

SUSTAINABILITY MANAGEMENT PLAN 2014



BUILDING A FUTURE TOGETHER
DALLAS FORT WORTH INTERNATIONAL

Updated July 2018

CONTENTS

EXECUTIVE SUMMARY

A summary of DFW's Sustainability Management Plan and the path forward

Page 3



ACKNOWLEDGEMENTS

A list of stakeholders who were involved in developing the Sustainability Management Plan

Page 15



INTRODUCTION

A brief history of DFW's sustainability program and the purpose of the Sustainability Management Plan

Page 19



STAKEHOLDER OUTREACH

The model for stakeholder engagement that was used to develop the Sustainability Management Plan

Page 25



VISION STATEMENT

The foundation of the Sustainability Management Plan

Page 33



FOCUS AREAS AND GOALS

Sustainability areas and goals that drive the overall program

Page 37



PAST ACHIEVEMENTS AND FUTURE ENDEAVORS

A baseline assessment, key performance indicators, metrics, targets, and ongoing and future initiatives

Page 43



NEXT STEPS

A plan for implementation of the Sustainability Management Plan

Page 81



APPENDIX LIST OF EXISTING PRACTICES

A comprehensive list of existing sustainability practices

Page 87



APPENDIX LIST OF ACRONYMS

A comprehensive list of acronyms used throughout the Sustainability Master Plan

Page 97





EXECUTIVE SUMMARY



Executive Summary

Dallas/Fort Worth International Airport (DFW) is committed to enhancing sustainability progress at the airport and in the broader community. For over two decades, DFW has been focused on reducing its impacts to the environment, supporting the community and maximizing its role as an economic engine for the North Central Texas area. In addition to improving its own operations, DFW employees have also participated in and provided leadership for sustainability efforts taking place locally, regionally, nationally and globally. As demonstrated in DFW's sustainability policy and annual sustainability reports, the airport strives to achieve optimal results in the areas of finance, social responsibility and environmental stewardship.

This Sustainability Management Plan was developed as part of FAA's Sustainability Management and Master Plan Pilot Program, which provided DFW with a unique opportunity to elevate its sustainability program to the next level. As a participant in the third round of this grant program, DFW joins 44 other domestic airports in developing a Sustainability Management or Master Plan and sharing lessons learned with the airport industry. The collective experience of the Pilot Program airports will help to shape future guidance on airport sustainability planning.



PURPOSE OF THE SUSTAINABILITY MANAGEMENT PLAN

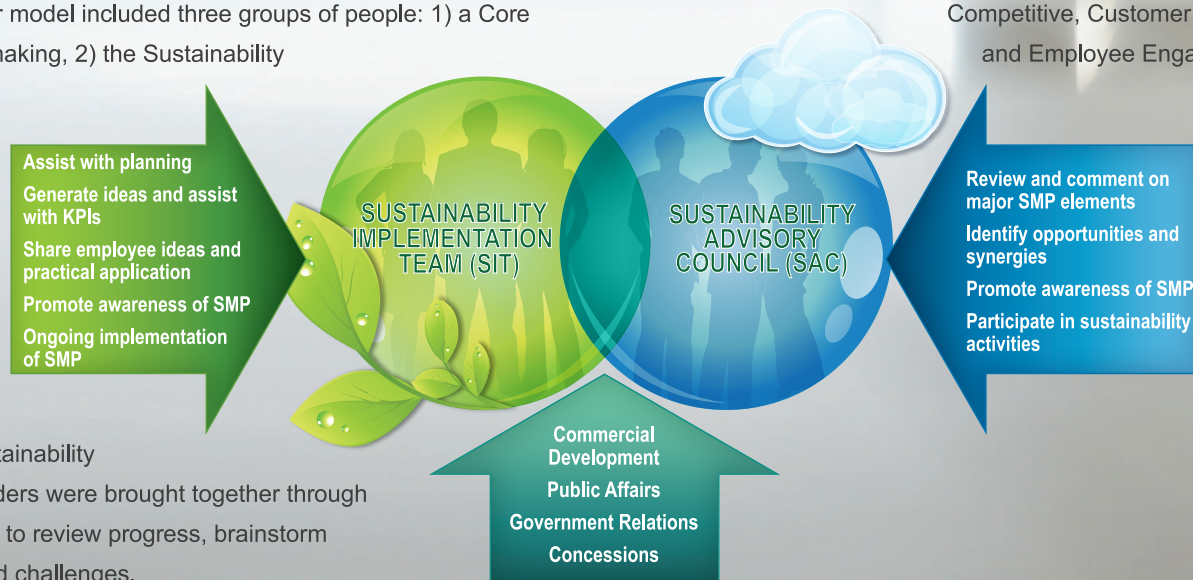
The purpose of this Sustainability Management Plan is to develop a roadmap for enhancing DFW's sustainability program through collaboration with stakeholders. Together, DFW and the community strengthened DFW's sustainability foundation by creating a common vision, selecting focus areas for improvement, and establishing meaningful goals, key performance indicators and metrics for measuring progress. Following, a comprehensive baseline assessment was conducted to better understand

DFW's past achievements and current efforts and to set achievable targets for the future. Based on stakeholder contributions and the information collected during the Plan development, DFW identified short-term, medium-term and long-term actions to reach the targets and further integrate sustainability into its culture and day-to-day business practices. Implementation and monitoring plans were also developed to allow DFW to evaluate progress and create a cycle of continuous improvement.



STAKEHOLDER OUTREACH

Stakeholder involvement in the planning and implementation of DFW's sustainability program is of paramount importance to the airport. Development of the Sustainability Management Plan provided a unique forum to bring together interested stakeholders and shape the future of DFW's sustainability story. DFW developed a stakeholder engagement model to efficiently engage participants and leverage their strengths. The stakeholder model included three groups of people: 1) a Core Team responsible for decision-making, 2) the Sustainability Implementation Team (SIT), an internal team who will ultimately be accountable for implementation of sustainability initiatives, and 3) the Sustainability Advisory Council (SAC), a team of external stakeholders to serve in an advisory role. Led by the Enterprise Sustainability Program Manager, the stakeholders were brought together through workshops, surveys, and emails to review progress, brainstorm ideas, and identify synergies and challenges.



VISION

Together with its stakeholders, DFW developed a vision to serve as a common foundation for the sustainability program. Although a sustainability policy has been in place since 2008, a formal vision statement was created to help strengthen the airport's message regarding its commitment to sustainability. The vision is consistent with the four pillars of the Strategic Plan (Cost Competitive, Customer Satisfaction, Operational Excellence and Employee Engagement) and DFW's five Beliefs (Innovating Wins, Stepping Up, Owning It, You're Important, and Reaching Out). Through collaboration, communication and coordination, sustainability principles and concepts can be used to accomplish the goals of the strategic plan and to foster a culture consistent with DFW's Beliefs.

VISION



sustainability

trusted with tomorrow

COLLABORATION

COLLABORATION

COMMUNICATION

COMMUNITY
ENGAGEMENT

SAFE AND
SECURE

BUSINESS
PERFORMANCE

OPERATIONAL
EXCELLENCE

CUSTOMER
EXPERIENCE

EMPLOYEE
ENGAGEMENT



Dallas Fort Worth International Airport (DFW) recognizes that applying sustainability principles throughout our organization plays a critical role in achieving our goals to **ensure safety and security, enhance business performance, optimize customer experience, deliver operational excellence and foster employee and community engagement**. Building on our Beliefs, DFW strives to integrate sustainable thinking into all aspects of our day-to-day activities to strengthen our commitment to our airport, our people, our community, and our environment. Understanding we are a part of a greater whole within our industry and community, we will work collaboratively with our stakeholders and partners to implement the innovation and change necessary to protect our natural resources and allow future generations to thrive.



DFW



FOCUS AREAS AND GOALS




The goal-setting process for the DFW Sustainability Management Plan began by identifying focus areas, or broad categories in which the airport hopes to affect change or continue ongoing sustainability efforts. Once the focus areas were established, goals were set that are closely aligned with the Strategic Plan. The focus areas and goals serve as the drivers for the selection of future sustainability initiatives at the airport.







SUSTAINABILITY GOALS



	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	 PROCUREMENT	 SUSTAINABLE INFRASTRUCTURE AND RESILIENCY	 ASSET OPTIMIZATION	 ENERGY AND AIR	 BIODIVERSITY AND NATURAL ENVIRONMENT	 WATER	 WASTE	 COMMUNITY PARTNERSHIPS	 COMMUNICATION AND EDUCATION	 EMPLOYEE PARTICIPATION	 LEADERSHIP
Measure the sustainable materials and services procured to minimize upstream and downstream impacts	★										
Measure the purchase of goods and services from North Central Texas	★										
Minimize resource demands and impacts of construction for building and non-building development		★									
Invest in public infrastructure that supports sustainability goals		★									
Evaluate and improve infrastructure and operations for climate change impacts		★									
Reduce overall lifecycle cost for capital investments			★								
Optimize efficiency of fleet operations			★								
Decrease energy and fuel use				★							
Increase alternative fuel usage use and grow the alternative energy portfolio				★							
Decrease air emissions				★							
Increase biodiversity and preserve natural areas					★						
Reduce the use of potable water						★					
Increase the use of reclaimed water						★					
Minimize the downstream impacts of stormwater						★					
Decrease generation of municipal solid waste and hazardous waste							★				
Increase recycling							★				
Act as a good neighbor to the residents and businesses surrounding the airport								★			
Support economic development in the regional community								★			
Increase outreach with employees, tenants, travelers, and the community related to sustainability									★		
Provide healthy lifestyle choices to travelers and employees									★		
Facilitate sustainable choices and decision-making to incorporate sustainability into business practices										★	
Be viewed as an employer of choice by providing a safe, diverse, and fair working environment for employees										★	
Advance DFW's leadership in environmental, social and economic activities in the global, national and North Central Texas communities											★

★ Primary Focus Area

	Ongoing Initiatives	Future Initiatives		
		Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
 Procurement	Green Procurement Team Identification of warehouse products with sustainability attributes Educational module for green procurement	Define “local products and services” and measure the baseline Develop process for selecting sustainable alternatives (e.g., refrigerants, paper, custodial)	Improve communication and tracking between procurement and other departments to streamline process. (e.g., coding in procurement tracking system is different than coding in CMMS system).	Collaborate on procurement in custodial, TSA, and concessionaire contracts.
 Sustainable Infrastructure and Resiliency	Green Building Standards	Evaluate current and future infrastructure for climate change risk Integrate sustainable infrastructure checklist into project development process Review and amend Green Building Standards, integrate with new LEED™ and Envision™ rating systems	Develop a Climate Action Plan Collaborate with owner cities on updating of building codes to be more sustainable (e.g. incorporating the International Green Construction Code).	Develop sustainable design and construction standards for concessionaires and tenants and create a process for enforcement and recognition.
 Asset Optimization	Utilize CMMS to capture fleet asset data	Produce and distribute fleet sustainability scorecard to end users Develop sustainability criteria for fleet renewal process	Identify, implement and provide training on a lifecycle costing tool to inform operations, maintenance, planning and design. Use GPS to track vehicle use and driver behavior and use the data to manage the fleet.	Use TRIP documentation to define “asset” (aggregation level) for building assets and use this definition to expand to asset information collected for the rest of the airport. Acquire clean vehicles for the fleet

	Ongoing Initiatives	Future Initiatives		
		Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
 Energy and Air	<p>Preconditioned Air (PCA), District Heat/Cool, Thermal Storage</p> <p>100% Renewable Electricity, Photovoltaic Array, Geothermal</p> <p>Lighting Upgrades, Automation and Controls, Continuous Commissioning</p> <p>Maintain ACI's Airport Carbon Accreditation Level 3+ Neutrality Certification</p> <p>Renewable Natural Gas (RNG)</p> <p>Electric Vehicle (EV) Charging Stations</p>	<p>Identify grant opportunities for energy and air quality improvements associated with CTA expansion</p> <p>Optimize PCA/Power utilization by using runtime meters</p> <p>Fleet optimization and electrification study</p> <p>Develop energy efficiency outreach program for employees</p> <p>Enforce an anti-idling policy</p> <p>Electric Vehicle (EV) Charging Stations</p>	<p>Identify and evaluate future opportunities to deploy on-site renewable energy strategies</p>	<p>Explore the use of virtual training for the Fire Training Facility to reduce the use of fuel and water and reduce air quality impacts.</p>
 Biodiversity and Natural Environments	<p>Watershed Management Program</p>	<p>Baseline preservation area and biodiversity value</p>	<p>Create a tree mitigation plan</p> <p>Increase use of native species, drought tolerant landscaping, and low impact development (LID) techniques for airport-controlled land</p>	<p>Create a "preservation bank" in coordination with NCTCOG for both on and/or off-site habitats.</p> <p>Implement a turf replacement program to plant buffalo grass or new varieties of St Augustine</p>
 Water	<p>Airport Image Elements (landscaping guidelines)</p> <p>Reclaimed Water Distribution</p> <p>Water Efficient Building Fixtures (WaterSense®)</p>	<p>Develop an outreach program for employees, customers and tenants on water conservation ideas for at work and at home</p> <p>Identify and evaluate stormwater capture and reuse opportunities</p> <p>Escalate WaterSense promotional partner communication</p> <p>Participate in regional long-term planning on water availability (led by NCTCOG)</p>	<p>Identify and evaluate opportunities to convert properties to minimal irrigation and/or reclaimed water irrigation</p>	<p>Develop a water metering monitoring system to identify outliers quickly and connect it to the new leak detection system</p> <p>Reduce potable water use for fracking, either through re-use of the water or use of reclaimed water.</p>

