

Hawaii Economic Outlook

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**To the
House Committee on Finance
January 3, 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

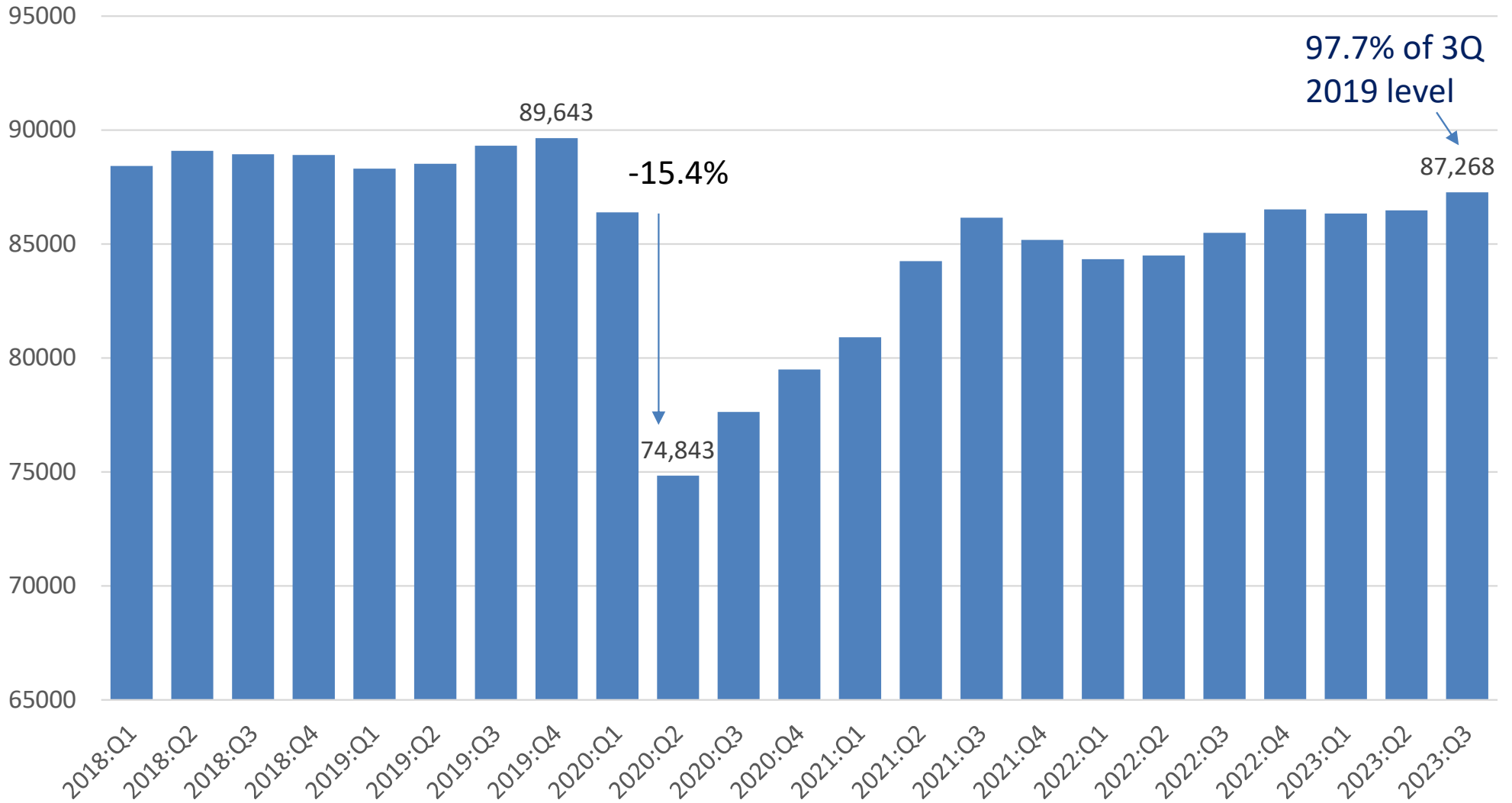
DBEDT December 2023 economic forecast

| Economic Indicators | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|---|--------|-------|-------|-------|----------|-------|-------|
| | Actual | | | | Forecast | | |
| 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 |

Source: Hawaii State Department of Business, Economic Development & Tourism, December 7, 2023

