# Quality of Life in Hawai'i 2009 Report

Framework, Indicators, and Technical Documentation



Department of Business, Economic Development & Tourism State of Hawai'i



Center on the Family University of Hawai'i

# Quality of Life in Hawai'i, 2009 Report: Framework, Indicators, and Technical Documentation

Sarah Yuan Subir Kole Soo-Young Hwang M. Chelo Manlagñit Sylvia Yuen Shi-Jen He

Center on the Family University of Hawai'i



Department of Business, Economic Development & Tourism State of Hawai'i



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For more information, please contact:

Center on the Family, University of Hawai'i at Mānoa 2515 Campus Road, Miller Hall 103, Honolulu, HI 96822 (808)956-4132 • cof@ctahr.hawaii.edu • www.uhfamily.hawaii.edu

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### **INTRODUCTION**

#### Overview

The Hawai'i Department of Business, Economic Development & 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. This report discusses in detail the QOL framework developed by the COF and measures utilized in the study, outlines the data sources used to generate the set of indicators, and presents major findings on the QOL in Hawai'i.

The concept of QOL is complex, multifaceted, and must be understood within the broader societal context. Accordingly, developing a framework for understanding and measuring QOL in Hawai'i is imperative. The resulting framework needs to encompass important domains related to individual, family, and community well-being, and to include indicators of high relevance to Hawai'i's communities and its stakeholders. In order to be useful, the QOL indicator data must be updated regularly; therefore, making use of regularly updated and publicly available data—such as data from governmental and other public sources—is cost effective in the long term. The QOL framework and the selected indicators in this report were based on a comprehensive review of the relevant research literature, QOL reports prepared previously in Hawai'i or in other communities in the U.S. or abroad, and a careful screening of relevant data in the public domain.

#### 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, we found the concept of social cohesion 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

Over the past several years there have been important efforts to improve the long-term viability of Hawai'i's economy. It is beyond the scope of this report to review these initiatives in detail, but one example of such an effort has been the focus on revitalizing human resources and economic capacity through the Innovation Initiative. This initiative included Act 148 of 2007, in which DBEDT was designated to conduct research and policy development related to emerging industries. Two of the significant contributing factors to global competitiveness are capital availability and workforce quality. Toward this end, QOL research can be used as a tool for place promotion and city marketing policies directed at attracting capital and high quality workers (Biagi, Lambiri, & Royuela, 2006).

Another economic vitality effort is the Hawai'i 2050 Project, which developed a broad set of proposals aimed at developing a sustainable long-term balance between economic growth and the quality of Hawai'i's environment, culture, and living conditions. The *Hawai'i 2050 Sustainability Plan* (2008) represents a statewide effort to set community goals and priorities that involved thousands of participants from many government agencies, private businesses, nonprofit groups, and other sectors, such as the legislature. Implementation of the aforementioned and other initiatives requires valid, accurate, and timely data to monitor progress and to inform policy and planning to favorably influence the QOL of Hawai'i's people.

There have also been earlier efforts to measure QOL in Hawai'i. One of the earliest initiatives was undertaken by the State Department of Planning and Economic Development through its 1974 publication *Quality of Life in the State of Hawai'i*. The purpose of the publication was to compile and present statistics related to QOL in Hawai'i for state decision-makers. For the study, 58 indicators were grouped into five areas: population, natural environment, man-made physical environment, economic environment, and social environment. There were no follow up reports to the initial study, although DBEDT has presented some of the statistics in its annual *State of Hawai'i Data Book*.

In 2005, 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 countylevel data (Yuan et al., 2005). The 51 indicators in this report focused on community well-being and societal concerns in six domains: the economy, education, health, public safety, community support, and the environment. Although Hawai'i is often ranked among the top states in national quality of life studies—for example, *AARP Healthiest Hometowns* (Mahoney & Edmondson, 2008); *American Human Development Index* (Burd-Sharps, Lewis & Martins, 2008); *Index of Social Health* (Opdycke & Miringoff, 2008); *Gallup Healthway Well-Being Index* (Gallup-Healthways, 2009)—the 2005 report revealed significant variation in the QOL in Hawai'i's four counties and identified specific issues that each county faced. Building on the 2005 QOL report, the 2050 goals and priorities, and the work of DBEDT on innovation initiatives, this report aims to present a comprehensive QOL framework and indicators that will assist stakeholders to monitor changes in the community's QOL and to provide cost-effective QOL tracking and reporting in the years ahead.

#### Structure of the 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 35 indicators for which confidence intervals or the results of statistical test 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., we identified 6 major domains that constitute the well-being of a community: economic, education, environment, health, housing and transportation, and social. Guided by the integrated framework, we selected 4 major measurement dimensions for each domain (with 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 67, was screened to meet all of 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 1 and 6 indicators (with an average of 2–3 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.

Domain	Dimension	No. of Indicators
	1. Standard of living	3
	2. Income inequality	2
A. Economic	3. Employment	2
	4. Compensation and work hours	2
	Total	9
	1. Attainment	2
	2. Performance	5
B. Education	3. Readiness	3
	4. Participation in higher education	2
	Total	12
	1. Pollution	4
	2. Conservation	2
C. Environment	3. Consumption	2
	4. Recycling	3
	Total	11
	1. Mortality	5
	2. Health status	2
D. Health	3. Disease prevention	6
	4. Access to care	3
	Total	16
	1. Affordable housing	3
	2. Unmet housing needs	2
E. Housing & Transportation	3. Commute time	1
Transportation	4. Automobile dependence	1
	Total	7
	1. Public safety	5
	2. Family relationship	3
F. Social	3. Community connectedness	2
	4. Social participation	2
	Total	12
TOTAL		67

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

#### **Data Collection**

We searched and examined datasets and published statistics from governmental agencies and nonprofit organizations and identified the best data sources available for each of the 67 indicators. The final dataset included data from surveys and administrative records obtained from 17 governmental agencies at the state and federal levels and from 5 public or nonprofit organizations.

Annual data for the indicators were collected for the nation and for the state and counties of Hawai'i from 2000 to the most current available year. When numbers were small for a given year, a three-year average was calculated to minimize unreliability in measurement (e.g., data for Kaua'i County from the American Community Survey).

#### Data Analysis

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

- *Compared to the nation:* for the same indicator for the most current available year, state data is compared to the national average (mean or median). For positive indicators (e.g., per capita income), a higher value indicates the outcome is better; whereas for negative indicators (e.g., violent crime rate), a higher value indicates the outcome is worse.
- *Over time:* using the earliest available year since 2000 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).
- *Across counties:* from 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 top.

Results of the analysis are presented using the following symbols.

Compared to the nation	Over time						
$\ominus$ HI better than the nation	✤ HI has improved						
$\ominus$ No difference	↔ No change						
$\bigcirc$ HI worse than the nation	HI has worsened						
Across counties							
♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦	anked and bottom-ranked counties						
$\approx$ No difference among counties							
Ot	her						
•• Data not available							

#### Table 2. Symbols Used in the Report

For indicator data based on surveys, margin of error was taken into consideration to ascertain the difference between two sample estimates (e.g., data for 2000 vs. 2008, the nation vs. Hawai'i, and Kaua'i County vs. Maui County). A 95% confidence level was utilized unless the data source adopted the 90% level (e.g., American Community Survey). Test of statistical significance was applied to 35 indicator data (52% of all indicators). The confidence intervals or the test results for these 35 indicators are reported in Appendix 1. Most of the remaining indicator data were from administrative records, such as vital statistics and crime reports, for which margins of error were not available.

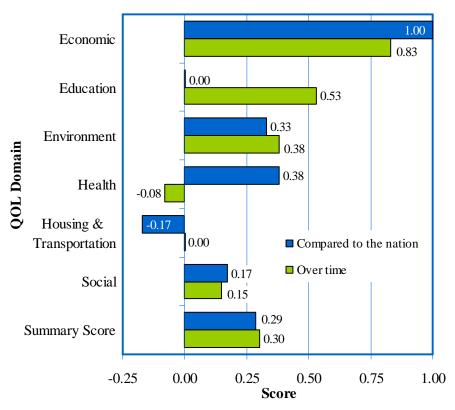
Two summary QOL scores are calculated: one for Hawai'i's standing compared to the nation, and one for Hawai'i's change over time. The indicator score for a positive outcome is 1, for a negative outcome is -1, and for no difference/no change is 0. Indicator scores within each dimension are averaged to obtain dimension scores, which then are averaged to obtain domain scores. A summary QOL score is the average of 6 domain scores. Dimension, domain, and summary scores range from -1, or "worse/worsened," to +1, or "better/improved," while 0 means "no difference/no change."

#### Limitations

While the selection of indicators emphasized the availability of national, county, and trend data, we included some indicators that lack one of these geographic or time dimensions because they were the best data available for measuring a specific QOL dimension at the time of this report. When an indicator's national data and county data were not comparable due to the use of different measurements, we reported the latter to facilitate county comparisons. For this reason, the national data for several indicators were not reported (e.g., voted in elections).

Like other QOL reports, our study 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 Hawai'i, 2009 – Summary Scores

#### Hawai'i fares above the national average on overall quality of life.

The state scored 0.29 in relative standing to the national average on a scale of -1 to +1 (worse to better than the nation). The state's scores were also better in 4 of the 6 domains: economic (1.00), health (0.38), environment (0.33), and social (0.17). In the education domain, Hawai'i was similar to the nation (0.00), but in housing and transportation Hawai'i scored below the nation (-0.17), primarily because of unfavorable housing conditions.

#### The quality of life in Hawai'i has improved since 2000.

Positive change was observed in 4 of the 6 QOL domains, with a QOL score of 0.30 on a scale of -1 to +1 (worsened to improved since 2000). The greatest progress was in the economic domain (0.83), followed by education (0.53), environment (0.38), and social (0.15). There was a slight decline in health-related quality of life (-0.08), and no gain was observed in the housing and transportation domain (0.00).

# Hawai'i's counties share similar conditions on some QOL measures, but present different strengths and weaknesses on others.

There was no county difference on about 15% (9 of 61) of county-level QOL indicators. Among the indicators (52) that showed county variation, the City and County of Honolulu ranked top on the largest number of indicators (37%), while Hawai'i County ranked lowest on almost half of the indicators (48%). Kaua'i and Maui Counties were in the middle range on the majority of indicators.

# ECONOMIC DOMAIN AND INDICATORS

Hawai'i's economic well-being is better than that of the nation, showing improvement since 2000 and outperforming all other QOL domains.

Compared to the nation, Hawai'i fared better on all of the 8 economic indicators for which there were data. Since the benchmark year 2000, Hawai'i improved on 5 indicators while there was relatively little change on 1 indicator. There were no trend data available for the remaining 3 indicators. See Table 3 for the most recent data and findings.

**Standard of Living:** Since 2000, there has been a rise in the state's mean income and reductions in poverty and children receiving free or reduced-cost school lunch due to low family incomes. On average, people in Hawai'i have a higher per capita income and are less likely to be in poverty than their national counterparts.

**Income Inequality:** There is a lesser degree of income concentration in the state compared to the nation, as indicated by a lower Gini index, and a smaller percentage of income shared by households in the top 20% income group. Trend data for Hawai'i are not available.

**Employment:** Hawai'i has a lower economic dependency ratio than the nation. For every 100 people in the labor force, 89.7 people are not economically active in Hawai'i, compared to 97.8 in the nation. The state's annual unemployment rate was 3.9% in 2008, almost 2 percentage points lower than the national rate, and about the same level as it was in 2000. From 2000 to 2007, the overall employment trend increased as the economic dependency ratio decreased by 8.4% and the unemployment rate remained low.

**Compensation and Work Hours:** Workers in Hawai'i have a higher median wage and are less likely to work long hours than their national counterparts. Since 2000, the state has improved on reducing the percentage of workers, including multiple job holders, who worked 41 hours or more per week.

#### **County Comparisons**

- Among the four countries, the City and County of Honolulu had the most favorable conditions on the largest number of indicators: per capita income, Gini index, income share of the top 20%, unemployment rate, and median earnings.
- Maui County ranked best on having the lowest rates for poverty, free or reduced-cost lunch, and economic dependency ratio.
- Kaua'i County's performance was in the middle range among the counties.
- Hawai'i County had the least favorable economic conditions, ranking the worst on per capita income, poverty rate, free or reduced-cost lunch, Gini index, income share of the top 20%, economic dependency ratio, unemployment rate, and median earnings.
- The four counties were similar in the percentage of workers who worked long hours.

#### Table 3. Economic Domain: Most Recent Data and Findings

				Hawai'i:	Hawai'i:	Over time <sup>(1)</sup>	County				
Economic Indicator	Year	U.S.	HI	Compared to the Nation	% Change	Improved or Worsened	Honolulu	Hawaiʻi	Kaua'i	Maui	Com- parison
Standard of living											
Per capita income, current dollars	2007	\$38,615	\$39,242	$\bigcirc$	38%	$\mathbf{\uparrow}$	\$42,015	\$29,702	\$33,356	\$35,835	$\langle \rangle$
Poverty rate, % of people	2007	13.0%	8.5%	$\ominus$	-14%	$\mathbf{\uparrow}$	7.8%	13.1%	9.0%	6.8%	$\langle \rangle$
Free or reduced-cost lunch, % of school children	2008	••	38.6%	••	-8%		37.9%	48.1%	35.0%	33.1%	$\langle \rangle$
Income inequality											
Gini index, a scale of 0–100	2005– 2007	46.5	42.7	$\ominus$	••	••	42.0	44.9	42.7	43.5	$\langle \rangle$
Income share of households in the top 20% income group, % of income	2005– 2007	50.0%	46.5%	$\ominus$	••	••	45.8%	48.4%	46.1%	47.8%	$\langle \rangle$
Employment											
<b>Economic dependency ratio</b> , number of people in the total population who are not in the labor force per 100 of those who are	2005– 2007	97.8	89.7	$\ominus$	-8%	∱	91.7	93.2	82.2	77.1	$\langle \rangle$
<b>Unemployment rate</b> , % of people in the civilian labor force	2008	5.8%	3.9%	$\ominus$	-3%	\$	3.5%	5.5%	4.4%	4.5%	$\langle \rangle$
Compensation and work hours											
Median earnings: For people aged 16 and over with earnings in the past 12 months, current dollars	2005– 2007	\$28,029	\$30,716	$\ominus$	••	••	\$31,405	\$27,191	\$28,435	\$30,202	$\langle \rangle$
Working long hours: Usually work 41 hours or more per week, % of employed people aged 25–64	2007	31.6%	22.9%	$\ominus$	-14%	∱	22.1%	23.1%	25.3% <sup>(2)</sup>	25.3% <sup>(2)</sup>	$\approx$
	Standard of livingPer capita income, current dollarsPoverty rate, % of peopleFree or reduced-cost lunch, % of school childrenIncome inequalityGini index, a scale of 0–100Income share of households in the top 20% income group, % of incomeEmploymentEconomic dependency ratio, number of people in the total population who are not in the labor force per 100 of those who areUnemployment rate, % of people in the civilian labor forceCompensation and work hoursMedian earnings: For people aged 16 and over with earnings in the past 12 months, current dollarsWorking long hours: Usually work 41 hours or more per week, % of employed people aged	Standard of livingImage: current dollars2007Per capita income, current dollars2007Poverty rate, % of people2007Free or reduced-cost lunch, % of school children2008Income inequality2005- 2007Gini index, a scale of 0–1002005- 2007Income share of households in the top 20% income group, % of income2005- 2007Employment2005- 2007Economic dependency ratio, number of 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Symbols: •• Data not available,  $\bigcirc$  HI better than the nation,  $\bigcirc$  No difference,  $\bigcirc$  HI worse than the nation,  $\uparrow$  HI has improved,  $\Leftrightarrow$  No change,  $\checkmark$  HI has worsened,  $\diamondsuit$  Difference found between top-ranked and bottom-ranked counties,  $\approx$  No difference among counties.

(1) The benchmark year is 2000 for all economic indicators.

(2) Data is based on a combined sample of Kaua'i and Maui Counties because individual county data were not available.

T	• 4		
Per ca	pita	income	

Average income per person (current dollars)

#### Why is this important?

This indicator assesses the economic health of a population. As an average measure, per capita income tells us how well income growth has kept up with population growth. A decreasing or increasing per capita income is useful in gauging local economic conditions and trends over time. Personal income affects many areas of concern such as access to adequate housing, healthcare, higher education, safety, nutritious food, and clean water, suggesting that strong economic resources can contribute to a higher quality of life.

A01

#### How are we doing?

In 2007, Hawai'i's per capita income of \$39,242 was higher than the national average of \$38,615 and was up 38% from \$28,437 in 2000 (which is a 15% actual increase based on 2007 adjusted dollars). Among the counties in the State of Hawai'i, there was also an increasing trend in per capita income. The City and County of Honolulu had the highest per capita income, while Hawai'i County had the lowest per capita income.

indicator 101. I er capita meome								
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	\$29,847	\$30,582	\$30,838	\$31,530	\$33,157	\$34,690	\$36,794	\$38,615
State of Hawai'i	\$28,437	\$28,840	\$29,632	\$30,555	\$32,782	\$34,885	\$37,117	\$39,242
C&C Honolulu	\$30,404	\$30,759	\$31,531	\$32,544	\$34,953	\$37,188	\$39,558	\$42,015
Hawai'i County	\$21,437	\$22,355	\$23,286	\$23,838	\$25,373	\$27,147	\$28,645	\$29,702
Kaua'i County	\$24,102	\$24,421	\$24,637	\$25,657	\$27,650	\$29,566	\$31,481	\$33,356
Maui County	\$25,149	\$25,456	\$26,561	\$27,410	\$29,536	\$31,486	\$34,083	\$35,835

#### Indicator A01: Per capita income

#### **Technical notes:**

Per capita income is calculated by dividing the total income of residents by the total number of residents.

#### Data source/s:

• U.S./HI, 2000–2007

U.S. Department of Commerce, Bureau of Economic Analysis. (n.d.). CA1-3: Personal income, population, per capita personal income. *Local area personal income, various years*. Retrieved from http://www.bea.gov/regional/reis/default.cfm?selTable=CA1-3&section=2

Poverty rate		Economic Domain
Percentage of people living below the federal poverty thresholds	A02	Standard of Living
unesholds		

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 remained consistently below the nation's rate in the 2000s. In 2007, the poverty rate in Hawai'i was 8.5% compared to the national rate of 13.0%. The general trend showed a declining poverty rate in the state. Hawai'i County had a similar rate as the nation and was higher than that of other counties. The largest difference was found between Hawai'i County and Maui County.

indicator 1102. I overty rate								
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	11.3%	11.7%	12.1%	12.5%	12.7%	13.3%	13.3%	13.0%
State of Hawai'i	9.9%	10.4%	11.0%	10.8%	9.0%	9.9%	9.4%	8.5%
C&C Honolulu	9.3%	9.8%	10.4%	10.5%	8.8%	9.3%	8.5%	7.8%
Hawai'i County	13.8%	14.3%	14.3%	13.1%	10.8%	13.5%	13.8%	13.1%
Kaua'i County	10.3%	11.1%	11.1%	10.5%	8.6%	11.8%	9.4%	9.0%
Maui County	9.4%	10.2%	10.4%	10.2%	8.3%	8.5%	9.8%	6.8%

#### **Indicator A02: Poverty rate**

#### **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, 2000–2007

U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE). (n.d.). *Model-based small area income and poverty estimates for school districts, counties, and states, various years*. Retrieved from

http://www.census.gov/did/www/saipe/data/statecounty/data/index.html

Free or reduced-cost lunch		Economic Domain
Percentage of school children receiving free or reduced-	A03	Standard of Living
cost lunch		

This indicator measures student poverty and its concentration in public schools. Children are eligible for free or reduced-price school lunch if their family income is below 185% of the federal poverty guidelines. Therefore, this indicator reveals the number of school-age children living in or near poverty. 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?

For the state and all its counties, there was a declining trend in school lunch program participation from 2000 to 2008, particularly in the last three years. At the same time, all counties, except for Hawai'i County, had lower participation rate compared to the state average. In 2008, 38.6% of public school students statewide were eligible to receive the free or reduced-cost lunch; whereas Maui County had the lowest rate with 33.1%, Hawai'i County had the highest rate with 48.1%.

nucator A05. Free of reduced-cost function									
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
State of Hawai'i	42.2%	43.3%	42.6%	45.0%	43.4%	42.7%	41.0%	39.8%	38.6%
C&C Honolulu	40.3%	42.4%	42.4%	44.2%	42.8%	41.6%	40.1%	39.4%	37.9%
Hawai'i County	52.9%	52.8%	52.5%	55.1%	53.8%	54.4%	50.6%	48.6%	48.1%
Kaua'i County	42.4%	41.4%	38.6%	42.3%	38.8%	39.8%	37.9%	36.3%	35.0%
Maui County	38.9%	38.1%	34.4%	39.8%	37.5%	37.5%	36.2%	33.4%	33.1%

#### Indicator A03: Free or reduced-cost lunch

#### **Technical notes:**

Data included students in public schools only and excluded those in charter schools and private schools. Data were collected in the fall for each school year. Data year refer to the school year ending in that particular year. National data were unavailable.

#### Data source/s:

• HI, 2000–2002

Hawai'i State Department of Education, Systems Accountability Office. (n.d.). *School status and improvement report, various years*. Retrieved from http://arch.k12.hi.us/school/ssir/ssir.html

• HI, 2003–2008

Hawai'i State Department of Education, Systems Accountability Office. (n.d.). *Trend report: Educational and fiscal accountability, various years*. Retrieved from http://arch.k12.hi.us/school/trends/trends.html

Gini index -	<b>A04</b>	Economic Domain
Gini index (0–100) of income concentration	A04	Income Inequality

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 proportionate 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 improving income equality.

