Hawaii Economic Outlook

Eugene Tian

Department of Business, Economic Development & Tourism

To the Senate Committee on Ways and Means January 2, 2024

December 2023 world economic growth projections

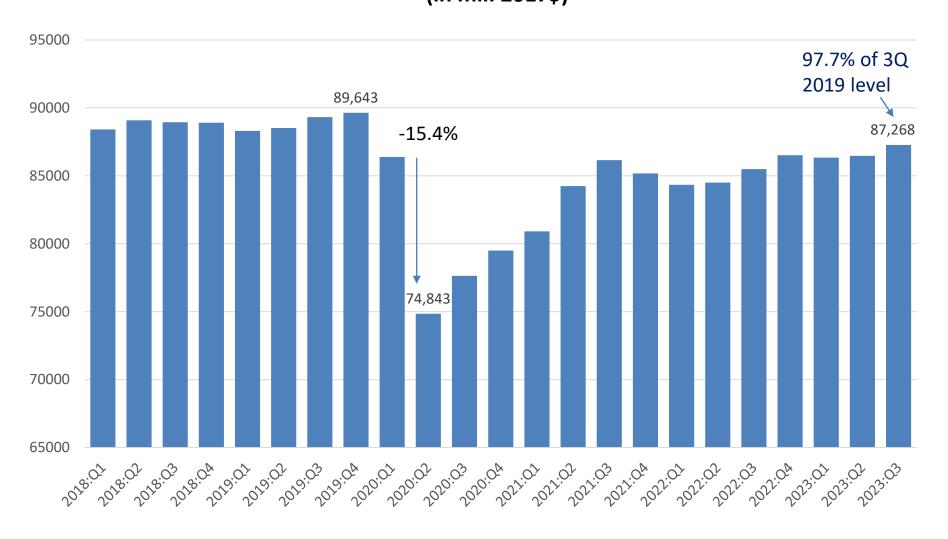
Economy	2019	2020	2021	2022	2023	2024
USA	2.3	-3.4	5.7	1.9	2.4	1.2
Canada	1.9	-5.1	5.0	3.4	1.1	0.7
Japan	-0.2	-4.7	2.3	1.0	1.7	0.9
S. Korea	2.2	-0.7	4.3	2.6	1.3	2.1
Hong Kong	-1.7	-6.5	6.4	-3.5	3.4	2.8
Taiwan	3.1	3.4	6.5	2.4	1.0	2.9
China	6.0	2.2	8.5	3.0	5.2	4.5
United Kingdom	1.7	-11.0	8.7	4.3	0.5	0.3
Germany	1.1	-4.1	3.1	1.9	-0.2	0.3
France	1.8	-7.9	6.4	2.5	0.8	0.6
Euro area	1.6	-6.3	5.9	3.4	0.5	0.5
Australia	2.0	-1.8	5.2	3.7	1.8	1.5
Brazil	1.2	-3.3	5.0	2.9	2.9	1.6

Source: Blue Chip Economic Indicators, December 10, 2023

DBEDT December 2023 economic forecast

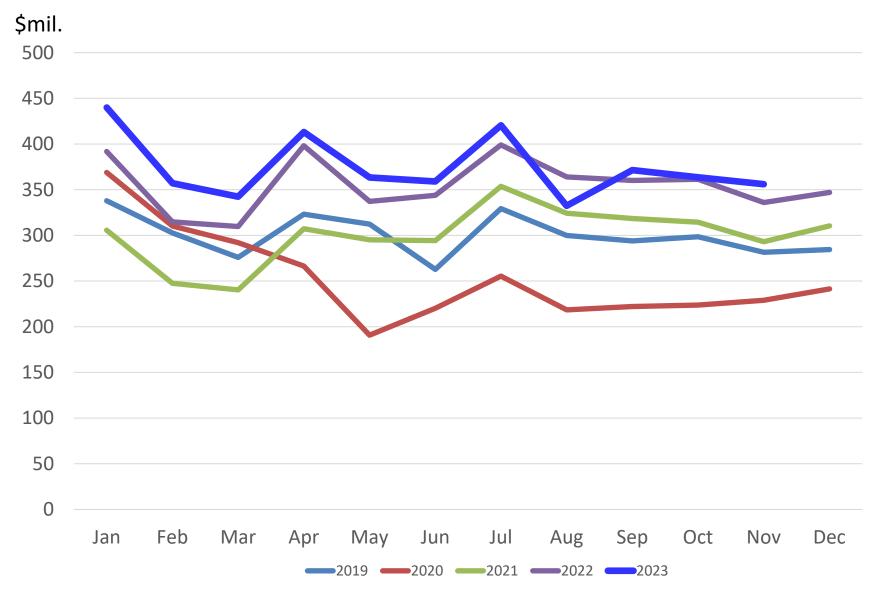
Economic Indicators	2019	2020	2021	2022	2023	2024	2025
		Act	ual			Forecast	t
Total population (1,000)	1,457	1,451	1,447	1,439	1,435	1,436	1,437
Visitor arrivals (million)	10.4	2.7	6.8	9.2	9.6	9.8	10.1
Visitor expenditures (\$B)	17.7	5.2	13.2	19.7	20.9	21.6	22.5
Honolulu consumer inflation rate (%)	1.6	1.6	3.8	6.5	2.8	2.5	2.4
Non-agricultural wage & salary jobs (1,000)	658.6	560.0	586.9	618.1	631.7	641.8	651.9
Civilian unemployment rate (%)	2.5	11.7	6.0	3.5	3.0	2.8	2.6
Real gross domestic product growth rate (%)	0.1	-10.5	5.7	1.3	1.9	1.3	1.9

Hawaii Real GDP: 1Q 2018-3Q 2023 (in mil. 2017\$)



Source: U.S. Bureau of Economic Analysis

State GET revenue increased 5.2% during 1st 11 months of 2023

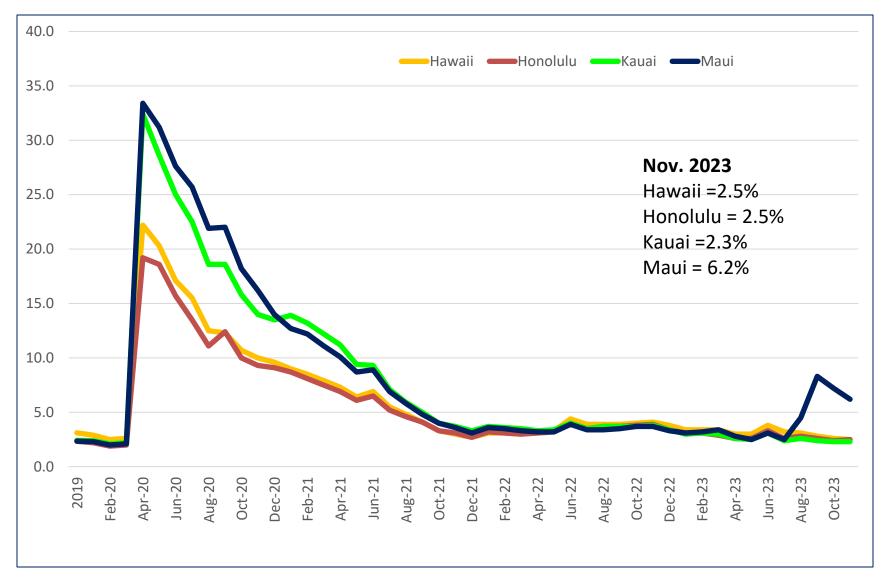


Job recovery month of November 2023 VS 2019

Industry	State	Honolulu County	Hawaii County	Maui County	Kauai County
Number of payroll jobs still lost	30,100	20,500	300	7,700	1,700
Total	95.5	95.7	99.6	90.5	94.9
Construction	99.7	100.4	97.4	100.0	95.2
Manufacturing	93.5	88.1	114.3	108.3	120.0
Wholesale trade	92.9	91.7	105.6	87.5	100.0
Retail trade	89.3	86.7	104.0	84.2	97.6
Transportation & utilities	92.9	91.5	106.3	91.1	112.5
Information	95.7	92.4	100.0	116.7	100.0
Financial activities	88.7	88.8	81.5	93.5	83.3
Professional & business services	97.2	97.4	97.1	93.1	93.8
Educational services	106.8	104.2	123.1	116.7	100.0
Health care	100.3	103.1	88.8	98.8	86.7
Hospitality	93.4	95.7	102.1	82.4	92.3
Other services	94.4	94.0	104.5	91.2	109.1
Government	97.9	97.8	98.7	96.8	96.2

Unemployment rate by county

(Not seasonally adjusted)

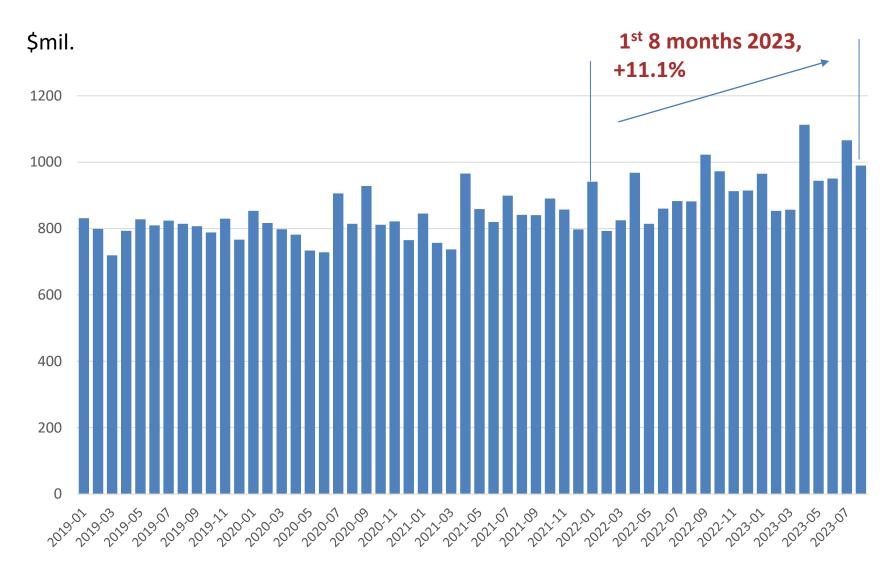


Average weekly initial unemployment claims

Year	Oahu	Hawaii	Maui	Kauai	State
2008	929	372	299	129	1,729
2009	1,290	494	487	194	2,464
2010	1,207	447	356	182	2,191
2011	1,148	393	281	155	1,976
2012	1,058	331	241	119	1,749
2013	1,088	324	253	114	1,779
2014	965	275	232	107	1,579
2015	796	217	191	84	1,288
2016	743	215	175	74	1,207
2017	796	205	167	70	1,238
2018	777	232	156	72	1,236
2019	746	212	144	73	1,176
2020	5,211	1,070	1,400	587	8,268
2021	1,745	343	367	169	2,624
2022	865	170	150	54	1,262
2023*	715	153	495	57	1,444

* Through week ending December 23, 2023 Source: Hawaii DLIR

State contracting tax base increased



Source: DoTax

Value of building permits increased (first 11 months)

County	JanNov. 2022	JanNov. 2023	% Change
Honolulu	\$2,260.50	\$2,767.69	22.4%
Hawaii	\$865.86	\$840.86	-2.9%
Maui	\$538.03	\$699.72	30.1%
Kauai	\$489.62	\$357.52	-27.0%
Total	\$4,154.01	\$4,665.79	12.3%

Number of home sales decreased 32% during the 1st 9 months of 2023

County	2021	2022	2023	2021- 2022	2022- 2023
State	19,240	17,237	11,703	-10.4%	-32.1%
Honolulu	11,297	10,998	7,263	-2.6%	-34.0%
Maui	2,436	1,692	1,159	-30.5%	-31.5%
Kauai	1,105	710	487	-35.7%	-31.4%
Hawaii	4,402	3,837	2,794	-12.8%	-27.2%

Prices also decreased for single family homes

Average single-family prices

County	2021	2022	2023	2021-2022	2022-2023
State	1,045,179	1,087,736	1,014,574	4.1%	-6.7%
Honolulu	1,196,458	1,355560	1,265,723	13.3%	-6.6%
Maui	1,472,237	1,431,898	1,410,255	-2.7%	-1.5%
Kauai	1,202,992	1,393,277	1,290,541	15.8%	-7.4%
Hawaii	661,565	623,098	569,793	-5.8%	-8.6%

