

APPENDIX 4

AIRPORT CASE STUDIES

NAPLES MUNICIPAL AIRPORT

How Naples Municipal Airport has developed and updated its own “Sustainability, Conservation, and Social Responsibility Plan”

Key Findings:

- It is important for an Airport to communicate with the public about its environmental stewardship and other positive impacts on the community.
- An Airport cannot change the perception of the entire community or its most critical opponents by advertising its sustainability performance, but it may develop support amongst those that are typically ambivalent about the Airport.
- If an Airport develops its own sustainability report, then one person should be assigned the responsibility of leading that effort and the report should be updated regularly.
- The designated Airport representative in charge of updating a sustainability plan should keep track of accomplishments and performance throughout the year to allow for a more efficient and accurate report update process.

Interviewee: Kerry Keith, Senior Director of Airport Development and Facilities, Naples Municipal Airport

Naples Municipal Airport is owned and operated by the City of Naples Airport Authority and is located two miles northeast of the central district of Naples. The Airport serves a wide variety of General Aviation, charter carriers, and nonscheduled commercial aircraft and includes an Air Traffic Control Tower, corporate/FBO hangars, and T-hangars. It also supports public services such as Medflights, Civil Air Patrol Squadrons, Collier County Sheriff’s Aviation Unit, AngelFlight Southeast, and the Museum of Military Memorabilia.

The City of Naples has a number of residents with a negative perception of the Airport that continue to express concerns about aircraft noise in the community. As a result, the Airport decided to provide the community with a report to describe and explain the Airport’s **sustainability** efforts: Sustainability, Conservation, and Social Responsibility Plan. The first version of the Plan was published online in 2009. The latest 2015 version includes the following sections and information²:

- *Sustainability:*
 - *Administrative Sustainability,*
 - *Stormwater Management,*
 - *Water Efficiency,*
 - *Development and Facilities, and*

² City of Naples Airport Authority, *Sustainability, Conservation, and Social Responsibility Plan*, March 2015 Update.

- *Safety Program.*
- *Conservation Measures*
- *Social Responsibility:*
 - *Noise Abatement,*
 - *Corporate Social Responsibility, and*
 - *Accolades.*

Kerry Keith, Senior Director of Airport Development and Facilities, is currently responsible for maintaining and conducting updates to the Plan. The creation of the Plan began prior to Mr. Keith's employment at Naples Municipal Airport by the previous Director of Airport Development and Facilities. The Plan is published every 1-2 years and takes 40 to 60 man-hours on each update to collect, format, and analyze data, as well as the finalization of the report. As each update is completed, the Airport provides hardcopies, presented by Mr. Keith, to the Authority Board during a meeting televised to the public. A copy of the report is also available on the Airport's website for the public to download. The Airport has recently decided to take a different approach to the formatting of the Plan in an effort to bring the plan more in line with the current concept of sustainability, to include: Economic viability, Operational efficiency, Natural resource conservation, and Social responsibility or EONS. In past years, the Airport has received little to no feedback from the community or the Authority Board.

The Airport currently sets performance goals, tracks water and electricity usage (as discussed in the Plan), and implements strategies to reduce utilities consumption. For example, the Airport **recently** purchased new pumps to assist in the control, monitoring, and tracking of the Airport's irrigation water consumption. Other strategies are outlined in the report.

In future **reports**, the Airport plans to provide more charts and graphs to demonstrate sustainability performance. Mr. Keith keeps a checklist/chart available throughout the year to check-off and note events and sustainability efforts as they occur to assist in efficient, accurate data collection and write-up of the report updates.

To gain support from the community and Authority Board, Mr. Keith stressed that it is important to clearly define **sustainability** and to provide frequent updates on the Airport's efforts and initiatives. The Airport has also been emphasizing sustainability education internally and to the public as an important strategy for general support. The Airport has received positive media coverage recently, and will consider issuing press releases to local media when future report updates are published.