Hawaii Real GDP: 1Q 2018-3Q 2023

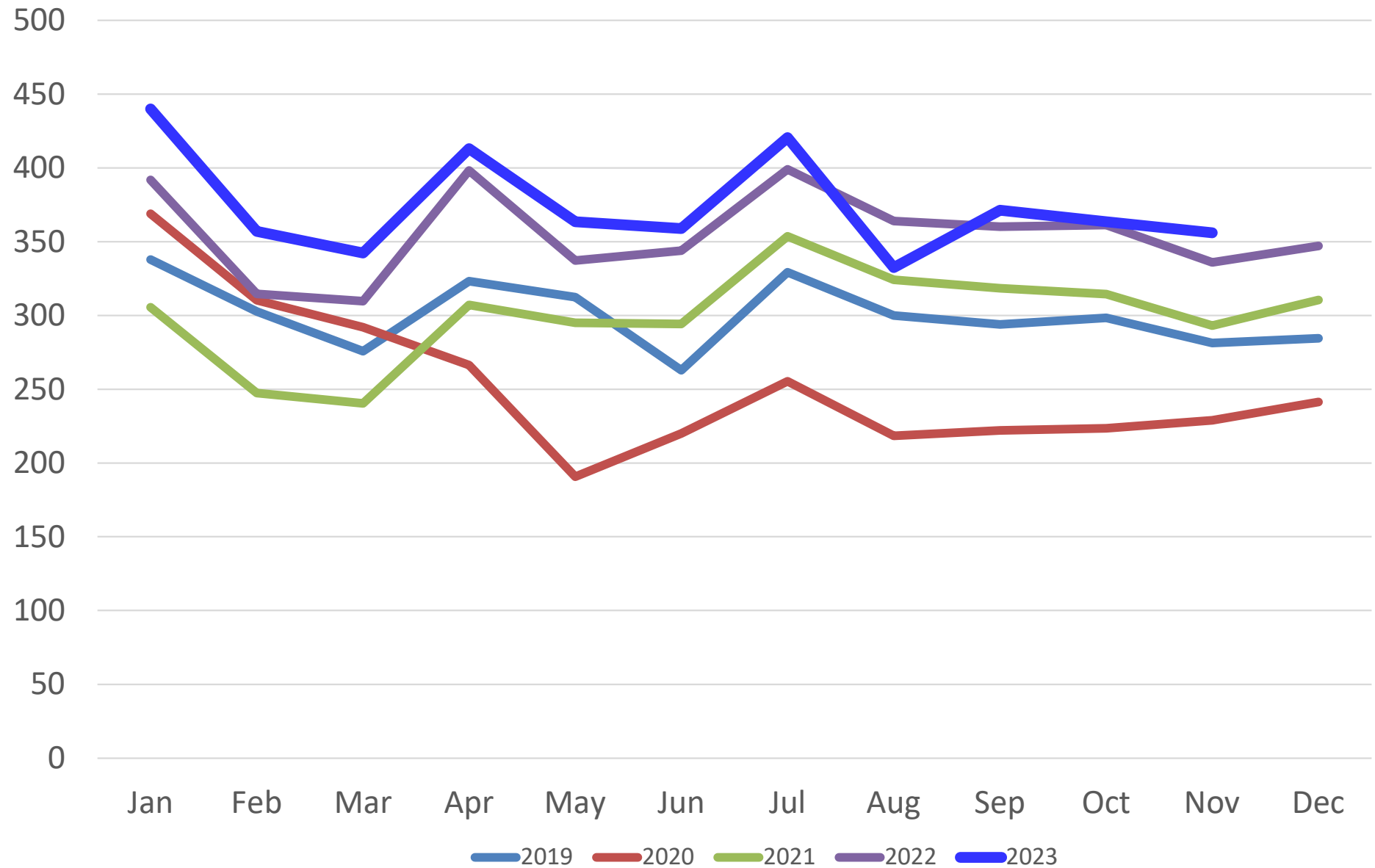
(in mil. 2017\$)



Source: U.S. Bureau of Economic Analysis

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

\$mil.