#### How are we doing?

When compared to the national average, Hawai'i's Gini index of income concentration in 2005–2007 was significantly lower (42.7 versus 46.5). At the county level, Hawai'i County had the highest income concentration while the City and County of Honolulu had the lowest (44.9 vs. 42.0).

#### Indicator A04: Gini index

Area / Year	2005–2007
United States	46.5
State of Hawai'i	42.7
C&C Honolulu	42.0
Hawai'i County	44.9
Kaua'i County	42.7
Maui County	43.5

#### **Technical notes:**

Data are a 2005–2007 average. Income for 2005 and 2006 was adjusted to 2007 dollars before computation. The margin of error was taken into account in determining the difference between two estimates.

#### Data source/s:

• U.S./HI, 2005–2007

U.S. Census Bureau. (2008). B19083: Gini index of income inequality. 2005–2007 American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

Income share of households in the top 20% income		Economic Domain
group	A05	
Percentage of income shared by households in the top 20% income group	<u>AU5</u>	Income Inequality

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. 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?

In 2005–2007, the income share of the top 20% households in Hawai'i stood at 46.5%, which was significantly lower than the national average of 50.0%. Among the counties, Hawai'i County (48.4%) and Maui County (47.8%) had significantly higher rates than the City and County of Honolulu (45.8%).

Area / Year	2005-2007
United States	50.0%
State of Hawai'i	46.5%
C&C Honolulu	45.8%
Hawai'i County	48.4%
Kaua'i County	46.1%
Maui County	47.8%

#### Indicator A05: Income share of households in the top 20% income group

#### **Technical notes:**

Data are a 2005–2007 average. Income for 2005 and 2006 was adjusted to 2007 dollars before computation. The margin of error was taken into account in determining the difference between two estimates.

#### Data source/s:

• U.S./HI, 2005–2007

U.S. Census Bureau. (2008). B19082: Shares of aggregate household income by quintile. 2005-2007 American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

Economic dependency ratio		Economic Domain
Number of people in the total population who are not in	A06	Employment
the labor force per 100 of those who are		

The economic dependency ratio measures the extent of a community's population that is not participating in 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, is associated with the educational attainment and job availability in the community.

#### How are we doing?

In 2005–2007, for every 100 persons in the labor force in Hawai'i, 89.7 were not, indicating a lower economic dependency ratio for the state when compared to the nation. Following the national trend, the state's economic dependency ratio decreased 8 percentage points since 2000. Among the counties, Maui had the lowest economic dependency ratio while Hawai'i had the highest.

Area / Year	2000	2005-2007
United States	102.7	97.8
State of Hawai'i	97.7	89.7
C&C Honolulu	95.9	91.7
Hawai'i County	110.0	93.2
Kaua'i County	106.2	82.2
Maui County	93.2	77.1

#### Indicator A06: Economic dependency ratio

#### **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 for 2005–2007 are a 3-year average. The margin of error was taken into account in determining the difference between two estimates.

#### Data source/s:

• U.S./HI, 2000

U.S. Census Bureau. (2002). P43: Sex by employment status for the population 16 years and over; P8: Sex by age. *Census 2000 Summary File 3*. Retrieved from http://factfinder.census.gov/

• U.S./HI, 2005–2007

U.S. Census Bureau. (2008). B23001: Sex by age by employment status for the population 16 years and over; B01001: Sex by age. 2005-2007 American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

Unemployment rate		Economic Domain
Percentage of people in the civilian labor force who are	A07	Employment
jobless and looking for work		

This indicator, which is a measure of the unutilized labor supply of a community, reveals the availability of jobs and opportunities in Hawai'i. Note that the unemployment rate tends to understate the unemployment situation of a region because 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.

#### How are we doing?

The unemployment rate in Hawai'i has continued to be lower than the national average since 2001. Although still lower than the national average of 5.8%, the unemployment rate in the state had increased to 3.9% in 2008 from 2.6% in 2007. At the county level, Hawai'i County posted the highest unemployment rate (5.5%), while the City and County of Honolulu had the lowest unemployment rate (3.5%) in 2008.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States	4.0%	4.7%	5.8%	6.0%	5.5%	5.1%	4.6%	4.6%	5.8%
State of Hawai'i	4.0%	4.2%	4.0%	3.9%	3.2%	2.7%	2.5%	2.6%	3.9%
C&C Honolulu	3.9%	4.1%	3.9%	3.7%	3.1%	2.7%	2.4%	2.5%	3.5%
Hawai'i County	4.7%	5.0%	4.6%	4.6%	3.9%	3.3%	2.9%	3.4%	5.5%
Kaua'i County	4.5%	5.0%	4.4%	4.0%	3.4%	2.7%	2.4%	2.5%	4.4%
Maui County	3.7%	4.0%	3.9%	3.7%	3.1%	2.6%	2.4%	2.8%	4.5%

#### **Indicator A07: Unemployment rate**

#### **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, 2000–2008

U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). Unadjusted unemployment rate. *Labor force statistics from the Current Population Survey, various years*. Retrieved from http://data.bls.gov/PDQ/servlet/SurveyOutputServlet

HI, 2000–2008
 Hawai'i State Department of Labor and Industrial Relations, Research and Statistics
 Office. (n.d.). Not seasonally adjusted data, 1976-present. Unemployment/labor force
 estimates. Retrieved from
 http://www.hiwi.org/article.asp?ARTICLEID=463&PAGEID=94&SUBID=

Median earnings		Economic Domain
Median earnings for people aged 16 and over with	A08	Compensation and
earnings in the past 12 months (current dollars)		Work Hours

This indicator, which is the most basic measure of economic well-being and opportunity, determines, primarily, people's capacity to 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 2005–2007, the median earning for people aged 16 and over with earnings in Hawai'i was \$30,716, higher than the national earnings of \$28,029. With respect to the distribution of median earnings among counties, the City and County of Honolulu had the highest median earnings, while Hawai'i County had the lowest.

#### **Indicator A08: Median earnings**

Area / Year	2005–2007
United States	\$28,029
State of Hawai'i	\$30,716
C&C Honolulu	\$31,405
Hawai'i County	\$27,191
Kaua'i County	\$28,435
Maui County	\$30,202

#### **Technical notes:**

Data are a 2005–2007 average. Income for 2005 and 2006 was adjusted to 2007 dollars before computation. Data are not comparable with that of Census 2000 due to different income reference periods being used and their associated response errors. The margin of error was taken into account in determining the difference between two estimates.

#### Data source/s:

• U.S./HI, 2005–2007

U.S. Census Bureau. (2008). B20017: Median earnings in the past 12 months (in 2007 inflation-adjusted dollars) by sex by work experience in the past 12 months for the population 16 years and over with earnings in the past 12 months. 2005–2007 American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

Working long hours		Economic Domain
Percentage of employed people aged 25–64 who usually	A09	Compensation and
work 41 hours or more per week		Work Hours

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?

When compared to the national average, Hawai'i had a significantly lower percentage of employed people who usually work 41 hours or more per week. In 2007, the state registered 22.9% of employed people working long hours compared to the national average of 31.6%. The proportion of workers working long hours shows a declining trend both for the state (by 14%) and the nation (by 4.5%). At the county level, there is no significant difference observed.

Area / Year	2000	2005	2006	2007						
United States	33.1%	31.9%	31.6%	31.6%						
State of Hawai'i	26.7%	24.7%	23.8%	22.9%						
C&C Honolulu	28.3%	25.7%	23.3%	22.1%						
Hawai'i County	22.6%	24.1%	22.4%	23.1%						
Kaua'i/ Maui County	22.3%	21.7%	26.9%	25.3%						

#### **Indicator A09: Working long hours**

#### **Technical notes:**

Individual county data for Kaua'i and Maui were not available. The margin of error was taken into account in determining the difference between two estimates.

#### Data source/s:

• U.S./HI, 2000, 2005–2007

Ruggles, S., Sobek, M., Alexander, T., Fitch, C.A., Goeken, R., Hall, P.K., et al. (n.d.). Census 2000 5% sample; American Community Survey 1% sample, various years. *Integrated Public Use Microdata Series: Version 4.0 [Data file]*. Minneapolis, MN: Minnesota Population Center. Retrieved from http://usa.ipums.org/usa/sda/

# EDUCATION DOMAIN AND INDICATORS

QOL ratings show that the quality of Hawai'i's education is on par with the national average, and has improved in recent year.

When compared to the nation, Hawai'i's education indicators showed mixed results. The state fared better on 3 and worse on 4 indicators for which national data were available. Of the 12 indicators tracked in the 2000s, Hawai'i improved on 7 indicators, declined on 1 indicator, and remained at the same level on 4 indicators. See Table 4 for the most recent data and findings.

**Attainment:** People in Hawai'i obtained a higher level of education than their counterparts in the nation. The percentage of people in the state aged 25 and over with less than a high school education declined significantly since 2000, and the percentage with a Bachelor's degree or higher increased.

**Performance:** Hawai'i's public school students had consistently weaker performance than their national peers. The percentage of 8th-grade students meeting National Assessment of Educational Progress (NAEP) proficiency was about 10 percentage points below the national average in mathematics, reading, and writing. However, 8th graders have shown improvement in math on the NAEP since 2000. In addition, students in grades 3 through 10 showed improvement in math and reading from 2007 to 2008 according to the Hawai'i Content and Performance Standards III (HCPS III).

**Readiness:** Since 2004, some progress has been made in preparing children entering kindergarten to be successful in school. The on-time graduation rate among public school students has remained unchanged at about 80% since 2003. The average Student Achievement Test (SAT) score of college-bound seniors continued to be lower than the national figure, and has slipped further in recent years.

**Participation in Higher Education:** Compared to the rest of the U.S., Hawai'i residents 24–44 years old have a higher participation rate in college or postgraduate education, and the data for this indicator has not changed significantly since 2000. Meanwhile, the percentage of high school seniors accepted into higher education has increased since 2000.

#### **County Comparisons**

- The City and County of Honolulu fared better than other counties, ranking highest for individuals with Bachelor's degrees or higher, meeting Hawai'i's standards in math and reading, and participating in lifelong learning.
- Kaua'i County ranked highest for on-time graduation from high school and lowest on individuals having a Bachelor's degree or higher.
- Maui County performed best in terms of children being ready to learn in kindergarten, and worst for having the highest percentage of people with less than a high school education and for having the lowest college-going rate.

• Hawai'i County ranked first for having the lowest percentage of people with less than a high school education and the highest college-going rate. However, it ranked lowest for student performance (2 indicators), education readiness (2 indicators), and participation in lifelong learning (1 indicator).

#### Table 4. Education Domain: Most Recent Data and Findings

				Hawai'i:	Hawai'i:	Over time <sup>(1)</sup>		(	County		
Economic Indicator	Year	U.S.	HI	Compared to the Nation	% Change	Improved or Worsened	Honolulu	Hawaiʻi	Kauaʻi	Maui	Com- parisor
Attainment											
Less than high school, % of people aged 25 and over	2005– 2007	16.0%	11.3%	$\bigcirc$	-27%	$\mathbf{\uparrow}$	11.2%	10.9%	11.2%	12.7%	$\langle \rangle$
<b>Bachelor's degree or higher</b> , % of people aged 25 and over	2005– 2007	27.0%	28.6%	$\bigcirc$	9%	$\mathbf{\uparrow}$	30.0%	26.0%	23.4%	25.4%	$\langle \rangle$
Performance											
<b>Meeting Hawai'i standards in math</b> , % of students	2008	••	42.3%	••	10%		45.2%	34.7%	42.2%	34.9%	$\langle \rangle$
<b>Meeting Hawai'i standards in reading</b> , % of students	2008	••	61.8%	••	4%	$\mathbf{\uparrow}$	63.7%	57.0%	60.1%	58.1%	$\langle \rangle$
At or above 8th-grade proficiency in math, % of 8th-grade students	2007	31%	21%	$\bigcirc$	31%	$\mathbf{\uparrow}$	••	••	••	••	••
At or above 8th-grade proficiency in reading, % of 8th-grade students	2007	29%	20%	$\bigcirc$	0%	$\Rightarrow$	••	••	••	••	••
At or above 8th-grade proficiency in writing, % of 8th-grade students	2007	31%	20%	$\bigcirc$	11%	$\Leftrightarrow$	••	••	••	••	••
Readiness											
Ready to learn, % of kindergarten classes	2008	••	8.4%	••	40%	$\mathbf{\uparrow}$	8.3%	7.8%	7.9%	9.9%	$\langle \rangle$
On-time graduation, % of high school students	2008	••	80.1%	••	0%	$\Rightarrow$	79.7%	78.2%	85.1%	82.6%	$\langle \rangle$
<b>SAT score of college-bound seniors</b> , combined average scores of math and critical reading	2008	1,017	983	$\bigcirc$	-2%	♦	••	••	••	••	••
Participation in higher education											
College-going rate, % of high school seniors	2008	••	54.0%	••	18%	$\mathbf{\uparrow}$	54.7%	59.2%	50.6%	45.4%	$\langle \rangle$
Lifelong learning: Enrolled in college or graduate school, % of people aged 25–44	2007	8.1%	9.8%	$\bigcirc$	7%	⇔	11.5%	5.4%	5.5% <sup>(2)</sup>	5.5% <sup>(2)</sup>	$\langle \rangle$

Symbols: •• Data not available,  $\bigcirc$  HI better than the nation,  $\bigcirc$  No difference,  $\bigcirc$  HI worse than the nation,  $\diamondsuit$  HI has improved,  $\Leftrightarrow$  No change,  $\checkmark$  HI has worsened,  $\diamondsuit$  Difference found between top-ranked and bottom-ranked counties,  $\approx$  No difference among counties.

(1) The benchmark year is 2000 or later, depending on the availability of comparable data. 2002: At or above 8th-grade proficiency in reading/writing, college going rate. 2003: On-time graduation. 2004: Ready to learn. 2007: Meeting HI standards in math/reading.

(2) Data is based on a combined sample of Kaua'i and Maui Counties because individual county data were not available.

Less than high school		Education Domain
Percentage of people aged 25 and over with less than	<b>B01</b>	Attainment
high school education		

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?

Compared to the national average of 16.0% in 2005–2007, Hawai'i had a lower percentage of people with less than high school education at 11.3%, representing a 27% decrease from 2000. Maui County had the highest percentage of people with less than high school education while Hawai'i County had the lowest percentage.

maleator Dor. Dess than men senoor				
Area / Year	2000	2005-2007		
United States	19.6%	16.0%		
State of Hawai'i	15.4%	11.3%		
C&C Honolulu	15.2%	11.2%		
Hawai'i County	15.4%	10.9%		
Kaua'i County	16.7%	11.2%		
Maui County	16.7%	12.7%		

#### **Indicator B01: Less than high school**

#### **Technical notes:**

"Less than high school education" includes all levels below a high school diploma or its equivalent. Data for 2005–2007 are a 3-year average. The margin of error was taken into account in determining the difference between two estimates.

#### Data source/s:

• U.S./HI, 2000

U.S. Census Bureau. (2002). P37: Sex by educational attainment for the population 25 years and over. *Census 2000 Summary File 3*. Retrieved from http://factfinder.census.gov/

• U.S./HI, 2005–2007 U.S. Census Bureau, (2008).

U.S. Census Bureau. (2008). B06009: Place of birth by educational attainment in the United States. 2005-2007 American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

Bachelor's degree or higher		Education Domain
Percentage of people aged 25 and over with a Bachelor's	<b>B02</b>	Attainment
degree or with higher education		

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. Aside from higher personal earnings, the availability of employer-sponsored health benefits and pension plans increases with every level of education completed. At the same time, 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 and poverty rates.

#### How are we doing?

On average, a higher percentage of people in Hawai'i had a Bachelor's degree or higher education (28.6%) compared to the nation (27.0%) in 2005–2007, and the percentage increased by 9% since 2000. Compared to the other counties, the City and County of Honolulu had a significantly higher percentage of people with higher levels of educational attainment.

Area / Year	2000	2005–2007
United States	24.4%	27.0%
State of Hawai'i	26.2%	28.6%
C&C Honolulu	27.9%	30.0%
Hawai'i County	22.1%	26.0%
Kaua'i County	19.4%	23.4%
Maui County	22.4%	25.4%

#### **Indicator B02: Bachelor's degree or higher**

#### **Technical notes:**

Data for 2005–2007 are a 3-year average. The margin of error was taken into account in determining the difference between two estimates.

#### **Data source/s:**

• U.S./HI, 2000

U.S. Census Bureau. (2002). P37: Sex by educational attainment for the population 25 years and over. *Census 2000 Summary File 3*. Retrieved from http://factfinder.census.gov/

• U.S./HI, 2005–2007

U.S. Census Bureau. (2008). B06009: Place of birth by educational attainment in the United States. 2005-2007 American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

Meeting Hawai'i standards in math		Education Domain
Percentage of students meeting Hawai'i standards in	<b>B03</b>	Performance
mathematics		

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?

In 2008, the percentage of students meeting Hawai'i standards in mathematics at the state level stood at 42.3%, representing a 10% increase from 2007. All counties also showed improvement in meeting Hawai'i's standards in mathematics. In 2008, the City and County of Honolulu had the highest achievement in meeting the standards in mathematics, followed by Kaua'i County, then Maui and Hawai'i Counties.

Area / Year	2007	2008
State of Hawai'i	38.3%	42.3%
C&C Honolulu	41.1%	45.2%
Hawai'i County	30.6%	34.7%
Kaua'i County	37.4%	42.2%
Maui County	31.7%	34.9%

#### Indicator B03: Meeting Hawai'i standards in math

#### **Technical notes:**

All students in public and charter schools who attended grades 3 to 10 are included in these data. Starting in the 2006–2007 school year, Hawai'i Content and Performance Standards III was fully implemented in standard-based assessments, report cards, and course descriptions. Data from previous years are not fully comparable due to the change in standards. Data year refers to the school year ending in that particular year. National data were unavailable.

#### Data source/s:

• HI, 2007, 2008

Hawai'i State Department of Education, Systems Accountability Office. (n.d.). Special tabulation for Center on the Family. *Hawai'i State Assessment, 2007 and 2008.* 

Meeting Hawai'i standards in reading		Education Domain
Percentage of students meeting Hawai'i standards in	<b>B04</b>	Performance
reading		

This indicator measures the knowledge and capabilities of Hawai'i's public school students on the mastery of reading. 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 meeting Hawai'i's standards in reading improved from 59.6% in 2007 to 61.8% in 2008. At the county level, while the performance of all counties increased at an average of 2 percentage points from 2007 to 2008, the City and County of Honolulu (63.7%) and Hawai'i County (57.0%) made the highest and lowest achievement, respectively, in meeting the standards in reading in 2008.

Area / Year	2007	2008
State of Hawai'i	59.6%	61.8%
C&C Honolulu	61.4%	63.7%
Hawai'i County	54.6%	57.0%
Kaua'i County	59.6%	60.1%
Maui County	55.9%	58.1%

#### Indicator B04: Meeting Hawai'i standards in reading

#### **Technical notes:**

All students in public and charter schools who attended grades 3 to 10 are included in these data. Starting in the 2006–2007 school year, Hawai'i Content and Performance Standards III was fully implemented in standard-based assessments, report cards, and course descriptions. Data from previous years are not fully comparable due to the change in standards. Data year refers to the school year ending in that particular year. National data were unavailable.

#### Data source/s:

• HI, 2007, 2008

Hawai'i State Department of Education, Systems Accountability Office. (n.d.). Special tabulation for Center on the Family. *Hawai'i State Assessment, 2007 and 2008.* 

At or above 8th-grade proficiency in math		Education Domain
Percentage of 8th-grade students who scored at or above	<b>B05</b>	Performance
NAEP proficiency in mathematics		

This indicator measures the ability of Hawai'i's public school 8th-grade students in mastering the basic knowledge and skills in math required for entering 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. In 2007, Hawai'i's rate stood at 21% compared to the national average of 31%. Though not as fast as the national growth rate, an improving tendency is also observed in Hawai'i.

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Area / Year	2000	2003	2005	2007		
United States	25%	27%	29%	31%		
State of Hawai'i	16%	17%	18%	21%		

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

#### **Technical notes:**

Data include public school students only. Data year refers to the school year ending in that particular year. 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, 2000, 2003, 2005 Hawai'i State Department of Education, Systems Accountability Office. (n.d.). *Trend report: Educational and fiscal accountability, various years*. Retrieved from http://arch.k12.hi.us/school/trends.html
- U.S./HI, 2007
   U.S. Department of Education, National Center for Education Statistics. (2008). Hawai'i grade 8 public schools. *Nation's report card: Mathematics 2007, State snapshot report.* Retrieved from http://nces.ed.gov/nationsreportcard/pdf/stt2007/2007495hi8.pdf

At or above 8th-grade proficiency in reading		Education Domain
Percentage of 8th-grade students who scored at or above	<b>B06</b>	Performance
NAEP proficiency in reading		

This indicator measures Hawai'i's public school 8th-grade students' ability to master the basic knowledge and skills in reading required to enter high school. At the same time, proficiency 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?