Airports are encouraged to establish community outreach programs to obtain a greater understanding of their community's sustainability expectations. Incorporating these expectations will help garner support for the airport from the community.

The Airport Authority has been in the process of selecting a new Executive Director, and selection **criteria** related to sustainability implementation has been used in the process. The new Executive Director is expected to encourage the Airport's sustainability efforts and assist with the EONS Plan updates.

VENICE MUNICIPAL AIRPORT

How Venice Municipal Airport has actively engaged the community to improve relations

Key Findings:

- General Aviation airports need to find ways to communicate the importance of their facilities to community members that aren't pilots. One way that has been successful at Venice Municipal Airport is to relate the interlinked history of the Airport and the City to the community and to take a proactive approach to engaging the airport's neighbors.
- Typically, the main deterrents to community engagement include airport management's perceived lack of time, personal skills that might not align with community engagement needs, and an external view of an airport as being "fenced off" from the rest of the community.
- An Airport Director can't do it all by themselves – airport businesses and proponent groups (pilot clubs, etc.) can be valuable extensions of staff to help with community engagement efforts.
- Elected officials need to be educated on the importance of General Aviation airports and their operational and development needs.

Interviewee: Chris Rozansky, Airport Director, Venice Municipal Airport

Venice Municipal Airport was originally built in the early 1940s by the U.S. government during World War II, and is currently owned and operated by the City of Venice. It is located 1.7 miles south of downtown Venice along the coast of the Gulf of Mexico. The Airport serves the General Aviation community with two intersecting 5,000-foot runways and includes corporate/FBO hangars, T-hangars, and a restaurant. The Airport is self-sufficient and does not receive assistance from the City's General Fund.

Some members of the community have expressed concerns with aircraft noise, public safety, and **property** values and held misperceptions about past Airport development plans. Members of the community have been critical of the Airport's operations and development plans for different reasons – including aircraft noise, misperceptions of condemnation of residences, closure of a popular municipal golf course for future development, and use of the City's General Funds to support the Airport. It is important to understand community members' different concerns so they might be addressed effectively.

The most frequent concern/complaint from surrounding residents is aircraft noise. Chris Rozansky, the Airport Director, notes that frequently noise is simply a symptom of another **underlying** issue. Airport representatives need to understand that sometimes there are other issues (non-airport related) that affect a person's perception of the aircraft noise and those are separate issues that an Airport does not have the ability to address.

Mr. Rozansky was hired as the Airport Director in 2010 while the Airport was in the process of a Master Plan Update. At that time, area residents urged the City Council to consider **alternatives**

to the proposed development alternative in the Master Plan Update. As a result of the community's pressure, the Master Plan Update reviewed alternatives that would decrease the utility of the Airport, including a lowering of the primary runway critical aircraft category. To alleviate those concerns, the Airport proposed enhancements to the crosswind runway that enables all aircraft to operate over the Gulf of Mexico instead of over residential areas. The Airport garnered enough public and City Council support to implement this plan because of its many operational benefits, including the reduction of noise and overflights of residential communities. The improvements have been implemented and the pilot community and the many members of the public are pleased with the results.

In an effort to better the Airport's general perception within the community, Mr. Rozansky organized meetings with homeowners to discuss their concerns. Since local history is of strong **importance** to the community, Mr. Rozansky researched and provided examples of how the Airport has played a key role in the growth of the City, including:

- In 1936, Dr. Fred Albee, a renowned orthopedic surgeon and a pilot, established an airfield (predecessor to the current Airport) to bring patients to Venice and his practice;
- Venice Theater was started in a hangar on the "new" airport property; and
- The local Catholic Church used airport property to hold weekly services.

Airport staff should familiarize themselves with the history of their airport. Many of Florida's airports have long and illustrious histories including being military training airfields for World War II, hosting aviation "firsts" such as the first commercial flight, and many others.

