

# Chapter 7

## Sustainability Initiatives



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## 7. Sustainability Initiatives

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### 7.1 Introduction

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Monroe County and the management of the Key West International Airport recognize and embrace the importance that the growing role of sustainability has in the national air transportation system. The Monroe County Airports Department (Airports Department) also understands the benefits that sustainability planning has outside of environmental considerations. Sustainability planning generally recognizes four categories: **E**conomic prosperity, **O**perational efficiency, **N**atural resource conservation, and **S**ocial responsibility—otherwise known as **EONS**. Airports also pursue those aspects of sustainability that meet the needs, values, and characteristics of the airport environment, as well as surrounding municipalities.

The sustainability plan presented in this document provide a framework for the Airports Department to evaluate their current conditions relative to sustainability; identify the aspects of EONS that warrant a higher degree of priority; isolate initiatives that allow the Airport to achieve sustainability goals they've identified; and develop a simplified methodology to monitor the effectiveness of chosen sustainability initiatives.

The FDOT has developed sustainability-specific guidance to encourage the state's airports to successfully implement sustainability planning. The development of this guidance is a result of FDOT's goals of driving the state's transportation network toward a highly efficient, economically prosperous, environmentally friendly, and safe future. The sustainability plan that was developed as part of the master plan and presented in this document is consistent with the FDOT guidelines.

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### 7.2 Setting the Stage

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Developing a sustainability plan includes agreeing upon a strategy and sustainability definition specific to the Airports Department, evaluating organizational readiness, outlining guiding principles, and identifying key focus areas tailored to the Airport's specific characteristics, values, and needs. This helps to ensure that the sustainability plan is developed in a manner that will help the Airports Department achieve sustainability goals.

#### 7.2.1 SUSTAINABILITY STRATEGY

The Airports Department's sustainability strategy is critical to developing a successful sustainability plan. The Airports Department will pursue sustainability initiatives that align with the economic prosperity, operational

efficiency, environmental friendliness, and social responsibility objectives of the Airports Department. Implementation of the initiatives will occur through the education of staff members at all levels and divisions within the Airport. Airport management will monitor the effectiveness of the plan to ensure that the plan is being implemented systematically, beneficially, and consistently.

This strategy is consistent with FDOT's sustainability guidance, that recommends an organization commit to pursuing the benefits of sustainability at all levels, and establishes the initial framework needed to develop the rest of the sustainability plan.

## 7.2.2 DEFINITION OF SUSTAINABILITY

The term *sustainability* has been typically assumed to only encompass environmental friendliness. However, the initial intent of sustainability extends beyond environmental friendliness. The FDOT *Airport Sustainability Guidebook* provides clarification on the origin of sustainability and its meaning by referencing the following:

The National Environmental Policy Act of 1969 committed the United States to sustainability, declaring it a national policy, "to create and maintain conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations."<sup>1</sup>

Accordingly, the Airports Department recognizes the four EONS categories of sustainability. In addition to these categories, the Airports Department believes its specific definition of sustainability requires buy-in from all staff members to ensure the ultimate success of the sustainability plan.

Utilizing the four categories and Monroe County's values for the Airports Department, EYW's unique definition of sustainability is as follows:

"We define sustainability as the adaptation of practices to operate EYW and MTH in a manner that protects the environment and is safe for our employees, neighbors, and customers. It is an active pursuit that extends to all levels of the Airport and thrives on the willingness of the staff to understand and implement its various elements."

## 7.2.3 AIRPORT READINESS

In evaluating EYW's overall readiness to implement this sustainability plan, the following questions from the FDOT *Airport Sustainability Guidebook* were answered. These questions were developed to help airports of all sizes to evaluate their organizational readiness to undertake sustainability initiatives.

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<sup>1</sup> U.S. EPA Learn About Sustainability, <https://www.epa.gov/sustainability/learn-about-sustainability> (accessed December 18, 2017).

#### 1. Has the Airport implemented any sustainability initiatives?

- Yes, the Airports Department has actively pursued recycling and waste reduction strategies at the Airport. More information on these strategies can be found in the Recycling and Waste Reduction discussion provided in Section 7.5.

#### 2. Does the Airport leadership understand and support the concept of sustainability?

- The Department of Airports leadership is committed to the pursuit of Airport sustainability and intends to collaborate with all Airport staff members to generate Airport-wide motivation and commitment.

#### 3. What aspects of sustainability are most important and applicable to the Airport?

- While all four categories of sustainability are considered important to Monroe County, the Airport's diverse and unique surroundings and proximity to the natural environment make environmental initiatives a priority in sustainability. The Airports Department also intends to pursue social initiatives in an effort to further engage with the County's vibrant community.

