class of 2015 to class of 2018.*

B08. SAT score of college-bound seniors

Combined average SAT math and critical readings cores 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 has historically been below that of the nation until 2016. In 2017 and 2018, Hawai'i's SAT scores have exceeded the national average by over 25 points.

Indicator B08. SAT score of college-bound seniors

Area / Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
United States	1014	1013	1015	1011	1010	1010	1010	1006	1002	1060	1068
State of Hawai'i	983	981	988	979	978	985	988	995	1002	1085	1099

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, 2008–2018
  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

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 supports 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?

The college-going rate for seniors has been relatively stable over the past few years; students from the class of 2015 through the class of 2018 have all went to college at a rate of around 55%. The City and County of Honolulu and Kaua'i County had the highest rates of going to college in the fall semester after graduation, followed by Maui County. Less than half of graduating seniors in Hawai'i County went to college the fall semester after graduation.

Area / Year	Class of 2015	Class of 2016	Class of 2017	Class of 2018
State of Hawai'i	56%	55%	55%	55%
C&C Honolulu	56%	57%	56%	57%
Hawai'i County	49%	47%	47%	49%
Kaua'i County	57%	59%	59%	55%
Maui County	54%	53%	55%	50%

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 2018
  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 2018.*

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?

A higher percentage of people aged 25-34 in Hawai‘i participated in lifelong learning than the nation (13.7 % vs. 12.1%). However, strong variation in participation rates was observed at the county level. The City and County of Honolulu had a distinctively higher rate at 15.5% in 2013-2017, compared to the other counties' lifelong learning rate, none of which exceed 10%. Hawai‘i County had the second highest rate at 9.7%. This is likely due to the prevalence of 4-year and graduate programs on O‘ahu and Hawai‘i Island.

Indicator B10. Lifelong learning

Area / Year	2006-2010	2013-2017
United States	12.4%	12.1%
State of Hawai‘i	14.2%	13.7%
C&C Honolulu	16.5%	15.5%
Hawai‘i County	8.5%	9.7%
Kaua‘i County	7.3%	6.6%
Maui County	7.8%	8.3%

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. 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. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013–2017
  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 5-Year Estimates.* Retrieved from http://factfinder.census.gov/

C. ENVIRONMENT DOMAIN AND INDICATORS

Compared to nation: +0.50	Comparison across time: +0.67

In the four environmental indicators that can be compared to the nation, Hawai‘i is better compared to the nation in three of them. The one indicator that is worse than the nation, unhealthy air quality days, is due to the volcanic activity on Hawai‘i Island; the other counties perform better than the nation in terms of air quality. Since the previous report, Hawai‘i has improved in seven indicators and worsened in one indicator; one indicator is essentially unchanged.

Pollution: Hawai‘i has fewer toxic releases but more unhealthy air quality days compared to the nation, though the high number of unhealthy air quality days is driven by the volcanic activity on Hawai‘i Island. In general, pollution has improved since 2008.

Conservation: Even though Hawai‘i has a higher percentage of electricity generated from renewable sources, the state has been decreasing the percentage of electricity produced from renewable sources. Park and historic site acreage has remained relatively unchanged over time.

Consumption: Hawai‘i consumes less water and energy, per capita, compared to 2007. Hawai‘i also consumes substantially less energy, per capita, compared to the nation.

Recycling: Solid waste recycling and wastewater reuse has improved in Hawai‘i recently, with a higher percentage of solid waste being diverted from landfills and an increase in the gallons of wastewater reused.

County comparisons

- The City and County of Honolulu, with its high population density, had some of the worst environmental measures in the state. It has the highest number of toxic releases, and the lowest acres of park and historic sites and renewable energy. It ranks second worst for surface water advisory days and water consumption. The City and County of Honolulu had relatively high amounts of solid waste generated but diverted the highest percentage of waste generated away from landfills.
- Hawai‘i County had the highest number of unhealthy air quality days, due to the volcanic activity on the island. More favorably, Hawai‘i County ranked first in conservation, with ranking highest in acres of park and historic sites and renewable energy.
- Kaua‘i County ranked first in toxic releases, but had the most surface water advisory days, in part due to the heavy rainfall on the island that contributes to a high number of brown water warnings. Kaua‘i County also produced high amounts of solid waste but diverted a large percentage of waste away from landfill.
- Maui County had the highest water consumption among the counties. Maui County also ranked poorly with regards to renewable energy. However, Maui County had the fewest surface water advisory days.

Table 5. Environmental Domain: Most Recent Data and Findings

Environment Indicators	Year	U.S.	HI	Hawaii, compared to the nation	Hawaii: Over time[1]		County			
					% change	Improved or Worsened	Honolulu	Hawaii	Kauai	Maui
Pollution										
C01. Unhealthy air quality days, number of days	2018	13	170	◒	-51%	↑	0	170	0	0
C02. Surface water advisory days, number of days	2018	••	2,957	••	••	••	929	378	1,299	351
C03. Solid waste generated, number of pounds per day per person	FY 2015	••	9.3	••	-10%	↑	10.0	6.8	11.4	7.2
C04. Toxic releases, number of pounds per person	2017	11.9	2.2	◓	-10%	↑	2.6	1.3	0.2	1.4
Conservation										
C05. Acres of parks and historic sites, per 1,000 acres of total area	2017	••	101	••	0.6%	↔	43	130	42	77
C06. Renewable energy, % of total electricity produced from renewable sources	2017	13%	18%	◓	-15%	↓	15%	39%	23%	17%
Consumption										
C07. Water consumption, number of gallons per day per person	2017	••	126	••	-14%	↑	125	117	116	141
C08. Energy consumption, million BTU per person	2017	300	199	◓	-22%	↑	••	••	••	••
Recycling										
C09. Solid waste recycled, % of total solid waste	FY 2015	••	43.0%	••	33%	↑	48.4%	26.7%	44.9%	14.4%
C10. Wastewater reused, million gallons of wastewater reused per day	2018	••	18.1	••	15%	↑	12.1	0.9	2.7	3.1

Symbols: •• Data not available; ◓ HI better than the nation, ◎ No difference, ◒ HI worse than the nation; ↑ HI has improved, ↔ No change, ↓ HI has worsened;
■ Top-ranked county, ■ ■ Mid-ranked county, ■ Bottom-ranked county, □ No difference

(1) The benchmark year is as follows. 2007: toxic releases, renewable energy, water consumption, energy consumption. 2008: unhealthy air quality days, acres of park and historic sites. FY2008: solid waste recycled. FY2008-2009: solid waste generated. 2015: wastewater reused

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?

Hawai‘i consistently has the highest number of unhealthy air quality days, due to the volcanic emissions in Hawai‘i County. Outside of Hawai‘i County, however, Hawai‘i's air quality is very good. The other counties usually only have unhealthy air quality once every few years. On average, a county will have 6 days with an Air Quality Index (AQI) of over 100, and about 14% of counties have less than 2.6 unhealthy AQI days.

Indicator C01. Unhealthy air quality days

Area / Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
United States	29	13	26.5	27	26.5	9	10.5	12	11.5	10	13
State of Hawai‘i	349	351	344	271	339	304	269	304	311	301	170
C&C Honolulu	0	1	1	1	0	0	1	0	0	0	0
Hawai‘i County	349	351	344	271	339	304	269	304	311	301	170
Kaua‘i County	..	..	..	1	1	0	0	0	0	0	0
Maui County	0	0	0	0	0	0	1	0	1	0	0

Technical notes:

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. National average is the median of 50 states and the District of Columbia. Data for Kaua‘i County were unavailable for 2008-2010.

Data source/s:

- U.S./HI, 2008-2018
  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 waters 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?

The number of days surface water advisories were posted has increased substantially within the past few years, even if beach advisories are disregarded. Total days almost tripled between 2016 and 2017, and more than doubled between 2017 and 2018. Most of the increase was due to an increase in surface water advisories in Kauaʻi County, with stormwater runoff as the primary reason for the brown water advisories posted.

Indicator C02. Surface water advisory days

Area / Year	2011	2012	2013	2014	2015	2016	2017	2018
State of Hawaiʻi	226	224	196	163	263	449	1268 (994)	2957 (2889)
C&C Honolulu	152	153	156	60	125	193	329 (319)	929 (890)
Hawaiʻi County	12	0	0	8	28	67	275 (216)	378 (365)
Kauaʻi County	32	71	32	44	50	37	250 (88)	1299 (1294)
Maui County	30	0	8	51	60	152	414 (371)	351 (340)

Technical notes:

County total is calculated by adding the number of days of sewage spills, brown water advisories, and beach advisories that were posted within a county. State total is the sum of county totals, except for in 2014, 2015, and 2018, when there were state-wide brown water advisories due to Hurricane Iselle, heavy rains, and Hurricane Lane, respectively. The advisories lasted for 4, 15, and 4 days, respectively; these are not added to the county totals. 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. Numbers in parentheses exclude beach advisories to allow for some comparability. National data were unavailable.

Data source/s:

- HI, 2011–2018
  State of Hawaiʻi 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 wastes 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 needs 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 FY 2015, Hawai‘i produced just over nine pounds of solid waste per person per day, a decrease of approximately 10% from fiscal year 2008-2009. Hawai‘i County usually generated the lowest amount of solid waste per capita. The other three counties alternate with producing the highest per capita solid waste. As of FY 2015, Kaua‘i County generated the most solid waste.

Indicator C03. Solid waste generated

Area / Year	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 2013	FY 2014	FY 2015
State of Hawai‘i	10.3	6.6	7.2	..[2]	9.6	..[2]	9.3
C&C Honolulu[1]	10.5	5.9	7.0	7.0	10.0	10.1	10.0
Hawai‘i County	7.5	7.2	6.9	7.2	6.7	6.3	6.8
Kaua‘i County	8.7	7.9	19.9	8.5	10.3	10.3	11.4
Maui County	13.2	9.5	3.3	..[2]	10.5	..[2]	7.2

[1] City and County of Honolulu data is reported by calendar year
[2] Incomplete data

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 the de facto population. The City and County of Honolulu reported data by calendar year, while other counties reported data by state fiscal year.

Data source/s:

- HI, 2008-2011, 2013-2015
  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, 2008–2011, 2013-2015, 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/

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 releases 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 has a lower level of toxic release compared to the nation, and both Hawai‘i and the nation show a decreasing trend in toxic release since 2007. In 2017, Hawai‘i released toxic chemicals at 2.15 pounds per resident, compared to the national average of 11.9 pounds. Among Hawai‘i's counties, Kaua‘i County had the lowest level of toxic releases (0.2 pounds), while the City and County of Honolulu, at 2.6 pounds of toxic release per person, had over 1 pound of toxic release per person more than any other county.

Indicator C04. Toxic releases

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	13.5	12.8	11.1	12.3	13.2	11.6	13.1	12.4	10.7	10.7	11.9
State of Hawai‘i	2.4	2.4	2.4	2.0	2.1	2.1	2.0	2.1	2.0	2.3	2.2
C&C Honolulu	2.6	2.6	2.6	2.2	2.3	2.4	2.4	2.4	2.4	2.7	2.6
Hawai‘i County	2.2	2.3	2.3	1.8	1.6	1.6	1.3	1.7	1.2	1.5	1.3
Kaua‘i County	0.4	0.3	0.3	0.5	0.4	0.3	0.1	0.4	0.2	0.1	0.2
Maui County	2.1	2.0	2.3	2.0	2.1	1.8	1.5	1.5	1.4	1.5	1.4

Technical notes:

Data includes both toxic releases disposed on site and those transferred to waste broker for disposal. Toxic release per person is calculated by dividing the annual total amount of toxic releases by the number of resident population.

Data source/s:

- U.S./HI, 2007–2017
  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
- U.S., 2007–2010, Denominator
  U.S. Census Bureau. (2019). Intercensal estimates of the resident population for counties and states: April 1, 2000 to July 1, 2010. CO-EST00INT-TOT. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/intercensal-2000-2010-counties.html

- U.S., 2010–2017, Denominator
  U.S. Census Bureau. (2019). Annual estimates of the resident population for selected age groups by sex for the United States, regions, states, counties, and Puerto Rico Commonwealth and municipios: April 1, 2000 to July 1, 2008. PEPAGESEX. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/2010s-national-detail.html
- HI, 2007–2017, 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/

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?
From 2007 to 2017, the state’s parks and historic sites acreage per 1,000 acres of total area was relatively stable, as the City and County of Honolulu and Hawai‘i County’s acreage saw minimal fluctuations. Kaua‘i County had a modest increase in acres of parks and historic sites per 1,000 acres of total area due to modest increases in state parks. Maui County’s large increase was due to a quadrupling of county park space since 2007.

