

DBEDT ANNUAL REPORT

2021



**A report to the Legislature of the State of Hawai'i as required by Section
201-10 of the Hawaii Revised Statutes and Act 100, Session Laws of Hawai'i 1999.**

DIRECTOR'S MESSAGE

The COVID-19 global pandemic was one of the most significant and historically disruptive events in our lifetime. It impacted our civic, social, political, and economic structures. For the State of Hawai'i, 2021 proved to be a year of recovery from the COVID-19 recession and DBEDT stayed committed to its mission to support the development of a Hawai'i economy that embraces innovation, an economy that is globally competitive, dynamic and productive; and an economy that provides opportunity for all of Hawai'i's citizens.

In 2020, Hawai'i's economic growth was down by 10.8 percent. In 2021, Hawai'i's real gross domestic products (GDP) increased by 4.6 percent. The Safe Travels program, which ran from October 2020 through 2021, played an integral role in resuming travel to the State of Hawai'i while balancing health precautions and reopening the economy.

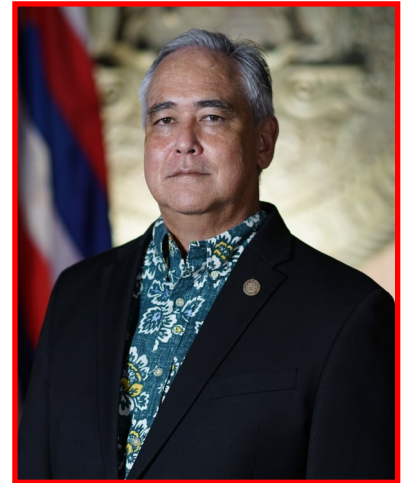
In 2021, the total visitor arrivals and visitor spending recovered 65.3 percent and 73.7 percent of the 2019 levels, respectively. These amounts translate to 6.8 million visitors and \$13.2 billion in spending annually. Hawai'i's unemployment rate dropped to 4.3 percent in December 2021, just 0.4 percentage points higher than the U.S. average.

Hawai'i's economic recovery has been gaining momentum as the negative impacts from the COVID-19 pandemic subside. However, two challenges that remain are job recovery and consumer inflation. Even with the help of all levels of government, including the infrastructure bill by the federal government and the extra-large amount of state and county government general obligation bond sales, job recovery is a slow process.

Energy cost is also the major driver of Hawai'i consumer inflation. This new challenge is an opportunity for Hawai'i to double down on our unified efforts to accelerate our conversion to clean energy and build a new economy that goes beyond net zero emission. A digital-data economy integrating clean energy, data-based decision making, artificial intelligence, and teleworking into businesses and government.

Hawai'i was able to face the challenges brought by COVID-19 due to the people of Hawai'i's commitment to being safe and resilient as a community. As we continue on this journey together, embracing the aloha spirit, innovation and resiliency, we will be able to create a new economy and work to change Hawai'i's trajectory by our shared commitment in restoring faith in government and establishing the Hawaiian Islands as a place future generations choose to call home.

With my aloha on behalf of DBEDT and our employees, HRS § 5-7.5 (a)/(b) & HRS § 89-1.



A handwritten signature in blue ink, which appears to read "Mike McCartney".

Mike McCartney
DBEDT Director

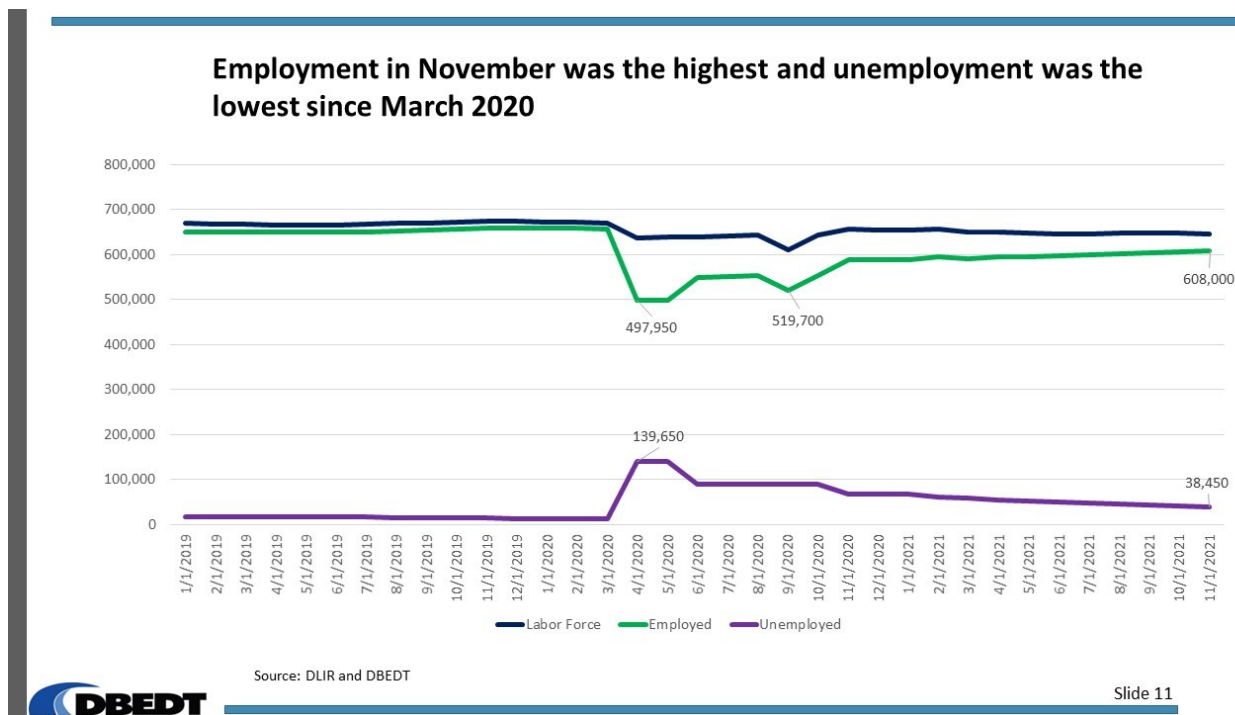
HAWAII'S ECONOMY

2021 was a year of economic recovery for Hawai'i though there were many challenges. According to estimates by the U.S. Bureau of Economic Analysis, Hawai'i's economic growth for the first nine months of 2021 was 5.6 percent, the highest since 2005. The second quarter economic growth rate was at 12.6 percent, also the highest quarterly growth rate since 2005.

Reflecting on the robust economic growth during the second quarter of 2021, the Hawai'i retail tax base was \$10 billion, the second highest quarterly sales in Hawai'i's history, just shy of the record first quarter of 2020 by \$13.5 million. Hawai'i's contracting tax base also had the second-best quarter in history at \$2.64 billion over the same period, just \$4.2 million short from the record level of \$2.65 billion in third quarter of 2020.

As a comprehensive indicator of Hawai'i economic activities, the state general excise tax (GET) collections were a record high of nearly \$1 billion in the third quarter of 2021. Year-to-date through November 2021 (calendar year), total GET collection was 99.2 percent of the collection during the same period in 2019.

Hawai'i's labor market conditions have continued to improve in 2021 with unemployment rates decreasing to a seasonally adjusted rate of 6.0 percent in November 2021 and 5.4 percent not seasonally adjusted. This compares to the 10.3 percent unemployment rate over the period last year for seasonally adjusted and 10.4 percent not seasonally adjusted. In November 2021, the total number of people employed either as payroll employees or self-employed was the highest since March 2020 at 608,000 and represents a 92.3 percent recovery compared to the pre-pandemic period of November 2019. The number of people who were on unemployment and still seeking jobs dropped to 38,450 in November 2021, the lowest level since March 2020.



Non-agricultural payroll jobs started to recover in the second quarter of 2021 with the second quarter growth rate at 10.4 percent and third quarter at 11.1 percent from the same period in 2020. As of November 2021, total non-agriculture payroll job count recovered to 87.6 percent of the November 2019 level.

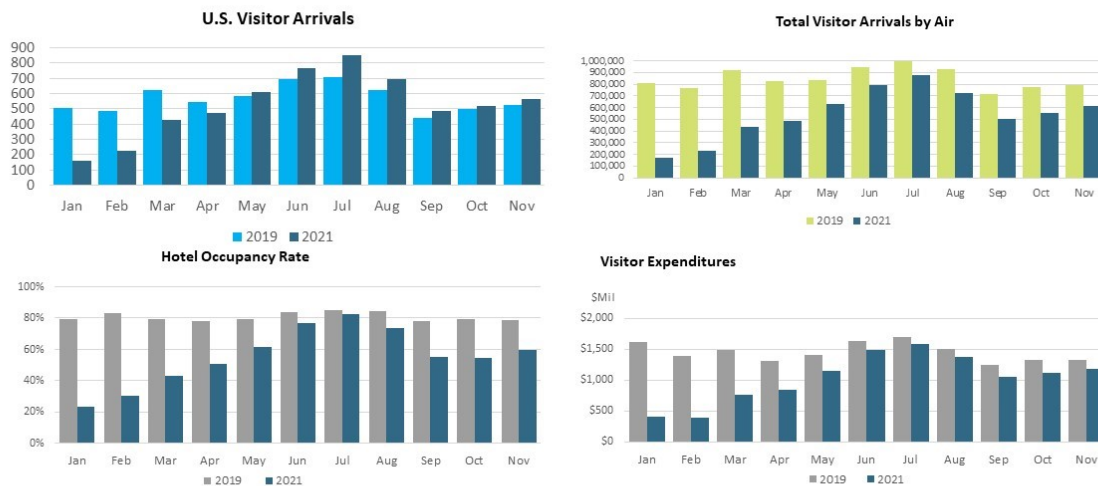
Although it has improved significantly, Hawai'i is still among the states with the highest unemployment rate. The seasonally adjusted rate was the seventh highest, and the non-seasonally adjusted rate was the fourth highest in the nation in November 2021.

HAWAII'S ECONOMY

Hawaii's tourism industry's recovery accelerated between January and July of 2021. In January 2021, total visitor arrivals were 21 percent of the level of the same month in 2019, increasing to 57 percent in April, and 88.4 percent in July 2021. Beginning in August, the spread of the Delta variant slowed the pace of tourism recovery through the middle of December. Through November 2021, total visitor arrivals reached 6 million and visitor spending totaled \$11.3 billion, representing a 63.9 percent recovery in arrivals and a 71 percent recovery in visitor expenditures, during the first 11 months of 2021 from the same period in 2019.

Tourism industry recovery

Through November 2021, arrivals recovered 63.9%, U.S. visitors have been fully recovered since May 2021



Slide 15

During the first 11 months of 2021, U.S. mainland visitors accounted for 96.1 percent of total visitors representing a 92.8 percent recovery from 2019 level. International visitor recovery was only at 7.6 percent. Since April 2021, U.S. visitor count surpassed the 2019 monthly levels. Between May and November 2021, U.S. visitor count was 110.4 percent of the same period in 2019 and compared with 2019 and 2020, visitors in 2021 spent more on a daily basis and stayed longer.

The construction industry performed well during the pandemic. In 2020, total construction put in place as measured by the contracting tax base reached a historic high of \$9.8 billion. During the first eight months of 2021, the total value of construction completed was \$6.7 billion, a 4.5 percent increase from the same period in 2020.

During the first 11 months of 2021, the value of private building permits issued by the county building departments increased 27.2 percent of which the value of residential building permits increased 80.2 percent while the value of commercial and industrial permits increased 10.5 percent and additions and alterations in building permits decreased 9.1 percent.

The number of residential home units authorized by the county building departments increased to 4,281 units during the first three quarters of 2021 compared to 1,916 units authorized during the same period a year ago—a 123.4 percent increase. Of the total authorized units during the first nine months this year, 40.9 percent or 1,751 were single family units and 49.1 percent or 2,530 were condominium units.

HAWAI'I'S ECONOMY

During the first three quarters of 2021, there were 19,240 homes sold statewide, a 49.3 percent increase from the same period in 2020 and 26.7 percent increase from the same period in 2019. Of the homes sold during the first nine months of 2021, 47.7 percent or 9,181 were single family homes and 52.3 percent or 10,059 of them were condo units.

The average sale price for single family homes during the first nine months of 2021 was \$1,044,537, representing a 30.5 percent increase from the same period in 2019 and 31.1 percent increase from the same period in 2020. During the same period, the average sale price for condo homes was \$660,940, an increase of 15.3 percent from the same period in 2019 and 13.4 percent from the same period in 2020.

New developments in the U.S. and local economy in the past few months will impact the economic growth nationwide. The first is the unexpected rise in consumer inflation due to supply chain issues. U.S. consumer inflation rate in November 2021 was 6.8 percent, the highest since 1990. Hawai'i's consumer inflation rate in November 2021 was 5.4 percent, the highest since 2007. Consumer price increases are driven by increasing oil and commodity prices. Crude oil price, as measured by New York Exchange WTI Future Price, increased 74.5 percent during the first 11 months of 2021 as compared with the same period last year. Hawai'i's general commodity price increased by 10.4 percent between May and November of 2021.

On November 15, 2021, President Biden signed into law the \$1 trillion infrastructure bill in which Hawai'i is expected to receive \$1.8 billion from the total. This fund will further help the Hawai'i construction industry in the next few years in the form of government construction such as airports, highways, and broadband.

After an 8.1 percent decline in bankruptcy filings in 2020, there were a total of 1,101 bankruptcy filings during the first 11 months of 2021 which represents a 20.9 percent decrease from the same period in 2020.

The economic recovery was reflected in DBEDT's fourth quarter forecast which was released on November 30, 2021. For 2021, the forecast predicts Hawai'i's real GDP growth will be 3.9 percent for 2021 and 3.0 percent for 2022. Visitor arrivals will recover to 85 percent and 92 percent of the 2019 level in 2022 and 2023, respectively.

The development of the omicron variant may create some uncertainties in Hawai'i's economic recovery. DBEDT will continue to monitor the pandemic and update its economic forecasts accordingly.

DBEDT Most Recent Economic Forecast

	2019	2020	2021	2022	2023	2024
Economic Indicators	Actual		Forecast			
Total population (thousands)	(NA)	1,455	1,456	1,459	1,463	1,467
Visitor arrivals (thousands)	10,387	2,708	6,840	8,861	9,531	9,996
Visitor expenditures (million dollars)	17,844	5,162	12,686	15,812	17,118	18,008
Honolulu CPI-U (1982-84=100)	281.6	286	297.7	306.4	313.5	320
Real personal income (millions of 2012\$)	61,855	63,833	63,889	61,852	62,799	63,777
Non-agricultural wage & salary jobs (thousands)	658.5	557.1	569	603.6	623.6	638.6
Civilian unemployment rate	2.5	11.6	7.5	6	5.2	4.5
Real gross domestic product (millions of 2012\$)	79,175	70,625	73,388	75,615	77,318	78,885
Annual Percentage Change						
Total population	(NA)	(NA)	0.1	0.2	0.3	0.2
Visitor arrivals	5	-73.9	152.6	29.5	7.6	4.9
Visitor expenditures	1.1	-71.1	145.8	24.6	8.3	5.2
Honolulu CPI-U	1.6	1.6	4.1	2.9	2.3	2.1
Real personal income	0.7	3.2	0.1	-3.2	1.5	1.6
Non-agricultural wage & salary jobs	0	-15.4	2.1	6.1	3.3	2.4
Real gross domestic product	-0.9	-10.8	3.9	3	2.3	2

NA, Not available or not applicable.

Source: Hawaii State Department of Business, Economic Development & Tourism, 11/30/21.

REPORT ON CARES FUNDING

WORKFORCE DEVELOPMENT INITIATIVE UTILIZING CARES FUNDS

DBEDT contracted with two non-profits, Kupu 'Āina Corps and the Economic Development Alliance of Hawai'i (EDAH), to train and pair individuals in Hawai'i's workforce with companies to provide workers with an opportunity to transition their careers and provide companies with additional resources for business recovery.

As reported last year, the objectives of the program were achieved as 346 individuals were placed in conservation, land management and agricultural jobs, assisting 151 organizations by Kupu. EDAH placed 433 individuals in emerging industries (non-tourism) related jobs, assisting 134 companies.

DBEDT was appropriated \$10 million for this project with the total cost for the projects amounting to \$6,902,402.44. The balance of funds from the appropriation less oversight expenses (\$3,097,597.56) were returned to the State Treasury.



CARES FUNDS TO SUPPORT THE HAWAII FISHING INDUSTRY

DBEDT was appropriated \$3 million for this project. The State entered into a \$2 million contract with the Hawai'i Longline Association (HLA) and \$780,000 contract with the Pacific States Marine Fisheries Commission (PSMFC) to encourage a continued fish supply to fill food shortages and support local food security caused by the pandemic.

Up to 135 fishing vessels received support from the Fishing Vessel Support Program (FVSP) that HLA established to reimburse qualified fishing vessels up to \$7,500 in eligible expenditures. The PSMFC contract provided economic support to Hawai'i's commercial non-longline fishery and charter/for-hire fishing vessels for their economic injury and for their trip expenses. The number of applicants that received support was 158. The cost for all projects totaled \$2,914,987.82 with the remaining funds from the appropriation less oversight expenses (\$85,012.18) returned to the State Treasury.

"PIVOT PROGRAM" FOR COMPANIES TO IMPLEMENT CHANGES

Due to COVID-19, businesses in Hawai'i needed to redesign and remodel the set-up of their physical operation, as well as adjust their operational practice, products and services. Twenty-five million dollars was allocated for the "Pivot Program," under contract with the Chamber of Commerce of Hawai'i, to provide Hawai'i companies with financial assistance to retool their operations and products and address necessary changes. Eligible companies were Hawai'i storefront companies with less than 100 employees and funding was up to \$10,000.

At the culmination of the program, 2,366 companies received assistance at a total cost of \$17.9 million. The remaining funds from the appropriation less oversight expenses (\$6,825,753.44) were returned to the State Treasury.

FUNDING TO FACILITATE ECONOMIC RECOVERY AND RESILIENCY

The Business Development and Support Division (BDSD) received the department's FY21, \$15 million general fund appropriation from the State Legislature to facilitate economic recovery and resiliency. These funds were managed by the DBEDT Director's office and allocated in accordance with the department's statutory directive to conduct research and demonstration projects (HRS 201-2). Of the total appropriation, DBEDT allocated \$11.9 million of which \$3.4 million was utilized for CARES Act overhead adjustments. The remaining \$3.1 million was returned to the state general fund.

REPORT ON CARES FUNDING

The funds were allocated across three objectives:

- 1) Strengthen traded activities that can redistribute Hawai'i's GDP ("O1");
- 2) Strengthen Hawai'i's participation in the digital economy through direct project activity or by increasing critical infrastructure needs to enhance local economic development efforts ("O2"); and
- 3) Strengthen DBEDT's infrastructure to better serve the community's well-being ("O3").

The table below summarizes the initiatives prioritized, their outputs, and current or anticipated outcomes.

Initiatives	Objective(s) Supported	Outputs	Outcomes
Remote Work Demonstration Project	O1, O2, O3	<ul style="list-style-type: none"> Consumer and business-facing website with remote work resources (invest.hawaii.gov/remote) Data analytics to assess remote work macro-trends. Research study on remote work marketplace to understand current remote work practices and future plans, capacity, benefits and challenges, and interest levels in remote work from employee and employer perspectives. Distribution process for refurbished laptops to bridge digital divide. 	<ul style="list-style-type: none"> Partnership and coordination between DBEDT and WDD/WDC to support the pivot to an equitable digital economy. Data-driven insights to help shape state programs and policies pertaining to the remote work marketplace. Scalable demonstration programs for remote work equipment access and job training and placement.
Strengthen Export of Hawai'i Products	O1, O3	<ul style="list-style-type: none"> Identify, plan, and develop post-production value-added agricultural opportunities. Preliminary "Made in Hawai'i" opportunity framework based on marketplace assessment of supply and demand. 	<ul style="list-style-type: none"> Partnership and coordination between DBEDT, UH, and ADC to strengthen enabling infrastructure to increase value-added agriculture exports. Data-driven insights to inform "Made in Hawai'i" policy, branding, and promotion.
Increase Federal Contract Opportunities and Commercialization	O1, O2	<ul style="list-style-type: none"> Cyber security mentorship program (see "CyberHawaii" below). Preliminary dual use task force findings and recommendations per Act 121, SLH 2021. 	<ul style="list-style-type: none"> Enhance capacity for Hawai'i businesses to pursue federal contracts. Partnership and coordination between government and private sector dual use industry initiatives.
Implement New Measures of Economic "Well-being"	O3	<ul style="list-style-type: none"> Updated methodology, calculation, and operational manual for the Genuine Progress Indicator (GPI). 	<ul style="list-style-type: none"> DBEDT's operationalization of tracking Hawai'i's Genuine Progress Indicator as a measure of economic prosperity that takes into account traditional economic, environmental, and social factors.
DBEDT 2.0 Change Management Program	O3	<ul style="list-style-type: none"> Department-wide staff training, strategies, and skill development to serve in an evolving economy. Community-centered economic planning and development demonstration projects. 	<ul style="list-style-type: none"> Strengthen DBEDT's capacity as a facilitative catalyst for economic development that serves the well-being of Hawai'i's people, environment, and culture.
Hawai'i Strong Program	O3	<ul style="list-style-type: none"> Programming for Hawai'i's families to safely enjoy together, while supporting Hawai'i's entertainment professionals. 	<ul style="list-style-type: none"> Support community resilience through individual well-being.

REPORT ON CARES FUNDING

FUNDING FOR RENTERS AND HOMEOWNERS

Due to the pandemic, the Hawai'i Housing Finance and Development Corporation (HHFDC) had to rapidly stand up and implement a rent relief program to help families remain housed as one of the CARES Act initiatives in 2020. Although the Rent Relief and Housing Assistance Program (RRHAP) terminated in December 2020, the agency is still spending time and energy on federal reporting and the fiscal audit.

HHFDC is also administering an American Rescue Plan Act (ARPA) funded program in 2021, the Homeowner Assistance Fund (HAF) Program. HAF provided \$50 million to the State of Hawai'i to assist homeowners impacted by COVID-19 to avoid foreclosure on their homes. This consisted of assistance with paying outstanding mortgages, property taxes, utilities and other eligible household expenses, as well as mortgage counseling and legal aid. Priority is given to homeowners with incomes at or below 100% AMI as well as those considered socially disadvantaged and are delinquent on their mortgage or other eligible household expenses.

HHFDC is administering the HAF Program for the island of O'ahu. The three other counties are administering their own HAF Programs through local nonprofit organizations.



ECONOMIC FRAMEWORK

DBEDT's approach to economic development consists of a balance between economic growth and the well-being of Hawai'i's people, culture, and environment. In focusing on each of these segments, DBEDT will be able to achieve a sustainable economic system that better serves Hawai'i's people.



The department's activities are guided by the following high-level values, strategies, and tactics.

VALUES

- ▶ Always be considerate and respectful of Hawai'i's people, place, and culture
- ▶ Work together to prioritize balanced long-term growth and sustainable economic development
- ▶ Integrate all sectors and stakeholders to work for the common good and collective existence

STRATEGIES

- ▶ Capitalize on Hawai'i's strengths and assets
- ▶ Strengthen and leverage collaboration between public and private organizations and Hawai'i citizens
- ▶ Empower the internal capacity of the department by giving programs and staff the tools they need to succeed
- ▶ Redesign the department to support flexibility and agility to better serve a dynamic economy
- ▶ Use continuous improvement processes for long-term growth

TACTICS

- ▶ Leverage internal expertise to sift through large volumes of information to make data-driven decisions
- ▶ Empower DBEDT's economic development experts with data to facilitate deep evaluation and analysis that can generate compelling and innovative ideas for a sustainable economic future
- ▶ Foster connections and collaboration amongst all stakeholders in order to build trust, consensus, and buy-in

The divisions and attached agencies of the department work together, in a team approach, in order to integrate these values, strategies and tactics that have been outlined. Thus, this annual report reflects on how the department works towards this economic system as opposed to the reporting of each individual agency. As each agency or program submits its own annual report, please refer to their annual reports to find out in detail what each program has been working on.

WELL BEING OF ENVIRONMENT

Innovative green development is the key to economic growth that simultaneously provides living wage jobs of the future, protects our ‘āina and contributes to climate change mitigation and resiliency. Innovative clean, affordable energy, local food production, and natural resource protection and enhancement are important economic drivers that are not only crucial to a vibrant tourism industry, but essential to a competitive knowledge-based economy in Hawai‘i.

CLEAN ENERGY INITIATIVES

- 1. Stakeholder and Community Education, Outreach and Engagement:** The Hawai‘i State Energy Office (HSEO) is prioritizing a more comprehensive public clean energy education, outreach, and engagement program, which is critical to achieving HSEO’s broader mission to promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy economy. To increase living wage jobs, capital investment in energy efficiency and renewable energy projects, access to energy efficiency opportunities, and decarbonize the economy, HSEO must reach out to all sectors in Hawai‘i. The increasing public challenges and vocalized community concerns about energy projects’ impacts on host communities has made it clear there needs to be a more focused effort to reach out to and include grassroots community in stakeholder engagements and collaborations to more effectively, efficiently, and equitably advance Hawai‘i’s clean economy goals. Actions undertaken by HSEO to support stakeholder and community education, outreach and engagement include:
 - **Clean Energy Education Program:** Working in partnership with the Hawai‘i Department of Education to support the development and further expansion of clean energy education programs that will empower Hawai‘i’s youth and citizens to meet the State’s clean energy goals, while strengthening science, technology, engineering, and math (STEM) education and introducing students to potential energy job opportunities.
 - **Stakeholder Outreach:** Participating in numerous educational and outreach events with staff serving as subject matter experts in a myriad of clean energy-focused topics. Event topics and themes include energy building codes, energy performance contracting, environmental/climate change, renewable energy, energy awareness fairs, EV/clean transportation, and energy-focused community meetings.
 - **Dedicated Website:** Updating and maintaining a dedicated website that educates viewers about Hawai‘i’s growing clean energy economy and vision and the HSEO’s initiatives, activities, and programs. Viewers can find up-to-date information about energy planning, renewable energy and energy projects, energy efficiency, and clean transportation, including the annual Hawai‘i Energy Facts and Figures, and numerous reports and studies. In FY21, there were 670,418 page views to energy.hawaii.gov, a nearly 98 percent increase over FY20.
 - **Publications:** Developing and distributing publications and collateral material to raise awareness and communicate progress of clean energy efforts of the HSEO. To educate and update stakeholders on Hawai‘i’s constantly changing energy landscape, HSEO distributes an annual report, a quarterly e-newsletter, an annual compendium of Hawai‘i’s key energy data, and various collateral pieces. In FY21 e-newsletters and e-blasts communications were sent to 10,233 subscribers, a decrease compared to FY20 due in part to vacancy in the PAO role for almost six months of the year.



WELL BEING OF ENVIRONMENT

One-Year goal: Overhaul HSEO communications and website; and launch a long-term stakeholder and community engagement strategy, including the Clean Energy Wayfinders Program, to educate the broader community about Hawai'i's energy needs and goals, what it will take to reach them, as well as to provide all Hawai'i's stakeholders a voice in project and policy development to support the State's successful achievement of its decarbonization goals. Utilize web-based community engagement software to solicit feedback from communities about their views toward large-scale renewable energy projects. Increase frequency and engagement of digital communications.

