

**SUSTAINABILITY ACTIONS TO CONSIDER**

**Sustainability Initiatives**

Stand-alone strategies and policies that advance sustainability at an airport (implementation of a sustainable purchasing policy, for example)

**Sustainable Project Elements**

Enhancements integrated into a capital improvement project that meet sustainability goals (roof-mounted solar energy system on new terminal building, for example)

**Sustainable Projects**

Stand-alone capital improvement projects that provide sustainability benefits as its core purpose (ground-mounted solar energy system, for example)

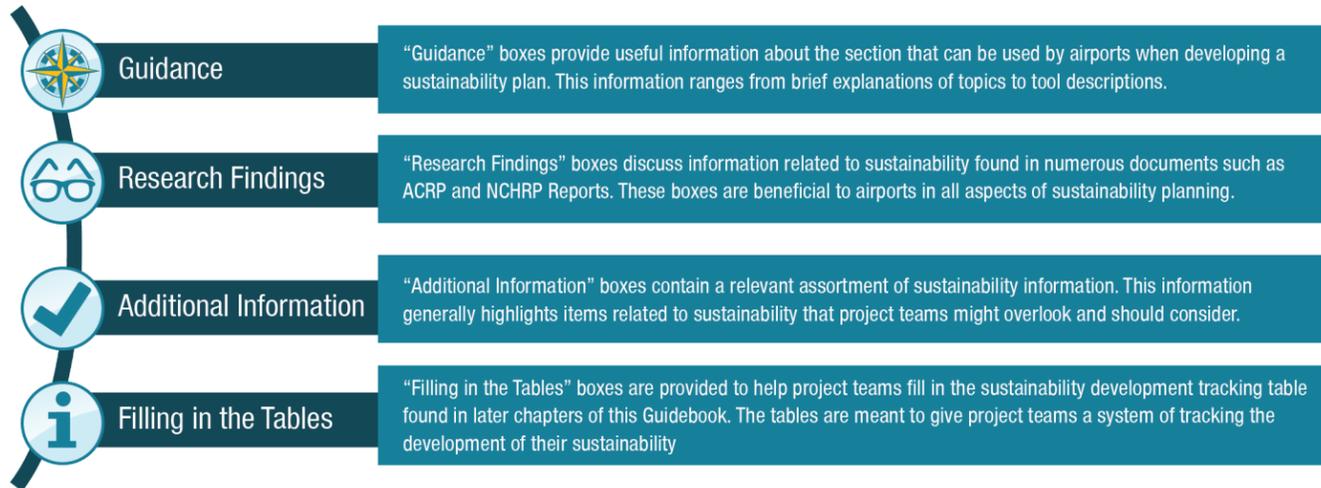
**OVERVIEW OF OUTREACH**

Numerous relevant agencies and stakeholders were coordinated with throughout the development of the Guidebook to provide the most thorough input possible. To assist in demonstrating real life application, six airport case studies were conducted and presented in the Guidebook to better understand certain aspects of an individual airport's sustainability efforts. The effectiveness of a Sustainability Plan relies on the commitment of the airport and key stakeholders. Strong support from airport management, staff and stakeholders will greatly enhance the effectiveness of the plan.

**OPPORTUNITIES FOR COST SAVINGS THROUGH SUSTAINABILITY**

- » Reduced energy costs through implementation of renewable energy production
- » Early identification of infrastructure issues through regular tracking of energy and water use
- » Greater community support for development, reducing time for permitting and local approval
- » Improving water efficiency resulting in lowered water utility costs

To help support the opportunity for cost savings through sustainability at airports, the Guidebook was developed with call-out boxes that provide useful information related to various aspects of sustainability planning. The graphic below highlights how this information is provided throughout the Guidebook.



Prepared for the Florida Department of Transportation  
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# Airport Sustainability Guidebook



**PURPOSE AND OVERVIEW**

The Florida Department of Transportation (FDOT) Aviation and Spaceports Office (ASO) developed the Florida Airport Sustainability Guidebook to lead Florida's airports into a successful and sustainable future. The Guidebook presents airports with recommended methods and guidance for developing an effective sustainability plan and implementing sustainability initiatives throughout all levels and functional areas of an airport.

The Guidebook's primary goal is to give airports the opportunity to become as sustainable as possible, thus enhancing the airport's economic prosperity and operational efficiency. The Guidebook was developed to address the needs of all sizes of airports, both commercial service and general aviation.

The intention of the Guidebook is to provide a foundation and framework for airports to develop a sustainability plan on their own.



*Sustainability is meant to be incorporated into all planning efforts that occur at an airport. The above graphic identifies seven plans that should all consider sustainability.*

## IMPORTANCE OF SUSTAINABILITY

All of Florida's airports are faced with daily challenges of meeting roles and expectations within the aviation system and the local community, changing dynamics of the airline and general aviation industries, and increased pressure to become as financially self-sufficient as possible.

Sustainability goes beyond the traditional meaning of environmental stewardship. The aviation industry has adopted the "EONS" approach to sustainability, which stands for Economic Viability, Operational Efficiency, Natural Resource Conservation, and Social Responsibility. These focuses cover all functional areas of the airport including administration, procurement, planning, design, construction, maintenance, and operations.

