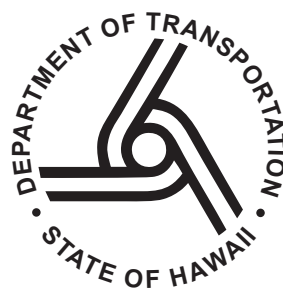
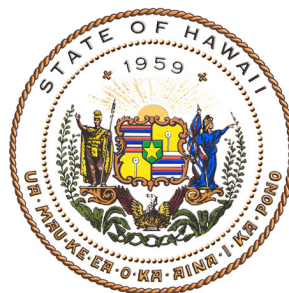




sustainable**HNL**

Annual Report for CY2019

Reporting sustainability progress at
Daniel K. Inouye International Airport



Published 2021



A MESSAGE FROM THE AIRPORT MANAGER

Aloha!

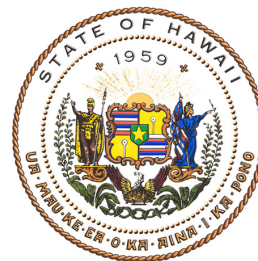
The Daniel K. Inouye International Airport sustainability initiative, known as Sustainable HNL (sHNL) is led by the Oahu Airports District Manager and supported by the diverse and dynamic HNL Sustainability Committee. The Committee accomplished several noteworthy sustainability measures in 2019:

- Reduced airport-wide energy consumption by 4% per passenger (measured in kWh) from 2018. From 2015 to 2019, the airport reduced electricity costs by 53%, which have saved millions of dollars on electricity bills.
- Savings primarily due to an energy savings performance contract with Johnson Controls Inc, using lighting upgrades, solar panels, HVAC upgrades, and building automation.
 - Phase 2 of the Energy Savings Performance Contract started in 2018, with more solar panels and lighting upgrades expected to save millions of dollars for the airport.
- Compiled a greenhouse gas emissions inventory for HNL, and received Airport Carbon Accreditation from the Airports Council International.
- Achieved Level 2 Accreditation (Reduction) by reducing the emissions from airport controlled operations within the operational boundary of the airport by 6% from 2018.
- We held four airport cleanup events; two FOD Walks and two Recycle Drives. The FOD Walk event sends volunteers onto the Airport Operations Area to pickup debris and contribute to airport safety. After the cleanup they receive donated food and sponsored raffle prizes.

We have been making big and small improvements to the airport with the goal of sustainability guiding the decisions. We want to be able to sustain our way of doing business without compromising the ability of future generations to conduct airport business.

Sincerely,

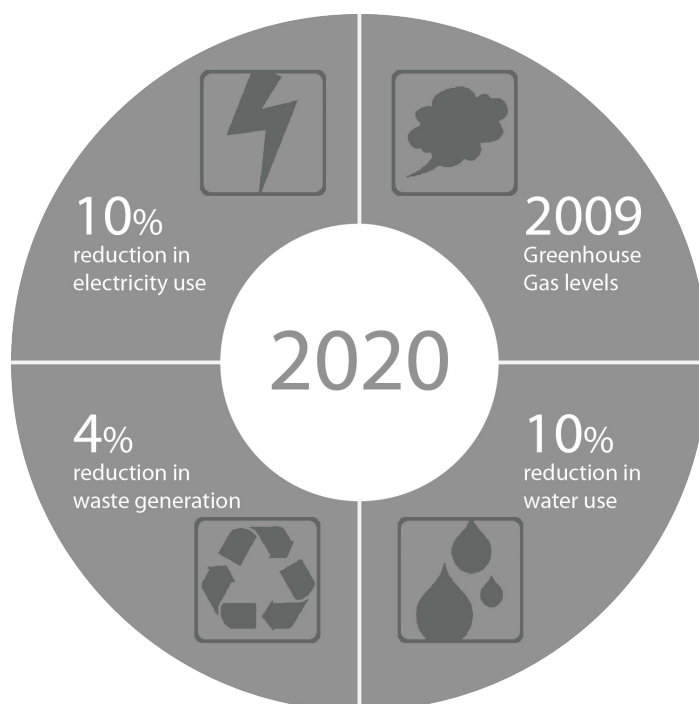
Rosemary Neilson-Nenezich
Oahu District Airports Acting Manager
State of Hawai'i Department of Transportation



SUSTAINABILITY GOALS AND TARGETS

GOALS

✈ HNL is guided by the Sustainable Management Plan which set goals for 4 priority categories.