Five-Year goal: Refine the website and continue strengthening community outreach and stakeholder engagement to solidify HSEO's emerging role as a trusted, unbiased navigator on Hawai'i's voyage to a clean energy economy.

Action Plan:

- ⇒ Start the Clean Energy Wayfinders Program through federal funding in coordination with Kupu 'Āina Corps.
- ⇒ Stand up an overhauled communications program including a new website that provides easier access to data, resources, and opportunities to provide comment to HSEO.
- ⇒ Develop and implement a community engagement playbook to provide tools and resources to communities and developers that help them work together productively on new clean energy infrastructure.
- ⇒ Co-host Okinawa-Hawai'i Partnership on Clean and Efficient Energy Development and Deployment activities and participate in other national and international forums.
- ⇒ Continue deploying new clean energy education curriculum and teacher training to Hawai'i K-12 Title One schools.

Measure of success: Number of viewers to HSEO information platforms. Compare community engagement feedback over time to measure effectiveness of each approach. Feedback from educators and students on new curriculum.

- 2. Democratizing Clean Energy for Underserved Ratepayers:** The Hawaii Green Infrastructure Authority ("HGIA" or "Authority") continued to originate, underwrite, approve, and fund loans to underserved ratepayers during the year leveraging its on-bill repayment mechanism and making clean energy more accessible to previously hard to reach ratepayers.

One-Year Goal: Continue deploying funds to facilitate clean energy adoption for underserved ratepayers.

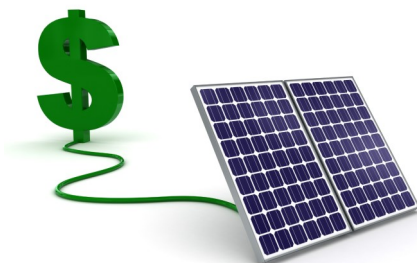
Five-Year Goal: Develop new products to further help underserved ratepayers, such as leveraging the on-bill repayment mechanism to service ongoing subscription fees for Community Based Renewable Energy ("CBRE") projects, with or without GEMS financing.

CBRE developers have reached out to HGIA to utilize its on-bill repayment mechanism to reach underserved ratepayers while mitigating developer risks. HGIA has been working with HECO on the reprogramming required to accommodate the GEM\$ Program Charge in the CBRE portal to automate Subscriber onboarding the servicing.

WELL BEING OF ENVIRONMENT

Action Plan:

- ⇒ Work with CBRE developers and HECO to re-program CBRE portal.
- ⇒ Obtain PUC approval to finance community solar projects. Obtain PUC approval to utilize the GEM\$ on-bill repayment mechanism without HGIA financing.
- ⇒ Develop processes, forms, documents and agreements for CBRE developers and Subscribers.
- ⇒ Enroll subscribers.
- ⇒ Service subscription fees.



Measure of Success: Jobs created, tax revenue generated kWh produced or reduced, etc., however, the real measurement of success will be the enrollment of underserved ratepayers who are currently being excluded from CBRE projects.

- 3. Expand Lending Activities:** Upon the passage of Act 107 (SHL 2021) on June 28, 2021, per Part 1719 of the Code of Federal Regulations, the Authority submitted a Letter of Intent to the US Department of Agriculture (“USDA”) Rural Energy Savings Program (“RESP”) to apply for a \$20.0 million loan under the RESP’s re-lending program in July 2021. In October 2021, USDA provided HGIA an “Invitation to Apply” with the complete application packet due by December 15, 2021. HGIA accomplished last year’s goal for legislation to be passed as well as submission of required application paperwork for the Federal grant.

One-Year Goal: Submit the application packet to USDA by the due date of December 15, 2021.

Five-Year Goal: Process loans through Rural Energy Savings Program while seeking additional sources of loan capital.

- * Based on HGIA’s proforma projections for the RESP loan application, HGIA estimates that the \$20.0 million in loan funds will facilitate approximately 112 installations. As such, the Authority will continue to seek additional funding sources as opportunities arise.

Action Plan:

- ⇒ Identify access to capital gaps within the State.
- ⇒ Design loan products. Instead of designing new loan products, the USDA funds will be integrated into HGIA’s existing suite of products for increased efficiencies in deployment.
- ⇒ Outreach with partners and stakeholders.

Measure of Success: Number of loans to facilitate clean energy projects, which results in additional economic and environmental impacts, all of which are reported quarterly.

WELL BEING OF ENVIRONMENT

RENEWABLE ENERGY

- 1. Renewable Energy Deployment:** HSEO supports the successful establishment of renewable energy projects that will replace the existing coal plant and limit negative impacts on communities while advancing the State's decarbonized economy goals. The scheduled replacement of 180 megawatts of capacity from coal on Oahu's grid is a substantial undertaking; grid reliability and power affordability will be dependent on the successful and timely deployment and operation of several solar and battery storage projects over the next two years. Toward this end, HSEO is supporting the deployment of 16 solar-plus-battery-storage projects and three standalone battery storage projects on O'ahu, Maui, and Hawai'i Island, as well as supporting the continued installation of distributed energy resources across the state.



Actions undertaken by HSEO to support renewable energy deployment include:

- Powering Past Coal Task Force:** On March 30, 2021, Governor Ige established the Powering Past Coal Task Force (PPCTF), through [Executive Order 21-01](#) to “convene stakeholders to increase transparency, coordination, collaboration, and urgency to timely facilitate, coordinate, and align project development and reviews by Hawaiian Electric, state, and county agencies for those measures anticipated to provide electricity for O'ahu to replace the coal plant's electricity...” The PPCTF is chaired by the Chief Energy Officer and consists of members from the City and County of Honolulu, the Mayor's Office, state agencies, state Legislators, Hawaiian Electric, non-government organizations interested in environmental protection and community engagement, and renewable energy developers. Information is provided by HSEO on its [PPCTF webpage](#). The PPCTF is not a policy or decision-making body and seeks only to improve coordination in the review of the projects and programs intended to replace the coal plant. Hawaiian Electric has stated that “The Companies have benefitted from participation in the Powering Past Coal Task Force, where the utility, developers, state and county permitting agencies, and community leaders regularly communicate and collaborate on projects under development and are open to the establishment of a similar forum to discuss issues related to the retirement of [Kahului Power Plant] KPP.” Expanding the work of the PPCTF to other islands has been requested by Hawaiian Electric and renewable energy developers.
- West Kaua'i Energy Project:** HSEO is a participant in PUC Docket No. 2020-0218, *Application For Approval Of Power Purchase Agreement With AED West Kaua'i Energy Project, Llc And To Include Costs In Kaua'i Island Utility Cooperative's Energy Rate Adjustment Clause, And Other Matters Related To The West Kaua'i Energy Project* that includes two hydropower electric generation facilities, a pumping station, a photovoltaic array and battery energy storage system, the use of Kōke'e Ditch, and the use of three reservoirs (Pu'u Lua, Pu'u 'Ōpae, and Mana Reservoirs). The project's annual energy production of 110 gigawatt-hours is expected to increase KIUC's renewable portfolio standard from 58% to 79% in 2030.

- Hawai'i Renewable Energy Projects Directory:** HSEO has upgraded and will continue to upgrade its lauded Hawai'i Energy Projects Directory, the only state-controlled source of information on the status of large energy projects that contribute to Hawai'i's renewable energy mandate. In FY21, HSEO transitioned the Directory to a data-based geographic information systems (GIS) platform that facilitates the sharing and analysis of more project-specific information and now includes the fossil fuel units that play a critical role in Hawai'i's energy mix. Interactive layers such as zoning and land use districts, tax map parcels, transmission lines, and other items inform the user of the various energy projects throughout the state and their characteristics. From July 1, 2020, to June 30, 2021, there were 12,955 page views to the Directory.



WELL BEING OF ENVIRONMENT

- **Renewable Energy Permitting Wizard:** One of HSEO's statutory duties under [HRS 196-72](#) is to facilitate the efficient, expedited permitting of renewable energy projects to achieve Hawai'i's renewable energy goals. One of the ways HSEO accomplishes this is through its online [Renewable Energy Permitting Wizard](#), which identifies the county, state, and federal permits and approvals and the sequence in which the approvals may be obtained; facilitates the appropriate siting of large projects; and serves to reduce soft costs associated with project siting and permitting due diligence. In June 2021, HSEO contracted a consultant to assist in updating the information contained in the Wizard; specifically, all the county, state, and federal permits contained in the Wizard. Updates are to be completed in 2022.
- **Environmental Review and Comment Submittal:** HSEO provides review and technical comments on HRS chapter 343 environmental documents for renewable energy projects across the state. In addition, HSEO regularly submits and provides written and oral testimony in support of renewable energy projects that require discretionary permits and approvals. HSEO collaborates with interested stakeholders and State and County agencies, such as the Department of Land and Natural Resources, when submitting comments on large projects that are often multifaceted and span various environmental sectors to help ensure concerns are proactively addressed when developing renewable energy projects.
- **Community-based renewable energy (CBRE),** also known as “community solar” and “Shared Solar,” provides a means for utility ratepayers to invest in solar projects where they do not have the means or ability to invest in their own rooftop solar installations. HSEO is an intervenor in the docket [2015-0389](#). In FY21, 124 documents, consisting of over twenty-one thousand pages, were filed in the docket. HSEO developed a webpage to explain the CBRE process, attended public and working group meetings, and facilitated public comments on the PUC's CBRE docket to improve the process for requests for proposals. HSEO will continue to work with project developers (“subscriber organizations”), the public, and communities.
- **Workforce Development:** HSEO met with previous and current renewable energy project developers to discern their progress and needs, and to identify near-term opportunities for Hawai'i residents to enter the clean energy industry. Several needed skills and certifications were identified. HSEO is working with schools and universities, trades, and workforce development organizations such as the Chamber of Commerce of Hawai'i and Workforce Development Council to ensure Hawai'i residents have access and opportunity to obtain the needed skills and certifications to design, build, and operate Hawai'i's clean energy future.
- **Real Property Assessments, O'ahu:** Ongoing communication with project developers during FY21 enabled HSEO to be productively involved in an issue that surfaced in August 2021 regarding a new property tax treatment that jeopardized the viability of solar projects in existence and under development because this was not the tax treatment the projects relied on during financing and competitive utility procurements. If not remedied, the new tax treatment would also significantly increase the cost for any new renewable energy projects on lands other than those zoned industrial. After much discussion and involvement, an interim measure was passed in December 2021. HSEO continues to work on this issue to reach a long-term solution.



One-Year goal: Conduct needs assessment with renewable energy developers, consultants, communities, and permitting agencies to identify potential project siting and permitting needs.

Five-Year goal: Maintain and update the tools to address contemporary issues and subjects regarding the siting and permitting of large renewable energy projects in Hawai'i.

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Action Plan:

- ⇒ Support implementation of the Stage 1 and 2 solar plus battery storage and standalone battery storage projects to ensure the timely decommissioning of Hawai'i's only coal plant in support of Act 23, SLH 2020.
- ⇒ Identify and facilitate local workforce employment opportunities. Support siting and permitting of large renewable energy and related projects to reduce risks and facilitate appropriate siting of grid-scale projects.

Measure of success: Successful and appropriately sited renewable energy projects. Effectiveness and usefulness of information and on-line tools.

2. **Energy Projects:** The Land Use Commission (LUC) is also responsible for the approval of Solar Projects on class A, B & C rated lands. Over 65 Megawatts of power were approved this year.

One-Year Goal: Expedite processing of Solar permits.

Five-Year Goal: Continued processing of permits in an expedited manner.

Action Plan: N/A

Measure of Success: Processing of permits in a timely manner.

3. **Expand the FTZ Energy Generation System:** The FTZ has been relying on its 300kW photovoltaic system since 2017 to help power its operations. Since the system was designed to provide only enough energy sufficient to augment daytime consumption, FTZ9 is working to enhance this system to extend its usability overnight.

One-Year Goal: Expand this system to reduce its dependence on the electric grid and shift toward renewable energy sources. Augment the existing system by installing additional panels and a battery system that will help to lower the FTZ's operating and energy costs and provide a resource for energy resiliency in the event of a natural or other type of disaster.

Five-Year Goal: Hawai'i's COOP plan sites FTZ as a location to intake, store, and distribute critical goods and materials in the event of an emergency and help in the State's recovery effort. The addition of a battery system will create a microgrid which could provide electricity for the area if electric feeder lines are inoperable, or supply lines are cut. The battery system would allow FTZ9 and surrounding neighbors to operate 24/7 solely on renewable energy.

Action Plan: Seek federal funding or grant opportunities to underwrite the cost of the project.

Measure of Success: Receive funding to start the project with the final outcome being a robust system.

4. **Testbed to address electricity delivery and grid integration:** There is significant value in developing an advanced energy technology testbed to address electricity delivery and grid integration problems both within the site boundaries and to provide value to a stressed utility operating in an isolated island environment. NELHA is in the process of completing a long-term plan for renewable energy upgrades to HOST Park. Primary emphasis is on achieving energy security and resiliency for critical seawater operations in the face of increasing vulnerability (especially during natural disasters) of the electric grid, uncertainty about the cost of oil-based resources, and the availability of increasing amounts of low-cost (primarily solar) renewable energy resources and storage. In this regard, NELHA contracted with the Hawai'i Natural Energy Institute (HNEI) to provide a facility wide renewable energy and microgrid road map for the next 10 years. HNEI completed Phase I the NELHA facility energy and infrastructure assessment report in FY21. HNEI will complete the final report in November 2021 with

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recommendations and strategies on how NELHA can implement and leverage microgrid technologies and further NELHA renewable energy portfolio into the future to meet its energy goals.

In addition, NELHA continued to work with the Public Utilities Commission regarding Microgrid Investigation in Docket No. 2018-0163. In Act 200, the 2018 Legislature specifically found that “[t]he natural energy laboratory of Hawai‘i authority is recognized as having the potential to operate a microgrid and may be designated as the first microgrid demonstration project after the establishment of the microgrid services tariff” The opportunities for regulatory flexibility at HOST Park that can facilitate microgrid applications to improve the resiliency of Hawai‘i’s energy systems. NELHA currently envisions that combining loads on the HELCO distribution circuit into a single microgrid under certain extended utility grid outage events would require the “temporary use” (limited to that period of time where the utility was unable to deliver grid power) of that section of their distribution circuit serving the several HOST Park metered accounts. The envisioned temporary use of the HELCO segment of distribution line would appear to fall under the requirements of the Hybrid Microgrid provisions of the tariff.

One-year Goal: Continue discussions with national labs, University of Hawai‘i, local utilities, and the private sector to formulate partnerships for new joint projects in the areas of additional PV, grid scale energy storage demonstrations and microgrid development.

Five-year Goal: Develop five new renewable energy projects.

Action Plan:

- ⇒ NELHA’s stretch goal is provide approximately 65 percent of total power from renewables onsite by 2030. Main initiatives include: 1) Establish an energy storage testbed; 2) Develop an integrated energy district or microgrid; 3) Reduce NELHA carbon footprint by adding renewable energy from solar photovoltaic (PV) panels; 4) Work with the University of Hawai‘i and US Department of Energy (USDOE) to develop a testbed for hydrogen technologies; 5) Expand efforts to assist the private sector in commercialization of OTEC; and, 6) Expand NELHA relationships with the national laboratories and other key players in Hawai‘i’s energy field such as HNEI and utilities.
- ⇒ NELHA management will use HNEI’s microgrid road map as a guide for potential future upgrades to the electrical systems at the facility. The inclusion and management of renewable resources and the strategies to implement will increase resiliency from grid related issues and emergency events.
- ⇒ Apply for grants to develop projects.
- ⇒ Continue to work with the PUC regarding microgrid designation in Docket No. 2018-0163.

Measure of success: Reduce fossil fuel generated energy consumption by 65 percent and PUC tariff designation for a demonstration microgrid.

- 5. Regional Seawater Air-Conditioning Analysis Study:** NELHA secured the consultant for the West Hawai‘i regional seawater air-conditioning analysis using CIP funds.

One-year Goal: Project is currently scheduled to be completed in the FY22.

Five-year Goal: Dependent upon the recommendations in the current analysis.

Action Plan: Continue to work with consultant to complete analysis.

Measure of Success: Implement recommendations of analysis and develop regional system if warranted.

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6. **Solar Desalination Project:** NELHA completed Phase Two implementation of \$2M USDOE SunShot grant for a solar desalination demonstration project and continue to explore requirements to facilitate an offshore deep water desalination project.

One-year Goal: Complete Phase 2 of the USDOE project and begin Phase 3. Obtain permits for offshore underwater desalination demonstration project.

Five-year Goal: USDOE Project is scheduled for completion in 2022. If successful ramp up desalination efforts. Successful demonstration of offshore desalination project.

Action Plan: Continue to work closely with contractor and USDOE and start-up company for offshore demonstration project.

Measure of Success: Proof of concept of new onshore technology to desalinate 133,000 gallons per day and up to 80,000 gallons per day for the offshore demonstration project.

ENERGY EFFICIENCY

Energy efficiency saves money for agencies, businesses, and residents. Hawai'i learns from, and contributes to, national and local organizations of experts in energy efficiency technologies, building codes and standards, and government operations and procurement. This allows HSEO to effectively collect information, assess feasibility, recognize, and share best practices, which informs, validates, increases success, and promotes implementation of energy efficiency measures, programs, and projects at all levels.

Actions undertaken by HSEO to support energy efficiency include:

- **International Energy Code Adoption:** As ex-officio voting member and Chair of the State Building Code Council, HSEO was instrumental in the Council's recent adoption of the 2018 International Energy Conservation Code with Hawai'i specific amendments. HSEO works with state agencies, county, business, non-profit, and energy professionals to evaluate and provide training on minimum energy performance standards for commercial, residential, and other buildings in Hawai'i. In addition, HSEO chairs the Tropical Zone Task Group of the National Green Building Standards committee and sits on the committees of the Cool Roof and Cool Wall Rating Councils and the Urban Heat Island committee.
- **Hawai'i Green Business Program:** HSEO coordinates the Hawai'i Green Business Program (HGBP), which provides technical assistance to businesses and organizations to implement energy and resource-efficient practices and recognizes the success and value of the practices during an annual award ceremony. Now in its twentieth year, the Hawai'i Green Business Program was established as a partnership between the HSEO, the Department of Health, the Board of Water Supply, and the Chamber of Commerce of Hawai'i.



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- **Energy Efficiency Technical Assistance:** HSEO collaborates with and provides information and technical review to government agencies, professional associations, and educational institutions in Hawai'i to reduce energy use and to participate in energy performance contracting (EPC). In addition to in-house expertise, HSEO contracts with technical and contracting experts to provide in-depth review, analysis, and recommendations.

One-Year goal: Provide training on the 2018 IECC and Hawai'i and county amendments and support for county adoption. Initiate 2021 IECC Working Group meetings to discuss industry, code official, and other stakeholder concerns and draft Hawai'i amendments to the 2021 IECC. Obtain federal funding to support technical assistance and training.

Five-Year goal: Adopt the 2021 IECC at the SBCC with Hawai'i amendments and at the county level with county amendments. Recruit and expand training programs to trade and professional associations via on-going partnership with the community colleges and universities. Provide technical assistance to support State agencies in financing energy efficiency and cost reductions via operational changes, EPCs or other mechanisms.

Action Plan:

- ⇒ Provide leadership in Energy Code and Community College Train the Trainer events and toolkits to improve the awareness of and interest in employment opportunities in code official and code verification professions. Establish a working group to develop Hawai'i-specific provisions in collaboration with the national labs, for the 2021 IECC for the State Building Code Council.
- ⇒ Work with State, county, federal agencies, and energy industry partners to reduce energy use for state buildings 25% (from 2005 levels) by 2025.
- ⇒ Increase the knowledge of advanced design and construction practices in community college and professional continuing education programs.

Measure of success: Utilization of train-the-trainer toolkits. The number of participating instructors and students. Number of other states that participate with Hawai'i, Illinois, and Nevada. Number of professionals and code officials trained in the 2018 and 2021 IECC. Meetings of the 2021 IECC working group and list of provisions for Hawai'i amendments. For State facilities: number of State facilities benchmarked; rebate or energy cost savings identified for capital improvement projects; measured energy savings; and calculated bill savings.

CLEAN TRANSPORTATION



The Hawai'i State Energy Office has taken a leadership role in advancing the adoption of clean transportation across Hawai'i, including facilitating zero emission vehicle (ZEV) deployment and associated electric vehicle charging infrastructure, which directly contribute to reducing petroleum consumption and emissions in the transportation sector. To decarbonize the transportation sector, HSEO works with local communities; federal, state, and county agencies; energy stakeholders; and clean transportation stakeholders to encourage and facilitate the adoption of clean transportation technologies.

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The availability of ZEVs for purchase and the accessibility of charging stations are significant factors for the advancement of clean ground transportation. HSEO has pursued opportunities to send market signals to vehicle manufacturers and lessors to increase the availability of ZEVs for purchase and rent throughout the state.

Actions undertaken by HSEO to support clean transportation include:

- **Medium- and Heavy-Duty Vehicle Memorandum of Understanding:** HSEO led the effort for Hawai'i to join with 14 other states and Washington D.C. in signing the Multi-State Zero Emission Medium- and Heavy-Duty Vehicle Memorandum of Understanding (MDHD MOU).
- **Volkswagen Settlement:** Investment of \$8.125 million allocated to Hawai'i as part of a federal settlement with Volkswagen to mitigate vehicle emissions through the replacement of medium and heavy-duty vehicles, as well as the deployment of light duty vehicle supply equipment.

HSEO has allocated \$2.5M of VW Settlement funds towards rebates for MDHD transit, shuttle, and school buses, as well as MDHD trucks. This funding is used as a local match for federal Diesel Emission Reduction Act (DERA) funds in partnership with Hawai'i Department of Health (HDOH). This partnership leveraged Volkswagen Settlement funds to receive a bonus incentive of roughly \$500,000 from the U.S. Environmental Protection Agency's Diesel Emissions Reduction Act program, increasing the otherwise available funds by more than 30 percent. These funds will go towards the Diesel Replacement Rebate (DRR), a multi-year program that will offer 45% rebates to public and private organizations within Hawai'i that replace old, medium- and heavy-duty vehicles with an electric equivalent and an associated charger.

HSEO is collaborating with Hawai'i Department of Transportation (HDOT) to utilize \$4.2M of Volkswagen Settlement funds to procure up to 12 ZEV transit buses for Hawai'i, Kaua'i, and Maui Counties. The partnership with HDOT leverages Federal Transit Administration Low or No Emission Vehicle Program formula funds and two competitive grants to develop the pilot project.

- Partnered with HDOH to leverage federal funds to help with the procurement of a battery electric bus and charging equipment for the City and County of Honolulu. This partnership will continue.
- HSEO has allocated 15%, the maximum authorized percentage, to the deployment of charging infrastructure in HSEO's Beneficiary Mitigation Plan.
- **EV Charging Infrastructure:** HSEO engages in both market building activities and infrastructure deployment supporting the buildout of EV charging infrastructure. HSEO has nominated alternative fuel corridors on Hawai'i island, Maui, Moloka'i, Lāna'i, O'ahu, and Kaua'i. With the designation of alternative fuel corridors, the Federal Highway Administration (FHWA), is establishing a national network of alternative fueling and charging infrastructure along national highway system corridors. Segments of each nomination have been designated either "corridor pending" or "corridor ready" by the FHWA. In 2020, FHWA Highway Infrastructure Program (HIP) funding was expanded to projects providing "necessary charging infrastructure along corridor ready or corridor pending alternative fuel corridors." Corridor designation also opens federal funding opportunities under the IIJA.

HSEO has allocated \$50,000 towards the deployment of a DC fast charger on Kaua'i to support the successful application of a future corridor ready designation. HSEO has filed to become a participant in Docket [2021-0173](#) concerning Hawaiian Electric's application to implement a \$79M Public Electric Vehicle Charger Expansion Project. HSEO has a role in coordination as directed by HRS section 169-72 and has an interest in the coordination opportunity the application presents. It will be critically important for HSEO to coordinate with

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HECO, HDOT, the Counties and all relevant parties to ensure that the application is assessed holistically and takes into consideration the IIJA formula and competitive funding opportunities as well as Volkswagen Settlement funds such that the needs of Hawai'i consumers, including low- and moderate-income consumers are addressed.

HSEO participates in a “electric vehicle as a service” contract with DOT, resulting in an electric vehicle that is available for HSEO staff to conduct official state business activities. This vehicle is price-comparable to a fossil fuel powered internal combustion engine vehicle, and costs less to fuel and maintain. Use of the vehicle is charged per mile of use and includes the cost of charging and maintaining the vehicle.

- **Vehicle Miles Traveled/Active Transportation:** HSEO and DLNR applied for and were awarded a grant from the U.S. Climate Alliance to hire a Vehicle Miles Traveled (VMT) and Active Transportation Specialist in December 2021. Reducing VMT is a form of energy efficiency. The least expensive energy is the kind that never has to be generated in the first, reducing the number of miles travels contributes to overall energy efficiency. Throughout the two years of the grant-funded position, this person will focus on the development and implementation of strategies to reduce VMT in the State of Hawai'i through mode-shift, active transportation, and other associated means.

One-Year goal: Release the Vehicle Assistance Program (VAP) for eBus rebates funded through the Volkswagen Settlement fund and Diesel Emission Reduction Act (DERA). Refine deployment plan for the investment of the remaining EV charging infrastructure dollars and eBus program under the Volkswagen Settlement. Collaborate with relevant state agencies, including HDOH and HDOT, and local stakeholders to identify and pursue funding opportunities including the IIJA.

Five-Year goal: Deploy all Volkswagen Settlement funds except for the final two years of VAP rebates. Through collaboration with HDOT, counties, and relevant state agencies and stakeholders, develop a plan to systematically access and deploy federal funds through a variety of programs strategically filling market gaps.

Action Plan:

- ⇒ Advance investment in clean transportation infrastructure and vehicle adoption throughout Hawai'i through the Volkswagen Settlement, DERA, and other federal grants, and designation of clean transportation corridors coordinated as relevant with sister agencies at the State and county level and transportation stakeholders.
- ⇒ Explore and participate in innovative ways to adopt alternative fuel vehicles. Support other State and county agencies as they transition to a decarbonized fleet.

Measure of success: Alternative fuel vehicles adopted, GHG and NOx emission reductions, federal and private funds leveraged.

HCATT Programs: Due to lack of congressional-add-on funding provided for the project, the Hawai'i Center for Advanced Transportation Technologies (HCATT) program is at risk of being suspended. HTDC continues to work with the Department of Defense, Hawai'i Air National Guard, and the congressional delegation on a path forward.

HCATT continues working on its \$30 million, 5-year cooperative agreement contract with the U.S. Air Force Research Lab. HCATT continues to solicit federal funding from a variety of sources to diversify its income stream. HCATT currently does not receive any state funding. The program has been reduced from five full time staff to two. HCATT operates the only operational renewable hydrogen production and dispensing station on Oahu and over the years has brought more than \$40 million in federal funds into the State, matched by another \$23 million from private partners.

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One-Year Goal: Secure funding for program.

Five-Year Goal: Integrate program into common renewable energy goals of DOD and the State.