Source: Hawaii State Department of Taxation

Job recovery month of November 2023 VS 2019

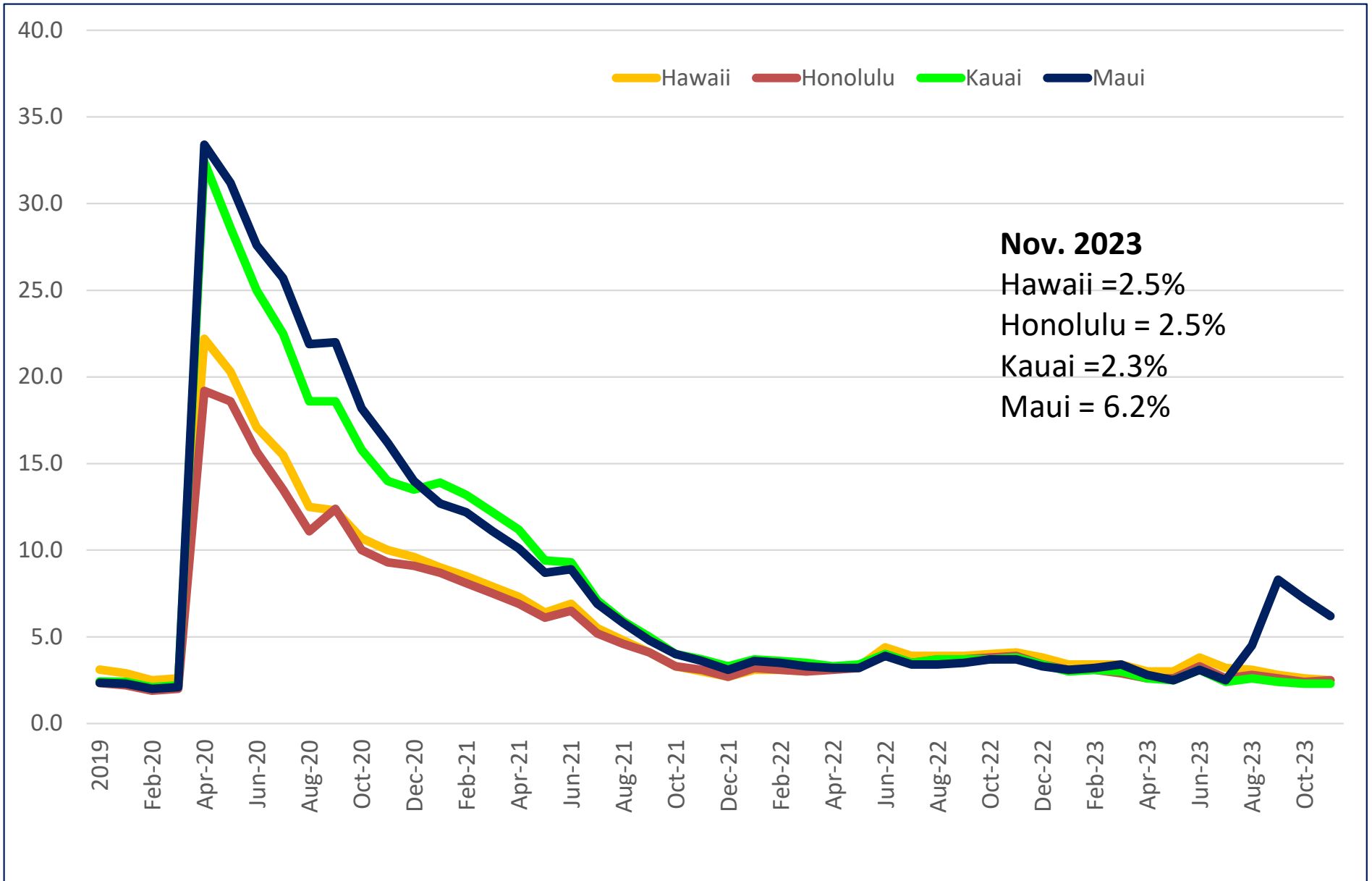
| Industry | State | Honolulu County | Hawaii County | Maui County | Kauai County |
|--|--------|-----------------|---------------|-------------|--------------|
| Number of payroll jobs still lost | 30,100 | 20,500 | 300 | 7,700 | 1,700 |
| Total | 95.5 | 95.7 | 99.6 | 90.5 | 94.9 |
| Construction | 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 |

Source: DLIR, DBEDT

Unemployment rate by county

(Not seasonally adjusted)