	Ongoing Initiatives	Future Initiatives		
		Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
 Waste	In-house collection of paper, plastic, aluminum, cardboard Composting with HMS Host W/R as a service to Tenants	Complete W/R Management Plan Establish hazardous waste target Expand composting and food donation programs with concessionaires Broaden recycle efforts, targeting volumes, emphasizing recycle as primary option and improving infrastructure in offices and terminals	Identify and evaluate opportunities for single comingled stream recycling Evaluate SOC and Accounting to incentivize recycling and eliminate system “gaming”	Research and promote tools and technologies as an alternative to paper and encourage users to change old processes/ways of thinking in regards to printing, storing and managing paper.
 Community Partnerships	BDD Programs Annual United Way Campaign	Develop targets for direct economic value generated and proportion of senior management from local communities Develop a baseline for volunteer/service hours contributed Airport wide Continue to host and participate in SAC and NCTESF meetings for regional sustainability coordination Formally include “Impacts to Society” criterion in the decision-making process for development projects	Partner with local transportation agencies to promote commuter options and increase ridership by employees and customers on systems such as the DART	Help to form and participate in a North Central Texas Working Group to create a dialogue about climate change risk
 Communication and Education	Sustainability Page (internal and external) External Reporting	Employee and Department Sustainability Recognition Program Develop Sustainability Communications strategies for various ‘customer’ groups Develop educational sustainability campaign for employees (‘how to’ format)	For all presentations (internal and external), include 1-2 sustainability slides and tie them into the topic Develop educational talking points for communities so that they can address concerns about the airport and market the airport’s successes using proper language and facts Measure how often the terminal fitness options are used and adjust the operations accordingly	Improve airline communication and tenant coordination regarding sustainability initiatives Develop a DFW sustainability app that employees can use to learn about sustainability, track progress, get ideas and submit ideas Develop a requirement for vendors to post nutrition information at food stations

	Ongoing Initiatives	Future Initiatives		
		Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
 Employee Participation	Green ITS Team Green Purchasing Team Green Building Team	Sustainability Recognition Program for Individuals Sustainability Recognition Program for Projects and/or Project Teams Conduct a poll with employees to determine what aspects of working at DFW are most important to them and use this data to continue being an employer of choice	Include one sustainability initiative in the annual departmental goals Create a process to collect sustainability ideas from employees	Develop a formal tracking process for tracking volunteer hours and recognizing the employee's actions, potentially as part of the performance appraisal process
 Leadership	Clean Texas Platinum EPA WaterSense EPA Green Power Partnership	Continue to host and participate in SAC and NCTESF meetings for regional sustainability coordination Communicate with stakeholders regularly	Host a national forum with airports, vendors and FBOs to share best practices and collaborate on activities, such as HMSHost's food donation program Start a "Speakers Bureau" or "Ambassador Program" that involves employees helping to train and educate others on sustainability Continue to evaluate on-site renewables as the economics change and partner with local utilities and regional communities to develop demonstration projects	Support the development of alternative aviation fuels by partnering with organizations such as CAAFI to run testing programs at DFW



2 ACKNOWLEDGEMENTS





Acknowledgements

DFW would like to acknowledge the contributions of its stakeholders in the development of this Sustainability Management Plan. Their insight made it possible to develop a plan that is both practical and achievable while maximizing the airport's sustainability. Future involvement of the stakeholders will undoubtedly help DFW to evaluate and enhance its ongoing sustainability program. Participants in the Sustainability Management Plan development include:



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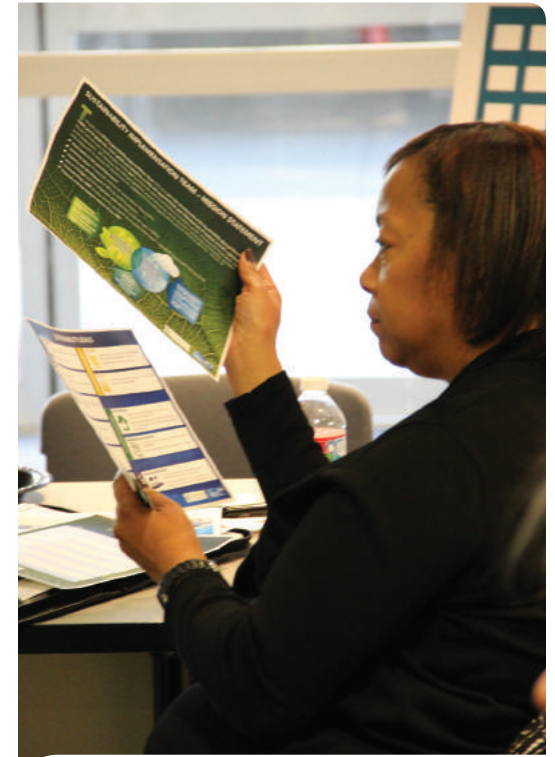
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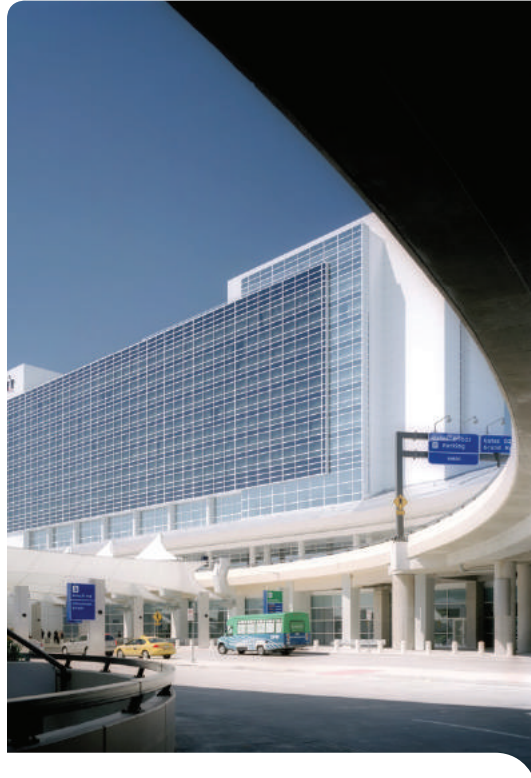
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INTRODUCTION





Introduction

Dallas/Fort Worth International Airport (DFW) has a rich history of advancing sustainability principles, both at the airport and in the broader community. For over ten years, DFW has been focused on reducing its impacts to the environment, supporting the community, and maximizing its effects as an economic engine for the North Central Texas area. Early on, projects aimed at emissions reduction, energy efficiency, renewable energy generation, water conservation, enhanced public transportation, and fleet vehicle conversions were completed to improve the airport's sustainability performance. To emphasize its commitment to sustainability, a formal sustainability policy, brand and tagline were developed in 2008 and internal

Green Teams were put in place in 2009. In 2012, DFW released its first Sustainability Report, which was prepared in accordance with the Global Reporting Initiative (GRI). Subsequent reports were published in 2013 and 2014 that outlined the continued efforts of the airport to integrate sustainability into its culture.

At the same time that DFW was focused on improving its own operations, airport employees were also participating in sustainability efforts taking place locally, regionally, nationally and globally. In particular, the airport participates in the North Central Texas Environmental Stewardship Forum (NCTESF), which is focused on finding

points of collaboration and streamlining sustainability efforts across the region. DFW is also an active participant in the Transportation Research Board's (TRB's) Airport Cooperative Research Program (ACRP) and other sustainability programs and committees taking place nationwide. More recently, DFW has been reaching out to international airports to share its sustainability story.

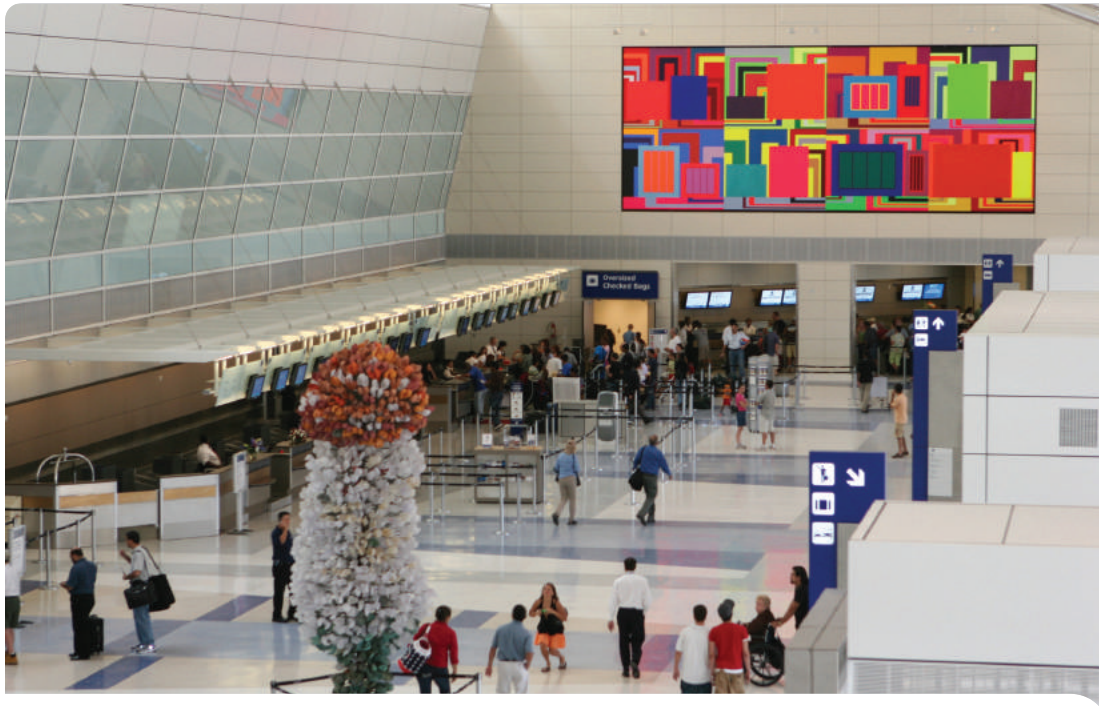
The FAA's Sustainability Master and Management Plan Pilot Program is a unique opportunity to help DFW elevate its sustainability program to the next level. As a participant in the third round of the grant program, DFW joins 44 other U.S.-based airports in developing a Sustainability Management Plan or Sustainability Master Plan and sharing lessons learned with the airport industry. The collective experience of the Pilot Program airports will help to shape future guidance on airport sustainability planning.

WHAT SUSTAINABILITY MEANS TO DFW

For DFW Airport, sustainability relates to the commitment of conducting business responsibly and allowing the benefits of the airport's work to flow naturally to all stakeholders. Rather than focus on solely monetary success, DFW strives to obtain optimal results in the areas of finance, social responsibility, and environmental stewardship,

otherwise known as the "Triple Bottom Line" of profit, people, and planet. Sustainability touches everyone and means making business decisions that positively impact the airport, the employees and the community. As outlined in the airport's sustainability policy, being sustainable involves





business operations and development that meets the need of the present without compromising the ability of future generations to meet their own needs by considering long-term economic, environmental and social impacts of current activities.

DFW'S SUSTAINABILITY MANAGEMENT PLAN

The purpose of this Sustainability Management Plan is to develop a roadmap for enhancing DFW's sustainability efforts through collaboration with stakeholders. Together, DFW and the community will strengthen the foundation of the sustainability program through the creation of a common vision, selection focus areas for improvement, and establishment of meaningful goals. A comprehensive baseline assessment was conducted to better understand DFW's past achievements and current efforts, and to set achievable targets for the future. Based on stakeholder information and the information collected during the Plan development, DFW was able to identify short-term, medium-term and long-term actions to further integrate sustainability into its culture and business practices. Implementation and monitoring plans were also developed to allow DFW to evaluate its progress and create a cycle of continuous improvement.



SUSTAINABILITY MANAGEMENT PLAN DEVELOPMENT PROCESS





4

STAKEHOLDER OUTREACH





Stakeholder Outreach

Stakeholder involvement in the planning and implementation of DFW's sustainability program is of paramount importance to the airport. Development of the Sustainability Management Plan provided a unique forum to bring together interested stakeholders and shape the future of DFW's sustainability story. In the early development stages of the Sustainability Management Plan, DFW identified stakeholders and developed a model to efficiently engage the participants and leverage their strengths. The stakeholder model include three main groups of people: 1) a Core Team responsible for decision-making, 2) the Sustainability Implementation Team (SIT), an internal team who

will ultimately be accountable for implementation and 3) the Sustainability Advisory Council (SAC), an external team of community partners, regulatory agencies, and airport tenants to serve in an advisory role. Several departments, including Commercial Development, Public Relations, Concessions, and Government Relations, participated on both the internal and external teams due to their inherent nature of working with tenants and the airport community. Led by the Enterprise Sustainability Programs Manager, the stakeholders were brought together through workshops, surveys, and emails to review progress, brainstorm ideas, and identify synergies and challenges.

