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

UHERO STATE FORECAST UPDATE, PUBLIC EDITION

SLOWING ONGOING, DESPITE ARRIVALS BOOM

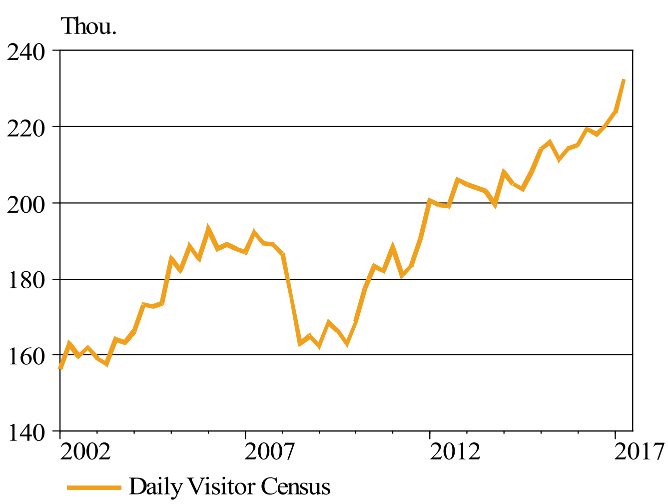
SEPTEMBER 29, 2017

Hawaii's growth continues to slow, even as visitor arrivals chalk up new records.

The Hawaii economy is decelerating. Job growth this year will come in at less than 1%, down from nearly 2% just two years ago, the consequence of a flattening construction path and the natural effects of tightening labor markets. Despite surprisingly persistent gains, even the robust tourism industry will move to a lower growth trend as capacity constraints exert themselves. Overall, growth in the number of jobs will downshift to about a half-percent per year by the end of the decade.

VISITORS GALORE

Tourism continues to exceed expectations. The visitor industry had very strong spring and summer seasons, and for the first seven months of the year arrivals rose more than 4% compared with the same period in 2016. Since early 2012, hotels have been operating at consistently high occupancy rates, and the average daily census has surpassed pre-recession levels. Despite this, visitor volumes have continued



THE STATE IS HOSTING FAR MORE TOURISTS THAN EVER BEFORE.

to expand by nearly 3% per year. At this point, the state is hosting far more tourists than ever before; this year the number of visitors is running 20% higher than a decade ago.

With hotels and timeshares operating near full capacity, it is clear that transient vacation rentals (TVRs) are facilitating at least some of the recent visitor growth. Increasingly tourists report that they are staying in private homes rather than traditional accommodations. And the rise of homesharing services like Airbnb and VRBO has certainly expanded the state's visitor plant, even if it is hard to come up with a precise figure. The benefits and costs of TVRs and how best to regulate them remain hot button issues in Hawaii. We will have more to say about this in our fourth quarter Annual Hawaii Forecast.

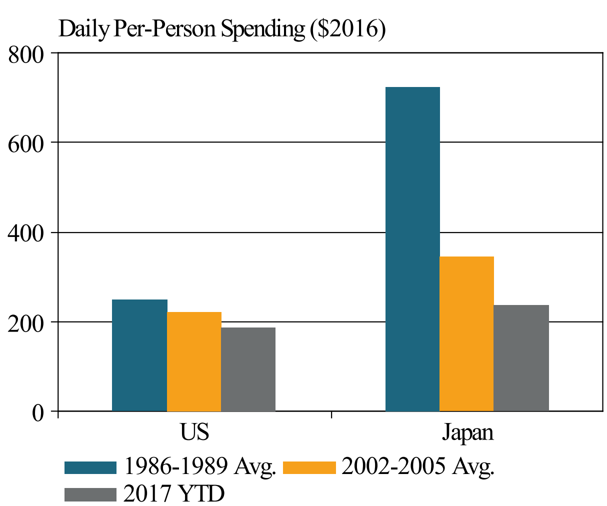
Visitor spending has grown at a rapid clip this year, rising 6% in real (inflation-adjusted) terms. In part, this simply mirrors the higher visitor census, but for the first time since 2012 we are also seeing a significant rise in daily per-person spending. (This is almost entirely due to higher lodging costs.) However, this year is an aberration. Despite recent gains, real daily spending has been on a decline for more than three decades, and total real visitor spending remains below the peak achieved in the late 1980s.

