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THE ECONOMIC RESEARCH ORGANIZATION

AT THE UNIVERSITY OF HAWAI'I



UHERO FORECAST PROJECT

KAUAI ECONOMIC OUTLOOK SUMMARY Prepared for the County of Kauai

DECLINING US OUTLOOK IS A RISING RISK FOR KAUAI

MAY 24, 2023







UHERO THE ECONOMIC RESEARCH ORGANIZATION AT THE UNIVERSITY OF HAWAI'I

KAUAI ECONOMIC OUTLOOK SUMMARY PREPARED FOR THE COUNTY OF KAUAI

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Executive Summary

Following a modest economic recovery, Kauai now finds itself at a critical juncture as the possibility of a US recession looms. While tighter credit and rising interest rates have constrained demand and signaled a pending economic downturn, Kauai's economic outlook appears relatively optimistic. Although more vulnerable to an impending US downturn compared to the state overall, the County's tourism sector will remain resilient.

- While inflation has receded, a US recession looks increasingly likely. Tightening credit and rising interest rates are constraining demand, with several indicators now pointing towards recession.
- Kauai's tourism sector is more exposed to a pending US downturn and is less insulated by the recovery of international visitors than Oahu. But Kauai's inherent resilience, as a sought-after destination with a strong sense of local attachment, sets a solid foundation for avoiding an outright downturn locally.
- Room rates have spiked considerably in the last few years along with a surge in US visitors, but increases in room rates on Kauai were smaller than on Maui. This rise in room rates, faster than inflation, has contributed to an increase in real visitor spending.
- The labor force recovery is nearly complete on Kauai. The unemployment rate will average 3.8% this year and edge up slightly in 2024.
- Homebuilding and authorizations have been particularly low on Kauai for several years. In 2021, residential permits on Kauai lingered at only 20% of 2005 levels. The lack of supply drives up prices and contributes to decreasing housing affordability. But large state infrastructure investments, particularly in road maintenance, will continue to buoy Kauai's construction sector.
- Despite the state's population declining overall, Kauai's population has remained relatively stable in recent years. This may be due to greater opportunities for remote work following the pandemic and amenity factors attracting residents to the Garden Isle.
- In the longer term, Kauai will have to continue to manage the environmental and social impacts of tourism, resident sentiment, infrastructure, and congestion. Opportunities to diversify the visitor base beyond the US, to diversify jobs with remote work, and to diversify local industries will help to build resilience.

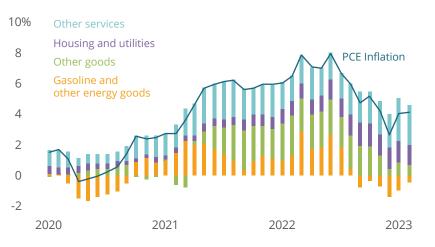
Kauai Forecast

Kauai is often described as a microcosm of the state, but it also has its own unique trends and nuances. The island's distinctive natural beauty and thriving tourism industry play a pivotal role in shaping its trajectory. Kauai attracts visitors from around the world, but is more reliant on US visitors than most other counties in Hawaii. It also has to manage a fragile environment for continued prosperity. Assessing the island's economic outlook is crucial to navigate post-pandemic conditions and the evolving economic landscape. This forecast aims to illuminate key sectors, emerging trends, and potential challenges that influence Kauai's economic outlook

Inflation risks are receding, but recession risks are rising

The external environment facing all of Hawaii remains dicey. The US Federal Reserve continues to increase interest rates, despite significant progress in reducing inflation and indications that the restraining effects of past rate hikes are beginning to be felt more broadly. On top of this, the collapse of Silicon Valley and Signature Banks has tightened lending standards and sparked financial challenges for small and medium sized banks. A US recession later this year is looking more likely, and recent developments increase the risk that the downturn could be more severe than currently anticipated. While these weaknesses are greater in the US overall than in Hawaii, Kauai is more exposed than the state as a whole to a downturn in US visitors.

