

Appendix 22

Salt Lake City Department of Airports

Salt Lake City International Airport (SLC)

Salt Lake City, Utah

The Salt Lake City Department of Airports is working to be an industry and community leader in preserving financial, human, and natural resources, including those required to operate Salt Lake City International Airport (SLC). Salt Lake City is striving to reach zero waste and SLC has committed to increasing its waste diversion rate by ten percent through recycling. Over the last 15 years, SLC has steadily increased the volume of material collected on a per passenger basis while also decreasing waste generation on a per passenger basis.

SLC has conducted waste stream composition studies to better understand the quantity and content of the facility's waste materials. A Sustainable Management Plan (attached at the end of this case example) was also developed for SLC and includes information about waste management. SLC maintains an online dashboard which displays up-to-date data related to waste reduction efforts (Figures 1 to 3). Some of SLC's waste metrics are normalized to passenger activity to facilitate year over year comparisons uninfluenced by travel trends. SLC also develops program progress summaries to supplement longer reports; an example of these summaries is included at the end of this case example.

The Facilities and Planning and Environmental Divisions fund waste management activities and monitor, measure, and track the program's progress. SLC receives rebates for recycled cardboard; in the last ten years, this revenue has totaled more than \$131,000. SLC has a waste management implementation team made up of representatives from the Facilities and Environmental and Planning Divisions as well as the janitorial contractors and tenants. This team meets quarterly to identify opportunities for improvement and respond to changing industry conditions. Facilities administers the contracts for collection of materials generated from the public areas as well as the tenant spaces; waste materials are collected by a private company and recyclables are collected by private companies and City personnel. These contractors provide data about the materials collected from the facility. Janitorial services are provided by private companies.

SLC manages solid waste generated from pre- and post-security public areas and provides labeled containers for comingled recyclables in these areas. These containers were previously installed in groups of three when the program was based on separation of paper recyclables from recyclable beverage containers and other items (Figures 4 to 6). SLC converted to single stream recycling by reusing the original station containers and replacing their labels in-house and purchasing new restrictive lids (Figure 7). The containers are configured in stations made up of collocated waste and recycling containers (Figures 8 and 9). SLC also repurposed underutilized waste containers identified by janitorial staff as recycling containers by applying the new labels to these fixtures. Reusing the existing bins in the new configuration allowed SLC to offer access to recycling in twice as many areas without purchasing additional containers. The stations are now available approximately every ten to fifteen feet in the terminal. The liners used in these stations now feature color coding and were substituting for a thinner material. SLC also maintains a system of compactors and dumpsters for employee and tenant use.

Airport employees have access to recycling and receive information about the program during new employee training and in emails on the topic. SLC provides a recycling guide for employees (Figure 10). Printer paper purchased for employee use is recyclable, this paper and paper products used throughout the facility include recycled content where possible.

To reduce waste generation, SLC auctions surplus and end of use items; sells pallets for reuse; chips trees for use as mulch; recaps and reuses tires; and supports the donation of edible food. HMS Host collects food from its food and beverage concession operations for pickup by a local charitable organization. Red Onion Food Services also donates food, including to the Utah Honor Flight organization. These programs address all three elements of sustainability (environmental, social, and financial) by diverting waste, providing meals for those in need, and avoiding the costs associated with landfill disposal. SLC offers bottle filling stations throughout the terminal to encourage use of reusable beverage containers (Figure 11).

Tenants, including concessionaires and airlines, are responsible for waste management in their leased spaces and have access to recycling through SLC's program. SLC's Rules and Regulations include specific requirements and instructions for the proper handling, recycling, and disposal of refuse. The Rules and Regulations pertaining to waste and recycling are included at the end of this case example. SLC's tenants can recycle free of cost through SLC's program; tenant participation is not mandatory. Several the SLC's food and beverage and retail operators also participate in the recycling program. Some of the airlines operating at SLC recycle through SLC's program, including items generated on inbound flights. SLC provides waste and recycling training to tenants and meets with their representatives monthly to answer questions and collect feedback about the program.

According to SLC's waste stream composition study, organic materials make up the bulk of the material generated at the facility. An anaerobic digester for organic waste is under construction three miles north of SLC; SLC is evaluating the feasibility of collecting food waste and utilizing this facility to convert the material into biogas. SLC is considering additional strategies to meet their and Salt Lake City's waste goals and objectives.

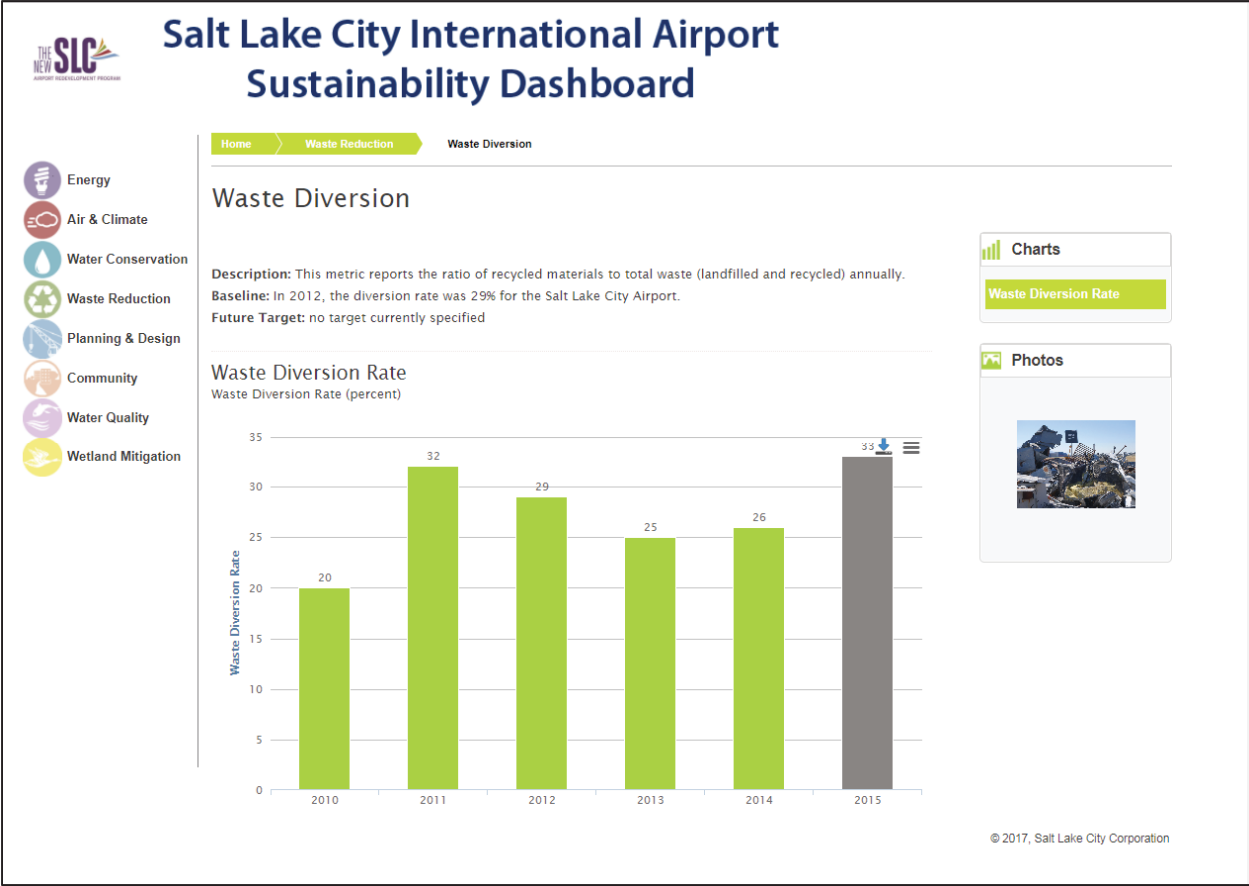


Figure 1: Screenshot of sustainability dashboard; courtesy of Salt Lake City Department of Airports



Salt Lake City International Airport Sustainability Dashboard

- Energy
- Air & Climate
- Water Conservation
- Waste Reduction
- Planning & Design
- Community
- Water Quality
- Wetland Mitigation

Home > Waste Reduction > Recycling Rate

Recycling Rate

Description: This metric reports the total rate of recycling at the airport excluding any construction material recycling. The data are provided in units of pounds recycled per passenger.

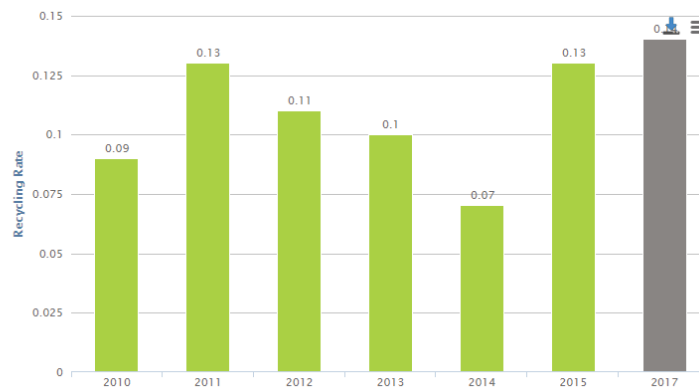
Baseline: In 2012, the recycle rate was at a rate of 0.12 pounds per passenger for the Salt Lake City Airport.

1 Year Target: Increase the recycling rate to 10% above 2012 rate to 0.13 pounds per passenger.

5 year Target: Increase the recycling rate to 15% above 2012 rate to 0.14 pounds per passenger.

Recycling Rate

Recycling Rate (pounds per passenger)



Charts

Recycling Rate

Photos



Figure 2: Screenshot of sustainability dashboard; courtesy of Salt Lake City Department of Airports



Salt Lake City International Airport Sustainability Dashboard

- Energy
- Air & Climate
- Water Conservation
- Waste Reduction
- Planning & Design
- Community
- Water Quality
- Wetland Mitigation

Home > Waste Reduction > Solid Waste Disposal Rate

Solid Waste Disposal Rate

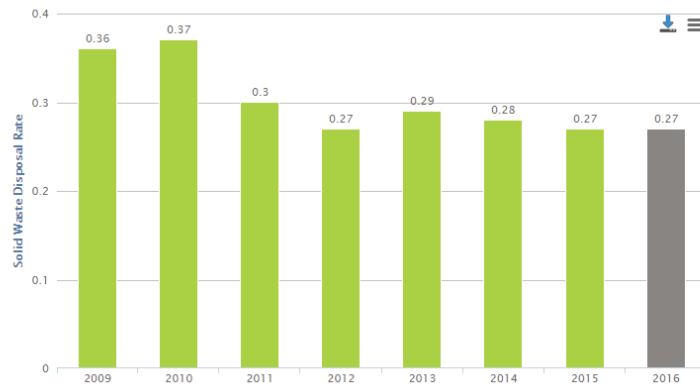
Description: This metric reports the amount of non-recyclable waste that goes to the landfill annually. The data are provided in units of pounds of waste per passenger.

Baseline: In 2012, the solid waste disposal rate was 0.27 pounds per passenger for the Salt Lake City Airport.

Future Target: During TRP implementation, the airport will aim to reduce its solid waste disposal rate to 0.24 pounds per passenger, 10% below 2012 levels.

Solid Waste Disposal Rate

Solid Waste Disposal Rate (pounds per passenger)



Charts

Solid Waste Disposa..

Photos

Figure 3: Screenshot of sustainability dashboard; courtesy of Salt Lake City Department of Airports



Figure 4: Previous recycling and waste containers (group of three); courtesy of Salt Lake City Department of Airports



Figure 5: Previous recycling and waste containers (group of three); courtesy of Salt Lake City Department of Airports



Figure 6: Previous recycling and waste containers (group of three); courtesy of Salt Lake City Department of Airports



Figure 7: New recycling container labels and restrictive lids; courtesy of Salt Lake City Department of Airports



Figure 8: Collocated waste and recycling containers (groups of two); courtesy of Salt Lake City Department of Airports



Figure 9: Terminal waste and recycling stations; courtesy of Salt Lake City Department of Airports

SALT LAKE CITY INTERNATIONAL AIRPORT RECYCLING GUIDE



RECYCLING

Cartons, phone books, cereal & paperboard boxes, packaging from frozen & microwaveable meals, magazines, newspapers, inserts, junk mail & office paper, shoe boxes, paper rolls, plastic coated milk & juice cartons, shredded paper (bagged), aluminum cans, steel cans, paper & plastic bags, styrofoam, ALL plastics.



Place the above items in your blue desktop containers and blue 90-gallon bins.

CARDBOARD

Corrugated cardboard boxes from shipping operations.

Place ALL cardboard in dumpsters/compactors located at Terminal Docks and North Support.



METAL

Steel, rebar, aluminum, copper wire, brass, or other metal items that contain a limited amount of non-metallic materials.

Scrapped and placed at the midfield recycling station.



ELECTRONICS

All computers, monitors, laptops and televisions are collected by the IT dept. for recycling.



LIGHT BULBS

All fluorescent, halogen, halide, and incandescent lamps are collected by the Lighting Dept. for recycling.



BATTERIES

Alkaline or single use batteries may be deposited in the brown totes located throughout the airport.



WOOD PALLETS

Wood pallets may be placed on the east side of the North Support Warehouse.



For more information, please contact: Kevin Staples, Environmental and Sustainability Coordinator at 801-575-3740, or kevin.staples@slcgov.com

Figure 10: Airport employee recycling guide; courtesy of Salt Lake City Department of Airports



Figure 11: Terminal bottle filling station; courtesy of Salt Lake City Department of Airports



Salt Lake City
International Airport

Sustainability Management Plan



To be a leader in the community and airport industry by **preserving and enhancing** Salt Lake City Department of Airports' **financial, human, natural, and energy resources.**

2015

PREPARED FOR:
Salt Lake City
Department of Airports

PREPARED BY:
VHB
Brendle Group
C&S Companies
Gensler



Salt Lake City
International Airport

To be a leader in the community and airport industry
by **preserving and enhancing** Salt Lake City
Department of Airports' **financial, human, natural,
and energy resources.**



Letter from the Executive Director



I am pleased to present the Salt Lake City International Airport Sustainability Management Plan (SLC SMP). The purpose of the SLC SMP is to advance the Airport's sustainability efforts, to establish Salt Lake City Department of Airports (SLCDA) as a leader in sustainability within the airport industry, and to support the sustainability principles of Salt Lake City.

SLCDA focuses on a holistic approach to sustainability through a commitment to enhancing the Airport's economic viability, operational efficiency, natural resource conservation, and social responsibility (EONS).

Our primary goal is to be a leader in the community and airport industry by preserving and enhancing Salt Lake City Department of Airport's financial, human, natural, and energy resources.

SLCDA has been a leader in sustainability planning, operations and implementation since the publication of a sustainability assessment in 2007. The SLC SMP continues our efforts by recommending nearly 200 new or enhanced sustainability initiatives, while providing the tools necessary to evaluate, implement, and track initiatives as well as monitor and report on the overall sustainability program's performance. The SLC SMP takes our sustainability program to the next level and ensures our continued success.

We would like to thank the many SLCDA employees and stakeholders who assisted in this effort. In particular, we would like to extend our sincere gratitude to the Federal Aviation Administration, who provided the financial resources to make this happen through its Sustainability Master Plan Pilot Program.

We are excited about working together to create a more sustainable future.

Sincerely,

A handwritten signature in blue ink that reads "Maureen Riley".

Maureen Riley

Executive Director, Salt Lake City Department of Airports



Acknowledgements

This plan was performed as part of the Federal Aviation Administration's (FAA's) Sustainable Master Plan Pilot Program. Because of a long-standing, demonstrated commitment to sustainability, Salt Lake City Department of Airports (SLCDA) received a grant under this program to complete Salt Lake City International Airport's first Sustainability Management Plan. SLCDA is grateful for the support of the FAA headquarters, Denver Airport District Office, and Northwest Mountain Region in the development of the Plan.

The Sustainability Management Plan Project Team would like to thank John Sweeney and Janell Barrilleaux of the FAA for their input and participation throughout this project.

Additionally, the Project Team would like to thank the SLCDA Sustainability Action Committee members for their thoughtful contributions in every phase of this study.

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Salt Lake City
International Airport

Sustainability Management Plan

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1 Introduction to Sustainability

FAA Sustainability Planning Program

Salt Lake City Department of Airports (SLCDA) considers environmental stewardship and fiscal responsibility an integral part of airport activities and has demonstrated its commitment to improving and preserving natural and social environments through continuously developing and implementing new sustainability strategies at Salt Lake City International Airport (SLC or the Airport). Because of a long-standing, demonstrated commitment to sustainability, SLCDA received a grant from the Federal Aviation Administration's (FAA's) Sustainable Master Plan Pilot Program¹ to complete the first Sustainability Management Plan (SMP) at SLC. Through this program, the FAA provides funding for the development of Sustainable Master Plans and Sustainability Management Plans. Sustainability Management Plans develop sustainability principles and include strategies that aim to reduce environmental impacts, achieve economic benefits, and enhance community involvement.

The general goals of this SMP are to enhance the efficiency of the Airport's operations and broader sustainability efforts, and to support the broader sustainability principles of the municipality of Salt Lake City.

This report provides guidance for SLCDA on how to implement the SMP recommendations. In addition to this report, a suite of a web-based database and spreadsheet-based planning tools were custom designed to assist in continuous planning and implementation. A companion document – the *SLC Sustainability Management Plan Highlights Report* – provides a summary of the plan for the public and other stakeholders. An electronic version of the Highlights Report is available on the SLC website.

What is Sustainability?

Sustainability has redefined the values and criteria for measuring organizational success by using a "triple bottom line" approach that considers economic, environmental, and social well-being. Applying this approach to decision-making is a practical way to optimize economic, environmental, and social capital. SLCDA takes a broad view of sustainability that builds on the

¹ FAA. Airport Sustainability, Airports. <http://www.faa.gov/airports/environmental/sustainability/>. Accessed October 22, 2014.

concept of the triple bottom line, and considers the airport-specific context. Consistent with the Airports Council International - North America's (ACI-NA) definition of Airport Sustainability (Figure 1-1),² SLCDA focuses on a holistic approach to managing the Airport to ensure economic viability, operational efficiency, natural resource conservation, and social responsibility (EONS).

A key element of sustainability is recognizing that addressing one aspect does not necessarily come at the expense of another. Optimally, evaluating a project or activity based on environmental, economic, social, and/or operational concerns will spur innovation that ultimately reduces costs and enhances benefits over the life of the project.

FIGURE 1-1: EONS APPROACH TO SUSTAINABILITY



Source: ACI-NA. <http://www.aci-na.org/>

Airport sustainability as part of a business strategy has both immediate and long-term benefits that can be measured. Some of the demonstrated benefits of implementing sustainability at various airports worldwide include:

- Improved passenger experience;
- Better use of assets;
- Reduced operations and maintenance costs;
- Reduced environmental footprints;
- Facilitation of environmental approvals/permitting;
- Improved relationships within the community;
- Enhancement of regional economy;

² Airport Council International – North America (ACI-NA). Undated. *Airport Sustainability: A Holistic Approach to Effective Airport Management*. <http://www.aci-na.org/static/entransit/Sustainability%20White%20Paper.pdf>. Accessed July 17, 2013.

- Creation of an engaged and enriched place to work; and
- Creation of new technologies through increased demand and investment in technologies that facilitate sustainable solutions.

Primary Goal

As part of this Sustainability Management Plan development process, SLCDCA crafted a primary goal that is reflective of its holistic definition of sustainability:

To be a leader in the community and airport industry by preserving and enhancing Salt Lake City Department of Airport's financial, human, natural, and energy resources.

History of SLCDCA Involvement in Sustainability

SLCDCA has taken a holistic approach to sustainability through the integration of environmental policies and practices with business operations and asset management. SLCDCA has committed to a quadruple bottom line, or EONS approach.

SLC Original Business Case Model

In 2007, SLCDCA was one of the first airports in the nation to conduct a sustainability assessment. The study, *Making the Business Connection to Airport Sustainability*,³ identified 150 sustainable programs and practices that SLCDCA managed in the past or was managing at that time. These programs and practices fell into five categories based on their intended outcomes or their administering business units. The five categories, or sustainable practice areas, were:

- **Management Practices** - everyday programs and policy-motivated sustainable practices used at SLCDCA to reduce their environmental impacts.
- **Conservation Initiatives** - particular programs and practices aimed at reducing the use of natural resources such as energy and water.
- **Waste Minimization** - programs and practices designed to reduce the amount of waste entering the waste stream through recycling and reusing materials.
- **Planning and Development** - practices that support current and future development projects, which improve social, economic, and environmental impacts.
- **Quality Initiatives** - practices that improve or innovate and show that SLCDCA is dedicated to seeking improved results.

³ SLCDCA. 2007. *Making the Business Connection to Airport Sustainability*. Prepared for SLCDCA by Carter & Burgess.

A review of the types of programs and practices included in the 2007 study revealed that those identified as *Quality Initiatives* were implemented most often, with 45 programs/practices representing 30 percent of all the practices at SLCDCA; followed closely by *Conservation Initiatives*, representing 24 percent; and *Management Practices* representing 23 percent of all initiatives. The categories with the fewest practices were *Waste Minimization* and *Planning and Development* at 13 percent and 10 percent of all initiatives, respectively.

FIGURE 1-2: MAKING THE BUSINESS CONNECTION TO AIRPORT SUSTAINABILITY - PROGRAMS AND PRACTICES BY CATEGORY



The 150 programs and practices were also sorted by the SLCDCA unit that supports each initiative:

- Environmental Management supports 42 sustainable programs and practices;
- Facility Systems Management supports 52 sustainable programs and practices; and
- Airport Operations and Management supports 56 sustainable programs and practices.

This study also included interviews with airline personnel and other airports around the U.S. The other U.S. airports were able to provide additional sustainability recommendations and program enhancement concepts. SLCDCA was known to “manage its business practices holistically to achieve sustainable outcomes” and it was recommended that SLCDCA “further institutionalize sustainability as a business model.” The assessment is available on SLCDCA’s website: <http://www.slcairport.com/cmsdocuments/sustainability.pdf>.

In addition to identifying existing programs and practices, the 2007 Study also proposed goals and strategies to further SLCDCA’s sustainability efforts. SLCDCA committed to the goals and strategies outlined in the 2007 assessment. It has also committed to applicable

environmental goals published by ACI-NA.⁴ The goals developed for this SMP are consistent with *Making the Business Connection to Airport Sustainability* findings and the applicable ACI-NA goals.

Awards

SLCDA has achieved national recognition for its creativity and commitment to sustainability. Table 1-1 lists the grants and awards presented to SLCDA. In addition to the reason for each award, the table includes the EONS categories associated with each initiative. The “EONS” categories refer to the four aspects that underlie airport sustainability: economic viability, operational efficiency, natural resource conservation, and social responsibility, previously described in this chapter and shown in Figure 1-1.

TABLE 1-1: GRANTS AND AWARDS PRESENTED TO SLCDA

AWARD NAME	YEAR	PRESENTER	REASON FOR AWARD	SUSTAINABILITY CATEGORIES ¹
SLC in the Top Ten Fastest Airports in the Country	2013	USA Today	Based on security wait times, expedited screening options, and airport layout	O, S
First Place for its Special Dietary Directory Program	2013	ACI Concessions Awards program	To inspire creativity in the industry and recognize innovative and outstanding airport concessions	O, S
Second Place for its Best Specialty Retail Program	2013	ACI Concessions Awards program	To inspire creativity in the industry and recognize innovative and outstanding airport concessions	O, S
SLC International Airport Among the Best Airports in the World	2013	Skytrax Research of London	Annual survey ranked SLC 94 out of 100 of the world's best airports. Only four US airports were named in the top fifty	O, S
SLC Airport Best Concessions Management Team	2013	Airport Revenue News	Award was based after the complete renovation of the concessions program	O, S
Honorable Mention for Excellence	2013	Northeast Chapter of the American Association of Airport Executives (NECAAAE) Balchen Post	For the performance of snow and ice control in the large hub category	O, N
Storm Ready Site	2013	National Weather Service Weather Forecast Office	SLCDA has made a commitment to implement infrastructure and systems needed to save lives and protect property when severe weather strikes.	O, S
First for Arrival and Departure 2013	2013	U.S. Department of Transportation	In 2013, 89.8 percent of departures from SLC were on time, while 88.6 percent of arrivals to SLC were on time.	O, S

Source: SLCDA: Compiled by VHB, 2014.

Note: ¹ EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)

⁴ ACI-NA. 2009. *ACI-NA Environmental Goals*. http://74.209.241.69/static/entransit/board_enviro_goals_feb6.pdf. Accessed October 7, 2013.

TABLE 1-1: GRANTS AND AWARDS PRESENTED TO SLCDA (CONT.)

AWARD NAME	YEAR	PRESENTER	REASON FOR AWARD	SUSTAINABILITY CATEGORIES ¹
SLC ranked 27 th out of the 40 largest airports for superior technical services	2012	PC World Magazine	Superior technical services, including free and high-quality Wi-Fi and cell phone reception	O, S
On-Time Service Performance	2012	FlightStats	Awarded for the Airport's on-time departure record of 86.55%, the national average was 76.67% in 2012	O, S
Certificate of Achievement for Excellence in Financial Reporting	2007-2012	Government Finance Officers Association of the United States and Canada (GFOA)	For readable and organized Comprehensive Annual Financial Reports	E
SLC Ranked 57 th in a survey of the top 101 Affordable US Airports	2011	Cheapflights Media	Based on average airfare searches	E, S
Fifth in Passenger Satisfaction Survey	2010	J.D. Power and Associates	SLC was fifth among airports with between 10-30 million annual passengers	O, S
Excellence in Paving Award	2010	Utah Chapter of the American Concrete Paving Association and the Utah Department of Transportation	Reuse of construction materials during the reconstruction of Taxiways M and H	O, N
Honorable Airport Service Quality Award, Best Airport with 15-25 million passengers	2010	Airport Service Quality – ACI-NA	Measure of customer service compared to airports nationwide	O, S
Tourism Achievement Award	2010	The Salt Lake Convention and Visitors Bureau	Awarded in the spirit of partnership and dedication to the tourism industry demonstrated by the hardworking staff of SLCDA	O, S
Best Print Advertising Campaign	2010	Utah Tourism Industry Coalition and the Utah Office of Tourism	Appreciation for the Airport's involvement in support of tourism in the State	O, S
Emergency Medical Dispatch Center of Excellence	2010	International Academies of Emergency Dispatch	SLC was the first Airport to receive this distinction for its comprehensive implementation and compliance with the Medical Priority Dispatch System	O

Source: SLCDA: Compiled by VHB, 2014.

Note: 1 EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)

TABLE 1-1: GRANTS AND AWARDS PRESENTED TO SLCD A (CONT.)

AWARD NAME	YEAR	PRESENTER	REASON FOR AWARD	SUSTAINABILITY CATEGORIES ¹
No. 1 Airport for On-Time Performance	2008-2009	Travel and Leisure Magazine	SLC was first in the nation for on-time departures and on-time arrivals, in 2009 only 12% of flights were delayed	O, S
Local Government Recycling Program of the Year	2005	Recycling Coalition of Utah	For creativity and passion in the commitment to recycling programs	O, N
Achievement Award in Pollution Prevention	2004	Utah Pollution Prevention Association	Recognizes SLCD A's water conservation program and implementation of xeriscape	O, N
Clean Air Promotion Award	2004	Natural Gas Vehicle Coalition	For the promotion and/or use of Compressed Natural Gas (CNG) vehicles	O, N
First Place for Excellence (Snow and control)	2001-2003, 1994, 1992, 1988-1989, 1982-1984, 1979, 1975	NECAA AE Balchen Post	For the performance of snow and ice control in the large hub category	O, N
Clean Cities Special Projects Grant	2001	U.S. Department of Energy	Recognizes SLCD A's Clean Fuel Program and provides the purchase of heavy-duty CNG vehicles	O, N

Source: SLCD A: Compiled by VHB, 2014.

Note: ¹ EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)

Organization of the Sustainability Management Plan Report

The SMP report includes the following chapters and supporting appendices, and has a companion document, the *SLC Sustainability Management Plan Highlights Report*.

- Chapter 1, *Introduction to Sustainability*, provides an overview of the FAA's sustainability planning grant program and the definition of sustainability that forms the basis for this SMP. This chapter also reviews SLCD A's history and awards received for its commitment to sustainability.
- Chapter 2, *Sustainability Planning Process*, details the elements of the Sustainability Management Plan process and the stakeholder engagement activities.
- Chapter 3, *Airport Profile*, places the SMP in context by providing a profile of SLC, including passenger and aircraft operations activity levels, transportation accessibility, airport facilities and tenants, as well as the organizational structure of the Airport.
- Chapter 4, *Baseline Assessment*, provides a thorough understanding of sustainability performance for key resources such as energy, water use and consumption, recycling and material management, people (passengers, employees, and tenants), natural resources. The baseline assessment will form the comparison point against which

continuous improvement will be measured over time. This chapter also provides an overview of the Collector™ tool.

- Chapter 5, *SLCDA's Sustainability Vision: Goals, Objectives, and Targets*, details SLCDA's primary goal and sustainability goals, objectives, and performance targets.
- Chapter 6, *Sustainability Initiatives*, details the process used to identify and evaluate sustainability initiatives and provides an overview of the Selector™ tool, which was developed to assist with this process.
- Chapter 7, *Implementation Process*, discusses the procedure used to track and implement initiatives at SLC. Additionally, the Tracker™ and Implementer™ tools are highlighted in this chapter.
- Chapter 8, *Sustainability Performance Monitoring and Reporting*, reviews the processes and procedures recommended to monitor and report on SLCDA's sustainability successes. The Reporter™ tool was developed to assist with this evaluation, and it is introduced in this chapter.
- Chapter 9, *Organizational Engagement*, reviews SLCDA's organizational framework, details potential opportunities to integrate sustainability into existing processes and procedures, and reviews internal and external engagement activities.
- Chapter 10, *Funding and Partnerships*, details potential funding opportunities at federal, state, and local levels and recommends partnerships to advance sustainability at SLC.

Supporting Appendices:

- Appendix A, *Sustainability Action Committee Presentations*, Presentations from the five Sustainability Action Committee (SAC) meetings, dated June 4, 2013; November 26, 2013; February 26, 2014; July 16, 2014; and September 16, 2014.
- Appendix B, *Sustainability Planning Project Team and Terminal Redevelopment Program Meeting Materials*.
- Appendix C, *Tenant Surveys*, Memorandums containing the survey results for the airline, Fixed-Base Operator (FBO), and concessionaires surveys.
- Appendix D, *Federal Aviation Administration Quarterly Reports*, Memorandums for the Federal Aviation Administration (FAA) lessons learned and quarterly reports.
- Appendix E, *Air Quality and Greenhouse Gas Assessment*, Full assessment on air quality and greenhouse gas (GHG) emissions, including emissions baseline inventory assumptions and modeling results.
- Appendix F, *Waste Management and Recycling Audit*, Contains the methodology and results from the September 18, 2013 waste and recycling audit.



- Appendix G, *Energy Evaluation*, This appendix details the building automation system and the energy conservation program implemented in 2001.
- Appendix H, *Sustainability Initiatives*, This appendix contains the short-, mid-, and long-term initiatives that are recommended for implementation at SLC.
- Appendix I, *SLC SPOT™ User's Guide*, A User's Guide to help users understand the functionality, usability, and operational capability of SPOT™, SLCD's sustainability tools.



Salt Lake City
International Airport

Sustainability Management Plan

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2 Sustainability Planning Process

Sustainability Framework and Process

The planning process followed in this Sustainability Management Plan (SMP) (Figure 2-1) provides the flexibility necessary to consider our operating environment and resources, the opportunity for continuous improvement, monitoring and implementation, as well as the goals of our stakeholders and the municipality of Salt Lake City. Through a competitive process, the Salt Lake City Department of Airports (SLCDA) hired a consultant team to lead the Salt Lake City International Airport (SLC or the Airport) through the sustainability planning process.

The planning process for the SMP considers input from six main stakeholder groups: Airport directors/leadership, the Sustainability Action Committee (SAC), tenants (airlines and concessionaires), the Terminal Redevelopment Program (TRP) team, Salt Lake City municipal staff, and the Federal Aviation Administration (FAA). The Sustainability Planning Project Team consisted of SLCDA Project Management Team and the Consultant Team.

The Sustainability Management Plan project team included the following groups:

- The SLCDA Project Management Team
 - Patty Nelis, Environmental Program Manager, and
 - Kevin Staples, PE, LEED AP, Environmental and Sustainability Coordinator
- The Consultant Team led by the prime consultant and its sub-consultants
 - VHB (Prime Consultant)
 - Brendle Group
 - C&S Companies
 - Gensler, Inc.

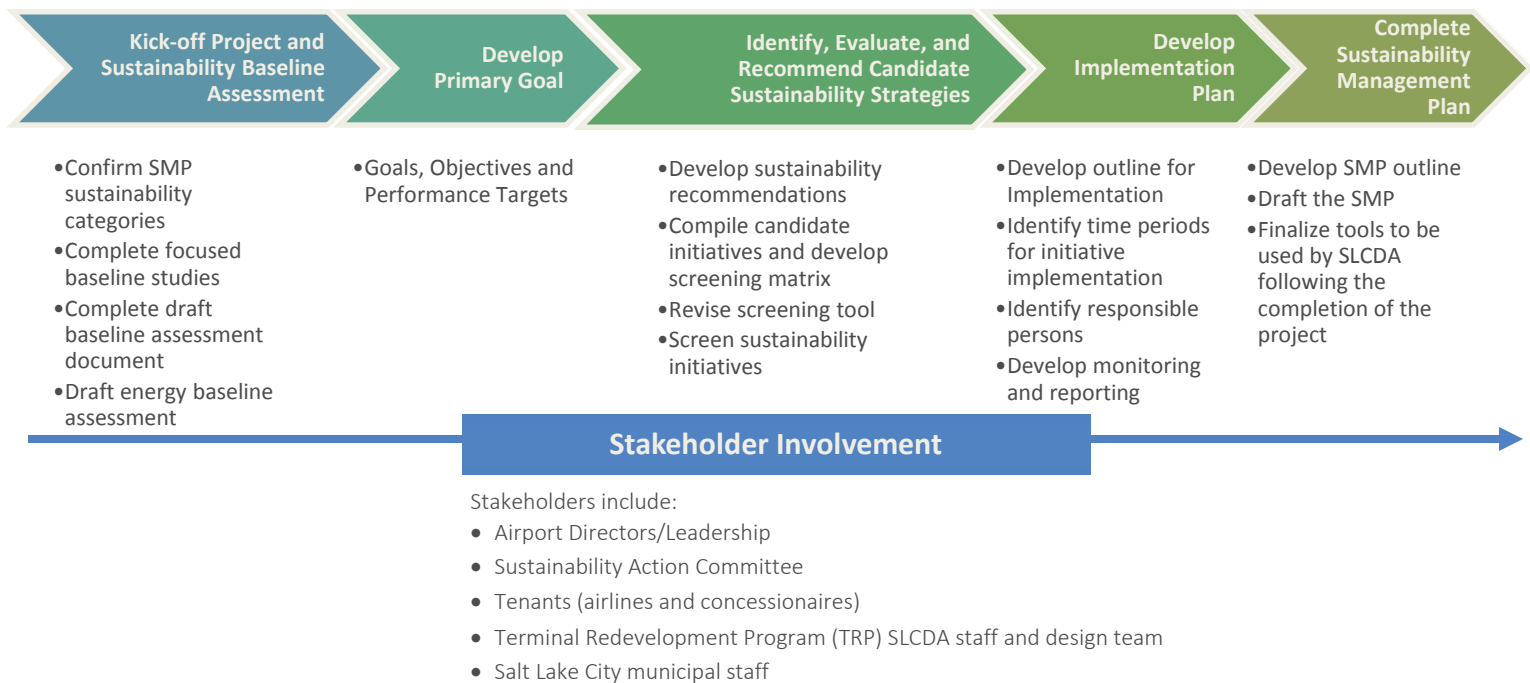
This chapter provides an overview of the steps in the SMP planning process; additional detailed information is described in subsequent chapters. To support the sustainability

planning process the Project Team custom designed a suite of tools, that will assist SLCDAs facilitate future implementation of the SMP recommendations. A brief summary of these tools is provided in this chapter, with detailed descriptions included in each relevant chapter.

Project Kick-off

The Sustainability Planning Project Team held meetings at the outset of the study to set expectations, establish communications protocols, and review the scope of work. The Project Team also met with the Airport Executive Director and Division Directors to brief them on the project and to receive input as to the Airport’s goals for the SMP. At the kick-off meetings two major tasks for the SMP process were also initiated, namely the stakeholder engagement effort and the baseline assessment.

FIGURE 2-1: SUSTAINABILITY MANAGEMENT PLAN PROCESS



Source: VHB, 2013.

Develop Primary Goal

The Sustainability Planning Project Team worked with the SAC at the earliest stages of the project to craft a succinct primary goal that captures the SLCDCA’s sustainability philosophy. The primary goal informed the development of sustainability goals and objectives for the focus areas identified at the beginning of the study, as well as measurable and specific performance targets that are quantifiable and specifically designed to help the SLC achieve each goal. This combination of high-level goals and more specific quantifiable targets gives SLCDCA flexibility to adjust targets in order to meet goals in changing circumstances.

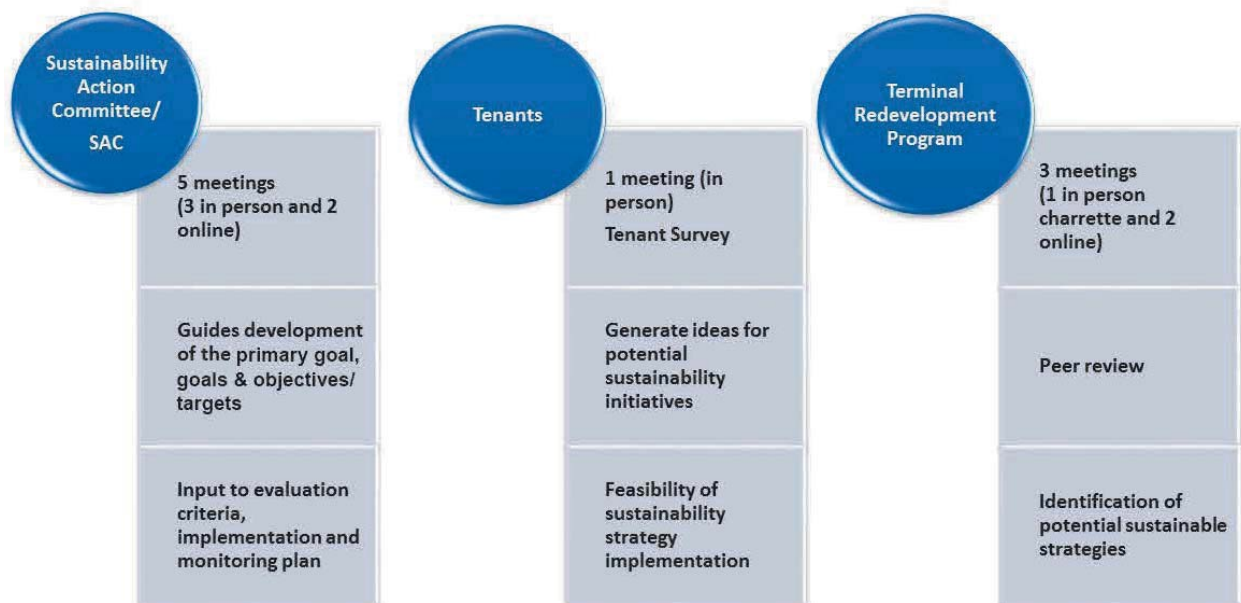
Our Primary Sustainability Goal

To be a leader in the community and airport industry by preserving and enhancing Salt Lake City Department of Airport’s financial, human, natural, and energy resources.

Stakeholder Involvement in Plan Development

From the outset of the project and at key milestones, the Sustainability Planning Project Team coordinated with a variety of key stakeholders to maximize the value of the plan and to ensure consistency with other on-going efforts. In addition to airport leadership and the City, Figure 2-2 shows the key stakeholder participants involved in plan development.

FIGURE 2-2: STAKEHOLDER PARTICIPATION



Source: VHB, 2014.

Airport Leadership

The Sustainability Planning Project Team met with the SLCDCA Executive Director, senior management and directors at the kick-off session and several times during the course of plan development to:

- Ensure understanding and buy-in of the sustainability planning process and implementation by SLCDCA leadership, and
- Enable staff members on the SAC to follow through on implementation of the SMP.

During the kick-off phase in June 2013, the Sustainability Planning Project Team gave a presentation to introduce the SMP, provide key background information on the FAA Sustainable Master Plan Pilot Program and other airport sustainability plans, as well as the main goals of the SLC SMP. The Sustainability Planning Project Team briefed the Board on the highlights of the plan and described the implementation approach during a final presentation held in November 2014.

Sustainability Action Committee (SAC)

As recommended by the FAA, SLCDCA convened an airport stakeholder group, the SAC, to facilitate development of the SMP. The SAC is an eleven-member committee of SLCDCA staff, appointed by Division Directors and managers, from a cross-section of divisions (the SAC also has an alternate from each department designated in case primary members cannot attend a particular meeting). SAC team members represent a cross-section of the functional areas of SLCDCA including:

- Engineering
- Operations
- Facilities/ Maintenance
- Human Resources
- Fleet
- Health & Safety
- Information Technology/
Building Automation
Systems
- Planning/Environmental
- Properties
- Finance



Sustainability Action Committee
Meeting #3, February 26, 2014

Figure 2-3 shows the SLCDA departments that participated in the plan development in conjunction with the SAC Committee.

FIGURE 2-3: DEPARTMENTS REPRESENTED IN THE SAC



Source: VHB, 2014.

The objectives of the SAC are to:

- Serve as the primary SLCDA working group during all phases of the planning process to provide input on the SMP development
- Play a key role in implementing the SMP after the close of the planning phase of the project

During the course of the SMP development, the SAC served the following roles and responsibilities:

- Helped define the primary goal, sustainability goals, objectives, and targets
- Identified existing sustainability initiatives
- Assisted in data collection process for the baseline assessment

- Defined screening criteria and evaluated feasibility of potential sustainability strategies
- Framed the implementation and monitoring program
- Reported to staff on the progress of the SMP development and implementation and solicited input from SLCDCA's divisions

The SAC convened five times throughout the duration of the project in meetings facilitated by the Sustainability Planning Project Team. Each meeting lasted 1.5 to 2 hours. The topics for the five meetings included:

- Meeting 1 (June 2013): Primary Goal/Baseline Data Collection/ Stakeholder Engagement (in-person)
- Meeting 2 (November 2013): Review of Baseline/Primary Goal, Sustainability Goals, Objectives, and Targets (online webinar)
- Meeting 3 (February 2014): Identify and Evaluate Sustainability Strategies (in-person)
- Meeting 4 (July 2014): Tool Development (online webinar)
- Meeting 5 (September 2014): Action/Implementation Plan (in-person)

Each meeting was a mix of Sustainability Planning Project Team presentations to the SAC and small group exercises to elicit discussion and input from the participants, which are located in Appendix A, *Sustainability Action Committee Presentations*.

In the future, the SAC will be responsible for on-going implementation of the plan recommendations and continuation of the "Plan-Do-Check-Act" process (see Part II of the *Sustainability Management Plan*, Chapter 8, *Sustainability Performance Monitoring and Reporting* for more information on the "Plan-Do-Check-Act" process). The SAC will fulfill its responsibilities during upcoming quarterly meetings. Activities associated with "Plan-Do" and "Check-Act" will alternate from meeting to meeting to provide adequate time for each responsibility. Appendix A, *Sustainability Action Committee Presentations* includes example SAC quarterly meeting agendas.

Airport Tenants

Tenants, such as airlines and concessionaires, are a significant part of SLC's daily operations and, as such, are critical to success of the overall sustainability program at the Airport. While tenants operate as independent entities, SLCDCA has influence over tenant activities through various mechanisms such as leases, contracts, and licenses. Tenants must comply with terms of SLCDCA lease agreements and tenant alteration policies, where there may be opportunity to integrate sustainability practices. Thus, the SMP process can provide suggestions and a framework to support tenants' sustainable operations. Many tenants are already engaged in sustainability practices or programs of their own.

The objectives of tenant engagement efforts were to:

- Educate tenants on the SMP process and outcomes
- Engage tenants to develop a baseline assessment of tenant current practices, initiatives, and data that would inform a tenant-targeted pilot program
- Learn about unique challenges tenants face in implementing sustainability initiatives

The Sustainability Planning Project Team developed two surveys, as shown in Appendix C, *Tenant Surveys*, for collecting information from tenants on existing sustainability programs and for soliciting recommendations for new or enhanced initiatives. One survey targeted airlines/cargo operators and the other for concessionaires.