In discussions with the community, Mr. Rozansky described the airport as a primary contributor to the City's increased development and tourism, as well as the promotion of commerce and business similar to what an interstate highway offers a community. This face-to-face interaction with the community explained in a relatable fashion worked best for Mr. Rozansky to be able to explain to those who are not pilots or involved in the aviation industry the importance of the Airport. For example, **highlighting** airport businesses/operators to the public such as Agape Flights, which provides flight support for Christian missionaries and hosts 80-100 volunteers weekly from throughout Sarasota County to support missions, can provide the public a different perspective about who is using the facility. Another tenant is the Sarasota County Sheriff's Office, who provides law enforcement, search and rescue, and firefighting services from the airport. During these meetings, Mr. Rozansky provides the public with hardcopy materials of facts, figures, and presentations for their reference.

In addition to in-person meetings with the public, the Airport offers events and provides services to promote and educate the community; these include:

Public Tours – helps to eliminate the feeling of separation between the airport and the **community**, as well as provides an educational opportunity to explain the financial and economic benefits of the airport (importing of goods, medical supplies, maintenance/overhaul, etc.). Key to the success of these tours is utilizing a van or tour bus to explore the airfield and visit tenants' facilities.

- Experimental Aircraft Association (EAA) – uses the Airport for educational opportunities including sessions and flights for children.
- Fairgrounds – airport property used for local fairs and events (Airport's name is used in association to promote Airport visibility).
- Venice Aviation Society, Inc. (VASI) – the largest promotor of the Airport; the group holds meetings, open to the public, to listen and discuss individual airport concerns and issues.
- Local public education – the Airport is coordinating with a local high school to develop a program for students to learn about different aviation-related professions.

The Airport staff also provides support with all community engagement efforts. Mr. Rozansky encourages his staff to become involved in all community outreach efforts, but emphasizes the importance of not becoming emotionally involved during interactions with the public.

Airport staff are encouraged to become familiar with community engagement techniques and may find some of the following resources useful:

- The Public Relations Society of American or the local chapter of the Florida Public Relations Association to increase their knowledge and skills.
- Working with City/County public affairs offices to utilize their expertise.
- The Florida Airports Council Noise Abatement and Community Affairs committee.
- Attending local college courses on communications and public relations.

ALBERT WHITTED AIRPORT

How St. Petersburg's Albert Whitted Airport is accommodating the City's new Executive Order on Sustainability

Key Findings:

- Airport staff and their consultants should involve appropriate city departments early in the planning process to review relevant plans, community input, codes, and other factors that may affect design, scope, and budget. This is especially important for urban and waterfront airports where the facility is closely connected to other dynamic developments and communities.
- Airport staff should assess the level of effort for city and airport personnel, as well as consultants, during scope, schedule and fee development to consider sustainable development and consistency with other city policies/plans. All parties will have varying levels of work depending on roles and responsibilities for example, city staff do not usually have the capacity to design and certify projects depending on workload, but can review scope, coordinate key staff and experts, participate in design meetings, and offer lessons learned from other city activities or examples.
- If Leadership in Energy and Environmental Design (LEED) or other "green" certification is being sought, contractors need to have qualifications and provide competitive bids. In addition, the project needs to be scoped appropriately for certification requirements which will include documentation for contractor and subcontractors for certification.
- Using the sustainability approach should result in lifecycle costs savings and/or other benefits important to the role of federal, state, and local government.

Interviewees: Richard Lesniak, Airport Director, Albert Whitted Airport

Sharon Wright, Sustainability Coordinator, City of St. Petersburg

Albert Whitted Airport is owned and operated by the City of St. Petersburg, and is located in the City's **downtown** core. The Airport serves the General Aviation community and includes a historic National Airlines hangar, contemporary terminal building with restaurant, an Airport Traffic Control Tower, as well as corporate/FBO hangars and T-hangars.