#### 4. Does the surrounding municipality or county have a sustainability plan/program?

- The City of Key West has numerous sustainability planning initiatives. In 2010, the City Commission enacted the Sustainability Advisory Board that was charged with promoting sustainability of the community as a whole. Additionally, in 2012, the City developed the *Solid Waste Master Plan: Establishing a Pathway to Zero Waste*, which extensively analyzed the City's current recycling system, contracts, and operations. The effort also evaluated potential avenues of recycling programs and initiatives to maximize the City's recycling footprint.
- Monroe County developed the *Green Keys! Sustainability Action Plan* to address the issues of climate change and sea-level rise. The plan's website further details its directive: "It provides guidance for decision-makers as well as for county employees, residents, and business owners. With 165 recommendations and a 5-year work plan, Greenkeys! is a blueprint for increased sustainability and resilience to climate change"
- It is important to the Airports Department to ensure the efforts and priorities of both the City and the County are included in the development of the Airport's sustainability plan.

#### 5. Are there any organization-wide planning efforts implemented?

- This Master Plan is the primary organization-wide planning process currently taking place at EYW. The Master Plan will support the development of a sustainability framework for the Airport that will identify the Airports Department's vision statement and focus areas for the Airport.

## 7.2.4 SUSTAINABILITY VISION STATEMENT

The vision statement serves as the Airport's road map; it was developed as a guide to future sustainability planning. This statement will be used to guide the Airport Department through future steps of implementing and revising sustainability initiatives. As recommended by the FDOT, this vision statement is also intended to help the Airport staff at all levels to develop a sense of pride in the Airport's sustainability initiatives. Accordingly, the Department of Airport's sustainability vision statement is as follows:

"EYW will strive to lead as an example for small-hub airports statewide by collaboratively achieving the goals outlined in the Airport sustainability plan. The Airport will align environmental initiatives with the County to safeguard the surrounding natural environment and be proactive towards consistency with the GreenKeys! Sustainability Action Plan."

### 7.2.4.1 Sustainability Framework

The final step in setting the stage is to develop the focus areas of the sustainability plan. The focus areas are a set of cascading developmental subjects, geared towards developing the "why" and "how" of the sustainability plan. These topics are discussed in the following sub-sections:

- Focus Areas
- Sustainability Mission Statement
- Sustainability Goals

### 7.2.4.2 Focus Areas

It is important for airport operators to attain a realistic understanding of which of the four EONS categories are most desirable and achievable based on the specific airport characteristics, the surrounding environs, and organizational objectives. Although it is the intention of the Airports Department to pursue sustainability in all four categories, there are two focus areas that the Airports Department believes could provide the greatest benefits given their unique circumstances.

First, given that EYW is surrounded by one of the country's most diverse, unique, and precious ecosystems, the primary objective of the Airports Department is to achieve a reduced environmental impact through natural resource conservation. Natural resource conservation is a critical environmental resource category in which the City, County, and State have already made commitments. The Airports Department's focus on natural resource conservation is consistent with the sustainability goals set by the surrounding municipalities.

Second, Airports Department leadership has indicated that focusing on social responsibility is an essential element for the sustainability plan. The Airports Department is keenly aware of the importance of the Airport being a good neighbor, and it values its relationship with the neighboring communities.

### 7.2.4.3 Sustainability Mission Statement

A critical component to every sustainability plan is the Airport's sustainability mission statement. This statement is a projection of the Airport's future in sustainability, similar to the vision statement, that provides a more in-depth explanation of how sustainability will be achieved. Specifically, the FDOT states:

A mission statement should present the big picture of what the airport would like to achieve. The mission does not need to be explicitly attainable; it should provide an aspirational image. With a mission in place, the airport can identify the goals that will help to achieve this vision.<sup>2</sup>

To aid in the development of the mission statement, ACRP Report 20, *Strategic Planning in the Airport Industry*, recommends answering the following questions:

1. What do we do?
2. For whom do we do it?
3. How do we do it?

The answers to these questions should be short and concise to allow for integration into the sustainability mission statement. EYW serves commercial air passengers wishing to experience the beauty and adventure of the Florida Keys. The Airport performs its services not only for tourists from around the globe but also for the local passengers departing from and returning to their hometown. The Airport's services are achieved by a dedicated staff working ambitiously to coordinate safe and efficient operations. Based on the aforementioned, and considering the Airport's vision statement, the following sustainability mission statement has been established:

"To provide safe aviation facilities at both EYW and MTH while working harmoniously with the county, city, and customers to implement environmental initiatives that protect the environment."