Action Plan: Collaborate with the State Energy Office, Air Force, and Navy.

Measure of Success: Federal funds brought into the state.



2050 SUSTAINABILITY PLAN

Hawai'i 2050 Sustainability Plan: Act 146, SLH 2019, (codified as HRS §226-65 within the Hawai'i State Planning Act) added new language clarifying that the newly updated Hawai'i 2050 Sustainability Plan "shall serve as the State's climate and sustainability action plan." The Hawai'i 2050 Sustainability Plan was completed and published in June 2021. An online and interactive version of the plan is also available online at: <https://hawaii2050.hawaii.gov/interactive>. The Plan embraced the United Nations' 2030 Sustainability Development Goals as the decennial framework while aligning the Aloha+ Challenge and the various sustainability and climate statutory targets, policies, plans, and initiatives to provide a vision and over 262 recommended actions within 38 strategies and 8 focus areas to achieve within the 2020-2030 "Decade of Action," to maintain the State's progress and direction toward Hawai'i's equitable, climate resilient, and sustainable future.

One-Year Goal: OPSD intends to provide statewide coordination to assist the various state agencies to implement the goals and actions in the 2020 – 2030 Update to the Hawai'i 2050 Sustainability Plan as required by HRS §226-65. Initial actions are to distribute the update and revision of the Hawai'i 2050 Sustainability Plan to policy makers, state and county agencies, and private and non-governmental stakeholders, and begin incorporating the guidance set forth by the Hawai'i 2050 Sustainability Plan in various climate change, environmental, and land use planning and reviews.

Five-Year Goal: OPSD will continue work towards the statewide implementation of the Hawai'i 2050 Sustainability Plan. OPSD's Statewide Sustainability Branch intends to conduct a 5-year review of the Hawai'i 2050 Sustainability Plan (2020-2030) update in 2026, to ensure the plan's progress toward achieving recommended actions. This review will provide an analysis of accomplishments through the UN's "Decade of Action" to ensure the State of Hawai'i continues in its progress in achieving Hawai'i's sustainability and climate-resilient statutory targets.

Action Plan: Implementation of the Hawai'i 2050 Sustainability Plan. OPSD's Statewide Sustainability Branch intends to provide annual measurement reports identifying progress or areas which need improvement, if provided the appropriate staffing. OPSD's Statewide Sustainability Branch intends to conduct a 5-year review of the plan in 2026. OPSD anticipates beginning the planning process for the 2030-2040 decennial update in late 2028 for publication by 2030.

Measure of Success: Progress toward achieving recommended actions and the State's sustainability and climate legal and statutory targets. This review will provide an analysis of accomplishments through the UN's "Decade of Action" to ensure the State of Hawai'i continues in its progress in achieving Hawai'i's sustainability and climate-resilient statutory targets.

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LOCAL FOOD PRODUCTION

1. **LUC Important Agricultural Land (IAL) Designation:** Pursuant to recently enacted legislation, private parties and the counties may submit petitions for various lands to be designated as “Important Agricultural Lands.” Counties may submit large scale proposals for designation.

One-Year Goal: Complete Petition by the City and County for O’ahu designation.

Five-Year Goal: Complete Maui County and Hawai’i County Petitions.

Action Plan: N/A

Measure of Success: Completion of designation process.

2. **Act 278 Study of Subdivision and CPR on Agricultural Lands on Oahu:** The OPSD has undertaken the following:
 - Completed and submitted its report prepared pursuant to Act 278, SLH 2019 regarding land subdivision and condominium property regime (CPR) laws related to agricultural land on Oahu (December 2020).
 - Supported Act 278-related legislation introduced in 2021 by Senator Gabbard and Representative Tarnas, resulting in Act 77 (2021) which allowed expanded county review and comments on CPRs, and bolstered county enforcement on leasehold agricultural subdivisions.
 - Expanded the Stakeholders Group to include Neighbor Island counties and held three meetings from August to October 2021.
 - Discussed potential expansion of the State Rural District with all county planning departments and LUC staff.

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One-year Goal: Seek funding to engage consulting services to guide interagency collaboration and revisions to State Rural District Policy, along with a feasible process to expedite redistricting from the Agricultural to the Rural District.

Five-year Goal: Pursue additional legislation as deemed needed. Monitor implementation of any legislation and county amendments to their ordinances and rules.

Action Plan: Meet with legislators and testify as needed before legislative committee hearings. Reconvene Stakeholders Group to continue discussions and remedial measures as needed.

Measure of Success: Enactment of legislation to better define farm dwellings and expand use of the Rural District.

3. **He'eia Community Development District:** In 2021, HCDA worked to establish a community development plan and rules for He'eia. The 400-acre community development district, primarily owned by the State, is a tremendous asset to the State's food security goals.

One-Year Goal: Complete the He'eia District Mangrove Remediation Project.

Five-Year Goal: Increase acreage of land for taro cultivation and other agricultural activities. Restore natural resources in the district.

Action Plan: Work collaboratively with the lessee, He'eia community and the surrounding neighborhoods, and other interest groups to develop the Plan and Rules. Work with the lessee to increase acreage of land in agriculture and production of taro and other agricultural products.

Measure of success: Community Development Plan and Administrative Rules are adopted. Increase in acreage of land in agricultural use and increase in production of taro and other agricultural products.

REDUCE GREENHOUSE GAS EMISSION

Feasibility and Implications of Establishing a Carbon Offset Program for the State of Hawai'i: OPSD accomplished the 2020 goal to finalize and publish a report which investigates the feasibility of establishing a state-administered carbon offset program in partnership with the Greenhouse Gas Sequestration Task Force. This feasibility report recommended the combination of local sequestration of atmospheric carbon dioxide and greenhouse gases (GHG) with Hawai'i's coordinated greenhouse gas emission reductions instead of launching a state-administered carbon crediting and carbon offsetting system to guide Hawai'i to achieve the Zero Emissions Clean Economy Target by 2045, pursuant to HRS § 225P-5. Funded by appropriation of Act 16, SLH 2018.

One-Year Goal: Completed report and publicized in 2019. Follow up activities to implement the report.

Five-Year Goal: Progress towards Zero Emissions Clean Economy Target.

Action Plan: Collaborate with DOH, DOA, and DLNR on incentivizing GHG sequestration. Discussions underway to develop a "Carbon Positive Incentive Program" to potentially provide financial incentives and subsidies to local large natural landowners, farmers, and ranchers to sequester GHGs via regenerative agricultural and ranching practices and sustainable land management practices. Policy determinations need to be decided to ensure both DLNR and DOA, and other state agencies as

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appropriate, can equally participate and distribute “carbon positive incentives” subsidies to Hawai‘i’s land managers to sequester GHGs statewide and increase GHG/“carbon” sinks.

Measure of Success: Reduction of greenhouse gas emission and increase of greenhouse gas sequestration via DOH GHG Emission Inventory Report and other reporting to the Greenhouse Gas Sequestration Task Force.

Greenhouse Gas Sequestration Task Force: The Greenhouse Gas Sequestration Task Force, established by HRS § 225P-4, includes State agencies, academia, county representatives, and members appointed by the President of the Senate and Speaker of the House of Representatives. OPSD plans to fulfill the requirements set forth by HRS §225P-4, to submit a report of the Greenhouse Gas Sequestration Task Force’s findings and recommendations, including any proposed legislation, to the Legislature and the climate change mitigation and adaptation commission. In December 2020, the OPSD joined 3 other state agencies to participate in the “Climate Ready Hawai‘i” AmeriCorps VISTA Cohort. As a part of this cohort, the OPSD secured one AmeriCorps VISTA Member, who served as a Climate Adaptation Research Analyst, under the supervision of the State Sustainability Coordinator. The AmeriCorp VISTA Member also supported the Statewide Sustainability Branch and OPSD to host three Greenhouse Gas Sequestration Task Force (GHGSTF) meetings in 2021.

One-Year Goal: OPSD plans to continue to host six GHGSTF meetings in 2022 and develop recommendations to align the State’s greenhouse gas emission reduction and carbon sequestration efforts. OPSD anticipates publishing the GHGSTF’s major Preliminary Report in December 2022 to meet the requirements set forth by HRS §225P-4.

Five-Year Goal: With increased staffing requested in the FY 22-23 Supplemental Budget for 1 FTE Greenhouse Gas Sequestration Specialist, OPSD plans to continue to host GHGSTF meetings, coordinate statewide greenhouse gas sequestration in alignment with statewide greenhouse gas emission reduction goals, support “carbon positive incentivization” financial subsidies for sustainable land management and regenerative farming and ranching practices, and publish annual reports on the progress of the GHGSTF beginning in 2024.

Action Plan: Frequent and current GHGSTF meetings, major preliminary reporting by 2023, annual reporting beginning in 2024, and the continued coordination and collaboration with managers of working and natural lands.

Measure of Success: Increase in sequestration of greenhouse gases through improved soil health and regenerative land management practices through carbon sink reporting via the DOH’s Greenhouse Gas Emission Inventory Annual Reports.

MARINE MANAGEMENT

Ocean Resources Management Plan (ORMP): The ORMP sets forth the guiding principles and recommendations for the State to achieve comprehensive and integrated ocean and coastal resources management. HRS § 205A-62, charges the CZM Program with the review and periodic update of the ORMP, as well as coordination of the overall implementation of the plan. The ORMP is an integrated, place-based approach to management of ocean resources in the island, based on recognition of the ecological connection between the land and sea, the link between human activities and their impact on the environment, and the need for improved collaboration and stewardship in natural resources governance.

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OPSD accomplished the 2021 goal to coordinate implementation of the 2020 ORMP. The final report incorporates Traditional Ecological Knowledge (TEK) and highlights three areas: Development and Coastal Hazards, Land-Based Pollution, and Marine Ecosystems.

One-Year Goal: The CZM Program seeks to establish multi-agency actions teams to implement ORMP focus area projects to inform decisions related to identified management gaps.

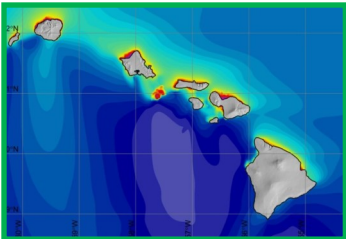
Five-Year Goal: The CZM Program will continue to collaborate with state, county and federal partners to implement projects to address management gaps to develop guidance for existing policies and/or to inform potential policy enhancements.

Action Plan: Collaborate with ORMP Working Group and Council on Ocean Resources to develop action teams. Specific projects and desired outcomes are identified specifically in the ORMP.

Measure of Success: The success of the various metrics will be measured and reported on the ORMP dashboard and webpage.

COASTAL HAZARDS

Probabilistic Tsunami Design Zone Maps: Managing development and impacts from coastal hazards remains a concern for the State of Hawai'i. In particular, climate change adaptation has been identified as a high management priority in need of significant investment towards quantifying impacts and implementing reasonable planning and regulatory solutions. The CZM Program developed a strategy to advance implementation of a priority of the 2013 State of Hawai'i Multi-Hazard Mitigation Plan, in collaboration with the Hawai'i Emergency Management Agency. The strategy addresses Hawai'i's high exposure to tsunami risk by modeling and mapping of comprehensive high-resolution probabilistic tsunami design zone maps for the State of Hawai'i.



OPSD partially accomplished the 2021 goal to complete the integration of tsunami design zone maps for a portion of Maui into the ASCE Tsunami Hazard Tool and facilitated application into Maui's building codes to strengthen resilience of critical infrastructure for the island of Maui and obtained additional competitive grant funding to complete Maui's mapping and initiate mapping for Kauai.

One-Year Goal: The CZM Program plans to complete the mapping and modeling of Maui's tsunami design zone maps for integration into the ASCE Tsunami Hazard Tool which will strengthen resilience of critical infrastructure.

Five-Year Goal: The CZM Program plans to complete the integration of tsunami design zone mapping and modeling for the counties of Maui and Kauai.

Action Plan: Utilizing the CZM Program federal funding and additional funding through the NOAA Project of Special Merit competition, the CZM Program will coordinate with counties to contract the modeling and mapping of probabilistic tsunami design zone maps.

Measure of Success: The adoption and use of the high-resolution maps in the International Building Code 2018/American Society of Civil Engineers (ASCE) 7-2016 Standard which include load and effects.

WELL BEING OF ENVIRONMENT

BROWNFIELDS

Hawai'i Brownfields Cleanup Revolving Loan Fund Program: The Hawai'i Brownfields Cleanup Revolving Loan Fund Program (HBCRLF) program was seeded by a \$2 million grant from the U.S. EPA in 2005. The HBCRLF program was established by Act 173, SLH 2002 and codified as HRS § 201-18(e). The HBCRLF program provides low- and no-interest loans to eligible public and private entities to cleanup brownfield sites where economic or community development projects show the greatest need, exhibit long-term project viability, and demonstrate the capacity for repayment. The program is currently operating under a closeout agreement with the U.S. EPA, which governs the type of brownfields activities eligible for HBCRLF funding and eligibility requirements for borrowers.

In the 2021 Legislative Session, the Legislature passed Administration bill SB 1054, SD 2 (Act 234, SLH 2021), to allow HBCRLF funds to be used for grants as well as loans for cleanups and grants for brownfields site assessment activities in alignment with the EPA Closeout Agreement. Act 234 will enable greater flexibility and meet the demand for HBCRLF funds for grants to eligible parties and sites.

One-Year Goal: OPSD will prepare amendments to the HBCRLF rules to allow for grants for cleanup and brownfields site assessment activities. Once the rule amendments are approved by the Governor, OPSD will issue a HBCRLF grant funding opportunity notice inviting grant applications. Grant funding will be disbursed in FY 2022 and 2023 to eligible projects and recipients selected for funding, based on fund availability. OPSD anticipates awarding grants to at least two projects in the first year of the grant program.

Five-Year Goal: OPSD will work with DOH in overseeing the conduct and completion of brownfields cleanup activities at recipient sites until all funded activities are completed in compliance with U.S. EPA brownfields funding requirements. OP will operate the loan and grant program in collaboration with the DOH HEER Office and U.S. EPA to expend the balance of HBCRLF. Once all HBCRLF-funded cleanup activities have been completed and DOH has issued no further action letters, OPSD will seek legislation to repeal HRS § 201-18(e), close the special fund, and end the HBCRLF program.

Measure of Success: Cleanups and completion of brownfields site assessment activities at recipient sites that enable reuse of the sites that is protective of public health and safety. Closure of the HBCRLF program.

ENVIRONMENTAL REVIEW PROGRAM



Act 152, SLH 2021, transferred the Office of Environmental Quality Control from the Department of Health (DOH), and renamed it as the Environmental Review Program (ERP), within OPSD. The ERP staff facilitates Hawai'i's environmental review system (commonly known as HEPA); produces and publishes the bi-monthly bulletin of environmental assessments (EA) and environmental impact statements (EIS); advises and provides assistance throughout the environmental review process to applicants, State and county agencies, other various stakeholders, and the public; and reviews and comments on EAs and EISs. Staff also provides technical and administrative support in all matters for the Environmental Advisory Council including research and interpretation of environmental practices in support of the Council.

One-Year Goal: Continue to publish the [Environmental Notice](#) two times a month to provide the public with environmental impact information on proposed state and county projects. Continue to provide training to state and county agencies and the public on Environmental Impact Statement Rules and provide comments on draft EA/EIS.

WELL BEING OF ENVIRONMENT

Five-Year Goal: Assist various stakeholders (agencies, accepting authorities, applicants, consultants, legislators, and members of the public) with the environmental review process.

Action Plan: Complete the transfer of over 7000 Environmental Assessments and Impact Statements from Department of Health to the Office of Planning and Sustainable Development. Restore the Planner V position to implement Chapters 341 and 343.

Measure of Success:

- % of EA/EIS Published for public notification on time/as scheduled.
- % of Consults on environmental issues response to Governor/Legislature on time.
- % of Increase in readership/circulation of The Environmental Notice.
- % of Submitted environmental review documents that were critically reviews/commented.
- # of EA/EIS reviewed.
- # of Consultations on environmental issues requested by Governor/Legislature.
- # of Environmental education projects & workshops conducted.
- # of Subscribers to The Environmental Notice.
- # of Exemption lists reviewed/concurred by the Environmental Advisory Council.

MAINTAIN NATURAL RESOURCES

He'eia National Estuarine Research Reserve System Plan: In 2020, HCDA commenced work pursuant to Act 166, SLH 2019, which establishes in part that the HCDA shall invite and consult with various entities for the development of a He'eia state park community-based long-range plan for the He'eia National Estuarine Research Reserve System (HNERRS).

One-Year Goal: Complete the He'eia state park community-based long-range plan.

Five-Year Goal: Not applicable. The final deliverables will be transmitted to the Department of Land and Natural Resources and the HCDA will not be involved in the implementation of the plan.

Action Plan: Identify stakeholders and landowners who have an interest in the future of the He'eia State Park or who would be affected by activities at the park. Identify and evaluate potential future uses and activities that support the Vision and Mission of the HNERRS. Develop a community-based long-range plan for the He'eia State Park.

Measure of success: The He'eia State Park community-based long-range plan is completed.

WELL BEING OF ENVIRONMENT

REGENERATIVE TOURISM

Understanding the significance of tourism's role to the state as the largest single source of private capital for Hawai'i's economy, HTA's primary focus is to protect Hawai'i's iconic brand. HTA sees the relaunch of tourism as an opportunity to reshape the model for tourism. Our natural environment, host culture, and community are collectively Hawai'i's brand – they play a major role in the appeal of the destination to our guests, to whom our marketing efforts are focused. For this reason, HTA serves as the connecting point between tourism, the community, and other state departments. We are guided by our four pillars in everything that we do and are supported by research and data.

The recently completed six Destination Management Action Plans serve as HTA's roadmaps and will continue to play an important role in improving resident sentiment towards the visitor industry. HTA developed and intends to deliver its branding strategy that incorporates its President & CEO's vision and philosophy of Mālama Ku'u Home (caring for our beloved home) to our markets. HTA's focus and efforts will be to attract mindful travelers with the goal of making a positive impact by leaving Hawai'i, our home, better than when they arrived. Hotels, industry partners and organizations across the state continue to be supportive of these efforts are strongly encouraging participation in voluntourism projects, in the spirit of helping to care for or "mālama" Hawai'i's precious resources.

1. **Destination Management Action Plans (DMAPs):** HTA launched a community-based tourism program in 2020, collaborating with the counties and state agencies, visitor industry, island visitor bureaus, and members of the public, to create the 3-year DMAPs to recover and rebuild tourism. The HTA Board of Directors approved all six DMAPs and the DMAPs were released to the public in February (Kaua'i), March (Maui Nui), April (Hawai'i Island), and August (O'ahu).

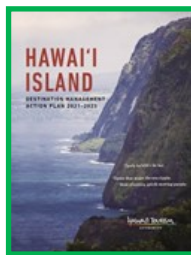
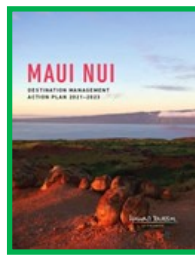
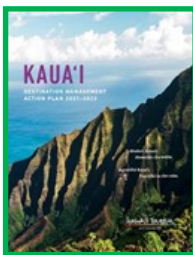


Photo credits: Hawai'i Tourism Authority

One-Year Goal: HTA will continue its work to implement DMAPs' actions based on each DMAP's timeline. Efforts include collaborating with other state departments, the counties, lawmakers, the visitor industry, and the community.

Five-Year Goal: Over the next five years, HTA plans to continue efforts to rebuild tourism in a sustainable and regenerative manner.

Action Plan:

- ⇒ HTA plans to work with the island visitor bureaus, counties, and other state agencies towards carrying out actions that are laid out in the DMAPs for each island.
- ⇒ HTA plans to increase its attention to improving and mitigating hotspot sites as identified in the DMAPs.
- ⇒ HTA plans to encourage and support responsible tourism by increasing the number of training sessions provided for the community and industry stakeholders.
- ⇒ HTA will continue to reach out to lawmakers and community groups to see how it can help with efforts to minimize the economic, environmental, and social impacts of tourism.

Measure of Success: Milestones and measures will be based on the number of actions completed and the number of hotspot issues addressed.

WELL BEING OF ENVIRONMENT

2. **Branding and Marketing:** HTA contracts organizations to brand Hawai'i around the world to educate visitors about Hawai'i's value proposition, what makes it unique as a destination and most importantly, share with them their kuleana when they visit the State. In recent years, HTA had identified nine source markets in which to focus our efforts. However, due to the pandemic and other factors HTA reduced that number to just six for CY22. The markets HTA suspended in 2020-2021 included China, Taiwan, Southeast Asia, and Europe.

HTA's coverage in 2021 was primarily focused on branding within the U.S. East and West markets. HTA also continued to support, at significantly reduced amounts, branding efforts in Canada, Japan, Oceania, and Korea. This messaging was focused on communicating Safe Travels and long-term brand messaging to keep Hawai'i relevant and top of mind for future travelers once conditions improved.

HTA's branding efforts are designed to incorporate our message of mālama and are built on the concept of Mālama Ku'u Home (Caring for my Beloved Home). Our branding strategies are built on this foundation and are supported by the four integral pillars of natural resources, Hawaiian culture, community, and branding. Hawai'i's brand consists of these pillars and the values that support them. It is critical that HTA continue to strengthen, support, and build upon these values to ensure a healthy, vibrant, and sustainable economic future that benefits our residents through the support of our visitor industry. HTA's branding efforts are focused on working with contractors in markets who share our commitment to our message of mālama, are supportive of our direction and branding strategies, and are focused on attracting high-value visitors while staying true to Hawai'i's brand. Under the direction of John De Fries, HTA's president and CEO, the branding teams have adopted his "mālama mindset" and vision for a sustainable future for Hawai'i.

One-Year Goal: HTA will continue to focus on branding strategies that incorporate our message of mālama and are built on the concept of Mālama Ku'u Home. We will design our strategies to attract mindful, respectful and high-value visitors. We will refine our efforts to attract visitors that are aligned with our values and our strategic plan. The Mālama Hawai'i program encourages visitors to responsibly participate in unique experiences that give back to Hawai'i.

Five-Year Goal: Over the next five years, HTA will expand its focus on markets and visitors that are mindful, respectful, high-spending, and relatively low impact on our communities. HTA will also continue its efforts to educate visitors on cultural etiquette, appropriate behaviors, and guidance that will assist them to be respectful and mindful while they are here in our home.

Action Plan:

- ⇒ HTA will work closely with our partners to ensure that Hawai'i's brand messaging reflects an authentic, respectful, and appropriate approach that focuses on Hawai'i as a unique and special place to visit.
- ⇒ HTA will develop and launch branding messages that align with our strategic plan, destination management action plans (DMAPs), and our Mālama Ku'u Home values.
- ⇒ HTA will work with our branding partners to ensure that branding messages are targeted towards mindful, respectful and high-value visitors.
- ⇒ HTA will continue to monitor and evaluate branding messages to ensure they are effective and make appropriate adjustments as warranted by our research.
- ⇒ HTA will work with our branding partners to ensure that their respective markets receive the proper education and awareness training in order to best understand Hawai'i as a destination.

WELL BEING OF ENVIRONMENT

Measure of Success: HTA will measure success of its branding strategies through our primary measures found in our strategic plan. These include: resident sentiment; visitor satisfaction; per-person-per-day spend; and total spend. In addition, we will utilize key performance indicators (KPI) incorporated into each branding partners contract and brand marketing and management plan (BMMP) to ensure they are meeting the expectations set forth in those respective plans.

3. Aloha ‘Āina Program: In 2021, the HTA engaged and collaborated with the Hawai‘i Community Foundation (HCF) to support the implementation and administration of the Aloha ‘Āina program for CY2022. Due to the pandemic and the timing of the award cycle for Aloha ‘Āina no projects were awarded funding for the CY21 cycle. However, through this collaborative effort with HCF, we were able to resume the Aloha ‘Āina program for CY22 projects. The projects supported by this program work to protect, enhance and maintain Hawai‘i’s unique and fragile environment. We know that one of the primary drivers of a visitor’s reason for choosing to come to Hawai‘i is its “natural beauty.” Pandemic restrictions, such as physical and social distancing, continue to have a limited impact on applicants’ ability to fully expand their respective programs. It is important to note that, while there are limitations and restrictions, many of the supported programs have been resilient and innovative in their approach to working through these challenges.

One-Year Goal: HTA aims to resume support for projects that protect, enhance and maintain Hawai‘i’s unique and fragile environment. These projects lay the foundation of a thriving natural environment and we recognize the importance to our way of life and the attractiveness of the Hawaiian Islands as a visitor destination. Projects supported by the program aim to:

- * Raise awareness of all stakeholders and support educational opportunities focused on the responsible use of natural resources.
- * Encourage and support sustainable and responsible tourism.
- * Engage and encourage active natural and cultural resource management strategies in areas frequented by visitors.
- * Promote visitor industry alignment with the Aloha+ Challenge, Hawai‘i’s recognized model to achieve the United Nations Sustainable Development Goals, especially for energy and water.
- * Increase efforts toward natural resource preservation, restoration, and management.
- * Increase opportunities for natural resource education.
- * Provide opportunities for continued mitigation efforts.
- * Enhance Existing Project – demonstrates enhancement and/or innovation of existing project
- * Community Support and Involvement – evidence of partnerships with outside organizations and visitor industry partners. Project has broad based community support and is in line with community value and community resources.

Five-Year Goal: Over the next five years, HTA will continue to expand support for these programs to help enhance and protect our natural resources.

Action Plan:

- ⇒ HTA will work closely with community organizations and other experts to ensure that projects and activities appropriately align with the intent to protect and enhance our natural resources.
- ⇒ HTA will further enhance and improve its ability to support projects and programs through collaborative partnerships.

WELL BEING OF ENVIRONMENT

- ⇒ HTA will monitor and report on the progress of the efforts that have been supported and funded to confirm and affirm the success of these efforts.
- ⇒ HTA will search for and support opportunities to connect funded programs with the Destination Management Action Plans' actions and sub-actions as part of the ongoing implementation phase where possible.

Measure of Success: HTA will track results through its various key performance indicators that are unique to each project funded as well as some larger program key performance indicators. HTA also measures and evaluates success of projects under the program through site visits, contract evaluations at the close of each project.



Photo credit: Hawai'i Tourism Authority

WELL BEING OF CULTURE

HTA supports programs that perpetuate and recognize the uniqueness and integrity of the Hawaiian culture and community and their significance in differentiating the Hawaiian Islands through genuine visitor experiences.

PRESERVATION OF HAWAIIAN CULTURE

Kūkulu Ola Program to perpetuate the Hawaiian Culture: In 2021, the HTA engaged and collaborated with the Hawai'i Community Foundation (HCF) to support the implementation and administration of the Kūkulu Ola program for CY2022. Due to the pandemic and the timing of the award cycle for Kūkulu Ola no projects were awarded funding for the CY21 cycle. However, through this collaborative effort with HCF, we were able to resume the Kūkulu Ola program for CY22 projects.

As of 12/14/21, the HTA have made awards to support 35 awardees. The programs address various needs and work to perpetuate the Hawaiian culture. Hawai'i is seen as unique among other destinations precisely because of these cultural practitioners and Hawaiian culture more generally. Pandemic restrictions, such as physical and social distancing, continue to have a limited impact on applicants' ability to fully expand their respective programs. It is important to note that, while there are limitations and restrictions, many of the supported programs have been resilient and innovative in their approach to working through these challenges.