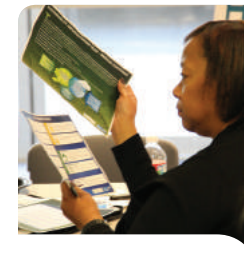


CORE TEAM

The Core Team was designed to engage decision-makers within DFW and to interface with the entire organization in an effective and efficient manner. The Core Team included the Executive Vice President for Operations, Vice President of Energy, Transportation and Asset Management, the Enterprise Sustainability Programs Manager, and the Sustainability Administrator. The Core Team was involved in every aspect of the development of the Sustainability Management Plan, including developing the strategic roadmap, drafting the vision, focus areas and goals, and prioritizing and selecting initiatives for future implementation. The Core Team was also responsible for organizing the stakeholder activities and communicating with the participants.

SUSTAINABILITY IMPLEMENTATION TEAM (SIT)

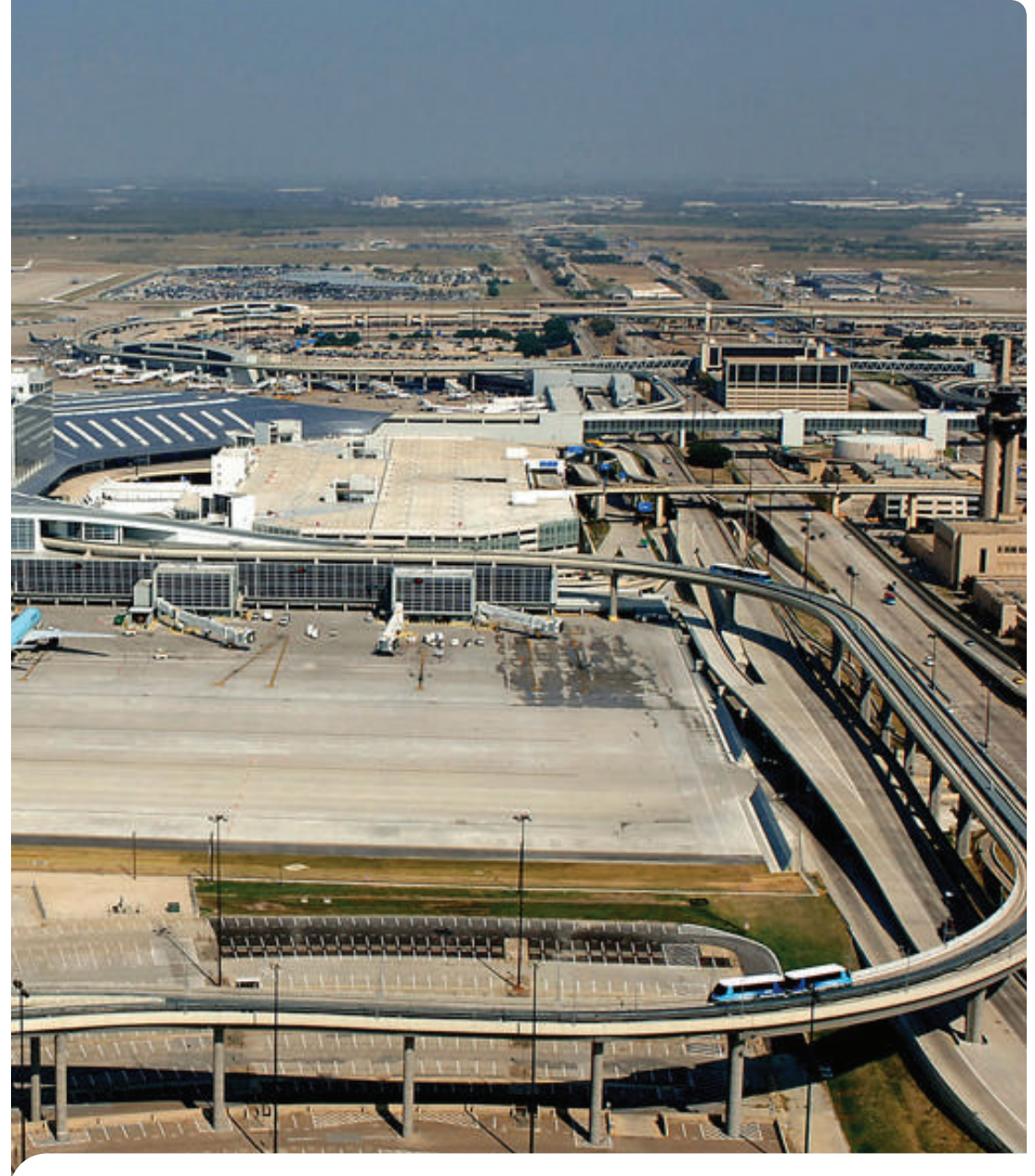
With more than 1,700 employees working directly for the DFW Airport Board, the people that keep the airport operating safely and consistently are DFW's greatest asset. As the people closest to DFW's operations and infrastructure, the airport's employees have the greatest insight into how to improve sustainability practices and further integrate sustainability into airport culture. As those responsible for implementing the Sustainability Management Plan, the SIT plays a crucial role in making the Plan practical and achievable. The SIT's mission is:



The goal of the DFW Sustainability Implementation Team (SIT) is to aid in the development of the Sustainability Management Plan (SMP) and to guide the vision, goals and initiatives so they are implementable and integrated into all aspects of DFW's operation. The SIT will aid in the implementation of the SMP to further the airport's commitment to economic growth, environmental stewardship, and social responsibility. SIT members are important agents for change and will be actively involved in enhancing communication, education and collaboration to achieve the airport's mission, support DFW's sustainability efforts and use resources efficiently. The SIT will:

- Participate in the planning process
- Generate ideas for potential initiatives for sustainability improvement
- Assist in the development of KPIs for tracking progress
- Act as a bridge between employee ideas and their practical implementation
- Promote DFW's SMP and the airport's reputation as a sustainability leader in the North Texas region and worldwide
- Support ongoing implementation of the SMP





SUSTAINABILITY ADVISORY COUNCIL (SAC)

In addition to engaging employees, DFW is committed to working with its neighbors to enhance the sustainability of the region. As an economic engine for North Central Texas, the airport works closely with the tenants, owner cities, surrounding communities, regulators, universities, and transportation agencies to improve quality of life, protect the environment and stimulate the local, regional and global economies. Using this regional perspective, community partnerships are a critical component to DFW's sustainability efforts. The SAC is charged with advising the SMP development and identifying synergies within North Central Texas.

The DFW Sustainability Advisory Council (SAC) will represent interests of major DFW stakeholders and provide advice to the SMP project team during the course of the project. The SAC will:

- ✈ Review and provide comments on the major elements of the DFW Sustainability Management Plan (SMP) during development
- ✈ Identify potential opportunities, challenges, partnerships, and resources
- ✈ Advise on synergies between DFW's sustainability program and those underway in North Texas
- ✈ Promote understanding and awareness of DFW's sustainability efforts among other stakeholders
- ✈ Participate in activities aimed at achieving DFW's sustainability goals and integrating sustainable practices throughout North Texas



STAKEHOLDER ACTIVITIES

Two workshops were held with the stakeholder teams during the development of the Sustainability Management Plan. The first workshop focused on the vision, focus areas and goals for the Plan, while the second workshop focused on initiatives and implementation details. In each case, draft content was prepared prior to the workshops and then reviewed by the stakeholders using small focus group discussions as well as dialogues within a large group setting. The workshops were followed up by a survey and/or email to create additional feedback methods for the participants. The conversations with the stakeholders provided invaluable input to the Sustainability Management Plan, informing everything from the overall direction of the sustainability program to the specific initiatives that were selected for implementation. Moving forward, DFW will continue to meet with the stakeholders as the sustainability program progresses.





5

VISION





Vision

As a first step in developing the Sustainability Management Plan, a vision was cast to serve as a unifying theme for DFW's sustainability program. Although a sustainability policy has been in place at DFW since 2008, a formal vision statement was created to help strengthen the airport's message regarding its commitment to sustainability. A conscious effort was made to ensure the vision statement is consistent with the four key results of the Strategic Plan (Cost Competitive, Customer Satisfaction, Operational Excellence, and Employee Engagement) and DFW's five Beliefs (Innovating Wins, Stepping Up, Owning It, You're Important and Reaching Out) , and emphasizing the



integration of sustainability into the culture and day-to-day operations of the airport. Through collaboration, communication and coordination, sustainability principles and concepts can be used to accomplish the goals of the Strategic Plan and to foster a culture consistent with DFW's Beliefs.

	<p>YOU'RE IMPORTANT</p> <p>I value you, your unique contributions and your success.</p>
	<p>OWNING IT</p> <p>I own the DFW experience and I do the right things to achieve results.</p>
	<p>STEPPING UP</p> <p>I overcome obstacles and influence outcomes.</p>
	<p>REACHING OUT</p> <p>I collaborate with others to build trust and mutual success.</p>
	<p>INNOVATING WINS</p> <p>I create leading-edge solutions that set the standard.</p>

and travelers, the opportunities it would create and the challenges it would present. The stakeholder feedback greatly enhanced the airport's vision and was incorporated into the final statement. Moving forward, DFW's sustainability vision statement will be the foundation upon which the airport enhances its sustainability efforts.





sustainability

trusted with tomorrow

COLLABORATION

COORDINATION

COMMUNICATION

COMMUNITY
ENGAGEMENT

SAFE AND
SECURE

BUSINESS
PERFORMANCE

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Dallas Fort Worth International Airport (DFW) recognizes that applying sustainability principles throughout our organization plays a critical role in achieving our goals to **ensure safety and security, enhance business performance, optimize customer experience, deliver operational excellence and foster employee and community engagement**. Building on our Beliefs, DFW strives to integrate sustainable thinking into all aspects of our day-to-day activities to strengthen our commitment to our airport, our people, our community, and our environment. Understanding we are a part of a greater whole within our industry and community, we will work collaboratively with our stakeholders and partners to implement the innovation and change necessary to protect our natural resources and allow future generations to thrive.

FOCUS AREAS AND GOALS





Focus Areas and Goals

The DFW goal-setting process began by identifying focus areas, or broad categories in which the airport hopes to affect change or continue ongoing sustainability efforts. Once focus areas were established, goals were set that are closely aligned with the Strategic Plan. The focus areas and goals serve as the drivers for the selection of future sustainability initiatives at the airport.

FOCUS AREAS

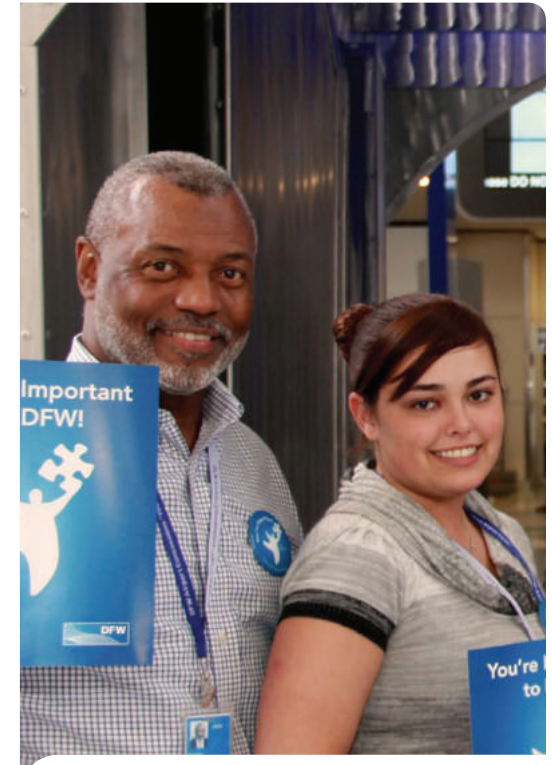
A list of potential focus areas was identified based on best practices currently in the aviation industry and an assessment of DFW's current sustainability activities. Resources such as the Global Reporting Initiative (GRI), the Envision™ Rating System for Sustainable Infrastructure, CDP (formerly the carbon disclosure project), LEED™, ISO 26000 Guidance on Social Responsibility, and the Global 100 were also evaluated for applicable focus areas. The list of potential focus areas was then mapped to the four pillars of the Strategic Plan to understand how they would align with the airport's overall business plan. In addition, an inventory of the airport's existing sustainability

activities was also compared to the focus areas to determine where DFW's efforts were currently being placed and where the greatest opportunities lie. Based on this analysis and stakeholder contributions, eleven focus areas were selected:



GOALS

After the focus areas were established, goals were developed based on existing commitments and activities, industry standards and leading trends in sustainability and social responsibility. In many cases, the goals applied to more than one focus area and more than one component of the Strategic Plan. The goals were originally developed by the Core Team and reviewed and approved by the stakeholders during a workshop and follow-up communications.



