

**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)

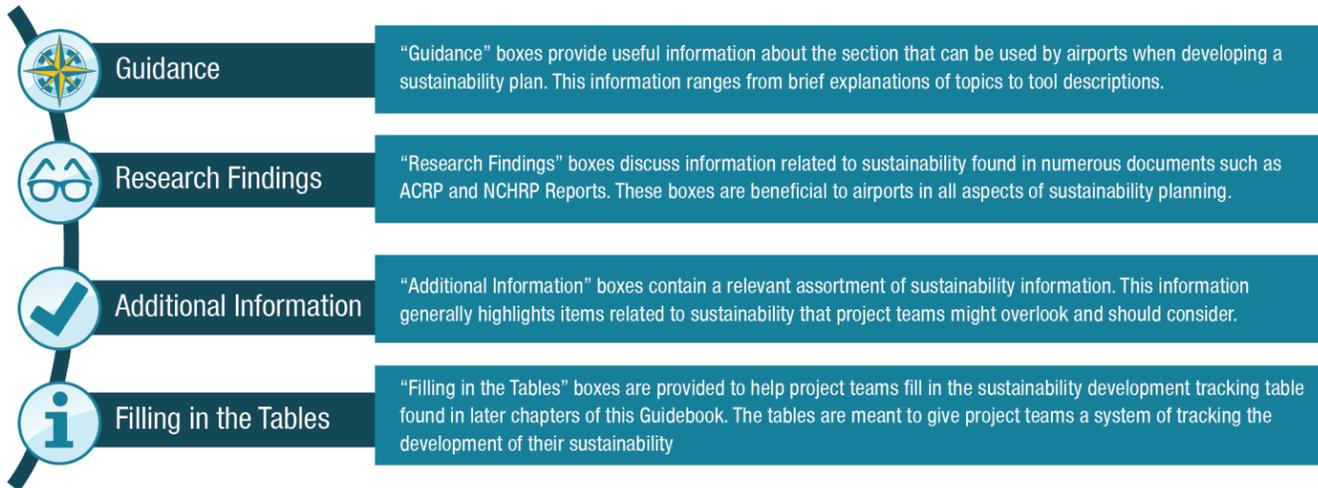
**OVERVIEW OF OUTREACH**

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  
Aviation and Spaceports Office  
605 Suwannee Street  
Tallahassee, Florida 32399  
www.fdot.gov/aviation

# 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 to a more successful and sustainable future. The Guidebook presents airports with recommended methods and guidance for developing an effective sustainability plan and implementing sustainability initiatives through all processes an airport undertakes, including administration, procurement, planning, design, construction, operations, maintenance, and operations.

The 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 effectiveness and longevity of a Sustainability Plan relies on the commitment of the airport and key stakeholders.

Sustainability is not just up to the airport - tenants, airlines, the community, and all users all have an important role!



*Sustainability is a collaborative effort that needs to be supported by all airport partners in order to be successful.*

**Sustainability is truly a team effort!**

## IMPORTANCE OF SUSTAINABILITY

All of Florida's airports are faced with daily challenges of meeting roles and expectations within the Florida's transportation system and their local community as well as serving an increase in operations as well as increased pressure to be as financially self-sufficient as possible. Sustainability goes beyond the traditional meaning of environmental practices. The aviation industry has adopted the "EONS" approach to sustainability, which stands for Economic Viability, Operational Efficiency, Natural Resource Conservation, and Social Responsibility. This approach incorporates all facets of an airport's day to day operations and development.

The benefits of the economy of scale related to sustainability planning can clearly help improve the quality of Florida's large and medium hub commercial service airports and the State's larger GA airports; however, the benefits of sustainability planning also extend to the small and non-hub commercial service and GA airports. In many instances, even a small initiative, such as occupancy sensors on lights or promoting businesses in a newsletter, can have a large impact on both the airport and its stakeholders' bottom line, as well as their relationships with the community.