One-Year Goal: HTA aims to resume support for projects that benefit the Hawaiian culture and community. These projects lay the foundation of a thriving community of cultural practitioners. Projects supported by the program aim to:

- * Preserve significant cultural practice(s), resource(s) or asset(s).
- * Increase the number of cultural practitioners.
- * Increase the skill level or proficiency in cultural practices.
- * Provide opportunities for continued practice.
- * Demonstrate the project's long-term value and impact to the cultural resource being preserved or perpetuated, as well as its impact to the Hawaiian culture and community.
- * Offer an innovative or enhanced approach toward Hawaiian culture preservation through opportunities that demonstrate a positive impact on Hawai'i's visitor industry future.

Five-Year Goal: Over the next five years, HTA will continue to expand support for Hawaiian programs and cultural practitioners, craftsmen, musicians, linguists, and other artists to help preserve and perpetuate the Hawaiian culture. We understand how integral Hawaiian culture is to the brand of Hawai'i and support for these programs will be critical to protecting our brand.

Action Plan:

⇒ HTA will work closely with Native Hawaiian cultural practitioners and other experts to ensure that projects and activities appropriately align with the intent to preserve and perpetuate the Hawaiian culture and language.



WELL BEING OF CULTURE

- ⇒ HTA will further enhance and improve its ability to support projects and programs through collaborative partnerships.
- ⇒ HTA will monitor and report on the progress of the efforts that have been supported and funded to confirm and affirm the success of these efforts.
- ⇒ HTA will adjust its strategies to align with and support the accurate and authentic representation of the Hawaiian culture by incorporating input and feedback from our Kūkulu Ola programs.
- ⇒ HTA will search for and support opportunities to connect funded programs with the Destination Management Action Plans' actions and sub-actions as part of the ongoing implementation phase where possible.

Measure of Success: HTA will track results through its various key performance indicators that are unique to each project funded as well as some larger program key performance indicators. HTA also measures and evaluates success of projects under the program through site visits, contract evaluations at the close of each project.



FUNDING CULTURAL PROGRAMS

- 1, **Community Festivals and Events:** Support for community projects, events and programs that are directly and indirectly related to tourism is critical if we are to stay true to our commitment to improve the lives of our residents. By supporting community-focused projects and programs, resident sentiment towards the visitor industry will inevitably be positively impacted. Community-focused projects and programs also bring residents and visitors together in a participative and collaborative way further connecting our communities throughout Hawai'i with visitors. The COVID-19 pandemic continues to be a concern as we move forward with our support of community projects, events, and programs. Precautions and safety protocols are necessary to prevent and limit the spread of COVID-19. In past non-pandemic years, HTA has funded, on average, 90 projects through its community enrichment program every year. As part of our community support, HTA plans to continue supporting education and prevention programs to improve safety among visitors and residents, to maintain Hawai'i's reputation as a safe destination

One-Year Goal: HTA will work to further enhance and support community-focused projects, events, and programs that support our residents while also serving as a bridge to connecting our communities with our visitors. We will work closely with our partners to ensure that funding and resources are utilized in a way that improves the lives of our residents.

WELL BEING OF CULTURE



Five-Year Goal: Over the next five years, HTA will continue to work towards supporting community-based non-profits to implement and enhance projects that are unique to their communities. By doing so we make investments into the kinds of experiences and activities residents and visitors can see and do while in Hawai'i. This makes up a major part of our visitor product.

Action Plan:

- ⇒ HTA plans to continue increasing the number of capacity-building training sessions provided for funded programs and management.
- ⇒ HTA will further enhance and improve its ability to support projects and programs through collaborative partnerships.
- ⇒ HTA will monitor and report on the progress of the efforts that have been supported and funded to confirm and affirm the success of these efforts.
- ⇒ HTA will adjust its strategies to align with and support the initiatives identified by the community.
- ⇒ HTA will search for and support opportunities to connect funded programs with the Destination Management Action Plans' actions and sub-actions as part of the ongoing implementation phase where possible.

Measure of Success: HTA will track results through its various key performance indicators that are unique to each project funded as well as some larger program key performance indicators. HTA also measures and evaluates the success of projects under the program through site visits, contract evaluations at the close of each project.

WELL BEING OF CULTURE

2. **13th Festival of the Pacific Arts and Culture (FestPAC):** The Festival was supposed to be hosted by Hawai'i in June 2020. However, due to the global pandemic, the Festival was rescheduled to June 2024. The FestPAC Commission continues to hold virtual meetings on a monthly basis to carry on the planning for this event.

One-Year goal: Re-affirm commitment of all partner organizations and confirm venues for all activities; finalize fundraising plan and engage fundraiser.

Five-Year goal: Assess success of Hawai'i event and share with other Pacific Island nations; create a new hybrid model for this event combining live and virtual activities and performances.

Action Plan: Leverage partnerships with cultural and community organizations.

Measure of success: Selection of Hawai'i to host other similar events.

International Affairs – Sister State

International Affairs: Hawai'i's continued prosperity is grounded in its ability to work with people from around the world and to communicate issues that are of great urgency and importance between cultures. Hawai'i is a bridge between people of all nations and DBEDT plays a critical role in forging relationships that will strengthen Hawai'i's role in trade, commerce, economic, defense, educational, creative, cultural, and energy and the environment in the years ahead.

In 2021, Hawai'i received approval to enter into a sister-state relationship with Yamaguchi Prefecture and looks forward to the official signing in 2022.

In 2021, the Madeira sister-state relationship was approved by the Hawai'i Sister-State Committee. DBEDT hopes to finalize that relationship in 2022.

One-Year goal: Produce the Philippines- Hawai'i Sister States, Provinces and Cities Symposium and Expo. (The event, originally scheduled for 2021, was canceled due to COVID pandemic restrictions.)

Two-Year goal: Produce the Japan- Hawai'i Sister-State Convention.

Five-Year goal: Leverage sister-state relations to increase trade and investment.

Action Plan: Leverage sister-state relations to increase trade and investment.

Measure of success: Increase in trade and investment.

ECONOMIC GROWTH

KNOWLEDGE-BASED ECONOMY STRATEGY

Economic growth is essential to sustaining our livelihood in Hawai'i and innovation is its key driver. Innovation leads to new and better paying jobs, resiliency to downturns in the global economy, and helps retain our best and brightest talent. Innovation is a mindset that demands continuous improvement in everything that we do and how we do it. It is inclusive, collaborative, and iterative.

DBEDT programs and projects look to build on our key assets of people, place, and culture with new capacity for our future. Hawai'i has always produced world class technologies and products. Our programs connect the businesses to resources and new opportunities in and beyond our state. Supporting today's innovators creates new channels of revenue and jobs on all islands.

BUILDING A DIGITAL FOUNDATION FOR A RESILIENT HAWAI'I ECONOMY

Provide Infrastructure – Broadband

- **Hawai'i Broadband & Digital Equity Office:** In July 2021, the Hawai'i Broadband & Digital Equity Office (HBDEO) was established in Act 225 (SLH 2021). The mission of the office shall:
 1. Develop and implement specific strategies and plans to aggressively increase broadband affordability, penetration, and competitive availability in the State;
 2. Support the efforts of both public and private entities in the State to enhance or facilitate the deployment of and access to competitively priced, advanced electronic communications services, including broadband and its products and services and internet access services of general application throughout the State;
 3. Promote the landing of trans-Pacific submarine cable, including the development of a shared access cable station and associated terrestrial connectivity to reduce barriers to fiber landing in Hawai'i;
 4. Promote, advocate, and facilitate the implementation of the findings and recommendations of the Hawai'i broadband task force established by Act 2, First Special Session Laws of Hawai'i 2007, and the 2020 Hawai'i Broadband Strategic Plan;
 5. Support the findings of the community-based Broadband Hui as reflected in its digital equity declaration;
 6. Administer grant programs in support of broadband infrastructure, innovation, and the digital economy;
 7. Actively seek out funding from public and private sources in furtherance of the office's duties pursuant to this section; and
 8. Provide a repository, aggregation point, and governance framework for broadband mapping and digital equity data from various sources, including digital literacy, telehealth, distance education, remote work, internet accessibility, and service coverage to support mapping, reporting, infrastructure deployment, and data-driven policy.



ECONOMIC GROWTH

- **Broadband Infrastructure Master Plan:** DBEDT made a solicitation and selection for the development of a master infrastructure plan (master plan) for deploying robust, resilient broadband infrastructure throughout the State of Hawai'i. A major impetus of the need for this statewide master plan is the recently passed American Rescue Plan Act (Capital Projects Fund) and the Infrastructure Investment and Jobs Act (IIJA). These two federal initiatives provide significant funding for broadband which Hawai'i can utilize to enhance its broadband infrastructure. This master plan will be used to plan and implement the upgrade to Hawai'i's broadband infrastructure to allow for reasonably priced broadband access, enhanced network capacity and speed to meet the needs of the next decade of digital expansion and improve the resiliency of the network.

One-Year Goal: Obtain funding for master plan.

Five-Year Goal: Apply plan findings for Capital Projects Fund and Broadband Equity, Access and Deployment funding.

Action Plan: [See Infrastructure Master Plan solicitation.](#)

Measure of Success: Number of projects completed.

Budget Impacts: Currently, there is no funding.

- **Broadband Hui:** Since March 2020, the State's Broadband Strategy Officer in collaboration with the nonprofit organizations –Transform Hawai'i Government and the Economic Development Alliance of Hawai'i (EDAH) – began an informal gathering that became the Hawai'i Broadband Hui. Its initial focus centered on broadband-related initiatives that would enable Hawai'i to weather the impacts of the pandemic, such as offers from providers to ease connectivity to students and homes. The convening drew participation from more than 400 empowered leaders from businesses including the wireline and wireless carriers and providers; federal, state, and county levels of government; public and private education; and non-profits with grass roots community initiatives.



This collective forum meets on a weekly basis and is the primary community engagement vehicle to address the broadband and digital equity needs throughout Hawai'i .

Notable projects include:

1. **Digital Equity Declaration:** The Broadband Hui created the [Digital Equity Declaration](#) which compiled the collective priorities articulated through months of thoughtful Broadband Hui conversations and, in alignment with the 2020 Hawai'i Broadband Strategic Plan, sets a foundation for collective action among private- and public-sector partners by providing a vision and goals that will move Hawai'i toward a more equitable digital future. This Declaration is a call to address this critical need by advancing the following three pillars of digital equity:
 - A = Access: Broadband access and infrastructure for all of Hawai'i's residents;
 - L = Literacy: The tools and learning to bring everyone up to a level of digital literacy; and
 - L = Livelihood: The ability to thrive in the digital economy also referred to our digital "pilina" or web of relationships, community, relationships and connections.

FCC Emergency Broadband Benefit: The Emergency Broadband Benefit Program was established by the Federal Communications Commission (FCC) in May 2021 to help households struggling to pay for internet

ECONOMIC GROWTH

service during the COVID-19 pandemic. Under the Emergency Broadband Benefit Program, eligible households can receive up to \$50 a month towards broadband service and up to \$75 for households on Hawaiian Home Lands. Through the Broadband Hui, an outreach strategy was developed and marketing collateral was created for frontline non-profits servicing the communities. To date, we have about 17,000 Hawai'i households participating.

2. Digital Equity Ecosystem Mapping – Identify the digital equity assets in the state and map them in preparation for the Digital Equity Act, part of the Infrastructure Investment and Jobs Act (IIJA).
3. Kūpuna Digital Inclusion Roadmap – Assist the Kūpuna Digital Inclusion Steering committee on a plan to achieve digital equity for Hawai'i's kūpuna.
4. Data Gathering and Mapping - Crowdsourcing of data to determine areas that are unserved or underserved with broadband.



5. Digital Literacy and building the Digital Pilina – In an effort to embrace the Livelihood in our Digital Equity Declaration we not only address the broadband access issues but also offered classes in digital and computer literacy, provided refurbished hardware to participants who did not have computers and shared information about affordability programs like the ACP. These digital literacy classes were primarily pilot programs, held at the public libraries, community centers and community college classrooms. We foresee scaling this program when funding becomes available.

6. Community Networks - Connecting communities like Pu'uuhonua o Wai'anae, Kīpahulu, Miloli'i and Moloka'i.

One-Year Goal: Continue convening Broadband Hui.

Five-Year Goal: Achieve goals stated in the Digital Equity Declaration.

Action Plan: See [Digital Equity Declaration](#).

Measure of Success: Create systemic and sustainable programs that continually work to eliminate the digital divide and to create pathways into the digital economy.

- **Transpacific Cable Landing Station:** DBEDT, made a solicitation and selection for the services of qualified engineering firms to provide engineering and design services for the design and engineering of carrier-neutral cable landing infrastructure on the Islands of O'ahu, Hawai'i Island, Maui, and Kaua'i.

One-Year Goal: Obtain funding for the engineering and design plan.

Five-Year Goal: Apply plan findings for Capital Projects Fund and Broadband Equity, Access, and Deployment funding.

Action Plan: [See Engineering and Design solicitation](#).

Measure of Success: Cable landing built.

ECONOMIC GROWTH

- **NTIA Broadband Infrastructure Program:** DBEDT, Hawai'i Broadband & Digital Equity Office, submitted a grant application seeking NTIA funds, from the Consolidated Appropriations Act of 2021, to carry out a project to cover 1,205 households, 100-300 houseless individuals, and at least one anchor institution at the cost of \$20,625,422 overall, under a combined covered-partnership unprecedented for Hawai'i. The partnership will consist of two fixed broadband providers that will expand existing Fiber To The Premise (FTTP) service networks on several islands – Hawaiian Telcom, Inc. (HTI) and Charter Communications (Spectrum) – and two wireless community networks that will focus on specific geographic areas on the Island of Hawai'i – Banyan Networks and Sun Global.

One-Year Goal: Obtain funding from NTIA, projected Jan 2022.

Five-Year Goal: Achieve project completion by 2024.

Action Plan: NTIA Broadband Infrastructure Program project proposal.

Measure of Success: Number of households covered.

- **Broadband infrastructure grant program:** In July 2021, the Broadband Infrastructure Grant Program was established in Act 225 (SLH 2021) within the Department of Business, Economic Development, and Tourism (DBEDT) for administrative purposes. DBEDT shall receive and review grant applications and may award grants for eligible projects pursuant to the program. The department may award grants for eligible projects; provided that on the date the application is submitted, the area to be served by the project shall include either unserved areas or underserved areas.

One-Year Goal: Obtain funding for grant program per Act 225 (SLH 2021).

Five-Year Goal: Rulemaking by 2023, Implement program and projects.

Action Plan: Start rulemaking process.

Measure of Success: Rules approved. Number of projects funded.

Provide Infrastructure – Utility

1. **District-Wide Improvement Program:** Develop and execute a district-wide infrastructure improvement program for Central Kaka'ako, which still is an under-utilized industrial and commercial area of Kakaako with substandard roads, insufficient drainage systems, and overhead utility lines.

One-Year Goal: Continue to develop a comprehensive infrastructure improvement plan for Central Kaka'ako.

Five-Year Goal: Seek legislative funding to complete the plan for the district-wide improvement program for Central Kaka'ako.

Action Plan: Plan, design, and construct infrastructure improvements identified in the year one goal.

Measure of success: Completion of the district-wide improvement program for Central Kaka'ako.

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- Kalaeloa Infrastructure Improvements:** HCDA completed the Kalaeloa Energy Corridor project in 2020. The \$13 million CIP funded project began at the intersection of Kapolei Parkway and Fort Barrette, continued along Enterprise Avenue and ended at Midway Road fronting the Kalaeloa Airport. The Department of Transportation Airports Division (DOT) has contracted with Hawaiian Electric Company to energize the new Enterprise Energy Corridor project.

One-Year Goal: Continue to work on improving infrastructure in Kalaeloa to support development. Work with landowners and stakeholders in identifying critical infrastructure deficiencies and prepare a plan to address the deficiencies.

Five-Year Goal: Seek CIP and other funding for infrastructure improvements.

Action Plan: Plan, design, and construct infrastructure improvements.

Measure of success: Improved infrastructure leading to additional housing and mixed-use development.

Provide Facilities

- HTDC Entrepreneur's Sandbox:** Although COVID-19 restrictions limited large in-person events, the Sandbox had 185 members and 6,000+ visitors in 2021. The coworking space remains open for members and most of the Entrepreneurs Sandbox programming continues to be delivered virtually. The Sandbox currently hosts approximately three webinars a month with relevant topics such as resume and linked-in tips, virtual job fairs, women in tech, transitioning to a tech job, and more.

ID8 Studios held their Grand Opening at the Sandbox in 2021. The Sandbox was designed as an innovation hub for tech, entrepreneurs, and creatives with the flexibility to accommodate various projects of different dimensions and now has demonstrated the ability to quickly adjust to support our urgent community needs.

One-Year Goal: Revamp the Sandbox to positive operating cashflow.

Five-Year Goal: Begin the planning of an adjacent facility.

Action Plan: Building demand with Sandbox reaching full capacity and fully developed and engaged with the community.

Measure of Success: Full capacity and positive cashflow.



- CreativeSpace Co-Working & Studio Entrepreneurs Sandbox:** CID, in partnership with Hawai'i Technology Development Corporation (HTDC), have launched the CreativeSpace studio and co-working space managed by Bizgenics at the Entrepreneurs Sandbox in Kakaako. This purpose-built stage is earning revenues, serving the local business and creative community, providing infrastructure necessary for the export of creative content globally.

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One-Year Goal: Increase export of local music and media IP.

Five-Year Goal: Launch a content platform like the Korean Creative Content Agency model (KOCCA).

Action Plan: Partner with KOCCA and regional accelerators. Create co-working hub networks between Hawai'i and Japan, Korea, and Mainland U.S.

Measure of Success: Increased revenues to local creatives.



2. Foreign-Trade Zone No. 9 at Pier 2: The FTZ9 program services 369 companies statewide, providing revenues of over \$2.2 million annually, which wholly supports the program. During the last reporting year:

- FTZ9 had over \$5.5 billion in cargo and merchandise that transited through Hawai'i's FTZs.
- Forty-four (44) different types of foreign merchandise were received into the FTZ9 from 23 countries.
- Hawai'i's FTZs had nearly \$146 million in exports, ranking 19th in the nation for warehouse/distribution export activity according to the Foreign-Trade Zones Board Annual Report to Congress.
- FTZ9 increased its overall value added for merchandise to nearly \$3.3 billion, of which \$3 billion was entered into U.S. commerce, and \$246 million was exported to foreign markets.
- FTZ9 ranked 24th highest in the nation for merchandise received for production authority.
- Zone activity supports 288 companies and 3,070 jobs for Hawai'i.

One-Year Goal: Continue its excellent service and provide support to its clients. Enhance existing security systems and measures to harden port security as directed by Homeland Security.

Five-Year Goal: Continue to serve FTZ clients to their highest expectation by adjusting program offerings to meet client demands. Continue to grow the FTZ Special Fund in order to fulfill its mission and expand services.

Action Plan: Using on-line platforms to invite prominent national and international speakers with in-person sessions, FTZ9 will develop a seminar series designed to educate clients and potential

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clients in international commerce and how to participate by leveraging the FTZ program. FTZ9 will expand partnerships with the U.S. Commercial Services, U.S. Customs and Border Protection, Small Business Administration, Chambers of Commerce, and DBEDT sister agencies to develop and present these seminars.

Measure of Success: Expansion in the number of clients and jobs the program continues to support, as well as continued growth in the program's Special Fund financial position.

- **Alternative Site Framework Zone (ASFZ):** FTZ9 is aggressively marketing the benefits of an FTZ and the ability to activate as an Alternative Site Framework Foreign-Trade Zone. The program has developed a plan to reach out companies most applicable to becoming an active Foreign-Trade Zone site. FTZ9 has submitted six (6) applications, three of which have Foreign-Trade Zone Board approval and are waiting for Customs and Border Protection approval and activation.

One-Year Goal: 3 companies approved as ASF Zone location.

Five-Year Goal: 6 companies approved as ASF Zone location.

Action Plan: Continue to identify companies conducive to FTZ procedures and assist them in completing and submitting an application for FTZ Board approval. These sites must also meet Customs and Border Protection security and operations guidelines and must execute a Zone User Agreement with FTZ9, the Grantee. FTZ continues its work with Innovate Hawai'i and other applicable agencies to identify and open discussions with companies who could benefit from using FTZ procedures in their operations. Improve the application process and relative speed of activation.

Measures of Success: Success for this initiative will be measured in the number of potential clients engaged, and how many have begun the FTZ application process.

3. **Natural Energy Laboratory Hawai'i Authority (NELHA):** NELHA is responsible for managing and operating facilities at the 870-acre Hawai'i Ocean Science and Technology (HOST) Park to facilitate research, development, and commercialization of aquaculture and ocean-related research, technology, and industry in Hawai'i. Revenue was flat for FY 2021 and increasing lease revenue has been challenging due to the COVID situation. NELHA completed several new leases in FY2021 in the Research Campus and two new leases in HOST Park were executed. NELHA's new incubator building is at full occupancy and outside space in the Research Campus is also at some of the highest it has ever been despite the pandemic with small expansions from three companies. Finally, despite the pandemic, no businesses in HOST Park failed and six new companies have established themselves at HOST Park which demonstrates the resiliency of this economic sector.



Live view cam of NELHA Research Campus

One-Year Goal: Increase revenue by 5%.

Five-Year Goal: Increase revenue by 15% with completion of expansion of research campus and increase operation of underutilized assets.

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Action Plan: NELHA will develop additional revenue streams to distribute operating costs over a broader base of clients. NELHA will generate additional revenue to cover development costs and make necessary improvements to facilities and infrastructure. NELHA will continue to review non-performing assets and realize the revenue potential afforded.

Measure of Success: Continued self-sufficiency of NELHA in maintaining operations from Special Fund sources and no need to request General Funds to subsidize operations.

- **Hawai'i Ocean Science and Technology (HOST) Park Development and Build Out – Continue efforts to plan and complete additional infrastructure to “tee-up” new areas for future development:** Secured grant funds from FEMA and insurance companies for the damages by the 2018 Kilauea volcanic eruption to NELHA facilities in Puna to use for development of and expansion to the existing Research Campus, which is at full occupancy, which will provide room for expansion. NELHA is also planning to construct a new visitor center. In November 2020, NELHA executed a contract with an architectural firm to plan and design expansion of the existing research campus with a new “Innovation Village” as well as a new visitor center. The work will include the design development of a new office building/ innovation complex and new visitor center and all associated construction documents, special entitlements, and permits. NELHA began the process to complete environmental assessments (EA) for the new sites.

One-Year Goal: Complete EA and entitlements process.

Five-Year Goal: Complete construction of the two new buildings.

Action Plan:

- ⇒ FY22 – Complete Environmental Assessment, Archaeological Inventory Survey, Traffic Impact Assessment, Biological Survey, Geotechnical survey and testing, and Drainage plan.
- ⇒ FY23 – Obtain permits for Special Management Area, Conservation Use District, and County of Hawai'i Building.
- ⇒ FY24 – Complete construction bid procurement and execute contract for construction.
- ⇒ FY25 – Complete construction and soft opening of new buildings.

Measure of Success: Completion of project on time and on budget.

- **Exploratory Well for Potable Water Resources:** Continued efforts for an exploratory well (CIP funds) for new potable water resources to be shared equally with HHFDC. This project has been on hold for several years and NELHA is still awaiting a permit from the Commission on Water Resource Management (CWRM) to begin drilling the exploratory well. All other work and permits have been completed and approved. Due to delays, the contractor requested cost increase of 10 percent for their services, and NELHA executed a supplemental agreement.

NELHA's permit request was discussed by the CWRM Board of Directors in April 2021. A decision on the permit was deferred. CWRM is requesting additional input from representatives of Native Hawaiian traditional and customary (T&C) practitioners and to hold a symposium to discuss “T&C” knowledge, history, and perspective of water resource use impacts on “T&C” practices along the West Hawai'i coastline. Due to COVID-19 restrictions, it has so far, not been possible to schedule this symposium. NELHA continues to invest significant time and effort working with CWRM staff, well development partners, HHFDC and other

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stakeholders in keeping the process moving forward. NELHA is also exploring alternative options such as desalination (discussed above) and are requesting CIP funds (see below) this year to identify offshore freshwaters seeps.

One-Year Goal: Work with CWRM to develop mitigation measures and monitoring metrics for CWRM approval and begin exploratory well drilling.

Five-Year Goal: Complete exploratory well, secure funding for production well and drill production well.

Action Plan: Work closely with HHFDC in partnership in drilling well and testing quality of freshwater.

Measure of Success: New high-quality source of freshwater verified.

- **NELHA Energy Efficiency:** The NELHA seawater system is the largest and most advanced in the world. Continued to maintain 99.99% uptime and an energy review for the seawater system in FY21, shows the facility has increased its overall efficiency by 4.43% in terms of power consumption per gallon from FY20. In short, NELHA saved \$39,347 in FY21 in electrical cost alone when compared with the facilities kWhr/kgal efficiency rate last year.

One-year Goal: Maintain uptime of 99.99% and increase efficiency by 1%.

Five-year Goal: Maintain uptime of 99.99% and maintain current efficiency.

Action Plan:

- ⇒ Continue efforts to improve efficiency, stabilize energy costs, maintain adequate reserve fund and achieve 99.99% uptime.
- ⇒ Continue to upgrade SCADA and Water Quality Lab (WQL) with new instruments and monitoring devices controlled by WQL including new nutrient analyzer, upgrading SCADA software and add additional monitoring devices, controls, and pump station security to SCADA system.
- ⇒ Complete microgrid development project with CIP funding and a grant from South Korean government for \$1.85M to service the 55" seawater pump station to lower or maintain energy costs. The testbed demonstration includes detailed design, deployment, testing and evaluation of a microgrid including 500 kilowatts of advanced PV panels and a 700-kilowatt-h NELHA energy storage system (ESS) at the main seawater pump station at HOST Park in Kailua-Kona. The microgrid demonstration project is expected to be operational in FY22.

Measure of Success: Continued stability of seawater system without disruption to HOST Park clients.

- **Removal of Abandoned Deep Seawater Pipelines:** Executed two contracts valued at \$500,000 (from CIP funds) to formulate plans and design of removal of abandoned deep seawater pipelines. Project was delayed significantly due to COVID-19 travel restrictions and technical difficulties with equipment operating at the 2,000 ft depth. Contractor presented a new workplan – however COVID-19 pandemic travel restrictions and safety protocols precluded any work until fall of 2021 – at which time winter storm season made for unsafe working conditions. Contractor will restart the survey in spring of 2022 after the winter storm season ends.

One-Year Goal: Complete survey and design for removal of pipelines.

Five-Year Goal: Remove pipelines or anchor in place.

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Action Plan: Complete current contracts and request CIP funds to mitigate any health and safety issues identified.

Measure of Success: Mitigate any health and safety issues associated with unsecured pipelines that could cause danger to boaters.

4. **Innovation and Manufacturing Center (IMC) in Hilo:** Contractors for the Hilo project-initiated work. A project site was evaluated but determined not feasible within budget. A scaled back version of the project is being assessed.