FOCUS AREA DEFINITIONS

OPERATIONAL EXCELLENCE

PROCUREMENT



Enhance DFW's green procurement program and evaluate the supply chain for opportunities to reduce environmental, social and economic impacts

SUSTAINABLE INFRASTRUCTURE AND RESILIENCY



Advance the Green Building Standards, develop a sustainable infrastructure program for non-building projects and evaluate and improve infrastructure for climate change impacts

CUSTOMER SATISFACTION

COMMUNITY PARTNERSHIPS



Document and optimize DFW's contributions to community programs and quality of life

COMMUNICATION AND EDUCATION



Tell DFW's sustainability story, including their vision and achievements, and provide information to assist customers and employees to improve their sustainability thinking

EMPLOYEE ENGAGEMENT

EMPLOYEE PARTICIPATION



Facilitate employees becoming more active in identifying and implementing sustainability initiatives

LEADERSHIP



Continue to provide leadership in the area of sustainability by sharing lessons learned, participating in innovative technology development, and providing opportunities for employees to transfer their knowledge in global, national and local forums

COST COMPETITIVE

ASSET OPTIMIZATION



Explore how to increase the useful life and decrease lifecycle costs for equipment, specifically the fleet

ENERGY AND AIR



Investigate additional opportunities to reduce energy demand and optimize energy supply to bring DFW's energy program to the next level

BIODIVERSITY AND NATURAL ENVIRONMENT



Reduce impacts to natural areas and watersheds and promote biodiversity and preservation of protected lands

WATER



Decrease water use and improve and protect stormwater quality and control quantity

WASTE






Better understand recycling and waste reduction activities and identify opportunities for improvement

Four Key Results of the Strategic Plan



SUSTAINABILITY GOALS

	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	 PROCUREMENT	 SUSTAINABLE INFRASTRUCTURE AND RESILIENCY	 ASSET OPTIMIZATION	 ENERGY AND AIR	 BIODIVERSITY AND NATURAL ENVIRONMENT	 WATER	 WASTE	 COMMUNITY PARTNERSHIPS	 COMMUNICATION AND EDUCATION	 EMPLOYEE PARTICIPATION	 LEADERSHIP
Measure the sustainable materials and services procured to minimize upstream and downstream impacts	★										
Measure the purchase of goods and services from North Central Texas	★										
Minimize resource demands and impacts of construction for building and non-building development		★									
Invest in public infrastructure that supports sustainability goals		★									
Evaluate and improve infrastructure and operations for climate change impacts		★									
Reduce overall lifecycle cost for capital investments			★								
Optimize efficiency of fleet operations			★								
Decrease energy and fuel use				★							
Increase alternative fuel usage use and grow the alternative energy portfolio				★							
Decrease air emissions				★							
Increase biodiversity and preserve natural areas					★						
Reduce the use of potable water						★					
Increase the use of reclaimed water						★					
Minimize the downstream impacts of stormwater						★					
Decrease generation of municipal solid waste and hazardous waste							★				
Increase recycling							★				
Act as a good neighbor to the residents and businesses surrounding the airport								★			
Support economic development in the regional community								★			
Increase outreach with employees, tenants, travelers, and the community related to sustainability									★		
Provide healthy lifestyle choices to travelers and employees									★		
Facilitate sustainable choices and decision-making to incorporate sustainability into business practices										★	
Be viewed as an employer of choice by providing a safe, diverse, and fair working environment for employees										★	
Advance DFW's leadership in environmental, social and economic activities in the global, national and North Central Texas communities											★

★ Primary Focus Area



PAST ACHIEVEMENTS AND FUTURE ENDEAVORS





Past Achievements and Future Endeavors

The heart of the Sustainability Management Plan is developing a path forward to enhance DFW's sustainability program. Understanding the airport's past achievements and current sustainability practices is a key step in creating a plan for future action. In addition, it is important to identify key performance indicators (KPIs) and metrics in order to measure progress toward achieving the sustainability goals. Together, the baseline assessment results, KPIs and metrics allow DFW to set meaningful targets and select near-term, medium-term and long-term initiatives that ensure those targets are met.

KEY PERFORMANCE INDICATORS AND METRICS

There was recognition early in the sustainability planning process that KPIs would play a critical role in tracking and improving DFW's sustainability program. In particular, gaining buy-in on KPIs from employees who will ultimately be responsible for implementation of sustainability practices and monitoring their success was an important focus of the development of the Sustainability Management Plan. Throughout the planning process, from vision statement development to the selection of focus areas and goals, KPIs were continually evaluated for applicability to the Sustainability Management Plan, the Strategic Plan and the existing GRI

reporting framework which DFW has selected as the format for its sustainability reporting. After the goals were finalized, a thorough analysis of KPIs was conducted. For each goal, potential KPIs were examined and modified, using resources such as existing airport KPIs, industry standards and, similar to the focus area evaluation, references such as GRI, Envision™, CDP, LEED™, ISO 26000 Guidance on Social Responsibility, and the Global 100. The list of potential KPIs was presented to the stakeholders during a workshop and finalized based on their feedback.

Following selection of the KPIs, specific metrics were developed to provide definition and measurability to each indicator. Metrics were chosen based on information that was already collected by DFW, data availability, and long-term data collection efforts. The intent of this effort was to leverage data already available through the airport's many compliance and tracking programs while minimizing new data collection efforts. In many cases, the metrics were normalized using industry standards such as "per passenger", "per enplanement", "per operation", "per square foot", "per acre", and "per revenue". The KPIs and metrics laid the groundwork for the baseline assessment, during which the indicators and metrics were modified based on details collected in the field.

BASELINE ASSESSMENT

After the KPIs and metrics were selected, a baseline assessment was conducted to understand airport performance in each focus area, identify trends based on existing initiatives, and guide future activities. The baseline was also used to refine the sustainability goals and set specific, measurable performance targets. With ongoing





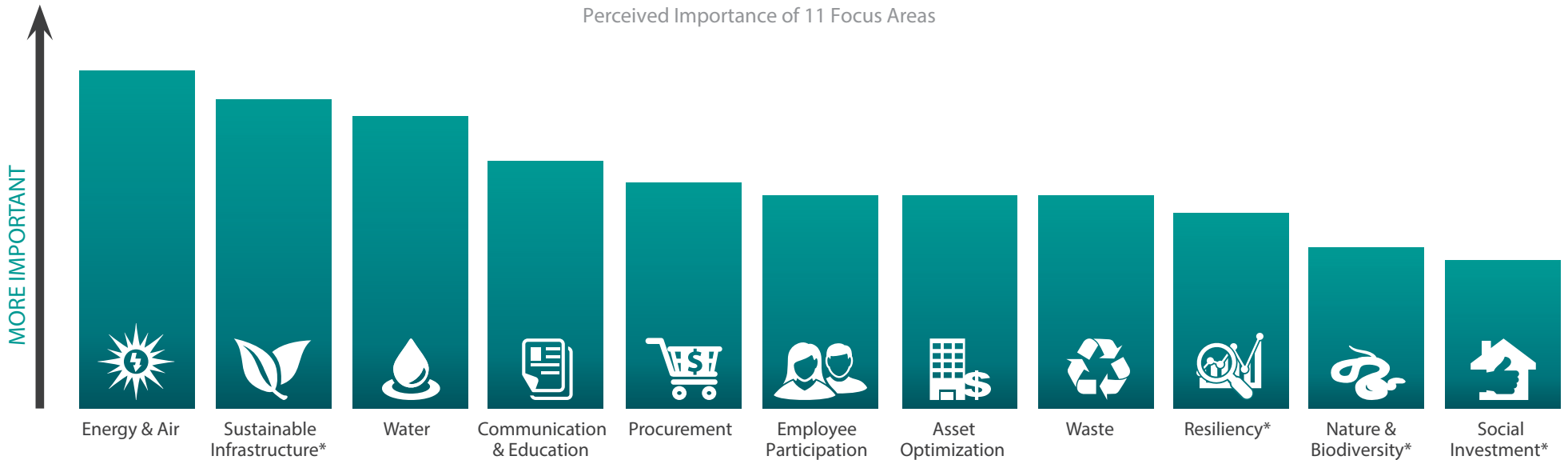
implementation and performance measurement in mind, one key component of the baseline assessment was to create replicable processes for data collection and streamline future progress reporting.

The baseline assessment was broken down into three parts: 1) existing practices research, 2) data gathering and investigation and 3) analysis and establishment of the baseline. Existing



practices were primarily identified by a review of available literature such as reports, studies, and plans; interviews with key DFW employees; and an internal stakeholder survey. The online survey asked respondents about their perceptions and knowledge of each focus area, past and current practices within their department, recommendations for new initiatives, and barriers to forward progress on potential initiatives. A similar survey was sent to members of the Sustainability Implementation Team (SIT) and Sustainability Advisory Committee (SAC) to identify existing practices and opportunities for collaboration.

Perceived Importance of 11 Focus Areas



* The focus areas included in the survey were the original areas, which changed slightly after the stakeholder meetings.

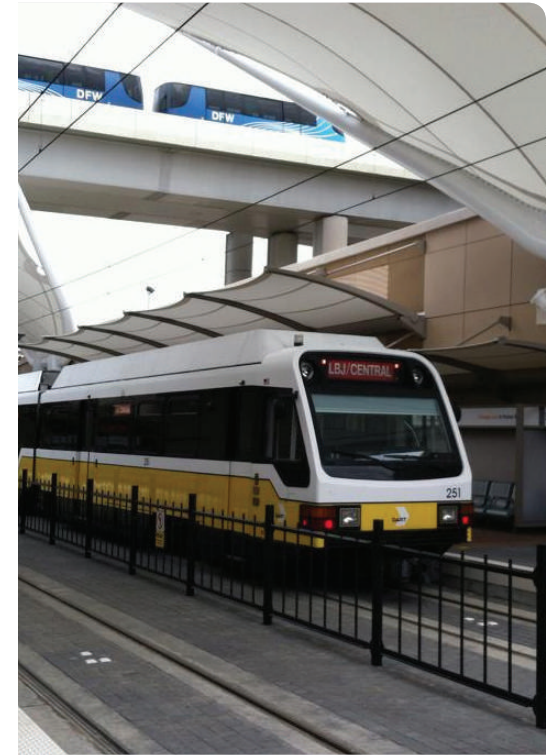
Data gathering included site visits, interviews and analysis of quantitative and qualitative data that is currently collected at the airport. While DFW has historically tracked many data points, there are KPIs identified where baseline data is not readily available. A gap analysis was used to identify additional data needs and processes were developed with the stakeholders to collect the missing information. As a result, the baseline data varied in level of detail and completeness and the KPIs were subsequently divided into three categories:

1. Quantitative data is readily available: baseline performance and targets can be established.
2. Practices exist, but data collection process need refinement: baseline performance is estimated or not available and targets and initiatives include refining the process.
3. New areas where processes and practices need to be established: baseline performance is not available and targets and initiatives include establishing processes for future data tracking.

Where quantitative data was available, it was analyzed and normalized and a baseline was established. Normalization factors were selected based on what was most appropriate for the metric using airport data such as enplanements, operations, square footage, acres, employees, and revenue. The baseline assessment was presented to the stakeholders and their comments were used to refine the results.

TARGETS

The KPIs, metrics and baseline assessment results served as the foundation for setting targets. Existing commitments and alignment with the Strategic Plan were also considered during the target-setting process. In cases where baseline data could not be established, targets included developing processes and collecting baseline data. It was critical to the airport that the targets be meaningful, achievable and approved by the stakeholders. Similar to the baseline assessment results, the targets were presented to the stakeholders and their input was used to refine the final list of targets.





A PATH FORWARD

Together with extensive stakeholder contributions, DFW evaluated the vision, goals, baseline, KPIs, and targets and looked at the entire sustainability program from a holistic viewpoint. Building on a solid foundation of sustainability planning and past progress, DFW selected near-term, medium-term and long-term initiatives and practices to achieve the goals and targets. A summary of the baseline data, targets and selected initiatives are shown below for each goal.



PROCUREMENT

Enhance DFW's green procurement program and evaluate the supply chain for opportunities to reduce environmental, social and economic impacts

While many current initiatives focus on the airport's own actions and performance, DFW realizes that the next major focus area for sustainability is supply chain management and influencing the decisions of major airport suppliers. The United Nations Global Compact recently published several guidance documents on establishing a process to vet major suppliers that includes not only the sustainability of products purchased but also the performance record of the suppliers themselves, which served as a major resource for developing the goals and KPIs for this focus area.



