UHERO

THE ECONOMIC RESEARCH ORGANIZATION
AT THE UNIVERSITY OF HAWAIʻI

UHERO FORECAST FOR THE STATE OF HAWAII

PRESS VERSION:
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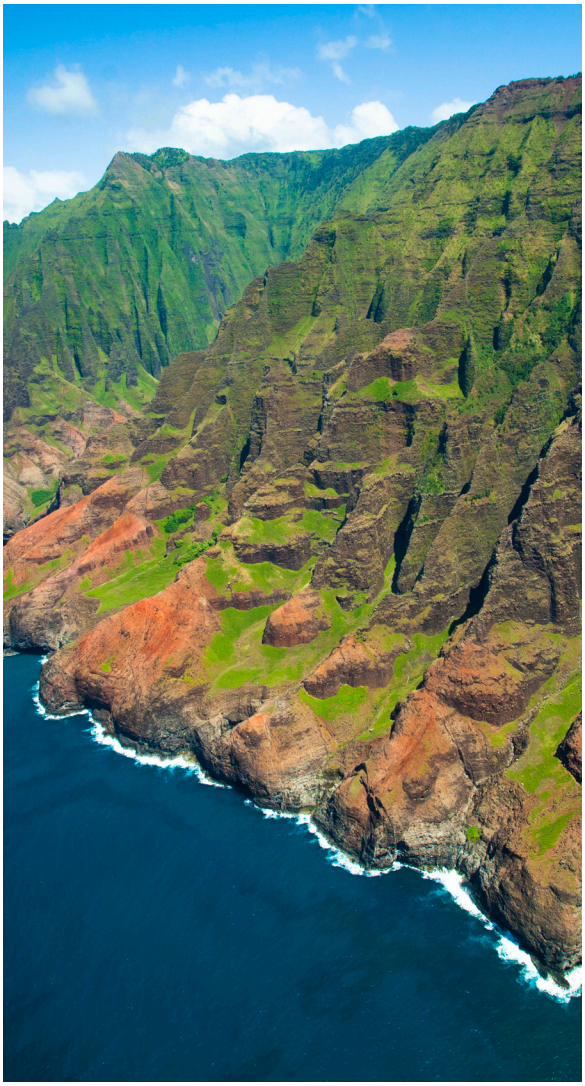
STATE FACING HEADWINDS AS MAUI RECOVERY BEGINS

DECEMBER 15, 2023



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EXECUTIVE SUMMARY

Hawaii's economy has been resilient in the face of weakening US and global economies, high interest rates, and the glacial return of Japanese travelers. Deceleration in key visitor markets will produce slower growth in 2024. But, absent a US recession, moderate gains will resume in 2025. While economic fallout from the Maui wildfires has been somewhat smaller than feared, the rebuilding path will be long, and there are considerable uncertainties about how it will proceed.

- The US has outperformed most advanced economies this year. High interest rates have weighed on investment, and the labor market has softened. Currently-robust consumer spending will slow as excess savings dwindle, helping to bring inflation into the Fed's target range and achieve a "soft landing" 1.1% growth next year.

- Canada and Japan's real gross domestic product contracted in the third quarter. The US slowdown will restrain Canada's economy, while Japan's move toward tighter monetary conditions to combat inflation will ease pressure on the yen. Australia's inflation fight is proving difficult, and its exports have been weak as China deals with a property market meltdown. Global growth in 2024 will be similar to this year's tepid 3% pace.

- The Maui visitor industry has been recovering faster than we anticipated, and visitors to the rest of the state have reached record levels. Japanese market recovery is taking forever, partly due to a very weak yen. This leaves Hawaii's dependence on the US market unusually high. The total number of visitors to Hawaii will be essentially flat in 2024, before returning to moderate growth in 2025.

- Visitor spending has been fairly soft this year, primarily due to the disruption of high-priced Maui tourism. Spending has risen on Kauai and the Big Island, as some travelers have substituted vacations on these islands. The weak yen is weighing on spending on Oahu, which has dipped below its pre-COVID peak. Overall real visitor spending will drop in 2024 and firm thereafter.

- Statewide payroll employment was rising at a modest pace this year, before being pulled down in the aftermath of the Maui wildfires. On Maui, there has been a more rapid than expected partial employment recovery, as some displaced workers have found alternative jobs in recovery or other work. Some have left the Island. Overall, we expect Hawaii job growth of about 1% next year. Very slow population growth will mean only incremental trend job growth thereafter.

- Consumer price inflation has receded from its March 2022 7.5% peak. Feedthrough of higher housing costs will keep inflation in the 3-3.5% range for the next year, before a slow downward trend resumes. Incomes have been battered by inflation, but are now above pre-pandemic levels in real terms, and they will grow at a roughly 2% annual pace. Real gross domestic product will slow below 2% in 2024, before picking up in 2025.

- There remain a host of uncertainties surrounding Maui's future recovery path, including how fast residents can be moved from hotels to more permanent housing, the speed of ongoing cleanup work, the extent and duration of support programs, and how long and in what fashion rebuilding will occur.

- The home resale market is suffering from high mortgage rates, high prices, and a lack of inventory by homeowners reluctant to give up low existing rates. Maui rebuilding will drive further expansion of an already hot Hawaii construction industry. Getting—and housing—the needed workers will be a challenge.

- While Maui's recovery remains top of mind, the state as a whole has continued to grow at a moderate pace, and only gradual slowing is expected. But, as always, Hawaii is somewhat at the mercy of conditions beyond our shores. A sharper slowdown or recession in the US mainland would mean a sharper slowdown in Hawaii in 2024-2025.

Forecast Summary

MAJOR ECONOMIC INDICATORS
BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
STATE OF HAWAII						
Nonfarm Payrolls (Thou)	587.0	618.0	634.3	641.2	648.4	654.7
% Change	4.8	5.3	2.6	1.1	1.1	1.0
Unemployment Rate (%)	6.0	3.5	3.1	2.5	2.3	2.3
Real Personal Income (Mil 2022$)	94,790.1	88,970.2	90,740.3	92,464.1	94,391.7	96,141.7
% Change	3.6	-6.1	2.0	1.9	2.1	1.9
Real GDP (Mil 2022$)	99,094.1	101,067.2	104,390.6	106,213.5	109,292.0	111,906.6
% Change	6.0	2.0	3.3	1.7	2.9	2.4
Total Visitor Arrivals by Air (Thou)	6,777.8	9,234.0	9,597.0	9,588.1	10,126.6	10,453.5
% Change	150.3	36.2	3.9	-0.1	5.6	3.2
Average Daily Census (Thou)	178.9	232.2	232.3	226.0	236.5	244.2
% Change	129.7	29.7	0.1	-2.7	4.6	3.3
Real Visitor Expenditures (Mil 2022$)	13,978.7	19,653.6	20,102.6	19,102.7	19,295.1	19,453.7
% Change	150.4	40.6	2.3	-5.0	1.0	0.8
HONOLULU COUNTY						
Nonfarm Payrolls (Thou)	424.3	444.7	457.5	463.6	468.4	472.5
% Change	3.0	4.8	2.9	1.3	1.0	0.9
Unemployment Rate (%)	5.5	3.3	2.9	2.3	2.1	2.1
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Real Personal Income (Mil 2022$)	68,677.7	64,653.0	65,819.7	67,228.5	68,574.5	69,804.2
% Change	1.9	-5.9	1.8	2.1	2.0	1.8
Total Visitor Arrivals by Air (Thou)	3,326.6	4,858.2	5,618.3	5,724.7	5,844.9	5,956.8
% Change	120.8	46.0	15.6	1.9	2.1	1.9
HAWAII COUNTY						
Nonfarm Payrolls (Thou)	64.9	68.3	70.2	71.3	72.0	72.8
% Change	6.7	5.2	2.9	1.5	1.1	1.2
Unemployment Rate (%)	5.9	3.9	2.8	2.2	2.4	2.2
Real Personal Income (Mil 2022$)	10,977.6	10,207.7	10,498.4	10,693.1	10,927.2	11,158.7
% Change	8.7	-7.0	2.8	1.9	2.2	2.1
Total Visitor Arrivals by Air (Thou)	1,183.5	1,667.6	1,783.8	1,839.7	1,877.6	1,915.6
% Change	139.7	40.9	7.0	3.1	2.1	2.0
MAUI COUNTY						
Nonfarm Payrolls (Thou)	69.6	74.5	75.1	74.5	75.9	77.0
% Change	13.7	7.0	0.8	-0.8	2.0	1.4
Unemployment Rate (%)	7.8	3.8	4.5	4.4	3.7	3.1
Real Personal Income (Mil 2022$)	10,586.2	9,927.9	10,141.7	10,211.1	10,463.5	10,658.2
% Change	9.8	-6.2	2.2	0.7	2.5	1.9
Total Visitor Arrivals by Air (Thou)	2,340.9	2,969.4	2,441.0	2,205.9	2,644.1	2,904.1
% Change	190.0	26.8	-17.8	-9.6	19.9	9.8
KAUAI COUNTY						
Nonfarm Payrolls (Thou)	28.2	30.6	31.5	31.8	32.0	32.4
% Change	7.1	8.5	2.9	1.0	0.7	1.0
Unemployment Rate (%)	8.3	3.9	2.6	2.3	2.5	2.5
Real Personal Income (Mil 2022$)	4,477.7	4,184.8	4,280.6	4,331.4	4,426.4	4,520.5
% Change	4.4	-6.5	2.3	1.2	2.2	2.1
Total Visitor Arrivals by Air (Thou)	813.6	1,345.6	1,433.4	1,470.1	1,450.7	1,469.4
% Change	146.4	65.4	6.5	2.6	-1.3	1.3

Note: Source is UHERO. Nonfarm Payrolls for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023-2026 are forecasts.

FOURTH QUARTER HAWAII FORECAST

Hawaii's economy continues to demonstrate resilience in the face of a softening US and global economic environment, the stress from high interest rates, and the agonizingly slow recovery of the key Japanese visitor market. Further deceleration of the US economy will produce slower growth here over the coming year, but, absent a US recession, somewhat stronger economic gains will resume as we move into 2025.

Four months after the tragic Maui wildfires, prospects for the Island's recovery still loom large in any discussion of Hawaii's economic future. Initial adverse economic effects have been somewhat smaller than feared, and important progress has already been made on the ground in Lahaina. But huge uncertainties remain about future progress. We continue to expect that full rebuilding will not be achieved until late in the decade. While promising a building boom, spillovers to construction elsewhere in the state will be felt, Maui's visitor industry and housing will continue to be impacted, and there will be ongoing strain on County and State finances. Displaced Maui residents will need to have the financial and moral support of our community for years to come.

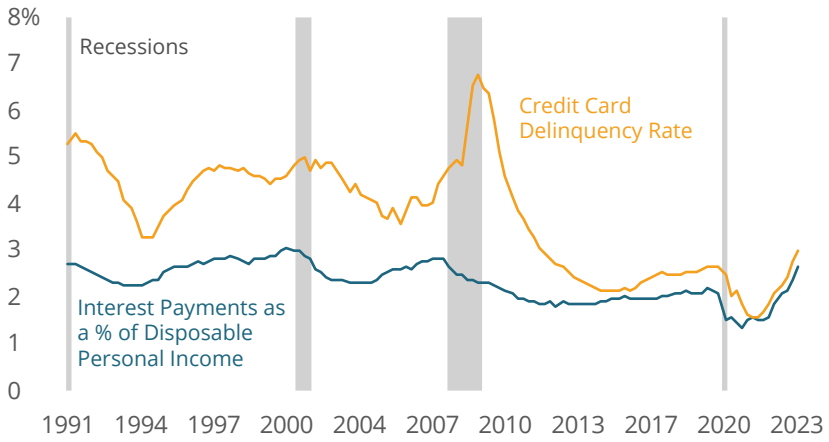
US likely to avoid recession

The global economy has turned in a mixed performance this year. Luckily for us, the economy that matters the most for Hawaii—the US—has outperformed most advanced countries. Canada has seen slower growth, as has much of Europe, and for Japan the weak yen and unfamiliar inflation are challenges. The developing world has fared most poorly, because of the adverse impacts of enhanced trade barriers, higher dollar costs of oil and debt finance, and in some cases heavier reliance on stagnant manufacturing. The common element among all countries has been the drag from near-lock-step interest rate hikes, which have yet to turn the corner.

The US economy has continued to defy expectations. In the third quarter, real gross domestic product (GDP) surged ahead more than 5%, driven by healthy consumer spending and strong federal government outlays. (Businesses also rebuilt or accumulated inventories at a rapid pace.) The persistence of robust economic growth demonstrates the economy's resilience, even if it is stronger than ideal given disinflation goals.

Consumer spending is by far the largest component of the US economy, and there are a number of reasons to think that it will soften in the coming months. First, spending has been supported by excess savings built up during the pandemic, when there were generous federal income supports and nowhere to spend them. Estimates of remaining excess spending range widely, from zero to about $400 billion, but in any case this is down from a peak of about $2 trillion. Household savings rates have been very low recently, so as these excess funds are exhausted, consumer spending growth will have to slow. In addition, households are showing signs of emerging financial distress. High interest rates have raised substantially the cost of financing consumer credit. For example, the typical household who rolls over credit card balances is now paying nearly $900 more per year than at the beginning of 2022, by a conservative estimate. Credit card delinquency rates have risen rapidly in recent months, although their level is not yet particularly high by historical standards, and there has been a tightening of bank lending standards.

PERSONAL INTEREST PAYMENTS (SHARE OF DISPOSABLE INCOME) AND CREDIT CARD DELINQUENCY RATE
Households are paying more interest, and delinquencies have picked up sharply.



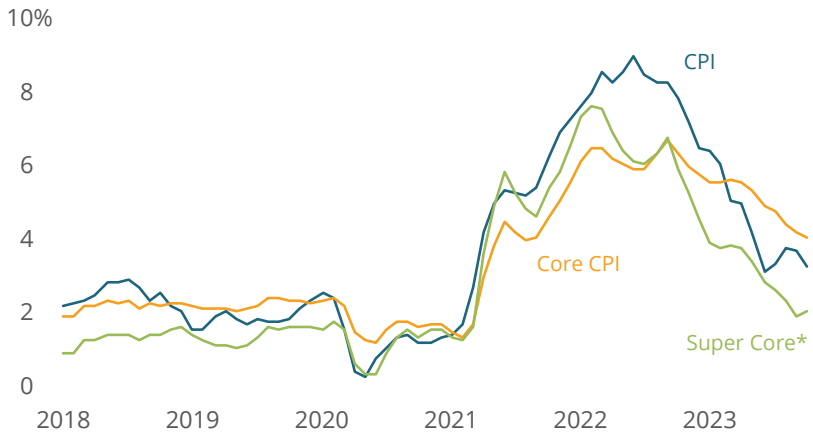
But while consumer spending power is declining, there remain important supports. Because a large number of families locked in low mortgage rates before and during the pandemic, overall debt financing burdens remain low. And households have built up considerable wealth in recent years, both in the stock market and in home equity. The labor market, while cooling, remains healthy. Job openings have declined considerably, but still remain somewhat above pre-pandemic levels. The unemployment rate has moved up to the 3.7 to 3.9% range from 3.4% as recently as April, but this is below the level consistent with stable long-run growth. The 199,000 jobs created in November is roughly in line with the level consistent with trend labor force growth. If this gradual pace of labor market easing continues, consumer spending and overall growth may well achieve the Fed's sought-after "soft landing."

And further easing will likely be necessary if inflation is to continue to move toward the Fed's 2% target. Considerable progress has been made in that direction over the past year. Annual headline inflation has receded from a 9% pace in June 2022 to 3.2% in October 2023, and the "Super Core" measure that excludes food, energy, and shelter costs has fallen all the way to 2%, measured on a year-over-year basis. But inflation in core service areas other than shelter—something that Fed Chair Jerome Powell emphasizes—has been more stubborn. Over the past three months, it has averaged more than 5%, stalling monthly gains in overall inflation, as well.