Downtown St. Petersburg has been redeveloped and grown extensively since the economic downturn in 2008. The growth in the City has led to increased tax revenues and a new demographic of residents that value environmental stewardship and sustainability. As a result of the community's desires and elected officials' motivations, the Mayor issued an Executive Order Establishing Policies Consistent with the City of St. Petersburg Sustainability Initiatives on August 18, 2015.³ The Executive Order includes many goals, initiatives, and actions, including the following policies:

³ EO-2015-07, www.stpete.org/docs/Sustainability_EO.pdf

- Obtain a Star Community Rating leadership certification⁴;
- Develop and implement a citywide Climate Action Plan;
- Apply the LEED program⁵ or the Green Building Initiative's Green Globes program⁶ for all new and existing city-owned and occupied buildings over 10,000 square feet; and
- Reduce greenhouse gas emissions, increase energy efficiencies, and utilize renewable energy sources.

Sharon Wright has served in the role of Sustainability Coordinator for the City since June 2015 and has been tasked with implementing the Executive Order. In her position, Ms. Wright has inventoried each City department to identify existing sustainability work and programs, developed key initiatives and implementation highlights for each strategic goal, assigned department liaisons to assist in community and department initiatives, and is working with leadership to incorporate life cycle cost analyses into the City's procurement process. While several City facilities like the Pier, Police Headquarters, and a Fire Station, were already planned to include sustainable design, the 2015 Executive Order has offered the opportunity to renew the approach and include more involvement from city departments to realize solutions. Moreover, the City is working toward the sustainable approach to activities and facilities as part of the City's "DNA" in how it meets economic, social, and environmental challenges and opportunities.

The Airport is currently in the pre-design phase for multiple, new hangars which are being partially funded with FDOT grants. During this phase, Richard Lesniak, the Airport Manager, became aware of the new Executive Order and realized that some of the new hangars may be greater than 10,000 square feet, which would trigger the LEED and/or Green Globes programs. Mr. Lesniak started coordinating with Ms. Wright and the City Engineering Department to determine the applicability. In addition, the Airport's engineering design consultant was brought in to help understand the implications to design, construction, and the overall costs of the added processes.

Though FAA and FDOT do typically view design and construction costs associated with green or sustainable guidelines such as LEED or Green Building Initiative (GBI) as grant eligible, neither organization will participate financially in the application and certification process.

The Airport Manager, the consultants, and city staff have been identifying the challenges associated with applying green building certification criteria to an airport facility, and are in the process of determining the best method of applying the City's Executive Order to the Airport's planned redevelopment. The sustainable design process for the future hangar facilities will continue in 2016. The Airport and the City are also in the process of determining how implementation of other components of the Executive Order will affect the Airport's operation, planning, and future development.

⁴ Sustainability Tools for Assessing & Rating Communities, <http://www.starcommunities.org/rating-system/>

⁵ U.S. Green Building Council, <http://www.usgbc.org/leed>

⁶ Green Building Initiative, <http://www.thegbi.org/green-globes-certification/>

GREATER ORLANDO AVIATION AUTHORITY

How GOAA has formed its “Green Team” to help implement sustainability at Orlando International Airport (MCO)

Key Findings:

- Authority employees from all departments and divisions, including tenants, concessionaires, and airlines, were encouraged to join the Green Team. Participation from the Authority’s Communications Department has been invaluable to advertise the group and its efforts.
- Meaningful, yet attainable, goals should be created for Green Team activities so participants feel a sense of accomplishment and the Airport’s sustainability efforts can be advanced.
- Internal recognition and appreciation of the Green Team is important to promote and encourage participation.

Interviewees: Jeff Daniels, Assistant Director of Maintenance and Operations, GOAA
Judith-Ann Jarrette, Noise Abatement and Sustainability Manager, GOAA
Chanel Jelovchan, Sustainability Specialist, ecoPreserve

GOAA began its sustainability-related efforts back in 2003 by establishing a formal solid waste recycling program at MCO. In 2013, GOAA developed its first Sustainability Management Plan (SMP). At the time, Jeff Daniels, the Assistant Director of Maintenance and Operations, was responsible for the SMP development and implementing sustainability at MCO. In March 2015, Judith-Ann Jarrette was hired as GOAA’s Noise Abatement and Sustainability Manager and sustainability planning and implementation responsibilities were shifted to the Operations Department. She was also tasked with management of the Green Team and its activities.