%



Nov. 2023
Hawaii = 2.5%
Honolulu = 2.5%
Kauai = 2.3%
Maui = 6.2%

Average weekly initial unemployment claims

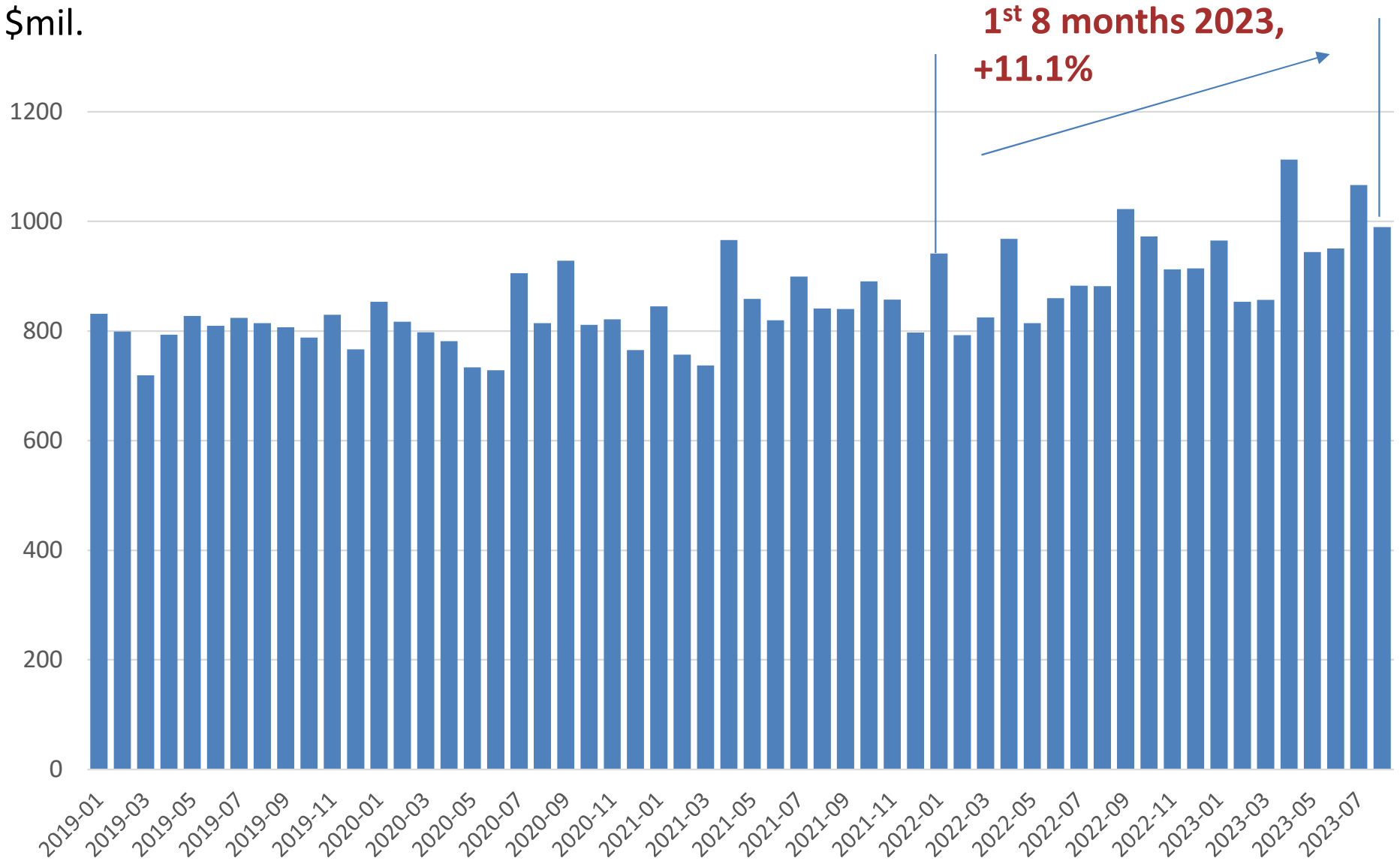
| Year | Oahu | Hawaii | Maui | Kauai | State |
|-------|-------|--------|-------|-------|-------|
| 2008 | 929 | 372 | 299 | 129 | 1,729 |
| 2009 | 1,290 | 494 | 487 | 194 | 2,464 |
| 2010 | 1,207 | 447 | 356 | 182 | 2,191 |
| 2011 | 1,148 | 393 | 281 | 155 | 1,976 |
| 2012 | 1,058 | 331 | 241 | 119 | 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

\$mil.



