Update on Sustainability

September 24, 2020





Long Beach Airport will develop a plan to lead the nation on sustainability for airports and work with the airlines serving LGB and other partners to become an incubator of clean technology in aviation, with goals of becoming a carbon neutral facility.

> Mayor Robert Garcia August 14, 2018



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Previous Update

- Gate Power and Air Conditioning
- On-Airport Parking
- Water Conservation Efforts
- Stormwater Pollution Prevention Plan
- Energy Reduction Efforts
- Community Noise
- Air Quality Implementation Plan (AQIP)



Impacts of COVID-19

- Unprecedented impact on the aviation industry:
 - Significant reduction in operations and passengers means significant reduction in revenue
 - Airports, airlines and airline manufacturers all severely impacted
 - Passenger traffic decreased 85-90%
- Recent increase in operations and passengers at LGB in August
- All projects are being evaluated amid budget cuts, but Sustainability is a priority
- LGB is committed to becoming a leader in Sustainability for airports



MOU with SCAQMD

- LGB entered into a voluntary MOU with South Coast Air Quality Management District (SCAQMD)
 - Significant reductions in NOx emissions needed
 - Airports in the region to implement clean air action plans for non-aircraft mobile sources
- Purpose of the MOU
 - Identify emission reduction benefits and how they will be quantified through the implementation of voluntary airport strategies outlined in the Airport's Air Quality Improvement Plan (AQIP)
 - Emission reduction benefits from specific measures in the AQIP will be used by SCAQMD to obtain California State Implementation Plan (SIP) credits
- Long Beach Airport AQIP Measure
 - Ground Support Equipment (GSE) NOx emission reductions



The Good Traveler Program

- Ability to voluntarily offset environmental impact of your travel
- Created by San Diego International Airport and managed by the nonprofit Rocky Mountain Institute
- Purchase of carbon offsets
 - Log into website and estimate your distance traveled
 - Offset all or a portion of your travel
- Money goes to projects that are certified to offset impacts from air or road travel





LEAVES NO TRACE

https://thegoodtraveler.org/how-it-works/projects/



Aeroplex Solar Project

- System Size:
 - 381 kW
 - 940 panels spanning over 55,000 sq. ft.
- Electricity Generation: 570 kWh generated annually
- Removes from the air annually:
 - 200 asthma-inducing particulates
 - 3,200+ lbs of NOx
 - 2,900+ lbs of sulfur dioxide
 - 1 million lbs of carbon dioxide emissions







Aeroplex Solar Project (cont.)

- The installation impact is equivalent to:
 - Eliminating 1.07 million car miles annually
 - Planting 563 acres of trees
 - Charging about 55 million smart phones







Electric Vehicle Purchases

- Replaced two older vehicles with the purchase of two electric Chevy Bolts
- AQIP initiative Airport-utilized Clean Fleet Policy





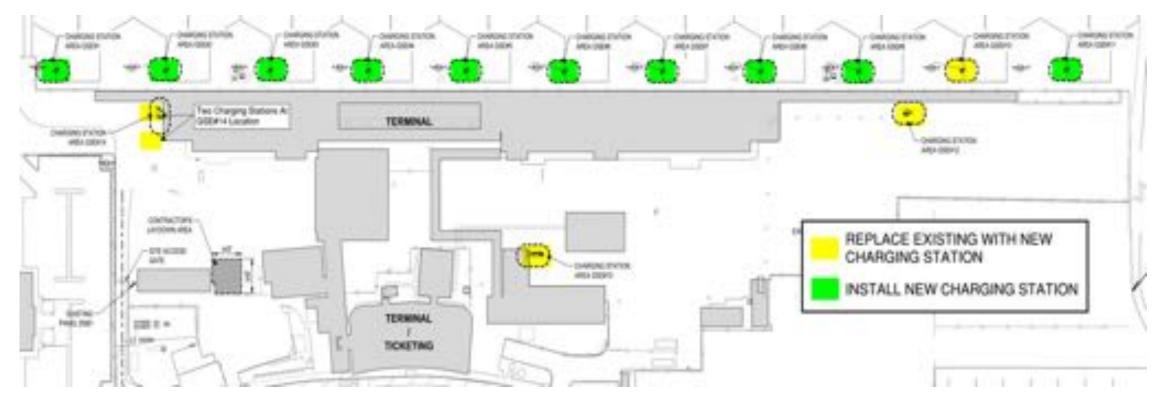
GSE Chargers Improvement Project

- Project Objective
 - Replacement of five existing electric GSE chargers
 - Existing units 20+ years old
 - High failure rates
 - Replacement parts are expensive and discontinued
 - High maintenance cost and inefficient
 - Installation of ten (10) new electric GSE chargers
 - 100% electrification at all eleven (11) commercial gates
 - Facilitate Airlines' GSE conversion to electric fleet and put LGB in a great position to achieve the aggressive targets for emission reductions outlined in the MOU





GSE Chargers Improvement Project





GSE Chargers Improvement Project

- Posichargers
 - 40kW
 - 500 A single plug, 250 A dual
 - BMID Control
 - Intelligent/Multi-Purpose Charging
 - Equalization of batteries
 - Charges both Lead-acid and Lithium at the same time
 - Less than 10W of power usage during idle
 - Great response from the airlines



Featured in the May/June Edition of Airport Improvement Magazine



Looking Ahead

- Collection of baseline sustainability data
 - Emissions
 - Waste Minimization and Recycling
 - Water
 - Electricity
 - Natural gas
- Preparing an RFP for the development of a Sustainability Action Plan
- Seeking Airport Carbon Accreditation (ACA)



Thank You





Questions?