One-Year Goal: Assess the feasibility of the project.

Five-Year Goal: Complete construction and begin operation.

Action Plan:

- ⇒ Create a Public-private partnership by working together with the community and state partners on a sustainable working model.
- ⇒ Secure public/private commitments for project.
- ⇒ Enhance opportunities for local businesses with workforce training and light manufacturing resources and help meet increasing demands as these industries grow in Hawai'i.

Measure of Success: Positive cashflow.

5. **Maui Research and Tech Center (MRTC):** The MRTC provides office space, coworking space, and workshops for the Maui tech community.

One-Year Goal: Cash Flow positive. Facility at 50% capacity.

Five-Year Goal: Facility at 90% capacity.

Action Plan: Revamp the facility to cater to remote workers.

Measure of Success: Number of new tenants and supporting workshop attendance.

6. **Kaka'ako Innovation Block Plan:** The Kaka'ako Innovation Block is an innovation cluster expanding on the success of the Entrepreneurs Sandbox. The defense subcontractor sector has expressed interest in being part of this development.

One-Year Goal: Leveraging partnerships and community resources to create sustainable model to help move the industry forward. Secure additional commitments from non-state sources.

Five-Year Goal: Begin planning on other components of the block.

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Action Plan: Continue activities at the Sandbox and further relationship with UH and the private sector.

Measure of Success: Non-state funds secured for the project.

7. **First Responders Tech Campus:** The FRTC is a technology campus for first responders located at the Mililani Tech Park. Project planning and permitting is on schedule.

One-Year Goal: Project planning and permitting.

Five-Year Goal: Secure partnership with agencies and begin construction.

Action Plan: Contractor hired to plan.

Measure of Success: Federal dollars secured for project.

8. **Neighbor Island Creative Co-Working Sites:** Develop smaller creative spaces and training/certificate programs within Hawai'i State Library system, beginning with rural areas. CSI will deliver a community-based model for the growing number of digital creatives, creating a pipeline of industry-ready talent who can work remotely and locally. Each space will feature the tools necessary to create content for business, media, music, and design/fashion.

One-Year Goal: Launch one neighbor island CreativeSpace Co-working and Studio in Q2 FY23 as a Creative Lab Hawai'i sister facility to ID8/CreativeSpace at Entrepreneurs Sandbox. Begin planning for Nanakuli Library Initiative for Micro CSI facility and programs.

Five-Year Goal: Generate income from CreativeSpace Initiative sites statewide, which are deposited into the Act 228, SLH 2019, HRS 201-113 fund to sustain/maintain facilities, seed fund content for export, continue training programs.

Action Plan: Finalize MOA between Hawai'i State Library System and CID/DBEDT and DHHL for the Nanakuli Library Micro CSI program. Issue RFP to engage contractor for technical build out. Launch creative skillset certification programs to be deployed across Oahu, neighbor island CS hubs and libraries. Identify benefactors and partnerships to install xR LED walls, software and engage industry expertise for training of workforce in new digital technologies. Finalize long-term capital strategy to include Legislative appropriations, foundation grants and benefactor contributions.

Measure of Success: Vibrant export of digital content, increased monetization for local creatives, artists, musicians, designers. Increased original content, programming from throughout Hawai'i for licensing to global markets, complete MOA with all neighbor island Public, Educational, and Governmental access organizations (PEGS), seek private sector donors to maintain the facilities.

9. **Aloha Stadium Redevelopment:** Act 146, SLH 2021, relating to the Stadium Development District, broadened the powers and duties of the Stadium Authority to acquire and hold real property, and to delegate to other state agencies implementation of capital improvement projects with approval of the Governor. All development responsibilities for the stadium and surrounding areas were given to the Stadium Authority under the bill with the HCDA as a resource to the Stadium Authority.

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BIG DATA AND RESEARCH AND DEVELOPMENT

- 1. Statistics and Data Support Branch (SDSB):** The SDSB conducts survey and studies mainly on Hawai'i's population and demographics. The program hosts two programs partnered with the U.S. Census Bureau: the State Data Center and the Federal State Cooperative for Population Estimates (FSCPE). The two programs are responsible for Hawai'i decennial census and annual population estimates. The branch compiles data and publishes the State of Hawai'i Data Book on annual basis and updates the book year-round when new data becomes available. The program provides support to other branches in the division by developing dashboards and data warehouses to present data produced by the Labor Research and Tourism Research Programs. The branch maintains the DBEDT [Economic Data Warehouse](#) and the [Tourism Data Warehouse](#) and maintains the [Hawai'i Energy Industry Information Reporting Program \(EIIRP\)](#). The branch provides support to statewide and worldwide data users.



One-Year Goal: To increase the data points by 20,000.

Five-Year Goal: SDSB will develop 5 more data dashboards on the labor, tourism, the economy and the population. Enlarge the Economic Data Warehouse to include more detailed data on labor statistics.

Action Plan: Assignments are given to specific employees with specific goals. Weekly meetings are held with the team to discuss work in progress. All projects are based on team work so that everyone on the team can substitute for each other if one is on leave. Periodic trainings are held in-house or by invited experts.

Measurement of success: The data products and studies will be measured by media coverage, citations, website visits, and comments from the legislature, administration, and the public.

- 2. Tourism Data:** In the last legislative session, HTA's research team and associated funding were shifted to DBEDT's Research & Economic Analysis Division (READ). HTA will work closely with DBEDT-READ to support its ongoing need for specific datasets and data collection tools necessary to successfully complete our mission.

Tourism Research Branch (TRB): The TRB conducts surveys and studies to monitor the performance and economic contribution of Hawai'i's tourism industry which is the largest employer of the State. The studies include the supply side of the industry such as visitor room inventory, air seats and cruise arrivals, and the demand side of the industry such as visitor arrivals, expenditures, accommodations used, and purpose of trips. The studies also include the satisfaction level of visitors and the attitude of residents toward tourism in Hawai'i.

One-Year Goal: To report the daily passenger arrivals by direction of travel, the monthly visitor statistics, and annual reports on all aspects of tourism.

Five-Year Goal: To conduct more area-focused studies on the economic impact of tourism such as the North Shore, Windward Side, Waikiki, and Leeward areas of O'ahu. The program will digitize most of the surveys in the next five years.

Action Plan: Periodic meetings with contractors, weekly meetings with the research team, monthly meetings with the Hawai'i Tourism Authority (HTA) Board to learn the new development in the tourism area and learn the demand of tourism data and research.

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Measurement of success: Number of reports released, data series in the dashboard and data warehouse, website visits, and media coverage of the tourism statistics and studies.

3. **Labor Research Branch (LRB):** LRB transferred from the Department of Labor and Industrial Relations (DLIR) effective July 1, 2021. Partnered with the U.S. Bureau of Labor Statistics (BLS), the branch conducts surveys to collect data and reports to the public on Hawai'i labor market conditions including labor force, employment, unemployment rate, job count by industry, wages by occupation, business size by industry, and occupational injuries.

One-Year Goal: To report monthly statistics and annual report on time following the schedule of the BLS.

Five-Year Goal: To prepare research reports on the development of labor market. Conduct trainings to Hawai'i data users on the use of labor statistics. Develop dashboard and enhance the Economic Data Warehouse by including more detailed labor data.

Action Plan: Periodic meetings with the BLS. Monthly and quarterly reports to the BLS. Establish a working group to develop dashboards and a data warehouse for labor statistics. Monthly and quarterly reports to BLS.

Measurement of success: Number of reports released, data series in the dashboard and data warehouse, number of attendees for the labor statistics training, website visits, and media coverage of the labor statistics.

4. **Economic Research Branch (ERB):** ERB conducts studies on all aspects related to Hawai'i's economy and the population including economic issues on energy, industry structure, workforce, household consumption, population, taxation, and businesses. The branch prepares annual reports on Emerging Industries and the Self-sufficient Income Standards as requested by legislation. The branch assesses the economic conditions, identifies growth potentials, and projects future trends. The branch also prepares economic documents for the Department of Accounting and General Services, Department of Transportation, and Department of Budget and Finance for the State's revenue bond and general obligation bond credit rating and sales. The branch also updates the Hawai'i Input-Output Model which is a tool used widely by the professionals for estimating economic impacts.

In addition, READ conducted the following COVID-19 related projects:

- Created a new dashboard on the [economic impact of COVID-19](#) with weekly updates.
- Produced reports on the impact of COVID-19 to the population and businesses in Hawai'i.
- Partnered with 16 private organizations in a READ designed, implemented, and tabulated Hawai'i Commercial Rent Survey. The survey was conducted in July, September, December 2020, and March 2021. The objectives of the survey included finding out the business operation status, revenue projections, tourism contribution to their businesses, and the status of business rent payments. Results revealed that in 2020, 16% of Hawai'i businesses were closed in July, 24% were closed in September due the second stay-home order for Honolulu County, 10% closed in December 2020, and 8% closed in March 2021.
- Conducted a survey on remote work in Hawai'i. 1,661 businesses and 5,451 resident employees responded to the survey. The survey found that 59.5% of Hawaii workers worked remotely at some point since the beginning of the COVID-19 pandemic. Businesses claimed that more than 80% of the remote workers performed the same or better than they were working on site.

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- Conducted a study on the Hawai'i Genuine Progress Indicators (GPI) for Hawai'i. GPI is a more comprehensive measure of the wellbeing of a society including economic, social and environmental indicators. The program developed a dashboard on the indicators and will continue estimating the indicators into future years.

One-Year Goal: Prepare five (5) reports on the current economic issues facing the state.

Five-Year Goal: Conduct 25 comprehensive studies on the economy and develop a new model for short-term and long-term economic and population projections.

Action Plan: Assignments are given to specific employees with specific goals. Weekly meetings are held with the team to discuss work in progress. All projects are based on team work so that everyone on the team can substitute for each other if one is on leave. Periodic trainings are held in-house or by invited experts.

Measurement of success: Number of studies produced annually, media coverage, citations, and comments from the Legislature, Administration and the public, number of page views on the report website.

5. **Energy Data Analytics:** Accessible, reliable, high-quality data undergirds all efforts to achieve a resilient clean energy decarbonized economy. Collection, analysis, and open access to quality data is critical to Hawai'i's successful transition to a decarbonized economy. Data supports the development of equitable and economically viable energy efficiency programs. Data is used to monitor and track progress towards state energy and climate goal, as well as objectives such as the conversion of medium- and heavy-duty vehicles.

Actions undertaken by HSEO to support data analytics include:

- HSEO has begun the work of establishing an energy ecosystem data governance framework. As a necessary preliminary activity to downstream data governance efforts, HSEO has conducted an in-house data inventory survey to develop and maintain a base level of situational awareness of the office's consumption, utilization, and curation of data. The results of this survey culminated in a data catalog comprising 80 datasets, spanning a multitude of public, private, and non-profit sources.
- The framework is the foundation of an online data lake to serve as a single source repository for energy related data, and other data that has been identified as the necessary raw material to fuel a data driven approach to analyzing, formulating, and recommending policies and plans to achieve the State's energy goals. Having all the relevant data housed in a single location, with standardized conventions and formats, will eliminate much of the need to manually forage for data.
- HSEO has hired a Data Science Specialist utilizing federal funds to aid in the data lake build out and to collaborate with energy data stakeholders throughout Hawai'i in developing a data governance framework. This framework will enable the Hawai'i State Energy Office to make more effective use of data by bringing it out of the wild and housing it in closer proximity to its demand. By culminating in a public-facing data API application programming interface and visualization dashboard, this framework will also facilitate future collaborations with energy stakeholders, as well as the dissemination of pertinent energy information to the public.
- HSEO has partnered with the Hawai'i Data Science Institute (HI-DSI) to sponsor three Data Science Fellows. The Fellows will develop, analyze, and visualize specific energy policy scenarios and develop building energy

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and transportation data sets within the data governance framework that the Data Science Specialist is developing.

- HSEO has continued developing its “Engage” energy system modeling tool. Previously known as Hawai’i Energy Visualization Initiative or HEVI, HSEO developed this in collaboration with the United States Department of Energy’s (DOE) National Renewable Energy Laboratory (NREL). “Engage” can augment the energy system planning process by empowering more stakeholders to better understand and solve energy system planning problems. NREL has provided training to the HSEO staff and HI-DSI Fellows on engage and co-developed island electric systems that will be used in future analyses.
- HSEO has continued the deployment of its HAVEN visualization platform as an engagement tool. HAVEN supports the analysis and communication of information contained within complex energy data sets highlighting energy and related sector interdependencies and scenarios. HAVEN continued to be utilized in discussions on the tradeoffs of alternative renewable energy buildout pathways, in particular how they may impact land utilization.

One-Year goal: Provision and deploy HSEO data lake. Build out preliminary capabilities: begin ingesting raw data, testing partitioning schemes, ETL logic, transformations, schemas for structured tables, cataloging, and meta-data. Design, develop, and deploy a new energy data dashboard on the HSEO website.

Five-Year goal: With a data governance framework largely in place, advanced data analytics are underway and available to the public. Explore monetization of data analytics per HRS §196-72(c)12. Dedicated funding source supports ongoing data science activities.

Action Plan:

- ⇒ Develop a data governance framework for energy data to support measurement and evaluation of progress towards state energy goals, identify opportunities, and promote outreach and education.
- ⇒ Design the framework to better disseminate data to the public. Develop the energy data governance framework for Hawai’i through a federally funded Data Scientist and Fellows in partnership with HI-DSI.

Measure of success: Common data standards and practices across Hawai’i’s energy ecosystem. Accessibility of data sets.

- 6. Community Outreach and Education:** READ participates with the State agency bond rating and sales activities every year. Prepares documents for State financial reports and budget. READ also participates in business community events and provides training on data use and presents the state economic conditions and projections.

One-Year Goal: 20 community event participations.

Five-Year Goal: 100 community event participation and training.

Action Plan: Join membership with business communities and organizations. Work with local communities in event planning. Taking the leadership positions in the communities.

Measurement of success: Good to excellent grade in event evaluations.

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7. **Strategic Plan for Statewide GIS Program:** The Statewide GIS Program leads a multi-agency effort to establish, promote, and coordinate the use of geographic information systems (GIS) data and technology among Hawai'i State Government agencies. The listening sessions with federal, State, county, and private sector stakeholders provided valuable feedback and input into current and future priorities of the program.

The GIS program is an important function that also supports emerging issues such as:

- **GIS Support during COVID-19:** The Statewide GIS Program provided staff support to Hawai'i Emergency Management Agency (HI-EMA) to develop multiple data sets, maps, dashboards, and a consolidated hub website related to the state's response to COVID-19. The Program also provided resources to the Hawai'i Tourism Authority for its interisland travel initiative to track airline passengers between islands and monitor their compliance with quarantine restrictions. In addition, the Statewide GIS Program assisted the Office of Enterprise technology Services (ETS) with its transpacific Safe Travels application by facilitating access to traveler and daily quarantine check-in data by appropriate county and state enforcement agencies using a GIS platform common to the state and counties. The Program provided staff support to the Hawai'i Department of Health (DOH) as it worked to integrate data from various data sources (VAMS, Tiberius, etc.) to track vaccine distribution and administration.
- **Navy Water System Incident GIS Support:** The Statewide GIS Program is providing staff support to DOH in its investigation and response to the petroleum product contamination of the ground water at Red Hill. GIS is being used to geocode and maintain data related to caller concerns and water sample results. In addition, data from the Statewide GIS Program was combined with other data to perform analysis and to create static and interactive maps for internal use. Publicly available maps will be available soon, once confidential and personally identifiable information are scrubbed from the data sets.

One-Year Goal: Draft an updated Strategic Plan for the Statewide GIS Program to build on its strengths and identify areas for improvement to address the needs and concerns of the GIS stakeholders.

Five-Year Goal: Implement the Strategic Plan and review and adjust annually, as needed.

Action Plan: The Strategic Plan will set the priorities for the Program and include goals and intermediate objectives and activities. GIS staff will implement the activities and elements of the approved Strategic Plan.

Measure of Success: Specific milestones and activities of the Strategic Plan will include measurable objectives that will be tracked.

8. **Implement Governance Framework for ArcGIS Online (AGOL) Platform:** OPSD plans to work with other state agencies to implement a governance framework around the AGOL platform. This will include coordinating with ETS and agency leadership to establish AGOL liaisons in state agencies who will be responsible for facilitating and managing agency GIS users, and geospatial content and applications

One-Year Goal: Obtain buy-in from agency directors and managers to recruit AGOL Liaisons within their agencies to implement governance changes in the AGOL platform. Work with agencies to identify AGOL liaisons and establish roles, responsibilities, and a communication plan.

Five-Year Goal: Establish a regular meeting schedule with AGOL Liaisons and work with them to implement changes in publishing and management of users and content. In collaboration with AGOL Liaisons develop additional guidance to address future changes in the platform as they arise.

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Action Plan: Work with AGOL Liaisons to implement elements of consultant recommendations: revise user roles; revise publishing protocols; empower and train AGOL Liaisons. Regularly solicit feedback from GIS community regarding issues or concerns with changes in the platform.

Measure of Success: Vetted data and applications from agencies (for content, context, and accuracy); reduced amount of storage required for user content; and reduced number of inactive users.

9. **Geoplatform Management:** During FY 2023, OPSD will work with agencies to expand governance guidance and operational standards from the AGOL online platform to include desktop and server GIS platforms.

One-Year Goal: Communicate licensing and platform changes to the user community and work collaboratively with agencies to develop governance standards across the full geoplatform, extending beyond the online platform to the on-premise server and desktop environments.

Five-Year Goal: Establish a representative GIS key stakeholder Advisory Hui to provide two-way communication channels among agency users. Develop State geoplatform governance standards.

Action Plan: Work with ETS to standardize and to conduct the annual GIS software inventory and negotiate GIS licensing and data hosting agreements. Work with agencies to manage and maintain server and desktop licensing as well as their use of the online AGOL platform. Establish a regular meeting schedule with the Advisory Hui; develop plans to address licensing and hosting requirements in advance of need.

Measure of Success: Year-to-year increase in the ArcMap and ArcGIS Pro installed user base. A smoother EA renewal process, secured earlier in the year. Earlier awareness by Statewide GIS Program of agency licensing plans and needs.

10. **Develop Memoranda of Understanding/Agreement with Agencies Around Data Sharing and Governance:**

OPSD plans to develop memoranda of understanding/ memoranda of agreement (MOUs/MOAs) with State and county agencies to provide a framework for consistent and reliable data sharing and data security, as well as MOUs/MOAs with state agencies to memorialize a comprehensive governance framework around the geospatial platform.

One-year goal: Execute an MOA with the Office of Enterprise Technology Services (ETS) to establish roles and responsibilities – ETS for funding the enterprise licensing agreement and cloud hosting environment, and OPSD for administering and managing the enterprise GIS platform.

Five-year goal: Execute MOUs with state and county agencies to establish regular updates of key data sets and document access and use constraints. Schedule regular periodic calls/meetings with ETS to discuss geoplatform concerns and issues.

Action Plan: Work with ETS' IT Governance office to develop an MOA; work with stakeholder agencies to identify data sets that can be shared in the state's geodatabase and develop MOUs to formalize data sharing agreements.

Measure of success: An executed MOA with ETS; and increasing number of MOUs with agencies (and a corresponding increase in shared data sets).

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11. Establish a Distributed/Federated System of GIS Servers and Data: OPSPD plans to develop a distributed/federated geoplatform architecture (geodatabases and hubs/portals) and develop a governance plan to manage the proliferation of geospatial data and applications in a distributed fashion. The federated architecture is expected to be in the Statewide GIS Strategic Plan.

One-year goal: Develop a comprehensive plan to learn more about the requirements (hardware, software, skill sets) for establishing and maintaining a federated GIS server environment.

Five-year goal: Establish an architecture supporting multiple agencies' GIS servers federating their geodatabases in ETS' Government Private Cloud (GPC).

Action Plan: Work with Esri and ETS to design a sustainable, distributed GIS server architecture to accommodate agency on-premise server needs and establish a best practice governance framework for managing this environment.

Measure of success: Proliferation of federated agency level GIS geodatabase servers and reduction in standalone, unfederated servers and standalone file geodatabases.

12. Develop a Quantitative Calculation of Return on Investment (ROI) for GIS: During FY 2022, OPSPD will work with state agencies to identify activities and measurable outcomes utilizing GIS resources to develop a quantifiable ROI for the state's investment in GIS tools and resources.

One-Year Goal: Gather information from agencies about regular workflows incorporating GIS and noteworthy cases that have had a measurable impact on operations. Identify outcomes and outputs of those efforts that can be highlighted as part of the communication and outreach strategy above. Work with agencies to quantify short- and long-term impacts of those efforts.

Five-Year Goal: Develop communication channels by which the GIS staff can continue to collect information from agencies about their use of GIS with quantifiable results.

Action Plan: Survey GIS user community and work with established GIS agency contacts to identify suitable project and regular workflows.

Measure of Success: Development of an annually repeatable ROI calculation to support continued investment in and further development of geospatial tools, resources, and analysis.

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PROVIDE SMALL BUSINESS THE INFORMATION AND KNOWLEDGE TO EXPAND THEIR BUSINESS TO THE GLOBAL MARKET

1. **Hawai'i State Trade Expansion Program (HiSTEP):** HiSTEP is an export development program designed to: 1) Expand exports and revenues from exports of Hawai'i produced goods and services; 2) Grow the number of Hawai'i companies active in global markets; and 3) Penetrate new markets for Hawai'i produced goods and services. During the nine years that this program has been in operation, the division has been awarded over \$5 million in grant monies which resulted in a total of \$103 million in export sales, supported 926 jobs, and generated \$7 million in tax revenues.

In 2021, the COVID-19 pandemic continued to impact many of the HiSTEP activities due to travel restrictions and cancellation of in-person trade shows.

Companies accustomed to finding new export business by attending trade shows were left having to find other means of keeping up export sales. DBEDT encouraged companies to seek ways to have an online global presence through e-commerce and digital marketing. DBEDT also focused on continuing to increase companies' export readiness by offering monthly webinars on export-specific and market-specific topics.



To continue this export program into the next year, the division was once again awarded a competitive grant of \$637,000 from the U.S. Small Business Administration (SBA). In anticipation of the easing of travel restrictions and the ability to attend trade shows in person, the division's proposal included a series of overseas and domestic trade shows, export training and one-on-one business advising, and direct financial assistance to support companies' export development plans. The division will continue to monitor the pandemic landscape and revise the HiSTEP activities into 2022 as needed.

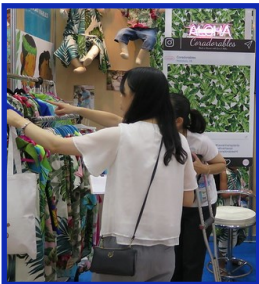
One-Year Goal: Secure \$800,000 SBA award (annual competitive grant); assist 225 companies; and achieve \$5.5 million in export sales.

Five-Year Goal: \$500,000 + grants each of 5-year period; \$20 million in export sales.

Action Plan: Tradeshow, missions and company assistance.

Measure of success: Increase in export sales; increase in number of Hawai'i companies exporting Hawai'i-made goods and services.

2. **2021 Tokyo International Gift Show:** In October 2021, DBEDT participated in the 2021 Tokyo International Gift Show (TIGS) as part of the HiSTEP. However, the challenges of the global pandemic, including travel restrictions, limited the participation of Hawai'i companies to those who were able to find representation through agents, importers or distributors in Japan. A total of 34 Hawai'i companies were represented at the 2021 autumn show, and while sales data from the participants is still being collected, estimated export sales are \$800,000 to date. Pandemic restrictions not only affected the number of Hawai'i companies that could participate but also the number of potential customers that attended the show. Show producers reported 170,246 buyers, wholesalers, distributors, brokers and retailers visited the 2021 TIGS, a decrease from previous year, thus also affecting potential business for Hawai'i companies.



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One-Year goal: 50 companies participating and reporting two million dollars in direct and mid-term export sales.

Five-Year goal: 70 companies reporting \$4 million in export sales.

Action Plan: Increase participation in collaboration with Hawai'i Tourism Japan and other partners.

Measure of success: Increase in export sales.

3. **2021 Hankyu Hawai'i Fair:** In July 2021, DBEDT once again participated in the Hankyu Hawai'i Fair in Osaka, Japan. Because of 2020's success, the 2021 Hawai'i Fair included both in-store shopping and activities and e-commerce shopping with virtual events. However, while in-person shopping at the Umeda Main Store was allowed by the Japanese government, company owners from Hawai'i were still not allowed to travel to Japan, so the overall event scale was limited when compared to 2019, before the COVID-19 pandemic.

There were 34 Hawai'i companies that were featured via online shopping and in-store. Compared to 2019, the event was one day shorter, and further burdened with social distancing restrictions, so store attendance was 48% of 2019 figures, or about 105,000 attendees. However, the Hawai'i Fair is always very popular, and Japanese shoppers have not been able to travel to Hawai'i, so the atmosphere was very lively and energetic. Total Fair sales results for both in-store and online shopping were over \$1.67 million, including apparel and gift items, and art originals and prints. This compares to 2019, the last year of continuous growth before the COVID pandemic. The 2019 Fair was all in-person and attracted over 220,000 customers over seven (7) days. Total sales achieved was \$2.1 million by 63 companies.

One-Year goal: to continue building momentum after the COVID-19 pandemic by achieving 40 vendor participants, topping \$2,000,000 in sales via e-commerce and in-store purchases.

Five-Year goal: 50 vendors topping \$2.5 million in sales.

Action Plan: Continuously improve manufacturers product offering, sales ability and leverage Made In Hawai'i brand in partnership with Hawai'i Tourism Japan and other partners.

Measure of success: Increased sales, improvement of individual companies exporting capabilities.

4. **Made In Hawai'i:** Building on the initial success achieved with the portal site, "Buy Hawai'i, Give Aloha" (<https://buy.hawaii.gov>), BDSD is planning and activating the "Made In Hawai'i" program created by the State Legislature in June 2021. While several details about the definition, certification and enforcement of Hawai'i-made products must be reviewed and formalized by legislation in the 2022 Session, BDSD has enacted an interim plan to continue building awareness of and encouraging purchase of "Made In Hawai'i" products.



- * **Branding and promotion:** BDSD created an updated, interim logo (to be further defined and formalized); updated the website <https://invest.hawaii.gov/made-in-hawaii/> to list 260 registered businesses, along with 8 large online marketplaces that feature hundreds of vendors each; updated the Made in Hawai'i video <https://youtu.be/YKU3fgLp8T0>; planned a holiday campaign via social media and paid banner ads to drive consumers to the web site; participated in the Mana Up Virtual Showcase broadcast and Made in Maui County Festival live streaming.
- * **Made In Hawai'i survey:** BDSD has developed a survey, <https://invest.hawaii.gov/made-in-hawaii-program-survey/>, to help us better understand manufacturers and to ascertain the component of "intellectual

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property” as it relates to product valuation. The survey has been distributed to our list of companies of over 7,000, and will be sent through BDSD partners: Pop Up Mākeke; Made In Maui County Festival; Kama‘aina First; Hawaiian Farmers Market; Made in Hawai‘i Festival; Shop Small Hawai‘i; Kaua‘i Made; Hawai‘i Food Manufacturers Association, and others.