Still, this year's record-breaking number of visitors and their healthy spending are welcome news to many in the industry. The gains have been uneven across markets. The US market continues to be the primary contributor to visitor growth, as it has been for the past several years. Japanese arrivals have surged with the introduction of a new direct route from Tokyo to Kona as well as expanded service to

Honolulu. Canadian arrivals are finally rebounding after several years of decline, supported by some strengthening of the Canadian dollar and higher oil prices. Other international markets have softened. Chinese arrivals are down 10%, visitors from Australia have slipped 3%, and Korean arrivals are flat.

Announced flight schedules by major airlines demonstrate their confidence in continued tourism strength as we head into the fall. During the September to November period, the number of scheduled seats to Hawaii is up about 4% over last year, with increases on both domestic and international routes. The Big Island and Kauai are seeing a surge in direct flights, which will boost lift to both counties by about 20%. Scheduled seats to Oahu and Maui will rise 2% compared with last fall.

Given a favorable external environment and considering recent strength, we anticipate a continuing healthy performance for Hawaii tourism. We do expect capacity constraints to begin to bite harder, despite the recent upside surprises, slowing arrivals growth from about 4% this year to 1.5% growth in 2018 and below 1% by 2020. The evolution of the industry beyond the next few years will depend on whether the large resort projects that have been floated move forward, particularly at Ko Olina and Turtle Bay on Oahu, as well as the uncertain prospects for TVRs.



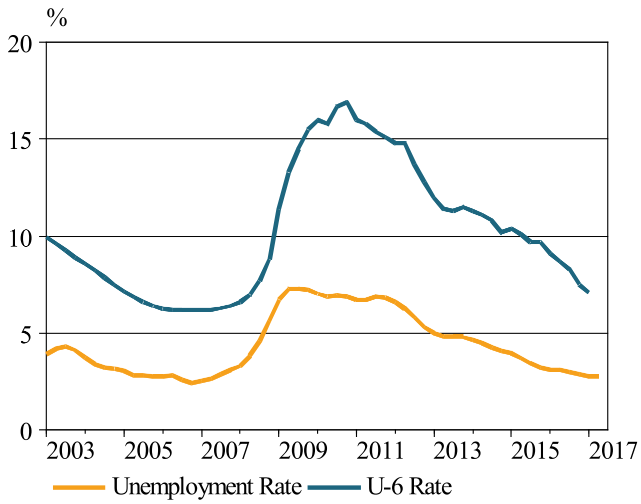
REAL DAILY SPENDING HAS DECLINED FOR MORE THAN THREE DECADES.

JOBS, ANYONE?

As we described last quarter, the Hawaii labor market is now operating near levels that are typical for Hawaii during periods of strong expansion. Through July, the unemployment rate has averaged 2.7% this year, on par with levels experienced during the 2005-2007 period. Perhaps more importantly, the broad U-6 rate, which includes individuals who have given up looking for work or who are working part-time but would like full-time jobs, is also returning to normal levels. The problem of discouraged and part-time workers has been a persistent legacy of the painful 2008-2009 recession. Now that recovery is complete, net job creation has become more incremental; through the first half of the year payrolls are up just 1%, a net change of 6,500 jobs.

Even with aggregate slowing, there are several industries that are still hiring at a healthy clip. The accommodation and food service sector continues to add workers, accounting for nearly two-thirds of all new jobs this year, not surprising for an industry that is firing on all cylinders. The transportation sector has seen a boost in jobs linked to expanded air lift, especially on the Big Island. Hiring in the healthcare sector has cooled slightly, but the industry still added more than 1,000 jobs in the first half of the year. Industries that have seen weaker job growth this year include the public sector and our broad "other service" sector, which includes a range of activities from private education to accounting. (Job figures are UHERO estimates of the future benchmark revision and differ from the current unrevised government statistics.)