### 7.2.4.4 Sustainability Goals

To commence the sustainability plan, the Airports Department must produce a set of goals for building the remainder of the plan. The Airports Department's goals are designed to reflect the areas of sustainability the Airports Department wishes to target, and they encompass the mission statement and vision of this sustainability plan. These goals will ultimately shape the establishment of Airports Department initiatives. Over

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<sup>2</sup> <http://www.florida-aviation-database.com/library/filedownload.aspx?guid=a49fabd0-dd55-4969-b56f-f7e6162e65fd>

time, these goals may evolve in accordance with how the Airport evolves. The following are the initial set of goals for the EYW sustainability plan:

1. Reduce nonrecycled waste generated by the Airport.
2. Educate Airport staff on sustainability and recycling.
3. Educate Airport customers on sustainability initiatives.
4. Promote sustainability and recycling to the local community.
5. Improve energy and water-saving strategies.

These goals provide a basic outlook into the future of sustainability at EYW. It is the Airports Department's hope that through this sustainability plan, these goals can be achieved.

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## 7.3 Plan Development

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This portion of the sustainability plan defines the developmental phases to help the Airports Department select its sustainability initiatives to achieve the sustainability goals. Additionally, this section includes the identification of specific action items to implement the initiatives. This section also contains details on how the Airports Department will achieve Monroe County's vision of becoming an exemplary small-hub airport for sustainability efforts.

### 7.3.1 SUSTAINABILITY INITIATIVES

Selecting sustainability initiatives involves assessing the goals and vision of the Airports Department and deciding appropriate and realistic tasks to achieve success. The Airports Department acknowledges the importance of selecting cost-efficient initiatives that have the greatest impact on the organization and its related goals.

To aid in evaluating and selecting initiatives, the Sustainable Aviation Guidance Alliance (SAGA)<sup>3</sup> database was consulted. This database contains a list of nearly 950 sustainability initiatives to help airport operators identify initiatives that meet their specific goals and needs. For purposes of this sustainability plan, the Airports Department has selected several initiatives from the SAGA database, identified in **Table 7.3-1**. Considering the Airport Department's limited resources, these initiatives were selected as they were determined to be realistic and economically feasible. These initiatives will contribute to the Airport's sustainability goals and vision.

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<sup>3</sup> Sustainable Aviation Guidance Alliance, <http://airportsustainability.org/sustainable-practices> (accessed December 18, 2017).

**Table 7.3-1: EYW Sustainability Initiatives**

NUMBER	DESCRIPTION	EONS CATEGORY
1	Identify an Airport sustainability champion.	All
2	Unplug cell phone chargers, fans, coffeemakers, desktop printers, radios, and other equipment that drains energy when not in use.	Environment Economic
3	Connect monitors, printers, and other accessories to a power strip/surge protector. Turn off the power strip to prevent them from drawing power when they are not in use.	Environment Economic
4	Post no-idling signs in applicable areas.	Environment
5	Provide sustainability awareness training programs, presentations, and/or meetings for employees, consultants, tenants, and contractors.	All
6	Sponsor local community projects that showcase sustainability efforts, such as recycling days and tree plantings.	Environment Social
7	Implement an Airport foreign object debris (FOD) and pollution day to educate Airport staff on FOD and challenge staff to pick up all airside and landside pollution.	Environment Operational
8	Purchase only "environmentally friendly" cleaning products for janitorial staff.	Environment Social
9	Install motion-detection lights in commonly unused rooms to prevent unused lighting.	Environment Economic
10	Install hand-drying systems in restrooms to remove paper towels.	Environment Economic Social
11	Develop a waste reduction/recycling plan.	Environment Social

## NOTES:

EONS – **E**conomic prosperity, **O**perational efficiency, **N**atural resource conservation, and **S**ocial responsibility

SOURCE: Sustainable Aviation Guidance Alliance, <http://airportsustainability.org/sustainable-practices> (accessed December 18, 2017).

Many of the proposed initiatives will require employee education to ensure success. Accordingly, it is anticipated that the Airport sustainability champion will host mandatory staff meetings to educate Airport employees on the efforts and benefits of the sustainability initiatives.

The development of a waste reduction and recycling plan (Reference Number 10 in Table 7.3-1) will greatly benefit the Airport in the goal of reducing its environmental impact. It is also a tangible program in which quantitative data can be shared with the community. This plan, which is further described in section 7.5, outlines specific recycling and waste reduction initiatives that add to the Airports Departments' overall sustainability efforts.

