



Department of Business
Economic Development & Tourism
2018 Annual Report





Department of Business, Economic Development & Tourism

P.O. Box 2359 • Honolulu, Hawaii 96804 • 808 586-2355

dbedt.hawaii.gov

This report fulfills the reporting requirement in Section 201-10, HRS



DIRECTOR'S STATEMENT

DBEDT continues to focus on three foundational pillars of economic development: infrastructure, capital, and talent. By concentrating on these areas, we can grow jobs, increase the standard of living for our residents, and bring prosperity to the State of Hawaii.

Our efforts to grow Hawaii's economy looks at ways to bring in investments and set up the right environment to create high paying jobs for our residents to compete in today's global economy.

In the last four years under Governor David Ige's first term, we accomplished many initiatives to benefit the people of Hawaii. We broke ground on the innovation block in Kakaako, we established a new film studio in Kalaeloa, we created new housing inventory, we decreased energy utilization and added new renewable energy resources, we expanded our exports abroad, we established new business partners in Japan, Korea, China and the Philippines, we amplified our presence internationally to attract foreign students, we fostered the growth of start-up companies, we increased resources for creative entrepreneurs to succeed, and we did this with the participation and involvement of public and private entities and all the counties in the state.

Overall, our economy is continuing to grow, albeit at a slower pace. Currently, we have the best labor market in the nation. At the end of 2018, Hawaii's unemployment rate was the lowest in the nation, our labor force, employment, and payroll job counts were at record high levels in the state's history.

DBEDT revised the visitor industry forecast with visitor arrivals now growing at 5.8 percent for 2018, 1.8 percent for 2019 and 1.5 percent for 2020 and 2021. Growth of visitor expenditures will be at 8.9 percent for 2018, 4.2 percent for 2019, and 3.6 percent for 2020 and 2021.

The state is still pushing forward with the state's 100 percent renewable energy goal by 2045 and DBEDT continues pushing to build a reliable energy industry for Hawaii. The department is also focused on other areas of innovation, which include global broadband; additional creative media/film opportunities; advancing aerospace; foreign trade; exporting locally made products; and increasing international student exchanges to further move the state's economy forward and create new jobs and opportunities for Hawaii's residents.

Hawaii's future looks bright and our economy is on the right track to continuing growing and developing for future generations.

Luis P. Salaveria
Director



DBEDT Divisions

Director's Office

(808) 586-2355

Administrative Services Division

(808) 586-2442

Business Development & Support Division

(808) 587-2750

Creative Industries Division

(808) 586-2590

Hawaii State Energy Office

(808) 587-3807

Foreign-Trade Zone Division

(808) 586-2507

Research & Economic Analysis Division

(808) 586-2466

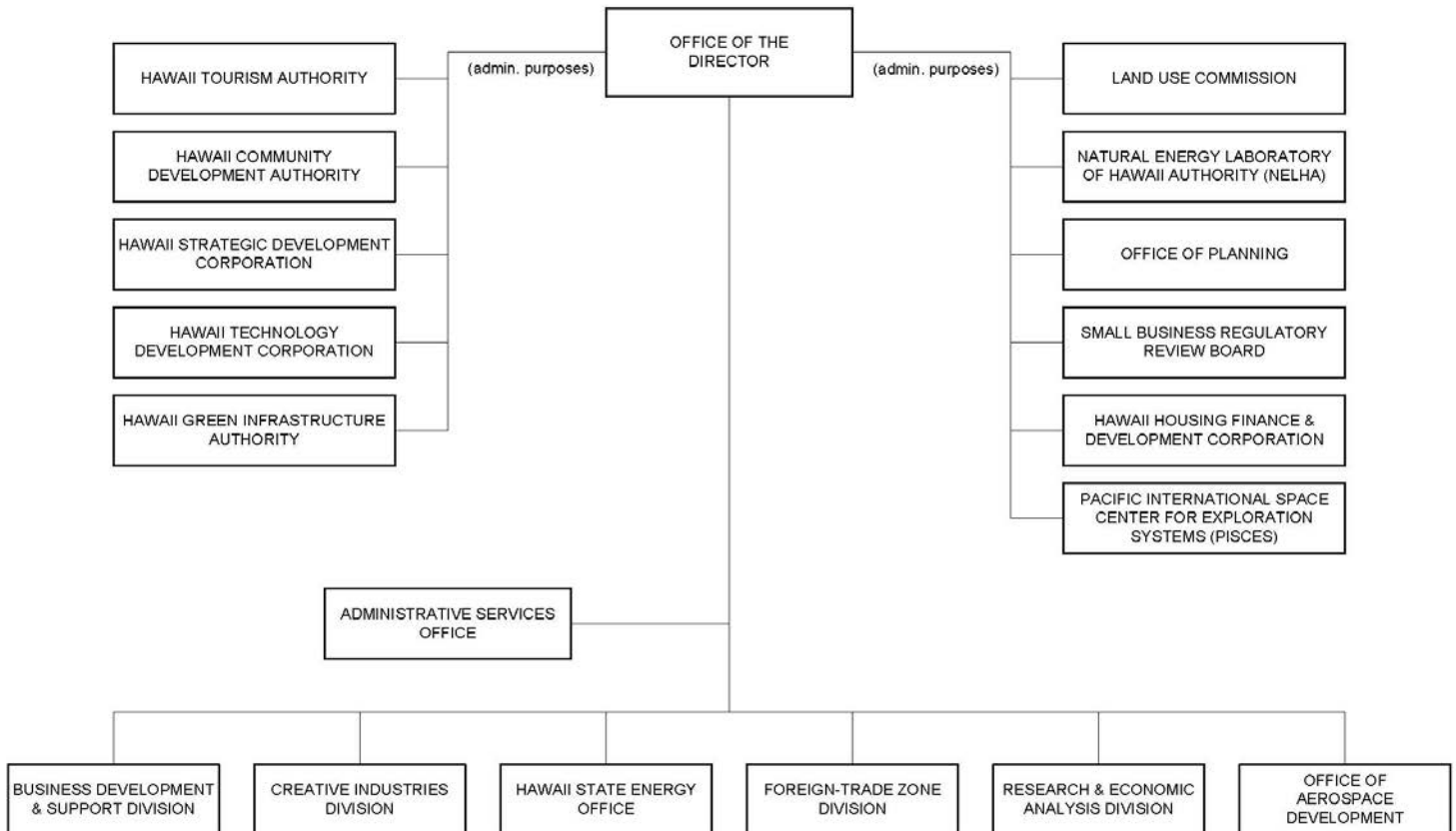
Office of Aerospace Development

(808) 586-2388



DBEDT Divisions and Branches

STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
ORGANIZATION CHART





Business Development & Support Division

invest.hawaii.gov



The Business Development & Support Division (BDSD) promotes business development and diversification in Hawaii by supporting existing and emerging businesses; attracting new investment and businesses that can create more skilled, quality jobs in the state; working to increase exports of Hawaii products and services; and assisting community based economic activities.