Compared to the national average, Hawai'i's percentage of 8th-grade students who scored at or above NAEP proficiency in reading remained steadily lower from 2002 to 2007. In 2007, Hawai'i's rate was 20%, which was 9 percentage points lower than the national average. No significant change in reading proficiency over time is observed for the state.

indicator boo. At or above oth-grade pronciency in reading							
Area / Year	2002	2003	2005	2007			
United States	31%	30%	29%	29%			
State of Hawai'i	20%	22%	18%	20%			

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

#### **Technical notes:**

Data include public school students only. Data year refers to the school year ending in that particular year. 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, 2002, 2003, 2005 Hawai'i State Department of Education, Systems Accountability Office. (n.d.). *Trend report: Educational and fiscal accountability, various years*. Retrieved from http://arch.k12.hi.us/school/trends.html
- U.S./HI, 2007
   U.S. Department of Education, National Center for Education Statistics. (2008). Hawai'i grade 8 public schools. *Nation's report card: Reading 2007, State snapshot report*. Retrieved from http://nces.ed.gov/nationsreportcard/pdf/stt2007/2007497hi8.pdf

At or above 8th-grade proficiency in writing		Education Domain
Percentage of 8th-grade students who scored at or above	<b>B07</b>	Performance
NAEP proficiency in writing		

This indicator measures Hawai'i's public school 8th-grade students' ability to master the basic knowledge and skills in writing required to enter high school. At the same time, proficiency 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 writing was consistently below the national average. In 2007, Hawai'i's performance (20%) was lower than the national average (31%) by 11 percentage points. The percentage change between 2002 and 2007 was not statistically significant.

#### Indicator B07: At or above 8th-grade proficiency in writing

Area / Year	2002	2007
United States	30%	31%
State of Hawai'i	18%	20%

#### **Technical notes:**

Data include public school students only. Data year refers to the school year ending in that particular year. 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, 2002, 2007

Hawai'i State Department of Education, Systems Accountability Office. (n.d.). *Trend report: Educational and fiscal accountability, various years*. Retrieved from http://arch.k12.hi.us/school/trends/trends.html

Ready to learn		Education Domain
Percentage of kindergarten classes in which entering students displayed skills and characteristics necessary for school success	<u>B08</u>	Readiness

This indicator is important since children who enter school ready to learn are more likely to achieve school success than children who are inadequately prepared. Early education, whether home- or center-based, can develop a child's love for learning and provide the nurturing environment that promotes readiness for academic success. This indicator also presents information on the quality of early care and education for Hawai'i's children and the linkages between early learning and what is taught in the K-12 system.

#### How are we doing?

In 2008, 8.4% of all Hawai'i public school kindergarten classes had three quarters of the class who displayed the skills and characteristics necessary for success in school. This percentage increased from 6.0% in 2004. Among the counties, Maui County had the highest percentage (9.9%), while Hawai'i and Kaua'i Counties had the lowest percentages (7.8% and 7.9%, respectively) in 2008.

Indicator Doot Ready to rearn						
Area / Year	2004	2005	2006	2007	2008	
State of Hawai'i	6.0%	11.4%	8.3%	8.0%	8.4%	
C&C Honolulu	5.4%	12.1%	8.9%	8.2%	8.3%	
Hawai'i County	2.0%	10.4%	8.5%	5.0%	7.8%	
Kaua'i County	3.2%	14.3%	0.0%	8.1%	7.9%	
Maui County	13.8%	5.6%	8.7%	9.6%	9.9%	

#### Indicator B08: Ready to learn

#### **Technical notes:**

Hawai'i State School Readiness Assessment was first implemented in the fall of 2004. At the beginning of the school year, teachers assessed their kindergarten classes on five dimensions of skills and characteristics that are necessary for success in school. The five dimensions, measured by 24 items, are: approaches to learning, academic (literacy & mathematics), school behaviors and skills, social-emotional behaviors, and physical well-being. "Ready to learn" is defined as having at least three-quarters of the class consistently displaying each of the 24 skills and characteristics assessed. National data were unavailable.

#### Data source/s:

• HI, 2004

Hawai'i State Department of Education, Systems Accountability Office. (2004). Special tabulation by Center on the Family. *Hawai'i State School Readiness Assessment, 2004* [Data file].

• HI, 2005–2008

Hawai'i State Department of Education, Systems Accountability Office. (2009). Special tabulation for Center on the Family. *Hawai'i State School Readiness Assessment, 2005-2008*.

On-time graduation		Education Domain
Percentage of students who graduated within four years		Readiness
of the first time the students entered the 9th grade		

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

#### How are we doing?

On-time graduation rate for Hawai'i's youth remained stable from 2003 to 2008, averaging around 80%. In 2008, Kaua'i County had the highest percentage of students graduating on time, followed by Maui County, then the City and County of Honolulu, and Hawai'i County.

Area / Year	2003	2004	2005	2006	2007	2008
State of Hawai'i	80.0%	80.3%	80.0%	80.0%	79.8%	80.1%
C&C Honolulu	79.5%	79.5%	78.6%	79.5%	79.5%	79.7%
Hawai'i County	81.2%	82.1%	80.7%	78.9%	79.1%	78.2%
Kaua'i County	84.6%	84.9%	85.6%	86.6%	82.5%	85.1%
Maui County	79.2%	79.7%	83.5%	80.3%	80.6%	82.6%

#### **Indicator B09: On-time graduation**

#### **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 of state or to another county 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 not added to the cohort. The 2008 on-time graduation rate is preliminary. Hawai'i data could not be compared to national data that the National Center for Education Statistics provided because of the different methodologies used in the calculations. County-level data were only available from Hawai'i State Department of Education.

#### Data source/s:

• HI, 2003–2008

Hawai'i State Department of Education, Systems Accountability Office. (n.d.). Special tabulation for Center on the Family. *Records*, 2003-2008.

SAT score of college-bound seniors		Education Domain
Combined average SAT math and critical reading scores	<b>B10</b>	Readiness
of college-bound seniors		

This indicator measures college-bound Hawai'i public school seniors' knowledge and skills in math and reading that are necessary for college success. SAT is used for admission to most fouryear universities. Likewise, this indicator reflects the schools' priorities in having advancedplacement, tech-prep classes, and other rigorous courses that students need to prepare 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 score of college-bound seniors in Hawai'i has persistently scored lower than the national average; the difference ranges from 12 points to 34 points. While the national average has not faltered, Hawai'i's SAT score decreased 2% from 2000 to 2008, resulting in a widening gap between the national and Hawai'i averages.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States	1,019	1,020	1,020	1,026	1,026	1,028	1,021	1,017	1,017
State of Hawai'i	1,007	1,001	1,008	1,002	1,001	1,006	991	990	983

### **Indicator B10: SAT score of college-bound seniors**

## **Technical notes:**

An average SAT score is the sum of the average mathematics score and the average criticalreading score. Data include college-bound seniors only. County data were unavailable.

## Data source/s:

• U.S./HI, 2000–2004

The College Board. (n.d.). *College-bound seniors: A profile of SAT program test takers, various years*. Retrieved from http://professionals.collegeboard.com

• U.S./HI, 2005–2008 The College Board. (n.d.) *College-bound seniors: State profile report: Hawai'i, various years*. Retrieved from http://professionals.collegeboard.com

College-going rate		Education Domain
Percentage of high school seniors accepted into higher	<b>B11</b>	Participation in
education or training as of May		Higher Education

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 in Hawai'i has been improving. In 2002, 45.9% of high school seniors in Hawai'i's public schools were accepted into higher education or training, and the percentage increased to 54.0% in 2008. At the county level, Hawai'i County had the highest college-going rate (59.2%), while Maui County had the lowest rate (45.4%) in 2008.

	00	0					
Area / Year	2002	2003	2004	2005	2006	2007	2008
State of Hawai'i	45.9%	44.8%	48.3%	51.9%	47.7%	53.0%	54.0%
C&C Honolulu	47.9%	46.8%	50.3%	53.6%	48.9%	53.5%	54.7%
Hawai'i County	46.2%	44.9%	50.2%	56.8%	53.6%	60.5%	59.2%
Kaua'i County	50.1%	39.6%	43.9%	47.2%	47.8%	43.7%	50.6%
Maui County	34.6%	37.6%	38.9%	41.7%	35.5%	47.7%	45.4%

### Indicator B11: College-going rate

## **Technical notes:**

Data are based on all of the public high school seniors who responded to the Senior Exit Plan Survey in May of their graduating year. Students self-reported if they were accepted into college or business or trade schools at the time of the survey. Hawai'i data could not be compared to national data that the National Center for Education Statistics provided because of the different methodologies used in the calculations. County-level data were only available from Hawai'i State Department of Education.

# Data source/s:

• HI, 2002–2008

Hawai'i State Department of Education, Systems Accountability Office. (n.d.). *Senior Exit Plan Survey, various years*. Retrieved from http://arch.k12.hi.us/school/seps/seps.html

Lifelong learning		Education Domain
Percentage of people aged 25–44 enrolled in college or	<b>B12</b>	Participation in
graduate school		Higher Education

This indicator reflects the success of working-age adults and students in meeting their educational goals and becoming more flexible, self-sufficient, open-minded and interested in new developments—all of which contribute 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 in Hawai'i participated in lifelong learning than the nation's general population (9.8% vs. 8.1%). However, variation in participation rates was observed at the county level. The City and County of Honolulu had a distinctively higher rate at 11.5% in 2007, compared to the other counties' lifelong learning rate (5.4%–5.5%).

mulcator B12. Enerong lear inng											
Area / Year	2000	2005	2006	2007							
United States	7.6%	8.3%	8.0%	8.1%							
State of Hawai'i	9.2%	9.5%	9.1%	9.8%							
C&C Honolulu	10.4%	10.6%	10.7%	11.5%							
Hawai'i County	7.0%	6.0%	5.2%	5.4%							
Kaua'i/Maui County	5.0%	7.2%	4.5%	5.5%							

# Indicator B12: Lifelong learning

## **Technical notes:**

Individual county data for Kaua'i and Maui were not available. The margin of error was taken into account in determining the difference between two estimates.

## Data source/s:

• U.S./HI, 2000, 2005–2007

Ruggles, S., Sobek, M., Alexander, T., Fitch, C.A., Goeken, R., Hall, P.K., et al. (n.d.). Census 2000 5% sample; American Community Survey 1% sample, various years. *Integrated Public Use Microdata Series: Version 4.0 [Data file]*. Minneapolis, MN: Minnesota Population Center. Retrieved from http://usa.ipums.org/usa/sda/

# ENVIRONMENT DOMAIN AND INDICATORS

Hawai'i's QOL in environmental quality surpasses the national average and has improved in recent years; only the dimension of environmental pollution shows a deteriorating trend.

On measures of environmental quality, Hawai'i fared better than the nation for 2 indicators, worse for 1 indicator, and about the same on 1 indicator. Since 2000 the state improved on 7 of the indicators in this domain and declined on the remaining 4 indicators. See Table 5 for the most recent data and findings.

**Pollution:** Hawai'i fared better than the nation in releasing a lesser amount of toxic chemicals per capita, and data for this indicator improved 16% between 2001 and 2007. However, Hawai'i's air quality has been adversely affected by recent volcanic activity in Hawai'i County: The Environmental Protection Agency (EPA) declared the state's air quality unhealthy for 16 days in 2008, worse than the national median of 1 day, and worse than the usual 1–2 days for the state recorded between 2000 and 2007. Over time, other indicators have deteriorated, including surface water advisory days and solid waste generated.

**Conservation:** The rate of Hawai'i's renewable energy use was at the same level as the nation in 2007, but this represented a 10% improvement for the state upon its 2000 rate. There was an increase in the acres of parks and historic sites in the state during the aforementioned 7-year period.

**Consumption:** The state's energy consumption was about three fourths of the national average in 2007, a reduction of 3% since 2000. Although water consumption has fluctuated over time, it increased 1% from 2000 to 2007.

**Recycling:** Over time, the state has improved in solid waste recycled (2003–2008), wastewater reused (2000–2008), and the percentage of adults participating in HI-5 recycling (2006–2008). No national data are available for comparison.

## **County Comparisons**

- Hawai'i County ranked best on surface water advisory days, acres of parks and historic sites, water consumption, energy consumption, and HI-5 recyclers. However, air quality was the worst in this county.
- Kaua'i County performed best on 3 indicators: solid waste generated, toxic releases, and wastewater reused. The County ranked lowest on 2 indicators: acres of parks and historic sites, and solid waste recycled.
- Maui County ranked best on renewable energy and ranked worst on 3 indicators—solid waste generated, water consumption, and energy consumption.
- The City and County of Honolulu had the least impressive record in this domain with 5 indicators ranked worse than the other counties: surface water advisory days, toxic releases, renewable energy, wastewater reused, and HI-5 recyclers. Honolulu ranked better than the other counties only on solid waste recycled.

Table 5. Environment	Domain: Most Re	ecent Data and Findings
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				Hawai'i:	Hawai'i:	Over time <sup>(1)</sup>	County				
Environment Indicator	Year	U.S.	ні	Compared to the Nation	% Change	Improved or Worsened	Honolulu	Hawaiʻi	Kaua'i	Maui	Com- parison
Pollution											
Unhealthy air quality days, number of days	2008	1	16	$\bigcirc$	700%	+	0	16	••	0	$\langle \rangle$
Surface water advisory days, number of days	2008	••	141	••	213%	+	108	5	21	7	$\langle \rangle$
Solid waste generated, number of pounds per day per person	2007	••	9.8	••	14%	♦	10.2	8.3	7.5	10.7	$\langle \rangle$
Toxic releases, number of pounds per person	2007	13.5	2.4	$\bigcirc$	-16%	$\mathbf{\uparrow}$	2.6	2.2	0.4	2.1	$\langle \rangle$
Conservation											
Acres of parks and historic sites, per 1,000 acres of total area	2007	••	100	••	44%	$\mathbf{\uparrow}$	40	132	36	55	$\langle \rangle$
<b>Renewable energy</b> , % of total energy consumption	2007	6.7%	6.7%	$\ominus$	10%	$\mathbf{\uparrow}$	3.0%	14.4%	10.0%	19.3%	$\langle \rangle$
Consumption											
Water consumption, number of gallons per day per person	2007	••	158	••	1%	+	154	141	151	197	$\langle \rangle$
<b>Energy consumption</b> , number of million BTU per person	2007	337	257	$\ominus$	-3%	$\mathbf{\uparrow}$	262	200	223	312	$\langle \rangle$
Recycling											
Solid waste recycled, % of total solid waste	2008	••	32.1%	••	8%	$\mathbf{\uparrow}$	33.4%	29.2%	15.8%	32.5%	$\langle \rangle$
Wastewater reused, % of treated wastewater	2008	••	15.8%	••	17%	$\mathbf{\uparrow}$	13.1%	19.8%	52.1%	15.0%	$\langle \rangle$
HI-5 recyclers, % of adults	2008	••	82.0%	••	13%	$\mathbf{\uparrow}$	78.0%	93.0%	85.0%	84.2%	$\langle \rangle$

Symbols: •• Data not available,  $\bigcirc$  HI better than the nation,  $\bigcirc$  No difference,  $\bigcirc$  HI worse than the nation,  $\Uparrow$  HI has improved,  $\Leftrightarrow$  No change,  $\checkmark$  HI has worsened, (1) The benchmark year is 2000 or later, depending on the availability of comparable data. 2001: Toxic releases. 2003: Solid waste generated, solid waste recycled. 2006: HI-5

recyclers.

# Unhealthy air quality days

Number of days that the EPA declared the air quality unhealthy

### 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 151 or higher is considered "unhealthy"—residents may begin to experience some adverse health effects, and members of sensitive groups (e.g., people with asthma or heart disease, older adults, and children) may experience more serious health effects.

**C1** 

### How are we doing?

Hawai'i's air quality has been affected by the recent volcanic activity in Hawai'i County. For all years between 2000 and 2007, the number of unhealthy air days for Hawai'i was low (1-3 days) compared to the median among states (2-15 days). According to the EPA, Hawai'i County had 16 days of unhealthy air quality in 2008, which was caused by high sulfate concentrations from volcanic emissions.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States	6	6	15	4	2	3	4	4	1
State of Hawai'i	2	2	1	2	2	3	2	1	16
C&C Honolulu	2	2	0	1	2	1	0	0	0
Hawai'i County	0	0	1	1	0	2	2	0	16
Kaua'i County	0	••	0	0	0	0	0	••	••
Maui County	0	0	0	0	0	0	0	1	0

### Table C1: Unhealthy air quality days

## **Technical notes:**

Air Quality Index (AQI) value 151 or higher includes AQI categories "unhealthy" (151–200), "very unhealthy" (201–300), and "hazardous" (301–500). Nationwide, about 0.3% of counties have any days in the "very unhealthy" or "hazardous" categories. Data is reported at the county level. State total is calculated by totaling the number of "unhealthy" days of all counties within a state. National average is the median of 50 states and the District of Columbia. Data for Kaua'i County were unavailable for 2001, 2007, and 2008.

## Data source/s:

• U.S./HI, 2000–2008

U.S. Environmental Protection Agency. (n.d.). *Air Quality Index report, various years*. Retrieved from http://www.epa.gov/air/data/index.html

Surface water advisory days		Environment Domain
Number of days surface water advisories are posted due	_C2_	Pollution
to water pollution		

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 not only recreational waters but also other shorelines, streams, and lagoons. Sewage, chemical spills, 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?

There was a spike in the number of surface water warnings posted in Hawai'i in 2006, mainly caused by sewage release related to heavy rainfall in the City and County of Honolulu. The number declined in 2007 and 2008 (161 and 141 days, respectively) but remained three times higher than in 2000 (45 days). In all but one year since 2000, the City and County of Honolulu had the largest share of surface water pollution in the state, while the numbers for other counties fluctuated. In 2007 and 2008, Hawai'i County had the fewest number of days with unsafe surface water.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
State of Hawai'i	45	32	56	60	106	276	544	161	141
C&C Honolulu	32	8	31	57	94	264	487	127	108
Hawai'i County	9	17	13	3	1	0	0	3	5
Kaua'i County	4	0	12	0	11	12	57	4	21
Maui County	0	7	0	0	0	0	0	27	7

## Table C2: Surface water advisory days

# **Technical notes:**

Surface water includes recreational waters, shorelines, streams, and lagoons. County total is calculated by adding the number of days of all advisories that were posted for any surface water within a county. State total is the sum of county totals. National data were unavailable.

# Data source/s:

• HI, 2000–2008

Hawai'i State Department of Health, Environmental Management Division, Clean Water Branch. (n.d.). Tabulation by Center on the Family. *List of surface water posting due to sewage or other water pollution*, 2000-2008 [Data file].

Solid waste generated per day per person (in pounds)

### 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 and about one-third of it is recycled. The island state faces many challenges on solid waste management, particularly the availability of new land for waste-pits. 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.

**C3** 

### How are we doing?

From 2003 to 2007, the state's per capita solid waste generation increased from 8.6 pounds per day to 9.8 pounds per day. During the same period, Maui County's figures increased drastically from 7.6 pounds to 10.7 pounds, exceeding the average amount generated in the City and County of Honolulu (10.2 pounds). On the other hand, Kaua'i County generated the smallest amount of solid waste from 2005 to 2007 (6.6 pounds to 7.5 pounds).

Tuste eet sona muste generatea										
Area / Year	2003	2004	2005	2006	2007					
State of Hawai'i	8.6	8.6	8.4	8.5	9.8					
C&C Honolulu	9.2	9	8.8	8.3	10.2					
Hawai'i County	6.7	7.4	8.2	8.7	8.3					
Kaua'i County	7.3	8.3	6.6	6.4	7.5					
Maui County	7.6	7.5	7.1	9.8	10.7					

### Table C3: Solid waste generated

### **Technical notes:**

Solid waste generated per day per person is calculated by dividing the annual total amount of solid waste 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. Except for Maui County, construction and demolition materials are included in the total solid waste because these materials are inseparable from other solid waste. Hawai'i data could not be compared to national data that the Environmental Protection Agency provided because the latter includes municipal solid waste only and excludes solid waste from industrial, construction, and demolition activities.

### Data source/s:

• HI, 2003–2007

Hawai'i State Department of Health, Environmental Management Division, Solid and Hazardous Waste Branch. (n.d.). Special tabulation for Center on the Family. *Solid waste produced by county, 2003-2008*.

# • HI, 2003–2007, Denominator

Hawai'i State Department of Business, Economic Development, and Tourism. (2008). Table 01.09: De Facto Population, by County: 1990 to 2007. *State of Hawaii data book*, 2007. Retrieved from http://hawaii.gov/dbedt/info/economic/databook/db2007/ Toxic releases per person (in pounds)

### 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.

**C4** 

### 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 2001. In 2007, Hawai'i released toxic chemicals at 2.4 pounds per resident, compared to the national average of 13.5 pounds. Among Hawai'i's counties, Kaua'i County had the lowest level of toxic releases, and the City and County of Honolulu had the highest level (0.4 pound versus 2.6 pounds in 2007).

Area / Year	2001	2002	2003	2004	2005	2006	2007
United States	19.7	16.6	15.3	14.5	14.7	14.4	13.5
State of Hawai'i	2.8	3.0	2.6	2.5	2.5	2.4	2.4
C&C Honolulu	3.0	3.3	2.8	2.8	2.6	2.5	2.6
Hawai'i County	3.0	3.2	2.5	1.9	2.4	2.6	2.2
Kaua'i County	0.3	0.5	0.3	0.5	0.4	0.4	0.4
Maui County	2.3	2.3	2.2	2.5	2.4	2.2	2.1

### **Table C4: Toxic releases**

## **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, 2001–2007 U.S. Environmental Protection Agency. (n.d.). Chemical report. *EPA Toxic Release Inventory (TRI) Explorer*. Retrieved from http://www.epa.gov/triexplorer/chemical.htm
- U.S., 2000–2007, Denominator
   U.S. Census Bureau. (2009). Annual estimates of the resident population for the United States, regions, states, and Puerto Rico: April 1, 2000 to July 1, 2008. NST-EST2008-01. Retrieved from http://www.census.gov/popest/states/tables/NST-EST2008-01.xls
- HI, 2000–2007, Denominator
   U.S. Census Bureau. (2009). Annual estimates of the resident population for counties of Hawai'i: April 1, 2000 to July 1, 2008. CO-EST2008-01-15. Retrieved from http://www.census.gov/popest/counties/tables/CO-EST2008-01-15.xls

Acres of parks and historic sites		Environment Domain
Acres of parks and historic sites per 1,000 acres of total	_C5_	Conservation
area		

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 2000 to 2007, Hawai'i's parks and historic sites increased from 69 to 100 acres per 1,000 acres of total area. Hawai'i County had the largest number of acres for parks and historic sites while Kaua'i County had the smallest number among the four counties (132 versus 36 acres per 1,000 acres of total area).