Members of the SLCDCA Project Management Team participated in a meeting with tenants at a regularly scheduled airport-wide tenant meeting. At the meeting, the SLCDCA Project Management Team briefed participants on the intent of the SMP and reviewed potential sustainability initiatives/programs. Discussion focused on opportunities for tenants to implement projects as part of their own operations and efforts SLCDCA could do to support or collaborate on those opportunities.



SLC offers a variety of dining options to enhance the passenger experience

Terminal Redevelopment Program (TRP) Team

As part of the planning process, the Sustainability Planning Project Team also coordinated with the planners and team members of the SLC Terminal Redevelopment Program (TRP). The coordination process allowed for exchange of ideas and information on sustainability initiatives and ensured that efforts were not duplicated. The TRP is a multi-year effort, aimed at modernizing the terminal area and support facilities to enhance the passenger experience at SLC. New or remodeled facilities will include terminals, concourses, central-utility plant, parking structure, roadways, and rental car quick turn facilities. Each of these has noticeably different impacts and influences on the sustainability of the Airport such as energy demands, carbon reduction potential, water efficiency, sustainable material considerations, and customer engagement opportunities. The enabling projects of the

phased construction of the SLC TRP began in Spring 2014. Build-out of the entire TRP will be phased over several years.

The central mission of the SLCD is to “achieve excellent and unprecedented customer service” so that the SLC is the “most convenient and efficient air transportation center in the world.” To this end, SLCD worked with a public relations firm to develop an extensive outreach and feedback process for the TRP that solicited suggestions directly from passengers via an internet site, social networks, emails, and letters, passenger interviews, a table with displays at the downtown Farmers Market, etc.

The Sustainability Planning Project Team held a one-day charrette with SLCD and the TRP design team (architects and engineers) to review sustainability initiatives already proposed for the TRP and identify additional or alternative sustainability recommendations as appropriate. The Sustainability Planning Project Team and the TRP design team held two additional meetings during the course of the SMP development. All Sustainability Planning Project Team-TRP coordination meeting materials are included in Appendix B, *Sustainability Planning Project Team and Terminal Redevelopment Program Meeting Materials*.



Flyer for the Farmers Market, where SLCD hosts a table



TRP-SMP Charette, October 3, 2013



Outreach to the public on the new SLC terminal.

Salt Lake City Municipal Staff

The Sustainability Planning Project Team met twice with municipal staff at Salt Lake City to provide a briefing on the project as well as give the City an opportunity to provide input. Since SLC is a municipally run airport, and has a strong link to the City because of its geography and connections to the transportation network, this coordination was important. The City is currently spearheading a multitude of sustainability initiatives through its *Sustainable Salt Lake - Plan 2015*, and there are synergies between what the City hopes to accomplish and SLCDCA's goals and strategies for the SMP.

City staff participated in a charrette with the Sustainability Planning Project Team and the TRP Team on October 3, 2013. City staff also participated in a SAC meeting on September 16, 2014. The City's Sustainability Director also attended the Board briefing on November 17, 2014.

The objectives of City engagement were to:

- Provide an overview of the SMP and the goals of the project
- Provide an opportunity for City officials to give input on current initiatives at the City level that could be integrated into the SMP and to learn from City efforts
- Provide an opportunity for City officials to give input on proposed sustainability initiatives

The Sustainability Planning Project Team also worked closely with the City’s Information Management Systems staff to develop a reporting mechanism within the suite of planning tools developed for the SMP that mirrors the City’s Sustainability Dashboard. See Chapter 8, *Sustainability Performance Monitoring and Reporting*.

FAA

In addition to providing five quarterly updates, which included “lessons learned” (Appendix D, *Federal Aviation Administration Quarterly Reports*), the Quarterly Reports contained summaries for use in future agency planning guidance documents. The FAA attended each of the SAC meetings by teleconference. Additionally, the Sustainability Planning Project Team and the FAA held a webinar to review the development of the sustainability implementation tools and procedures.

Sustainability Baseline Assessment

The FAA’s Interim Guidance suggests that the SMP focus on sustainability topics of relevance to each particular airport. The Sustainability Planning Project Team identified focus areas that were consistent with the recommendations in FAA’s Interim Guidance on preparing sustainable management plans and the City’s sustainability plan. The baseline inventory and assessment was conducted early in the planning process to create the framework for the SMP and assist in identifying potential data gaps in the sustainability focus areas. The baseline assessment also will provide the comparison point against which SLCDCA can measure its progress toward meeting the plan goals and evaluate its related sustainability performance.

The Project Team collected existing and historical data for SLC in areas under the management or operation of SLCDCA (SLCDCA facilities) or influence (tenant facilities) of the SLCDCA to generate rates of resource consumption and information on existing sustainability initiatives. The tenant surveys previously discussed in this chapter informed the tenant portion of the baseline inventory. The baseline inventory enabled the Project Team to evaluate and understand SLC’s performance, identify and recognize opportunities for enhanced sustainability. Figure 2-4 illustrates topics covered under the baseline assessment.

FIGURE 2-4: BASELINE INVENTORY TOPICS BY EONS CATEGORY



Source: ACI-NA. <http://www.aci-na.org/> VHB, 2013.

In addition to the broad baseline review, the following focused specialized studies were conducted as part of the plan either to augment existing available information, or to respond to FAA planning requirements:

- Waste management and recycling evaluation (including a waste audit)
- Air quality/Greenhouse gas (GHG) emissions inventory
- Water conservation evaluation
- Governance, organizational capacity, and existing management procedures review

Identify, Evaluate, and Recommend Candidate Sustainability Strategies

For the identified SMP sustainability categories, the Sustainability Planning Project Team identified and evaluated sustainability strategies for possible implementation by SLCDCA. The Project Team screened potential strategies to determine their contribution to achieving SLCDCA's sustainability goals and targets, and environmental and financial feasibility, while also maintaining the Airport's operational efficiency. The outcome of this task was a set of recommended sustainability strategies that are separated into short-, mid-, and long-term time-frames based on financial considerations and effectiveness in meeting sustainability goals.

Develop Implementation Plan

Based on the prioritization of sustainability initiatives, the Sustainability Planning Project Team developed a comprehensive implementation plan to ensure success of the plan in the future. The focus of the implementation plan is on the process used by SLCDCA to identify, evaluate, prioritize, and implement sustainability initiatives.

Document Sustainability Management Plan

The Sustainability Planning Project Team documented the plan in a comprehensive main report, the SMP (this document), and a summary document, *the Highlights Report*, for the public and other external stakeholders. The SMP documentation will be updated regularly by the SLCDCA Project Management Team as the process evolves in the future.

Sustainability Planning Optimization Tools (SPOT™)

To support the SMP planning process and facilitate future implementation of the SMP recommendations and monitor and report on progress, the Planning Team custom-designed a suite of tools. The use and deployment of each tool is described in the relevant chapters that follow. Table 2-1 provides a brief overview of these tools.



TABLE 2-1: SPOT™ TOOLS

PLANNING ELEMENT	SPOT™ TOOL
Baseline Assessment	Collector™ – Web-based tool to collect and organize baseline data
Identify Sustainability Initiatives	Selector™ – Excel-based spreadsheet to identify and select sustainability initiatives to meet goals. Includes pre-defined evaluation criteria such as feasibility, costs (capital, return on investment, staffing, operations, and maintenance) and benefits (environmental, social, and economic)
Implementation Plan	Implementer™ – Excel-based report that lays out the steps to implement initiatives Tracker™ – Excel-based spreadsheet that tracks the implementation status of initiatives including responsible personnel, timeframes, and completion
Monitoring and Reporting	Reporter™ – Excel-based dashboard that reports on key performance indicators such as energy and water consumption and compares them to goals, objectives and targets

Source: VHB, 2014.

3 Airport Profile

Salt Lake City International Airport (SLC or the Airport) is located four miles northwest of the downtown business district in Salt Lake City, UT. Approximately 21.1 million passengers (domestic and international) passed through the Airport in 2014.⁵ SLC covers 7,697 acres and has four runways, including three air carrier runways (16L/34R, 16R/34L, and 17/35), and one general aviation (GA) runway (14/32). Passenger terminal buildings consist of three passenger terminals that have five concourses and 82 gates:

- **Terminal 1** has Concourse A (gates A1-A9) and Concourse B (gates B1-B22).
- **Terminal 2** has Concourse C (gates C1-C13), Concourse D (gates D1-D13), and Concourse E (gates E60-E85).
- **International Terminal** is used for departing and arriving international flights at gates D2, D4, and D6.

The Salt Lake City Department of Airports (SLCDA) commenced planning and implementing a comprehensive Terminal Redevelopment Program (TRP) in 2014 that, over the next decade, will reconfigure the passenger terminals, concourses, central-utility plant, parking garage, roadways and rental car facilities.

Timeline History of SLC Airport

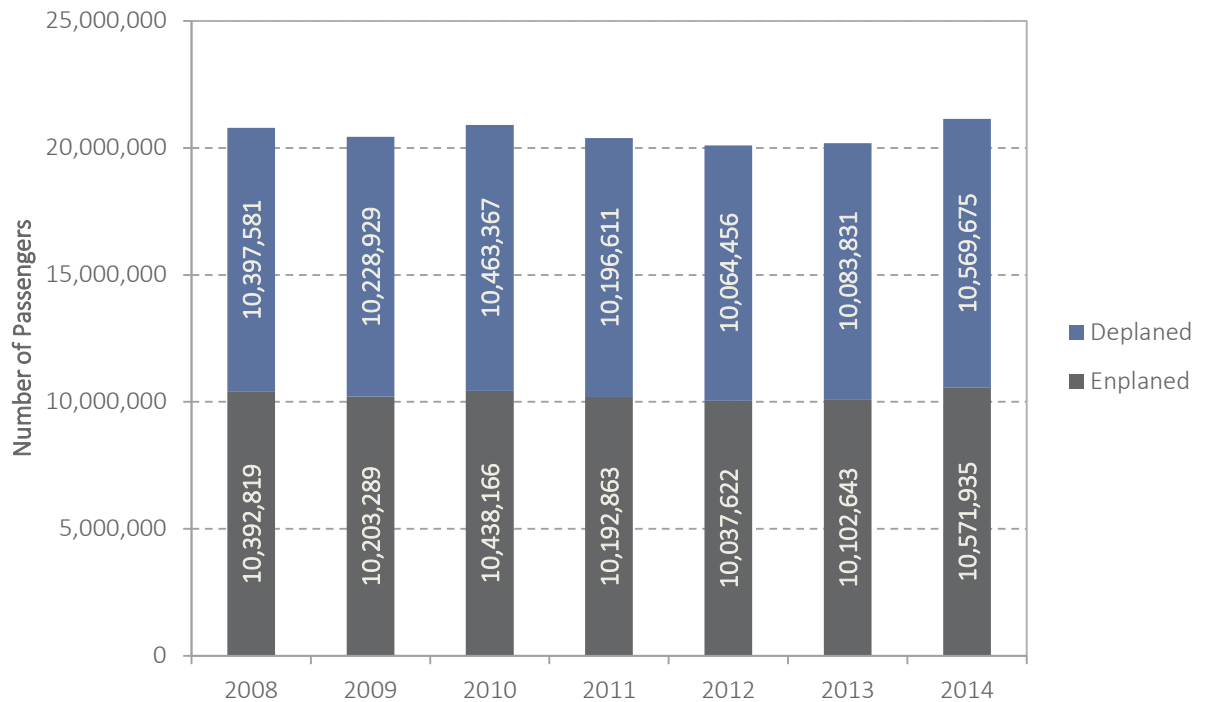
- *1910s*: Landing strip called Basque Flats is used for aerobatic flights
- *1920s*: Salt Lake City purchases 100 acres surrounding Basque Flats, which is renamed "Woodward Field." First commercial passenger flights from the Airport take place
- *1930s*: Woodward Field is renamed "Salt Lake City Municipal Airport." Three runways, an airport administration building and hangars are built
- *1940s*: U.S. Air Force uses the Airport as a training base and depot
- *1950s*: Three runways improved to support commercial jet aircraft
- *1960s*: Terminal One is dedicated and Airport is renamed "Salt Lake City International Airport"
- *1970s*: Airport is expanded to over 7,000 acres and Terminal Two is completed
- *1980s*: Terminals One and Two are expanded and remodeled and Delta Air Lines (formerly Western Airlines) establishes hub
- *1990s*: Parking garage constructed, new air carrier runway and International Terminal is built, Aircraft Rescue and Fire Fighting becomes operational, and FAA opens new Air Traffic Control Tower
- *2000s*: Salt Lake City hosts the Olympic Winter Games and west landside area is reconfigured

⁵ SLCDA. 2015. SLC Fast Facts. <http://www.slcairport.com/slc-fast-facts.asp>. Accessed March 6, 2015.

Activity Levels

In 2013, SLC was the 26th busiest airport in North America and the 80th busiest in the world by total number of passengers.⁶ Total passenger volume reached its peak of 22,045,233 passengers in 2007. Since 2008, total passenger volume has been relatively steady with only slight year-to-year fluctuations of between -2.0 percent and 2.0 percent. Figure 3-1 depicts total passenger traffic between 2008 and 2014.

FIGURE 3-1: TOTAL PASSENGERS (2008-2014)



Source: SLCD, 2015.

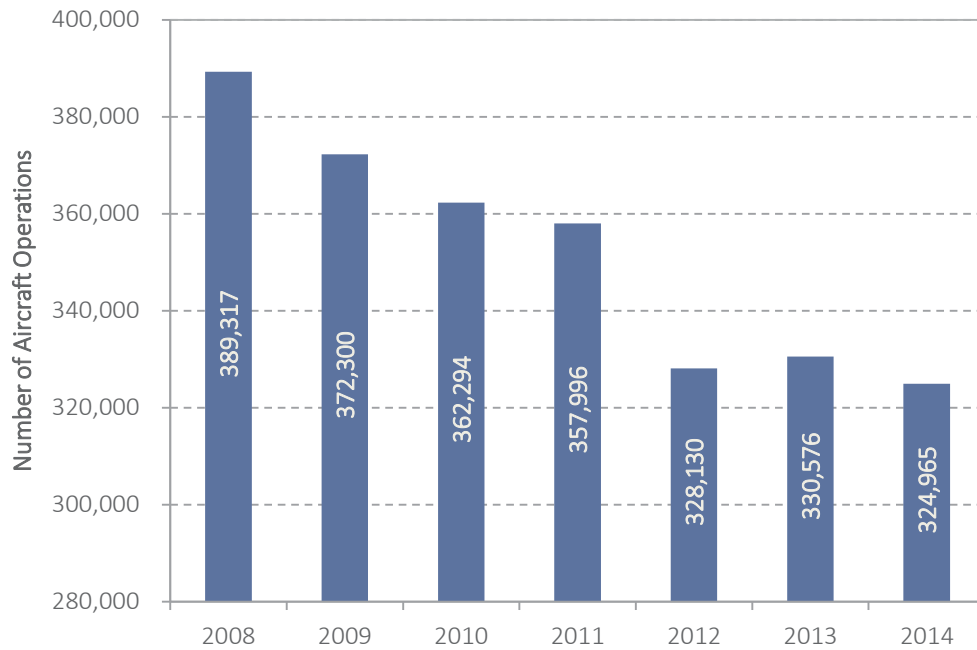
Note: Deplaned passengers disembark aircraft at SLC, and Enplaned passengers board aircraft at SLC. Includes both domestic and international passengers.

Aircraft operations (landings and departures) at SLC have been steadily declining since 2008. The overall decline in aircraft operations reflects the nationwide economic recession of 2008, continued reduction of capacity (seats) by airlines, and an airline industry trend toward larger aircraft. Between 2008 and 2013, aircraft operations at SLC decreased more than 15 percent; however, the load factors have increased. There were 324,965 aircraft operations in 2014, or approximately 890 per day.⁷ Figure 3-2 depicts total aircraft operations between 2008 and 2014.

⁶ FAA. 2015. 2013 Air Carrier Activity Information System (ACAIS) data. http://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/passenger/. Accessed March 9, 2015.

⁷ Salt Lake City Department of Airports (SLCDA). 2014. Summary Statistics, 2008-2014.

FIGURE 3-2: TOTAL AIRCRAFT OPERATIONS (2008-2014)

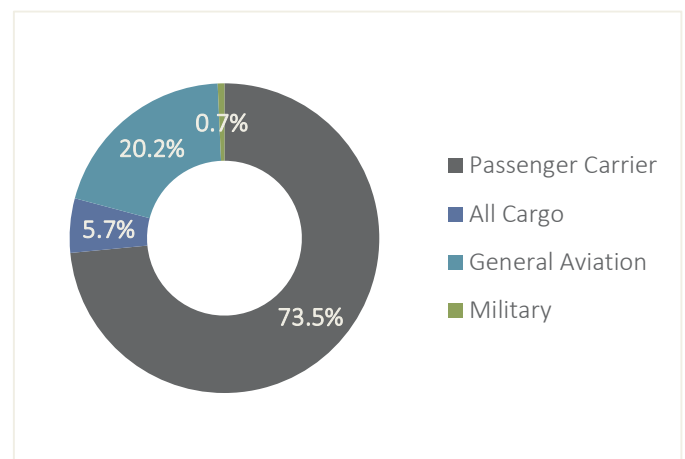


Source: SLCD, 2014.

In 2014, passenger carrier operations represented the majority (73.5 percent) of the total operations at the Airport (Figure 3-3). During the same period, general aviation (local and transient) accounted for 20.2 percent, cargo operations accounted for 5.7 percent, and military aircraft operations accounted for less than 1 percent.⁸

FIGURE 3-3: 2014 AIRCRAFT OPERATIONS BY TYPE

Seven passenger airlines, not including their regional affiliates, operate out of SLC. The carriers include Alaska Airlines, American Airlines/US Airways,⁹ Delta Air Lines, Frontier Airlines, JetBlue Airways, Southwest Airlines, and United Airlines. SLC is a hub for Delta Air Lines, which means that the airline and its regional affiliates (Delta Connection, operated by SkyWest, Mesaba, and Compass Airlines), use the Airport as a connection point for flights from all over the country, and has a market share of 74 percent (based on total enplanements) at SLC. Delta’s hub operation increases the number of aircraft



Source: SLCD, 2015.

⁸ SLCD. 2015. Summary Statistics for 2014.

⁹ American Airlines and US Airways merged on December 9, 2013, creating the American Airlines Group, Inc.

operations and connecting passengers at the airport, which affects airfield capacity and passenger terminal efficiency, respectively.

Air cargo (pounds) at SLC has steadily increased since 2009, with a slight drop since 2012. Between 2009 and 2012, air cargo weight at SLC increased nearly 20 percent. Figure 3-4 depicts air cargo activity between 2008 and 2014.

FIGURE 3-4: AIRCRAFT CARGO, POUNDS (2008-2014)



Source: SLCDCA, 2015.

Markets/ Destinations

Airline operators at SLC offer non-stop flights to more than 89 domestic and international cities.¹⁰ Table 3-1 depicts the top ten destination airports (as of September 2014) in the United States that originate from SLC. Non-stop international destinations include:

- Canada
 - Calgary (SkyWest Airlines)
 - Vancouver (SkyWest Airlines)
- Mexico
 - Cancun (Frontier Air Lines)
 - Los Cabos (Delta Air Lines)

¹⁰ SLCDCA. 2013. *SLC Fast Facts*. <http://www.slcairport.com/slc-fast-facts.asp>. Accessed September 16, 2013.

- Puerto Vallarta (Delta Air Lines)
- Paris, France (Delta Air Lines)

TABLE 3-1: TOP 10 DESTINATION AIRPORTS IN THE U.S. FROM SLC (DEC. 2013 – NOV. 2014)

U.S. DESTINATION AIRPORTS	PASSENGERS (THOUSANDS)
1. Denver, CO: DEN	754
2. Phoenix, AZ: PHX	622
3. Los Angeles, CA: LAX	552
4. Atlanta, GA: ATL	494
5. Seattle, WA: SEA	465
6. Las Vegas, NV: LAS	450
7. Dallas/Fort Worth, TX: DFW	360
8. New York, NY: JFK	292
9. Portland, OR: PDX	289
10. Minneapolis, MN: MSP	257

Source: BTS, 2014: *Top 10 Destination Airports* for December 2013–November 2014, retrieved March 5, 2015 from <http://www.transtats.bts.gov/airports.asp?pn=1>.

Access and Ground Transportation

SLC is accessible from Interstate 80 (I-80), Interstate 215 (I-215), State Route 154, and the Bangerter Highway. Ground transportation serving SLC includes rental cars, taxi service, public transportation, and shuttle services.¹¹

The Utah Transit Authority (UTA), the regional provider of public transportation, offers multiple ways of getting to and from the Airport. Recently opened in April 2013, the new light rail link (TRAX) connects Downtown Salt Lake City and surrounding communities to the Airport providing passengers and employees another convenient and inexpensive mode of transportation to and from the Airport. The TRAX stops at the south end of Terminal One every 15 minutes on weekdays and every 20 minutes on weekends. The addition of TRAX serves as an important link in the public transportation network allowing passengers and employees to connect to other public transit in the City. Other public transit serving the Airport includes bus service (Routes 453 and 454) available outside the Welcome Center at the south end of Terminal One; however, there is no service on weekends or holidays. UTA Flex Trans, a Para-transit service, is available for passengers with disabilities.

¹¹ SLCDA. 2013. *Ground Transportation*. <http://www.slcairport.com/ground-transportation.asp>. Accessed September 26, 2013.



Fast-Track to Ticketing

TRAX ticket locations are conveniently located within Terminal One for easy access by passengers leaving the Terminal. The station is located within walking distance of the Terminal.

Rental car services are primarily located on the ground floor of the short-term parking garage and include Advantage, Alamo, Avis, Budget, Dollar, Enterprise Rent-A-Car, Fox Rent A Car (off-site), Hertz, National, and Thrifty.

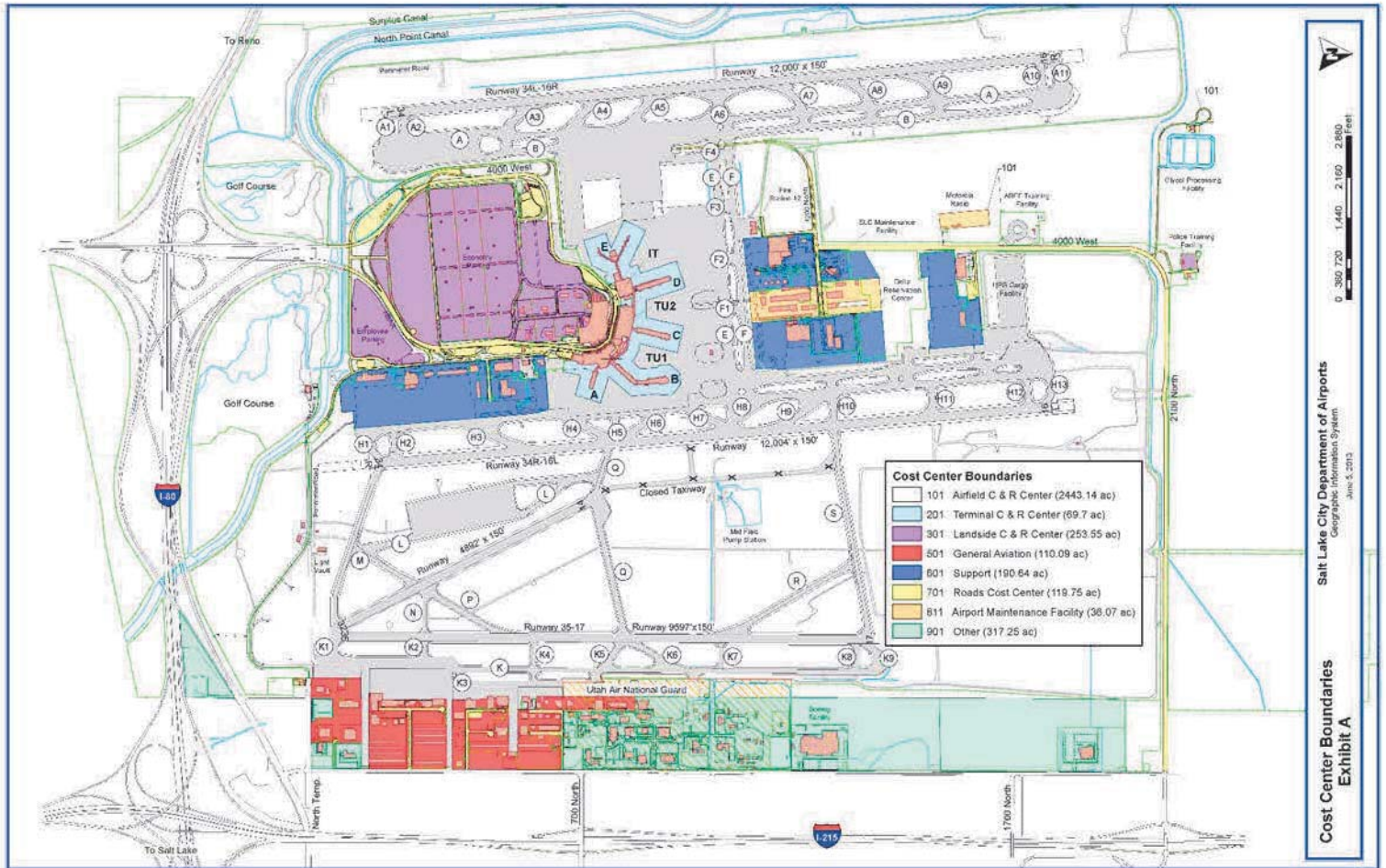
Four operators provide taxi service at SLC: City Cab, Ute Cab, Yellow Cab, and Yellow Cab of Park City.¹² Taxis are available outside Door #7 in Terminal One and Door #11 in Terminal Two. Local hotels offer “Courtesy Cars” to and from the Airport, and are available from both Terminal One and Terminal Two. Onsite shuttle companies, such as limousine and motor coach services, are also available.

Airport Facilities

Figure 3-5 depicts existing facilities at SLC along with the location of some of the Airport’s “cost centers.” Cost centers are sections of the Airport to which energy and water costs are charged for accounting purposes. Performance evaluations and strategy recommendations are made by cost center in this plan to remain consistent with current SLCDCA accounting practices. A list of the cost centers and a list of the water meters by cost center (some cost centers have multiple meters) are summarized in Chapter 4, *Baseline Assessment*, Table 4-5.

¹² SLCDCA. 2013. *Parking and Transportation: Taxis*. <http://www.slcairport.com/taxis.asp>. Accessed September 26, 2013.

FIGURE 3-5: AIRPORT FACILITIES AND COST CENTERS



Source: SLCD, 2013.

Tenants

As previously noted, SLC is served by seven air carriers, not including regional affiliate airlines. There is one fixed-base operator (FBO), TAC Air. SLC has the following tenant types:

- Air carriers
- Concessionaires (e.g., HMS Host, car rentals, newsstands, retail stores, and restaurants)
- Cargo carriers (e.g., ABX Air (DHL), Aero Charter & Transport, Air Transport International, Airnet Systems, Ameriflight, Corporate Air (Billings), Empire, FedEx, UPS, and Western Air Express)¹³

¹³ SLC Airport, "Air Traffic Statistics and Activity Report," October 2014. http://www.slcairport.com/cmsdocuments/2014_10.pdf. Accessed January 5, 2015.

- Charter flight services (e.g., American Trans Air, Aviation Services International, and Casper Air Service)
- Corporate tenants (e.g., Boeing Corporation and Boise Cascade)
- The Utah Air National Guard (serves an air refueling mission with the KC-135-Stratotanker, as the primary aircraft)
- Corporate hangar tenants (e.g., LynxJet and Civil Air Patrol)
- Aviation training tenants (e.g., Flight Safety International)
- Aviation support services (e.g., baggage handling, disability services, and flight kitchen)
- Banks and ATMs (in passenger terminal areas)
- Wireless communications providers (e.g., Nextel Communications)
- Farmland lease
- Wingpointe,¹⁴ an 18-hole golf course operated by the Salt Lake City Golf Division (part of the Public Services Department of Salt Lake City), is located on the south end of the Airport
- The Airport and Salt Lake City Fire Department operate an Aircraft Rescue and Fire Fighting (ARFF) Training Center, which opened in 1997, located on the Airport. The Training Center has been used to train and certify over 10,000 firefighters from departments all over the world.¹⁵
- In addition to the 328-foot tall Air Traffic Control Tower and Terminal Radar Control are located on the Airport, the Salt Lake Air Route Traffic Control Center (ARTCC) is located adjacent to the Airport. The Salt Lake ARTCC covers the largest geographical area in the continental United States and controls airspace as far north as the Canadian border.

Airlines at SLC

- Delta Air Lines/SkyWest Air Lines
- Alaska Airlines
- Frontier Airlines
- JetBlue Airways
- Southwest Airlines
- United Airlines
- American Airlines/US Airways

Additional information on tenants is provided in Chapter 4, *Baseline Assessment*.

Current Airport Governance Structure

In order to achieve a truly sustainable organization, sustainability principles must be integrated into the “thinking, planning, and doing” processes. However, organizations often address sustainability as an accessory or afterthought to its typical structure and procedures. The current governance structure, organizational capacity, and procedures of SLCDCA were evaluated in support of this SMP. This helped identify potential opportunities to integrate sustainability into

¹⁴ <http://www.slcc-golf.com/wingpoint.html> retrieved January 5, 2015.

¹⁵ SLC ARFF “Salt Lake City ARFF Training Center,” <http://www.slcarff.com/program-overview.htm>, accessed January 5, 2015.

existing processes and procedures, without creating additional, resource-consuming requirements, and employ an organizational commitment to the Airport's goals and objectives, ensuring continued success.

The Sustainability Planning Project Team identified opportunities related to SLCDAs organization process to integrate a sustainability perspective and developed recommendations for employee, tenant, and passenger engagement, which are detailed in Chapter 9, *Organizational Engagement*, of this SMP.

Existing Organizational Structure

SLCDA is a department of the municipality of Salt Lake City. In addition to SLC, SLCDAs operates GA facilities at South Valley Regional Airport in West Jordan and Tooele Valley in Erda. The Mayor, City Council, and a nine-member advisory board of volunteers oversee the airport. The Mayor of Salt Lake City appoints the Executive Director of SLCDAs, who leads the airport management staff along with eight division directors. The directors oversee the following divisions:

- Planning and Programming;
- Engineering;
- Maintenance;
- Finance and Accounting;
- Administration/Commercial Services;
- Public Relations and Marketing;
- Operations; and
- Information Technology.

SLCDA employs approximately 490 full-time equivalent (FTE) employees across all airports under its jurisdiction, which includes three employees at South Valley Regional Airport.¹⁶ Figure 3-6 illustrates the organization of SLCDAs. The Airport has no outstanding debt and is financially self-sustaining with revenue generated from airline and passenger fees, concessions, vehicle parking, fuel, and leases for office and hangar space.

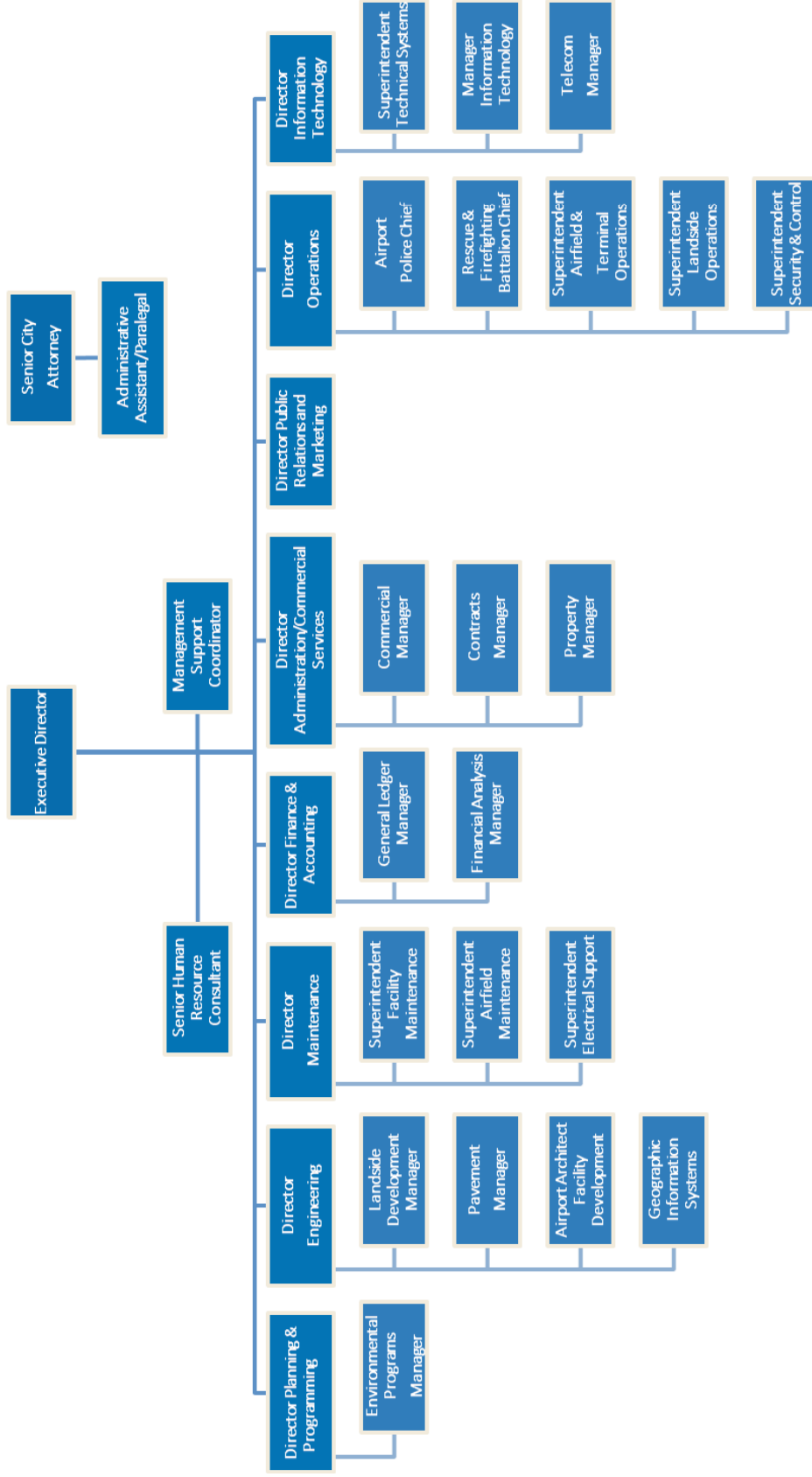
¹⁶ FTE = 40 hours per week



Salt Lake City
International Airport

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FIGURE 3-6: SLCDCA ORGANIZATIONAL CHART



Source: VHB, 2013.

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4 | Baseline Assessment

The Salt Lake City Department of Airports (SLCDA) has committed to a long-term, comprehensive, and integrated approach to sustainability that considers economic viability, operational efficiency, natural resource conservation, and social responsibility (EONS), described in more detail in Chapter 1, *Introduction to Sustainability*. The baseline for this project was 2012 because this project was started in 2013, therefore the latest full-year worth of data is from 2012. This chapter documents baseline sustainability performance and activities, and informs the development of sustainability goals and initiatives. The focus areas of the baseline assessment were selected by the SLCDA Project Management Team because of their relevance to Salt Lake City International Airport’s (SLC’s or the Airport’s) and the City’s sustainability priorities and consistency with past sustainability evaluation efforts. The focus areas of the baseline assessment, which cover all aspects of EONS, are shown in Figure 4-1.

FIGURE 4-1: BASELINE INVENTORY TOPICS BY EONS CATEGORY



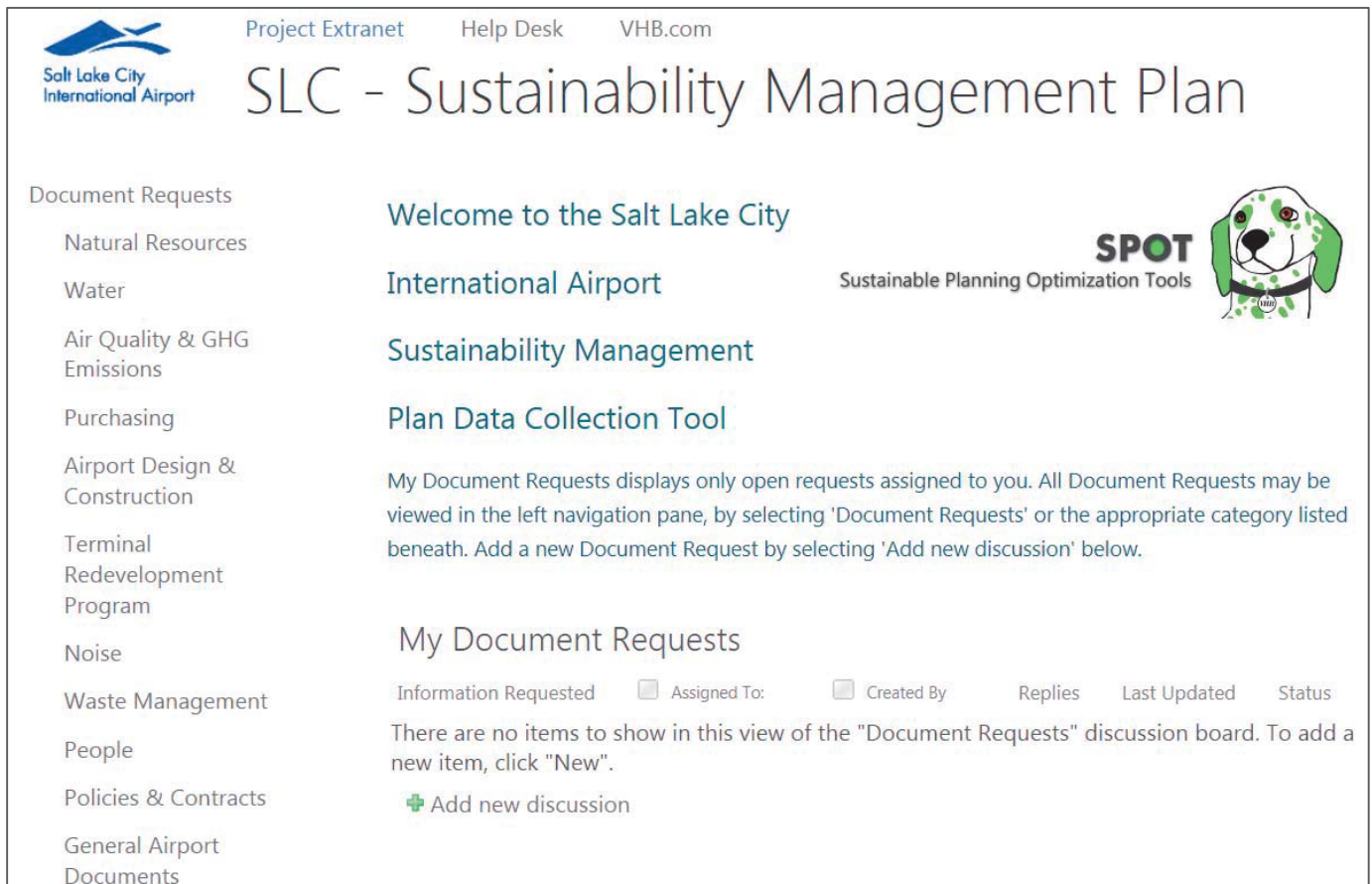
Source: ACI-NA. <http://www.aci-na.org/> VHB, 2013.

In addition to the broad baseline review, the Sustainability Planning Project Team conducted the following focused specialized studies as part of the plan either to augment existing available information, or to respond to Federal Aviation Administration (FAA) planning guidance, and are provided as appendices:

- Appendix E, *Air Quality and Greenhouse Gas (GHG) Assessment*
- Appendix F, *Waste Management and Recycling Audit* (including a waste audit)
- Appendix G, *Energy Evaluation*

SPOT: The Collector™

The SLC SMP Project Team developed the Collector™ to assist with data collection efforts associated with the baseline assessment. This tool provides a repository for sustainability baseline information and has the potential to be used by SLCDCA in the future to store related performance data. The Collector™ is part of a suite of Sustainability Planning Optimization Tools (SPOT) that also includes the Selector™, the Tracker™, the Implementer™, and the Reporter™.



The homepage of the Collector™

Community (Employees, Tenants, and Passengers)

SLC's surroundings consist primarily of vacant and industrial lands far from residential areas. SLC is part of an airport community that consists of airline passengers, and SLCDCA and tenant employees. SLCDCA values its community and recognizes the importance of travelers, employees, and tenant partners to the Airport's advancement of sustainability. This section provides an overview of the SLC community, including the Airport's economic impact on the region.

Regional Economic Impact

SLC has a considerable economic benefit to Utah's overall economy by providing access to goods, creating jobs, and generating operating revenues. According to an economic impact study commissioned by SLCDCA, approximately \$1.1 billion in wages/income are distributed amongst 35,290¹⁷ full-time employees at the Airport. Further, the Airport contributes approximately \$1.8 billion to the gross domestic product (GDP) and has a total economic output of \$3.4 billion.¹⁸

Passenger Experience

SLC prides itself on its superior facilities that provide a welcoming environment to ease the passenger experience. As part of the Airport Council International (ACI) Airport Service Quality survey (ASQ) initiative, SLCDCA conducted an ASQ survey in 2012 that gauged customer satisfaction.¹⁹ This survey initiative started in 2006 and has become "the world's leading airport passenger satisfaction benchmark."²⁰ ACI conducts the survey annually by airports across the nation and world. Each participating airport can select up to 16 peer airports against which to be benchmarked. In 2013, SLC came in fourth place for the Best Airport by Size for 15-25 million passengers.²¹

The results indicated that the Airport was performing well in the following areas:

- Providing comfortable waiting areas,
- Helpful staff,

¹⁷ Includes all on-Airport employees such as airline and tenant employees.

¹⁸ SLCDCA. 2013. *Elevations, Salt Lake City Department of Airports*. Summer 2013. http://www.slcairport.com/cmsdocuments/Elevations_Summer13.pdf. Accessed October 29, 2013.

¹⁹ Airport Service Quality Annual Results 2012 Priority Analysis, © ACI 2013.

²⁰ ACI. *Airport Service Quality Awards*. <http://www.aci.aero/Airport-Service-Quality/ASQ-Awards/About-the-ASQ-Awards/About-the-ASQ-Awards>. Accessed October 22, 2014.

²¹ ACI. *Airport Service Quality Awards, 2013 Winners, Best Airports by Size, 15-25 million passengers*. <http://www.aci.aero/Airport-Service-Quality/ASQ-Awards/2013-Winners/Best-Airport-By-Size/15-25m>. Accessed October 22, 2014.

- Clean and available washrooms, and
- Efficient arrivals processing and passport inspection.

The ASQ results also indicated that there were areas that SLCDCA could enhance:

- Ambience,
- General cleanliness,
- Business lounges and bank facilities, and
- Customs inspections.

Many of the areas needing improvement will be addressed when a new terminal complex is designed and constructed under the Terminal Redevelopment Program (TRP). Current services and amenities in the terminal complex include:

- Outstanding concession options
- Free Wi-Fi
- Banking services
- Pet areas
- Therapy animals
- Shoe shine
- Photocopying and fax services
- Language translation services
- In-seat power station for power cords and USB cables, as well as a charging bar with both standard outlets and USB ports
- Art program displaying local, regional, and national exhibits
- Variety of lounges
- Spa and massage therapy
- Convention and tourist information booths



Paintings by Willamarie Huelskamp.

SLC Art Program

SLCDA has been collecting art since 1977, which is displayed throughout the Airport.

The multimedia collection creates ambiance for passengers, employees and other airport users.

The art is periodically rearranged to accommodate the evolving demands on airport space creating a movable visual feast.

Passengers also benefit from having access to a variety of transportation modes to the Airport. To better support alternative transportation modes, SLC offers:

- Smart Bus system with Global Positioning System (GPS) to streamline operations and electronic signs with next arrival time for passengers
- Bike racks (primarily used by employees)
- Utah Transit Authority (UTA) light rail (TRAX) station at Terminal One, which connects the Airport to downtown Salt Lake and in surrounding communities (see *Access and Ground Transportation* in Chapter 3)

TRAX not only provides convenient access to the Airport, it is considerably more affordable than driving to the Airport and parking. An average four-day trip would cost approximately \$32 dollars in parking and gas compared to \$5 using TRAX to get to the Airport from downtown Salt Lake City.²²

²² TRAX based on \$2.50 one-person fare each way using TRAX. Parking based on Economy Parking lot at \$9/day and \$4 for gas.