### 7.3.2 ACTION PLAN

The success of the previously identified sustainability initiatives is primarily tied to the following three questions:

1. How will we get where we want to be?
2. Who will make it happen?
3. When will it happen?

Answering these three questions is intended to give the Airports Department a place to start in implementing its chosen initiatives. Although it is recommended that the Airports Department answer the questions to the best of its abilities, the Airports Department is not obligated to implement the initiatives using the exact answers to the questions. Circumstances often change and require airports to update their timeline or how they implement an initiative.

**Table 7.3-2** presents EYW's sustainability action plan. The numbered cells displayed in the table correspond directly with the numbers of the sustainability initiatives presented in Table 7.3-1.

**Table 7.3-2: EYW Sustainability Action Plan**

NUMBER	HOW	WHO	TIME FRAME
1	Educate Airport staff on desired sustainability practices and post signs in the office as reminders.	Airport staff led by sustainability champion	Short term
2	Educate Airport staff on desired sustainability practices and post signs in the office as reminders.	Airport staff led by sustainability champion	Short term
3	Develop signs with third-party sign developer and place at key areas around the Airport.	Airport staff led by sustainability champion	Short term
4	Train appropriate staff members on the Airport's sustainability plan, specifically explaining the role they play and why.	Airport staff led by sustainability champion	Short term
5	Actively seek out local community events and projects and reach out to their respective managers about sponsor opportunities.	Airport managerial staff	Short term
6	Designate one day every year to gather Airport staff, to discuss FOD and pollution, and to have staff members go outside to the Airport airside and landside to collect as much FOD/pollution as possible.	Airport staff led by sustainability champion	Short term
7	Research and switch to cost-effective cleaning products deemed "environmentally friendly." Post signs around the Airport stating, "EYW is cleaned with all environmentally friendly materials."	Airport janitorial staff	Short term
8	Find and purchase motion-detection lighting equipment to install in rooms/offices that do not experience frequent usage.	Airport sustainability champion and Airport maintenance staff	Long term

9	Find and purchase air hand-drying system equipment to install in restrooms.	Airport sustainability champion and Airport maintenance staff	Long term
10	Develop a waste reduction and recycling plan.	Airport staff	Short term

SOURCE: Ricondo & Associates, Inc., December 2017

## 7.4 Performance Monitoring and Next Steps

As the Airports Department begins to implement the Airport's sustainability plan, it is important to revisit and monitor the plan's progress. As previously stated, sustainability planning is a continuous effort. Occasional updates to the plan will be required to ensure the plan is unfolding efficiently and within the established sustainability framework. Beginning with the development of this sustainability plan, it is the Airports Department's intention to continue sustainability efforts into the future.

### 7.4.1 RECURRING CHECK-IN MEETINGS

To ensure the effectiveness of this sustainability plan, it is anticipated that the Airports Department will host annual sustainability check-in meetings with the sustainability champion and Airport management team. These meetings will cover the initiatives that have been implemented, their status, and their perceived effectiveness. These meetings will serve as a general overview of initiative performance.

In addition to reviewing current initiatives, check-in meetings will discuss the feasibility and merits of implementing new initiatives. Further initiative selection will be documented appropriately to be included in future iterations of the Airport's written sustainability plan. Specifically, the annual sustainability meeting will answer the following questions:

1. Which initiatives have been implemented?
2. How effective have the implemented initiatives been?
3. Are we meeting our goals and vision?
4. What could we improve upon?
5. Are we ready to implement more initiatives?
6. Do we need to select new initiatives?

### 7.4.2 PERFORMANCE MONITORING

It is anticipated that the sustainability champion will regularly track the performance of the initiatives. The sustainability champion should develop a brief written update on the initiatives every three months that would cover which initiatives have been formally implemented, how the Airport staff and customers have reacted, and if the initiatives have achieved their anticipated result. This update should be developed and submitted to Airport management to track the sustainability plan's success and to determine if further efforts are required. Additionally, these updates will serve as a motivational tool to continue the pursuit of overall Airport sustainability.

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## 7.5 Waste Reduction and Recycling Plan

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Being a top destination for tourists and travelers from all over the world, EYW maintains the responsibility of providing an efficient and safe airport, while protecting the delicate and expansive ecosystem that surrounds it. An additional responsibility for an airport commercial traffic is to pursue sustainable practices and, more specifically, recycling initiatives.