Area / Year	2000	2001	2003	2004	2006	2007
State of Hawai'i	69	69	98	••	••	100
C&C Honolulu	40	41	47	39	40	40
Hawai'i County	83	83	128	128	128	132
Kaua'i County	35	35	36	35	36	36
Maui County	56	56	57	••	••	55

## Table C5: Acres of parks and historic sites

# **Technical notes:**

Parks include national, state and county parks. Data were not updated for 2002 and 2005. Data for Maui County and the state were unavailable for 2004 and 2006. National data were unavailable.

# Data source/s:

- HI, 2000, 2001, 2003, 2004, 2006, 2007
- Hawai'i State 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://hawaii.gov/dbedt/info/economic/databook/
- HI, 2000, 2001, 2003, 2004, 2006, 2007, Denominator Hawai'i State Department of Business, Economic Development, and Tourism. (2009). Section 6, Table 6.04: Estimated acreage of land use districts, by island: December 31, 2006. *State of Hawai'i data book: A statistical abstract, 2008*. Retrieved from http://hawaii.gov/dbedt/info/economic/databook/

Renewable energy
Percentage of renewable energy use in total energy
consumption

This indicator measures the extent to which renewable energy is used in the state to conserve fuel and natural resources. Fossil fuels—coal, oil, and natural gas—cannot be recreated at the same rate that we use them. 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.

**C6** 

### How are we doing?

In 2007, the percentage of renewable energy use in Hawai'i was on par with the national average of 6.7%, representing a 10% increase from 2000. The City and County of Honolulu had the lowest percentage of renewable energy use (3%) while Maui County had the highest percentage (19.3%).

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	6.3%	5.5%	6.0%	6.3%	6.2%	6.4%	6.9%	6.7%
State of Hawai'i	6.1%	5.0%	5.3%	5.6%	6.3%	5.5%	6.1%	6.7%
C&C Honolulu	3.0%	3.1%	3.3%	3.1%	3.8%	2.9%	3.4%	3.0%
Hawai'i County	13.1%	12.3%	6.8%	9.7%	10.5%	9.3%	10.8%	14.4%
Kaua'i County	24.7%	14.3%	14.5%	15.5%	14.6%	15.0%	12.2%	10.0%
Maui County	16.1%	9.0%	14.0%	15.7%	16.5%	16.0%	16.9%	19.3%

### Table C6: Renewable energy

## **Technical notes:**

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

## Data source/s:

• U.S., 2000–2007

U.S. Energy Information Administration. (n.d.). Table 1.3: Primary energy consumption by source, 1949-2007. *Annual energy review*. Retrieved from http://www.eia.doe.gov/aer/txt/stb0103.xls

• HI, 2000–2007 Hawai'i State Department of Business, Economic Development, and Tourism. (2009). Special tabulation for Center on the Family. *Types of energy used by county*, 2000-2007. Daily water consumption per person (in gallons)

### Why is this important?

As a scarce and limited resource, water poses many challenges in all 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.

**C7** 

### How are we doing?

The level of water consumption fluctuated from year to year between 2000 and 2007. In 2007, water consumption was slightly higher than in 2000 (158 versus 157 gallons per day per person). Among the counties, Hawai'i County had the lowest water consumption while Maui County had the highest water consumption in 2007 (141 versus 197).

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
State of Hawai'i	157	162	159	164	157	152	157	158
C&C Honolulu	151	156	155	161	153	148	153	154
Hawai'i County	138	142	144	146	144	135	138	141
Kaua'i County	158	172	156	156	154	141	154	151
Maui County	207	210	198	201	193	197	198	197

### **Table C7: Water consumption**

## **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, 2000–2007

Hawai'i State Department of Business, Economic Development, and Tourism. (n.d.). Section 5, Table: Water services and consumption, for county waterworks. *State of Hawai'i data book: A statistical abstract, various years*. Retrieved from http://hawaii.gov/dbedt/info/economic/databook/

 HI, 2000–2007, Denominator Hawai'i State Department of Business, Economic Development, and Tourism. (2008).
 01.09: De Facto Population, by County: 1990 to 2007. *State of Hawai'i data book 2007: A statistical abstract*. Retrieved from http://hawaii.gov/dbedt/info/economic/databook/db2007/ Energy consumption per person (in million BTU)

**C8** 

### 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 appliance, building design, and industrial machinery; and through behavioral change that involve using less energy to achieve a lesser energy service, such as driving less, or cooling a room less in summer.

### How are we doing?

Hawai'i consumes far less energy than the nation. In 2007, an average Hawai'i resident consumed 257 million British thermal unit (BTU), whereas an average U.S. resident consumed 31% more. Compared to 2000, Hawai'i's energy consumption dropped 3% in 2007. At the county level, Maui County had the highest level (312) of energy consumption, while Hawai'i County had the lowest level (200).

Table Co. Eller	gy consur	nption						
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	351	338	340	338	343	340	335	337
State of Hawai'i	264	250	249	259	259	257	250	257
C&C Honolulu	281	265	260	275	274	269	258	262
Hawai'i County	189	181	172	183	182	214	194	200
Kaua'i County	206	185	201	167	194	197	214	223
Maui County	259	253	284	282	278	257	279	312

### **Table C8: Energy consumption**

## **Technical notes:**

Energy consumption per person is calculated by dividing the annual total amount of energy consumed by resident population estimates. Data for the U.S. de facto population were not available; therefore, resident population was used in the calculations for both the U.S. and Hawai'i to facilitate comparison.

## **Data source/s:**

• U.S., 2000–2007

U.S. Energy Information Administration. (n.d.). Table 1.3: Primary energy consumption by source, 1949-2007. *Annual energy review*. Retrieved from http://www.eia.doe.gov/aer/txt/stb0103.xls

- HI, 2000–2007 Hawai'i State Department of Business, Economic Development, and Tourism. (2009). Special tabulation for Center on the Family. *Types of energy used by county, 2000-2007*.
- U.S., 2000–2007, Denominator
   U.S. Census Bureau. (2009). Annual estimates of the resident population for the United States, regions, states, and Puerto Rico: April 1, 2000 to July 1, 2008. NST-EST2008-01. Retrieved from http://www.census.gov/popest/states/tables/NST-EST2008-01.xls

# • HI, 2000–2007, Denominator

U.S. Census Bureau. (2009). Annual estimates of the resident population for counties of Hawai'i: April 1, 2000 to July 1, 2008. CO-EST2008-01-15. Retrieved from http://www.census.gov/popest/counties/tables/CO-EST2008-01-15.xls

Solid waste recycled		Environment Domain
Percentage of solid waste recycled	09	Recycling

This indicator measures the extent to which solid waste is diverted from landfills for recycling or reuse in Hawai'i. Recycling is one of the major ways to 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?

In 2008, about one-third of solid waste was recycled, representing an 8% increase from 2003. The county recycling rate fluctuated over the years. In 2008, the City and County of Honolulu had the highest rate (33.4%), followed closely by Maui County (32.5%) and Hawai'i County (29.2%), whereas Kaua'i County had the lowest rate (15.8%).

Area / Year	2003	2004	2005	2006	2007	2008
State of Hawai'i	29.6%	29.1%	32.5%	34.1%	31.4%	32.1%
C&C Honolulu	31.5%	31.0%	37.1%	38.8%	30.8%	33.4%
Hawai'i County	14.7%	15.8%	19.1%	25.8%	23.8%	29.2%
Kaua'i County	19.6%	25.7%	5.3%	3.1%	19.9%	15.8%
Maui County	34.4%	31.7%	30.1%	29.9%	44.1%	32.5%

### Table C9: Solid waste recycled

## **Technical notes:**

The City and County of Honolulu reported data by calendar year, while other counties reported data by state fiscal year. Except for Maui County, construction and demolition materials are inseparable from other solid waste and therefore included in the total solid waste. Hawai'i data could not be compared to national data that the Environmental Protection Agency provided because the latter included municipal solid waste only and excluded solid waste from industrial, construction and demolition activities.

## **Data source/s:**

• HI, 2003–2008

Hawai'i State Department of Health, Environmental Management Division, Solid and Hazardous Waste Branch. (n.d.). Special tabulation for Center on the Family. *Solid waste produced by county*, 2003-2008.

Wastewater reused	<u> </u>	Environment Domain
Percentage of treated wastewater reused		Recycling

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 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.

### How are we doing?

In 2008, more than 15% of treated wastewater was reused in the State of Hawai'i, which was about 2 percentage points higher than the rate in 2000. Data for 2008 indicated great variations among the four counties: Kaua'i County had the highest percentage of treated wastewater reused (52.1%) while the City and County of Honolulu had the lowest percentage (13.1%).

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
State of Hawai'i	13.5%	13.3%	16.0%	15.7%	15.7%	15.7%	16.4%	16.3%	15.8%
C&C Honolulu	••	•	••	••	••	••	•	••	13.1%
Hawai'i County	••	••	••	••	••	••	••	••	19.8%
Kaua'i County	••	••	••	••	••	••	••	••	52.1%
Maui County	••	••	••	••	••	••	••	••	15.0%

### Table C10: Wastewater reused

## **Technical notes:**

In 2008, 152 million gallons per day (MGD) in wastewater was treated in the State of Hawai'i: 72% treated in the City and County of Honolulu, 17% in Maui County, 6% in Hawai'i County, and 5% in Kaua'i County. The percentage of wastewater reused is calculated based on the quantity of treated wastewater. County data were unavailable for 2000-2007.

### **Data source/s:**

• HI, 2000–2007

Hawai'i State Department of Health, Environmental Planning Office. (n.d.). *Indicators of environmental quality report, various years*. Retrieved from http://hawaii.gov/health/environmental/environmental/envplanning/goals/goalsandindicators.html/

• HI, 2008

Hawai'i State Department of Health, Environmental Planning Office. (n.d.). Special tabulation for Center on the Family. *Wastewater reused by county, 2008.* 

Percentage of adults who recycle HI-5 beverage C11	Recycling
containers	

This indicator reflects public awareness and responsibility toward the environment through recycling. Over 930 million beverage containers are consumed in Hawai'i every year, thus the recycling of beverage containers is one of the most critical environmental objectives. If not recycled, these containers become waste in the streams or litter in the community. The State Department of Health launched the HI-5 recycling program in 2005, placing a 5¢ redeemable deposit on each beverage container.

# How are we doing?

In 2008, 82% of adult residents recycled beverage containers through various channels including directly participating in the HI-5 program. Hawai'i County had the highest percentage of HI-5 recyclers (93.0%) while the City and County of Honolulu had the lowest percentage (78.0%). The State of Hawai'i's percentage of HI-5 recyclers increased by 13% between 2006 and 2008.

Table C11: HI-5 recyclers								
Area / Year	2006	2008						
State of Hawai'i	72.5%	82.0%						
C&C Honolulu	68.8%	78.0%						
Hawai'i County	80.2%	93.0%						
Kaua'i County	79.6%	85.0%						
Maui County	72.4%	84.2%						

# Table C11. III F

# **Technical notes:**

HI-5 recyclers are those who returned or donated beverage containers for recycling purposes. National data were unavailable. The margin of error was taken into account in determining the difference between two estimates.

## **Data source/s:**

• HI, 2006, 2008

Hawai'i State Department of Health, Environmental Management Division, Solid and Hazardous Waste Branch. (n.d.). Tabulation by Center on the Family. Survey of Deposit Beverage Container (DBC) Program, 2006 and 2008, conducted by Ward Research Institute [Data file].

# HEALTH DOMAIN AND INDICATORS

Hawai'i has a better QOL rating than the nation in terms of health despite a slight decline in recent years.

As indicated by better ratings on 10 of the 14 indicators for which comparisons were possible, Hawai'i enjoyed a better QOL in health than the nation. The state performed worse on 2 indicators and about the same on 2 other indicators. In tracking changes over time, scant progress was made: 7 indicators with positive change, 6 with negative change, and 3 with no change since 2000. See Table 6 for the most recent data and findings.

**Mortality:** Cardiovascular disease, cancer, and diabetes are 3 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. While progress has been made in reducing deaths in infancy and deaths that cardiovascular disease caused since 2000, the loss of lives due to cancer and diabetes has increased.

**Health Status:** Hawai'i residents rated their health status similarly to their counterparts in the rest of the nation, and there has been a slight decline in the rating since 2000. The average Hawai'i resident has about 24.4 healthy days per month, a decline from 25.6 days in 2000.

**Disease Prevention:** On 4 of the 6 disease-prevention measures, Hawai'i fared better than the nation: lower rates of obesity and smoking among adults, higher child immunization rate, and a higher percentage of adults who consumed 5 or more servings of fruits and vegetables daily. In all of the aforementioned areas, Hawai'i progressed over time, except for the rate of obesity, which worsened. State and national data for the percentage of adults engaged in physical activity are similar with little change since 2001. However, the state fared worse than the nation in the rate of adults who engage in binge drinking, and the rate has increased over time.

Access to Care: Compared to the nation, Hawai'i's adult residents have better health insurance coverage, but their access to long-term care from home- and community-based services (HCBS) is more limited. While there has been no change in health insurance coverage for both adults and children since 2000, more HCBS have become available and are being utilized by elderly and disabled persons as reflected by an increased percentage of Medicaid spending for this purpose.

## **County Comparisons**

- The City and County of Honolulu ranked the best for life expectancy at birth; death rates due to cardiovascular disease, cancer, and diabetes; and health insurance coverage for adults; but ranked the worst for physical activity rate and fruit and vegetable consumption.
- Kaua'i County ranked first for having the lowest smoking rate, and highest physical activity rate and fruit and vegetable consumption, but ranked last for having the highest infant mortality and cancer death rates.
- Maui County had the lowest infant mortality rate, but the highest diabetes death rate.

- Hawai'i County ranked worst on life expectancy at birth, cardiovascular disease death rate, prevalence of smoking, and health insurance coverage for adults.
- The four counties were similar on 5 indicators—adults reporting good or better health, number of healthy days, health insurance coverage for children, obesity, and binge drinking.

# Table 6. Health Domain: Most Recent Data and Findings

				Hawai'i:	Hawai'i:	Over time <sup>(1)</sup>			County		
				Compared		Improved					
Haaldh Indiastan	Veen	U.S.	HI	to the	%	or	<b>TT</b> 1 1	<b>TT</b> • ( •	<b>T</b> 7 (•		Com-
Health Indicator	Year	U.S	HI	Nation	Change	Worsened	Honolulu	Hawai'i	Kaua'i	Maui	parison
Mortality				-							
Life expectancy at birth, years	2005	77.8	80.8	$\ominus$	1%	$\mathbf{\uparrow}$	80.9	79.7	80.7	80.6	$\langle \rangle$
Infant mortality, per 1,000 live births	2007	6.6	6.2	$\ominus$	-18%	$\mathbf{\uparrow}$	6.6	6.7	6.9	2.8	$\langle \rangle$
Cardiovascular disease death rate, per 100,000 people	2007	275 <sup>(2)</sup>	236	$\bigcirc$	-12%		227	278	263	228	$\langle \rangle$
Cancer death rate, per 100,000 people	2007	187 <sup>(2)</sup>	169	$\ominus$	11%	+	163	188	199	168	$\langle \rangle$
Diabetes death rate, per 100,000 people	2007	24 <sup>(2)</sup>	22	$\bigcirc$	34%	+	21	24	27	30	$\langle \rangle$
Health status											
Good or better health, % of adults	2008	85.6%	85.2%	$\ominus$	-3%	+	85.5%	84.2%	83.8%	85.4%	$\approx$
Healthy days, per month for adults	2008	••	24.4	••	-5%	+	24.6	23.9	24.3	24.0	$\approx$
Disease prevention											
<b>Obesity</b> , % of adults	2008	26.7%	23.1%	$\bigcirc$	47%	+	22.8%	24.0%	23.5%	23.8%	$\approx$
Smoking, % of adults	2008	18.4%	15.4%	$\ominus$	-22%	$\mathbf{\uparrow}$	14.8%	18.9%	13.1%	16.5%	$\langle \rangle$
Binge drinking, % of adults	2008	15.6%	17.6%	$\overline{}$	69%	+	17.2%	18.7%	18.7%	18.2%	$\approx$
Immunization rate, % of children aged 19–35 months	2007	77.4%	87.5%	$\bigcirc$	20%	$\mathbf{e}$	••	••	••	••	••
<b>Physical activity</b> : Moderate or rigorous, % of adults	2007	49.5%	51.0%	$\ominus$	2%	↔	50.1%	52.5%	55.5%	53.2%	$\langle \rangle$
Fruit and vegetable consumption: Consume 5 or more daily servings, % of adults	2007	24.4%	28.7%	$\bigcirc$	28%	∱	27.1%	32.3%	34.1%	31.9%	$\langle \rangle$
Access to care											
Adults without health insurance, % of adults	2008	14.5%	6.3%	$\bigcirc$	-7%	$\Leftrightarrow$	5.3%	9.5%	8.6%	7.3%	$\langle \rangle$
<b>Children without health insurance</b> , % of children aged 17 and younger	2007	••	3.9%	••	-13%	\$	3.5%	5.7%	4.6%	4.3%	$\approx$

				Hawai'i:	Hawai'i:	Over time <sup>(1)</sup>			County		
				Compared to the	%	Improved or					Com-
Health Indicator	Year	U.S.	HI	Nation	Change	Worsened	Honolulu	Hawaiʻi	Kaua'i	Maui	parison
Home- and community-based service expenditures, % of Medicaid long-term care spending for aged and disabled persons	2007	26.3%	17.5%	$\overline{}$	26%	∱	••	••	••	••	••

Symbols: •• Data not available,  $\bigcirc$  HI better than the nation,  $\bigcirc$  No difference,  $\bigcirc$  HI worse than the nation,  $\diamondsuit$  HI has improved,  $\Leftrightarrow$  No change,  $\checkmark$  HI has worsened,  $\diamondsuit$  Difference found between top-ranked and bottom-ranked counties,  $\approx$  No difference among counties.

(1) The benchmark year is 2000 or later, depending on the availability of comparable data. 2001: Binge drinking, physical activity. 2002: Home- and community-based service expenditures.

(2) U.S. data is from 2006, the latest year for which data were available for this report.

Life expectancy at birth		Health Domain
Average number of years a newborn infant is expected to	<b>D01</b>	Mortality
live		

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 assesses whether a community has a healthy population, adequate public health infrastructure, and an efficient and effective health care system.

## How are we doing?

The average life expectancy in the state and its four counties remained above the national average. Life expectancy in Hawai'i increased one whole year from 2000 to 2005. In 2005, an average Hawai'i newborn infant was expected to live 3 more years than its counterparts in the nation (80.8 years versus 77.8 years). Among the counties, Hawai'i County had the lowest life expectancy (79.7 years).

maleutor 2011 Zile empectancy at siter								
Area / Year	1999	2000	2005					
United States	••	77	77.8					
State of Hawai'i	••	79.8	80.8					
C&C Honolulu	80.5	••	80.9					
Hawai'i County	77.3	••	79.7					
Kaua'i County	79.7	••	80.7					
Maui County	80.4	••	80.6					

### Indicator D01: Life expectancy at birth

# **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. 1999 and 2005 county data came from two different studies in which a 5-year average (1997–2001) was used in one and 3-year average (2004–2006) was used in the other. County data were unavailable for 2000.

## Data source/s:

• U.S./HI, 2000

Hawai'i State Department of Business, Economic Development, and Tourism. (2008). Table 2-1: Life expectancy at birth for the U.S. and Hawai'i: 1980-2005 (total resident population). *Population and economic projections for the state of Hawai'i to 2035: DBEDT 2035 series*. Retrieved from

http://Hawaii.gov/dbedt/info/economic/data\_reports/2035LongRangeSeries/2035\_Long\_ Range\_Series\_Report1.pdf

• 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. *National vital statistics report, 56*(16). Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\_16.pdf

# • HI, 1999

Murray, C., Kulkarni, S., Michaud, C., Tomijima, N., Bulzacchelli, M., Iandiorio, T., et al. (2006). Life expectancy at birth by county. *Supplementary online material*. Retrieved from http://dx.doi.org/10.1371/journal.pmed.0030260.sd001

# • HI, 2005

Hawai'i State 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://Hawaii.gov/dbedt/info/economic/databook/db2007/

Infant mortality	<b>D02</b>	Health Domain
Number of infant deaths per 1,000 live births	D02	Mortality

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. According to the Centers for Disease Control and Prevention, the national goal is to reduce infant mortality to 4.5 per 1,000 live births by 2010.

### How are we doing?

From 2004–2007, Hawai'i had a lower infant mortality rate than the nation. In 2007, the infant mortality in Hawai'i was 6.2 per 1,000 live births while the national average was 6.6. There was some progress in reducing infant mortality since 2000, but both national and Hawai'i's rates were still higher than the national goal of 4.5 per 1,000 live births. County rates tended to fluctuate over time. In 2007, Kaua'i County had the highest rate whereas Maui County had the lowest rate.

mulcator D02.	imant m	n tanty						
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	6.9	6.8	7	6.9	6.8	6.9	6.7	6.6
State of Hawai'i	7.6	5.9	6.8	7.3	5.3	6.3	5.7	6.2
C&C Honolulu	7.5	5.8	7.4	7.6	5.3	6.5	6.1	6.6
Hawai'i County	10.3	3.6	5	8.8	5.8	7.4	5.9	6.7
Kaua'i County	1.3	7.7	4.1	6.1	4.8	4.1	1.2	6.9
Maui County	8.0	8.0	5.9	3.2	5.3	4.7	4.4	2.8

### **Indicator D02: Infant mortality**

## **Technical notes:**

The rates for the state and county are based on the place of residence of the deceased infants and live births. U.S. data for 2007 is provisional.