GOAL: Measure the sustainable materials and services procured to minimize upstream and downstream impacts

KPI	Metric(s)	Baseline	Target
Value of materials purchased that have sustainability attributes	% of products purchased with sustainability attributes (based on dollar value)	No data currently available	Identification of sustainability attributes and measurement of the baseline by 2016
Number of new suppliers screened using sustainability criteria	% of suppliers screened for sustainability criteria	No data currently available	Identification of sustainability attributes and measurement of the baseline by 2016
	% of suppliers that meet sustainability criteria	No data currently available	



GOAL: Measure the purchase of goods and services from North Central Texas

KPI	Metric(s)	Baseline	Target
Proportion of spending on North Central Texas-based suppliers	% of product purchases made locally (based on dollar value)	No data currently available	Definition of "local products" and measurement of the baseline by 2016
	% of service contract awards to local companies (based on dollar value)	No data currently available	Definition of "local services" and measurement of the baseline by 2016



PROCUREMENT INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
<p>Green Procurement Team</p> <p>Identification of warehouse products with sustainability attributes</p> <p>Educational module for green procurement</p>	<p>Define "local products and services" and measure the baseline</p> <p>Develop process for selecting sustainable alternatives (e.g., refrigerants, paper, custodial)</p>	<p>Improve communication and tracking between procurement and other departments to streamline process. (e.g., coding in procurement tracking system is different than coding in CMMS system).</p>	<p>Collaborate on procurement in custodial, TSA, and concessionaire contracts.</p>



SUSTAINABLE INFRASTRUCTURE AND RESILIENCY

Advance the Green Building Standards, develop a sustainable infrastructure program for non-building projects and evaluate and improve infrastructure for climate change impacts

Like many airports, capital improvements at DFW include both building and non-building projects. The last decade has seen the advent of LEED™ as a leader in sustainable design for new building construction and, more recently, the Envision™ rating system for civil infrastructure is available from the Institute of Sustainable Infrastructure for projects such as pavement rehabilitation, transportation, and utility corridors. Using these resources, combined with their Green Building Standards, internal best practices and project planning processes, the airport strives to reduce the impacts of its development, both upstream and downstream. In addition, DFW is committed to improving infrastructure that serves the community beyond the airport's boundaries to improve regional sustainability progress.

DFW also recognizes the uncertainty that exists in regards to future climate conditions and associated infrastructure performance. The Texas Climate Initiative has predicted future climate scenarios for North Central Texas rural and urban areas that include higher average and peak temperatures, higher nighttime temperatures, changes in stormwater runoff, increased precipitation, and more frequent and intense storms linked to urban expansion. The airport endeavors to assess the risk to infrastructure and business processes and ensure that they are resilient enough to perform under changing climate scenarios.



GOAL: Minimize resource demands and impacts of construction for building and non-building development

KPI	Metric(s)	Baseline	Target
Projects screened using sustainability criteria in the planning process	% new projects screened for site suitability	No data currently available	Identification of sustainability attributes and measurement of the baseline by 2016
	% new construction or renovation projects screened for green building strategies	100% buildings screened	Maintain 100%
Projects verified using sustainability criteria	% of square feet of new construction or renovation project earning certification	0% of DFW Board facilities	50% of new construction/renovation building projects that are eligible for certification by 2018
	% civil infrastructure projects earning certification	0% of infrastructure projects	50% of new construction/rehabilitation flatwork projects that are eligible for certification by 2018



GOAL: Invest in public infrastructure that supports sustainability goals

KPI	Metric(s)	Baseline	Target
Development and impact of infrastructure investments provided primarily for public benefit	Annual Summary of Investments	Summary includes DART and Reclaimed Water Delivery System	Provide Annual Summary



GOAL: Evaluate and improve infrastructure and operational resiliency for climate change impacts

KPI	Metric(s)	Baseline	Target
Preparations for short-term hazards and long-term adaptability	% of new and planned projects assessed for climate risk	No data currently available	Development of risk assessment criteria and measurement of baseline by 2016
	% of existing infrastructure assessed for climate risk	No data currently available	Completion of risk assessment and measurement of baseline by 2016
	% of Climate Action Plan implemented	No data currently available	Development of Climate Action Plan by 2017
Financial implications and other risks and opportunities for the organization's activities due to climate change	Potential costs to repair or replace at-risk infrastructure in response to changes in climate	No data currently available	Quantification of costs and realize a downward trend in financial liabilities year-over-year
	Potential cost of loss of operations due to climate change	No data currently available	



SUSTAINABLE INFRASTRUCTURE AND RESILIENCY INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
Green Building Standards	<p>Evaluate current and future infrastructure for climate change risk</p> <p>Integrate sustainable infrastructure checklist into project development process</p> <p>Review and amend Green Building Standards, integrate with new LEED™ and Envision™ rating systems</p>	<p>Develop a Climate Action Plan</p> <p>Collaborate with owner cities on updating of building codes to be more sustainable (e.g. incorporating the International Green Construction Code).</p>	<p>Develop sustainable design and construction standards for concessionaires and tenants and create a process for enforcement and recognition.</p>



ASSET OPTIMIZATION

Explore how to increase the useful life and decrease lifecycle costs for equipment, specifically the fleet

Capital assets at the airport include buildings, mechanical equipment, fleet equipment, and infrastructure, among others. DFW's existing asset management program tracks capital assets and schedules preventative maintenance. The focus area of Asset Optimization is intended to dovetail with the existing asset management program to further extend the lifetime of their equipment and to shift the selection process so that the lifecycle of the investment is more heavily considered.



GOAL: Reduce overall lifecycle cost for capital investments

KPI	Metric(s)	Baseline	Target
Plan for long-term monitoring and maintenance	% assets tracked in CMMS System	No data currently available (100% buildings screened outside off CMMS System)	Measurement of baseline by 2016 100% of new vehicles 100% of buildings
Useful life of assets	Years of use beyond standard life for fleet vehicles	Admin: +5.4 (135%) ETAM/ADE: +2.8 (40%) DPS: +1.4 (35%) OPS: -1.6 Parking (bus): -3.1 Parking (admin): -0.1	Extend life of vehicles to be the "optimal life" for each vehicle type by 2016
	Years of use beyond standard life for building assets	No data currently available	Measurement of baseline by 2016
Lifecycle cost of assets	% assets that go through lifecycle analysis	No data currently available	Identification of lifecycle costing process and measurement of the baseline by 2016
	Lifecycle cost/year of use (by asset)	No data currently available	



GOAL: Optimize efficiency of fleet operations

KPI	Metric(s)	Baseline	Target
Fuel Efficiency	Miles Per Gallon (by department)	Admin = 17 mpg ETAM/ADE = 10.3 mpg DPS = 13.4 mpg OPS = 11.8 mpg Parking (bus) = 4.7 mpg Parking (admin) = 22.4 mpg	Admin = 25 mpg by 2015 ETAM/ADE = 15 mpg by 2015 DPS = 15 mpg by 2015 OPS = 13 mpg by 2015 Parking (bus) = 7 mpg by 2015 Parking (admin) = 25 mpg by 2015
	Cents/mile	Admin = \$0.14 ETAM/ADE = \$0.23 DPS = \$0.31 OPS = \$0.28 Parking (bus) = \$0.35 Parking (admin) = \$0.11	Admin = \$0.12/mile by 2018 ETAM/ADE = \$0.19/mile by 2018 DPS = \$0.27/mile by 2018 OPS = \$0.24/mile by 2018 Parking (bus) = \$0.30/mile by 2018 Parking (admin) = \$0.10/mile by 2018

DFW DALLAS/FORT WORTH INTERNATIONAL AIRPORT

Fleet Usage Baseline Data (2013)

User Group (Department)	Total Vehicle	Average Vehicle Age	Average Fuel Economy (MPG GGE)	Average Fuel Economy (Weighted) (MPG GGE)	Fuel Economy Optimization (FEO) Score	Total Miles 2013	Average Miles Per Vehicle 2013	Total Fuel Cost 2013	Total Maintenance Cost 2013	Total Fuel & Maint. Cost 2013	Average Maint. Cost Per Vehicle 2013	Average Fuel Cost Per Mile 2013	Average Maint. Cost Per Mile 2013	Average Fuel & Maint. Cost Per Mile 2013
OPERATIONS	18	4.4	12.3	11.8	44	457,797	25,433	\$ 128,198	\$ 64,652	\$ 192,850	\$ 3,592	\$ 0.28	\$ 0.14	\$ 0.42
CUSTOMER SVS	5	7.4	17.0	13.7	28	8,237	1,647	\$ 1,250	\$ 1,953	\$ 3,203	\$ 391	\$ 0.15	\$ 0.24	\$ 0.39
PUBLIC AFFAIRS	2	11.0	9.2	7.9	27	4,726	2,363	\$ 754	\$ 850	\$ 1,605	\$ 425	\$ 0.16	\$ 0.18	\$ 0.34
DPS	87	4.2	16.9	14.0	36	1,562,698	17,962	\$ 367,534	\$ 157,580	\$ 525,114	\$ 1,811	\$ 0.24	\$ 0.10	\$ 0.34
AIRPORT DEV	35	7.7	11.9	11.1	41	157,465	4,499	\$ 38,085	\$ 13,468	\$ 51,553	\$ 385	\$ 0.24	\$ 0.09	\$ 0.33
ASSET MGMT	12	9.8	13.7	11.9	39	47,489	3,957	\$ 6,870	\$ 7,600	\$ 14,470	\$ 633	\$ 0.14	\$ 0.16	\$ 0.30
HR	2	6.5	16.3	19.8	79	20,097	10,049	\$ 3,378	\$ 2,365	\$ 5,743	\$ 1,182	\$ 0.17	\$ 0.12	\$ 0.29
ETM	4	11.3	15.3	12.2	35	10,442	2,611	\$ 1,061	\$ 1,707	\$ 2,768	\$ 427	\$ 0.10	\$ 0.16	\$ 0.27
ADMIN	1	3.0	14.5	14.5	50	170	170	\$ 40	\$ -	\$ 40	\$ -	\$ 0.24	\$ -	\$ 0.24
PARKING	31	5.7	24.4	21.4	38	459,491	14,822	\$ 47,266	\$ 38,250	\$ 85,516	\$ 1,234	\$ 0.10	\$ 0.08	\$ 0.19
ENVIRONMENTAL	1	12.0	27.6	27.6	50	2,529	2,529	\$ 114	\$ 352	\$ 466	\$ 352	\$ 0.04	\$ 0.14	\$ 0.18
ITS	10	10.0	21.0	22.0	54	39,581	3,958	\$ 2,913	\$ 4,180	\$ 7,093	\$ 418	\$ 0.07	\$ 0.11	\$ 0.18
PROCUREMENT	1	11.0	28.2	28.2	50	1,819	1,819	\$ 80	\$ 90	\$ 169	\$ 90	\$ 0.04	\$ 0.05	\$ 0.09
Total	209	6.0	16.8	14.2	44	2,772,541	13,266	\$ 597,542	\$ 293,048	\$ 890,590	\$ 1,402	\$ 0.22	\$ 0.11	\$ 0.32



ASSET OPTIMIZATION INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
Utilize CMMS to capture fleet asset data	<p>Produce and distribute fleet sustainability scorecard to end users</p> <p>Develop sustainability criteria for fleet renewal process</p>	<p>Identify, implement and provide training on a lifecycle costing tool to inform operations, maintenance, planning and design.</p> <p>Use GPS to track vehicle use and driver behavior and use the data to manage the fleet.</p>	<p>Use TRIP documentation to define “asset” (aggregation level) for building assets and use this definition to expand to asset information collected for the rest of the airport.</p> <p>Acquire clean vehicles for the fleet</p>



ENERGY AND AIR

Investigate additional opportunities to reduce energy demand and optimize energy supply to bring DFW's energy program to the next level

Since 2005, DFW has implemented many initiatives geared toward improved energy efficiency and decreased emissions. The airport has successfully documented energy reduction results and been recognized regionally and nationally for their efforts. In addition, the area surrounding DFW has been designated by EPA as a non-attainment area for ozone, thereby underscoring the need for the region to continue to address the generation of greenhouse gases (GHGs) and other pollutants.

In 2015, Airport Council International (ACI) Airport Carbon Accreditation (ACA) program certified DFW as the first certified carbon neutral airport in the Americas. The 2016-2020 DFW Strategic Plan increased the Airport's carbon reduction goal from 2% annually, to 3%.