Indicator C05. Acres of park and historic sites

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
State of Hawai‘i	100	100	100	100	100	100	100	100	100	100	101
C&C Honolulu	40	44	44	44	44	44	44	43	43	40	43
Hawai‘i County	132	130	130	130	130	130	130	130	130	130	130
Kaua‘i County	36	41	41	40	40	40	40	41	41	40	42
Maui County	55	74	74	75	75	76	76	77	77	77	77

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 source/s:

- HI, 2007-2017
  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, 2007-2017, Denominator
  State of Hawai‘i Department of Business, Economic Development, and Tourism. (2009). Table 6.04: Estimated acreage of land use districts, by island: December 31, 2006. *State of Hawai‘i data book: A statistical abstract, 2018*. 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 reduces 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?

While the nation has steadily increased the percentage of electricity produced from renewable sources, the percentage has decreased in Hawai'i, though Hawai'i still produces a higher percentage of its electricity from renewable sources. The decline in Hawai'i was due to a decline in the City and County of Honolulu; in contrast, Hawai'i, Kaua'i, and Maui County all increased the percentage of electricity produced from renewable sources. Hawai'i County consistently had the highest percentage of electricity produced from renewable sources.

Indicator C06. Renewable energy

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	9%	10%	11%	11%	12%	11%	12%	11%	11%	12%	13%
State of Hawai'i	22%	22%	22%	23%	13%	14%	16%	17%	17%	18%	18%
C&C Honolulu	22%	23%	22%	23%	6%	8%	8%	13%	13%	13%	15%
Hawai'i County	31%	32%	31%	33%	35%	37%	39%	38%	38%	40%	39%
Kaua'i County	15%	9%	9%	9%	10%	10%	9%	11%	14%	24%	23%
Maui County	14%	13%	14%	14%	35%	31%	47%	25%	25%	23%	17%

Technical notes:

Renewable energy sources include hydroelectric power, biomass, and geothermal, wind, photovoltaic, and solar thermal energy.

Data source/s:

- U.S., 2007-2017
  U.S. Energy Information Administration. (2019). Table 1.2: Primary energy production by source. *Annual energy review: energy overview*. Retrieved from https://www.eia.gov/totalenergy/data/annual/
- HI, 2007-2017
  State of Hawai'i Department of Business, Economic Development, and Tourism. (n.d.). Table 17.07: Electricity production, by source, state total and by island. *State of Hawai'i data book: A statistical abstract, various years*. Retrieved from http://dbedt.hawaii.gov/economic/databook/

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?

Per capita daily water consumption has declined modestly since 2007 for all four counties, for an average decline of a little over 20 gallons per person, per day, across the state. For Kaua‘i County and Maui County, half the decrease is due to an increase in population increases and the rest is due to a decline in total water consumption. For the City and County of Honolulu and Hawai‘i County, most of the decrease in per capita daily water consumption was due to an increase in the population. Maui County consistently consumed the most water.

Indicator C07. Water consumption

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
State of Hawai‘i	147	154	144	146	139	135	133	135	127	128	126
C&C Honolulu	139	152	142	144	138	132	127	136	126	126	125
Hawai‘i County	138	132	126	129	117	119	119	115	114	119	117
Kaua‘i County	148	156	147	140	137	128	138	121	119	119	116
Maui County	187	181	171	168	167	168	171	150	145	145	141

Technical notes:

Water consumption per day per person is calculated by dividing the annual total amount of water consumed by 365 days and then dividing the daily average by the de facto population. National data were unavailable.

Data source/s:

- HI, 2007–2017
  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, 2007–2017, 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/

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 consumed less energy than their national counterparts in 2017, about 199 million BTU versus 300 million BTU. Per capita energy consumption has declined in both Hawai‘i and across the nation. The decline in energy usage in Hawai‘i has been faster than the nation, widening the gap between the two, from about 80 million BTU per person to just over 100 million BTU per person.

Indicator C08. Energy consumption

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	335	325	306	315	311	301	307	309	304	301	300
State of Hawai‘i	257	208	205	203	207	199	198	197	199	198	199

Energy consumption per person at the county level could not be calculated. However, almost all of Hawai‘i’s energy is derived from petroleum consumption, of which 60% is used by the transportation sector and 25% is used for electricity production; the other main sources of energy consumption in Hawai‘i is from coal and renewable energy sources, which are primarily used in the form of electricity. Thus, to get an idea of how much energy each county uses, the following tables provide a breakdown of per capita electricity consumption and fuel consumption in each county.

The City and County of Honolulu’s energy consumption is likely underestimated by these tables; military jet fuel, which is primarily consumed on O‘ahu, is not included in the fuel estimates, and O‘ahu consumes almost all the State’s coal in electricity production. The decline in energy consumption in the state are reflected by the decline in per capita electricity and fuel consumption.

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

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
State of Hawai‘i	8.0	7.8	7.5	7.3	7.2	6.9	6.7	6.6	6.6	6.5	6.4
C&C Honolulu	8.3	8.1	7.8	7.6	7.5	7.1	7.0	6.9	6.8	6.7	6.6
Hawai‘i County	6.5	6.3	6.1	6.0	5.9	5.7	5.6	5.5	5.4	5.4	5.2
Kaua‘i County	7.2	6.9	6.6	6.5	6.4	6.3	6.2	6.1	6.1	6.1	6.2
Maui County	8.6	8.2	7.8	7.7	7.5	7.2	7.0	6.9	6.9	6.7	6.6

Indicator C08c. Annual per capita fuel consumption, in 1,000 gallons

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
State of Hawai‘i	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
C&C Honolulu	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
Hawai‘i County	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Kaua‘i County	1.4	1.3	1.3	1.1	1.2	1.3	1.2	1.3	1.2	1.1	2.1
Maui County	1.0	0.9	0.9	0.8	1.0	0.9	0.9	0.9	1.0	0.9	0.5

Technical notes:
Energy consumption per person is calculated by dividing the annual total amount of energy consumed by resident population estimates. Different types of fuel produce different amounts of energy; if one county used a disproportionate amount of certain types of fuel, energy consumption could be less correlated fuel consumption. However, the percentage of fuel usage in each county closely reflects the percentage of energy usage from each county. Thus, total per capita fuel consumption is used, instead of breaking down by fuel type. Fuel totals do not include fuel sold to the federal government for government use. Fuel totals refer to fuel sold during a 12-month period ending November 30.

Data source/s:

- U.S./HI, 2007-2017
  U.S. Energy Information Administration. (2019). 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, 2007-2017
  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, 2007–2017, 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/

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?

Diversion rates have generally improved since FY 2008; across the State, diversion rates have improved from 32.3% to 43.0% in FY 2015. The City and County of Honolulu and Kaua‘i County have had marked improvements in the percentage of solid waste diverted from landfills. Hawai‘i County experienced some improvements, but had a decline in diversion rates in FY 2014 and FY 2015. Maui County has had multiple years of incomplete data; it’s likely that the 14.4% diversion rate in FY 2015 is significantly lower than the actual diversion rate.

Indicator C09. Solid waste recycled

Area / Year	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
State of Hawai‘i	32.3%	35.7%	39.6%	35.1%	34.7%[2]	36.6%	36.8%[2]	43.0%[2]
C&C Honolulu[1]	33.4%	37.2%	39.2%	36.9%	38.6%	37.1%	40.3%	48.4%
Hawai‘i County	29.2%	30.9%	35.9%	28.9%	38.4%	34.1%	24.7%	26.7%
Kaua‘i County	29.6%	26.3%	25.0%	23.8%	32.5%	43.5%	42.4%	44.9%
Maui County	33.1%	34.2%	35.6%	36.6%	..[2]	32.9%	..[2]	14.4%[2]

[1] City and County of Honolulu data is reported by calendar year
[2] Incomplete data

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 source/s:

- HI, 2008-2011, 2013-2015
  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 meeting 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 waste water 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 2030.

How are we doing?
Since 2015, Hawai‘i has increased the daily amount of recycled water used. The growth is primarily from increasing usage of treated wastewater in the City and County of Honolulu. At its current growth rate, the state will just meet the Hawai‘i Fresh Water Initiative goal in 2030.

Indicator C10. Wastewater reused

Area / Year	2015	2016	2017	2018
State of Hawai‘i	16.3	17.2	18.3	18.8
C&C Honolulu	9.0	9.8	11.2	12.1
Hawai‘i County	1.2	1.3	1.1	0.9
Kaua‘i County	2.4	2.2	2.1	2.7
Maui County	3.7	4.0	3.9	3.1

Technical notes:
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. The Environmental Planning Office, the agency that collected the data on treated wastewater supplied in the 2009 report, was closed in 2018; the Wastewater Branch expressed concern about the treated wastewater supplied data, noting that the treated wastewater supplied has been stable over the past decade despite an increasing population and improved technology. Thus, the Wastewater Branch recommended not using the data.

Data source/s:

- HI, 2015-2018
  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

Compared to nation: +0.63	Comparison across time: +0.29

Broadly speaking, Hawai‘i is healthier than the nation, with 13 of the 17 QOL health indicators being better than the national average. The state did worse on three indicators, and one indicator could not be compared. There was significant variability in the progress of health indicators since 2007; while life expectancy has improved, health status has declined. Hawai‘i has improved in certain activities that improve health outcomes, but has gotten worse in others. Access to health care has improved.

The measure of healthy days has been split into separate measures of physical health and mental health. This was done because the 2009 aggregation methodology assumed that poor physical health days and poor mental health days were mutually exclusive. Furthermore, this report looks at whether there are over 14 days of poor physical/mental health; while even one day of poor physical/mental health detracts from the quality of life, there is research to suggest that experiencing these poor physical/mental health days more frequently can lead to additional health problems and further detract from wellbeing.

The indicators for health insurance now include national comparisons, as the American Community Survey now asks whether household members have health insurance. However, the fruits-and-vegetable-consumption indicator no longer has data published at the national level.

Mortality: Cardiovascular disease, cancer, and diabetes are three of the major causes of death in Hawai‘i, yet the death rates due to these diseases are lower than that of the nation. Hawai‘i also has a slightly lower infant death rate and a longer life expectancy than the nation. Progress has been made across all measures of mortality.

Health status: Hawai‘i residents’ self-reported health status was slightly better than their counterparts in the rest of the nation. However, health status has declined in both the nation and in the state, with a growing percentage of people reporting frequent mental or physical distress (having more than 14 or more poor mental or poor physical health days).

Disease prevention: Hawai‘i has fewer obese adults and smokers, as a percentage of adults, compared to the nation, but has a higher percentage of adults who binge drink and a lower percentage of children who are fully immunized. Hawai‘i adults exercise more than the national average. Compared to earlier years, obesity and immunization rates are doing worse, while smoking and binge drinking rates are improving. An increase in obesity rates might be in part due to a decrease in physical activity.

Access to care: Hawai‘i continues to have better health insurance coverage compared to the nation, with both Hawai‘i and the nation seeing strong improvements in coverage. A higher percentage of Medicaid spending is 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 has improved in Hawai‘i since 2007.

County comparisons

- The City and County of Honolulu generally had the best ratings for the QOL health indicators, ranking either first or a close second for most of the indicators. The two indicators which the City and County of Honolulu did the worst in: life expectancy at birth and physical activity.
- There was little consistency among the rankings of Hawai‘i County, Kaua‘i County, and Maui County for the indicators. Hawai‘i County had the lowest obesity rates and highest physical activity rate, but the binge drinking rates and the lowest percentage of adults reporting good health or better. Kaua‘i County had the highest life expectancy at birth, but otherwise ranked second or third in the health indicators. Maui County was a little more consistent with having poor health indicators, but had the highest percentage of adults reporting good or better health and the lowest percentage of smoking adults.