BDSD's export promotion HiSTEP (Hawaii State Trade and Expansion Program) targets growing companies to increase export revenues and capital. In the sixth year of this program, it has participated in 35 international and domestic trade shows, and retail promotions. More than 600 Hawaii companies from industries ranging from fashion, food, gifts, education, to life sciences, were featured at various DBEDT-produced Hawaii Pavilions in Japan, Taiwan, China and major U.S. cities such as Orlando, Salt Lake City, San Francisco, Las Vegas, Denver, Boston and San Diego.

In 2018, the division's efforts, mostly under the banner "Buy Hawaii, Give Aloha," increased exports by \$18.5 million, which has positively impacted Hawaii's economy by \$30.5 million. The Hawaii Pavilion at the Tokyo International Gift Show in 2018, itself had record participation with 80 companies representing the largest product trade show delegation ever from Hawaii. Preliminary results from this show alone topped \$8.5 million.

To continue this export program, the division won a competitive grant award of \$450,000 from the U.S. Small Business Administration (SBA). The division's proposal included a series of overseas and domestic trade shows, training and cost share programs. In total, during the six years that this program has been in operation, DBEDT has won \$3.5 million in grant monies.



Business Development & Support Division

invest.hawaii.gov

Hawaii's overseas offices in Taipei and Beijing promote programs to attract and increase international students at Hawaii's schools, colleges and universities. The Hawaii Education Service Centers work with the DBEDT-organized Study Hawaii Education Consortium of 31 public and private schools. BDSD, in collaboration with Study Hawaii, hosted a media mission from Beijing and Taipei with 15 journalists participating. With Study Hawaii, an international student attraction mission to Taipei, Hsinchu and Taichung was organized by the Taipei Office to promote education in Hawaii. DBEDT's Study Hawaii Ambassador Program deputized 508 ambassadors to encourage dialogue among peers, primarily via social media, about Hawaii as a study destination. The annual Hawaii Small Business Fair co-sponsored by DBEDT again achieved success with attendance of more than 250 entrepreneurs each at the winter and summer events.

To attract investments into Hawaii, DBEDT in partnership with the Japan External Trade Organization (JETRO) held an investment seminar in Osaka, and presented business opportunities sessions in Hokkaido and Taipei.

In the promotion of international relations, the division oversaw the signing of a new sister-state relationships with Goa, India. The division also commemorated the 25th anniversary of Hawaii-Taiwan sister-state relations with events and business seminars both in Taipei and Honolulu.

BDSD continued its Business of Exporting -- an accelerator and mentoring program targeted towards high potential export firms. The division also continued the Community Based Economic Development (CBED) micro-loan program to assist entrepreneurs with financial assistance.

The annual Hawaii Small Business Fair co-sponsored by DBEDT again achieved success with attendance of more than 250 entrepreneurs each at the winter and summer events.

The Enterprise Zones (EZ) Program continues to support more than 250 companies from diverse industries. For tax year 2017, EZ companies reported over 1,713 jobs created or maintained.

The 2018 Tax Cuts and Jobs Act created Opportunity Zones that could attract investors with tax incentives. The Division along with county partners, identified tracts statewide and officially designated them as Opportunity Zones.





Creative Industries Division

cid.hawaii.gov



KONG SKULL ISLAND, filmed in Hawai'i, continues the legacy of exciting high-profile monster movies filmed in the Hawaiian Islands. Photo courtesy of Warner Bros.

Creative Industries Division (CID) is the state's lead agency for building the business capacity of Hawaii's creative clusters through initiatives, infrastructure and policy development.

The Hawaii Film Office (HFO) is responsible for supporting Hawaii's film and television industry, a cornerstone of Hawaii's creative economy. HFO is expanding Hawaii's role in global film production through marketing Hawaii as a world class filming destination and managing the state's tax credit program, in effect through December 31, 2025. In 2018, Hawaii's film and television industry generated more than \$430 million in direct production expenditures. This translates to an estimated \$744 million in overall economic activity for the state, generating an average of 2,200 jobs annually. Notable recent productions and releases include CBS' HAWAII FIVE-O (now in its ninth season) and an exciting reboot of the classic MAGNUM PI; as well as several large features starring Dwayne Johnson including Columbia Sony's JUMANJI: WELCOME TO THE JUNGLE, Disney's JUNGLE CRUISE, and Universal Pictures' HOBBS AND SHAW. Centropolis Entertainment's MIDWAY about the epic WWII battle was also shot in Hawaii in 2018. And another huge Legendary Pictures' monster movie, GODZILLA vs KONG shot in the last two months of 2018 on the heels of Legendary's GODZILLA and KONG: SKULL ISLAND, both shot in Hawaii.

The Arts and Culture Development Branch (ACDB) handles business and workforce development for Hawaii's creative entrepreneurs, focusing initiatives in the areas of talent/workforce development, infrastructure, investment and policy, to establish a continuum of job and business opportunities from education to workforce, which enables increased export of creative Intellectual Property (IP) products and services – all key aspects of developing Hawaii's innovation ecosystem.



Creative Industries Division

cid.hawaii.gov

Hawaii's creative sectors in film, performing and visual arts, culture, music, publishing, design, architecture, animation and interactive media include 53,937 jobs. During 2017, the sectors collectively generated \$3.65 billion in gross domestic product (GDP).

CID launched the Creative Lab Hawaii (CLH) Program in 2012 to develop an ecosystem to increase export, attract investment and build the state's creative entrepreneurial capacity. Through hands-on immersive workshops, panels and mentorship by industry leaders from across the globe, CLH provides entrepreneurs with business and creative skill sets necessary to monetize their intellectual property and expand distribution channels. This positions Hawaii as a nexus of creative media development in the Pacific. Funded by the Hawaii State Legislature and the U.S. Department of Commerce, Economic Development Administration, a total of 1,832 individuals have participated in CLH Programs since its inception.

The division is shaping the vision to develop a new creative media/film studio complex in West Oahu to support the development of emerging media, traditional film and television industries, as well as creative co-working space.