Employee Well-Being



Employee Country of Origin Map

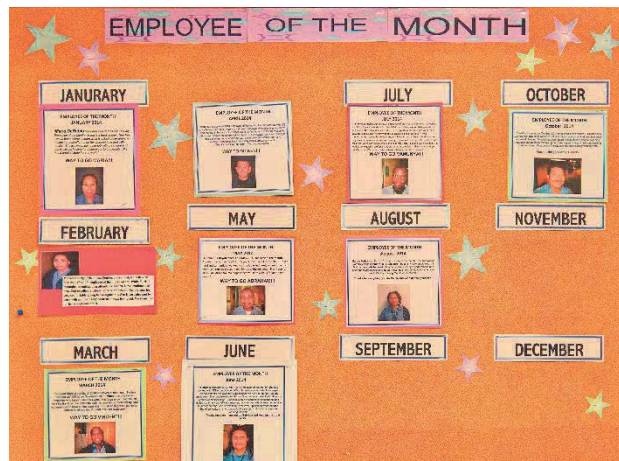
SLC is an international airport with employees hailing from around the world.

To reinforce the diversity of its workforce, SLCDCA keeps a map with markers noting employees' countries of origin.

Employee recognition is important at SLC. SLCDCA's employee recognition program was transformed over the last three years to create a merit-based, transparent award program utilizing peer and manager review with monthly awards given for various categories.

Highlights of the Program include:

- Employees are recognized by their peers on merit in eight categories (Acts of Heroism, Consistently Exceeding Job Expectations, Contribution to Quality Improvement, Customer Service, Innovations/Savings, Safety/Security, Teamwork, and Sustainability). Between four and five employees are randomly selected and given \$25 gift cards each month.
- In 2012, 330 employees received recognition
- The *Connections* employee newsletter highlights employee recognition



Employee Recognition

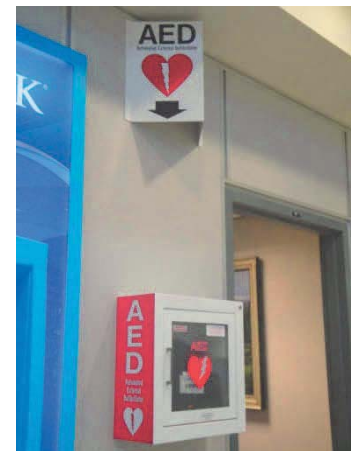
The Janitorial Services Department has its own employee recognition program, which selects an employee each month to highlight and describe their special contributions.

In addition to comprehensive FAA-compliant airside safety program, SLCDCA’s extensive safety program ensures that both passengers and employees receive immediate care should a medical emergency occur. The SLCDCA Safety Committee (managed by the Airport Safety Program Operations Manager) meets monthly and conducts a thorough review of how each event was handled and how procedures might be enhanced in the future.

SLCDCA’s safety and wellness program also goes beyond emergencies to foster a healthy working environment by offering free physical therapy on the job for SLCDCA employees three days a week by appointment. This unique program has already shown benefits from reduced doctor appointments, sick days, and reduced need for workers compensation.

Safety and Wellness Program Highlights include:

- Regular Training for employees includes cardiopulmonary resuscitation (CPR) and use of automated external defibrillator (AED). Over 200 people or 45 percent of SLCDCA staff is now trained in CPR and/or AED use.
 - Twenty-nine defibrillators are located throughout the terminal, concourses, parking structure, and airport support structures with an additional eight in airfield operations and police vehicles
 - Recently improved signage for AEDs was installed to enhance visibility
 - When training is completed, each employee is given an Airport identity card with a location map of all AEDs
- Physical Therapy program is offered to all employees by WorkAbility Centers (<http://www.workabilitycenters.com/Services.html>).
- Post-offer employment test or POET (physical demand test) is available for all employees.
- Employees are eligible to use Airport exercise facilities and equipment.



Automated External Defibrillators (AEDs)

AEDs are positioned throughout the terminal complex, and have saved lives every year since their installation.

Table 4-1 provides a representative list of community- related initiatives. Since SLC is located far from residential areas, the Airport community consists of airline passengers and SLCDCA and tenant employees.

TABLE 4-1: EXISTING AIRPORT COMMUNITY INITIATIVES

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS ¹)
SLCDA Art Program	Supports local artists and enhances the visual environment for passengers.	S
Bicycle racks to encourage bicycle riding to or around the airport	Supports bicycling as a viable means of transportation for employees and passengers.	E, O, N, S
Free TRAX light rail, bus, and Fronrunner fare for all SLCDA employees (all City employees)	Increases use of public transit, which helps reduce traffic and associated emissions.	E, O, N, S
Bike path around the south side of airport	Encourages exercise and alternative transportation mode that does not contribute to emissions.	E, N, S
Walking path from Economy Parking lot to passenger terminal buildings	Encourages exercise.	S
Foreign Object Debris (FOD) walks. FOD can be any object on runways that could be ingested into aircraft engines or damage tires	Enhances safety of runway operating environment and promotes exercise.	O, S
Designated, airport-proximate parking stalls for employees that carpool	Helps reduce traffic and associated emissions.	E, O, N, S
Tuition Aid Reimbursement Program to help employees continue their education	Encourages employees to gain new skills that will ultimately help improve efficiency and operations at SLC.	O, S
Internships for local college students by department, dependent upon funding and need	Supports the community and SLCDA employees.	O, S
Free fitness facility (Airport Police and North Support facilities) available to all Airport employees	Improves the health and well-being of SLCDA employees.	S
Employee training offered for safety and emergency awareness, customer service, harassment prevention, software training, and American Disabilities Act procedures	Improves the operations and safety of the Airport.	O, S
Employee, merit-based recognition program based on peer and manager review	Supports employee development and rewards employee initiative.	O, S
Disabled community event – an airport orientation for disabled members of the community	Supports the needs of the local disabled population and eases the travel experience by providing an orientation to the travel process.	O, S
Use of non-toxic and environmentally friendly cleaning products	Choosing less hazardous products that have positive environmental attributes reduces exposure and can minimize harmful impacts to custodial workers and building occupants, improve indoor air quality, and reduce water and ambient air pollution. (United States Environmental Protection Agency, http://www.epa.gov/epp/pubs/cleaning.htm)	E, O, N, S

Note: 1 - EONS = Economic viability, (E) Operational efficiency, (O) Natural resource conservation, (N) and Social responsibility (S)
Source: SLCDA; Compiled by VHB, 2014.

TABLE 4-1: EXISTING AIRPORT COMMUNITY INITIATIVES (CONT.)

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS1)
On-site physical therapy available to all Airport employees	Improves the health and well-being of SLCDCA employees.	O, S,
Healthy Utah Wellness Program	Improves the health and well-being of SLCDCA employees.	S

Note: 1 - EONS = Economic viability, (E) Operational efficiency, (O) Natural resource conservation, (N) and Social responsibility (S)
Source: SLCDCA; Compiled by VHB, 2014.

Natural Resources

SLC is located on the eastern shore of the Great Salt Lake. The Jordan River, which flows into the Great Salt Lake, runs south to north less than one mile east of the airfield. There are two canals that transect the property boundaries of SLC the Surplus Canal and the North Point Consolidated Canal (NPCC). The Surplus Canal crosses Interstate 80 (I-80) just south of the airfield; it then runs along the southern boundary of SLC until it reaches the western boundary of the airfield, at which point it runs north along SLC’s western boundary until it courses westward across from Taxiway F. The NPCC parallels the Surplus Canal until the Surplus Canal deviates to the west; the NPCC continues north until it wraps around and continues along SLC’s northern boundary for irrigation purposes and to manage wetlands.²³ The Surplus Canal is also used for stormwater discharge.

Wetlands

According to the 2005 Wetlands Delineation Report, approximately 1,184 acres of wetlands are within SLC property boundaries.²⁴ This represents 15 percent of the 7,697 acres the Airport owns. Wetlands at SLC are largely concentrated to the west and north of the airfield. The largest type of wetland at SLC is the Playa Lakes. Table 4-2 depicts the types and amount of existing wetlands at SLC.

TABLE 4-2: WETLANDS WITHIN SLC PROPERTY BOUNDARIES

WETLAND TYPE	ACRES
Canal	83.9
Ditch	1.8
Emergent Marsh	222.9

Source: SLCDCA, 2004 SLCDCA Airport Wetland Delineation USACE-verified Results

²³ Salt Lake City Department of Airports (SLCDA). August 22, 2012. *Salt Lake City International Airport Terminal Redevelopment Program*. Prepared by CH2MHILL. Report.

²⁴ SLCDCA. August 3, 2005. 2004 SLCDCA Airport Wetland Delineation USACE-verified Results. Prepared by SWCA. Map.

TABLE 4-2: WETLANDS WITHIN SLC PROPERTY BOUNDARIES (CONT.)

WETLAND TYPE	ACRES
Open Water	57.5
Playa Lakes	412.4
Scrub Shrub	25.3
Scrub Shrub/Wet Meadow	41.6
Wet Meadow	338.7
Total	1,184.1

Source: SLCD, 2004 SLCD Airport Wetland Delineation USACE-verified Results

Included in Table 4-2, SLCD manages approximately 450 acres of wetlands west of the airfield.²⁵ SLCD worked with local environmental and regulatory groups to design and create this site to compensate for natural wetlands impacted by runway construction during the early 1990s. Typical management practices in the dedicated wetlands areas include monitoring water levels, monitoring and replacing wetland plants, as needed, controlling invasive species, removing trash and debris, and protecting the property from trespassing and hunting.

Stormwater

SLCD maintains a stormwater discharge permit under the Utah Pollutant Discharge Elimination System (Permit Number UT0024988), in compliance with the Utah Water Quality Act. Drainage infrastructure at SLC includes catch basins, manholes, trunk line and lateral pipes, ditches and swales, detention ponds, pump stations, sub-drains, diversion and overflow structures, and outfalls.²⁶ There are five regulated points of discharge (outfall points) at SLC. Under normal conditions, four of these outfall points discharge to the Surplus Canal, while the remaining one discharges to the City Drain located east of the airfield.²⁷ SLCD requires its tenants and contractors to operate under the 2014 Stormwater Pollution Prevention Plan. Measures and controls outlined in this plan include:

- Good housekeeping;
- Preventative maintenance;
- Spill prevention and response procedures;
- Source reduction;

²⁵ SLDA. 2007. *Making the Business Connection to Airport Sustainability*. Prepared by Carter & Burgess. Report.

²⁶ SLCD. August 22, 2012. *Salt Lake City International Airport Terminal Redevelopment Program*. Prepared by CH2MHILL. Report.

²⁷ *Ibid.*

- Management of runoff;
- Inspections;
- Pollution prevention training;
- Recordkeeping and internal reporting measures;
- Non-storm water discharges; and
- Sediment and erosion control.²⁸

De-icing Practices

The Airport is constructing the third of four end of runway deicing pads. The pad drainage systems are designed to collect residual deicing fluid as it is applied to aircraft. The location of the pads will reduce taxi times and enhance efficiency by applying deicing fluid just prior to departure. Aircraft deicing fluid is collected from the pads, and processed and resold. In 2002/2003, SLC started recycling glycol and recovered 142,000 gallons, which was then sold on the secondary market. The sales helped to offset the operation and maintenance costs of the deicing fluid reclamation plant. To improve deicing fluid reclamation in 2003/2004, SLC purchased a glycol recovery vehicle to gather further fluid from the de-icing pads.²⁹ Additionally, in February 2014, the Elevations newsletter reported that the Airport recycles 70,000 gallons of glycol per year on average.³⁰ In 2012, the Airport sold over 92,000 gallons of glycol.

Landscaping

The *Zoning Ordinance of Salt Lake City, Utah* requires landscaping features at SLC to include plant species that are drought-tolerant, and irrigation systems that are designed for the efficient use of potable water.³¹ Further details of SLC's low water landscaping are provided in the *Water Use and Conservation* section of this chapter.

Wildlife

In keeping with safe operations at SLC and in accordance with the FAA safety requirements, SLCDA developed a Wildlife Hazard Management Plan (WHMP).³² As outlined in the 2007 WHMP, the primary wildlife management techniques employed at SLC includes:

²⁸ SLCDA. May 1, 2009. *Storm Water Pollution Prevention Plan*. Report.

²⁹ SLCDA. 2007. *Making the Business Connection to Airport Sustainability*. Prepared by Carter & Burgess. Report.

³⁰ SLCDA. February 2014. *Elevations*. http://www.slcairport.com/cmsdocuments/Elevations_Feb14.pdf. Accessed October 23, 2014.

³¹ Salt Lake City. 2007. Title 21A: Zoning, 21A.34.040: *AFPP Airport Flight Path Protection Overlay District*. http://www.sterlingcodifiers.com/codebook/index.php?book_id=672. Accessed August 15, 2013.

³² SLCDA. 2007. *Wildlife Hazard Management Plan*. Revised. April 2. Report.

- Daily patrols of runways, taxiways, and associated areas for wildlife inspections and control management;
- Habitat modification, including the removal of attractants such as food sources and nesting areas followed by their replacement with materials that are unattractive to wildlife; and
- Hazing, including the use of sirens and pyrotechnics to scare wildlife away from the airfield.



Asphalt Millings Replace Wildlife Attractants

SLCDA repurposes asphalt milling, which reduces construction and demolition waste, as infill between taxiways and runways, in part, for wildlife management purposes. Asphalt millings replace grasses that can be a wildlife attractant.

In certain situations, bird and animals are trapped and relocated away from the airfield. Airport Operations officers currently live trap and remove problem species that include raptors (e.g., Ferruginous Hawk and Northern Harrier), American White Pelicans, Black-billed Magpies, Canada Geese, European Starlings, House Sparrows (also known as English Sparrows), and Rock Doves (also known as Common Pigeons). Other problem species at or near SLC include ducks, California and Franklin’s Gulls, the White-faced Ibis, Barn and Cliff Swallows, and Horned Larks.

SLCDA also employs lethal control; however, this wildlife management technique is conducted only after all other methods have proven ineffective. Lethal control at SLC is performed in accordance with United States Fish and Wildlife Service and Utah state depredation permits.



Wildlife Hazard Management

SLCDA places traps for different bird species near the airfield. Birds and animals are relocated to reduce the potential for hazards to aircraft at the Airport.

SLCDA records the types and numbers of aircraft collisions with birds and animals at SLC. In 2008, approximately 390,000 aircraft operations (takeoffs and landings) took place at the Airport. Among these operations, SLCDA recorded 69 bird strikes, two percent of which resulted in significant damage to aircraft.³³

To manage pest populations at SLC, SLCDA implements a procedure known as Integrated Pest Management (IPM), an effective and environmentally sensitive approach to pest control. IPM balances the use of non-chemical strategies with the prudent use of pesticides to achieve pest control results with the least possible hazard to people, property, and the environment.³⁴ Further, SLCDA collaborates with the state entomologist at the Utah Department of Agriculture and Food to develop spraying regimes on the airfield to control insect populations that are an attractant to certain species of birds.

SLCDA has developed several partnerships with local, state, and federal organizations and agencies to enhance wildlife management at and near SLC. Current partnerships maintained by SLCDA include:

- In May 2008, SLCDA contracted with the United States Department of Agriculture (USDA) Wildlife Services to provide a full-time, FAA-certified wildlife biologist. The USDA wildlife biologist is responsible for:
 - Identifying wildlife species, their preferred nesting areas and food sources;
 - Elimination of food sources, nesting areas and deployment of other practices aimed at keeping the bird population low;
 - Conducting bird count surveys taken at 13 sites to monitor activity.
- Utah Division of Wildlife Resources assists SLCDA in trapping and relocating Canadian Geese and American White Pelicans.
- USDA and other agencies are supporting SLCDA in the relocation of an existing, hazard-creating bird habitat to the Airport's wetlands mitigation area on the west side of the property.
- With the cooperation of local duck clubs, SLCDA chemically treats ponds near the airfield to discourage waterfowl foraging.

In addition to the aforementioned partnerships, SLCDA collaborates with the State of Utah, USDA, as well as other airports and aviation industry organizations on an ongoing basis to stay up-to-date on the latest and best wildlife management practices.³⁵ Table 4-3 provides a representative list of existing natural resources.

³³ Salt Lake City International Airport (SLC). 2013. *Environment*. <http://www.slairport.com/environment.asp>. Accessed August 17, 2013.

³⁴ United States Environmental Protection Agency (USEPA). 2013. *Integrated Pest Management (IPM) Principles*. Accessed August 17, 2013.

³⁵ SLC. 2013. *Environment*. <http://www.slairport.com/environment.asp>. Accessed August 17, 2013.

TABLE 4-3: EXISTING NATURAL RESOURCES INITIATIVES

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS ¹)
Wetlands. SLCDA created and maintains approximately 450 acres of wetlands west of the airfield	Preserves and enhances natural resources.	O, N, S
Water Efficient Landscaping. SLCDA has transitioned from lawn-based landscaping to xeriscaping	Limits the amount of irrigation and fertilizer needed and encourages the use of native and adaptive plants.	E, O, N, S
On-Airport Greenhouse. SLCDA operates a greenhouse to grow landscaping materials	Limits the amount of irrigation and fertilizer needed and encourages the use of native and adaptive plants as well as reduces transportation costs.	E, O, N
Wildlife Hazard Management Plan. SLCDA (in collaboration with USDA) performs daily wildlife patrols, hazing, and habitat modification	Enhances safety of aircraft operations, reduces need for other wildlife control measures.	O, N, S
Pavement Millings Reuse. SLCDA repurposes asphalt millings as infill between taxiways and runways	Replaces grasses with material that is unattractive to wildlife and reduces transportation and disposal costs.	E, O, N
Integrated Pest Management. SLCDA combines non-chemical strategies with the prudent use of pesticides to control the pest population at SLC	Decreases the use of harmful chemicals, limiting associated hazards to people, property, and the environment.	O, N, S

Note: 1 - EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
Source: SLCDA; Compiled by VHB, 2014.

Noise

Aircraft noise is typically the greatest concern the public has with airport development and operations. Noise from aircraft operating at airports is regulated by 14 CFR Part 150 (Part 150), Airport Noise Compatibility Planning, and the FAA Advisory Circular (AC) 150/5020, Noise Control and Compatibility Planning for Airports. Table 1 in Appendix A of 14 CFR Part 150 depicts compatible land use guidelines for several land uses as a function of annual day-night average sound level (DNL) values. DNL is the 24-hour average sound level, in decibels (dB), derived from an average of all aircraft operations, and adds a 10 dB noise penalty to each aircraft operation occurring during nighttime hours (10:00 PM to 6:59 AM). The nighttime penalty compensates for people’s heightened sensitivity to noise during this period. According to 14 CFR Part 150, the exposure of individuals to aircraft noise must be established in terms of DNL. Residential land uses are considered incompatible with aircraft noise exposure levels of 65 DNL or greater.

SLCDA is committed to reducing the impacts of aviation noise, and works with the communities surrounding SLC to reduce these concerns. SLCDA completed a Part 150 Study in 1998. The Part

150 Study, which also included temporary noise monitoring in certain areas, was designed to analyze existing and future aircraft noise levels, develop operational noise abatement procedures, and to identify compatible and non-compatible land uses within the noise contours. As part of this program, SLCDCA published Noise Exposure Maps (NEMs) identifying areas exposed to noise equal to or greater than 60 decibel (dB) DNL from aircraft operating at SLC. The NEMs are available on SLC's website (<http://www.slcairport.com/environment.asp>), and are presented to the public for disclosure purposes. The noise contours presented on SLC's website were developed for its 1998 Master Plan/Part 150 Study and represent 1998 and forecast 2003 conditions. Existing operations are less than the approximately 450,000 annual operations forecasted for 2003.³⁶ New aircraft technology employed in current fleets has resulted in an overall decrease in noise emissions.

Part 150 Noise Compatibility Program

The Part 150 Noise Compatibility Program (NCP) includes SLCDCA-prepared recommendations intended to balance the continued use of SLC with improving compatibility between aircraft operations and noise-sensitive land uses surrounding the Airport. Elements of the Part 150 NCP include noise abatement measures, land use measures, and continuing program measures that are documented in FAA's Record of Approval on September 3, 1999.

Measures that were approved by FAA included:

- Preferential/Alternating arrival and departure flow;
- Maximize north flow departures and south flow arrivals between 11:00 PM and 6:59 AM (Nighttime Operations);
- Runways 16R, 16L, and 17 (south) Noise Abatement Departure Flight Tracks;
- Runways 34R, 34L, and 35 (north) Noise Abatement Departure Flight Tracks;
- Runways 34R, 34L, and 35 (north) Noise Abatement Arrival Flight Tracks;
- Stage I Aircraft Operating Restriction; and
- Voluntary Turbojet Use of Distant Noise Abatement Departure Procedures.

To influence land development and mitigate the impact of noise on non-compatible land uses, SLCDCA recommended the following land use measures:

- Comprehensive planning;
- Capital improvements planning;
- Environmental review;
- Airport zoning/overlay districts; and

³⁶ SLCDCA. 1998. *Master Plan Update and F.A.R. Part 150 Study Update: Airport Master Plan*. Report.

- Land acquisition and relocation.

To implement and update the Part 150 NCP, SLCDCA recommended the following continuing program measures:

- Noise abatement personnel;
- Noise Abatement Committee;
- Airport noise and operations monitoring; and
- Periodic evaluation of noise exposure, noise exposure map, and noise compatibility program revision.

The *Part 150: Records of Approval* for SLC provides detailed information on the aforementioned measures, and is available on FAA's website.³⁷

Land Use Compatibility

SLC is predominantly surrounded by industrial (heavy and light), open space, and commercial land uses. All of these land uses are considered compatible with SLC operations based on FAA standards.³⁸ During the 1980s, SLCDCA purchased land within the 65 DNL contour using federal grants. The forecast 2003 conditions NEM depicts only one non-compatible land use within the 65 dB DNL contour. This non-compatible land use was a residential property located to the northeast of the airfield, at the intersection of W 2100 N and 2200 W.

Salt Lake City, West Valley City, and Salt Lake County have all adopted an airport overlay district in accordance with the land use policy plan set forth by SLCDCA at SLC. Each airport overlay district restricts non-compatible land uses from developing in noise-impacted areas.³⁹

The Airport Flight Path Protection Overlay District (AFPP), part of the *Zoning Ordinance of Salt Lake City, Utah*, establishes four Airport Influence Zones (AIZ): "A," "B," "C," and "H" (Figure 4-2).⁴⁰ Each AIZ has land use controls designed to minimize hazards, including noise-related impacts, associated with aircraft operations at SLC. AFPP also requires that developers and landowners within the AIZs acknowledge the prescriptive aviation easement as a condition of new development.

³⁷ FAA. 1999. *Part 150:Records of Approval*. http://www.faa.gov/airports/environmental/airport_noise/part_150/states/media/roa_utah_090399.pdf. Accessed August 20, 2013.

³⁸ FAA. August 16, 2013. *Part 150—Airport Noise Compatibility Planning*. <http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=44fb7ed6bee65430ad245a9c5ae49582&rgn=div5&view=text&node=14:3.0.1.3.21&idno=14>. Accessed August 20, 2013.

³⁹ FAA. September 3, 1999. *Part 150: Records of Approval, Salt Lake City International Airport, Salt Lake City Utah*. http://www.faa.gov/airports/environmental/airport_noise/part_150/states/media/roa_utah_090399.pdf. Accessed September 11, 2013.

⁴⁰ Salt Lake City. 2007. Title 21A: Zoning, 21A.34.040: AFPP Airport Flight Path Protection Overlay District. http://www.sterlingcodifiers.com/codebook/index.php?book_id=672. Accessed August 15, 2013.

Associated noise levels and land use controls for each AIZ are:

- **Airport Influence Zone “A.”** Exposed to very high aircraft noise. AIZ “A” permits industrial and commercial uses with adequate sound attenuation. Specific height restrictions apply.
- **Airport Influence Zone “B.”** Exposed to high aircraft noise. AIZ “B” permits industrial and agricultural uses. Residential uses are allowed in conjunction with agricultural zoning; however, sound attenuation is required. Specific height restrictions apply.
- **Airport Influence Zone “C.”** Exposed to moderate levels of aircraft noise. AIZ “C” allows residential uses, but sound attenuation measures, such as air circulation systems, are required. Specific height restrictions apply. The Part 150 Study recommends the extension of this zone into an area west of the airfield, an area that is subject to continuous overflights by both arriving and departing air traffic.⁴¹
- **Airport Influence Zone “H.”** Land use controls within AIZ “H” are the same as the underlying zoning; however, additional height restrictions apply.

Aircraft Operational Measures

Effective March 1, 2011, SLCDA entered into an agreement with the FAA regarding flight procedures coming into and out of SLC. The provisions of the agreement are outlined in the *Preferential Runway Use Program Letter of Agreement*.⁴² The Preferential Runway Use Program includes the noise abatement measures outlined under the discussion of the Part 150 NCP above, plus restrictions concerning runway conditions, crosswinds, and temperature.

Airport Construction Noise

According to the *Salt Lake City International Airport Construction Safety and Security Compliance Manual*, SLCDA advises all contractors to “take any and all preventative measures to curtail the noise level at all times.”⁴³

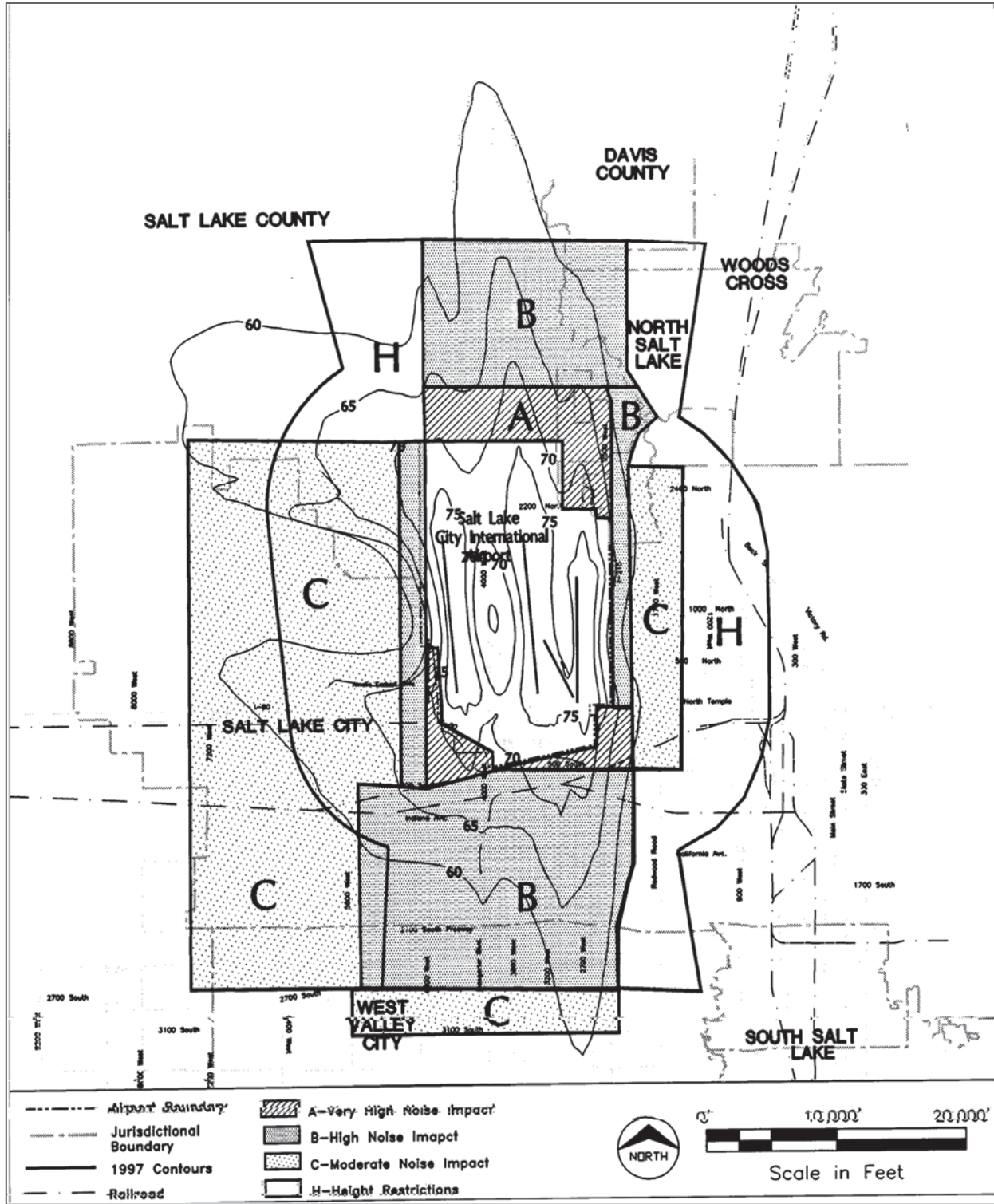
⁴¹ SLCDA. 2006. *Salt Lake City International Airport: Airport Master Plan and F.A.R. Part 150 Study*. Prepared by HNTB Corporation. Report.

⁴² SLCDA. 2000. *Letter of Agreement: Preferential Runway Use Program*.

⁴³ SLCDA. July 2012. *Salt Lake City International Airport Construction Safety and Security Compliance Manual*. http://www.slcairport.com/cmsdocuments/Construction_Safety_Manual.pdf. Accessed August 20, 2013.



FIGURE 4-2: AIRPORT FLIGHT PATH PROTECTION OVERLAY DISTRICT



Source: Salt Lake City, 2007.

Noise Complaints

Annually, SLCDCA receives approximately 20 noise complaints associated with air traffic operations at SLC. A telephone hotline operator is available to receive noise complaints between 8:00 AM and 4:30 PM, and a voice message system is available 24 hours per day, seven days per week.

Noise complaints at SLC are relatively minimal compared to other airports with a similar number of operations. In 2012, Washington Dulles International Airport had 312,070 operations, while SLC had 328,130 operations;⁴⁴ however, Dulles received 274 noise complaints in 2012.⁴⁵ This is most likely a reflection of the lack of residential land uses surrounding SLC relative to other major U.S. airports like Dulles.

Table 4-4 details existing noise-related initiatives that have been implemented by SLCDCA at SLC.

TABLE 4-4: EXISTING NOISE ABATEMENT INITIATIVES

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS ¹)
Preferential Runway Use Program. SLCDCA established preferred arrival and departure procedures for aircraft	Reduces noise impacts to residential populations.	O, S
Zoning for Land Use Compatibility. SLCDCA works with local jurisdictions to minimize noise hazards to surrounding communities and offers a noise complaint telephone number: 801-575-2824	Reduces noise impacts to residential populations and non-compatible land use.	O, S
Noise Monitoring. SLCDCA provides a noise complaint telephone number on their website for the surrounding communities: 801-575-2824	Increases Airport awareness of noise issues on the surrounding communities. Minimizes noise hazards to the surrounding communities.	S

Notes: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
Source: SLCDCA; Compiled by VHB, 2014.

Water Use and Conservation

The Airport is located in a region with a sub-humid climate and average annual rainfall of 16.2 inches.⁴⁶ Given the region’s drier climate and the increased variability of weather

⁴⁴ Airports Council International (ACRP). 2012. *2012 North American (ACI-NA) Top 50 Airports (includes Passenger, Cargo and Movements)*. <http://www.aci-na.org/content/airport-traffic-reports>. Accessed October 29, 2013.

⁴⁵ Metropolitan Washington Airports Authority. 2012. *2012 Annual Aircraft Noise Report for Washington Dulles International Airport (IAD) and Ronald Reagan Washington National Airport (DCA)*. http://www.mwaa.com/file/noise_report_2012.pdf. Accessed October 24, 2013.

⁴⁶ Weather.com, “Average Weather for Salt Lake City International Airport,” www.weather.com/weather/wxclimatology/monthly/graph/SLC:9

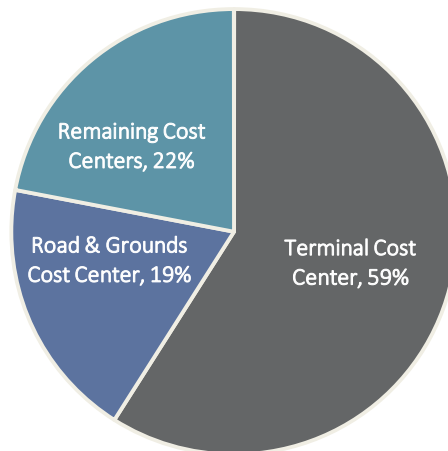
patterns resulting from climate change, it is important that SLCDAs act as a good steward of water resources by minimizing water use through conservation efforts. Water quality protection and stormwater management also are good practices that the Airport should adopt. These are addressed in more detail in the Natural Resources section.

There are many benefits to improved water conservation, including reduced utility costs, energy savings from reduced hot water use (e.g., hand-washing sinks), and protection of a scarce natural resource in the region. As the region continues to experience increased variability in precipitation as a result of climate change, these benefits will become more significant. Just in the past few years, as water utility rates have increased, the Airport has realized significant benefits from its irrigation and end-use fixture upgrades.

In 2012, 133 million gallons (Mgal) of water were consumed at the Airport resulting in a cost of almost \$286,000. Water use at the Airport is metered among 13 separate “cost centers.” A map of the SLC’s cost centers is included in Chapter 3, *Airport Profile* (Figure 3-5).

Historically, the majority of water is consumed in the Terminal (terminal and concourses) and Road and Grounds cost centers (landscaping only), which combine for 78 percent of total water consumption at the Airport. As shown in Figure 4-3, almost 60 percent of water consumed at the Airport was used by the Terminal cost center, which is largely restroom and heating, ventilation, and air conditioning (HVAC) uses. The Road and Grounds cost center consumes almost 20 percent of water use at the Airport, primarily for landscape irrigation. The remaining 11 cost centers combine to consume the last 22 percent of the water. None of these remaining cost centers consumes more the four percent of total water use.

FIGURE 4-3: AVERAGE WATER USE BY COST CENTER

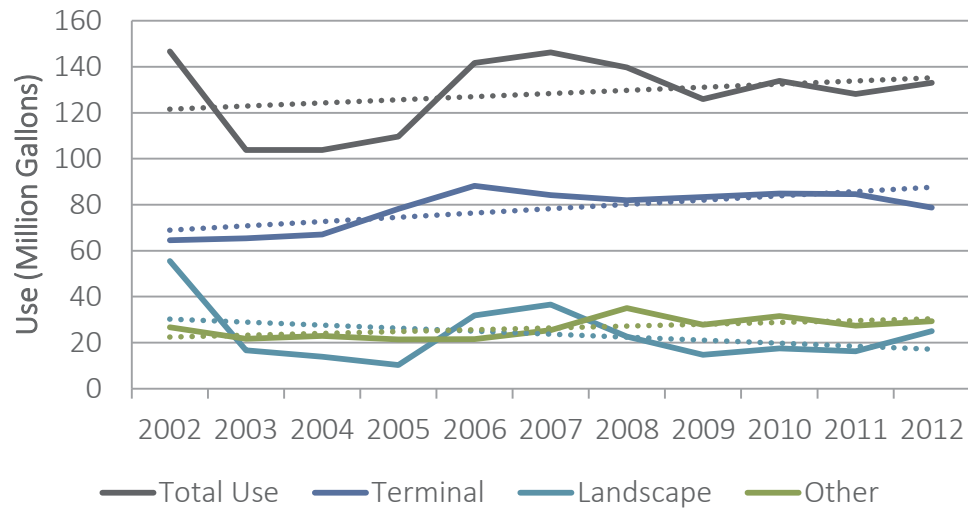


Source: SLCDAs; Compiled by Brendle Group, 2013.

As shown in Figure 4-4, since 2002, water use in the Terminals cost center has trended upward, which is the primary driver in an overall upward trend in total water use for the

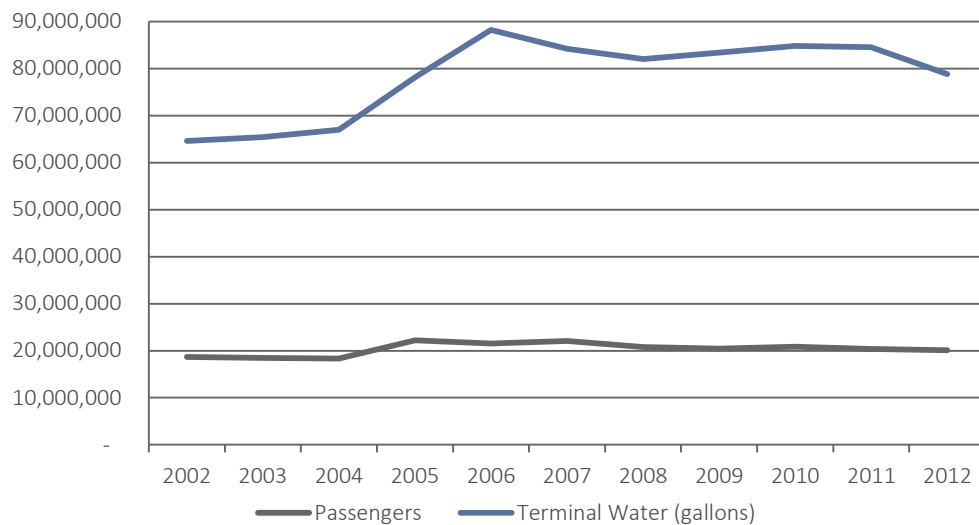
Airport (the dotted lines in the figure represent the average trend for each category). Figure 4-5 illustrates that passengers fluctuated between 2002 and 2012 and water use fluctuated in the same direction as the passengers and at generally the same time but did not change as drastically as passengers did. On the other hand, water use in the Road & Grounds cost center, which is largely landscape irrigation, has trended downward slightly since 2002. Water use for the remaining eleven cost centers has trended upwards along with Terminal use, but their combined, relative impact is much smaller.

FIGURE 4-4: WATER USE AND TREND LINES, 2002-2012



Source: SLCD; Compiled by Brendle Group, 2013.

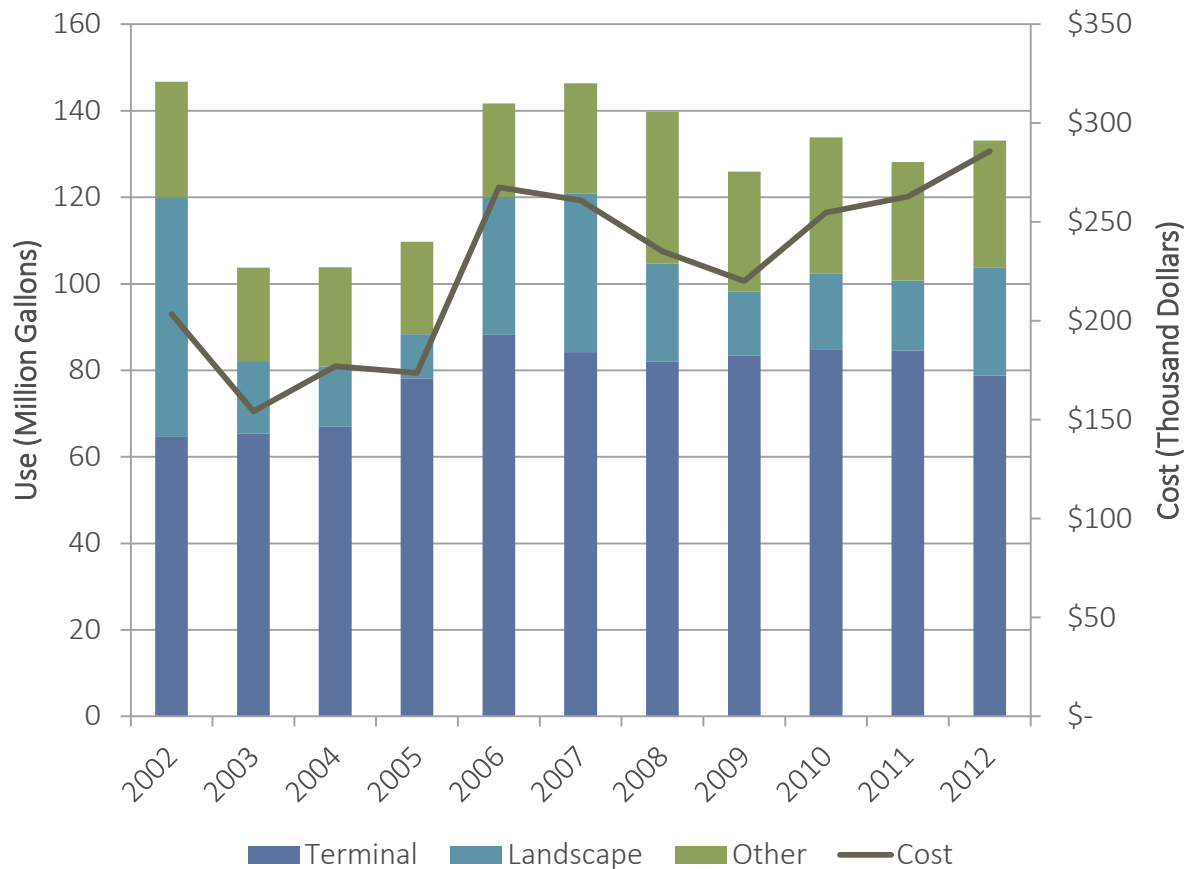
FIGURE 4-5: WATER USE AND PASSENGERS, 2002-2012



Source: SLCD; Compiled by Brendle Group, 2013.

Water utility costs at the airport have trended upward at a steeper rate than use as the unit cost of water increased from an average \$1.38 per thousand gallons in 2002 to \$2.11 per thousand gallons in 2012, a 53 percent increase. Figure 4-6 shows annual use and cost trends since 2002.

FIGURE 4-6: HISTORIC WATER USE & COST, 2002-2012



Source: SLCD; Compiled by Brendle Group, 2013.

Terminals Cost Center Water Use

Restrooms and HVAC equipment make up the majority of the water use at the Airport and the vast majority of use in the Terminal cost center category. Most restrooms are equipped with 1.5-gallons-per-minute (GPM) urinals and 1.0-GPM faucet aerators. Newer toilets are rated at 1.6 gallons per flush (GPF) while older toilets are 3.5 GPF.

There is a central Boiler Plant with six chillers and four boilers that provide heating and cooling to the majority of the Airport. The central plant currently shares a water meter with the Airport Terminal making it difficult to determine HVAC's contribution to overall water use at the Airport.

Terminals Cost Center

The following water meters are located within the Terminal Cost Center:

- Terminals and Boiler Plant
- Concourse D/E/IAB
- Concourse B (Lower)

Road and Grounds Cost Center Water Use

Within the Road and Grounds cost center, there is one water meter that is used for landscaping irrigation. There are 33 total landscaped acres at the Airport, or 0.4 percent of the 7,697 acres within its boundaries. More than 90 percent of the landscaped areas, or 30.2 acres, use low water xeriscaping practices. The remaining three acres are turf landscape.

SLCDA has demonstrated leadership in the design and maintenance of low water landscaping for a majority of its landscaped areas. Drawing inspiration from the natural landscape of the Salt Lake City region, SLCDA landscape designers and airfield staff have successfully transitioned from traditional, water-consumptive lawn-based landscaping to xeriscaping, which includes native and/or adaptive plantings, rock cover, rock swales, and mulches.

The Airport began converting to low water landscaping in 2001, resulting in substantial decreases in irrigation water use. Though precipitation patterns cause fluctuation in irrigation water use from year to year, average annual irrigation water use dropped from 91 million gallons (Mgal) per year from 1997 to 2001 to 24 Mgal from 2002 to 2012, a decrease of 74 percent. Two zoning ordinances in 2003 and 2007 codified requirements for low water use landscapes at the Airport,^{47,48} and included requirements for use of drought-tolerant plant species and irrigation systems that are designed for the efficient use of potable water.



Xeriscaping

Examples of the low water landscaping practiced throughout the Airport.