During the course of the initial SMP development, the GOAA Green Team was formed. The Green Team was created to help with portions of the SMP development and implement the plan. All departments, employees, tenants, and concessionaires were invited to attend. Approximately 100 people are signed up as volunteer members, and there are usually 15-20 active members of the Green Team. Committees were created to assist in the development of specific components of the SMP.

Ms. Jarrette is now responsible for managing the Green Team and its efforts. Before Judith-Ann was named the Noise Abatement and Sustainability Manager and after the original SMP **development**, the Green Team operated without a designated leader. Representatives from GOAA’s Customer Service Department assisted, as well as the Authority’s sustainability consultant (ecoPreserve), to continue the progress that the volunteer group was making.

The Green Team no longer is divided up amongst different committees because the same volunteers were active on each. The group now engages in all aspects of advancing sustainability with Ms. Jarrette’s guidance. The Green Team establishes goals each year for

completing initiatives and tracks performance based on the percentage complete. Each meeting includes a presentation on updates for each goal and a discussion of new and innovative ideas. Once a month, the Team holds a Sustainable Speaker Series, which is open to all GOAA and tenant employees as well as non-airport personnel, with speakers focused on how to implement sustainability in all aspects of daily life. The Green Team also publishes *The Dirt*, which informs GOAA employees and tenants about sustainability efforts and accomplishments at the Airport and is publicly available on GOAA's website. GOAA's sustainability consultant, ecoPreserve, assists in planning the Sustainable Speaker Series and article production for *The Dirt*.

The Green Team organizes two major events at MCO during the year:

- Earth Day – On April 22, approximately 80 exhibitors display in the MCO terminal lobby to educate GOAA staff, tenants, and the traveling public about environmental stewardship. In 2015, GOAA held its second Earth Day event.
- America Recycles Day – On November 13, GOAA held its second America Recycles Day. Approximately 20 exhibitors were displayed in the MCO terminal lobby to educate and promote waste management practice and recycling.

Both of these events provide valuable exposure of GOAA's commitment to environmental stewardship and sustainability to the public. These events could not occur without the volunteer efforts of the Green Team.

The interviewees offered three factors as reasons of why the Green Team has been successful:

- Motivation. The Green Team is encouraged and motivated by Ms. Jarrette, who recognizes the group's efforts at Team meetings and at Authority Directors' meetings. A recent Sustainable Speakers Series event was also dedicated as a Green Team Appreciation luncheon.
- Communication. The GOAA Green Team includes employees from the GOAA Customer Service and Operations Departments who assist in the promotion and advertisement of the Team and their efforts, including the online publication *The Dirt*.
- Continuous Activity. The Green Team stays very active with the two major events each year, the Sustainable Speaker Series, and activities associated with advancing the Authority's sustainability goals. Green Team leadership continually identifies new activities and initiatives to engage the group in – for example, assistance with waste audits and field trips to the solid waste transfer station.

Airports are encouraged to identify a Champion for ongoing sustainability implementation and specific initiatives. This Champion, working with other dedicated individuals throughout the facility (tenants, airlines, staff, etc.), will increase the chances for a successful sustainability program.

The interviewees recognize that one of the most important and challenging aspect of setting up a Green Team and implementing sustainability initiatives is to obtain senior leadership support.

Implementing the Green Team did not require the Authority to provide a large amount of money, however support is still needed to ensure the volunteer group can accomplish all of its activities and goals. A dedicated leader for the group is also very important to continuing the Green Team's activities and success.

