

The following memorandum summarizes the information provided during the stakeholder interviews.

FEDERAL AVIATION ADMINISTRATION

Wednesday | October 28, 2015 | 3:30 – 5:00 PM

On October 28th, a stakeholder interview was held with the Federal Aviation Administration (FAA) for the FDOT Airport Sustainability Guidebook. Prior to the interview, a set of questions was sent to help facilitate the discussion. Attendees included:

- Marisol Elliot – FAA
- Rebecca Henry – FAA
- Stephen Wilson – FAA
- Pedro Blanco – FAA
- Jenny Iglesias-Hamann
- Thomas Cuddy – FAA (on phone)
- Jon Sewell – Kimley-Horn
- Pam Keidel-Adams – Kimley-Horn
- Zach DeVeau – Kimley-Horn
- Benjamin Siwinski – VHB
- Sierra Gaenicke – VHB
- Jim Halley – FDOT

The following is a summary of the input received from the interview.

- The FAA's sustainability efforts focus both on environmental and economic sustainability
 - It was noted that for both of these categories, it is all about efficiency
- The FAA's Recycling, Reuse, and Waste Reduction guidance is just now being incorporated into master plan scopes at a large scale, it will take a while for there to be enough information on the outcome of this program
- It was stated that the information provided in the Guidebook must be used to help airports enhance the value of the State and Federal funding that they receive
- The FAA noted that it is important for the Guidebook to be coordinated and integrated with other FDOT and FAA documents and guidance
- The FAA noted that numerous airports in Florida are unable to receive Federal funding because they cannot provide the local match
 - It was noted that an airport being able to save even a small amount of money through the implementation of sustainable initiatives may then be able to provide a local match
 - This would then make them eligible for more State and Federal funding, without having to use any additional local funds
 - Including this information, as well as how to convey it to local policy makers, would be a great help to airports
- It was noted that communication is very important
 - Often, different people are responsible for paying bills, management, and day-to-day operations

- Having open communication between all these players, as well as FDOT and the FAA, will help to eliminate inefficiencies
- Related to their sustainability efforts, the FAA noted that they are beginning to fund greenhouse gas (GHG) and carbon inventories
 - Under this program, certification will not be eligible for funding
 - Information from these studies could be extrapolated out and used for a wider audit
- The FAA also has a Zero Emissions Vehicle Pilot Program that airports can utilize for obtaining or converting vehicles to be zero emission
 - Currently, only one project has been completed - Inductive charging at Atlanta International Airport
- It was noted that there has been little participation due to the numerous requirements and provisions that must be met to participate in the program (Ex: Must buy-American)
 - Per 49 USC §47136b(2), airports that are air quality attainment or maintenance areas may now apply for funding under this program.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Monday | November 16, 2015 | 1:00 – 2:00 PM

On November 16th, a stakeholder interview was held with the Florida Department of Environmental Protection (DEP) for the FDOT Airport Sustainability Guidebook. Prior to the interview, a set of questions was sent to help facilitate the discussion. Attendees included:

- Chris Stahl – DEP
- Jon Sewell – Kimley-Horn
- Zach DeVeau – Kimley-Horn
- Jim Halley – FDOT (on phone)
- Sierra Gaenicke – VHB (on phone)

The following is a summary of the input received from the interview.

- Currently, DEP does not have any formalized sustainability initiatives that they follow as an organization
 - Any initiatives that they would implement agency wide would have to come from the Governor's office
- DEP does not believe there are any limitations to implementing and promoting sustainability efforts at their organization
 - It is not DEP's role to promote and implement sustainability initiatives. DEP is responsible for helping people with the permitting process
- DEP currently participates in a program with Florida military bases to conserve and protect land surrounding the bases
 - When land becomes available for sale surrounding a base, the military buys it to protect the encroachment of incompatible land uses
 - In the future, when DEP has funds available, they purchase the land from the base for conservation through their Florida Forever program
 - Once purchased, the land is evaluated for its ecological characteristics and a management plan is developed for the land
 - The focus of purchasing this land is to protect the fence line around airports
 - If public-use airports were to participate in this, they would need to have the funds available to purchase the land and be able to hold onto it until DEP can buy it
- It was noted that in some areas of the state, DOTs have started working with water management districts and other state agencies to utilize regional stormwater basins for local water management
 - This helps cut down on local costs for projects and would reduce incompatible land uses around airports
- DEP provides a large library of geographic information system (GIS) files that can be utilized by airports or municipalities
 - Airports can access this data through the DEP website at: www.dep.state.fl.us/gis/
- DEP provides numerous tools to help outside agencies, including:
 - Recycling Business Assistance Center
 - Brownfield incentives