Average condo prices

County	2021	2022	2023	2021-2022	2022-2023
State	661,037	716,065	733,076	8.3%	2.4%
Honolulu	586,459	647,489	656,503	10.4%	1.4%
Maui	921,098	977,107	1,160,658	6.1%	18.8%
Kauai	1,009,496	1,200,188	992,791	18.9%	-17.3%
Hawaii	748,345	944,558	922,762	26.2%	-2.3%

Source: Title Guaranty

Visitor recovery rate by market: first 11 months of 2023

Market	Arrivals, 11 mon. 2019	Arrivals, 11 mon. 2022	Arrivals, 11 mon. 2023	Recovery rate 2022	Recovery rate 2023	22-23 growth
TOTAL	9,434,232	8,362,096	8,783,688	88.6%	93.1%	5.0%
U.S. West	4,176,799	4,830,023	4,574,590	115.6%	109.5%	-5.3%
U.S. East	2,061,163	2,240,772	2,217,921	108.7%	107.6%	-1.0%
Japan	1,439,570	157,421	505,574	10.9%	35.1%	221.2%
Canada	475,922	352,899	398,176	74.2%	83.7%	12.8%
Other	1,148,583	699,290	946,596	60.9%	82.4%	35.4%
Cruise ship	132,195	81,691	140,831	61.8%	106.5%	72.4%

Source: DBEDT

2023 air visitor recovery from the same month in 2019 (%)

Island	23- Jan	23- Feb	23- Mar	23- Apr	23- May	23- Jun	23- Jul	23- Aug	23- Sep	23- Oct	23- Nov
State	96.2	96.0	97.3	97.8	94.6	93.6	93.4	82.7	89.6	90.3	90.9
Oahu	89.2	90.6	93.0	93.2	89.0	89.1	88.2	88.3	94.5	95.5	93.9
Kauai	100.8	96.2	99.8	111.3	103.0	96.4	100.4	109.7	123.3	106.5	103.0
Maui Isl.	98.0	99.6	101.7	98.1	95.5	93.3	95.4	41.0	44.8	55.8	69.5
Molokai	77.9	58.7	88.9	88.4	67.8	66.1	77.8	61.3	56.6	67.2	104.2
Lanai	85.3	81.3	71.7	112.0	99.7	64.1	78.4	93.7	74.0	59.9	100.3
Hawaii Isl.	100.7	99.3	100.1	106.3	97.6	97.1	98.9	97.1	115.4	102.1	103.0

Scheduled air seats by market: first 11 months

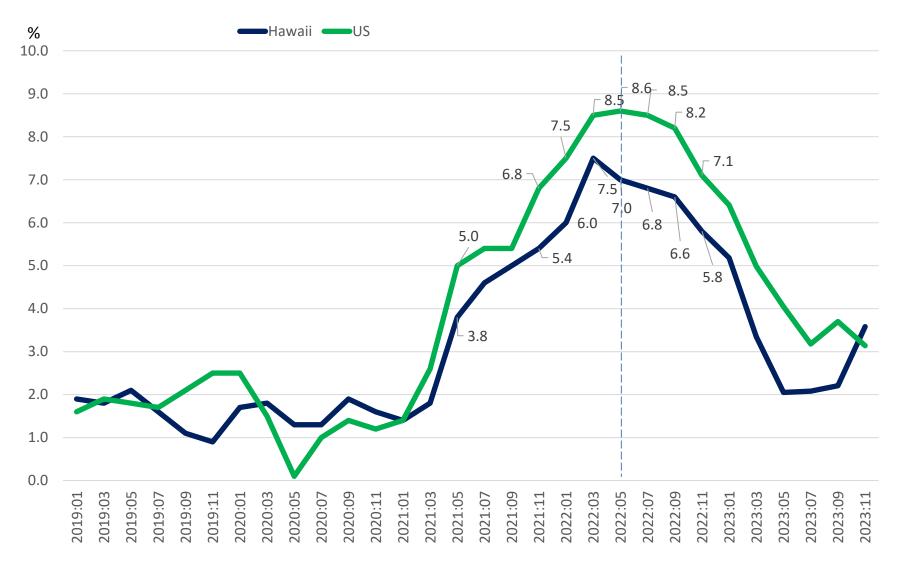
Market	11 mon. 2019	11 mon. 2023	11 mon. 2024	Recovery rate 2023	Recovery rate 2024	23-24 growth
TOTAL	12,283,728	11,952,929	12,264,897	97.3%	99.8%	2.6%
U.S. West	7,783,245	8,667,216	8,520,554	111.4%	109.5%	-1.7%
U.S. East	1,065,284	1,127,574	1,075,549	105.8%	101.0%	-4.6%
Japan	1,825,761	945,249	1,442,091	51.8%	79.0%	52.6%
Canada	424,534	405,681	382,090	95.6%	90.0%	-5.8%
Other Asia	442,387	253,633	271,293	57.3%	61.3%	7.0%
Oceania	454,327	301,031	270,399	66.3%	59.5%	-10.2%
Other	288,190	252,545	302,921	87.6%	105.1%	19.9%

Scheduled air seats by airport: first 11 months

Airport	11 mon. 2019	11 mon. 2023	11 mon. 2024	Recovery rate 2023	Recovery rate 2024	23-24 growth
STATE TOTAL	12,283,728	11,952,929	12,264,897	97.3	99.8	2.6%
Honolulu	7,573,724	7,202,083	7,721,749	95.1	102.0	7.2%
Kahului	2,614,106	2,600,046	2,410,047	99.5	92.2	-7.3%
Kona	1,146,045	1,252,437	1,235,660	109.3	107.8	-1.3%
Hilo	43,556	1,162	0	2.7	0.0	-100.0%
Lihue	906,297	897,201	897,441	99.0	99.0	0.0%

Source: DBEDT

Consumer inflation for both U.S. and Hawai'i started to decline since July 2022



Source: BLS

Industry Structure and Diversification

U.S. and Hawaii industry structure: % of 2022 GDP by industry

Industry	U.S.	Hawaii	Concentration U.S. =100
Agriculture, forestry, fishing and hunting	1.1	0.5	48.6
Mining, quarrying, and oil and gas extraction	1.8	0.1	4.9
Utilities	1.7	2.5	146.4
Construction	4.2	5.7	133.5
Manufacturing	10.3	1.7	16.4
Trade	12.3	10.8	88.0
Transportation and warehousing	3.6	5.1	142.1
Information	5.4	2.4	44.4
Finance and insurance	7.5	4.0	53.7
Real estate and rental and leasing	13.2	17.2	130.6
Professional and business services	12.9	8.6	66.9
Educational services	1.1	1.1	96.9
Health care and social assistance	7.2	7.4	102.4
Hospitality	4.2	10.9	259.0
Other services	2.1	2.4	115.1
Government	11.4	19.6	171.5
Top 5 Industries	55.3	67.1	121.4
Source: U.S. Bureau of Economic Analysis		γ/	

Hawaii's economy is more concentrated than the U.S.

Hawaii industry share of GDP: 2002 and 2022 (%)

Industry (by NAICS code)	2002	2022	
Real estate and rental and leasing	15.4	17.2	
Health care and social assistance	6.3	7.4	
Mining and construction	5.2	5.8	
Transportation and warehousing	4.2	5.1	
Utilities	1.9	2.5	
Hospitality	10.9	10.9	
Professional, scientific, and technical services	4.5	4.5	
Educational services	1.1	1.1	,
Federal government	12.0	11.1	
Trade	11.4	10.8	
State & local government	9.8	8.5	
Finance & insurance	4.1	4.0	
Administrative & support & waste management & remediation services	3.2	2.9	
Other services	3.0	2.4	
Information	2.8	2.4	
Manufacturing	2.2	1.7	
Management of companies and enterprises	1.3	1.2	
Agriculture, forestry, fishing and hunting	0.8	0.5	

Source: U.S. Bureau of Economic Analysis

Emerging Industry Analysis

6 Sectors, 39 industry Groups, 280 detail industries

Technology Sector

Alternative Power Generation Biotechnology Chemical and Pharmaceutical Manufacturing Computer System Design and Related Services Engineering and Related Services Information and Telecom Technology Medical Labs and Imaging Centers Other Technology Manufacturing R&D Services (except Biotechnology) Technical Consulting Services Technology Equipment Distribution

Creative Sector

Architecture Art Education Business Consulting Computer Services and Software Publishers Cultural Activities Design Services Engineering and Research and Development Film, TV, Video Production/Distribution, Cable and Media Streaming Marketing, Photography and Related Music Performing and Creative Arts Publishing and Information Radio and Television Broadcasting

Agribusiness Sector Agriculture Inputs Agriculture Packaging and Warehousing Agriculture Processing Agriculture Support Services Aquaculture Farm Production Fishing, Forestry and Hunting

Health and Wellness Sector Health Practitioners Hospitals and Nursing Facilities Pharmacies Specialty Health Care Services

Education (Private) Sector Higher Education Specialty Education

Other Targeted Activities Sector Apparel Call Centers

Source: DBEDT Emerging Industry Report

Methodology

Emerging Activities	Base-Growth Activities	
HI job growth >0 HI job growth > U.S. job growth HI job share < U.S. job share	\$ HI job growth >0 HI job growth > U.S. job growth HI job share > U.S. job share	
	_	
Declining Activities	Transitioning Activities	

Base Growth Industry Groups

Period measured	Industries in Base Growth
2002-2008	R&D, Medical Lab, Cultural Activities, Music, Aquaculture
2002-2010	R&D, Biotech, Medical Lab, Engineering and R&D, Performing Arts, Aquaculture
2001-2011	R&D, Biotech, Medical Lab, Cultural Activities, Film, Aquaculture
2002-2012	Biotech, Medical Lab, Cultural Activities, Film, Aquaculture
2003-2013	Biotech, Cultural Activities, Music, Aquaculture
2004-2014	Renewable Energy, Cultural Activities, Music
2005-2015	Cultural Activities, Music
2006-2016	Renewable Energy, Cultural Activities, Music, Fishing, Forestry & Hunting, Apparel
2007-2017	Cultural Activities, Film, Design Services, Fishing, Forestry & Hunting, Specialty Health
2008-2018	Cultural Activities, Film, Specialty Health
2009-2019	Cultural Activities, Film, Fishing, Forestry & Hunting, Pharmacies, Specialty Health
2010-2020	Engineering & Related Services, Cultural Activities, Pharmacies, Specialty Health
2011-2021	Engineering & Related Services, Film, Pharmacies, Specialty Health
2012-2022	Pharmacies, Specialty Health

Emerging Industry Groups

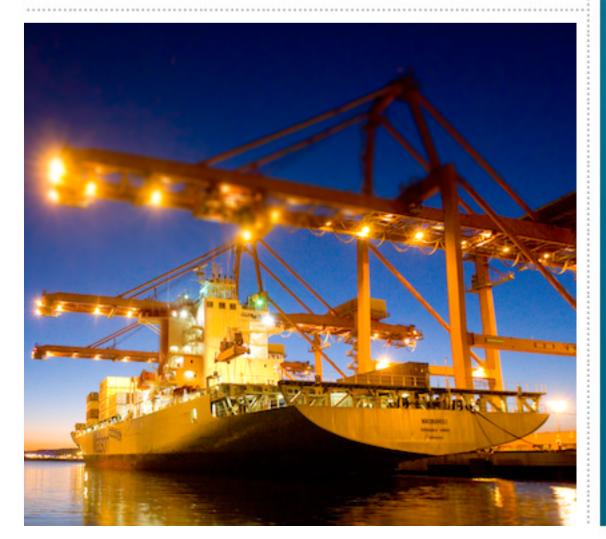
Period	Industries Emerging
2002-2008	Specialty Health, Hospitals & Nursing, Business Consulting, Farm Production, Call Centers
2002-2010	Specialty Health, Hospitals and Nursing, Business Consulting, Ag. Support, Call Centers
2001-2011	Specialty Health, Business Consulting, Call Centers
2002-2012	Specialty Health, Hospitals and Nursing, Renewable Energy, Business Consulting, Ag. Inputs, Farm Production, Call Centers
2003-2013	Specialty Health, Hospitals and Nursing, Renewable Energy, Business Consulting, Film, Ag. Inputs, Farm Production
2004-2014	Specialty Health, Business Consulting, Ag. Processing, Farm Production, Ag. Inputs, Aquaculture
2005-2015	Hospitals & Nursing, Renewable Energy, Ag. Processing, Farm Production, Ag. Inputs, Aquaculture
2006-2016	Specialty Health, Hospitals and Nursing, Business Consulting, Film, Ag. Inputs, Ag. Support, Ag. Processing, Farm Production, Aquaculture
2007-2017	Hospitals and Nursing, Renewable Energy, Engineering & Related Services, Ag. Support, Ag. Processing, Aquaculture
2008-2018	Hospitals and Nursing, Renewable Energy, Engineering & Related Services, Ag. Support, Ag. Inputs, Aquaculture
2009-2019	Hospitals and Nursing, Renewable Energy, Ag. Support, Ag. Inputs, Aquaculture
2010-2020	Hospitals and Nursing, Renewable Energy, Ag. Support, Ag. Packaging & Warehousing, Aquaculture
2011-2021	Hospitals and Nursing, Renewable Energy, Tech Equip. Distribution, Ag. Support, Aquaculture
2012-2022	Hospitals and Nursing, Tech Equip. Distribution, Film, Ag. Support, Aquaculture