GOAL: Decrease carbon emissions

KPI	Metric(s)	Baseline	Target
Location-Based Carbon Footprint Per Passenger	kg CO ₂ /passenger	2015: 2.88 kg CO ₂ /passenger	15% reduction by 2020; 3% reduction per year compared to baseline
Market-Based Carbon Footprint Per Passenger	kg CO ₂ /passenger	2010: 3.10 kg CO ₂ /passenger	Continuous annual reduction when compared to average of 3 prior years



GOAL: Increase alternative fuel usage and grow the alternative energy portfolio

KPI	Metric(s)	Baseline	Target
Renewable Electricity Source	% Electricity Renewably Sourced	2010: 18% Renewable Wind Electricity	2018: 100% Renewable Electricity
Renewable Natural Gas	% Natural Gas Renewably Sourced for Fleet Vehicles	2015: 0% Renewable Natural Gas for Fleet Vehicles	2025: 90% Renewable Natural Gas for Fleet Vehicles



ENERGY AND AIR INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
Preconditioned Air (PCA), District Heat/Cool, Thermal Storage	Identify grant opportunities for energy and air quality improvements associated with CTA expansion	Identify and evaluate future opportunities to deploy on-site renewable energy strategies	Explore the use of virtual training for the Fire Training Facility to reduce the use of fuel and water and reduce air quality impacts.
100% Renewable Electricity, Photovoltaic Array, Geothermal	Optimize PCA/Power utilization by using runtime meters		
Lighting Upgrades, Automation and Controls, Continuous Commissioning	Fleet optimization and electrification study		
Maintain ACI's Airport Carbon Accreditation Level 3+ Neutrality Certification	Develop energy efficiency outreach program for employees		
Renewable Natural Gas (RNG)	Enforce an anti-idling policy		
Electric Vehicle (EV) Charging Stations	Electric Vehicle (EV) Charging Stations		



BIODIVERSITY AND NATURAL ENVIRONMENT

Reduce impacts to natural areas and watersheds and promote biodiversity and preservation of protected lands

The natural world, including wetlands, wildlife, and watersheds, are an existing part of DFW operations and planning. Taking into account effects of development and operational decisions on these natural components, DFW strives to find a balance between achieving performance goals and minimizing negative impacts to the natural environment.



GOAL: Increase biodiversity and preserve natural areas

KPI	Metric(s)	Baseline	Target
Habitats protected or restored	acres of on-site open space and surface water planned for habitat preservation	TBD	Maintain or increase open space and surface water habitat identified in EAD Drainage Master Plan
	acres of off-site land preserved for habitat	0 acres	Realize cumulative increasing trend
Minimize impact to the biodiversity of water bodies and related habitats downstream	Biodiversity Value	TBD	Maintain Biodiversity Value for on-site based on reference stream and downstream habitats based on TCEQ biological sampling
	WQ Parameters (BOD, TSS, TN, TP, BOD, Ecoli)	95th percentile over last 3 years	Class III Surface WQ Standards (except ecoli < 126 c/sample)



GOAL: Increase biodiversity and preserve natural areas (continued)

KPI	Metric(s)	Baseline	Target
Wildlife Strikes	# Wildlife Strikes	352	Realize downward trend
	metric = # Wildlife Strikes/10,000 Operations baseline = 5.44 target = Realize downward trend		
	# of animals dispersed	No data currently available	Realize downward trend
Fines and sanctions for environmental noncompliance related to waste	# of EPA Reportable Spills	0	Maintain 0 spills
	\$ of environmental fines	0	Maintain 0 fines
	# of penalties	0	Maintain 0 penalties



BIODIVERSITY AND NATURAL ENVIRONMENTS INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
Watershed Management Program	Baseline preservation area and biodiversity value	Create a tree mitigation plan Increase use of native species, drought tolerant landscaping, and low impact development (LID) techniques for airport-controlled land	Create a “preservation bank” in coordination with NCTCOG for both on and/or off-site habitats. Implement a turf replacement program to plant buffalo grass or new varieties of St Augustine



WATER

Decrease water use and improve and protect stormwater quality and control quantity

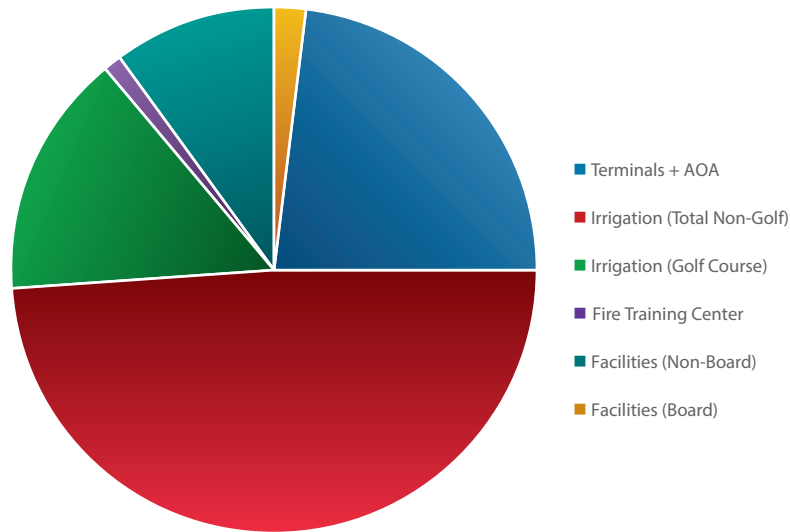
Water scarcity is poised to become one of the leading issues for North Central Texas in the next decade. A shift in the water paradigm has led to the view that all water, whether potable water, wastewater, or stormwater is a valuable resource with integrated uses and opportunities. The ability to identify alternative sources of water, conduct operations in the midst of potential water shortages, and contribute to maintaining regional water supplies are key activities that DFW hopes to address through this focus area.



GOAL: Reduce the use of potable water

KPI	Metric(s)	Baseline	Target
Total water use and water intensity	Total Gallons (potable+non-potable)	648,696,265 (Board+Unmetered) 1,152,314,000 (total)	5% reduction by 2016; 15% by 2020 compared to baseline
	Gallons/revenue \$	2.0	5% reduction by 2016; 25% by 2020 compared to baseline
	Gallons/passenger for terminals	6.2	5% reduction by 2016; 15% by 2020 compared to baseline
	Gallons/operation	392	5% reduction by 2016; 15% by 2020 compared to baseline
	Gallons/sf for buildings	31.6 (Board Facilities) 11.1 (Non-Board Facilities)	5% reduction by 2016; 10% by 2020 compared to baseline
	Gallons/acre for irrigation	33,673 (non-golf course) 481,147 (golf course) 42,905 (whole site)	10% reduction by 2016; 25% by 2020 compared to baseline
	% Non-Potable for irrigation (whole site)	0% (non-potable service began Oct 2013)	10% increase by 2016; 25% by 2020 compared to baseline
	Gallons/FTRC Event for FTFC	4,082 (1% of water use)	3% reduction by 2016 compared to baseline

DFW Potable Water Use



GOAL: Increase the use of reclaimed water

KPI	Metric(s)	Baseline	Target
Total reclaimed water use	Gallons	0 (non-potable service began Oct 2013)	Increase gallons of reclaimed water over time
	% Non-Potable Water	0 (non-potable service began Oct 2013)	15% by 2015; 25% by 2020
Percentage and total volume of water recycled and reused from on-site sources	Gallons Non-Potable Water	0	5% by 2020
	% On-site Non-Potable Water	0%	



GOAL: Minimize the downstream impacts of stormwater

KPI	Metric(s)	Baseline	Target
Permit exceedences associated with stormwater quality or quantity	# exceedances for stormwater quality	1 exceedance (in 10 yrs)	0
	# of penalties	0	0
	\$ of penalties	\$0	\$0
Aircraft and pavement deicing	% Deicing fluid captured for treatment	86% for 2009 (most recent year of analysis)	90%



WATER INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
Airport Image Elements (landscaping guidelines)	Develop an outreach program for employees, customers and tenants on water conservation ideas for at work and at home	Identify and evaluate opportunities to convert properties to minimal irrigation and/or reclaimed water irrigation	Develop a water metering monitoring system to identify outliers quickly and connect it to the new leak detection system
Reclaimed Water Distribution			
Water Efficient Building Fixtures (WaterSense ®)	Identify and evaluate stormwater capture and reuse opportunities Escalate WaterSense promotional partner communication Participate in regional long-term planning on water availability (led by NCTCOG)		Reduce potable water use for fracking, either through re-use of the water or use of reclaimed water.



WASTE

Better understand recycling and waste reduction activities and identify opportunities for improvement

At 17,207 acres, DFW is the size of a small municipality complete with municipal solid waste, construction and demolition debris, and materials recovery, including recycling and reuse. The airport is focused on the reduction and diversion of solid waste for its major waste streams.



GOAL: Decrease generation of municipal solid waste and hazardous waste

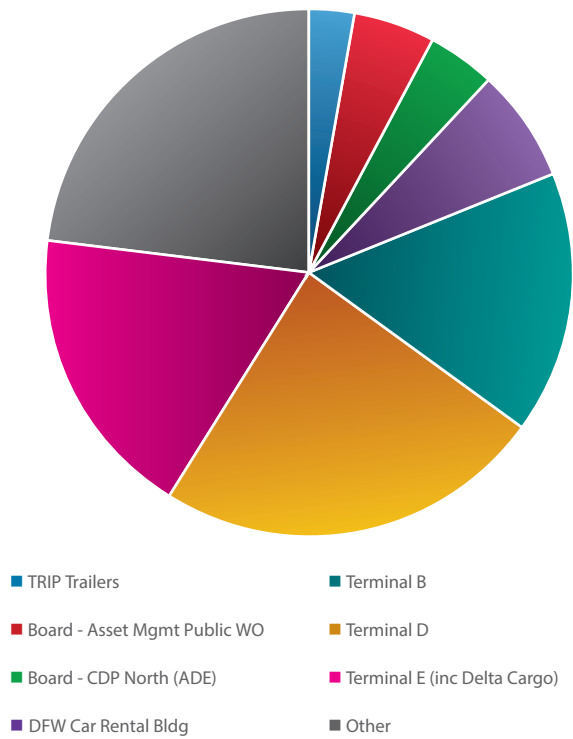
KPI	Metric(s)	Baseline	Target
Total Municipal Solid Waste (MSW)	Pounds of MSW/enplanement	3.66	2.93 by 2015; 2.56 by 2017
Hazardous Waste	Weight of hazardous waste generated on site (tons)	2.67 tons	Develop a consensus-based target by 2016



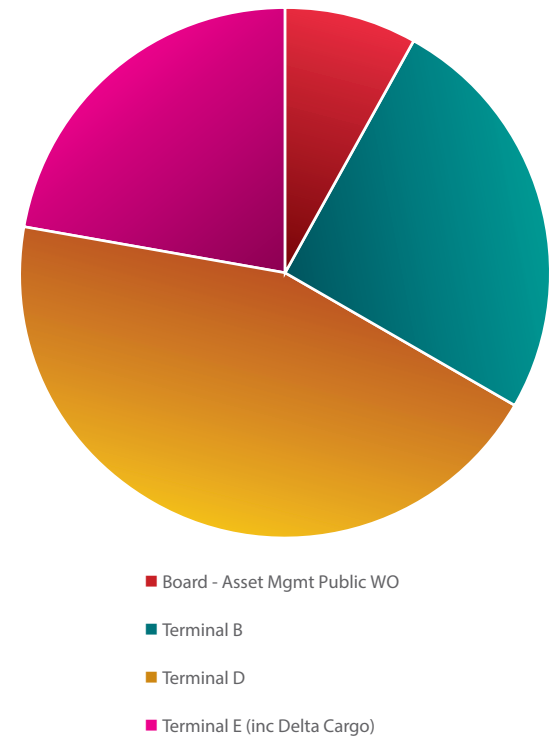
GOAL: Increase recycling

KPI	Metric(s)	Baseline	Target
Total weight of Municipal Solid Waste (MSW)	% waste recycled (inc. composted)	13.1%	20% by 2015; 30% by 2017
Total weight of construction and demolition waste diverted from landfills	% diverted construction and demolition waste	93% (approx. 64,110 tons diverted)	Maintain a minimum 90% diversion rate

Total Landfilled Waste (Tons)



Total Recycled (Tons)





WASTE INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
In-house collection of paper, plastic, aluminum, cardboard	Complete W/R Management Plan	Identify and evaluate opportunities for single comingled stream recycling	Research and promote tools and technologies as an alternative to paper and encourage users to change old
Composting with HMS Host	Establish hazardous waste target	Evaluate SOC and Accounting to incentivize recycling and eliminate system "gaming"	processes/ways of thinking in regards to printing, storing and managing paper.
W/R as a service to Tenants	Expand composting and food donation programs with concessionaires		
	Broaden recycle efforts, targeting volumes, emphasizing recycle as primary option and improving infrastructure in offices and terminals		



COMMUNITY PARTNERSHIPS

Document and optimize DFW's contributions to community programs and quality of life

As an economic engine for North Central Texas, DFW works to contribute to the local economy through employment opportunities and business partnerships and to be meaningful participants in community efforts. Building and maintaining positive relationships in the community is a critical component of the Sustainability Management Plan. DFW works with local governments, businesses, non-profit organizations, and private citizens to ensure that DFW is and will always be a force for good in our own backyard.