1st 8 months 2023,
+11.1%

Value of building permits increased

(first 11 months)

| County | Jan.-Nov. 2022 | Jan.-Nov. 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% |

Source: County Building Departments

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% |

Source: Title Guaranty

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 | 1,355,560 | 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% |

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 |

Source: HTA & DBEDT

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% |

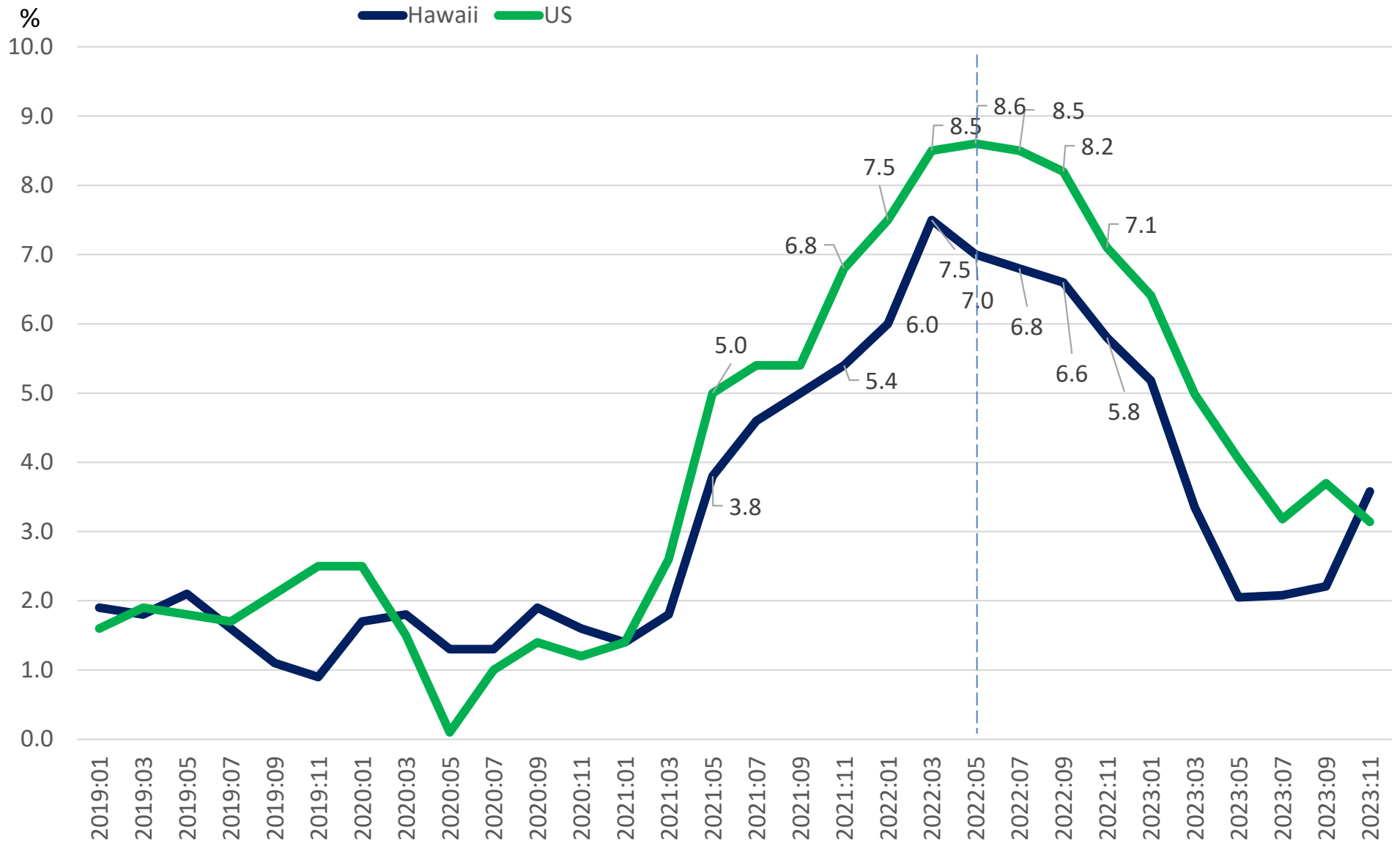
Source: DBEDT

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

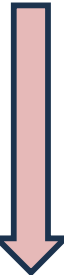
| Industry | U.S. | Hawaii | Concentration U.S. =100 |
|---|-------------|-------------|----------------------------|
| Agriculture, forestry, fishing and hunting | 1.1 | 0.5 | 48.6 |
| Mining, quarrying, and oil and gas extraction | 1.8 | 0.1 | 4.9 |
| Utilities | 1.7 | 2.5 | 146.4 |
| Construction | 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