Summary

- Hawaii's economy will follow the U.S. trend and slowing down in 2024
- Full economic recovery will be after 2025 in terms of tourism and job count
- Construction industry will perform well, and real estate will improve in 2024
- Growth in the next decade will be mainly coming from health care, tourism, construction, and professional services
- Industries emerging and in growth and yet still small help diversify our economy, these include renewable energy, film, aquaculture, and some agriculture activities
- Demographic challenges have grown: Hawaii is getting older and losing population









AT THE UNIVERSITY OF HAWAI'I

STATE FACING HEADWINDS AS MAUI RECOVERY BEGINS

Dr. Carl Bonham EXECUTIVE DIRECTOR, UHERO PROFESSOR, DEPARTMENT OF ECONOMICS

> SENATE WAYS & MEANS COMMITTEE PRE-SESSION BRIEFING JANUARY 2, 2024



After the Maui wildfires: The road ahead





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

nd-Smith, urnett, ron arez,



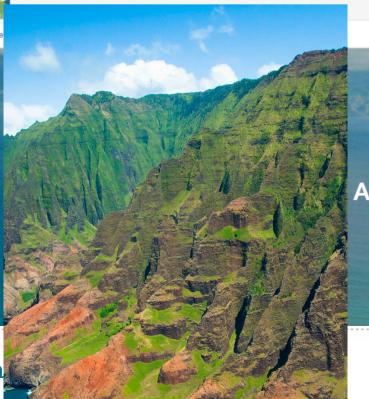
Jobless claims reveal staggering employment cost of Maui wildfires

By Byron Gangnes Jobless claims for the week ending September 2 have been released. At the national level, new claims ticked down for the fourth

UHERO FORECAST FOR THE STATE OF HAWAII

SUPPORTER EDITION WILDFIRES DELIVER HEAVY BLOW TO MAUI ECONOMY

SEPTEMBER 22, 2023



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Economic Perspective of Maui's Devastating Wildfires

By James Mak, Paul Brewbaker, and Frank Haas Lahaina is a very special place with so much deep, rich history. Over time, it's evolved. It's



<u>Reducing fire risk and restoring</u> value to fallow agricultural lands

This blog was conceived via conversations among UHERO faculty and fellows from diverse backgrounds from environmental economics, ecosystem services, economic diversification, and fire and ecosystems.

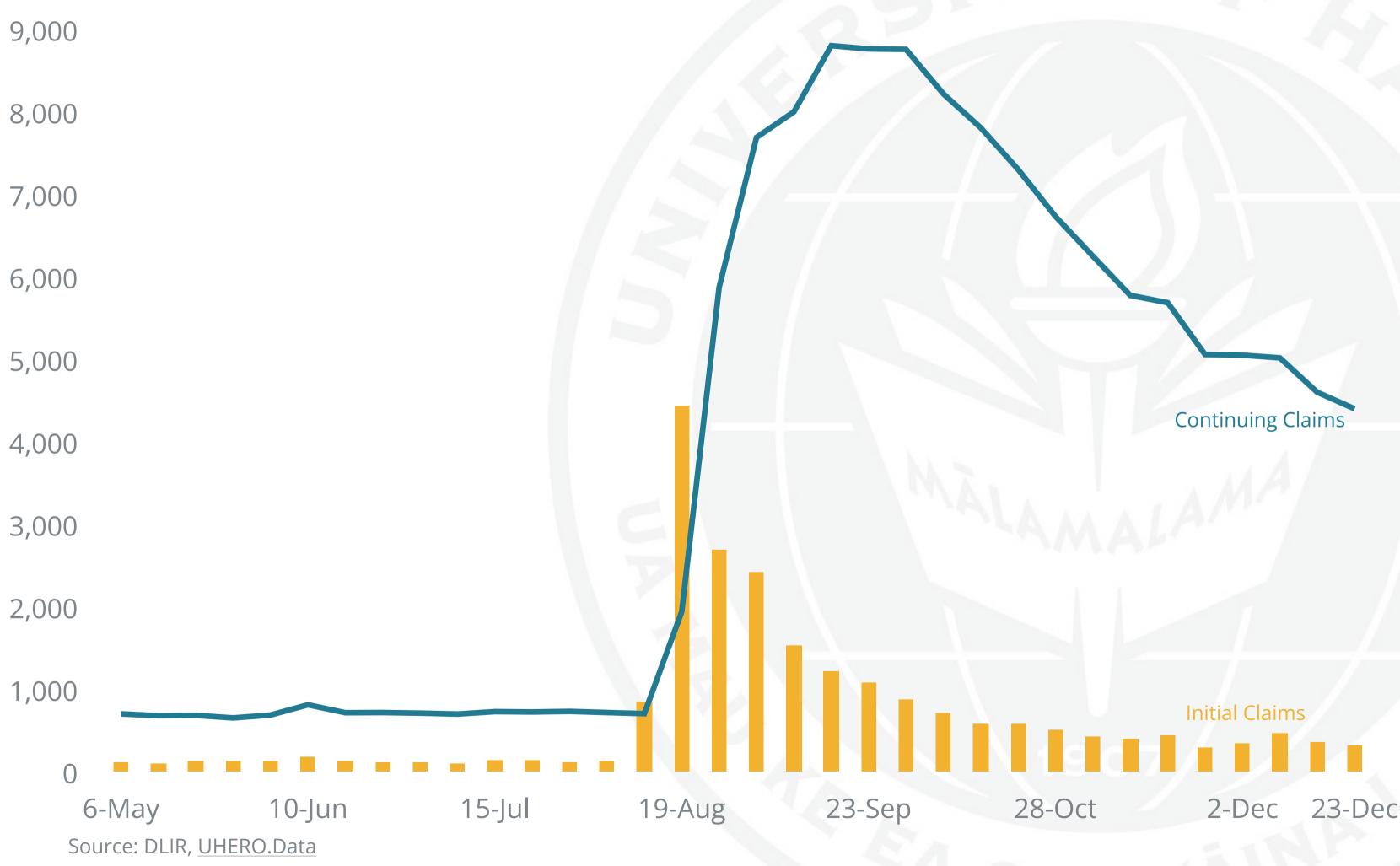
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learn more at <u>bit.ly/UHERO</u>

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Return of visitor spending and recovery work is helping

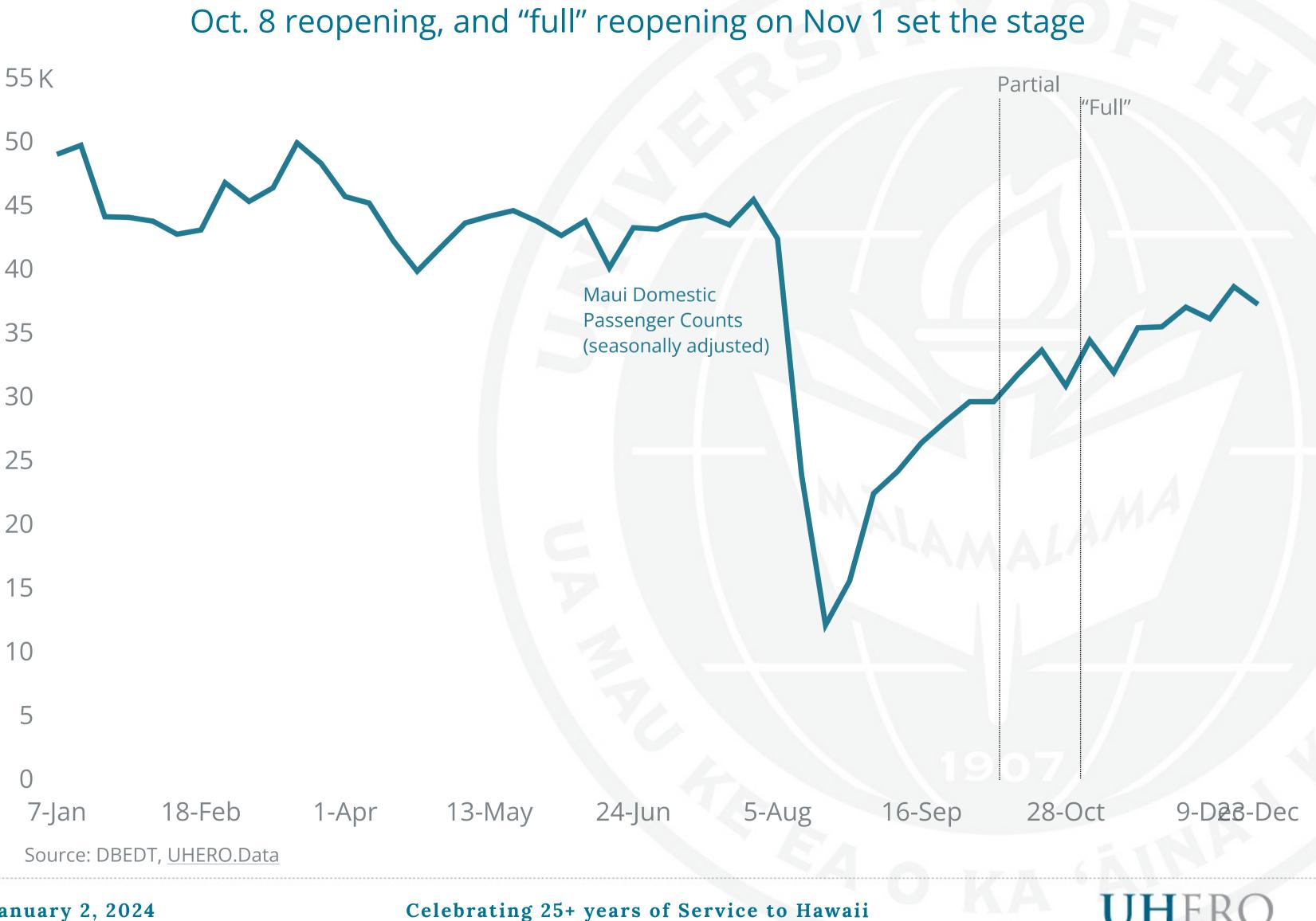
Maui county initial and continuing claims for unemployment insurance