MIAMI-DADE AVIATION DEPARTMENT

How Miami-Dade Aviation Department (MDAD) manages reporting challenges and fosters a sustainability mindset throughout the organization

Key Findings:

- Tracking sustainability performance can be a challenge because of the resources that are required to ensure complete and accurate reporting.
- Formal processes like an Environmental Management System (EMS) and International Organization of Standardization (ISO) Certification can be used to formalize environmental stewardship practices, identify responsible parties, and track environmental progress.
- Airports need to include all organizational levels when working to implement environmental stewardship and sustainability initiatives. Particular attention should be paid to appropriate training of “front line” workers that implement most initiatives and strategies. Two-way communication channels should also be fostered to allow for identification of potential strategies/initiatives from all organizational levels.
- Sustainability strategies/initiatives can be difficult to implement at smaller airports within a system because of fewer resources at the general aviation and reliever airport facilities.

Interviewees: Jose Ramos, Division Director for Aviation Planning, Land-Use and Grants, MDAD
Carlos Jose, Assistant Director of Facilities Management, MDAD
Pedro Hernandez, Assistant Director for Facilities Development, MDAD

Miami International Airport (MIA or the Airport) is a large hub airport that is owned by Miami-Dade County and operated by the MDAD, which also operates Miami-Opa-locka Executive Airport, Miami Executive Airport, Miami Homestead General Aviation Airport, and Dade-Collier Training and Transition Airport.

MDAD started to formalize an environmental stewardship program in the late 1990s after compiling a record of poor fuel containment practices at MIA. The organization decided to pursue International Organization of Standardization (ISO) certification. To achieve this certification, the Airport divided the airport departments into divisions, which are certified individually. Each division is then responsible for maintaining its ISO certification. MDAD has developed an Environmental Management Systems (EMS) as a part of the requirements of the ISO 14001.

The following units are already registered to ISO 14001:

- MIA Fuel Facility⁷
- MIA Civil Environmental Engineering Division⁸

⁷ http://www.miami-airport.com/library/mia_env_Fuel_Certificate.pdf

⁸ http://www.miami-airport.com/library/mia_env_Eng_Certificate.pdf

- MIA Facilities Maintenance and Engineering Division⁹
- MIA Commodities Management Division¹⁰

At the request of the Miami-Dade County Mayor, MDAD provides “scorecard” information to the County on a quarterly basis.¹¹ The interviewees noted that the reporting process is very challenging and time-consuming. Many other sustainability-related performance indicators go unreported because of the level of effort needed address the County scorecard requirements. The scorecard includes the following items:

1. Customer
 - a. Enhance customer service
 - b. Provide a secure environment at the airports
2. Financial
 - a. Enhance MDAD revenue
 - b. Sound financial strategies
 - c. Enhance MIA competitive position
 - d. Meet operating budget targets
3. Internal
 - a. Maintain a safe working environment
4. Learning and Growth
 - a. Comply with FAA requirement
 - b. Comply with Aircraft Operating Area (AOA) recertification requirements
5. Sustainability (ISO 14001 certifications, cardboard recycling initiative)

Sustainability-related efforts at MIA include:^{12,13}

- Recycling Program which includes the collection of cardboard (collects about 600 tons of cardboard per year), collection of domestic waste off of incoming aircraft (provide separate cans for trash and recycling), paper, wood pallets, electronics, the selling of comingled recycling material, and more.
- Electrical savings of roughly \$2.592 million per year. To achieve such a high energy savings, MDAD changed all airfield lighting and lamp fixtures in the terminals to LED lights, and replaced multiple terminal chillers.
- Decreased carbon footprint by purchasing hybrid electric vehicles (HEVs), and use of ground power units (equivalent of removing 5,001 gas-powered vehicles off airport roads).
- Internal and tenant auditing program.
- Aircraft noise abatement task force to address public comments and concerns and create mitigation measures.