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- Business Recycling Tracking Tool
- Online E-Permitting Tool
- With regards to future coordination on this project with DEP, it was suggested that all major plans and projects both at the state level and individual airport level be coordinated with DEP

FLORIDA DEPARTMENT OF TRANSPORTATION – ENVIRONMENTAL MANAGEMENT OFFICE

Tuesday | December 1, 2015 | 1:00 – 2:00 PM

On December 1st, a stakeholder interview was held with the Florida Department of Transportation (FDOT) Environmental Management Office (EMO) for the FDOT Airport Sustainability Guidebook. Prior to the interview, a set of questions was sent to help facilitate the discussion. Attendees included:

- Mariano Berrios – FDOT EMO
- Jon Sewell – Kimley-Horn
- Zach DeVeau – Kimley-Horn
- Jim Halley – FDOT

The following is a summary of the input received from the interview.

- Prior to beginning the meeting, Mr. Berrios commented that he was very impressed with the definition of sustainability provided in the project’s white paper
- Currently, the FDOT EMO has nothing in the form of sustainability programs or guidance
 - It has been discussed in the past, but nothing has ever happened
- With regards to NEPA and requirements from the FHWA for incorporating sustainability into projects, no formal guidance is provided
 - It was stated that it was verbally suggested that sustainability be included within projects, but that is largely politically driven
 - It was also noted that some programs, such as recycling concrete/pavement during resurfacing projects, has been done for years, just not under the sustainability umbrella
- It was stated that EMO does not have any marketing tools that it uses to promote sustainability, but tying sustainability to financial cost savings would be a great way to promote sustainability
- It was stated that there are initiatives that are being promoted in Florida that support sustainability, but they are not being promoted in that way. Current initiatives include:
 - Limiting mowing and planting wildflowers along roadways
 - Decreases maintenance costs
 - Provides the public with a visual benefit
 - Use of wetland mitigation banks during projects
 - Wildlife/cultural resource protection during projects
- It was stated that because there is limited guidance related to sustainability, it is up to the agencies and individuals to decide if they “want the bar to be the floor or the ceiling”

DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

Wednesday | December 2, 2015 | 2:00 – 3:00 PM

On December 2nd, a stakeholder interview was held with the Department of Agriculture and Consumer Services (DACS) for the FDOT Airport Sustainability Guidebook. Prior to the interview, a set of questions was sent to help facilitate the discussion. Attendees included:

- Michael Mitchell – DACS
- John Leeds – DACS
- Jon Sewell – Kimley-Horn
- Zach DeVeau – Kimley-Horn
- Jim Halley – FDOT

The following is a summary of the input received from the interview.

- Prior to the meeting, DACS provided the project team with a list of programs and grants that are available through their office, these include:
 - Florida Renewable Energy Tax Incentives
 - Natural Gas Fuel Fleet Vehicle Rebate
 - Renewable Energy and Energy Efficient Technologies (REET) Grant Matching Program
- It was stated in the meeting that some of these programs may be difficult to apply to airports on a large scale

Below is a summary of these programs and grants:

Natural Gas Fuel Fleet Vehicle Rebate

- This program is funded through FY 2017/18
- Six million dollars per year is appropriated for this rebate
 - 40 percent is allocated to public entities
 - 60 percent is allocated to private entities
- Rebate provides up to 50 percent or \$25,000, whichever is greater
- Each applicant can receive a total of \$250,000 per fiscal year
- Rebate is eligible for any vehicle registered in the State of Florida
 - Would include tugs (if registered)
- Rebate is given on a first come first serve basis
- Rebate is eligible for the follow natural gas types:
 - Propane
 - Compressed natural gas
 - Liquid natural gas
 - Bio-fuels
- Would be most useful at airports that already have gas systems

Renewable Energy and Energy Efficient Technologies (REET) Grant Matching Program

- This program provides matching funds for research and development projects
- This program requires a third party to participate in order to be eligible
 - Both FDOT and FAA would fulfill the third party requirement
- Applicants must have a “primary funder,” and can apply to DACS to receive cost-share or matching funds
- Funds are awarded only if the primary funder awards a grant
- Program may only be applicable to large research project taking place at spaceports, not necessarily airports throughout the state