## Data source/s:

• U.S., 2000–2006

Centers for Disease Control and Prevention. (n.d.). Table 30: Infant, neonatal, and postneonatal mortality rates by race and sex. *National vital statistics report: Deaths, final data, various years*. Retrieved from http://www.cdc.gov/nchs/products/nvsr.htm

• U.S., 2007

Centers for Disease Control and Prevention. (2009). Table A3. Provisional vital statistics for the United States, July 2008. *National vital statistics report 57(13): Births, marriages, divorces, and deaths: Provisional data for July 2008.* Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57\_13.htm#tables

# • HI, 2000–2007

Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Infant deaths by geographical area. *Vital statistics annual report, various years*. Retrieved from http://Hawaii.gov/health/statistics/vital-statistics/vital-statistics/index.html

Cardiovascular disease death rate		Health Domain
Number of deaths due to cardiovascular disease per	<b>D03</b>	Mortality
100,000 people		

Death rates due to cardiovascular disease are important in identifying specific health behaviors, risk factors, and environmental surroundings attributable to deaths. In 2000, cardiovascular disease was the first 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, with proper personal care, diet, and exercise, this disease can be prevented, delayed, and managed through the cooperation of patient and primary care physicians. In many cases, the causes of cardiovascular disease are personal health-damaging behaviors practiced on a daily basis during the course of a lifetime.

### How are we doing?

Compared to the nation, Hawai'i has a lower cardiovascular diseases death rate. In 2006, Hawai'i had 240 deaths per 100,000 residents that was caused by cardiovascular diseases, compared to 275 in the nation. A decreasing trend was observed for both the nation and Hawai'i since 2000. There was a large difference between the counties with the highest and the lowest rates: about 50 per 100,000 residents when comparing Hawai'i County to Honolulu and Maui Counties (278 versus 227–228).

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	340	324	319	310	293	289	275	••
State of Hawai'i	268	263	281	269	263	248	240	236
C&C Honolulu	264	262	280	270	266	246	236	227
Hawai'i County	294	311	315	306	287	271	291	278
Kaua'i County	255	267	272	263	258	287	248	263
Maui County	267	213	247	222	219	214	202	228

### Indicator D03: Cardiovascular disease death rate

## **Technical notes:**

Cardiovascular diseases include diseases of the heart, stroke, and other cerebrovascular diseases. State and county data are based on the place of residence of the deceased persons. National data for 2007 is unavailable at the time of this study.

## Data source/s:

• U.S., 2000–2006

Centers for Disease Control and Prevention. (n.d.). Table 14: Death rates for 113 selected causes by race and sex: United States. *National vital statistics report: Deaths, Final data, various years*. Retrieved from http://www.cdc.gov/nchs/products/nvsr.htm

• HI, 2000–2007

Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Resident deaths by county and selected causes of death, State of Hawai'i. *Vital statistics annual report, various years*. Retrieved from http://Hawaii.gov/health/statistics/vital-statistics/vital-statistics/index.html

Cancer death rate	D04	Health Domain
Number of deaths due to cancer per 100,000 people	<u>D04</u>	Mortality

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. In 2000, cancer was the second leading cause of death in Hawai'i and the nation. People suffering from cancer are especially hindered by the lack of health insurance and access to care. However, with proper personal care, diet, and exercise, cancer can be prevented, delayed, and managed through the cooperation of patient and primary care physicians.

### How are we doing?

In 2006, fewer people died of cancer in Hawai'i than the nation (166 versus 187 per 100,000 people). However, Hawai'i's trend was the opposite of the nation: Hawai'i's rate increased while the national rate decreased since 2000. Among the counties, Kaua'i County had the highest cancer death rate, which increased from 170 to 199 per 100,000 residents between 2000 and 2007.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	201	194	193	192	189	189	187	••
State of Hawai'i	153	163	153	167	163	168	166	169
C&C Honolulu	147	163	148	161	160	168	160	163
Hawai'i County	173	166	189	200	174	161	195	188
Kaua'i County	170	176	169	204	186	193	197	199
Maui County	162	158	143	156	155	164	153	168

### **Indicator D04: Cancer death rate**

## **Technical notes:**

State and county data are based on the place of residence of the deceased persons. National data for 2007 is unavailable at the time of this study.

## Data source/s:

• U.S., 2000–2006

Centers for Disease Control and Prevention. (n.d.). Table 14: Death rates for 113 selected causes by race and sex: United States. *National vital statistics report: Deaths, Final data, various years*. Retrieved from http://www.cdc.gov/nchs/products/nvsr.htm

• HI, 2000–2007

Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Resident deaths by county and selected causes of death, State of Hawai'i. *Vital statistics annual report, various years*. Retrieved from http://Hawaii.gov/health/statistics/vital-statistics/vital-statistics/index.html

Diabetes death rate		Health Domain
Number of deaths due to diabetes mellitus per 100,000	D05	Mortality
people		

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. In 2000, diabetes was the sixth leading cause of death in Hawai'i, following cardiovascular diseases, cancer, accidents, chronic lower respiratory diseases, and influenza/pneumonia. It became the fifth leading cause in 2007. 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 2 times that of people without diabetes. This indicator is especially important in light of the increasing diabetes rate in Hawai'i.

### How are we doing?

Although the diabetes death rate was lower in Hawai'i than the national average (21 versus 24 per 100,000 people in 2006), over the years, this rate worsened as indicated by an increasing trend, while the national rate was relatively stable. At the county level, Maui County had the highest and the City and County of Honolulu had the lowest diabetes death rate in 2007.

Indicator Dos: Diabetes dealer rate											
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007			
United States	25	25	25	26	25	25	24	••			
State of Hawai'i	17	14	16	16	15	17	21	22			
C&C Honolulu	15	14	16	17	14	18	19	21			
Hawai'i County	26	16	16	16	18	14	22	24			
Kaua'i County	22	12	13	8	13	18	29	27			
Maui County	16	15	13	14	20	17	30	30			

### **Indicator D05: Diabetes death rate**

## **Technical notes:**

Due to data unavailability, the state and county rates for 2000 were calculated by Center on the Family based on the number of diabetes deaths and 2001 vintage resident population estimates. Other rates came directly from data sources. National data for 2007 is unavailable at the time of this study.

## Data source/s:

• U.S., 2000–2006

Centers for Disease Control and Prevention. (n.d.). Table 14: Death rates for 113 selected causes by race and sex: United States. *National vital statistics report: Deaths, final data, various years*. Retrieved from http://www.cdc.gov/nchs/products/nvsr.htm

• HI, 2000–2007

Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Resident deaths by county and selected causes of death, State of Hawai'i. *Vital statistics annual report, various years*. Retrieved from http://Hawaii.gov/health/statistics/vital-statistics/vital-statistics/index.html

# • HI, 2000 Denominator

U.S. Census Bureau. (2002). *Time series of Hawai'i population estimates by county: April 1, 2000 to July 1, 2001. Table 1: CO-EST2001-07-15.* Retrieved from http://www.census.gov/popest/archives/2000s/vintage\_2001/CO-EST2001-07/CO-EST2001-07-15.html

Good or better health		Health Domain
Percentage of adults who reported good, very good, or	<b>D06</b>	Health Status
excellent health		

This indicator provides information on the health status of the population based on the selfreported health status of respondents. As such, it complements the traditional measures of morbidity and mortality. Self-perceived health condition may be useful in two ways. First, this indicator serves as a proxy measure for the perceived symptom burden of both acute and chronic health conditions; and second, it is a predictive indicator of the future burden on the health care delivery system.

## How are we doing?

Nearly the same proportion of U.S. and Hawai'i adults (about 85%) reported that their health were good, very good, or excellent. From 2000 to 2008, a decrease of 2.4 percentage points was observed in Hawai'i. At the county level, no significant difference was observed.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States	86.1%	86.0%	85.3%	85.3%	85.2%	85.2%	85.3%	85.1%	85.6%
State of Hawai'i	87.6%	87.6%	88.6%	87.8%	85.6%	86.4%	85.3%	85.3%	85.2%
C&C Honolulu	87.9%	87.9%	88.5%	87.9%	86.8%	87.0%	85.6%	86.0%	85.5%
Hawai'i County	86.2%	84.6%	86.1%	86.6%	82.9%	82.0%	83.7%	82.5%	84.2%
Kaua'i County	88.5%	86.8%	90.4%	88.2%	84.6%	84.0%	83.1%	84.3%	83.8%
Maui County	86.9%	89.3%	87.2%	89.1%	81.4%	89.0%	86.3%	85.7%	85.4%

### Indicator D06: Good or better health

# **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." 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., 2000–2008

Centers for Disease Control and Prevention. (n.d.). Nationwide (States and DC), all available years: Health status. *Behavioral Risk Factor Surveillance System: Prevalence and Trends Data*. Retrieved from http://www.cdc.gov/brfss/index.htm

• HI, 2002–2008 Centers for Disease Control and Prevention. (n.d.). Health status. *Behavioral Risk Factor Surveillance System. SMART: BRFSS city and county data.* Retrieved from http://apps.nccd.cdc.gov/BRFSS-SMART/index.asp • HI, 2000-2001, 2003 (Kauaʻi), 2004

Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). General health status. *Hawai'i Behavioral Risk Factor Surveillance System*. Retrieved from http://Hawaii.gov/health/statistics/brfss/index.html

Healthy days	D07	Health Domain
Average number of healthy days per month	<u>D07</u>	Health Status

This is a simple, yet comprehensive summary measure of perceived physical and mental health of a population over time. It adds to traditional measures of morbidity. 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.

### How are we doing?

In 2008, the average number of healthy days reported by adults in Hawai'i was 24.4, representing a decrease of 5% since 2000. There was no significant difference among counties.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
State of Hawai'i	25.6	26.7	26	26.1	24.7	24.9	25.0	24.8	24.4
C&C Honolulu	25.8	26.9	26.4	26.3	25.1	24.9	25.1	25.0	24.6
Hawai'i County	24.7	26	25.1	25.5	23.4	24.3	24.5	24.2	23.9
Kaua'i County	25.6	26.7	26.3	25.8	24.8	24.8	24.4	24.6	24.3
Maui County	25.6	26.6	24.7	25.9	23.7	24.8	24.9	24.6	24.0

### Indicator D07: Healthy days

# **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?" and "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?" A person's number of unhealthy days is obtained by adding together the numbers of unhealthy days from these two questions, and by setting the maximum value to 30. Number of healthy days is calculated by subtracting the number of unhealthy days from 30 days. National data were unavailable. The margin of error was taken into account in determining the difference between two estimates.

## Data source/s:

• HI, 2000–2008

Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Average number of unhealthy days in the past 30 days. *Hawai'i Behavioral Risk Factor Surveillance System*. Retrieved from http://Hawaii.gov/health/statistics/brfss/index.htm

Obesity	D08	Health Domain
Percentage of adults who are obese	<b>D</b> 08	Disease Prevention

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. According to the Centers for Disease Control and Prevention, the national goal is to reduce the percentage of obese people to 15% by 2010.

### How are we doing?

In 2008, Hawai'i had a lower percentage of adult obesity (23.1%) than the nation (26.7%). Following the national trend, adult obesity increased by 47% in Hawai'i since 2000. There was no significant difference among the four counties.

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Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States	20.0%	20.9%	21.9%	22.9%	23.2%	24.4%	25.1%	26.3%	26.7%
State of Hawai'i	15.7%	17.9%	17.1%	16.4%	20.9%	19.7%	20.6%	21.7%	23.1%
C&C Honolulu	15.6%	18.1%	16.6%	16.2%	21.7%	19.2%	20.6%	21.1%	22.8%
Hawai'i County	15.2%	20.7%	19.2%	18.9%	19.7%	23.0%	20.4%	23.1%	24.0%
Kaua'i County	15.8%	16.1%	14.7%	15.3%	18.8%	20.5%	21.6%	22.0%	23.5%
Maui County	17.4%	14.1%	19.2%	15.7%	18.1%	18.7%	20.4%	24.1%	23.8%

### **Indicator D08: Obesity**

## **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. 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., 2000–2008

Centers for Disease Control and Prevention. (n.d.). Weight classification by Body Mass Index (BMI). *Behavioral Risk Factor Surveillance System*. Retrieved from http://www.cdc.gov/brfss/index.htm

HI, 2000–2008
 Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Body weight based on estimated BMI (Body Mass Index) status. *Hawai'i Behavioral Risk Factor Surveillance System*. Retrieved from <a href="http://Hawaii.gov/health/statistics/brfss/index.html">http://Hawaii.gov/health/statistics/brfss/index.html</a>

Smoking	D00	Health Domain
Percentage of adults who report smoking cigarettes	D09	Disease Prevention

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. According to the Centers for Disease Control and Prevention, the national goal is to reduce tobacco smoking to 12% by 2010.

### How are we doing?

When compared to the national average in 2008, Hawai'i had a lower percentage of adults who smoke (15.4% versus 18.4%). Following the national trend, smoking prevalence among Hawai'i's adults was reduced by 22% from 2000 to 2008. Hawai'i County is the only county with a smoking rate above the national average while Kaua'i County had the lowest rate in 2008.

	211011116	•							
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States	23.2%	23.2%	23.2%	22.0%	20.9%	20.6%	20.1%	19.8%	18.4%
State of Hawai'i	19.7%	20.5%	21.0%	17.2%	17.2%	17.0%	17.5%	17.0%	15.4%
C&C Honolulu	19.2%	19.4%	19.7%	17.0%	15.8%	16.1%	17.1%	16.5%	14.8%
Hawai'i County	23.1%	23.6%	23.5%	17.1%	23.0%	19.8%	19.2%	19.4%	18.9%
Kaua'i County	18.9%	25.3%	24.4%	18.7%	18.9%	19.2%	17.7%	17.5%	13.1%
Maui County	19.7%	22.5%	25.9%	18.2%	19.2%	19.3%	18.7%	17.2%	16.5%

### **Indicator D09: Smoking**

## **Technical notes:**

Adult respondents were asked: "Do you now smoke cigarettes every day, some days, or not at all?" Those who responded "every day" or "some days" are smokers. 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., 2000–2008

Centers for Disease Control and Prevention. (n.d.). Adults who are current smokers. *Behavioral Risk Factor Surveillance System*. Retrieved from http://www.cdc.gov/brfss/index.htm

• HI, 2000–2008

Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Smoking status (3 levels). *Hawai'i Behavioral Risk Factor Surveillance System*. Retrieved from http://Hawaii.gov/health/statistics/brfss/index.html

Binge drinking	D10	Health Domain
Percentage of adults who report binge drinking	<u>D10</u>	Disease Prevention

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. According to the Centers for Disease Control and Prevention, the national goal is to reduce binge drinking among adults to 6% by 2010.

### How are we doing?

The rate of adult binge drinking in Hawai'i remained higher than the national average since 2004. In 2008, 17.6% of adults in Hawai'i reported binge drinking, representing a 69% increase since 2001. There was no significant county variation in the rate of binge drinking.

		8						
Area / Year	2001	2002	2003	2004	2005	2006	2007	2008
United States	14.8%	16.3%	16.5%	15.1%	14.4%	15.4%	15.8%	15.6%
State of Hawai'i	10.4%	11.9%	13.3%	18.6%	16.5%	17.9%	18.5%	17.6%
C&C Honolulu	9.6%	10.2%	13.2%	18.0%	15.7%	17.7%	18.3%	17.2%
Hawai'i County	12.2%	13.9%	15.0%	19.3%	17.5%	17.8%	18.1%	18.7%
Kaua'i County	13.3%	16.6%	12.2%	18.5%	19.6%	18.6%	19.3%	18.7%
Maui County	13.0%	19.0%	12.3%	22.1%	18.9%	16.2%	19.7%	18.2%

## **Indicator D10: Binge drinking**

## **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. Prior to 2006, binge drinking was defined as having five or more drinks on one occasion, regardless of gender. The change in definition caused an increase in the binge drinking rate among females, which offset the decrease in binge drinking rate among males, and resulted in no significant change in the overall rate from 2005 to 2006. 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., 2001–2008; HI (state), 2006 Centers for Disease Control and Prevention. (n.d.). Binge drinkers. *Behavioral Risk Factor Surveillance System*. Retrieved from http://www.cdc.gov/brfss/index.htm
- HI, 2001–2005, 2007–2008 Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). At risk for binge drinking. *Hawai'i Behavioral Risk Factor Surveillance System*. Retrieved from http://Hawaii.gov/health/statistics/brfss/index.html

# • HI (county), 2006

Centers for Disease Control and Prevention. (n.d.). Binge drinkers. *Behavioral Risk Factor Surveillance System. SMART: BRFSS city and county data.* Retrieved from http://apps.nccd.cdc.gov/BRFSS-SMART/index.asp

Immunization rate		Health Domain
Percentage of children 19–35 months who are fully	<b>D11</b>	Disease Prevention
immunized		

### Why is this important?

This indicator assesses the current and future health of the children in Hawai'i. Timely immunization for childhood diseases is a crucial part of preventing the spread of infectious diseases among children and preserving the public health of the general population. According to the Centers for Disease Control and Prevention, the national goal is to increase the children immunization rate to 80% by 2010.

### How are we doing?

In 2007, Hawai'i (87.5%) exceeded the national goal of having 80% of children fully immunized before age 3, while the national rate (77.4%) remained below the goal. Hawai'i made significant progress in getting children immunized: a 20% increase was observed from 2000 to 2007.

### **Indicator D11: Immunization rate**

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	72.9%	73.7%	65.5%	72.5%	76.0%	76.1%	76.9%	77.4%
State of Hawai'i	72.8%	70.8%	69.1%	78.7%	79.8%	77.5%	78.8%	87.5%

# **Technical notes:**

From 2002 onwards, both Hawai'i and national data reflect the 4:3:1:3:3:1 series that is required by the State. For 2000 and 2001, both Hawai'i and national data reflect the 4:3:1:3:3 series. The latest required series, 4:3:1:3:3:1, includes 4 doses of DTP/DTaP; 3 doses of Polio; 1 dose of measels; 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, 2000–2005

Centers for Disease Control and Prevention. (n.d.). National, state, and urban area vaccination coverage among children aged 19-35 months, United States. Morbidity and mortality weekly reports, various years. Retrieved from http://www.cdc.gov/mmwr/

• U.S./HI, 2006–2007 Centers for Disease Control and Prevention. (n.d.). Estimated vaccination coverage with individual vaccines and selected vaccination series among children 19-35 months of age by state and local area. U.S. National Immunization Survey, Q1-Q4, various years. Retrieved from http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis

Physical activity		Health Domain
Percentage of adults who engage in moderate or vigorous	D12	Disease Prevention
physical activity on a regular basis		

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. 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. Participating in vigorous physical activity at least 3 times a week for 20 minutes or more each time provides greater health benefits.

#### How are we doing?

About half of the adults in both Hawai'i and the nation engage in regular physical activity. This proportion has not changed significantly over time (from 2001 to 2007). Kaua'i had the highest physical activity rate while the City and County of Honolulu had the lowest among the counties.

Area / Year	2001	2002	2003	2004	2005	2007
United States	46.1%	••	47.4%	••	49.1%	49.5%
State of Hawai'i	50.2%	47.3%	49.8%	57.0%	52.2%	51.0%
C&C Honolulu	50.2%	47.5%	49.7%	57.1%	51.1%	50.1%
Hawai'i County	47.8%	47.7%	51.9%	55.5%	54.3%	52.5%
Kaua'i County	45.7%	44.7%	45.5%	60.7%	54.6%	55.5%
Maui County	55.6%	46.6%	50.0%	56.7%	55.7%	53.2%

### **Indicator D12: Physical activity**

### **Technical notes:**

Moderate activities include brisk walking, bicycling, vacuuming, gardening, or other activities that cause some increase in breathing or heart rate. Vigorous activities include running, aerobics, heavy yard work, or other activities that cause a substantial increase in breathing or heart rate. The national average is the median of 50 states and District of Columbia. National data for 2002 and 2004 were unavailable. The margin of error was taken into account in determining the difference between two estimates.

### Data source/s:

• U.S., 2001, 2003, 2005, 2007

Centers for Disease Control and Prevention. (n.d.). Adults with 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week. *Behavioral Risk Factor Surveillance System*. Retrieved from http://www.cdc.gov/brfss/index.htm

HI, 2001–2005, 2007
 Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). At risk for lack of moderate physical activity. *Hawai'i Behavioral Risk Factor Surveillance System*. Retrieved from http://Hawaii.gov/health/statistics/brfss/index.html

Fruit and vegetable consumption		Health Domain
Percentage of adults who consume 5 or more daily	<b>D13</b>	Disease Prevention
servings of fruit and vegetable		

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 2005 Dietary Guidelines for Americans, a 1,200-calorie diet requires about 5 servings (2.5 cups) of fruits and vegetables, and a 2,000-calorie diet requires about 9 servings (4.5 cups).

#### How are we doing?

In 2007, a higher percentage of adults in Hawai'i ate 5 servings of fruits and vegetables on a daily basis compared to the national average (28.7% versus 24.4%). The percentage for Hawai'i increased by 28% from 2000 to 2007. Among the four counties, Hawai'i and Kaua'i had a significantly lower percentage than Honolulu (32.3%, 34.1%, and 27.1% respectively) in having 5 servings of fruits and vegetables daily.