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

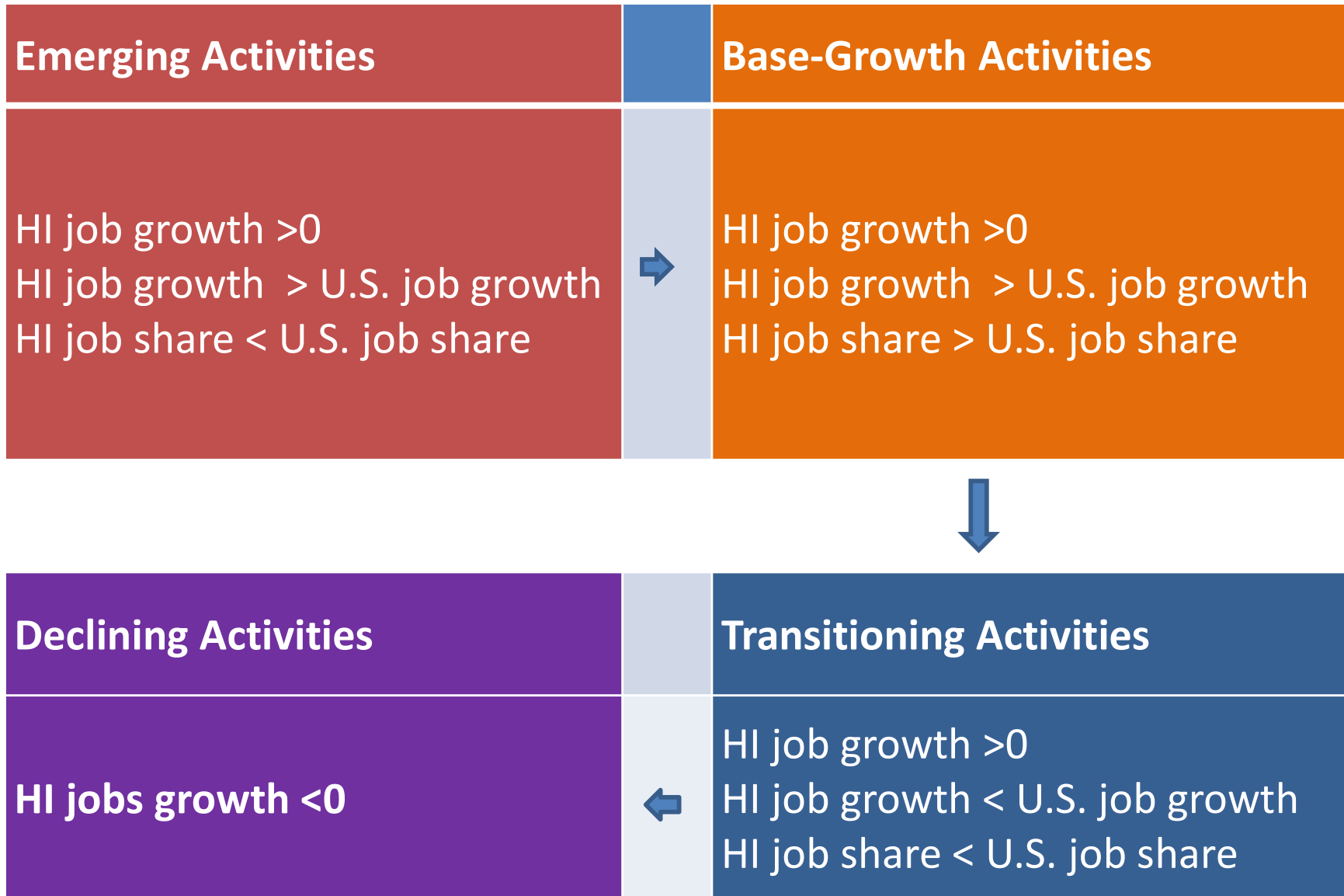
Education (Private) Sector

- Higher Education
- Specialty Education

Other Targeted Activities Sector

- Apparel
- Call Centers

Methodology



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