The State of Hawaii has garnered national recognition for being an early adopter of a creative economy strategy. CID represents the State of Hawaii on the National Creativity Network (NCN) and actively engages in the national dialogue on the value of America's creative economy. CID continues to forge strategic partnerships with national industry organizations and local arts and media agencies in music, cultural arts, and film to leverage the state's investment in developing business opportunities for Hawaii's creative entrepreneurs.





Hawaii State Energy Office

energy.hawaii.gov



The Hawaii State Energy Office (HSEO) is helping drive the state's clean energy agenda with a focus on meeting Hawaii's commitment to have utilities generate 100 percent of their electricity sales from renewable resources by 2045. Pursuing energy independence is stimulating economic growth in an innovation economy, elevating Hawaii's job growth prospects and business opportunities, from the volatile carbon economy to the higher paying jobs in clean energy.

Under Hawaii law, the Director of the Department of Business, Economic Development & Tourism is the state's Energy Resources Coordinator (ERC), responsible for energy planning, policy and programs. As the ERC's delegate, HSEO is charged with carrying out this agenda. This includes pursuing high-impact solutions to break down barriers to renewable energy development and help our state meet its energy needs well into the future. Since 2008, this agenda has been characterized as the Hawaii Clean Energy Initiative (HCEI). HCEI, which began as a groundbreaking partnership between the State of Hawaii, the U.S. Department of Energy, the military and the private sector, has been updated to reflect Hawaii's evolving clean energy landscape.

In recent years, the HSEO in partnership with other renewable energy advocates, has made substantial progress in advancing Hawaii's clean energy transformation. The percentage of utility electricity sales from renewable resources, known as the renewable portfolio standard (RPS), now stands at 27.6 percent, up from 8.3 percent in 2008. With significant amounts of new renewable energy production coming online Hawaii is well-positioned to meet its 2020 interim RPS target of 30 percent.



Hawaii State Energy Office

energy.hawaii.gov

HSEO supports an array of programs that are helping the state meet its energy efficiency portfolio standard (EEPS). The EEPS mandates a 4,300-gigawatt-hour reduction in electricity use by 2030 through efficiency and conservation measures. Hawaii surpassed its 2015 interim EEPS target thanks in part to the robust issuance of energy performance contracts (EPC), an innovative clean energy financing tool that allows government buildings to achieve significant energy efficiency savings without having to pay capital expenses up front. With technical assistance from HSEO staff and contractors, Hawaii led the nation in 2018 for the seventh consecutive year in the per capita value of EPCs awarded by state and local governments.

Improving the way buildings are designed also can significantly reduce energy waste. Toward this end HSEO is working with Hawaii's counties to have their councils adopt a new International Energy Conservation Code for new construction that will reduce energy use in buildings by nearly one-third. HSEO was a key player in the Hawaii Building Code Council's adoption of the updated code, which will advance Hawaii's clean energy goals.

To help drive Hawaii's energy revolution HSEO provides a suite of online self-help tools and roadmaps to assist energy developers and attract international investment. The interactive Developer & Investor Center and Self-Help Suite includes the Renewable EnerGIS online mapping tool that provides comprehensive information on the siting, permitting, and development of renewable energy facilities in Hawaii. In 2018, HSEO unveiled an updated version of Renewable EnerGIS that makes it easier for land owners, developers, residents and policy makers to assess the renewable energy potential of sites statewide as Hawaii moves ahead with its clean energy transformation.

On the planning front, HSEO is developing two innovative visualization tools: the Hawaii Advanced Visualization Environment Nexus (HAVEN) and the Hawaii Energy Visualization Initiative (HEVI). HAVEN allows stakeholders to visualize the electric system and land use impacts of the HECO Companies' Power Supply Improvement Plan from the present through 2045. HEVI is an analytical model that will perform scenario analyses on Hawaii's comprehensive energy eco-system as well as feed data visualizations for program and policy assessment. HSEO also is nearing completion of a study of utility ownership and regulatory models. The study, undertaken at the request of the Legislature, will provide guidance on which models could best serve Hawaii as it makes the transition to an electricity system that takes full advantage of the state's plentiful clean, indigenous energy resources.





Foreign Trade Zone Division

ftz9.org



The Foreign-Trade Zone Division administers the federal charter issued to the State of Hawaii in 1965 by the Foreign-Trade Zones Board in Washington, D.C. Hawaii has a large and diversified Zone program with its nine authorized general-purpose sites and four subzones. Its strategic Pier 2 location, excellent support facilities, and experienced professional staff make it one of the oldest and most respected Foreign-Trade Zones in the nation. Foreign-Trade Zone 9 (FTZ) is in its 52nd year of operation.

The FTZ program is a federal program based on the simple idea of the removal of 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 and thereby create and retain the employment and capital investment opportunities that result from those operations.

FTZ9, with the concurrence of U.S. Customs and the federal Foreign-Trade Zones Board, authorizes designated areas in Hawaii as FTZs for use in import tariff relief. Currently, there are 13 designated Foreign-Trade Zone locations in Hawaii, of which six are active Zone sites.

The FTZ program is solely special-funded and is completely supported by the revenues it generates. It takes no resources from the state's General Fund to underwrite its operations.



Foreign Trade Zone Division

ftz9.org

FTZ9 has solidified its role as the Hub of International Trade for Hawaii, by bringing together critical players in the international trade sector of the state's economy to its Pier 2 facility. These companies include a majority of the state's customs brokers, key shipping agents and logistics providers, as well as governmental agencies such as U.S. Customs and Border Protection. The Honolulu office of the U.S. Commercial Service, a division of the Department of Commerce, is also located at the FTZ Pier 2 facility and is available to assist companies in exploring and identifying foreign markets for Hawaii's exports.

Foreign-Trade Zone No. 9's mission is to foster and expand the state's economy through the creation of local jobs, businesses, and infrastructure in the international trade and trade-related economic sector.

Additionally, FTZ9 continued to develop its relationships with private and public entities in order to leverage expertise and reduce costs for Hawaii's businesses. FTZ9 has been working closely with the Hawaii District Export Council to develop initiatives and programs such as "Export 101" which serve to educate companies and advocate Hawaii's product exports. These programs are designed to help companies prepare and position themselves to successfully compete in the global marketplace. FTZ9 also works with federal agencies such as the U.S. Department of Commerce, the U.S. Small Business Administration, and the EXIM Bank to promote and bring Hawaii to an international market.