Construction is now past the peak of this building cycle. The industry added 6,000 jobs between mid-2014 and mid-2016, accounting for roughly one-third of all new jobs during



LABOR MARKET CONDITIONS REFLECT THE STRENGTH OF THE EXPANSION.

this period. Since then, a number of significant condo and retail projects have wrapped up, while fewer new buildings have broken ground, resulting in an overall reduction in construction activity and jobs. So far this year, employment in the industry is down more than 4%, a net loss of 1,600 jobs. Still, there are enough projects in the pipeline to maintain the current level of building activity for several more years. This will mean a much more gradual industry slowing than Hawaii experienced during the past two boom-bust cycles. For an in-depth look at the construction sector, see our forecast, *Construction Easing, But More in the Pipeline,* released last week.

Labor income gains have been anemic at best this year. Preliminary figures for the first quarter point to a meager 0.2% gain in real (inflation-adjusted) terms. Interestingly, the sectoral pattern of income growth differs somewhat from what we would expect based on our job estimates. We are seeing weakness in income numbers for healthcare, construction, and military, which largely offset strength across the rest of the service sector.

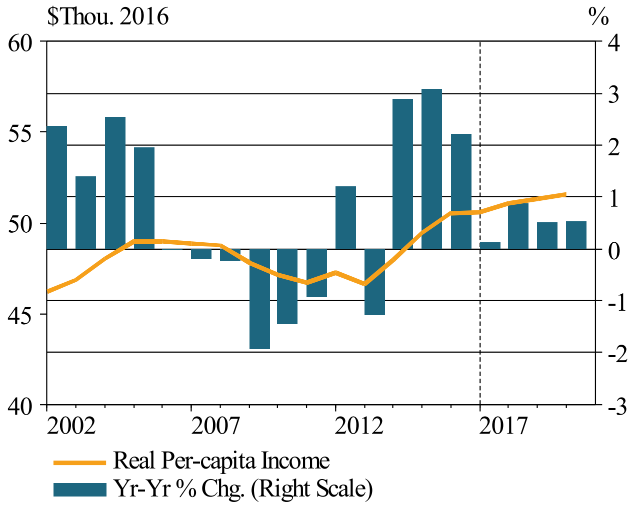
With the state growing along its long-term trend path and construction past its peak, further gains in employment and income will be modest. The robust conditions in tourism will drive moderate hiring in the accommodation and food services industry a bit longer before slowing occurs. The healthcare industry will continue to expand by roughly 1-1.5% annually, although policy developments could disrupt this. Construction employment will hover near its current level through the end of the decade, while budget pressures will continue to weigh on the public sector. Overall job growth will come in below 1% this year and slow to about half a percent by the end of the decade. Personal income will expand at a 1.3% pace, generating a further modest gain in real per-capita income.

IT'S PRICIER OUT THERE

Price pressures in Honolulu are slowly building. Inflation for the first half of 2017 came in at 2.5%, largely the result of a 4.2% surge in shelter costs, the fastest pace of housing cost appreciation since 2007. Median single-family home prices on Oahu were up less than 3% in the year through August, but they have risen 30% since 2011, and this is affecting shelter costs for homeowners and renters. Energy prices are recovering after several years of rapid decline. Through August, regular gasoline on Oahu averaged $2.92 per gallon, almost 50 cents higher than the same period last year.

As energy prices firm and home prices continue to appreciate, we expect a further modest pickup in inflationary pressure. After a 2.8% rise this year, inflation will move to just over 3% in 2018 and 2019, before easing near the end of the decade. Rates of price inflation in this cycle will remain moderate compared with the mid to late 2000s, when robust housing demand drove inflation to the 4-6% range.

State tax collections have been volatile, despite Hawaii's steady economic expansion. Following a surge in collections in 2016, general fund revenues edged up only 2.2% in the 2017 fiscal year, well short of projections. Citing lagging tax collections and uncertain federal funding, Governor Ige ordered 10% budget cuts to State discretionary spending.



FURTHER GAINS IN EMPLOYMENT AND INCOME WILL BE MODEST.

This fiscal year has started off with another upswing in collections, although in part this reflects comparison to a weak period in the previous year. The Council on Revenues recently increased to 4.3% its growth forecast for the current fiscal year, while lowering slightly their forecast for the 2020-2024 period. Further out, the State faces substantial long-term budget challenges related to the unfunded liabilities for public worker healthcare and pension benefits.