⁴⁷ *Creating an Airport Landscaping Overlay District and Adopting Related Changes to the City Code.* www.slcfdbase.com/Ord_by_Chron_2000-2009/default.htm#!Documents/ordinance70of2003.htm

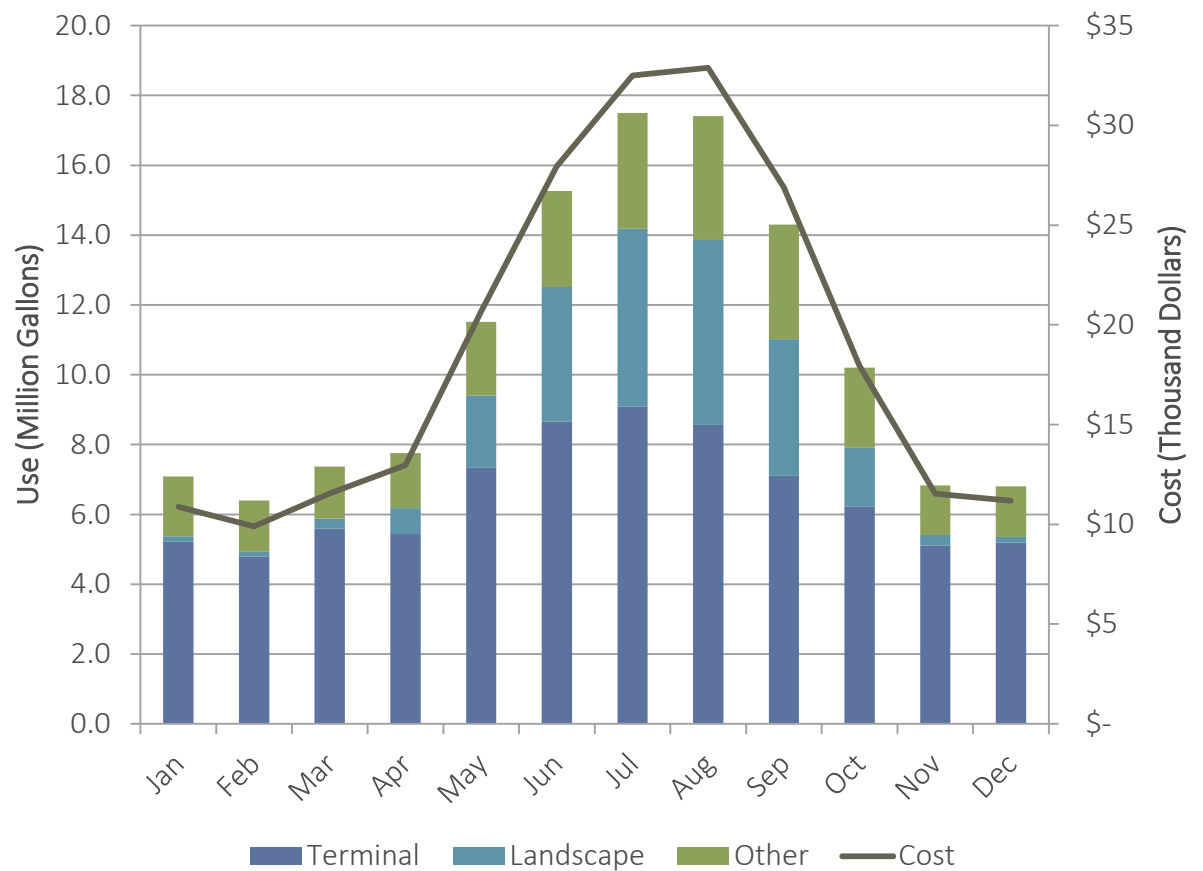
⁴⁸ Salt Lake City. 2007. Title 21A: Zoning, 21A.34.040: AFPP Airport Flight Path Protection Overlay District. http://www.sterlingcodifiers.com/codebook/index.php?book_id=672. Accessed August 15, 2013.

The small amount of turf grass that remains at the site is connected through the xeriscape areas and provides a desired aesthetic quality. Currently, there are no plans to convert additional turf to xeriscape.

In addition to low water landscaping, SLCDCA has installed an integrated, high-efficiency irrigation system to further reduce water use. This system connects all irrigated landscapes to one centralized control point that is connected to a weather station measuring wind, rain, humidity, and temperature. The irrigation system takes this data to measure the evapotranspiration factor each day to determine the watering needs of specific landscapes.

Water use spikes at the Airport during the summer months are primarily from landscape irrigation, though there are also monthly fluctuations in other Airport water uses (Figure 4-7). Drip irrigation is used for low water landscapes, which are typically watered one day per week, while spray heads are used for turf landscapes that are watered three days a week.

FIGURE 4-7: AVERAGE MONTHLY WATER USE & COST TRENDS, 2002-2012

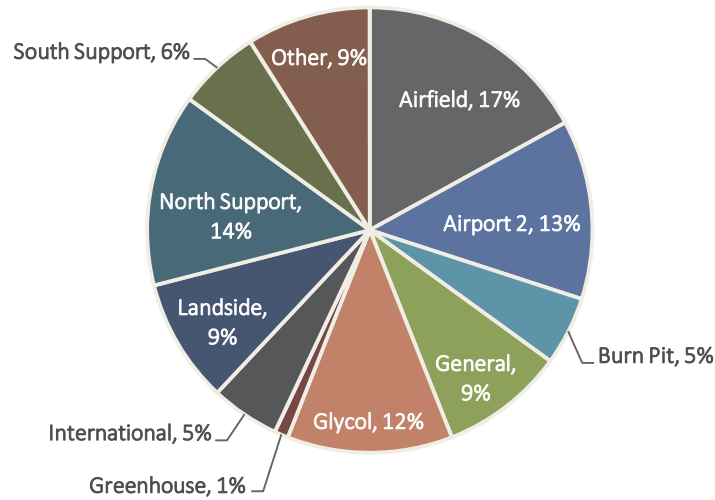


Source: SLCDCA; Compiled by Brendle Group, 2013.

Other Cost Centers Water Use

Figure 4-8 outlines how the 22 percent of water not used by the Terminal or Road and Grounds cost centers is broken up between the remaining eleven cost centers. For the remaining cost centers with multiple meters, Table 4-5 summarizes the distribution of use among the multiple meters based on 2012 water use data. Some of the larger sources of water use among the 11 cost centers in this ‘Remaining Cost Centers’ category include glycol operations, vehicle washing, and restroom facilities.

FIGURE 4-8: AVERAGE ANNUAL DISTRIBUTION OF WATER USE IN OTHER COST CENTERS (EXCLUDING TERMINAL AND ROAD & GROUNDS COST CENTERS), 2002-2012



Note: Airport 2 is South Valley Regional Airport
Source: SLCD; Compiled by Brendle Group, 2013.

TABLE 4-5: 2012 DISTRIBUTION OF WATER USE IN REMAINING COST CENTERS (EXCLUDING TERMINAL AND ROAD AND GROUNDS COST CENTERS) WITH MULTIPLE METERS

COST CENTER	COST CENTER METERS	PERCENT OF TOTAL COST CENTER USE
Airfield	Airfield Lighting Vaults	1%
	Airfield Operations Building CB2	3%
	Airplane	<1%
	South Glycol Tanks	2%
	Fire Station # 12	23%
	Batch Plant	22%
	Airport Batch	6%
	Delta Airline's Glycol	34%
	Aircraft De-icing Facilities	8%
	Airport Snow Equipment Storage Bldg.	<1%
General Aviation	Executive Terminal	31%
	Barken Aviation	2%
	Tree Farm	67%
International (Intl.) Center ¹	Intl. Center Radix Plaza	41%
	Intl. Center Office	58%
	Intl. Center Warehouse	1%
Landside	Parking Structure	55%
	Airport Police Training Facility	34%
	Airport Police Station	6%
	Parking Administration Building/ Culinary	5%
	Taxi Cab Plaza	1%
North Support	Car Wash/Roads & Grounds	46%
	Roads & Grounds	16%
	Warehouse & Shops	19%
	Preventative Maintenance (PM) Facility	7%
	Airfield Maintenance Building	5%
	Technical Support Building - North Temple Street	7%
South Support	Delta Airlines Cargo	66%
	Joint Cargo #1	15%
	Joint Cargo # 3	12%
	Joint Cargo #2 (SkyWest)	7%
Other	FAA Building	13%
	Airport Ground Transportation Building East Side	34%
	National Weather Service (NWS) Building	51%
	USAC Aviation Hangar & Lawn	2%

Note: 1 - The International Center is an area of office, industrial, hotel and restaurant development west of the Airport area and north of I-80 that is owned by SLCDA.

Source: SLCDA, 2013.

Table 4-6 details existing water use and conservation initiatives that have been implemented by SLCDCA.

TABLE 4-6: EXISTING WATER USE AND CONSERVATION INITIATIVES

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS ¹)
Low water landscaping and xeriscaping on 90% of landscaped area	Reduces water use during peak water consumption times in the summer and reduces fertilizer application and contamination.	E, O, N, S
Drip irrigation for low water landscaped and xeriscaped areas	Reduces water use during peak water consumption times in the summer.	E, O, N
Low-flow toilets in some restrooms (also piloted some waterless urinals)	Reduces water use year round in the Terminal cost center.	E, O, N

Notes: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
Source: SLCDCA; Compiled by VHB, 2014.

Air Quality and Climate Change

Air quality can potentially correlate with almost any other sustainable category. The incorporation of sustainability into the management of SLC will reduce emissions as well as positively impact the air quality of the area. For example, an increase in energy efficiency through terminal upgrades will reduce natural gas usage for heating of the buildings and electricity usage associated with building cooling. Additionally, water conservation programs reduce electricity demands associated with pumping, and use of public transportation decreases fuel usage associated with vehicles. Any reduction in natural gas, fuel, water, or electricity usage decreases the amount of criteria pollutants and GHGs emitted at the Airport or the utility company provider.

Sources of both criteria pollutants and GHGs at SLC include aircraft, ground support equipment (GSE), boilers, generators, transportation vehicles, and maintenance activities. Some of the sources are directly managed by SLCDCA, while other emission sources such as aircraft, GSE, and ground transportation are controlled by others (e.g., airlines, concessions and other tenants).

The air quality baseline inventory was based on 2012 data, unless otherwise noted. This section only addresses the emissions of criteria pollutants and GHGs to the outdoor atmosphere associated with SLC operation sources. Monitored results of indoor air quality (inside the terminals, concourses, or other buildings owned and operated by the SLCDCA) are not available and are not addressed in this Air Quality section.

Criteria Air Quality Pollutants

Criteria pollutants are compounds that affect human health and the environment. The United States Environmental Protection Agency (USEPA) has set National Ambient Air

Quality Standards (NAAQS) for criteria pollutants such as carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and ozone (O₃). These pollutants, except O₃, are emitted from the combustion of fuel. Ozone is formed through a photochemical reaction between nitrogen oxides (NO_x) and volatile organic compounds (VOCs) in the presence of sunlight. A “non-attainment” area is a geographical area that exceeds one or more of the NAAQS as designated by the USEPA, while a maintenance area was formerly designated non-attainment but is currently meeting the applicable standards.

SLC is located in Salt Lake County, which is designated as a non-attainment area for particulate matter less than ten microns (PM₁₀), particulate matter less than 2.5 microns (PM_{2.5}), and SO₂, and a maintenance area for O₃ and CO. (It should be noted that a request for re-designation to attainment was submitted to the USEPA for SO₂ in 2005.) In addition, the Salt Lake City area is prone to temperature inversions in the winter months, which trap a dense layer of cold air and pollutants under a layer of warm air. Temperature inversions during the winter of 2012 to 2013 created such poor air quality in the area that Salt Lake City received national exposure through media reports describing the severity of the problem.

The impact’s assessment of criteria pollutants is typically conducted to demonstrate compliance with the State Implementation Plan (SIP) for projects at airports located in a non-attainment area. An analysis is performed in accordance with the guidelines provided in the FAA 2004 *Air Quality Procedures for Civilian Airports & Air Force Bases* (Airport Air Quality Handbook), FAA Order 5050.4B, and FAA Order 1050.1E, constitute the relevant provisions of the National Environmental Policy Act, the Clean Air Act, and other applicable regulations. As part of the SLC SMP, the baseline air inventory was conducted in a similar manner as these guidelines.

Sources of emissions at SLC include stationary sources, aircraft, GSE, auxiliary power units (APUs), as well as vehicle traffic. Electricity usage also causes emissions, not at the Airport, but at the utility generating the power. Table 4-7 describes the sources of emissions as well as the method used for the baseline calculations. It should be noted that there are significant emission sources, such as aircraft, GSE, and public transportation that are not owned and controlled by the SLCDCA.

To estimate emissions from the various sources, information was obtained from the SLCDCA, tenants, and available sources. Similarly, various approaches including modeling, emission factors, and calculations were used to determine baseline emissions.

TABLE 4-7: SOURCES OF EMISSIONS AT SLC

SOURCES	CHARACTERISTICS OF EMISSIONS AND METHOD FOR BASELINE CALCULATIONS
Stationary Sources	The primary stationary sources at SLC are boilers and emergency generators that exhaust products of fossil fuel combustion. Other sources include the burn pit, incinerator, paint booths, and the carpenter shop vacuum system. Emission calculations were based on information provided by the SLCDCA, including the 2012 GHG Inventory and the 2011 Annual Emission Inventory for the Utah Division of Air Quality (UDAQ). It should be noted that the release of refrigerants were also considered in calculating SLC GHG emissions.
SLC Off-Road Vehicles	Exhaust is produced by fuel combustion from SLCDCA-owned off-road vehicles. These include mowers, tractors, sweepers, AARF vehicles, All-terrain vehicles, etc. The expected emissions were calculated based on fuel usage, detailed in the 2012 GHG inventory, multiplied by applicable emission factors for the off road vehicles.
Aircraft	Exhaust is produced by fuel combustion from aircraft, but varies depending on aircraft engine type, fuel type, number of engines, power setting and time-in-mode, and amount of fuel burned. The FAA’s Emission Dispersion Modeling System (EDMS) Version 5.1.4 was used to calculate emissions for aircraft. The modeled scenarios were based on information provided by the SLCDCA, such as the monthly Airport Schedule Reports and the 2012 Environmental Assessment (EA). The aircraft emissions account for the complete landing and takeoff cycle to an elevation of 3,000 feet above ground level.
Ground Support Equipment (GSE)	Exhaust is produced by fuel combustion from aircraft service trucks, baggage tugs, belt loaders, deicers and other portable equipment, used by the airlines and fixed- based operators (FBO). EDMS defaults were used to calculate emissions for GSEs based on aircraft operations, provided by the SLCDCA, such as the monthly Airport Schedule Reports and the 2012 EA.
Auxiliary Power Units (APU)	Emissions are also emitted by APUs used to provide power to aircraft when the main engines are off. Since all of the commercial gates at Concourses A, B, C, and D have gate electrification and pre-conditioned air (PCA) available, the EDMS default of seven minutes per landing/takeoff cycle was used to account for APU emissions.
On-Road Vehicles	Exhaust is produced by fuel combustion from SLCDCA-owned vehicles, passenger vehicles, employee and cargo motor vehicles approaching, departing, and moving about SLC. The emissions from this source vary from the type of vehicle (automobiles, vans, trucks, and busses), type of fuel, and the amount of fuel consumed. The EDMS default for fleet mix was used to estimate emissions from surface vehicles. The default fleet mix including all vehicle types, fuels, and ages are assumed to represent the distribution of surface traffic at SLC. The 2012 traffic volume was obtained by proportioning the 2009 vehicle miles traveled (VMT) used in the EA by the difference in enplanements between the two years.
Electrical Consumption	Emissions are associated with the production of electricity at off-site utilities that use coal, oil, or natural gas. Since emissions do not occur at the Airport, electricity usage is only accounted for in GHG emission calculations. Electricity usage information was provided by the SLCDCA.

Source: C&S Engineers, Inc., 2013.

Table 4-8 provides a summary of emission sources and the applicable throughput used for the baseline inventory, while Table 4-9 summarizes the criteria pollutant emissions by source. SLCDCA-owned and operated sources of criteria pollutants, which comprise of less than seven percent of particulate matter emissions associated with SLC, oxides of nitrogen comprise of approximately 2.5 percent, while carbon monoxide, volatile organic compounds, and sulfur oxides are one percent or less.

TABLE 4-8: SOURCES INCLUDED IN THE BASELINE EMISSION INVENTORY

SOURCES	CONTROLLING ENTITY (GHG SCOPE)	THROUGHPUT	UNITS
Heat Plant - 4 Boilers	SLCDA (Scope 1)	70,449	million British Thermal Units (BTUs) of natural gas
Heat Plant - 4 Boilers	SLCDA (Scope 1)	2,155	gallons of diesel fuel
Other Boilers/Combustion Sources	SLCDA (Scope 1)	28,031	million BTUs of natural gas
Generators	SLCDA (Scope 1)	2,563	gallons of diesel fuel
Burn Pit	SLCDA (Scope 1)	130,069	gallons of propane
Incinerator ^{1,2}	SLCDA (Scope 1)	19,800	cubic feet of natural gas
Spray Booths ¹	SLCDA (Scope 1)	144	gallons per year
Fuel Tanks ¹	SLCDA (Scope 1)	58,000	total gallon tank capacity
Carpenter Shop Vacuum ¹	SLCDA (Scope 1)	75	pounds particulates captured/week
Off-Road Vehicles	SLCDA (Scope 1)	NA	varies by fuel
Natural Gas Combustion – Tenants	Tenants (Scope 3)	12,122	million BTUs of natural gas
Commercial Airline Operations	Airlines (Scope 3)	117,874	Landing Takeoff Cycles (LTOs)
General Aviation (GA) Operations	Airlines (Scope 3)	48,545	LTOs
GSE	Airlines/FBOs (Scope 3)	EDMS Default	based on number LTOs
APUs	Airlines (Scope 3)	7 Minute	default of 7 minute/LTO Cycle
On-Road Vehicles	Public (Scope 3)	21,999,059	VMT per year

Notes: 1. These values were based on 2011 data in Utah Division of Air Quality Emission Inventory
 2. At this time, the incinerator is only used periodically for wildlife management operations.
 NA = Not Applicable

Source: C&S Engineers, Inc., 2013.

TABLE 4-9: CRITERIA POLLUTANT EMISSIONS

SOURCE	NOX (TONS/YR.)	CO (TONS/YR.)	VOC (TONS/YR.)	SOX (TONS/YR.)	PM _{2.5} (TONS/YR.)	PM ₁₀ (TONS/YR.)
SLCDA-Owned and Operated Sources						
Heat Plant - 4 Boilers	6.01	0.85	0.19	0.02	0.27	0.27
Other Boilers/Combustion Sources	2.38	0.34	0.08	0.01	0.11	0.11
Generators	0.66	0.15	0.04	0.03	0.03	0.03
Burn Pit	0.41	2.20	0.83	0.00	0.00	0.00
Incinerator	0.00	0.00	0.00	0.00	0.00	0.00
Off-Highway Vehicles	15.83	10.24	1.56	1.34	1.29	1.29
Spray Booths	NA	NA	0.38	NA	NA	NA
Fuel Storage Tanks	NA	NA	0.52	NA	NA	NA
Vacuum Equipment	NA	NA	NA	NA	0.03	0.03
Total SLCDA-Owned Emissions	25.29	13.78	3.60	1.40	1.73	1.73
Other Sources						
Natural Gas Combustion –Tenants	1.03	0.15	0.03	0.00	0.05	0.05
Commercial Airline Operations	724.46	1039.52	126.09	89.98	11.90	11.90
Commercial GSE	65.90	676.94	22.30	1.75	1.87	1.96
Commercial APUs	9.60	13.58	1.00	1.48	1.47	1.47
GA Operations	184.12	527.13	223.76	22.13	6.51	6.51
GA GSE	21.71	189.33	6.66	0.47	0.74	0.77
GA APU	1.00	0.98	0.06	0.13	0.08	0.08
On-Road Vehicles	23.30	232.31	14.02	0.21	0.90	0.52
Total Emissions - Other Sources	1031.12	2679.94	393.92	116.15	23.52	23.26
TOTAL EMISSIONS	1056.41	2693.72	397.52	117.55	25.25	24.99

Notes: NA = Not Applicable
Source: C&S Engineers, Inc.

Regional Air Quality Monitoring

The SLCDA does not monitor regional air quality. However, periodic stack testing is performed on the airport boilers to document compliance with facility permits.

The Utah Department of Environmental Quality maintains the Air Monitoring Center (AMC), which is responsible for operating an ambient air-monitoring network that protects the health and welfare of the citizens of Utah. The AMC provides air pollution information for the daily air quality, health advisories, winter season wood burn conditions, and summer season. The NWS also provides an Air Quality/Smoke Dispersal Index to provide information for regulators decisions on open burning and air quality. This information is readily available at the following website: www.wrh.noaa.gov/slc/projects/ifp/html/clrindx.php

Greenhouse Gas (GHG) Emissions

Greenhouse gases (GHGs) are pollutants such as carbon dioxide (CO₂), methane, nitrous oxide, and refrigerants that trap heat and radiation in the earth’s atmosphere causing climate change. Unlike criteria pollutants, GHG emissions do not directly affect the regional air quality, but contribute to climate change, which results in an increased frequency of storms and global temperature. GHGs are typically measured in carbon dioxide equivalents (CO_{2e}), which accounts for the different global warming potential of the various GHGs.

The baseline GHG emissions for SLC were calculated using the information contained in the 2012 GHG Inventory, prepared by the SLCDCA, as well as procedures outlined in the Airport Cooperative Research Program (ACRP) *Guidebook on Preparing Airport Greenhouse Gas Emissions Inventories*. In accordance with the guidebook, the baseline inventory was segregated into three sections, or scopes. Scope 1 (direct emissions), include emissions associated with fuel necessary to power SLCDCA-owned vehicles on and off the Airport and SLCDCA-owned combustion facilities. Scope 2 (indirect emissions) include purchased electricity. Scope 3 emissions include sources not owned or controlled by the SLCDCA such as aircraft emissions, public ground travel on and off the Airport, and Airport employee commute emissions.

Greenhouse Gas (GHG) Emissions: “Scopes”

Airport industry guidance for developing GHG emissions inventories divides results into the controlling entities, or scopes:

- Scope 1 - direct emissions; SLCDCA-owned and operated sources.
- Scope 2 - indirect emissions; includes purchased electricity.
- Scope 3 - sources not owned or controlled by the SLCDCA.

Scope 1 Emissions

Scope 1 emissions consist of fuel consumption necessary to power SLCDCA-owned vehicles and facilities. It includes the combustion of natural gas, diesel fuel, unleaded gasoline, compressed natural gas, and other petroleum sources. These emissions from SLCDCA-owned and operated boilers, emergency generators, fire pit, incinerator and SLCDCA-owned vehicles fall under Scope 1 emissions. In addition, the type and amount of refrigerants released are also categorized as Scope 1. Table 4-10 summarizes the Scope 1 emissions by type of fuel combusted or refrigerant released, while Figure 4-9 depicts the percentage of each

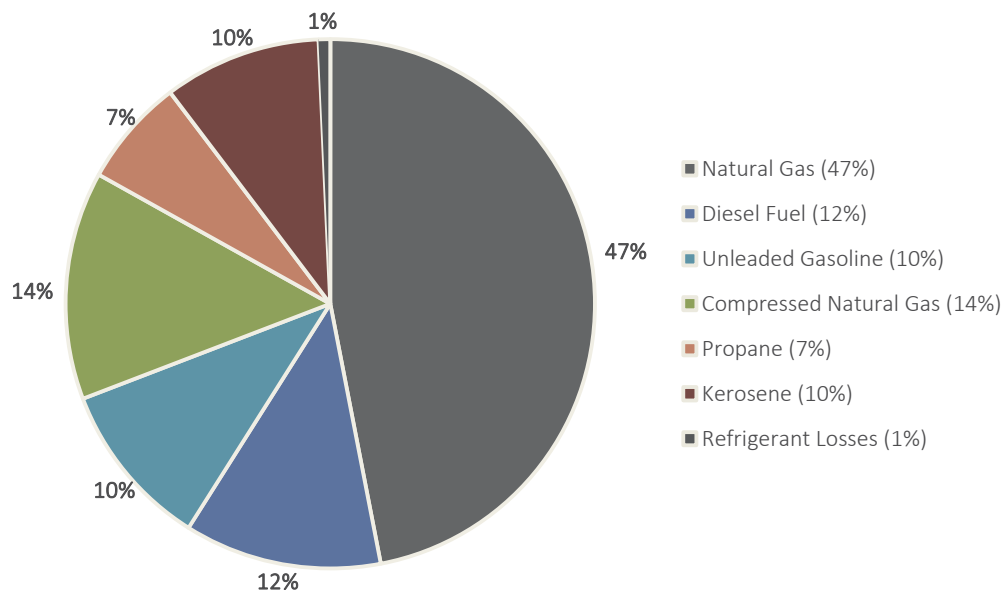
category. The combustion of natural gas for heating provides the highest GHG emissions of any fuel type used by the SLCD.

TABLE 4-10: SCOPE 1 GREENHOUSE GAS EMISSIONS

TYPE OF FUEL	ANNUAL USAGE (volume/year)	GHG EMISSIONS (metric tons CO _{2e} /year)
Natural Gas	98,480 decatherms	5,241
Diesel Fuel	130,992 gallons	1,344
Unleaded Gasoline	128,747 gallons	1,137
Compressed Natural Gas	224,055 gallons	1,556
Propane	130,069 gallons	734
Kerosene	110,000 gallons	1,073
Refrigerant HFC 134a Losses	60 pounds	35
Refrigerant R410A	30 pounds	24
Coolant R407C	30 pounds	21
TOTAL SCOPE 1 EMISSIONS		11,165

Source: C&S Engineers, Inc., 2013.

FIGURE 4-9: SCOPE 1 PERCENTAGES OF GREENHOUSE GAS EMISSIONS



Source: C&S Engineers, Inc., 2013.

Scope 2 Emissions

Scope 2 emissions are indirect emissions associated with electrical usage. As illustrated in Table 4-11, electrical use data for the SLCD facilities, concessions/airlines, and other tenants as well as GHG emission factors were used to determine carbon dioxide equivalents for the Scope 2 emissions. It should be noted that the tenant electricity usage is not owned and operated by the SLCD. The GHG emissions of 14,646 metric tons of CO_{2e} by the SLCD exceed the Scope 1 emissions total.

TABLE 4-11: SCOPE 2 GREENHOUSE GAS EMISSIONS

OWNER AND OPERATOR	ELECTRICITY USAGE (volume/year)	GHG EMISSIONS (metric tons CO _{2e} /year)
SLCDA	39,202,923 KW-hours/year	14,646
Concessions/Airlines	10,483,987 KW-hours/year	3,918
Parking/Cargo/Other Tenants	3,198,769 KW-hours/year	1,195
TOTAL SCOPE 2 EMISSIONS	52,885,679 KW-hours/year	19,759

Source: C&S Engineers, Inc., 2013.

Scope 3 Emissions

Scope 3 emissions are those associated with SLC, but not owned or operated by the SLCD. These include emissions from tenant-owned facilities, aircraft, GSE, as well as transportation vehicles used by employees, passengers, and others traveling to the Airport. The majority of Scope 3 GHG emissions are associated with aircraft operations. Table 4-12 summarizes the Scope 3 emissions by source.

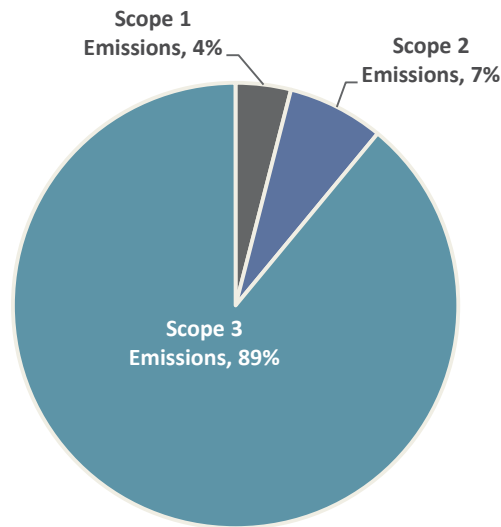
TABLE 4-12: SCOPE 3 GREENHOUSE GAS EMISSIONS

SOURCE	ANNUAL USAGE (volume/year)	GHG EMISSIONS (metric tons CO _{2e} /year)
Natural Gas – Tenants	12,122 decatherms	645
Commercial Airline Operations	117,874 LTOs	199,335
GA Operations	48,545 LTOs	49,030
Ground Support Equipment	EDMS Default	3,846
On-Road Vehicles	21,999,059 VMT	9,947
TOTAL SCOPE 3 EMISSIONS		262,803

Source: C&S Engineers, Inc. 2013.

Scope 3 emissions comprise approximately 89 percent of the GHG emissions at SLC, while aircraft operations (commercial and GA) alone comprise 85 percent. Figure 4-10 provides a graphical illustration of a comparison between Scope 1, 2, and 3 GHG emissions.

FIGURE 4-10: GREENHOUSE GAS (GHG) EMISSIONS BY SCOPE



Source: C&S Engineers, Inc., 2013.

Climate Change

Salt Lake City has developed the *Sustainable Salt Lake –Plan 2015*, which provides the City’s agenda to address climate change, protect resources, enhance assets, and establish a path toward greater resiliency and vitality for every aspect of the community. The SLCDCA has established goals and initiatives in the SMP to reduce emissions of air pollutants and climate-changing greenhouse gases. The Planning Director and the Environmental Manager from SLCDCA actively participate on the Mayor’s Climate Adaptation Steering Committee.

SLC is StormReady®

The National Weather Service has recognized SLC as a StormReady site – only the tenth airport in the U.S. – for SLCDCA’s strong commitment to implement the infrastructure and systems needed to save lives and protect property when severe weather strikes.

<http://www.stormready.noaa.gov/>

Adaptation to a changing climate also needs to be considered during capital projects at SLC. The majority of adaptation measures involve infrastructure improvements to accommodate higher intensity storms or redundancy to minimize utility shutdowns.

In 2012, the SLCDCA participated on the Salt Lake City Mayor’s Climate Adaptation Steering Committee. The committee met as a group and identified 81 possible climate related impacts that could affect City operations in the future. These potential impacts were identified as possible scenarios that the City may face if the region sees temperature increases, more frequent droughts, loss of snow pack, and an increased frequency of severe weather events.

Of the 81 impacts considered, 23 potential impacts were identified as posing a high risk to the manageability and sustainability of City operations, and to community welfare and quality of life.

In 2014, the Steering Committee met again to further discuss the 23 high-risk impacts and give direction on how to incorporate climate adaptation planning into all levels of city planning. Individual departments and divisions will develop climate adaptation policies, which describe how they will mitigate the effects of climate change on all impacts identified by the Steering Committee. The Steering Committee also discussed current and future mitigation efforts, which will be included in adaptation policies to be developed by the individual departments.

SLCDA has already incorporated a number of air quality and GHG emissions reduction at the Airport. For more information, the Air Quality and Greenhouse Gas Assessment is located in Appendix E, *Air Quality and Greenhouse Gas Assessment*. Table 4-13 details existing initiatives that have been implemented by the SLCDCA at SLC.

In addition to the above measures conducted by the SLCDCA, several airlines are implementing emission reduction initiatives, such as:

- Single-engine taxi when appropriate
- Conversion of GSE to electric or alternative fuels
- Turning off GSE to minimize idling
- Solar fuel carts
- Aircraft weight reduction programs to conserve fuel

TABLE 4-13: EXISTING AIR POLLUTANT AND GHG REDUCTION INITIATIVES

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS ¹)
The SLCDA installed electrification and PCA at commercial gates on Concourses A, B, C, and D	Reduces use of jet fuel to power aircraft APU and associated emissions.	O, N
The SLCDA uses natural gas shuttle buses to transport employees and passengers to the employee and long-term parking lots, respectively. Currently, 47% of the fuel use for the Airport fleet is compressed natural gas	Natural gas is a cleaner burning fuel and less costly than diesel or gasoline. Use of natural gas reduces NOx emissions and operating costs.	E, N
The SLCDA-owned fleet consists of 82 alternative-fuel vehicles, including electric, biofuels, hybrids, and CNG, with propane-operated specialty equipment	Increases fuel efficiency and reduces criteria pollutant and GHG emissions.	E, N
The SLCDA provides public access to the natural gas fueling station	Promotes the purchase of natural gas vehicles by companies and individuals.	N, S
Public transportation is provided to the Airport via (UTA TRAX), bus, and Frontrunner as well as free ridership for employees	Reduces emissions and traffic congestion near the terminal.	N, S
Salt Lake City has a “No Idling Policy” for vehicles operating at the Airport	Reduces emissions and provides better air quality near the terminal.	N, S
The SLCDA specified the use of hybrid vehicle technology for taxi cab operators in the latest Request for Proposals (RFP)	Increases fuel efficiency and reduces criteria pollutants and GHGs in the region.	N
The SLCDA installed bicycle racks for employees and passengers	Reduces emissions associated with vehicle trips to the Airport.	N, S
The SLCDA offers preferred parking for employees carpooling to the Airport	Reduces emissions associated with vehicle trips to the Airport.	N, S
The SLCDA has conducted several energy audits to increase energy efficiency of facilities	This reduces operating costs, fuel and electricity usage as well as associated emissions at the airport.	E, O, N
The SLCDA implemented a Building Automation System (BAS) to increase energy efficiency at SLC	This reduces both electricity and natural gas usage as well as associated emissions.	E, O, N
The SLCDA has incorporated particulate matter control language in SLCDA construction specifications	Particulate matter control assists UDAQ in achieving better air quality in the region since Salt Lake County is in non-attainment for particulate matter; it also improves regional air quality.	N, S

Notes: 1- EONS = Economic viability, (E) Operational efficiency, (O) Natural resource conservation, (N) and Social responsibility (S)
Source: SLCDA; Compiled by VHB, 2014.

Waste Management and Recycling

The management and disposal of solid waste have considerable impacts on an airport's finances, operations, environmental well-being, and relationship with the community. Its significance has been identified by the FAA and incorporated into recent regulations. Section 133 of the *FAA Modernization and Reform Act of 2012* requires airports with a master plan to complete a recycling plan that includes/addresses:

- A solid waste audit
- Feasibility of solid waste recycling
- Minimization of solid waste generation
- Operation and maintenance requirements
- Review of waste management contracts
- The potential for cost savings or the generation of airport revenue⁴⁹

In order to assist airports in the development of these recycling programs, the FAA recently issued a memorandum document titled *Guidance on Airport Recycling, Reuse, and Waste Reductions Plans*.⁵⁰ This memorandum offers direction on preparing airport recycling, reuse, and waste reduction plans as part of a sustainability plan or within a master plan. The seven sections that should be part of an airport recycling, reuse, and waste reduction plan identified by the FAA include:

- Facility Description and Background
- Waste Audit
- Review of Recycling Feasibility
- Operation and Maintenance Requirements
- Review of Waste Management Contracts
- Potential for Cost Savings or Revenue Generation
- Plan to Minimize Solid Waste Generation

Consistent with the sources identified in *Recycling, Reuse and Waste Reduction at Airports: A Synthesis Document*,⁵¹ the Airport generates the majority of its waste from terminals, airfields, aircraft maintenance hangars, cargo hangars, flight kitchens, offices, and airport construction projects. SLCDCA has made considerable efforts to minimize waste generation and maximize diversion rates within these source areas.

⁴⁹ Federal Aviation Administration (FAA). *FAA Modernization and Reform Act of 2012*.

⁵⁰ Federal Aviation Administration (FAA). September 30, 2014. *Guidance on Airport Recycling, Reuse, and Waste Reductions Plans*.

⁵¹ Federal Aviation Administration (FAA). April 24, 2013. *Recycling, Reuse and Waste Reduction at Airports: A Synthesis Document*.

Collection Process and Recycling Rates

Waste is collected in several different manners across the Airport. Descriptions of the waste collection procedures are listed in Table 4-14 by waste source (terminal, airfield, concessions, etc.).

TABLE 4-14: WASTE MANAGEMENT PROCEDURES AT SLC


WASTE SOURCE	WASTE MANAGEMENT PROCEDURES
Terminals—Pre-Security (excluding concessions)	No recycling; trash is transported by the janitorial service (ISS Facility Services) to pick-up sites, where it is then hauled away by Waste Management (WM) to the Salt Lake County disposal facility. ⁵²
Terminals—Post-Security (excluding concessions)	Individual sterile trash bins are interspersed with recycling stations consisting of separate bins for paper and plastics recycling and trash. Waste and recyclables are transported by the janitorial service (ISS Facility Services) to pick-up sites (separate dumpsters for recycling and trash), where it is then hauled away by WM. Trash is taken by WM directly to a Materials Recovery Facility (MRF) while all recyclables are brought to WM’s West Jordan MRF. There it is sorted first through automated processes and then by hand (estimated capture rate is 98%). Deplaned waste (excluding international waste) is handled privately by the airlines (refer to Table 4-15 for additional information).
Concessions	Waste from concessionaire activities is not handled by the SLCDCA. However, approximately 66% of concessionaires ⁵³ recycle at the Airport and many recycle waste cooking oil through the services of Renegade Oil (refer to Table 4-15). Approximately 25% of concessionaires reported using the City’s curbside recycling program.
Airfield	Landscaping waste (e.g., trees, shrubs, grass mowings, leaves, weeds, etc., generated through landscaping activities) is typically reused or recycled (e.g., mulching) by the SLCDCA. Scrap metal generated on the airfield is stored for recycling and glycol is collected from de-icing operations and sold by the SLCDCA.
Aircraft Maintenance Hangars	Collection tanks are provided by the SLCDCA for used oil generated during engine maintenance.
Cargo Hangars	Tenants are required to manage their own waste and recyclables. DHL Express’ trash and recyclables generated throughout its office and warehouse are collected by its janitorial service (currently Wingfoot). Trash and recyclables are placed into separate bags and disposed of appropriately in a four-yard trash dumpster or eight-yard recycling dumpster, which are picked up by WM. United Postal Service (UPS) also contracts with WM for its trash disposal but does not currently recycle municipal solid waste (everyday items used and discarded such as newspapers, food scraps, product packaging, etc.). UPS does, however, recycle steel and other metals, as well as used oil, antifreeze, and oil filters (aircraft oil is recycled through Skydrol; antifreeze and other lubricants are recycled through the services of Thermo Fluids).

Source: SLCDCA, 2013; Concessionaire Survey Result, 2013.

⁵² Waste is picked up five times per day (twice per eight-hour day shift [two day shifts] and once per eight-hour night shift [one night shift]).

⁵³ Based on survey provided to Airport concessionaires as part of the Sustainability Management Plan.

TABLE 4-14: WASTE MANAGEMENT PROCEDURES AT SLC (CONT.)

WASTE SOURCE	WASTE MANAGEMENT PROCEDURES
<p>Flight Kitchens</p>	<p>LSG Sky Chef removes international waste from planes, stores it in designated containers until the waste is hauled away for incineration.⁵⁴ Domestic airlines use the Airport’s cardboard compactors and comingled waste systems (janitorial staff [ISS Facility Services] will pick up and remove this waste) or their own contracted services. Almost 90% of airlines operating at SLC recycle (see Table 4-15) and more than 55% of them participate in the City’s curbside recycling program.⁵⁵</p>
<p>Offices</p>	<p>Each individual SLCDCA office has small containers for comingled recycling (i.e., all recyclable materials including paper, plastics, metals, etc., are combined into one container and sorted after collection at the recycling facility). These recyclables are transported by individuals to a 90-gallon container in a common area and then taken curbside by Airport Maintenance personnel (pick-up occurs each Friday). Office trash is picked up once daily by the SLCDCA’s janitorial service.</p>
<p>Airport Construction Projects</p>	<p>The majority of airfield construction materials are stored and reused on site (as shown in the photo) by the SLCDCA. Additionally, some projects have an on-site concrete crushing operation. Plantings removed during construction are either saved and replanted elsewhere on the Airport or shredded and used as mulch. Landside construction material and any remaining airside construction material that is not salvageable are collected by WM.WM’s staff sorts through the materials for potential recyclables prior to landfill delivery.</p> 
<p>Airport-Wide</p>	<p>The SLCDCA offers open-top waste removal to tenants and the public once a year, accepting anything from furniture to electronics.</p> <p>The SLCDCA encourages tenants to participate in the City’s curbside recycling program. Greenhouse staff, Building Automation System staff, and other Airport workers outside of the terminal area also use the curbside program.</p> <p>The SLCDCA offers several specialty recycling collection services (batteries, tires, electronics, etc.) for its operations, which are returned to suppliers for recycling.</p> <p>Landscaping waste is generally either relocated to another site on the Airport or shredded and used as mulch.</p> <p>The SLCDCA operates several cardboard compactors for recycling.</p> <p>Used motor oil and antifreeze generated during vehicle maintenance is stored and recycled.</p> <p>Old equipment, vehicles, furniture, and other items are auctioned off to the public through a third party.</p>

Source: SLCDCA, 2013; Concessionaire Survey Result, 2013.

⁵⁴ This process is consistent with federal regulations.

⁵⁵ Based on survey of airlines as part of the Sustainability Management Plan.

There are two major recycling providers in operation at the Airport— WM Contractors and Salt Lake City Curbside Recycling. Both accept the following recyclable materials:

- Recyclable metal (aluminum and steel cans / containers, etc.)
- Newspaper
- Magazines/catalogs
- Office paper, junk mail, receipts, etc.
- Cardboard and paperboard
- Styrofoam (only City curbside program)
- Recyclable plastics (#1 through #7)

Glass is not currently recycled by the SLCDCA; however, both of the recycling providers currently offer this service as an option. To recycle glass through WM, the Airport would require additional bins that would need to be maintained separately because this material stream is transported to a different recycling facility than comingled material. As part of its curbside recycling program, the City of Salt Lake recently partnered with a private company to collect glass recyclables. This also requires a separate container and additional fee.



Waste Management Dumpsters at SLC

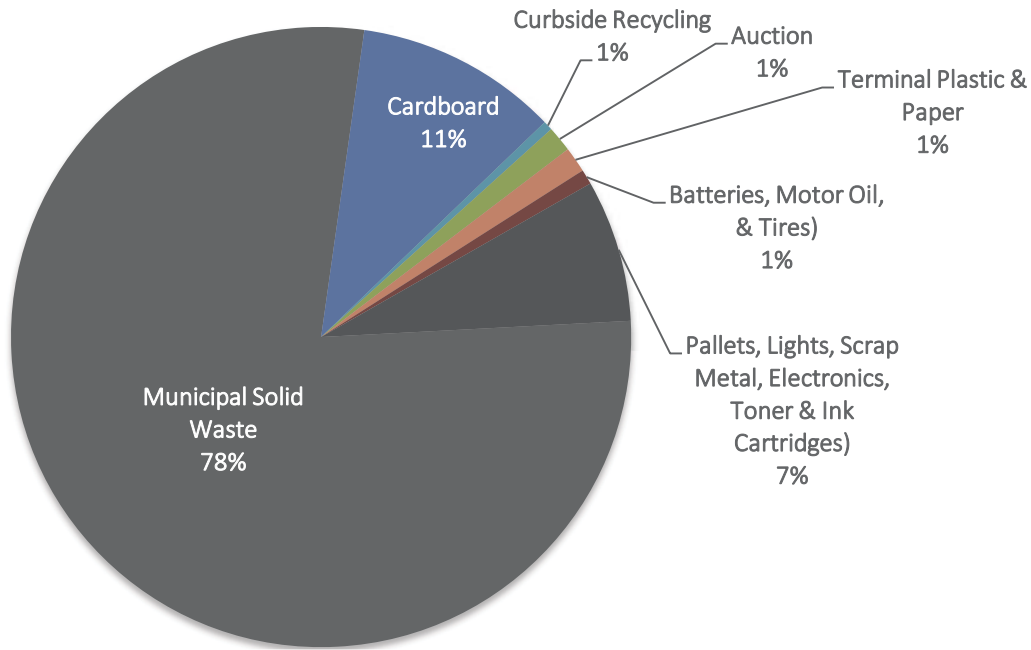
In 2012, the Airport disposed of approximately 0.27 pounds of solid waste per passenger and recycled approximately 0.07 pounds of material per passenger. As shown in Figure 4-11, approximately 22 percent of the Airport’s manageable waste (excluding construction, demolition, landscape waste, and glycol [omitted because of its measurement in gallons rather than tons]) was recycled/salvaged in 2012.