January 2, 2024

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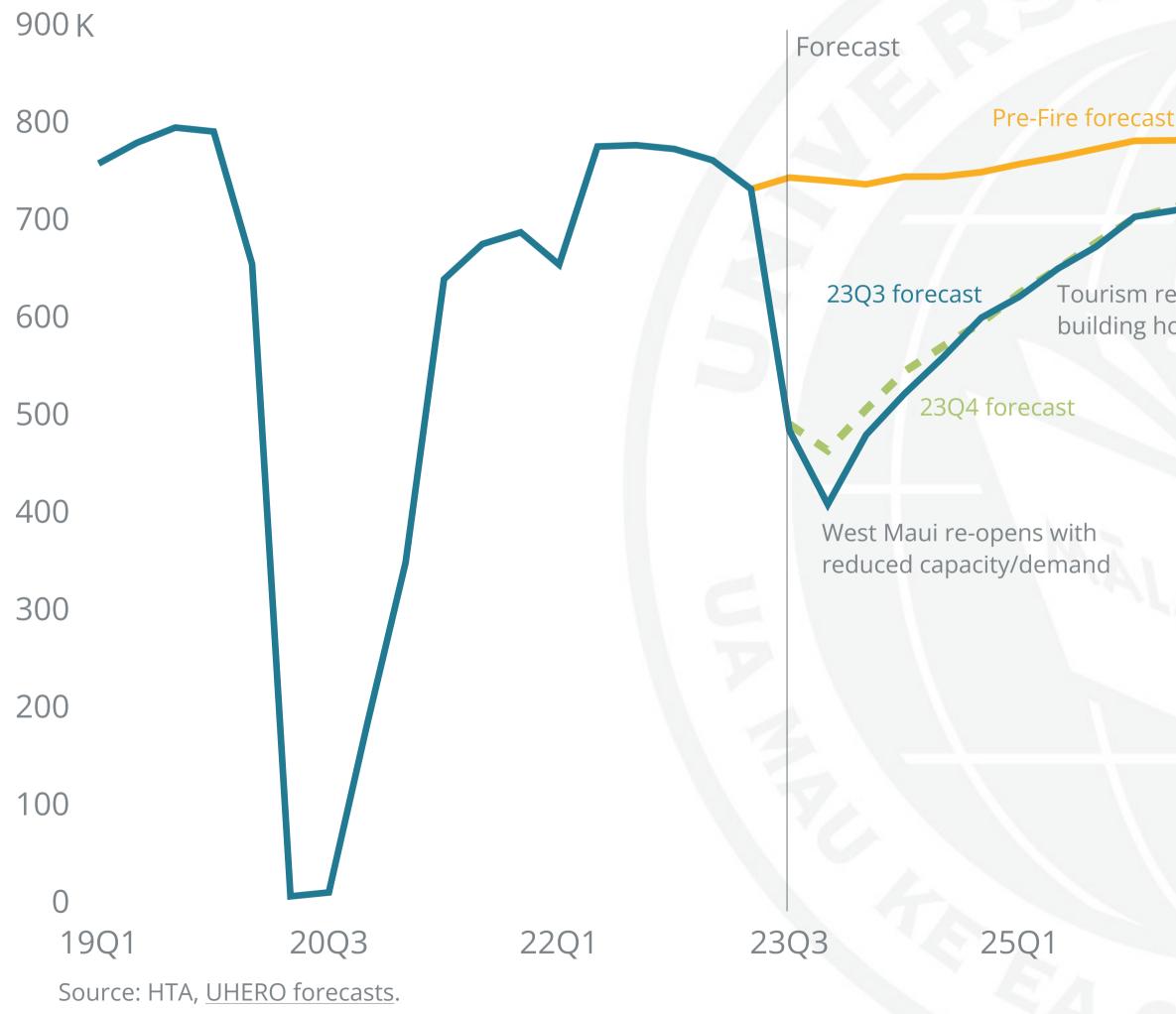
Initial recovery has been faster than expected



January 2, 2024

Maui visitor arrivals forecast was too pessimistic





January 2, 2024

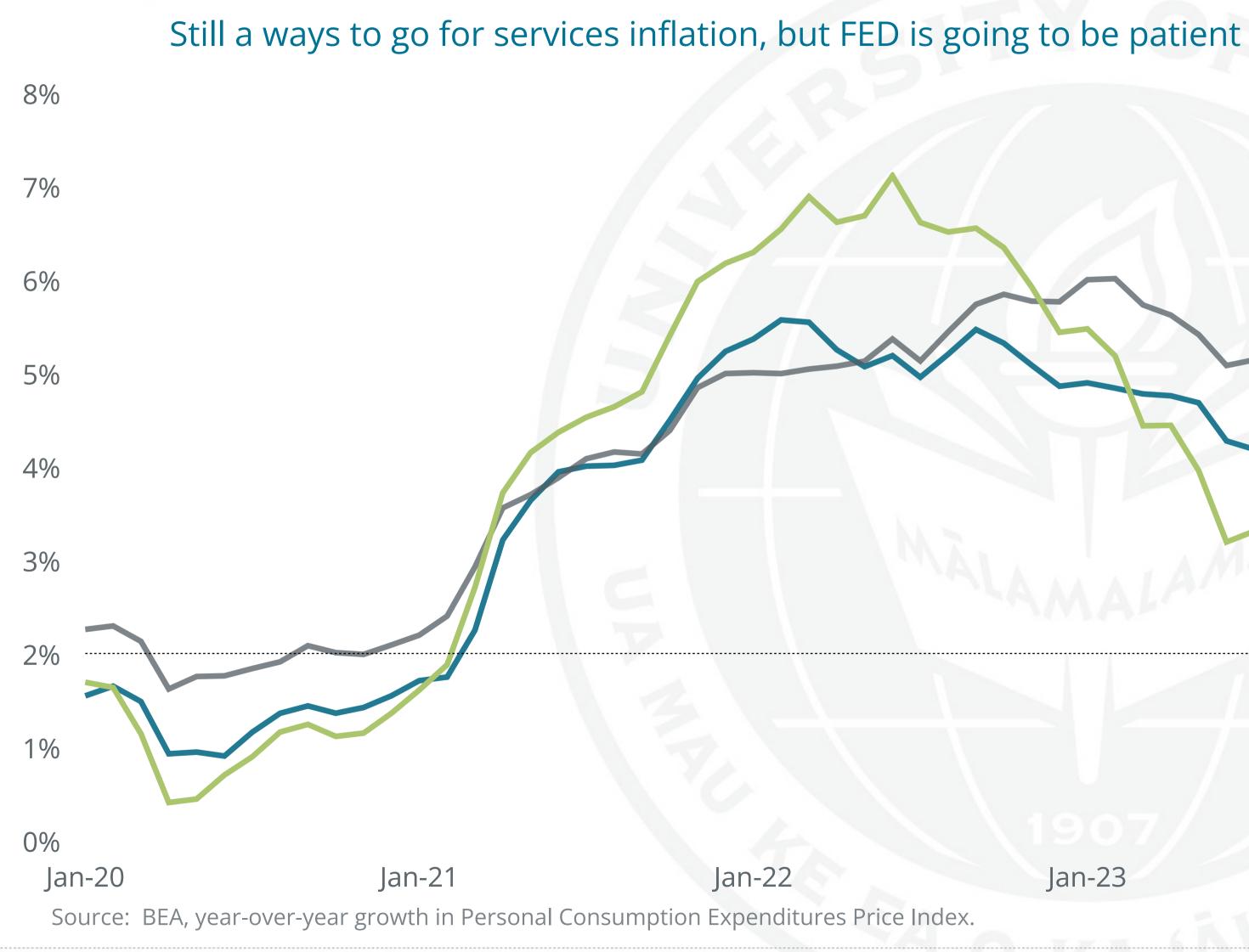
Celebrating 25+ years of Service to Hawaii

Tourism recovery depends on building housing of all types



28Q

<u>US outlook</u>: Inflation is on path to target



January 2, 2024

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PCE Inflation

Services

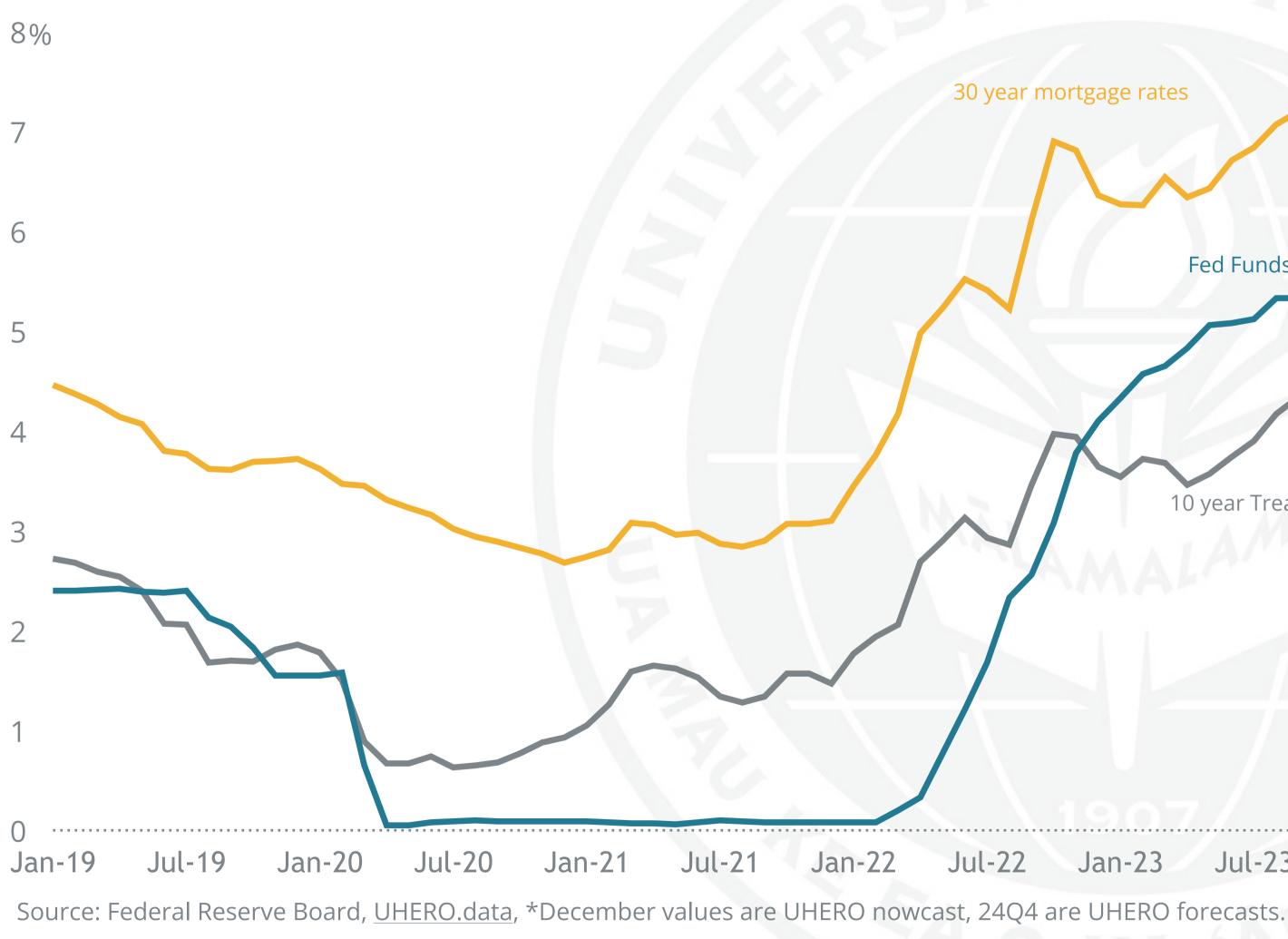
Jan-23

Nov-23

UHL

<u>US outlook</u>: Rates will come down a bit in 2024

FED is committed to nailing a soft landing



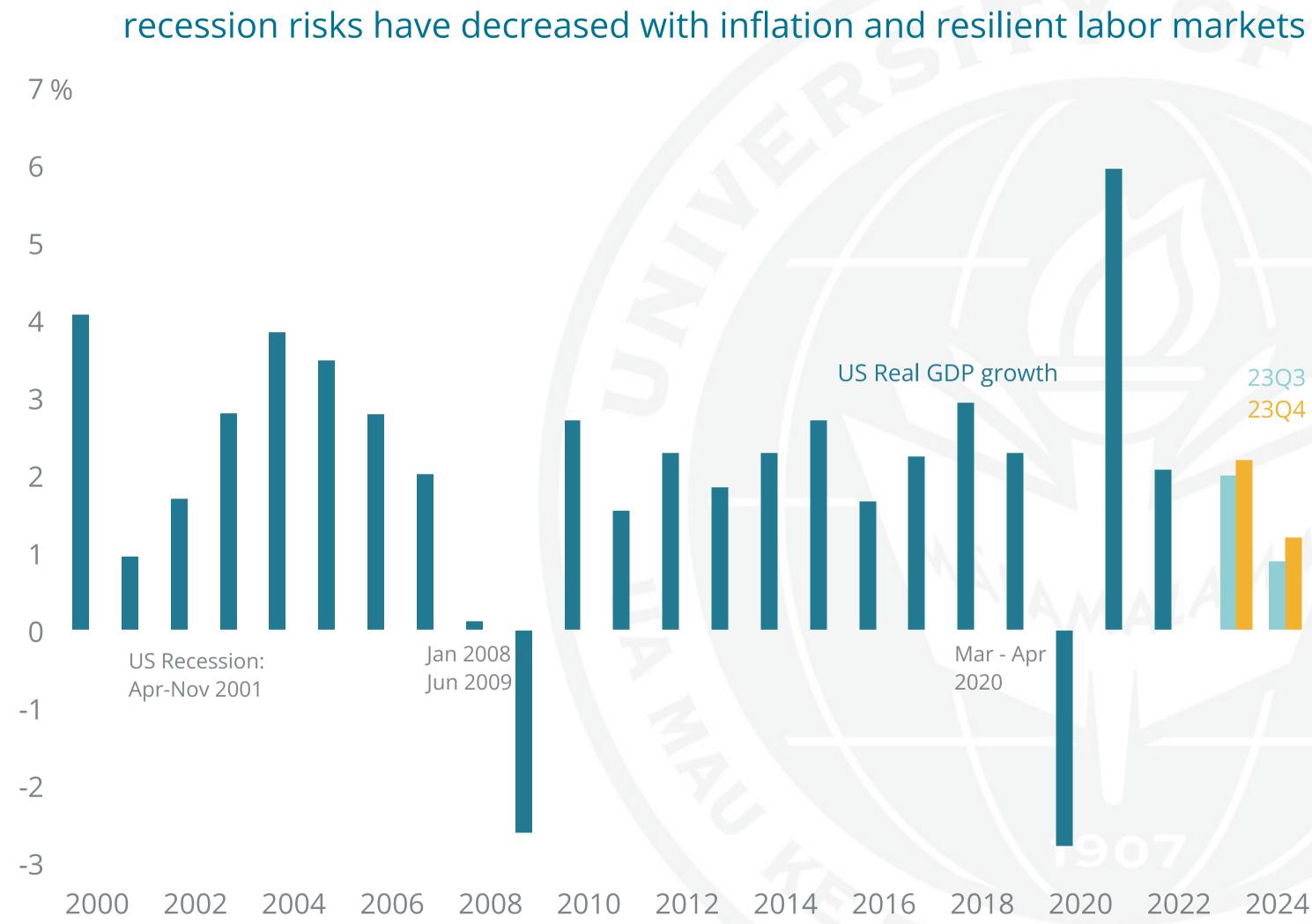
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30 year mortgage rates 24Q4 Fed Funds Rate FOMC Dec 24 24Q4

10 year Treasury Yield

Jan-23 Jul-23 Dec-23*

<u>US outlook:</u> US resilience underpins Hawaii's economy



Source: BEA, UHERO forecasts.

