# Key Findings from the General Plan Comprehensive Review Trends and Forecasts Report

October 2022

## Context

### Requirements of the General Plan

The County of Hawaiʻi Planning Director initiated a comprehensive review of the General Plan in February 2015. The purpose of the General Plan is to set forth the County Council's policy for long-range comprehensive physical development of the County. As required by HRS §226-58 and Hawaiʻi County Charter §3-15, the Plan must be formulated on the basis of sound rationale, data, and analyses and must include, among other things, objectives, policies, and implementation actions for the desirable density of population, land use, infrastructure (water, waste, transportation, public buildings), utilities, affordable housing, and economic development.

### Purpose of the Trends and Forecasts Report

The General Plan Comprehensive review, therefore, requires an understanding of demographic, economic, and real estate trends and forecasts that can be used to anticipate and plan for impacts on land use, infrastructure, and services. The Trends and Forecasts Report is intended to meet that need by providing both trends and forecasts for a set of variables relevant to the County of Hawaiʻi's General Plan review. The Report was prepared by Honolulu-based SMS Research & Marketing Services, Inc.

Apart from the report, SMS provided data both at the County-wide level and by the following Forecast Analysis Zones (FAZs), which are groupings of census tracts based on the geographic location of population centers in Hawaiʻi County:

- Hilo (Hilo and Wainaku)
- North Hilo-Hāmākua Coast Villages (Paukaʻa to Laupāhoehoe)
- Honokaʻa-Paʻauilo
- North Kohala
- Waimea
- Waikoloa Area (Kawaihae-Puakō-Waikoloa-Waikoloa Resorts)
- North Kona
- South Kona
- Kaʻū
- Upper Puna (Volcano to Mountain View)
- Keaʻau-Kurtistown
- Hawaiian Paradise Park-Orchidland
- Lower Puna (Pahoa and Lower Puna subdivisions)

Below, these FAZ groupings are used to refer to geographic sub-areas of the County.

Historic data are generally provided from 1990, and forecasts are provided to 2045, which is the year through which forecasts are provided by the State Department of Business, Economic Development, and Tourism (DBEDT).

In addition to informing the Trends and Forecasts Report, these data are being used for the development of planning scenarios reflecting baseline conditions, build-out, growth capacity, growth trends, and alternatives to the trend.

## Purpose of these Key Findings

Importantly, forecasts typically assume "business as usual" – that is, they generally assume that historic trends will continue into the future. The planner's challenge is to understand the implications of those trends and the trade-offs associated with adapting to or influencing them.

The Trends and Forecasts Report provides definitions of each metric, data sources, discussions of trends and forecasts, explanations of forecast methods, and short discussions of demographic, economic, and real estate dynamics. However, it is beyond the scope of that report to connect those dynamics to planning. Therefore, the purpose of these Key Findings is to identify "take-aways" from the report that inform the analysis required for the General Plan Comprehensive Review.

## Summary of Key Findings

Hawaiʻi County is rural.  Only 40% of Hawaiʻi County's population is within its three urban areas, and in both urban and rural areas, population density is low.

The County is expected to grow by 35% by the year 2045.  On average from 2017-2021, visitors make up about 9% of the population, and during peak periods, 90% of the growth is from immigration.  Almost ¼ of our residents from 2025 and beyond will be 65 years or older.

Rates of job growth are expected to match population growth, but due to the economy's reliance on lower-paying service sector jobs, 16% of our estimated population will continue to live below the poverty line.  Moreover, over 30% of our households are shelter burdened, and many are struggling to make ends meet, often living in overcrowded conditions.  Much of the affordable housing is not located in or near job centers, so commutes are getting longer.

Visitor arrivals continue to increase and are forecasted to increase to about 2.6 million in 2045.  Visitor accommodation units have also increased and while most hotel units are clustered primarily in North Kona and Waikoloa, a large supply of short-term vacation rental units has developed in Lower Puna.  Steady growth of the visitor unit is expected to continue to match the demand of visitor arrivals, though the makeup of that growth (hotel vs. vacation rental) is unknown.