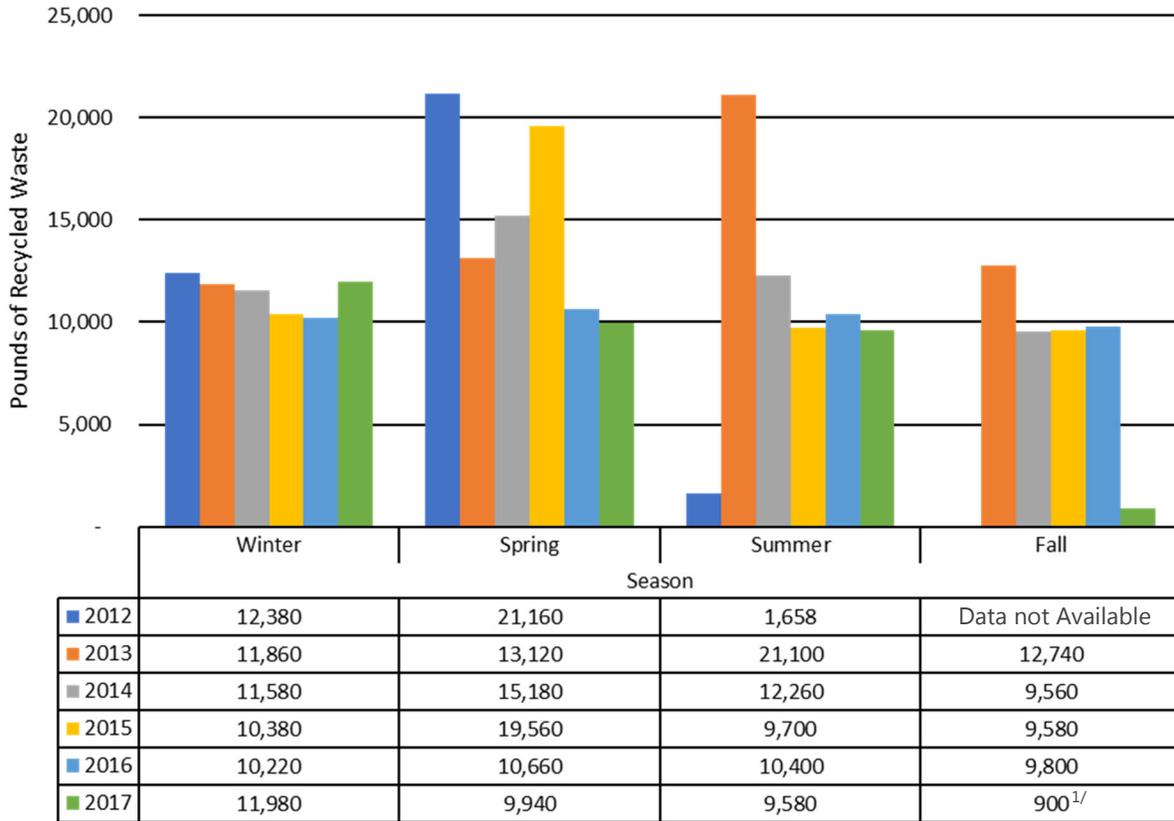
### 7.5.1 EXISTING RECYCLING/WASTE PROGRAM

In 2009, the City of Key West implemented a mandatory recycling practice to reduce the City's overall waste footprint.<sup>4</sup> EYW complies with this City requirement primarily by placing marked recycle bins next to all standard waste bins in the commercial terminal and its surrounding facilities. In fiscal year 2015, EYW recorded nearly 50,000 pounds in recycled waste which represents approximately 14% of total waste. This demonstrates the role that the Airport plays in the City of Key West's recycling efforts. **Exhibit 7.5-1** displays EYW's recorded recycled content between fiscal year 2013 and fiscal year 2017.

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<sup>4</sup> City of Key West Florida, <http://www.keywestcity.com/egov/docs/129486867240.htm> (accessed November 13, 2017).

**Exhibit 7.5-1: Pounds of Annual Recycled Waste**



NOTES: 1/ Low recycling rate due to clearing of hurricane debris.

SOURCE: Monroe County Airports Department, April 28, 2018.

PREPARED BY: Ricondo & Associates, Inc., May 2018.

Most of the Airport’s recycling efforts, beyond the stationed recycling bins, are coordinated by the Airport’s TSA staff. However, EYW currently does not have a formal recycling or waste management plan in place; despite this, Airports Department staff understand the significance and importance of a successful waste/recycling program.

### 7.5.1.1 Areas of Influence

Since the commercial passenger terminal is where the majority of passenger activity takes place at the Airport, this area remains the primary focus of waste management and recycling efforts. However, the recycled waste compactor has been placed in a neutral location at the Airport to allow for easy access by the Airport FBO and Airport tenants. This location provides other Airport users the opportunity to participate in the Airport’s recycling efforts. While the Airport shares compactors and dumpsters with the FBO and tenants, waste reduction and recycling efforts are not currently coordinated directly with them.