There has been considerable progress in the Fed's battle against inflation. The Fed's favored index, the personal consumption expenditure (PCE) deflator, has receded to 4.2%. Looking at changes over just the past six months, the PCE deflator has risen just 3.6% on an annualized basis. While still higher than the long-run target of 2%, inflation is clearly headed in the right direction. But this trend is predominantly in goods and energy prices. Shelter inflation has only recently begun to recede, contributing more than one percentage point of the 3.6% overall PCE inflation observed over the past six months. And inflation for all services other than shelter continues at more than 4.5%, contributing nearly 2.5 percentage points to overall PCE inflation.



CONTRIBUTIONS TO US PCE INFLATION, PAST 6 MONTHS AT AN ANNUAL RATE

Housing and other shelter price gains represent nearly all of current US inflation. The decline of inflation has been even more dramatic in Hawaii. While there is no CPI index for Kauai, price trends are likely to be similar to the CPI index for Honolulu. In March, declines in the price of food, energy and utilities, and gasoline drew the annual inflation rate for Honolulu down to 3.3%. The inflation rate also eased because the very large price increases that occurred over a year ago are no longer part of the annual measure of price change— the annualized six-month inflation rate is down to only 0.5%.

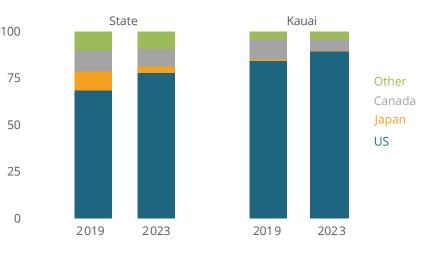
We expect the US economy to slow appreciably in coming months as the effects of high interest rates continue to dampen aggregate demand and to be in recession by the fourth quarter of this year. Economic growth in Hawaii's biggest visitor markets will generally be weak for the next two years, and this is especially true for Kauai, which predominantly relies on US visitors. The US economy will expand by about 1.5% for 2023 as a whole and only 0.3% in 2024. As recovery takes hold, GDP growth will average 2.5% in 2025.

For a more detailed discussion of the US and global economic outlook see UHERO's 2023 2nd Quarter forecast report, <u>Promise and peril for the Hawaii</u> <u>economy</u>.

US visitors drive growth in Kauai's tourism industry

Kauai's visitor industry has continued to perform well, with activity exceeding 2019 levels. In March, total visitor arrivals on the Garden Island were 15% higher than in March 2022 and 5% above their 2019 level. Average daily visitor census, which takes into account the length of stay, fared similarly.

The continued strong performance of the visitor industry is mostly due to strength in US tourism that has been in place during the entire recovery period. The average daily census of US visitors to Kauai exceeds its 2019 level by 6.5%. As we have noted above, the US visitor share on the Island is much higher than for the state as a whole, which makes the Island more exposed to a potential US downturn. In March, US visitors represented almost 90% of the total visitor market on Kauai, while US visitors represented 78% of the overall visitor market share for the state.



CHANGE IN VISITOR MARKET SHARES IN KAUAI COMPARED TO THAT OF THE STATE Kauai relies heavily on the US visitor market.

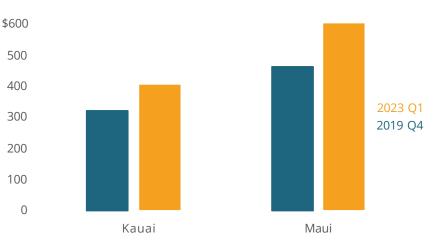
Room rates soar, boosting visitor spending on Kauai

Room rates on the Island have benefitted from strong visitor demand. In the first quarter, real (inflation-adjusted) room rates stood at \$400. Room rates have grown most in counties that host the largest share of US visitors. Since 2019, real room rates in Maui and Kauai Counties have increased by 30% and 25%, respectively. Occupancy rates on Kauai have fluctuated between 70-80% for the past twelve months and ended the first quarter half a percentage point above their 2019 level. In contrast, occupancy rates statewide are 5% below the 2019 level. Real revenue per available room (RevPAR), which is commonly used in the industry to gauge overall hotel performance, has now surpassed the 2019 level by 26% on Kauai. However, according to this metric Maui and the Big Island have exhibited even stronger hotel performance.