Table 6. Health Domain: Most Recent Data and Findings

Health Indicators	Year	U.S.	HI	Hawaii, compared to the nation	Hawaii: Over time[1]		County			
					% change	Improved or Worsened	Honolulu	Hawaii	Kauai	Maui
Mortality										
D01. Life expectancy at birth, years	2014	78.9	81.5	◓	1%	↑	80.2	81.8	81.9	81.1
D02. Infant mortality, per 1,000 live births	2015	5.9	5.7	◓	-7%	↑	5.4	5.1	••	8.4
D03. Cardiovascular disease death rate, per 100,000 people	2017	218.1	179.6	◓	-11%	↑	178.8	211.1	156.2	154.4
D04. Cancer death rate, per 100,000 people	2017	152.5	128.6	◓	-13%	↑	123.5	159.9	126.7	123.2
D05. Diabetes death rate, per 100,000	2017	21.5	15.9	◓	-16%	↑	15.3	16.2	22.2	17.5
Health Status										
D06. Good or better health, % of adults	2017	82.5%	85.3%	◓	0%	↔	85.2%	83.4%	86.3%	85.4%
D07. Frequent mental distress, % of adults with 14 or more poor mental health days	2017	12.0%	9.5%	◓	12%	↓	8.8%	11.8%	7.1%	11.4%
D08. Frequent physical distress, % of adults with 14 or more poor physical health days	2017	12.0%	10.7%	◓	19%	↓	10.8%	12.7%	9.4%	9.3%
Disease Prevention										
D09. Obesity, % of adults	2017	31.3%	23.8%	◓	9%	↓	24.4%	23.3%	21.5%	23.0%
D10. Smoking, % of adults	2017	17.1%	12.8%	◓	-24%	↑	12.3%	14.9%	13.1%	12.5%
D11. Binge drinking, % of adults	2017	17.4%	19.5%	◒	-19%	↑	19.0%	19.0%	21.8%	20.5%
D12. Immunization rate, % of children aged 19-35 months	2017	73.2%	71.9%	◒	-17%	↓	••	••	••	••
D13. Physical activity, % of adults meeting 150 minute/week aerobic exercise and 2+ days muscle strengthening recommendation	2017	20.3%	24.6%	◓	-7%	↓	24.2%	22.0%	25.2%	28.2%
D14. Fruit and vegetable consumption, % of adults who consume 5 or more daily servings	2017	••	19.8%	••	0.5%	↔	18.4%	22.9%	22.8%	21.2%

Health Indicators	Year	U.S.	HI	Hawaii, compared to the nation	Hawaii: Over time[1]		County			
					% change	Improved or Worsened	Honolulu	Hawaii	Kauai	Maui
Access to Care										
D15. Adults without health insurance, % of adults	2012-2016	13.5%	5.9%	◓	-16%	↑	5.1%	7.8%	7.8%	8.0%
D16. Children without health insurance, % of children aged 17 and younger	2012-2016	5.9%	2.6%	◓	-28%	↑	2.4%	2.6%	3.0%	3.7%
D17. Home- and community-based service expenditures, % of Medicaid long-term care spending for aged and disabled persons	FY 2016	45.2%	26.0%	◒	39%	↑	··	··	··	··

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

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

(1) The benchmark year is as follows. 2005: life expectancy. 2007: infant mortality, cardiovascular death rate, cancer death rate, diabetes death rate, immunization rate. FY 2007: home- and community-based service expenditures. 2008-2010: adults without health insurance, children without health insurance. 2011: good or health, frequent mental distress, frequent physical distress, obesity, smoking, binge drinking, fruit and vegetable consumption. 2013: physical activity.

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?
Hawai‘i and the four counties continue to have a higher life expectancy than the nation. Furthermore, from 2005 to 2014, life expectancy has improved in the state and in the nation; the nation has improved faster, so the gap in life expectancy between Hawai‘i and the nation has shrunk slightly from 3 years to 2.5 years. County ranks have reversed; the City and County of Honolulu has gone from highest life expectancy to worse, while Hawai‘i County has gone from lowest life expectancy to essentially the highest life expectancy.

Indicator D01. Life expectancy at birth

Area / Year	2005	2010	2014	2017
United States	77.8	78.7	78.9	78.6
State of Hawai‘i	80.8	82.4	81.5	··
C&C Honolulu	80.9	··	80.2	··
Hawai‘i County	79.7	··	81.8	··
Kaua‘i County	80.7	··	81.9	··
Maui County	80.6	··	81.1	··

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. The method used by the Center for Disease Control and Prevention to estimate life expectancy changed in 2008.

Data source/s:

- U.S., 2005
  Centers for Disease Control and Prevention. (2008). Table 6: Expectation of life by age, race, and sex: United States, final 2005 and preliminary 2006. *Deaths: Preliminary data for 2006*. National vital statistics report, 56(16). Retrieved from https://www.cdc.gov/nchs/products/index.htm
- HI, 2005
  State of Hawai‘i Department of Business, Economic Development, and Tourism. (2008). Table 2.12: Expectation of life at birth by sex, by county, 2005. *State of Hawai‘i data book, 2007: A statistical abstract.* Retrieved from http://dbedt.hawaii.gov/economic/databook/

- U.S./HI, 2010, 2014
  State of Hawai‘i Department of Business, Economic Development, and Tourism. (2019). Table 2.11: Expectation of life at birth, by sex, for Hawai‘i and the United States: 1920-2010; Table 2.12: Expectation of life at birth, by sex, by county: 2014. *State of Hawai‘i data book, 2018: A statistical abstract*. Retrieved from http://dbedt.hawaii.gov/economic/databook/
- U.S., 2017
  Centers for Disease Control and Prevention. (2019). Table A: Expectation of life by age, race, Hispanic origin, race for the non-Hispanic population, and sex: United States, 2017. *United States Life Tables, 2017*. National vital statistics report 68(7). Retrieved from https://www.cdc.gov/nchs/products/index.htm

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 2020 target is 6.0 infant deaths per 1,000 live births.

How are we doing?

Outside of a slight uptick in 2013, Hawai'i had a lower infant mortality rate than the nation since 2007 and has been below the Healthy People 2020 target since 2008. Hawai'i is one of 26 states to meet the target. County rates are highly variable, sometimes fluctuating drastically between years; the City and County has had the most stable infant mortality rates.

Indicator D02. Infant mortality

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015
United States	6.8	6.6	6.4	6.1	6.1	6.0	6.0	5.8	5.9
State of Hawai'i	6.1	5.3	5.8	5.7	4.8	4.8	6.2	4.4	5.7
C&C Honolulu	6.5	5.3	5.6	6.4	4.9	5.7	6.8	4.8	5.4
Hawai'i County	6.7	4.6	6.9	4.2	6.9	..	2.5	3.3	5.1
Kaua'i County	6.9	11.7	..	..	..	..	..	..	..
Maui County	2.8	3.3	7.8	..	3.0	3.5	8.3	3.1	8.4

Technical notes:

The rates for the state and county are based on the place of residence of the deceased infants and live births. Data is suppressed when there are 1-5 deaths in a year. Three-year aggregate infant mortality rates for Kaua'i after 2009 are around 4 deaths per 1,000 live births per year.

Data source/s:

- U.S., 2007-2017
  Centers for Disease Control and Prevention. (2019). Table 1: Live births, infant, neonatal, and postneonatal deaths and mortality rates: United States, 19952017. *Infant mortality in the United States, 2017: Data from the period linked birth/infant death file*. National vital statistics report 68(10). Retrieved from https://www.cdc.gov/nchs/products/index.htm
- HI, 2007-2015
  Hawai'i Health Data Warehouse; State of Hawai'i Department of Health, Office of Health Status Monitoring. (2017). Infant deaths for the state of Hawai'i (residents only), for the years 2000-2015; infant deaths for the state of Hawai'i (residents only), by county of residents, for the years 2000-2015. *Vital statistics reports, infant deaths in Hawai'i.* Retrieved from http://hhdw.org/health-reports-data/category/maternal-infant-child-health/infant-health/

- HI, 2007-2015
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2017). Infant deaths for the state of Hawai‘i (residents only), by 3-year aggregates, for the years 2000-2015; infant deaths for the state of Hawai‘i (residents only), by county of residents, by 3-year aggregates, for the years 2000-2015. *Vital statistics reports, infant deaths in Hawai‘i (3-year aggregate).* Retrieved from http://hhdw.org/health-reports-data/category/maternal-infant-child-health/infant-health/

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 has a lower cardiovascular diseases death rate. A decreasing trend was observed for both Hawai‘i and the nation since 2007. Maui County had the lowest cardiovascular disease death rate in 2017, at 154 deaths per 100,000 residents; Hawai‘i County had the highest, at 211 deaths per 100,000 residents.

Indicator D03. Cardiovascular disease death rate

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	257	251	239	234	227	223	222	219	222	218	218
State of Hawai‘i	202	202	200	183	180	180	186	182	184	172	180
C&C Honolulu	190	194	196	184	177	174	181	183	179	170	179
Hawai‘i County	245	240	218	192	195	216	200	194	224	206	211
Kaua‘i County	211	203	208	191	183	181	213	166	168	158	156
Maui County	227	204	198	159	182	176	187	172	177	152	154

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/s:

- U.S./HI, 2007–2017
  Centers for Disease Control and Prevention. (n.d.). Underlying cause of death, 1999-2017. *Detailed mortality*. CDC Wonder. Retrieved from https://wonder.cdc.gov/

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?

In 2017, Hawai‘i had a cancer death rate of 129 deaths per 100,000 people, compared to 153 deaths per 100,000 people in the nation. Hawai‘i’s cancer death rate has decreased since 2007. The City and County of Honolulu and Maui County had the lowest cancer death rate in 2017 (around 123 deaths per 100,000 people) and Hawai‘i County had the highest cancer death rate (160 deaths per 100,000).

Indicator D04. Cancer death rate

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	179	176	174	173	169	167	163	161	159	156	153
State of Hawai‘i	148	143	141	141	138	135	136	140	135	129	129
C&C Honolulu	141	141	137	139	135	134	132	141	131	126	123
Hawai‘i County	169	156	155	154	149	139	142	143	147	144	160
Kaua‘i County	166	131	166	1460	156	140	138	121	133	121	127
Maui County	159	143	140	136	137	131	154	140	147	123	123

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.

Data source/s:

- U.S./HI, 2007–2017
  Centers for Disease Control and Prevention. (n.d.). Underlying cause of death, 1999-2017. *Detailed mortality*. CDC Wonder. Retrieved from https://wonder.cdc.gov/

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?

Even though diabetes has become more prevalent since 2007, the death rate has declined in Hawai‘i, from 19 deaths per 100,000 people in 2007 to around 16 deaths per 100,000 in 2017. Kaua‘i County had the highest death rates in 2017, about 22 deaths per 100,000; the City and County of Honolulu had the lowest diabetes death rate, at 15.3 deaths due to diabetes per 100,000 people. Maui County experienced a significant decline in the diabetes death rate from 2007.

Indicator D05. Diabetes death rate

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	23	22	21	21	22	21	21	21	21	21	22
State of Hawai‘i	19	19	20	17	16	16	16	15	15	15	16
C&C Honolulu	17	17	18	17	15	16	15	15	15	15	15
Hawai‘i County	21	26	19	14	15	16	14	16	15	12	16
Kaua‘i County	··	··	27	··	··	··	··	··	··	20	22
Maui County	30	18	30	19	19	21	20	18	13	16	18

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.

Data source/s:

- U.S./HI, 2007–2017
  Centers for Disease Control and Prevention. (n.d.). Underlying cause of death, 1999-2017. *Detailed mortality*. CDC Wonder. Retrieved from https://wonder.cdc.gov/
  Retrieved from http://hhdw.org/health-reports-data/category/death-data/leading-causes-of-death/

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?

Self-reported health status was similar among U.S. and Hawai‘i adults. About 83% of U.S. adults reported that their health was good, very good, or excellent, compared to around 85% of Hawai‘i adults. Smaller sample sizes contributed to large enough confidence intervals to differentiate the counties on this indicator; however, it appears that Hawai‘i County and Kaua‘i County usually had the fewest people reporting good, very good, or excellent health.

Indicator D06. Good or better health

Area / Year	2011	2012	2013	2014	2015	2016	2017
United States	83.1%	83.1%	83.3%	83.2%	83.6%	83.6%	82.4%
State of Hawai‘i	85.0%	85.2%	86.2%	85.4%	86.4%	85.2%	85.3%
C&C Honolulu	85.5%	85.1%	86.5%	85.7%	86.2%	86.1%	85.2%
Hawai‘i County	83.6%	84.7%	85.0%	82.2%	86.0%	81.6%	83.4%
Kaua‘i County	81.8%	83.5%	86.8%	84.3%	85.8%	83.6%	86.3%
Maui County	85.4%	86.6%	85.2%	86.0%	87.2%	85.6%	85.4%

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.” In 2011, the survey methodology for the Behavioral Risk Factor Surveillance System and imputations changed, so results before and after 2011 are not comparable. The national average is the median of 50 states and District of Columbia. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2011-2017
  Centers for Disease Control and Prevention. (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/

- HI, 2011-2017
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2019). General health status and disability indicators: health status – health – good or better vs fair or poor. *Behavioral risk factor surveillance system, various years.* Retrieved from http://ibis.hhdw.org/ibisph-view/

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 has a smaller percentage of adults reporting 14 or more days of poor mental health per month compared to the nation (9.5% versus 12%). Both Hawai‘i and the nation have had an increase in the percentage of adults experiencing frequent mental distress, though the increase has been larger for Hawai‘i. Hawai‘i County has the highest percentage of adults experiencing frequent mental distress.

Indicator D07. Frequent mental distress

Area / Year	2011	2012	2013	2014	2015	2016	2017
United States	11.7%	11.7%	11.3%	11.0%	11.2%	11.7%	12.0%
State of Hawai‘i	8.5%	8.5%	8.2%	8.4%	8.8%	9.2%	9.5%
C&C Honolulu	8.1%	8.2%	7.9%	8.2%	8.9%	8.6%	8.8%
Hawai‘i County	10.0%	10.1%	10.2%	10.6%	8.3%	11.4%	11.8%
Kaua‘i County	9.2%	7.7%	5.4%	7.4%	8.7%	6.4%	7.1%
Maui County	8.3%	8.4%	8.4%	7.5%	8.5%	10.1%	11.4%

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?”* Unlike the 2009 QOL report, poor physical health days and poor mental health days were separated into two different indicators because poor physical health days and poor physical mental health days are not mutually exclusive. In 2011, the survey methodology for the Behavioral Risk Factor Surveillance System and imputations changed, so results before and after 2011 are not comparable. The national average is the median of 50 states and District of Columbia. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2011-2017
  America’s Health Ranking analysis of Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System. (n.d.). *Annual report, various years*. Retrieved from https://www.americashealthrankings.org/explore/annual

- HI, 2011-2017
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2019). Mental health status indicators: mental health – health – mental bad 14+ of past 30 days. *Behavioral risk factor surveillance system, various years.* Retrieved from http://ibis.hhdw.org/ibisph-view/

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 has a smaller percentage of adults reporting 14 or more days of poor physical health per month compared to the nation (10.7% versus 12.0%). Both Hawai‘i and the nation have had an increase in the percentage of adults experiencing frequent physical distress, though the increase has been larger for Hawai‘i. Hawai‘i County has the highest percentage of adults experiencing frequent physical distress.