# Demographic Key Findings

## Population Centers are both Urban and Rural

For the 2020 Census, an urban area comprises a densely settled core of census blocks that meet minimum housing unit density and/or population density requirements. This includes adjacent territory containing non-residential urban land uses. To qualify as an urban area, the territory identified according to criteria must encompass at least 2,000 housing units or a population of at least 5,000. It is important to note that most of our town centers do not meet the criteria to be designated as urban areas.

| Urban Areas | Population | Housing | % of Population | Population Density (Pop/Sq Mile) |
|---|---:|---:|---:|---:|
| Hilo | 41,410 | 16,878 | 20% | 1,767 |
| Kailua Kona | 33,024 | 15,746 | 16% | 1,548 |
| Waikoloa Village | 6,824 | 3,222 | 3% | 1,150 |

## Population Density is Low

By the Census definition, the majority (approximately 60%) of the County's population lives in rural areas, no change is expected through 2045. In contrast, nationwide, 20% of the population lives in rural areas.

In both urban and rural areas, the County of Hawaiʻi has a relatively low population density. It has an average of 1,488 people living in every square mile of urban areas and an average of 18 persons per square mile in rural areas. In contrast, urban Honolulu had over 5,556 persons per square mile in 2020.

## Roughly 35% Growth by 2045

In 2018, there were 202,263 residents living in the County of Hawaiʻi. Over the next 25 years, the population growth rate is expected to decline from an average of 2.3% per annum to about 0.9% per annum. In 2045, the County resident population is forecast to be approximately 273,232 – a 35% increase since 2018.

| Forecast Analysis Zones (FAZ) | Total Population | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Estimate | | | | | Projection | | | | |
| | 2000 | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Hilo | 42,425 | 44,070 | 45,714 | 47,409 | 47,910 | 52,553 | 53,899 | 55,186 | 56,392 | 57,584 |
| North Hilo – Hāmākua Coast Villages | 6,681 | 6,968 | 7,254 | 6,538 | 5,861 | 6,787 | 6,537 | 6,283 | 6,024 | 5,768 |
| Honokaʻa-Paʻauilo | 6,108 | 6,311 | 6,513 | 7,441 | 6,056 | 7,270 | 7,353 | 7,429 | 7,495 | 7,560 |
| Waimea | 7,116 | 8,328 | 9,540 | 11,118 | 11,023 | 12,545 | 13,644 | 14,722 | 15,770 | 16,806 |
| North Kohala | 6,038 | 6,180 | 6,322 | 6,490 | 5,906 | 6,733 | 6,712 | 6,685 | 6,650 | 6,616 |
| Kawaihae-Puakō-Waikoloa-Waikoloa Resorts | 6,015 | 7,051 | 8,087 | 7,713 | 8,937 | 9,629 | 10,296 | 10,948 | 11,580 | 12,204 |
| North Kona | 28,543 | 33,209 | 37,875 | 41,213 | 47,252 | 50,744 | 55,464 | 60,095 | 64,604 | 69,059 |
| South Kona Villages | 8,589 | 9,293 | 9,997 | 11,268 | 11,421 | 12,649 | 13,427 | 14,186 | 14,920 | 15,646 |
| Kaʻū | 5,827 | 7,139 | 8,451 | 7,942 | 9,773 | 10,393 | 11,294 | 12,177 | 13,036 | 13,885 |
| Keaʻau-Kurtistown | 3,545 | 4,258 | 4,970 | 5,028 | 5,524 | 6,096 | 6,584 | 7,063 | 7,527 | 7,986 |
| Upper Puna | 7,772 | 9,833 | 11,893 | 10,499 | 12,612 | 13,681 | 14,748 | 15,793 | 16,808 | 17,810 |
| HPP-Orchidland | 11,421 | 14,412 | 17,403 | 18,597 | 17,999 | 21,116 | 22,911 | 24,671 | 26,382 | 28,073 |
| Lower Puna | 8,597 | 9,829 | 11,060 | 10,226 | 11,076 | 12,200 | 12,733 | 13,249 | 13,745 | 14,234 |
| **County of Hawaiʻi** | 148,677 | 166,878 | 185,079 | 191,482 | 201,350 | 222,396 | 235,601 | 248,486 | 260,935 | 273,232 |

The *de facto* population is the sum of the resident population and the average daily visitor census. The average daily visitor census was around 19,441 in 2018 and is expected to rise to approximately 50,519 by 2045, bringing the de facto population from about 213,880 to about 311,869 – a 46% increase.