FTZ9 continues to work with and support other state agency initiatives such as the INNOVATE Hawaii manufacturing program through extension support and grant programs. FTZ9 also works closely with the sister DBEDT agencies, Business Development and Support Division through the HiSTEP grant program, and the Creative Industries Division by supporting the Creative Labs program with office space, co-working space, and facilities resources to expand Hawaii's burgeoning creative economy.





Research & Economic Analysis Division

dbedt.hawaii.gov/economic

The Research & Economic Analysis Division (READ) works to enhance and contribute to the economic development of the state by providing data and analyses and policy recommendations on economic issues. READ provides economic forecasts that contribute to government and business planning and infrastructure needs assessment. READ also conducts research to assess the status of Hawaii's industry sectors and the quality of life for Hawaii residents.

READ produces an average of 50 economic and statistical reports a year, covering all aspects related to Hawaii's economy and the population. READ collects data and maintains the database on Hawaii petroleum industry and the state government electricity usage by account.

READ hosts the Hawaii State Data Center and the Federal-State Cooperative for Population Estimates that partners with the U.S. Census Bureau and publishes Hawaii data, including the decennial census, the annual American Community Survey, Economic Census, and the annual population estimates. State Data Center sponsored eight workshops in 2018, provided training on Census data products and data mining tools.

READ's website receives an average of 30,000 page views a month. Some of the data products and reports READ produced in 2018 include:

- Daily passenger count data – Cited by Star Advertiser every Thursday
- Weekly unemployment claim data with analysis -Cited by Star Advertiser every Monday
- Weekly photovoltaic permits data with analysis
- The Quarterly Statistical and Economic Report with economic forecast
- The State of Hawaii Data Book
- Hawaii's Monthly Economic Indicators and highlights
- Monthly Energy Trend Data and Analysis
- Annual Updates on Emerging Industries in Hawaii
- Annual Updates on the Status of the Hawaii's Creative Industry
- Status of Renewable Primary Energy and Renewable Electricity
- State of Hawaii Energy Data and Trends
- Solar PV Battery Installations in Honolulu: 2017
- Top 20 Occupations in Hawaii
- Hawaii's Working Population: An Analysis by Industry 2012-2016
- 2017 Hawaii Quarterly Consumer Debt Report
- Demographic, Social, Economic, and Housing Characteristics for Selected Race Groups in Hawaii
- Population and Economic Projections for the State of Hawaii to 2045
- The economic Impact of International Students in Hawaii – 2018 Update
- Hawaii Tax Credit for Research Activities for Tax Year 2017
- Hawaii's Petroleum Consumption and Expenditures by Product and by Sector

Statewide support from READ includes State government revenue bond and general obligation bond rating and sale activities, and 15 presentations to the business communities on the current and future economic conditions.





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

The HTA's 5-year strategic plan was drafted in 2016 with the purpose of guiding the organization to move the industry forward. These strategies were identified with the goals of working and collaborating with partners and stakeholders to increase economic activity, sustaining positive new benefits of tourism, growing visitor spending and being an effective organization. The four key goals to achieve the strategies are to improve the integrity of the destination, ensure stable economic benefits, elevate Hawai'i's value perception and strengthen the HTA's reputation.

The strategic plan also presents a collective ambition, which consists of a strong set of principles and a vision as to how tourism should be cultivated. The seven principles include: a healthy economy, environmental sustainability, cultural authenticity, market knowledge, host and guest satisfaction, collaboration, and accountability.

Relating to the Hawaii experience and delivering on the Hawaii brand promise, HTA can manage, create and support the development of unique tourism experiences such as community and cultural festivals, sporting events, natural resources and community programs. HTA also directly affects the visitor experience through its support of workforce development and visitor assistance initiatives, all the while integrating the community and resident's respect for the Hawaiian host culture.



Hawaii Community Development Authority

dbedt.hawaii.gov/hcda



The Hawaii Community Development Authority (HCDA) was created to establish community development plans in community development districts; determine community development programs and cooperate with private enterprise and the various components of federal, state, and county governments to bring community development plans to fruition. The authority's work will result in economic and social opportunities and aims to meet the highest needs and aspirations of Hawaii's people.

In the Kakaako Community Development District, \$210 million in state infrastructure investments has resulted in at least \$6 billion in construction spending as the area is redeveloped.

In 2018:

- Ground was broken on two affordable housing projects that will add 232 affordable housing units to the area.
- Ground was broken on Howard Hughes Corporation's Aalii project that adds 150 affordable units as part of HCDA's Reserved Housing Program. The project adds 751 units overall to Kakaako. Homeowners attended the groundbreaking as they eagerly await the completion of the project.
- HCDA adopted revised Reserved Housing rules that will keep Reserved Housing units affordable for a longer period of time.



Hawaii Community Development Authority

dbedt.hawaii.gov/hcda

Since January 2016, 10 projects have been completed in Kakaako. These projects added 3,001 units to Kakaako's housing stock, 43 percent of which are affordable to those making 140 percent of the Area Median Income (AMI) or less. Nine more projects are under construction or permitted that would add 2,917 additional units, 36 percent of which are affordable to those making 140 percent AMI or less. So far, the new units have increased property taxes in the area by 40 million dollars a year, and the increased economic activities have added to state coffers.

In the Kalaeloa Community Development District, HCDA continues construction of the Kalaeloa Enterprise Energy Corridor project to provide reliable electrical power to state and federal agencies in the area. Construction on the first phase began in late 2017 and is anticipated to be completed shortly. It will extend reliable electricity to the FBI building. The second phase of the project is expected to begin early 2019 and will extend to the Kalaeloa Airport. In addition, HCDA is evaluating infrastructure to address the need for reliable and secure energy in the district. It is anticipated that a request for proposals will be issued to implement a new energy model.

HCDA's non-profit lessee, Kakoo Oihi continues to work on the expansion and maintenance of the Heeia Wetlands. Wetland restoration includes the planting of taro and new crops, restoring old historic roads and removing invasive species. In addition, a mangrove removal project continues through a grant from the National Oceanic Atmospheric Administration. The project will remove approximately 6 acres of invasive mangrove on the mauka and makai sides of Kamehameha Highway. Removal of the mangrove forest will allow the restoration of a key historic road that runs parallel to Kamehameha Highway.



Hawaii Strategic Development Corporation

hsrc.hawaii.gov

The Hawaii Strategic Development Corporation (HSDC) is an agency of the State of Hawaii established in 1990 to promote economic development and economic diversification in Hawaii through a return-driven investment program in partnership with private capital. HSDC is governed by HRS 211F and Chapter 127 of the Hawaii Administrative Rules.