Indicator D08. Frequent physical distress

Area / Year	2011	2012	2013	2014	2015	2016	2017
United States	11.8%	12.1%	11.8%	11.6%	11.4%	11.7%	12.0%
State of Hawai‘i	9.0%	9.8%	9.7%	9.7%	9.2%	9.9%	10.7%
C&C Honolulu	8.5%	9.4%	9.1%	7.8%	8.8%	8.6%	10.8%
Hawai‘i County	10.1%	11.3%	12.7%	11.4%	10.8%	14.2%	12.7%
Kaua‘i County	13.1%	8.7%	8.2%	11.7%	10.6%	10.0%	9.4%
Maui County	9.3%	10.7%	11.2%	9.5%	9.5%	12.6%	9.3%

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?*” Unlike the 2009 QOL report, poor physical health and poor mental health were separated into two different indicators because poor physical health and poor physical mental health are not mutually exclusive. In 2011, the survey methodology for the Behavioral Risk Factor Surveillance System and imputations changed, so results before and after 2011 are not comparable. The national average is the median of 50 states and District of Columbia. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2011-2017
  America’s Health Ranking analysis of Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System. (n.d.). *Annual report, various years*. Retrieved from https://www.americashealthrankings.org/explore/annual

- HI, 2011-2017
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2019). General health status and disability indicators: health status – health – physical bad 14+ of past 30 days. *Behavioral risk factor surveillance system, various years.* Retrieved from http://ibis.hhdw.org/ibisph-view/

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 less than 30.5%.

How are we doing?

In 2017, Hawai'i had a lower percentage of adult obesity (23.8%) than the nation (31.3%). Following the national trend, adult obesity increased in Hawai'i since 2011. There was no significant difference among the four counties.

Indicator D09. Obesity

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

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. In 2011, the survey methodology for the Behavioral Risk Factor Surveillance System and imputations changed, so results before and after 2011 are not comparable. The national average is the median of 50 states and District of Columbia. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2011-2017
  Centers for Disease Control and Prevention. (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, 2011-2017
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2019). General health status and disability indicators: BMI — BMI – choose any one category (obese). *Behavioral risk factor surveillance system, various years.* Retrieved from http://ibis.hhdw.org/ibisph-view/

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 2020 goal is to reduce the percentage of current smokers among adults to 12%.

How are we doing?

In 2017, Hawai'i had a lower percentage of adults who smoke compared to the national average (12.8% versus 17.1%). There has been a reduction of for the nation and Hawai'i since 2011. Hawai'i County has the highest prevalence of smokers. Hawai'i had not met the Healthy People 2020 target.

Indicator D10. Smoking

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

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. In 2011, the survey methodology for the Behavioral Risk Factor Surveillance System and imputations changed, so results before and after 2011 are not comparable. The national average is the median of 50 states and District of Columbia. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2011-2017
  Centers for Disease Control and Prevention. (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, 2011-2017
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2019). Health behavior indicators: tobacco use – prevalence – cigarettes – current smoker. *Behavioral risk factor surveillance system, various years.* Retrieved from http://ibis.hhdw.org/ibisph-view/

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 2020 goal is to reduce binge drinking among adults to less than 24.2%.

How are we doing?

A higher percentage of adults in Hawai'i report binge drinking compared to the nation, a little over 19% in Hawai'i compared to 17.4% in the U.S. in 2017. Binge drinking has declined since 2011, but still exceeds the prevalence in the 2009 QOL report. There is no significant county variation in the rate of binge drinking.

Indicator D11. Binge drinking

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

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. In 2011, the survey methodology for the Behavioral Risk Factor Surveillance System and imputations changed, so results before and after 2011 are not comparable. The national average is the median of 50 states and District of Columbia. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2011-2017
  Centers for Disease Control and Prevention. (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, 2011-2017
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2019). Health behavior indicators: alcohol use – alcohol – binge drinking. *Behavioral risk factor surveillance system, various years.* Retrieved from http://ibis.hhdw.org/ibisph-view/

D12. Immunization rate

Percentage of children 19-35 months old who are immunized as required by the State

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. The federal Office of Disease Prevention and Health Promotion's Healthy People 2020 goal is to increase the children immunization rate to 90% by 2020.

How are we doing?

In Hawai‘i and across the nation, vaccination rates have decreased, moving away from the Healthy People 2020 goal. In 2007, Hawai‘i almost reached that goal, and was 10 percentage points higher than the national vaccination rate (87.5% compared to 77.4%). However, in 2017, Hawai‘i's immunization rate had fallen below the national average of 73.2%.

Indicator D12. Immunization rate

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	77.4%	76.1%	48.3%	59.2%	71.0%	71.9%	74.0%	74.6%	75.1%	73.8%	73.2%
State of Hawai‘i	87.5%	77.4%	47.3%	66.1%	77.0%	82.4%	72.8%	75.0%	76.1%	77.3%	71.9%

Technical notes:

Hawai‘i and national data reflect the 4:3:1:3:3:1 series (combined 6 vaccine series) that is required by the State. The series includes 4 doses of DTP/DTaP; 3 doses of Polio; 1 dose of measles; 3 doses of Hib; 3 doses of HepB; and 1 dose of varicella. County data were unavailable. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2007-2017
  Centers for Disease Control and Prevention. (n.d.). Trend report: 2002 through 2017 childhood vaccination coverage. *ChildVaxView – results for childhood combined 6-vaccine series coverage by survey year*. Retrieved from https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/6-series/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 (24.6%) compared to the nation as a whole (20.3%), which has been the case across all survey years. This figure has decreased slightly in Hawai‘i and has been stable in the nation. Outside of being the 2015, when it had the lowest rate, Maui County had the highest percentage of adults meeting the physical activity recommendation. Hawai‘i County usually had the lowest percentage of adults meeting the physical activity recommendation.

Indicator D13. Physical activity

Area / Year	2011	2013	2015	2017
United States	··	20.5%	20.3%	20.3%
State of Hawai‘i	··	26.5%	23.6%	24.6%
C&C Honolulu	23.4%	26.3%	23.4%	24.2%
Hawai‘i County	23.3%	26.0%	22.8%	22.0%
Kaua‘i County	25.1%	26.4%	27.8%	25.2%
Maui County	25.8%	28.4%	21.8%	28.2%

Technical notes:

In the 2009 QOL report, the U.S. Department of Health and Human Services (DHHS) recommendation for physical activity was 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity aerobic exercise a week. Since then, DHHS has increased its requirement to add 2 days or more of muscle strengthening exercise a week. To follow the DHHS recommendation, this indicator has been updated to include the 2 days or more recommendation; thus, this indicator is not directly comparable to the previous report. In 2011, the survey methodology for the Behavioral Risk Factor Surveillance System and imputations changed, so results before and after 2011 are not comparable. The national average is the median of 50 states and District of Columbia. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2013, 2015, 2017
  Centers for Disease Control and Prevention. (n.d.). Physical activity, physical activity index, 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, 2013, 2015, 2017
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2019). Health behavior indicators: physical activity – met aerobic and strengthening recommendation. *Behavioral risk factor surveillance system, various years.* Retrieved from http://ibis.hhdw.org/ibisph-view/

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 2015-2020 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?

Fruit and vegetable consumption in Hawai‘i has been rather stable from 2011 to 2015, at just below 20%. The City and County of Honolulu had the lowest percentage of adults who consumed the recommended amount of fruits and vegetables across all survey years.

Indicator D14. Fruit and vegetable consumption

Area / Year	2011	2013	2015
State of Hawai‘i	19.7%	18.1%	19.8%
C&C Honolulu	18.5%	16.4%	18.4%
Hawai‘i County	19.8%	20.6%	22.9%
Kaua‘i County	26.5%	20.5%	22.8%
Maui County	23.4%	24.4%	21.2%

Technical notes:

In 2017, the options for vegetables changed slightly, thus the 2017 results are not directly comparable to previous years. In 2011, the survey methodology for the Behavioral Risk Factor Surveillance System and imputations changed, so results before and after 2011 are not comparable.

Data source/s:

- HI, 2011, 2013, 2015
  Hawai‘i Health Data Warehouse; State of Hawai‘i Department of Health, Office of Health Status Monitoring. (2019). Health behavior indicators: nutrition – fruit and veg – daily frequency of total fruit and vegetable consumption. *Behavioral risk factor surveillance system, various years.* Retrieved from http://ibis.hhdw.org/ibisph-view/

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?

A lower percentage of Hawai‘i adults were not covered by health insurance compared to their counterparts in the nation. For 2012-2016, 5.9% of adults had no health insurance, down from 8.4% in 2008-2010. The nation had similar improvements to health insurance coverage. The City and County of Honolulu had the lowest uninsured rate, just over 5% uninsured, while Hawai‘i County, Kaua‘i County, and Maui County had similar uninsured rates of around 8%.

Indicator D15. Adults without health insurance

Area / Year	2008-2010	2012-2016
United States	17.1%	13.5%
State of Hawai‘i	8.4%	5.9%
C&C Honolulu	6.9%	5.1%
Hawai‘i County	12.3%	7.8%
Kaua‘i County	10.4%	7.8%
Maui County	11.2%	8.0%

Technical notes:

Data are a 2008–2010 average and 2012-2016 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2008–2010
  U.S. Census Bureau. (2011). B27001: Health insurance coverage status by sex by age. *2010 American Community Survey 3-Year Estimates.* Retrieved from http://factfinder.census.gov/
- U.S./HI, 2012–2016
  U.S. Census Bureau. (2017). B27001: Health insurance coverage status by sex by age. *2016 American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.census.gov/

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?

In 2012-2016, a lower percentage of children 17 and younger in Hawai‘i did not have health insurance compared to the nation (2.6% compared to 5.9%). The state did not experience much reduction in the uninsured rate from 2008-2010, as the City and County of Honolulu's uninsured rate was stable. However, Hawai‘i County, Kaua‘i County, and Maui County had marginal improvements to the uninsured rate for children.

Indicator D16. Children without health insurance

Area / Year	2008-2010	2012-2016
United States	8.7%	5.9%
State of Hawai‘i	3.1%	2.6%
C&C Honolulu	2.4%	2.4%
Hawai‘i County	4.7%	2.6%
Kaua‘i County	6.1%	3.0%
Maui County	4.5%	3.7%

Technical notes:

Data are a 2008–2010 average and 2012-2016 average. Data include children under age 18. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2008–2010
  U.S. Census Bureau. (2011). B27001: Health insurance coverage status by sex by age. *2010 American Community Survey 3-Year Estimates.* Retrieved from http://factfinder.census.gov/
- U.S./HI, 2012–2016
  U.S. Census Bureau. (2017). B27001: Health insurance coverage status by sex by age. *2016 American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.census.gov/

D17. Home- and community-based service expenditures

Percentage of Medicaid long-term care spending for aged and disabled persons allocated to home- and 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, between FY 2007 and FY 2016, home- and community-based services grew from 18.7% of Medicaid long-term care spending to 45.2%. For the nation, home- and community-based services went from 32.3% of Medicaid long-term spending in FY 2007 to 45.2% by FY 2016.

Indicator D17. Home- and community-based service expenditures

Area / Year	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
United States	32.3%	34.9%	36.0%	37.3%	38.2%	38.8%	40.2%	41.1%	43.8%	45.2%
State of Hawai‘i	18.7%	18.9%	··	··	24.8%	21.8%	21.9%	24.5%	23.9%	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, 2007-2016
  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

Compared to nation: -0.30	Comparison across time: -0.43

Hawai‘i’s housing was rated worse than the nation for all the indicators in the affordable housing and unmet housing needs sections, but was rated better in one of the two housing characteristics indicators and equal in the other. Hawai‘i’s transportation was rated better than the nation in two of the three indicators and worse in one of the indicators. Of the indicators that allowed for a time comparison, two indicators improved, five indicators worsened, and one stayed about the same.

The commute time dimension and automobile dependence dimension have been combined into one dimension, commuting patterns, which also has a new indicator, public transportation usage. The Federal Transit Administration has public transportation usage data for Hawai‘i counties from 2014 and national data from 1985. National data include use of rail and ferry, forms of public transportation that are currently unavailable in the state.

To make up for the combining of transportation dimensions, a new dimension was created, housing characteristics. Two indicators are in this dimension: internet access at home and age of the housing structure. These two indicators are intended to provide insight about housing quality.