| Forecast Analysis Zones (FAZ) | De Facto Population | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Estimate | | | | Projection | | | | |
| | **2000** | **2010** | **2015** | **2020** | **2025** | **2030** | **2035** | **2040** | **2045** |
| Hilo | 41,108 | 50,054 | 54,767 | 49,730 | 59,979 | 63,641 | 67,240 | 70,692 | 74,207 |
| North Hilo – Hāmākua Coast Villages | 6,523 | 7,943 | 7,553 | 6,084 | 7,337 | 7,785 | 8,226 | 8,648 | 9,078 |
| Honokaʻa-Paʻauilo | 5,857 | 7,131 | 8,596 | 6,286 | 7,582 | 8,044 | 8,499 | 8,936 | 9,380 |
| Waimea | 8,579 | 10,446 | 12,844 | 11,442 | 13,800 | 14,642 | 15,470 | 16,265 | 17,073 |
| North Kohala | 5,685 | 6,922 | 7,497 | 6,130 | 7,394 | 7,845 | 8,289 | 8,714 | 9,148 |
| Kawaihae-Puakō-Waikoloa-Waikoloa Resorts | 7,272 | 8,855 | 8,910 | 9,277 | 11,188 | 11,871 | 12,543 | 13,187 | 13,842 |
| North Kona | 34,058 | 41,471 | 47,609 | 49,047 | 59,155 | 62,767 | 66,317 | 69,722 | 73,188 |
| South Kona Villages | 8,990 | 10,946 | 13,017 | 11,855 | 14,298 | 15,171 | 16,029 | 16,852 | 17,690 |
| Kaʻū | 7,599 | 9,253 | 9,175 | 10,144 | 12,235 | 12,982 | 13,716 | 14,420 | 15,137 |
| Keaʻau-Kurtistown | 4,469 | 5,442 | 5,808 | 5,734 | 6,916 | 7,338 | 7,753 | 8,151 | 8,556 |
| Upper Puna | 10,695 | 13,022 | 12,128 | 13,091 | 15,789 | 16,753 | 17,701 | 18,609 | 19,535 |
| HPP-Orchidland | 15,649 | 19,055 | 21,483 | 18,683 | 22,533 | 23,909 | 25,261 | 26,558 | 27,878 |
| Lower Puna | 9,946 | 12,110 | 11,813 | 11,497 | 13,866 | 14,713 | 15,545 | 16,343 | 17,156 |
| **County of Hawaiʻi** | 166,429 | 202,650 | 221,200 | 209,000 | 252,073 | 267,463 | 282,588 | 297,097 | 311,869 |

### Immigration Outpaces Resident Population Growth

During the last two decades, there has been an average of 2,338 births and 1,458 deaths per year in the County, resulting in a net increase of almost 880 people annually. Also contributing to population growth are the approximately 8,521 individuals, on average, who choose to move to Hawaiʻi County each year. In other words, about 90% of the growth on average is through immigration. However, it is important to note that according to UHERO, in 2018, 67,293 Hawaiʻi residents moved to the mainland, or equivalent to more than 4.5% of the state's total population; they were partially replaced by 54,074 mainlanders who moved to Hawaiʻi for a net out-migration from Hawaiʻi of 13,219. More information on this is needed at a county level to understand Hawaiʻi County's out-migration data and related effects.

### We have an Aging Population

The County population over age 65 is expected to grow by 44% by the year 2045. In 2020, the largest cohort of the population was aged 60-69. As this subset of the population continues to age, it will present a variety of opportunities and challenges with regard to housing, economic development, and public services.

## Growth and Development Key Findings

### Housing is a Burden for more than 40% of Households

The housing guidelines from the federal Department of Housing and Urban Development suggest that households should devote no more than 30% of their income to pay monthly housing expenses; otherwise, a household is considered "shelter burdened" and may have difficulty affording necessities such as food, clothing, transportation, and medical care. Further households spending more than 50% of their income are considered severely shelter burdened.

In Hawaiʻi County, the percentage of households that are burdened has remained constant and considerably above the national average. In 2010, 42% of owner households with a mortgage and 45% of all renter households were paying more than 30% of their income for housing. By 2020, this had decreased slightly to 39% and 43%, respectively. Further, a majority of those could be considered severely shelter burdened.