The Airports Department recognizes three primary categorizations of waste: Municipal Solid Waste (MSW), Recyclables, and Construction and Demolition (C&D) Debris. Each of these waste categories has a designated compactor located to the west of the commercial passenger terminal. The three primary waste categorizations are further explained as follows:

- **Municipal Solid Waste** – This waste is regarded as standard waste produced by people on a daily basis. At EYW, this waste includes deplaned waste and compostables. The janitorial staff at EYW collects this waste daily, and transports it to the MSW compactor.
- **Recyclables** – Generally, recyclables are a form of MSW that can be repurposed in post-processing efforts. In accordance with the City of Key West, at EYW, recycling bins are placed next to each standard MSW bin. These recycling bins collect glass, aluminum, cardboard, paper, and plastics marked with #1 through #7. Accepted recycled materials are determined by Waste Management, Inc. (WM), the waste collection agency at the Airport. The EYW janitorial staff collects recycled waste daily and transports it to the designated recycled waste compactor.
- **Construction and Demolition Debris** – This form of MSW is generated through any Airport construction effort, including demolition, renovation, utility maintenance, etc. FAA guidance on Airport Recycling, Reuse, and Waste Reduction Plans<sup>5</sup> lists the following examples of C&D debris: concrete, wood, metals, soil, bricks and masonry, asphalt, rock, stone, gravel, sand, carpet, and pipe. The transportation of C&D debris at EYW takes place on an as-needed basis and is generally performed by the responsible construction or renovation team.

The three categories contribute collectively to the Airport's waste footprint. However, the goal of this plan is to focus more intently on decreasing typical landfill-bound MSW generation and increasing Airport recyclables.

### 7.5.1.2 Existing Waste Operations

The waste process begins at EYW when waste is collected daily by the Airport janitorial staff. This waste is then taken to the Airport compactors located to the west of the commercial terminals. WM then takes the waste to the City of Key West Solid Waste Transfer Station (Transfer Station), which is owned and operated by the City. According to the City's Solid Waste Master Plan,<sup>6</sup> the Transfer Station is permitted to handle up to 350 tons of waste a day. The waste tipping fee at the Transfer Station is \$165.97 per ton, while there is no tipping fee for recyclables. In 2010 and 2011, a waste study was conducted at the Transfer Station to determine the amount of waste that could have been recycled. The study found that, collectively, 71 percent of waste at the Transfer Station could have been recycled. After waste is collected at the Transfer Station, WM transports it to one of its waste-to-energy facilities in Broward County, Florida, or to one of its landfills.

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<sup>5</sup> Federal Aviation Administration, <https://www.faa.gov/airports/environmental/media/airport-recycling-reuse-waste-reduction-plans-guidance.pdf> (accessed December 18, 2017).

<sup>6</sup> City of Key West Florida, [http://www.cityofkeywest-fl.gov/egov/documents/1345470842\\_715881.pdf](http://www.cityofkeywest-fl.gov/egov/documents/1345470842_715881.pdf) (December 18, 2017).

## 7.5.2 RECYCLING FEASIBILITY

In pursuing additional recycling initiatives at EYW, it is important to first examine the feasibility of recycling efforts at the Airport. This section analyzes both the physical and economic feasibility of a recycling program at EYW, as well as federal, state, and local guidance for implementation.

### 7.5.2.1 Physical Feasibility

EYW covers approximately 334 acres of land in Key West, Florida. In 2009, major renovations were completed to EYW's commercial terminal, adding a new elevated building and new parking spaces for 300 vehicles. This new 30,000-square-foot terminal building nearly doubled the commercial terminal building size, increasing the Airport's capacity for commercial air travelers. With the addition of terminal space and parking facilities, EYW increased its amount of single-stream recycling bins. Currently, EYW only uses single-stream recycling bins located around the commercial terminal and its associated facilities. These bins are easily accessible to janitorial staff and are clearly marked in visible areas. **Exhibit 7.5-2** displays a single-stream recycling bin at EYW.

To increase waste-handling efficiency, EYW has its recycling and waste compactors located adjacent to each other in an easily accessible area. The adjacent location of these compactors allows for an efficient and streamlined handling process of the waste from the terminal and corresponding facilities, where it is collected, to the compactors, where it is disposed. Further, this location provides adequate space for WM to efficiently collect disposed waste. Despite its relatively small size, EYW has successfully maintained the single-stream recycling collection and disposal practice. As new or expanded facilities open at the airport, the ongoing waste collection process and recycling initiatives are expected to cover the newly developed areas and/or facilities.

