

DAVID Y. IGE  
GOVERNOR



**DEPT. COMM. NO. 133**

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**STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 PUNCHBOWL STREET  
HONOLULU, HAWAII 96813-5097**

IN REPLY REFER TO:

December 18, 2019

The Honorable Ronald D. Kouchi,  
President and Members of the Senate  
Twenty-Ninth State Legislature  
State Capitol, Room 409  
Honolulu, Hawaii 96813

The Honorable Scott K. Saiki  
Speaker and Members of the House of  
Representatives  
Twenty-Ninth State Legislature  
State Capitol, Room 431  
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Saiki and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Government Operations Report as requested in ACT 100 (09).

In accordance with HRS 93-16, I am also informing you that the report may be viewed electronically at: <http://hidot.hawaii.gov/library/reports/reports-to-the-legislature/>

Sincerely,

A handwritten signature in blue ink, appearing to be "Jade T. Butay".

JADE T. BUTAY  
Director of Transportation

c: Legislative Reference Bureau

REPORT TO THE THIRTIETH LEGISLATURE  
OF  
THE STATE OF HAWAII  
REGULAR SESSION OF 2020  
ON  
ACT 100  
SECTION 7  
SESSION LAWS OF HAWAII 1999

SUBJECT: RELATING TO GOVERNMENT OPERATIONS

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
DECEMBER 2019

## **A. DEPARTMENT OF TRANSPORTATION**

### **Statement of Goals**

The overall goal of the Department of Transportation is to facilitate the rapid, safe, and economical movement of people, goods, and mail into, within, and out of the State by providing and operating transportation facilities and supporting services.

### **Objectives and Policies**

In order to achieve its overall goal, the Department of Transportation currently has three Divisions- Airports, Harbors and Highways- that provide, operate, and maintain eleven (11) commercial service airports, four (4) general aviation airports, ten (10) commercial harbors, and more than nine hundred fifty-eight (954) centerline miles of highway.

To help move the Department toward its goal the Divisions will implement policies and projects relating to the following objectives.

1. Create and manage an integrated multi-modal transportation system that provides mobility and accessibility for people and goods.
2. Enhance the safety of the transportation system.
3. Ensure the secure operation and use of the transportation system.
4. Protect Hawaii's unique environment and quality of life and mitigate any negative impacts.
5. Ensure that the transportation facility systems support Hawaii's economy and future growth objectives.
6. Support the State's energy goal of 100% clean energy by 2045, which includes a target of 40% renewable energy and a 30% increase in energy efficiency by 2030, enhancing the reliability and security of clean energy sources.
7. Create secure, flexible, and sustainable revenues and funding sources for transportation needs.
8. Provide effective leadership department wide, focusing on accountability, ethics, training, and transparency.

### **Action Plan and Timetable to Implement Objectives and Policies.**

The Department of Transportation is responsible for the planning, designing, constructing, operating, and maintaining of the state facilities in all modes of transportation including air, water, and land. Coordination with other state, county,

and federal programs is maintained in order to achieve the overall objective.

Responsible planning and budgeting for air, water, and land transportation systems is essential to meeting our objectives. Each capital improvement or special maintenance project is related to either improving our existing system, managing demand, or expanding the present system.

**Process to Measure the Performance of Programs and Services in Meeting the Stated Goals, Objectives and Policies**

The Multi-Year Program and Financial Plan (PFP) measures the Department's effectiveness by reporting on a number of effectiveness measures for each of the divisions. Performance is determined by comparing actual results with established goals on a fiscal year basis. Further, each project or initiative highlighted in this report is measured by the respective division for effectiveness by their own specific guidelines. While these measures may be used to measure our performance, our customers, the traveling public, grade us by their personal experiences.



## **B. Airports Division**

The statewide airports system consists of eleven airports serving commercial airlines and four general aviation airports. The Airports Division's objective is to build for the future and promote Hawaii's airports as important gateways for its economic growth by planning, designing, constructing, managing, and maintaining efficient cost-effective airport facilities and equipment based on evolving technology.

The Airports Division strives to provide a professionally managed, efficient, safe, and financially sound airport system by working in partnership with the airlines, concessionaires, governmental and regulatory agencies, lessees, businesses, employees, members of the public, and other stakeholders.

Recognizing that the state's airport system is only one of two modes to enter or exit the state, the statewide airports system is part of the state's critical economic infrastructure, enabling interstate and international commerce and travel through the flow of passengers, cargo, and mail between the islands, as well as throughout the Pacific Basin and the continental U.S.

### **Statement of Goals**

The Airports Division's goal is to develop, manage, and promote a high quality cost-effective regional and global air transportation enterprise with the spirit of aloha for all.

In order to achieve its goals, the Airports Division has established the following objectives:

### **Objectives and Policies**

- 1. Mobility and Accessibility - Create and Manage an Integrated Multi-modal Transportation System that Provides Mobility and Accessibility for People and Goods.**
  - **Preserve and maintain the existing air transportation systems, in good condition or better.**
  - **Ensure multi-modal connections for passengers.**
  - **Reduce congestion in the air transportation systems.**

**Daniel K. Inouye International Airport (HNL) Mauka Concourse Program:** Construction of a new Mauka Concourse which will provide additional gates to accommodate 6 wide body, 11

narrow body, or a combination of wide and narrow body aircraft.

**Timeline:**

- Construction commenced September 2016
- Sale of Airport Revenue Bonds closed August 22, 2018 that will primarily fund the construction of the Mauka Concourse
- Anticipated construction complete May 2021

**Measures used to gauge effectiveness:** Construction on time within budget. There have been delays due to the relocation of the Commuter Terminal, contaminated materials and unforeseen utility conflicts.

**Daniel K. Inouye International Airport (HNL)**

**Roadway/Terminal Signage Improvements:** Replace the roadway, parking garages, and terminal wayfinding signage, including renaming the terminals and gates to alpha-numeric and baggage claims to numeric.

**Timeline:**

- Construction commenced May 2017
- Anticipated construction complete December 2019

**Measures used to gauge effectiveness:** Construction on time within budget.

**Daniel K. Inouye International Airport (HNL) DH Concourse**

**Concession Improvements:** Provide additional concession spaces by enclosing the exterior sidewalk and demolishing and/or renovating existing restrooms.

**Timeline:**

- Construction commenced September 2017
- Anticipated construction complete December 2019

**Measures used to gauge effectiveness:** Construction on time within budget.

**Daniel K. Inouye International Airport (HNL) Restroom**

**Improvements:** Renovate and/or enlarge 52 public restrooms at Terminal 2 (baggage claim, ticket lobbies, OST concourse walkway, and Central Concourse). Restrooms in the Ewa and DH Concourses were completed under respective Concession Improvements projects.

**Timeline:**

- Construction commenced September 2018
- Anticipated construction complete March 2021

**Measures used to gauge effectiveness:** Construction on time within budget.

**Daniel K. Inouye International Airport (HNL) OST Pedestrian Bridge Replacement:** Replace three (3) pedestrian bridge crossings between Terminal 2 (Overseas Terminal) and the Terminal 2 Parking Structure.

**Timeline:**

- Construction commenced September 2018
- Anticipated construction complete March 2021

**Measures used to gauge effectiveness:** Construction on time within budget.

**Daniel K. Inouye International Airport (HNL) Baggage Handling System Improvements Phase 2 & Ticket Lobby Renovations:** Replace Terminal 1 & 2 Baggage Handling Systems; Renovate Ticket Lobby 4, 5 & 6 to match Lobbies 7 & 8.

**Timeline:**

- Design commenced July 2015
- Anticipated design complete October 2019
- Anticipated construction commences April 2020
- Anticipated construction complete April 2022

**Measures used to gauge effectiveness:** Construction on time within budget.

**Daniel K. Inouye International Airport (HNL) DH Extension Modernization Program:** A \$1.1B program to extend the DH side of the airport, providing 15-20 additional gates, including necessary landside facilities (i.e. roadway access, parking, ticket lobbies, baggage claim, security checkpoints, and concessions). A second FIS facility and Intra-Terminal Transportation System to replace the Wiki-Wiki Buses will be considered.

**Timeline:**

- Anticipated Planning Study commence January 2020
- Anticipated Planning Study complete December 2020
- Anticipated Environmental Site Assessment/Investigation and Environmental Assessment commence January 2021
- Anticipated Environmental Site Assessment/Investigation and Environmental Assessment complete December 2023
- Anticipated design for various projects commences January 2024 - continuous
- Anticipated construction for various projects commence June 2025

- Anticipated DH Extension Modernization Program complete December 2032

**Measures used to gauge effectiveness:** Construction on time within budget.

**Statewide Consolidated Car Rental Facilities:** Construction of Consolidated Car Rental Facilities at Daniel K. Inouye International Airport (HNL), Kahului Airport (OGG), and Lihue Airport (LIH) which will provide more efficient use of land and facilities to car rental companies and passengers. Projected Schedules as of reporting period - actual schedules dependent upon leases, funding, and land acquisition.