### 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.

 <p><b>Economic Viability</b></p>	<p><b>Major Considerations Include:</b></p> <ul style="list-style-type: none"> <li>• Job creation</li> <li>• Local purchasing</li> <li>• Advancing new markets</li> <li>• Increasing GDP</li> </ul>
 <p><b>Operational Efficiency</b></p>	<p><b>Major Considerations Include:</b></p> <ul style="list-style-type: none"> <li>• Airfield capacity and delay</li> <li>• Roadway congestion</li> <li>• Intermodal transportation access</li> <li>• Air travel delay</li> </ul>
 <p><b>Natural Resource Conservation</b></p>	<p><b>Major Considerations Include:</b></p> <ul style="list-style-type: none"> <li>• NEPA considerations</li> <li>• Air quality and climate change</li> <li>• Water quality and conservation</li> <li>• Wildlife hazards and management</li> </ul>
 <p><b>Social Responsibility</b></p>	<p><b>Major Considerations Include:</b></p> <ul style="list-style-type: none"> <li>• Land use compatibility</li> <li>• Community benefits</li> <li>• Quality of life</li> <li>• Employee welfare</li> </ul>

## SUSTAINABILITY PLANNING

Sustainability planning can be accomplished as standalone Sustainability Plans, integrated in Master Plans, or as ad hoc plans. 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." It is strongly encouraged that stakeholders are involved in this step to obtain a greater understanding of the individual processes, opportunities, constraints, and readiness. Stakeholders may include airport tenants, FBOs, pilot associations, local residents, local officials and agencies, municipal departments, and airport department staff. Additional steps may be taken during this step to educate stakeholders on the importance of aviation and what sustainability means to aviation.

Being such a diverse and important player to national aviation and to the State's economy, Florida's aviation system needs to evolve in concert with modern initiatives and strategies to enhance the overall system. If sustainability initiatives are pursued with persistence and dedication by the airport, Florida's aviation system can continue to lead the nation as the premier system in successful and efficient aviation practices. Initiatives and measures will be adjusted periodically following monitoring periods 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 of the plan.

<p><b>STEP 1</b> Setting the Stage</p> <ul style="list-style-type: none"> <li>• Develop a strategy and define sustainability</li> <li>• Identify and convene stakeholders</li> <li>• Develop guiding principles                             <ul style="list-style-type: none"> <li>▪ Vision</li> <li>▪ Priorities</li> </ul> </li> <li>• Develop focus areas                             <ul style="list-style-type: none"> <li>▪ Goals and objectives</li> <li>▪ Performance measures</li> <li>▪ Performance indicators</li> </ul> </li> </ul>	<p><b>STEP 2</b> Baseline Assessment</p> <ul style="list-style-type: none"> <li>• Economic viability</li> <li>• Operational efficiency</li> <li>• Natural resource conservation</li> <li>• Social responsibility</li> <li>• Identifying goals</li> <li>• Identifying objectives</li> <li>• Data collection</li> <li>• Determination of deficiencies</li> </ul>
<p><b>STEP 3</b> Plan Development</p> <ul style="list-style-type: none"> <li>• Identify Initiatives</li> <li>• If necessary, refine goals, objectives, performance measures, and performance initiatives</li> <li>• Select action items (who, what, when, where, why, how)</li> <li>• Set performance targets</li> <li>• Develop an action plan and a monitoring plan</li> <li>• Complete the plan/program</li> </ul>	<p><b>STEP 4</b> Implementation and Performance Monitoring</p> <ul style="list-style-type: none"> <li>• Monitor performance</li> <li>• Evaluate the program                             <ul style="list-style-type: none"> <li>▪ Collect data relevant to the goals and objectives</li> <li>▪ Assess the progress against targets</li> </ul> </li> <li>• Revise focus areas, goals, and objectives as needed</li> </ul>

Basic Traditional Conventional Customary StatusQuo

Tipping the Scale for a More Sustainable Tomorrow

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.