In the corporate sector, there continues to be a divergence between interest-sensitive real estate and manufacturing on the one hand, and most of the rest of the economy on the other. Real estate is in deep hibernation, with resales at the national level down 40% from their January 2021 peak and 30% below their level before the pandemic. We will have more to say about the housing market in the Hawaii discussion, below. New home building has fared much better, in part because of incentives offered to home buyers. But homebuilder sentiment has worsened in recent months. Manufacturing activity has been flat, with no sign yet of an end to the sector's recession. Investment spending has remained moderately positive, despite the drag until recently from the residential side.

Financial conditions are worsening for the corporate sector, and they represent a clear downside risk. Yields on ten-year Treasury bonds have drawn back from the nearly 5% rates of late October, but they remain higher than rates on many existing corporate bonds that will need to be refinanced in coming months, at a time when private debt rollover will compete with a high volume of federal debt issuance and refinancing. A majority of

US CONSUMER PRICE INFLATION BY ALTERNATIVE MEASURES
Considerable progress has been made in the inflation fight.



*Super core Inflation includes all items except food, energy, and shelter.

banks continue to report tightening lending standards—particularly for the moribund commercial real estate and development sector—and a drop in loan demand. The work-from-home movement has exacerbated high vacancy rates in many cities, casting a long shadow over future commercial development.

Chair Powell and many other members of the policy-setting Federal Open Market Committee (FOMC) have made it clear that they do not yet see inflation safely on a glide path to the 2% goal, and Powell has continued to say that it will take more than a few months of favorable economic data to convince the Fed that their policy is sufficiently restrictive to get the job done. In the meantime, further rate hikes remain on the table. For the Fed, "favorable" conditions will include ongoing inflation progress but also further slowing in labor markets and overall growth, which they see as the underpinnings of inflation performance.

Still, with recent economic slowing, we are starting to hear musings about when the first Fed rate cut may occur, with some now expecting the first easing to come as early as the first quarter of next year. And in fact, as inflation expectations begin to ease, "real" borrowing rates will start to take a bigger bite, arguing for rate cuts sooner rather than later. But given the Fed's demonstrated conservatism, we do not expect rate cuts to begin before the second quarter of 2024, barring an unexpected sharp downward turn in the overall US economy.

Satisfactory US performance has been maintained at the cost of increasingly unsustainable long-run fiscal conditions. Higher near-term growth has been supported by an exceptionally high level of pandemic-era fiscal support, without tax or spending offsets to address the increased deficits now that the economy is doing well. Considering the looming costs of caring for an aging population and the (at least short-term) higher financing costs, this has raised future fiscal burdens and heightened concerns about US federal debt obligations, resulting in a November ratings downgrade by Moody's. Aside from these medium-term concerns, the lack of fiscal discipline may take fiscal policy off the table when the next crisis hits.

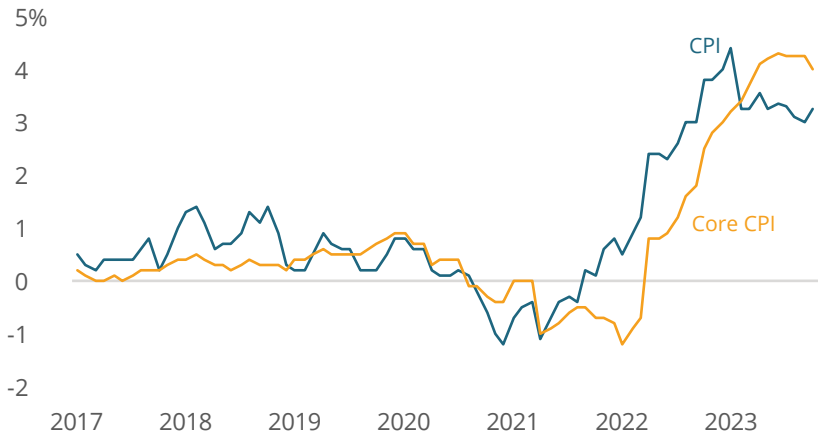
Tepid global growth will persist in 2024

If the US economy's performance has exceeded expectations, much of the rest of the advanced world has underwhelmed. Europe has had a very weak 2023, both in the European Union and the United Kingdom. In part, this reflects the more pronounced drag from higher energy prices last winter and heavier reliance on exports, which have been weak globally. Both the European Central Bank and the Bank of England have followed the Fed's lead in substantially increasing interest rates, reducing inflation but hampering growth. There are considerable differences across countries. Manufacturing-heavy Germany, Europe's largest economy, has seen output shrink in three of the past four quarters and is likely now in recession. The UK has had a harder time getting inflation under control; tight monetary policy means only about a half-percent growth this year and next. France has done better but has also slowed markedly in recent months. The region as a whole will manage less than 1% growth this year, strengthening only a bit in 2024.

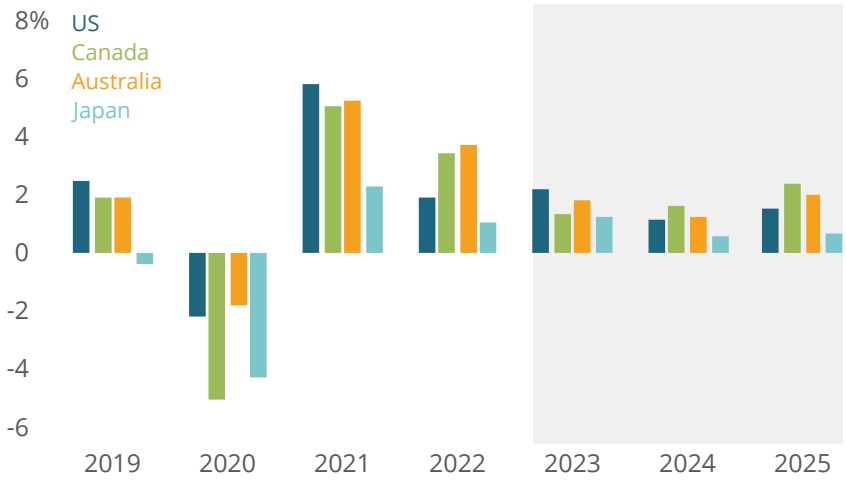
As far as our two biggest visitor markets are concerned, Canada's economy has performed poorly over the past two years. As in the US, the Bank of Canada has raised interest rates sharply, leading to weaker demand for housing and other large purchases. GDP growth has turned from nearly 4% in 2022 to a 1% contraction in this year's third quarter. Some of this year's weakness resulted from the record-breaking wildfire season and a higher than usual number of union strikes. The Canadian labor market has softened only a bit, despite substantial growth in the immigrant and female labor force. Prospects for Canada's economy are influenced by the US, and so anticipated near-term US slowing raises the risk of a recession to our North.

Japan's economy contracted at a 2% annual rate in the third quarter, after bouncing back from a second-half 2022 recession. Both consumption and nonresidential investment have declined over the past six months. Net exports surged in the second quarter, buoyed by auto exports and a decline in imports in the wake of yen depreciation. Consumer spending and business investment have been restrained by unfamiliar inflation (both headline and core), which has soared from negative rates at the beginning of last year to 3-4% recently. As a result, the Bank of Japan has taken tentative action to move away from the exceptionally expansionary monetary policy that has been in place since 2016. The upward interest rate moves have been modest so far, but if they rise relative to the US in coming months this should

CONSUMER PRICE INFLATION FOR JAPAN
Japan is struggling to address unfamiliar inflationary pressures.



REAL GROSS DOMESTIC PRODUCT GROWTH IN SELECT HAWAII MARKETS
Most Hawaii visitor markets will see slower growth in 2024.



take some pressure off the yen, which has hovered around 150 yen/dollar recently.

Australia is expected to grow just under 2% this year and weaken further in 2024. Real GDP growth has slowed from a roughly 4% annualized pace in the middle of last year to 1.4% in the second quarter. Mineral and housing investment have been moribund for some time, held back by weak exports. Now consumer spending has also softened considerably, due to higher borrowing rates and falling disposable income. Inflation is proving more intractable in Australia than in many other advanced economies; headline inflation in September stood at 5.4%, compared with 3.2% in the US. Core inflation was 5.5%. This likely means "higher-for-longer" interest rates, which could mean slower growth, even as they raise the possibility of some improvement in the exchange rate for Australian visitors to Hawaii. Given the lags in monetary policy and weak Chinese import demand, growth will be slow in 2024, before strengthening begins.

China has struggled to restart its economy following the COVID-19 pandemic. While the weak global economy and heightened trade restrictions have weighed on growth, the pandemic also laid bare underlying problems. Chief among these has been overbuilding in the residential property sector, exemplified by the bond defaults of Country Garden and the Evergrande Group. Because China's property developers borrowed funds from state-owned banks, this is also causing stress for local governments. The drag from high debt levels, collapsing residential investment, and weak confidence has led to flat manufacturing and soft retail sales. As a result—and with inflation absent—China is implementing fiscal and monetary support programs. The strongest area has been consumer spending, particularly from pent-up demand for services following the interminable lock-down periods. But even here, sentiment remains poor and unemployment has risen. Growth will be about 5% for this year as a whole, but likely only about 4% next year. At this pace, it will take several years for China to reach full employment.

Other developing countries have suffered from weak global demand for exports, lower commodity prices, and increased dollar debt financing burdens. For the globe as a whole, inflation-fighting success means the monetary policy tightening cycle appears to be coming to an end. How fast rates fall will depend on further core inflation progress and other indicators of economic slowing in the coming months. In many countries a "soft landing" is still possible, although the time lags before interest rate hikes are

fully felt means that there is the risk of over-tightening and recessions that spread beyond those that we have seen in some countries. Overall, the IMF projects about the same 3% growth in 2024 that we are seeing this year, with just a bit of strengthening in 2025.

Maui visitor pickup surprises, but it still challenges state tourism

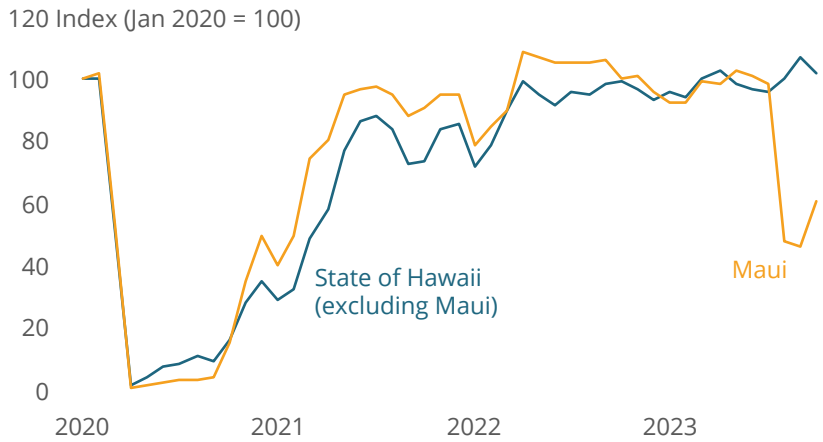
The visitor industry has been heavily impacted by the Maui wildfires, which have dragged down statewide visitor numbers from their spring highs. In the third quarter, visitor arrivals fell 10% from the previous quarter and were 4% lower than a year earlier. They came in 13% below their 2019 pre-pandemic level. Visitor census was a bit stronger because of a longer length of stay. The apparent weakness at the statewide level is entirely due to the impact of the Maui wildfires: the rest of Hawaii saw a record number of visitors in the third quarter.

The number of visitors to Maui collapsed following the August wildfires, but the initial recovery has been more rapid than we anticipated in our third quarter forecast. Maui's October visitor arrivals came in at nearly 60% of the year-earlier level. Seasonally adjusted weekly passenger counts, which are available more quickly than arrivals numbers, have trended up since the August drop, recovering to 80% of their pre-fire levels by November. These passenger counts overstate the tourism recovery because they include non-visitors, whose proportion of Maui travelers has jumped by about 20 percentage points since the time of the wildfires.

The other counties have benefitted from some tourists choosing Hawaii alternatives to Maui. Hawaii, Honolulu, and Kauai Counties have all experienced an uptick in tourism. In the September-to-October period, the Honolulu visitor census was 9% higher than last year and slightly higher than its pre-pandemic level. Already busy Kauai and the Big Island have seen smaller year-over-year increases in their visitor census, climbing 10-15% above 2019 levels.

As highlighted in our previous report, US visitor arrivals have slipped over the course of this year. The weakening, which occurred as the post-pandemic travel boom began to ease, was apparent before the Maui wildfires. In October, arrivals from the US were 10% lower than in the same

AVERAGE DAILY VISITOR CENSUS RELATIVE TO JANUARY 2020
For the state other than Maui, visitors hit a record high in September.



period last year, although they remained 3% above their 2019 peak. Gains in international arrivals came to an abrupt halt after the Maui wildfires. Canadian arrivals are down 20% from last year, and the influx of other international visitors has slowed.

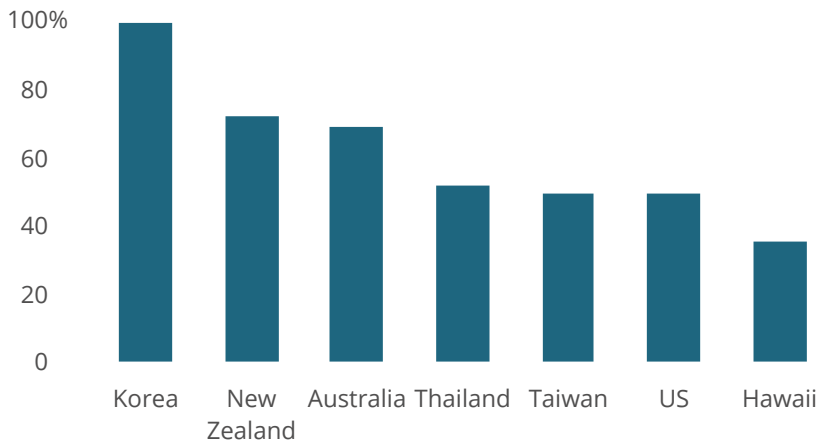
Japan, we are still waiting!

The recovery of the Japanese market continues to lag the most. Japanese visitor arrivals hovered near 40% of their pre-pandemic levels during the summer, before seesawing after the wildfires. The lagging recovery can also be observed in the higher-frequency passenger counts, which have remained essentially flat since July. As we noted above, passenger counts also include non-visitors, such as returning residents. The number of Hawaii residents traveling to Japan appears to have fully recovered to their pre-pandemic level, while arrivals of Japanese visitors have not budged since early summer.

The roughly 33% drop in the value of the yen has certainly played a role in this recent weakness. (As it has presumably lifted Hawaii resident travel to Japan.) It may be noteworthy that the only major international destination to have fully recovered their Japanese visitors is South Korea, where the yen has depreciated "only" about 20% against the won. Many other markets have much less favorable exchange rates for Japanese travelers. But the recovery of Japanese arrivals to Hawaii also falls far behind these other destinations, such as Australia, New Zealand, Thailand, and even the United States overall. Therefore exchange rates alone do not fully explain the slow recovery of Hawaii's Japanese market. Other factors, such as high Hawaii tourism costs and a desire to stay closer to home in the uncertain post-pandemic times, may be playing an important role.

The spending habits of US visitors have undergone a significant post-pandemic shift, particularly when compared with Japanese spending. Historically, Japanese visitors would outspend US visitors by a large margin, with each tourist spending 30% more per day. However, US visitors have "caught up" with their Japanese counterparts and are now spending roughly the same daily amount. A crucial factor influencing these dynamics is the increase in trip costs. The cost of lodging and food away from home in Honolulu has skyrocketed. Room rates have surged by 31%, and dining out in Honolulu is now 28% more expensive than in 2019. These increases in local tourism costs affect all visitors, and they have pushed up US visitor spending.