⁹ http://www.miami-airport.com/library/mia_env_ISO_CERTIFICATE_for_Maintenance-1.pdf

¹⁰ <http://www.miami-airport.com/library/MIA-CMU-US-0464764-ISO-140012004-Final-Cert.pdf>

¹¹ Fiscal Year 2014-2015, Quarter 4 MDAD Scorecard: http://www.miamidade.gov/performance/library/quarterly-reports/FY2014-15/Q4/trans_aviation.pdf

¹² <http://www.miami-airport.com/environmental.asp>

¹³ Environmental Achievements @ Miami International Airport, 2007, http://www.miami-airport.com/library/MIA_Env_Report.pdf

- Green purchasing of environmentally-friendly products and materials.

While the Airport has achieved significant savings due to its successful sustainability efforts, it can be challenging to report every effort accomplished by the Airport. Challenges to comprehensive sustainability implementation and performance tracking include:

- **System-wide Sustainability Implementation:** The other airports within the MDAD system have fewer personnel and it can be a challenge for those individuals to complete their current work tasks and implement particular sustainability-related strategies/initiatives.
- **Performance Tracking:** Currently, proper resources for comprehensive sustainability tracking are not available to MDAD - only those required by the Mayor's "scorecard" are recorded and reported on a quarterly basis.
- **Encouragement and Organizational Buy-in:** All levels of airport employees need to be engaged in the organization's sustainability goals and strategies/initiatives to ensure successful implementation. In addition, ideas for efficient implementation of high-value strategies can be shared freely and acted upon.

Despite the challenges associated with reporting of the multitude of MDAD's sustainability efforts, the organization has done an excellent job in encouraging and promoting environmental stewardship and sustainability throughout all departments/divisions.

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT

How Hartsfield-Jackson Atlanta International Airport Tracks and Reports Sustainability Performance

Key Findings:

- Sustainability performance tracking informs educational outreach efforts (internally and externally).
- Compliance with sustainability goals and objectives lies within the contracts and leases with vendors, tenants, and service providers.
- Building Information Modeling (BIM) systems can be used to gather valuable performance data but they can be underutilized if they are not programmed and managed properly.
- Utility Management Systems, EPA's Portfolio Manager, and ISO 50001 can be used to formalize environmental stewardship policies, identify responsible parties, and track environmental progress.

Interviewees: Michael Cheyne, Planning Director, Hartsfield-Jackson Atlanta International Airport
Charles Marshall, Utilities Manager, Hartsfield-Jackson Atlanta International Airport
Liza Milagro, Senior Sustainability Manager, Hartsfield-Jackson Atlanta International Airport

Hartsfield-Jackson Atlanta International Airport (ATL or the Airport) is a large hub airport that is owned and operated by the City of Atlanta's Department of Aviation. The Airport was part of the FAA's Sustainable Master Plan Pilot Program, which provided Airport Improvement Program (AIP) grant funding to develop a Sustainable Management Plan (SMP)¹⁴ in 2011. The SMP describes the Airport's existing sustainability practices, recent improvements, and opportunities for enhancements in the following areas: procurement, energy management, integrated water resources management, emissions, waste, "green" construction, noise and land use compatibility, and community involvement.

The responsibility to manage sustainability and related activities at ATL rests within its Asset Management and Sustainability (AMS) Division. The AMS Division combines the responsibilities of asset management, and sustainable development with measures to guide operational, planning, and business development decisions. It is made up of three business units: Asset Management, Facilities Management, and Sustainability. The mission statement for the AMS Division is:

"To lead the Department of Aviation to become one of the greenest airports in the world while maintaining and improving efficiency and proactively manage our aging infrastructure based on life cycle analysis, total cost of ownership, and sustainable development."