**Timeline:**

- HNL Interim CONRAC construction completed November 2015
- HNL Permanent CONRAC construction commenced June 2016
- OGG CONRAC construction completed May 2019
- Sale of CFC Revenue Bonds closed August 27, 2019 that will primarily fund the construction of the HNL Permanent CONRAC
- HNL Permanent CONRAC anticipated construction complete October 2021
- LIH anticipated land subdivision approval complete December 2018
- LIH anticipated Environmental Assessment commence June 2019
- LIH CONRAC anticipated design commence June 2019
- LIH anticipated Environmental Assessment complete December 2020
- LIH anticipated infrastructure complete December 2021
- LIH CONRAC anticipated design complete June 2021
- LIH CONRAC anticipated construction commence January 2022
- LIH CONRAC anticipated construction complete June 2024

**Measures used to gauge effectiveness:** Construction on time within budget. Delays in subdivision approval will push out the schedule.

**Alternative Fuel Usage Pilot Program/Car Rental Facility Shuttles:** Executing a pilot program to collect data that will provide useful information as to what is the most cost-



effective alternative fuel to be used during the operation of the shuttle bus service to/from the Car Rental Facility on the airport property. There are three different alternative fuel sources involved in the testing during the pilot program, Electric, Natural Gas and Hydrogen.

**Timeline:**

- Pilot program completed February 2019 - Electric bus chosen

**Measures used to gauge effectiveness:** Bus performance (wear and tear), carbon emission levels, overall operational cost.

**Ellison Onizuka Kona International Airport at Keahole**

**Terminal Modernization Program (TMP):** Design and construction to provide a centralized security checkpoint to connect the north and south holdrooms and an in-line baggage handling system.

**Timeline:**

- Construction commenced February 2017
- TSA in-line baggage handling screening completed at the back-of-house and operational July 2019
- Anticipated construction complete February 2020

**Measures used to gauge effectiveness:** Construction on time within budget.

**Ellison Onizuka Kona International Airport at Keahole**

**Federal Inspection Station (FIS):** Design and construction facility to meet U.S. Department of Homeland Security, Customs and Border Protection (CBP) technical design standards. This project will provide a permanent facility to replace the interim facility thereby establishing a permanent 3<sup>rd</sup> point of entry for international passengers, which can also serve as a CBP compliant alternate for the Daniel K. Inouye International Airport (HNL).

**Timeline:**

- Construction commenced July 2019
- Anticipated construction complete December 2021

**Measures used to gauge effectiveness:** Construction on time within budget.

**Ellison Onizuka Kona International Airport at Keahole USDA**

**Inspection Building:** Design and construction to in-line the USDA inspection screening with the TSA baggage handling screening at the back-of-house.

**Timeline:**

- Design commenced August 2019

- Anticipated design complete February 2020
  - Anticipate construction commence September 2020
  - Anticipated construction complete September 2021
- Measures used to gauge effectiveness:** Design and construction on time within budget.

**Ellison Onizuka Kona International Airport at Keahole Restroom Improvements:** Design and construction to renovate restrooms in the north and south terminals.

**Timeline:**

- Design commenced July 2018
- Anticipated design complete December 2019
- Anticipate construction commence June 2020
- Anticipated construction complete June 2021

**Measures used to gauge effectiveness:** Design and construction on time within budget.

**Kahului Airport Restroom Improvements:** Third phase of the restroom renovation to include restrooms in Holdrooms A, B and E.

**Timeline:**

- Design commenced December 2017
- Design completed May 2018
- Construction commenced July 2019
- Anticipated construction complete May 2020

**Measures used to gauge effectiveness:** Design and construction on time within budget. Delay in the start of construction due to bid protest.

**CBP Automated Passport Control (APC) Kiosks at International Arrivals Building, Daniel K. Inouye International Airport (HNL):** In coordination with CBP, installed 40 APC kiosks in the Federal Inspection Station (FIS), International Arrivals Building, Daniel K. Inouye International Airport (HNL) and 13 APC kiosks at Ellison Onizuka Kona International Airport at Keahole (KOA). The use of these self-service kiosks at other international arrivals airports has been proven to be effective in reducing the wait time and congestion for returning U.S. citizens and international travelers, who qualify for and receive approval under the Electronic System for Travel Authorization (ESTA). The technology used in these kiosks automates the routine checks with the highest level of protection and allows the CBP inspectors to focus on passenger assessment and not reviewing documents (passport, fingerprints, and declaration cards). In the

interim until civil service positions can be established and filled, a request for contractor services has been submitted for approval to allow bilingual staff to identify, qualify and encourage international arriving passengers to use the APC kiosks to further reduce the wait time and congestion at the FIS.

**Timeline:**

- 2015 - Notice to Proceed issued to install 32 APC Kiosks at HNL.
- 2016 & 2017 - Due to the success of the first 32 installed kiosks, 8 additional kiosks were installed at HNL, as well as 13 kiosks installed at KOA with the reopening of the FIS.
- 2019 - Recruiting new bilingual VIP Assistant positions.

**Measures used to gauge effectiveness:** Determine the effective use of APC kiosks, evaluate the reduction of wait time and passenger congestion at the FIS. Wait times were found to be reduced by 30%.

**Kahului Airport Holdroom and Gate Improvements:** Enlarge the holdroom capacity by enclosing and air conditioning the exterior walkway and connecting Holdrooms A and B. Reconfigure the aircraft apron for increased capacity.

**Timeline:**

- Design commenced May 2018
- Anticipated design complete November 2019
- Anticipated construction commences June 2020
- Anticipated construction complete June 2022

**Measures used to gauge effectiveness:** Design and construction on time within budget.

**Lihue Airport Ticket Lobby Improvements:** Enlarge ticket lobby by removing planter boxes for increased capacity.

**Timeline:**

- Design commenced August 2015
- Design completed August 2019
- Anticipated construction commences January 2020
- Anticipated construction complete September 2020

**Measures used to gauge effectiveness:** Design and construction on time within budget.

**Lihue Airport Holdroom Improvements:** Enlarge the holdroom capacity by enclosing and air conditioning the exterior walkway.



**Timeline:**

- Anticipated design commences February 2020
- Anticipated design complete October 2020
- Anticipated construction commences April 2021
- Anticipated construction complete September 2022

**Measures used to gauge effectiveness:** Design and construction on time within budget.

**Hilo International Airport Restroom Improvements:** Renovate 4 set of restrooms on the ground level.

**Timeline:**

- Design commenced February 2018
- Design complete December 2018
- Anticipated construction commences June 2020
- Anticipated construction complete June 2021

**Measures used to gauge effectiveness:** Design and construction on time within budget. Delay in the start of construction due to bid protest.

**2. Safety - Enhance the Safety of the Air Transportation System**

- **Enhance the system and user safety and transportation facilities both motorized and non-motorized, with the use of proper equipment, technology, and physical hazard reduction; and implement priority safety projects for each mode.**
- **Continuously conduct assessment, preparedness, and emergency response for natural disasters as part of all planning efforts.**

**Ellison Onizuka Kona International Airport at Keahole Airport Rescue Fire Fighting (ARFF) Training Facility:** This project will construct a regional ARFF training facility which will be used by the ARFF personnel statewide to consolidate training into one facility for cost savings and efficiency. Key components include Full Scale Specialized Aircraft Fire Trainer (SAFT), Fuel Spill Trainer (FST), Control Tower, Structural Trainer, Rehab Shelter, and associated site improvements. The main purpose is to design and construct a world-class ARFF and emergency response facility that fully meets end user goals, to be financially self-sustaining, and to provide academic and practical training for ProBoard Certification.

**Timeline:**

- Anticipated design complete December 2019
- Anticipated construction commences July 2020

- Anticipated construction complete September 2021
- Measures used to gauge effectiveness:** Continuous personnel training, field evaluation by FAA Certification Inspector and to standardize the training to meet national certification criteria offered throughout the State.

**Kahului Airport Runway 2-20 Reconstruction:** Reconstruct Runway 2-20. East Ramp temporary runway to be constructed for use while Runway 2-20 is reconstructed. Temporary relocation of East Ramp tenants.

**Timeline:**

- Environmental Assessment commenced July 2019
- Anticipated Environmental Assessment complete August 2020
- Anticipated design commences March 2020
- Anticipated design complete December 2021
- Anticipated construction commences June 2022
- Anticipated construction complete December 2024

**Measures used to gauge effectiveness:** Design and construction on time within budget.

**Lihue Airport Runway 3-21 RSA Improvements:** Provide Runway Safety Areas to enhance the safety of aircraft in the event of an undershoot, overshoot, or excursion from the runway.

**Timeline:**

- Environmental Assessment completed June 2018
- Design commenced August 2015
- Airport Layout Plan submitted September 2019
- Anticipated Airport Layout Plan approval November 2019
- Anticipated design complete July 2020
- Anticipated construction commences January 2021
- Anticipated construction complete September 2022

**Measures used to gauge effectiveness:** Design and construction on time within budget.

**3. Security - Ensure the secure operation and use of the Air Transportation System.**

- **Minimize risks of disruption of transportation to, from, and within Hawaii due to terrorism and other human security threats and events, as well as threats and events from natural disasters.**
- **Work with Federal, State, and County agencies as well as tenants to conduct vulnerability and risk assessments.**

- **Implement security policies and strategies to minimize risks and threats of disruption of or damage to the transportation systems while maintaining the intended function of the system.**  
**Provide continuous monitoring of critical infrastructure and communications systems to provide for appropriate emergency response capability.**
- **Coordinate and work with Federal, State, and County agencies in various emergency training exercises and response preparedness.**

**Test the Effectiveness of Hazing to Prevent/Minimize Nesting of Nesting of Nēnē at Hōkūala Resort, Līhu`e, Kaua`i:** The objective of the proposed pilot project is to minimize/prevent nēnē nesting at Hōkūala Timbers Resort (Resort), Līhu`e, Kaua`i, by initiating a continuous hazing program during the 2018/2019 breeding season (August to March) thru the use of trained dogs (Border Collies) with the objective of flushing birds from the property. The birds will need to be flushed multiple times in order to be effective. A spotter with infrared scope and/or night vision binoculars will need to be observing to see where the birds go so that if they land again on the property they can be flushed again. The use of dogs has proven to be successful in chasing Canada geese from specific locations. The information obtained by this project may be useful in the development of long-term plan to prevent nēnē nesting at the Resort.