JAPANESE OUTBOUND TRAVEL, PERCENT RECOVERY TO SEPTEMBER 2019 LEVEL
Hawaii's visitor recovery lags other Japanese outbound destinations, including the US.



But Japanese visitors have been hit even harder because of the dramatic fall in the yen's value, which has squeezed their Hawaii travel budgets.

Hotel occupancy buoyed by wildfire recovery and displaced residents

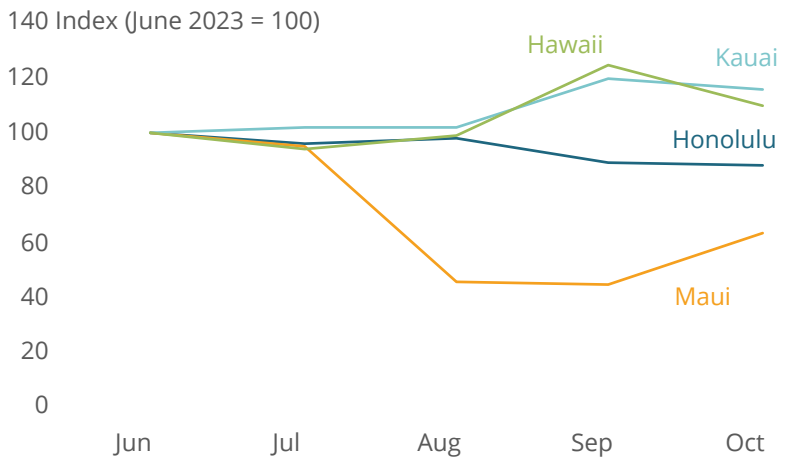
The hotel industry has remained resilient despite the Maui wildfires. Statewide occupancy rates actually rose to 77% in September, the highest level this year. Across the counties, occupancy remains below its 2019 level, except on Kauai, where the rate climbed to 80% in the third quarter. On Maui, the drop in occupancy rates that occurred in the wake of the wildfires had been fully reversed by September, as hotels offered shelter to displaced residents and visiting recovery workers. Following the first phase of West Maui's reopening on October 8, some hotels there also began welcoming visitors.

Throughout the year, Hawaii room rates have remained near peak levels. The statewide room price averages about 15% higher than it did in 2019. On Maui, after a sharp decline in August, seasonally adjusted average room rates bounced back in September and October, leaving room rates in the most recent data just 4% below year-earlier levels. The recovery of Maui room rates mirrors the recovery of occupancy rates after the short absence of nearly all visitors immediately following the wildfires.

Visitor spending has shown a mixed pattern this year. We noted above the adverse impact of the exceptionally weak yen on Japanese travelers. And the overall trend indicates a deceleration of spending, down 11% from the previous year and 9% below 2019 levels after adjusting for inflation. But there are of course variations at the county level. Maui's visitor spending declined by more than 50% compared with early summer, due to wildfire impacts. In contrast, both Kauai and the Big Island experienced record-high levels of visitor spending. These two islands have benefited from a shift in travel plans, with some visitors choosing them as alternatives to Maui. Visitor spending in Honolulu County has fluctuated near its 2019 level, lagging just a bit because of the Island's traditional heavy reliance on Japanese visitors. Visitor spending by market mirrors the pattern of arrivals. While North American spending has remained above that of 2019, Japanese visitor spending has recovered to only one-third of the pre-pandemic level.

While events like the Honolulu Marathon are expected to attract more visitors this year— particularly from Japan, where the Marathon has been

NOMINAL VISITOR EXPENDITURES BY COUNTY RELATIVE TO JUNE 2023
After the Maui wildfires, tourism surged on the Big Island and Kauai.



popular historically—sustained recovery in Hawaii's tourism sector would benefit from a greater diversification of the visitor mix. The present over-reliance on the US market exposes the industry to significant country risk, as we have seen already in this year's sliding US numbers. Additionally, Maui's visitor recovery is expected to be gradual in light of the severe property damage and necessary rebuilding efforts, leading to muted overall tourism numbers in the near term. We will return to this issue in the forecast section, below.

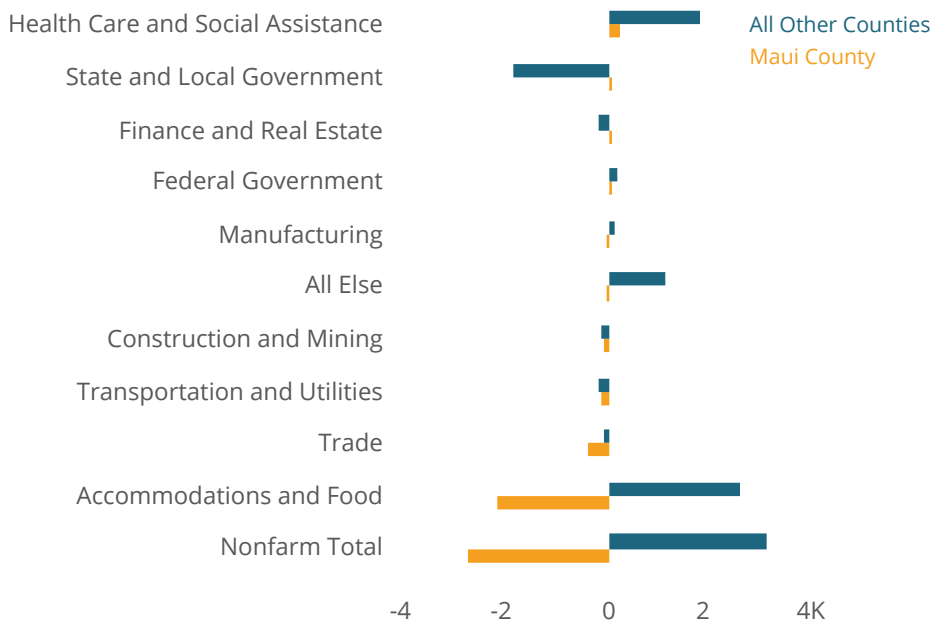
Maui jobs recovering, even if hard to measure

While it is clear that the Maui wildfires have had a large impact on Maui County's labor market, it is less straightforward to quantify the size of that impact. The US Bureau of Labor Statistics collects data on labor market statistics through a monthly survey of establishments and another survey of households. These data are then used to estimate several measures of the labor market, including the labor force, work hours, earnings, unemployment, and so forth. During the pandemic, response rates fell for most labor market surveys, and with the destruction of hundreds of Lahaina businesses and homes, response rates have fallen further. Therefore, according to the BLS, it is not possible to precisely estimate the net impact of the wildfires on Maui's labor market. To produce the content in this report, we have worked to use the most reliable information available at this time.

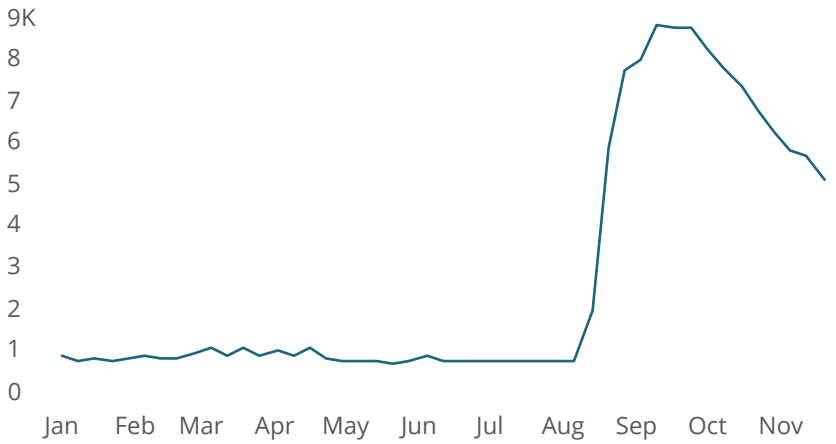
Prior to the wildfires, the state's payroll employment had been expanding at about a 2% pace, continuing to gradually cool as the economic recovery matured. The wildfires sharply altered Maui's labor market conditions and limited the growth of the total state job count to roughly 300 jobs between July and October. Not surprisingly, the vast majority of job losses were in Maui County's accommodations and food services industry. The sector has seen a decline of more than 2,000 jobs since the time of the wildfires. Nonfarm payrolls across the other counties increased by a combined 3,000 jobs over the same period. The accommodations and food services sectors on Oahu, Hawaii Island, and Kauai added a combined 2,500 jobs.

Data on unemployment insurance (UI) claims likely provide the most accurate picture of what is happening in Maui's labor market. This is because

CHANGE IN PAYROLL JOBS BETWEEN JULY AND SEPTEMBER 2023
Maui's post-fire job losses have largely offset modest gains in the rest of the state.



CONTINUING MAUI UNEMPLOYMENT INSURANCE CLAIMS
The number of people claiming unemployment compensation on Maui has seen a sharp decline.



the data is based on actual claims, rather than relying on survey samples. After jumping to a dramatic 9,000 claimants by mid-September, continuing claims for unemployment insurance have declined by roughly 400 to 500 claims per week since the beginning of October. They stood at just over 5,000 in the week ending November 25th. This quick recovery in employment is due to multiple factors, including opportunities in relief and recovery work and strong labor demand that already existed in the pre-fire Maui labor market.

The decline in unemployment insurance claims also reflects the loss of workers from the Maui labor force who have migrated at least temporarily to other islands or the US mainland. While it is very difficult to get definitive data on net outmigration, an estimated 1,000 households that had reached out to FEMA for support have now left the state, according to the federal agency. Another 700 households have moved to other islands. Data from the State Department of Education seem to imply more limited outmigration. DOE data show that at least 2% of children enrolled in a Lahaina DOE school have enrolled in a school out of state and another 1% have enrolled in a school on another Hawaii island. IRS migration data will eventually provide a more definitive number when tax filings for 2023 and 2024 are reported.

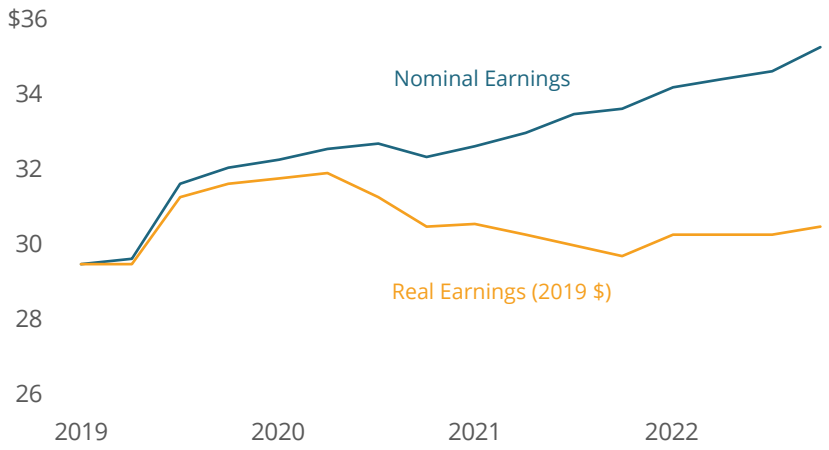
In addition to the outmigration issue, we note that declining UI claims do not necessarily mean that newly re-employed workers have been made whole. Those gaining new jobs may not be working jobs of the same quality (and pay) that they held prior to the wildfires. Many people who regained employment may be working part time or in temporary jobs that are not intended for the long term.

Overall Hawaii labor market approaches pre-COVID conditions

The labor market across the rest of the state has continued to stabilize this year. At the height of the worker shortages in 2021, there were 19,000 more job openings than workers available to fill them. Excess jobs have since retreated to 13,000, similar to the pre-pandemic period. Employment has also normalized. On Oahu and Kauai, employment over the past year has remained stable at roughly 97% of its January 2020 level. Employment on Hawaii Island grew in the second half of this year and is now 1% higher than before the pandemic. The unemployment rate across all three counties is currently at a very low 2% rate. Nonfarm payrolls from the establishment survey have made limited gains this year and are now about 4% below pre-COVID levels. There remain about 20,000 fewer filled jobs than before the pandemic.

STATE AVERAGE HOURLY EARNINGS IN NOMINAL AND INFLATION ADJUSTED 2019 DOLLARS

Inflation has eroded most of the post-pandemic earnings gains.



During the pandemic, average hourly earnings spiked temporarily due to a shift in the composition of employed workers: lower-paying service workers in high-contact sectors lost jobs at far higher rates than did higher-skilled workers. As the service sectors rebounded, these lower earning workers regained employment, and average hourly earnings receded to a more normal level. Since then, earnings have been on the rise, increasing from $33 per hour in 2022 to $35 in September of this year. Despite this 7% increase, high inflation brought down inflation-adjusted earnings. Last year, inflation peaked at 7.5% in March, the highest level the state has seen since the early 1990s. Rising prices pulled down the purchasing power of earnings throughout 2021 and most of 2022. While inflation has come down substantially since then—it is now running at 2.2%—this has yet to translate into significant real earnings gains, which are up only slightly this year.

Mortgage rate surge has hammered affordability

High mortgage interest rates have radically altered the state's housing market. In late October, the US average interest rate on a 30-year fixed-rate mortgage approached 8%, and it has hovered near 7.3% recently. This more than doubling of the mortgage interest rate has dramatically reduced the typical homebuyer's purchasing power. For example, the monthly mortgage payment for the median-priced single-family home purchased in October 2021 was $3,000. Today, the monthly payment would be $5,300. The number of new mortgage originations in the state has plummeted as a result, from 5,000 per month in the final quarter of 2021 to 2,000 per month currently. Mirroring the national trend, home transactions have collapsed in Hawaii, falling by nearly 50% from their June 2021 peak. Excluding a brief period during pandemic lockdowns, the number of home resale transactions is the lowest since 2012.

Despite a collapse in housing demand, resale prices have not fallen significantly. While the rising interest rate has decreased demand for housing, it has also decreased the supply of housing due to a mortgage "lock-in" effect. Homeowners who originated their mortgage when rates were low would face dramatically higher rates if they decided to sell their house now and buy a new one. The result is homeowners increasingly staying put, resulting in very low inventory, largely offsetting the effect on prices of lower housing demand. Statewide, the median sale price of a single-family home is now $944,000, only 2% below the June 2022 historic peak.

Local homebuyers now find themselves facing an unfortunate combination of high interest rates and high home prices. As a result, housing affordability

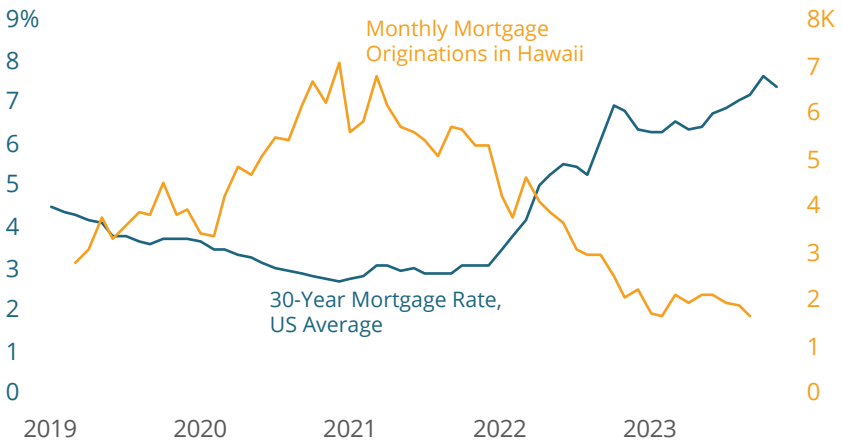
is at an all-time low. With limited new supply coming online, the housing market looks set to continue operating with few transactions and low inventory until interest rates begin to fall significantly.