- * **HiSTEP Program:** BDSD is also integrating the “Made in Hawai‘i” export development program offering support to registered companies who are ready to expand their sales abroad. BDSD will continue strengthening the website as a hub of information and resources for Hawai‘i manufacturers and retailers.

One-year goal: 400 companies registered and listed at the end of FY 2022.

Five-year goal: Business-to-Business (BtoB) e-commerce, increased online network of importers and overseas distributors.

Action plan: Promotion to target markets of local shoppers, visitors, U.S. continent, Japan and other overseas markets.

Measure of success: Increase in visitor traffic and sales by companies.

MANUFACTURING

INNOVATE Hawai‘i Program: In response to the pandemic, INNOVATE Hawai‘i secured an additional \$850,000+ of federal funds for Hawai‘i in FY 2021 through competitive federal grant opportunities from Economic Development Administration, Small Business Administration, United States Department of Agriculture, and National Institute of Standards and Technology. The funding is generally used to hire local service providers to help Hawai‘i based manufacturers recover from the economic injury caused by COVID-19.

The following funds were awarded to the INNOVATE Hawai‘i program in FY21:

- * \$600,000 (EDA) E-commerce and Digital Marketing Assistance for Manufacturers
- * \$125,000 (SBA) 1-year SBIR outreach and assistance (secured for third straight year)
- * \$75,000 (USDA) + \$45,000 (Hawai‘i and Kauai Counties) to support the Neighbor Island Innovation.

In FY20, the INNOVATE Hawai‘i program started a suite of E-commerce and Digital Marketing training activities to help local businesses reach new markets. Additional EDA grant funds were secured in FY21 to ramp up this effort. This program continues and consists largely of assessing a company’s needs and matching them with a local specialist.

One-Year Goal: Continue program.

Five-Year Goal: Increase funding for the program.

Action Plan: Continue the efforts in workforce development, food safety, advanced manufacturing, and e-commerce. Adapt to the changing needs of the companies.

Measure of Success: Successful award from NIST. NIST survey and scorecard.

MAP Grants: HTDC’s Manufacturing Assistance Program (MAP) offers Hawai‘i -based manufacturers up to a 20% reimbursement (up to \$100,000) on qualified expenses to help Hawai‘i manufacturers become globally competitive. The MAP grant program also provides wrap around services and is one of HTDC’s core programs.

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NOTE: Due to COVID, MAP Grant funding was not available this past year, so no grant awards were made.

One-Year Goal: Seek funding and grant support for Hawai'i SBIR and manufacturing small businesses and the wrap around support services.

Five-Year Goal: Double the company investment and total match requested by the companies. Use this program to justify an increase in the amount of annual federal funds received from NIST.

Action Plan: Revamp of MAP grant program to include support for workforce development for manufacturers to address challenges with skills gap and employee retention.

Measure of Success: Number of jobs provided by companies in program.

OVERSEA OFFICES

Oversea Offices: Due to the global pandemic, both overseas offices in Beijing and Taipei continued their work and support to DBEDT in their represented areas respectively. Both offices were responsible for business development programs designed to promote trade and investment, and sister-state relations between Hawai'i and Greater China. Offices were able to support Hawai'i Tourism Authority (HTA) while their representatives were absent during the reorganization, to maintain the brand image of Hawai'i for tourism industry in Asia.

One-Year goal: Organize 2 coffee marts to introduce Hawai'i coffee to the buyer from Shanghai and Kaohsiung. Establish the travel bubble agreement between Hawai'i and Taiwan.

Five-Year goal: Maintain the operation of overseas offices, refunction offices as Education Services Center to attract more students to Hawai'i.

Action Plan: Leverage sister-state relations and the local relationship in China to increase opportunities for Hawai'i businesses through different projects.

Measure of success: Increase export sales and increase in international students from Greater China.



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EXPAND DEFENSE INDUSTRY IN HAWAII

1. **\$1.1M Grant from DOD Office of Local Defense Community Cooperation:**

In March 2021, DBEDT was awarded a \$1.1 million grant from the Department of Defense's (DoD) Office of Local Defense Community Cooperation to further promote resiliency, growth, and compliance within the local defense industrial base. Subsequent to that award, DBEDT awarded two contracts to local vendors to pursue those initiatives. The period of performance for the grant is from April 2021 through September 2022.

A. Hawai'i Military Alliance: In April 2021, DBEDT awarded a \$645,000 contract to the Chamber of Commerce to establish a Hawai'i Military Alliance which would be a collaboration between government, industry, educational institutions, and community resource partners. The Alliance has identified these key areas of focus:

- * **Small Business Support:** Designed to increase opportunities for local small and medium sized businesses within the defense and federal marketplace.
- * **Workforce Development:** Create programs designed to meet the workforce demands of both the local defense industrial base and the DoD.
- * **Business Ecosystem Development:** Establish a network of national, regional, and local companies to promote the growth of local businesses in support of defense requirements.
- * **Market Development and Resiliency:** Collaborate with local businesses and non-profits to increase market flexibility and economic resiliency in order to successfully withstand the ups and downs of defense related spending.

One-year goal: Create a formal Hawai'i Defense Alliance comprised of representatives from all identified partners. Establish working groups to address the initiatives of the Alliance and an Executive Committee to oversee and guide the Alliance.

Five-year goal: Through the efforts of the Alliance, increase the dollar amount and number of DoD contracts and sub-contracts that are awarded to local businesses. Establish career pathways for local workers/students to obtain high-paying jobs.

Measure of Success: \$50 million dollar increase in defense related procurement to local businesses.

B. Cybersecurity Assistance: In April of 2021, DBEDT awarded a \$345,500 contract to Referentia Systems Inc. to provide educational and technical cybersecurity assistance to local businesses to maintain compliance with DoD cybersecurity requirements. This contract will focus on:

- * **Learning and Education:** Establish an on-line learning platform to educate local businesses about the cybersecurity requirements DoD mandates for all their contractors.
- * **Technical Assistance:** Provide in-person assistance for up to 40 local businesses who require a more in-depth review of their information systems. For those companies who handle Controlled Unclassified Information, additional steps are required to ensure their information systems are secure and any vulnerabilities within the system are identified.



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One-year goal: Improve the level of knowledge amongst the local defense industrial base regarding DoD cybersecurity requirements.

Five-year goal: Maintain an active cybersecurity compliance program to ensure local DoD contractors continue to meet the ever-changing requirements of DoD.

Measure of Success: No local businesses who complete the learning modules or receive technical assistance are identified as non-compliant with DoD cybersecurity requirements.



2. Cyber Leaders: As cybersecurity is vital not only to the defense sector but also to those businesses who perform, or wish to perform, on all federal contracts, DBEDT awarded a \$250,000 contract to CyberHawaii in June 2021. The intent of this contract is to:

- * **Develop a corps of Cyber Leaders:** Through the collection of IT firms that comprise CyberHawaii, IT professionals will be trained and interned with local companies to educate local small businesses on cybersecurity hygiene and best practices. The goal is to educate and certify at least 12 IT professionals as Cyber Leaders and to assist up to 250 local businesses.

One-year goal: Establish a training program and certify 12 cyber leaders within the local community.

Five-year goal: Create a viable resource for local businesses to educate them on the importance of cybersecurity for both federal contractors and non-contractors.

Measure of success: Increase in the number of local small businesses who are aware of, and utilize, best practices related to cybersecurity.

PROVIDE ASSISTANCE TO SMALL BUSINESS

1. Community Based Economic Development (CBED): Through loans, grants and technical assistance the Community Based Economic Development (CBED) program provides training and capacity building opportunities to promote, support, and invest in community-based development projects that result in measurable economic impact.

CBED offers small business loans ranging from \$25,000 to \$125,000, to eligible small businesses that support economic development in their communities. The CBED loan program supports a broad range of businesses focusing on agricultural producers and manufacturing businesses. Loans may be used for: start-up costs and working capital; construction or improvement of facilities; purchase of equipment; payment of production and marketing expenses including materials, labor and services. CBED currently has co-lending arrangements with the Hawai'i Dept. of Agriculture (HDOA), Feed the Hunger Foundation (FTHF), and the Hawai'i Community Reinvestment Corporation (HCRC) to execute and provide loan servicing on participation loans.

BDSD has an additional \$1 million available from an Economic Development Administration (EDA) grant for the CBED Revolving Loan Fund to use for CBED Small Business Loans.

One-Year Goal: Eight (8) CBED Loans to Small Businesses.

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Five-Year Goal: Obtain additional federal funds to increase amount available to lend.

Action Plan: Using Federal funds increase the number of loans to Hawai'i businesses.

Measure of success: 50 loans to fund businesses within 5 years.



2. **Hawai'i Small Business Capital Program (HI-CAP):** The American Rescue Plan Act ("ARPA") reauthorized and appropriated additional funds to all states for its State Small Business Credit Initiative ("SSBCI") Program. The SSBCI program would bring to Hawai'i approximately \$60 million in federal funding to expand access to capital for small businesses, startups, and entrepreneurs. The Hawai'i Technology Development Corporation ("HTDC") and the Hawai'i Green Infrastructure Authority (HGIA) have partnered together to jointly administer this program.

One-Year Goal: the SSBCI application is due in mid-December 2021. Approvals and funds are expected in March 2022. The direct financing and credit enhancement program are required to be established no later than June 2022. Upon the launch of these programs, HGIA will be doing stakeholder outreach to deploy funds.

Five-Year Goal: At least 2/3 of the total funds available should be deployed to eligible businesses and organizations in order for Hawai'i to maximize the amount of funds received from the Federal government. SSBCI funds need not be returned to the Federal government and repayment will establish revolving facilities which will be available to assist more small businesses even after the SSBCI program ends in seven years.

Action Plan:

- ⇒ As part of HTDC's SSBCI team, HGIA has been meeting with over 150 interested stakeholders, including conventional bankers, non-traditional lenders, small businesses, venture capital funds and investors to gather feedback in developing an SSBCI program for Hawai'i.
- ⇒ Upon Treasury approval, HGIA will develop the Collateral Support Program, including processes, forms, applications, documents and agreements for banks, credit unions and CDFIs.
- ⇒ For the direct financing program, HGIA will develop processes, forms, applications, documents, and agreements for applicants with catalytic projects.
- ⇒ Enroll banks, credit unions and CDFIs into the Collateral Support Program.
- ⇒ Approve applications (either Collateral Support applications or direct financing applications) and deploy funds.

Measure of Success: One measurement of success is bringing all \$60.0 million to Hawai'i. The other measurements are providing small businesses with access to credit, jobs created/retained, etc.

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3. **Small Business Regulatory Review Board:** During 2021, the SBRRB reviewed approximately 50 pre- and post-public Hawai'i Administrative Rules (HAR) of State and County agencies.

One-Year Goal: Continue to meet monthly to review State and County HAR and requests from small businesses for regulatory relief.

Five-Year Goal: Strategic plans are established annually.

Action Plan: In order to achieve these goals, Board members must review, evaluate and update its action plan on a regular basis.

Measure of Success: Number of small business participation in meetings. Number of pre- and post-public hearings conducted.

4. **SBRRB Outreach:** Conferences and events scheduled for outreach purposes in 2021 were held either virtually or not at all due to the pandemic. In order to provide information to the small business community, outreach via social media platforms – Facebook, Twitter and Instagram, is being ramped up.

SBRRB brochures are mailed monthly to dozens of Hawai'i businesses, and the distribution list of its monthly e-newsletter is being increased.

In addition, the proposed NIC Hawai'i contract for the SBRRB's website entails redesigning the homepage, adding state and county department level filtering, and updating content pages and Mailchimp signup form.

One-Year Goal: Expand current and projected outreach activities and identify small business organizations to explore potential cooperative outreach.

Five-Year Goal: Strategic plans are established annually.

Action Plan: Continue to review and improve upon the Board's outreach plan, which includes weekly social media outreach, mailing of brochures and outreach efforts performed by individual board members.

Measure of Success: Outreach activities will be measured by the number of activities attended, and small business organizations approached.

5. **BDSD Enterprise Zone:** The EZ Partnership Program is a joint state-county effort intended to stimulate—via tax and other incentives—certain types of business activity, job preservation, and job creation in areas where they are most appropriate or most needed. At the end of 2020, the companies eligible to receive EZ benefits reported 1,095 new or maintained jobs statewide. There were 192 companies enrolled in the EZ Program at the end of 2020.

One-Year goal: 225 companies enrolled at the end of 2022.

Five-Year goal: 250 companies enrolled.

Action Plan: Market to agriculture, wholesaling and manufacturing related companies.

Measure of success: Increase in jobs created and maintained in economically challenged areas of the state.

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CREATIVE INDUSTRIES

Hawai'i's reputation as a hub for film, television and streaming production has hosted more series production in 2021 than any other year, anticipated to reach \$425 million in estimated production spend. Aligned with this focus for our State as a hub for content production is the maturing of the locally produced films and launch of content platforms, which are seeing a rise in licensing, distribution, and investment fund opportunities from outside of the state.

In compliment to the rise in production locally and location based, Hawai'i's arts, culture, music, media, film, and entertainment industries are intrinsic to our State's identity. CID develops initiatives which build export of capacity of intellectual property for creative entrepreneurs in three areas: 1) talent and workforce development initiatives; 2) cluster specific infrastructure development; and 3) access to remote work capacity and capital investment to expand export of global creative content and intellectual property (IP).

1. **Film Production:** Impacted by the pandemic, the estimated Film Production expenditures were \$225 million in 2020. Hawai'i is on target to reach an estimated \$425 million in production expenditures in 2021.

One-Year Goal: Stabilize staffing with permanent hires for statutory duties of film tax credit and film permitting. Complete digital transformation through online tax credit filing system developed with NIC. Launch of the portal in FY22-Q3 will feature Production Registration Form (PRF) with Hawai'i Production Report (HPR) module in Spring FY22.

Five-Year Goal: Resilient film and television production, Increased contributions to Act 228, SLH 2019 Hawai'i Film and Creative Industries Development Fund.

Action Plan: Continue partnerships with private sector, foundations, federal support to mitigate fiscal impacts to program.

Measure of Success: Maintain steady offshore production and increase infrastructure capacity of stages on all islands.

2. **Creative Lab Hawai'i & Digital Transformation Initiatives:** The increased digital export of original content and music driven by the pandemic need to pivot to an online presence and has reached a record number despite the pandemic. This signals a significant opportunity to shift focus on digital transformation for Hawai'i creatives.

One-Year Goal: Build digital online hub to showcase original content. Workshops in legal, business and IP creation/protection in conjunction with Senator Hirono's team in D.C. Continue to build out the pipeline of education-to-workforce opportunities in media, indigenous storytelling, VR/AR storytelling music and design. Build partnerships and secure funding from foundations and federal dollars.

Five-Year Goal: Increase jobs in e-commerce, export of creative IP, post-production, licensing of original songs in mainstream film, television, streaming and commercials.



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Action Plan: MOA's and P3's developed to accelerate placement in new sectors of emerging industries.

Measure of Success: 30 to 50% of increase of jobs across creative and emerging sectors.

- 3. Creative Industries Partnerships:** A partnership agreement with the Creative Industries Division was established to run the soundstage at the Sandbox. The ID8 Studios celebrated its grand opening in FY21.

One-Year Goal: Ramp up the ID8 studios.

Five-Year Goal: Fill the ID8 studios to capacity.

Action Plan: Work with DBEDT CID and secure additional public/private stakeholder commitments for project.

Measure of Success: Positive cashflow.

Budget Impacts: Reduced staff support for this project which will slow down the progress.

INNOVATIVE

- 1. Accelerator Program:** The Accelerator programs provide funding, mentorship, and training for startup companies. HTDC funded five accelerator programs – Blue Startups, ManaUp, Purple Mai'a, Impact Hub and XLR8HI, -- a total of \$200,000 in FY21. Each program is required to have at least a 1:1 match in order to receive funding from the State.

Funding for the accelerator programs were not provided in FY21. However, through a DBEDT remote work initiative partnership, funding was awarded to support the accelerators.

One-Year Goal: Develop next generation of accelerator programs and continue to provide financial support and mentorship for startups.

Five-Year Goal: Programs continue successfully.

Action Plan: Evaluate existing measuring system for better indicators to measure program performance. Additional measurables to consider include: total number of activities, total attendance, number of companies through the accelerator programs, private sector engagement/dollar leveraged.

Measure of Success: Number of companies running through program and still in operation.

- 2. TRUE Initiative:** The Technology Readiness User Evaluation (TRUE) Initiative is a technology solutions-focused collaboration between local private sector business leaders, HTDC, other State departments, and our local universities and colleges. The program is housed out of the Sandbox. The initiative seeks to tech-enable organizations and local businesses through sharing of solutions to common business challenges. The goal is to help create quality jobs and new opportunities with higher wages throughout the State for sustainable living in Hawai'i and attract kama'āina looking for opportunities to return home. The initiative operated through its second year. Progress has been slowed by the restrictions on in-person events. While the program continued virtually, the initiative relies on building stronger cross-industry professional relationships which is difficult to do virtually.

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One-Year Goal: Companies readily collaborating and implementing new tech projects.

Five-Year Goal: Wide adoption from many companies.

Action Plan: TRUE initiative will mostly operate independently with input and guidance from HTDC.

Measure of Success: TRUE initiative operates independently and is recognized by industry.

3. **SBIR Grants:** The Hawai'i Small Business Innovation Research (SBIR) grant provides matching grants and wraparound services to assist companies further the development of new products to solve critical issues. Applicants must have received a federal SBIR grant in order to qualify for the State's matching grant. The HSBIR program provides up to 50% match for companies receiving SBIR awards. The SBIR grant program is one of HTDC's core programs.

Due to COVID Phase II and III funds were not available this year so only Phase 0/1 awards were made.

Results of Phase 0/1 Awards

4 - Phase 0 Applicants Awarded
12 - Phase 1 Applications Received
9 - Phase 1 Applications Awarded
3 - First-time Phase 1 Applicants
\$2.6MM Federal Grants Awarded
\$639k Total Match Requested
\$362k Total Matching Grants Awarded

One-Year Goal: Continue funding and grant support for Hawai'i SBIR and Manufacturing small businesses and the wrap around support services.

Five-Year Goal: Expand efforts with University of Hawai'i to increase pipeline and with DOD through Hawai'i Tech Bridge program.

Action Plan: Seek capital to continue growth of the program. The Hawai'i Tech Bridge is envisioned to provide a competitive advantage for Hawai'i in commercializing technologies for DoD priorities.

Measure of Success: Number of jobs provided by companies in program.

4. **Digital Currency Innovation:** Created through a partnership between HTDC and the Department of Commerce and Consumer Affairs, Division of Financial Institutions (DFI), the Innovation Lab explores digital currency innovation. During the second year of operation, 3 additional companies were added. A program website was developed. <https://www.htdc.org/digital-currency-innovation-lab/>

The pilot has been very successful but will require new legislation to continue digital currency activities in Hawai'i.

One-Year Goal: Legislation in place for new virtual currency companies to do business in Hawai'i.

Five-Year Goal: Integrate digital currency into economic development initiatives.

Action Plan: Continue building relationships with digital currency companies.

Measure of Success: Progress measured by engagement with new fintech businesses.

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AQUACULTURE

Aquaculture Accelerator Project: The pilot aquaculture accelerator completed the third and final year. Despite the pandemic challenges, HATCH was able to run a virtual cohort in the fall of 2020 bringing the number of startups that have received \$100K seed funding through this program to a total of 21. HATCH also raised a total of \$8.4 million for an associated “follow-on” venture fund. Twenty percent (20%) of the cohort companies were either Hawai‘i based or moved to Hawai‘i. For the last and final year of the pilot accelerator project, HATCH organized an Innovation Studio to focus on developing the pipeline of new aquaculture startups forming in Hawai‘i. Recruitment for this final session was completed and program took place in August 2021. Fifty percent (50%) of the participants were from Hawai‘i.

Based on the pilot aquaculture accelerator project accomplishments and successes from 2019 - 2021, NELHA applied for another EDA grant to continue the HATCH aquaculture accelerator for another four years. An award of \$1.8M was made by EDA in May 2021 using EDA 2019 East rift zone lava disaster funds. NELHA is also expecting to receive \$656,000 in construction funds from EDA to improve incubator facilities and construct an innovation village consisting of a fleet of approximately 8 mobile labs. With cost share (mostly provided by HATCH), a total of \$3.1M will be available to develop a long-term self-sustaining aquaculture accelerator at NELHA to benefit global and Hawai‘i aquaculture over 4 years. It is expected that about 75 companies will benefit from the extended accelerator program and 25 companies will benefit from associated incubator activities. HATCH will also aim to raise an \$40M associated “follow on” venture fund. The new EDA grant began in October 2021.

One-Year Goal: Begin 4th year of accelerator operations.

Five-Year Goal: Continue operations of accelerator and complete annual cohorts during the 4-year EDA grant period.

Action Plan:

- ⇒ NELHA will continue to develop the strategy to establish an aquaculture proof of concept center and be identified as a place for innovation of global aquaculture technologies.
- ⇒ Offer additional services and facilities to support “incubation – accelerator – proof of concept” type facilities and programs and other laboratory services especially in the field of global aquaculture innovation.
- ⇒ Implement grant in conjunction with HATCH.

Measure of Success: Increase in number of companies involved in growth global aquaculture; increase Hawai‘i’s image and brand as an aquaculture leader; and increase revenue to NELHA. Aquaculture acceleration to become self-sustaining at the end of the new 4-year EDA grant period.



Photo courtesy of Blue Ocean Mariculture

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Tying all of these economic framework concepts together is the Hawai'i State Plan. In 1978 when the Hawai'i State Plan was first developed, then Governor George Ariyoshi wrote, "The Hawai'i State Plan was drafted with utmost concern for the wishes and diverse needs of Hawai'i's people, and with a proper respect for the State's limited resources. Hawai'i--our people and land, our surrounding waters and air--is a unique place on the globe. It is a very fragile island community in which great care must be taken to protect priceless values ... The aspirations of the people of Hawai'i are mirrored in the Hawai'i State Plan ..."¹

HAWAI'I STATE PLANNING ACT

The Special Planning Branch (SPB) is tasked with carrying out the functions of the Office of Planning and Sustainability Development (OPSD) related to statewide planning under the Hawai'i State Planning Act. The SPB conducts statewide planning and coordination, as well as policy analysis to address critical areas of concern affecting the direction, rate and character of growth (primarily land use and economic growth). The activities of the SPB include statewide integration of sustainability goals and objectives. The SPB conducts the five-year update of the Comprehensive Economic Development Strategy (CEDS) which is required by Congress for government and non-profit agencies to be eligible to apply for economic development grants from the U.S. Department of Commerce, Economic Development Administration. CEDS-enabled eligibility is critical due to the increase in ARPA and Infrastructure grant programs appropriated to Economic Development Administration (EDA) by Congress to address the COVID-19 economic impacts.

- 1. The Comprehensive Economic Development Strategy (CEDS):** The CEDS is a federally funded strategy-driven plan for regional economic development. The CEDS provides a blueprint for economic development throughout the State. OPSD served as the Hawai'i state planning lead for the CEDS since 2002. The CEDS is updated every five years and mandated by Congress and the EDA. Between updates, OPSD reviews applications for EDA grants submitted by Hawai'i government agencies and nonprofits and provides letters confirming consistency with the current CEDS.

One-Year Goal: Complete the CEDS Update and start the Hawai'i Economic Recovery & Resilience (HIERR) Plan.

Five-Year Goal: Apply for EDA grant to support the next five-year CEDS Update and complete the HIERR Plan and support implementation of the focus-area actions.

Measure of Success: Enable Hawai'i's government and non-profit agencies to be eligible to apply for federal funds to support sustainable and resilient economic development programs and facilities.

- 2. EDA American Recovery Act Plan Grant (ARPA)– Statewide Planning Program:** Hawai'i received \$1 million in funds for the statewide planning program that was awarded by the EDA to assist communities in their efforts to build back better by accelerating the economic recovery from the coronavirus pandemic and building local economies to be resilient to future economic shocks.

¹ Downes, Cornelius. "Islands in Transition, A Quarter-Century of Planning and Economic Development in the State of Hawaii", 1986, pp 11.

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One-Year Goal: Complete project set-up with two federally funded positions to manage the grant and convene a steering committee and cross-sector groups already working on focus-areas identified in the EDA approved scope of work.

Five-Year Goal: Complete the Hawai'i Economic Recovery & Resilience (HIERR) Plan and submit to the Economic Development Administration for acceptance.

Action Plan: Work with focus-area stakeholders to develop a work plan for actions and facilities to support a more equitable and resilient economy.

Measure of Success: Hawai'i's economy recovers from the COVID-19 pandemic and becomes more resilient, equitable and sustainable.

CREATE LIVABLE COMMUNITIES

Smart Growth and Transit-Oriented Development (TOD) are closely aligned concepts. Smart Growth refers to land use policies that result in more compact, mixed-use, and accessible developments that also preserve and protect valued agricultural lands, open space, and natural resource areas. Transit-oriented development (TOD) is a type of community development that includes a mix of land uses such as housing, office, retail and/or other amenities integrated into a walkable, moderate-to-high density neighborhood and located within designated TOD zones or within a one-half mile radius of public transportation nodes.

SMART GROWTH DEVELOPMENT

1. Stimulate the Construction Industry and Increase State Housing Inventory: The Land Use Commission (LUC) processes, reviews, and acts on petitions for housing and infrastructure projects to help stimulate the construction industry and increase the State's housing inventory. The primary way this is accomplished is through district boundary amendments involving lands over 15 acres in the State Agricultural, Rural, and Urban Districts and all petitions seeking reclassification of lands in the Conservation District; review and act on applications for special permits in the Agricultural and Rural Districts which are over 15 acres; process motions and boundary interpretation request, and maintain, update, and disseminate official State land use district maps and land use information.

- **Petition Processing:** The LUC will be able to continue to meet all long- and short-term goals in the approval of these matters. The LUC has also been able to meet all of its projected goal with regard to Boundary Interpretations, Special permits and Important Agricultural Lands petitions, allowing the Counties to process and issue construction permits for over 1,200 small projects. The estimated economic impact of the LUC this fiscal year was:

- * Minimum Direct Development Investment of over \$1 billion;
- * Post Development Economic Activity exceeding \$300 million;
- * 1,570 direct construction jobs exceeding \$600 million in wages;
- * Offsite and Post development economic activity exceeding \$350 million;
- * 484 acres of Industrial lands approved for construction; and
- * 200 hotel rooms approved.

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One-Year Goal: Reduce the time for response to boundary determinations.

Five-Year Goal: Continue to streamline process.

Action Plan: Digitize archive materials. Update and modify the LUC website.

Measure of Success: Increase in number of petitions handled annually.

- **Special Permit Applications:** Various infrastructure projects such as the expansion of the Honouliuli wastewater treatment plant and continued operation of various public and private landfills, and quarrying operations to supply materials for road building and construction. Over 484 new acres of commercial and industrial lands were approved.

One-Year Goal: Complete processing of filed petitions.

Five-Year Goal: Continued processing of filed petitions.

Action Plan: N/A

Measure of Success: Completion of petitions.

- **Enforcement of District Boundary Amendment Compliance:**

One-Year Goal: Finalize three outstanding enforcement actions.

Five-Year Goal: Reinstate activity upon budget restoration.