Nēnē began visiting and subsequently nesting at the Resort property between the two main runways at Līhu`e Airport (LIH) in the mid-1980's. The increasing number of nēnē adjacent to LIH created concerns that an air strike could result. On April 14, 2011, Governor Neal Abercrombie issued an Emergency Proclamation directing the State Department of Land and Natural Resources (DLNR) in cooperation with the Department of Transportation, Federal Aviation Administration, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture Wildlife Services to immediately undertake to translocate nēnē from the Resort property. The DLNR developed a 5-year plan to translocate the entire nēnē nesting population from the Resort. As of March 31, 2016 a total of 652 nēnē were translocated from the Resort to the islands of Maui and Hawai`i. As nēnē were removed from the Resort, the number of dispersal events at LIH declined. However, since translocation of nēnē stopped in April of 2016, nēnē have resumed loafing and nesting at

the Resort. This project is also intended to prevent additional pairs from nesting.

**Timeline:**

- **One-Year Pilot Project (Start June 2019)**

**Measures used to gauge effectiveness:**

The use of two trained dog (Border Collies) teams provided instant results and continued success since the inception of the program in terms of reducing Nene loafing and nesting at the Resort by approximately 95% during the first 6 months of the pilot program (June 2019 to present).

4. **Environment and Quality of Life** - Ensure that the air transportation system respects environmental, natural, cultural, and historic resources; and adopts guidelines to conserve natural resources and alleviate environmental degradation caused by motor vehicles.
  - **Implement sustainability and livability practices in existing and new facilities, with "sustainability" defined as: "Respect the culture, character, beauty, and history of our state's island communities; strikes a balance among economic, social, community, and environmental priorities; and meets the needs of the present without compromising the ability of future generations to meet their own needs."**
  - **Assess sustainability and livability for air transportation facilities and operation practices.**

**Sustainability and Cultural Development:** The Airports Division has developed guiding documents to represent the place-based value system of the sustainability and cultural programs. Used together, these resources empower Hawaii's airports to cultivate best practices within their respective districts. These resources also provide Hawaii's airport system with a common perspective that complements Hawaii's lifestyle and environment in and around all facilities designed, built, maintained and operated by the Airports Division. Guiding documents

include the *Sustainable Program Profile, Sustainable High-Performance Guidelines, Hawaii Sense of Place Primer and Cultural Appropriateness Guidelines*. These documents are available on the Airports Division website at <http://hidot.hawaii.gov/airports/doing-business/engineering/sustainableledota/>. Use of the cultural guidelines are ongoing and included in project designs. Implementation of the Airports Division's sustainability initiative has started through the Sustainable Management Plan project which was 75% funded by the FAA. Through sustainable efforts Honolulu International Airport currently holds the Level 2 Reduction of the Airport Carbon Accreditation Programme from the Airports Council International. To further implement a sustainable initiatives study for the feasibility of water reclamation (scalping) at Hawai'i's airports in response to Act 229, Session Laws of Hawaii 2015 has started. The FAA also participated in this project with funding of 80%.

**Timeline:**

- 2016 - Sustainable Management Plan completed
- 2018 - Sustainability/Water Scalping Study completed
- 2018 - Water scalping projects commenced
- 2020 - Anticipated water scalping projects complete

**Measures used to gauge effectiveness:** Measurable reduction in use of fossil fuels and natural resources. Traveling public recognition of Hawaiian sense of place in airports.

**5. Economy and Growth - Ensure that the air transportation facility systems support Hawaii's economy and future growth objectives.**

- **Identify sector needs, current and projected, as they relate to the movement of people and goods.**

**Master Planning:** The Airports Division does separate master plans for all its 15 airports based on internal and external requirements and stakeholder needs. The master planning process involves inventory assessment, passenger forecasts, stakeholder and public involvement, identification of alternatives and recommendation of a preferred alternative. Master plans are approved by the FAA and result in development plans and projects. Development



plans and projects then require an environmental assessment process prior to implementation.

**Timeline:** Ongoing

**Measures used to gauge effectiveness:** Organize development of the airport system which meets stakeholder needs.

6. **Sustainability - Support the State's energy goal of 70% clean energy, which includes 40% produced by renewable energy and 30% increase in energy efficiency, enhancing the reliability and security of clean energy sources. Incorporate sustainable practices in operations and infrastructure.**

**Energy Savings Performance Contract:** Procure Energy Savings Performance Contracts where outside vendors install energy efficient equipment in State Facilities the improvements are paid for through the savings in energy payments.

**Timeline:**

- 2013 - Phase 1 Procurement completed
- 2015 - Phase 1 Construction completed
- 2019 - Anticipated Phase 2 Construction complete

**Measures used to gauge effectiveness:** Kilowatt hour savings of equipment replaced as much as 49%.

**Kahului Airport Wastewater and Water Treatment System:**

Design-Build to construct package membrane bioreactor scalping plant to extract R-1 water from a Kahului wastewater reclamation plant for irrigation use.

**Timeline:**

- Design-Build commenced May 2018
- Anticipated construction complete December 2020

**Measures used to gauge effectiveness:** Water recycling reducing potable and non-potable water consumption and associated expenses.

7. **Funding - Create secure, flexible, and sustainable revenues and funding sources to sustain the statewide airport system (Enterprise).**
- **Develop a framework for long-range financial forecasting; and within this framework distinguish between system preservation, capacity enhancement, and modernization needs that are funded from user-financing.**
  - **Identify sources and develop and secure funding for the sustainable delivery, maintenance, operation,**

**rehabilitation, replacement, and expansion of the state transportation systems.**

- **Ensure funding for the safety and security of the state transportation systems**
  - a. Maximize the use of Federal programs and funding for needed transportation infrastructure; use Federal non-recurring initiatives and funding sources such as American Recovery and Reinvestment Act (ARRA) and report on project and program achievements.
  - b. Study the reliability and viability of future transportation financing streams and funding and consider scenarios for innovative and non-traditional financing.
  - c. Achieve project readiness in support of new funding sources as they come available; and report on achievements of project completion.
  - d. Review outstanding bond issues and refund (refinance) if it is cost beneficial.
  - e. Review potential areas to increase revenue from current and prospective customers, tenants and stakeholders.
  - f. Meet with rating agencies and bond issuers, to maximize borrowing.

**Timeline:** Continuous

**Measures used to gauge effectiveness:** Maintain bond credit ratings.

**Convert the Revocable Permits for parking into a concession agreement for the neighbor island airports like that at Daniel K. Inouye International Airport (HNL).**

**Timeline:**

- 2012 the Airports Division drafted and executed individual concession agreements for parking management for all islands. The agreements include the provision, if applicable, for charging stations in accordance with the law.
- 2013 Districts monitored the management firm to determine if they were in compliance with the terms of their agreements. Districts used customer surveys, on-site observations, and unannounced audits as gauge to determine compliance. Progress: Maui completed, a draft for Kona was reviewed by the AG, a contract for Hilo was worked on, Lihue was under contract.
- 2014 Districts monitored the management firm to determine if they were in compliance with the terms of their agreements. Districts used



customer surveys, on-site observations, and unannounced audits to determine and encourage compliance.

- 2015 Districts monitored the management firm to determine if they were in compliance with the terms of their agreements. Districts used customer surveys, on-site observations, and unannounced audits as gauge to determine compliance. Timelines being established for rolling concession offerings at each of the airports. Such timelines helped insure broad response to the solicitation.
- 2016 Districts monitored the management firm to determine if they were in compliance with the terms of their agreements. Districts used customer surveys, on-site observations, and unannounced audits as gauge to determine compliance. Five-year concession agreement advertised for operation of the public parking facilities at the Ellison Onizuka Kona International Airport at Keāhole, bids opened, and contract awarded in 2016.
- 2017 Review in process to establish terms for offering to be issued in 2017 for Hilo International Airport. Anticipate new contract to take effect in 2018. Subsequent issuances for Lihule, Kahului, and Honolulu to be made on similar timetables to avoid multiple contracts being issued in the same year.
- 2018 New five-year contract which commenced in 2018 negotiated with the current parking operator at Honolulu.
- 2019 Negotiations anticipated to issue new contracts at Hilo International Airport and Kahului Airport.

**Measures used to gauge effectiveness:** Minimal complaints, efficient and timely service, and maximum revenues for the State.

**Extensions of Concession Agreements:** Act 46, Session Laws of Hawaii 2012, as extended by Act 126, Session Laws of Hawaii, 2014, allowed the DOT to extend the terms of existing Concession Agreements, provided that the concessionaire agreed to make revenue enhancing improvements to the airport concession. Ten Concession Agreements were extended under the provisions of the acts.