Affordable housing: Hawai‘i is considered one of the most expensive places in the nation when it comes to housing, and the three indicators in this subsection confirmed that. The financial burden for Hawai‘i’s both renters and homeowners is higher than the nation, and a lower percentage of people own a home, compared to the nation overall. While housing cost burden has improved in Hawai‘i, the other two indicators have gotten worse.

Unmet housing needs: The lack of affordable housing in Hawai‘i leads to unmet housing needs. Hawai‘i had a higher percentage of overcrowded dwellings compared to the nation in 2013-2017, and regularly has a higher homeless point-in-time count. In 2016, on any given day, there were 170 homeless per 100,000 people in the nation; in Hawai‘i, there were 500 homeless per 100,000 people, almost three times higher than the nation. There has not been a substantial change to the percentage of overcrowded dwellings, but homelessness has increased significantly since 2007.

Housing characteristics: This is a new subsection to measure the quality of housing in Hawai‘i; better amenities could help compensate for the high housing costs. Hawai‘i rates better for the one indicator in this section and is about the same in the other; housing units in Hawai‘i are about as old as they are for the nation, but there is wider access to the internet in households in Hawai‘i.

Commuting patterns: Hawai‘i has a higher percentage of commuting workers traveling an hour or longer to work compared to the national average, despite fewer workers driving alone to work and higher public transportation usage. Commute time has gotten worse in Hawai‘i, even though fewer workers are driving alone to work.

County comparisons

- The City and County of Honolulu had the best public transportation usage and workers driving alone to work but suffered from the longest commute time. Honolulu had the lowest housing cost burden and fewest homeless people per 100,000 but ranked the worst for rental cost burden and home ownership. It also had the lowest percentage of total housing units built after 1980.
- Hawai‘i County had the lowest housing cost burden (tied with the City and County of Honolulu) and percentage of overcrowded dwellings, and the highest home ownership rate, yet ranked last in homeless population per 100,000. Hawai‘i County had the fewest public transportation trips taken per capita.
- Kaua‘i County generally ranked better than other counties in housing, with the lowest rental cost burden and homeless population, and ranked second in home ownership rate and overcrowded dwellings. Kaua‘i County had the highest housing cost burden. Kaua‘i had the highest percentage of workers driving alone to work and the second lowest public transportation usage but had the lowest percentage of workers traveling over 60 minutes to work.
- Maui County had the highest percentage of occupied housing units that were overcrowded.

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

Housing & Transportation Indicators	Year	U.S.	HI	Hawaii, compared to the nation	Hawaii: Over time[1]		County			
					% change	Improved or Worsened	Honolulu	Hawaii	Kauai	Maui
Affordable Housing										
E01. Rental cost burden, % of renters spending over 30% of household income on rent	2013-2017	46.8%	51.6%	◒	5%	↓	54.3%	51.6%	42.7%	44.5%
E02. Housing cost burden, % of owners with a mortgage spending over 30% of household income on selected monthly owner costs	2013-2017	29.3%	40.0%	◒	-16%	↑	39.1%	39.1%	47.0%	43.7%
E03. Home ownership, % of occupied housing units	2013-2017	63.8%	58.1%	◒	-2%	↓	55.6%	67.0%	63.0%	59.3%
Unmet Housing Needs										
E04. Overcrowded dwellings, % of occupied housing units with 1.01 or more occupants per room	2013-2017	3.3%	9.0%	◒	2%	↔	9.4%	6.4%	7.8%	10.7%
E05. Homelessness, point-in-time count, per 100,000 people	2016	170	500	◒	25%	↓	471	626	473	525
Housing Characteristics										
E06. Age of structure, % of total housing units built after 1980	2013-2017	45.3%	46.4%	◎	··	··	38.3%	64.0%	60.1%	58.6%
E07. Internet access, % of households with internet access at home	2013-2017	82.4%	85.6%	◓	··	··	86.9%	80.4%	83.5%	85.5%
Commuting Patterns										
E08. Long commute time, % of commuting workers traveling 60 minutes or more to work	2013-2017	8.9%	10.1%	◒	28%	↓	11.5%	9.3%	4.7%	4.9%
E09. Driving alone to work, % of workers	2013-2017	76.4%	67.1%	◓	1%	↓	64.0%	73.8%	80.0%	73.3%
E10. Public transportation usage, per capita annual unlinked trips	2017	31.1	49.7	◓	7%	↑	67.5	4.8	11.3	14.4

Symbols: ·· Data not available; ◓ HI better than the nation, ◎ No difference, ◒ HI worse than the nation; ↑ HI has improved, ↔ No change, ↓ HI has worsened;
■ Top-ranked county, ■ ■ Mid-ranked county, ■ Bottom-ranked county, □ No difference

(1) The benchmark year is 2006-2010 except for the following indicators. 2007: homelessness. 2014: public transportation usage.

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?

The percentage of renter-occupied housing units that spend 30% or more of household income on rent increased in Hawai'i from 49.3% in 2006-2010 to 51.6% in 2013-2017, an increase of about 5%. Over 54% of renter-households had a high cost burden in the City and County of Honolulu, up from 51% in 2006-2010. There was a slight decrease in this rate for Maui County.

Indicator E01. Rental cost burden

Area / Year	2006-2010	2013-2017
United States	47.%	46.8%
State of Hawai'i	49.3%	51.6%
C&C Honolulu	50.7%	54.3%
Hawai'i County	44.2%	45.0%
Kaua'i County	42.8%	42.7%
Maui County	48.5%	44.5%

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013-2017
  U.S. Census Bureau. (n.d.). B25070: Gross rent as a percentage of household income in the past 12 months. *American Community Survey 5-Year Estimates*. Retrieved from http://factfinder.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?

Housing cost burden is more prevalent among Hawai'i's homeowners who have a mortgage than their national counterparts, though both experienced a decline since 2006-2010. In 2013-2017, Hawai'i's homeowners with a mortgage who spent 30% or more of their household income on selected monthly owner costs was 40.0%, which was 10.7 percentage points higher than the national average. The City and County of Honolulu and Hawai'i County had the lowest rate of housing burden.

Indicator E02. Housing cost of burden

Area / Year	2006-2010	2013-2017
United States	37.4%	29.3%
State of Hawai'i	47.7%	40.0%
C&C Honolulu	46.4%	39.1%
Hawai'i County	48.0%	39.1%
Kaua'i County	50.9%	47.0%
Maui County	53.5%	43.7%

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013-2017
  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 5-Year Estimates*. Retrieved from http://factfinder.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. However, the gap between the two has narrowed. For 2006-2010, the home ownership rate was over 7 percentage points lower in Hawai‘i (59.3% versus 66.6%), compared to a difference of just under 6 percentage points for 2013-2017 (58.1% home ownership rate in Hawai‘i compared to 63.8% in the nation). The City and County of Honolulu had the lowest home ownership rate while Hawai‘i County had a homeownership rate that was almost 10 percentage points higher than the state average.

Indicator E03. Home ownership

Area / Year	2006-2010	2013-2017
United States	66.6%	63.8%
State of Hawai‘i	59.3%	58.1%
C&C Honolulu	57.6%	55.6%
Hawai‘i County	66.1%	67.0%
Kaua‘i County	65.0%	63.0%
Maui County	58.8%	59.3%

Technical notes:
Data are a 2006–2010 average and 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013-2017
  U.S. Census Bureau. (n.d.). B25003: Tenure. *American Community Survey 5-Year Estimates*. Retrieved from http://factfinder.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?
While the nation saw a slight increase in the percentage of overcrowded dwellings since 2006-2010, Hawai'i remained relatively unchanged, at around 9%. There were some changes at the county level, however. The City and County of Honolulu's percentage of overcrowded dwellings increased from 8.8% in 2006-2010 to 9.4% in 2013-2017, while Hawai'i County and Maui County had decreases of around 1 percentage point each. Maui maintained its rank of having the highest percentage of overcrowded dwellings.

Indicator E04. Overcrowded dwellings

Area / Year	2006-2010	2013-2017
United States	3.1%	3.3%
State of Hawai'i	8.9%	9.0%
C&C Honolulu	8.8%	9.4%
Hawai'i County	7.8%	6.4%
Kaua'i County	7.8%	7.8%
Maui County	11.3%	10.7%

Technical notes:
Data are a 2006–2010 average and 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013-2017
  U.S. Census Bureau. (n.d.). B25014: Tenure by occupants per room. *American Community Survey 5-Year Estimates*. Retrieved from http://factfinder.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 the 2009 QOL report, Hawai‘i’s homeless population rate was a little more than twice the national rate (474 homeless per 100,000 people on any given day, compared to 223). Since then, Hawai‘i’s homeless population has increased and the nation’s has decreased, such that Hawai‘i’s homeless population rate is almost three times the national rate (500 compared to 170) in 2016. The City and County of Honolulu had more homeless people than the other counties combined, but its total population was high enough to result in having the lowest homeless population rate. Though the homeless population rate declined substantially in Hawai‘i County since 2007, it still has the highest homeless population rate in the state.

Indicator E05. Homelessness

Area / Year	2009	2010	2011	2012	2013	2014	2015	2016
United States	205	206	200	198	187	181	176	170
State of Hawai‘i	401	397	415	411	411	444	483	500
C&C Honolulu	374	422	423	427	441	453	467	471
Hawai‘i County	470	296	275	295	262	401	562	626
Kaua‘i County	250	328	395	461	386	417	366	473
Maui County	530	406	529	432	422	453	528	525

Technical notes:

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.

Data source/s:

- U.S., 2009-2016
  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.hudexchange.info/resource/5783/2018-ahar-part-1-pit-estimates-of-homelessness-in-the-us/

- HI, 2009-2016
  State of Hawai‘i Department of Human Services. (2016). Table 1: Statewide PIT summary 2012-2016; Table 3: O‘ahu summary 2012-2016; Table 8: Hawai‘i Island summary 2012-2016; Table 13: Maui County summary 2012-2016; Table 18: Kaua‘i County summary 2012-2016. *State of Hawai‘i homeless point-in-time count, January 24, 2016*. Retrieved from https://humanservices.hawaii.gov/annual-homeless-persons-point-in-time-count-pit-report/
- U.S., 2007–2010, Denominator
  U.S. Census Bureau. (2019). Intercensal estimates of the resident population for counties and states: April 1, 2000 to July 1, 2010. CO-EST00INT-TOT. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/intercensal-2000-2010-counties.html
- U.S., 2010–2016, Denominator
  U.S. Census Bureau. (2019). Annual estimates of the resident population for selected age groups by sex for the United States, regions, states, counties, and Puerto Rico Commonwealth and municipios: April 1, 2000 to July 1, 2008. PEPAGESEX. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/2010s-national-detail.html
- HI, 2007–2016, 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 tend to have better amenities and are less costly to maintain. Importantly, several laws were enacted in the 1970s to improve the safety of residential buildings. Multifamily structures built before 1980 in the City and County of Honolulu might not have a fire sprinkler system, as sprinklers only became mandatory for apartments in 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 win children.

How are we doing?

During 2013-2017, Hawai‘i had marginally more housing units built after 1980 than the national average (46.4% compared to 45.3%). Interestingly, the City and County of Honolulu had by far the fewest percentage of total housing units built after 1980, at less than 40%, while the other counties are at around 60%. However, Honolulu had a higher percentage of units built after 2010 (though this figure is less than 4%). Much of Hawai‘i County’s and Maui County’s housing units were built between 1980 and 2010, while Kaua‘i County’s housing units were mostly built between 1980 and 2000. Almost a quarter of Honolulu’s housing units were built in the 1970s.

Indicator E06. Age of structure

Area / Year	2013-2017
United States	45.3%
State of Hawai‘i	46.4%
C&C Honolulu	38.3%
Hawai‘i County	64.0%
Kaua‘i County	60.1%
Maui County	58.6%

Technical notes:

Data are a 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2013–2017
  U.S. Census Bureau. (2018). CP04: Comparative housing characteristics. *2017 American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.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 during 2013-2017 (85.6% versus 82.4%). The City and County of Honolulu had the highest percentage of households with internet access among the counties. Hawai‘i County, which is more rural than the other counties, had the lowest rates of internet accessibility from home.

Indicator E07. Internet access

Area / Year	2013-2017
United States	82.4%
State of Hawai‘i	85.6%
C&C Honolulu	86.9%
Hawai‘i County	80.4%
Kaua‘i County	83.5%
Maui County	85.5%

Technical notes:

Data are a 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2013–2017
  U.S. Census Bureau. (2018). B28002: Presence and types of internet subscriptions in household. *2017 American Community Survey 5-Year Estimates.* Retrieved from http://factfinder.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?

Long commute times have grown substantially in Hawai‘i, compared to modest growth in the nation, leading to a divergence in the percentage of commuting workers who travel 60 minutes or more to work. Both Hawai‘i and the nation were at 8% in 2006-2010, but that has grown to 10.1% and 8.9%, respectively. This figure has grown even more so for the City and County of Honolulu, as 11.5% of commuting workers travel 60 minutes or more to work. Kaua‘i County and Maui County also experienced increases from 2006-2010, whereas Hawai‘i County had a smaller percentage of workers with long commute times in 2013-2017 compared to 2006-2010.