Three recent surveys of Hawaii's entrepreneurial ecosystem have documented the success of HSDC's efforts to mobilize capital to invest in growth sectors of Hawaii's economy. Since 2012, HSDC has deployed \$13.1 million in a comprehensive effort to jumpstart an innovation sector by supporting 1) a vibrant entrepreneurial ecosystem; 2) establishing accelerator programs in key industry sectors; and 3) anchoring the fund raising of Hawaii-based venture funds to provide access to startup capital.

In 2016, the Economic Research Organization at the University of Hawaii (UHERO) published its report on HSDC's program, *The Evolution of the HI Growth Initiative*. The report concluded HSDC's investment resulted in "the rapid growth in Hawaii-based accelerators [that] may finally provide the necessary impetus to draw attention to entrepreneurship in the state, leading to further growth in venture capital, one of the necessary ingredients in a vibrant innovation ecosystem."

Validation of the vibrant entrepreneurship environment in Hawaii was provided in a 2017 report by the Kauffman Foundation in their national survey of outcomes from state entrepreneurial ecosystems, *The Kauffman Index of Growth Entrepreneurship: State Trends*. The report measured the rate of startup growth, the share of scaleups, and the high growth density in each state. Hawaii ranked second among the 25 smaller states, a jump of 9 places over its previous ranking.

The growth in venture capital in Hawaii is documented in the 2018 report, *Venture Capital in Hawaii 2010-2018*, prepared by Startup Capital Ventures, the leading Hawaii-based venture fund in Hawaii. The report documented the impact HSDC's activities had on the growth in deal flow, the consistency of funding year to year at approximately \$20 million, and the nearly \$450 million that has been raised by Hawaii-based or Hawaii-founded companies over the past 8 years.

HSDC's strategy of a comprehensive approach to attracting investment capital has clearly succeeded. A focus on accelerators in key industry sectors has generated a pipeline of investable companies. A continuum of startup financing has been established to allow those companies to grow and scale. Support for entrepreneurial events have spotlighted the opportunities in Hawaii and allowed entrepreneurs and investors to collaborate. Additionally, Hawaii has developed talented professionals in the venture capital industry and the quality and breadth of the investor base in Hawaii has improved dramatically.



The Hawaii Technology Development Corporation (HTDC) is leading the State of Hawaii's effort to grow the technology industry sector with the objectives of diversifying the economy and creating high-wage job opportunities for the people of the State. HTDC continues to progress toward the 80/80 Initiative: a goal for Hawaii to create 80,000 new tech and innovation jobs earning more than \$80,000/year by 2030. HTDC is partnering with other agencies and the private sector to build the infrastructure, provide the capital and develop the talent needed for innovation to thrive.

HTDC conducts an annual economic impact survey of all its clients. In 2017, 149 companies responded and reported \$588 million in revenues, \$282 million in income, generating \$48 million in state taxes and more than \$1 billion in economic impact and supporting 3,736 jobs.

Building infrastructure is a cornerstone to create environments ripe for encouraging entrepreneurship and new company formation.

- Kakaako - HTDC and HCDA broke ground on a new collaborative space for innovators and entrepreneurs. The Entrepreneurs Sandbox will provide all the resources required for tech and creative entrepreneurs to turn their ideas into prototypes including a makerspace, digital media studio, training room, coworking space, meeting rooms, and small flexible offices. The project is funded by the State of Hawaii, the U.S. Department of Commerce Economic Development Authority, and Stanford Carr Development.



Hawaii Technology Development Corporation

htdc.org

- Hilo - The conceptual master plan for the Innovation and Manufacturing Center (IMC) was completed. The IMC is a shared mixed-use facility equipped to support the light manufacturing needs of the region and provide opportunities for hands-on workforce training. The project is a collaboration between HTDC, Department of Labor and Industrial Relations (DLIR), UH Hilo, and the Foreign Trade Zone (FTZ).
- Central Oahu – The conceptual master plan for the First Responder Tech Campus (FRTC) was completed. The FRTC will offer joint training grounds, shared facilities and a cybersecurity center. The project is a collaboration between multiple state and county agencies.

HTDC grant programs provide critical capital to help technology companies and manufacturing firms grow and become sustainable businesses:

- The Manufacturing Assistance Program (MAP) provides grants up to \$100,000 to help manufacturers expand their business through equipment, training, or energy efficiency. In FY18, a total of 29 companies were awarded grants totaling \$900,000 and company invested \$13.6 million matching.
- The Hawaii Small Business Innovation Research (HSBIR) program provides grants up to \$500,000 to move companies from the research phase into products. In FY18, a total of 17 companies received matching grant awards including 3 new to the SBIR program. The companies received a total of \$10.3 million in federal grants awarded.
- New in FY18. HTDC provided grants to support three accelerator programs. The accelerators provide pre-seed investment, training, and mentoring support to startup companies in a structured program.

In addition, HTDC continues its existing programs, which include: managing two incubator facilities, working in partnership with other DBEDT departments and other state agencies in developing, managing, and assisting technology centers statewide; creating entrepreneurial and technology educational programs; supporting community events that support the growth of technology companies and industry; marketing and promoting Hawaii's technology assets; and providing mentoring and technical assistance support on all the islands.

To promote Hawaii's technology assets, HTDC works with the Hawaii Strategic Development Corporation (HSDC), DBEDT's Creative Industries Division (CID), and FTZ to provide a comprehensive program from technology startup to manufacturing. Additionally, HTDC provides program support to the Natural Energy Lab (NELHA) new incubator facility.



Hawaii Technology Development Corporation

htdc.org

The Neighbor Island Innovation Initiative (NI3) program fills a void providing mentoring to tech and innovation companies and entrepreneurs on the neighbor islands. Few resources are available to companies in many of the remote locations on the islands. The program provides no-cost mentoring that meets the needs of the companies. More than 86 companies were mentored on Kauai and Hawaii Island.

HTDC Administers the TechHire Hawaii White House initiative that works with private sector, workforce organizations and technology training institutes to prepare Hawaii's future workers for the many emerging technology jobs in Hawaii. HTDC hosts an annual Holiday Tech Job fair where more than 350 jobseekers interacted with 50 tech employers. HTDC sponsors hackathons throughout the year that encourage engagement and provides opportunities for employers to find qualified candidates.

HTDC provides startup business mentoring at technology innovation centers statewide, including the Manoa Innovation Center and the Maui Research & Technology Center. Technology business incubators support the transition from startup ventures to sustained businesses. In FY18, the incubators supported 65 startup companies and 54 entrepreneurs in its Maui coworking space. As a member of the incubator, clients have access to programs that include: business training workshops; business plan review with experienced mentors; access to a vetted group of service providers; and networking opportunities with like-minded CEOs. Starting in FY 19, HTDC will no longer operate an incubator at the Manoa Innovation Center as the University has taken ownership of the facility.