The Kauai County Planning Department has also intensified its efforts to enforce regulations on short-term rentals. This has resulted in the issuance of numerous citations to hosts who are operating without a permit or breaching other regulations. Furthermore, the department has taken legal action by filing several lawsuits against non-compliant short-term rental hosts. The implementation of stricter regulations and the recent surge in enforcement will suppress TVR (Transient Vacation Rental) supply and support accommodation prices.

Kauai is also actively combatting overtourism, addressing concerns raised by residents. At present, visitor fees are in effect for Haena State Park, Kokee State Park, and Waimea Canyon State Park. However, Kauai is currently assessing the feasibility of introducing County visitor fees for Lydgate Beach, Hanalei Bay (Black Pot Beach), and Poipu Beach. It is rumored that the County is leaning towards selecting Hanalei as the initial location for a pilot program to be created and tested. There is also a newly implemented Visitor Bureau program on Kauai that aims to enhance the Island's cultural and historical significance through the placement of informative signage throughout the area. Overtourism remains a key challenge that local authorities strive to tackle by working together with the tourism industry.

The Island's total visitor spending has experienced a boost due to the combination of rising room rates and a consistent flow of US visitors. Inflation-adjusted visitor expenditures in March were 31% higher than in March 2022, and 29% higher than in 2019. The recent moderation of the US



REAL HOTEL ROOM RATES (2022\$) Room rates grew faster than inflation. dollar rally brings positive prospects for international visitors, as it reduces the cost of traveling to the Island. Although the international market in Kauai is quite small, the stability of the Canadian and Australian dollars will support modest additional growth in international visitor spending.

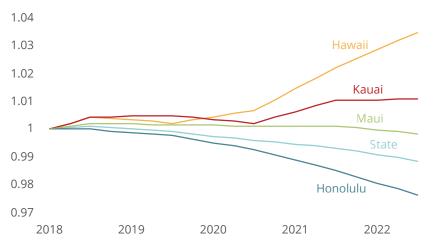
Some relief from tight labor market conditions

Hawaii's labor market continues to perform well, with employment recovery ongoing and an unemployment rate that sits at about 3.5%. Kauai County in particular has seen substantial recovery since the depths of the pandemic, with the unemployment rate now at 2.8%. Kauai's unemployment rate is just slightly above its 2019 level.

While many firms still report difficulty finding qualified employees, the worker shortage across Hawaii has eased considerably over the past year with a recovery of labor supply. At the state level, the labor force is now less than 2% below its December 2019 level. Because Kauai has a greater reliance on tourism, the county has had a slower path to recovery in the labor market. However, Kauai's labor market has made significant progress and the labor force now sits 2% below its pre-pandemic level.

County differences in the labor force compared with the pre-pandemic level have been driven partly by migration patterns. Since the start of the pandemic, Honolulu County's population has declined by more than 20,000 residents. This large decrease drove a 1% decline in the state's total population. In contrast, population growth in Kauai County was positive, up 0.7%.

Prior to the pandemic, Kauai's population growth was slightly decreasing. However, COVID-19 induced a slight uptick in the county's population. Due to data limitations, we cannot directly observe what is driving Kauai's population increase. One theory has attributed rural population increases over the course of the pandemic to the rise of remote work. Since remote jobs allow greater flexibility in where workers live, some may be attracted to the amenities of rural or far-suburban locations (e.g., lower housing costs, family ties, and so forth). In 2021, 10% of workers in Kauai worked from home, up three percentage points from 2019. Another theory has attributed increased population numbers in rural areas to the surge in retirements during the pandemic. A study from the Economic Innovation Group found



COUNTY POPULATION CHANGE (INDEX, 2018 Q1 = 1)

The pandemic accelerated population changes that were already underway. areas that saw accelerated population growth had higher concentrations of vacation homes and longer commute times.