Rents increased dramatically during the pandemic but the rate of increase has been falling recently, both nationally and in Hawaii. According to data from Zillow, annual rent increases peaked at 16% during the first quarter of 2022, but have slowed to 3% recently. Rents in Honolulu have risen 4% over the past year. On Maui, rents have risen by 8%, but there has not been dramatic movement since the wildfires: Zillow reports Maui rents rising 4% since the time of the fires. Many displaced families are still receiving accommodations at hotels, and, as we noted above, a significant number of households may have left the island. Lower demand for rental homes reduces upward rent pressure.

In July, the Governor signed the Emergency Proclamation on Housing, which provided for expedited approval for a wide range of housing developments by eliminating many of the regulatory hurdles required for new projects. The proclamation has since been updated in September, and again in October. Changes were made to address public criticism that the process enacted by the proclamation lacked public oversight and sidestepped some important regulatory protections. The updates to the proclamation restore the need for proposed housing projects to go through a public meeting process. The updates also reinstate some regulatory processes including environmental review and sign-off by the State Land Use Commission. The current version of the proclamation is now more narrowly focused on affordable housing projects rather than extending to market-rate housing.

The initial proclamation provided a plausible path for the state to begin catching up after decades of low home production. The ability of regulatory bodies and public campaigns to derail housing projects is a central reason why housing has been underprovided. On the other hand, oversight systems can provide valuable safeguards against poor planning. The updates to the proclamation reduce the program's potential to affect significant housing production, but the incorporation of public feedback and restored oversight controls could improve public trust in the process going forward.

HAWAII MORTGAGE RATES AND ORIGINATIONS
High mortgage rates are weighing heavily on home resales.



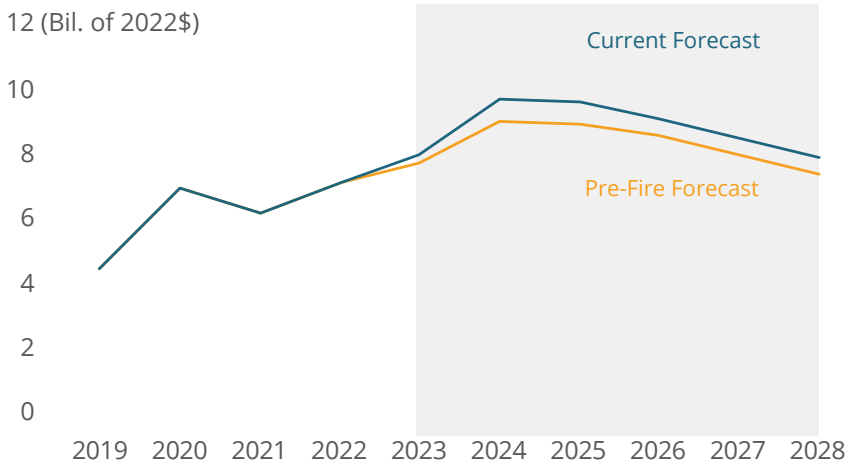
Addressing Maui housing needs will press construction capacity

Addressing the pending housing shortage on Maui remains a critical challenge for local policymakers. As displaced households move out of temporary accommodation, they face an extremely expensive local housing market. Recovery projects may require construction labor from outside the state, and these workers will also need housing. Some proposed policies include compelling owners of vacation rental properties to move their properties into the long-term rental market, and moves to amend or waive some regulations to allow for more accessory dwelling units and prefabricated housing have also gained traction. The ability to provide new housing quickly on Maui will require significant policy changes that overcome the standard permitting process, which in the past has tended to be very slow and often reluctant to provide approval for significant new housing projects. (See the box, "Uncertainties cloud Maui recovery prospects," for a discussion of the range of uncertainties facing the Maui recovery in coming years.)

Turning to the public sector, the flow of government construction contracts in Hawaii is high by historical standards. Federal contracts for improvements to Pearl Harbor remain a primary source of construction industry activity and capital investment, and there are also a number of other large projects in the pipeline. In September, newly awarded construction contracts totaled $252 million. Kauai received the largest recent contract, $156 million awarded for runway improvements at Lihue Airport. In early November, the U.S. Department of Transportation Maritime Administration awarded the Hawaii Department of Transportation $23 million for capital improvements to Kawaihae Harbor on Big Island. The investment aims to improve the efficiency of cargo shipping.

The Governor announced the redeployment of some state money to aid wildfire recovery efforts on Maui. $173 million that was earmarked for Hawaii Convention Center improvements, state parks, and agricultural infrastructure will instead be directed to the Maui recovery. The state will continue to face huge demand for construction materials and labor because of ongoing public investments across the state.

REAL AUTHORIZATIONS TO BUILD (PRIVATE BUILDING PERMITS AND GOVERNMENT CONTRACTS AWARDED)
Maui rebuilding and public sector projects will propel construction employment to new highs.



Uncertainties cloud Maui recovery prospects

The months-long cleanup of toxic waste, and the even longer process of debris removal, are providing time for community conversations and preliminary planning for rebuilding and recovery. But there remains a host of uncertainties about both the near and long-term recovery process. This box discusses various aspects of the ongoing recovery to understand the many sources of uncertainty for the Maui economy.

Economy

As of November 12, only Lahaina town itself remains closed, but the economic recovery in the rest of Maui will take time. Many transient vacation rentals are hosting displaced Maui residents, with the possibility of transitioning some to long-term rentals. Several hotels are hosting recovery workers rather than visitors, and at least six hundred businesses are closed, more than half of the number in Lahaina before the wildfires. Some conferences have returned to Maui, but other events have relocated elsewhere. For example, the Council for Native Hawaiian Advancement held its annual conference on Maui in November, but the Maui Invitational basketball tournament was shifted to Oahu.

Some negative economic impacts are partially mitigated by recovery work. FEMA and the Red Cross have been recruiting local workers to assist with recovery, offering opportunities to Maui residents who became unemployed from either the tragedy itself or the resulting economic downturn. About a month after the tragedy, FEMA reported that there were 1,500 federal workers on the ground, and in October the Red Cross said that it had 370 workers assisting with the recovery. However, visiting workers have very different spending patterns than vacationing tourists, and federal outlays fall far short of what visitors would spend. The federal per diem for Maui is a maximum of $507 per day including lodging, compared with an average outlay of about $1,100 per occupied room for a visiting family. Ultimately, Maui's economic recovery depends on the recovery of visitor numbers, and therefore on finding alternative accommodation for at least some recovery workers and building new housing for residents.

While the initial stages of the recovery have been swift—the EPA completed hazardous waste cleanup in late November—the timing of a full recovery remains uncertain. There are many contributing factors. Tourists may still be unsure about visiting Maui. It is unclear when federal agencies may be able to reduce the number of mainland workers staying in hotels. Just how long it will take to rebuild Lahaina is unknown, and there are near-term uncertainties for economic recovery related to the environmental damage from the wildfires. For example, Maui's lucrative whale-watching season will be substantially reduced this year.

Compensation and support

FEMA reports spending $859 million in August and September from its Disaster Relief Fund in response to the Hawaii wildfires. FEMA has approved $38.6 million in its Individuals and Households Program and nearly $108 million in public assistance grants. While the deadline for victims to apply for federal disaster assistance passed on December 9, federal support will continue to flow for some time: FEMA projects spending a further $867 million between October 2023 and September 2024.

Governor Josh Green announced a proposed fund of $150 million from State, Hawaiian Electric Co., Kamehameha Schools, and Maui County resources. The fund would compensate families of those who died or were seriously injured with individual payments of more than $1 million. By requiring beneficiaries to agree not to sue the parties contributing to the fund, the initiative is viewed as a way to reduce uncertainty and fast-track victim compensation. Such compensation, insurance payouts, and disaster relief monies may not fully replace all losses, but they will help to mitigate some of the economic uncertainty facing wildfire victims.

Temporary housing

Prior to rebuilding, displaced residents require stable housing. Several partial solutions have been proposed.

One option proposed is an 18-month ban on short-term rentals on Maui and paying property owners to lease to displaced residents. However, there could be significant additional costs and legal challenges to such proposals, as property owners may demand to be further compensated for changes to their property rights. Governor Josh Green has proposed that short-term rental owners could be incentivized to rent out properties long-term to displaced residents by offering them premium rents of $5,000 per month for a studio and $11,000 per month for a four-bedroom home. Similar incentives have been proposed by Maui County Mayor Richard Bissen, offering property tax breaks to owners of short-term rental properties who lease homes to displaced residents and increasing property tax rates for those who continue to lease short-term rental units to visitors.

While the proposed options may address some of the immediate housing needs, the timeline will almost certainly be too short for rebuilding housing in Lahaina, meaning that housing becomes uncertain again in 18 months' time as these initiatives expire. Furthermore, shifting enough short-term rentals to long-term tenancies for occupants of all 2,200 units lost in Lahaina would imply a substantial ongoing loss of visitor capacity, representing about $800 million in tourism spending and roughly $48 million in tax revenue over 18 months, even before building any new permanent housing. Potential lost spending and tax revenue will be mitigated if hotel occupancy rates increase and to the extent that new permanent dwellings, such as Accessory Dwelling Units (ADUs), can be built in a timely fashion. For example, the Governor's proposal to compensate homeowners who build accessory dwelling units might mitigate some of the lost spending and tax revenue from leasing temporary units.

Policy-makers will have to consider a number of trade-offs among the proposed alternatives, but any long-term solution ultimately requires that new homes be built, and the overall economic costs will be reduced if those new buildings can be provided sooner rather than later, so that visitors can return.

Recovery and rebuilding

Maui County has established an Office of Recovery with a request from the County budget of $20.6 million, although much of this cost may eventually be reimbursed by FEMA. The majority of the requested funding is for equipment and operations needed for waterline repairs, water testing, and some of the initial costs to dispose of ash and debris. The standalone department may be a useful mechanism for coordinating the many different agencies involved at multiple levels of government. It has developed a framework for recovery with six focus areas: community planning; housing; infrastructure; natural, historical and cultural resources; economic resiliency; and health and social service systems.

Among the needs already identified are an expedited building process and updated building regulations. But it will still take considerable time before rebuilding can occur. Now that the first phase of hazardous waste removal has been completed, the removal of ash and fire debris can begin. Then environmental and soil testing will examine whether properties are safe for rebuilding. Even as the clean-up progresses, other uncertainties may constrain rebuilding. Up to 2,200 water connections may need replacing in Lahaina. While upper Kula has been released from the unsafe water advisory, water restrictions could slow the recovery in Upcountry Maui, as well.

The cost of the Maui recovery leaves State and County governments facing difficult budget trade-offs. The governor has proposed reallocating $172.6 million of previously appropriated spending to fund Maui recovery efforts. Bond financing in a 2025 supplemental budget has been proposed to replace the reallocated funding, but some State projects could still be delayed by the reallocation.

THE HAWAII OUTLOOK

In several respects, our Hawaii forecast is just a bit stronger than our third-quarter outlook. This partly reflects some data revisions, but an important reason is the somewhat faster recovery of Maui tourism that we have seen, which translates into better performance in tourism-related sectors. This does not change our overall outlook for an extended period of Maui tourism recovery. We are also seeing a bit more lift in visitors to other Neighbor Islands, as some travelers substitute those destinations. For the state overall, tourism numbers are just a tad higher than in our previous forecast. The biggest drag continues to come from the Japanese market, held back in part by inflation at home and a very weak yen abroad. Depreciating currencies are a challenge for many other visitor markets, and in general, the global outlook has weakened somewhat. With a soft landing for the US economy now looking more likely, the outlook for domestic tourism is somewhat better over the next few years.

At home, the real estate market remains exceptionally weak. Mortgage rates, which flirted with 8% in October, have fallen sharply in recent weeks, and we expect further decline over the next several years. But a return to the ultra-low rates that prevailed before and during the pandemic is not in the cards, so moderately high rates and high prices will continue to make affordability a real challenge. Despite this, the construction sector remains strong, and it will need to expand much further to meet Maui's rebuilding needs through the remainder of the decade. Getting the needed workers will be a challenge and will likely drive up construction costs. This could also slow the pace of Maui's recovery. Employment progress will soften in most sectors in 2024, as the US visitor market weakens and the overall economy transitions from the long post-COVID recovery to slower trend expansion, constrained by stagnant population growth and an aging workforce.

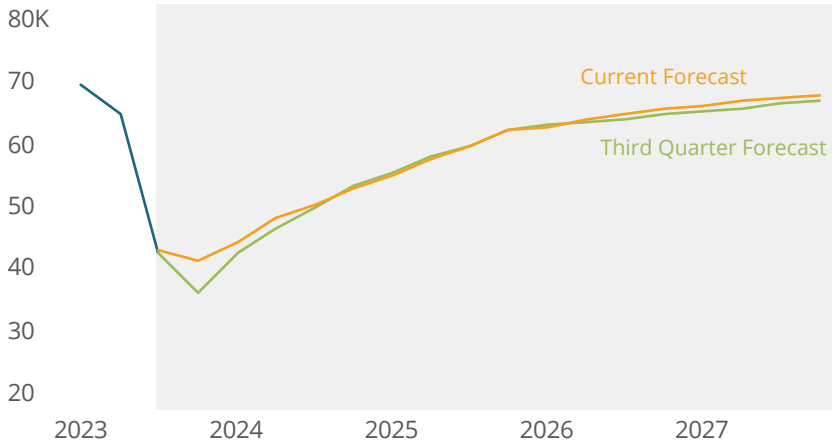
International visitor recovery will partly offset US weakness

As we discussed above, after the dramatic contraction of Maui tourism in the wake of this summer's devastating wildfires, visitor numbers have picked up a little faster than we had anticipated in those few weeks following the tragedy. October visitor arrivals to Maui came in at 58% of the year-ago level. Seasonally adjusted weekly passenger counts have trended up from the August dip, recovering to more than 75% of the pre-fire levels by late November.

While this is welcome news, we continue to believe that a full recovery of the Maui visitor industry is many years down the road. Barriers to recovery will include the necessary use of hotel rooms and other visitor accommodations to house recovery and reconstruction workers, highway congestion and resource constraints, and hesitancy on the part of some travelers to choose Maui as a travel destination.

To a significant extent, Kauai and the Big Island have seen offsetting stronger visitor numbers, as some would-be Maui travelers opt for these other islands. These gains will soften the blow to aggregate Hawaii tourism, although at record levels they are pushing up hard against available capacity. These are primarily US visitors, who have been the chief support for Hawaii's tourism recovery over the past two years. Today, visitors from the mainland account for more than 75% of all arrivals, far higher than their 66% market share in 2019. US visitor numbers will soften next year as the US economy slows,

MAUI AVERAGE DAILY VISITOR CENSUS
Visitor numbers on Maui picked up a bit faster than we anticipated.



household resources for travel decline, and post-pandemic "make-up" travel recedes.