Nationally, on average, 30% of households paid more than 30% of their income on housing in 2020. It is also important to note that the State of Hawaiʻi continuously ranked in the top 3 highest shares of shelter burdened, nationally.

| Forecast Analysis Zones (FAZ) | Households | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Estimate | | | | Projection | | | | |
| | 2000 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Hilo | 15,141 | 17,623 | 16,166 | 16,826 | 16,458 | 16,704 | 16,914 | 17,096 | 17,257 |
| North Hilo – Hāmākua Coast Villages | 2,384 | 2,646 | 2,280 | 2,185 | 2,137 | 2,169 | 2,196 | 2,220 | 2,241 |
| Honokaʻa-Paʻauilo | 2,083 | 2,158 | 1,990 | 2,033 | 1,988 | 2,018 | 2,044 | 2,066 | 2,085 |
| Waimea | 2,241 | 3,217 | 3,222 | 3,615 | 3,536 | 3,589 | 3,634 | 3,673 | 3,708 |
| North Kohala | 1,751 | 1,862 | 1,915 | 2,269 | 2,219 | 2,253 | 2,281 | 2,305 | 2,327 |
| Kawaihae-Puakō-Waikoloa-Waikoloa Resorts | 2,407 | 2,983 | 2,909 | 3,298 | 3,226 | 3,274 | 3,315 | 3,351 | 3,382 |
| North Kona | 10,492 | 14,374 | 13,946 | 16,234 | 15,878 | 16,116 | 16,318 | 16,494 | 16,650 |
| South Kona Villages | 3,113 | 3,531 | 3,659 | 3,838 | 3,754 | 3,810 | 3,858 | 3,900 | 3,936 |
| Kaʻū | 2,209 | 2,624 | 2,829 | 3,438 | 3,363 | 3,413 | 3,456 | 3,493 | 3,526 |
| Keaʻau-Kurtistown | 1,261 | 1,520 | 1,672 | 1,802 | 1,763 | 1,789 | 1,811 | 1,831 | 1,848 |
| Upper Puna | 2,974 | 3,618 | 4,106 | 5,016 | 4,906 | 4,980 | 5,042 | 5,096 | 5,144 |
| HPP-Orchidland | 3,784 | 4,594 | 6,309 | 6,627 | 6,482 | 6,579 | 6,661 | 6,733 | 6,797 |
| Lower Puna | 3,115 | 3,632 | 4,045 | 4,566 | 4,466 | 4,533 | 4,590 | 4,639 | 4,683 |
| **County of Hawaiʻi** | 52,955 | 64,382 | 65,048 | 71,747 | 70,176 | 71,227 | 72,120 | 72,897 | 73,585 |

## Housing Remains Unaffordable

SMS considered housing affordable if its price (asking rent or sales price) is affordable to households if those units require not more than 30% of the household's income. Approximately 43% of the housing units were deemed unaffordable in 2020.

## Households Remain Overcrowded

A household is considered overcrowded when the ratio of household members to rooms in the housing unit exceeds 1.0. A household is classified as extremely overcrowded when that ratio exceeds 1.50.

Crowding is considered to be a negative indicator of the health of a local housing market, a sign that the market is unable to supply the number and types of housing units needed.

Hawaiʻi has one of the highest overcrowding rates in the country at 7.7%. However, the level of overcrowding varies across the island with Kaʻū, Waimea, South Kona, and Upper Puna experiencing overcrowding rates in the double digits. However, on average, Hawaiʻi County's overcrowding rate is still the lowest among all of Hawaiʻi's counties.

## Affordable Housing can be Found Island Wide

The availability of affordable housing varies by region. Relative to the countywide average, the rural communities – particularly Lower Puna and Waimea – have the largest percentages of housing that is affordable. In contrast, the North Hilo-Hāmākua Coast Villages and North Kohala have the lowest percentages of affordable housing. At the same time, most of the County's total stock of affordable housing is in Puna (24.2%), Hilo (21.7%), and North Kona (23.3%).

| Forecast Analysis Zones (FAZ) | Affordable Housing Units | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Estimate | | | Projection | | | | |
| | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Hilo | 9,989 | 10,570 | 11,114 | 12,160 | 13,200 | 14,122 | 15,044 | 15,188 |
| North Hilo – Hāmākua Coast Villages | 1,686 | 1,669 | 1,682 | 1,841 | 1,998 | 2,138 | 2,277 | 2,299 |
| Honokaʻa-Paʻauilo | 1,446 | 1,373 | 1,414 | 1,548 | 1,680 | 1,797 | 1,915 | 1,933 |
| Waimea | 2,057 | 2,111 | 2,312 | 2,529 | 2,746 | 2,937 | 3,129 | 3,159 |
| North Kohala | 1,471 | 1,451 | 1,544 | 1,689 | 1,834 | 1,962 | 2,090 | 2,110 |
| Kawaihae-Puakō-Waikoloa-Waikoloa Resorts | 3,349 | 3,525 | 3,594 | 3,933 | 4,269 | 4,567 | 4,865 | 4,912 |
| North Kona | 10,615 | 11,252 | 11,955 | 13,080 | 14,198 | 15,190 | 16,182 | 16,337 |
| South Kona Villages | 2,474 | 2,493 | 2,761 | 3,021 | 3,279 | 3,509 | 3,738 | 3,774 |
| Kaʻū | 2,393 | 2,435 | 2,512 | 2,748 | 2,983 | 3,192 | 3,400 | 3,433 |
| Keaʻau-Kurtistown | 1,043 | 1,034 | 1,186 | 1,298 | 1,409 | 1,507 | 1,605 | 1,621 |
| Upper Puna | 3,341 | 3,128 | 3,576 | 3,913 | 4,248 | 4,544 | 4,841 | 4,887 |
| HPP-Orchidland | 3,941 | 3,964 | 4,395 | 4,809 | 5,220 | 5,584 | 5,949 | 6,006 |
| Lower Puna | 3,071 | 3,095 | 3,225 | 3,528 | 3,830 | 4,097 | 4,365 | 4,407 |
| **County of Hawaiʻi** | 46,875 | 48,101 | 51,271 | 56,096 | 60,892 | 65,147 | 69,403 | 70,066 |