The concessions agreed to construct almost \$88 million in improvements at the airports. In general, the concessions pay the DOT the greater of a minimum annual guaranteed fee or a percentage fee. As part of the agreements, the concessions collectively increased the guaranteed revenues to the DOT by approximately \$90 million over the term of the extensions.

**Timeline:**

- 2015 The Airports Division extended the Concession Agreements and monitored its progress.
- 2019 Concessionaires in the process of constructing new facilities at HNL, and OGG. Efforts at KOA to begin once remodeling of terminal areas is completed.

**Measures used to gauge effectiveness:** Timeliness of completing improvements and determine if the improvements increased revenues.

**Ensure that the current Non-Signatory rates are consistent with the First Lease Amendment of 2008:** This initiative is to ensure that the Airports Division meets its obligation to the First Lease Amendment that all Non-Signatory rates must be 125% above the Signatory rates. The impact of not meeting this critical obligation could result in Signatory carriers electing to become Non-Signatory carriers which could affect the Airports' bond rating.

**Timeline:**

- 2019 To be consistent with the First Amended Lease Extension Agreement signed in October 2007 and ensure that all rates and charges were consistent with all agreements, Airports Division increased the rates and charges for the non-signatory carriers with effective date July 1, 2019.

**Measures used to gauge effectiveness:** The modification or "right sizing" of the rates will ensure that all signatory air carriers will remain as signatory carriers and will not convert to non-signatory carriers. Conversely, non-signatory carriers will pay the higher rate and charges, but their operations will be commensurate to these charges. Should their operations expand they (non-signatory carriers) will have the ability to convert to signatory carriers.

**Audits:** Increase the use of unannounced audits and inspections of contracts, cash and financial instruments on hand, documents, equipment, and facilities to prevent theft

and ensure maximum utilization. Increase audits of tenants, contractors, and concessionaires to assure that gross revenues and reimbursable costs are accurately reported. Evaluated the effectiveness of their audit and monitored the corrective actions by the Districts. This was an on-going effort and expanded to other program areas. Audit results were noted and reported to appropriate management. The effectiveness of the audit was determined by management response and noted on follow-up audits. Determined if additional internal controls were necessary to improve operations.

**Timeline:**

- 2019 On-going. Evaluated the effectiveness of their audit and monitored the corrective actions by the Districts. This was an on-going effort and expanded to other program areas. Audit results were noted, reported to appropriate management. The effectiveness of the audit was determined by management response and noted on follow-up audits. Determined if additional internal controls were necessary to improve operations. Audited statewide T-Hangar maintenance contract to determine if contract costs are reasonable. Determined if General Aviation tenants are meeting the 70% sublease clause in their lease agreements in order to receive 50% of fair market rent. Reviewed revenue projection of tenant delinquent on rent payments. Also reviewed financial information to determine if they could continue to make rent payments despite financial hardship. Various confidential audits are currently in progress.

**Measures used to gauge effectiveness:** The results of the audits and monitoring of the corrective measures will reduce theft of funds, mishandling of purchases, encourage effective contract management, compliance with SPO regulations, and promote ethical behavior.

8. **Leadership** - Provide effective leadership focusing on accountability, ethics, training, and transparency.
  - **Increase the level of accountability of personnel both on and off the job.**
  - **Provide increased opportunities for training and sufficient equipment allowing personnel to be successful.**

- **Implement policies that demonstrate commitment to transparency, ethics, and strict compliance with regulations, policies, and procedures.**

**Development of the Oracle Unifier Project Management**

**Application:** The Oracle Unifier Project Management Application is the Engineering Branch's tool for tracking, monitoring and archiving project processes, documents, records and financial information to provide accountability for project performance, funding and expenditures.

**Timeline:** Ongoing

**Measures used to gauge effectiveness:** Deployment of Business Processes and implementation of real time contracting.

**LEADERSHIP ASPECTS**

- Increase the level of accountability of personnel
- Provide increased opportunities for training and sufficient equipment, sufficient staffing, and sufficient funding to support new facilities and to allow personnel to be successful.
- Implement and update policies that demonstrate commitment to transparency, ethics, and strict compliance with regulations, policies, and procedures.
- Promote open communication between management and rank and file employees.
- Conduct regular meetings of the Executive Steering Group (all Airport District Managers and Branch Heads) to collectively discuss critical issues, and possible and best solutions and status of our many projects.
- Create Ad Hoc Committees to address critical issues. The committee, (comprising of all key SMEs and some decision makers) identifies the problem(s), finds out what the cause(s) are and arrives at possible and best solutions moving forward.
- Conduct regular meetings with the local and regional Federal Aviation Administration representatives on compliance issues as well as Airport Improvement Program grant funding.
- We have worked with the State's Ethics Commission to conduct mandatory Ethics Training for our personnel.
- Continue the effort to ensure that all projects are on schedule and all Federal grant funds associated with these projects are expended in a timely manner.
- Establish a team approach for determining which projects are included in the CIP budgets. We have

provided the Airport District Managers more of a voice in this process.

**Timeline:** Ongoing.

**Measures use to gauge effectiveness:** Increase in productivity and efficiency due to increased teamwork.

## **C. HARBORS DIVISION**

The Harbors Division operates and manages a statewide harbors system of ten (10) commercial harbors divided into four (4) districts. They are: Oahu District - Honolulu and Kalaeloa Barbers Point; Hawaii District - Hilo and Kawaihae; Maui District - Kahului and Hana on Maui, Kaunakakai on Molokai, and Kaunapali on Lanai; and Kauai District - Nawiliwili and Port Allen. The commercial harbors provide for the movement of cargo, passengers, and vessels between ports within the state and provide facilities and support services for loading, off-loading, and handling of cargo, passengers, and vessels.

### **Statement of Goals**

The Harbors Division's goal is to provide for the expeditious, efficient, and safe movement of people and goods which may be delivered for shipment or discharged on the commercial docks, wharves, and piers to ensure the economic security of the state; promote economic growth and sustain the quality of life within the state by:

1. Creating and managing an integrated multi-modal transportation system that provides mobility and accessibility for people and goods.
2. Enhancing the safety of the water transportation system.
3. Ensuring the secure operation and use of the water transportation system.
4. Protecting Hawaii's unique environment and quality of life and mitigating any negative impacts.
5. Ensuring that the water transportation facility systems support Hawaii's economy and future growth objectives.
6. Supporting the state's energy goal of 70% clean energy, which includes 40% produced by renewable energy and 30% increase in energy efficiency, enhancing the reliability and security of clean energy sources.
7. Creating secure, flexible, and sustainable revenues and funding sources for transportation needs.
8. Providing effective leadership division-wide focusing on accountability, ethics, training, and transparency.

### **Objectives and Policies**

The Harbors Division has reset its objectives over the next 5 years from July 1, 2019. The Harbors Division will plan, develop, and implement the following projects to help achieve the following objectives:



1. **Mobility and Accessibility.**

- **Preserve and maintain existing water transportation systems in good condition or better; give comparable consideration to funding preservation capital projects as is given to expansion projects.**
- **Ensure the provision of essential and critical water transportation operation and services for all communities throughout the islands.**
- **Reduce congestion in the water transportation systems.**
- **Obtain federal funds for harbor infrastructure projects.**

**Kalaeloa Barbers Point Harbor (KBPH) Fuel Pier Development Plan and Environmental Impact Statement, Oahu**

**Timeline:**

Year 1 - The Harbors Division is implementing concepts presented in the KBPH 2040 Master Plan, (MP), by identifying phases in which to develop the improvements. Vessel berth and dockage time was studied to provide strategic guidance in determining the length and placement of the fuel pier. In coordination with the current tenant, detailed discussions may lead to a final design of the fuel pier; and, minimize relocation and operational disruption to the tenant's operation. With Kapolei Properties LLC completing the area-wide drainage channel, the Harbors Division will also begin its work to plan and design its drainage elevations and KBPH roadways in and around the harbor and future development of cargo and revenue generating leased lots.

Year 2 - Continue with the final design of the fuel pier to minimize relocation and operational disruption to the tenant's operation; and initiate additional environmental assessments or supplemental environmental impacts arising out of the final designs. The private developer ceased removing coral material during 2018. With the remaining 5% of the 1.085 million cubic yards of coral material, plans to revise the use of the coral material is ongoing and/or left in place and used in the development of terraced lots to accommodate sea level rise.

Year 5 - Finish design of Fuel Pier.

**Measures used to gauge effectiveness:** Determine the economic and social impact of removing the remaining



coral material; and develop alternative plans consistent with the Regional Drainage Plan, while incorporating material in future plans to develop KBPH, which is also underway for planned uses.

**Pier 4 Inter-Island Cargo Terminal, Hilo, Hawaii**

**Timeline:**

Year 1 - Construction of Pier 4 was completed during December 2017. The interisland shipping company is adopting new terminal operations to improve efficiency in the movement of cargo. Plans to remove the Pier 2-3 shed is in progress. Removal of the shed will support efficiency of terminal operations with the creation of more space without obstruction from a structure.

Year 2 - Complete the removal of the Pier 2-3 shed and improvements to the piers.

Year 5 - Complete the land acquisition along Kalaniana'ole Street and Kumau Street and plan and design street access into Pier 4 and Pier 1

**Measures used to gauge effectiveness:** Complete the removal of the Pier 2 and 3 shed and related improvements. Substantially complete the acquisition of land along Kalaniana'ole Street.