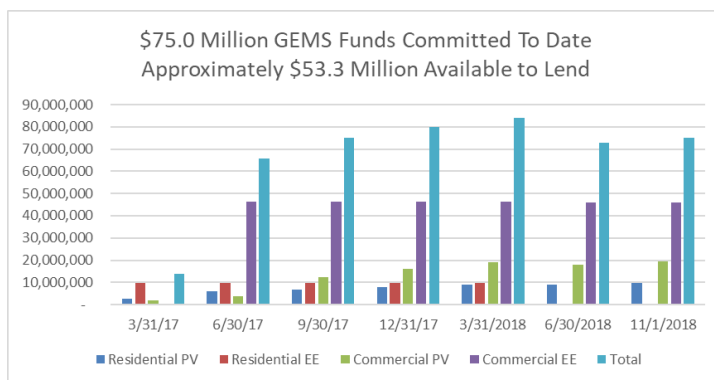
HTDC also leverages federally funded programs that align with the HTDC mission. HTDC's INNOVATE Hawaii program is funded by the U.S. National Institutes of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP) to improve the capabilities of Hawaii manufacturers. HTDC's Hawaii Center for Advanced Transportation Technologies (HCATT) is recognized as a national leader in developing and demonstrating market readiness for alternative energy transportation technologies. With a \$20 million federal contract with Air Force Research Laboratory, HCATT is working on projects like the Pacific Energy Assurance Research Laboratory (PEARL) to develop demonstration microgrid systems that operate on 100 percent renewable energy. Projects like these leverage federal dollars to address the goals of the Hawaii Clean Energy Initiative.

HTDC provides additional support to the innovation and technology industries by strengthening communication through its monthly networking event, WetWare Wednesdays (WWW). This networking event brings together coders and developers and provides an opportunity for employers and job seekers to connect.



The Hawaii Green Infrastructure Authority (HGIA) was constituted in November 2014 to administer the Green Energy Market Securitization (GEMS) Financing Program. GEMS is designed to make clean energy improvements affordable and accessible for a broader cross-section of Hawaii's ratepayers, while advancing the state's goal of achieving 100 percent renewable portfolio standard in the electricity sector by 2045.

The GEMS program was capitalized through an innovative market-driven financing mechanism, with a portion of its funds to benefit the underserved. Since funding its first solar PV loan in January 2016, HGIA has committed \$75 million to date with approximately \$53.3 million available to lend.



Highlights over the past year includes the following:

- Providing financing for Kahauki Village's Micro-Grid, which provided housing for 30, previously homeless families on January 12, 2018. Unbeknownst to most, the village did not have access to the electric utility's grid until mid-June 2018. If not for the micro-grid, which could not be financed without the support of GEMS, the village would have been vacant for six months as residents would not have been able to move in without electricity to power their homes.
- On June 1, 2018, HGIA began implementing the Hawaii Public Utilities Commission approved Green Energy Money Saver (GEM\$) On-Bill Program, which provides access to green infrastructure financing to the underserved (i.e. renters, low and moderate-income households and nonprofits).

Leveraging this non-traditional repayment mechanism, Hawaii's first three GEM\$ loans approved are expected to result in significant estimated bill savings of approximately 49 percent for a nonprofit, as well as solar hot water heaters for two Molokai households.

- Structure special fund and convert \$50 million into the Energy Efficiency Revolving Line of Credit for State Agencies to finance cost effective energy efficiency measures on an on-going basis, subject to fund availability. The Department of Education is utilizing \$45.9 million under this revolving facility and is expecting to save more than \$159 million in gross utility costs over the estimated useful life of the measures installed.



Land Use Commission

luc.hawaii.gov

The Land Use Commission (LUC) operates by means of a nine-member voluntary commission, assisted and supported by the executive officer, chief clerk, GIS specialist, three planners and one secretary (seven employees).

In 2018, the LUC met all of its requirements with regard to petitions filed in a timely manner. In FY 18, and since FY 12, LUC has met all required action deadlines well within the statutory time period and has reduced the time for response to boundary determinations by 50%. With the influx of 201H projects (which must be processed within 45 days), LUC has increased efficiency by making rule changes and working directly with petitioners to ensure a fair but expedited process. The commission has become increasingly efficient by using electronic filings and posting public documents on a revised website decreasing the time to process matters by an average of 30 to 60 days depending on the nature of the petition or motion.

The LUC has amended its rules to ensure issues of sustainability and climate change are addressed in its examination of district boundary amendments. Requiring analysis in these areas will ensure that LUC meets its obligations under the public trust doctrine. The LUC has successfully brought two matters forward to respond to violations of conditions. Both resulted in reversion of the property back to their original classification.



Natural Energy Laboratory of Hawaii Authority

nelha.hawaii.gov



The Natural Energy Laboratory of Hawaii Authority (NELHA), based in Kailua-Kona, promotes sustainable business development and supports economic diversification by providing resources and facilities for energy and ocean-related research, development, and commercialization. The mission of NELHA is to participate in the development and diversification of the economy of Hawaii by providing resources and facilities for energy and ocean-related research, education, and commercial activities in an environmentally sound and culturally sensitive manner. This is achieved through marketing, managing and operating facilities that support sustainable utilization of available natural resources such as cold deep seawater, warm surface seawater, and high solar potential. Recent accomplishments include:

- Secured new additional funding of almost \$7 million from the Hawaii State Legislature and federal grants to initiate new initiatives and provide for maintenance of existing resources.
- Opening of a 15,000 sq. ft. business incubator to help entrepreneurs in the area blue technology and advanced energy start and grow their businesses.
- Completion of a new \$9 million access road to HOST Park under budget and ahead of schedule.
- NELHA received a grant award of \$2.2 million from the U.S. Department of Energy to refurbish the Keahole Solar Power site for an innovative solar desalination project. The project is projected to produce more than 100,000 gallons per day.
- Held a statewide aquaculture summit in November 2017, which was instrumental in bringing various UH research, state, federal and private sector interests together to undertake a concerted and collaborative effort to raise Hawaii's global visibility in marine aquaculture to capitalize on the commercial opportunity in the global aquaculture industry by establishing an aquaculture accelerator and associated investment fund at NELHA.