GOAL: Act as a good neighbor to the residents and businesses surrounding the airport

KPI	Metric(s)	Baseline	Target
Number of community partnerships	Number of active initiatives involving DFW and regional communities	3 (MOU with EPA and AA, Sustainability Forum)	Realize increasing trend
Number and percentage change of people residing in areas affected by noise	# Noise inquiries	335	Realize downward trend
Projects that proactively review potential impacts on local communities	% of new projects that undergo "Impact to Society" review	0%	100% by 2016



GOAL: Act as a good neighbor to the residents and businesses surrounding the airport (continued)

KPI	Metric(s)	Baseline	Target
Confirmed incidents of corruption and noncompliance with laws and regulations	# of total corruption incidents	0 total incidents	Maintain zero incidents of corruption and noncompliance
	# corruption lawsuits	0 lawsuits	
	# of employees dismissed for corruption	0 employees dismissed	
	# of contracts terminated/not renewed due of corruption	0 contracts terminated	
	# of fines/sanctions	0 fines/sanctions	
	\$ spent on fines/sanctions	0 spent	



GOAL: Support economic development in the regional community

KPI	Metric(s)	Baseline	Target
Direct economic value generated and distributed	Annual Operating Budget (\$)/enplanement	\$21.68	Develop a target by 2016
Proportion of senior management hired from the local community	% senior management from local community	71%	Develop a target by 2016



GOAL: Support economic development in the regional community (continued)

KPI	Metric(s)	Baseline	Target
Indirect economic impacts	# of individuals employed by DFW, tenants or direct contractors	143,000	Maintain or increase number of jobs available
	# of jobs available per revenue dollar	257 jobs per million dollar in revenue	Maintain or increase number of jobs available per revenue dollar
	\$/employee of charity donations	\$82.58 (United Way Campaign)	Realize increasing trend
	hr/employee of volunteer and service projects	No data currently available	Development of a measurement process and baseline data by 2016
	# of people served by public infrastructure projects	1,328,000	Realize increasing trend



COMMUNITY PARTNERSHIPS INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
BDD Programs Annual United Way Campaign	<p>Develop targets for direct economic value generated and proportion of senior management from local communities</p> <p>Develop a baseline for volunteer/service hours contributed Airport wide</p> <p>Continue to host and participate in SAC and NCTESF meetings for regional sustainability coordination</p> <p>Formally include "Impacts to Society" criterion in the decision-making process for development projects</p>	<p>Partner with local transportation agencies to promote commuter options and increase ridership by employees and customers on systems such as the DART</p>	<p>Help to form and participate in a North Central Texas Working Group to create a dialogue about climate change risk</p>



COMMUNICATION AND EDUCATION

Tell DFW's sustainability story, including their vision and achievements, and provide information to assist customers and employees to improve their sustainability thinking

DFW provides services to more than 58 million passengers a year, in addition to airport staff, tenants, vendors, and non-commuting airport users. With such a large audience, DFW has the opportunity to provide outreach and education about sustainability and promote sustainable choices. By communicating the airport's sustainability story and providing healthy and sustainable choices for airport patrons and employees, DFW endeavors to affect a positive change in the local, regional and global arenas.



GOAL: Increase outreach with employees, tenants, travelers, and the community related to sustainability

KPI	Metric(s)	Baseline	Target
Outreach with the community and customers around sustainability	% departments with community outreach initiatives	9% (2 of 22 depts)	50% by 2015; 75% by 2016; 100% by 2017
	# sustainability -related outreach events per year	1	12 per year (monthly) by 2016
	# campaigns in terminals featuring sustainability	0	12 per year (monthly) by 2016
Outreach with employees around sustainability	# campaigns for employees featuring sustainability	9	12 per year (monthly) by 2016
			18 per year (monthly + 6 special campaigns) by 2018
Outreach with Aviation Industry around sustainability	# of sustainability related activities within the industry	10	15 per year



GOAL: Provide healthy lifestyle choices to travelers and employees

KPI	Metric(s)	Baseline	Target
Healthy lifestyle options offered	% vendors serving healthy food options	79%	100% by 2020
	% employees participating in wellness programs	97% participation (primarily education/ intervention)	Increasing trend of deeper engagement in assessment & lifestyle/behavior choices. No more than 40 hrs personal & 40 hrs dependent sick time
	# fitness options available to passengers	2 (yoga studio (D); "Art Walk" walking path (D))	1 per terminal by 2020, 2 per terminal by 2025
	# initiatives in terminals featuring healthier options	0	2-3 per year



COMMUNICATION AND EDUCATION INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
Sustainability Page (internal and external) External Reporting	Employee and Department Sustainability Recognition Program Develop Sustainability Communications strategies for various 'customer' groups Develop educational sustainability campaign for employees ('how to' format)	For all presentations (internal and external), include 1-2 sustainability slides and tie them into the topic Develop educational talking points for communities so that they can address concerns about the airport and market the airport's successes using proper language and facts Measure how often the terminal fitness options are used and adjust the operations accordingly	Improve airline communication and tenant coordination regarding sustainability initiatives Develop a DFW sustainability app that employees can use to learn about sustainability, track progress, get ideas and submit ideas Develop a requirement for vendors to post nutrition information at food stations



EMPLOYEE PARTICIPATION

Facilitate employees becoming more active in identifying and implementing sustainability initiatives

The ultimate goal of the Sustainability Management Plan is to further integrate sustainability into DFW's existing business processes and culture. In addition to having important insight into how to improve the airport's sustainability progress, every employee is responsible for supporting and implementing DFW's sustainability practices. Equally important, the airport is committed to maintaining a happy and engaged workforce and being viewed as an employer of choice.



GOAL: Facilitate sustainable choices and decision-making to incorporate sustainability into business practices

KPI	Metric(s)	Baseline	Target
Provide organizational commitment around sustainability implementation	Presence of sustainability commitments at organization level	Yes – Sustainability Policy; Sustainability Report	Continued commitment
	% of Departments with commitment to sustainability initiatives (thru implementation or reporting)	27%	100% by 2015
	# of recognitions for personal sustainability	0	10 by 2015
	Presence of annual sustainability report	Yes	Continued annual report



GOAL: Facilitate sustainable choices and decision-making to incorporate sustainability into business practices (continued)

KPI	Metric(s)	Baseline	Target
Update and implement Sustainable Management Plan	Presence of sustainability tracking system	No	Develop tracking system
	Percentage of SMP metrics tracked	86%	100% by 2016
	% of SMP initiatives implemented	0%	25% by 2015; 100% by 2017
	% departments engaged with system	0%	100% by 2016



GOAL: Be viewed as an employer of choice by providing an inclusive, safe, diverse, and fair working environment for employees

KPI	Metric(s)	Baseline	Target
Number and rate of new employee hires and employee turnover by age, gender and region	% turnover by age	<30 yrs = 6% 30-50 = 13% >50 yrs = 11%	Maintain rate at least 10% better than industry standard
	% turnover by gender	Male = 12% Female = 9%	
	% turnover by department	ETAM = 12% ITS = 13% OPS = 33% PKG = 19% DPS = 10% All Others = 0%	
Benefits provided to employees	% of employees who participate in benefits programs	100%	100%
Return to work and retention rates after parental leave	% Employee Retention After Parental Leave	100%	Maintain a minimum rate of 75%
Percentage of total workforce represented in employee engagement groups	% workforce in engagement groups	10%	15% by 2015



GOAL: Be viewed as an employer of choice by providing an inclusive, safe, diverse, and fair working environment for employees (continued)

KPI	Metric(s)	Baseline	Target
Rates of injury, occupational diseases, and lost days	Injury Rate	5%	3% by 2015 (annually)
	# Lost Days due to occupational injury	1,154 (65 days/100 employees)	Maintain below industry standard
Average hours of training per year per employee	Training Hrs/Year/Employee	Min 4 hrs/10 hrs for OPS	Min 8 hrs/16 hrs for OPS by 2015
Percentage of employees receiving regular performance reviews	% Employees receiving annual reviews	100%	100%
Composition of governance bodies and breakdown of employees by gender, age group, minority group	M:F Ratio on Board & Senior Leadership	Board (%F): 42%	Board (%F): 50%
		Leadership (%F): 29%	Leadership (%F): 50%
	M:F Ratio of Employees	DFW (%F): 31%	DFW (%F): 50%
Ratio of basic salary and remuneration by gender	Average \$ Earned (males:females)	M: \$63,230 F: \$58,552 (1.08:1)	M: F Ratio is 1:1
Incidents of non-compliance with regulations concerning health and safety impacts	# of incidents of health & safety issues/YR	No data currently available	Realize downward trend
Coverage of the organization's defined benefit plan obligations	Provide List of Benefits	Yes	Provide List of Benefits
Range of ratios of standard entry level wage by gender compared with local min wage	Average DFW: Minimum Wage Ratio for both males and females	M: 1.86:1 F: 1.85:1	Maintain 1.3:1 ration or better
	% of employees paid a Living Wage	100%	100% employees making at least the Living Wage for Dallas-Fort Worth area



EMPLOYEE PARTICIPATION INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
Green ITS Team	Sustainability Recognition Program for Individuals	Include one sustainability initiative in the annual departmental goals	Develop a formal tracking process for tracking volunteer hours and recognizing the employee's actions, potentially as part of the performance appraisal process
Green Purchasing Team	Sustainability Recognition Program for Projects and/or Project Teams	Create a process to collect sustainability ideas from employees	
Green Building Team	Conduct a poll with employees to determine what aspects of working at DFW are most important to them and use this data to continue being an employer of choice		



LEADERSHIP

Continue to provide leadership in the area of sustainability by sharing lessons learned, participating in innovative technology development, and providing opportunities for employees to transfer their knowledge in global, national and local forums

Forward-thinking and providing industry leadership is an integral part of DFW's culture. Formally capturing leadership as a focus area in the Sustainability Management Plan emphasizes its importance to the stakeholders. In the area of sustainability, DFW's leadership has helped to shape the airport industry's approach and progress in the areas of environmental stewardship, economic growth and social responsibility.



GOAL: Advance DFW's leadership in environmental, social and economic activities in the global, national and North Central Texas communities

KPI	Metric(s)	Baseline	Target
Evidence of effective leadership and commitment to sustainability	# of sustainability related activities (speaking, written, participation in industry groups)	10	15 per year
	# of events initiated by DFW relating to sustainability	1	2 per year
	# of innovative technologies supported by DFW	1 (Solar Impulse)	2 every 5 years
	# of leadership positions held in industry organizations	11	12 per year
Fostering of teamwork and collaboration	# of joint efforts within the global, national and local communities aimed at achieving sustainability goals	5	3 per year



LEADERSHIP INITIATIVES

Ongoing Initiatives	Future Initiatives		
	Near Term (1-2 Years)	Medium Term (2-4 Years)	Long Term (4+ Years)
Clean Texas Platinum	Continue to host and participate in SAC and NCTESF meetings for regional sustainability coordination	Host a national forum with airports, vendors and FBOs to share best practices and collaborate on activities, such as HMSHost's food donation program	Support the development of alternative aviation fuels by partnering with organizations such as CAAFI to run testing programs at DFW
EPA WaterSense		Start a "Speakers Bureau" or "Ambassador Program" that involves employees helping to train and educate others on sustainability	
EPA Green Power Partnership	Communicate with stakeholders regularly	Continue to evaluate on-site renewables as the economics change and partner with local utilities and regional communities to develop demonstration projects	



8

NEXT STEPS





Next Steps

DFW's Sustainability Management Plan lays out a roadmap for improving the airport's sustainability performance on the short-term, medium-term and long-term horizons. The plan was developed in cooperation with stakeholders, including Board employees, regulatory agencies, tenants, and surrounding communities. The foundation of the Plan includes a common vision, focus areas and goals, which served as the building blocks

for conducting the baseline assessment, setting achievable targets, and selecting future initiatives. In the coming months and years, DFW will develop and execute implementation plans, monitoring performance, and continue to engage stakeholders.

IMPLEMENTATION PLANS

Starting with the short-term activities that were selected for each focus area, DFW will develop implementation plans that will guide successful completion of the actions. The implementation plans include information such as specific action items, human,

financial and other resource needs, responsible parties, schedule, deliverables, and priority level. The plans will be developed in coordination with the stakeholders who will be accountable for implementation.

Implementation Plan

Sustainability Practice					Goals:			
Scope					KPIs			
Start Date:					Metrics			
Target Completion Date:								
Champion(s)					Key Stakeholders			
Specific Action Item(s)		Priority (High/Med/Low)	Responsible Party (Job/Personnel)	Deliverables	People Resource Needs	Financial Resource Needs	Schedule/Milestones	Status*
1								
2								
3								
4								
5								
Status*:		Green = Ongoing; Grey = Planned; Yellow = Need Help; Red = Behind; Completed = Blue						

MONITORING

During the baseline assessment, several Excel-based tools were developed to record and analyze the data related to the airport's sustainability performance. These tools will continue to be used to monitor progress on monthly basis for some data sets and

an annual basis for others. In addition, DFW is currently developing a sustainability dashboard to automate the collection and reporting of sustainability data.