**Exhibit 7.5-2: Single-Stream Recycling Bin at EYW**



SOURCE: Monroe County Airports Department, April 28 2018.  
PREPARED BY: Ricondo & Associates, Inc., May 2018.

### 7.5.2.2 Government Guidance

Federal, state, and local guidance exists to mandate, encourage, and assist efforts being undertaken by entities in the United States, the State of Florida, and the City of Key West.

#### *Federal Guidance*

There are numerous resources provided by the federal government to aid airport operators and other entities in pursuing recycling and waste management efforts. The FAA provides information and guidance to airport operators for successfully implementing sustainable practices, such as recycling at airports. Specifically, the FAA provides technical guidance on Airport Recycling, Reuse, and Waste Reduction through the form of a technical memorandum, a synthesis document, and collections of ACRP reports<sup>7</sup>. Additionally, in 2009, the EPA completed a large collection of airport-specific recycling information through numerous research studies and data collection efforts: "Developing and Implementing an Airport Recycling Program."<sup>8</sup> The FAA collaborates with the EPA to ensure airports are receiving the best and most accurate information for implementing recycling and waste reduction initiatives.

#### *State Guidance*

The State of Florida has several laws and initiatives in place to ensure proper waste handling, disposal, and recycling. The Florida Department of Environmental Protection (FDEP) is specifically responsible for maintaining the state's rules and statutes regarding recycling. Florida Statute (F.S.) Chapter 403, Section 7032, "Recycling,"<sup>9</sup> sets Florida's long-term recycling goal of 75 percent of municipal solid waste by 2020. Further, F.S. Chapter 403, Section 706, "Local Government Solid Waste Responsibilities,"<sup>10</sup> outlines required recycled waste goals for the state's counties: 70 percent by December 31, 2018, and 75 percent by December 31, 2020.

In addition to the Florida Statutes and guidance from FDEP, the FDOT provides airport-specific information on pursuing sustainability initiatives. The FDOT *Airport Sustainability Guidebook* was released in 2017. This guidebook provides Florida's airports with specific processes and objectives to achieve successful sustainability initiatives.

The Airports Department recognizes the rules and goals enforced by the FDEP and is striving to provide a solid foundation for Monroe County to achieve its upcoming recycling goals of 70 percent by the end of 2018 and 75 percent by the end of 2020. Further, the Airports Department strongly anticipates upcoming guidance from the FDOT to aid in the implementation of sustainable initiatives at the Airport.

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<sup>7</sup> [https://www.faa.gov/airports/environmental/airport\\_recycling/](https://www.faa.gov/airports/environmental/airport_recycling/)

<sup>8</sup> United States Environmental Protection Agency, <https://archive.epa.gov/wastes/conservation/tools/rogo/web/pdf/airport-recycling-guide.pdf> (accessed December 18, 2017).

<sup>9</sup> The Florida State Senate, 2013 Florida Statutes, <http://www.flsenate.gov/Laws/Statutes/2013/403.7032> (accessed December 18, 2017).

<sup>10</sup> The Florida State Senate, 2013 Florida Statutes, <http://www.flsenate.gov/Laws/Statutes/2013/403.706> (accessed December 18, 2017).

### Local Guidance

In 2012, the City of Key West completed its *Solid Waste Master Plan: Establishing a Pathway to Zero Waste*.<sup>11</sup> This master plan addresses all aspects of the City's waste lifecycle, including initial disposal, waste collection, waste transportation, and corresponding fees. This master plan can be used by businesses and residents in the City of Key West to align their waste reduction and recycling goals with the City's goals and, in-turn, with the County's goals and the State's goals. Additionally, this master plan provides the City's residents and businesses with general guidance on how to effectively reduce nonrecycled waste in a variety of scenarios.

### 7.5.3 PLAN TO INCREASE RECYCLED WASTE

Currently at EYW, recycling bins are placed throughout the landside facilities, and the Airport houses a recycled waste compactor. While these initiatives play a large role in meeting recycling goals, further efforts will greatly help to emphasize the importance of recycling and waste reduction at the Airport.

Based on the current condition of the Airport's recycling and waste reduction plan, as well as federal, state, and local guidance, the following objectives are recommended for EYW in pursuit of increasing recycling and minimizing solid waste.

