

sustainable HNL Annual Report for CY2020

Reporting sustainability progress at Daniel K. Inouye International Airport





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 2020:

- Reduced overall airport-wide energy consumption by 17% (measured in kWh) from 2019. From 2015 to 2020, 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 finished in 2020, 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 one airport cleanup event despite COVID Challenges. The Recycle Drive is sponsored by the airport in order to give tenants a free and easy way to dispose of large bulky items responsibly. The one day event cleared 200 cubic yards of waste from the airport property.

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

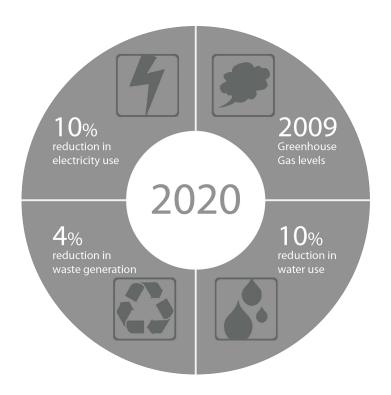




SUSTAINABILITY GOALS AND TARGETS

GOALS

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

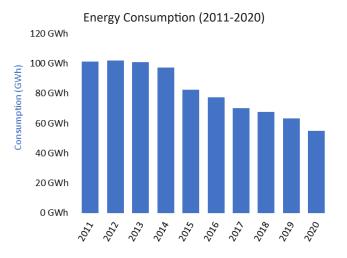


TARGETS

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	8.4	In Progress
CARBON	lbs. CO ² / passenger	10.6	9.5	13.3	In Progress
WATER	gal. / passenger	22.0	19.8	48.9	In Progress
WASTE	waste diversion rate	0.9%	4%	1.0%	In Progress

ENERGY

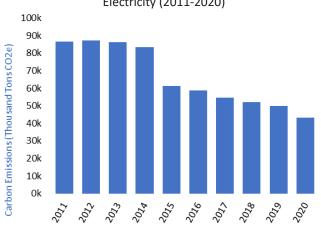


- The Airport decreased total energy consumption and cost by 17% from 2019 due to various renewable energy projects completed and COVID19 impacts.
- The chart to the left shows how energy consumption has decreased 39% since 2011.
- Thousands of on-site solar PV panels generated 16% of HNLs electricity needs in 2020.
- A one megawatt energy storage (battery) system came online to reduce spikes in energy usage. This helps reduce energy costs from demand charges.



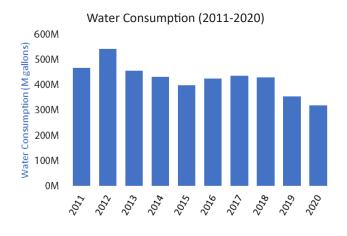
CARBON

Carbon Emissions from Airport Owned Sources & Electricity (2011-2020)



- Reduced overall airport-generated carbon emissions by 13% from 2019 due to energy savings projects and COVID19 impacts.
- Since 2011, airport-generated carbon emissions have decreased 50%.
- 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.





- Overall water use is down by 10% from 2019. Water and Sewer Costs have decreased as well. This is due in part to DOTA efforts finding and fixing water leaks and less passengers.
- The chart on the left shows water use has decreased 42% since 2011.





- Unfortunately due to COVID19, there was no large gatherings allowed and so there was no large FOD Walk.
 - However, volunteers still conducted small FOD Walks with the support of the airport providing trash bags and gloves.
- Coordinated one bulky item Recycling Drive in the Fall for tenants and state offices for a 95% diversion from landfill:
 - Scrap Metal 150 Cubic Yards
 - Incinerator 50 Cubic Yards
- The airport recycled about **200 cubic yards** of aluminum cans and plastic bottles from terminals and concourses in 2020. This number is down due to less passengers than 2019.



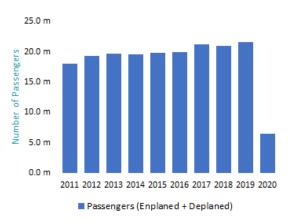
STORM WATER



- Staff, tenants, consultants and contractors participated in the first virtual edition of 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.



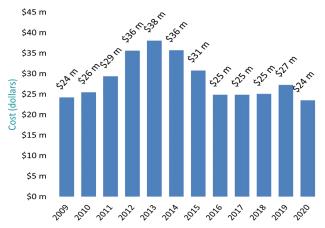
DAY-TO-DAY OPERATIONS



- Passengers decreased by **70%** from 2019 and **64%** from 2009. It was a rough year for airlines.
- Cargo and mail weight landed stayed the same since 2019 and is up 72% since 2009.
- The hope is that by 2022 passenger numbers will rebound to pre-pandemic levels.



FINANCIAL SUSTAINABILITY



- Utilities costs did go down, but were still a large cost burden.
- Completed Phase 2 of the Energy Savings Performance Contract.
 - Guarantees \$65.5 million dollars in savings over the remaining 15 years of the contract.
 - 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 sensored faucets.



GROUND TRANSPORTATION



- > Studying the use of electric shuttle buses as opposed to the current diesel vehicle fleet.
- Continued to support electric vehicles with charging stations and preferred parking.



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 on the roofs of the parking garages.



COMMUNITY



- To protect the traveling public, the DOT-A installed thermal scanners designed to screen incoming passengers at HNL to individually measure people's temperatures as they come off their planes.
- The airport very quickly deployed screening stations and staff to welcome passengers arriving, while safely screening them for COVID19 test proof. This was the first line of defense for stopping the spread via air travel.



FOOD AND BEVERAGE



- Unfortunately, many food places were closed to protect the health and safety of the traveling public. Once passenger numbers return to normal, the full range of food service providers will return.
- The gift stores stayed open, offering a variety of locally made items such as chocolate, and locally grown pineapple and coffee.

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





sustainable**DOT-A**

Created in partnership between the Department of Transportation-Airports Division and the KYA Design Group.

STATE OF HAWAI'I