January 2, 2024

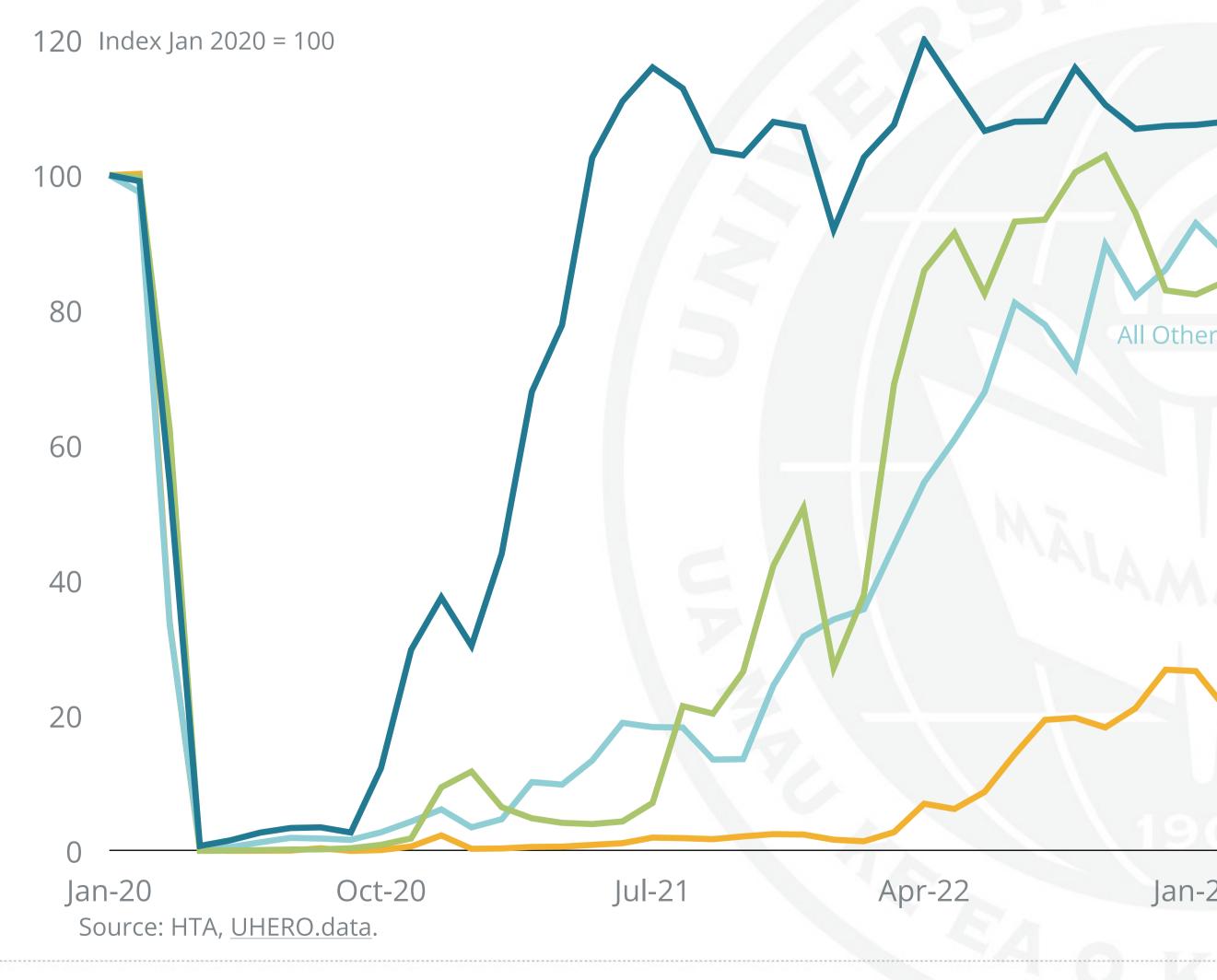
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23Q3 forecast 23Q4 forecast

2020 2022 2024 2026

US visitors represent 75% of total arrivals and spending

US market is critical with continued slow Japanese recovery



January 2, 2024

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US Arrivals

Canadian Arrivals

Japan

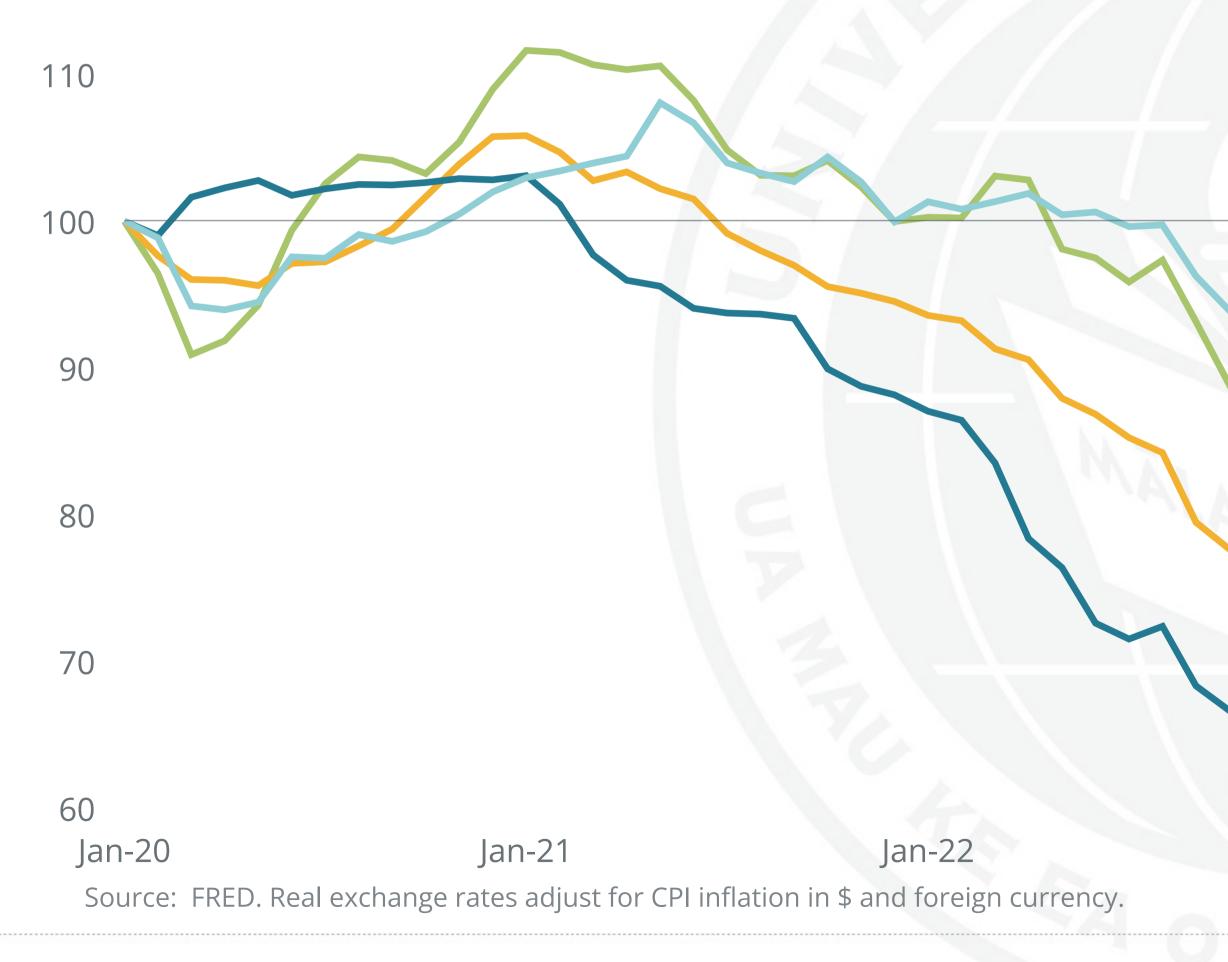
Jan-23

Otto2B23

Yet soaring costs are stifling pent up Japanese demand

Yen -35%, Hotel rooms +33%, Food and Drink + 27%

120 Index Jan 2020 = 100



January 2, 2024

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Canadian dollar

Australian dollar

Korean won

Japanese yen

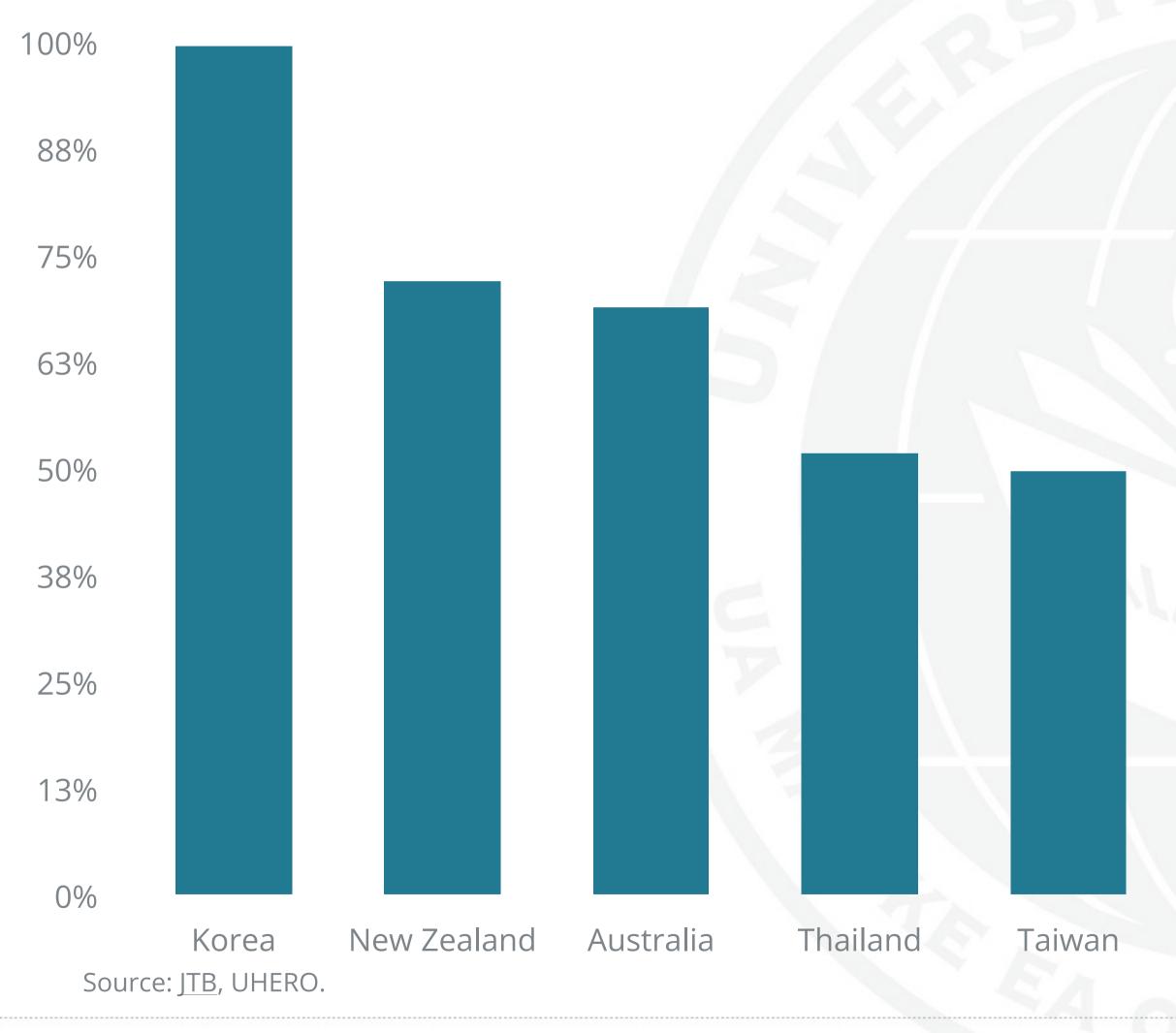
HE

Oct-23

Jan-23

Other destinations have seen much stronger recoveries

Recovery of Japanese outbound travel: September 2023 vs 2019



January 2, 2024

Celebrating 25 years of Service to Hawaii



Hawaii



Tourism now recovering from another shock

300 K visitors **Real Spending** (right axis) 250 200 Average Gulf War **Daily Census** SARS 150 Iniki 9/11 100 50 0 2012 2016 2000 2004 2008 1988 1992 1996 Source: HTA, UHERO forecasts.