As shown on Figure 4-12, the recycling rate per passenger has significantly increased since 2009, partially because of the initiation of curbside, fluorescent bulb, and pallet recycling, as well as a significant increase in scrap metal recycling. Additional metrics express the progress that the Airport has made since 2003:

- Solid waste generation per passenger has decreased by 13 percent
- The amount of recycling (excluding construction and demolition waste) has nearly tripled
- The SLCDCA has received more than \$131,000 in cardboard recycling rebates over the past 10 years

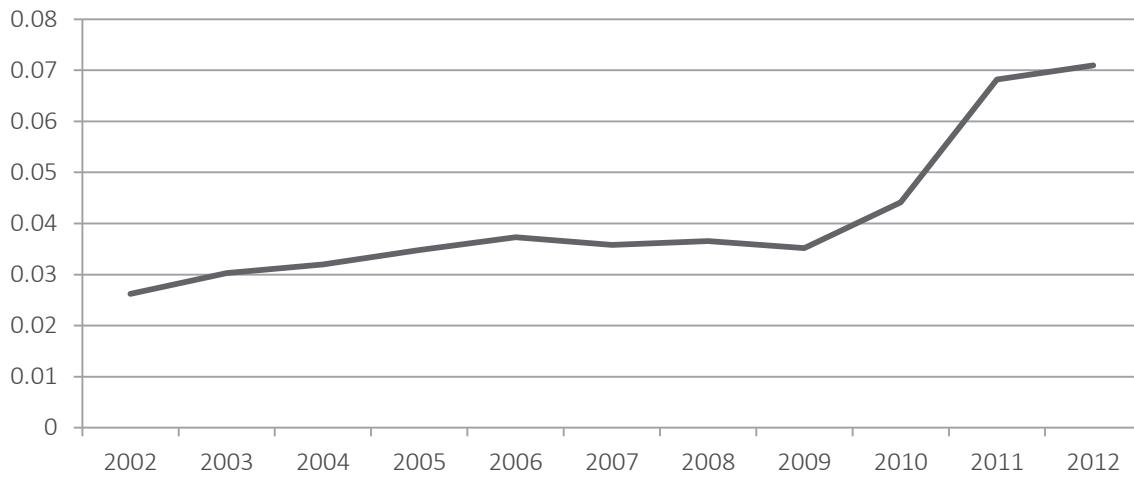


FIGURE 4-11: COMPOSITION OF WASTE AT SLC IN 2012



Source: SLCD, 2012.

FIGURE 4-12: HISTORICAL RECYCLING RATES (POUNDS OF MATERIAL RECYCLED PER PASSENGER) AT SLC



Source: SLCD, 2012.

Education and Promotional Initiatives

The Airport is equipped with water bottle filling stations post security throughout the terminal concourses, which allow passengers to easily refill containers instead of purchasing single-use water bottles. Each unit includes an electronic tracker tallying the number of disposable plastic bottles saved (i.e., each refill tracks one bottle). Although there is no signage directing passengers to these units, the use of graphics on the units themselves promote their use and educate passengers.

Sixty-seven recycling stations post-security are positioned so that they are visible to passengers seated at any gate. Additionally, the bright-colored labels are aesthetically pleasing and attention grabbing. Also within the Airport terminal is a sustainability display that includes a panel (with limited text) on waste management and recycling efforts.



Post-Security Recycling Stations

The post-security passenger areas include individual trashcans as well as recycling stations, which offer plastic recycling, paper recycling and trash disposal. This photo depicts not only the bin labels, but also the shaped slots that influence the types of materials disposed of in each bin.

Airfield Materials Salvaging

Salvaging of construction materials is promoted through designated and labeled areas according to material types (areas for concrete and metals shown below).



Waste Audit

An audit of Airport waste from the passenger and administrative areas was conducted on September 18, 2013 (Appendix F, *Waste Management and Recycling Audit*). This audit was conducted in order to identify the following:

- What percentage of waste is being diverted from landfills through recycling?⁵⁶
- What percentage of the recycling stream comprises non-recyclable items (i.e., placed incorrectly in recycling bins)?
- What percentage of the waste stream includes items that could have been recycled?
- What is the general composition of the materials being discarded?

This audit also assists SLCDCA in meeting FAA requirements for considering waste management and recycling in the master planning process, as set forth in Section 133 of the *FAA Modernization and Reform Act of 2012* and *FAA's Guidance on Airport Recycling, Reuse, and Waste Reduction Plans (2014)*.

Audited waste streams included pre-security trash from blast-resistant bins, post-security trash from individual units, post-security trash from recycling stations, post-security paper recycling, post-security plastic recycling, concessions trash (from food court areas, only), curbside recycling bins in administrative areas, and desk-side trash bins (very limited). Each waste stream was sorted separately and materials were separated according to the following categories:

- Recyclable metal (e.g., aluminum cans and containers, steel)
- All other metal (e.g., electronics)
- Newspaper
- Magazines / catalogs
- Office paper, junk mail, receipts, etc.
- Paper products (e.g., paper towels, napkins, tissues,)
- Other paper (e.g., soft or hard cover books)
- Cardboard (e.g., cardboard boxes, shoe boxes, paper tubes, cereal boxes)
- Recyclable glass bottles and jars
- All other glass (e.g., light bulbs, windows, dishes, ceramics)
- Styrofoam
- Recyclable plastic (#1 through 7)
- All other plastic (e.g., plastic toys)

⁵⁶ Supplemental information from Airport records was used to determine diversion rates.

- Wet Waste (e.g., food scraps, coffee grounds, plate scrapings)
- Batteries
- Toner
- Mixed material (e.g., plastic, bound documents)
- All other



Photo Credit: C&S Companies, 2013.

SLC Waste Audit

On September 18, 2013, SLCDA staff assisted in an audit of passenger and administrative waste and recycling. This effort covered a representative sample of waste collected over 24 hours throughout the Airport.

Below are several key observations/results from this audit.⁵⁷

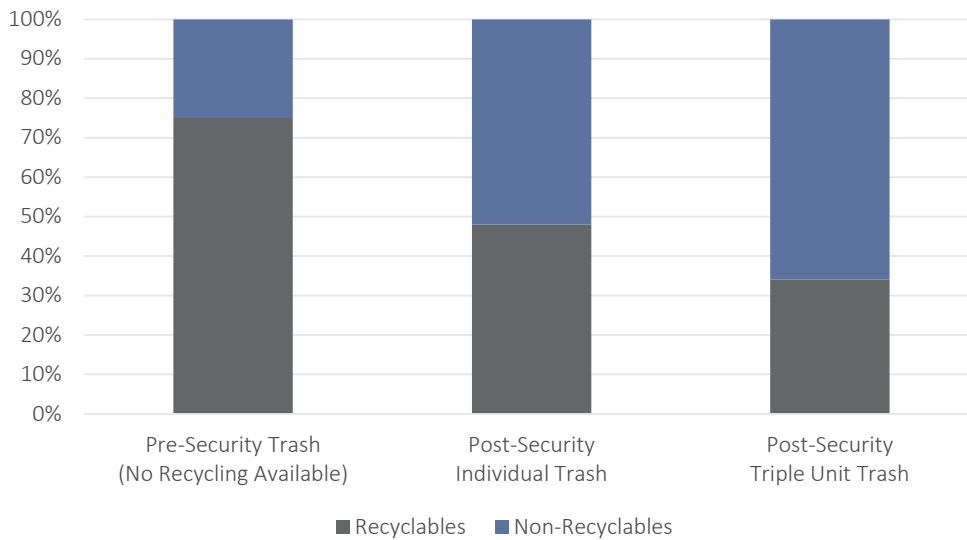
Waste Audit Observations

- *More than 86 percent of materials in paper recycling bins were correctly discarded.*
- *Minimal glass was observed, so there would be little value in implementing Airport-wide glass recycling because of the additional bin needs and potential cost increases. However, this audit did not cover concessionaires' internal operations, which may justify glass recycling because of alcohol bottles, glass food containers, etc.*
- *Non-recyclable items found in recycling bins primarily included hot beverage containers, paper products (e.g., napkins, tissues), and mixed plastic waste.*
- *Trash containers included many recyclable items especially paper (e.g., paper bags, paper scraps), plastic beverage containers (often filled with liquid), metal containers, etc.*
- *Concessions waste (in food courts) had a high amount of recyclables in the trash receptacles because of the lack of recycling containers in that area.*

⁵⁷ The waste audit measured items by weight, and not by volume. Therefore, items that weigh more, such as food waste and plastics, appear as greater percentages of overall waste than lighter items such as paper products and styrofoam. When possible, volumes of each item were noted anecdotally.

Figure 4-13 depicts the impact of placing recycling bins adjacent to trash receptacles as reported in the waste audit. Recycling is not available in the pre-security trash bins, and 75 percent of this waste was recyclable, representing the greatest percentage in any of the audited trash streams. The post-security trash bins are located individually (not collected with recycling bins), and recyclables drop to half of the total materials. The amount of recyclables found in trash bins decreases further in the recycling station trash receptacles, where paper and plastic recycling is available directly adjacent to the trash bins.

FIGURE 4-13: PERCENT OF RECYCLABLE MATERIAL DISCARDED IN PASSENGER-AREA TRASH BINS



Source: Waste Audit at SLC, September 18, 2013.

Table 4-15 details the existing waste management and recycling initiatives that have been implemented by the SLCDCA.

TABLE 4-15: EXISTING WASTE MANAGEMENT AND RECYCLING INITIATIVES

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS ¹)
Terminals		
The SLCDCA has installed 15 water bottle filling stations throughout the Airport	Discourages single-use containers and presents a benefit to passengers. So far, the water bottle filling stations have saved approximately 700,000 plastic bottles since their installation.	N, S
The Maintenance Division began using color-coded plastic liners in trash and recycling bins	Prevents co-mingling thus yielding higher diversion rates, bridges the language barrier for employees, and simplifies the collection process.	O, N, S
The Maintenance Division began using reduced-thickness plastic liners	Reduces material needs and costs.	E, N
The SLCDCA installed recycling stations post-security, which are visible at every gate and consist of paper and plastic recycling, and trash all adjacent to each other	Raises passenger awareness, increases diversion rate by decreasing the effort needed to recycle, and minimizes inaccurate disposal.	O, N, S
The janitorial service (ISS Facility Services) uses repurposed buffing pads as filters in janitorial closet drains	Reduces need (and associated costs) for virgin materials to be used as filters and reduces water quality impacts.	E, N
Concessions		
World Duty Free Group (WDFG)/ HMSHost, McDonald’s, Salt Lake Brewing Co., LLC, and others use the SLCDCA-run cardboard recycling program	Increases diversion rate and provides financial gain for the Airport, which receives rebates for cardboard recycling.	O, N
The majority of concessionaires recycle. Approximately 66% of concessionaires ⁵⁸ recycle at the Airport, though the types and extent of materials recycled range significantly. Approximately 25% of concessionaires reported using the City’s curbside recycling program. HMSHost initiated a glass bottle recycling program, which several other tenants have joined	Increases diversion rate of materials from landfills.	N

Notes: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
Source: SLCDCA; 2012 Southwest Airlines One Report; The Grove, Inc. (TGI), *Green Initiatives*; 2013 Concessionaires Survey Results; and 2013 FBO/Airline Survey Results.

⁵⁸ Based on survey provided to Airport concessionaires as part of the Sustainability Management Plan.

TABLE 4-15: EXISTING WASTE MANAGEMENT AND RECYCLING INITIATIVES (CONT.)

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS1)
Concessions (Cont.)		
Starbucks and Millcreek Coffee Roasters compost coffee grounds	Diverts coffee grounds from landfills, limits new material needs and associated costs, and educates staff on composting.	E, N, S
All concessions are required to install grease traps as specified in their lease agreements and the Airport’s Rules and Regulations and several recycle their waste vegetable oil ⁵⁹	Diverts oil from reaching the storm drain system, which used to occur at the Airport. The grease traps minimize work involved with disposing of this oil.	O, N
The Grove, Inc. (TGI), launched a Green Concessions Action Plan that prohibits the following for consumer packaging: Styrofoam, petroleum-based plastic bags, and petroleum-based plastic consumer containers and utensils	Prevents landfill pollution and space demands associated with these products, and the material needs, energy demands and air quality impacts associated with their manufacturing by replacing them with biodegradable substitutes.	N
TGI’s plan includes a surplus food donation plan for pre-packaged food	Minimizes waste going to landfills (and associated hauling costs) and benefits the community.	E, N, S
Salt Lake City Brewing Co., LLC, converts its fryer oil into fuel for their delivery truck	This closed loop system minimizes waste going to landfills (and associated hauling costs), benefits air quality through use of alternative fuel, and reduces the need for non-renewable fuel (and associated costs).	E, N
Salt Lake City Brewing Co., LLC, provides spent grain from the brewing process to local farmers to feed their livestock	Minimizes waste going to landfills (and associated hauling costs), benefits the community, and decreases the need for virgin materials.	E, N, S
Airfield		
The SLCDCA recycles glycol from de-icing operations at the Airport	Reclaimed Deicing Fluid is sold and the revenue returned to the Airport (since 2007 the SLCDCA has received over \$1.6 million in the sale of glycol to local secondary markets). The new deicing pads make glycol collection efficient and operationally effective. Capturing this glycol prevents stormwater pollution and its recycling prevents use of virgin materials.	E, O, N

Notes: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
 Source: SLCDCA; 2012 Southwest Airlines One Report; The Grove, Inc. (TGI), *Green Initiatives*; 2013 Concessionaires Survey Results; and 2013 FBO/Airline Survey Results.

⁵⁹ Concessionaires previously hauled their grease to the docks, where the open containers would overflow and leak into the storm drains. Lease agreements and the Airport’s Rules and Regulations now require its collection, though neither specify that the waste oil must be recycled.

TABLE 4-15: EXISTING WASTE MANAGEMENT AND RECYCLING INITIATIVES (CONT.)

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS1)
Airfield (Cont.)		
Landscaping waste is typically left in place, reused, or recycled (e.g., mulching) by the SLCDCA	Increases diversion rate, limits the need for virgin materials, and reduces hauling costs. Additionally, leaving grass mowings in place presents an operational benefit by decreasing the amount of effort/time needed to dispose of this material.	E, O, N
Aircraft Maintenance Hangars		
Collection tanks are provided by the SLCDCA for used oil generated during engine maintenance, which is then recycled. Southwest Airlines locally recycles both used oil and oil filters from maintenance activity through the Safety Kleen program	Prevents water quality impacts from release of used oil into the storm drain system; recycling limits the need for virgin materials (and associated costs), increases the diversion rate, and benefits the local economy by use of local programs.	E, N, S
Cargo Hangars		
DHL Express currently recycles paper, plastics, cardboard/paperboard and metals through WM	Increases diversion rate of materials from landfills.	N
UPS privately recycles steel and other metals, as well as used oil, antifreeze, and oil filters (aircraft oil is recycled through Skydrol; antifreeze and other lubricants are recycled through Thermo Fluids)	Increases diversion rate of materials from landfills.	N
Flight Kitchens		
Several airlines collect and recycle paper, plastic, aluminum, and/or magazines	Increases diversion rate and limits the need for virgin materials.	N
Southwest Airlines promotes recycling to employees and customers through education	Increases diversion rate and limits the need for virgin materials. Educating customers and employees encourages them to recycle both at home and while traveling/working.	N, S
Southwest Airlines uses recycled-content paper as part of its corporate policy	Reduces the need for virgin materials.	N

Notes: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
Source: SLCDCA; 2012 Southwest Airlines One Report; The Grove, Inc. (TGI), *Green Initiatives*; 2013 Concessionaires Survey Results; and 2013 FBO/Airline Survey Results.

TABLE 4-15: EXISTING WASTE MANAGEMENT AND RECYCLING INITIATIVES (CONT.)

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS1)
Offices		
The SLCDCA is implementing new software to track TRP finances; all billings will be submitted online	Reduces paper needs (and associated costs), increases efficiency of tracking finances, and simplifies process for employees.	E, O, N, S
Recycling bins provided in office areas	Increases diversion rate and limits the need for virgin materials.	N, S
Construction Projects (airfield and buildings)		
Contractors are encouraged to recycle construction materials locally. The Airport reuses concrete, asphalt and fill from construction projects when possible	Diverts material from landfills; reduces air emissions and costs from the transportation of this material to off-site disposal facilities; reduces the need for virgin materials on future construction projects, which also reduces future costs; and increases efficiency of construction projects. It is estimated that diversion of construction materials from landfills has saved an estimated \$55,000,000 since 2002.	E, O, N
Construction contractors routinely install on-site concrete crushing facilities for airfield construction materials		
Airfield asphalt millings are repurposed by the SLCDCA as infill between taxiways and runways for wildlife management. Millings are also used for road building to provide an adequate surface for driving and to control fugitive dust	Reduces the potential for wildlife hazards, increasing operational safety. Reduces air emissions, energy needs, and costs associated with transporting the materials off-site. Reduces costs by avoiding purchasing of new materials for this infill. Minimizes maintenance needs associated with mowing.	E, O, N, S
As of 2006, all construction/major renovations of City buildings more than 10,000 square feet must be built to Leadership in Energy and Environmental Design (LEED) Silver standards. LEED for New Construction and Major Renovations includes a credit for construction waste management that involves development of a construction waste management plan and diversion (through recycling or salvaging) of at least 50% (one point) or 75% (two points) of materials	Diverts material from landfills; reduces air emissions and costs from the transportation of material; potentially reduces the need for virgin materials on future construction projects, which also reduces future costs; and increases efficiency of construction projects if material can be reused on-site.	E, O, N

Notes: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
 Source: SLCDCA; 2012 Southwest Airlines One Report; The Grove, Inc. (TGI), *Green Initiatives*; 2013 Concessionaires Survey Results; and 2013 FBO/Airline Survey Results.

TABLE 4-15: EXISTING WASTE MANAGEMENT AND RECYCLING INITIATIVES (CONT.)

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS1)
Airport-Wide		
The SLCDCA recycles batteries, fluorescent bulbs, tires, pallets, steel, glycol, etc.	Reduces the need for virgin materials, increases the diversion rate, prevents pollution, and provides a benefit to employees by simplifying their disposal process. Additionally, the SLCDCA may receive revenue from the sale of some materials.	E, O, N, S
The SLCDCA repurposes and/or relocates equipment whenever possible (asset management)	Reduces the need for virgin materials (new equipment), saves costs, and prevents unnecessary waste.	E, N
Mowings are left in place by the SLCDCA to biodegrade back into the ground	Prevents unnecessary waste (and associated costs of hauling), helps maintain a soil moisture, and simplifies the landscaping process.	E, O, N
Cardboard compactors are used by the SLCDCA and many tenants	Increases the diversion rate and minimizes the need for virgin materials. Reduces the number of pick-ups necessary, decreasing costs, air emissions from vehicles, and the demand for fuel. Finally, the Airport has received more than \$131,000 in cardboard recycling rebates since 2003.	E, O, N

Notes: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
 Source: SLCDCA; 2012 Southwest Airlines One Report; The Grove, Inc. (TGI), *Green Initiatives*; 2013 Concessionaires Survey Results; and 2013 FBO/Airline Survey Results.

Energy Evaluation

Because of the type and scale of operations at the facility, SLC is a significant consumer of energy. The primary component of this energy consumption is fossil fuels, the combustion of which

contributes to air pollution and GHGs. In addition to the environmental detriments, energy consumption and demand represents a substantial cost to SLCDCA and its tenants.



Glycol Plant at SLC

To avoid duplicating efforts with the TRP, the study area for this assessment focuses on non-TRP cost centers.⁶⁰ The select cost centers included in this analysis are Airfield, Burn Pit, Glycol, Greenhouse, and North Support shown previously in Figure 3-5. Each of the sites within these cost centers is equipped with electric and natural gas meters, with no sub-meters. Rocky Mountain Power (RMP) provides electricity to the Airport, while Questar (distributor and supplier) and BP (supplier) provide natural gas. Table 4-16 depicts the select cost centers as well as the sites within these cost centers and their respective utilities.

In certain instances, RMP charges the Airport for demand based on its peak usage. The Airport has ten meters that are subject to time-of-use charges (Rate Schedule 6A).⁶¹ All but one of these meters are located at the Airfield, and are predominantly associated with the airfield lighting vaults and stormwater pump stations. The remaining time-of-day metering equipment is located at the glycol treatment facility. Table 4-17 denotes the rate schedules and applicable charges of the select cost centers at the Airport.

TABLE 4-16: SELECT SLC COST CENTERS AND UTILITIES

COST CENTER	SITES WITHIN COST CENTER	UTILITY
101: Airfield	Airfield Lighting Vaults	Electric
	Fire Station 12	Electric, Natural Gas
	Pump Stations Stormwater	Electric
	Airfield Operations Building CB2	Electric, Natural Gas
	Fire Station 11 (East)	Electric, Natural Gas
	West Airfield Pump House	Electric
	Airplane De-icing Facilities	Electric
	Lift Stations	Electric
	Incinerator	Natural Gas
	East Side Oil Separator	Electric
	Noise Monitoring (4)	Electric
130: Burn Pit	ARFF Training Facility	Electric
150: Glycol	Glycol Treatment Facility	Electric, Natural Gas
702: Greenhouse	Greenhouse	Electric, Natural Gas

Source: SLCDA, 2013.

⁶⁰ Cost centers are sections of the Airport to which energy and water costs are charged for accounting purposes.

⁶¹ RMP. 2013. *Electric Service Schedule No. 6A*.
https://www.rockymountainpower.net/content/dam/rocky_mountain_power/doc/About_Us/Rates_and_Regulation/Utah/Approved_Tariffs/Rate_Schedules/General_Service_Energy_Time_of_Day_Option.pdf. Accessed April 15, 2014.



TABLE 4-16: SELECT SLC COST CENTERS AND UTILITIES (CONT.)

COST CENTER	SITES WITHIN COST CENTER	UTILITY
811: North Support	Warehouse, Shops, Roads, and Grounds	Electric, Natural Gas
	PM Facility	Electric, Natural Gas
	Airport Facilities Maintenance Cold Storage	Natural Gas
	Technical Support Building North Temple	Electric, Natural Gas
	Airfield Maintenance Building	Electric, Natural Gas
	Radio Communications Building, NS12	Electric
	PM Facility Cold Storage	Natural Gas
	Warm Storage (6 Bays)	Natural Gas
	Warm Storage (7 Bays)	Natural Gas
	Sewer Lift Station @ 1200	Electric

Source: SLCDA, 2013.

TABLE 4-17: RATE SCHEDULES AT THE SELECT COST CENTERS

COST CENTER	RATE SCHEDULE ¹	\$ PER KWH	PEAK HOUR CHARGES	
			\$ per on-peak kWh	\$ per off-peak kWh
101: Airfield	23	0.107	NA	NA
	6	0.035	NA	NA
	6A	NA	0.098	0.03
130: Burn Pit	6	0.035	NA	NA
150: Glycol	23	0.107	NA	NA
	6	0.035	NA	NA
	6A	NA	0.098	0.03
702: Greenhouse	23	0.107	NA	NA
811: North Support	23	0.107	NA	NA
	6	0.035	NA	NA

Note: NA = Not Applicable

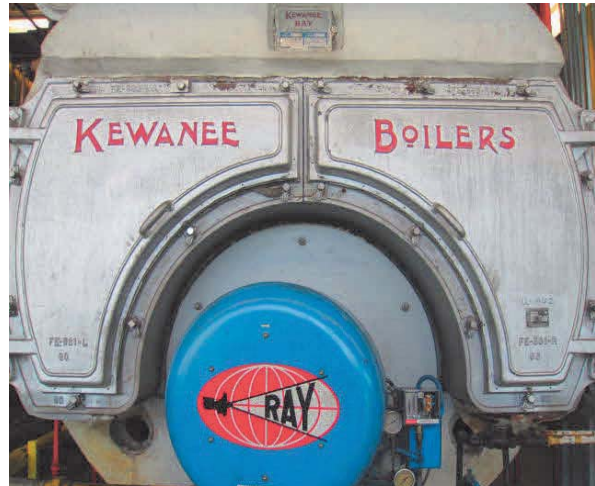
1- (a) [Rate Schedule 23](#) is Distribution Voltage – Small Customer

(b) [Rate Schedule 6](#) is General Service – Distribution Voltage

(c) [Rate Schedule 6A](#) is General Service – Energy Time-of-Day Option

Source: SLCDA, 2013.

None of the electricity that SLCDCA currently consumes derives directly from renewable sources (e.g., solar, wind). RMP does offer its customers the option of purchasing renewable energy in 100 kilowatt-hour (kWh) increments through the Blue Sky renewable energy program. In turn, RMP purchases renewable energy certificates on the customer's behalf. Since 2000, the Blue Sky renewable energy program has supported more than 156 community-based renewable energy projects - all wind generation facilities - in Wyoming, Utah, Idaho, Washington, Oregon, Montana, and Colorado.⁶²



Boiler at SLC

Energy Use

Boilers and chillers located in the boiler plant currently provide the sources of heating and cooling for the heating, ventilation, and air conditioning (HVAC) systems in the terminal buildings, and represent the largest energy end-use at the Airport. As part of the TRP, however, a new central-utility plant (CUP) will replace the boiler plant and service the new terminal complex. The decommissioning of the boiler plant and construction of the CUP and subsequent new equipment will produce significant energy savings for SLCDCA.

In 2012, SLCDCA used approximately 187,500 MMBTU (one million British thermal units) (55 million kWh) of electricity and 113,400 MMBTU, 1.1 million CCF (one hundred cubic feet) of natural gas at the Airport. Compared to 2011, this represents an increase of 3.6 percent in electricity consumption and a decrease of 16.9 percent in natural gas consumption. However, as shown in Figures 4-14 and 4-15, use of electricity and natural gas at the Airport has fluctuated since 2006.

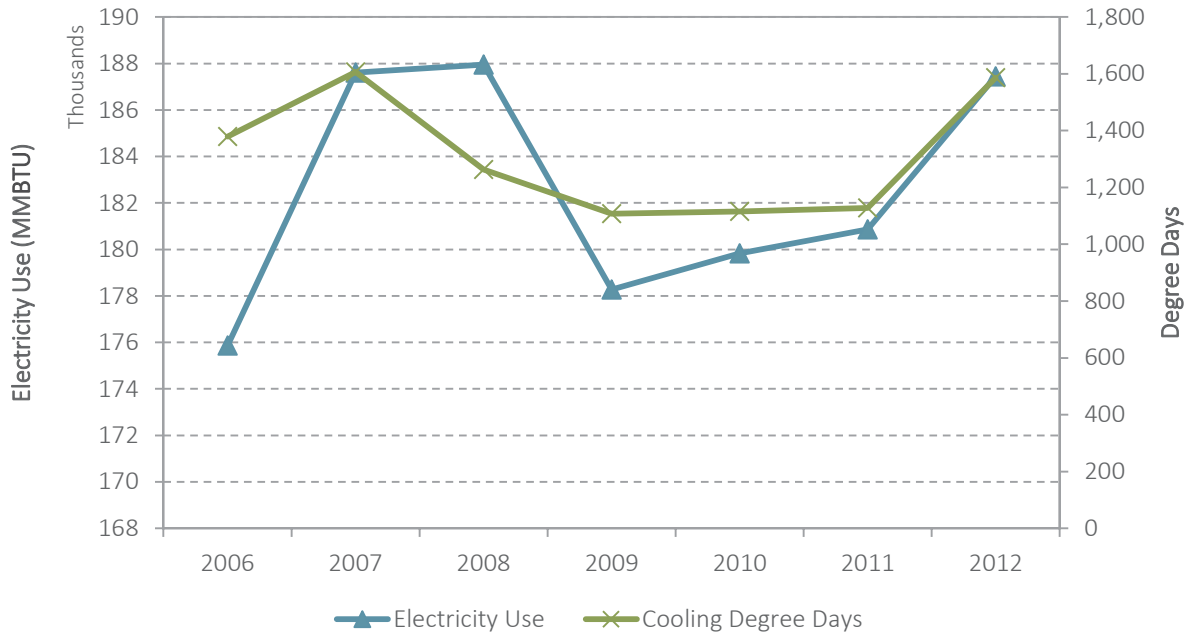
Fluctuations in electricity and natural gas consumption are relatively consistent with annual changes in local cooling degree-day (CDD) and heating degree-day (HDD) counts, respectively. Exceptions to this correlation exists between 2007 and 2008, when an increase in electricity consumption was accompanied by a decrease in CDD, and between 2009 and 2010, when an increase in natural gas consumption was accompanied by a decrease in HDD. The increase in electricity consumption between 2007 and 2008 is at least partially attributable to the ramp up of the explosive detection system in Terminal 2, while the increase in natural gas consumption between 2009 and 2010 is largely attributable to the construction of vestibules (passenger holding points) at Concourse E for Delta Air Lines.⁶³

⁶² RMP. 2013. *Renewable Energy Facilities Blue Sky Supports*. <https://www.rockymountainpower.net/env/bsre/bses.html>. Accessed January 17, 2014.

⁶³ Staples, Kevin. (2014, April 8). Telephone Interview.

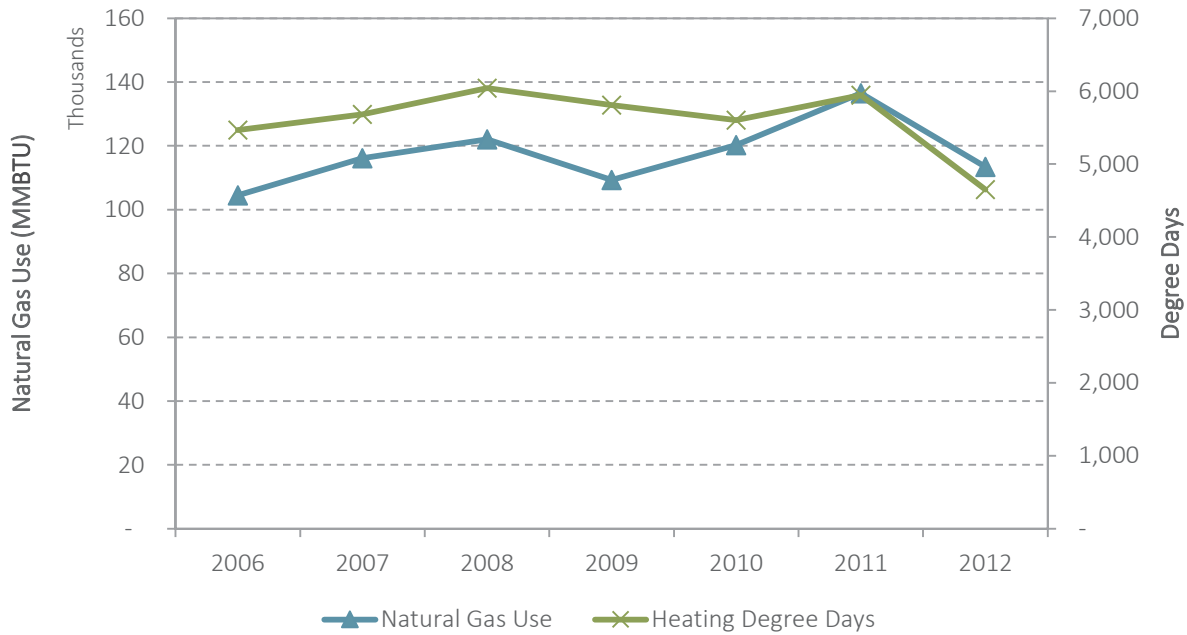


FIGURE 4-14: AIRPORT-WIDE ELECTRICITY USE AND COOLING DEGREE DAYS (2006 – 2012)



Source: SLCD; Salt Lake City NWSFO, Utah. 2013. *Monthly Total Cooling Degree Days*. <http://www.wrcc.dri.edu/cgi-bin/cliMONtcdd.pl?ut7598>. Accessed April 1, 2014.

FIGURE 4-15: AIRPORT-WIDE NATURAL GAS USE AND HEATING DEGREE DAYS (2006 – 2012)



Source: SLCD; Salt Lake City NWSFO, Utah. 2013. *Monthly Total Heating Degree Days*. <http://www.wrcc.dri.edu/cgi-bin/cliMONthdd.pl?ut7598>. Accessed April 1, 2014.

In conjunction with the overall increase in total energy use, total utility costs (electricity and natural gas) at the Airport have also risen in recent years (Table 4-18). Between 2006 and 2012, total utility costs climbed 24.5 percent, including a 46.0 percent increase in electricity costs and a 37.9 percent decrease in natural gas costs. The significant cost reduction for natural gas during this period, despite an overall increase in use, is the result of price fluctuations. Between 2005 and 2006, high natural gas prices increased further in the aftermath of Hurricanes Katrina and Rita, which disrupted the production and delivery of natural gas in the Gulf of Mexico.⁶⁴ Post-2006 decreases in natural gas costs incurred at the Airport reflect, to some extent, price normalization.

TABLE 4-18: HISTORICAL AIRPORT-WIDE UTILITY COSTS (2006 – 2012)

YEAR	ELECTRICITY	PERCENT OF TOTAL	NATURAL GAS	PERCENT OF TOTAL
2006	\$2,947,283.90	74.3	\$1,018,600.62	25.7
2007	\$3,413,921.30	78.8	\$919,859.29	21.2
2008	\$3,418,893.60	80.0	\$853,326.49	20.0
2009	\$3,474,558.90	79.5	\$895,891.73	20.5
2010	\$3,632,129.00	80.9	\$857,989.90	19.1
2011	\$3,909,578.50	81.1	\$913,054.72	18.9
2012	\$4,304,400.35	87.2	\$632,364.33	12.8

Source: SLCDA, 2013.

Between 2006 and 2012, SLCDA paid an annual average of \$0.07 per kWh (\$0.02 per kBTU) for electricity and \$0.75 per therm (\$0.01 kBTU) for natural gas. As shown in Table 4-18, electricity has constituted an increasing majority of the Airport’s utility costs since 2006. In 2012, electricity accounted for 87.2 percent of total utility costs, while natural gas accounted for 12.8 percent.

The Airport is located within the Western Electricity Coordinating Council Northwest eGRID sub-region, which had a 2010 total output emission rate of 846.97 lbs. CO₂e/MWh.⁶⁵ Commercial Sector emission factors for natural gas are:

- 66.83 kg CO₂ per MMBTU;
- 0.005 kg CH₄ per MMBTU; and
- 0.0001 kg N₂O per MMBTU.⁶⁶

⁶⁴ MGE Energy. 2006. *Understanding Natural Gas Prices*. <http://www.mge.com/images/PDF/Brochures/Residential/UnderstandingGasPrices.pdf>. Accessed January 21, 2014.

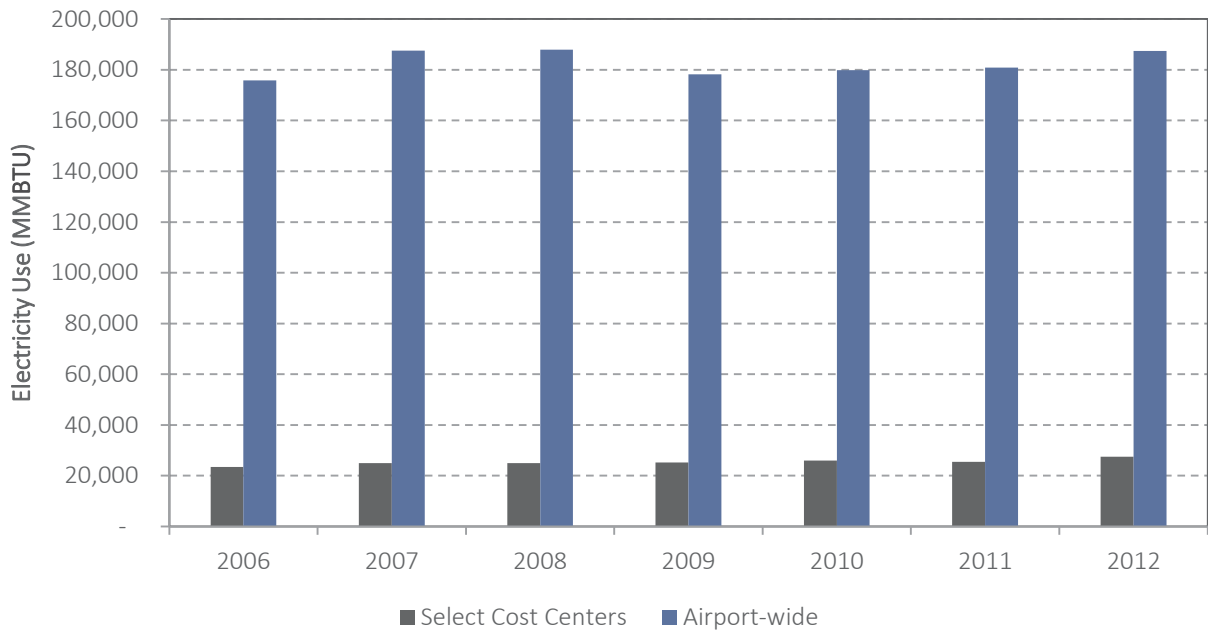
⁶⁵ Environmental Protection Agency. 2014. *eGrid 9th Edition Version 1.0; Year 2010 Summary Tables*. http://www.epa.gov/cleanenergy/documents/egridzips/eGRID_9th_edition_V1-0_year_2010_Summary_Tables.pdf. February 2014. Accessed April 17, 2014.

⁶⁶ The Climate Registry. 2010. *Local Government Operations Protocol*. <http://www.theclimateregistry.org/downloads/2010/05/2010-05-06-LGO-1.1.pdf>. Accessed April 17, 2014.

Summary of Energy Usage for Select Cost Centers

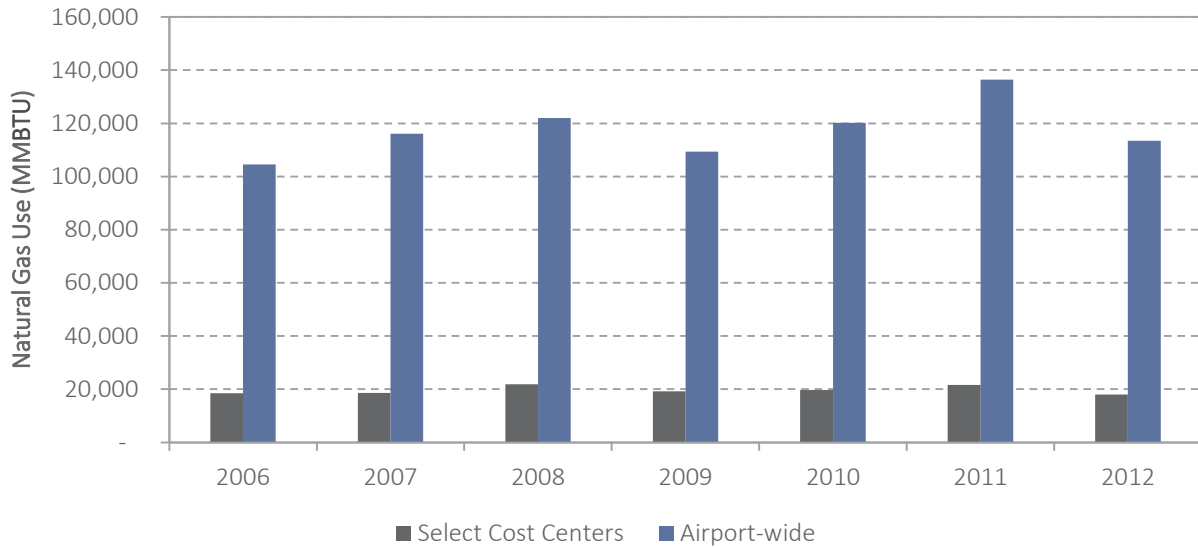
Similar to the Airport as a whole, total energy use for the select cost centers (i.e., Airfield Burn Pit, Glycol, Greenhouse, and North Support) has increased since 2006 (Figures 4-16 and 4-17). Between 2006 and 2012, total energy consumption at the select cost centers increased 8.4 percent; electricity consumption increased 17.1 percent, while natural gas consumption decreased 2.5 percent. In 2012, the select cost centers collectively accounted for approximately 15.1 percent of the total energy consumed at the Airport (Table 4-19).

FIGURE 4-16: TOTAL ELECTRICITY USE (MMBTU) FOR THE AIRPORT AND THE SELECT COST CENTERS (2006 - 2012)



Source: SLCD, 2013.

FIGURE 4-17: TOTAL NATURAL GAS USE (MMBTU) FOR THE AIRPORT AND THE SELECT COST CENTERS (2006 - 2012)



Source: SLCDA, 2013.

TABLE 4-19: TOTAL MMBTU FOR THE SELECT COST CENTERS (2006 – 2012)

YEAR	ELECTRICITY (MMBTU) (Percent of Airport-wide Total)	NATURAL GAS (MMBTU) (Percent of Airport-wide Total)	TOTAL (MMBTU) (Percent of Airport-wide Total)	YEAR-TO-YEAR CHANGE (Percent)
2006	23,418.9 (13.3)	18,518.5 (17.7)	41,937.4 (15.0)	--
2007	24,996.5 (13.3)	18,585.6 (16.0)	43,582.1 (14.3)	3.9
2008	24,983.9 (13.3)	21,804.9 (17.9)	46,788.8 (15.1)	7.4
2009	25,248.5 (14.2)	19,178.8 (17.5)	44,427.3 (15.4)	-5.0
2010	25,929.5 (14.4)	19,634.1 (16.3)	45,563.6 (15.2)	2.6
2011	25,454.5 (14.1)	21,614.1 (15.8)	47,068.6 (14.8)	3.3
2012	27,430.0 (14.6)	18,049.5 (15.9)	45,479.5 (15.1)	-3.4

Note: Cost Centers include Airfield (101), Burn Pit (130), Glycol (150), Greenhouse (702), and North Support (811)

Source: SLCDA, 2013.

Table 4-20, depicts annual electricity costs for the select cost centers between 2006 and 2012. Between 2011 and 2012, SLCDCA managed to decrease overall energy consumption at the select cost centers by 3.4 percent. This is likely due, at least in part, to energy efficiency improvements implemented at these facilities. A later section of this chapter entitled “Current Sustainability Initiatives” details some of these improvements.

TABLE 4-20: ANNUAL ELECTRICITY COST (USE AND DEMAND) FOR THE SELECT COST CENTERS (2006 – 2012)

	2006	2007	2008	2009	2010	2011	2012
Airfield							
Use	\$255,902	\$287,759	\$303,480	\$310,055	\$346,921	\$357,447	\$387,979
Demand	\$86,825	\$99,789	\$94,651	\$94,619	\$108,975	\$104,207	\$111,326
Burn Pit							
Use	\$11,156	\$12,965	\$13,398	\$16,630	\$16,420	\$16,861	\$17,213
Demand	\$6,257	\$7,913	\$8,283	\$10,301	\$9,987	\$10,197	\$10,764
Glycol							
Use	\$97,401	\$98,961	\$98,090	\$126,631	\$136,947	\$106,475	\$183,995
Demand	\$55,274	\$52,576	\$47,912	\$66,719	\$75,417	\$51,034	\$102,699
Greenhouse							
Use	\$55	\$83	\$86	\$87	\$100	\$116	\$126
Demand	-	-	-	-	-	-	-
North Support							
Use	\$128,133	\$142,223	\$144,189	\$149,254	\$150,937	\$165,696	\$164,593
Demand	\$55,551	\$61,390	\$62,672	\$64,364	\$65,428	\$69,319	\$72,475
Total							
Use	\$492,647	\$541,991	\$559,243	\$602,657	\$651,325	\$646,595	\$753,906
Demand	\$203,907	\$221,668	\$213,518	\$236,003	\$259,807	\$234,757	\$297,264

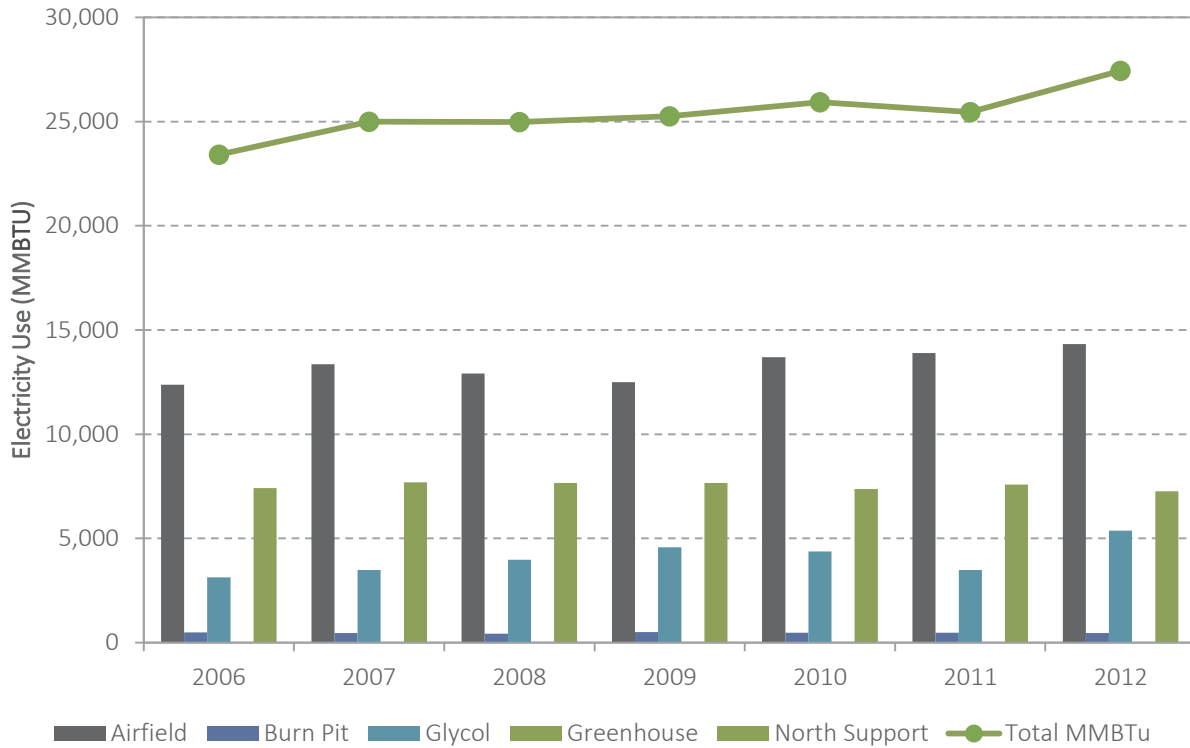
Source: SLCDCA, 2013.