## Forecasted Growth Rates Vary by Community

The number of housing units in the County of Hawaiʻi in 2020 was estimated to be 90,478. Among those, approximately 82% were single-family dwellings, and the remainder were multi-family units. 69% of housing units were owner-occupied.

Growth rates have varied considerably by region, and that trend is expected to continue. Relative to the countywide estimate of 14% growth in housing units from 2020 to 2045, North Hilo-Hāmākua Villages (-1.6%) are expected to decrease and Hilo (20%) is expected to grow more slowly, relative to the others. Others are expected to grow in order of growth rates are: Hawaiian Paradise Park-Orchidland (56%)

Waimea (52%), Puna – Keaʻau-Kurtistown (44.5%), Kaʻū (42%), Upper Puna (41%), and Lower Puna (28.5%). These differences in growth rates are forecasted to result in shifts in the relative population centers.

| Forecast Analysis Zones (FAZ) | Housing Units | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Estimate | | | | Projection | | | | |
| | 2000 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Hilo | 16,640 | 17,544 | 18,602 | 19,211 | 20,471 | 21,104 | 21,714 | 22,307 | 22,877 |
| North Hilo – Hāmākua Coast Villages | 2,566 | 2,961 | 2,938 | 2,908 | 3,099 | 3,195 | 3,287 | 3,377 | 3,463 |
| Honokaʻa-Paʻauilo | 2,327 | 2,540 | 2,417 | 2,445 | 2,605 | 2,686 | 2,764 | 2,839 | 2,912 |
| Waimea | 2,634 | 3,613 | 3,715 | 3,996 | 4,258 | 4,390 | 4,517 | 4,640 | 4,759 |
| North Kohala | 1,922 | 2,583 | 2,554 | 2,669 | 2,844 | 2,932 | 3,017 | 3,099 | 3,178 |
| Kawaihae-Puakō-Waikoloa-Waikoloa Resorts | 3,160 | 5,881 | 6,204 | 6,213 | 6,620 | 6,825 | 7,022 | 7,214 | 7,399 |
| North Kona | 13,960 | 18,642 | 19,804 | 20,664 | 22,019 | 22,700 | 23,356 | 23,994 | 24,607 |
| South Kona Villages | 3,514 | 4,345 | 4,388 | 4,773 | 5,086 | 5,243 | 5,395 | 5,542 | 5,684 |
| Kaʻū | 2,883 | 4,202 | 4,285 | 4,342 | 4,627 | 4,770 | 4,908 | 5,042 | 5,171 |
| Keaʻau-Kurtistown | 1,438 | 1,831 | 1,820 | 2,050 | 2,184 | 2,252 | 2,317 | 2,380 | 2,441 |
| Upper Puna | 3,599 | 5,867 | 5,506 | 6,182 | 6,587 | 6,791 | 6,987 | 7,178 | 7,362 |
| HPP-Orchidland | 4,316 | 6,922 | 6,976 | 7,597 | 8,095 | 8,346 | 8,587 | 8,821 | 9,047 |
| Lower Puna | 3,714 | 5,393 | 5,447 | 5,574 | 5,940 | 6,123 | 6,300 | 6,472 | 6,638 |
| **County of Hawaiʻi** | 62,674 | 82,324 | 84,656 | 88,624 | 94,436 | 97,357 | 100,170 | 102,907 | 105,536 |

## Visitor Unit Growth is Steady, but Types are Shifting

The vast majority of visitor units are in the Waikoloa Area and North Kona. With the upward trend in visitor arrivals expected to increase through 2045, increasing demand for visitor units is likely. With this growth comes the challenge of planning for their impact on the local economy, especially with regard to accommodations.