Area / Year	2000	2001	2002	2003	2004	2005	2007	
United States	23.2%	23.9%	22.6%	22.6%	••	23.2%	24.4%	
State of Hawai'i	22.4%	21.6%	20.4%	27.6%	34.6%	24.5%	28.7%	
C&C Honolulu	21.8%	21.5%	20.5%	26.9%	35.0%	23.7%	27.1%	
Hawai'i County	23.3%	21.5%	21.9%	27.1%	33.5%	26.4%	32.3%	
Kaua'i County	24.4%	19.8%	21.4%	23.8%	33.5%	27.4%	34.1%	
Maui County	24.8%	23.1%	17.4%	34.5%	33.2%	26.8%	31.9%	

#### Indicator D13: Fruit and vegetable consumption

### **Technical notes:**

The national average is the median of 50 states and District of Columbia. National data for 2004 is unavailable. The margin of error was taken into account in determining the difference between two estimates.

### Data source/s:

• U.S., 2000–2003, 2005, 2007

Centers for Disease Control and Prevention. (n.d.). Adults who have consumed fruits and vegetables five or more times per day. *Behavioral Risk Factor Surveillance System*. Retrieved from http://www.cdc.gov/brfss/index.htm

 HI, 2001–2005, 2007
 Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Number of daily servings of fruits and vegetables per day. *Hawai'i Behavioral Risk Factor Surveillance System.* Retrieved from http://Hawaii.gov/health/statistics/brfss/index.html

Adults without health insurance	D14	Health Domain
Percentage of adults without health insurance	<u>D14</u>	Access to Care

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, the high level of uninsured adults may hurt the economy of the state.

#### How are we doing?

A lower percentage of Hawai'i's adults were medically uninsured compared to their counterparts in the nation. In 2008, 6.3% of Hawai'i's adults had no health care coverage. There was no significant change over time (from 2000 to 2008). The City and County of Honolulu had the lowest uninsured rate while Hawai'i County had the highest.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States	11.9%	12.9%	14.1%	14.4%	14.9%	14.5%	14.5%	14.2%	14.5%
State of Hawai'i	6.8%	7.8%	8.6%	8.2%	9.1%	7.8%	8.3%	6.0%	6.3%
C&C Honolulu	5.9%	6.7%	6.8%	6.6%	7.8%	6.7%	6.4%	5.2%	5.3%
Hawai'i County	8.7%	11.5%	12.3%	12.0%	11.2%	12.8%	13.9%	7.8%	9.5%
Kaua'i County	12.3%	9.7%	15.6%	14.7%	14.7%	11.2%	9.2%	7.3%	8.6%
Maui County	8.4%	10.3%	13.6%	11.6%	13.1%	8.0%	13.7%	8.0%	7.3%

#### Indicator D14: Adults without health insurance

### **Technical notes:**

Adult respondents were asked: "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare?" Those who answered "no" had no health insurance. 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., 2000–2008

Centers for Disease Control and Prevention. (n.d.). Do you have any kind of health care coverage? *Behavioral Risk Factor Surveillance System*. Retrieved from http://www.cdc.gov/brfss/index.htm

• HI, 2000–2008 Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Do you have any kind of health care coverage? *Hawai'i Behavioral Risk Factor Surveillance System*. Retrieved from http://Hawaii.gov/health/statistics/brfss/index.html

Children without health insurance		Health Domain
Percentage of children aged 17 and younger without	D15	Access to Care
health insurance		

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 2007, about 4.0% of children in Hawai'i did not have any health insurance coverage. The rate of uninsured children did not change over time (from 2000 to 2007) and across counties.

Area / Year	2000	2001	2002	2003	2004	2005	2007
State of Hawai'i	4.5%	3.6%	2.9%	2.9%	3.7%	2.1%	3.9%
C&C Honolulu	3.4%	2.9%	2.5%	2.2%	••	••	3.5%
Hawai'i County	7.0%	3.9%	3.9%	5.1%	••	••	5.7%
Kaua'i County	8.8%	3.8%	5.3%	3.6%	••	••	4.6%
Maui County	6.5%	7.6%	6.2%	4.1%	••	••	4.3%

### **Indicator D15: Children without health insurance**

# **Technical notes:**

Data include children under age 18. Data was collected via a telephone household survey in which an adult from each household reported on the health insurance status for each child living in the household. National data for all years and county data for 2004 and 2005 were unavailable. The margin of error was taken into account in determining the difference between two estimates.

# Data source/s:

• HI, 2000–2007

Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Number and percent uninsured by county, gender, age, ethnicity, and poverty: Population of Hawai'i. Hawai'i *Health Survey*. Retrieved from. http://Hawaii.gov/health/statistics/hhs/index.html

Home- and community-based service expenditures		Health Domain
Percentage of Medicaid long-term care spending for aged	<b>D16</b>	Access to Care
and disabled persons allocated to home- and community-		
based services		

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 2007, Hawai'i allotted 17.5% of Medicaid long-term care spending for aged and disabled persons to home- and community-based services, which increased from 13.9% in 2002. However, the percentage remained lower than the national average of 26.3%.

Area / Year	2002	2003	2004	2005	2006	2007
United States	17.7%	20.2%	21.8%	23.2%	23.9%	26.3%
State of Hawai'i	13.9%	15.2%	16.8%	16.8%	16.8%	17.5%

#### Indicator D16: Home- and community-based service expenditures

### **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 mental retardation/developmental disabilities (MR/DD) and services received through managed care programs are not included in the data. County data were unavailable.

### Data source/s:

• U.S./HI, 2002–2007

Burwell, B., Sredl, K., Eiken, S. (2008). Tables 1 and A through T. *Medicaid long term care expenditures FY 2007 (based on data provided by Thomson Reuters, formerly Medstat)*. Retrieved from http://hcbs.org/files/145/7231/2007LTCExpenditures.xls

# HOUSING AND TRANSPORTATION DOMAIN AND INDICATORS

The quality of housing and transportation in Hawai'i has not improved in recent years and remains below the national average, primarily because of unfavorable housing conditions.

Hawai'i's housing was rated below the national average on 4 of 5 indicators with only 1 indicator rated on par with the national average. The situation for transportation was better with 1 indicator rated above the national average and 1 indicator at the national average. No gain was observed in this domain since 2000: Data for 2 indicators improved, 2 worsened, and 1 remained unchanged. Two indicators did not have trend data. See Table 7 for the most recent data and findings.

**Affordable Housing:** Compared to the nation, Hawai'i has a lower percentage of owner occupied housing units and a higher percentage of homeowners with a mortgage that results in their spending 30% or more of household income on housing. The financial burden for Hawai'i's renters is similar to that of other renters in the nation. Between 2000 and 2007, the state's home ownership rate increased by 4%.

**Unmet Housing Needs:** Although there has been progress in reducing overcrowded dwellings in Hawai'i since 2000, the issue remains a greater problem in the state than in the nation. The homeless rate increased between 2005 and 2007, and was two times worse than the national rate in 2007.

**Commute Time:** There was no difference between Hawai'i and the nation in the percentage of workers who experienced a long commute time to work, and no significant change since 2000 was observed on this indicator.

**Automobile Dependence:** From 2000–2007, Hawai'i's dependence on automobiles increased as indicated by the higher percentage of workers who drove alone to work. However, Hawai'i's figure compared favorably to that of the nation.

### **County Comparisons**

- Kaua'i County fared better than other counties in housing, and ranked best for having the highest home ownership rate and lowest rates of overcrowded dwellings and homelessness. Transportation in Kaua'i ranked best for keeping commute time under 1 hour, but ranked worst for the highest percentage of workers who drove alone to work.
- The City and County of Honolulu ranked best for rental cost and workers driving alone to work, and ranked worst on the home ownership rate.
- Hawai'i County ranked first for having the lowest housing cost burden for homeowners and ranked last for having the highest rental cost burden, homelessness rate, and percentage of workers with long commutes to work.
- Maui County ranked worst on housing cost burden to homeowners, and for overcrowded dwellings.

					Hawai'i:	Hawai'i:	Over time <sup>(1)</sup>			County		
	Housing & Transportation Indicator	Year	U.S.	HI	Compared to the Nation	% Change	Improved or Worsened	Honolulu	Hawaiʻi	Kauaʻi	Maui	Com- parison
	Affordable housing											
	<b>Rental cost burden</b> : Spending 30% or more of household income on rent, % of renter-occupied housing units	2005– 2007	45.7%	46.1%	$\ominus$	••	••	48.0%	38.3%	43.7%	43.3%	$\langle \rangle$
	Housing cost burden: Spending 30% or more of household income on selected monthly owner costs, % of owners with a mortgage	2005– 2007	36.3%	43.8%	$\bigcirc$	••	••	42.8%	42.3%	46.2%	50.9%	$\langle \rangle$
	Home ownership, % of occupied housing units	2005– 2007	67.3%	58.9%	$\bigcirc$	4%	$\mathbf{\uparrow}$	56.9%	66.0%	66.6%	58.6%	$\langle \rangle$
	Unmet housing needs											
76	<b>Overcrowded dwellings</b> : 1.01 or more occupants per room, % of occupied housing units	2005– 2007	3.0%	8.9%	$\bigcirc$	-42%		8.6%	8.0%	7.5%	11.9%	$\langle \rangle$
	Homelessness: Point-in-time count, per 100,000 people	2007	223	474	$\bigcirc$	12%	+	416	748	409	540	$\langle \rangle$
9	Commute time											
	Long commute time: Travel 60 minutes or more to work, % of commuting workers	2005– 2007	8.0%	8.0%	$\ominus$	-1%	\$	8.6%	10.7%	3.0%	4.1%	$\langle \rangle$
	Automobile dependence											
	Driving alone to work, % of workers	2005– 2007	79.2%	70.5%	$\bigcirc$	6%	♦	67.7%	74.9%	83.5%	77.4%	$\langle \rangle$

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

Symbols: •• Data not available,  $\bigcirc$  HI better than the nation,  $\bigcirc$  No difference,  $\bigcirc$  HI worse than the nation,  $\diamondsuit$  HI has improved,  $\Leftrightarrow$  No change,  $\checkmark$  HI has worsened,  $\diamondsuit$  Difference found between top-ranked and bottom-ranked counties,  $\approx$  No difference among counties.

(1) The benchmark year is 2000 or later, depending on the availability of comparable data. 2005: Homelessness.

Rental cost burden		Housing & Transportation Domain
Percentage of renter-occupied housing units spending 30% or more of household income on rent	<u>E01</u>	Affordable Housing

Affordable housing is a significant factor in quality of life, and in 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 high 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?

No significant difference exists between Hawai'i and the nation in terms of rental cost burden. Nearly 46% of renter-occupied housing units spent 30% or more of household income on rent. However, this rate was the highest in the City and County of Honolulu and the lowest in Hawai'i County.

Area / Year	2005-2007
United States	45.7%
State of Hawai'i	46.1%
C&C Honolulu	48.0%
Hawai'i County	38.3%
Kaua'i County	43.7%
Maui County	43.3%

#### Indicator E01: Rental cost burden

#### **Technical notes:**

The data are a 2005–2007 average based on total renter-occupied units. Data are not comparable with that of the 2000 Census, where only "specified renter-occupied housing units" were reported. The margin of error was taken into account in determining the difference between two estimates.

#### Data source/s:

• U.S./HI, 2005–2007

U.S. Census Bureau. (2008). B25070: Gross rent as a percentage of household income in the past 12 months. 2005-2007 American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

Housing cost burden		Housing & Transportation Domain
Percentage of owners with a mortgage spending 30% or more of household income on selected monthly owner costs	E02	Affordable Housing

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, may also lessen the ability of employers to recruit and retain employees, and may 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. In 2005–2007, Hawai'i's homeowners with a mortgage who spent 30% or more of their household income on selected monthly owner costs was 43.8%, which was 7.5 points higher than the national average. Maui County had the highest rate of housing cost burden while Hawai'i County had the lowest.

### Indicator E02: Housing cost burden

Area / Year	2005-2007
United States	36.3%
State of Hawai'i	43.8%
C&C Honolulu	42.8%
Hawai'i County	42.3%
Kaua'i County	46.2%
Maui County	50.9%

### **Technical notes:**

The data are a 2005–2007 average based on total owner-occupied units. Data are not comparable with that of 2000 Census where only "specified owner-occupied housing units" were reported. The margin of error was taken into account in determining the difference between two estimates.

### Data source/s:

• U.S./HI, 2005–2007

U.S. Census Bureau. (2008). B25091: Mortgage status by selected monthly owner costs as a percentage of household income in the past 12 months. 2005-2007 American *Community Survey 3-Year Estimates*. Retrieved from http://factfinder.census.gov/

Home ownership		Housing &		
	E03	Transportation Domain		
Percentage of owner-occupied housing units		Affordable Housing		

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. As is evident from the subprime mortgage crisis, increased, stable home-ownership cannot be achieved by manipulating the qualification and financing process.

### How are we doing?

Compared to the nation, a lower percentage of people in Hawai'i own the home in which they live. During 2005–2007, the difference in the home ownership rate between the state (58.9%) and the nation (67.3%) was 8.4 points. Hawai'i's home ownership rate increased by 4% since 2000. Among the four counties, Kaua'i County had the highest rate, closely followed by Hawai'i County, while Maui and Honolulu Counties had the two lowest rates.

### Indicator E03: Home ownership

Area / Year	2000	2005-2007
United States	66.2%	67.3%
State of Hawai'i	56.5%	58.9%
C&C Honolulu	54.5%	56.9%
Hawai'i County	64.5%	66.0%
Kaua'i County	61.3%	66.6%
Maui County	57.4%	58.6%

# **Technical notes:**

The data for 2005–2007 are a 3-year average. The margin of error was taken into account in determining the difference between two estimates.

# Data source/s:

• U.S./HI, 2000

U.S. Census Bureau (2002). H7: Tenure. *Census 2000 Summary File 3*. Retrieved from http://factfinder.census.gov/

U.S./HI, 2005–2007
 U.S. Census Bureau. (2008). B25003: Tenure. 2005–2007. American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

Overcrowded dwellings		Housing & Transportation Domain	
Percentage of occupied housing units with 1.01 or more	<u>E04</u>	Unmet Housing Needs	
occupants per room			

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 lack of affordable housing and residents' incapacity to rent or own housing, both of which hinder quality of life.

### How are we doing?

Following the national trend, the percentage of overcrowded dwellings in Hawai'i decreased by 42% since 2000. Compared to the nation, overcrowded dwellings remained a more widespread problem in Hawai'i (8.9% versus 3.0%) during 2005–2007. Among the counties, Maui had the highest percentage of overcrowded dwellings while Kaua'i had the lowest.

malculor 2011 Overerowaed awening					
Area / Year	2000	2005-2007			
United States	5.7%	3.0%			
State of Hawai'i	15.4%	8.9%			
C&C Honolulu	16.0%	8.6%			
Hawai'i County	12.8%	8.0%			
Kaua'i County	12.4%	7.5%			
Maui County	16.3%	11.9%			

#### **Indicator E04: Overcrowded dwellings**

### **Technical notes:**

The data for 2005–2007 are a 3-year average. The margin of error was taken into account in determining the difference between two estimates.

### Data source/s:

• U.S./HI, 2000

U.S. Census Bureau. (2002). H20: Tenure by occupants per room. *Census 2000 Summary File 3*. Retrieved from http://factfinder.census.gov/

• U.S./HI, 2005–2007 U.S. Census Bureau. (2008). B25014: Tenure by occupants per room. 2005-2007 *American Community Survey 3-Year Estimates*. Retrieved from http://factfinder.census.gov/

Homelessness		Housing &
	E05	Transportation Domain
Number of people who are homeless on a given day per	<u>E05</u>	Unmet Housing Needs
100,000 people		

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?

With 474 homeless per 100,000 people on any given day in 2007, Hawai'i's homeless population rate was more than twice the national rate of 223. While the rate of homelessness decreased nationwide from 2005 to 2007, it increased 12% in Hawai'i. Among the counties, Hawai'i County had the highest homeless rate (748 homeless per 100,000 people) and Kaua'i County had the lowest rate (409).

Area / Year	2005	2007
United States	252	223
State of Hawai'i	424	474
C&C Honolulu	325	416
Hawai'i County	877	748
Kaua'i County	403	409
Maui County	538	540

### **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. 2005, 2007

National Alliance to End Homelessness and Homelessness Research Institute. (2009). Table 1: Changes in CoC homelessness estimates: 2005 to 2007. *Homelessness counts: Changes in homelessness from 2005 to 2007. Research report on homelessness.* Retrieved from http://www.endhomelessness.org/content/article/detail/2158 • HI, 2005, 2007

FAQ Hawai'i, Inc. (2007). Unsheltered and sheltered homeless counts for 2007 and 2005. 2007 Point-in-time count: Report for Hawai'i Public Housing Authority, Homeless Programs Branch and Bridging the Gap Continuum of Care. Retrieved from http://www.hcdch.state.hi.us/documents/002%20Homeless%20PITC%20Report%202007 .pdf

• HI, 2005, 2007

SMS (2007). Table 5: Total homeless. *City and County of Honolulu: Homeless point-intime count, 2007. Report for City and County of Honolulu, Department of Community Services.* Retrieved from http://www.hcdch.state.hi.us/documents/Homeless%20PITC%20Report%20Oahu%2020 07.pdf

• HI, 2005–2007, Denominator

U.S. Census Bureau. (2009). Annual estimates of the resident population for counties of Hawai'i: April 1, 2000 to July 1, 2008. Table CO-EST2008-01-15. Retrieved from http://www.census.gov/popest/counties/tables/CO-EST2008-01-15.xls

Long commute time		Housing &
	E06	Transportation Domain
Percentage of commuting workers who travel 60 minutes		Commute Time
or more to work		

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?

Both Hawai'i and the nation had about the same proportion of commuting workers who traveled 60 minutes or more to work—both at 8% in 2005–2007. There was no significant change in commute time since 2000. While a higher percentage of workers commuted for an hour or more in Honolulu and Hawai'i Counties, a much lower percentage of workers commuted for this amount of time in Kaua'i and Maui Counties.

mulcator Eoo. Long commute time							
Area / Year	2000	2005-2007					
United States	8.0%	8.0%					
State of Hawai'i	8.1%	8.0%					
C&C Honolulu	8.9%	8.6%					
Hawai'i County	8.0%	10.7%					
Kaua'i County	4.4%	3.0%					
Maui County	4.8%	4.1%					

## Indicator E06: Long commute time

### **Technical notes:**

Percentage calculations are based on all workers who commute to work. The data for 2005–2007 are a 3-year average. The margin of error was taken into account in determining the difference between two estimates.

### Data source/s:

• U.S./HI, 2000

U.S. Census Bureau. (2002). P31: Travel time to work for workers 16 years and over. *Census 2000 Summary File 3*. Retrieved from http://factfinder.census.gov/

 U.S./HI, 2005–2007
 U.S. Census Bureau. (2008). B08012: Sex of workers by travel time to work. 2005–2007
 *American Community Survey 3-Year Estimates*. Retrieved from http://factfinder.census.gov/

Driving alone to work		Housing &
	E07	Transportation Domain
Percentage of workers who drive alone to work		Automobile Dependence

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?

From 2005–2007, a lower percentage of workers in Hawai'i (70.5%) drove alone to work compared to the nation (79.2%); however, the gap has been closing since 2000 due to a more rapid increase in driving alone in Hawai'i (6% versus 1% nationwide). Kaua'i County had the highest rate (83.5%) of driving alone to work among the counties, and the City and County of Honolulu had the lowest rate (67.7%) due to its better developed public transportation.

marcator 2077 Driving arone to work							
Area / Year	2000	2005-2007					
United States	78.3%	79.2%					
State of Hawai'i	66.3%	70.5%					
C&C Honolulu	63.3%	67.7%					
Hawai'i County	73.1%	74.9%					
Kaua'i County	79.1%	83.5%					
Maui County	74.7%	77.4%					

#### **Indicator E07: Driving alone to work**

# **Technical notes:**

The data for 2005–2007 are a 3-year average. The margin of error was taken into account in determining the difference between two estimates.

### Data source/s:

• U.S./HI, 2000

U.S. Census Bureau. (2002). P30: Means of transportation to work for workers 16 years and over. *Census 2000 Summary File 3*. Retrieved from http://factfinder.census.gov/

 U.S./HI, 2005–2007
 U.S. Census Bureau. (2008). B08006: Sex of workers by means of transportation to work. 2005-2007 American Community Survey 3-Year Estimates. Retrieved from http://factfinder.census.gov/

# SOCIAL DOMAIN AND INDICATORS

Hawai'i's QOL rating in social well-being is slightly better than the national average and has improved to some extent in recent years.

Of the 6 indicators in this domain with national data, Hawai'i fared better on 4 indicators and worse on 2 indicators. Comparisons over time indicate that the state made slight progress since 2000 in improving its social conditions. There were improvements on 4 indicators, negative changes on 4 indicators, and no change on 4 indicators. See Table 8 for the most recent data and findings.

**Public Safety:** The rates of violent crime; deaths by accident, homicide, and suicide; and drug related arrests were lower in Hawai'i than the nation. However, these rates have increased since 2000, suggesting a deterioration of public safety in the state. In contrast, the property crime rate has reduced by 17% since 2000, but it is currently higher than the national rate. Nevertheless, about three fourths of Hawai'i's families reported living in a safe neighborhood, and this figure has not changed significantly over time.

**Family Relationship:** The state has made noticeable progress in reducing the number of child abuse and neglect cases since 2000, achieving a rate that was lower than the national average in 2007. Unfortunately, there has been a worsening of the state's domestic abuse rate over the same period. On the bright side, about 70% of Hawai'i's families with children eat together regularly 5 or more times per week and the percentage has not changed since 2002.