SLOW AND STEADY, MAYBE

The Hawaii economy continues to perform well. As expected, the pace of growth has eased, now that the long recovery from the 2008-2009 recession is complete. With unemployment low, further job gains must fall in line with the natural growth of the local labor force. Even tourism, which has added visitors far longer than we had expected, faces capacity limits. Near-term additions to the room stock will be small, and the use of transient vacation rentals cannot grow at this pace forever. The growth impetus from construction has also ended, even if the level of activity will remain high for some time.

Where could our forecast go wrong? On the downside, we are clearly living in precarious political and geopolitical times. A policy mistake could quickly damage confidence or the willingness to travel. This could cause a pullback in construction, as well. On the upside, the longevity of the visitor boom reminds us that strength can be surprisingly enduring, particularly when there are fundamental changes taking place in the way that an industry operates. We could be surprised again.

HAWAII ECONOMIC INDICATORS
YEAR-OVER-YEAR PERCENT CHANGE

	2015	2016	2017	2018	2019	2020
Visitor Arrivals	4.5	3.1	4.1	1.5	1.1	0.8
U.S. Visitor Arrivals	6.9	4.1	4.4	1.4	1.1	0.8
Japan Visitor Arrivals	-1.9	0.4	7.1	2.3	1.5	0.4
Other Visitor Arrivals	3.1	2.6	0.5	0.9	0.9	1.1
Non-farm Payrolls	1.8	1.6	0.9	0.7	0.6	0.6
Unemployment Rate (%)	3.6	3.0	2.7	2.8	2.9	3.3
Inflation Rate, Honolulu MSA (%)	1.0	2.0	2.8	3.2	3.1	2.6
Real Personal Income	3.7	2.4	0.8	1.3	1.3	1.3
Real GDP	3.9	2.1	0.6	1.3	1.1	1.4

Note: Source is UHERO. Non-farm Payrolls for 2016 are UHERO estimates of the benchmark revision. Figures for 2017 are UHERO estimates. Figures for 2018-2020 are forecasts.

[THIS PAGE INTENTIONALLY LEFT BLANK]

UHERO
THE ECONOMIC RESEARCH ORGANIZATION
AT THE UNIVERSITY OF HAWAIʻI

UHERO THANKS THE FOLLOWING SPONSORS:

KAWEKIʻU - THE TOPMOST SUMMIT

Hawaii Business Roundtable

KILOHANA - A LOOKOUT, HIGH POINT

American Savings Bank
DR Horton
First Hawaiian Bank
Hawaiian Airlines
Hawaiʻi Electric Light Company, Ltd.
Hawaiian Electric Company, Inc.
Matson Company
Maui Electric Company, Ltd.
The Nature Conservancy

KUAHIWI - A HIGH HILL, MOUNTAIN

Bank of Hawaiʻi
Better Homes and Gardens Real Estate Advantage Realty
Central Pacific Bank
First Insurance Company of Hawaii, Ltd.
HGEA
The Howard Hughes Corporation
Kaiser Permanente Hawaiʻi
Kamehameha Schools
The Natural Energy Laboratory of Hawaii Authority
The Pacific Resource Partnership
Servco Pacific, Inc.
Stanford Carr Development
Young Brothers, Limited

Kulia I Ka Nuʻu (literally “Strive for the summit”) is the value of achievement, those who pursue personal excellence. This was the motto of Hawaiʻi’s Queen Kapiʻolani. Sponsors help UHERO to continually reach for excellence as the premier organization dedicated to economic research relevant to Hawaiʻi and the Asia Pacific region.

The UHERO Forecast Project is a community-sponsored research program of the University of Hawaiʻi at Mānoa. The Forecast Project provides the Hawaiʻi community with analysis on economic, demographic, and business trends in the State and the Asia-Pacific region.

All sponsors receive the full schedule of UHERO reports, as well as other benefits that vary with the level of financial commitment.

For sponsorship information, browse to http://www.uhero.hawaii.edu.