**Kapalama Container Terminal, Phase 1, Oahu, Hawaii**

**Timeline:**

Year 1 - Continue to make significant progress on construction of KCT Phase I - The KCT project is the cornerstone of DOT Harbors Modernization Program. This container terminal is needed to meet Hawaii's cargo demands.

Year 2 - Complete construction of the container yard.

Year 5 - Allow for full use of Phase I container yard with KCT Phase II.

**Measures used to gauge effectiveness:** Complete the construction and allow full use of the terminal that is not impacted by KCT Phase II.

**Kapalama Container Wharf, Phase 2, Oahu, Hawaii**

**Timeline:**

Year 1 - Start construction of KCT Phase II - Container Yard summer 2020. The KCT project is the cornerstone of DOT Harbors Modernization Program. This container terminal is needed to meet Hawaii's cargo demands.

Year 2 - Have significantly completed construction of the wharf side of the KCT.

Year 5 - Construction completed and KCT Phase I & II in full use.

**Measures used to gauge effectiveness:** Fully operational Kapalama Container Terminal.

## **2. Safety**

Enhance the system and user safety and transportation facilities with the use of proper equipment, physical hazard reduction; and implement priority safety projects for each harbor.

Annual planning and development of Special Maintenance Projects to remediate and address safety concerns and necessary facility improvements. The following two projects provide an example of the type of projects undertaken to implement this policy:

## **3. Security**

- **Minimize risks of disruption of transportation to, from, and within Hawaii due to terrorism and other human security threats and events, as well as threats and events from natural disasters.**
- **Work with federal, state, and county agencies as well as tenants to conduct vulnerability and risk assessments.**
- **Implement security policies and strategies to minimize risks and threats of disruption of or damage to the transportation systems while maintaining the intended function of the system.**
- **Provide continuous monitoring of critical infrastructure and communications systems to provide for appropriate emergency response capability.**
- **Support national security in the Indo-PACOM region by providing reliable and efficient water-borne commerce throughout the Pacific Islands.**

**Maritime Wireless Communication System - Broadband (Funded by Department of Homeland Security, Port Security Grant.)**

**Timeline:**

**Currently in Year 5** - The DOTH is awaiting DOD's completion to provide for the integration of each island's system to a central command center and DAGS and DOD enhancements to the microwave system.

**Measures used to gauge effectiveness:** Connect statewide video feeds from all commercial harbors to county emergency centers and state civil defense. The connection will allow common situational awareness during pre-disaster and post-disaster situations, critical for response and continuity of business operations. The project is being supported by DAGS because of their unique and assigned core functions regarding electronic communications.

#### **4. Environment and Quality of Life**

- **Ensure that users and tenants of the water transportation system and its facilities respect environmental, natural, and historic resources.**
- **Support the programs of state and federal natural resource agencies, as well as support on-going lines of communication and coordination with these agencies.**

**Small Municipal Separate Storm Sewer System (MS4), Storm Water Permits for Honolulu Harbor and Kalaeloa Barbers Point Harbor.**

**Timeline:**

Completed - Met Storm Water Management Plan (SWMP).

**Measures used to gauge effectiveness:** Meet EPA compliance deadlines pursuant to the consent decree and address any third-party audit findings, if any.

#### **5. Economy and Growth**

- **Create a community flow and freight handling system that is dependable and efficient, with industrial/commercial land use and storage areas.**
- **Provide reliability, dependability, and redundancy for commerce in the import and export of goods movement system including inspection facilities at ports, address actions for security of commerce.**
- **Create modern water transportation systems that are part of a positive visitor experience.**

**Development of 84-Acre Container Terminal with 1,800+ Foot Long Pier at Kapalama Military Reservation, Honolulu Harbor, Oahu.**

**Timeline:**

Year 1 - As of the end of September 2019, construction of KCT is 65% complete. In reviewing the financial plan that includes the increases in tariffs that support the funding requirements to construct Phase I, the DOTD anticipates that it can possibly fund Phase I

by combining remaining funds from its 2010 Revenue Bonds, with DOTH's cash while maintaining 1,000 days of operating cash. A DOTH cash balance equal to 1,000 days of operating cash is to remain in compliance with the policy directions and fiscal practices set by the former DOT Director. The cash financing may save the DOTH approximately \$16 million a year in debt service payments for each year that a new revenue bond issuance is deferred.

Year 2 - Complete 90 percent construction for the container yard, Phase I.

Year 5 - Completion of construction of container yard, Phase I.

**Measures used to gauge effectiveness:** The 30-day public comment period required for the DOTH's application for a Clean Water 401 permit was published on October 25, 2018 to bring Phase II closer to being built. Phase II allows for the Kapalama Container Terminal facility to be completed and opened for use. The improvements will accommodate the rising demand for container facilities at Honolulu Harbor and improve port resiliency. Continue to move forward with Phase II before the construction of wharf, pier, and dock improvements

## 6. Energy

- **Support the national goal to reduce transportation-related greenhouse gas (GHG) emissions and reliance on foreign oil.**
- **Use opportunities where and when practicable and available, to use solar (heating and photovoltaic), wind, geothermal, and ocean resources to supply power to create electricity for transportation facilities.**

**Assess the feasibility of energy savings performance contracting to implement energy conservation measures in facilities using guaranteed energy savings to finance the projects.**

**Timeline:**

Completed - effective March 31, 2019.

## 7. Funding

- **Develop a framework for long- and short-term financial forecasting for system-wide maintenance, capital improvement, and modernization projects to ensure the harbors will support optimized operations.**

- **Achieve and maintain high bond ratings and other performance ratios that support a broad range of financing options for projects, including but not limited to bond sales, commercial paper, and cash flow financing.**
- **Maximize the use of federal funding and support programs for needed infrastructure, feasibility studies, planning, and other authorized uses.**

**Continue to review, analyze, and amend the administrative rules for the Harbors Division to ensure financial self-sufficiency for the system-wide harbors capital program and Harbors Modernization Plan.**

**Timeline:**

In January 2018, the Harbors Division approved a series of tariff increases for dockage, port entry, and passenger fees to supplement the increases for cargo wharfage that were approved in December 2016.

Year 1 - July 1, 2019, is the effective date for a 20% increase in dockage and port entry fees for all vessels, as well as the effective date for an incremental increase (the greater of either 3% or the CPI) for wharfage. The analysis of the administrative rules and other portions of the tariff will continue to determine whether other user fees must be adjusted; amendments will be made and approved accordingly.

Year 2 - July 1, 2020, is the effective date for a 15% increase in dockage and port entry fees for all vessels, as well as the effective date for an incremental increase (the greater of either 3% or the CPI) for wharfage.

Year 3 - July 1, 2021, is the effective date for a 15% increase in dockage and port entry fees for all vessels, as well as the effective date for an incremental increase (the greater of either 3% or the CPI) for wharfage. The analysis of the administrative rules and other portions of the tariff will continue to determine whether other user fees must be adjusted; amendments will be made and approved accordingly.

Year 5 - Continued analysis of revenue trends and the bond ratings and other performance ratios that allow for multiple options for financing, especially cash flow financing. Revenue trends during this year should reflect greater efficiencies created by the opening of the Kapalama Container Terminal by 2023.

**Measures used to gauge effectiveness:** Bond ratings, financial performance ratios (e.g., debt ratio),



calculated savings based on cash flow financing compared to bond sales, and the number of projects delivered on time and on or under budget.

#### **8. Leadership**

- **Increase the level of accountability of personnel both on and off the job.**
- **Provide professional and personal development in the areas of project management, team building, conflict resolution, critical thinking, and problem solving.**
- **Implement policies that demonstrate commitment to transparency, ethics, and strict compliance with regulations, policies, and procedures.**
- **Promote open communication between management and rank and file employees.**

**Improve management capabilities to ensure coordination and compliance of the statewide maritime security program with all federal security requirements provided in 33 CFR 105.**

##### **Timeline:**

Year 1 - In accordance with Act 187 (19), 2 Harbor Police were certified as trainers for new electric guns. Harbor law enforcement personnel are equipped with knowledge, skills and abilities comparable to state sheriffs to increase professionalism and ensure the division's compliance with all federal requirements imposed by 33 CFR 105. Additionally, the DOTH has monitored changes in operations and re-classified existing and vacant positions to meet new manpower demands. All staff involved in project development and procurement will be trained in project management and contract management.

The 2017 and 2018 State Legislature consolidated the appropriations for motor vehicles, equipment, and special maintenance. Consolidation has proven to be efficient and effective with streamlining procurement processes.

Year 2 - Continue filling vacancies, reclassifying, re-describing, and reallocating positions to work towards maximizing management and personnel effectiveness and efficiency. Work towards improving the completion of construction on schedule.

Year 5 - KCT is the cornerstone of the Harbors Modernization Program and will be operating with Pasha, utilizing new facilities and transferring interisland cargo directly to Young Brothers at Pier

41, Honolulu Harbor. We will continue to coordinate and comply with federal security requirements provided in 33 CFR 105.

**Measures used to gauge effectiveness:** No assessment of violations or fines relating to non-compliance of 33 CFR 105. And more recently, minimize the increase in positions by reviewing and re-organizing positions to meet new program needs.