Historically, hotel rooms accounted for the majority of the visitor accommodation units in the County of Hawaiʻi (59%), with visitor rental units (VRUs) and timeshare units a distant second and third (16% and 15% of the total visitor units, respectively). When the annual Visitor Plant Inventory (VPI) report began issuing a supplemental analysis of visitor units in 2016, a more comprehensive picture of individual vacation rental units began to emerge that indicated that VRUs outnumbered hotel rooms.

## Economic Key Findings

### Poverty Persists

Household income rises and falls along with economic cycles. The median household income trended up in 2020 to $65,401.

The previous downward trend fell to a low of 13.1% in 2007. Since that time, the percentage of poverty increased to a record high in 2015 of 19.5% for individuals and has declined again to 14% in 2020. The official poverty rate nationwide was 11.4%, and statewide it was nearly 9.3%. It is important to remember that the cost of living in Hawaiʻi continues to be among the highest in the nation, compounding impacts on those who are already struggling to meet basic needs.

### Self-Sufficiency is Out of Reach for Many

The poverty rate is a national measure and is hardly a living wage, especially in Hawaiʻi. The median household income in 2020 was $65,401. The State Department of Business, Economic Development & Tourism publishes an annual Self-Sufficiency Income Standard. In 2020, Hawaiʻi County had the lowest self-sufficiency income requirements ($74,030 for a family of four with a preschooler and one school-age child), but that income is well above the poverty line. A family of four needed to earn a combined hourly wage of $35.05 (or $17.53 each on average) to be economically self-sufficient. That was 76.2% above the state minimum wage level and 145.7% above the federal poverty threshold for Hawaiʻi.

| Forecast Analysis Zones (FAZ) | Median Household Income | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Estimate | | | Projection | | | | |
| | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Hilo | $52,931 | $51,030 | $63,386 | $68,172 | $71,536 | $76,458 | $81,670 | $86,883 |
| North Hilo – Hāmākua Coast Villages | $54,840 | $48,401 | $58,082 | $62,106 | $65,550 | $70,060 | $74,837 | $79,614 |
| Honokaʻa-Paʻauilo | $60,095 | $54,691 | $58,753 | $61,127 | $63,216 | $65,982 | $68,889 | $71,805 |
| Waimea | $77,813 | $58,475 | $95,909 | $102,553 | $108,241 | $115,689 | $123,576 | $131,464 |
| North Kohala | $56,574 | $63,879 | $82,483 | $88,197 | $93,089 | $99,494 | $106,277 | $113,061 |
| Kawaihae-Puakō-Waikoloa-Waikoloa Resorts | $76,930 | $72,669 | $80,143 | $85,695 | $180,896 | $193,342 | $206,524 | $219,706 |
| North Kona | $63,745 | $62,573 | $79,358 | $84,856 | $89,562 | $95,724 | $102,250 | $108,777 |
| South Kona Villages | $55,637 | $55,323 | $65,516 | $71,954 | $164,093 | $192,695 | $227,721 | $270,467 |
| Kaʻū | $41,352 | $34,104 | $39,751 | $85,010 | $89,724 | $95,898 | $102,436 | $108,974 |
| Keaʻau-Kurtistown | $50,208 | $41,773 | $69,022 | $73,804 | $77,897 | $83,257 | $88,933 | $94,609 |
| Upper Puna | $41,657 | $40,402 | $29,385 | $31,421 | $99,491 | $106,337 | $113,586 | $120,837 |
| HPP-Orchidland | $38,336 | $40,546 | $65,213 | $69,731 | $220,794 | $235,986 | $252,075 | $268,165 |
| Lower Puna | $34,635 | $31,182 | $33,259 | $35,563 | $112,606 | $120,354 | $128,560 | $136,766 |
| **County of Hawaiʻi** | $54,996 | $52,108 | $65,401 | $69,932 | $73,810 | $78,889 | $84,267 | $89,646 |

## Job Growth Mirrors Population Growth

The average annual growth rate for jobs averaged 1.4% since 2005, mirroring population trends, and it is expected to mirror population trends experiencing a slight decrease in the growth rate for the next several decades.