Indicator E08. Long commute time

Area / Year	2006-2010	2013-2017
United States	8.0%	8.9%
State of Hawai‘i	8.0%	10.1%
C&C Honolulu	8.6%	11.5%
Hawai‘i County	10.7%	9.3%
Kaua‘i County	3.0%	4.7%
Maui County	4.1%	4.9%

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013-2017
  U.S. Census Bureau. (n.d.). S0801: Commuting characteristics by sex. *American Community Survey 5-Year Estimates*. Retrieved from http://factfinder.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 2013-2017, Hawai‘i had a lower percentage of workers who drove along to work (67.1%) compared to the nation (76.4%). The City and County of Honolulu had the lowest rate of workers driving alone to work; the concentration of work opportunities increased rates of carpooling while the more developed public transportation system increased bus-taking rates. A higher percentage of people also walked or biked to work. Kaua‘i had the highest percentage of people driving alone to work among the counties.

Indicator E09. Driving alone to work

Area / Year	2006-2010	2013-2017
United States	75.0%	76.4%
State of Hawai‘i	66.3%	67.1%
C&C Honolulu	64.5%	64.0%
Hawai‘i County	68.0%	73.8%
Kaua‘i County	78.8%	80.0%
Maui County	70.6%	73.3%

Technical notes:
Data are a 2006–2010 average and 2013-2017 average. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013-2017
  U.S. Census Bureau. (2018). S0801: Commuting characteristics by sex. *American Community Survey 5-Year Estimates*. Retrieved from http://factfinder.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?
In 2017, Hawai‘i had more unlinked passenger trips per person than the national average (49.7 versus 31.0). The City and County of Honolulu was the main driver of that figure, with 67.5 unlinked passenger trips per person. The other counties had less developed bus systems, possibly due to the lack of a population center. Hawai‘i County had the lowest unlinked passenger trips per person in 2017, at 4.8; the distance between the two large towns in the county likely makes it difficult to provide a robust bus system, though there is a route between the two that runs multiple times each day.

Indicator E10. Public transportation usage

Area / Year	2014	2015	2016	2017
United States	33.0	32.3	31.7	31.1
State of Hawai‘i	46.3	47.7	46.8	49.7
C&C Honolulu	64.8	67.2	66.3	67.5
Hawai‘i County	5.0	5.0	4.8	4.8
Kaua‘i County	9.9	9.4	9.1	11.3
Maui County	13.3	12.9	12.0	14.4

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.

Data source/s:
- U.S., 2017
  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, 2017
  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, 2017 Annual agency profile. *NTD transit agency profiles, various years.* Retrieved from https://www.transit.dot.gov/ntd/transit-agency-profiles
- U.S., 2017, Denominator
  U.S. Census Bureau. (2019). Annual estimates of the resident population for selected age groups by sex for the United States, regions, states, counties, and Puerto Rico Commonwealth and municipios: April 1, 2000 to July 1, 2008. PEPAGESEX. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/2010s-national-detail.html
- HI, 2017, 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/

F. SOCIAL DOMAIN AND INDICATORS

Compared to nation: +0.20	Comparison across time: -0.18

In the social domain, Hawai‘i fared better on 5 indicators and worse on 3 indicators compared to the nation; there was no difference for 2 indicators. Hawai‘i is generally better than the nation with regards to public safety and family relationship, and does worse in community connectedness and social participation. Comparisons across time indicate that the state has not progressed in the social indicators. Only 4 indicators improved, compared to 6 indicators that had negative changes. One indicator has not changed over time.

The data for some indicators come from a difference source than the data source in the 2009 report, and thus are not directly comparable to the 2009 data. In particular, the Family Touchstone Survey, developed by the University of Hawai‘i Center on the Family, has not been conducted since the previous report. There are two sets of surveys that ask similar questions: (1) the Current Population Survey’s (CPS) civic engagement supplement and volunteer supplement, and (2) the National Survey of Children’s Health (NSCH). The benefit of these surveys is that comparisons can be made between the nation and the State of Hawai‘i; however, unlike the Family Touchstone Survey, comparisons cannot be made across all counties. The NSCH does not provide county data, and the sample size for the CPS is very small outside of the City and County of Honolulu. While there are questions that are nearly identical to the Family Touchstone Survey, a few indicators do not have a direct comparison, and a question that is most similar is used instead.

The indicator for idle youth has changed slightly from the 2009 report. The 2009 QOL report tabulated values for people aged 16-24; that has changed to 16-19 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 County and Maui County data.

Public safety: Hawai‘i had lower violent crime rates; accident, homicide, and suicide death rates; and drug-related arrests compared to the nation. Hawai‘i had higher property crime rates than the nation. Hawai‘i experienced improvements in both violent and property crime rates, as well as drug-related arrests, with the latter two indicators having declines of over 25%.

Family relationship: Two indicators in this subsection worsened since the 2009 QOL report: domestic abuse rates increased and fewer families ate together. The rate of child abuse and neglect improved for Hawai‘i. Hawai‘i had better measures of family relationship compared to the nation, with fewer unique and confirmed reports of child abuse and neglect per 1,000 compared to the nation and more families eating together regularly. Domestic abuse rates could not be compared.

Community connectedness: Hawai‘i rated worse than the nation in one indicator and rated about the same in the other. Hawai‘i had a higher percentage of idle youth. The other measure of community connectedness, regularly talking with neighbors, has been in decline in Hawai‘i.

Social participation: Hawai‘i had less social participation than the nation; fewer people volunteered and voter turnout was worse in Hawai‘i. Both indicators have gotten worse over time for Hawai‘i, as well.

County comparisons

- The City and County of Honolulu generally was ranked highest in the indicators, doing poorly relative to the highest ranked county only in voter turnout. While the City and County of Honolulu only ranked third in property crime rate, it was closer to highest ranked Kaua‘i County (about 2,800 crimes per 100,000 for Honolulu and 2,500 crimes per 100,000 for Kaua‘i) than it was to lowest ranked Maui County (about 3,500 crimes).
- Hawai‘i County fared poorly across half the indicators, ranking last for child abuse and neglect, domestic abuse, and voter turnout. However, Hawai‘i County had the second lowest property crime rate.
- Kaua‘i County had the lowest property crime rate and the second lowest violent crime rate, but ranked highest for accident, homicide, and suicide death rate. Kaua‘i County also had the highest percentage of idle youth. Kaua‘i County had the highest percentage of registered voters voting in the most recent election.
- Maui County ranked last in violent crime rate, property crime rate, and drug-related arrests.

Table 8. Social Domain: Most Recent Data and Findings

Social Indicators	Year	U.S.	HI	Hawaii, compared to the nation	Hawaii: Over time(1)		County			
					% change	Improved or Worsened	Honolulu	Hawaii	Kauai	Maui
Public Safety										
F01. Violent crime rate, per 100,000 people	2017	384	251	◓	-9%	↑	246	255	253	269
F02. Property crime rate, per 100,000 people	2017	2,363	2,829	◒	-31%	↑	2,774	2,700	2,509	3,454
F03. Accident, homicide, and suicide death rate, per 100,000 people	2017	69	53	◓	18%	↓	51	60	66	53
F04. Drug-related arrests, per 100,000 people	2017	453	171	◓	-26%	↑	92	301	183	410
F05. Safe neighborhoods, % of families with children under 18 years old	2017-2018	95.3%	96.2%	◎	••	••	••	••	••	••
Family Relationship										
F06. Child abuse and neglect, per 1,000 children aged 17 and younger	2017	9.1	4.2	◓	-41%	↑	2.9	8.1	4.8	6.6
F07. Domestic abuse, per 100,000 people	2017	••	378	••	19%	↓	326	633	398	378
F08. Families eating together regularly, % of families with children under 18 years old	2017-2018	73.3%	77.2%	◓	-6%	↓	••	••	••	••
Community Connectedness										
F09. Idle youth, % of people aged 16-19	2013-2017	4.8%	6.2%	◒	0%	↔	4.0%	9.3%	11.3%	8.4%
F10. Regularly talking with neighbors, % of people	2017	55.3%	55.2%	◎	-23%	↓	••	••	••	••
Social Participation										
F11. Participated in volunteer activities, % of people 15 and older	2015	26.0%	21.5%	◒	-9%	↓	••	••	••	••
F12. Voted in elections, % of registered voters	2018	••	52.7%	••	-20%	↓	52.5%	51.5%	58.1%	52.4%

Symbols: •• Data not available; ◓ HI better than the nation, ◎ No difference, ◒ HI worse than the nation; ↑ HI has improved, ↔ No change, ↓ HI has worsened;
■ Top-ranked county, ■ ■ Mid-ranked county, ■ Bottom-ranked county, □ No difference

(1) The benchmark year is 2007 except for the following indicators. 2006-2010: idle youth. 2008: regularly talking with neighbors, voted in elections.

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 2017 was 251 violent crimes per 100,000 people, while the nation’s violent crime rate was 384 per 100,000 people. However, the nation’s violent crime rate has been decreasing faster than Hawai‘i’s. The City and County of Honolulu and Maui County switched places between 2007 and 2017 for violent crime rates: in 2007, Honolulu had the highest violent crime rate and Maui had the lowest; in 2017, Honolulu had the lowest violent crime rate and Maui had the highest.

Indicator F01. Violent crime rate

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	472	459	432	405	387	388	369	362	374	387	384
State of Hawai‘i	276	272	276	265	252	243	245	241	247	242	251
C&C Honolulu	289	285	280	268	246	239	231	229	244	238	246
Hawai‘i County	260	251	266	272	262	223	287	237	204	238	255
Kaua‘i County	269	327	336	362	348	306	239	257	190	235	253
Maui County	221	199	233	193	236	259	282	314	338	273	269

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.

Data source/s:

- U.S., 2007-2017
  U.S. Department of Justice, Federal Bureau of Investigation. (2018). Table 1: Crime in the United States by volume and rate per 100,000 inhabitants, 1998–2017. *Crime in the United States, 2017*. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017
- HI, 2007–2017
  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 1975-2017. *Crime in Hawai‘i – Uniform crime reports.* Retrieved from http://hawaii.gov/ag/cpja/main/rs/Folder.2005-12-05.2910/

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 occurs at a higher rate than the national average. In 2017, the national property crime rate was 2,363 per 100,000 people, compared to 2,829 property crimes per 100,000 people in Hawai'i. Hawai'i's property crime rate improved faster than the nation's, narrowing the gap between the two. Among the counties, Maui County usually had the highest property crime rate. Prior to 2014, Hawai'i County usually had the lowest property crime rate; since then, Kaua'i County has had the lowest property crime rate.

Indicator F02. Property crime rate

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	3,276	3,215	3,041	2,946	2,905	2,868	2,734	2,574	2,501	2,452	2,363
State of Hawai'i	4,119	3,567	3,689	3,357	3,191	3,118	3,214	3,186	3,171	2,965	2,829
C&C Honolulu	4,107	3,512	3,682	3,333	3,177	3,017	3,203	3,085	3,111	3,033	2,774
Hawai'i County	3,420	3,125	3,269	2,783	2,518	2,844	2,771	3,486	3,413	2,509	2,700
Kaua'i County	4,519	4,057	4,248	3,642	3,871	3,782	3,766	2,904	2,253	2,077	2,509
Maui County	4,870	4,235	3,997	4,090	3,788	3,781	3,573	3,575	3,641	3,484	3,454

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.

Data source/s:

- U.S., 2007-2017
  U.S. Department of Justice, Federal Bureau of Investigation. (2018). Table 1: Crime in the United States by volume and rate per 100,000 inhabitants, 1998–2017. *Crime in the United States, 2017*. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017

- HI, 2007–2017
  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 1975-2017. *Crime in Hawai‘i – Uniform crime reports.* Retrieved from http://hawaii.gov/ag/cpja/main/rs/Folder.2005-12-05.2910/

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 is lower in Hawai‘i compared to the nation (53 deaths per 100,000 versus 69 deaths per 100,000). In both Hawai‘i and the U.S., this figure increased since 2007. The City and County of Honolulu consistently has the lowest death rate. In 2017, Kaua‘i County had the highest death rate.

Indicator F03. Accident, homicide, and suicide death rates

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	57	56	54	55	56	56	57	58	62	66	69
State of Hawai‘i	44	40	44	46	48	44	44	46	47	50	53
C&C Honolulu	42	35	40	44	44	40	41	42	44	47	51
Hawai‘i County	54	58	62	50	56	61	62	49	57	58	60
Kaua‘i County	58	53	41	58	48	50	30	46	45	64	66
Maui County	42	42	47	46	61	52	47	62	59	51	53

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, 2007–2017
  Centers for Disease Control and Prevention. (n.d.). Underlying cause of death, 1999-2017. *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’s drug arrest rate has declined significantly since 2007, from 232 arrests per 100,000 to 171 in 2017. The nation’s drug arrest rate has not declined as much, going from 480 arrests in 2007 to 453 in 2017. The City and County of Honolulu, Hawai‘i County, and Kaua‘i County all experienced significant declines, whereas Maui County’s drug arrest rate increased to the highest in the state. The City and County of Honolulu has the lowest drug arrest rates among the counties.