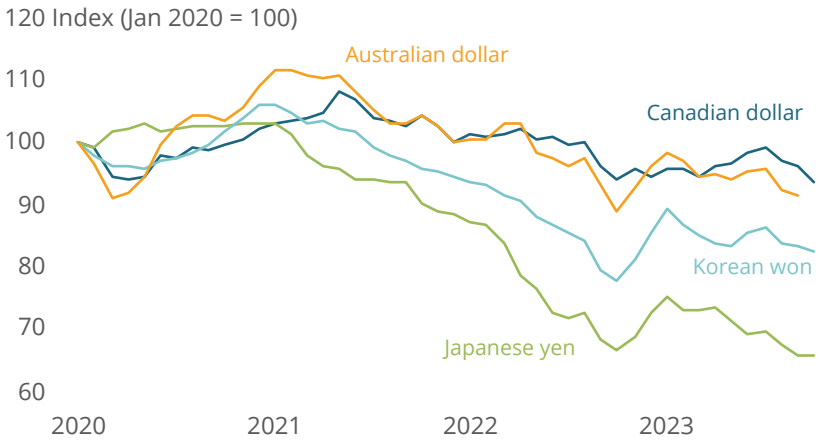
The ongoing recovery of international markets will help to offset near-term US market weakness. We have noted above the relatively weak global conditions and currencies that are weighing on many overseas markets. International average daily census, which is influenced by the length of visitor stays in the Islands, has retreated slightly this year. Among our major markets, the Japanese and Korean currencies have fallen the most. Once the Fed turns the corner on this tightening cycle, we expect these currencies to strengthen against the dollar. This will support the ongoing recovery of international markets, even as the weaker global economy continues to provide headwinds. Overall, we see further gradual recovery of many international markets over the next several years, bringing the total number of arrivals from markets other than the US and Japan back to roughly their 2019 level by the end of the decade.

Statewide visitor arrivals in 2024 will come in near this year's level. The recovery of international markets will help us avoid a significant contraction and move us gradually back to a more diversified visitor mix. Measures of visitor activity will recover in 2025.

A dearth of Japanese visitors has been a major concern during the post-COVID period. The recovery of Japanese tourism took forever to begin and has remained limited so far. As we discussed above, there are a number of plausible reasons for this slow recovery, including the very weak yen, macroeconomic challenges at home, and perhaps a preference for international destinations that are closer to home, although the extent of the shortfall remains surprising. By some measures, the meager return of Japanese arrivals actually slowed a bit over the summer. Japanese arrivals totaled 149,000 in the third quarter, just 38% of their level in the third quarter of 2019. (The average daily census of Japanese visitors was 41% of the 2019Q3 level.) Information on bookings leads us to expect a measured upward trend over the next year, with Japanese arrivals totaling more than 220,000 by the fourth quarter of 2024. At that point, Japanese visitors will still number fewer than 60% of their 2019 total.

Further growth of Japanese visitor numbers will continue at a slower pace thereafter, and we are relatively pessimistic about longer-term prospects. Because of a shrinking and aging population, the number of Japanese visitors at the end of the decade will be 15% lower than the average for the 2015-2019 period. But it is important to note that at that time Japan will remain the second largest visitor market after the US.

REAL VALUE OF FOREIGN CURRENCIES AGAINST THE DOLLAR, RELATIVE TO JANUARY 2020
The continued weakness of the yen does not bode well for Japanese travel.



Statewide tourism will pick up after 2023 wildfire pullback

The total number of visitors to Hawaii will be flat in 2024, after a nearly 4% gain this year. The average daily census, which reflects both the number of tourists and how long they stay, will be nearly 3% lower in 2024, although this number reflects in part comparison to a strong period at the start of this year. Visitor numbers are expected to bounce back thereafter, with growth in average daily census accelerating to more than 4.5% in 2025.

Real visitor spending has risen a bit above last year's level, and it will exceed its 2019 level for this year as a whole. It will drop somewhat in 2024. The ongoing rise in the number of international travelers from Asia and Oceania will help to soften the decline in mainland visitor spending as the US economy softens. But until there is significant dollar softening, the real value of goods and services that many travelers can afford—and their contribution to industry fortunes—will continue to be more limited than in the past, preventing robust gains in visitor spending.

Looking across counties, the Neighbor Islands have experienced a more substantial recovery of visitors than Oahu from the depths of the COVID-19 pandemic, because of the latter's traditional reliance on Japanese travelers. But that also means that the Neighbor Islands are more exposed to the anticipated softening of the mainland market as the US economy slows further. But even Oahu has seen a large rise in the share of US travelers in the absence of Japanese visitors. Still, Oahu and Hawaii County stand to benefit most from the anticipated ongoing Japanese market revival. The disproportionate surge in hotel room rates on the Neighbor Islands will act as a constraint on industry expansion going forward.

A bit better jobs path for Maui, but the US will create statewide drag

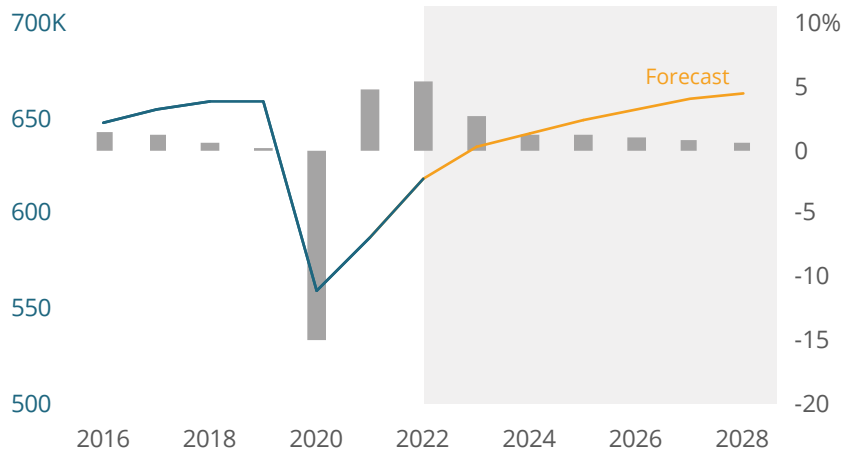
Beyond tourism, the Maui economy has seen substantial labor market impacts, even if there has been a more rapid partial recovery than we had initially expected. The broader state economy will be affected by weakening US tourism, but also by the same macro forces that are affecting the US and global economy: high interest rates, tighter credit, and a softening labor market. Relief will come in the form of much lower inflation than we have seen over the past two years. And robust construction, both for large existing federal projects and for the pending Maui rebuild, will boost construction activity to a very high level. At this point, we continue to expect Hawaii to avoid a recession, even as weakening macro conditions lead to slow incremental near-term growth.

Maui's payroll job count fell by 3,700 jobs between July and September in the immediate aftermath of the wildfires. It recovered nearly 1,000 of those jobs in October, as businesses in unaffected tourism areas recovered, and perhaps as other existing firms saw increased demand from recovery initiatives. So by October, the Maui payroll job base had returned to within 4% of its July level. (Earlier in this report we discussed the likely shortcomings of labor market data for Maui.) As we noted above, this has been a more rapid job recovery than we had expected.

Further Maui job recovery will be gradual, held back of course by Lahaina jobs that no longer exist, but also by the gradual pace of further visitor industry recovery. At the same time, rebuilding will add to the job base increasingly as time goes by. We expect Maui payroll jobs to average about 1% lower in 2024 than in the current year, but bump up 2% in 2025 to the highest employment level since the pandemic recovery began. Incremental job gains of 1.3-1.4% will occur in the following two years. Maui's unemployment rate will average 4.4% next year, receding to 3% by 2026. This is a considerably lower unemployment path than we had expected in the wildfires' immediate aftermath, reflecting both faster employment recovery and anticipated outflows from the labor force as some residents relocate to other islands or the US mainland.

The state's overall labor market has been affected by evolving labor market conditions on Maui, and so it too has improved faster than we had expected at the time of our third-quarter report. (There were also some upward data revisions from UHERO's early benchmark of payroll jobs data.) Still, the job losses caused by the wildfires will dent the fourth-quarter statewide aggregate, despite partial offsets from somewhat stronger labor demand in the other counties. Net payroll job growth for this year as a whole will come in at 2.6%, half the pace of last year's 5.3% expansion, and it will slow further to 1.1% next year, with weaker conditions in nearly all industries except construction. Moderate gains will continue thereafter. We believe that the state's unemployment rate peaked at the end of 2022. Because of the better-than-expected labor market data for Maui, we no longer see an upward spike in statewide joblessness. Instead, modest ongoing job gains will continue to suppress the unemployment rate. The statewide average will edge down from 2.8% in the third quarter of this year to 2.4% by the end of next year.

HAWAII NONFARM PAYROLL JOBS
Job gains will slow in 2024 with softer domestic and external economic conditions.



Slow growth will become the norm

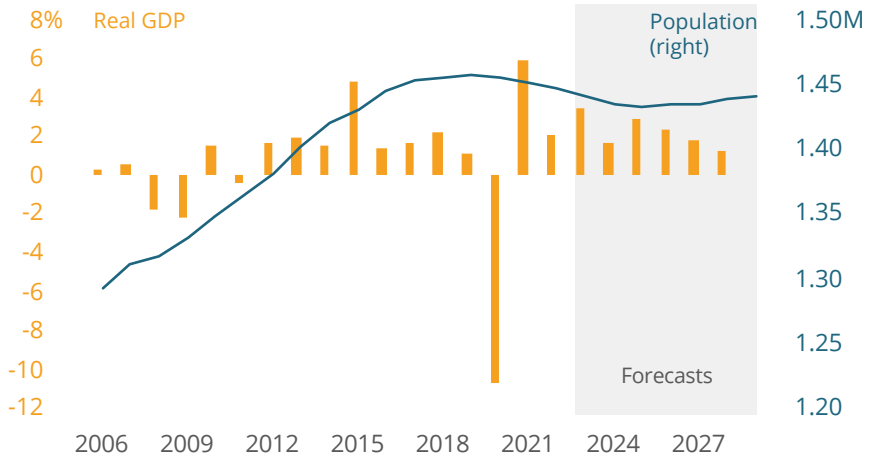
With the state's labor force participation now effectively recovered—at least outside the areas directly affected by the wildfires—additional expansion of the state's workforce will be tied to population growth. As we have noted in the past, even before the wildfires the counties were experiencing different migration patterns, with Oahu's and Maui's population decline more than offsetting gains on Kauai and the Big Island. A stagnant labor force will constrain the state economy in the near term, and very slow trend population growth will limit labor market gains thereafter. As a result, the number of filled jobs will not fully return to pre-pandemic level until late in the decade.

Looking at the sectoral pattern of employment change, there will be a slowing of job gains in nearly all industries in 2024. In part, this simply reflects maturing of the post-pandemic recovery, but softening macro conditions will also play a role. Tourism-related industries will see sharply lower growth rates or slight contractions, but the existing high level of activity in the visitor industry will still support limited expansion in some areas. In particular, the accommodations and food services sector will add more than 1,500 jobs statewide in 2024. The (nearly) perennially growing healthcare sector will continue to experience above average job growth in 2024, before slowing begins. Finance, insurance, and real estate will shed some jobs as the effects of high interest rates continue to pummel the sector. Growth in the expansive "other services" sector, which includes everything from business services to education, will decelerate in 2024, after a nearly 4% gain this year.

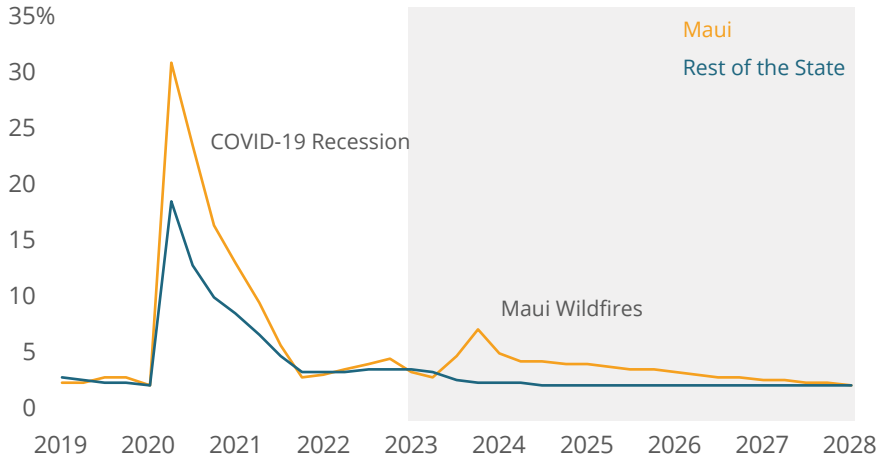
Slower growth will also be seen in the state and local government sector, where the need to support Maui's recovery will battle with fiscal realities. The job base in the construction industry will expand by about 2,500 jobs over the next 12 months. We consider the construction sector's longer-term prospects in the next section.

Overall job growth will expand at roughly the same pace in 2025 as in 2024. The trade sector will return to positive growth, as Maui rebuilding and visitor recovery proceed, as will transportation and utilities, and the finance, insurance, and real estate sector. Accommodations and food services jobs will continue to grow at a moderate pace. Other service areas and the public

HAWAII POPULATION AND REAL GDP GROWTH
Maui rebuilding will lift Hawaii output by 2026, but a stagnant population limits long-term growth.



UNEMPLOYMENT RATE FOR MAUI AND THE REST OF THE STATE
Maui's high unemployment will take some time to recede.



sector will drop toward a trend growth pace of about a half to one percent. Growth will decelerate further in the out years as slower population growth holds Hawaii to a considerably slower trend rate of economic growth than we have seen in the past.

Maui rebuilding will push construction well above record levels

Rebuilding efforts on Maui will come on top of a large volume of projects already underway or in the pipeline, as we have noted above. While there is considerable uncertainty about the evolution of the construction cycle, we estimate that at their peak, rebuilding efforts on Maui will require about 2,000 additional construction workers. Projects slated for construction in Honolulu will require another 3,000 construction workers, bringing total industry employment in the state above 42,000 workers by 2027, by far the highest level on record.

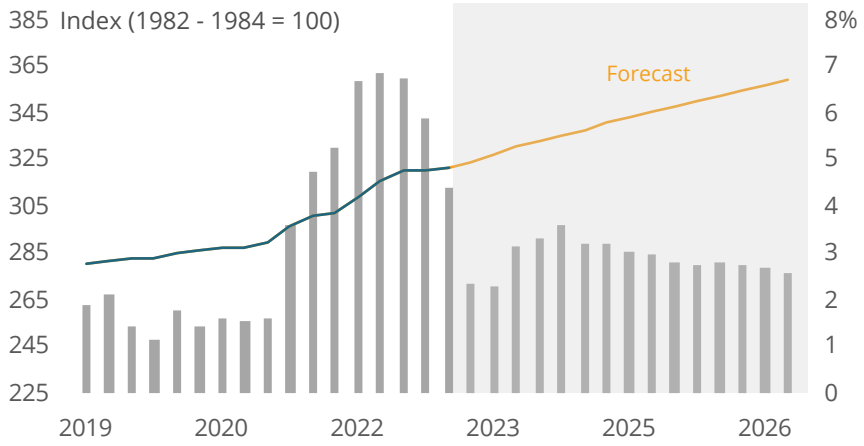
This unprecedented building boom, while a welcome offset to macroeconomic weakness in the near term, will impose a substantial strain on the industry and state over the remainder of the decade. The pool of construction workers, already in short supply, will need to grow substantially. Some of that can and should be met by training or retraining existing Hawaii residents. But there will also need to be a large influx of construction workers from the mainland. Attracting them to Hawaii and housing them will be a huge challenge. Along with materials demand, this will likely drive up construction costs to some extent.

High inflation should be (mostly) behind us

Honolulu inflation plummeted from a peak of 7.5% in March 2022 to a 2% annual pace this May. While year-over-year numbers continue at about this level, recent months have seen a significant pick-up: inflation rose at a nearly 4% pace between March and September. Among the major culprits are housing costs, apparel, motor vehicles, and the "other goods and services" category, while falling energy prices are helping to offset the re-acceleration. More shelter inflation feed-through will keep overall inflation in the 3-3.5% range for much of next year, before a downward trend resumes. Inflation will average just under 3% in 2025 and 2.5% by 2027, not far from its long-run average. Excess demand for some goods and services associated with Maui rebuilding represent an upside risk. (Note that inflation data in Hawaii is available only for the Honolulu metropolitan area.)