TARGETS

✈ The goals have specific targets for 2020 and are tracked on an annual basis.

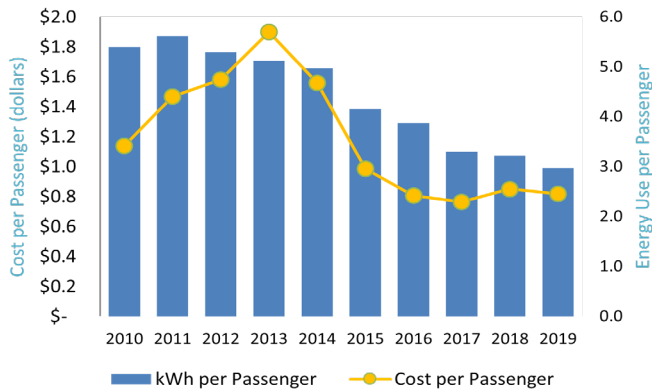
CATEGORY	INDICATOR	BASE LINE	2020 TARGET	ANNUAL	PROGRESS
ENERGY	kWh / passenger	5.0	4.5	3.0	Exceeding
CARBON	lbs. CO ² / passenger	10.6	9.5	4.7	Exceeding
WATER	gal. / passenger	22.0	19.8	16.7	Exceeding
WASTE	waste diversion rate	0.9%	4%	1.0%	In Progress

SUSTAINABILITY HIGHLIGHTS



ENERGY

Energy Consumption and Cost per Passenger
(2009-2019)

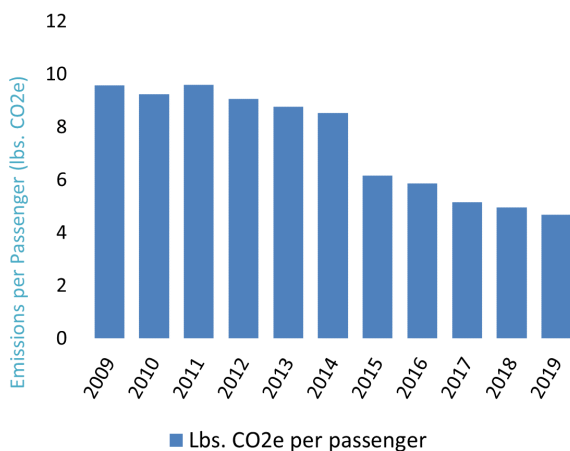


- ✈ The chart to the left overlaps energy consumption with cost for comparison. It shows how energy use (**blue**) and energy costs (**yellow**) have decreased since 2014.
- ✈ Decreased energy consumption by **4%** from 2018 due to various **renewable energy** projects completed.
- ✈ Thousands of on-site solar PV panels generated **8%** of HNLs electricity needs in 2019.
- ✈ Energy bills went down by **3%** from 2018 as a result of strong efforts by DOTA to reduce energy.
- ✈ More solar panel projects are now underway and expected to be completed in 2020.



CARBON

Carbon Emissions from Airport Owned Sources & Electricity (2009-2019)

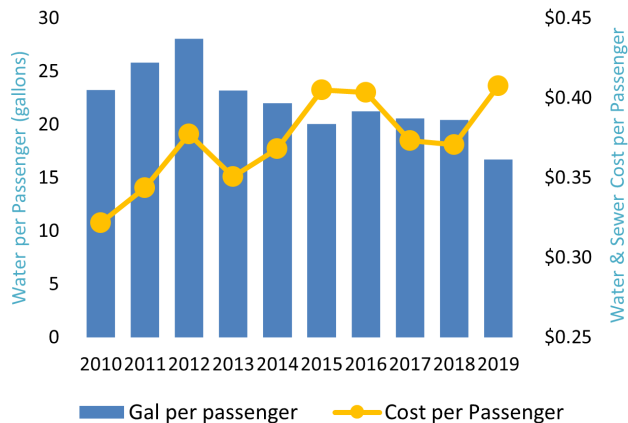


- ✈ Reduced airport-generated carbon emissions by **6%** from 2018 due to energy savings projects.
- ✈ Received worldwide recognition via **Airport Carbon Accreditation** renewing at Level 2. A third party verified process was undertaken to document efforts to account for and reduce carbon dioxide emissions from airport managed operations. Launched by Airports Council International, the program info can be found at airportco2.org.