Florida Renewable Energy Tax Incentives

- Consists of three different types of tax refunds:
 - Renewable Energy Technology Sales
 - Renewable Energy Technology Investment
 - Renewable Energy Production Credit

The impetus for developing these resources came from a variety of sources:

- The REET program was passed down by legislation
- Other programs, such as the Energy Efficient Retrofit program were developed through Federal programs
 - Program development, whether at the State or Federal level is really based on the needs and trends of the time
 - If an entity comes to DACS with a need/idea and they like it, it will be passed along to the legislature
 - Based on the priorities of the leadership at that time, the measure will be supported
 - In reality, it is based on what the industry wants at the time

Following the meeting, DACS provided the project team with the following information and resources that may be able to be utilized by airports:

Energy Audits: Energy saving companies will come in and perform an audit on energy usage and offer guaranteed savings on their services

http://www.dms.myflorida.com/business_operations/state_purchasing/vendor_information/state_contracts_and_agreements/state_term_contracts/energy_savings

Energy Database: Database of energy efficiency and renewable energy incentives

www.dsireusa.org

Energy Efficiency programs: Energy efficiency programs provided by the US Department of Energy

<http://energy.gov/eere/better-buildings>

Rural Energy for America Program (REAP): Finances energy efficiency improvements for rural areas (all rural areas other than cities of greater than 50,000 population and their adjacent urbanized areas)

<http://www.rd.usda.gov/fl>

DEPARTMENT OF ECONOMIC OPPORTUNITY

Tuesday | December 8, 2015 | 2:00 – 3:00 PM

On December 8th, a stakeholder interview was held with the Department of Economic Opportunity (DEO) for the FDOT Airport Sustainability Guidebook. Prior to the interview, a set of questions was sent to help facilitate the discussion. Attendees included:

- Ana Richmond – DEO
- Sean Reiss – DEO
- Zach DeVeau – Kimley-Horn

The following is a summary of the input received from the interview.

- DEO has no formal definition of sustainability, but that is because there are so many departments within the agency, there would be too many different definitions that would be developed
 - More realistically, definitions of sustainability would need to be developed for each department
- When the DEO Community Planning Department thinks about “sustainability,” it is under the umbrella of land use compatibility
 - Applied to airports, they try to think about planning for the future of airports, not necessarily what is there today
- Much of the efforts of DEO are related to Adaptation (Resiliency) Planning
 - Planning for Coastal Flooding and Sea Level Rise
 - Provide Technical Assistance Grant to assist communities with resiliency planning
 - Technical Assistance Grant is provided in consultant time, not monetary funding
 - Currently, three communities (Escambia County, St. Petersburg, and St. Augustine) are participating in a Pilot Program utilizing the Technical Assistance Grant
 - From the Pilot Program, a list of lessons learned and best management practices will be developed for others to use
 - Not anticipated to be completed by 2017
- The project team asked if the DEO had any effective methods for transmitting information to interested stakeholders. Though nothing has been developed specifically related to sustainability, DEO provided the following suggestions for successfully implementing any project:
 - Using face-to-face meetings in-lieu of webinars or teleconferences
 - Providing ready-made templates that users can populate with information that is pertinent to them
 - Provide a summary list of frequently asked questions

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Wednesday | December 9, 2015 | 10:00 – 11:00 AM

On December 9th, a stakeholder interview was held with the National Oceanic and Atmospheric Administration (NOAA) for the FDOT Airport Sustainability Guidebook. Prior to the interview, a set of questions was sent to help facilitate the discussion. Attendees included:

- Paul Witsaman – NOAA
- Victor Murphey – NOAA
- Zach DeVeau – Kimley-Horn
- Brain Powers – Kimley-Horn

The following is a summary of the input received from the interview.