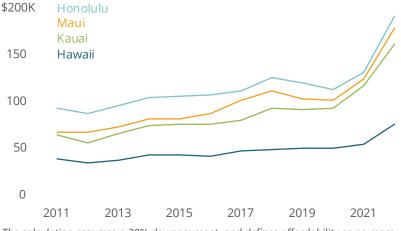
Most of Hawaii's population inflows and outflows have been movements to and from the US mainland. About 75% of those who left Kauai between 2019 and 2020 migrated out of state. Aside from other islands within the state, the top three outward destinations for Kauai migrants were California, Nevada, and Washington. Those who moved to California made up the largest share of migration outflows, roughly 10% of the total.

Many residents who leave the state do so because of the financial challenge of living in Hawaii. A 2019 survey by the Pacific Resource Partnership found that 47% of residents who were thinking of moving out of Hawaii attributed their decision to the high cost of living. Do these migrants who leave Hawaii end up better off? Data from the IRS reveals that migrants who left Kauai for another state from 2019 to 2020 ended up with more purchasing power on average. For example, the average income of Kauai residents relocating to Clark County, Nevada would have been just \$21,500 in Hawaii, after adjusting for Hawaii's high cost of living. At Nevada's lower living cost, the typical Hawaii resident moving to Nevada would have experienced an annual gross income gain of \$4,000.

Limited new home construction compounds affordability challenges

Single-family home prices in Hawaii rose a remarkable 40% from the start of the pandemic to their peak in April 2022. Since then, median prices have fallen about 10%. The modest dip in prices relative to the pandemic upturn means home prices remain very high by historical standards. High mortgage interest rates, which remain well above 6%, further increase ownership costs for new homebuyers. The combination of high prices and high interest rates now makes homeownership unattainable for a large share of Hawaii's population.

In 2012, a household earning \$55,000 per year could afford the median single-family home on Kauai, meaning that less than 30% of their income would go to mortgage payments. In 2022, the amount of income needed to afford a home had nearly tripled. To afford a mortgage on the median priced home on Kauai, a household now needs to earn \$161,000 annually. Over the same period, the median household income on Kauai has risen by only 36%,



The calculation assumes a 20% downpayment, and defines affordability as no more than 30% of the household income going toward mortgage payments.

HOUSEHOLD INCOME NEEDED TO "AFFORD" THE MEDIAN SINGLE-FAMILY HOME

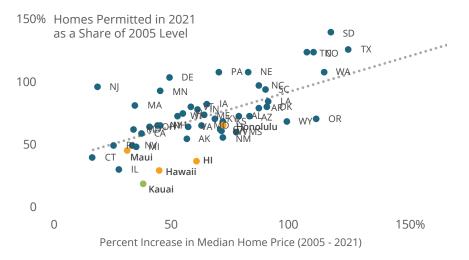
The pandemic-era price surge has made Hawaii housing much less affordable. to \$81,000, and more than 80% of Kauai households earn less than \$161,000. The result is a smaller and smaller share of households that are able to afford to buy a home.

The dramatic price inflation of single-family homes can be attributed largely to a lack of new supply. When demand rises sharply in Hawaii's housing market, strict regulations and long permit wait times mean that new housing cannot be created to absorb the demand. Instead, new demand is absorbed by rising home prices. Since 2008, the state has not approved more than 2,500 single-family homes in any given year and Kauai has not approved more than 250.

Overall housing production in the state is low by historical standards. In 2021, Hawaii permitted only 35% as many homes as it did in 2005. While many states are permitting fewer homes than in the past, Hawaii's recovery has been particularly lackluster. In a well functioning, competitive housing market, home builders respond to rising prices by building more homes. Hawaii ranks 49th out of 50 states in terms of housing permitted relative to 2005 levels. If Hawaii were producing housing at the level of other states that experienced similar price rises, we would be permitting 7,200 new units of housing per year, 73% of 2005 levels. In reality, Hawaii is permitting only half that many homes.

The underproduction of housing in Kauai is particularly striking. Kauai is permitting less housing, as a share of 2005 levels, than any county in the state. In 2021, Kauai permitted new housing at only 20% of 2005 levels.