**Community Connectedness:** Compared to their national peers, a higher percentage of Hawai'i's youth was not attending school and not in the labor force although a slight improvement was observed in recent years. On the other hand, almost all of Hawai'i's families with children under 18 years felt they had someone to rely on in the community.

**Social Participation:** The rate of Hawai'i's residents voting in elections increased between 2000 and 2008, when it reached two thirds of all registered voters. Within the state, 3 in 5 families with children under 18 years volunteered their time to the community in 2006, about the same rate as reported in 2002. No national data are available for comparison.

### **County Comparisons**

- Kaua'i County ranked top for having the lowest child abuse rate and the highest volunteering and registered voters' voting rates.
- Maui County ranked first for having the lowest rates of violent crime and accident, homicide, and suicide deaths. It ranked last on 2 indicators: property crime rate and registered voters voting.
- The City and County of Honolulu ranked best for having the lowest rates of drug-related arrests and domestic abuse. However, it ranked worst on the violent crime rate, families eating together, and volunteerism.

- Hawai'i County ranked best on 2 indicators— property crime rate and families eating together—and worst on rates of accident, homicide, and suicide deaths; drug-related arrests; child abuse and neglect; and domestic abuse.
- There were no county differences on: safe neighborhoods, idle youth, and having someone to rely on in the community.

#### Table 8. Social Domain: Most Recent Data and Summary Findings

					Hawai'i:	Hawaiʻi:	Over time <sup>(1)</sup>			County		
	Social Indicator	Year	U.S.	HI	Compared to the Nation	% Change	Improved or Worsened	Honolulu	Hawaiʻi	Kaua'i	Maui	Com- parison
	Public Safety											
	Violent crime rate, per 100,000 people	2007	467	276	$\ominus$	13%	+	289	260	269	221	$\langle \rangle$
	Property crime rate, per 100,000 people	2007	3,264	4,119	$\bigcirc$	-17%	$\mathbf{\uparrow}$	4,107	3,420	4,519	4,870	$\langle \rangle$
	Accident, homicide, and suicide death rate, per 100,000 people	2005– 2007	57 <sup>(2)</sup>	47	$\bigcirc$	8%	♦	45	58	55	42	$\langle \rangle$
	Drug-related arrests, per 100,000 people	2007	611	261	$\ominus$	2%	+	171	517	351	482	$\langle \rangle$
	<b>Safe neighborhoods</b> , % of families with children under 18 years old	2006	••	72.1%	••	2%	\$	72.8%	68.0%	74.3%	72.5%	$\approx$
	Family relationship											
87	Child abuse and neglect, per 1,000 children aged 17 and younger	2007	10.1	7.1	$\bigcirc$	-41%	$\mathbf{\uparrow}$	6.5	10.9	5.7	6.8	$\langle \rangle$
	Domestic abuse, per 100,000 people	2008	••	352	••	19%	+	279	683	371	398	$\langle \rangle$
	Families eating together regularly, % of families with children under 18 years old	2006	••	71.3%	••	1%	⇔	69.5%	78.2%	73.0%	71.2%	$\langle \rangle$
	Community connectedness											
	Idle youth, % of people aged 16–24	2005– 2007	8.0%	9.1%	$\bigcirc$	-13%	$\mathbf{\uparrow}$	8.9%	7.9%	10.8% <sup>(3)</sup>	10.8% <sup>(3)</sup>	$\approx$
	Have someone to rely on in the community, % of families with children under 18 years old	2006	••	89.1%	••	6%	\$	88.1%	91.4%	92.7%	89.5%	$\approx$
	Social participation											
	<b>Participated in volunteer activities</b> , % of families with children under 18 years old	2006	••	59.3%	••	1%	\$	57.1%	60.8%	66.0%	64.2%	$\langle \rangle$
	Voted in elections, % of registered voters	2008	••	66.0%	••	13%	$\mathbf{e}$	66.1%	67.7%	68.2%	61.1%	$\langle \rangle$

Symbols: 
•• Data not available, ⊖ HI better than the nation, ⊖ No difference, ⊖ HI worse than the nation, ↑ HI has improved, ⇔ No change, ↓ HI has worsened, ♦ Difference found between top-ranked and bottom-ranked counties, ≈ No difference among counties.

(1) The benchmark year is 2000 or later, depending on the availability of comparable data. 2000–2002: Accident, homicide, and suicide death rate. 2002: Safe neighborhoods, families eating together regularly, have someone to rely on in the community, participated in volunteer activities.

(2) U.S. 3-year average is from 2004–2006, the latest 3 years for which data were available for this report.

(3) Data is based on a combined sample of Kaua'i and Maui Counties for which individual county data were not available.

Violent crime rate	<b>F01</b>	Social Domain
Number of violent crimes per 100,000 people	FUI	Public Safety

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 has a much lower violent crime rate compared to the national average. In 2007, violent crimes was 276 per 100,000 people in Hawai'i (compared to 467 in the nation), representing a 13% decrease since 2000. In the same year, the City and County of Honolulu had the highest violent crime rate (289 per 100,000 people) whereas Maui County had the lowest rate (221).

Indicator P01. Violent erinte rate								
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	507	505	494	476	463	469	474	467
State of Hawai'i	244	255	262	270	259	269	283	276
C&C Honolulu	263	278	290	288	277	283	302	289
Hawai'i County	159	182	143	189	182	286	253	260
Kaua'i County	246	162	299	310	341	222	267	269
Maui County	211	221	195	230	198	181	207	221

#### **Indicator F01: Violent crime rate**

### **Technical notes:**

The violent crime index is comprised of homicide, forcible rape, robbery, and assault.

### Data source/s:

• U.S., 2000–2007

U.S. Department of Justice, Federal Bureau of Investigation. (n.d.). Table 1: Crime in the United States by volume and rate per 100,000 inhabitants, 1988–2007. *Crime in the United States, various years*. Retrieved from http://www.fbi.gov/ucr/ucr.htm

 HI, 2000–2007 Hawai'i State Department of Attorney General, Crime Prevention and Justice Assistance Division. (n.d.). *Crime in Hawai'i: A review of uniform crime reports, various years*. Retrieved from http://hawaii.gov/ag/cpja/main/rs/Folder.2005-12-05.2910/

Property crime rate	<b>E02</b>	Social Domain
Number of property crimes per 100,000 people	FU2	Public Safety

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?

The property crime rate in Hawai'i is higher than the national average; however, the rate in recent years has started to decrease. In 2007, there were 4,119 property crimes per 100,000 people in Hawaii, compared to 3,264 nationwide. Between 2000 and 2007, Hawai'i's property crime rate decreased by 17%, whereas the national rate decreased by 10%, narrowing the gap between the two rates. Among the counties, Maui County had the highest property crime rate (4,870 per 100,000 people) while Hawai'i County had the lowest rate (3,420) in 2007.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	3,618	3,658	3,631	3,591	3,517	3,432	3,335	3,264
State of Hawai'i	4,955	5,132	5,782	5,238	4,782	4,755	4,256	4,119
C&C Honolulu	5,063	5,218	6,101	5,336	4,867	4,665	4,211	4,107
Hawai'i County	4,162	4,411	4,338	4,373	3,727	4,744	3,696	3,420
Kaua'i County	4,163	3,799	4,781	4,715	4,087	3,329	4,036	4,519
Maui County	5,501	5,981	5,759	5,812	5,763	5,992	5,322	4,870

#### **Indicator F02: Property crime rate**

### **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, such as burglary, larceny, theft, motor vehicle theft, arson, shoplifting, and vandalism.

### Data source/s:

• U.S., 2000–2007

U.S. Department of Justice, Federal Bureau of Investigation. (n.d.). Table 1: Crime in the United States by volume and rate per 100,000 inhabitants, 1988-2007. *Crime in the United States, various years*. Retrieved from http://www.fbi.gov/ucr/ucr.htm

 HI, 2000–2007 Hawai'i State Department of Attorney General, Crime Prevention and Justice Assistance Division. (n.d.). Crime in Hawai'i: A review of uniform crime reports, various years. Retrieved from http://hawaii.gov/ag/cpja/main/rs/Folder.2005-12-05.2910/

Accident, homicide, and suicide death rate		Social Doma
Number of deaths by accident, homicide, and suicide per	<b>F03</b>	Public Safe
100,000 people		

nin ety

#### 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, and 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 drug, 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?

Despite the latest increase in the rate, Hawai'i's death rate due to accident, homicide, and suicide remains lower than the national average. In the three-year average of 2005–2007, Hawai'i had 47 deaths per 100,000 people due to accident, homicide, and suicide, an increase of 8% since 2000–2002. The highest rate was in Hawai'i County (58) and the lowest in Maui County (42). The latest national data, 2004–2006, reported a high rate of 57 per 100,000 people.

Area / Year	2000-2002	2001–2003	2002-2004	2003-2005	2004–2006	2005-2007
United States	53	54	55	56	57	••
State of Hawai'i	43	44	44	44	45	47
C&C Honolulu	40	41	42	42	43	45
Hawai'i County	62	65	61	60	56	58
Kaua'i County	44	42	43	46	49	55
Maui County	44	41	38	39	40	42

#### Indicator F03: Accident, homicide, and suicide death rate

### **Technical notes:**

Data are calculated as a 3-year moving average to reduce random fluctuations caused by a small number of cases at the county level. National data were unavailable for 2005-2007 at the time of this study.

### Data source/s:

• U.S., 2000–2006

Centers for Disease Control and Prevention. (n.d.). Table 10: Number of deaths from 113 selected causes by age: United States. *National vital statistics report: Deaths, Final data, various years*. Retrieved from http://www.cdc.gov/nchs/products/nvsr.htm

• HI, 2000–2007 Hawai'i State Department of Health, Office of Health Status Monitoring. (n.d.). Special tabulation for Center on the Family. *Resident deaths, 2000-2007: Three years moving average*.

- U.S., 2000–2006, Denominator
  - U.S. Census Bureau. (2009). Annual estimates of the resident population for the United States, regions, states, and Puerto Rico: April 1, 2000 to July 1, 2008. Table NST-EST2008-01. Retrieved from http://www.census.gov/popest/states/tables/NST-EST2008-01.xls
- HI, 2000–2007, Denominator
   U.S. Census Bureau. (2009). Annual estimates of the resident population for counties of Hawai'i: April 1, 2000 to July 1, 2008. CO-EST2008-01-15. Retrieved from http://www.census.gov/popest/counties/tables/CO-EST2008-01-15.xls

Drug-related arrests	<b>F04</b>	Social Domain
Number of drug-related arrests per 100,000 people	<b>FU4</b>	Public Safety

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 rate is about half of the national rate. In 2007, Hawai'i had 261 arrests per 100,000 people, compared to 611 nationwide. The rate of the state increased slightly (2%) since 2000. Noteworthy gaps exist among counties. The City and County of Honolulu had the lowest rate (171), followed by Kaua'i County (351) and Maui County (482), while Hawai'i County had the highest rate (517).

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	560	557	535	578	596	625	633	611
State of Hawai'i	256	250	253	265	259	258	255	261
C&C Honolulu	194	204	216	183	180	172	177	171
Hawai'i County	421	377	327	439	446	534	490	517
Kaua'i County	335	344	323	392	481	403	374	351
Maui County	447	369	387	553	461	420	427	482

#### **Indicator F04: Drug-related arrests**

### **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., 2000–2007

U.S. Department of Justice, Federal Bureau of Investigation. (n.d.). Table 29: Estimated number of arrests. *Crime in the United States, various years*. Retrieved from http://www.fbi.gov/ucr/ucr.htm

- HI, 2000–2007
   Hawai'i State Department of Attorney General, Crime Prevention and Justice Assistance Division. (n.d.). *Crime in Hawai'i: A review of uniform crime reports, various years*. Retrieved from http://hawaii.gov/ag/cpja/main/rs/Folder.2005-12-05.2910/
- U.S., 2000–2007, Denominator U.S. Census Bureau. (2009). *Annual estimates of the resident population for the United States, regions, states, and Puerto Rico: April 1, 2000 to July 1, 2008. Table NST-*

*EST2008-01*. Retrieved from http://www.census.gov/popest/states/tables/NST-EST2008-01.xls

HI, 2000–2007, Denominator
 U.S. Census Bureau. (2009). Annual estimates of the resident population for counties of Hawai'i: April 1, 2000 to July 1, 2008. Table CO-EST2008-01-15. Retrieved from http://www.census.gov/popest/counties/tables/CO-EST2008-01-15.xls

Safe neighborhoods		Social Domain
Percentage of families with children under 18 years old	<b>F05</b>	Public Safety
who report living in a safe neighborhood		

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 2006, 72.1% of Hawai'i's families with children under 18 years old reported feeling safe in their neighborhoods. There was no significant difference over time (between 2002 and 2006) and among the four counties.

Indicator 1 05. Bare neighborhoods						
Area / Year	2002	2006				
State of Hawai'i	70.9%	72.1%				
C&C Honolulu	71.6%	72.8%				
Hawai'i County	63.9%	68.0%				
Kaua'i County	81.7%	74.3%				
Maui County	69.4%	72.5%				

#### **Indicator F05: Safe neighborhoods**

### **Technical notes:**

The survey was conducted using a statewide representative sample of families with at least one child aged 17 or younger. A parent from each sampled family was asked: "*Is there any area near where you live*—*that is, within a mile*—*where you would be afraid to walk alone at night?*" A "no" response indicated perception of safety. National data were unavailable. The margin of error was taken into account in determining the difference between two estimates.

### Data source/s:

• HI, 2002, 2006 Center on the Family. (n.d.). *Family Touchstone Survey, 2002 and 2006 [Data file]*.

Child abuse and neglect	
Number of unduplicated and confirmed reports of child	<b>F06</b>
abuse and neglect per 1 000 children	

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 2007, Hawai'i had 7.1 unduplicated and confirmed reports of child abuse and neglect per 1,000 children, compared to 10.1 nationwide. The rate has been decreasing in recent years in Hawai'i. Among the four counties, the rate fluctuated over time but Hawai'i County has always been the highest (10.9 in 2007) in all observed years compared to other counties.

malcutor 1 000 emila ababe una neglece								
Area / Year	2000	2001	2002	2003	2004	2005	2006	2007
United States	12.1	12.4	12.3	12.2	12.0	12.1	11.8	10.1
State of Hawai'i	12.0	13.5	13.0	13.3	11.7	8.9	8.3	7.1
C&C Honolulu	10.6	12.8	12.1	11.6	10.6	8.1	7.7	6.5
Hawai'i County	19.5	20.2	20.1	26.5	20.3	15.0	13.3	10.9
Kaua'i County	11.4	13.9	16.1	10.7	8.4	6.2	7.8	5.7
Maui County	12.1	10.3	8.9	10.2	9.9	8.2	6.2	6.8

#### Indicator F06: Child abuse and neglect

### **Technical notes:**

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

### Data source/s:

• U.S., 2000–2007

U.S. Department of Health and Human Services, Administration on Children, Youth and Families. (n.d.). *Child maltreatment, various years*. Retrieved from http://www.acf.hhs.gov/programs/cb/

• HI, 2000–2007

Hawai'i State Department of Human Services, Management Services Office. (n.d.). *A* statistical report on child abuse and neglect in Hawai'i, various years. Retrieved from http://hawaii.gov/dhs/protection/social\_services/child\_welfare/ChildAbuse

- U.S., 2000–2007, Denominator
  - U.S. Census Bureau. (2009). *State single year of age and sex population estimates: April* 1, 2000 to July 1, 2008—resident. NST-EST2008-01. Retrieved from http://www.census.gov/popest/states/asrh/files/SC-EST2008-AGESEX-RES.csv
- HI, 2000–2007, Denominator
   U.S. Census Bureau. (2009). Annual estimates of the resident population by selected age groups and sex for counties: April 1, 2000 to July 1, 2008. CC-EST2008-AGESEX-15. Retrieved from http://www.census.gov/popest/counties/asrh/files/cc-est2008-agesex-15.csv

Domestic abuse	
Number of domestic abuse protective orders filed per	<b>F07</b>
100,000 people	

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 19% from 2000 to 2008, reaching 352 domestic abuse protective orders filed with the courts per 100,000 people in 2008. Among the counties, Hawai'i County had the highest rate of domestic abuse while the City and County of Honolulu had the lowest rate.

Area / Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
State of Hawai'i	295	331	377	414	386	365	365	353	352
C&C Honolulu	239	259	322	344	301	288	292	276	279
Hawai'i County	559	607	627	708	773	693	719	680	683
Kaua'i County	203	305	345	394	350	403	362	360	371
Maui County	407	502	468	542	509	460	411	441	398

#### **Indicator F07: Domestic abuse**

### **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, 2000–2008 Hawai'i State Judiciary. (n.d.). *Annual report statistical supplement, various years*. Retrieved from http://www.courts.state.hi.us/attachment/2008StatSuppl.pdf
- HI, 2000–2008, Denominator
   U.S. Census Bureau. (2009). Annual estimates of the resident population for counties of Hawai'i: April 1, 2000 to July 1, 2008. Table CO-EST2008-01-15. Retrieved from http://www.census.gov/popest/counties/tables/CO-EST2008-01-15.xls

Families eating together regularly		Social Domain
Percentage of families with children under 18 years old	<b>F08</b>	Family Relationship
eating together regularly		

#### 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?

Around 71% of families eat together on a regular basis in Hawai'i. There was no significant change over time (from 2002 to 2006). Among the counties, Hawai'i had the highest percentage of families eat together regularly, while Honolulu had the lowest percentage.

Area / Year	2002	2006
State of Hawai'i	70.6%	71.3%
C&C Honolulu	69.4%	69.5%
Hawai'i County	76.9%	78.2%
Kaua'i County	70.9%	73.0%
Maui County	70.3%	71.2%

#### **Indicator F08: Families eating together regularly**

### **Technical notes:**

The survey was conducted using a statewide representative sample of families with at least one child aged 17 or younger. A parent from each sampled family was asked: "How many nights a week out of seven days does your family eat together?" Responses of "5-6 nights" a week and "every night" indicated families eat together regularly. National data were unavailable. The margin of error was taken into account in determining the difference between two estimates.

### **Data source/s:**

• HI, 2002, 2006 Center on the Family. (n.d.). Family Touchstone Survey, 2002 and 2006 [Data file].

#### Idle youth

Percentage of people aged 16–24 who are not attending school and not in the labor force

**F09** 

#### 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 idle youth. In 2005–2007, 9.1% of the state's youth aged 16 to 24 were idle, compared to 8.0% nationwide. There was no county difference in the percentage of idle youth.

indicator 109. rate youth							
Area / Year	2000	2005-2007					
United States	9.8%	8.0%					
State of Hawai'i	10.5%	9.1%					
C&C Honolulu	10.2%	8.9%					
Hawai'i County	12.0%	7.9%					
Kaua'i/Maui County	11.0%	10.8%					

#### **Indicator F09: Idle youth**

#### **Technical notes:**

Data include all people 16–24 years old not living in group quarters. The reference period for school enrollment is from February 1 to date of interview for decennial census data, and 3 months prior to the interview for American Community Survey (ACS) data. A reference period is the "last week" for labor force participation for both data sources. The data for 2005–2007 are a 3-year average. Individual county data for Kaua'i and Maui were not available. The margin of error was taken into account in determining the difference between two estimates.

#### **Data source/s:**

• U.S.,/HI, 2000, 2005–2007

Ruggles, S., Sobek, M., Alexander, T., Fitch, C.A., Goeken, R., Hall, P.K., et al. (n.d.). Census 2000 5% sample; Multi-Year American Community Survey 1% sample, 2005-2007. *Integrated Public Use Microdata Series: Version 4.0 [Data file]*. Minneapolis, MN: Minnesota Population Center. Retrieved from http://usa.ipums.org/usa/sda/

Have someone to rely on in the community
Percentage of families with children under 18 years old

who feel they can rely on others in their community

**F10** 

### Why is this important?

This indicator provides information on the availability of other sources of support for residents outside their families, reflecting a sense of social connectedness, security, and trust. If residents in a community care about one another and act upon that concern, that care increases the quality of life for everyone. 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?

In Hawai'i, 89.1% of families with children under 18 years old responded that they can count on someone in their community. There was no significant difference over time (between 2002 and 2006) and across counties.

Area / Year	2002	2006
State of Hawai'i	84.3%	89.1%
C&C Honolulu	82.4%	88.1%
Hawai'i County	91.7%	91.4%
Kaua'i County	85.9%	92.7%
Maui County	87.2%	89.5%

#### Indicator F10: Have someone to rely on in the community

# **Technical notes:**

The survey was conducted among a statewide representative sample of families with at least one child aged 17 or younger. A parent from each sampled family was asked: "*Is there someone in your community, outside of your family, that you feel you can rely on in time of need?*" A "yes" indicated perception of community support. National data were unavailable. The margin of error was taken into account in determining the difference between two estimates.

### **Data source/s:**

• HI, 2002, 2006

Center on the Family. (n.d.). Family Touchstone Survey, 2002 and 2006 [Data file].

Participated in volunteer activities
Percentage of families with children under 18 years old
who participated in volunteer activities

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.

**F11** 

#### How are we doing?

Over half of the families with children under 18 years old engage in volunteer work. The proportion remained statistically unchanged from 2002 to 2006. Differences on the percentage of volunteerism among counties exist. In 2006, Kaua'i County had the highest rate of volunteerism and the City and County of Honolulu had the lowest (66.0% vs. 57.1%).