In 2012, total electricity **use** attributable to the select cost centers was greater than 27,400 MMBTU (8.0 million kWh). This represents increases of 17.1 percent from 2006 and 7.8 percent from 2011. Typical uses of electricity at the sites within the select cost centers include HVAC and lighting as well as process loads of the sites listed in Table 4-16. Among the select cost centers, the Airfield cost center consumed the most electricity (52.2 percent) followed by North Support (26.5 percent). Electricity use at the Glycol cost center increased noticeably between 2011 and 2012 (54.0 percent). This upsurge is attributable to the installation of several high-energy turbo-fans for glycol processing.⁶⁷

⁶⁷ Staples, Kevin. (2014, January 28). Telephone Interview.

Figure 4-18 depicts electricity use by cost center compared to the total electricity used at the select cost centers between 2006 and 2012.

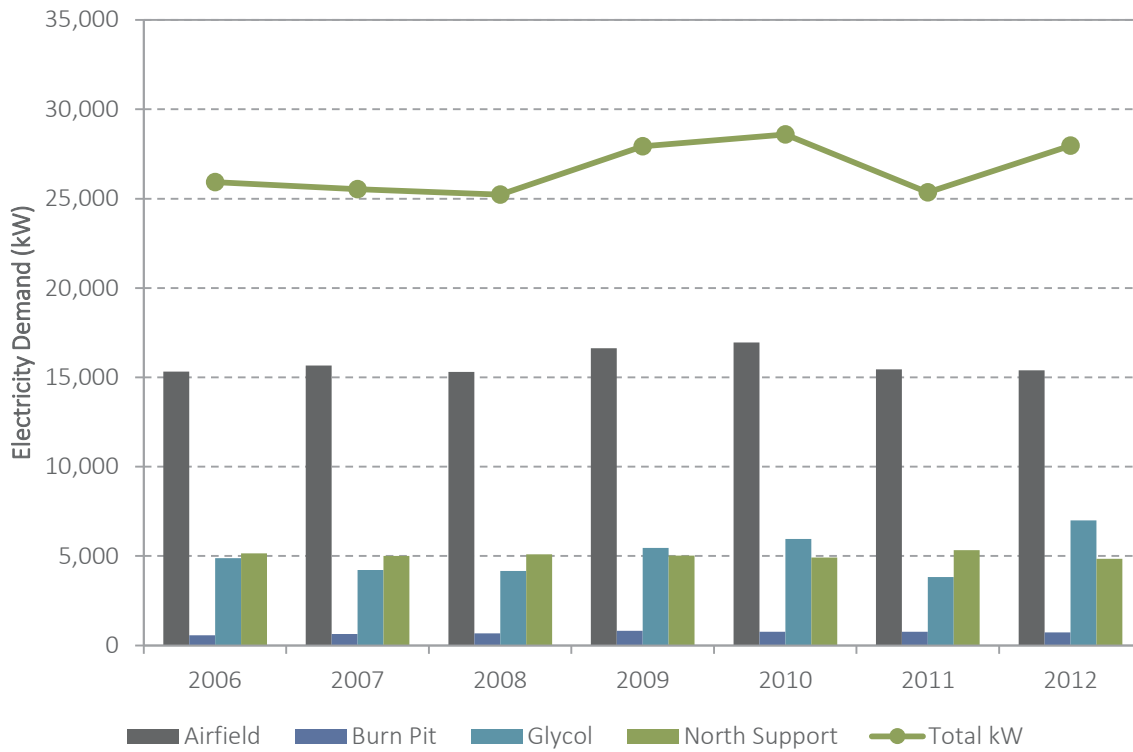
FIGURE 4-18: ELECTRICITY USE (MMBTU) FOR THE SELECT COST CENTERS (2006 - 2012)



Source: SLCDA, 2013.

In 2012, total electricity **demand** among all of the select cost centers was greater than 186,000 kW. This represents increases of 7.9 percent from 2006 and 10.3 percent from 2011. Among the select cost centers, the Airfield cost center registered the highest demand (55.1 percent) followed by Glycol (25.0 percent). The green house facility cost center does not use enough electricity to register a demand. Figure 4-19 depicts electricity demand by cost center compared to the total demand at the select cost centers between 2006 and 2012.

FIGURE 4-19: ELECTRICITY DEMAND (kW) FOR THE SELECT COST CENTERS (2006 - 2012)



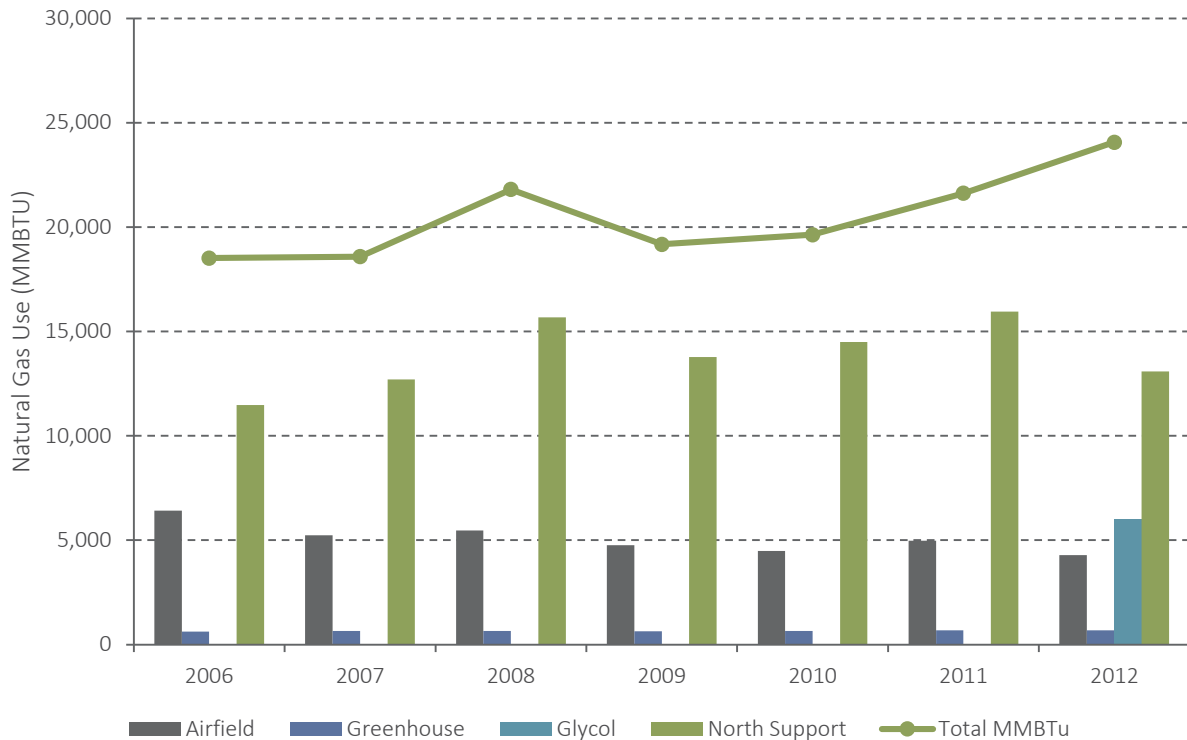
Note: Electricity demand for the Greenhouse facility cost center not available
 Source: SLCDA, 2013.

In 2012, total electricity costs among the select cost centers were approximately \$753,900 for consumption and \$297,300 for demand. This equates to increases of 16.6 percent for consumption and 26.6 percent for demand since 2011, and the largest year-over-year increase since 2006.

For the Airfield, Greenhouse facility, Glycol, and North Support cost centers combined natural gas use in 2012 was greater than 24,000 MMBTU (approximately 233,000 CCF). Of this total, North Support consumed 54.3 percent, Glycol consumed 25.0 percent, Airfield consumed 17.8 percent, and Greenhouse consumed the remaining 2.9 percent. HVAC represents the largest use of natural gas at these locations; the incinerator at the Airfield uses natural gas as a supplemental fuel.

Figure 4-20 depicts annual natural gas use for the Airfield, Greenhouse facility, Glycol, and North Support cost centers between 2006 and 2012. The Burn Pit cost center does not use natural gas.

FIGURE 4-20: NATURAL GAS USE (MMBTU) FOR THE SELECT COST CENTERS (2006 - 2012)



Notes: 1 - The Burn Pit does not consume natural gas.
 2 – Prior to 2012, the Environmental Quality Company (EQ), a subcontractor to SLCD, operated the glycol treatment facility. SLCD took over operations of this facility once its contract with EQ expired.
 Source: SLCD, 2013.

Energy Assessments and Audits

In recent years, the SLCD has commissioned various Airport facilities energy evaluations. This includes an assessment by Siemens Building Technologies in 2008 and an audit sponsored by RMP in 2009.

Preliminary Feasibility Assessment

In 2008, Siemens Building Technologies completed a walk-through of several SLCD facilities as part of the *Preliminary Energy Feasibility Assessment*. The purpose of the assessment was to “identify the feasibility of potential facility improvement measures (FIMS) funded partially or fully by energy and operational cost savings.”⁶⁸ The facilities included in this report were:

⁶⁸ Siemens Building Technologies. 2008. Preliminary Energy Feasibility Assessment, Revision 1: Salt Lake City International Airport. October 15, 2008. Report.

- North Support Maintenance Buildings
- New Parking Administration (including pay booths)
- Fire Station 12
- Fire Station 11
- ARFF Training Center
- Police Training Center
- Shuttle Building
- South Airfield Lighting Vault
- North Airfield Lighting Vault
- Glycol Recycle Building (main floor and mezzanine)
- Taxi Starter Building
- NS12 Radio/Fiber Hub Building
- South Runway Deice Chemical Storage
- T Hangars 15, 21, and 28
- Shade Hangars 11 and 12
- Fuel Island Canopy

Among the recommendations, the only measure that SLCDCA implemented was the replacement of T12 (tubular shaped bulb that is 1.5 inches in diameter) fluorescent lighting, an old lamp that is being phased out, with T8 (tubular shaped bulb that is 1 inch in diameter) fluorescent lighting, that is newer and more energy efficient.⁶⁹ The *Preliminary Energy Feasibility Assessment* included the overarching recommendation for a comprehensive investment grade audit to explore the recommended FIMS in detail.

Rocky Mountain Power (RMP) Recommissioning Program – Verification Activities

In 2009, the Airport underwent verification activities related to three implementation measures performed on the mechanical and electrical systems in Terminal One and Concourses A and B (Phase 1)⁷⁰ as well as Terminal Two, Concourse C, and Car Rental (Phase 2).⁷¹ The implementation measures and subsequent verification activities were part of the RMP Recommissioning Program. The objective of the RMP Recommissioning Program is to “identify low cost and no cost opportunities to improve the efficiency of major mechanical and electrical systems, and reduce energy costs without adversely affecting facility comfort or system operations.”⁷² Table 4-21 provides the reported annual energy and cost savings by implementation measure. The implementation measures had an average simple payback of less than one year.

⁶⁹ Clayson, Eddie. (2014, April 22). Telephone Interview.

⁷⁰ Nexant, Inc. and Engineering Economics, Inc. 2009. *Verification Report, Salt Lake City International Airport – Phase 1*. RMP. July 20, 2009. Report.

⁷¹ Nexant, Inc. and Engineering Economics, Inc. 2009. *Verification Report, Salt Lake City International Airport – Phase 2*. RMP. July 20, 2009. Report.

⁷² *Ibid.*

TABLE 4-21: VERIFICATION REPORT SAVINGS SUMMARY (2009)

	ANNUAL ELECTRIC ENERGY SAVINGS (kWh/year)		ANNUAL ELECTRIC ENERGY COST SAVINGS (\$/year)	
	Phase 1	Phase 2	Phase 1	Phase 2
Reduced Supply Air Temperature	172,201	141,151	2,505	8,312
Static Pressure Reset	144,565	142,363	911	4,957
Air Handling Unit Scheduling	73,877	130,111	6,553	3,511
Total	390,643	413,626	9,968	16,780

Source: Nexant, Inc. and Engineering Economics, Inc. 2009.

Further detailed descriptions regarding the BAS and energy conservation program may be found in Appendix G, *Energy Evaluation*.

Table 4-22 summarizes the existing energy initiatives at the Airport, implemented by SLCD, by sustainability benefit and EONS applicability.

TABLE 4-22: EXISTING ENERGY INITIATIVES AT SLC

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS ¹)
Reduced Supply Air Temperature	This adjusted supply air temperature based on outside air temperature to achieve energy/cost savings.	E, O, N
Static Pressure Reset	This adjusted static pressure setpoints based on outside air temperature to achieve energy/cost savings.	E, O, N
Air Handling Unit Scheduling	This aligned AHU scheduling to reflect unoccupied periods to achieve energy/cost savings.	E, O, N
BAS	This computerized system promotes operational efficiencies and increases energy savings/reduces energy costs.	E, O, N
Energy Conservation Program	This reduced energy use and costs. It included corporate-wide integration of conservation principles and practices, and maintenance of high customer service standards.	E, O, N, S
Lighting retrofits and use of Light-emitting diode (LEDs)	Various LED installations throughout SLC will result in cost savings and a return on investment through reduced energy consumption and maintenance.	E, O, N
New facility buildings designed, constructed, and operated to LEED certification standards	This reduced energy use and costs, enhanced occupant health, and increased employee productivity.	E, O, N, S

Note: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
Source: SLCD; Compiled by VHB, 2014.

TABLE 4-22: EXISTING ENERGY INITIATIVES AT SLC (CONT.)

INITIATIVE	SUSTAINABILITY BENEFIT(S)	APPLICABLE SUSTAINABILITY CATEGORIES (EONS ¹)
Chiller Variable Speed Drives	This retrofit reduced chiller energy consumption and provided savings of \$60,400 in one summer season.	E, O, N
Parking Structure Chiller Replacement	SLCDA replaced an existing chiller model with a more efficient version to provide long-term cost savings.	E, O, N
Annual investigation and research on potential energy conservation opportunities	This reduced energy use and costs and displayed commitment to sustainability.	E, O, N
Environmental Management Procedures	This reduced energy use and costs and provided integration of conservation principles and practices into management activities.	E, O, N
Utility Bill Auditing	This ensures SLCDA is not overcharged for its utility usage and offers options for better utility rates, as available, to realize cost savings.	E, O
Energy Management Plan	The SLCDA is one of the first City divisions to conduct an Energy Management Plan under an Executive Order from the Mayor. This plan will develop a tool to conduct economic analyses to support goal setting and strategy prioritization for the Airport.	E, O, N, S

Note: 1- EONS = Economic viability (E), Operational efficiency (O), Natural resource conservation (N), and Social responsibility (S)
Source: SLCDA; Compiled by VHB, 2014.

Beyond the improvements implemented by SLCDA, the Airport’s tenants have implemented the following initiatives:

- Squatter’s Brew Pub uses off-site WindStar electrical power exclusively, maintaining its corporate commitment to only using electrical power generated by wind turbines located in Wyoming.
- The baggage system used by SkyWest Airlines is shut down at night and in between flight banks to minimize power consumption; and

Squatters Pub Brewery’s Sustainability Philosophy

Squatters Pub Brewery operates under a triple bottom line philosophy, which includes people, planet, and profit. Practices associated with this approach include:

- *Recycling fry oils and using them as biodiesel for company vehicles*
- *Using biodegradable post-consumer packaging and tableware*
- *Installing waterless urinals*
- *Administering its own glass recycling program*
- *Purchasing renewable energy credits from Rocky Mountain Power Blue Sky*
- *Supporting TapIt™, a water bottle refilling network*

- Delta Air lines has an Environmental Management System tailored to the Airport, including its ground service equipment shop, line maintenance, and customer service.
- Boeing’s Salt Lake Facility recently received a LEED Silver certification for their 35,000 square foot painting facility. The building installed 3,600 rooftop solar tubes that help heat water for the paint curing process. The Salt Lake facility is one of Boeing’s six zero-solid-waste-to-landfill sites.

Tenant Sustainability

Like many commercial service airports, the Airport has tenants that include airlines, concessionaires (restaurants and shops), FBOs, and the military. Major tenants at the Airport responded to a survey on sustainability practices sent from SLCDCA to indicate what sustainability initiatives they were implementing or planning to implement at SLC. The purpose of the survey was to solicit general sustainability-related information relating to:

- Existing sustainability policies;
- Existing and/or planned sustainability initiatives; and
- Suggestions for enhancement of sustainability initiatives at SLC.

Twenty-six tenants responded to the survey, including 12 airlines and FBOs and 14 concessionaires. The results of the survey indicated the following:

- Less than half of respondents have a formalized sustainability program
- Most tenant respondents recycle to some degree; please refer to the Waste Management section for additional information. Commonly recycled materials include:
 - Paper and cardboard
 - Aluminum cans
 - Plastic and glass bottles
 - Batteries
 - Lighting products



Squatters Pub Brewery at SLC

- Six airlines are implementing air quality or GHG emission reduction initiatives at SLC that include:
 - Promoting single-engine aircraft taxiing
 - Connecting to gate electrification/PCA
 - Converting GSE to electric or alternative fuel
 - GSE idling policies
 - Optimal thrust for take-offs
- Use of green cleaning products
- Purchasing recycled paper
- Alternative waste management strategies, such as:
 - Use of fryer oil to fuel fleet vehicles
 - Recycling spent grain for use by local farmers
- Buying employees TRAX passes
- Use of energy efficient lighting

When asked how SLCDCA could support tenant initiatives, the following responses were provided:

- Provide assistance with glass recycling, waterless urinals, a composting program for coffee grinds and clean green waste, and a newspaper re-purpose program for travelers
- Communicate what sustainability activities are available, who the direct contact is, and what type of compliance timeline is being enforced
- Launch programs that would not only be sustainable, but would actually keep costs in line or even reduce them
- Encourage UTA to offer discounts to tenant employees commuting on TRAX
- Provide sufficient recycling receptacles, and strategically place them in terminal areas
- Hold “waste drives” to give employees the opportunity to recycle household items
- Make the current paper-recycling program easier

The majority of tenants surveyed indicated that they would like to be involved in or kept informed of sustainability initiatives at SLC. SLCDCA and its tenants will continue to coordinate and communicate to further sustainability at the Airport.

Respondents that provided more detailed information about existing sustainability programs are highlighted in the following sections.

Delta Air Lines

The Airport is a connecting hub of Delta Air Lines, the westernmost hub for the company in the United States. Delta accounts for approximately 67 percent of passengers at the Airport, not including its affiliates. The airline operates out of Terminals One and Two. In addition to passenger operations, Terminal Two also contains Delta office space and conference rooms, a credit union, a club lounge, and a group room. Terminal Two is used exclusively by Delta and its regional affiliate, SkyWest Airlines.

Delta facilities at the Airport also include hangar space, a reservations center, and a cargo building. The hangar space and reservations center are located in the North Support Area, while the cargo building is located south of Terminal One in the South Support Area. Delta Dash, Delta’s small package express service, operates out of the cargo facility.

Current corporate-wide sustainability initiatives at Delta include improving fuel efficiency of aircraft and GSE, assessing the feasibility of alternative fuels, waste diversion and recycling, and offering commuting options to its employees. At SLCD, Delta recycles domestic in-flight waste and provides discounted UTA passes to some employees.

HMSHost

HMSHost operates a number of food and beverage and retail concessions in more than 100 airports around the world. HMSHost is the largest concessionaire at the Airport, and operates national chains, such as Starbucks Coffee, and local eateries, such as Market Street Grill, Café Rio, and Greek Souvlaki. HMSHost has a corporate sustainability policy called startsomewhere®, which focuses on three major areas: the environment, nutrition and wellness, and community partnerships. Startsomewhere® was presented the 2012 Airport Going Green Award for Excellence in Sustainability Efforts.

The Grove Inc. (TGI)

The Grove Inc. (TGI) is another concessionaire with multiple enterprises at the Airport. TGI operates more than 50 stores in 11 airports, such as Auntie Anne’s, Fresh Market, On-The-Go, and Jamba Juice at the Airport. TGI has a corporate sustainability policy named Eco Effort, whose vision statement is to “Foster a business approach that embraces our



Several new restaurants offer a variety of cuisines to passengers



Salt Lake City
International Airport

Sustainability Management Plan

physical, social, and ecological environments while simultaneously creating a corporate culture that advocates for a better, cleaner, and greener planet.” TGI’s Green Concessions Action Plan includes numerous sustainability initiatives, such as educating corporate and operational staff on green issues, incentives, and goals; replacing Styrofoam and petroleum-based consumer packaging with biodegradable products; procuring green cleaning supplies; and source-separating all solid waste refuse into recyclable, compostable, and non-recyclable waste types.



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Following this meeting, the Project Team reviewed SLCDCA materials and the City’s sustainability program. At the second SAC meeting, the Committee drafted a primary sustainability goal.

At the third SAC meeting, the Project Team provided three options for the SLCDCA’s primary goal, based on the input from the previous meetings. The Team stressed that there are five essential questions the SAC members need to ask themselves when finalizing the primary goal:

1. Why are we here at the Airport?
2. What does the world need most that we are uniquely able to provide?
3. What are we willing to sacrifice?
4. What matters more than money?
5. Are we on this mission together?

SAC member input revealed the options that best reflected its primary goal. This input included important terms such as “promoting the responsible use of resources” to sustain the airport into the future; to get passengers efficiently to and from their destination; and preserving human resources (implies safety). The group also stressed that the primary goal needs to have a strong action verb like “to achieve” or “to lead,” and to be a leader in the community. SLCDCA’s primary goal was confirmed at the fourth SAC meeting.

Our Primary Sustainability Goal

To be a leader in the community and airport industry by preserving and enhancing Salt Lake City Department of Airport’s financial, human, natural, and energy resources.

City Sustainability Policies

SLCDCA has aligned governance and operations at the Airport with the principles of Salt Lake City’s sustainability program, Salt Lake City Green (SLCgreen). SLCgreen is the City’s award-winning compilation of environmental programs and policies, which lays the framework for the conservation of resources, reduction of pollution, and deceleration of climate change to ensure a healthy and sustainable future for Salt Lake City.⁷³ *Sustainable Salt Lake – Plan 2015* is a major component of SLCgreen, and strives to make Salt Lake City “one of the greenest, most inclusive and economically viable municipalities in the country.”⁷⁴

⁷³ Salt Lake City. 2013. SLCgreen. <http://www.slcgov.com/slcgreen>. Accessed September 24, 2013.

⁷⁴ Salt Lake City. 2013. *Sustainable Salt Lake – Plan 2015*. http://www.slcdocs.com/slcgreen/SustainableSaltLake_Plan2015.pdf. Accessed September 24, 2013.

The City Code of Salt Lake City includes a number of sustainability practices and principles that are applicable to the Airport, including a Leadership in Energy and Environmental Design (LEED) Silver certification requirement for city-funded construction and major renovations and the allowance of solar and wind generating systems in airport zoning districts.⁷⁵

As part of Salt Lake City's Code Revision Project, the city is further incorporating sustainability practices and principles into its development and operation. Some of the potential revisions to the City Code of Salt Lake City that are applicable to the Airport involve water efficient landscaping, recycling and waste reduction, transportation demand management, and outdoor lighting (<http://www.slcgov.com/slccgreen/coderevisionproject>).

Salt Lake City offers businesses, including those located at SLC, the opportunity to become members in the e2 Business Program. This program provides businesses with assistance in identifying opportunities for reducing overall operating costs and environmental impacts in energy and water usage, along with employee transportation and waste production. It also provides businesses with successful case studies from other member businesses, networking opportunities, a periodic program newsletter, and various advertising discounts.⁷⁶

SLCDA Sustainability Goals, Objectives, and Performance Targets

After the high-level primary goal is developed, various sustainability goals are identified, objectives are developed to meet each goal, and performance targets are established to ensure success. The following are definitions and examples of goals, objectives, and performance targets:

Goals are:

- Broad / general intentions or directions
- Abstract, hard to measure
- Typically have a long, ongoing time frame
- Example: Reduce the total energy use and demand of the airport and increase renewable energy generation on airport property.

Objectives are:

- Narrow / specific
- Concrete, easy to measure / assess
- Usually set for a shorter term
- Example: Complete energy efficiency projects to reduce energy use in airport facilities.

⁷⁵ Salt Lake City. 2013. Salt Lake City, Utah – City Code. http://www.sterlingcodifiers.com/codebook/index.php?book_id=672. Accessed September 24, 2013.

⁷⁶ Salt Lake City. 2013. SLCgreen – Become an e2 business. <http://www.slcgov.com/node/269>. Accessed October 7, 2013.

Performance Targets are:

- Measurable (qualitatively or quantitatively) with a set timeframe
- Specific to an objective
- Related to Performance Metrics (discussed further in Chapter 8, *Sustainability Performance Monitoring and Reporting*)
- Example: Decrease energy use in buildings and operations by 10 percent over a rolling 10-year average (2020 reduction from 2000-2010 average, then 2030 reduction from 2010-2020 average).

The SAC meetings were held in formats that provided information to inform the goals, objectives, and performance targets identified for the SMP. At the second SAC meeting, the Project Team reviewed planning tasks and gathered feedback from the SAC members in the following areas:

- Review of baseline assessment evaluations, including the waste audit, air quality/greenhouse gas (GHG) emissions inventory, and water use evaluation
- Tenant survey results
- Overview of Terminal Redevelopment Program (TRP) Coordination
- Draft primary goal, sustainability goals and objectives, including a focus on:
 - Energy
 - Air Quality and Climate Change
 - Recycling and Materials Management
 - Water Resources
 - Community Health and Safety

After this meeting, the Project Team reviewed the information from the SAC members, data available from the baseline inventory, and the *Sustainable Salt Lake - Plan 2015* Water Resources Goals etc. and other plans. The Project Team then developed draft goals and identified reasonable and achievable targets to present at the third SAC meeting.

The feedback from the second SAC meeting was reviewed in the third SAC meeting. The goals of this meeting were to:

- Select metrics to measure progress
- Identify successful sustainability initiatives
- Decide how to evaluate proposed initiatives

During a breakout group session, the SAC was asked to give feedback on goals, objectives, and performance targets. They were divided into three groups and each group received two different goal categories to discuss goal language, objectives, and performance targets.

As a result of this meeting, SLCDAs SAC identified appropriate goal categories that are consistent with the City goals, as well as objectives, that are measurable, and specifically designed to help the Airport achieve each goal.



Sustainability Action Committee Meeting #3

Figure 5-2 demonstrates the consistency among goal categories of the Airport and the *Sustainable Salt Lake - Plan 2015*. The City’s plan includes 12 sustainability goal categories of which the Airport has adopted five, illustrated in blue, as well as an additional goal category illustrated in green; the other seven City goals are also shown. The Airport’s goal categories were selected because of their relevance to SLC and its operating environment.

FIGURE 5-2: SUSTAINABLE SALT LAKE - PLAN 2015 AND AIRPORT SUSTAINABILITY GOAL CATEGORIES



Note: The Planning and Building goal category was identified by SLCDCA as a distinct sustainability goal category and is not included as a separate goal category by the City.

Based on input from senior leadership, the SAC, and in consideration of the City of Salt Lake City’s sustainability goals, Table 5-1 depicts the goals, objectives, and targets that will guide the implementation of the Sustainability Management Plan for SLC. Performance Metrics are covered in detail in Chapter 8, *Sustainability Performance Monitoring and Reporting*, but are included in this table to show the relationship between SLCDCA’s goals, objectives, and targets, and the performance metrics that can be used to measure success.

TABLE 5-1: PERFORMANCE METRICS AND KEY PERFORMANCE INDICATORS

SUSTAINABILITY CATEGORIES	GOAL	OBJECTIVE	METRICS	TARGET	
Energy	Reduce the total energy use and demand of the airport and increase renewable energy generation on airport property.	Complete energy efficiency projects to reduce energy use in airport facilities.	Total energy use (MMBTu/year)*	Decrease energy use in buildings and operations by 10% over a rolling 10-year average (2020 reduction from 2000-2010 average, then 2030 reduction from 2010-2020 average).	
			Total Electricity use per passenger (MMBTu/passenger)		
			Total Electricity demand per passenger (kW/passenger)		
			Total Natural gas use per passenger (MMBTu/passenger)		
			Total energy use by cost center (MMBTu/cost center)		
			Utility Costs (Electricity and Natural Gas)		
			Rate of energy use in De-icing Fluid Reclamation Facility*		Decrease rate of energy use in De-icing Fluid Reclamation Facility by 5% in five years.
			Renewable energy generated on property (kWh/yr)*		
			Percent of total electricity purchased from renewable sources		
			NA		
NA					
NA					
Percent of alt-fuel/electric vehicles of total fleet vehicles*	Develop, incorporate, and distribute a comprehensive employee education and engagement program for energy conservation on a quarterly basis. Develop passenger education information through Wi-Fi dashboard or lobby dashboards. Create right-sizing program to encourage the right vehicle for the right use. Increase to 35% mix of alternative fuel/electric vehicles in 5 years.				
Conventional fuel use (diesel/gasoline) vs. alt-fuel (CNG) (gal/year)*					
NA					
Scope 1 and 2 GHG emissions (tons/year) by scope per passenger*					
Percent of tenant-owned GSE powered by electricity/alternative fuels					
Total ridership of Airport TRAX line					
Percent SLGDA employees walking, bicycling, or using HOV modes of transportation to access the Airport					
Recycling rate per passenger (lbs./passenger) (excludes construction and demolition waste)*		Increase recycling rate per passenger to 10% within 1 year and 15% goal within 5 years of new waste management contract.			
Solid waste disposal rate per passenger (lbs./passenger)*					
Recycling percentage by commodity					
NA					
Waste diversion (lbs.)*					
Solid waste disposed vs. cardboard diverted (tons)					
Construction and demolition reused material (tons)					
Recovery rate of glycol used (%)					
NA					
Recovery rate of glycol used (%)					

* Metrics in bold and denoted with an asterisk are KPIs

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TABLE 5-1: PERFORMANCE METRICS AND KEY PERFORMANCE INDICATORS (CONT.)

RESOURCE	GOAL	OBJECTIVE	METRICS	TARGET	
Water Resources	Assist in the region's efforts to sustain its water resources for current and future generations.	Encourage efficient water use and reduce water waste.	Water use per passenger (gal/passenger)*	No specific target developed; SAC input to build process targets based on bottom up assessments. Consider process water targets folding into terminal target to streamline targets to just indoor versus outdoor use.	
			Water use in landscape irrigation (gal/acre of landscaped area)*		
			Total potable water use (gal)		
			Acres of native, drought-tolerant landscaping or xeriscaping		
Community Health and Safety	Support employee and tenant programs that support health.	Support employee and tenant programs that support health.	Percent of SLCDA staff participating in the city's employee wellness program(s)*	Increase percentage of SLCDA staff participating in City Employee Wellness program (need to establish baseline first year).	
			Percent of Airport project dollars (federally sourced) going to local, small, and DBE/WBE companies*	Increase amount of economic impact (\$) to community (need to establish baseline first year).	
	Support the local and regional economy.	Support community outreach and engagement activities that promote social, economic, and environmental sustainability.	Percent of employees participating in SLCDA-sponsored/supported volunteerism	Increase number of community events supported annually (need to establish baseline first year).	
			Number of community events supported		
	Encourage concessionaries to buy and provide local food.	Encourage concessionaries to buy and provide local food.	NA	Increase percentage of organic and/or local food products available in concessions (need to establish baseline first year).	
	Encourage partnerships between tenants and the airport to support wellness initiatives.	Encourage partnerships between tenants and the airport to support wellness initiatives.	NA		
	Planning and Building Design	Promote Green Building, energy efficiency, and operational efficiency.	Ensure all new buildings and major renovations of 10,000 square feet or higher are LEED Silver-certified or higher.	Number of noise complaints per individual per year	All new buildings and renovation of 10,000 square feet or higher are LEED Silver-certified or higher.
			Encourage tenants to incorporate sustainable building design measures for new construction and major renovations.	Percent of new/renovated buildings with LEED Silver-certification or higher*	All new tenant buildings and renovation of 10,000 square feet or higher are LEED Silver-certified or higher.
Incorporate life cycle analysis into all Airport planning and operations.			NA		
Incorporate appropriate resiliency features into future facility designs.			NA		

*Metrics in bold and denoted with an asterisk are KPIs



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6 Organizational Engagement

In order to achieve a truly sustainable organization, sustainability principles must be integrated into the “thinking, planning, and doing” processes. However, organizations often address sustainability as an accessory to its typical structure and procedures. Salt Lake City Department of Airports (SLCDA) has made great strides already in this regard with:

- The commissioning of a study on sustainability in 2007⁷⁷,
- Senior commitment to sustainability as evidenced in the current pursuance of Leadership in Energy and Environmental Design (LEED) for the Terminal Redevelopment Program (TRP),
- Implementation of a myriad of efforts to reduce energy consumption and improve operational efficiency,
- Securing of a grant for sustainability planning, and
- Designation of a Sustainability Coordinator.

Formalizing an organizational approach to sustainability will be the required next step for the successful implementation of the Sustainability Management Plan (SMP) recommendations and suggestions.

Organizational Framework

As part of the Salt Lake City International Airport (SLC or the Airport) SMP baseline assessment, the current governance, organizational capacity, and procedures of SLCDA were evaluated. This helped identify potential opportunities to integrate sustainability into existing processes and procedures. The intent of the SMP recommendations is to identify adjustments to existing processes and procedures that will not create additional, resource-consuming requirements.

⁷⁷ SLCDA. 2007. *Making the Business Connection to Airport Sustainability*. Prepared by Carter & Burgess. Report.

Organizational Role in Promoting Sustainability

Clear identification of SLCDCA employee roles is important to facilitate SLCDCA's overall sustainability program, and will be critical to employee, passenger, and tenant engagement. The following are the suggested roles for various levels of management and staff in the SLCDCA for promoting sustainability in the organization.

- **Senior Leadership** is responsible for promoting SLCDCA's sustainability program both internally and externally to SLCDCA. This includes creating a work environment that facilitates considering potential sustainability initiative suggestions from employees, as well as from passengers, tenants, and the community.
- The **Sustainability Coordinator** will continue to manage the sustainability program and implementation of initiatives. The Sustainability Coordinator will work with staff, managers, and senior leadership to ensure a comprehensive sustainability program is maintained at SLC. The role of the Sustainability Coordinator is detailed further in the following section.
- The **Sustainability Action Committee (SAC)** will continue to be led by the Sustainability Coordinator, and support SLC's sustainability program. A broad representation of SLCDCA staff is represented on the SAC. The group will assist with identifying and evaluating potential initiatives. Frequently, members of the committee will assist with identifying the appropriate managers and staff members that will be responsible for tracking and implementing initiatives. The SAC also includes "Sustainability Category Champions" that have an interest and background in one of the sustainability goal categories. The Sustainability Category Champions will assist the Sustainability Coordinator in their area of expertise to conduct initial screening of initiatives.
- **Managers** have multiple roles. First, they should ensure their staff has the necessary resources to continue to implement existing and proposed initiatives. Managers will be responsible for completing the Progress Reports (Tracker™) and providing feedback to the Sustainability Coordinator, as applicable. It is also anticipated that Managers may be the link between their staff and the SAC. Initiatives that their staff members recommend should be brought forward to the Sustainability Coordinator or SAC for consideration.
- The **Public Relations and Marketing** department is critical for ensuring that all employees, tenants, passengers, and the community are aware of SLCDCA's sustainability program. Internal and external (employee and general public) promotional activities will increase sustainability awareness and engagement at SLC.
- **Staff** members from all departments are the primary key to a successful sustainability program. These personnel are the ones that implement proposed initiatives, identify problems or conditions that reduce the anticipated performance of an initiative, and frequently are the primary group to identify new potential initiatives.

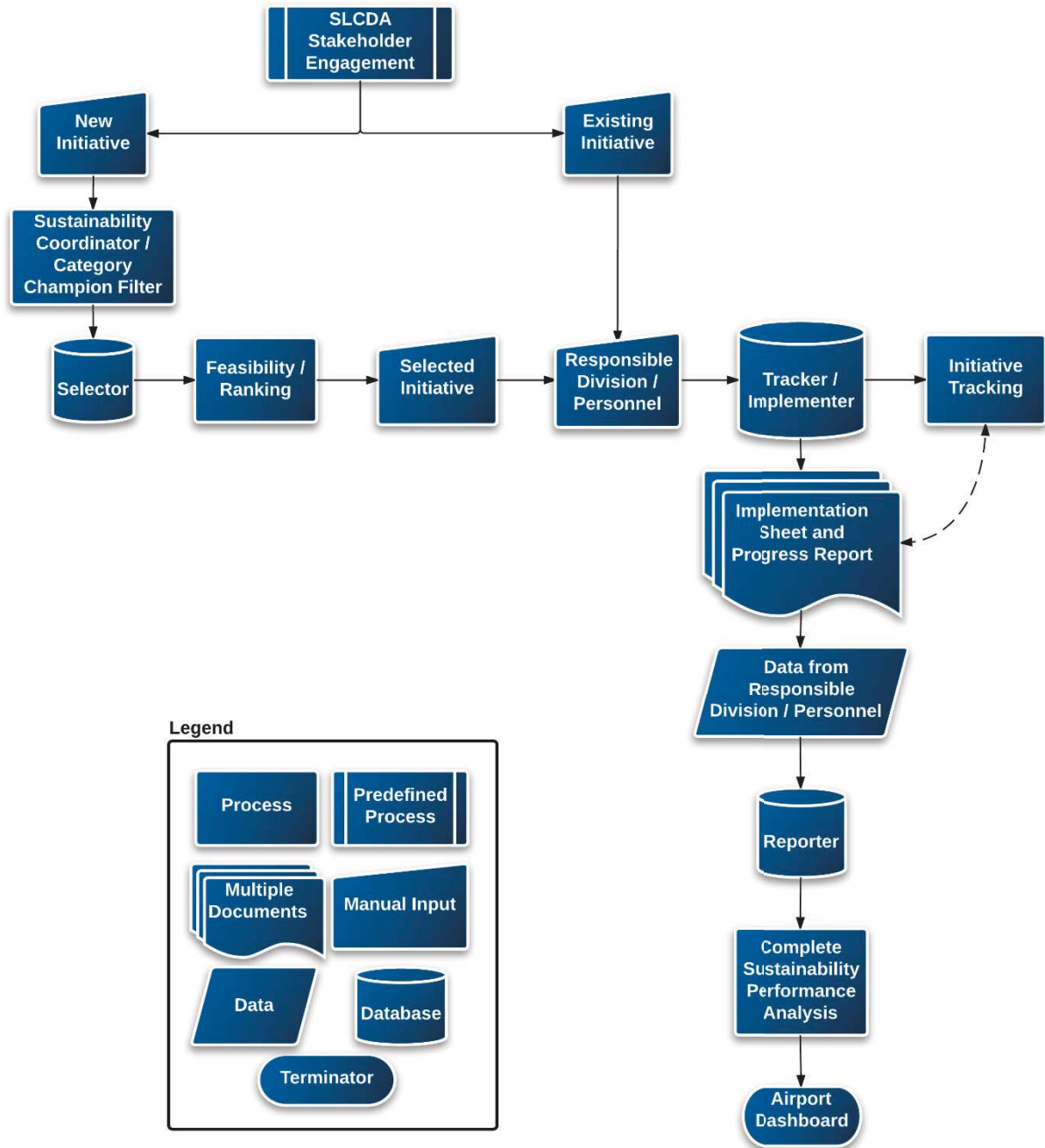


Sustainability Coordinator and the Implementation Process

A successful sustainability initiative implementation process will require coordination across the organization. The sustainability implementation process will be facilitated by SLCDCA's Sustainability Coordinator, supported by the SAC and various staff across the organization.

Figure 6-1 shows the process that would be undertaken to either identify and implement a new sustainability initiative or document existing initiatives and track their implementation progress and performance.

FIGURE 6-1: SLCDA INITIATIVE IMPLEMENTATION PROCESS



Source: SLCD and VHB, 2014.

Identifying and Screening New Sustainability Initiatives

It is anticipated that potential initiatives will originate from a variety of sources, such as departments and staff members within SLCDA, the SAC, passengers, and tenants, as well as from the community by innovative suggestions through the sustainability dashboard. Potential initiatives would be brought to the SLCDA Sustainability Coordinator or Category Champion's attention to begin the evaluation and implementation process.

The Sustainability Coordinator will determine if the potential initiative(s) meets the sustainability program's goals. Detailed in Chapter 7, *Sustainability Initiatives*, the initial **screening process** evaluates the initiative's ability to meet the sustainability program goals, overall feasibility of implementation, cost-effectiveness, and associated sustainability benefits. If the initiative is not eliminated in the screening process, the Sustainability Coordinator or SAC **will assign the division and/or person responsible for** implementation of the new initiative.

Implementing and Tracking New Initiatives

Prior to implementing an initiative, an **implementation summary** would be developed to assist with initiative tracking/progress reporting. The implementation summary, described in Chapter 8, *Implementation Process*, will identify: steps needed for implementation, estimated staff time required, capital or operational and maintenance costs, recommended implementation timeframe, division/person responsible, implementation steps, funding resources, and relevant case studies/additional information. The division/person responsible should follow the implementation steps listed on the summary sheet to help successfully implement each initiative. For this SMP, the Sustainability Planning Project Team developed implementation summaries for the short-term initiatives that have been selected. In the future, the SLCDA Sustainability Coordinator and identified Initiative leaders will develop Implementation Summaries for medium and long-term efforts and new initiatives.

Once initiatives are ready for implementation, the **tracking process**, also described in Chapter 8, would begin. Tracking an initiative allows the Sustainability Coordinator to collect pertinent information and helps track the progress of SLCDA's sustainability program. To assist in tracking the progress of each initiative, a **progress report** is recommended and should be updated on a routine basis, to be determined by the Sustainability Coordinator/SAC. These progress reports should contain information such as current implementation status, percent of completion, number of labor hours required, issues or challenges, lessons learned, and recommended next steps. The responsible division/person should send the progress report to the Sustainability Coordinator.

The **reporting step** includes updating performance metrics and Key Performance Indicators (KPIs), which help to document SLCDA's overall sustainability performance (see Chapter 9, *Sustainability Performance Monitoring and Reporting*). The results will typically be provided in a **Sustainability Report** and available for public review on the Airport's Dashboard.



Documenting and Tracking Existing Initiatives

SLCDA is already implementing a substantial number of sustainability initiatives in departments across the organization. Implementation of the sustainability program requires documenting these initiatives, confirming parties responsible for their implementation, and tracking initiative progress and performance. SLCDA should develop an implementation summary for each existing initiative, track the initiatives in the Tracker™, and report (using the Reporter™).