## **D. HIGHWAYS DIVISION**

The Highways Division oversees the State Highway System. It is comprised of more than 958.02 centerline miles of highways and roads that provide regional movement and link major sites, such as airports, harbors, industrial areas, major communities, and primary urban centers. Although it accounts for only 24% of the total centerline miles of roadways, the State Highway System carries approximately 55% of the total 10.9 billion annual vehicle miles traveled in Hawaii. By connecting regions with key locations and carrying high volumes of vehicles and freight, the State Highway System enables the efficient movement of commuters and goods statewide.

### **Statement of Goals**

The Highways Division's goal is to provide a safe, efficient, accessible, and sustainable inter-modal transportation system that ensures the mobility of people and goods and enhances and/or preserves economic prosperity and the quality of life.

### **Objectives and Policies**

In order to achieve this goal, the Highways Division is guided by goals and objectives developed in alignment with Federal and State plans, policies, and regulations, including the Federal Planning Factors, identified in the Code of Federal Regulations, and the Department's Hawaii Statewide Transportation Plan.

The goals and objectives of the Highways Division include, but are not limited to, the following:

#### **1. Mobility and Accessibility**

##### **• System Preservation**

- o Manage transportation assets and optimize investments.
- o Maintain a safe, efficient, and complete transportation system for the long-term.

The System Preservation program preserves, upgrades, and maintains the State Highway System to help ensure the functionality of the system, that it operates safely and efficiently, and meets federal requirements. In addition to CIP projects, a major component of the system

preservation program is the Special Maintenance Program, which identifies routine preservation projects with longer lifespans on each island and provides dedicated funds to implement them. This supplies approximately \$35-65 million per year to be used for state projects or as the 20% match for federal aid projects. Initiatives completed under the System Preservation Program include pavement preservation; pavement resurfacing, rehabilitation, and reconstruction; bridge replacement, rehabilitation, and/or seismic retrofit; drainage improvements; erosion control; guardrail replacement; and street light pole replacement.

**Oahu Highways, Culvert Remediation at Various Locations on Oahu, Phase 2:** The scope of work for this project includes rehabilitation of pipe culverts using trenchless technology and debris removal; and embankment slope improvements.

**Timeline:** Construction Notice-to-Proceed was issued on January 25, 2019, with estimated completion date of March 11, 2020.

**Measures used to gauge effectiveness:** Improved safety and health of the natural environment.

**Oahu Highways, Pali Highway Resurfacing, Vineyard Boulevard to Waokanaka Street:** This project includes cold planing, resurfacing, pavement reconstruction of weakened areas, installation of traffic loop detectors, replacement of guardrails and end treatments, bridge railing and end post upgrades, replacement of traffic signals, sidewalk repairs, installation of signs and pavement markings.

**Timeline:** Construction to be advertised in the winter of 2020.

**Measures used to gauge effectiveness:** Improved roadway ride-ability without recurring potholes and loose gravel from the unraveling of pavement. Increased visibility from improved roadway markings.

**Hawaii Highways, Pavement Marking Repairs and Milled Rumble Strip Installation at Various Locations, Island of Hawaii:** This 12-month contract extension includes pavement marking repairs and rumble strip installation on the Island of Hawaii on an as-needed basis.

**Timeline:** This 12-month contract was awarded on June 4, 2018, and has been extended for an additional 12 months.

**Measures used to gauge effectiveness:** Increased visibility from improved roadway markings, and reduced number of cross-over incidents.

**Maui Highways, Hana Highway Improvements, Phase 2C, Huelo to Hana:** This project includes roadway, roadside, and drainage improvements along Hana Highway, Route 360, between mile post 8.1 and 21.5; replacing and installing new metal guardrail and end treatments; installing new soil nail retaining walls; repaving of asphalt concrete pavement; replacing and installing new pavement markings; replacing and installing new signing; installing new concrete drainage outlet structure; Installing new grated drain inlets, storm drain manholes, drain pipe/culverts; installing new concrete rubble masonry wall; removing existing earth berms.

**Timeline:** Construction Notice-to-Proceed was issued September 11, 2018 with an estimated construction completion date of February 2020.

**Measures used to gauge effectiveness:** Reduced maintenance costs, and improved safety along this stretch of Hana Highways.

**Maui Highways, Hana Highway Resurfacing, Ho'okipa Park to Kaupakalua Road:** This project consists of pavement resurfacing and reconstruction; installing pavement markings and rumble strips; installing, upgrading and adjusting guardrail, end terminals, and posts; applying longitudinal joint stabilizer; and other related incidental work.

**Timeline:** Notice-to-Proceed was issued February 19, 2019, with anticipated completion in the winter of 2019.

**Measures used to gauge effectiveness:** Improved safety and roadway ride-ability without recurring potholes and loose gravel from the unraveling of the pavement.

**Kauai Highways, Maalo Road Resurfacing, Mile Post 1.0 to Mile Post 2.0:** This project includes pavement resurfacing and reconstruction; replacing pavement markers, traffic signs and milled rumble strips;

dressings of shoulders; and other related incidental work.

**Timeline:** Bids were opened on May 2, 2019. Award is anticipated shortly. Construction is estimated to start in January 2020.

**Measures used to gauge effectiveness:** Improved roadway ride-ability without recurring potholes and loose gravel from the unraveling of the pavement. Increase visibility from improved roadway markings.

**Kauai Highways, Kuhio Highway Slope Stabilization in the Vicinity of Kalihiwai Bridge:** This project involves the clearing of albizia trees, removal of loose rocks, and installation of rock anchors in order to stabilize this slope and maintain connectivity to the north side of Kauai, as Kuhio Highway is the only facility providing this access.

**Timeline:** Construction was advertised on September 25, 2019, with bid opening held on October 31, 2019.

**Measures used to gauge effectiveness:** Improved safety and rockfall reduction along this stretch of Kuhio Highway.

**Kauai Highways, Kuhio Highway Replacement and Strengthening of Wainiha Bridges:** This project will replace Wainiha Bridges Nos. 1, 2, & 3 with structures that meet current bridge design standards. One lane width bridges will be maintained to preserve historical/cultural aspects of the highway.

**Timeline:** Construction is to be advertised and bid this fall/winter, with an estimated 19-month construction duration.

**Measures used to gauge effectiveness:** Improved safety by meeting current design standards for structures.

- **System Efficiency Management and Operations**

Improve capacity and efficiency, and reduce congestion within the existing transportation system for long term benefit.

System Efficiency Management and Operations includes the Highway Division's capacity and congestion programs. The Capacity Program provides new and/or additional capacity for all modes of transportation. The process begins with



the identification and prioritization of capacity needs in the Long-Range Land Transportation Plans. Initiatives completed under the Capacity Program include widening existing highways and constructing new highways, sidewalks, bike lanes, and shared use paths.

The Congestion Program provides infrastructure, operations, improvements, and technology to optimize traffic flow, reduce travel times, and address recurring and non-recurring events/incidents that cause congestion.

Initiatives completed under the Congestion Program include Intelligent Transportation Systems (ITS) which include the freeway management system and Freeway Service Patrol and intersection operations improvements, traffic signal upgrades, and traffic signal optimization.

**Oahu Highways, Freeway Management System: Freeway Management System:**

Continuing development and deployment of a Freeway Management System (FMS) will maximize efficiency and improve safety along our freeways by using intelligent transportation systems technologies. The FMS includes the deployment of CCTV cameras, vehicle detectors, dynamic message signs, dissemination of traveler information, Freeway Service Patrols (FSP), Traffic Operation Center enhancement, and other traffic management strategies.

**Timeline:**

The popular FSP program is currently in its 11<sup>th</sup> year of operation. The current contract is in its third year of a three-year term. A project to add new cameras and a Dynamic Message sign on the H-1 Freeway between Ewa and Makakilo is under construction. **Measures used to gauge**

**effectiveness:** Decreased incidences of secondary crashes due to FSP's removal of disabled vehicles from travel lanes and subsequent removal from the freeway right-of-way. Improved Level-of-Service and traffic flow by helping the motoring public to plan trips through traveler information. Improved freeway traffic flow by managing traffic incidents.

**Hawaii Highways, Keaau-Pahoa Road Intersection**

**Improvements at Ainaloa Boulevard:** This project will



provide safety and operational improvements at the intersection of Ainaloa Boulevard and Keaau-Pahoa Road, including installation of a compact roundabout with a central island, restriping, signage, access control, and bus pullouts and other multimodal improvements.

**Timeline:** Construction is to be advertised this fall/winter, with an estimated 9-month construction duration.

**Measures used to gauge effectiveness:** Reduced number of serious or fatal accidents due to the construction of roundabouts, improved Level-of-Service for motorists traveling through this intersection, with reduced fuel consumption and less degradation to the environment.

**Kauai Highways, Kuhio Highway, Short-Term Improvements, South Leho Drive to Aleka Loop:**

This project will add an additional southbound lane along Kuhio Highway from Kuamoo Road to the Temporary Bypass Road, providing additional capacity in this congested segment of Kuhio Highway.

**Timeline:** Bid opening is pending resolution of a bid protest. Award to follow.

**Measures used to gauge effectiveness:** Improved traffic flow with reduced delays, reduced fuel consumption, and less degradation to the environment.

• **Transportation Access Mobility and Modal Integration**

- Provide appropriate and reliable transportation access options statewide to all users.
- Ensure transportation investments in programs and prioritization processes are balanced (across modes and demographics, i.e. serves Environmental Justice populations.)
- Provide a multimodal transportation system of motorized and non-motorized options.
- Promote efficient travel between modes by creating connections and removing barriers.
- Promote safe connections between modal alternatives.