While plans to build more housing face regulatory and political hurdles, they may also struggle to find construction capacity. Large construction projects feed growth in industry wages, pushing up building costs. And construction workers are in heavy demand. Large state infrastructure investments, particularly in road maintenance, will continue to buoy Kauai's construction sector. For example, a \$23 million contract was recently awarded for slope stabilization work along Kuhio Highway. In January, construction payrolls across the state rose to 40,000 workers, nearing record highs set in 2008 and 2016. Construction payrolls on Kauai reached 2,200, the highest level since 1993. This level of industry employment is in striking contrast to overall payrolls, which have not yet recovered to pre-pandemic levels.



STATE HOUSING PERMITS RELATIVE TO CHANGING PRICES

Kauai housing production has not risen as much as home price appreciation would predict. In many respects, our Kauai forecast is closely aligned with our forecast for the state. Kauai faces similar external risks, though with a higher share of visitors from the US, Kauai is more exposed to a pending US downturn. The anticipated US recession and sub-par growth abroad will bring total visitors to Kauai down just a bit over the next two years. The real estate market remains weak. Mortgage rates will continue to be elevated, and so affordability will only improve gradually over the next five years. Despite this, the construction sector remains strong, with industry employment above the pre-recession level. Employment progress will soften in most sectors this year and next, before a return to modest growth. Continuing high interest rates and softening US and global conditions will cause a slowdown in Kauai growth.

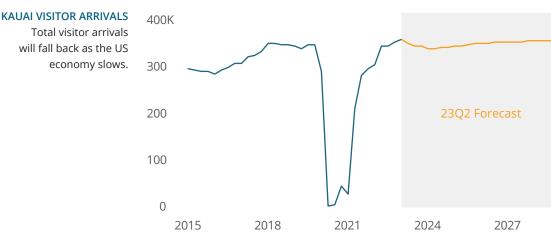
As the US economy passes through a mild recession and recovery over the next several years, US visitor arrivals to the Islands will fall back a bit.

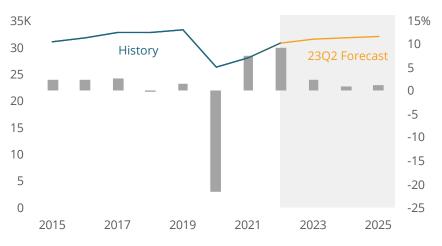
A robust dollar has weighed on international arrivals over the past several years. The partial retreat of the dollar that we have seen since late last year will help to support ongoing recovery of international markets, and further dollar weakening can be expected once the Fed turns the corner on this tightening cycle. At the same time, weaker global macroeconomic conditions will provide headwinds for nearly all international markets.

Overall, we see further gradual recovery of many international markets over the next several years, bringing the total arrivals from markets other than the US and Japan back to roughly their 2019 level by 2027. The continued recovery of other markets will help us avoid a sharp downturn in overall visitor numbers and move us gradually back to a more diversified visitor mix.

Kauai Economic gains will decelerate into 2024

Weakening US tourism, tight credit, and high interest rates will weigh on the Kauai economy this year and next, resulting in the slowest incremental growth since the recovery began. Net payroll job growth for this year as a whole will decelerate to 2.4%, less than third of the pace of last year's 9% expansion. These annual figures mask greater underlying weakness. From the





KAUAI NONFARM PAYROLL JOBS

The pace of job growth is expected to decelerate over the next two years.

> first quarter of this year through the first quarter of next year, there will be only a half-percent growth in the total nonfarm job count. Moderate gains will not return until US and global conditions firm in the second half of next year, nudging annual job growth above 1% by 2025. The softer labor market will result in a slight uptick in the unemployment rate. The unemployment rate on Kauai will edge up from 3.4% in the first quarter to 4.2% at the end of this year. Unemployment will begin to recede in the second half of 2024. This represents a mild unemployment cycle compared with past slowdowns.

> Expansion of the workforce will be tied to population growth within the county. A stagnant labor force will constrain the economy in the near term, and slow trend population growth will limit labor market gains thereafter. As a result, the number of filled jobs will not fully return to the pre-pandemic level until late in the decade.