It is hard to overstate the adverse effects of recent inflation on local purchasing power. Consumer prices jumped more than 11% between the

HONOLULU CONSUMER PRICES
Further inflation progress will be harder to achieve.



end of 2020 and the end of 2022. This imposed significant economic pain on local households, to a greater or lesser degree depending on the goods and services they buy the most. And the ending of federal support programs further undermined income last year, although excess savings built up during the pandemic have served as a support for spending. Pay raises in recent months have begun to reverse the decline in purchasing power, and as inflation moderates, this will further support real income gains. Inflation-adjusted real personal income rose back above its pre-pandemic level at the end of last year, and it will grow at a roughly 2% annual pace for the next three years.

Real gross domestic product, our broadest measure of economic activity, will slow below 2% next year, following this year's estimated 3.5% rise. Growth will pick up in 2025 as the drag from weaker external economies eases and Maui rebuilding kicks into gear.

Maui rebuilding is still Hawaii's biggest economic challenge

Four months down the road from the tragic Maui wildfires, prospects for the Island's recovery still loom large in any discussion of Hawaii's economic future. Early progress on the labor market and visitor industry fronts has been welcome. At the same time, they likely overestimate actual gains, in the first case because of outflows from the Island's labor force, and in the second from the continuing use of many hotel rooms to house displaced residents and recovery workers.

And the contours of Maui's recovery path remain largely speculative. The recent completion of EPA cleanup work marks an important milestone in recovery efforts, clearing the way for the Army Corp of Engineers to start, well, clearing the way for rebuilding. Work is underway among various interests to determine what that rebuilding will look like once the ground is prepared. But it remains largely unknown how long rebuilding will take. We continue to expect an extended period that will extend Maui rebuilding work well into the second half of this decade.

Maui rebuilding efforts will entail a significant expansion of the state's construction workforce and the supporting infrastructure of land use and permitting agencies, the special workgroups set up to expedite the process, public utility companies, and so forth. This may crowd out other important building projects, drive up construction costs, and impose ongoing stress on the existing Maui housing stock. It will also necessarily strain State and County budgets. But, all in all, the progress already made is an encouraging sign of the ongoing commitment of all players to rebuilding a Lahaina that

meets the needs of residents and becomes once again an important part of the Maui visitor experience. Public agencies and the Hawaii citizenry as a whole continue to demonstrate their willingness to support the community over this period, even if delays and incomplete information can be maddening at times. (See the box, "Uncertainties cloud Maui recovery prospects," above, for a discussion of the range of uncertainties facing Maui recovery in coming years.)

The rest of the state has largely avoided significant adverse impacts during the initial recovery period. In fact, tourism outside of Maui remains healthy, reflecting in part the resilience of the US economy in the face of the sharp interest rate increases that have been imposed to fight the once-in-forty-years inflation that arose during the pandemic and its aftermath. But those interest rate hikes are harming real estate and other interest-sensitive sectors here, as on the mainland. One confounding area of weakness is the Japanese visitor market, which has recovered at an exceptionally slow pace. This is not fully understood, apparently driven only in part by a weak yen and macroeconomic problems at home. We expect recovery of this market to continue, but in the meantime, this leaves Hawaii's visitor mix uncomfortably dependent on the US market.

And there remains considerable uncertainty about the path ahead for the US economy. As we noted, "so far so good" in moving toward the sought-after "soft landing," where the inflation fight relieves excess demand pressures without causing a damaging recession. Nevertheless, this represents the biggest downside risk for Hawaii over the next two years. US consumer spending, which has been the bulwark of growth, will lose impetus as excess pandemic-era savings are now gone or dwindling rapidly, real income growth has weakened, and financial strains are increasingly evident. And the lagged effects of high interest rates on business investment may not yet have been fully felt. A sharper drop in either consumer or investment outlays could lead to a self-reinforcing decline in spending and income that might all too easily result in a US recession. And this during a time when the global economy is also experiencing tepid growth.

For now, we can celebrate Hawaii's economic resilience, the progress and care that our community is providing our Maui neighbors, and the prospect of further strengthening of our essential tourism industry. But, as is often the case, potential macroeconomic problems beyond our shores could yet disrupt our ongoing expansion.

TABLE 1: MAJOR ECONOMIC INDICATORS
STATE OF HAWAII BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Nonfarm Payrolls (Thou)	587.0	618.0	634.3	641.2	648.4	654.7
% Change	4.8	5.3	2.6	1.1	1.1	1.0
Unemployment Rate (%)	6.0	3.5	3.1	2.5	2.3	2.3
Population (Thou)	1,447.2	1,440.2	1,435.5	1,433.4	1,433.5	1,435.2
% Change	-0.3	-0.5	-0.3	-0.1	0.0	0.1
Personal Income (Mil$)	89,014.5	88,970.2	93,486.4	98,365.1	103,281.7	107,998.7
% Change	7.6	-0.1	5.1	5.2	5.0	4.6
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Real Personal Income (Mil 2022$)	94,790.1	88,970.2	90,740.3	92,464.1	94,391.7	96,141.7
% Change	3.6	-6.1	2.0	1.9	2.1	1.9
Real Per Capita Income (Thou 2022$)	65.5	61.8	63.2	64.5	65.8	67.0
% Change	3.9	-5.7	2.3	2.0	2.1	1.7
Real GDP (Mil 2022$)	99,094.1	101,067.2	104,390.6	106,213.5	109,292.0	111,906.6
% Change	6.0	2.0	3.3	1.7	2.9	2.4
TOURISM SECTOR DETAIL						
Total Visitor Arrivals by Air (Thou)	6,777.8	9,234.0	9,597.0	9,588.1	10,126.6	10,453.5
% Change - Total Visitor Arrivals by Air	150.3	36.2	3.9	-0.1	5.6	3.2
U.S. Visitors	6,468.9	7,746.5	7,399.5	7,128.2	7,445.5	7,599.9
% Change - U.S. Visitors	225.5	19.8	-4.5	-3.7	4.5	2.1
Japanese Visitors	18.9	192.6	544.1	812.8	983.5	1,103.4
% Change - Japanese Visitors	-93.5	916.9	182.6	49.4	21.0	12.2
Other Visitors	289.9	1,294.9	1,631.3	1,647.0	1,697.6	1,750.2
% Change - Other Visitors	-32.9	346.6	26.0	1.0	3.1	3.1
Average Daily Census (Thou)	178.9	232.2	232.3	226.0	236.5	244.2
% Change	129.7	29.7	0.1	-2.7	4.6	3.3
Average Daily Room Rate ($)	315.8	370.2	377.6	376.3	379.8	392.0
% Change	51.6	17.2	2.0	-0.3	0.9	3.2
Occupancy Rate (%)	57.1	73.4	72.1	70.9	71.3	72.3
Real Visitor Expenditures (Mil 2022$)	13,978.7	19,653.6	20,102.6	19,102.7	19,295.1	19,453.7
% Change	150.4	40.6	2.3	-5.0	1.0	0.8

Note: Source is UHERO. Nonfarm Payrolls for 2022 and 2023 are UHERO estimates of the benchmark revision. Occupancy rate includes UHERO's estimate of TVR occupancy. Figures for 2023-2026 are forecasts.

TABLE 2: JOBS BY INDUSTRY
STATE OF HAWAII BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Nonfarm Payrolls (Thou)	587.0	618.0	634.3	641.2	648.4	654.7
% Change	4.8	5.3	2.6	1.1	1.1	1.0
Construction and Mining	37.1	37.2	37.3	38.7	40.5	41.5
% Change	0.8	0.2	0.2	3.8	4.7	2.5
Manufacturing	12.1	12.5	12.7	12.8	13.0	13.2
% Change	0.8	3.3	1.0	1.0	1.9	1.5
Trade	79.8	82.1	83.3	83.2	83.9	85.1
% Change	2.5	2.9	1.4	-0.1	0.9	1.4
Transportation and Utilities	29.7	32.8	34.4	34.4	35.0	35.6
% Change	7.9	10.5	5.0	0.1	1.7	1.6
Finance, Insurance and Real Estate	27.3	27.6	27.4	27.2	27.5	27.8
% Change	-0.3	1.3	-1.0	-0.4	1.0	1.0
Services	280.8	305.7	316.6	320.1	322.7	325.2
% Change	9.0	8.9	3.5	1.1	0.8	0.8
Health Care and Soc. Assistance	72.0	72.6	74.0	75.1	75.5	75.9
% Change	1.2	0.8	1.9	1.5	0.5	0.6
Accommodation and Food	85.5	100.7	104.9	106.5	108.3	109.8
% Change	22.8	17.7	4.2	1.5	1.7	1.4
Other	123.2	132.4	137.6	138.5	139.0	139.4
% Change	5.7	7.5	3.9	0.6	0.3	0.4
Government	120.3	120.1	122.9	124.7	125.6	126.3
% Change	-0.7	-0.2	2.3	1.5	0.7	0.5
Federal Government	34.7	34.7	35.0	35.0	35.1	35.1
% Change	-1.0	-0.2	0.9	0.2	0.1	0.1
State and Local Government	85.5	85.4	87.8	89.7	90.6	91.2
% Change	-0.6	-0.2	2.9	2.1	1.0	0.7

Note: Source is UHERO. Industry job counts for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023-2026 are forecasts.

TABLE 3: PERSONAL INCOME BY INDUSTRY
STATE OF HAWAII BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Real Personal Income (Mil 2022$)	94,790.1	88,970.2	90,740.3	92,464.1	94,391.7	96,141.7
% Change	3.6	-6.1	2.0	1.9	2.1	1.9
Labor & Proprietors' Income	62,220.7	61,457.2	62,829.2	64,247.4	65,839.1	67,147.8
% Change	4.7	-1.2	2.2	2.3	2.5	2.0
Construction	4,905.4	4,665.3	4,770.5	5,083.0	5,435.7	5,648.8
% Change	-3.1	-4.9	2.3	6.6	6.9	3.9
Manufacturing	972.8	988.1	1,025.4	1,044.9	1,076.6	1,105.7
% Change	-4.2	1.6	3.8	1.9	3.0	2.7
Trade	5,048.4	4,979.9	5,062.6	5,095.0	5,179.1	5,299.6
% Change	2.6	-1.4	1.7	0.6	1.7	2.3
Transportation and Utilities	3,245.2	3,519.4	3,648.7	3,686.8	3,802.6	3,912.4
% Change	3.5	8.4	3.7	1.0	3.1	2.9
Finance, Insurance & Real Estate	4,876.4	4,573.9	4,421.1	4,357.5	4,423.2	4,505.5
% Change	17.6	-6.2	-3.3	-1.4	1.5	1.9
Services	24,561.0	25,355.3	26,235.8	26,740.7	27,202.3	27,657.2
% Change	9.5	3.2	3.5	1.9	1.7	1.7
Health Care & Soc. Assist. (% ch.)	-0.6	-1.8	1.5	3.0	1.6	1.3
Accommodation & Food (% ch.)	43.1	8.3	6.4	2.1	3.2	3.2
Other (% ch.)	4.6	3.8	3.2	1.3	1.1	1.1
Government	18,117.2	17,029.9	17,293.5	17,858.9	18,332.7	18,629.5
% Change	-1.2	-6.0	1.5	3.3	2.7	1.6
Federal, civilian (% ch.)	0.0	-2.8	3.7	1.6	0.8	0.6
State & Local (% ch.)	-4.6	-7.4	-0.4	5.2	4.8	2.8
Less Social Security Taxes (-)	7,098.2	7,210.5	7,364.5	7,495.7	7,675.2	7,822.5
% Change	3.3	1.6	2.1	1.8	2.4	1.9
Transfer Payments	21,793.8	16,928.8	16,771.6	17,026.5	17,387.3	17,730.3
% Change	1.7	-22.3	-0.9	1.5	2.1	2.0
Dividends, Interest and Rent	17,873.8	17,794.8	18,504.3	18,686.6	18,841.5	19,086.9
% Change	2.1	-0.4	4.0	1.0	0.8	1.3
Population (Thou)	1,447.2	1,440.2	1,435.5	1,433.4	1,433.5	1,435.2
% Change	-0.3	-0.5	-0.3	-0.1	0.0	0.1
Real Per Capita Income (Thou 2022$)	65.5	61.8	63.2	64.5	65.8	67.0
% Change	3.9	-5.7	2.3	2.0	2.1	1.7
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Nominal Personal Income (Mil. $)	89,014.5	88,970.2	93,486.4	98,365.1	103,281.7	107,998.7
% Change	7.6	-0.1	5.1	5.2	5.0	4.6

Note: Source is UHERO. Figures for 2023-2026 are forecasts.

TABLE 4: CONSTRUCTION INDICATORS
STATE OF HAWAII BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
BUILDING PERMITS (Mil 2022$)						
Total Commitments to Build	6,137	7,122	7,982	9,656	9,565	9,097
% Change	-10.3	16.0	12.1	21.0	-0.9	-4.9
Real Private Building Permits	3,979	3,579	3,743	4,512	4,946	5,069
% Change	14.7	-10.0	4.6	20.5	9.6	2.5
Real Residential Building Permits	2,118	1,760	1,602	2,000	2,330	2,398
% Change	65.8	-16.9	-9.0	24.8	16.5	2.9
Real Non-Residential Building Permits	1,861	1,819	2,141	2,512	2,616	2,672
% Change	-15.1	-2.2	17.7	17.3	4.1	2.1
Real Government Contracts Awarded	2,159	3,543	4,238	5,144	4,620	4,027
% Change	-36.6	64.1	19.6	21.4	-10.2	-12.8
CONSTRUCTION ACTIVITY						
Real GE Contracting Tax Base (Mil 2022$)	10,748	10,797	11,907	13,950	14,851	14,720
% Change	-0.8	0.5	10.3	17.2	6.5	-0.9
Nominal GE Contracting Tax Base (Mil $)	10,122	10,797	12,184	14,851	16,431	16,850
% Change	4.2	6.7	12.9	21.9	10.6	2.6
Construction Job Count (Thou)	37.1	37.2	37.3	38.7	40.5	41.5
% Change	0.8	0.2	0.2	3.8	4.7	2.5
Real Construction Income (Mil 2022$)	4,905	4,665	4,771	5,083	5,436	5,649
% Change	-3.1	-4.9	2.3	6.6	6.9	3.9
PRICES & COSTS (HONOLULU)						
Honolulu Median Home Price (Thou $)	987.3	1105.9	1048.2	1065.8	1090.3	1114.4
% Change	20.0	12.0	-5.2	1.7	2.3	2.2
Honolulu Median Condominium Price (Thou $)	470.6	506.6	510.3	525.9	540.3	553.0
% Change	8.8	7.7	0.7	3.0	2.7	2.3
Honolulu Housing Affordability Index	81.7	57.3	54.1	55.8	60.1	62.9
% Change	-11.5	-29.8	-5.6	3.0	7.7	4.7
Honolulu Construction Cost Index (2022=100)	94.2	100.0	102.3	106.5	110.6	114.5
% Change	5.1	6.2	2.3	4.0	3.9	3.5
30-Year Mortgage Rate (%)	3.0	5.3	6.8	6.8	6.3	6.0

Note: Source is UHERO. Figures for 2023-2026 are forecasts. Commitments to Build are the sum of private permits and public contracts awarded. Figures for Total Commitments to Build and Real Government Contracts Awarded for 2021 and 2022 are UHERO estimates. Permits and tax base are deflated by Honolulu Construction Cost Index. Income is deflated by Honolulu CPI. Housing affordability index is the ratio of median family income to qualifying income for a loan for the median-priced home (times 100).