Organizational Processes and Procedures

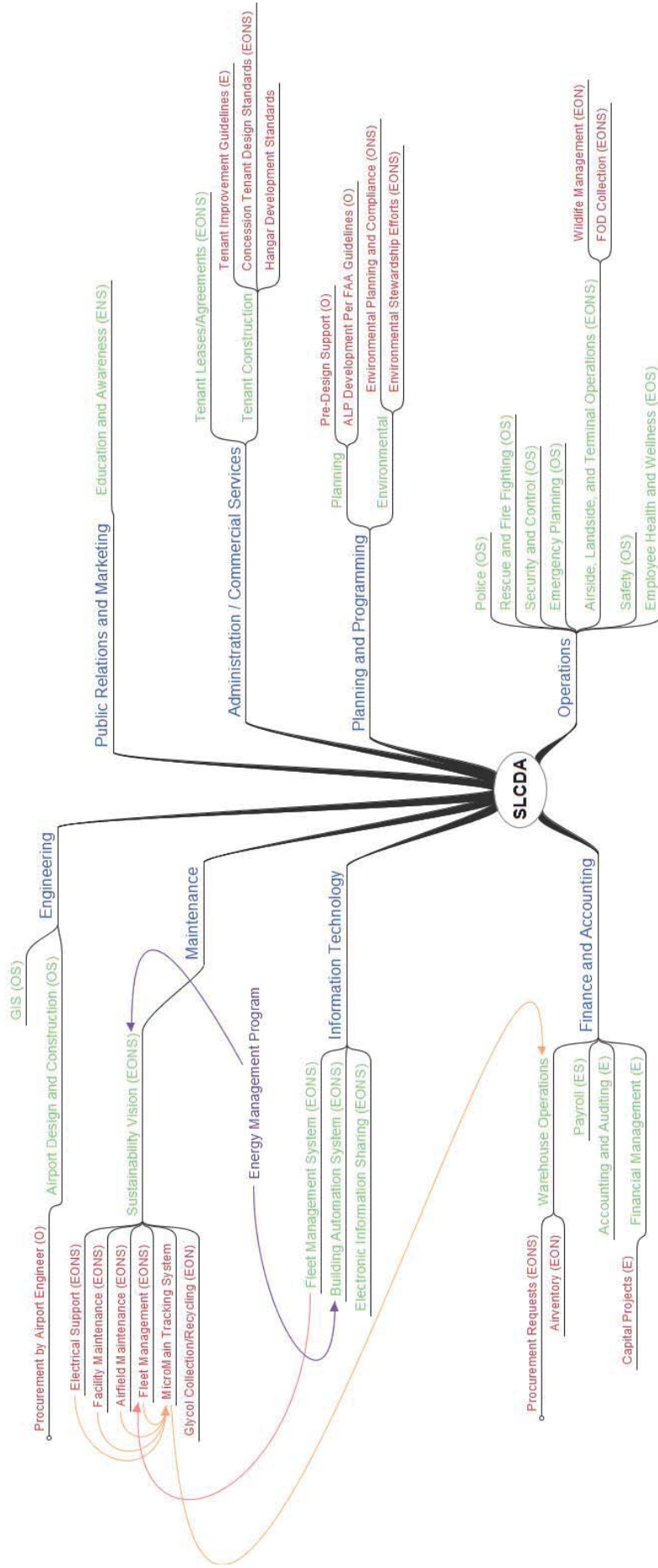
SLCDA has made significant progress in integrating sustainability into its existing processes, procedures and operation. Figure 6-2 depicts all of the Divisions within SLCDA and represents many processes and procedures that fall under each Division that could include sustainability components.

In addition, the City has developed several guidelines, policies, and plans that encourage sustainability within its departments, including SLCDA. These guidelines include:

- City Code of Salt Lake City
- Salt Lake City Corporation Executive Orders
- Salt Lake City Administrative Rules for Procurement
- Salt Lake City's Environmental Policy
- Sustainable Salt Lake – Plan 2015

The City is in the process of updating its Code and will further integrate sustainability into the revisions. These revisions have the potential to affect the Airport relative to water-efficient landscaping, recycling and waste reduction, transportation demand management, and outdoor lighting.

FIGURE 6-2: SLCD A SUSTAINABILITY PROCESSES AND PROCEDURES



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Opportunities to Integrate Sustainability Considerations

The processes and procedures currently in place at SLCDCA were reviewed for additional opportunities to incorporate sustainability. Recommendations have been identified that could assist in ensuring that the four pillars of airport sustainability, Economic viability, Operational efficiency, Natural resource conservation, and Social responsibility (EONS), are considered in decision-making across the organization and throughout its operation. The processes and procedures as well as opportunities identified to integrate sustainability are detailed in Table 6-1.

TABLE 6-1: SLCDCA DIVISIONS AND SUSTAINABILITY OPPORTUNITIES

PROCESSES AND PROCEDURES BY DIVISION	OPPORTUNITIES TO ENHANCE CURRENT PRACTICES
Sustainability Vision (All Divisions)	Develop Sustainability Vision for each Division - either adapting the SLCDCA Sustainability mission or developing one similar to the Maintenance Division.
Engineering	
Geographic Information System (GIS)	Consider Information Technology (IT) Opportunities to enhance integration of existing software programs, including GIS.
Maintenance Glycol Recovery	
Electrical Support	Identify opportunities to make the electrical maintenance system more efficient.
Facility and Airfield Maintenance	Develop integrated Work Order Management System. Consider IT Opportunities to enhance integration of existing software programs, including MicroMain.
MicroMain Tracking System	Use MicroMain tracking system to enhance operational efficiency.
Information Technology	
Electronic Information Sharing	Integrate existing software programs (e.g., BAS, GIS, MicroMain, and Airventory) for better tracking and verification. For example, currently, when a SLCDCA employee reports a light outage in his or her office, MicroMain generates a work order that includes the office number, individual, etc. However, when the Maintenance staff obtains the replacement from the warehouse, Airventory requests only the cost center (e.g., Planning & Environmental) for which it is intended, therefore missing a tracking opportunity. If the existing BAS could alert MicroMain when there is a light outage, a work order could be generated automatically (and then verified by Maintenance personnel) and an accompanying list of equipment/material needs created for Airventory. This data could then be published on a GIS database with query capabilities. In addition to the tracking benefits, integration of these systems would also decrease staffing needs and efforts.

Sources: C&S Companies and VHB, 2014.

TABLE 6-1: SLCDA DIVISIONS AND SUSTAINABILITY OPPORTUNITIES (CONT.)

PROCESSES AND PROCEDURES BY DIVISION	OPPORTUNITIES TO ENHANCE CURRENT PRACTICES
Information Technology (Cont.)	
Building Automation System (BAS)	Increase use of BAS to track energy use and resource consumption.
Finance and Accounting	
Standards of Practice for Finance Oversight Committee (Draft)	Consider Life Cycle Costing and other sustainability evaluation criteria in financial considerations.
Financial Management, including Capital Projects	<p>Evaluate the success of new Capital Improvement Program and make adjustments if necessary.</p> <p>Include sustainability evaluation criteria in CIP process to be used by all involved divisions. (e.g., capital requests should document projects' contribution to items such as greenhouse gas (GHG) emissions reduction, energy use reduction, cost savings, water conservation).</p>
Procurement Administration and Commercial Services	<p>Establish sustainability criteria for material procurement that adheres to the City's Administrative Rules for Procurement and ensures that materials are contributing to the Airport's pursuit of EONS including criteria such as certified "green products," recycled content, office supplies, janitorial and chemical supplies, and packaging.</p> <p>Educate procurement staff on life cycle cost analysis and the importance of considering a product/material's entire life cycle. A life cycle cost analysis and/or return on investment approach should be taken when considering the acquisition of significant assets (from equipment to facilities).</p>
Request for Proposals (RFPs) Administration and Commercial Services	Include option for responders to suggest the most sustainable option whether for product specification, a service process, or performance based functional specification.
Asset Management	<p>Establish an organized and comprehensive asset management program to centralize ongoing efforts across the divisions and seek new opportunities for repurposing materials and equipment among the three airports.</p> <p>Additionally, increased focus on the management of assets would ensure that each purchase has been vetted and determined to be justified, needed at that time, and the best alternative (considering all elements of EONS).</p>
Warehouse Operations	Require vendors to combine delivery trips where possible.
Payroll, Accounting and Auditing	Look for opportunities to make systems more efficient and integrated with other IT systems.
Airline Use and Lease Agreements Administration and Commercial Services	Opportunities include encouraging use of preconditioned air, ground service equipment, waste hauling, ticket counter allocation, gate electrification, common use equipment, participation in working groups, general maintenance services.

Sources: C&S Companies and VHB, 2014.

TABLE 6-1: SLCDA DIVISIONS AND SUSTAINABILITY OPPORTUNITIES (CONT.)

PROCESSES AND PROCEDURES BY DIVISION	OPPORTUNITIES TO ENHANCE CURRENT PRACTICES
Public Relations and Marketing	
Education and Awareness	<p>Increase awareness of the overall SLCDA sustainability mission, developed within this SMP) through the different divisions and across all levels. Similar to the Maintenance Division, encourage other areas to identify additional goals within their reach and collaborate with other divisions to increase effectiveness.</p> <p>Educate SLCDA employees and tenants on current and planned sustainability initiatives, consider using Social Media.</p>
Employee Health and Wellness Operations	Educate employees about how employee health and wellness contributes to the sustainability of the Airport.
Administration / Commercial Services	
Airport Rules and Regulations	<p>Incorporate additional sustainability requirements and recommendations into the Airport’s Rules and Regulations, which must be complied with by all Airport tenants and users.</p> <p>Reevaluate requirements for tenants considering the Airport as a whole system to determine if revisions would contribute to the Airport’s long-term sustainability. For example, tenants are currently required to handle their own waste and recycling. Although this may limit the SLCDA’s staffing needs and waste management costs, providing these services may result in increased and more accurate waste diversion from the Airport as a whole.</p>
Airport Design and Construction RFPs	Incorporate sustainability conditions or performance specifications into design and construction RFPs and contracts.
Hangar Development Standards	Incorporate sustainability conditions or performance specifications into design, construction (and operation) of hangars.
Tenant Improvement Guidelines	Encourage tenants to develop and implement their own sustainability programs, policies, or guidelines; support the Airport’s sustainability objectives; or better inform their employees of existing policies in place.
Concession Tenant Design Standards	Incorporate sustainability criteria into tenant design and construction guidelines.

Sources: C&S Companies and VHB, 2014.

TABLE 6-1: SLCD DIVISIONS AND SUSTAINABILITY OPPORTUNITIES (CONT.)

PROCESSES AND PROCEDURES BY DIVISION	OPPORTUNITIES TO ENHANCE CURRENT PRACTICES
Administration / Commercial Services (Cont.)	
Concessions and Vendor Contracts and Leases	Develop contract templates or standard contract/lease language that specifies sustainability criteria. Convene a multi-stakeholder committee to review contract and lease language and develop criteria to encourage sustainable practices including topics such as waste hauling, source reduction, programs to facilitate food quality/sourcing/recycling/composting, energy and water efficiency, packaging, sustainable design for tenant alterations, alternatively fueled rental cars. See Airport Cooperative Research Program (ACRP) Synthesis Report 42: Integrating Environmental Sustainability into Airport Contracts.
	Actively manage contracts to ensure sustainability requirements are being met - though scheduled inspections, spot-checking, monthly reports, or requests for information.
	Consider developing a sustainable food policy for food concessionaires including displays that promote healthy eating, visible food preparation areas, and appropriate portion sizes to support good health.
Planning and Programming	
Standards of Practice for Submittals to the Design Review Committee (Draft)	Include sustainability evaluation criteria in Design Review Committee process.
Planning	Incorporate sustainability into the alternatives analysis process of all future planning efforts. Consider development of sustainable planning guidelines similar to other airports such as San Francisco International Airport.
Environmental	Consider a requirement to achieve standards established by the Institute for Sustainable Infrastructure (ISI) Envision rating system for horizontal projects similar to the LEED Silver standard currently in place for vertical projects.
Organizational Policy: Construction Committee Special and General Conditions (for construction) (Draft)	Develop and implement sustainable design, construction, and operation guidelines that could be used for all projects similar to those established at other airports.
Operations	
Police, Rescue and Fire Fighting, Security and Control, Emergency Planning	Encourage operational efficiency in operations. Look for opportunities to make procedures and operations more streamlined. Integrate departments to the extent feasible.
Airside, Landside, and Terminal Operations, Including Wildlife Management, and FOD Collection	Look for opportunities to make operations more efficient. Consider procedures with dual benefits (e.g., using xeriscaping that reduces wildlife attractants).

Sources: C&S Companies and VHB, 2014.

Employee, Passenger, and Tenant Engagement

The organizational engagement enhancements identified in this chapter build on existing opportunities to integrate sustainability considerations for SLCDCA employees and tenants, and to raise awareness of sustainability for passengers and other airport users.

A few engagement ideas are provided in Figure 6-3 and additional employee, tenant, and public engagement opportunities are identified below. Several of these recommendations are also short-term initiatives (see Chapter 7, *Sustainability Initiatives*).

FIGURE 6-3: HOW WILL YOU ENGAGE THE ORGANIZATION?



Source: SLCDCA, 2014.

Employee Engagement Opportunities

Opportunities to engage SLCDCA employees include:

- Develop a sustainability portal for plan input
- Educate SLCDCA employees on current and planned sustainability initiatives through training programs, newsletters, announcements on-line
- Consider promotional activities to improve internal engagement, such as:

- Kickoff event to launch SLC’s official sustainability program
- Sustainability calendar with monthly programming
- Interdepartmental games/competitions
- Rewards or other recognition program
- At-home sustainability challenges

Tenant Engagement Opportunities

Opportunities that can be used to engage some or all of SLC’s tenants include:

- Recognize and reward sustainability efforts of tenants
- Encourage tenants to develop and implement their own sustainability programs, policies or guidelines; participate in the Airport’s objectives; or better inform their employees of existing policies in place⁷⁸
- Incorporate sustainability into tenant design and construction guidelines
- Reevaluate requirements for tenants considering the Airport as a whole system to determine if revisions would contribute to the Airport’s long-term sustainability. For example, tenants are currently required to handle their own waste and recycling. Although this may limit the SLCD’s staffing needs and waste management costs, providing these services may result in increased and more accurate waste diversion from the Airport as a whole.
- Educate tenants on current and planned sustainability initiatives and how they can participate in the Airport’s program
- Invite tenants to participate in internal engagement efforts, such as:
 - Kickoff party to launch SLC’s official sustainability program
 - Rewards or other recognition program
 - At-home sustainability challenges

Passenger Engagement Opportunities

Opportunities to engage passengers and the public in SLC’s sustainability program include:

- Enhance awareness and education of SLC’s sustainable strategies through a public awareness campaign which should include social media and SLC’s website
- Create a multimedia display to showcase sustainability metrics and would provide an interactive platform to engage and educate visitors
- Develop an education program in the terminal as the TRP is developed

⁷⁸ Many of the respondents to the FBO/Airline Questionnaire were unsure if their companies had formal sustainability programs, policies, or guidelines in place.



- Conduct surveys to understand overall satisfaction level
- Incorporate environmental stewardship education into the Airport public art program
- Provide learning material related to sustainability and aviation for public schools

Many of the engagement opportunities identified in the sections above can be applied to more than that individual group of stakeholders. It will be up to the SAC and Sustainability Coordinator to evaluate the best use of funding, and consider activities that engagement more than one group of stakeholders.



Salt Lake City
International Airport

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7 Sustainability Initiatives

A key outcome of the Sustainability Management Plan (SMP) is the identification of sustainability initiatives that will meet the Sustainability initiatives are discrete actions that were identified during the planning process through the following sources:

- Opportunities identified through the baseline assessment process,
- Sustainability Action Committee (SAC) coordination,
- Sustainable Aviation Guidance Alliance (SAGA) database,
- Transportation Research Board (TRB) Airport Cooperative Research Program (ACRP) reports, and
- Project team expertise and experience at other airports.

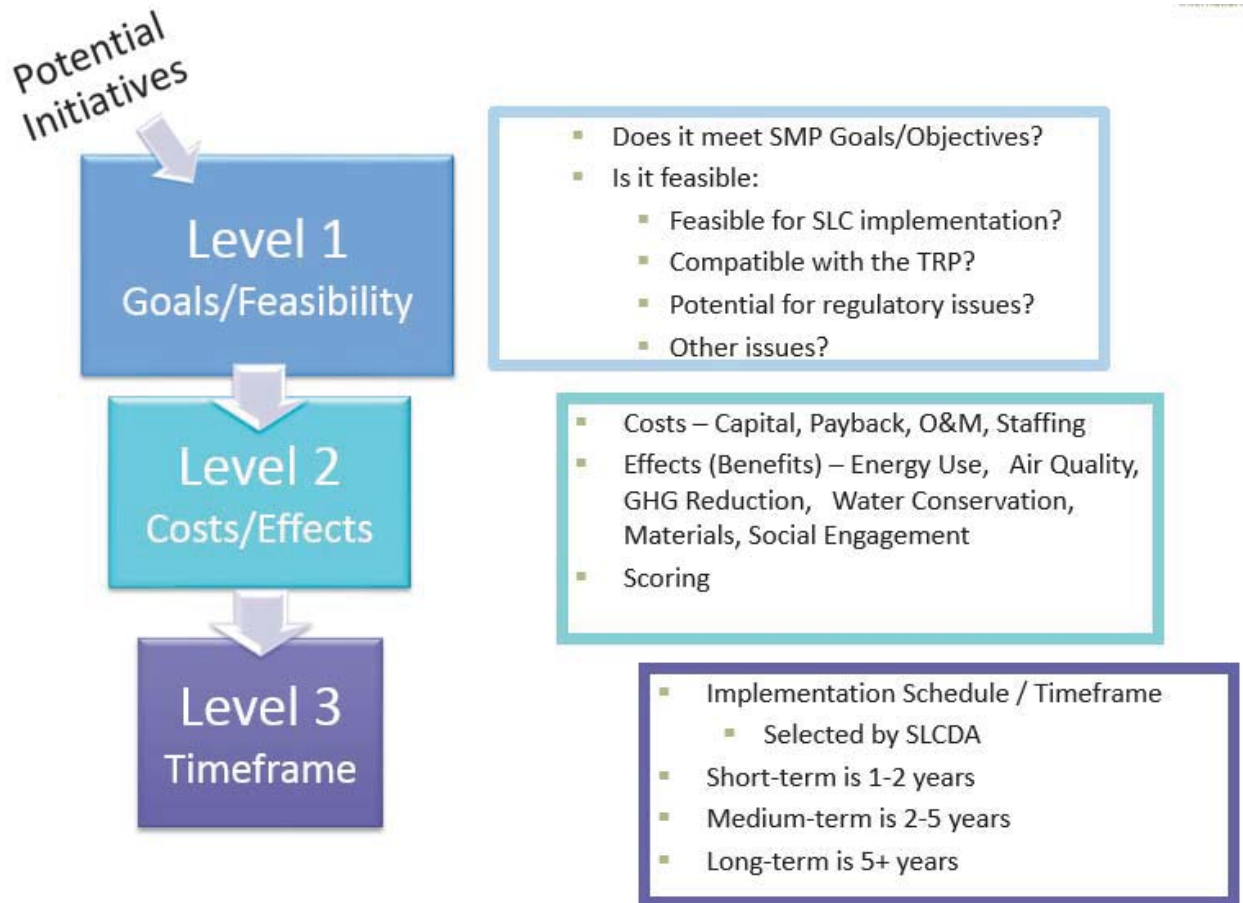
In all, over 200 initiatives were initially identified as candidates that could meet the Salt Lake City International Airport's (SLC's or the Airport's) goals and objectives. The Planning Team worked closely with SLCDCA in 2014 to review potential screening and feasibility criteria. The screening criteria outlined in this chapter were developed through an iterative process with SLCDCA. This also included meetings with the SAC and key departments to understand potential impacts and desired criteria. Before proceeding with the evaluation, SLCDCA staff agreed on the screening criteria. The screening process is transparent and compares candidate sustainability initiatives on a consistent basis, with criteria applied uniformly.

Initiative Screening Process

The candidate initiatives were screened according to their ability to meet SLCDCA's sustainability program goals, overall feasibility, cost-effectiveness, and associated benefits. Once the initiatives had been screened and selected, the final step in the process is to assign each initiative to an implementation timeframe: short, medium, or long.

The steps taken to screen and evaluate potential initiatives are shown in Figure 7-1 and described further.

Figure 7-1: Evaluation Criteria and Initiative Screening Process



Source: VHB, 2014.

Level 1: Goal Assessment

SLCDA’s sustainability program has six goals that relate to the priority areas of energy, air quality, waste management, community well-being, water use and conservation, and planning and building design. These goals are part of SLCDA’s Sustainability Vision, detailed in Chapter 5. The first screening step was to determine if the proposed initiative meets any of SLCDA’s goals, summarized below:

- Reduce the total **energy** use of the Airport and increase renewable energy generation on Airport property.
- Reduce criteria **air pollutants and greenhouse gas (GHG) emissions** to improve public health and mitigate climate change.
- Reduce **waste generation** and increase diversion from landfills.
- Assist in the region's efforts to sustain its **water resources** for current and future generations.

- Maintain a safe and healthy **natural and human environment** for passengers, Airport employees, and tenant employees.
- Promote green **building**, energy efficiency, and operational efficiency.

The more goals met, the higher an initiative will score in the screening process; in other words, an initiative that meets a high number of goals would be prioritized higher than one that only meets one goal. For example, an energy conservation initiative that would reduce the total **energy** use of the Airport could also reduce criteria **air pollutants and GHG emissions**, and promote green **building**, which results in advancing three sustainability goals.

Level 1: Feasibility Assessment

The Feasibility evaluation step determined if a sustainability initiative would be retained based on the practicability of implementing the initiative. If an initiative was feasible based on the following considerations, it was advanced for further consideration:

- No Regulatory Obstacles;
- Compatible with the Terminal Redevelopment Program (TRP); and
- Other (general challenges that SLCDCA felt would make this initiative not feasible at this time).

ID	Sustainability Initiatives	SLCDA Input	No Regulatory Issue	Compatible with the TRP	Other	feasibility
C-19	Provide bus transfers to employees to encourage the use of the TRAX system	Yes	Yes	Yes	Not Feasible	Not Feasible
C-20	Enhance awareness and education of sustainable strategies (for example, use social media to spread information more quickly)	Yes	Yes	Yes	Yes	Feasible

Example of Feasibility Columns and Initiative Elimination. The feasibility review helps to determine how practical it is to implement an initiative. If the initiative is not feasible, it is eliminated from further consideration.

Level 2: Estimated Costs

If an initiative met at least one of SLCDCA’s sustainability goals and was determined feasible, it moved forward in the screening process to estimate the costs associated with implementation. Four types of costs were considered in this evaluation step:

- Capital costs,
- Return on investment,
- Annual operations and maintenance, and
- Staffing.

Capital
0- Very Expensive: > \$100K
1- Moderately Expensive: \$50-\$100K
2- Low Cost: \$5-\$50K
3- Marginal Cost: 0 < \$5K

Example Scoring (Capital Costs)

Level 2: Effects

The Effects evaluation step determined the level of impact an initiative would have across sustainability issues. The criteria reflects the effects/impacts that are important to SLC, which include:

- Energy Use - impacts to energy consumption and the generation of renewable energy
- Air Quality - change in the amount of contaminants of concern/criteria pollutants emitted
- GHG emissions - change in the amount of GHGs emitted
- Water Conservation - impacts to water use and the use of reclaimed water
- Sustainable Materials - concentration of sustainable content such as recycled materials
- Materials Management - amount of materials recycled or diverted from solid waste landfills
- Social Engagement - level of stakeholder engagement necessary for initiative implementation

Energy Use
0 - Increase in energy consumption
1 - No effect on net energy consumption
2 - Small decrease (<5% below baseline) in energy consumption and/or generates renewable energy
3 - Large decrease (>5% below baseline) in energy consumption and/or generates renewable energy

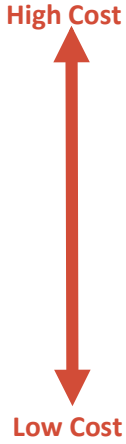
Example Scoring (Energy Effects). Evaluation of the costs and effects identifies the level of impact an initiative will have on SLCDCA’s sustainability goals.

Scoring

After determining whether or not an initiative moved forward in the evaluation process based on its ability to meet at least one SLC sustainability goal and feasibility considerations, evaluation criteria were used to “score or rank” the initiatives based on costs and effects. Every cost or benefit was scored (see Appendix I, *SLC SPOT™ Users Guide*, for more scoring levels for all evaluation criteria) from a range of 0 to 3. For example, initiatives that had low

capital costs were considered more favorable than initiatives that had high capital costs. The cumulative result of this ranking system resulted in high scores for favorable (low cost / high benefits) initiatives and automatic elimination of initiatives that did not meet any sustainability goals or were not feasible. Figures 7-2 and 7-3 depict the scoring levels and explanation for the costs and benefits.


Figure 7-2: Evaluation and Scoring: Costs



Score	Capital Costs	O&M Costs	Pay Back Period	Staffing
0	> \$100,000	> \$100,000	> 10 Years	> 200 Hours per Month
1	\$50,000-\$100,000	\$50,000-\$100,000	5-10 Years	50-200 Hours per Month
2	\$5,000-\$50,000	\$5,000-\$50,000	2-5 Years	10-50 Hours per Month
3	< \$5,000	< \$5,000	0-2 Years	< 10 Hours per Month

Source: VHB, 2014.

Figure 7-3: Evaluation and Scoring: Effects (Benefits)



Score	Energy Use	Air Quality	GHG Emissions	Water Use	Sustainable Materials	Materials Mgmt.	Social
0	Increase in Energy Use	Net Decrease in Air Quality	Increase	Increase in Water Use	No Sustainable Content	No C&D reused / recycled	No Engagement
1	No Effect on Net Energy Use	No Net Effect on Air Quality	No Net Effect	No Impact	5-15% Sustainable Content	Up to 30% recycled, or < 3% decrease in MSW	Internal Only (SLCDA Employees)
2	< 5% decrease in Energy Use	Moderate Net Improvement in Air Quality	< 1,200 tons/year of CO _{2eq} decrease	< 5% decrease in Water Use	15-40% Sustainable Content	30-60% recycled, or 3-6% decrease in MSW	Full Internal and Limited External (e.g., Airlines and Tenants)
3	> 5% decrease in Energy Use	Significant Net Improvement in Air Quality	> 1,200 tons/year of CO _{2eq} decrease	> 5% decrease in Water Use	> 40% Sustainable Content	> 60% recycled, or > 6% decrease in MSW	Full Internal and External (Public)

Source: VHB, 2014.

Note: C&D is Construction and Demolition Waste. MSW – Municipal Solid Waste.

Level 3: Timeframe

Timeframe defines when the Airport should begin implementing the initiative. Timeframes were broken out by three time periods, which included:

- Short-term: 0-2 years
- Medium-term: 2-5 years
- Long-term: 5+ years



Timeframe for implementation is frequently determined based on the total score

Short-term initiatives were identified by having the highest scores based on the Level 1 and 2 screening. Medium and long-term initiatives had lower scores because of higher costs and/or fewer benefits. Coordination with the SAC was conducted to review and confirm the timeframes identified for each initiative. Initiatives that were screened during the planning process and identified for short-term implementation as well as those that are considered Existing – To Be Continued/Expanded are provided in Table 7-1.

Thirty short-term initiatives are recommended for implementation in the next two years, consisting of the following sustainability goal categories:

- Community (14 initiatives)
- Water Conservation (3 initiatives)
- Air Quality (1 initiative)
- Waste Management (6 initiatives)
- Energy (4 initiatives)
- Planning and Building (2 initiatives)

Implementation of these efforts will be the responsibility of a cross-section of SLCD staff in various departments. Instructions on how to implement the initiatives and to track and report their progress is described in the following chapters.

Because the medium- and long-term initiatives are not yet ready for implementation, a comprehensive implementation approach was not developed for each initiative (e.g., responsible person, steps for implementation, etc.). A complete listing of short, medium, and long-term initiatives is provided in Appendix H, *Sustainability Initiatives*.

SPOT: The Selector™

The Selector™ provides SLCD staff a transparent method to screen potential sustainability initiatives for feasibility and effectiveness and identify appropriate implementation timeframes. Various features/components the Selector™ were depicted throughout this chapter. This tool provides a thorough way to evaluate each initiative and assist with selecting the implementation timeframe based on costs and benefits. The Selector™ is summarized on the following page and additional information can be found in the *User's Guide*, provided in Appendix I, *SLC SPOT™ User's Guide*.

Initiatives

The short-term initiatives from the Level 3 screening analysis (identifying timeframe) are provided in Table 7-1. A detailed list of initiatives, which includes medium and long-term initiatives, is provided in Appendix H, *Sustainability Initiatives*.

Future Potential Initiatives

In the future, potential initiatives will be screened and evaluated in a transparent and consistent manner. It is recommended that evaluation criteria be re-evaluated after a period of time has passed to determine if any modifications should be made. Any changes to evaluation criteria or scoring should be documented for future users.

TABLE 7-1: SHORT-TERM SUSTAINABILITY INITIATIVES

INITIATIVE ID	SUSTAINABILITY INITIATIVES
Community	
C-8	Promote a "Take the TRAX" day on a regular basis to encourage employees to use TRAX when feasible (or alternative transportation day)
C-13	Specify healthy building materials that do not contain Environmental Protection Agency (EPA) "Chemicals of Concern" by project
C-16	Develop a sustainability portal for plan input from SLCDCA employees
C-17	Provide employee training and education on sustainability initiatives
C-20	Enhance awareness and education of sustainable strategies (for example, use social media to spread information more quickly)
C-22*	Enhance formal customer service training for SLCDCA employees
C-28	Increase plantings and natural plantings inside passenger and employee spaces (Biophilia)
C-35	Educate tenants regularly on SLC's sustainability efforts and how they can participate in the Airport's sustainability program
C-39	Host an annual airport health and wellness clinic/expo for employees and tenants that provides health screening, seminars, health and safety exhibits, flu shots, a workout pavilion, healthy cooking demos, green living ideas, exhibitors, financial health information, and more.
C-46	Continue regular meetings/ coordination with the SAC
C-47	Develop relationships with community groups and local businesses to advance common goals
C-48	Establish working relationships with the local community leadership to enable effective and efficient communication
C-50	Provide construction and related sustainability information at kiosks and information displays to be distributed throughout the terminal building and landside
C-53	Work with local radio affiliates to include construction updates during morning and afternoon traffic alerts. Announce construction traffic reports on local AM radio stations.
C-57	Continue to operate and maintain facilities in accordance with best Integrated Pest Management practices
Water	
W-13*	Continue to convert turf landscaping to native plantings
W-14*	Identify and repair leaks in the water conveyance system
W-16*	Install high-efficiency water conservation products.
W-17*	Conduct landscape irrigation audits regularly to ensure the irrigation system is performing properly and all irrigation schedules are appropriately set.

*Initiative ID's denoted with an asterisk are Existing – To Be Continued/Expanded initiatives

TABLE 7-1: SHORT-TERM SUSTAINABILITY INITIATIVES (CONT.)

INITIATIVE ID	SUSTAINABILITY INITIATIVES
Air Quality	
AQ-3*	Replace vehicles that are at the end of their useful life with alternative fuel, electric, or low-emission/zero-emission vehicles, while meeting the vehicle use requirements of SLCDCA.
AQ-15	Encourage airlines to park late aircraft close to the terminal core, so entire piers do not need to be "started up" late at night with heating, ventilation, and air conditioning (HVAC) and lighting.
AQ-21*	Require Construction Activity Pollution Prevention for all new construction projects
Waste Management	
WM-3	Place additional 90-gallon recycling bins throughout the Airport property (including near cargo operators) as part of the City's curbside recycling program.
WM-4	Strategically position trash and recycling receptacles adjacent to one another in passenger terminal.
WM-5	Provide recycling receptacles in pre-security and food court areas.
WM-12	Promote recycling reward days for passengers "caught" recycling.
WM-15*	Use multi-surface cleaners to reduce the number of cleaning agents.
WM-19*	Repurpose trees and plants for replanting elsewhere on Airport property or other locations.
WM-20	Utilize recycled concrete in new projects.
Energy	
E-4*	Incorporate any new air handlers systems into the Building Automation System (BAS)
E-5	Implement monitoring-based commissioning software in the BAS control scheme to monitor airport equipment and systems in near-real time.
E-14	Continually evaluate maintenance schedules to ensure peak efficiency
E-18*	Continue to upgrade to high efficiency light fixtures (i.e., light-emitting diode (LED))
E-34*	Utilize direct/indirect evaporative cooling from HVAC
E-39*	Continue to convert to LED airfield lighting
E-41	Improve efficiency of deicing fluid reclamation plant process flow
Planning and Building	
P&BD-16*	Design spaces to appropriate sizes to avoid increasing building footprint and initial resource use and energy and maintenance burden
P&BD-17	Encourage use of local materials airport-wide

*Initiative ID's denoted with an asterisk are Existing – To Be Continued/Expanded initiatives

Coordination with the Terminal Redevelopment Program

Throughout the development of the SMP, the Project Team collaborated with the TRP Team to consider potential sustainability initiatives for incorporation into the redevelopment process. All Sustainability Planning Project Team-TRP coordination materials are included in Appendix B, *Sustainability Planning Project Team and Terminal Redevelopment Program Meeting Materials*.

In the pursuit of LEED Gold certification, the TRP is focusing on the following initiatives:

- Centralized pre-conditioned air (PCA) which uses a central heating and cooling plant and a thermal energy storage system
- The Baggage Handling System (BHS) will use permanent magnetic motors instead of alternating current motors for conveyor drive systems
- BHS Logic which results in individual conveyor sections operating only if a bag is detected on or immediately upstream
- Building glazing reduced from 46 percent to 30 percent
- Radiant heating systems will be used in the gate lounge, main plaza, and pedestrian bridge
- Systems will slow escalators and moving walkways to 25 percent in public areas when not in use
- A photovoltaic (PV) array for onsite renewable energy generation
- Damper features in the proposed air handling units to minimize the heating energy use of the HVAC system
- Indirect direct evaporative cooling capabilities to pre-cool the supply air volume prior to the traditional cooling coil served by the electric chillers
- Improved energy-efficient lighting



SLCDA has embarked on an ambitious Terminal Redevelopment Program (TRP) that will enhance landside, terminal, and airside operations.

8 Implementation Process

The sustainability implementation framework is used to determine which initiatives are ready for implementation at SLC, periodically review potential initiatives, and monitor their implementation. The first step of the implementation process was undertaken as part of the Sustainability Management Plan (SMP) planning effort and serves as an example for future activities.

Initiative Implementation Guidance

Implementing initiatives is the next step in executing the SMP. An implementation summary sheet, included in the Implementer™, should be sent to the responsible party for each initiative. The summary sheet includes basic initiative information such as estimated staff time required, costs, and timeframe among other details:

- Start Date and Due Date
- Lead and Supporting Departments
- Responsible Party contact information
- Initiative Description
- Steps for Implementation
- Potential Funding Resources
- Helpful Resources and Case Studies

Initiative Summary	
Status:	Not Started
Staffing Hours:	Minimal: < 10 hrs per month
Social Engagement:	SLCDA employees
Timeframe:	Short-term: 0 - 2 years
Capital Costs:	Marginal Cost: 0 < \$5K
Annual O&M Costs:	Marginal Cost: 0 < \$5K
Payback Period:	Long: > 10 years

Example Initiative Summary from the Implementer™.

SPOT: The Implementer™

The Implementer™ was created to support Salt Lake City Department of Airports' (SLCDA's) initiative implementation. This tool provides a summary of the initiative, implementation steps, and helpful resources for all recommended short-term initiatives. The Implementer™ is depicted in this chapter, and the *User's Guide*, provided in Appendix I, *SLC SPOT™ User's Guide*, provides additional information.

Initiative Description

SLC should encourage reduced employee vehicle miles travelled by encouraging employees to ride TRAX for their daily commute. Promoting the use of TRAX on a regular basis will continue to encourage employee use. Emissions from employee commuting is one source of GHG emissions that SLC can help reduce. Employees that use the TRAX would not only lower the Airport's carbon footprint, but could also save money and improve

Implementation Steps

- 1) Develop the framework for a "Take the TRAX" program. Consider methods of marketing and the communication of the program's intent
- 2) If the "Take the TRAX" program includes events (e.g., fairs), then determine the event's focus, list of participants, venue, and schedule. As one event ends, plan for the next.
- 3) Provide route maps and information to employees to increase familiarity with Salt Lake City's TRAX, bus, and commuter rail systems
- 4) Identify additional ideas to encourage/motivate employee use of the TRAX system (e.g., provide rewards to employees that convert from private to public transportation or use public transportation for more than a given percentage of time).

Helpful Resources & Case Studies

Utah Transit Authority, About Trax:
<http://www.rideuta.com/mc/?page=TRAX-AboutUTATRAX>

Example Initiative Description, Implementation Steps, and Other Resources from the Implementer™. The Implementation Summary Sheet includes initiative-specific guidance to personnel responsible for implementing each initiative.

Initiative Tracking

Tracking initiatives involves monitoring the progress of initiative implementation. Each sustainability goal category should be tracked independently to determine progress in meeting each goal.

Progress Reports

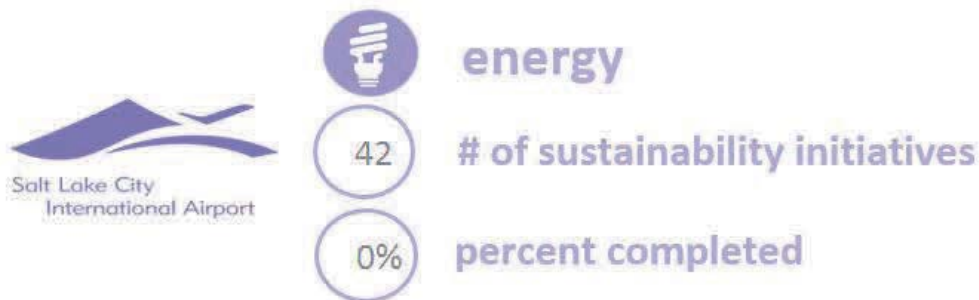
The Tracker™ tool is provided so that responsible parties easily fill in the required information on the progress of implementing an initiative in a consistent manner. Use of a progress report is recommended to collect and update information about an initiative's status. This progress report should be sent to the responsible department/contact, and can

be distributed quarterly or monthly depending on the implementation timeframe or type of initiative, and SLCDCA’s monitoring schedule. Prior to transmittal, the Sustainability Coordinator should identify the *Sustainability Initiative ID* and the *Progress Report Due Date*. The responsible department/contact should summarize and provide all supporting documentation on the progress report. It is anticipated that the person(s) responsible for filling out the progress report would send updated reports back to the Sustainability Coordinator based on a predetermined schedule.

In addition to tracking progress in implementing sustainability initiatives, it is also important for the SLCDCA to understand how cumulatively, the initiatives are contributing to achieving the overall sustainability goals, objectives, and targets identified in Chapter 5. *Chapter 8, Sustainability Monitoring and Reporting*, provides a framework for monitoring and reporting on overall sustainability performance.

SPOT: The Tracker™

The Tracker™ provides SLCDCA one location to track the progress of all sustainability initiatives, regardless of implementation timeframe. In addition to the progress report, this tool provides each initiative, implementation timeframe, status/progress, expected benefits, responsible departments, etc. The Progress Report is shown on the following page and additional information can be found in the *User’s Guide*, provided in Appendix I, *SLC SPOT™ User’s Guide*.



Example Energy Implementation Summary. The Tracker™ centrally manages information for those initiatives in the implementation process. Each sustainability goal category has its own Tracker™ and helps monitor the progress.



**community well-being
PROGRESS REPORT**

C-8

Please complete the following information to update SLCDA's Sustainability Coordinator on the status of initiative implementation.

Name: Kevin Staples
Email: Kevin.Staples@slcgov.com
Phone: (801) 575 - 3470

Progress Report Request or Due Date: 00-00-0000
 Current Initiative Status (Check One) Not Started In Progress Deferred Completed
 Percent Completed: 10% - 20% 30% - 40% 50% - 60% 70% - 80% 90%+
 Est. # of Hours Dedicated: > 200 hrs/mo. 50 - 200 hrs/mo. 10 - 50 hrs/mo. 0 < 10 hrs/mo.
 Other _____

1. Were there implementation issues or challenges? (e.g., Additional staffing, funding needed, etc.)

2. If available, please describe realized benefits and outcomes:

3. If complete, please list lessons learned during implementation:

4. Please submit the following data at the completion of this initiative:
 Describe any data that will support understanding of the initiative's success.

5. Please identify data appended to this transmittal:

Document Name and Type: _____
Method of Transmittal: _____

Additional Notes

If needed, please type additional notes, questions, or comments here.

Example Progress Report. The Progress Report accompanies the Tracker™, and allows the lead contact person to report on individual initiative implementation progress, and transfer any related data to the Sustainability Coordinator.

9 Sustainability Performance Monitoring and Reporting

Salt Lake City Department of Airports (SLCDA) has a track record of implementing sustainability measures at the Airport. One of the key motivators for preparing the Sustainability Management Plan (SMP) was to place these initiatives into an organized structure, so that the results of these initiatives could be tracked and monitored for their success. This SMP creates a framework of goals and objectives for SLCDA key priority areas, with associated targets and metrics to assess sustainability performance. These targets and metrics are intended to provide information to SLCDA on success of the sustainability program as a whole, and not individual initiatives.


Performance monitoring and reporting is vital to the successful implementation of the program. This is the “Monitor” phase depicted in Figure II-2. Performance metrics and key performance indicators (KPIs) are used to assist SLCDA in monitoring the effectiveness of SLC’s sustainability program and initiative implementation.

Performance Metrics, Key Performance Indicators, and Performance Targets

The selection of performance metrics and KPIs began during the fourth Sustainability Action Committee (SAC) meeting. The SAC broke into small groups in order to generate ideas for monitoring in reporting. Some key findings from the discussion included:

- Performance metrics should be tied to sustainability goals and objectives
- Data should be available for any metrics selected for the plan
- Metrics should be easy to understand for the general public
- Monitoring may include two different sets of data – one for internal tracking and others (KPIs) for communication to the senior SLCDA leadership and the public
- Metrics should be relatable/comparable to other airports as much as possible
- Tenant metrics should be reconsidered because it is difficult to gather and report tenant data

This chapter includes the performance metrics by goal category, as identified by SLCDCA, including existing performance metrics that are for future monitoring. These performance metrics are used internally by SLCDCA to track success and identify areas for improvement in each goal category. Some of the performance metrics in each goal category are used as KPIs to communicate sustainability progress externally. The performance metrics and KPIs are compared against performance targets that have been defined by SLCDCA as “achievement markers.” Table 9-1 lists each sustainability goal, objective, and corresponding performance metric (KPIs are identified with an asterisk) and performance target.

SUMMARY			
Reporting Year	2012		Select Performance Year
TOPIC AREA	Key Performance Indicator		
Energy	Total Energy Use	300,924	MMBtu
	Rate of Energy Use in De-Icing Fluid Reclamation Facility	0.00%	
	Renewable Energy Generated on Property	0.00	kWh
	<i><u>% of Total Electricity Purchased from Renewable Sources</u></i>	0.00%	
	<i>Select Cost Center</i>	-	MMBtu
	<i>Total Electricity Use</i>	9.32	% of Total
	<i>Total Electricity Demand</i>	6.26	MMBtu per 1,000 passengers
	<i>Total Natural Gas Use</i>	5.65	kW per 10k passengers
	<i>Utility Cost, Electric</i>	\$4,252,517	MMBtu per 1,000 passengers
	<i>Utility Cost, Natural Gas</i>	\$0	

Example KPI Summary. The Reporter™ provides a structured format to report on SLC’s performance metrics and KPIs.

Reporting on Sustainability Performance

The Sustainability Coordinator is responsible for collecting performance data and tracking performance against SLCDCA’s established targets. Performance reviews should be conducted on a quarterly basis. Current performance should be compared to previous quarters or years, and consideration should be given to seasonal variances. For example, terminal energy use will vary between winter and summer seasons, because of heating and cooling needs.

TABLE 9-1: PERFORMANCE METRICS AND KEY PERFORMANCE INDICATORS

RESOURCE	GOAL	OBJECTIVE	METRICS	TARGET	
Energy	Reduce the total energy use and demand of the airport and increase renewable energy generation on airport property.	Complete energy efficiency projects to reduce energy use in airport facilities.	Total energy use (MMBTu/yr)*	Decrease energy use in buildings and operations by 10% over a rolling 10-year average (2020 reduction from 2000-2010 average, then 2030 reduction from 2010-2020 average).	
			Total Electricity use per passenger (MMBTu/passenger)		
Air Quality and Climate Change	Reduce criteria air pollutants and greenhouse gas (GHG) emissions to improve public health and reduce environmental impact.	Reduce regulated air pollutants and GHG emissions from airport operations (Scope 1 and 2).	Total Electricity demand per passenger (kW/passenger)	Develop, incorporate, and distribute a comprehensive employee education and engagement program for energy conservation on a quarterly basis."	
			Total Natural gas use per passenger (MMBTu/passenger)		
			Total energy use by cost center (MMBTu/cost center)		
			Utility Costs (Electricity and Natural Gas)		
			Rate of energy use in De-icing Fluid Reclamation Facility*		Develop passenger education information through Wi-Fi dashboard or lobby dashboards.
			Renewable energy generated on property (kWh/yr)*		Create right-sizing program to encourage the right vehicle for the right use.
			Percent of total electricity purchased from renewable sources		Increase to 35% mix of alternative fuel/electric vehicles in 5 years.
			NA		Develop and implement incentive program to reduce conventional fuel use by 5% over 5 years.
			NA		
			NA		
Recycling and Material Management	Reduce waste generation and increase diversion from landfills.	Engage employees, passengers, and tenants in waste reduction and recycling efforts.	Percent of alt-fuel/electric vehicles of total fleet vehicles*	Increase recycling rate per passenger to 10% within 1 year and 15% goal within 5 years of new waste management contract.	
			Conventional fuel use (diesel/gasoline) vs. alt-fuel (CNG) (gal/year)*		
			NA		
			Scope 1 and 2 GHG emissions (tons/year) by scope per passenger*		
			Percent of tenant-owned GSE powered by electricity/alternative fuels		
			Total ridership of Airport TRAX line		
			Percent SLCDA employees walking, bicycling, or using HOV modes of transportation to access the Airport		
			Recycling rate per passenger (lbs./passenger) (excludes construction and demolition waste)*		
			Solid waste disposal rate per passenger (lbs./passenger)*		
			Recycling percentage by commodity		
Recycling and Material Management	Increase the landfill diversion.	Develop capacity for composting or recovering energy from food scraps and other compostables.	NA	Reduce waste to landfill by 10% during future phase of TRP implementation.	
			Waste diversion (lbs.)*		
			Solid waste disposed vs. cardboard diverted (tons)		
			Construction and demolition reused material (tons)		
			Recovery rate of glycol used (%)	No specific target developed until SLCDA-managed facility is operational for period of time.	