Transportation Access Mobility guides development of a travel way that is balanced and provides

transportation options for all users. Modal integration provides connectivity between modes and safety for the various modes within the travel way.

Transportation Access Mobility is addressed by the HDOT's Title VI and Environmental Justice Program, which covers all HDOT plans, programs, and projects. As a recipient of federal financial assistance, the HDOT is required to comply with federal non-discrimination laws and regulations.

Both Transportation Access Mobility and Modal Integration are integrated into plans, programs, and projects by the consideration of the Highways Division's Complete Streets policy. The policy and its principles guide and direct the Highways Division in providing safe mobility for all users, including bicyclists, pedestrians, transit riders, movers of freight, and motorists, appropriate to the function and context of the transportation facility.

In addition, Section 264-18 of the Hawaii Revised Statutes (HRS) requires the Highways Division to report on bikeway projects and expenditures and to spend at least 2% of eligible federal funds on bikeway projects. In federal fiscal year 2018, over \$3.6 million in federal funds (and over \$4.3 million, total) was obligated for projects providing bike facilities.

**Oahu Highways, Leeward Bikeway, Philippine Sea Road to Waipahu Depot Street:** The Leeward Bikeway will provide an asphalt concrete bike path from Philippine Sea Road to Waipahu Depot Street.

**Timeline:** Project was advertised for construction on October 10, 2019, with bid opening scheduled for November 14, 2019.

**Measures used to gauge effectiveness:** Improved safety for bicyclists traversing this area.

**Oahu Highways, Kalaniana'ole Highway Resurfacing, Poalima Street to Vicinity of Makai Pier:** This project includes cold planing, resurfacing, pavement reconstruction of weakened areas, installation of signs and pavement markings, median improvements, left turning lanes, shelter lanes, bus pullouts, sidewalks, equestrian paths, center left-turn lanes, bicycle

improvements, relocation and reconstruction of existing utilities affected by the highway improvements, retaining walls, upgrade of highway lighting system to LED shielded lights, landscaping, traffic signal improvements, pedestrian warning light at Moole Street intersection, Inoaole Stream Bridge Replacement.

**Timeline:** Construction to be advertised in the spring of 2020.

**Measures used to gauge effectiveness:** Improved safety for bicyclists traversing this area, improved roadway ride-ability without recurring potholes and loose gravel from the unraveling of pavement, and increased visibility from improved roadway markings and lighting.

## 2. Safety

- **Maintain a safe transportation system for all land transportation modes.**
- **Improve safety of the community through connectivity of the transportation infrastructure.**

The Safety Program supports Hawaii's roadway users arriving safely at their destinations by collecting data to identify areas characterized with high accident occurrences; implementing both infrastructure improvements and non-infrastructure education and public outreach programs; maintaining the integrity of roadway features like embankments, slopes, retaining walls, pavement, and bridges; and installing and upgrading roadway features such as guardrails to reduce injuries and increase survivability during crashes. Initiatives completed under the Safety Program include various projects that fall under the Highway Safety Improvement Program, rockfall and slope stabilization, guardrail and shoulder improvements, and highway shoreline protection.

### **Oahu Highways, Interstate Route H-1 Safety**

#### **Improvements, Palailai Interchange to Waiawa Overpass:**

This project includes shoulder rehabilitation, the upgrading of guardrail endposts, drainage improvements, and Makakilo on-ramp improvements.

**Timeline:** Construction contract to be readvertised in Spring, 2020.

**Measures used to gauge effectiveness:** Improved safety and accident reduction along this stretch of H-1.

**Oahu Highways, Kamehameha Highway Safety Improvements, Waikane Valley Road to Vicinity of Kahekili Highway:**

This project involves low-cost safety installations, including high friction surface treatments, milled rumble strips, paving, and pavement markings.

**Timeline:** Construction started on April 26, 2019, with current estimated completion date of November 29, 2019.

**Measures used to gauge effectiveness:** Improved safety and accident reduction along this stretch.

**Hawaii Highways, Hawaii Belt Road Guardrail and Shoulder Improvements, Vicinity of Kalopa Bridge and Kaumoali Bridge to East Paauilo Bridge:** This project consists of paving shoulders, installing new striping, markers, and milled rumble strips, installing new signs, installing and adjusting guardrails, and installing and upgrading bridge railings.

**Timeline:** Construction was started on May 10, 2019 and is approximately 20% complete.

**Measures used to gauge effectiveness:** Improved safety and accident reduction along this stretch of Hawaii Belt Road.

**Maui Highways, Piilani Highway Improvements, Vicinity of Kulanihako Street:** This project involves the installation of traffic signals, pavement markings and striping, signage, radar speed displays, and other safety improvements along Piilani Highway at the intersection of Kulanihako Street in Kihei.

**Timeline:** Construction award was issued July 19, 2018. Construction can proceed once Kihei High School offsite work is completed.

**Measures used to gauge effectiveness:** Improved safety and accident reduction at this intersection.

**Kauai Highways, Guardrail and Shoulder Improvements at Various Locations, Part 5:** This project includes the upgrade of guardrail end terminals, to bring them into

compliance with Federal Highway Administration policy requirements.

**Timeline:** Construction bids were opened on September 19, 2019, with award to follow.

**Measures used to gauge effectiveness:** Improved safety for motorists on Kauai.

**Click It or Ticket:** The DOT also continued numerous traffic safety countermeasure activities this fiscal year. Through its "Click It Or Ticket" (CIOT) campaign, Hawaii has one of the highest seatbelt usage rates nationwide at 97.9 percent. The success of the CIOT campaign can be attributed to the hard work of many highway safety partners, which include the four county police departments, the Department of Health, the Department of Education, the Federal Highway Administration, the Federal Motor Carrier Safety Association, local fire departments, religious leaders, military bases, and others, along with the DOT. Enforcement was supported by a strong media campaign that utilized television, radio, and movie theatres advertising aimed at key demographics, along with variable highway message boards reminding motorists to buckle up.

**Timeline:** Continuous

**Measures used to gauge effectiveness:** Improved safety through increased compliance to state and federal seat belt statutes.

**Impaired Driving:** To combat the problem of drunk driving, DOT, in collaboration with the four county police departments, continued the "Drive Sober or Get Pulled Over" public safety campaign to increase the frequency of sobriety checkpoints to a minimum of one every week, all year-round. A strong media campaign using television, radio and movie theater ads also help to reach key demographics.

As with other states, driving while under the influence of drugs is a growing concern in Hawaii, whether it is prescription or illegal substances. We have worked diligently to expand Hawaii's Drug Recognition Expert (DRE) program which helps identify drivers who are impaired by substances other than alcohol. Currently, Hawaii has 49 certified DREs and 29 certified DRE instructors.

**Timeline:** Continuous



**Measures used to gauge effectiveness:** Improved safety through education and enforcement of impaired driving statutes. Also, tracking impaired driving fatality data.

**Walk Wise Hawaii:** Walk Wise Hawaii (WWH), a pedestrian safety education program administered by DOT, continued its partnerships with various State and County agencies, private businesses, and community organizations to sponsor an annual education campaign to inform citizens about safe behaviors and laws for pedestrians and drivers. The campaign includes outreach to senior groups, rotary clubs, neighborhood boards, hotels, and other community groups and events. Multi-language brochures, movie theatre ads, and bus ads have also been included in WWH's outreach. Additionally, the WWH program also created Pedestrian Safety Month which happens every August. During the month, we try to have at least one pedestrian safety activity each day to educate the public and generate media coverage.

**Timeline:** Continuous

**Measures used to gauge effectiveness:** Improved pedestrian safety through education and information. Tracking pedestrian fatality and injury data.

**Safe Routes to School:** The Safe Routes to School (SRTS) program was created in 2005 and is a Federally funded program administered by the DOT. It is designed to encourage elementary and middle school aged children to be physically active; make walking and bicycling to school a safe, routine activity; and facilitate planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. SRTS infrastructure and non-infrastructure projects are currently ongoing. One non-infrastructure project was funded in 2018 during the fifth round of Call for Applications to award SRTS federal funds. SRTS informational workshops were offered statewide from August to October 2019 to inform the public about the SRTS program and requirements of SRTS federal grants. Following these workshops, the sixth round of Call for Applications to award remaining SRTS federal funds obtained under SAFETEA-LU is anticipated to be issued

in 2020. In addition, the State DOT manages State funds in the SRTS program special fund that was established by Act 317, SLH 2012. In accordance with Chapter 19-109 of the Hawaii Administrative Rules, funds from the SRTS program special fund are distributed to counties annually to support county-level SRTS programs.

**Timeline:** Continuous

**Measures used to gauge effectiveness:** Improved health of children by encouraging walking and bicycling to school. Improved traffic flow by reducing vehicle trips to schools.

### 3. Security

- **Plan, maintain, and operate a transportation system that supports evacuation, response, and recovery for incidents.**
- **Improve the resiliency of the State through the transportation system.**

Security is an especially key issue because the majority of belt roads in Hawaii are the only access to many communities. Security is maintained through coordination and implementation of the Highways Division programs, Systems Preservation, Safety, Capacity, and Congestion (discussed earlier). The maintenance and improvement to these belt roads, along with the other state roads, provides for security in terms of sufficient capacity and traffic flow to serve for evacuation, emergency response, recovery, resiliency, and other security needs if an incident occurs.