January 2, 2024

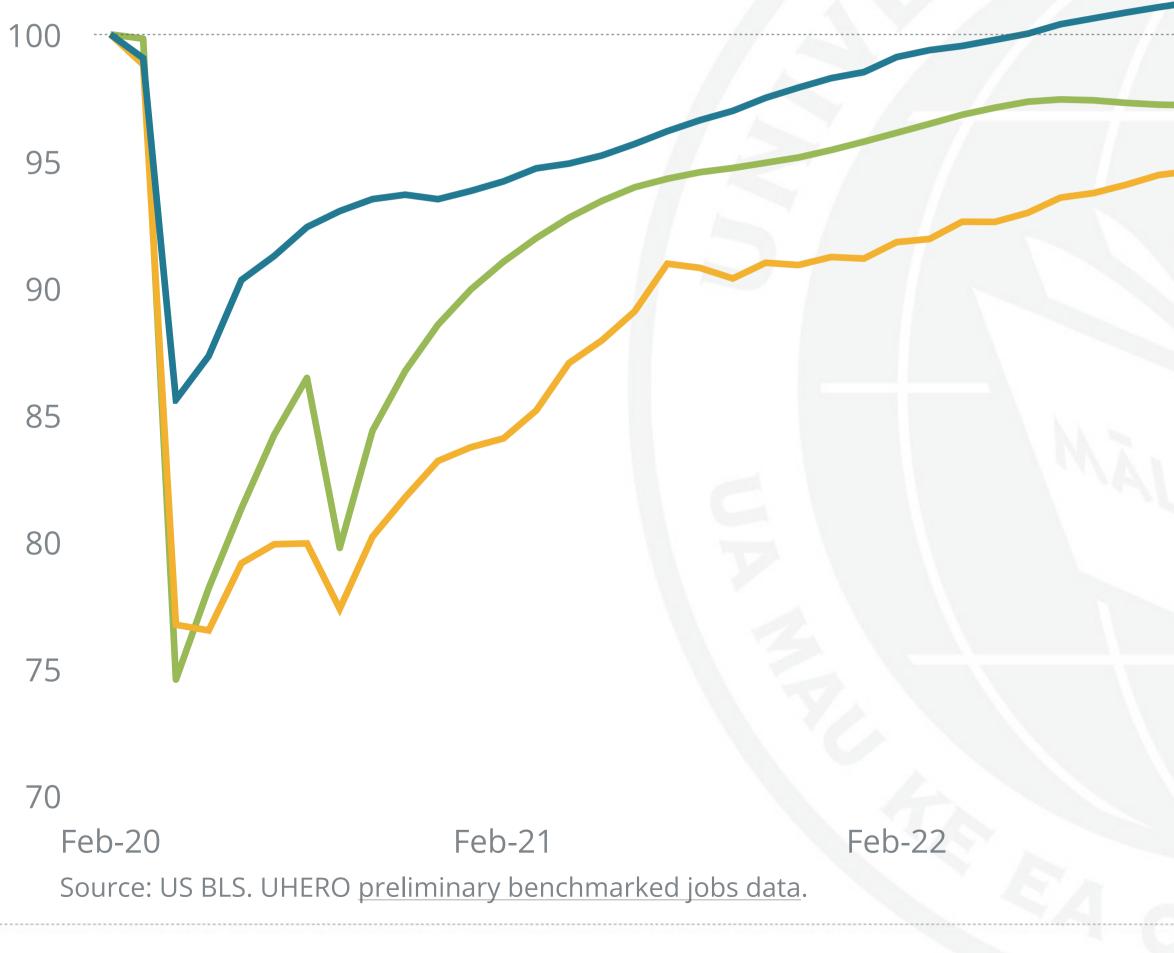
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Hawaii labor market recovery has run its course