WATER

Water Consumption and Cost per Passenger
(2010-2019)



- ✈ The chart on the left overlaps water consumption and cost for comparison. It shows how water costs (**yellow**) have gone down because water use (**blue**) was reduced due to projects completed in 2018.
- ✈ Water use per passenger is down by **18%** from 2018. Water and Sewer Costs per passenger have increased however. The bills are at all time highs.
- ✈ Efforts to reduce water consumption by identifying leaks helped to reduce overall water usage.



WASTE



- ✈ Coordinated two Airport-Wide Foreign Object Debris (**FOD**) **Walks**, in the Spring and Fall.
- ✈ **1,440 lbs.** of trash on the AOA cleaned up
- ✈ **351** total volunteers
- ✈ Coordinated two bulky item **Recycling Drive** in Spring and Fall for tenants and state offices for a **95%** diversion from landfill:
 - ✈ E-Waste **13,000 lbs.**
 - ✈ Scrap Metal **350 Cubic Yards**
 - ✈ Incinerator **50 Cubic Yards**
- ✈ The airport recycled about **720 cubic yards** of aluminum cans and plastic bottles from terminals and concourses in 2019.

SUSTAINABILITY HIGHLIGHTS



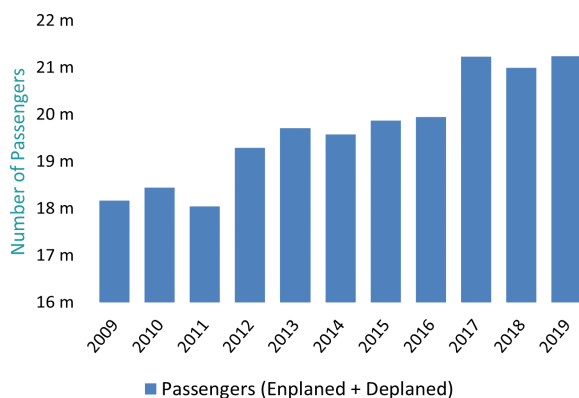
STORM WATER



- ✈ Staff, tenants, consultants and contractors participated in the annual Department of Transportation storm water training event, the **Protect Our Water Conference**.
- ✈ Training sessions focused on construction BMPs, regulation, technologies and techniques for reducing the **downstream impacts** of storm water in the environment.



DAY-TO-DAY OPERATIONS

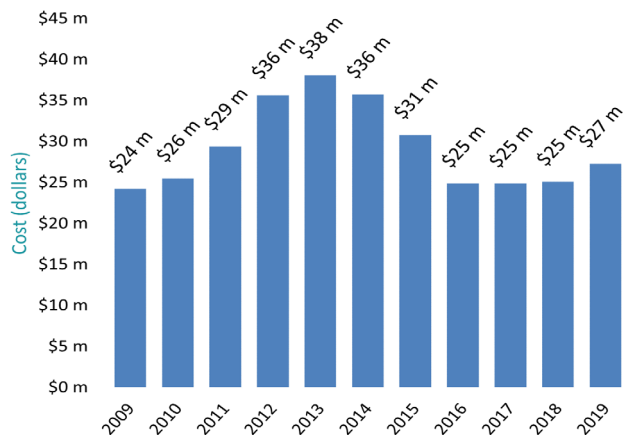


- ✈ Passengers increased by **1%** from 2018 and **17%** from 2009.
- ✈ Cargo and mail weight landed stayed the same since 2018 and is up **72%** since 2009.
- ✈ The general trend is that air transportation has been on an upward trend since 2009.