Office of Planning

planning.hawaii.gov

Office of Planning's (OP) mission is to guide the overall growth and development of the State of Hawaii through a statewide comprehensive planning framework. OP prepares plans and studies and conducts policy analysis primarily on issues related to land, coastal, and ocean uses.

OP consists of four programs: Hawaii Coastal Zone Management (CZM) Program, Hawaii Geographic Information System (GIS) Program, Land Use Division, and the Special Plans Branch.

The CZM Program guides and determines acceptable activities and uses of resources for Hawaii's valuable land and water resources in the state's coastal zone area. The GIS Program supports and coordinates GIS efforts across state agencies, in addition to conducting spatial analysis and mapping for projects and initiatives in OP, and other state agencies. The Land Use Division coordinates with state agencies and prepares the state's position before the State Land Use Commission (LUC) and ensures that the LUC's decision and orders include terms and conditions that protect the state's interest in the long-term, and promotes sustainable use of limited state resources, such as land, water, and state infrastructure facilities. The Special Plans Branch carries out the statewide planning functions of OP as established by the Hawaii State Planning Act, HRS Chapter 226; conducts statewide planning and policy studies to assist government decision makers, including the Comprehensive Economic Development Strategy (CEDS); and administration of the \$2 million Brownfield Cleanup Revolving Loan Fund.

In addition, OP serves as lead or co-lead on several initiatives, including:

- Lead of the Greenhouse Gas Sequestration Task Force pursuant to Act 15, Session Laws of Hawaii 2018, which is tasked with establishing a baseline for greenhouse gas emissions within Hawaii and short- and long-term benchmarks for increasing greenhouse gas sequestration in the state's agricultural and natural environment. Lead of the Special Action Team on Affordable Rental Housing pursuant to Act 127, Session Laws of Hawaii 2016. In this role, OP leads and coordinates with housing departments within the state and counties to achieve goals that will deliver additional affordable rental housing throughout the State.
- Co-lead agency (with the Hawaii Housing Finance and Development Corporation) to coordinate Transit Oriented Development (TOD) on State-owned lands around the proposed Honolulu Area Rapid Transit rail stations. In this role, OP coordinates with several State agencies, as well as the City and County of Honolulu and other counties to ensure TOD on state-owned lands are planned correctly and developed to address state goals.
- Co-lead agency (with the Department of Land and Natural Resources) for the Hawaii Climate Mitigation and Adaptation Commission, established under Act 32, Session Laws of Hawaii 2017.



In the past year, OP has accomplished:

- **Ocean Resources Management Plan (ORMP) Dashboard** – A state performance measures website requested during the public outreach process of the ORMP Update to evaluate the implementation of ORMP's stated objectives. The dashboard was created to fulfill this request and provide a platform for ongoing information sharing. The website assesses progress in fulfilling ORMP's management priorities and goals by tracking 84 metrics, indicators of performance or progress for state agency actions under the ORMP.
- **Community Stewardship Directory Update:** The longstanding goal of this directory is to refine and institutionalize an integrated planning approach for the Hawaii CZM Program to move the State towards the vision portrayed in the Ocean Resources Management Plan where natural and cultural resource management is grounded by the place, the culture, and the community. The directory currently includes 104 community-based organizations.
- **Affordable Rental Housing Report and 10-Year Plan:** The report provides policy makers with a plan to achieve the affordable rental housing goal of 22,500 affordable rental housing units statewide to be ready for occupancy by December 31, 2026. This report notes that Hawaii's decades-long affordable housing shortage requires solutions that will span multiple state administrations, receive consistent, multi-year funding from the Legislature, involve all four counties, rely on partnerships with the private sector, and are embraced by community members statewide.
- **Hawaii 2050 Sustainability Plan – 10 Year Measurement Update (2008-2017):** This update/evaluation includes a compilation, review and analysis of available metrics originally established by the 2008 version of the Hawaii 2050 Sustainability Plan, along with additional recommendations developed by OP. This evaluation and measurement was the first of its kind over the past decade. This report reviews the data collected over the course of this 10-year measurement of Hawaii's progress toward sustainability according to the Hawaii 2050 Sustainability Plan's five goals, nine "2002 benchmarks," 22 strategic actions, and 55 indicators.
- **Development of an elevation service** utilizing all known publicly available lidar (light detection and ranging) data in the state collected from 1999-2017. For the first time, lidar data collected by the state, counties and other partners is readily available and can be downloaded from one location. The elevation service also allows the public to easily visualize the data as surface or bare earth terrain models, and to visualize the slope and aspect of the terrain. The elevation service layers can also be brought into mapping applications as web services to be used for analysis with other geospatial data.



Small Business Regulatory Review Board

dbedt.hawaii.gov/sbrrb



The Small Business Regulatory Review Board's mission is to review any proposed new or amended rule that impacts small business and to consider any request from small business owners for review of any rule adopted by a state agency and/or to make recommendations to the agency or the legislature regarding the need for a rule change or legislation. For requests regarding county ordinances, the board may make recommendations to the county council or the mayor for appropriate action.

The year 2018 marked the twentieth anniversary of the SBRRB. During the year, the members convened each month to address, collaborate, and provide timely responses to the Governor, small businesses, and state and county agencies. A total of 58 new and amended state and county administrative rules were reviewed. The board welcomed two new members in 2018, one from the County of Maui and one from Kauai.



Hawaii Housing Finance and Development Corporation

dbedt.hawaii.gov/hhfdc



HHFDC's mission is to increase and preserve the supply of workforce and affordable housing statewide by providing leadership, tools and resources to facilitate housing development.

In Fiscal Year 2018, the HHFDC assisted in the delivery of 1,216 workforce/affordable units while managing assets of close to \$1.5 billion. Since its inception in 2006, the HHFDC has facilitated the development of 9,333 workforce and affordable units statewide and currently has a production plan in place to add 6,971 more units over the next five years.

In the immediate future, the HHFDC is concentrating on increasing the production pipeline and accelerating the delivery of homes that people can afford. We will continue to leverage additional state funding to attract more private investment to construct more housing.



Hawaii Housing Finance and Development Corporation

dbedt.hawaii.gov/hhfdc

In FY 2018, Act 39 provided historic funding to meet the state's long-term housing demands and move us closer to our goals.

- \$200 million infusion into the Rental Housing Revolving Fund to generate approximately 1,600 affordable rentals.
- \$30 million in annual General Excise Tax Exemptions until 2030 to assist in the delivery of approximately 24,000 affordable rentals.
- \$10 million infusion into the Dwelling Unit Revolving Fund.