There will be a slowing of job gains in nearly all sectors this year and next. In part this simply reflects maturing of the post-pandemic recovery period, but poorer macro conditions will also play a role. Tourism-related industries will see sharply lower growth rates, but the existing high level of activity in the industry will still support notable additional expansion in some areas. In particular, the accommodation and food service sector will add more than 350 jobs in 2023— nearly half of all net job gains—and transportation and utilities will add 6.6% to its employment base. But even these sectors will slow to negligible growth in 2024.

While the building industry is typically very susceptible to cyclical fluctuations, it will remain a resilient segment of the local economy, expanding on average 4.5% annually during the next two years. Growth in the expansive "other services" sector, which includes everything from business services to education, will decelerate in 2023 after a 10% gain last year, and then pause in 2024. Expansion in the government sector is essentially on hold, with a modest employment upturn expected to resume in 2024. Stagnant public sector employment reflects a tighter and more uncertain fiscal landscape. There will be some firming of job growth later in the decade, but slower population growth will keep it below the pre-pandemic trend rate.

High inflation should be behind us

It is hard to overstate the adverse effects of recent inflation on local purchasing power. Consumer prices (measured in Honolulu) jumped more than 11% between the end of 2020 and the end of 2022. This imposed significant economic pain on local households. And the ending of federal support programs further undermined income last year. But as inflation continues to slow, this will also help to support real income gains. Inflation-adjusted real income will grow at a moderate 2.3% annual average pace over the next three years.

Making progress, but challenges ahead

Kauai has demonstrated a gradual economic recovery while simultaneously grappling with unique challenges. Improving conditions are evident in the labor market, where the excess demand for labor has returned to normal levels. The rapid decline in inflation is welcome news for Kauai. The Island's unparalleled natural beauty continues to attract visitors from the US and around the world, bolstering the tourism sector, even if the anticipated slowing of the US economy will weigh on economic growth in Kauai in the near term.

Despite heightened downside risks, we continue to see the path forward for Kauai and the state that is better than for the nation as a whole. The US economy will enter recession in the fourth quarter of this year. Hawaii still looks likely to avoid recession itself, but the US downturn will weigh more heavily on Kauai due to its greater reliance on US visitors. The ongoing recovery of international markets presents an opportunity to diversify Kauai's sources of visitors and reduce reliance on US tourists to mitigate the potential downside risks in the US economy.

But we are now at a key moment. The Federal Reserve's campaign against inflation has been historically aggressive. We have felt the effects in real estate and housing, and they are being seen more acutely now in US manufacturing. Whispers of weakening are now being heard in the labor market, even as it retains considerable strength. Credit is now harder to get for some borrowers. At the same time, there remain areas of unexpected strength, particularly the American consumer, but on balance the US economy is gradually slowing. As always, the precise extent and timing of the macroeconomic cooling that will come from tighter monetary policy is unknown—and unknowable. Given the softening we are seeing and the clear progress reducing inflation, it is time for the Fed to stop. And it may already have gone too far, risking more than just the mild recession that we and many others foresee.



REAL PERSONAL INCOME

The income losses from inflation and ending federal programs will begin to reverse. Looking ahead, Kauai also faces long-term challenges. Kauai residents' concerns about the environmental and social impacts of tourism, congestion, and infrastructure issues require local solutions to mitigate potential adverse effects. The high cost of living and limited housing availability pose ongoing obstacles to growth. Few opportunities beyond tourism make diversification difficult on the Garden Isle, while congestion and infrastructure may limit the growth of visitors, to the relief of Kauai residents. Additionally, the impacts of climate change, though challenging to quantify, will require proactive measures to ensure environmental sustainability and resilience. Going forward, Kauai will have to manage these local issues, but we remain optimistic that Kauai's economy will be resilient through the pending US recession.

Kauai's inherent resilience, as a sought-after destination with a strong sense of local attachment, sets a solid foundation for overcoming these challenges. The commitment of public, private, and nonprofit leaders to address emerging issues showcases a proactive approach to ensure a sustainable and prosperous future for Kauai. While Kauai faces specific concerns related to over-tourism, infrastructure, congestion, and environmental impacts, the island's economic forecast remains positive. Kauai is poised to navigate these challenges and continue its trajectory of economic resilience during a challenging period for the global economy.