TABLE 5: MAJOR ECONOMIC INDICATOR SUMMARY
HONOLULU COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Non-farm Payrolls (Thou)	424.3	444.7	457.5	463.6	468.4	472.5
% Change	3.0	4.8	2.9	1.3	1.0	0.9
Unemployment Rate (%)	5.5	3.3	2.9	2.3	2.1	2.1
Population (Thou)	1,004.7	995.6	991.6	990.5	989.7	990.2
% Change	-0.8	-0.9	-0.4	-0.1	-0.1	0.1
Personal Income (Mil $)	64,493.2	64,653.0	67,811.5	71,519.0	75,033.0	78,413.1
% Change	5.7	0.2	4.9	5.5	4.9	4.5
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Real Personal Income (Mil 2022 $)	68,677.7	64,653.0	65,819.7	67,228.5	68,574.5	69,804.2
% Change	1.9	-5.9	1.8	2.1	2.0	1.8
Real Per Capita Income (Thou 2022 $)	68.4	64.9	66.4	67.9	69.3	70.5
% Change	2.6	-5.0	2.2	2.3	2.1	1.7
TOURISM SECTOR DETAIL						
Total Visitor Arrivals by Air (Thou)	3,326.6	4,858.2	5,618.3	5,724.7	5,844.9	5,956.8
% Change - Total Visitor Arrivals by Air	120.8	46.0	15.6	1.9	2.1	1.9
U.S. Visitors	3,142.0	3,833.6	3,932.9	3,745.6	3,656.0	3,606.9
% Change - U.S. Visitors	224.8	22.0	2.6	-4.8	-2.4	-1.3
Japanese Visitors	18.0	186.6	532.4	787.8	950.0	1,061.0
% Change - Japanese Visitors	-93.3	936.7	185.3	48.0	20.6	11.7
Other Visitors	166.6	837.9	1,138.0	1,191.2	1,238.9	1,289.0
% Change - Other Visitors	-38.2	403.0	35.8	4.7	4.0	4.0
Average Daily Census (Thou)	73.7	99.1	110.5	109.0	110.1	111.5
% Change	110.2	34.5	11.5	-1.3	1.0	1.3
Occupancy Rate (%)	54.9	75.2	78.4	77.3	77.8	78.5

Note: Source is UHERO. Nonfarm Payrolls for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023 - 2026 are forecasts.

TABLE 6: JOBS BY DETAILED SECTOR (THOUSANDS)
HONOLULU COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Non-farm Payrolls (Thou)	424.3	444.7	457.5	463.6	468.4	472.5
% Change	3.0	4.8	2.9	1.3	1.0	0.9
Construction and Mining	27.0	26.8	26.8	27.5	28.7	29.3
% Change	0.7	-0.9	-0.1	2.9	4.2	2.3
Manufacturing	9.2	9.2	9.3	9.5	9.7	9.9
% Change	-2.7	0.7	0.8	1.9	2.3	1.7
Trade	54.4	56.0	56.7	57.0	57.6	58.6
% Change	1.5	3.0	1.2	0.4	1.2	1.8
Transportation and Utilities	21.6	23.9	25.4	25.5	26.0	26.4
% Change	3.3	10.6	6.2	0.7	1.6	1.6
Finance, Insurance and Real Estate	21.2	21.1	20.9	20.8	21.0	21.2
% Change	-1.9	-0.4	-1.2	-0.3	0.9	0.9
Services	198.3	215.3	223.7	226.9	228.4	229.7
% Change	6.5	8.6	3.9	1.4	0.7	0.5
Health Care and Soc. Assistance	53.8	54.7	55.9	56.8	57.1	57.4
% Change	1.8	1.6	2.3	1.6	0.5	0.5
Accommodation and Food	50.3	59.8	62.7	64.5	65.4	66.2
% Change	16.7	18.9	4.9	2.8	1.5	1.1
Other	94.1	100.8	105.0	105.6	105.9	106.1
% Change	4.4	7.1	4.2	0.6	0.3	0.2
Government	92.6	92.3	94.8	96.4	97.0	97.4
% Change	-0.6	-0.3	2.7	1.7	0.7	0.4
Federal Government	32.0	31.9	32.1	32.2	32.2	32.2
% Change	-0.8	-0.4	0.9	0.1	0.0	0.1
State and Local Government	60.7	60.5	62.7	64.2	64.8	65.2
% Change	-0.5	-0.3	3.6	2.5	1.0	0.6

Note: Source is UHERO. Industry job counts for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023 - 2026 are forecasts.

TABLE 7: PERSONAL INCOME BY DETAILED SECTOR
HONOLULU COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Real Personal Income (Mil 2022 $)	68,677.7	64,653.0	65,819.7	67,228.5	68,574.5	69,804.2
% Change	1.9	-5.9	1.8	2.1	2.0	1.8
Labor & Proprietors' Income	47,063.4	46,305.7	47,450.9	48,657.0	49,726.3	50,610.1
% Change	2.8	-1.6	2.5	2.5	2.2	1.8
Construction	3,610.2	3,392.6	3,486.6	3,683.5	3,918.4	4,062.4
% Change	-4.1	-6.0	2.8	5.6	6.4	3.7
Manufacturing	763.2	753.9	776.6	796.9	824.4	847.4
% Change	-6.2	-1.2	3.0	2.6	3.4	2.8
Trade	3,498.2	3,453.2	3,492.2	3,533.2	3,607.6	3,696.5
% Change	2.1	-1.3	1.1	1.2	2.1	2.5
Transportation and Utilities	2,536.0	2,753.1	2,887.1	2,932.3	3,018.7	3,105.1
% Change	2.2	8.6	4.9	1.6	2.9	2.9
Finance, Insurance & Real Estate	3,582.7	3,328.4	3,212.8	3,187.8	3,244.1	3,307.8
% Change	12.6	-7.1	-3.5	-0.8	1.8	2.0
Services	17,703.2	18,178.3	18,866.8	19,307.1	19,542.2	19,806.8
% Change	6.5	2.7	3.8	2.3	1.2	1.4
Health Care & Soc. Assist. (% ch.)	-0.2	-1.7	1.9	3.2	1.5	1.2
Accommodation & Food (% ch.)	34.2	10.4	8.0	3.5	3.0	3.1
Other (% ch.)	3.9	2.8	3.4	1.5	0.4	0.8
Government	15,252.1	14,333.9	14,611.8	15,096.8	15,450.3	15,663.0
% Change	-0.6	-6.0	1.9	3.3	2.3	1.4
Federal, civilian (% ch.)	-0.1	-3.0	3.7	1.5	0.7	0.6
State & Local (% ch.)	-4.5	-7.6	0.0	6.0	4.6	2.5
Less Social Security Taxes (-)	5,407.4	5,445.8	5,554.9	5,666.5	5,801.2	5,914.3
% Change	2.6	0.7	2.0	2.0	2.4	2.0
Transfer Payments	14,338.4	11,225.3	11,092.8	11,243.3	11,491.0	11,727.9
% Change	2.5	-21.7	-1.2	1.4	2.2	2.1
Dividends, Interest and Rent	12,735.3	12,618.0	13,124.4	13,245.0	13,349.1	13,511.5
% Change	-2.1	-0.9	4.0	0.9	0.8	1.2
Population (Thou)	1,004.7	995.6	991.6	990.5	989.7	990.2
% Change	-0.8	-0.9	-0.4	-0.1	-0.1	0.1
Real Per Capita Income (Thou 2022 $)	68.4	64.9	66.4	67.9	69.3	70.5
% Change	2.6	-5.0	2.2	2.3	2.1	1.7
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Nominal Personal Income (Mil $)	64,493.2	64,653.0	67,811.5	71,519.0	75,033.0	78,413.1
% Change	5.7	0.2	4.9	5.5	4.9	4.5

Note: Source is UHERO. Figures for 2023 - 2026 are forecasts.

TABLE 8: MAJOR ECONOMIC INDICATOR SUMMARY
HAWAII COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Non-farm Payrolls (Thou)	64.9	68.3	70.2	71.3	72.0	72.8
% Change	6.7	5.2	2.9	1.5	1.1	1.2
Unemployment Rate (%)	5.9	3.9	2.8	2.2	2.4	2.2
Population (Thou)	203.8	206.3	207.0	207.9	208.6	209.3
% Change	1.5	1.2	0.3	0.4	0.4	0.3
Personal Income (Mil $)	10,308.7	10,207.7	10,816.1	11,375.5	11,956.3	12,534.9
% Change	12.8	-1.0	6.0	5.2	5.1	4.8
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Real Personal Income (Mil 2022 $)	10,977.6	10,207.7	10,498.4	10,693.1	10,927.2	11,158.7
% Change	8.7	-7.0	2.8	1.9	2.2	2.1
Real Per Capita Income (Thou 2022 $)	53.9	49.5	50.7	51.4	52.4	53.3
% Change	7.0	-8.2	2.5	1.4	1.8	1.8
TOURISM SECTOR DETAIL						
Total Visitor Arrivals by Air (Thou)	1,183.5	1,667.6	1,783.8	1,839.7	1,877.6	1,915.6
% Change - Total Visitor Arrivals by Air	139.7	40.9	7.0	3.1	2.1	2.0
U.S. Visitors	1,137.2	1,437.8	1,471.0	1,438.1	1,434.6	1,444.0
% Change - U.S. Visitors	199.9	26.4	2.3	-2.2	-0.2	0.7
Japanese Visitors	1.0	15.5	47.5	94.1	123.6	140.6
% Change - Japanese Visitors	-97.2	1,451.5	206.1	98.2	31.3	13.7
Other Visitors	45.3	214.4	267.6	307.5	319.4	331.0
% Change - Other Visitors	-42.8	373.2	24.9	14.9	3.9	3.6
Average Daily Census (Thou)	30.0	37.7	38.4	38.1	38.5	39.0
% Change	138.2	25.5	1.7	-0.5	0.8	1.5
Occupancy Rate (%)	60.8	74.1	68.3	69.0	69.5	70.6

Note: Source is UHERO. Nonfarm Payrolls for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023 - 2026 are forecasts.

TABLE 9: JOBS BY DETAILED SECTOR (THOUSANDS)
HAWAII COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Non-farm Payrolls (Thou)	64.9	68.3	70.2	71.3	72.0	72.8
% Change	6.7	5.2	2.9	1.5	1.1	1.2
Construction and Mining	3.7	3.7	3.8	3.9	4.0	4.0
% Change	2.1	0.9	1.1	2.3	3.1	0.4
Manufacturing	1.4	1.6	1.7	1.7	1.7	1.7
% Change	14.0	8.7	7.7	0.7	0.4	0.6
Trade	11.1	11.3	11.6	11.6	11.7	11.8
% Change	4.3	1.8	2.5	0.1	0.7	0.9
Transportation and Utilities	2.9	3.1	3.2	3.3	3.3	3.4
% Change	15.5	8.3	3.3	1.8	0.9	0.9
Finance, Insurance and Real Estate	2.4	2.5	2.5	2.5	2.5	2.6
% Change	2.1	5.5	0.3	-1.3	1.6	1.6
Services	29.4	31.8	33.1	33.7	34.1	34.6
% Change	11.9	8.1	3.9	2.0	1.0	1.4
Health Care and Soc. Assistance	7.5	7.4	7.5	7.6	7.6	7.7
% Change	0.1	-1.5	1.3	1.8	0.4	0.8
Accommodation and Food	10.8	12.5	13.2	13.6	13.8	14.2
% Change	30.5	15.8	5.4	3.0	2.0	2.3
Other	11.2	11.9	12.4	12.6	12.6	12.7
% Change	5.7	7.1	4.1	1.1	0.4	0.7
Government	14.0	14.2	14.4	14.6	14.7	14.9
% Change	-1.5	2.1	1.0	1.6	0.9	1.1
Federal Government	1.3	1.3	1.3	1.3	1.3	1.3
% Change	-6.1	1.7	2.1	0.7	0.4	0.4
State and Local Government	12.7	12.9	13.1	13.3	13.4	13.6
% Change	-1.0	2.1	0.9	1.6	1.0	1.2

Note: Source is UHERO. Industry job counts for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023 - 2026 are forecasts.

TABLE 10: PERSONAL INCOME BY DETAILED SECTOR
HAWAII COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Real Personal Income (Mil 2022 $)	10,977.6	10,207.7	10,498.4	10,693.1	10,927.2	11,158.7
% Change	8.7	-7.0	2.8	1.9	2.2	2.1
Labor & Proprietors' Income	5,932.3	5,851.2	5,993.4	6,147.0	6,342.8	6,516.5
% Change	8.6	-1.4	2.4	2.6	3.2	2.7
Construction	459.3	441.4	—	—	—	—
% Change	—	-3.9	—	—	—	—
Manufacturing	97.8	—	—	—	—	—
% Change	—	—	—	—	—	—
Trade	—	661.6	—	—	—	—
% Change	—	—	—	—	—	—
Transportation and Utilities	—	—	—	—	—	—
% Change	—	—	—	—	—	—
Finance, Insurance & Real Estate	405.1	388.5	—	—	—	—
% Change	28.5	-4.1	—	—	—	—
Services	—	—	—	—	—	—
% Change	—	—	—	—	—	—
Health Care & Soc. Assist. (% ch.)	—	-2.5	—	—	—	—
Accommodation & Food (% ch.)	—	—	—	—	—	—
Other (% ch.)	—	—	—	—	—	—
Government	1,429.0	1,355.0	1,435.7	1,483.6	1,508.5	1,525.9
% Change	-4.0	-5.2	6.0	3.3	1.7	1.2
Federal, civilian (% ch.)	-0.7	0.8	-1.0	1.7	1.3	1.3
State & Local (% ch.)	-4.7	-6.2	7.2	3.6	1.8	1.2
Less Social Security Taxes (-)	711.3	731.8	754.1	764.9	784.3	801.4
% Change	9.2	2.9	3.0	1.4	2.5	2.2
Transfer Payments	3,576.3	2,874.9	2,856.7	2,908.2	2,959.7	3,011.8
% Change	4.2	-19.6	-0.6	1.8	1.8	1.8
Dividends, Interest and Rent	2,149.6	2,183.1	2,277.3	2,308.9	2,330.7	2,368.9
% Change	17.7	1.6	4.3	1.4	0.9	1.6
Population (Thou)	203.8	206.3	207.0	207.9	208.6	209.3
% Change	1.5	1.2	0.3	0.4	0.4	0.3
Real Per Capita Income (Thou 2022 $)	53.9	49.5	50.7	51.4	52.4	53.3
% Change	7.0	-8.2	2.5	1.4	1.8	1.8
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Nominal Personal Income (Mil $)	10,308.7	10,207.7	10,816.1	11,375.5	11,956.3	12,534.9
% Change	12.8	-1.0	6.0	5.2	5.1	4.8

Note: Source is UHERO. Figures for 2023 - 2026 are forecasts. Because of data disclosure rules, industry-level income is not available for some sectors.