| Forecast Analysis Zones (FAZ) | Total Civilian Jobs | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Estimate | | | | Projection | | | | |
| | 2000 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Hilo | 32,935 | 39,077 | 42,073 | 45,273 | 48,523 | 51,836 | 55,040 | 58,207 | 61,470 |
| North Hilo – Hāmākua Coast Villages | 1,927 | 2,286 | 2,461 | 2,648 | 2,838 | 3,032 | 3,220 | 3,405 | 3,596 |
| Honokaʻa-Paʻauilo | 3,303 | 3,919 | 4,219 | 4,540 | 4,866 | 5,198 | 5,519 | 5,837 | 6,164 |
| Waimea | 4,373 | 5,188 | 5,586 | 6,011 | 6,443 | 6,883 | 7,308 | 7,729 | 8,162 |
| North Kohala | 2,171 | 2,576 | 2,774 | 2,985 | 3,199 | 3,417 | 3,628 | 3,837 | 4,052 |
| Kawaihae-Puakō-Waikoloa-Waikoloa Resorts | 1,009 | 1,197 | 1,289 | 1,387 | 1,487 | 1,588 | 1,686 | 1,784 | 1,883 |
| North Kona | 21,100 | 25,035 | 26,955 | 29,005 | 31,087 | 33,210 | 35,263 | 37,291 | 39,382 |
| South Kona Villages | 4,312 | 5,116 | 5,508 | 5,927 | 6,353 | 6,786 | 7,206 | 7,620 | 8,048 |
| Kaʻū | 1,988 | 2,358 | 2,539 | 2,732 | 2,929 | 3,128 | 3,322 | 3,513 | 3,710 |
| Keaʻau-Kurtistown | 3,608 | 4,281 | 4,610 | 4,960 | 5,316 | 5,679 | 6,030 | 6,377 | 6,735 |
| Upper Puna | 612 | 726 | 781 | 841 | 901 | 963 | 1,022 | 1,081 | 1,141 |
| HPP-Orchidland | 31 | 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 |
| Lower Puna | 1,774 | 2,104 | 2,266 | 2,438 | 2,613 | 2,792 | 2,964 | 3,135 | 3,310 |
| **County of Hawaiʻi** | 79,142 | 93,900 | 101,100 | 108,790 | 116,600 | 124,560 | 132,260 | 139,870 | 147,710 |

## 85% Employed in the Service Sector

In 2020, 85.4% of employment was in one of the industries classified as within the services producing sector. The three primary economic sectors of the Hawaiʻi Island economy are the services producing sector, the goods producing sector (construction and manufacturing), and agriculture. The services producing sector (education, health, accommodation, entertainment, food, professional, financial, real estate, public, etc.) is by far the largest, representing over 85% of employment. The agriculture sector represents about 6.5% of employment.

More than two-thirds of workers are employed in one of five key industries: educational service, healthcare, and social assistance (approximately 18%); arts, entertainment, recreation, accommodation, and food services (approximately 15%); retail trade (approximately 10%); professional, scientific, management, administrative, and waste management (approximately 9%); and construction (approximately 7%). Tourism drives the arts, entertainment, recreation, accommodation, and food services industries and much of the retail trade, representing a large portion of employment. Employment in the construction industry continues to be the most volatile among the top industries, with notable spikes and dips in employment that generally correspond to fluctuations in the housing market.

## Job and Population Centers Mismatch = Longer Commutes

Data varies by source and date, but in general, about 42% of jobs in Hawaiʻi County are in Hilo, another quarter in North Kona, 7% in the Waikoloa and Waimea areas, and about 1 to 7% in each of the other population centers.

It is useful to compare these job centers with the County's population centers. Hilo for example has a surplus of jobs relative to the population, reflecting the fact that residents commute there from other communities. At the other end of the spectrum, the Hawaiian Paradise Park-Orchidland area has a working population that far exceeds the number of nearby jobs.

These mismatches are reflected in the increase in the Census measure of "mean travel time to work" from 24.5 minutes in 2000 to 26.8 in 2020. This is also consistent with the national trend. In 2020, the average one-way commute in the United States increased to a new high of 27.6 minutes.

## Competitive Advantages Vary

In contrast to employment and occupation data, which are from the Census and therefore tie data to the physical location of the *resident*, jobs data are collected from employers and therefore tied to the physical location of the *employer*.[1] Hawaiʻi County has the greatest number of jobs in government (18.6%); retail (12.5%); business, professional, and other services (12.7%); health and social assistance (10.7%); dining (9.8%); and hotels (8.6%).