### How Can Airports Be More Sustainable?

Airport sustainability goes beyond environmental considerations. By drafting an airport sustainability plan, airports can:

- » Reduce environmental impacts
- » Realize economic benefits
- » Increase efficiency in their operations
- » Improve community relations

Sustainability is not an effort to be pursued by one person or department within the airport, but by the organization as a whole.

## SUSTAINABILITY PLANNING PROCESS

Sustainability planning can be accomplished as standalone Sustainability Plans, integrated in Master Plans, or ad hoc Sustainability. Whichever method is utilized, sustainability begins with a preliminary analysis of the airport and its ideas, goals, and vision of sustainability, or "setting the stage." After the stage has been set, the project team can begin the airport baseline assessment which collects data on the focus areas identified.

The Guidebook provides a series of checklists to assist in data collection. In the Plan Development step, initiatives are selected and prioritized and performance targets are set. The Guidebook provides guidance on developing the initiatives and crafting an overall plan. Following the Plan development, the Airport must be able to implement the plan and monitor the progress of obtaining the goals.

Initiatives and measures will be adjusted periodically to meet the ever-changing needs and opportunities of the airport. External communication of the goals, initiatives, and progress are an important component to ensure longevity and buy-in of the plan.

### STEP 1 Setting the Stage

- Develop a strategy and define sustainability
- Identify and convene stakeholders
- Develop guiding principles
  - Vision
  - Priorities
- Develop focus areas
  - Goals and objectives
  - Performance measures
  - Performance indicators

### STEP 2 Baseline Assessment

- Economic viability
- Operational efficiency
- Natural resource conservation
- Social responsibility
- Identifying goals
- Identifying objectives
- Data collection
- Determination of deficiencies

### STEP 3 Plan Development

- Identify Initiatives
- If necessary, refine goals, objectives, performance measures, and performance initiatives
- Select action items (who, what, when, where, why, how)
- Set performance targets
- Develop an action plan and a monitoring plan
- Complete the plan/program

### STEP 4 Implementation and Performance Monitoring

- Monitor performance
- Evaluate the program
  - Collect data relevant to the goals and objectives
  - Assess the progress against targets
- Revise focus areas, goals, and objectives as needed

The overall goal of the Airport Sustainability Guidebook is to provide airports with a resource to make their airport more sustainable, and, as a result, improve the overall financial self-sufficiency of the airport. By applying the information in the Guidebook, FDOT hopes that airports will be able to tip the scale towards a more sustainable tomorrow.

 <p><b>Economic Viability</b></p>	<p><b>Major Considerations Include:</b></p> <ul style="list-style-type: none"> <li style="width: 33%;">• Job creation</li> <li style="width: 33%;">• Local purchasing</li> <li style="width: 33%;">• Advancing new markets</li> <li style="width: 33%;">• Increasing GDP</li> <li style="width: 33%;">• Total cost of ownership</li> <li style="width: 33%;">• Initial costs</li> <li style="width: 33%;">• Life-cycle costs</li> <li style="width: 33%;">• Staff training</li> <li style="width: 33%;">• Revenue generation</li> <li style="width: 33%;">• FAA funding eligibility</li> <li style="width: 33%;">• Capital improvement planning</li> </ul>
 <p><b>Operational Efficiency</b></p>	<p><b>Major Considerations Include:</b></p> <ul style="list-style-type: none"> <li style="width: 33%;">• Airfield capacity and delay</li> <li style="width: 33%;">• Roadway congestion</li> <li style="width: 33%;">• Intermodal transportation access</li> <li style="width: 33%;">• Air travel delay</li> <li style="width: 33%;">• Taxiway design standards</li> <li style="width: 33%;">• APUs, gates, GSE equipment efficiency</li> <li style="width: 33%;">• Energy conservation</li> </ul>
 <p><b>Natural Resource Conservation</b></p>	<p><b>Major Considerations Include:</b></p> <ul style="list-style-type: none"> <li style="width: 33%;">• NEPA considerations</li> <li style="width: 33%;">• Air quality and climate change</li> <li style="width: 33%;">• Water quality and conservation</li> <li style="width: 33%;">• Wildlife hazards and management</li> <li style="width: 33%;">• Landscape and vegetation management</li> <li style="width: 33%;">• Solid waste and recycling</li> <li style="width: 33%;">• Hazardous materials and chemical management</li> </ul>
 <p><b>Social Responsibility</b></p>	<p><b>Major Considerations Include:</b></p> <ul style="list-style-type: none"> <li style="width: 33%;">• Land use compatibility</li> <li style="width: 33%;">• Community benefits</li> <li style="width: 33%;">• Quality of life</li> <li style="width: 33%;">• Employee welfare</li> <li style="width: 33%;">• Diversity and environmental justice</li> <li style="width: 33%;">• Education and public outreach</li> <li style="width: 33%;">• Public relations</li> <li style="width: 33%;">• Innovation and industry leadership</li> <li style="width: 33%;">• Transparency and information sharing</li> <li style="width: 33%;">• Regional economic benefits</li> <li style="width: 33%;">• Noise abatement</li> </ul>



Tipping the Scale for a More Sustainable Tomorrow