TABLE 11: MAJOR ECONOMIC INDICATOR SUMMARY
MAUI COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Non-farm Payrolls (Thou)	69.6	74.5	75.1	74.5	75.9	77.0
% Change	13.7	7.0	0.8	-0.8	2.0	1.4
Unemployment Rate (%)	7.8	3.8	4.5	4.4	3.7	3.1
Population (Thou)	164.9	164.4	163.0	161.2	161.2	161.4
% Change	0.0	-0.3	-0.8	-1.1	0.0	0.1
Personal Income (Mil $)	9,941.1	9,927.9	10,448.6	10,862.7	11,449.0	11,972.7
% Change	14.0	-0.1	5.2	4.0	5.4	4.6
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Real Personal Income (Mil 2022 $)	10,586.2	9,927.9	10,141.7	10,211.1	10,463.5	10,658.2
% Change	9.8	-6.2	2.2	0.7	2.5	1.9
Real Per Capita Income (Thou 2022 $)	64.2	60.4	62.2	63.4	64.9	66.0
% Change	9.8	-6.0	3.0	1.9	2.5	1.7
TOURISM SECTOR DETAIL						
Total Visitor Arrivals by Air (Thou)	2,340.9	2,969.4	2,441.0	2,205.9	2,644.1	2,904.1
% Change - Total Visitor Arrivals by Air	190.0	26.8	-17.8	-9.6	19.9	9.8
U.S. Visitors	2,239.4	2,559.2	2,045.7	1,843.7	2,223.2	2,426.4
% Change - U.S. Visitors	233.2	14.3	-20.1	-9.9	20.6	9.1
Japanese Visitors	0.8	5.7	10.8	12.3	16.5	20.4
% Change - Japanese Visitors	-90.6	636.4	89.0	13.5	34.7	23.4
Other Visitors	100.7	404.5	387.3	349.9	404.5	457.3
% Change - Other Visitors	-20.7	301.5	-4.2	-9.7	15.6	13.1
Average Daily Census (Thou)	56.0	66.8	54.0	48.9	58.6	64.2
% Change	164.4	19.2	-19.2	-9.3	19.8	9.5
Occupancy Rate (%)	59.9	67.4	62.2	58.7	60.9	63.0

Note: Source is UHERO. Nonfarm Payrolls for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023 - 2026 are forecasts.

TABLE 12: JOBS BY DETAILED SECTOR (THOUSANDS)
MAUI COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Non-farm Payrolls (Thou)	69.6	74.5	75.1	74.5	75.9	77.0
% Change	13.7	7.0	0.8	-0.8	2.0	1.4
Construction and Mining	4.3	4.6	4.6	5.1	5.6	6.0
% Change	-2.5	6.7	0.6	11.5	9.7	5.8
Manufacturing	1.1	1.2	1.2	1.1	1.1	1.1
% Change	13.1	12.0	-3.4	-5.2	1.9	1.2
Trade	10.3	10.5	10.6	10.3	10.3	10.3
% Change	5.7	1.9	1.0	-3.2	0.0	0.2
Transportation and Utilities	3.7	4.1	4.1	3.9	4.0	4.1
% Change	26.6	11.4	0.1	-5.3	2.9	2.3
Finance, Insurance and Real Estate	2.7	2.9	2.9	2.8	2.9	2.9
% Change	11.8	7.4	-0.8	-0.5	1.1	1.1
Services	38.9	42.6	43.0	42.5	43.2	43.7
% Change	21.3	9.5	1.0	-1.3	1.6	1.2
Health Care and Soc. Assistance	7.9	8.0	8.0	8.1	8.1	8.2
% Change	-0.9	0.6	0.9	0.8	0.6	0.4
Accommodation and Food	18.1	20.4	20.6	19.8	20.3	20.6
% Change	38.9	12.6	1.0	-3.7	2.4	1.6
Other	12.9	14.2	14.4	14.5	14.7	14.9
% Change	16.5	10.5	1.2	1.0	1.2	1.1
Government	8.7	8.6	8.7	8.7	8.8	8.9
% Change	-0.8	-0.7	0.7	0.5	1.1	0.6
Federal Government	0.9	0.9	0.9	0.9	0.9	0.9
% Change	0.0	3.7	-0.3	0.8	0.6	0.5
State and Local Government	7.8	7.7	7.8	7.8	7.9	8.0
% Change	-0.8	-1.2	0.9	0.5	1.2	0.7

Note: Source is UHERO. Industry job counts for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023 - 2026 are forecasts.

TABLE 13: PERSONAL INCOME BY DETAILED SECTOR
MAUI COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Real Personal Income (Mil 2022 $)	10,586.2	9,927.9	10,141.7	10,211.1	10,463.5	10,658.2
% Change	9.8	-6.2	2.2	0.7	2.5	1.9
Labor & Proprietors' Income	6,595.4	6,628.4	6,649.0	6,650.6	6,901.2	7,082.0
% Change	15.8	0.5	0.3	0.0	3.8	2.6
Construction	557.3	565.9	577.3	631.0	683.1	718.7
% Change	-7.1	1.6	2.0	9.3	8.3	5.2
Manufacturing	86.1	91.1	91.4	86.9	90.2	92.5
% Change	5.8	5.8	0.4	-4.9	3.7	2.6
Trade	627.8	618.9	654.0	632.9	644.8	655.9
% Change	5.8	-1.4	5.7	-3.2	1.9	1.7
Transportation and Utilities	314.7	341.0	354.5	338.2	353.1	365.6
% Change	12.1	8.3	4.0	-4.6	4.4	3.5
Finance, Insurance & Real Estate	640.3	614.0	616.6	618.1	624.1	629.7
% Change	37.1	-4.1	0.4	0.3	1.0	0.9
Services	3,439.2	3,520.9	3,640.2	3,630.7	3,743.8	3,830.5
% Change	26.2	2.4	3.4	-0.3	3.1	2.3
Health Care & Soc. Assist. (% ch.)	-0.5	-1.8	3.1	1.9	1.8	1.4
Accommodation & Food (% ch.)	65.0	2.1	4.5	-3.3	4.5	3.1
Other (% ch.)	17.5	4.9	2.3	2.0	2.3	2.0
Government	892.0	840.8	886.2	906.5	923.4	930.2
% Change	-4.7	-5.7	5.4	2.3	1.9	0.7
Federal, civilian (% ch.)	0.3	0.3	-1.4	1.9	1.6	1.5
State & Local (% ch.)	-5.7	-6.6	6.8	2.4	2.0	0.6
Less Social Security Taxes (-)	675.2	709.1	723.3	730.2	747.9	757.7
% Change	2.7	5.0	2.0	1.0	2.4	1.3
Transfer Payments	2,521.2	1,855.0	1,857.6	1,894.9	1,937.2	1,972.9
% Change	-6.8	-26.4	0.1	2.0	2.2	1.8
Dividends, Interest and Rent	2,114.2	2,122.8	2,202.3	2,223.3	2,244.3	2,276.1
% Change	13.6	0.4	3.7	1.0	0.9	1.4
Population (Thou)	164.9	164.4	163.0	161.2	161.2	161.4
% Change	0.0	-0.3	-0.8	-1.1	0.0	0.1
Real Per Capita Income (Thou 2022 $)	64.2	60.4	62.2	63.4	64.9	66.0
% Change	9.8	-6.0	3.0	1.9	2.5	1.7
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Nominal Personal Income (Mil $)	9,941.1	9,927.9	10,448.6	10,862.7	11,449.0	11,972.7
% Change	14.0	-0.1	5.2	4.0	5.4	4.6

Note: Source is UHERO. Figures for 2023 - 2026 are forecasts.

TABLE 14: MAJOR ECONOMIC INDICATOR SUMMARY
KAUAI COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Non-farm Payrolls (Thou)	28.2	30.6	31.5	31.8	32.0	32.4
% Change	7.1	8.5	2.9	1.0	0.7	1.0
Unemployment Rate (%)	8.3	3.9	2.6	2.3	2.5	2.5
Population (Thou)	73.8	73.8	73.8	73.9	74.0	74.2
% Change	0.8	0.0	0.0	0.1	0.2	0.2
Personal Income (Mil $)	4,204.9	4,184.8	4,410.1	4,607.9	4,843.3	5,078.0
% Change	8.4	-0.5	5.4	4.5	5.1	4.8
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Real Personal Income (Mil 2022 $)	4,477.7	4,184.8	4,280.6	4,331.4	4,426.4	4,520.5
% Change	4.4	-6.5	2.3	1.2	2.2	2.1
Real Per Capita Income (Thou 2022 $)	60.7	56.7	58.0	58.6	59.8	60.9
% Change	3.6	-6.6	2.3	1.1	2.0	1.9
TOURISM SECTOR DETAIL						
Total Visitor Arrivals by Air (Thou)	813.6	1,345.6	1,433.4	1,470.1	1,450.7	1,469.4
% Change - Total Visitor Arrivals by Air	146.4	65.4	6.5	2.6	-1.3	1.3
U.S. Visitors	785.1	1,207.3	1,265.1	1,286.2	1,258.2	1,268.2
% Change - U.S. Visitors	179.9	53.8	4.8	1.7	-2.2	0.8
Japanese Visitors	0.4	3.0	5.6	8.8	13.0	15.8
% Change - Japanese Visitors	-90.0	719.3	90.5	56.9	47.6	20.8
Other Visitors	28.2	135.3	165.4	175.0	179.4	185.4
% Change - Other Visitors	-38.9	379.6	22.3	5.8	2.5	3.3
Average Daily Census (Thou)	19.2	28.6	29.3	29.9	29.3	29.5
% Change	145.2	49.0	2.6	1.9	-2.1	0.6
Occupancy Rate (%)	57.0	77.3	75.4	76.7	75.8	76.3

Note: Source is UHERO. Nonfarm Payrolls for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023 - 2026 are forecasts.

TABLE 15: JOBS BY DETAILED SECTOR (THOUSANDS)
KAUAI COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Non-farm Payrolls (Thou)	28.2	30.6	31.5	31.8	32.0	32.4
% Change	7.1	8.5	2.9	1.0	0.7	1.0
Construction and Mining	2.1	2.1	2.1	2.2	2.2	2.2
% Change	7.2	-0.6	2.1	1.9	2.7	0.3
Manufacturing	0.5	0.6	0.5	0.5	0.5	0.5
% Change	12.0	17.8	-5.0	0.7	0.3	0.6
Trade	4.1	4.3	4.4	4.4	4.4	4.4
% Change	4.4	4.9	1.7	0.0	0.2	0.6
Transportation and Utilities	1.4	1.6	1.7	1.7	1.7	1.7
% Change	27.1	12.3	2.6	1.5	0.7	0.8
Finance, Insurance and Real Estate	1.0	1.1	1.1	1.1	1.1	1.1
% Change	-0.9	11.8	0.5	-0.3	1.4	1.5
Services	14.2	16.1	16.8	17.0	17.1	17.3
% Change	9.8	13.3	4.3	1.2	0.5	1.2
Health Care and Soc. Assistance	2.8	2.6	2.6	2.6	2.6	2.7
% Change	-1.2	-6.8	-0.8	1.5	0.7	0.9
Accommodation and Food	6.3	8.0	8.4	8.6	8.7	8.8
% Change	20.2	26.9	5.8	1.9	1.0	1.9
Other	5.1	5.5	5.7	5.7	5.7	5.8
% Change	5.0	7.6	4.7	0.1	-0.2	0.4
Government	5.0	4.9	5.0	5.0	5.0	5.1
% Change	-0.5	-2.5	2.0	1.1	0.6	0.7
Federal Government	0.6	0.6	0.6	0.6	0.6	0.6
% Change	-1.4	-1.2	3.1	0.9	0.6	0.7
State and Local Government	4.4	4.3	4.3	4.4	4.4	4.5
% Change	-0.4	-2.7	1.9	1.1	0.6	0.7

Note: Source is UHERO. Industry job counts for 2022 and 2023 are UHERO estimates of the benchmark revision. Figures for 2023 - 2026 are forecasts.

TABLE 16: PERSONAL INCOME BY DETAILED SECTOR
KAUAI COUNTY BASELINE FORECAST

	2021	2022	2023	2024	2025	2026
Real Personal Income (Mil 2022 $)	4,477.7	4,184.8	4,280.6	4,331.4	4,426.4	4,520.5
% Change	4.4	-6.5	2.3	1.2	2.2	2.1
Labor & Proprietors' Income	2,647.5	2,674.1	2,735.9	2,792.8	2,868.7	2,939.2
% Change	6.9	1.0	2.3	2.1	2.7	2.5
Construction	277.1	263.8	—	—	—	—
% Change	—	-4.8	—	—	—	—
Manufacturing	—	—	—	—	—	—
% Change	—	—	—	—	—	—
Trade	—	246.9	—	—	—	—
% Change	—	—	—	—	—	—
Transportation and Utilities	45.1	—	—	—	—	—
% Change	—	—	—	—	—	—
Finance, Insurance & Real Estate	247.4	240.0	—	—	—	—
% Change	36.4	-3.0	—	—	—	—
Services	—	—	—	—	—	—
% Change	—	—	—	—	—	—
Health Care & Soc. Assist. (% ch.)	—	-3.0	—	—	—	—
Accommodation & Food (% ch.)	—	—	—	—	—	—
Other (% ch.)	—	—	—	—	—	—
Government	535.6	497.3	523.3	537.9	545.1	549.5
% Change	-3.6	-7.1	5.2	2.8	1.3	0.8
Federal, civilian (% ch.)	3.6	-2.0	-0.9	2.0	1.6	1.6
State & Local (% ch.)	-5.4	-8.3	6.9	3.0	1.3	0.7
Less Social Security Taxes (-)	306.7	324.4	332.2	334.1	341.9	349.2
% Change	6.6	5.8	2.4	0.6	2.3	2.1
Transfer Payments	1,274.0	972.9	964.5	980.1	999.4	1,017.6
% Change	-2.5	-23.6	-0.9	1.6	2.0	1.8
Dividends, Interest and Rent	872.0	873.0	900.4	909.5	917.4	930.4
% Change	8.9	0.1	3.1	1.0	0.9	1.4
Population (Thou)	73.8	73.8	73.8	73.9	74.0	74.2
% Change	0.8	0.0	0.0	0.1	0.2	0.2
Real Per Capita Income (Thou 2022 $)	60.7	56.7	58.0	58.6	59.8	60.9
% Change	3.6	-6.6	2.3	1.1	2.0	1.9
Inflation Rate, Honolulu MSA (%)	3.8	6.5	3.0	3.3	2.9	2.7
Nominal Personal Income (Mil $)	4,204.9	4,184.8	4,410.1	4,607.9	4,843.3	5,078.0
% Change	8.4	-0.5	5.4	4.5	5.1	4.8

Note: Source is UHERO. Figures for 2023 - 2026 are forecasts. Because of data disclosure rules, industry-level income is not available for some sectors.

TABLE 17: EXTERNAL INDICATORS
STATE OF HAWAII FORECAST

	2021	2022	2023	2024	2025	2026
U.S. FACTORS						
Employment (Thou)	152,580.7	158,291.1	161,075.5	161,280.4	161,983.8	163,261.0
% Change	3.2	3.7	1.8	0.1	0.4	0.8
Unemployment Rate (%)	5.4	3.7	3.6	4.3	4.5	4.1
Inflation Rate (%)	4.7	8.0	4.2	3.3	2.6	2.4
Real GDP (Bil chained 2012$)	21,407.7	21,822.0	22,304.6	22,556.9	22,901.8	23,363.2
% Change	5.8	1.9	2.2	1.1	1.5	2.0
Population (Thou)	332,351.0	333,595.0	335,204.1	336,641.3	337,988.1	339,302.4
% Change	0.2	0.4	0.5	0.4	0.4	0.4
JAPAN FACTORS						
Employment (Thou)	66,665.8	67,225.8	67,328.4	67,104.5	66,834.5	66,468.4
% Change	-0.2	0.8	0.2	-0.3	-0.4	-0.5
Unemployment Rate (%)	2.8	2.6	2.6	2.7	2.5	2.3
Inflation Rate (%)	-0.2	2.5	3.2	2.3	1.7	1.2
Real GDP (Bil chained 2011 yen)	540,495.4	546,022.4	552,927.5	555,977.6	559,548.2	562,232.1
% Change	2.2	1.0	1.3	0.6	0.6	0.5
Population (Thou)	125,681.6	125,125.0	124,505.6	123,842.4	123,171.8	122,494.9
% Change	-0.5	-0.4	-0.5	-0.5	-0.5	-0.6
Exchange Rate (Yen/$)	109.8	131.5	140.6	144.6	135.8	126.8

Note: Source is UHERO. Figures for 2023-2026 are forecasts.

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