TABLE 1: MAJOR ECONOMIC INDICATOR SUMMARY

KAUAI COUNTY FORECAST

	2020	2021	2022	2023	2024	2025
Non-farm Payrolls (Thou)	26.3	28.2	30.7	31.5	31.8	32.1
% Change	-21.0	7.1	8.9	2.4	1.0	1.1
Unemployment Rate (%)	16.4	8.1	4.2	3.8	4.0	3.7
Population (Thou)	73.2	73.8	73.8	73.8	73.9	74.1
% Change	-0.3	0.8	0.0	0.0	0.1	0.2
Personal Income (Mil \$)	3,924.2	4,121.0	4,199.4	4,437.0	4,608.2	4,822.2
% Change	5.5	5.0	1.9	5.7	3.9	4.6
Inflation Rate, Honolulu MSA (%)	1.6	3.8	6.5	2.4	2.2	2.4
Real Personal Income (Mil 2022 \$)	4,336.7	4,388.4	4,199.4	4,331.5	4,400.7	4,498.6
% Change	3.8	1.2	-4.3	3.1	1.6	2.2
Real Per Capita Income (Thou 2022 \$)	59.3	59.5	56.9	58.7	59.5	60.7
% Change	4.1	0.4	-4.3	3.2	1.4	2.0
TOURISM SECTOR DETAIL						
Total Visitor Arrivals by Air (Thou)	339.0	813.6	1,345.3	1,396.6	1,361.5	1,385.9
% Change - Total Visitor Arrivals by Air	-75.4	140.0	65.3	3.8	-2.5	1.8
U.S. Visitors	295.4	785.1	1,207.1	1,221.9	1,170.8	1,176.8
% Change - U.S. Visitors	-74.2	165.8	53.8	1.2	-4.2	0.5
Japanese Visitors	3.6	0.4	3.0	8.1	12.5	15.6
% Change - Japanese Visitors	-85.7	-90.0	718.7	175.0	54.1	24.2
Other Visitors	42.9	28.2	135.2	166.5	178.2	193.6
% Change - Other Visitors	-79.4	-34.2	379.5	23.1	7.0	8.7
Visitor Days (Thou)	2,859.6	7,005.8	10,460.2	10,321.4	10,049.5	10,228.5
% Change	-71.7	145.0	49.3	-1.3	-2.6	1.8
Occupancy Rate (%)	30.6	57.0	78.3	78.8	75.9	76.9

Note: Source is UHERO. Income figures for 2022 are UHERO estimates. Figures for 2023 - 2025 are forecasts.

TABLE 2: JOBS BY DETAILED SECTOR

KAUAI COUNTY FORECAST

	2020	2021	2022	2023	2024	2025
Non-farm Payrolls (Thou)	26.3	28.2	30.7	31.5	31.8	32.1
% Change	-21.0	7.1	8.9	2.4	1.0	1.1
Construction and Mining	2.0	2.1	2.1	2.2	2.3	2.3
% Change	-6.0	4.8	2.6	6.6	2.5	1.2
Manufacturing	0.4	0.5	0.6	0.6	0.6	0.6
% Change	-16.7	12.0	23.2	8.9	-0.5	0.0
Trade	3.9	4.1	4.3	4.4	4.5	4.5
% Change	-14.8	5.1	4.9	3.3	0.4	0.9
Transportation and Utilities	1.1	1.4	1.7	1.8	1.8	1.8
% Change	-29.2	20.6	22.3	6.6	0.6	1.0
Finance, Insurance and Real Estate	1.0	1.0	1.0	1.0	1.0	1.0
% Change	-18.6	-2.8	6.9	-2.7	0.7	1.5
Services	12.9	14.0	16.1	16.6	16.7	17.0
% Change	-29.2	8.2	15.4	2.9	1.0	1.2
Health Care and Soc. Assistance	2.8	2.8	2.6	2.7	2.7	2.7
% Change	-4.5	-0.7	-6.3	1.1	1.0	1.0
Accommodation and Food	5.2	6.2	8.1	8.4	8.6	8.7
% Change	-43.9	19.2	29.3	4.5	1.5	1.8
Other	4.9	4.9	5.4	5.5	5.5	5.5
% Change	-18.6	1.6	10.1	1.3	0.3	0.4
Government	5.1	4.9	4.8	4.8	4.9	4.9
% Change	-1.5	-2.6	-1.9	-0.5	1.1	1.1
Federal Government	0.6	0.6	0.6	0.6	0.6	0.6
% Change	7.4	0.6	-4.4	-0.6	1.0	1.3
State and Local Government	4.4	4.3	4.2	4.2	4.3	4.3
% Change	-2.6	-3.0	-1.5	-0.5	1.1	1.0