Indicator F04. Drug-related arrests

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	480	445	439	424	391	399	409	394	374	406	453
State of Hawai‘i	232	189	195	191	186	193	109	109	187	225	171
C&C Honolulu	160	122	125	128	122	127	112	114	101	95	92
Hawai‘i County	453	338	334	321	336	267	281	263	275	236	301
Kaua‘i County	264	222	216	200	245	210	182	188	202	248	183
Maui County	359	363	397	372	331	441	524	530	509	378	410

Technical notes:

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

Data source/s:

- U.S., 2007-2017
  U.S. Department of Justice, Federal Bureau of Investigation. (n.d.). Arrests offense counts in the United States, various years. *Crime Data Explorer*. Retrieved from https://crime-data-explorer.fr.cloud.gov/explorer/national/united-states/arrest
- HI, 2007–2017
  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 1975-2017. *Crime in Hawai‘i – Uniform crime reports.* Retrieved from http://hawaii.gov/ag/cpja/main/rs/Folder.2005-12-05.2910/

- U.S., 2007–2010, Denominator
  U.S. Census Bureau. (2019). Intercensal estimates of the resident population for counties and states: April 1, 2000 to July 1, 2010. CO-EST00INT-TOT. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/intercensal-2000-2010-counties.html
- U.S., 2010–2017, Denominator
  U.S. Census Bureau. (2019). Annual estimates of the resident population for selected age groups by sex for the United States, regions, states, counties, and Puerto Rico Commonwealth and municipios: April 1, 2000 to July 1, 2008. PEPAGESEX. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/2010s-national-detail.html
- HI, 2007–2017, 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/

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?

In 2017-2018, the percentage of families with a children under 18 years old who reported living in a safe neighborhood was lower in Hawai'i than in the nation, 90.3% compared to 95.1%. There appears to be an improvement in neighborhood safety over the past decade.

Indicator F05. Safe neighborhoods

Area / Year	2007	2011-2012	2017-2018
United States	86.1%	86.6%	95.3%
State of Hawai'i	84.6%	87.0%	96.2%

Technical notes:

For the 2007 and 2011/2012 version of the National Survey of Children's Health, parents were asked: "*How often do you feel safe in your community or neighborhood?*" The response options were never, sometimes safe, usually safe, and always safe; the latter two were considered affirmative safe neighborhood responses. For the 2017/2018 survey, parents were asked: "*To what extend do you agree with these statements about your neighborhood or community? This child is safe in our neighborhood.*" Response options were definitely agree, somewhat agree, somewhat disagree, and definitely disagree. Responses of definitely agree and somewhat agree were considered affirmative safe neighborhood responses. Because of the difference in question, 2017/2018 data might not be comparable to earlier years. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2007, 2011/2012
  Data Resource Center for Child and Adolescent Health. (n.d.) Archived data query. *National Survey of Children's Health, various years*. Retrieved from https://www.childhealthdata.org/browse/survey/archive
- U.S./HI, 2017/2018
  Data Resource Center for Child and Adolescent Health. (n.d.) NSCH interactive data query. *National Survey of Children's Health, various years*. Retrieved from https://www.childhealthdata.org/browse/survey/archive

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 is lower than the national average. In 2017, Hawai'i had 4.2 unduplicated and confirmed reports of child abuse and neglect per 1,000 children, compared to 9.1 nationwide. There is somewhat of a downward trend in Hawai'i, with a slight uptick in 2016. In contrast, the rate has been relatively stable nationwide. The City and County experienced the largest improvement in child abuse and neglect rate, currently at 2.9 reports per 1,000 children, the lowest rate in the state. Hawai'i County has the highest child abuse and neglect rate.

Indicator F06. Child abuse and neglect

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
United States	10.1	9.5	9.3	9.3	9.2	9.2	8.8	9.1	9.2	9.1	9.1
State of Hawai'i	7.1	6.3	7.2	5.0	4.6	4.5	4.3	4.5	5.0	7.0	4.2
C&C Honolulu	6.5	5.8	6.6	4.2	3.6	3.5	3.5	3.4	3.6	6.1	2.9
Hawai'i County	11.0	8.4	9.9	7.2	7.6	7.1	6.6	7.8	9.7	11.5	8.1
Kaua'i County	5.7	6.7	6.3	5.3	5.8	6.4	5.2	6.7	6.8	9.6	4.8
Maui County	6.9	6.4	8.5	7.4	6.0	6.3	5.5	6.1	7.1	5.8	6.6

Technical notes:

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

Data source/s:

- U.S., 2007–2017
  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.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment

- HI, 2007–2017
  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., 2007–2010, Denominator
  U.S. Census Bureau. (2019). Intercensal estimates of the resident population for counties and states: April 1, 2000 to July 1, 2010. CO-EST00INT-TOT. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/intercensal-2000-2010-counties.html
- U.S., 2010–2017, Denominator
  U.S. Census Bureau. (2019). Annual estimates of the resident population for selected age groups by sex for the United States, regions, states, counties, and Puerto Rico Commonwealth and municipios: April 1, 2000 to July 1, 2008. PEPAGESEX. Retrieved from https://www.census.gov/data/datasets/time-series/demo/popest/2010s-national-detail.html
- HI, 2007–2017, 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/

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?

The domestic abuse rate in Hawai‘i increased from 2007, but the increase happened in 2008, and the domestic abuse rate has been stable around 380 domestic abuse protective orders filed with the courts per 100,000 since 2008. Hawai‘i County continues to have the highest rate of domestic abuse while the City and County of Honolulu regularly has the lowest domestic abuse rate.

Indicator F07. Domestic abuse

Area / Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
State of Hawai‘i	344	382	378	388	375	374	376	383	382	369	378
C&C Honolulu	273	315	303	310	301	295	292	300	294	300	326
Hawai‘i County	676	667	686	708	683	710	718	746	733	644	633
Kaua‘i County	366	439	487	487	462	431	396	410	405	448	398
Maui County	386	434	425	443	426	437	473	443	482	415	378

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.

Data source/s:

- HI, 2007–2017
  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, 2007–2017, 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/

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 meal times 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 meal times 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?

Just over 77% of families ate dinner together regularly in Hawai‘i for 2017-2018, compared to just over 73% in the nation. A smaller percentage of families ate together in both Hawai‘i and nation compared to 2007.

Indicator F08. Families eating together regularly

Area / Year	2007	2011-2012	2017-2018
United States	76.9%	78.4%	73.3%
State of Hawai‘i	82.0%	80.6%	77.2%

Technical notes:

The National Survey of Children’s Health 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”. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2007, 2011/2012,
  Data Resource Center for Child and Adolescent Health. (n.d.) Archived data query. *National Survey of Children’s Health, various years*. Retrieved from https://www.childhealthdata.org/browse/survey/archive
- U.S./HI, 2017/2018
  Data Resource Center for Child and Adolescent Health. (n.d.) NSCH interactive data query. *National Survey of Children’s Health, various years*. Retrieved from https://www.childhealthdata.org/browse/survey/archive

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 has a higher percentage of youth age 16 to 19 who are not in school or in the labor force. In 2013-2017, 6.2% of 16- to 19-year-olds in Hawai‘i were idle compared to 4.8% in the nation. The prevalence of idle youth has grown substantially since 2007-2009.

Indicator F09. Idle youth

Area / Year	2006-2010	2013-2017
United States	5.4%	4.8%
State of Hawai‘i	6.2%	6.2%
C&C Honolulu	6.4%	4.9%
Hawai‘i County	3.2%	9.3%
Kaua‘i County	5.9%	11.3%
Maui County	4.0%	8.4%

Technical notes:

Data are a 2006–2010 average and 2013-2017 average. This indicator changed from young people aged 16-24 in the 2009 QOL report to 16-19 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. As one might expect, the youth age 19-24 are more likely to be absent from school and work, so the figures from the 2009 QOL and this report are not directly comparable. The margin of error was taken into account in determining the difference between two estimates.

Data source/s:

- U.S./HI, 2006-2010, 2013-2017
  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 http://factfinder.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 is similar in Hawai‘i and the U.S., at about 55% in 2017. There appears to be a decline in the percentage of people who regularly talk with their neighbors.

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.

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 persons age 15 and older in Hawaii who participated in volunteer activities is regularly below the national average. In 2015, 21.5% of persons age 15 and older volunteered in Hawai‘i, compared to 26.0% for the nation. Volunteering has been declining in Hawai‘i and the nation. There is some evidence that while fewer people volunteer in Hawai‘i, those who volunteer significantly more time. The average hours volunteered of all people in Hawai‘i is occasionally higher than the national average.

Indicator F11. Participated in volunteer activities

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

Technical notes:

Data includes all persons age 15 and older who indicated they spent time doing volunteering activities for any organization in the past year. The data comes from the volunteer supplement, distributed in September, of the Current Population Survey.

Data source/s:

- U.S./HI, 2007-2015
  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?
The percentage of registered voters voting in the general election has declined since 2008, with presidential election years (2008, 2012, 2016) having a higher turnout rate than midterm election years. In the most recent election, in 2018, 52.7% of registered voters voted. Kaua'i County regularly has the highest turnout rates. Since 2014, Hawai'i County has the lowest turnout rates.

Indicator F12. Voted in elections

Area / Year	2008	2010	2012	2016	2018
State of Hawai'i	66.0%	55.8%	61.9%	52.3%	58.4%
C&C Honolulu	66.1%	57.3%	62.9%	52.8%	58.5%
Hawai'i County	67.7%	53.3%	61.2%	47.7%	52.4%
Kaua'i County	68.2%	57.3%	62.9%	57.4%	61.4%
Maui County	61.1%	49.7%	56.8%	52.7%	56.4%

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 generally has much lower turnout than the national average, except for in 2010 and 2014.

Indicator 12b. Voting-eligible population turnout

Area / Year	2008	2010	2012	2014	2016	2018
United States	62.2%	41.8%	58.6%	36.7%	60.1%	50.3%
State of Hawai'i	49.0%	40.3%	44.5%	36.5%	43.2%	39.3%

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.

Data source/s:

- HI, 2008, 2010, 2012, 2014, 2016, 2018
  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, 2008, 2010, 2012, 2014, 2016, 2018
  United States Elections Project. (n.d.) Voter turnout. *General election state turnout rates, various years*. Retrieved from http://www.electproject.org/home/voter-turnout/voter-turnout-data

APPENDIX: CONFIDENCE INTERVALS

Indicator A02: Poverty rate

Area / Year	2007	2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	13.0%	13.4%	13.3%	13.5%
State of Hawai‘i	8.5%	9.5%	9.1%	9.9%
C&C Honolulu	7.8%	8.3%	7.6%	9.0%
Hawai‘i County	13.1%	15.0%	12.9%	17.1%
Kaua‘i County	9.0%	10.1%	8.1%	12.1%
Maui County	6.8%	10.0%	8.3%	11.7%

Indicator A03: Households receiving SNAP/food stamps

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	15.8%	20.9%	20.8%	20.9%
State of Hawai‘i	10.9%	18.5%	17.8%	19.1%
C&C Honolulu	10.0%	15.8%	15.1%	16.5%
Hawai‘i County	18.8%	34.0%	31.1%	36.8%
Kaua‘i County	9.9%	17.4%	14.8%	20.1%
Maui County	8.6%	17.9%	15.8%	20.0%

Indicator A04: Gini index

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	46.7	48.2	48.1	48.2
State of Hawai‘i	43.0	44.0	43.7	44.4
C&C Honolulu	42.2	43.0	42.7	43.3
Hawai‘i County	45.8	47.1	46.0	48.3
Kaua‘i County	42.2	42.8	41.1	44.4
Maui County	43.1	44.5	43.4	45.7

Indicator A05: Income share

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	50.2%	51.5%	51.5%	51.5%
State of Hawai‘i	46.6%	47.5%	47.2%	47.9%
C&C Honolulu	46.0%	46.8%	46.5%	47.1%
Hawai‘i County	48.7%	49.7%	48.6%	50.8%
Kaua‘i County	45.7%	45.8%	44.2%	47.3%
Maui County	47.2%	48.2%	47.1%	49.3%

Indicator A08: Median earnings

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	$28,029	$32,141	$32,098	$32,184
State of Hawai‘i	$30,716	$35,680	$35,439	$35,921
C&C Honolulu	$31,405	$36,705	$36,403	$37,007
Hawai‘i County	$27,191	$30,740	$30,142	$31,338
Kaua‘i County	$28,435	$35,115	$33,908	$36,322
Maui County	$30,202	$35,186	$34,536	$35,836