Action Plan: N/A

Measure of Success: Restoration of enforcement activity.

2. **State Land Use Review of Districts:** The OPSD completed a draft report of the boundary review required by HRS § 205-18 which calls for the “review of the classification and districting of all lands in the state.” The draft report was distributed to state and county agencies and made available to the public on the OPSD website. A presentation of the review findings was made to the State Land Use Commission in November 2021. The review focuses on the consistency of the district boundaries with county plans for urban growth, and on the Agricultural District which has experienced the most changes in land use over the past few decades.

One-Year Goal: Complete and submit the final Boundary Review report to the Governor, Legislature, State Land Use Commission, counties, and the general public. Proceed with further discussion of approaches to resolving land use issues identified to the extent possible given limitation of staff and funding.

Five-Year Goal: Collaborate with state, county, and landowners to implement actions including legislation as deemed necessary. Initiate the boundary review in keeping with the original intent to conduct a review of the land use districts every five years, subject to staff capacity or funding to undertake the review.

Action Plan: Employ GIS overlays and analyses to compare the current status of the district boundaries relative to county land use plans, resources, and developments. Consult with counties, the Land Use

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Commission and stakeholders in the State Land Use process in the implementation of report findings. Recommendations for district boundary amendments may be pursued if funding becomes available.

Measure of Success: Adoption of recommendations by state and county.

TRANSIT-ORIENTED DEVELOPMENT

- 1. State Transit-Oriented Development (TOD):** The OPSD-prepared the *State of Hawai'i Strategic Plan for TOD (Aug 2018)*, including over 65 proposed TOD projects on State and county lands Statewide. The Plan has continued to evolve with the undertaking of master plans and the addition of new projects endorsed by the TOD Council.

In 2020, OPSD completed the *State TOD Planning and Implementation Project for the Island of Oahu* which sets forth the infrastructure and investment needs and financing strategy to enable development of planned State TOD projects in three priority regions along the rail line on O'ahu – East Kapolei, Halawa-Stadium, and Iwilei-Kapālama. TOD Council affordable housing and infrastructure work groups were formed to assess priorities.

The OPSD issued a request for proposals in August 2021 for an Infrastructure Finance Study including a finance consultant to explore infrastructure financing and value capture options for a TOD Pilot Area in each county (\$500,000). Selection of a finance consultant is expected in January 2022.

One-Year Goal: Award the Infrastructure Finance Study and initiate project work for the TOD Pilot Areas and education on value capture options which could include future legislative recommendations. Use the 2020 TOD Implementation Plan report to help prioritize funding of TOD project and regional infrastructure capital improvement project needs.

Five-Year Goal: Undertake a comprehensive review of the State TOD Strategic Plan to assess progress, objectives and revise strategies as needed for improved implementation, including review of the role and responsibilities of the TOD Council.

Action Plan: Use the Implementation Project findings to assist and track actions needed to facilitate shared infrastructure investments and individual State agency project development.

Measure of Success: Use of the study cost information and financing strategies to guide development and infrastructure decisions.

- 2. OPSD TOD CIP-funded Projects:** During the past year, OPSD has worked on awarding a total of \$3 million in TOD CIP Planning Funds appropriated by the Legislature in 2020 and 2021 to implement TOD projects in the *State Strategic Plan for Transit-Oriented Development*. The primary purpose of the funds is to jumpstart master planning or infrastructure assessment work that is critical to advancing State and county TOD projects in proximity to transit nodes—with particular emphasis on projects that require multi-agency cooperation and collaboration and meet State TOD objectives and principles in the *State TOD Strategic Plan*.

FY21 TOD CIP funds (\$1.5 million) were awarded to the four projects listed below. Consultants have been selected and contracts are pending for all projects, and projects are expected to get underway once contracts are executed in the next month or so. OPSD will be managing the two County project contracts.

1. Lanakila Homes/County of Hawai'i Multi-Modal Transportation Project, Hilo, Hawai'i (Hawai'i Public Housing Authority (HPHA) and County of Hawai'i) \$550,000.
2. West Maui TOD Corridor Plan, Lahaina to Kaanapali, Maui (County of Maui), \$500,000.
3. Līhu'e Civic Center Mobility Plan, Līhu'e, Kaua'i (County of Kaua'i) \$250,000.
4. Integrated Kahului Library/Kahului Mixed-Use Civic Center Complex, Kahului, Maui (Hawai'i State Public Library System and Department of Accounting and General Services) \$200,000.

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Of the \$2 million in FY22 TOD CIP funds appropriated to OPSD by the Legislature in 2021, \$1.5 million was awarded to the six TOD projects below, and \$500,000 will fund an OPSD TOD Infrastructure Finance Study mandated by a budget proviso in Act 88, SLH 2021. Funds for the two OPSD-County contracts have been released and contracts should be executed in December. OPSD-State expending agency agreements for the delegation of funds to State project recipients will be executed upon their respective board approvals in December and January 2022.

1. Līhu'e Civic Center Redevelopment Plan, Līhu'e, Kaua'i (County of Kaua'i) \$350,000
2. UH-West O'ahu Non-Campus Lands Urban Design Plan Update, O'ahu University of Hawai'i – West O'ahu (UHWO) \$125,000
3. East Kapolei TOD Conceptual Urban Design Plan, O'ahu (Department of Land and Natural Resources) \$300,000
4. Kahekili Terrace Housing Master Plan, Kahului, Maui (Hawai'i Public Housing Authority) \$225,000
5. Puuwai Momi Housing Redevelopment Master Plan, Halawa, O'ahu (Hawai'i Public Housing Authority) \$400,000
6. Pāhoa Transit Hub Site Selection and Planning, Pāhoa, Hawai'i (County of Hawai'i) \$100,000

An RFP has been issued for the TOD Infrastructure Finance Study. Proposals are due December 29, 2021. Contract execution is anticipated in March 2022, with the project commencing thereafter.

One-Year Goal: Participate in all projects awarded OPSD TOD CIP fund to ensure that state and county collaboration around State TOD objectives and principles are advanced in each project and that projects stay on schedule and result in impactful deliverables. Seek continued appropriations for TOD CIP funds to seed TOD projects which can help with economic revitalization and the development of affordable housing within mixed-use communities.

Five-Year Goal: Completion of all planning work (within two years of project initiation).

Action Plan: Finalize Memoranda of Agreement and contractual and funding disbursement arrangements with lead project agencies; participate in project planning and monitor project progress and deliverables for timely completion. Share best practices among projects to expand implementation of TOD principles and to deepen collaborative relationships among state and county agencies.

Measure of success: Completion of funded projects and initiation of development.

3. **Kaka'ako Mauka Area Rule Amendment:** Amend the Kaka'ako Mauka Area Rules to include Transit Oriented Development (TOD) principles to support the State's TOD goals.

One-Year Goal: Complete and adopt the Mauka Area Rule amendments, which will include a TOD rule overlay with zoning incentives.

Five-Year Goal: Implement the amended rules and TOD zoning incentives to encourage development in Kaka'ako.

Action Plan: Work with Kaka'ako landowners, developers, and stakeholders to plan and implement development projects that can utilize zoning incentives.

Measure of Success: Success will be measured by the number of development projects and housing units (especially reserved housing units) in Kaka'ako.

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CREATE COMMUNITIES TO LIVE, WORK AND PLAY

- 1. Create Economic Development Through Revitalization:** The 1976 State Legislature created the HCDA as a way to plan for the future development of underutilized urban areas of Hawai'i. Lawmakers determined these "community development districts" were underused and deteriorating but had the potential to provide great economic opportunities to the state once they were redeveloped.

One-Year Goal: HCDA staff will continue to review and approve development and renovation permits throughout the districts, manage its revenue earning assets and lands in the districts.

Five-Year Goal: Encourage more development in the Kaka'ako and Kalaheo development districts including development of affordable housing.

Action Plan:

- ⇒ HCDA will work closely with the landowners and developers, development permit applicants, and HCDA lessees in each of the community development districts.
- ⇒ HCDA will work with the community and HCDA consultants in amending community development district plans and rules as necessary to facilitate development in each district, especially in Kaka'ako, where HCDA will amend the Mauka Area rules as further described below.

Measure of Success: The measurement for achieving these goals is the number of development permits processed by the HCDA, the number of housing and mixed-use developments in each community development district, the number of affordable housing units developed, an increase in HCDA revenue from its leases, and an increase in GET and property tax revenue generated in the community development districts.

- 2. Kalaheo Community Development District Plan:** HCDA commenced the update of the Kalaheo Community Development District (KCDD) Plan and Administrative Rules. The Kalaheo Master Plan was adopted in 2006 and the Hawai'i Administrative Rules Title 15 Chapter 215 and 216 were adopted in 2012. The Plan and Rules govern all development activities within the estimated 3,700 acres in the KCDD except for federally controlled parcels. Since the Kalaheo Plan and Rules were adopted, major developments have occurred within and adjacent to the KCDD. An assessment of the current state of the KCDD and surrounding area is needed.



One-Year Goal: Continue with the update of the Plan and Administrative Rules.

Five-Year Goal: Complete the update of Plan and Administrative Rules. Implement the amended Plan and Rules.

Action Plan: Identify favorable and detrimental conditions to redevelopment in the district and develop strategies for affordable housing development. Work collaboratively with community groups and stakeholders to obtain feedback relating to development in the district.

Measure of success: The updated Plan and Rules are adopted. Success will also be measured by the number of development projects in the district and number of affordable housing units in the district.

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AFFORDABLE HOUSING

1. **LUC Affordable Housing:** The Land Use Commission (LUC) activities are focused on approval and enabling of large and medium scale construction and housing projects to stimulate the construction industry and further the state inventory of affordable and market rate housing. This past fiscal year, over 1,150 affordable homes and 4800 market rate homes were approved.

One-Year Goal: Complete filed petitions within required time frames.

Five-Year Goal: Complete filed petitions within required time frames.

Action Plan: Work directly with petitioners to ensure a fair but expedited process.

Measure of Success: Decrease in affordable housing shortage.

2. **HCDA Affordable Housing:** The HCDA under its Reserved Housing Program requires at least 20 percent of the residential units in new developments to be made available at an affordable price to qualifying households. Within the Kaka'ako Community Development District (KCDD), 39 residential projects have been completed, two are under construction, and one has been permitted but has not started construction. Between these projects 12,589 residential units are completed, under construction, or going into construction, out of which more than 1 in 3 units are designated as affordable housing units.

In June 2021, the HCDA amended its Reserved Housing Rules (Hawai'i Administrative Rules 15-218-41), which allowed Reserved Housing Unit Owners to prepay their shared equity amount without sale or transfer of their unit.

In August 2021, The HCDA allowed Reserved Housing Unit Owners to obtain a second mortgage, which creates the opportunity for reserved housing unit owners to further access the equity in their unit.



One-Year Goal: Complete the review of applications for the 697 reserved housing units at Ulana.

Five-Year Goal: Utilize shared equity payments to leverage affordable housing development, preferably affordable rental housing development in Kaka'ako.

Action Plan: HCDA will continue to work with Kaka'ako community, private developers, and Hawai'i Housing Finance & Development Corporation to develop affordable housing in Kaka'ako.

Measure of Success: Success will be measured by the number of new development projects in Kaka'ako and an increase in affordable housing units in Kaka'ako.

3. **HHFDC Affordable Housing:** In FY 2021, and in collaboration with the private sector, HHFDC provided financing for affordable rental housing to individuals and families earning 30% to 140% of the area median income (AMI) through the following programs:

- **Low-Income Housing Tax Credits (LIHTC).** HHFDC awarded \$12,996,658 in 9% non-volume and 4%

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volume-cap LIHTC credits for the construction of 565 units for 7 projects across all islands. The LIHTC Program is a financing tool for private developers and non-profit entities to construct or rehabilitate affordable rental units. Federal and state tax credits are awarded by HHFDC and may be used to obtain a dollar-for-dollar reduction in income tax liability for 10 years for federal tax credits and 5 years for state tax credits or may be syndicated to generate project equity. The federal LIHTC is a program administered by the Internal Revenue Service. HHFDC is responsible for the administration of the LIHTC program for the State of Hawaii. A state LIHTC equal to 50% of the federal LIHTC is also available to qualified applicants.

- Hula Mae Multi-Family (HMMF Bonds).** HHFDC requested issuance of \$65,790,787 in tax-exempt bonds to assist in the construction of 269 affordable units. The purpose of the Hula Mae Multi-Family (HMMF) Tax-exempt Bond program is to promote the development of new or the rehabilitation of existing rental housing projects through the issuance of tax-exempt revenue bonds for interim and/or permanent financing at rates below market interest rates. HHFDC serves as the conduit issuer of the bonds. Issuance of bonds through the HMMF program is subject to the allocation of Private Activity volume cap by the State's Director of Finance and the approval of the Governor of the State of Hawaii.
- Rental Housing Revolving Fund (RHRF awards).** HHFDC awarded \$71,076,783 in RHRF funds to 5 projects. The RHRF program provides "Equity Gap" low-interest loans to qualified owners and developers constructing affordable housing units. Funds may be used to provide a loan for the development, construction, acquisition, preservation, and substantial rehabilitation of rental housing units.
- HOME Investment Partnership Program (HOME)** funds and Housing Trust Funds (HTF) supported the construction of 53 units in four affordable rental projects located in Kauai and Maui. These projects were placed in service in FY 2021. Federal HOME funds may be used to assist families at or below 80% of the area median income (AMI), and at or below 50% AMI. Federal HTF funds may be used for the development of rental housing affordable to families at or below 30% AMI. HTF funds were allocated to the City and County of Honolulu and used to acquire a rental housing project on O'ahu, delivering an additional five units.

Location/Project	Total Units	HOME Units	HTF Units
<u>County of Kaua'i</u>			
Koa'e Workforce Housing Development	134	11	13
Waimea Huakai Affordable Apartments	34	6	0
<u>County of Maui</u>			
Kaiwahine Village, Phase I	64	12	0
Kaiwahine Village, Phase II	56	0	6
<u>City and County of Honolulu</u>			
Mahani Hale*	5	0	5
Total	293	29	24

*Non-LIHTC project

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- Assisted in the completion and placement in service of 1,513 workforce/affordable housing units. Notable projects include the following:

- * **Hale Kalele (Piikoi Street, Honolulu, O'ahu, 201 units)** This mixed-use project between the Judiciary and Executive branch, which broke ground in October 2020, is the first intergovernmental collaboration. The project took an underutilized state-owned parcel and turned it into a mixed-use project, including low to moderate income rental housing and a juvenile services facility. The residential portion of the facility was financed with \$24,500,000 in RHRF, \$44,661,970 in HMMF bonds and \$40,500,000 in Federal and State LIHTC equity for the residential portion of the facility. HHFDC also committed \$15,000,000 in DURF towards the Judiciary's portion of the project. Estimated occupancy for the residential portion of the project is May/June 2022.
- * **Kokua (Alakea Street, Honolulu, O'ahu, 224 units)** This elderly rental project located in the Honolulu central business district broke ground in September 2021. It was financed using \$24,698,418 in RHRF, \$48,900,000 in HMMF bonds and \$33,720,309 in Federal and State LIHTCs. The project is projected to be completed in Summer 2023.
- * **The Central (Kapiolani Boulevard, Honolulu, O'ahu, 513 units)** This condominium located adjacent to Ala Moana Center and the Honolulu rail transit line was developed using 201H development powers to expedite project approvals. The Central was completed in August 2021 and has been placed in service. It provides 310 affordable homeownership units for households at income levels ranging from 80 to 140% of the area median income.
- * **Lima Ola Master Planned Community ('Ele'ele, Kaua'i, 550 units)** This project is the largest affordable housing project that Kauai County has ever undertaken. HHFDC provided a Dwelling Unit Revolving Fund (DURF) loan of \$13,000,000 to the County of Kaua'i Housing Agency to fund regional infrastructure improvements supporting the project's development. Project site work began in November 2020 and is ongoing.
- * **Huliau (Kahului, Maui, 12 units)** HHFDC executed a Memorandum of Understanding with the County of Maui to lease the project site and provided \$5,000,000 in DURF funds for planning and construction of the project. The County of Maui used the funds to convert the former University of Hawai'i Maui Community College dormitories, which were unused and vacant for 15 years, into transitional housing for unsheltered families. The project was completed in March 2021 and is fully occupied. The County of Maui administers the project using 'Ohana Zone funds to pay for on-site property management, case management, and wraparound services.



Five-year projection: HHFDC's plan is to assist in the finance and development of approximately 7,563 workforce/affordable units over the next five years.

<u>Fiscal Years</u>	<u>Rental</u>	<u>For Sale</u>	<u>Total</u>
2022	992	667	1,659
2023	748	0	748
2024	1,424	708	2,132
2025	874	200	1,074
2026	1,600	350	1,950
Total	5,638	1,925	7,563

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Action Plan: HHFDC will continue to work with the counties, the community, private developers, and Hawai'i Community Development Authority and other state agencies to facilitate the development of housing statewide.

Measure of Success: Number of new development projects and affordable and workforce housing units which are produced or preserved statewide.

PROVIDING BASIC NECESSITIES

Energy Assurance and Resilience: HSEO's top priority is to ensure the continued availability and delivery of reliable energy, both fuels and electricity, to support economic recovery and meet the demands throughout the state.

HSEO's State Emergency Response Team (SERT) is led by two dedicated staff members, one of which is a temporary federally funded position, and is supported by additional HSEO staff serving as core team members, with all other HSEO staff receiving cross-training on support functions and roles for the core team members. Even with these measures in place, HSEO's ability to fully resource its SERT during long-duration events such as the ongoing COVID-19 pandemic, hurricanes, or volcanic activity has been strained due to recent staff attrition and hiring freezes. HSEO anticipates continued strain on SERT staffing in the future as impacts from emerging threats in cybersecurity, and hazards, such as major storm events, heat waves, sea level rise, and inland flooding increase in frequency and severity exacerbated by climate change.

Actions undertaken by HSEO to support energy assurance and resilience include:

- **Energy Common Operating Picture:** The ongoing development of an energy system common operating picture (COP)—situational awareness supporting all levels of emergency incident management, homeland security, and across jurisdictions. A COP is essential to HSEO's role as the Primary and Coordinating agency under HI-EMA for State Emergency Support Function 12: Energy (SESF-12) to plan and prepare for and respond and recover from all significant energy disruptions and incidents through its SERT.
- **State Emergency Response Team: Energy:** Staffing the HSEO SERT to provide technical expertise and support to energy asset owners and operators, as well as state and local government agencies, to aid in overcoming challenges associated with the repair and restoration of the energy system.
 - * The SERT develops, maintains, and disseminates information and situational awareness products on the status of energy repair and restoration efforts and other information as appropriate.
- **FEMA Grant Implementation:** HSEO has pursued federal funding under the Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program to increase the resilience of Hawai'i's energy eco-system. Working with Hawai'i's Emergency Management Agency (HI-EMA), HSEO secured a \$600,000 Advance Assistance grant to assess the energy supply chain and the interdependencies of Community Lifelines—FEMA defined customers that provide essential services in response to, and recovery from, all hazards events such as first responders, hospitals, water, and wastewater. HSEO has also partnered with Hawaiian Electric to apply under FEMA's annual Building Resilient Infrastructure and Communities program for Critical Customer Hubs (CCH). CCH are microgrids that service multiple Community Lifeline facilities to support local communities in the response to, and recovery from, all hazards events.
- **Energy Assurance in PUC Dockets:** Representing the State's interest in energy assurance and resilience, HSEO participated in dockets 2020-0090 Hawaiian Electric's *Application For Approval Of A First Amendment To Petroleum Fuel Supply Contract With Par Hawai'i Refining, Lc, Etc.*; and 2020-0158 Hawai'i Gas'

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Application For Approval Of Petroleum Feedstock Agreement With Par Hawai'i Refining, LLC, And To Include Costs In The Fuel Adjustment Clause Of The Gas Company, LLC Dba Hawai'i Gas. to assess the impact of the contracts to energy security in Hawai'i. The contracts were a consequence of the collapse in jet travel in 2020, and associated jet fuel demand, which clearly demonstrated that commercial aviation's demand for jet fuel subsidizes fuel and electricity prices across Hawai'i's economy. An outcome of the docket was recognition that a COP of fuel supply and demand statewide is necessary to fully understand the implications to energy security and the capability of existing infrastructure and market participants to completely import all finished fossil fuel products to Hawai'i in the event of the remaining refinery were to shut down. HSEO is also participating in Docket 2021-0098 *Joint Application For Approval Of The Transfer Of Upstream Membership Interests And Related Matters* concerning the transfer of ownership of Hawai'i Gas to Argo to represent Hawai'i's energy assurance and decarbonization policies.

One-Year goal: Contract for services to develop training exercise workshops for SESF-12/SERT; identify and obtain funding for a second position to support energy assurance operations and training; pursue and administer BRIC, Hazard Mitigation and Homeland Security grants, Emergency Management and Cybersecurity technical assistance, and IIJA resilience funding opportunities. Represent the State's energy assurance policies in relevant dockets to develop a complete record in support of the Hawai'i Public Utilities Commission (HPUC).



Five-Year goal: All HSEO staff cross trained in SERT roles and responsibilities and government continuity of operations to ensure SERT capacity and effectiveness. A portfolio of energy resilience projects coordinated with relevant state agencies and energy stakeholders is developed for annual federal funding opportunities including BRIC.

Action Plan:

- ⇒ Continue to build out HSEO's SERT and expand office-wide capability to support SESF-12 activities to prepare for effective discussion-based exercises, as well as the development and implementation of the actual exercises to provide needed feedback and input needed for updating state level plans and developing institutionalized capacity within the HSEO and State.
- ⇒ Develop an Energy Common Operating Picture (COP) for both energy assurance and resilience planning and emergency response.
- ⇒ Advance investment in resilient energy supply infrastructure throughout Hawai'i.
- ⇒ BRIC, Hazard Mitigation grants, IIJA, and other energy resilience and homeland security grant opportunities coordinated as relevant with sister agencies at the State and county level to develop a pipeline of projects and funding.

Measure of success: Number of staff and stakeholders trained in the roles and responsibilities related to SESF-12.

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EDUCATION

International Student Attraction: Based upon the report on the economic impact of international students in Hawai'i, 2020 calculations are as follows:

- \$223.0 million in economic output generated, including direct, indirect, and induced effects
- \$15.7 million in state taxes generated
- \$97.3 million in household income generated
- 3,011 jobs supported by international student spending

In 2021, Hawai'i's colleges and universities slowly reopened to international students via virtual webinars and meetings and by allowing for courses to be completed remotely.

The State of Hawai'i Offices in Beijing and Taipei continued their support of Hawai'i as a study destination. The Study Hawai'i Consortium and Hawai'i Education Service Centers in Beijing and Taipei maintained relationships with schools, students, and parents during the global pandemic.

One-Year goal: Keep connecting students and parents through Study Hawai'i Consortium and State of Hawai'i Oversea Offices.

Five-Year goal: Recapture students to study in Hawai'i.

Action Plan: Rejuvenation of Study Hawai'i organization, reattract students to come to Hawai'i for studying.

Measure of success: Increase in international students.

ENTREPRENEURIAL ECOSYSTEM DEVELOPMENT

CID's Arts and Culture Development Branch (ACDB) handles business, infrastructure, access to capital (Act 228, SLH 2019) and workforce development including Creative Lab Hawai'i and related initiatives to build a thriving creative ecosystem.

One-Year Goal: Continue expansion of collaborative initiatives, fund Act 228 SLH 2019, and launch initiative to provide seed capital for qualified Hawai'i creative entrepreneurs with projects under \$200,000.

Five-Year Goal: Hawai'i has developed a self-sustaining ecosystem with vibrant economic impact, export of original works increased through global IP licensing.

Action Plan: Build out infrastructure. Secure partnerships with New Zealand, Japan, and Korea for business-to-business remote work opportunities for Hawai'i residents in media, VR/AR, content creation.

Measure of Success: Pipeline of business opportunities generated from industry relationships, private sector capital raise for Act 228 SLH 2019 nets \$1 million annually beginning FY23. Metrics of export of IP includes licensing and distribution of films, online series and music licensed, pipeline of jobs filled by residents in emerging industries.

WELL BEING OF PEOPLE

DBEDT WORKFORCE DEVELOPMENT INITIATIVE

Aligning Hawai'i's Economic and Workforce Development Efforts: The DBEDT Economic and Workforce Development Initiative continues to work with the State of Hawai'i Workforce Development Council, the Workforce Development Division, the State of Hawai'i Department of Human Services, Division of Vocational Rehabilitation, and the four county American Job Centers. This initiative has expanded to include the Waipahu and McKinley Community Schools for Adults, the UH Community Colleges, and other private non-profit organizations.

The alignment of DBEDT programs and initiatives continues as the WDC and WDD integrate their new program structure to meet their new statutory requirements. This alliance has allowed DBEDT's remote work, digital literacy and other economic development initiatives to synchronize efforts resulting in the leveraging the rollout of the remote work programs through Hawai'i's four American Job Centers run by individual county departments.

REMOTE WORKING

The Hawai'i Remote Work Initiative started in 2020 in response to the economic lockdown triggered by public health crisis from COVID-19. It was an effort to provide Hawai'i residents with immediate employment opportunities through remote work. This program was developed in partnership with the State of Hawai'i Workforce Development Council and implemented through and in coordination with the State of Hawai'i Workforce Development Division and four county American Job Centers.



In 2021, this program continued to support the initial target of 2,000 residents with remote work opportunities through two contracted initiatives with Instant Teams and FlexJobs both offering Hawai'i residents different forms of remote work opportunities. To expand the reach of this program, the department developed and launched the new Hawai'i Remote Work Project Website: <https://invest.hawaii.gov/remote>. Between August 2021 and December 2021, the site received 16,187 visitors of which 13,337 were residents seeking remote work opportunities and 2,850 were general visits to the site. Approximately 4,000 residents registered to participate in one of the DBEDT remote work sites. Over 325 residents were screened to participate in the 88 slots available or hire in the Instant Teams of which 88 completed the requisite training and 78 were matched and employed on business teams.

The Hawai'i Remote Work Project also supported digital literacy through a contract with Hawaiian Hope for 650 refurbished laptop computers to be distributed through the State of Hawai'i Workforce Development Council's Hawai'i Digital Literacy initiative. An initial 67 computers or 10.31% of the available systems have been distributed through partnerships with the Hawai'i Public Library System and the Waipahu Community School for Adults.

To better understand Hawai'i resident's appetite for and Hawai'i's employers' preparedness for remote work, the team worked with the Research and Economic Analysis Division to survey Hawai'i's household and businesses on remote work. The data collection phase and initial analysis of the survey has been completed and the report is being drafted with a target release in the first quarter of 2022.

One Year Goal: Continue to support local residents and local businesses in remote work. Continue to work in collaboration with the DBEDT Broadband Strategy Office, State of Hawai'i Workforce Development Council, Hawai'i Public Library system and community partners on increasing remote work opportunities and supporting digital literacy throughout the state.

5 Year Goal: Providing efficient distribution processes for advanced remote work opportunities and supporting local business in providing remote work opportunities for the residents of Hawai'i.