SUSTAINABILITY HIGHLIGHTS



FINANCIAL SUSTAINABILITY



- Despite decreasing the energy and water usage, utilities costs were higher than 2018.
- Half way through Phase 2 of the **Energy Savings Performance Contract**.
- Guarantees **\$65.5** million dollars in savings over the remaining 15 years of the contract.
- Will complete in 2020.
- Includes rooftop **solar** canopies on parking garages and apron **lighting** upgrades.



DESIGN AND CONSTRUCTION



- **\$2.3** Billion Dollar Airport Modernization; Sustainability highlights:
- Construction in progress on the 250,000 sq. ft. Mauka Concourse pursuing **LEED Silver** certification.
- Construction in progress on Consolidated Rental Car Facility pursuing **LEED Silver** certification.
- Continued **renovating restrooms**, including foam soap dispensers and sensed faucets.



GROUND TRANSPORTATION



- Discontinued using b20 biodiesel in inter-terminal buses but efforts are underway to study using electric shuttle buses.
- Continued to support electric vehicles with charging stations and preferred parking.

SUSTAINABILITY HIGHLIGHTS



CLIMATE RESILIENCY



- The Airport Modernization Program projects have taken the following steps to mitigate impacts of **climate change**:
 - All project components are being constructed in existing development areas of the airport.
 - Located more than **0.5** miles from the shoreline.
 - Located outside tsunami **evacuation zone**.
 - Located on ground surface elevations greater than **10 ft** above sea level.
- Installed **renewable energy** generation systems.



COMMUNITY



- **351 volunteers** total participated in the Airport Spring and Fall cleanup event '**FOD Walk**'.
- **22** Airport Tenants and State Airport offices participated in the Airport Spring and Fall cleanup event '**Recycling Drive**'.



FOOD AND BEVERAGE



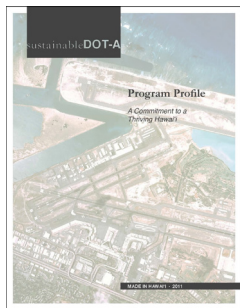
- Local ingredients, flavors and flair:
 - The Local - serving **Kona Brewing** Company beers, locally grown pineapples and locally caught **mahi mahi** fish tacos.
 - Makai Plantation – **Ahi** (locally caught yellowfin tuna), local greens for salads, hot dog with locally baked sweet bread buns, salads with **macadamia nuts**
 - Locally grown **chocolate, coffee & pineapple**.

RESOURCES

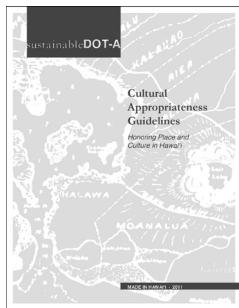
GUIDING DOCUMENTS



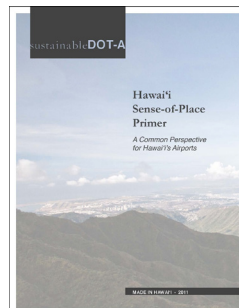
Sustainable
Management Plan



Sustainable DOT-A
Program Profile



Cultural
Appropriateness
Guidelines (CAG)



Hawai'i Sense-of-Place
Primer (HSPP)



Sustainable High
Performance
Guideline (SHPG)



REFERENCES

Sustainable HNL:

Sustainable DOT-Airports:

Federal Aviation Administration Sustainability Plans:

The Hawaii Aloha + Challenge:

Sustainable Hawaii Initiative:

Hawaii Clean Energy Initiative:

Hawaii Storm Water Airport Tenant Training Video:

<http://airports.hawaii.gov/hnl/airport-info/sustainablehnl/>

<http://tinyurl.com/susDOTA>

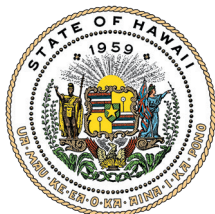
<https://www.faa.gov/airports/environmental/sustainability/>

<https://alohachallenge.hawaii.gov/>

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

<http://www.hawaiicleanenergyinitiative.org/>

<https://www.youtube.com/watch?v=YSE54E2cUIE>



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STATE OF HAWAII

2021

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