Area / Year	2002	2006
State of Hawai'i	58.5%	59.3%
C&C Honolulu	55.9%	57.1%
Hawai'i County	68.5%	60.8%
Kaua'i County	62.3%	66.0%
Maui County	62.2%	64.2%

#### Indicator F11: Participated in volunteer activities

### **Technical notes:**

The survey was conducted among a statewide representative sample of families with at least one child aged 17 or younger. A parent from each sampled family was asked: "*In the past year, have you done any volunteer work for any church, charity, or community group?*" A "yes" indicated volunteerism. National data were unavailable. The margin of error was taken into account in determining the difference between two estimates.

### **Data source/s:**

• HI, 2002, 2006 Center on the Family. (n.d.). *Family Touchstone Survey, 2002 and 2006 [Data file]*.

Voted in elections	F12	Social Domain
Percentage of registered voters voting	<u><b>F12</b></u>	Social Participation

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 presidential election increased from 58.3% in 2000 to 66.7% in 2004, and stayed at the similar level—66.0%—in 2008. On the other hand, the voting rate for off-year election decreased slightly from 57.0% in 2002 to 52.7% in 2006. Among the four counties, Maui County had the lowest voting rate among registered voters and Kaua'i County had the highest rate across all years.

Area / Year	2000	2002	2004	2006	2008
State of Hawai'i	58.3%	57.0%	66.7%	52.7%	66.0%
C&C Honolulu	58.0%	57.4%	67.4%	53.0%	66.1%
Hawai'i County	60.9%	56.3%	66.0%	53.2%	67.7%
Kaua'i County	64.1%	62.8%	68.7%	55.7%	68.2%
Maui County	54.1%	52.6%	61.6%	48.3%	61.1%

#### **Indicator F12: Voted in elections**

### **Technical notes:**

Data are based on official records, which provide county-level voter turnout rates. 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 provide county-level data but national data did not.

### Data source/s:

• HI, 2008

Hawai'i State Office of Elections. (2009). *Final summary report. 2008 Hawai'i general elections: Official results.* Retrieved from

http://hawaii.gov/elections/results/2008/general/

<sup>•</sup> HI, 2000, 2002, 2004, 2006 Hawai'i State Office of Elections. (n.d.). *Factsheet: Election registration and turnout statistics*. Retrieved from http://hawaii.gov/elections/factsheets/fsvs505.pdf

# APPENDIX: CONFIDENCE INTERVALS / SIGNIFICANCE TESTING

This appendix presents 35 indicators for which confidence intervals or the results of the significance test were available from their data sources. For each of these indicators, the margin of error was taken into consideration to ascertain the difference between estimates, in particular, Hawai'i vs. the national average, Hawai'i's baseline data vs. the most recent data, and among Hawai'i's four counties. A difference (X - Y) is statistically significant if it is larger than the margin of error of the difference (MOE<sub>*X*-*Y*</sub>).<sup>1</sup>

Area / Year	2005-2007	90% Confidence Interval		
Area / Tear	2005-2007	Lower Bound	Upper Bound	
United States	13.0%	12.9%	13.0%	
State of Hawai'i	8.5%	8.1%	8.8%	
C&C Honolulu	7.8%	7.1%	8.5%	
Hawai'i County	13.1%	11.3%	14.9%	
Kaua'i County	9.0%	7.3%	10.8%	
Maui County	6.8%	5.6%	7.9%	
Area / Year	2000			
State of Hawai'i	9.9%			

#### **Indicator A02: Poverty rate**

#### Indicator A04: Gini Index

Area / Year	2005-2007	90% Confidence Interval		
Area / Tear	2005-2007	Lower Bound	<b>Upper Bound</b>	
United States	46.5	46.5	46.5	
State of Hawai'i	42.7	42.2	43.2	
C&C Honolulu	42.0	41.5	42.5	
Hawai'i County	44.9	42.8	47.0	
Kaua'i County	42.7	40.8	44.6	
Maui County	43.5	42.2	44.9	

<sup>&</sup>lt;sup>1</sup> MOE<sub>*X*-*Y*</sub> = Z \*  $\sqrt{(SE_X^2 + SE_Y^2)}$ , where Z is 1.96 for 95% confidence level or 1.65 for 90% confidence level, SE<sub>*i*</sub> is (Upper Bound<sub>*i*</sub> – Lower Bound<sub>*i*</sub>)/2 Z.

Area / Year 20	2005-2007	90% Confidence Interv		
Area / Tear	2005-2007	Lower Bound	<b>Upper Bound</b>	
United States	50.0%	49.8%	50.2%	
State of Hawai'i	46.5%	46.0%	47.0%	
C&C Honolulu	45.8%	45.3%	46.3%	
Hawai'i County	48.4%	46.3%	50.5%	
Kaua'i County	46.1%	44.4%	47.8%	
Maui County	47.8%	46.6%	49.0%	

### Indicator A05: Income share of households in the top 20% income group

### Indicator A06: Economic dependency ratio

Area / Year	2005-2007	90% Confidence Interval		
Area / Tear	2005-2007	Lower Bound	<b>Upper Bound</b>	
United States	97.8	97.7	97.9	
State of Hawai'i	89.7	88.8	90.6	
C&C Honolulu	91.7	90.6	92.8	
Hawai'i County	93.2	92.1	94.3	
Kaua'i County	82.2	78.1	86.3	
Maui County	77.1	74.1	80.1	
Area / Year	2000			
State of Hawai'i	97.7			

## Indicator A07: Unemployment rate

Area / Year	2008	90% Confide	ence Interval
Alca / I car	2008	Lower Bound	<b>Upper Bound</b>
State of Hawai'i	3.9%	3.5%	4.4%
Area / Year	2000		
State of Hawai'i	4.0%		

## Indicator A08: Median earnings

Area / Year	2005-2007	90% Confide	ence Interval
		Lower Bound	<b>Upper Bound</b>
United States	\$28,029	\$27,985	\$28,073
State of Hawai'i	\$30,716	\$30,443	\$30,989
C&C Honolulu	\$31,405	\$31,130	\$31,680
Hawai'i County	\$27,191	\$26,602	\$27,780
Kaua'i County	\$28,435	\$26,875	\$29,995
Maui County	\$30,202	\$29,309	\$31,095

## Indicator A09: Working long hours

Area / Year	2007	95% Confide	ence Interval	
Area / Tear	2007	Lower Bound	<b>Upper Bound</b>	
United States	31.6%	31.5%	31.7%	
State of Hawai'i	22.9%	21.7%	24.0%	
C&C Honolulu	22.1%	20.8%	23.5%	
Hawai'i County	23.1%	20.2%	26.1%	
Kaua'i/Maui County	25.3%	22.4%	28.1%	
Area / Year	2000	95% Confidence Interva		
Area / Tear		Lower Bound	<b>Upper Bound</b>	
State of Hawai'i	26.7%	26.1%	27.3%	

### Indicator B01: Less than high school

Area / Year	ear 2005-2007	90% Confidence	ence Interval
Alta / Ital		Lower Bound	<b>Upper Bound</b>
United States	16.0%	15.9%	16.0%
State of Hawai'i	11.3%	10.9%	11.7%
C&C Honolulu	11.2%	10.7%	11.6%
Hawai'i County	10.9%	10.1%	11.7%
Kaua'i County	11.2%	10.0%	12.4%
Maui County	12.7%	11.5%	14.0%
Area / Year	2000		
State of Hawai'i	15.4%		

# Indicator B02: Bachelor's degree or higher

Area / Year	2005-2007	90% Confidence Interval		
Alca / I car	2005-2007	Lower Bound	<b>Upper Bound</b>	
United States	27.0%	27.0%	27.1%	
State of Hawai'i	28.6%	28.1%	29.1%	
C&C Honolulu	30.0%	29.4%	30.6%	
Hawai'i County	26.0%	24.6%	27.4%	
Kaua'i County	23.4%	21.4%	25.5%	
Maui County	25.4%	24.1%	26.7%	
Area / Year	2000			
State of Hawai'i	26.2%			

Indicator B05:	At or above	8th-grade	proficiency in math
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Area / Year	2007	Test of Difference (95% confidence level)
United States	31%	Significant (U.S. vs. HI)
State of Hawai'i	21%	Significant (0.3. vs. III)
Area / Year	2000	Test of Difference (95% confidence level)
State of Hawai'i	16%	Significant (2000 vs. 2007)

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

Area / Year	2007	Test of Difference (95% confidence level)
United States	29%	Significant (U.S. vs. HI)
State of Hawai'i	20%	Significant (0.5. vs. III)
Area / Year	2002	Test of Difference (95% confidence level)
State of Hawai'i	20%	

### Indicator B07: At or above 8th-grade proficiency in writing

Area / Year	2007	Test of Difference (95% confidence level)
United States	31%	Significant (U.S. vs. HI)
State of Hawai'i	20%	Significant (0.5. vs. III)
Area / Year	2002	Test of Difference (95% confidence level)
State of Hawai'i	18%	

## **Indicator B12: Lifelong learning**

Area / Vear	Area / Year 2007	95% Confidence Interval	
Area / 1 car		Lower Bound	<b>Upper Bound</b>
United States	8.1%	8.0%	8.1%
State of Hawai'i	9.8%	8.7%	10.8%
C&C Honolulu	11.5%	10.2%	12.8%
Hawai'i County	5.4%	3.2%	7.6%
Kaua'i/Maui County	5.5%	3.5%	7.5%
Area / Year	2000	95% Confide	ence Interval
Area/ rear	2000	Lower Bound	<b>Upper Bound</b>
State of Hawai'i	9.2%	8.8%	9.6%

## Indicator C11: HI-5 recyclers

Area / Year	2008	Test of Difference (95% confidence level)
State of Hawai'i	82.0%	
C&C Honolulu	78.0%	Significant (Hawaiʻi County.
Hawai'i County	93.0%	vs. C&C Honolulu
Kaua'i County	85.0%	
Maui County	84.2%	
Area / Year	2002	Test of Difference (95% confidence level)
State of Hawai'i	72.5%	Significant (2002 vs. 2008)

### **Indicator D06: Good or better health**

Area / Year		95% Confidence Interval	
		Lower Bound	<b>Upper Bound</b>
United States	85.6%		
State of Hawai'i	85.2%	84.0%	86.3%
C&C Honolulu	85.5%	84.0%	87.1%
Hawai'i County	84.2%	82.0%	86.6%
Kaua'i County	83.8%	80.0%	87.3%
Maui County	85.4%	83.0%	88.1%
Area / Year	2000 -	95% Confide	ence Interval
		Lower Bound	Upper Bound
State of Hawai'i	87.6%	86.5%	88.7%

### **Indicator D07: Healthy days**

Area / Year	2008	95% Confidence Interval	
Area / Tear		Lower Bound	<b>Upper Bound</b>
State of Hawai'i	24.4	24.1	24.8
C&C Honolulu	24.6	24.2	25.0
Hawai'i County	23.9	23.3	24.5
Kaua'i County	24.3	23.4	25.3
Maui County	24	23.3	24.7
Area / Year	2000	95% Confide	ence Interval
Area / Tear		Lower Bound	Upper Bound
State of Hawai'i	25.6	25.3	25.9

## Indicator D08: Obesity

Area / Year 2008	2008	95% Confidence Interval	
Area / Tear		Lower Bound	<b>Upper Bound</b>
United States	26.7%		
State of Hawai'i	23.1%	21.7%	24.7%
C&C Honolulu	22.8%	20.9%	24.9%
Hawai'i County	24.0%	21.1%	27.2%
Kaua'i County	23.5%	19.4%	28.3%
Maui County	23.8%	20.6%	27.4%
Area / Year	2000	95% Confide	ence Interval
Area/ rear		Lower Bound	Upper Bound
State of Hawai'i	15.7%	14.4%	17.2%

## Indicator D09: Smoking

Area / Year 2008	95% Confide	ence Interval	
Alca / I cal	2008	Lower Bound	<b>Upper Bound</b>
United States	18.4%		
State of Hawai'i	15.4%	14.1%	16.8%
C&C Honolulu	14.8%	13.1%	16.6%
Hawai'i County	18.9%	16.3%	21.8%
Kaua'i County	13.1%	10.2%	16.7%
Maui County	16.5%	13.8%	19.7%
Area / Year	2000 -	95% Confide	ence Interval
Area/ rear		Lower Bound	Upper Bound
State of Hawai'i	19.7%	18.3%	21.1%

## Indicator D10: Binge drinking

Area / Year	2008 -	95% Confide	ence Interval
Area / Tear		Lower Bound	<b>Upper Bound</b>
United States	15.6%		
State of Hawai'i	17.6%	16.1%	19.1%
C&C Honolulu	17.2%	15.3%	19.3%
Hawai'i County	18.7%	16.0%	21.7%
Kaua'i County	18.7%	14.8%	23.4%
Maui County	18.2%	15.4%	21.4%
Area / Year	2001	95% Confide	ence Interval
		Lower Bound	<b>Upper Bound</b>
State of Hawai'i	10.4%	9.2%	11.8%

### **Indicator D11: Immunization rate**

Area / Year	/ Year 2007	95% Confide	ence Interval
Area / Tear		Lower Bound	<b>Upper Bound</b>
United States	77.4%	76.3%	78.5%
State of Hawai'i	87.5%	83.0%	92.0%
Area / Year	2000	95% Confide	ence Interval
Alea / Iear		Lower Bound	<b>Upper Bound</b>
State of Hawai'i	72.8%	66.7%	78.9%

### Indicator D12: Physical activity

Area / Year	2007	95% Confide	ence Interval
Alca / I cal		Lower Bound	<b>Upper Bound</b>
United States	49.5%		
State of Hawai'i	51.0%	49.3%	52.8%
C&C Honolulu	50.1%	47.9%	52.4%
Hawai'i County	52.5%	49.3%	55.7%
Kaua'i County	55.5%	50.6%	60.3%
Maui County	53.2%	49.4%	56.9%
Area / Year	2001	95% Confide	ence Interval
Area/Year	2001	Lower Bound	Upper Bound
State of Hawai'i	50.2%	48.2%	52.3%

### Indicator D13: Fruit and vegetable consumption

Area / Year	2007	95% Confide	ence Interval
Area / Tear		Lower Bound	<b>Upper Bound</b>
United States	24.4%		
State of Hawai'i	28.7%	27.2%	30.2%
C&C Honolulu	27.1%	25.2%	29.1%
Hawai'i County	32.3%	29.4%	35.3%
Kaua'i County	34.1%	29.5%	39.1%
Maui County	31.9%	28.5%	35.6%
Area / Year	2000	95% Confide	ence Interval
Area / Tear		Lower Bound	<b>Upper Bound</b>
State of Hawai'i	22.4%	21.1%	23.8%

Area / Year	2008	95% Confidence Interval	
Area / Tear		Lower Bound	<b>Upper Bound</b>
United States	14.5%		
State of Hawai'i	6.3%	5.4%	7.3%
C&C Honolulu	5.3%	4.2%	6.8%
Hawai'i County	9.5%	7.6%	11.9%
Kaua'i County	8.6%	5.9%	12.3%
Maui County	7.3%	5.4%	9.7%
Area / Year	2000 -	95% Confide	ence Interval
Aita/ Itai		Lower Bound	Upper Bound
State of Hawai'i	6.8%	5.9%	7.7%

### Indicator D14: Adults without health insurance

# Indicator D15: Children without health insurance

Area / Year	2007	95% Confidence Interval	
Alca / I car	2007	Lower Bound	<b>Upper Bound</b>
State of Hawai'i	3.9%	2.9%	5.0%
C&C Honolulu	3.5%	2.1%	4.9%
Hawai'i County	5.7%	3.5%	7.9%
Kaua'i County	4.6%	1.8%	7.3%
Maui County	4.3%	2.0%	6.6%
Area / Year	2000	95% Confide	ence Interval
Area / Year		Lower Bound	Upper Bound
State of Hawai'i	4.5%	3.4%	5.6%

## Indicator E01: Rental cost burden

Area / Year	2005-2007	90% Confidence Interval	
Alca / I car		Lower Bound	<b>Upper Bound</b>
United States	45.7%	45.6%	45.7%
State of Hawai'i	46.1%	44.7%	47.5%
C&C Honolulu	48.0%	46.4%	49.6%
Hawai'i County	38.3%	34.9%	41.8%
Kaua'i County	43.7%	37.3%	50.1%
Maui County	43.3%	39.4%	47.1%

## Indicator E02: Housing cost burden

Area / Year	2005-2007	90% Confidence Interval	
Area / Tear		Lower Bound	<b>Upper Bound</b>
United States	36.3%	36.2%	36.4%
State of Hawai'i	43.8%	42.5%	45.2%
C&C Honolulu	42.8%	41.3%	44.3%
Hawai'i County	42.3%	39.5%	45.1%
Kaua'i County	46.2%	41.1%	51.3%
Maui County	50.9%	46.9%	54.8%

## Indicator E03: Home ownership

Area / Year 2005-200	2005 2007	90% Confidence Interval	
	2005-2007	Lower Bound	<b>Upper Bound</b>
United States	67.3%	67.1%	67.4%
State of Hawai'i	58.9%	58.3%	59.4%
C&C Honolulu	56.9%	56.2%	57.5%
Hawai'i County	66.0%	64.3%	67.7%
Kaua'i County	66.6%	64.5%	68.8%
Maui County	58.6%	57.0%	60.3%
Area / Year	2000		
State of Hawai'i	56.5%		

# Indicator E04: Overcrowded dwellings

Area / Year	2005-2007	90% Confidence Interval	
		Lower Bound	<b>Upper Bound</b>
United States	3.0%	3.0%	3.0%
State of Hawai'i	8.9%	8.4%	9.3%
C&C Honolulu	8.6%	8.2%	9.1%
Hawai'i County	8.0%	6.9%	9.1%
Kaua'i County	7.5%	5.8%	9.1%
Maui County	11.9%	10.4%	13.5%
Area / Year	2000		
State of Hawai'i	15.4%		

### **Indicator E06: Long commute time**

Area / Year	2005-2007	90% Confidence Interval	
		Lower Bound	<b>Upper Bound</b>
United States	8.0%	8.0%	8.0%
State of Hawai'i	8.0%	7.7%	8.4%
C&C Honolulu	8.6%	8.2%	9.0%
Hawai'i County	10.7%	9.6%	11.8%
Kaua'i County	3.0%	2.0%	4.0%
Maui County	4.1%	3.1%	5.0%
Area / Year	2000		
State of Hawai'i	8.1%		

## Indicator E07: Driving alone to work

Area / Year	2005-2007	90% Confidence Interval	
		Lower Bound	<b>Upper Bound</b>
United States	79.2%	79.1%	79.2%
State of Hawai'i	70.5%	69.8%	71.2%
C&C Honolulu	67.7%	66.9%	68.5%
Hawai'i County	74.9%	73.0%	76.8%
Kaua'i County	83.5%	82.2%	84.9%
Maui County	77.4%	75.4%	79.5%
Area / Year	2000		
State of Hawai'i	66.3%		

# Indicator F05: Safe neighborhoods

County Comparison	Difference Between Means (2006)	95% Confidence Interval	
		Lower Bound	Upper Bound
Honolulu – Hawaiʻi	4.8%	-1.9%	11.6%
Honolulu – Maui	0.3%	-6.5%	7.1%
Kaua'i – Hawai'i	6.2%	-2.0%	14.4%
Kauaʻi – Honolulu	1.4%	-6.6%	9.3%
Kauaʻi – Maui	1.6%	-6.6%	9.8%
Maui – Hawaiʻi	4.6%	-2.6%	11.7%

County Comparison	Difference Between Means (2006)	95% Confidence Interval	
		Lower Bound	<b>Upper Bound</b>
Hawaiʻi – Honolulu	8.7%	2.1%	15.4%
Hawaiʻi – Kauaʻi	5.2%	-2.9%	13.3%
Hawaiʻi – Maui	7.0%	0.0%	14.0%
Kauaʻi – Honolulu	3.5%	-4.3%	11.3%
Kauaʻi – Maui	1.8%	-6.3%	9.9%
Maui – Honolulu	1.7%	-5.0%	8.4%

#### **Indicator F08: Families eating together regularly**

# Indicator F09: Idle youth

Area / Year	2005-2007	95% Confidence Interval	
		Lower Bound	<b>Upper Bound</b>
United States	8.0%	8.0%	8.1%
State of Hawai'i	9.1%	8.2%	10.0%
C&C Honolulu	8.9%	7.9%	10.0%
Hawai'i County	7.9%	5.6%	10.1%
Kaua'i/Maui County	10.8%	8.3%	13.4%
Area / Year	2000	95% Confide	ence Interval
		Lower Bound	<b>Upper Bound</b>
State of Hawai'i	10.5%	9.8%	11.2%

### Indicator F10: Have someone to rely on in the community

County Comparison	Difference Between Means (2006)	95% Confidence Interval	
		Lower Bound	Upper Bound
Hawaiʻi – Kauaʻi	1.2%	-4.2%	6.6%
Honolulu – Hawaiʻi	3.3%	-1.2%	7.8%
Honolulu – Kauaʻi	4.5%	-0.7%	9.8%
Honolulu – Maui	1.4%	-3.1%	5.9%
Maui – Hawaiʻi	1.9%	-2.8%	6.7%
Maui – Kauaʻi	3.1%	-2.3%	8.6%

#### **Indicator F11: Participated in volunteer activities**

County Comparison	Difference Between Means (2006)	95% Confidence Interval	
		Lower Bound	<b>Upper Bound</b>
Honolulu – Hawaiʻi	3.7%	-3.6%	11.0%
Honolulu – Maui	7.1%	-0.3%	14.4%
Honolulu – Kauaʻi	8.8%	0.3%	17.4%
Hawaiʻi – Maui	3.4%	-4.3%	11.0%
Hawaiʻi – Kauaʻi	5.1%	-3.7%	13.9%
Maui – Kauaʻi	1.8%	-7.1%	10.6%

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