As we move forward, the HHFDC remains committed to being good stewards of the resources entrusted to us, while being strategic about developing long-term sustainable solutions to benefit future generations in Hawaii.





The Pacific International Space Center for Exploration Systems

pacificspacecenter.com



The Pacific International Space Center for Exploration Systems (PISCES) is a state-funded aerospace agency operating under DBEDT. Based in Hilo, PISCES is working to grow a sustainable aerospace industry in the State of Hawaii through economic development, applied research, and workforce development initiatives.

As one of its economic development projects in FY 2018, PISCES helped create an advisory group to develop a Small Satellite Launch Facility in Hawaii. Small and ultra-small satellite launch sites are in high demand from the commercial satellite industry and Hawaii offers an ideal location for equatorial orbit launches. The facility would support the launch of small space vehicles into equatorial orbit. The target date for a working facility is 2020.

With funding from the Hawaii State Legislature, PISCES contracted a Continuous Basalt Fiber (CBF) market study in 2017 to determine the feasibility of a CBF manufacturing plant on Hawaii Island. CBF is gaining popularity around the globe as a viable alternative to s-glass and carbon composite materials. The industry is currently valued at \$100 million worldwide and projected to double in the coming decade.

PISCES is also working with a space communications technology company to build a ground-based laser communication station in Hawaii to facilitate the next generation of space-based networking technology. The agency also participated in the planning of an Innovation and Manufacturing Center (IMC) in East Hawaii to bolster the technology sector. In 2016, a third-party feasibility study funded by Hawaii Technology Development Corporation (HTDC), the Dept. of Labor & Industrial Relations and the University of Hawaii concluded such a facility was in high demand.



The Pacific International Space Center for Exploration Systems

pacificspacecenter.com

In late FY 2018, PISCES completed an In-Situ Resource Utilization (ISRU) project funded through a NASA Small Technology Transfer Research Phase 1 grant in partnership with Honeybee Robotics. Called "Planetary LEGO Blocks," the project successfully created interlocking bricks for vertical and horizontal construction applications using only Hawaii volcanic basalt and heat. The ISRU technology has potential uses for space exploration as well as sustainable products here on Earth.

In Workforce Development, PISCES employed a total of six Hawaii students in the fields of Robotics and Materials Science/Planetary Geology during FY 2018. PISCES partnered with the County of Hawaii on a UAV (unmanned aerial vehicle) project to control little fire ant populations in tree canopies. A local high school graduate built and programmed the UAV. In FY 2018, PISCES also partnered with Akamai Workforce Initiative to provide a Hawaii-based student with hands-on work and research experience in Materials Science.

PISCES STARS (STEM Aerospace Research Scholars) Program for local high school girls had 12 graduates from schools throughout the state in late FY 2018. The program provides an inspiring lineup of female scientists and engineers from organizations like NASA's Jet Propulsion Laboratory and Caterpillar, Inc. who teach and inspire the young women to pursue careers in aerospace and related STEM fields.

PISCES encourages youth interest in STEM fields and participated in 37 education and outreach events in FY 2018. As a special project, PISCES partnered with RISE (Realizing Individual Strength through Excellence) and the University of Hawaii to bring a VexIQ robotics league to Keaukaha elementary students. Participating students have learned to build and program their own remotely controlled robots, and team up to compete in competition arenas.





DBEDT

Statement of Operating Appropriations, Expenditures, and Encumbrances For the Period July 1, 2017 – June 30, 2018

General Funds	Adjusted Appropriations	Expenditures & Encumbrances	Balance
BED 100 Business Development & Support Business Development & Support Division	1,542,419	1,524,619	17,800
BED 103 Statewide Land Use Management Land Use Commission	604,515	550,982	53,533
BED 105 Creative Industries Creative Industries Division	1,752,720	1,752,203	517
BED 128 Office of Aerospace Office of Aerospace	1,255,045	1,203,880	51,165
BED 130 Economic Planning & Research Research and Economic Analysis Division	1,233,924	1,199,067	34,857
BED 142 General Support for Econ. Development Office of Director & Admin. Services Office	2,401,694	2,260,344	141,350
BED 143 High Technology Development Corp. HTDC	4,000,493	3,996,778	3,715
BED 144 Statewide Planning & Coordination Office of Planning	1,379,925	1,280,452	99,473
BED 150 Hawaii Community Development Authority HCDA	859,048	688,203	170,845
Total General Funds	15,029,783	14,456,528	573,255



DBEDT

Statement of Operating Appropriations, Expenditures, and Encumbrances For the Period July 1, 2017 – June 30, 2018

Special & Revolving Funds	Adjusted Appropriations	Expenditures & Encumbrances	Balance
BED 107 Foreign Trade Foreign Trade Zone Special Fund	2,303,326	2,121,201	182,125
BED 113 Tourism Tourism Special Fund	88,500,000	77,472,068	11,027,932
Convention Center Enterprise Special Fund	52,854,295	40,358,132	12,496,163
BED 113 Total	141,354,295	117,830,200	23,524,095
BED 120 Environmental & Energy Development Energy Security Special Fund	4,802,086	4,083,490	718,596
BED 138 Hawaii Green Infrastructure Authority Hawaii Green Infrastructure Authority	1,011,432	838,183	173,249
BED 143 High Technology Development Corp. High Technology Special Fund	3,867,836	1,354,125	2,513,711
BED 145 Hawaii Strategic Development Corporation Hawaii Strategic Development Revolving Fund	4,325,672	2,363,956	1,961,716
Hydrogen Investment Capital Special Fund	2,608,516	6,502	2,602,014
BED 145 Total	6,934,188	2,370,458	4,563,730
BED 146 Natural Energy Laboratory of Hi Authority Natural Energy Laboratory of Hi Auth. Special Fund	7,845,985	4,325,621	3,520,364
BED 150 Hawaii Community Development Authority Hi Community Development Auth Revolving Fund	866,053	657,559	208,494
Kalaeloa Community Dev District Revolving Fund	510,382	419,626	90,756
BED 146 Total	1,376,435	1,077,185	299,250
BED 160 Hawaii Housing Finance & Development Corp Administration	6,731,650	5,431,113	1,300,537
Economic Development	2,246,905	1,517,466	729,439
Housing Finance	2,259,506	1,718,297	541,209
BED 160 Total	11,238,061	8,666,876	2,571,185
Total Special & Revolving Funds	180,733,644	142,667,339	38,066,305



Department of Business, Economic Development & Tourism

P.O. Box 2359 • Honolulu, Hawaii 96804 • 808 586-2355

dbedt.hawaii.gov