With very limited job growth in 2023

105 Index Feb 2020 = 100



January 2, 2024

Celebrating 25 years of Service to Hawaii

US Payroll Jobs

Hawaii Employment

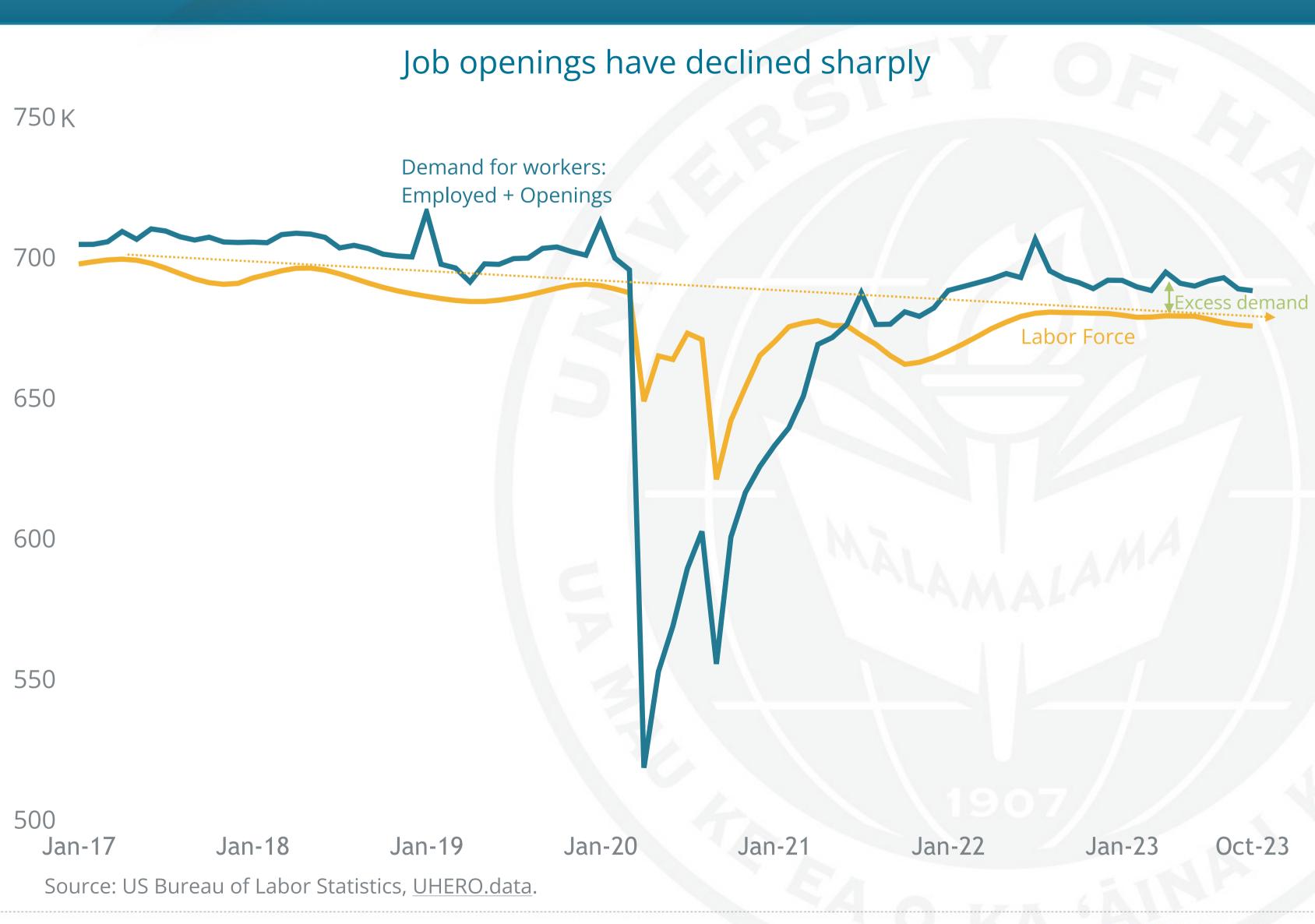
Hawaii Non-farm Payrolls



Nov-23

UHER

Back to normal levels of excess demand

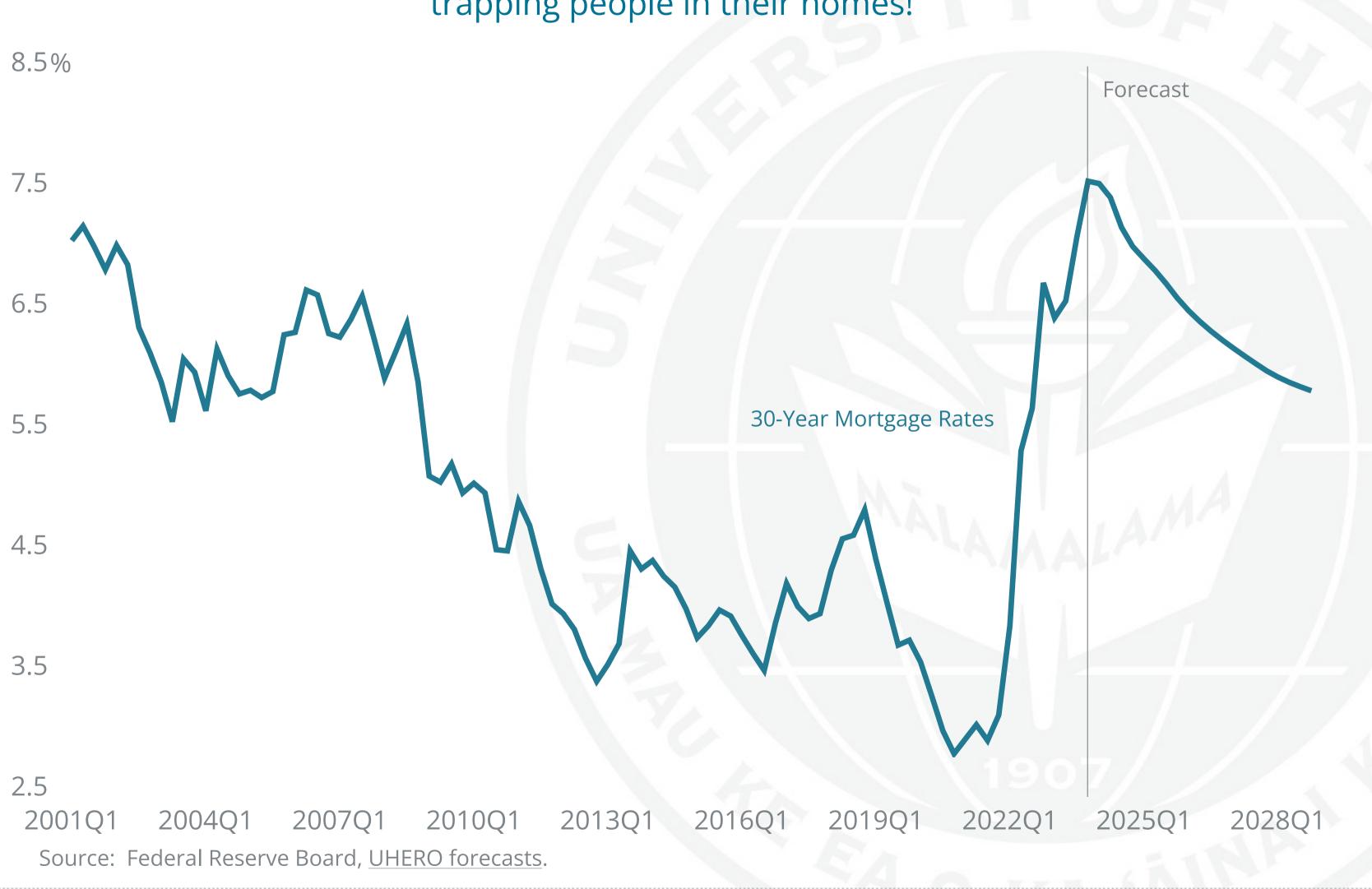


January 2, 2024

Celebrating 25 years of Service to Hawaii

Renewed mortgage rate surge took us to 20+ year highs

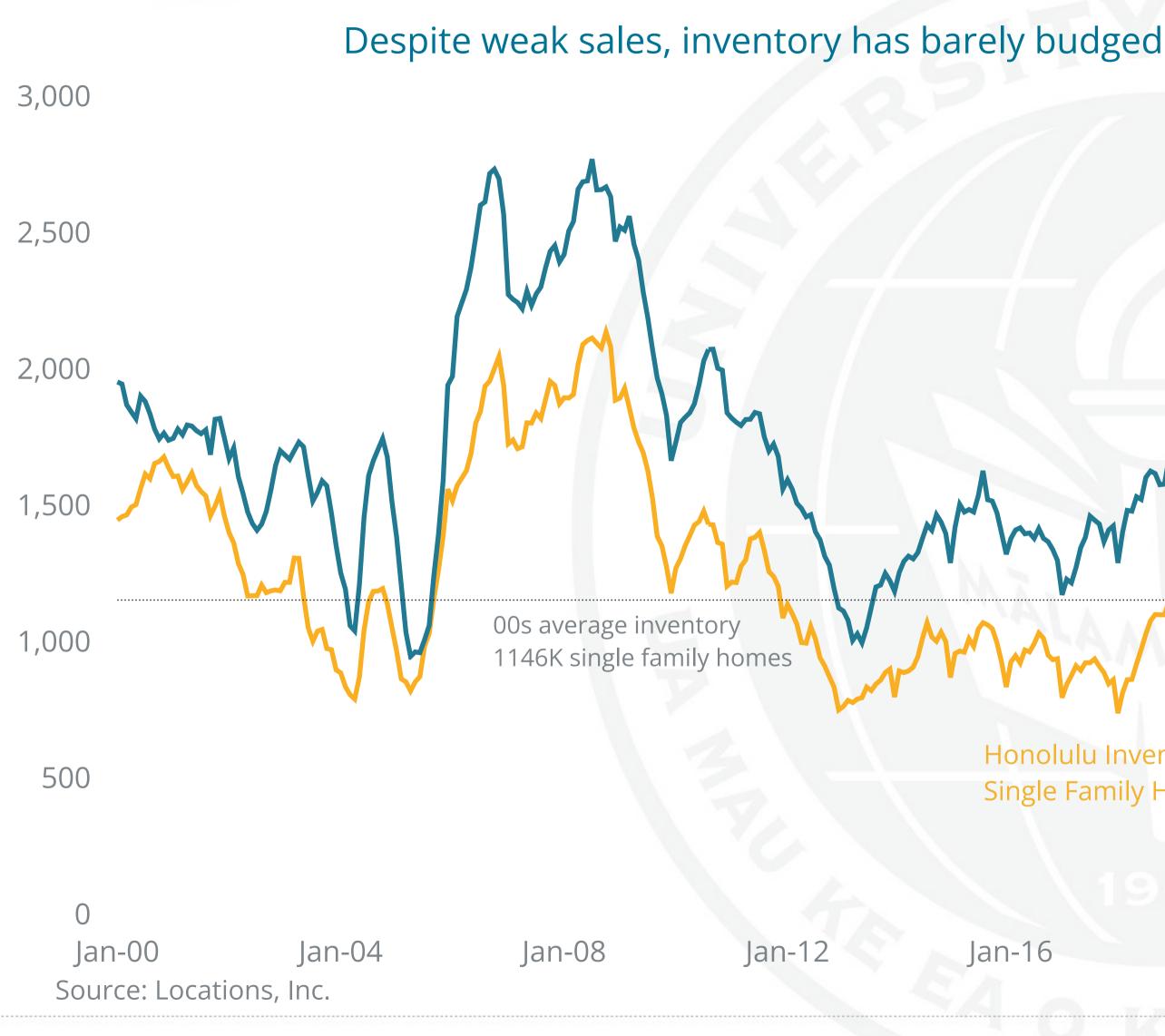




January 2, 2024

Celebrating 25 years of Service to Hawaii

And constraining desperately needed inventory



January 2, 2024

Celebrating 25 years of Service to Hawaii



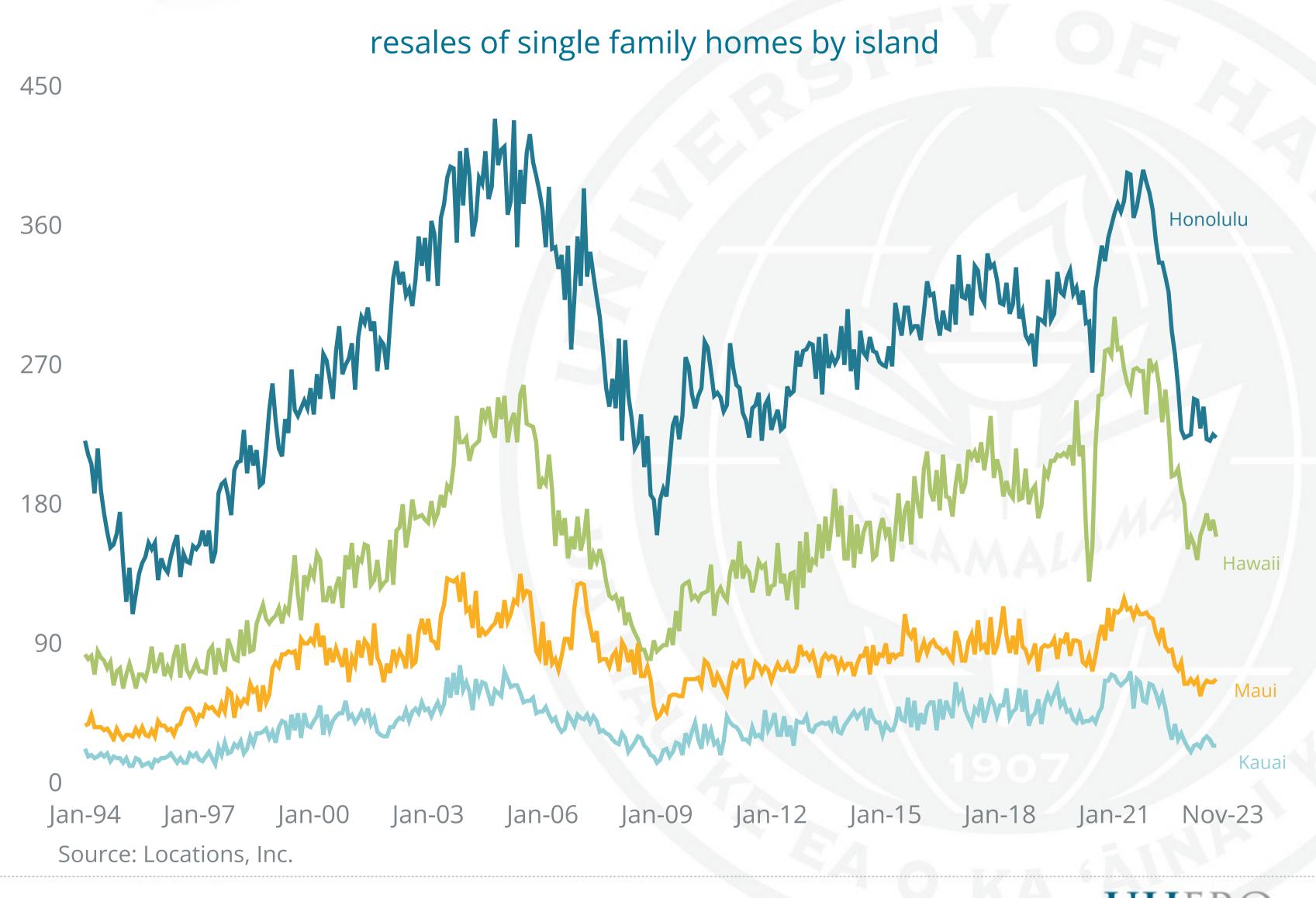
Honolulu **Condo Inventory**

Honolulu Inventory of **Single Family Homes**

Jan-20

Nov-23

Resales have fallen to near financial crises levels statewide

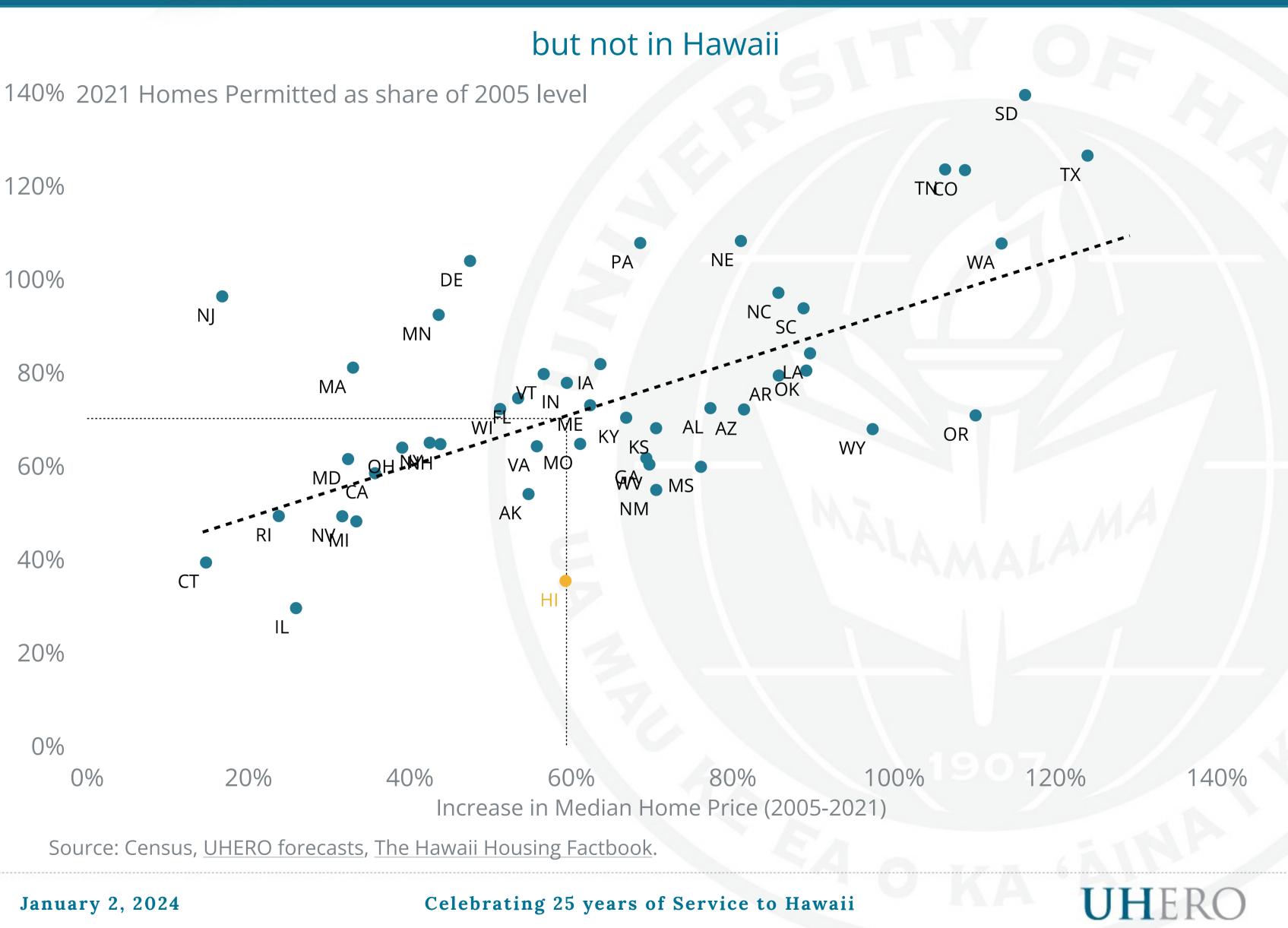


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Rising prices should lead to more construction