Note: Source is UHERO. Figures for 2023 - 2025 are forecasts.

TABLE 3: PERSONAL INCOME BY DETAILED SECTOR KAUAI COUNTY FORECAST

	2020	2021	2022	2023	2024	2025
Real Personal Income (Mil 2022 \$)	4,336.7	4,388.4	4,199.4	4,331.5	4,400.7	4,498.6
% Change	3.8	1.2	-4.3	3.1	1.6	2.2
Labor & Proprietors' Income	2,487.2	2,609.0	2,751.4	2,817.0	2,898.7	2,973.8
% Change	-12.4	4.9	5.5	2.4	2.9	2.6
Construction	_	285.0	_	_	_	_
% Change	_	_	-	—	_	_
Manufacturing	_	—	-	—	—	—
% Change	—	—	-	—	_	_
Trade	_	—	—	—	—	—
% Change	_	_	-	—	_	_
Transportation and Utilities	_	_	-	—	_	_
% Change	_	—	—	—	—	—
Finance, Insurance & Real Estate	185.7	189.7	-	—	_	—
% Change	—	2.2	-	—	_	_
Services	_	_	-	_	_	_
% Change	—	—	_	—	—	—
Health Care & Soc. Assist. (% ch.)	_	_	-	—	_	_
Accommodation & Food (% ch.)	—	—	_	—	—	—
Other (% ch.)	—	—	_	—	—	—
Government	555.0	540.0	482.8	477.5	494.9	512.5
% Change	4.7	-2.7	-10.6	-1.1	3.7	3.6
Federal, civilian (% ch.)	5.5	3.6	-8.0	-4.6	2.0	1.5
State & Local (% ch.)	4.8	-4.3	-11.1	-0.6	4.1	4.1
Less Social Security Taxes (-)	289.5	306.1	319.2	326.6	335.9	344.4
% Change	-11.4	5.7	4.3	2.3	2.9	2.5
Transfer Payments	1,287.0	1,246.7	946.4	1,014.2	1,035.3	1,058.9
% Change	62.1	-3.1	-24.1	7.2	2.1	2.3
Dividends, Interest and Rent	860.3	847.9	827.6	821.5	819.7	827.8
% Change	-2.7	-1.4	-2.4	-0.7	-0.2	1.0
Population (Thou)	73.2	73.8	73.8	73.8	73.9	74.1
% Change	-0.3	0.8	0.0	0.0	0.1	0.2
Real Per Capita Income (Thou 2022 \$)	59.3	59.5	56.9	58.7	59.5	60.7
% Change	4.1	0.4	-4.3	3.2	1.4	2.0
Inflation Rate, Honolulu MSA (%)	1.6	3.8	6.5	2.4	2.2	2.4
Nominal Personal Income (Mil \$)	3,924.2	4,121.0	4,199.4	4,437.0	4,608.2	4,822.2
% Change	5.5	5.0	1.9	5.7	3.9	4.6

Note: Source is UHERO. Income figures for 2022 are UHERO estimates. Figures for 2023 - 2025 are forecasts. Because of data disclosure rules, industry-level income is not available for some sectors.

THE ECONOMIC RESEARCH ORGANIZATION AT THE UNIVERSITY OF HAWAI'I

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