WELL BEING OF PEOPLE

Action Plan:

- ⇒ Expand the Instant Teams project from Customer Services Professional and Business Development Specialist to include more technical positions including positions in Data Analytics and Reporting and Software Engineering and Implementation Specialists.
- ⇒ Accelerate the distribution of FlexJobs subscriptions and alleviate any additional burdens from Hawai'i's public workforce system for providing access to services provided by FlexJobs.
- ⇒ Support the digital literacy through the distribution of the remaining laptops and provide ongoing support for the expansion of digital literacy throughout the State of Hawai'i.
- ⇒ Continue data acquisition through direct household and business survey on remote work. Develop a better understanding of the local business preparedness and household appetite for remote work.

Measures of Success:

- Providing remote work opportunities to technical fields including data analytics, and software engineering through phase 2 of the Remote Ready Hawai'i Project with Instant Teams.
- Efficient method for distributing the approximately 1,000 remaining FlexJob subscriptions to the residents of Hawai'i.
- Distributed the remaining 613 refurbished laptop computers in support and coordination with the Hawai'i Digital Literacy initiative and in cooperation with the State of Hawai'i WDC, Hawai'i Public Library system and other community partners.
- Publish the Hawai'i Remote Work Study in early 2022.

DBEDT UNIVERSITY

The DBEDT University training and development initiative focused on program planning that can provide support for DBEDT employees to achieve better work/life balance and also expand this effort to include other state agencies that work with DBEDT on projects that support the overall well-being of Hawai'i's people, culture and environment.

In 2021, the department was afforded the opportunity to build off of the DBEDT department-wide training project rolled out in 2020, to expand the program to both intra- and inter-departmental support for project-based teams. Planning, gather Executive Branch support, and strengthening partnerships with service providers to support the expanded program, contract development and support from the Governor's Office were accomplished.

One-Year goal: Complete contract execution and provide cafeteria style of professional development opportunities to intra- and inter-department DBEDT Teams.

Five-Year goal: Stronger DBEDT intra- and inter-departmental project teams that capitalize on individual team member strengths. Improved work/life balance for DBEDT employees.

WELL BEING OF PEOPLE

Action Plan:

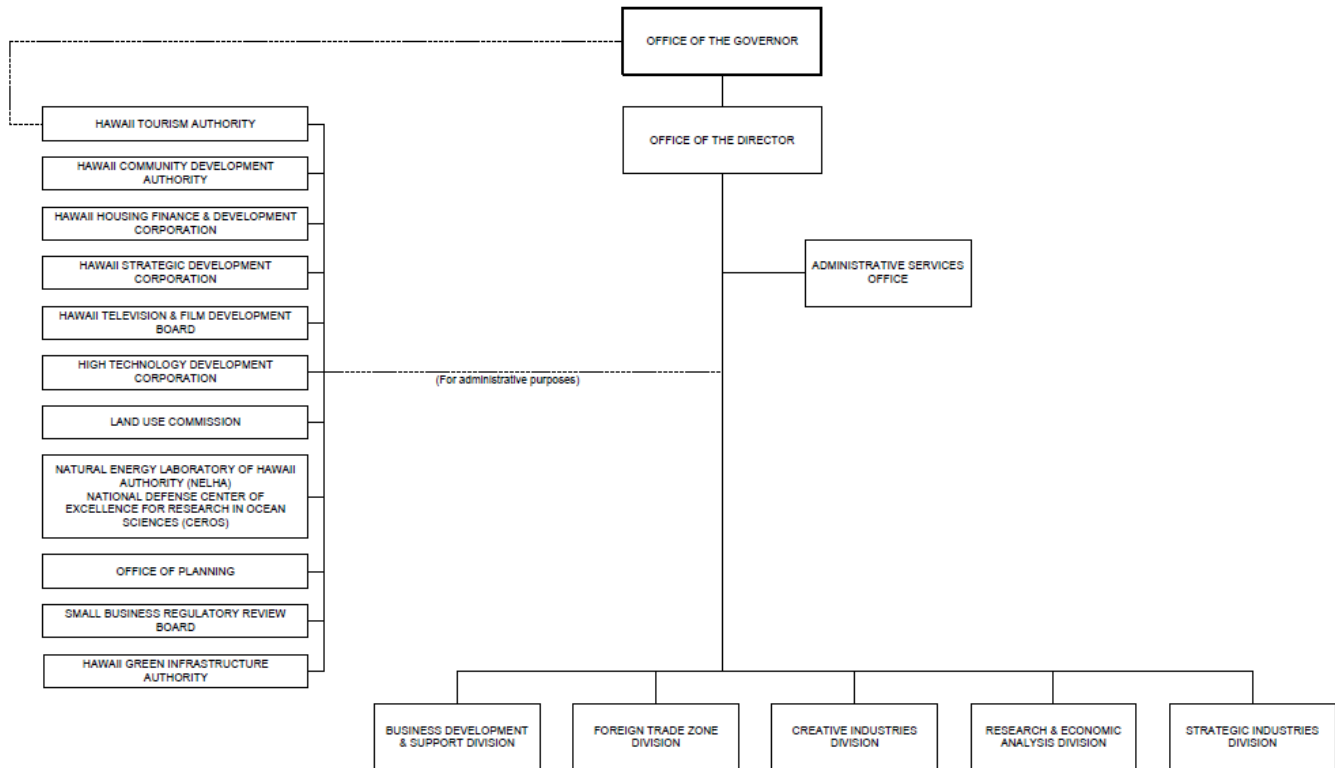
- ⇒ Develop program structure around cafeteria style menu options for selecting team building and individual strength building tool.
- ⇒ Develop and execute services contract for team and strength building services.
- ⇒ Work with managers and agency executives to identify specific training objectives and measures of success.

Measure of success:

- Improved team performance
- Improved work/life balance for DBEDT employees.



DBEDT ORG CHART



Note: Pending reorganization.

DBEDT PROGRAM OVERVIEW

DIRECTOR'S OFFICE

Phone: (808) 586-2355

Website: <https://dbedt.hawaii.gov/overview/>

The Office of the Director and Administrative Services Office (ASO) supports regional and statewide economic development programs by effectively, efficiently, and timely allocating resources including data to programs that support growth, diversification, and resiliency of Hawai'i's economy. The Director's Office and ASO ensures the overall well-being of staff by supporting digital and human development investments that improve our employee's work-life balance that simultaneously increase productivity.

BUSINESS DEVELOPMENT & SUPPORT DIVISION (BDSD)

Phone: (808) 587-2755

Website: <https://invest.hawaii.gov/>

The division promotes industry development and economic diversification by supporting: existing and emerging industries through the attraction of new investment; increase in exports of Hawai'i products and services; expansion of Hawai'i's participation in global trade and commerce; and planning, implementation and coordination of programs and projects aimed at targeted business sectors or economically distressed areas, including rural areas and areas affected by natural disaster.

CREATIVE INDUSTRIES DIVISION (CID)

Phone: (808) 586-2590

Website: <https://cid.hawaii.gov/>

The Creative Industries Division (CID) ensures that Hawai'i maintains its stature as an internationally recognized production destination and creative media hub in the Pacific. CID positions the State as a leader in the global creative innovation based digital economy; strengthens Hawai'i's entrepreneurial ecosystem for creatives; and expands avenues of global export for Hawai'i's originated creative content. Comprised of the Hawai'i Film Office (HFO) and the Arts and Culture Development Branch (ACDB), CID has increased the business capacity and growth of the state's media, music and design clusters creative products and IP through Creative Lab Hawai'i and CreativeSpace808 initiatives.

FOREIGN-TRADE ZONE (FTZ)

Phone: (808) 586-2507

Website: www.FTZ9.org

The FTZ program is a federal program based on the simple idea of removing disincentives related to storing or manufacturing products in the U.S. This is accomplished by allowing U.S.-based companies to defer, reduce or eliminate customs duties on products admitted to the government-authorized zones as they could in a foreign location. This tariff and tax relief is designed to lower the costs of U.S.-based operations engaged in international trade, thereby creating and retaining employment and capital investment opportunities that result from those operations. Currently, Hawai'i has 13 established Zone sites with six active Zones within its project area.

OFFICE OF AEROSPACE DEVELOPMENT (OAD)

Act 1, Special Session 2021, Section 2, repealed Chapter 201, Part IV, HRS, Office of Aerospace Development. Therefore, the Office of Aerospace Development is no longer part of DBEDT.

RESEARCH & ECONOMIC ANALYSIS DIVISION (READ)

Phone: (808) 586-2466

Website: <https://dbedt.hawaii.gov/economic/>

The Research & Economic Analysis Division (READ) enhances and contributes to the economic development of the State by providing analyses and policy recommendations on economic issues; developing short- and long-range forecasts of Hawai'i's economy, conducting and reporting on basic research into the economy of the state, collecting, compiling, interpreting and publishing data and statistics on all aspects of business activity, the economy, and demographic characteristics of the State; and maintaining a statewide statistical reporting program through the State of Hawai'i Data Book and online Data Warehouse.

DBEDT PROGRAM OVERVIEW

ADMINISTRATIVELY ATTACHED ENTITIES

HAWAI'I COMMUNITY DEVELOPMENT AUTHORITY (HCDA)

Phone: (808) 594-0300

Website: www.dbedt.hawaii.gov/hcda

HCDA revitalizes urban areas in the State which are in need of timely redevelopment through the creation of mixed-use districts for residential, commercial and light industrial development that help to address the economic and social needs of the people of the State of Hawai'i by encouraging the desired private investment through: (1) the planning and implementation of infrastructure improvements; (2) the development of public facilities; and (3) the establishment of planning guidelines and parameters that encourage mixed-use development. HCDA also helps to address sustainable food production and education by increasing the acreage of land for taro cultivation and other agricultural activities in He'eia.

HAWAI'I GREEN INFRASTRUCTURE AUTHORITY (HGIA)

Phone: (808) 587-3868

Website: www.gems.hawaii.gov

HGIA is a State administered financing authority established to democratize clean energy for underserved ratepayers previously locked out of solar. HGIA utilizes innovative financing tools to make green energy investments accessible and affordable to Hawai'i's ratepayers, while leveraging private capital, mitigating risks and reaching new markets. HGIA is Hawai'i's Green Bank.

HAWAI'I HOUSING FINANCE & DEVELOPMENT CORPORATION (HHFDC)

Phone: (808) 587-0620

Website: <https://dbedt.hawaii.gov/hhfdc/>

HHFDC's goal is to increase and preserve the supply of affordable and workforce housing by providing financing and development resources to those entities who build or rehabilitate affordable housing units. In this way, HHFDC is also supporting growth of the State's economy. Resources made available to developers and homebuilders include state and federal tax credits, equity gap low-interest loans, exemptions from general excise taxes, infrastructure development and, on occasion, real property.

HAWAI'I STATE ENERGY OFFICE (HSEO)

Phone: (808) 587-3807

Website: <https://energy.hawaii.gov/>

The Hawai'i State Energy Office promotes energy efficiency, renewable energy, and clean transportation to help achieve a resilient clean energy economy by: (1) providing analysis and planning to actively develop and inform energy-related policies; (2) leading efforts to incorporate clean energy across public facilities; (3) providing energy project deployment facilitation to assist private sector projects; and (4) engaging the private sector to help lead efforts to achieve renewable energy and clean transportation goals.

HAWAI'I TECHNOLOGY DEVELOPMENT CORPORATION (HTDC)

Phone: (808) 539-3806

Website: www.htdc.org

The Hawai'i Technology Development Corporation (HTDC) is the State of Hawai'i's lead agency to grow the technology industry sector through the development of infrastructure, capital and talent. Infrastructure includes facilities to nurture new companies and innovations. Capital provides the resources required to move the companies to self-sufficiency. HTDC works closely with all of the DBEDT divisions and administers two federally-funded programs assisting manufacturers and demonstrating new alternative energy solutions. Hawai'i Strategic Development Corporation statute and mission were added to HTDC as the Hawai'i Strategic Development Program. The program's mission is to stimulate private investment in Hawai'i by establishing programs that co-invest public funds in private organizations to utilize the investment acumen of the private sector.

DBEDT PROGRAM OVERVIEW

HAWAI'I TOURISM AUTHORITY (HTA)

Phone: (808) 973-2253

Website: www.hawaiiitourismauthority.org

The Hawai'i Tourism Authority (HTA) is the official agency for tourism in the State of Hawai'i. HTA strategically manages Hawai'i's tourism in a sustainable manner consistent with economic goals, cultural values, preservation of natural resource community desires and visitor industry needs.

LAND USE COMMISSION (LUC)

Phone: (808) 587-3822

Website: <https://luc.hawaii.gov/>

The program objectives of the Land Use Commission (LUC) are to process, review, and act on petitions for housing and infrastructure projects and stimulate the construction industry and increase the state housing inventory. The primary way this is accomplished is through district boundary amendments involving lands over 15 acres in the State Agricultural, Rural, and Urban Districts and all petitions seeking reclassification of lands in the Conservation District; review and act on applications for special permits in the Agricultural and Rural Districts which are over 15 acres; process motions and boundary interpretation request; and maintain, update, and disseminate official State Land Use district maps and land use information.

Note: Act 153, SLH 2021, established that the Land Use Commission would be a part of the Office of Planning and Sustainable Development for administrative purposes.

NATURAL ENERGY LABORATORY OF HAWAI'I AUTHORITY (NELHA)

Phone: (808) 327-9585

Website: www.nelha.hawaii.gov

The Natural Energy Laboratory of Hawai'i Authority's (NELHA) promotes advanced energy and sustainable business development that utilizes the availability of natural resources such as cold and warm seawater along with high solar insolation.

OFFICE OF PLANNING AND SUSTAINABLE DEVELOPMENT (OPSD)

Phone: (808) 587-2846

Website: <https://planning.hawaii.gov/>

The Office of Planning and Sustainable Development's (OPSD) objective is to enhance the efficiency and effectiveness of state programs by maintaining a comprehensive statewide planning process, through the formulation of a state policy plan and the development of a policy planning and implementation framework. The OPSD undertakes comprehensive land use and coastal zone planning, management, and implementation by facilitating intergovernmental coordination and cooperation. They undertake strategic and regional planning to address areas of critical state concerns related to social, economical or physical conditions and promote programs and capital improvement projects which further state policies.

Note: Act 153, SLH 2021, renamed the Office of Planning to the Office of Planning and Sustainable Development (OPSD). In addition, Act 153, SLH 2021, placed the Land Use Commission as part of OPSD. Act 152, SLH 2021, transferred the purpose, functions, and duties of the Office of Environmental Quality Control from the Department of Health to OPSD.

DBEDT PROGRAM OVERVIEW

SMALL BUSINESS REGULATORY REVIEW BOARD (SBRRB)

Phone: (808) 586-2418

Website: <https://sbrrb.hawaii.gov>

The SBRRB program is governed by the Hawai'i Small Business Regulatory Flexibility Act (RFA), Chapter 201M, Hawai'i Revised Statutes. The purpose of the RFA is to lessen the economic burden on small businesses and improve the State's entrepreneurial climate. Under the RFA, the SBRRB acts as a gatekeeper for laws affecting small businesses, and an avenue for regulatory change and complaints. The SBRRB reviews the state and county's proposed new and amended administrative rules impacting small business and makes recommendations for a rule change or for legislation based on any request from small business owners.

Agencies annual reports can be found here: <https://dbedt.hawaii.gov/overview/annual-reports-reports-to-the-legislature/>



Hawai'i Revised Statutes §5-7.5 "Aloha Spirit".

(a) "Aloha Spirit" is the coordination of mind and heart within each person. It brings each person to the self. Each person must think and emote good feelings to others. In the contemplation and presence of the life force, "Aloha", the following unuhi laula loa may be used:

"Akahai", meaning kindness to be expressed with tenderness;

"Lokahi", meaning unity, to be expressed with harmony;

"Oluolu", meaning agreeable, to be expressed with pleasantness;

"Haahaa", meaning humility, to be expressed with modesty;

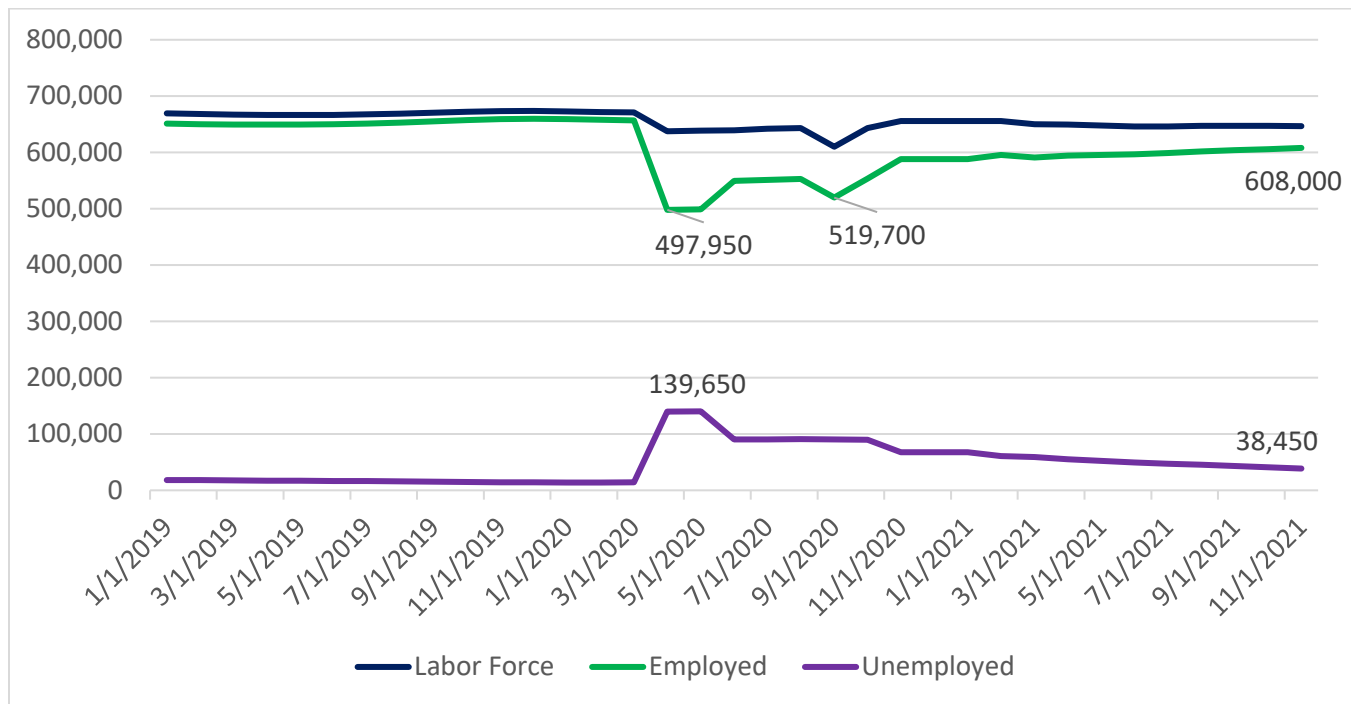
"Ahonui", meaning patience, to be expressed with perseverance.

These are traits of character that express the charm, warmth and sincerity of Hawaii's people. It was the working philosophy of native Hawaiians and was presented as a gift to the people of Hawaii. "Aloha" is more than a word of greeting or farewell or a salutation. "Aloha" means mutual regard and affection and extends warmth in caring with no obligation in return. "Aloha" is the essence of relationships in which each person is important to every other person for collective existence. "Aloha" means to hear what is not said, to see what cannot be seen and to know the unknowable.

APPENDIX

Note: Accessible version of charts and graphs from pages 3 and 4.

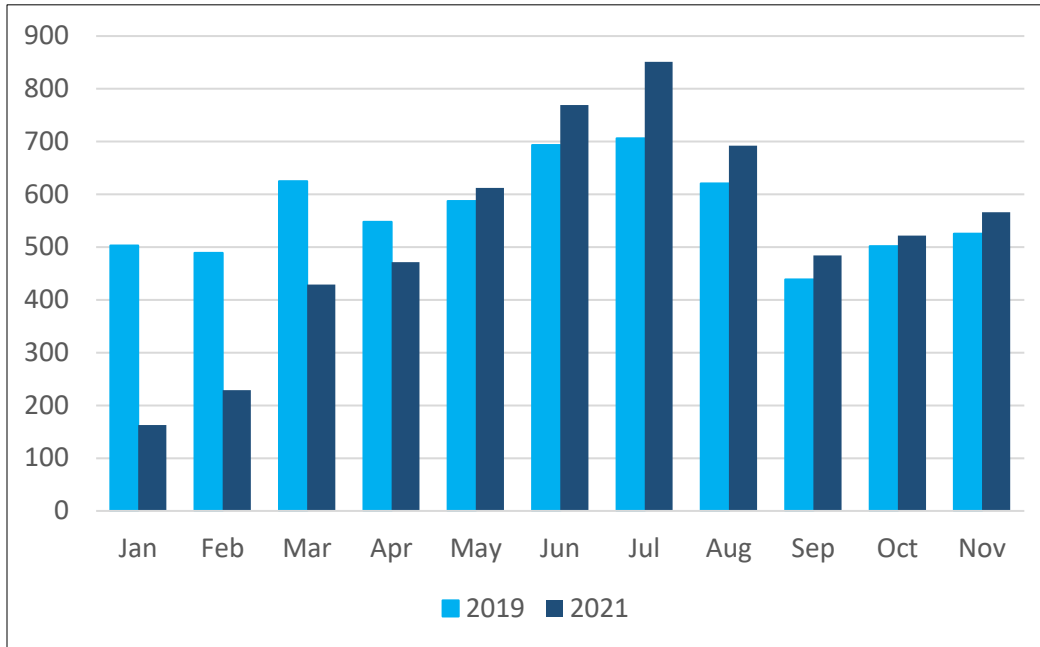
Employment in November was the highest and unemployment was the lowest since March 2020.



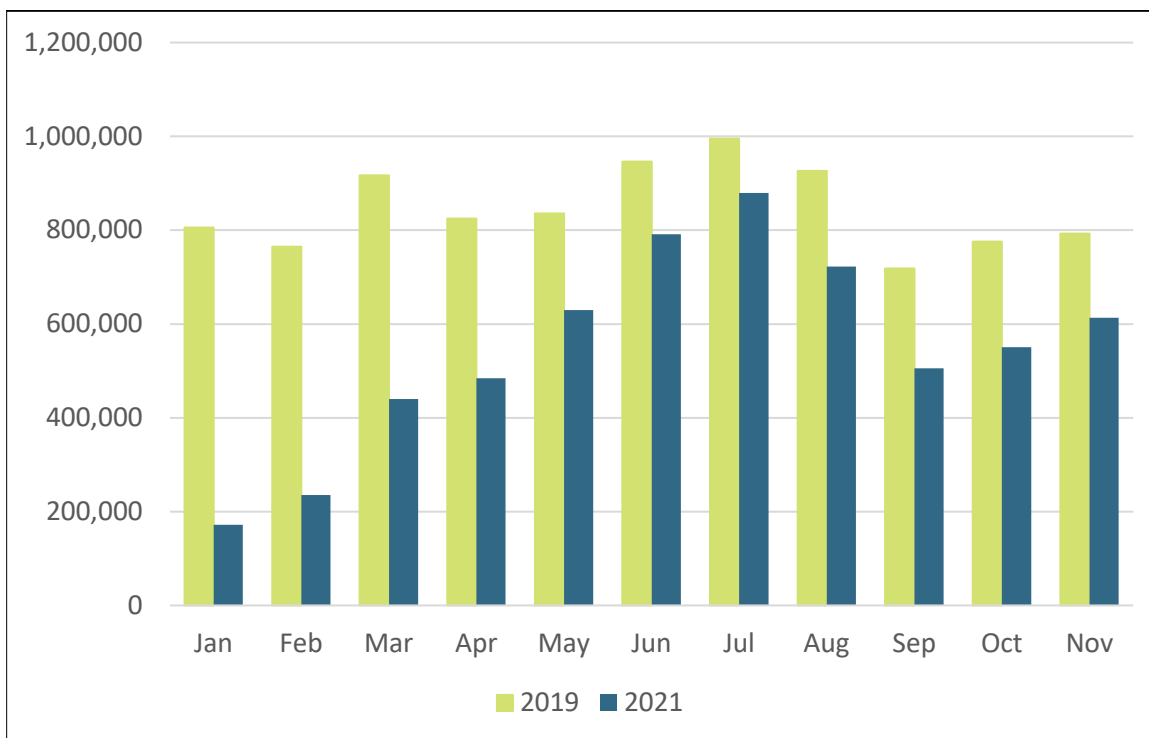
Tourism industry recovery

Through November 2021, arrivals recovered 63.9%, U.S. visitors have been fully recovered since May 2021

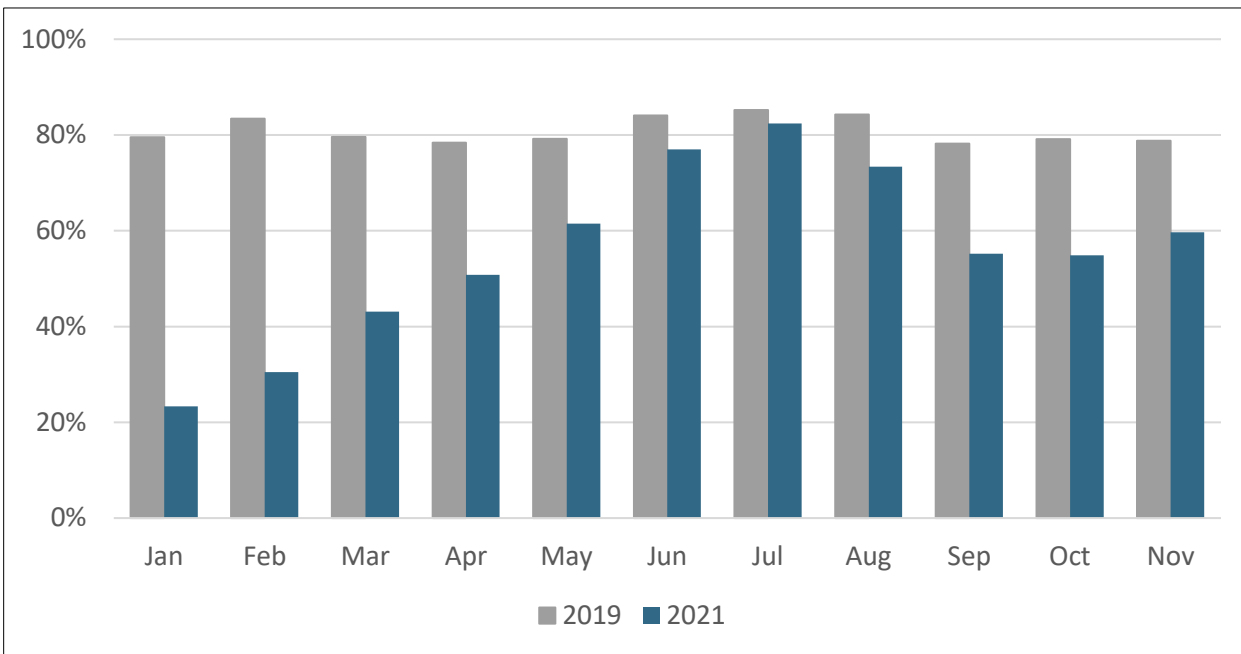
U.S. Visitor Arrivals



Total Visitor Arrivals by Air



Hotel Occupancy Rate



Visitor Expenditures