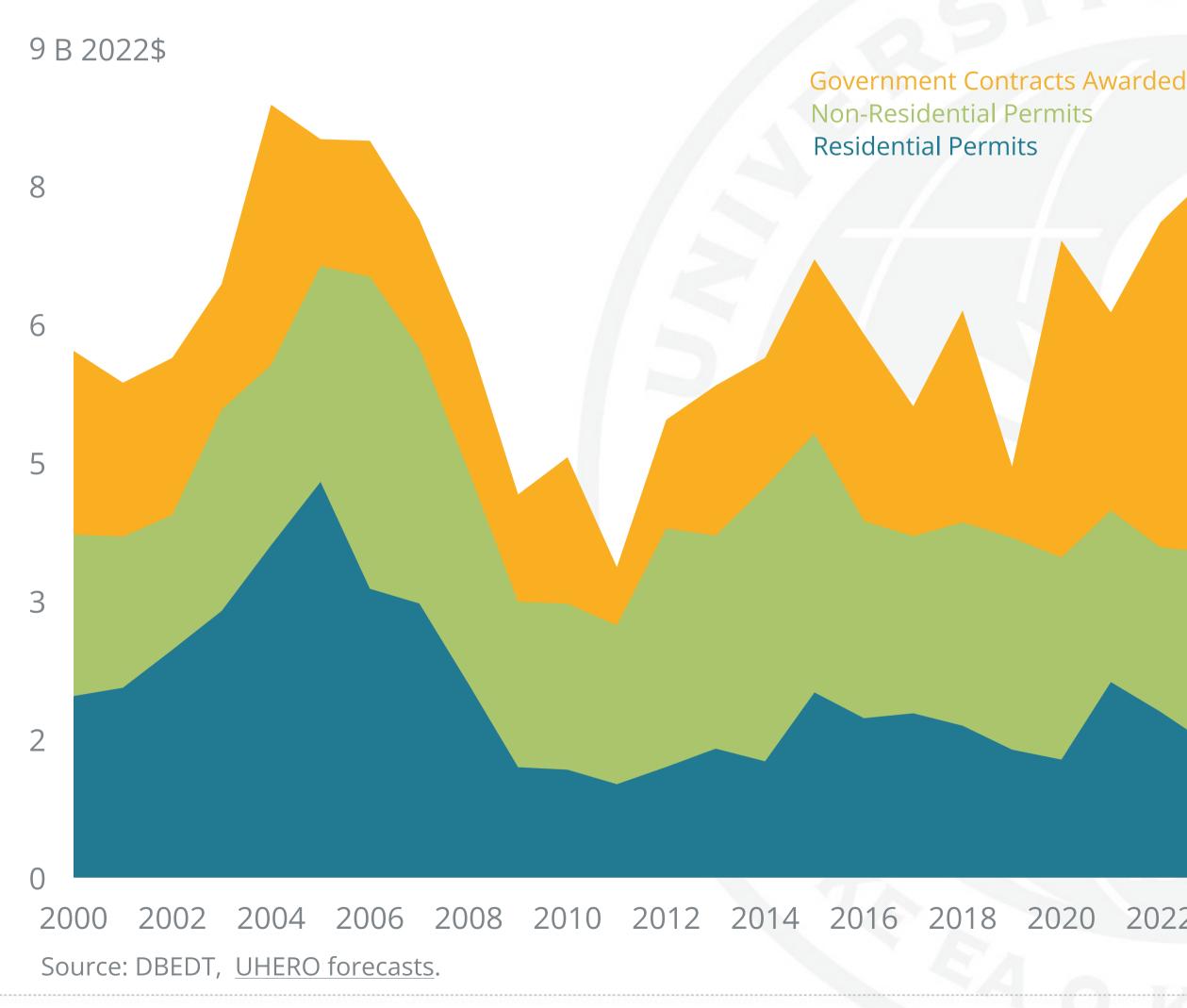
140% 2021 Homes Permitted as share of 2005 level





Construction spending will replace most lost visitor spending

With federal IJA and DoD\$—this time may really be different



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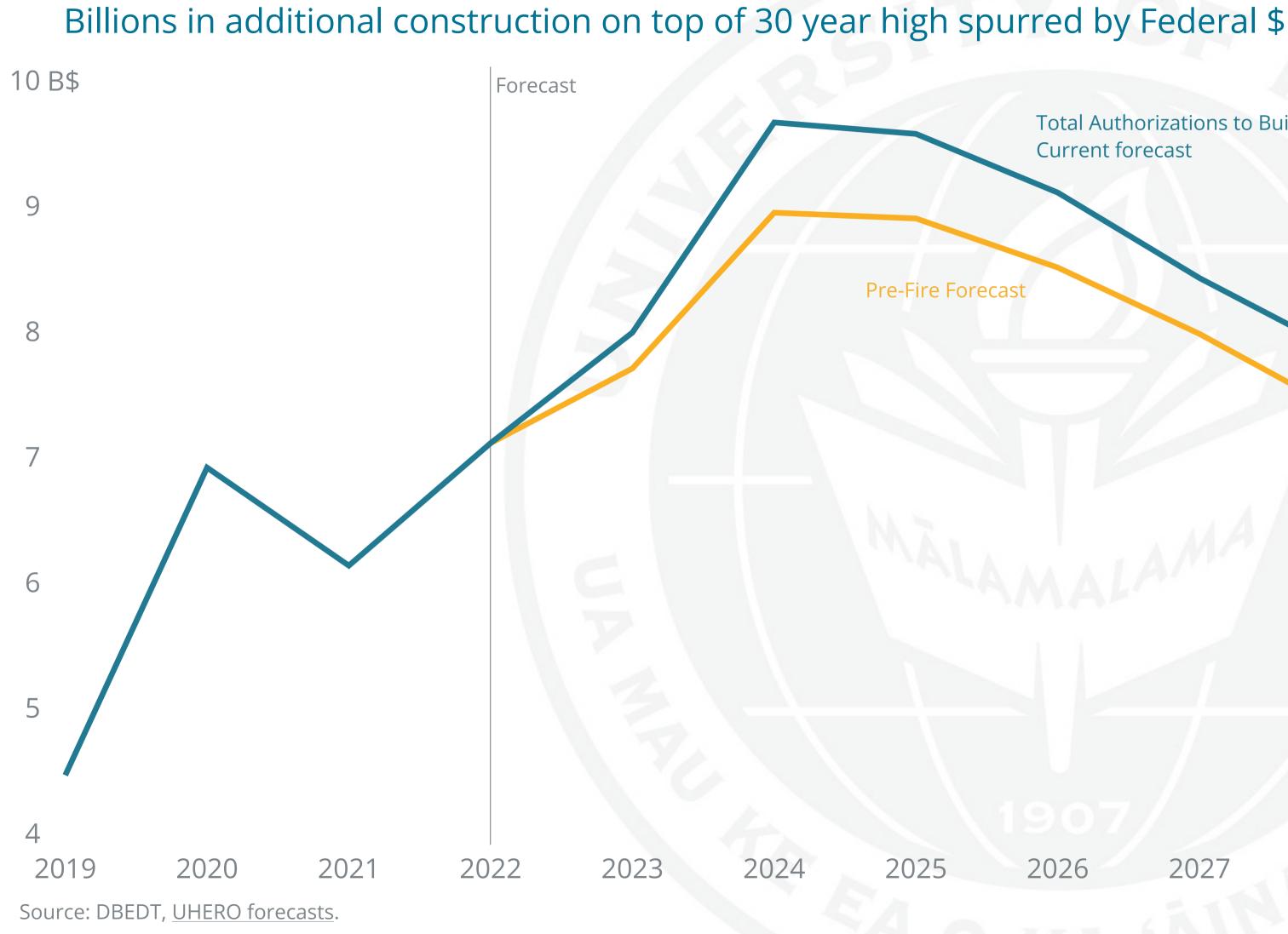
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2022 2024 2026 2028

Forecast (pre fire)

UHERO

Where will the workers/homes come from?



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Total Authorizations to Build **Current forecast**

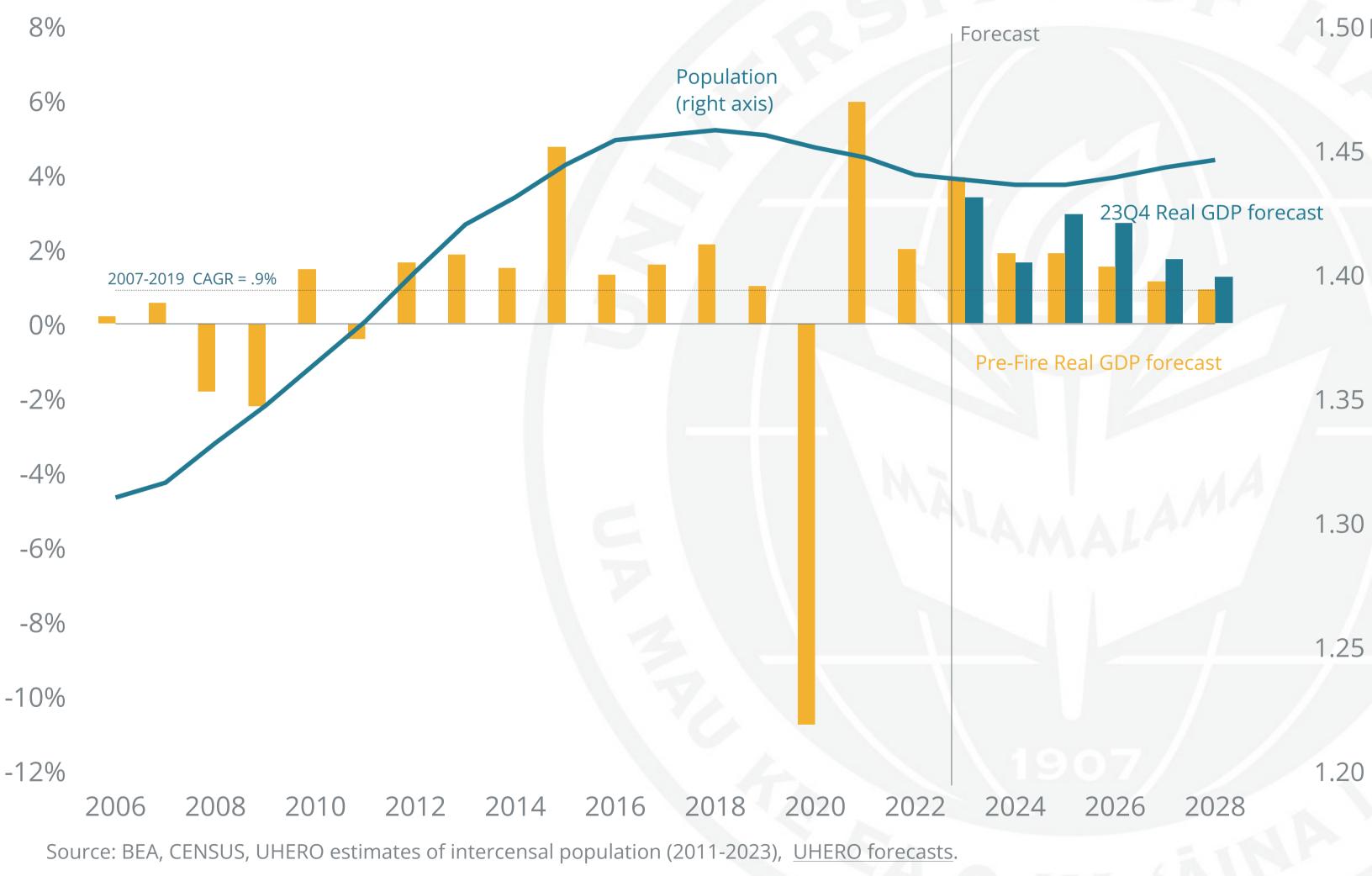
2026

2027

2028

Maui rebuilding will bolster Hawaii real output growth

but stagnant population will limit long-term growth



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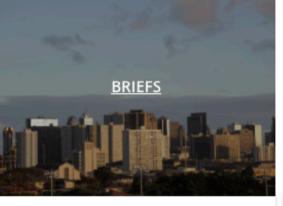
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Public Health Report: Shaping Health in Hawaii - The Influences of Poverty, Housing and Food Insecurity

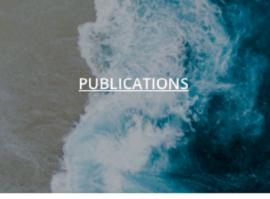
July 12, 2023

In June 2023, UHERO's public health team, in partnership with the Pacific Alliance Against COVID-19, carried out the third wave of the UHERO Rapid Health

June 28, 2023

Residents of Hawai'i face the highest housing costs in the nation. High housing costs lower the standard of living for residents and hinder the State's

where of the would be



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