Example Monitoring Plan for Terminal Waste Handling

Acct #	Agreement #	Customer Name	Compacted	Front Load	Loose	Under 12	Over 12	Recycled	Temp Under 12	Temp Over 12	Sunday Compacted	Compost (1.33 cu yds/ton)	Landscape Waste (Unavailable)
January	BOARD		2377	1392	370	38	14	584.79	0	9	0		
February	BOARD		2248	1204	320	38	14	551.72	0	8	0		
March	BOARD		2373	1280	300	38	15	583.7	0	7	0		
April	BOARD		2388	1236	450	38	15	612.86	0	8	0		
May	BOARD		2560	1368	260	38	15	638.85	0	8	0		
June	BOARD		2299	1228	320	38	15	600.09	0	8	0		
July	BOARD		2348	1340	340	38	15	679.76	0	8	0		
August	BOARD		2487	1300	320	38	15	671.79	0	8	0		
September	BOARD		2442	1136	260	38	14	593.48	0	6	0		
October	BOARD		2318	1224	370	38	15	565.98	0	2	0		
November	BOARD		2196	1232	340	38	15	520.78	0	3	0		
December	BOARD		2136	1068	430	38	15	609.06	0	3	0		
TOTALS DFW BOARD			28,172.00	15,008.00	4,080.00	456.00	177.00	7,212.86	-	78.00	-	22.55639098	
			51.0%	27.2%	7.4%	0.8%	0.3%	13.1%	0.0%	0.1%	0.0%	0.000408583	

CONTINUED STAKEHOLDER OUTREACH

Discussions with the stakeholders to develop the Sustainability Management Plan were extensions of conversations that were already taking place with airport employees and outside parties. Recognizing the importance of stakeholder input, DFW plans to continue stakeholder meetings, including the North Central Texas Environmental Stewardship Forum, after the plan is submitted and implementation gets underway. The feedback from the stakeholders will continue to help evaluate the overall sustainability program and to create a cycle of continuous improvement.



















































A






















APPENDIX

























































	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	Procurement	Sustainable Infrastructure and Resiliency	Asset Optimization	Energy and Air	Biodiversity and Natural Environments	Water	Waste	Community Partnerships	Communication and Education	Employee Participation	Leadership
EXISTING INITIATIVES											
Emergency management works with Tarrant County to identify and determine how to respond to/mitigate potential climate scenarios											
Periodically optimize existing building operations through Continuous Commissioning Program (CCP)											
Upgrade/retrofit existing lighting with fluorescent lamps											
Utilize occupancy sensors in administrative areas											
Utilize daylight sensors											
Calculating and assessing annual air quality emissions from criteria pollutants and greenhouse gas emissions											
Creating emissions trends analyses											
Assessing indirect emissions reductions from renewable energy and biofuel use											
Assisting DPS Fire with annual assessment of greenhouse gas emissions from fleet vehicles											
Utilize energy efficient design for new buildings											
Implement HVAC & light controls projects											
Reduce potential asbestos exposure in legacy terminal buildings to address indoor air quality											
Development of DFW's Green Building initiatives and other planning programs that could reduce energy demand.											
Implemented clean vehicle program utilizing alternative fuels											
Submitted grant for zero emissions electric vehicles											
CNG vehicle fleet has achieved significant NOx reductions											



















	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	Procurement	Sustainable Infrastructure and Resiliency	Asset Optimization	Energy and Air	Biodiversity and Natural Environments	Water	Waste	Community Partnerships	Communication and Education	Employee Participation	Leadership
EXISTING INITIATIVES											
Reduced energy consumption at Terminal A Section A due to TRIP.				☀️							
Installed photovoltaic solar panels on ADE.				☀️							
Purchase of energy saving/approved hardware/appliances	🛒			☀️							
Implement LED for TRIP parking areas			🏢	☀️			♻️				
Implement LED Airfield Lighting				☀️							
Install geothermal heat pump at EAD		🏆	🏢	☀️							
Install solar thermal arrays		🏆	🏢	☀️							
Develop sustainable tenant build out requirements		🏆		☀️		💧	♻️				
Develop a Board Facilities Renewal Master Plan to guide renovation activities		🏆		☀️		💧	♻️				
Implement employee LiveWell Program								📄		👥	
Provide supplied air and power at gates (i.e Centralized Utilities)				☀️							
Utilize thermal storage (indirect efficiency) at chilled water plant		🏆		☀️							
Upgrade boilers and chillers with high-efficiency models at DFW Energy Plant				☀️							
Install cool roof technology in Terminal D		🏆		☀️							
Provide pre-conditioned air at gates to (minimize APU)				☀️							

















	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	Procurement	Sustainable Infrastructure and Resiliency	Asset Optimization	Energy and Air	Biodiversity and Natural Environments	Water	Waste	Community Partnerships	Communication and Education	Employee Participation	Leadership
EXISTING INITIATIVES											
Purchase wind generated electricity											
Install PV solar array at ADE Building											
Fleet replacement & reassignment planning to balance high/low mileage users' needs for vehicle acquisitions.											
Fleet management initiatives to "right-size" the fleet											
Preventive maintenance frequencies and intervals adjusted based on equipment performance.											
Supplement fleet with CNG Buses, Trucks, Equipment											
Install two CNG Fueling stations on site											
Provide charging areas for hybrid passenger cars											
Use biodiesel fuel for select heavy equipment											
Install SkyLink train system connecting 5 terminals (in place of shuttle bus system)											
Provide recycling programs for cardboard, paper, scrap metal, used oil, fluorescent lamps, used electronics (via R2 facility), batteries, tires, pallets, plastic bottles											
Use polystyrene foam densifier											
Recycle concrete, steel, copper and other construction materials											
Coordinate with concessionaires to provide opportunities to donate unused food											
Participate in Water Advocates initiative to reduce bottled water waste											

	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	Procurement	Sustainable Infrastructure and Resiliency	Asset Optimization	Energy and Air	Biodiversity and Natural Environments	Water	Waste	Community Partnerships	Communication and Education	Employee Participation	Leadership
EXISTING INITIATIVES											
Provide for recycling of used cooking oil for concessionaires at Terminal D											
Provide water refill stations in terminals (in lieu of bottled water)											
Landscaping "image elements" at International Commerce Park											
Provide drought tolerant landscaping at Founders' Plaza											
Re-use mulch											
Management of Trigg Lake aerators to promote the health of aquatic life											
Periodic aquatic life and habitat assessments with local university to document airport biodiversity											
Plant a tree farm near Department of Public Safety (DPS) 4											
Implement a channel maintenance program to maintain functionality and performance of on-site stormwater infrastructure.											
Implement herbicide restrictions as part of National Partnership for Environmental Priorities (NPEP) commitment											
Enforce SWPPP Program for tenants and construction projects											
Collection and treatment of deicing fluid before it reaches natural areas											
Require Terminal Improvement and Renewal Program (TRIP) Safety Program / Rolling Owner Controlled Insurance Program (ROCIP)											
Utilize driving simulators											
Utilize online training at DFW Test Center in place of paper/hard copy tests											

	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	Procurement	Sustainable Infrastructure and Resiliency	Asset Optimization	Energy and Air	Biodiversity and Natural Environments	Water	Waste	Community Partnerships	Communication and Education	Employee Participation	Leadership
EXISTING INITIATIVES											
Utilize reclaimed water for irrigation and provide major customer for Ft Worth reclaimed water pipeline											
Implement a formal water conservation plan											
Install low flow fixtures in terminals and administrative buildings											
Install low water landscaping utilizing native and drought tolerant plants											
Install condensate diversion for ice machines and coolers to chill water loop											
Implement a leak detection program to routinely check the condition of piping and reduce leaks											
Evaluate deicing operations impacts to storm water permitting, waste generation, and airport receiving waters (Trigg Lake, Bear Creek, watershed, etc.)											
Oversee storm water permits to improve water quality (MSGP, MS4, Individual, and construction permits).											
Fulfill MS4 requirements to implement education, involvement, and outreach both internally and externally. Coordinate training, public speaking/tours, public outreach career fairs/expos annually.											
Received SPEAS Award at Founders' Plaza Center for SMART Landscaping											
Native plants were planted at Founder's Plaza and placards for the garden were created to support community awareness about plant life and sustainable watering practices											
Conduct ongoing departmental materials management review pertaining to in-house, contracted and hybrid activities											
Department of Public Safety (DPS) 6 - LEED TM											
Founders' Plaza - LEED TM											

	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	Procurement	Sustainable Infrastructure and Resiliency	Asset Optimization	Energy and Air	Biodiversity and Natural Environments	Water	Waste	Community Partnerships	Communication and Education	Employee Participation	Leadership
EXISTING INITIATIVES											
International Commerce Park - LEED TM											
DFW Headquarters Admin Building - LEED TM											
Developed a Green Procurement Team to identify more sustainable procurement options											
Implement a Refrigerant Tracking and Audit Program											
Develop a Chemical Purchasing Policy to evaluate environmental impacts of chemical products											
Paper purchase tracking and reduction											
Developed a Green ITS Team to track and encourage reduction in paper usage											
Installed an increased number of recycling bins throughout the terminals.											
Paper reduction through business process automation, duplex printing, promotion of scanning over printing and thinking before printing.											
Implement Shred Day - an initiative to reduce paper storage/dependency and promote the use of electronic repositories											
Provide a Yoga Studio in Terminal											
Provide Employee Assistance Program											
Support Holiday Helpers Program											
Implement and support Employee Resource Groups											
Maintain environmental health and safety compliance programs											

	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	Procurement	Sustainable Infrastructure and Resiliency	Asset Optimization	Energy and Air	Biodiversity and Natural Environments	Water	Waste	Community Partnerships	Communication and Education	Employee Participation	Leadership
EXISTING INITIATIVES											
Paper Patrol											
Conduct department-wide projects, e.g. day of caring and 5k against violence											
Staff serve on non-profit boards throughout the community representing DFW Airport											
Planning and implementing annual DFW Earth Day event for local schools and airport employees											
Carry out a "Planning Gives Back" program for DFW employee engagement activities, e.g. volunteered to build a playground at a Boys and Girls Club, volunteered at Graces Christmas Cottage handing out donated gifts to less fortunate families.											
Contribute to the DFW Airport Interfaith Chaplaincy program. Volunteer chaplains serve the passengers, employees, tenants, and military every day.											
Contribute to Travelers Aid specifically aimed at passengers.											
DFW Diversity groups sponsor/participate in various community outreach activities, e.g. ERGs have a school supply drive, United Way drive, Parents Step Ahead, UNCF.											
Conduct new employee orientation related to environmental issues at DFW Airport											
Implement annual storm water refresher training module to raise employee awareness of issues											
Conduct semi-annual pollution prevention meetings with airport tenants and departments											
Provide sustainability presentations and tours to external audiences											
Provide on-going educational tools to employees in all areas of well-being											

	OPERATIONAL EXCELLENCE		COST COMPETITIVE					CUSTOMER SATISFACTION		EMPLOYEE ENGAGEMENT	
	Procurement	Sustainable Infrastructure and Resiliency	Asset Optimization	Energy and Air	Biodiversity and Natural Environments	Water	Waste	Community Partnerships	Communication and Education	Employee Participation	Leadership
EXISTING INITIATIVES											
Implement department-level employee engagement programs											
Include achievement of sustainability as a Level 1 goal in employee assessments											
Implement employee Pollution Prevention Teams											
Employee engagement activities including: department luncheons, quarterly goals and incentives, teamwork on projects, and staff meetings to stay informed.											
Environmental Management System											
Maintain noise management/tracking program											
Developed Supplier Diversity Policy											
Support Employee United Way Program											
Provide Ambassador Program at terminals											
DFW customer satisfaction surveys support high customer satisfaction											
DFW has received multiple Awards / Recognition for energy reduction											
Eco-Airport of the Year 2011, ATW Online											
Green Power Partnership											
Work with concessionaires to provide nutrition information and nutritious options to travelers											
Provide complimentary Parking for Medal of Honor/Disabled Veterans											



→ B APPENDIX



Acronyms

AA	American Airlines	ISO	International Organization for Standardization
ACI	Airports Council International	ITS	Information Technology Services
ACRP	Airport Cooperative Research Program	KPI	Key Performance Indicator
ADE	Airport Development and Engineering Department	LEED	Leadership in Energy and Environmental Design
BDD	Business Diversity and Development	LID	Low Impact Development
CAAFI	Commercial Aviation Alternative Fuels Initiative	MOU	Memorandum of Understanding
CCP	Continuous Commissioning Program	MSW	Municipal Solid Waste
CDP	formerly Carbon Disclosure Project	NCTCOG	North Central Texas Council of Governments
CMMS	Computerized Maintenance Management System	NCTESF	North Central Texas Environmental Stewardship Forum
CTA	Central Terminal Area	OPS	Operations
DART	Dallas Area Rapid Transit	PCA	Preconditioned Air
DPS	Department of Public Safety	SAC	Sustainability Advisory Council
EPA	Environmental Protection Agency	SIT	Sustainability Implementation Team
ETAM	Energy, Transportation and Asset Management Department	SOC	Schedule of Charges
FAA	Federal Aviation Administration	TCEQ	Texas Commission on Environmental Quality
FBO	Fixed Base Operator	TRB	Transportation Research Board
FTRC	Fire Training Research Center	TRIP	Terminal Renewal and Improvement Program
GPS	Global Positioning System	TSA	Transportation Security Administration
GRI	Global Reporting Initiative	USEPA	United States Environmental Protection Agency
HVAC	Heating Ventilation Air Conditioning	W/R	Waste/Recycling



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