Because jobs data are geographically linked to the place of employment, they can be used to identify characteristics of job centers. A location quotient (LQ) quantifies how concentrated jobs are within a geographic area relative to a larger area. A high location quotient in a specific industry may translate into a competitive advantage in that industry for the local economy. The Trends and Forecasts Report considered the LQ of Hawaiʻi County vis-à-vis the State and each FAZ population center vis-à-vis the County.

Hawaiʻi County has a much higher concentration of agricultural jobs relative to the State as a whole. Hawaiʻi County also employed about 1 out of 5 residents in hospitality (arts, entertainment, recreation, accommodations, and food services compared to 1 out of 6 for the rest of the State. On the other hand, the information sector in Hawaiʻi County is underrepresented as compared to the rest of the State. Employment in the finance and insurance industry has also been relatively low in Hawaiʻi County compared to the State.

The competitive advantages of population centers relative to the County are provided below (LQ provided in parentheses). The urban centers are the seat of government and the center of professional, service, and retail trades. Agriculture, food processing, and related wholesale trade are centered in the most rural areas and Waimea. Tourism and related industries are centered on the leeward side and in North Kohala and Honokaʻa. Interestingly, HPP-Orchidland's economy is quite diversified despite its limited number of jobs. Also, the Lower Puna area appears to be a small hub for the information industry.

[1] This explains the slight differences between employment and jobs data.

| Forecast Analysis Zone (FAZ) | Location Quotient Relative to the County |
|---|---|
| Hilo | • Government (1.48)<br>• Education services and Health services (1.28)<br>• Transportation and utilities (1.06) |
| North Hilo-Hāmākua Coast Villages | • Agriculture, mining, and construction (1.20)<br>• Government (1.92) |
| Honokaʻa-Paʻauilo | • Agriculture, mining, and construction (1.71)<br>• Professional and business services (1.33)<br>• Education services and Health services (1.22)<br>• Arts/entertainment, hotels, eating, drinking (1.49) |
| Waimea | • Agriculture, mining, and construction (1.22)<br>• Professional services and business services (1.21)<br>• Education services and Health services (1.03)<br>• Arts/entertainment, hotels, eating, drinking (1.67) |
| North Kohala | • Agriculture, mining, and construction (1.31)<br>• Manufacturing and food processing (1.35)<br>• Finance and insurance, real estate and rentals (1.15)<br>• Professional and business services (1.02)<br>• Arts/entertainment, hotels, eating, drinking (1.61) |
| Kawaihae-Puakō-Waikoloa-Waikoloa Resorts | • Agriculture, mining, and construction (1.22)<br>• Arts/entertainment, hotels, eating, drinking (1.33)<br>• Professional and business services (1.46)<br>• Finance and insurance, real estate and rentals (1.21) |
| North Kona | • Transportation and utilities (1.15)<br>• Information (1.38)<br>• Finance and insurance, real estate and rentals (1.61)<br>• Professional and business services (1.19)<br>• Arts/entertainment, hotels, eating, drinking (1.61)<br>• Other services (1.14)<br>• Arts/entertainment, hotels, eating, drinking (1.29) |
| South Kona Villages | • Agriculture, mining, and construction (1.51)<br>• Manufacturing and food processing (2.30)<br>• Transportation and utilities (1.06)<br>• Information (1.99)<br>• Other services (1.48)<br>• Finance and insurance, real estate and rentals (1.11)<br>• Arts/entertainment, hotels, eating, drinking (1.02) |
| Kaʻū | • Agriculture, mining, and construction (2.49)<br>• Information (2.31)<br>• Education services and Health services (1.07)<br>• Government (1.11) |
| Upper Puna | • Manufacturing and food processing (2.12)<br>• Education services and Health services (1.09)<br>• Government (1.84) |

| Forecast Analysis Zone (FAZ) | Location Quotient Relative to the County |
|---|---|
| Keaʻau-Kurtistown | • Agriculture, mining, and construction (1.57)<br>• Transportation and utilities (1.18)<br>• Education services and Health services (1.41)<br>• Other services (1.75) |
| HPP-Orchidland | • Manufacturing and food processing (1.40)<br>• Transportation and utilities (1.15)<br>• Education services and Health services (1.19)<br>• Other services (1.43)<br>• Government (1.05) |
| Lower Puna | • Manufacturing and food processing (1.05)<br>• Agriculture, mining, and construction (1.19)<br>• Information (1.62)<br>• Transportation and utilities (1.22)<br>• Professional and business services (1.50)<br>• Education services and Health services (1.71) |