Additionally, as part of its operations, the Highways Division has crews and equipment available to respond to localized incidents and is part of the civil defense network of government agencies that coordinate and dispatch crews and equipment, as needed to proactively prepare for and respond to incidents of statewide or countywide significance.

### 4. Environment and Quality of Life

- **Meet the relevant environmental regulations and standards set by Federal, State, and County/City agencies. Maintain collaborative working relationships with agencies and comply with goals of their relevant plans and policies.**

- **Promote the use of sustainable practices in designing, constructing, operating, and maintaining transportation facilities and programs.**
- **Promote long term resiliency relative to all hazards mitigation, namely global climate change with considerations to reducing contributions to climate change from transportation facilities, and reducing the future impacts of climate change on the transportation infrastructure.**

Environment and Sustainability objectives are incorporated into the Highways Division's plans, programs, and projects through compliance with federal and state environmental requirements, such as 23 CFR 771 (the National Environmental Policy Act [NEPA]), Section 4(f) of the Department of Transportation (DOT) Act of 1966, HRS 343 (the Hawaii Environmental Policy Act, Section 106 of the National Historic Preservation Act, HRS 6E on Historic Preservation, Section 7 of the Endangered Species Act. In addition, the Highways Division has specific environmental programs for maintenance, statewide storm water management, and waste management to protect and enhance the environment as well as to meet federal and state requirements.

**Environmental Management System:** An Environmental Management System (EMS) has been developed and implemented, especially for all maintenance activities. The EMS follows EPA's National Environmental Investigative Center (NEIC) EMS model, which incorporates the ISO 14001 EMS standards. The coverage of the EMS includes Environmental Policy; Organization; Personnel and Oversight of EMS; Accountability and Responsibility; Environmental Requirements, Assessment, Prevention and Control; Environmental Incident and Noncompliance Investigations; Environmental Training, Awareness, and Competence; Environmental Planning and Decision-Making; Maintenance of Records and Documentation; Pollution Prevention and Best Management Practices Program; Continuing Program Evaluation and Improvement; and Public Involvement and Community Outreach.

**Timeline:** Ongoing

**Measures used to gauge effectiveness:** Continuing to meet NEIC standards.

**Oahu Highways, Storm Water Best Management Practices Improvements at Maintenance Baseyards on Oahu:**

DOT Highways has prepared a Storm Water Pollution Control Plan (SWPCP) for baseyards with industrial activities on Neighbor Islands and baseyards on Oahu, as applicable.

**Timeline:** Continuous

**Measures used to gauge effectiveness:** Independent third-party inspections of baseyards statewide are being conducted by a trained individual on a periodic basis.

**Oahu Highways, Slope Improvements for Erosion Control at Various Sites on Oahu, Phase 8:** Project involves clearing vegetation, site grading, demolition and removal of an existing concrete ditch, installation of various drainage facilities, installation and maintenance of permanent best management practices and erosion control.

**Timeline:** Construction started on January 14, 2019, with estimated completion date of January 2020.

**Measures used to gauge effectiveness:** Minimal signs of additional erosion at this site.

**Oahu Highways, Miscellaneous Permanent Best Management Practices, Phase 2B:** The project includes construction of an in-line storm water filtration system, access road construction, planting, mulching, maintaining vegetation during plant establishment, erosion control BMPs, providing temporary traffic controls, and 12 months maintenance of the storm water filtration system.

**Timeline:** Construction started on March 22, 2019, with estimated completion date of August 2020.

**Measures used to gauge effectiveness:** Minimal signs of additional erosion at this site.

**5. Economy and Growth**

- **Promote the expansion and diversification of Hawaii's economy through the efficient and effective use of transportation facilities including movement of people, goods, and services in a safe, energy efficient, and environmentally sound manner.**



Economy and Growth objectives are supported by the Highways Division programs—Capacity, Congestion, System Preservation, and Safety (discussed earlier). Addressing Hawaii's congestion and capacity needs establishes efficient connections regionally and between harbors, airports, industrial areas, major communities, and primary urban centers and addressing safety and system preservation needs provides a safe and functioning transportation system for roadway users. Therefore, the system enables commuter and freight movements, which are essential to the economic vitality of our state.

## **6. Energy**

- **Actively pursue actions in transportation which help to achieve the State Clean Energy Goal of 40% renewable energy by 2030; and use integrated action plans from DBEDT's Lead by Example Energy Initiatives with priority transportation actions that would support the Hawaii Clean Energy Initiative (HCEI).**
- **Identify ways to increase energy efficiency by 30% at transportation facilities and identify projects and programs for increased efficiency of energy in support of the HCEI, Leadership in Energy & Environmental Design (LEED), and other green initiatives for more efficient use of energy.**

Energy objectives are supported in coordination and implementation of our programs that support operations, such as congestion, capacity, and preservation. The congestion program monitors and reduces travel times (and therefore fuel consumption and greenhouse gas emissions) through optimizing traffic flow and addressing events/incidents that cause congestion. Transportation Access Mobility and Modal Integration policies, such as the Highways Division's Complete Streets policy, also decrease the demand for fossil fuels by promoting non-motorized travel and providing mobility for non-motorized modes.

**Implementing Energy Saving Measures:** All new computer equipment will be energy star compliant. The Highways Division has installed PV systems at their Hawaii, Maui,



and Kauai District Offices, as well as the Keanae Baseyard facility on Maui.

The Highways Division entered into an energy savings performance contract in 2015, in which an energy savings of approximately \$4 million in operating costs is anticipated per year for our Division. The contract includes conversion of our existing facility lighting to LED statewide, conversion of our existing highway lighting for Oahu and Maui Districts to LEDs, installation of PV systems statewide, and air conditioning replacements and controls statewide.

DOT has also worked in the past with the County of Hawaii and Kauai Island Utility Cooperative (KIUC) to convert our highway lighting to LEDs on those islands.

**Timeline:** Ongoing.

**Measures used to gauge effectiveness:** Cost savings achieved through the above-mentioned energy saving measures.

## 7. **Funding**

- Obtain sufficient and specific transportation funding. The Highways Division receives its funding from both Federal and State sources, with federal funds making up about two fifths of its funding. Federal Highway Trust Fund revenues come from motor vehicle fuel taxes, sales taxes for heavy trucks and trailers, tire taxes, and heavy truck use taxes. The Federal Highway Trust Fund allocates revenue to states through the Federal-aid highway program by formula apportionment. Fixing America's Surface Transportation (FAST) Act: FAST authorized the federal surface transportation programs for highways, highway safety, and transit for 5 years from 2016 to 2020. This highway act provided federal funds of approximately \$171 million to \$187 million per year for Hawaii. However annual appropriations bills generally limit the funds that can actually be obligated to approximately 90% to 94% of the apportioned funds. The major core programs include: National Highway Performance Program, Surface Transportation Block Grant Program, Highway Safety Improvement Program, Railway-Highway Crossings Program, Congestion Mitigation & Air Quality Improvement Program, Metropolitan Planning, and the National Highway Freight Program. To be eligible to receive funds from the Federal Highway Trust Fund, programs and projects must be included in the Highways Division's statewide long-range land transportation plan

and in Hawaii's Statewide Transportation Improvement Program (STIP). The STIP is basically a four-year Federal approved budget for the Division.

FAST continues a performance driven approach established under the previous MAP-21 Authorization Act that requires States to develop and implement performance measure strategies. Failure to comply with these new federal requirements will result in a Federal Participation rate of 65% for eligible projects, instead of the 90% used for interstate projects, or 80% for other non-interstate projects, and reduced flexibility in the use of federal funds.

Since the FAST Act ends in Federal Fiscal Year 2020, on July 29, 2019, the Senate Environment & Public Works Committee introduced a proposed reauthorization legislation that may increase investment in the core federal highway programs. The proposed "America's Transportation Infrastructure Act of 2019" would provide funding from FY 2021 through FY 2025 if it passes in its current form. The State Highway Fund is used to fund land transportation projects and programs in the State of Hawaii. The four primary revenue fees for the Highway Fund are the gas tax, rental car surcharge tax, vehicle weight tax, and vehicle registration fee. The State Highway Funds used by the Highways Division fall under the Capital Improvement Program, Special Maintenance Program, and Routine Maintenance Program.

As Hawaii's vehicle fleet consumes less fuel by transitioning to more fuel efficient and alternative fuel vehicles (consistent with state energy objectives), state gas tax revenues are declining. The DOT Highways Division was awarded a \$3.988 million grant from the Federal Highway Administration (FHWA) and in 2018, started implementation of a 3-year statewide mileage-based user fee demonstration project to study the option of a mileage-based road usage charge as a potential alternative source of revenue to the gas tax.

## **8. Leadership**

- **Increase the level of accountability of personnel both on and off the job.**
- **Provide increased opportunities for training and sufficient equipment allowing personnel to be successful.**
- **Implement policies that demonstrate commitment to transparency, ethics, and strict compliance with regulations, policies, and procedures.**

- **Promote open communication between management and rank and file employees.**

**Achieve full compliance with procurement training requirements for staff delegated with procurement authority to approve, review, conduct or participate in procurement actions.**

**Timeline:** Ongoing. Employees with delegated authority to approve, review, conduct or participate in procurement actions have either attended or continue to attend core mandatory and refresher courses as such courses become available.

**Measures used to gauge effectiveness:** 100% attendance to mandatory courses; no procurement violations.