- NOAA indicated that they deal primarily with the Terminal Area Forecasts and the management of letters of agreement for weather warnings
- NOAA stated that they thought sustainability efforts should take airport weather systems into consideration, this included both:
 - AWOS – Automated Weather Observing System
 - ASOS – Automated Surface Observing System
- Joint Airport Improvement Program (AIP) funding and State clearinghouses can be a great funding mechanism for airport weather systems when coordinated effectively
 - Ex: The Texas Department of Transportation (TxDOT) coordinates with their airports to have combined applications for AWOS/ASOS system purchasing and installation
 - Generally, TDOT will wait for 3-5 applicants before applying for the AIP funding for these projects
 - By pooling resources and applying for a group of funding at one time, TxDOT is able to save airports time and money when acquiring weather systems
 - TxDOT receives the funds and disperses them out to the counties/cities that identified the need
 - The installation of these facilities is approximately \$100,000 per airport
 - These facilities have the capability to transmit weather data into a National/International system (not all airports use this feature)
- Correctly utilizing AWOS/ASOS systems can assist in economic growth
 - Pilots are able to determine the weather conditions from around the world, and able to chart flights accordingly
 - These systems increase visibility for the community, airport, and even aid medivac services
 - Increased airport activity has the potential to generate and enhance local commerce
- It was noted that numerous airports in Florida have spent the money to install AWOS/ASOS systems, but do not report the data to NOAA
 - Not reporting the data to NOAA limits the number of pilots who can access the information and cuts the airport off from outside users
- NOAA categorize their primary efforts into a three pronged approach:
 - **Commerce**: provide weather data to improve movement and safety of goods and people

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- **Safety:** provide information that allows for safe air travel and meet FAA regulations
- **Emergency Management:** provide information for emergency services and increase early warning accuracy

Thursday | December 10, 2015 | 2:30 – 3:30 PM

On December 10th, a stakeholder interview was held with the Florida Department of Transportation (FDOT) Office of Policy Planning for the FDOT Airport Sustainability Guidebook. Prior to the interview, a set of questions was sent to help facilitate the discussion. Attendees included:

- Maria Cahill – FDOT Office of Policy Planning
- Jon Sewell – Kimley-Horn
- Zach DeVeau – Kimley-Horn
- Jim Halley – FDOT

The following is a summary of the input received from the interview.

- It was explained that this project is intended to pull information from existing resources
 - The document will complement the Florida Transportation Plan (FTP) and other applicable state documents
 - This Guidebook will be developed to be consistent with and support the goals of the FTP
 - Multimodal transportation
 - Quality of life and quality places
 - Environment and energy conservation
- The project will be looked at as a financial document; other elements, such as the environmental benefits, will be included as added benefits
- It was recommended that one important factor is ensuring that facilities are resilient to future trends
 - It was noted that if an airport does not design its facilities for the potential for sea level rise, they could be limiting the return on investment in their facilities
 - Ft. Lauderdale-Hollywood International Airport built a runway to account for future flooding
- Currently, the FAA has not taken a stance on resiliency planning, but their sustainability focus has been on financial initiatives
- It was suggested that including sea level rise models into the Airport Layout Plans/Airport Master Plans alternatives would help airports plan for the future and develop more resilient facilities
- Related to assisting airports, it was noted that the Office of Policy Planning has developed two (2) tools to assist users in mapping and calculating sea level rise:
 - Florida Sea Level Scenario Sketch Planning Tool
 - Identifies transportation infrastructure potentially at risk from projected sea level changes
 - Sea Level Rise Inundation Surface Calculator
 - Assists users in creating GIS layers representing potentially inundated areas due to various sea level rise scenarios
 - Calculator provided for each FDOT District

- A pilot program was also developed to test these tools and develop vulnerability assessments
- A future phase of the project will be completed that updates the Sketch Planning Tool with new floodplain maps
 - Training has also be approved to teach Metropolitan Planning Organizations (MPOs) how to effectively use the tools
- Tools can be accessed here: <http://sls.geoplan.ufl.edu/#intro>
- It was noted that large-scale changes to how facilities are designed have not been implemented because designers and engineers do not think there is enough scientific advancement to change the design guidelines based on predicted sea level rise
- It was recommended that, at a minimum, the following types of facilities should be designed to be resilient to future sea level rise:
 - Evacuation routes
 - Barrier island bridges
 - Roads to airports
 - “Critical” facilities
 - Airports themselves are critical facilities, especially during times of emergency such as hurricanes, law enforcement/firefighting/medical response operations, etc.
- It was noted that, currently, no statewide sustainability policies have been implemented, just resiliency requirements in the FTP
 - The current political climate is not receptive to addressing these issues
- It was recommended that looking at vulnerability to climate change should be a part of the master planning process at Florida’s airports. At a minimum they should include design elements that address the following:
 - 100/500 year storm events
 - Projected sea level rise
- The Sketch Planning Tool could be used to understand future problems
 - Utilizing the tools would help airports and FDOT understand the implications on the design life of the facilities