Airport Sustainability Planning

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The U.S. System of Airports

- **19,536** airports overall
- **14,400** airports designated as private-use
- **5,136** airports open to the public
- **3,330** existing airports in the National Plan of Integrated Airport Systems ("NPIAS")
- **530** airports certificated under Part 139 (commercial service by aircraft with 9 or more seats)
- **380** primary airports (scheduled commercial service with at least 10,000 annual enplanements)
Airport Improvement Program

• The FAA’s Airport Improvement Program (AIP) provides grants to public agencies for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems (NPIAS)
Airport Sustainability Planning - Overview

• FAA began a pilot program in 2011

• **Goal**: To make sustainability a core objective in airport planning

• FAA has issued over $20M in Airport Improvement Program grants for comprehensive airport sustainability plans
  – Awards to 47 airports
  – Most plans are stand-alone documents. But some airports have chosen to integrate sustainability into airport master plans

• As of Sep 30, 2014, airport sustainability plans always eligible for AIP grants
Airport Sustainability Planning - Overview

• Eligible Document Types:
  – “Sustainability Master Plan:” An airport master plan that integrates sustainability
  – “Airport Sustainability Plan” Stand-alone sustainability planning document

• Each document includes:
  – A sustainability mission statement
  – A sustainability baseline assessment in certain focus areas, such as carbon, energy, waste, etc. (airport’s choose the areas)
  – Sustainability initiatives in those areas
  – A system to track implementation
Sustainability planning: example initiatives

- Reduced energy consumption
- Reduced noise impacts
- Reduced hazardous and solid waste generation
- Climate resilience

- Reduced greenhouse gas emissions
- Improved water quality
- Improved community relations
- Cost savings
Airport Sustainability Planning - 2016

Grant awarded in 2016 to San Diego International (SAN)

- San Diego’s stated objective:
  …to deeply integrate sustainability into its Airport Development Plan…

Tasks:
- Conducting baseline assessment for each sustainability element
- Developing performance targets for each sustainability element

Baseline assessments are expected to include:
- Ground transportation and parking data
- GSE and Authority fleet inventories
- Public transit use
- Biological resource maps
- Greenhouse gas and criteria pollutant emission inventories
- Forecasted regional climate change impacts
- Solid waste composition surveys
Airport Sustainability Planning and Carbon

Many sustainability plans have included carbon inventories and measures to reduce carbon

- Carbon inventories provide baseline information on emission sources across the airport
Baseline carbon inventory

– Usually funded as part of sustainability planning
– Allows a more comprehensive approach to sustainability

Inventories can be leveraged for future grant requests

– When inventory data shows areas for airport improvement,
– Infrastructure and upgrades identified in a plan are then eligible for FAA grants
– Airport plan capital improvements and FAA can support those improvements through Airport Improvement Program (AIP) grants

Carbon inventory could also be used for accreditation
Airport Carbon Accreditation Status in North America

- Currently 22 certified airports in North America
- **Dallas Fort Worth International Airport** became North America’s first certified carbon neutral airport in 2016
- FAA support for baseline carbon inventories facilitates process
Other FAA grant programs

Sustainability planning is in addition to other FAA programs:

- **VALE**: Voluntary Airport Low Emissions program
- **ZEV**: Zero Emissions Vehicle program
- **Energy Efficiency** grants program (Section 512 grants)

FAA Sustainability Website:
https://www.faa.gov/airports/environmental/sustainability/
Resources – Recent ACRP Reports

- Outcomes of Green Initiatives: Large Airport Experience, May 2014 (Synth 53)

- Evaluating Impacts of Sustainability Practices on Airport Operations and Maintenance, July 2014 (Report 110)

- Lessons Learned from Airport Sustainability Plans, July 2015 (Synth 66)

- Airport Sustainability Practices, Sept. 2016 (Synth 77)