#### 7.5.3.1 Short-Term Objectives

##### **1. Designate an Airport recycling coordinator and associated "green team."**

To ensure the success of the Airport recycling efforts, it is critical that the Airports Department designate a recycling coordinator. This staff member will be responsible for coordinating Airport recycling initiatives, maintaining staff and customer awareness, and the overall monitoring of recycling. Additionally, an Airport "green team" can be designated. This team should consist of one team member from every department of the Airport. This team will meet with the recycling coordinator and help carry out and encourage recycling tasks and initiatives within their respective Airport departments.

##### **1. Develop and place posters in commercial terminal facilities.**

Educating passengers is perhaps the most important aspect of a strong recycling program. Developing posters that encourage passengers to find their nearest recycling bin will help to increase waste recycled and to decrease standard waste. It is recommended that these posters be placed near recycling bins and/or standard waste bins to inform passengers of why recycling is important and to list the benefits that are associated with it.

##### **2. Initiate bimonthly employee education and encouragement for recycling.**

Bimonthly employee education will give Airport employees a chance to meet about recycling and to learn about their specific roles within the Airport recycling efforts. Although for most people this role may be small, the

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<sup>11</sup> United States Environmental Protection Agency, City of Key West Florida, [http://www.cityofkeywest-fl.gov/egov/documents/1345470842\\_715881.pdf](http://www.cityofkeywest-fl.gov/egov/documents/1345470842_715881.pdf) (accessed December 18, 2017).

encouragement and educational impact of learning the benefits of the recycling program can help drive the success of the overall recycling efforts.

### **3. Implement different colored liners for recycling bins.**

The EPA found that at Seattle-Tacoma International Airport, when recycling bins were more noticeable, public recycling at the airport increased by 40 percent.<sup>12</sup> While EYW's recycling bins easily stand out, the EPA also recommends the use of different colored liners for recycling bins. This effort will help attract the public's eye, and it will also reduce the risk of confusion for the janitorial staff between recycled waste and nonrecycled waste during the disposal process.

#### **7.5.3.2 Long-Term Objectives**

##### **1. Relabel recycling bins with example images of recycleable waste.**

The uncertainty of which items to place in a recycling bin often leads to customers either putting inappropriate waste in recycling bins or bypassing the recycling bin altogether. For this reason, many studies show that top-facing images representing the types of waste to put in a recycling bin will increase the amount of appropriate recycled waste. An EPA study found that the most common types of recycled waste generated by airport public terminals, ticketing areas, and security gates included: mixed paper, newspaper, glass, aluminum cans, and plastic bottles. Therefore, it is recommended that recycle bins at EYW depict representations of these types of waste.

##### **2. Coordinate with airline representatives to reduce solid deplaned waste.**

In the FAA's 2013 recycling synthesis,<sup>13</sup> a study showed that "on average, 20 percent of a commercial service airport's municipal solid waste is from deplaned waste." Further FAA analysis has shown that "40 percent of that total could be readily recycled." To help reduce the amount of nonrecycled deplaned waste generated by commercial airlines at EYW, it is recommended that the airport leadership reach out to airline representatives to coordinate alternative methods of handling waste and properly discarding it to the appropriate recycling bins.

##### **3. Establish a tracking system for solid waste and recycled waste.**

To help track and understand the Airport's waste footprint, it is recommended that the Airports Department establish a simple qualitative and quantitative methodology to track the waste generated at the Airport. Due to the availability of waste compactors, the Airports Department should begin to track the amount of waste and compare that to the amount of recycled waste on a weekly and monthly basis. Additionally, Airport staff should track which Airport facilities are receiving the most recycled waste and nonrecycled waste. These forms of waste

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<sup>12</sup> United States Environmental Protection Agency, <https://archive.epa.gov/wastes/conserve/tools/rogo/web/pdf/airport-recycling-guide.pdf> (accessed December 18, 2017).

<sup>13</sup> Federal Aviation Administration, <https://www.faa.gov/airports/resources/publications/reports/environmental/media/RecyclingSynthesis2013.pdf> (accessed December 18, 2017).

tracking and identification can greatly benefit the Airports Department in its future efforts to reduce waste and to encourage recycling at the Airport.

### 7.5.3.3 Continuous Monitoring – Continuous Improvement

The Airports Department recognizes the vital role of the Airport in the City, County, and State recycling efforts. Further, the Airports Department is continuously seeking to protect and promote the safety of the ecosystems that surround EYW. Therefore, it is important to the Airports Department to continuously monitor its recycling and waste reduction efforts, to educate its staff and customers on the importance of recycling and waste reduction, and to seek ongoing improvements and methods that will further accelerate the Airport's recycling.