¹⁴ Hartsfield-Jackson Atlanta International Airport Sustainability Management Plan: <http://www.atlanta-airport.com/docs/Airport/Sustainability/Sustainable%20Management%20Plan.pdf>

The Airport has discovered that compliance with its sustainability goals and objectives is rooted in establishing policies that are incorporated into contracts and leases with vendors, tenants, and service providers. The Airport will be implementing a Sustainability Procurement Policy in 2016 that will further aid in meeting its sustainability goals and reporting/tracking requirements. In addition, the Airport publishes an Annual Sustainability Progress Update¹⁵ that focuses on procurement, construction, operation and maintenance, and policy. The Progress Update also includes a “scorecard” that quantifies achievements using the following metrics:

- Energy (BTU/Sqft)
- Water (Gallons/Passenger)
- Emissions (Tons CO₂e/Passenger)
- Waste (Lbs/Passenger Enplanement)

The Airport is dedicated to promoting recycling throughout the Airport campus. Waste management and recycling in the passenger terminal facilities is conducted by a third-party contractor hired by the airlines to collect and transport waste and recycling from the concourses. Additionally, the contractor promotes recycling at the Airport and is required to provide monthly reports on recycling data. All other waste and recyclables generated by employees, cargo, and other areas of the Airport is managed by the AMS Division. Management of waste and recycling by the AMS Division allows for accurate and efficient performance tracking.

The AMS Division converts the waste management and recycling data into educational materials to advertise and promote recycling efforts throughout the Airport. ATL is exploring opportunities to separate and compost organic materials throughout the Airport to support its Zero Waste Plan. The Airport’s goal is to divert 90% of waste from the landfills.

The feasibility of managing organics at ATL is hampered by the fact that there aren’t any nearby composting facilities. A potential strategy is to develop an on-site recycling center to manage recyclables and organics for the Airport *and* surrounding community. This would help the Airport to strengthen community relations and provide a more efficient diversion and recycling process for the Airport.

The AMS Division is responsible for tracking energy and water usage, which includes three important phases:

- Understand utility invoicing for each month,
- Identify conservation opportunities, and
- Identify efficiency opportunities.

An enterprise management system (Utility Management System) is used to track all energy and water use data. The system manages all utility invoice data (monthly) and stores utility meter locations throughout the Airport. Meter locations are also entered into the Airport’s Geographic

In 2011, ATL previously won the Airports Going Green Award for implementing the Sustainable Food Court Pilot Program. The program required all food court vendors to use compostable packaging and service wares, and source-separate organics for composting collection.

¹⁵ The current annual progress update can be found at: http://www.atlanta-airport.com/docs/Airport/Sustainability/2014_Sustainability_Progress_Update_rev5_green_LETTER.pdf

Information System (GIS). The GIS department inputs all metering information while also linking the data within the enterprise management system, maintenance data, and project data. This allows any airport employee with access to the system the opportunity to provide real-time updates to utility, maintenance, and project data into the GIS. The enterprise management system allows ATL to continuously improve its tracking and reporting process.

In December 2015, the Airport was certified under the International Organization of Standardization (ISO) as ISO 50001¹⁶. ISO 50001, Energy Management System standard, ensures that the entire organization works collaboratively to reduce energy usage. The certification requires the Airport to identify all significant energy users throughout the airport and implement a method of control. The Airport has completed this task and realized a decrease in energy usage from the major users. The Airport now has a tool to improve operations and reduce energy at the Airport, while identifying opportunities of improvement.

The City of Atlanta recently approved the *Atlanta Commercial Buildings Energy Efficiency Ordinance*¹⁷ on July 20, 2015 in conjunction with the Atlanta Building Efficiency¹⁸. It requires the use of EPA's Portfolio Manager as a tool to track and measure energy and water use for all buildings 25,000 square feet or larger (10,000 square feet or larger for city-owned buildings), however the Airport has decided to use the Portfolio Manager for *all* airport buildings that use energy.

¹⁶ ISO 50001 Energy Management System: <http://www.iso.org/iso/home/standards/management-standards/iso50001.htm>

¹⁷ Atlanta Commercial Buildings Energy Efficiency Ordinance: <https://atlantabuildingbenchmarking.files.wordpress.com/2015/05/15-o-1101-atlanta-commercial-energy-efficiency-ordinance.pdf>

¹⁸ Atlanta Building Efficiency - <http://atlantabuildingefficiency.com/about/>