Indicator B01: Less than high school degree

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	15.0%	12.7%	12.6%	12.8%
State of Hawai‘i	10.2%	8.4%	7.6%	9.2%
C&C Honolulu	10.1%	8.6%	7.7%	9.5%
Hawai‘i County	9.5%	7.7%	5.5%	9.9%
Kaua‘i County	11.7%	8.2%	5.0%	11.4%
Maui County	11.3%	7.9%	5.6%	10.2%

Indicator B02: Bachelor’s degree or higher

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	27.9%	30.9%	30.8%	31.1%
State of Hawai‘i	29.4%	32.0%	31.2%	32.9%
C&C Honolulu	31.1%	34.0%	33.0%	35.0%
Hawai‘i County	26.6%	28.6%	26.1%	31.1%
Kaua‘i County	22.7%	28.2%	24.7%	31.7%
Maui County	25.7%	26.3%	23.9%	28.7%

Indicator B10: Lifelong learning

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	12.4%	12.1%	12.0%	12.1%
State of Hawai‘i	14.2%	13.7%	12.7%	14.7%
C&C Honolulu	16.5%	15.5%	14.2%	16.7%
Hawai‘i County	8.5%	9.7%	6.6%	12.8%
Kaua‘i County	7.3%	6.6%	3.0%	10.2%
Maui County	7.8%	8.3%	5.5%	11.1%

Indicator D06: Good or better health

Area / Year	20011	2017	95% Confidence Interval, Lower Bound	95% Confidence Interval, Upper Bound
United States	83.1%	82.4%		
State of Hawai‘i	85.0%	85.3%	84.1%	86.3%
C&C Honolulu	85.5%	85.2%	83.6%	86.6%
Hawai‘i County	83.6%	83.4%	80.7%	85.8%
Kaua‘i County	81.8%	86.3%	83.3%	88.9%
Maui County	85.4%	85.4%	82.7%	87.7%

Indicator D07: Frequent mental distress

Area / Year	20011	2017	95% Confidence Interval, Lower Bound	95% Confidence Interval, Upper Bound
United States	11.7%	12.0%		
State of Hawai‘i	8.5%	9.5%	8.6%	10.5%
C&C Honolulu	8.1%	8.8%	7.7%	10.1%
Hawai‘i County	10.0%	11.8%	9.8%	14.2%
Kaua‘i County	9.2%	7.1%	5.2%	9.5%
Maui County	8.3%	11.4%	9.4%	13.9%

Indicator D08: Frequent physical distress

Area / Year	20011	2017	95% Confidence Interval, Lower Bound	95% Confidence Interval, Upper Bound
United States	11.8%	12.0%		
State of Hawai‘i	9.0%	10.7%	9.8%	11.7%
C&C Honolulu	8.5%	10.8%	9.6%	12.2%
Hawai‘i County	10.1%	12.7%	10.6%	15.1%
Kaua‘i County	13.1%	9.4%	7.3%	12.1%
Maui County	9.3%	9.3%	7.5%	11.3%

Indicator D09: Obesity

Area / Year	20011	2017	95% Confidence Interval, Lower Bound	95% Confidence Interval, Upper Bound
United States	27.8%	31.3%		
State of Hawai‘i	21.9%	23.8%	22.4%	25.2%
C&C Honolulu	21.7%	24.4%	22.6%	26.3%
Hawai‘i County	24.0%	23.3%	20.7%	26.2%
Kaua‘i County	18.8%	21.5%	18.0%	25.5%
Maui County	22.0%	23.0%	20.2%	26.0%

Indicator D10: Smoking

Area / Year	20011	2017	95% Confidence Interval, Lower Bound	95% Confidence Interval, Upper Bound
United States	21.2%	17.1%		
State of Hawai‘i	16.8%	12.8%	11.7%	13.9%
C&C Honolulu	16.3%	12.3%	10.9%	13.8%
Hawai‘i County	19.2%	14.9%	12.7%	17.5%
Kaua‘i County	20.1%	13.1%	10.5%	16.3%
Maui County	14.8%	12.5%	10.4%	15.0%

Indicator D11: Binge drinking

Area / Year	20011	2017	95% Confidence Interval, Lower Bound	95% Confidence Interval, Upper Bound
United States	18.3%	17.4%		
State of Hawai‘i	21.5%	19.5%	18.2%	20.9%
C&C Honolulu	21.3%	19.0%	17.3%	20.8%
Hawai‘i County	22.5%	19.0%	16.4%	21.9%
Kaua‘i County	17.7%	21.8%	17.6%	26.6%
Maui County	22.6%	20.5%	17.6%	23.7%

Indicator D13: Physical activity

Area / Year	20013	2017	95% Confidence Interval, Lower Bound	95% Confidence Interval, Upper Bound
United States	20.5%	20.3%		
State of Hawai‘i	26.5%	24.6%	23.2%	26.0%
C&C Honolulu	26.3%	24.2%	22.4%	26.2%
Hawai‘i County	26.0%	22.0%	19.4%	24.9%
Kaua‘i County	26.4%	25.2%	21.3%	29.6%
Maui County	28.4%	28.2%	25.0%	31.7%

Indicator D14: Fruit and vegetable consumption

Area / Year	20011	2015	95% Confidence Interval, Lower Bound	95% Confidence Interval, Upper Bound
State of Hawai‘i	19.7%	19.8%	18.4%	21.2%
C&C Honolulu	18.5%	18.4%	16.6%	20.2%
Hawai‘i County	19.8%	22.9%	19.9%	26.3%
Kaua‘i County	26.5%	22.8%	19.1%	27.0%
Maui County	23.4%	21.2%	18.4%	24.4%

Indicator D15: Adults without health insurance

Area / Year	2008-2010	2012-2016	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	17.1%	13.5%	13.4%	13.6%
State of Hawai‘i	8.4%	5.9%	5.4%	6.5%
C&C Honolulu	6.9%	5.1%	4.4%	5.7%
Hawai‘i County	12.3%	7.8%	5.9%	9.6%
Kaua‘i County	10.4%	7.8%	4.8%	10.8%
Maui County	11.2%	8.0%	6.0%	10.0%

Indicator D16: Children without health insurance

Area / Year	2008-2010	2012-2016	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	8.7%	5.9%	5.8%	6.0%
State of Hawai‘i	3.1%	2.6%	2.2%	3.1%
C&C Honolulu	2.4%	2.4%	2.0%	2.9%
Hawai‘i County	4.7%	2.6%	1.0%	4.2%
Kaua‘i County	6.1%	3.0%	0.8%	5.2%
Maui County	4.5%	3.7%	2.2%	5.1%

Indicator E01: Rental cost burden

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	47.0%	46.8%	46.6%	47.1%
State of Hawai‘i	49.3%	51.6%	49.5%	54.0%
C&C Honolulu	50.7%	54.3%	51.9%	57.2%
Hawai‘i County	44.2%	45.0%	38.6%	52.8%
Kaua‘i County	42.8%	42.7%	33.7%	54.3%
Maui County	48.5%	44.5%	38.3%	52.6%

Indicator E02: Housing cost burden

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	37.4%	29.3%	29.2%	29.4%
State of Hawai‘i	47.7%	40.0%	38.3%	41.8%
C&C Honolulu	46.4%	39.1%	37.0%	41.1%
Hawai‘i County	48.0%	39.1%	33.6%	44.5%
Kaua‘i County	50.9%	47.0%	37.9%	56.0%
Maui County	53.5%	43.7%	38.1%	49.2%

Indicator E03: Home ownership

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	66.6%	63.8%	63.5%	64.1%
State of Hawai‘i	59.3%	58.1%	57.5%	58.7%
C&C Honolulu	57.6%	55.6%	55.0%	56.2%
Hawai‘i County	66.1%	67.0%	65.5%	68.5%
Kaua‘i County	65.0%	63.0%	61.1%	64.9%
Maui County	58.8%	59.3%	57.7%	60.8%

Indicator E04: Overcrowded dwellings

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	3.1%	3.3%	3.3%	3.4%
State of Hawai‘i	8.9%	9.0%	8.4%	9.7%
C&C Honolulu	8.8%	9.4%	8.6%	10.2%
Hawai‘i County	7.8%	6.4%	4.8%	8.1%
Kaua‘i County	8.8%	7.8%	5.4%	10.3%
Maui County	11.3%	10.7%	8.3%	13.1%

Indicator E06: Age of structure

Area / Year	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	45.3%	45.2%	45.4%
State of Hawai‘i	46.4%	45.3%	47.5%
C&C Honolulu	38.3%	37.2%	39.4%
Hawai‘i County	64.0%	60.3%	67.6%
Kaua‘i County	60.1%	55.5%	64.8%
Maui County	58.6%	55.1%	61.9%

Indicator E07: Internet access

Area / Year	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	82.4%	82.3%	82.5%
State of Hawai‘i	85.6%	85.3%	85.9%
C&C Honolulu	86.9%	86.5%	87.3%
Hawai‘i County	80.4%	79.3%	81.5%
Kaua‘i County	83.5%	82.1%	85.0%
Maui County	85.5%	84.5%	86.5%

Indicator E08: Long commute time

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	8.0%	8.9%	8.8%	9.0%
State of Hawai‘i	7.9%	10.1%	9.8%	10.4%
C&C Honolulu	8.5%	11.5%	11.1%	11.9%
Hawai‘i County	10.1%	9.3%	8.4%	10.2%
Kaua‘i County	2.6%	4.7%	4.0%	5.4%
Maui County	4.4%	4.9%	4.3%	5.5%

Indicator E09: Driving alone to work

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	76.0%	76.4%	76.3%	76.5%
State of Hawai‘i	66.3%	67.1%	66.7%	67.5%
C&C Honolulu	64.5%	64.0%	63.5%	64.5%
Hawai‘i County	68.0%	73.8%	72.4%	75.2%
Kaua‘i County	78.8%	80.0%	78.0%	82.0%
Maui County	70.6%	73.3%	71.9%	74.7%

Indicator F01: Idle youth

Area / Year	2006-2010	2013-2017	90% Confidence Interval, Lower Bound	90% Confidence Interval, Upper Bound
United States	76.0%	76.4%	76.3%	76.5%
State of Hawai‘i	66.3%	67.1%	66.7%	67.5%
C&C Honolulu	64.5%	64.0%	63.5%	64.5%
Hawai‘i County	68.0%	73.8%	72.4%	75.2%
Kaua‘i County	78.8%	80.0%	78.0%	82.0%
Maui County	70.6%	73.3%	71.9%	74.7%

REFERENCES

Berger-Schmitt, R. (2002). Considering social cohesion in quality of life assessments: Concept and measurement. *Social Indicators Research, 58,* 403–428.

Bognar, G. (2005). The concept of quality of life. *Social Theory and Practice, 31*(4), 561–580.

Diener, E. & Suh, E. (1997). Measuring quality of life: Economic, social, and subjective indicators. *Social Indicators Research, 40,* 189–216.

Ferriss, A.L. (2006). A theory of social structure and the quality of life. *Applied Research in Quality of Life, 1,* 117–123.

Hawai‘i 2050 Sustainability Task Force. (2008). *Hawai‘i 2050 sustainability plan: Charting a course for Hawai‘i’s sustainable future.* Honolulu: State of Hawai‘i Office of the Auditor.

Hawai‘i 2050 Sustainability Task Force. (2018). *Hawai‘i 2050 sustainability plan – ten year measurement update.* Honolulu: State of Hawai‘i Office of the Auditor.

Hawai‘i State Department of Business, Economic Development, & Tourism. (n.d.). *State of Hawai‘i data book: A statistical abstract, various years.* Retrieved from http://hawaii.gov/dbedt/info/economic/databook/

Love, I., & Garboden, P. (2019). *Drivers of well-being in Hawai‘i: Quantifying individual and community impacts* (Working Paper 2019-7). Honolulu: Economic Research Organization at the University of Hawai‘i (UHERO).

Myers, D. (1987). Community-relevant measurement of quality of life: A focus on local trends. *Urban Affairs Quarterly, 23*(1), 108–125.

National Research Council. (2002). *Community and quality of life: Data needs for informed decision making.* Washington, DC: National Academy Press.

Sirgy, M., Michalos, A., Ferriss, A., Easterlin, R., Patrick, D., & Pavot, W. (2006). The quality-of-life (QOL) research movement: Past, present, and future. *Social Indicators Research, 76,* 343–466.

Yuan, S., He, S.J., Tom, A., Yuen, S., Schmidt, K., Kadir, A., Ripke, M., Taniguchi, K., Mastrobuono, S., & Stern, I. (2005). *Aloha United Way Quality of life in Hawai‘i, 2005 Report*. Honolulu: University of Hawai‘i, Center on the Family. Retrieved from http://uhfamily.hawaii.edu/publications/brochures/QualityOfLifeinHawaii2005wRef.pdf

Yuan, S., Kole, S., Hwang, S.Y., Manlagñit, M.C., Yuen, S., & He, S.J. (2009). *Quality of Life in Hawai‘i, 2009 Report: Framework, Indicators, and Technical Documentation.* Honolulu, HI: University of Hawai‘i, Center on the Family.