*Metrics in bold and denoted with an asterisk are KPIs

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TABLE 9-1: PERFORMANCE METRICS AND KEY PERFORMANCE INDICATORS (CONT.)

RESOURCE	GOAL	OBJECTIVE	METRICS	TARGET
Water Resources	Assist in the region's efforts to sustain its water resources for current and future generations.	Encourage efficient water use and reduce water waste.	Water use per passenger (gal/passenger)*	No specific target developed; SAC input to build process targets based on bottom up assessments. Consider process water targets folding into terminal target to streamline targets to just indoor vs. outdoor use.
			Water use in landscape irrigation (gal/acre of landscaped area)*	
Community Health and Safety	Maintain a safe and healthy natural and human environment for passengers, Airport employees, and tenant employees.	Total potable water use (gal)	Acres of native, drought-tolerant landscaping or xeriscaping	Increase amount of SLCDA staff participating in City Employee Wellness program (need to establish baseline first year).
		Support employee and tenant programs that support health.	Percent of SLCDA staff participating in the city's employee wellness program(s)*	Increase amount of economic impact (\$) to community (need to establish baseline first year).
		Support the local and regional economy.	Percent of Airport project dollars (federally sourced) going to local, small, and DBE/WBE companies*	Increase number of community events supported annually (need to establish baseline first year).
		Support community outreach and engagement activities that promote social, economic, and environmental sustainability.	Percent of employees participating in SLCDA-sponsored/supported volunteerism	Increase percentage of organic and/or local food products available in concessions (need to establish baseline first year).
		Encourage concessionaries to buy and provide local food.	Number of community events supported	
		Encourage partnerships between tenants and the airport to support wellness initiatives.	NA	
		Ensure all new buildings and major renovations of 10,000 square feet or higher are Leadership in Energy and Environmental Design (LEED) Silver-certified or higher.	NA	
		Encourage tenants to incorporate sustainable building design measures for new construction and major renovations.	Number of noise complaints per individual per year	
		Incorporate life cycle analysis into all Airport planning and operations.	Percent of new/renovated buildings with LEED Silver-certification or higher*	
		Incorporate appropriate resiliency features into future facility designs.	Percent of new/renovated buildings with LEED Silver-certification or higher*	
Planning and Building Design	Promote Green Building, energy efficiency, and operational efficiency.		NA	All new buildings and renovation of 10,000 square feet or higher are LEED Silver-certified or higher.
			NA	All new tenant buildings and renovation of 10,000 square feet or higher are LEED Silver-certified or higher.

*Metrics in bold and denoted with an asterisk are KPIs



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SPOT: The Reporter™

The Reporter™ was developed to provide one tool that SLCDCA can use to update all performance metric data. The Airport's Sustainability Dashboard will utilize data from the Reporter™ to update the KPIs selected for public reporting. The Reporter™ is highlighted on the following page and described in more detail in the *User's Guide* in Appendix I, *SLC SPOT™ User's Guide*. The Sustainability Coordinator will be responsible for internal reporting. This may include sharing performance metrics and trends with SLCDCA leadership and the Sustainability Action Committee.



The Reporter™ provides a structured format for SLCDCA's Sustainability Coordinator to report on SLC's performance metrics and KPIs. The KPIs and related data will be in a format that can also be used on the Airport's online Sustainability Dashboard for public reporting. The Reporter™ is organized into the same categories as identified in the SMP and includes input tables/data and outputs/metrics. The first column shows what inputs go into, for example, the 'Greenhouse Gas' tab, that is then referenced as an input for various category outputs. The inputs section shows which tabs are used for the calculations that give the associated metrics (outputs) for the topic area (category).

The Reporter™ includes a 'Summary' tab that provides a snapshot of all activities in a given year as well as numerous charts to provide a visual display of the Reporter outputs. These charts provide a breakdown of where the largest resource consumers are as a function of each cost center and, with regards to waste, how much is recycled versus sent to landfills. Annual trend bar charts are also included for each activity area.

A key feature of the Reporter™ is its ability to calculate GHG emissions for the Airport, displayed on the 'Greenhouse Gas' tab. This tab is set up to reference the tool's other tabs for electricity, natural gas, fuel, and refrigerant use in order to provide greenhouse gas emissions.

The Reporter™ includes two additional tabs, 'Conversion Factors' and 'Normalizing Factors', for reference purposes. These tabs are used for metric calculations as well as applying the conversion factors to get the appropriate units for calculations. The Reporter is set up to automatically calculate results as data are entered.



					
<h2>THE REPORTER</h2>					
<h3>Electricity</h3>					
		<h2>2012</h2>			
		Consumption (kWh)	Demand (kW)	Demand Cost (\$)	Cost (\$)
AIRFIELD		4,197,979	1,608	\$111,325.58	\$387,979.03
BURNPIT		133,740	99	\$10,764.29	\$17,212.82
GLYCOL		1,577,239	688	\$102,699.11	\$183,994.62
TERMINALS		35,207,262	7,942	\$0.00	\$2,662,420.56
LANDSIDE		7,044,624	1,055	\$153,688.13	\$483,982.30
AIRPORT2		449,798	57	\$5,566.86	\$37,077.82
AIRPORT3		183,086	56	\$0.00	\$17,124.86
GENERAL		912,515	171	\$22,801.29	\$73,005.86
S.SUPPORT		1,200,612	207	\$32,629.44	\$94,270.00

Example Inputs (Energy Performance Metrics). Performance Metrics and Key Performance Indicators are used to ensure SLC continues to make progress towards achieving its sustainability goals. Graphics are created from these metrics, which can be used on the Airport's Sustainability Dashboard.

Airport Sustainability Dashboard

The Sustainability Coordinator will use the tracking sheets for internal reporting. This may include sharing performance metrics and KPIs, along with trends, with SLCD A leadership and the Sustainability Action Committee (SAC). The Sustainability Coordinator will also be responsible for external coordination with the general public. An Airport Sustainability “Dashboard” has been established that mimics the City’s sustainability dashboard, which will share SLC’s KPI results with the public (Figure 9-1). It is recommended that the Airport Dashboard be updated annually, at a minimum.

FIGURE 9-1: AIRPORT SUSTAINABILITY DASHBOARD EXAMPLE



Source: SLCD A Airport Dashboard, 2015.



Salt Lake City
International Airport

Sustainability Management Plan

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10 | Funding and Partnerships

According to the Airport Cooperative Research Program (ACRP) Synthesis 10 *Airport Sustainability Practices*,⁷⁹ a major reason many airports cannot implement a sustainability plan is because of lack of funding. Airports that receive funding for sustainability may have identified funding from state, federal, private or non-profit sources. Although funding is a challenge for many airports, sustainability is becoming more of a focus and many funding opportunities are available. This chapter summarizes traditional and non-traditional funding sources that may be available to the Salt Lake City Department of Airports (SLCDA) to fund its sustainability efforts. In addition to funding strategies, partnership opportunities can offer the means to accomplish initiatives that benefit multiple parties. Opportunities for strategic partnerships also are presented in this chapter.

Federal Funding Opportunities

The Federal Aviation Administration (FAA) and United States Environmental Protection Agency (USEPA) provide several funding options that SLCDA may be eligible to receive. Current federal funding opportunities are commonly for projects/programs that support energy and greenhouse gas reductions; therefore, most of the grants described in the section are related to those resources. However, USEPA has broader grant program and additional opportunities are identified below.

FAA Energy Efficiency of Airport Power Sources Program

The FAA is currently developing guidance for an Energy Efficiency of Airport Power Sources funding program. This program was authorized in Section 512 of the *FAA Modernization and Reform Act of 2012* and will promote comprehensive energy assessments of airport operations and provide funding for upgrades, including but not limited to, the following:

- Heating and cooling
- Base-load operations
- Back-up power

⁷⁹ ACRP Synthesis 10 [\\KIRK\dept\EV\Sustainability Library\ACRP\Synthesis_010-Airport_Sustainability_Practices.pdf](#)

- Power for on-road and off-road airport vehicles

As a result of the assessments, energy conservation measures (ECMs) must be identified that will reduce airport energy usage. These reduction measures may include photovoltaics, wind power, or other measures. Although guidance is expected to be released in Fall 2015, it is anticipated that assessments will be required to follow ASHRAE *Procedures for Commercial Building Energy Audits*. In addition, the guidance will include an energy project cost estimating tool and general information that can reduce the time and/or cost of an assessment.

The Energy Efficiency of Airport Power Sources program may be funded through Airport Improvement Program (AIP) entitlements or discretionary grants (i.e., there is no separate set-aside). Based on preliminary discussions, an ASHRAE Level 1 assessment, which can be performed by airport personnel with specialized training and tools, or energy assessors, will satisfy requirements and meet eligibility standards for funding if an airport is able to identify ECMs from its results. A more detailed Level 2 assessment, which may require more intensive analysis, will be evaluated for funding on a case-by-case determination.

FAA Voluntary Airport Low Emission (VALE) Program

The FAA's Voluntary Airport Low Emission (VALE) Program is a national program that provides funding for commercial airports located in a non-attainment or maintenance area for the National Ambient Air Quality Standards (NAAQS) to implement projects that reduce emissions and improve air quality in the region. The emission reduction projects must be both cost-effective and voluntary. In addition to funding, VALE projects will also have an assurance to grant emission reduction credits from state regulatory agencies, which may be used to meet future environmental obligations under the Clean Air Act, such as meeting General Conformity and New Source Review.

VALE grants are available for infrastructure modifications, low-emitting ground support equipment (GSE) and ground access vehicles (GAV), as well as other emission reduction projects for non-attainment and maintenance pollutants. Eligible infrastructure projects must reduce emissions by virtue of vehicle displacement, fuel conversion, and/or reduced fuel consumption at the airport. Typical examples of low-emission infrastructure include gate electrification and pre-conditioned air (PCA); higher efficiency or cleaner burning combustion sources including boilers; and recharging or refueling stations for alternative-fuel vehicles. VALE funding is typically through the FAA's Airport Improvement Program (AIP) Noise and Air Quality Set Aside, although Passenger Facility Charges (PFCs) can also be used.

The Salt Lake City area has been designated as non-attainment for particulate matter (both PM₁₀ and PM_{2.5}) and maintenance for ozone and carbon monoxide. Salt Lake City International Airport (SLC or the Airport) is eligible for VALE funding of up to 75 percent of the infrastructure cost and 75 percent of the incremental cost of vehicles associated with voluntary emission reduction projects. Draft VALE applications are due in January, while the final application and grant award will be issued by the end of the fiscal year.

In order to receive funding, the projects must be cost-effective for the non-attainment or maintenance parameters. The cost-effectiveness range is based on total project costs versus emission reductions over the useful life of equipment or vehicles. Cost effectiveness varies by parameter, ranging from \$100,000 to \$175,000 for particulate matter, \$10,000 to \$15,000 for carbon monoxide, and \$10,000 to \$30,000 for the ozone precursors of oxides of nitrogen and volatile organic compounds. In addition, the State of Utah Department of Environmental Quality, Division for Air Quality, would be required to provide a Letter of Assurance to issue Emission Reduction Credits (ERCs).

Additional information is available on the FAA website:
www.faa.gov/airports/environmental/vale/

FAA Zero Emissions Vehicle (ZEV) Program

The FAA Zero Emissions Airport Vehicle and Infrastructure (ZEV) Pilot Program provides Airport Improvement Program (AIP) funds for the acquisition of zero-emissions vehicles at an airport and for making infrastructure changes to facilitate the delivery of energy necessary for the use of these vehicles. The Program is only eligible for on-road vehicles (i.e., not airside ground support equipment) used exclusively on-airport for airport purposes, such as shuttle buses and security and maintenance vehicles. Any new vehicle and equipment purchased through the ZEV Pilot Program must be owned by the airport sponsor. Unlike the VALE Program, the ZEV Program does not include requirements for modeling emission reductions or obtaining a Letter of Assurance from the Utah Division for Air Quality.

The ZEV Pilot Program pays for 50 percent of the total infrastructure and vehicle costs. However, the vehicle must be entirely electric or hydrogen fuel cell, since any other fuel generates emissions SLC already has natural gas buses and infrastructure, but may consider the program for purchasing electric vehicles for airport vehicles.

The selection criteria used by the FAA for funding gives priority to airports located in non-attainment areas, then maintenance, with remaining airports in attainment being the last to be considered. In addition, the FAA grants funding to applications that demonstrate the greatest air quality benefits, based on a cost effective analysis specific to the ZEV Pilot Program.

Additional information is available at the following website:

http://www.faa.gov/airports/environmental/zero_emissions_vehicles/

USEPA Diesel Emission Reduction Act

The USEPA administers the Diesel Emission Reduction Act (DERA), which offers funding for vehicle and ground support equipment conversion from using diesel fuel. DERA provides grants for technologies including emissions and idle control devices, aerodynamic equipment, engine and vehicle replacements, and alternative-fuel options. The projects

must meet critical local air quality needs by deploying both proven and emerging technologies much earlier than would otherwise occur. Seventy percent of DERA funds are used for national competitive grants, with the remaining 30 percent allocated to the states to promote diesel emission reductions.

In addition to airport-owned vehicles, DERA grants are also available to airlines and fixed based operators operating at the airport. Reimbursement is 25 percent of the vehicle cost and can include retrofits, cleaner fuel combustion or engine upgrades. The State of Utah has already participated in the DERA program.

DERA grants are competitively bid against other organizations using diesel equipment, but airlines have received funding in the past. If interested in DERA funding, it may be advantageous to team with other diesel equipment users in the area to collaborate on a joint application, with larger diesel reductions.

Additional information is available at the following website:

<http://www.epa.gov/cleandiesel/grantfund.htm#dera>

[Other “Air Grants” related to air quality emissions, transportation, climate change, indoor air quality, etc. can be found at: http://www.epa.gov/air/grants_funding.html.](http://www.epa.gov/air/grants_funding.html)

USEPA Environmental Education Grants

USEPA is awarding grants to eligible applicants in support of environmental education projects that promote environmental awareness and stewardship, and will help provide people with the skills to take responsible actions to protect the environment. This grant program provides funding to support projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques. Several educational initiatives will likely be implemented in the short-term at SLCDA, and may be eligible for funding through this program if a local or state education or environmental agency applies for the grant funding.

[Additional information can be found at: http://www2.epa.gov/education/environmental-education-ee-grants](http://www2.epa.gov/education/environmental-education-ee-grants)

Other USEPA Grants

USEPA provides many grant funding opportunities that include, but are not limited to:

- Brownfield Development
- Community Action for a Renewed Environment
- Environmental Information Exchange Network
- Pollution Prevention (matching funds for state programs)
- Water (potable and waste water, water pollution prevention, and wetlands protection)

Additional information is available at the following website:

<http://www2.epa.gov/home/grants-and-other-funding-opportunities>

State and Local Funding Opportunities

There are several state and local funding opportunities that SLCDAs may be eligible to apply and receive. Most of the opportunities identified in this section are focused on energy-related initiatives, but there are several that address the natural environment and community.

Utah Department of Environmental Quality Clean Fuels

The Utah Department of Environmental Quality has two programs to support clean fuels. More information is available at:

www.airquality.utah.gov/Planning/Mobile/cleanfuels/index.htm.

- Clean Fuel Vehicle Grant and Loan Program supports the purchase, conversion, or retrofit of clean fuel vehicles or the purchase of clean fuel refueling equipment. Funds of up to \$250,000 per year in grants or loans are available.
- The Utah Clean Diesel Program has grant funds available to support retrofits, purchases, etc. to improve the emissions of diesel vehicles and diesel fleets.

Utah Office of Energy Development U-Save Revolving Loan Fund

The U-Save Energy Fund finances energy efficiency retrofits of existing publicly-owned buildings. Low interest rate loans are provided to assist in financing energy related cost-reduction efforts. The program's revolving loan mechanism allows applicants to repay loans through the stream of energy cost savings realized from the projects. The program is currently closed to new applicants but is expected to issue another RFP for new projects. Check the website frequently for notice of a new RFP.

Additional information is available on the Utah Office of Energy Development website:

<http://energy.utah.gov/funding-incentives/energy-financing>

Rocky Mountain Power – Solar Incentive Program

Rocky Mountain Power (RMP) has a Solar Incentive Program, a utility rebate program that SLCDAs should be eligible to receive. The Solar Incentive Program has a total budget of \$50 million for calendar years 2013 through 2017. RMP will accept applications during the first two weeks of each program year. Winners will be selected via lottery. If there is remaining capacity available for a sector after the lottery, additional applicants will be awarded incentives on a first come, first served basis.

For large non-residential entities (25 kW to 1,000 kW) it offers up to \$800,000. Eligible systems must be net-metered and the maximum system size that RMP will allow is 2 MW, but the incentive will not exceed \$800,000.

Large non-residential applicants will receive their incentive in five annual installments, with the first installment coming within 60 days of the receipt of an approved incentive claim form. Large non-residential systems are also required to produce 85 percent of the expected output based on estimates from PVWatts. If the system produces less than expected, annual payments will be reduced proportional to the under-performance of the system.

Additional information is available on the Solar Incentive Program website:

http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=UT24F&re=0&ee=0

Rocky Mountain Power – Wattsmart Incentive Program

RMP's wattsmart incentive program is open to current electric utility customers. The wattsmart program provides incentives for energy efficiency upgrades and projects such as lighting, heating (electric) and cooling, electronically commutated (EC) motors, variable frequency drives (VFDs), building envelope, appliances, controls, recommissioning, energy manager co-funding, and other custom projects. RMP account representatives can be contacted for more information or the website is accessed at

www.rockymountainpower.net/bus/se/utah.html.

Rio Tinto Kennecott

Rio Tinto Kennecott (RTK) has both foundation and corporate giving initiatives. The corporate giving program is currently suspended because of a slide at its Bingham Canyon Mine in 2013. However, RTK has been very active in the regional community partnering with, and providing funding for, multiple organizations and initiatives. These include Kennecott Nature Center, Natural History Museum of Utah (\$15 million in support), Envision Utah, and The Nature Conservancy (\$300,000 in support for an education collaboration).

The Bingham Canyon Mine Visitors Center Charitable Foundation raises money for local charities through tax-deductible entrance fees to the Visitors Center. The next deadline is October 15. Additional information on all of RTK's charitable giving can be found at:

<http://www.kennecott.com/community>

The Community Foundation of Utah

The Community Foundation of Utah (CFU) has multiple avenues to support financial contributions. The Utah Fund was established to meet the Utah's emerging needs to catalyze change and fund innovative solution to the state's most challenging problems. Another avenue to attract philanthropic contributions is to establish a specific fund with the CFU. More information can be found at: <http://www.utahcf.org/>

George S. and Dolores Dore Eccles Foundation

George S. and Dolores Dore Eccles Foundation (EF) has a preservation and conservation grant area making gifts to charitable organizations that preserve and protect the natural environment. For example, the EF made an \$8 million, multi-year matching grant to The Nature Conservancy's Utah's Lasting Landscapes campaign.

Government units are eligible for funding. Organizations looking for funding need to request an application from at: <http://www.gsecclesfoundation.org/gsecclesForms/application.html>

Additional information can be found at:
<http://www.gsecclesfoundation.org/preservation/index.html>

Questar Gas

Questar Gas offers the ThermWise business incentive program for current customers. The ThermWise program provides incentives for the purchase of qualifying energy efficient equipment such as food service appliances, laundry clothes washers, gas heating equipment such as boilers, and building envelope weatherization for new or existing buildings. Contact information is available at the website:

www.thermwise.com/business/BusinessRebates.php.

Qualified Energy Conservation Bond

Qualified Energy Conservation Bond (QECB) is a low-cost bond available to local governments to help fund energy conservation projects. Funds can be used for qualifying projects that reduce energy consumption by at least 20 percent in publicly owned buildings and facilities. These funds can be used for energy efficiency and renewable energy (solar) projects. Salt Lake City received \$1.9 million from the state. SLCDCA may contact the SLC Office of Sustainability to discuss available funds.

Additional information is available on the Utah Governor's Office of Economic Development website: <http://business.utah.gov/programs/pab/energy-conservation-bonds/>.

Power Purchase Agreement

Power Purchase Agreements (PPA) are an avenue to consider for the purchase of solar PV systems. With a PPA, the solar PV system is financed and owned by a third-party and you pay them for the power produced much like you currently purchase electricity from RMP. In Utah, only government, non-profit, and public entities are able to use PPAs, which can be a way to purchase renewable energy with little to no upfront cost.

Additional information is available on the Solar Simplified (Utah Clean Energy) website: <http://solarsimplified.org/incentives-financing/financing-options-programs>.

Private Funding Opportunities

Several private funding opportunities were identified and are described in this section. There are likely other private funding opportunities that SLCDCA would be eligible to receive, but private funding opportunities frequently vary from year to year. It is recommended that SLCDCA pursue these funds, as well as seek others, once initiatives are ready for implementation.

Surdna Foundation

The Surdna Foundation funds projects nationwide for three topic areas: sustainable environments, strong local economies, and thriving cultures. The Sustainable Environments Program seems to fit the best with an airport's needs. According to Surdna, this program:

“...works to overhaul our country's low performing infrastructure, much of it outdated and crumbling, with a new approach that will foster healthier, sustainable, and just communities. We believe in the potential of what we call “next generation infrastructure” to improve transit systems, make buildings more energy efficient, better manage our water systems and rebuild regional food systems.”

Within the Sustainable Environments Program, there are four paths:

- Sustainable transportation networks and equitable development patterns;
- Energy efficiency in the built environment;
- Urban water management; and
- Regional food supply.⁸⁰

The first option may be the most applicable to airports, which is described as the support of “...clean, affordable, equitable, high-quality and efficient transportation and land use development that better connects critical services, jobs, schools, housing and other regional destinations.”⁸¹

Energy Foundation

The Energy Foundation supports six main programs throughout the U.S. The programs and initiatives that may be eligible for funding include:

- Buildings – To support policies that improve energy efficiency of business and homes, and reduce carbon emissions and utility bills.
- Climate – To support policies to reduce greenhouse gas emissions and reduce impacts of climate change.

⁸⁰ All four options in detail: <http://www.surdna.org/what-we-fund/sustainable-environments.html>.

⁸¹ Guidelines for this option: <http://www.surdna.org/what-we-fund/sustainable-environments/4-what-we-fund-/what-we-fund-/480-sustainable-transportation-networks-a-equitable-development-patterns.html>

- Power – Provide cleaner sources of energy at more affordable rates.
- Public Engagement – Obtain support nationally and at a state-level for cleaner energy.
- Transportation – To promote cleaner fuels and more energy efficient vehicles.

SLCDA would likely be eligible to apply for the Power, Public Engagement, and Transportation funding programs. For more information on the Energy Foundation, visit the Programs page on the Energy Foundation Website: <http://www.ef.org/programs/>

The William and Flora Hewlett Foundation

The Hewlett Foundation offers an Environment Program that has three grants: Western Conservation, Energy and Climate, and Bay Area Communities. SLCDA may qualify for the Western Conservation and Energy and Climate grants.

The Western Conservation program focuses on areas in western North America that encompasses 12 states (including Utah) and three Canadian provinces. The Western Conservation grant would be suitable for SLCDA as one of the grant's four strategies includes increasing clean energy. The Energy and Climate grant focuses on clean power, clean transportation, and building broad support, which SLCDA has initiatives that could be funded with this grant.

Additional information about the Hewlett Foundation Grants can be found at: <http://www.hewlett.org/grants/grantseekers/environment-grantseekers>

Partnerships

Potential partners were identified at the state and local levels to advance sustainability with SLCDA. These potential partners were identified based on the unique attributes of SLCDA as well as this SMP and associated recommended sustainability initiatives. Several potential private partners were also identified, but this list provides a small selection, as many other potential partners exist.

Utah Recycling Alliance

The Utah Recycling Alliance (URA) is a non-profit organization focused on developing and promoting relationships, resources, and recycling programs throughout the State of Utah. Current sponsors of URA include a range of businesses and organizations including Waste Management, Varian Medical Systems, Ace Recycling & Disposal, Intermountain Healthcare, Track Your Truck, and Metech Recycling. Additional information can be found at: <http://utahrecyclingalliance.org/>

iUTAH

iUTAH is an interdisciplinary research project dedicated to preserving Utah's water resources and comprised of a vast network of researchers, universities, governmental agencies, industry partners, and non-profit organizations. More information can be found at: <http://iutahepscor.org/index.php>

Wasatch Front Regional Council

The Wasatch Front Regional Council (WFRC) consists of elected officials representing local governments from Salt Lake, Davis, Weber, Morgan, Box Elder, and Tooele counties working together to pursue common interests. The WFRC has a focus on transportation planning, but has a range of projects from air quality and bike planning to green infrastructure. Additional information can be found at: http://www.wfrc.org/new_wfrc/

Healthy Environment Alliance of Utah

Healthy Environment Alliance of Utah (HEAL) is a group focused on educating citizens on the problems people in Utah face, and work towards making Utah's environment healthy and safe for all. HEAL has focused on promoting participation in the democratic process that ensures fundamental changes in the way the people of Utah make decisions so a healthy environment can be enjoyed by the people of Utah. More information may be found at: <http://healutah.org/who/aboutus>

Utah Office of Energy Development

The Utah Office of Energy Development was formed in response to the Governor's 10-year Strategic Energy Plan, and has now been positioned as the primary resource for advancing energy development in Utah. Additional Information may be found at: <http://energy.utah.gov/about/>

Utah Energy Infrastructure Authority Board

The Utah Energy Infrastructure Authority (UEIA) was created by the Utah State Legislature in the 2012 General Session. The aim of the Authority is to utilize tax-free state bonds to advance energy infrastructure projects that facilitate responsible energy development in Utah. The Board is chaired by the Governor's Energy Advisor, and is composed of various energy experts, utility representatives, and government leaders, as outlined in statute. Additional information may be found at: http://le.utah.gov/~code/TITLE63H/pdf/63H02_020200.pdf

The Utah Generated Renewable Energy Electricity Network Authority (UGREEN)

The Utah Generated Renewable Energy Electricity Network Authority is an independent state agency that is tasked with the development of a master plan for renewable energy production and transmission infrastructure in the state of Utah. More information may be found at:

<http://wyia.org/wp-content/uploads/2010/09/utah-generated-renewable.pdf>

http://www.edcutah.org/files/Utah_Legislative_Changes_040909.pdf

Utah Department of Environmental Quality

The Utah Department of Environmental Quality's mission is to safeguard public health and our quality of life by protecting and enhancing the environment. We implement State and federal environmental laws and work with individuals, community groups, and businesses to protect the quality of our air, land, and water. More information may be found at:

http://www.deq.utah.gov/Admin/About_DEQ/index.htm

State of Utah Public Service Commission

The primary responsibility of the Commission is to ensure safe, reliable, adequate, and reasonably priced utility service. It conducts hearings and investigations of utility company operations in order to determine just and reasonable rates for service. The Commission strives to protect efficient, reliable, reasonably priced utility service for customers, and to maintain financially healthy utility companies. These goals are attained through the regulatory decisions the Commission makes and through rules it adopts. More information may be found at: <http://www.psc.state.ut.us/aboutus/history.html>

Utah Traffic Lab

The Utah Traffic Lab (UTL) is a University of Utah Advanced Transportation Systems facility that is associated with the Department of Civil & Environmental Engineering. The research emphasis of UTL is Adaptive Traffic Signal Control Systems. They are interested in Intelligent Transportation Systems (ITS), Traffic Operations Research, and Innovative Transportation Solutions with a focus on application-oriented research. UTL uses the latest technology to solve problems, validate and evaluate transportation systems and recommend solutions for technological applications. More information may be found at:

<http://www.trafficlab.utah.edu/>

Utah Clean Cities Coalition

Utah Clean Cities Coalition (UCCC) is one of the nearly 100 Coalitions that are part of the U.S. Department of Energy's Clean Cities Initiative, working to reduce our dependence on

foreign oil, develop regional economic opportunities, and improve air quality. As a non-profit organization, UCCC provides tools and resources for voluntary, community based programs to reduce consumption of petroleum-based fuels. Through our stakeholder partnerships, UCCC serves as a resource to promote and create alternative fuels, stations, and vehicles, as well as to promote clean strategies such as Idle Free Utah and the Clear the Air Challenge. UCCC has dual locations in Salt Lake City and St. George, which serve the entire state. More information may be found at: <http://utahcleancities.org/>

Institute for Clean and Secure Energy: University of Utah

The mission of Institute for Clean and Secure Energy (ICSE) is education through interdisciplinary research on high-temperature fuel utilization processes for energy generation, and associated environmental, health, policy, and performance issues. More information may be found at: <http://www.ices.utah.edu/about>

Utah Clean Energy

Utah Clean Energy is a non-profit, non-partisan public interest organization partnering to build the new clean energy economy. This organization is committed to creating a future that ensures healthy, thriving communities for all, empowered and sustained by clean energy. More information may be found at: <http://utahcleanenergy.org/>

Amaron Energy

Amaron Energy is a research and development firm focused on clean, renewable technologies for producing energy. More information may be found at: http://amaronenergy.com/Amaron_Energy/Amaron_Energy.html

Blu.

Blu. Is a total solution provider for Liquefied Natural Gas fueling application: trucking, mining, marine, railroad, industrial, and more. Their motivation is the fact that as fleets convert to natural gas, our air gets cleaner, companies cut costs, and we reduce our dependence on foreign energy. More information may be found at: <http://blulng.com/about-us-2/>

Wasatch Wind

Wasatch Wind is an independent wind developer focused on wind energy projects in the Intermountain West. They are motivated by being involved in the field of renewable energy and are enthusiastic about working with communities and governments to deliver the economic benefits that accompany the generation of homegrown, clean energy. More information may be found at: <http://www.wasatchwind.com/about-wasatch-wind>



Washakie Renewable Energy

Washakie Renewable Energy is a company that focuses on creating and producing high quality, renewable fuel to help ensure a greener tomorrow. More information may be found at: <http://wrebiofuels.com/about/>

These suggested funding and partnership opportunities will need to be evaluated on a case-by-case basis for each initiative as it becomes ready for implementation.



Salt Lake City
International Airport

Sustainability Management Plan

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11

SMP in Action

The Salt Lake City International Airport (SLC) Sustainability Management Plan (SMP) has a robust set of recommendations, suggestions, and directives. Key to the successful implementation of the SMP will be following a well laid out and organized framework, as described in Chapter 6, *Organizational Engagement*, and Chapter 8, *Implementation Process*, within a reasonable timeframe. Also important for successful implementation is the understanding and embracing of implementation roles and responsibilities within the organization, and that those responsible for implementation feel supported by the organization in their efforts.

This chapter lays out a high-level work plan for Salt Lake City Department of Airports (SLCDA) through mid-2016. Key considerations of this work plan include:

- Organizational readiness;
- Sustainability engagement;
- Identifying and implementing sustainability initiatives and projects; and,
- Developing a sustainability monitoring and reporting framework.

The Sustainability Coordinator at SLCDA, a staff member within the Planning Environment, will play a key role in the fulfillment of this work plan. The Sustainability Coordinator is dedicated to overseeing the SLC SMP as well as driving continuous improvement.

Organizational Readiness

Putting in place the organizational structure to implement the SMP will be one of the first tasks of the SMP. Continuation of the **Sustainability Action Committee (SAC)** will be an important step to provide input from various divisions within SLCDA during and after the implementation process. Senior leadership will select **Sustainability Category Champions** to represent each SMP goal category (energy, air quality and climate change, recycling and material management, water resources, and community health and safety, and planning and building design). The Sustainability Category Champions will be responsible for assisting in the identification and screening of initiatives within their areas of expertise. The Sustainability Category Champions will be appointed by the second quarter of 2015.

The Sustainability Coordinator will convene quarterly meetings with the SAC to update them on the overall progress of SMP implementation as well as consult with them regarding their specific SMP responsibilities. The SAC will be responsible for providing input on initiative screening and prioritization. Proposed agenda items for the quarterly SAC meetings are as follows:

AGENDA

Salt Lake City Department of Airports (SLCDA) - Sustainability Action Committee (SAC) Quarterly Meeting: Sustainability Initiative Identification, Evaluation, and Prioritization

Date: MM/DD/YYYY

Time: [Recommended to be no more than 1 hour]

Time	Item
8:00 AM – 8:05 AM	Welcome
8:05 AM – 8:20 AM	Identification of New and Existing Sustainability Initiatives
8:20 AM – 8:40 AM	Evaluation of Potential Sustainability Initiatives (Selector™)
8:40 AM – 8:55 AM	Prioritization of Sustainability Initiatives Ready for Implementation (Selector™)
8:55 AM – 9:00 AM	Closing Remarks and Meeting Adjournment

Sustainability Engagement

One of the cornerstones of a successful implementation strategy will be engaging SLCDA’s employees, tenants, as well as the travelling public. The SMP includes a comprehensive set of engagement instruments, as discussed in Chapter 6, *Organizational Engagement*. Table 11-1 reintroduces these instruments along with recommended timeframes for implementation.

TABLE 11-1: SUSTAINABILITY ENGAGEMENT INSTRUMENTS

ENGAGEMENT INSTRUMENT	SUGGESTED TIMEFRAME
SMP Highlights Report	Completed in 2015 (by SMP team)
SLC Sustainability Dashboard	Launch in 2015
Brief FAA on SMP	Upon completion of documentation in 2015
Meet with SLCDCA Public Relations and Marketing staff	Develop plan for traditional and social media engagement quarterly beginning Q2 2015
Online Sustainability Suggestion Box – on SLCDCA Dashboard	Deploy Q3 2015; check regularly
Newsletter (Connections)	Quarterly Sustainability Feature article
Training Opportunities	Identify Q3 2015, Launch in 2016 on as needed basis
Annual Sustainability Awards Based on SMP Categories	Award on Earth Day
2016 Sustainable SLC Calendar	Planning to begin Q3 2015, Launch January 2016
Plan Review and Revision	Review process to begin in Q2 2016; Revisions defined and implemented by Q3 2016

Identifying and Implementing Sustainability Initiatives and Projects

Identifying sustainability initiatives and projects are part of the planning phase of the typical Plan-Do-Check-Act process. The process consists of engaging SLCDCA’s internal stakeholders to understand existing sustainability activities and achievements and identify new sustainability activities for evaluation and potential implementation. Existing initiatives have been identified through a review of existing projects as well as interdepartmental communications. New initiatives will be solicited through applicable methods of stakeholder engagement (e.g., employee/public Sustainability Dashboard Outreach Tools).

Guided by the Sustainability Coordinator, the Sustainability Category Champions will be responsible for providing input on initiative screening and prioritization. The Category Champions will support the implementation of initiatives by working with the Sustainability Coordinator to develop initiative-specific implementation plans, including implementation steps, persons responsible by task, and supporting documentation. They will also support initiative tracking by providing quarterly progress reports and initiative-level data at project closeout for determining realized sustainability benefits. Persons identified to carry out initiative implementation will provide feedback for initiative improvement.

This effort will be supported by the Selector™, a custom-designed Excel-based tool that provides the means for initiative screening based on sustainability evaluation criteria related to goal applicability, feasibility, estimated costs, and estimated effects. The screening process, to be conducted on a quarterly basis by the Sustainability Coordinator in

consultation with the Sustainability Category Champions, determines the cost-benefit of initiative implementation specific to the unique conditions at SLC.

Developing a Sustainability Tracking, Monitoring and Reporting Framework

Tracking, monitoring, and reporting performance is an important element of a sustainability implementation process. As described in Chapter 9, *Sustainability Performance Monitoring and Reporting*, reporting tools will be used to track implementation progress and gather importance performance data for use in metrics and key performance indicators.

The custom suite of Excel-based tools, together comprising SLC's Sustainable Planning Optimization Tool (SPOT™), supports this effort. Tools relevant to tracking, monitoring, and reporting include:

The Tracker™: Provides the framework to monitor the progress of SLC's sustainability program by initiative.

The Reporter™: Provides a structured format for SLC's Sustainability Coordinator to report on the Airport's performance metrics and key performance indicators (KPIs). The KPIs and related data will be in a format that can be used on a Sustainability Dashboard for reporting to senior leadership and the public.

Sustainability Dashboard: This tool will report on high-level sustainability performance at SLC in a visual, easily understood manner. The Sustainability Dashboard only includes KPIs, and as such, is representative of SLCDCA's sustainability priorities and not of the entire program. The Sustainability Dashboard can also be used as a sustainability engagement tool externally.

Chapter 9, *Sustainability Performance Monitoring and Reporting*, discusses these tools in detail.

Periodic Sustainability Management Plan Review and Revision

On an annual basis, SLC's Sustainability Coordinator will review the plan implementation and performance monitoring/tracking process with the SAC. The SAC will recommend any implementation procedure changes to enhance the program. Larger, systemic changes to sustainability management at SLC (i.e., changes to sustainability goals and objectives) identified by the Sustainability Coordinator and SAC on an annual basis will potentially require approval of the SLCDCA management team.

Conclusion

The SMP provides SLCDCA with a structured framework for the planning, implementation, tracking, monitoring, and reporting of a sustainability program at SLC. Through this SMP, senior leadership and staff have established a broad vision of sustainability within the organization that maintains its role as an innovative industry leader through continuous improvement in operational efficiency, facility design and construction, and environmental stewardship while engaging passengers, employees, and the community in a sustainable manner. SLCDCA's adherence to the SMP along with the realization of its sustainability mission and vision will contribute to the longevity of the organization.

Airport Sustainability Highlights

Our Mission: To be a leader in the community and airport industry by preserving and enhancing the Salt Lake City Department of Airports energy, financial, human, and natural resources.

Airport Sustainability Goals

-  Reduce total energy use and demand, while increasing renewable energy generation on Airport property.
-  Reduce criteria air pollutants and greenhouse gas emissions to improve public health and reduce environmental impact.
-  Assist in the region's efforts to sustain its water resources for current and future generations.
-  Reduce waste generation and increase diversion from landfills.
-  Promote green building, energy efficiency, and operational efficiency.
-  Maintain a safe and healthy environment for passengers and employees.
-  Aim for LEED Gold certification for the first phase of The New SLC coming in 2020.
-  Strive for LEED Silver certification for the Airport Operations Center to be completed early 2018.

The Salt Lake City Department of Airports (SLCDA) considers environmental stewardship and fiscal responsibility an integral part of Airport activities. The Airport has demonstrated its commitment to improve and preserve natural and social environments by developing and implementing new sustainability principles and strategies that aim to reduce environmental impacts, achieve economic benefits, and enhance community involvement.

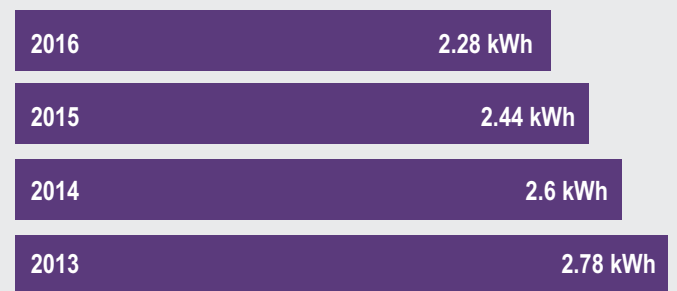
Airport Sustainability Results



- Installed over 5,200 LED Fixtures in terminals, roadways, rental car facilities, and runway lighting from 2014 through 2016.
- Saved \$460,000 annually in maintenance costs.

- Participated in the Rocky Mountain Power Watt Smart Program resulting in 30 percent of all LED project costs paid out through this program.
- Saved 2,600 MWh annually through LED implementation.

Electricity Use Per Passenger





- Recycled 85 percent of water used at the airport's car rental facility's 14 car wash bays.

- Utilized 427,000 gallons of compressed natural gas (CNG) and 10,000 gallons of biodiesel in 2016.
- Prevented 1,900 tons of air pollutants during the life of the airport's 18 CNG shuttles.



- Doubled the amount of recycling containers in the pre-boarding and boarding areas of the Airport. Recycling containers are located within 10 steps of passengers traveling through SLC.



- Reduced aircraft taxi time through the use of more than 100 acres of end-of-runway deicing pads.

- Avoided aircraft idling by plugging into ground power and air conditioning units preventing more than 220,000 tons of air pollutants annually.



- Reused or recycled more than 75,000 tons of construction material in 2016 as part of the Airport Redevelopment Program (ARP). The ARP team has maintained a construction diversion rate of more than 96 percent during construction of The New SLC.

- Increased collection of deicing fluid. The fluid collected at each de-icing pad and sent through more than 5 miles of pipes to the Airport's reclamation facility. In 2016, the facility processed 3 million gallons of fluid and recycled more than 100,000 gallons of glycol.



Salt Lake City Department of Airports



Rules and Regulations

Updated - January 2015

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1. INTRODUCTION

1.1 Purpose

These Rules and Regulations and any amendments hereto, are designed to protect the public health, safety, interest, and general welfare at Salt Lake City International Airport (SLCIA/Airport), and to restrict or prevent any activity or action that would interfere with the safe, orderly, and efficient use of the Airport by its passengers, operators, tenants, and users.

1.2 Administration and Responsibility

The Rules and Regulations apply to activities, operation, and use of Salt Lake City International Airport. Copies may be obtained during normal business hours at the Airport's administrative offices, located on the second floor of Terminal One at 776 North Terminal Drive, Salt Lake City, UT 84116 or by accessing the following link: <http://www.slairport.com/rules.asp>. Every Person and entity doing business at the Airport is responsible for maintaining a current knowledge of and complying with the Rules and Regulations and companion documents referred to in the document. The companion documents are posted at the link above.

1.3 No Pre-emption

To the extent of any irreconcilable conflict between these Rules and Regulations and any federal, State, and local statutes, ordinances, policies and procedures, these Rules and Regulations will be subordinate to such other laws and policies.

It is not the intent of these Rules and Regulations to excuse any entity from the performance of any obligation it may have under any agreement with the City and/or Salt Lake City Department of Airports, whether the agreement is in existence on the date of the adoption of these Rules and Regulations or entered into at any time thereafter. Tenant contracts with the SLCDCA may include additional requirements and/or cover these Rules and Regulations in further detail.

1.4 No Actual or Implied Contract

These Rules and Regulations do not create an actual or implied contract between the City and/or the Airport and any Person, including, without limitation, employees, vendors, service providers, tenants, Airport users, or any other entity or Person with respect to any matter or issue.

1.5 Changes to Rules and Regulations

The Rules and Regulations may be changed by the Executive Director who will give notice to Airline Airport Affairs Committee (AAAC) on matters pertinent to the airlines and as required by the Airline Use Agreement (AUA).

1.6 Enforcement

The SLCDA may remove or evict from the Airport any Person, who violates any rule or regulation prescribed herein, or any rule or regulation by federal, State, or local government.

1.7 Variance or Waiver

The SLCDA may vary from the provisions of these Rules and Regulations from time-to-time when circumstances may require.

1.8 Nondiscrimination

Any individual and/or entity for itself, its heirs, personal representatives, successors in interest, and assignees, shall comply with all federal requirements imposed pursuant to nondiscrimination in federally assisted programs of the United States Department of Transportation, and as said regulations may be amended.

1.9 Authority of the Executive Director

The Executive Director is authorized to enforce these Rules and Regulations as required to assure the convenience and safety of the traveling public and others using the Airport. In addition to these Rules and Regulations, the Executive Director is empowered to issue other guidelines to ensure the safety and well-being of Airport users or as otherwise determined to be in the best interest of the SLCDA. The Executive Director may prohibit use of the Airport or any part thereof by any Person in violation of these Rules and Regulations. The Executive Director may use any legal remedy or recourse to aid the enforcement of the provisions contained in these Rules and Regulations.

Appeals or resolution processes other than those regulated by applicable law will be heard by the Executive Director.

2. **DEFINITIONS**

Any terms not defined in this section shall have the meaning set forth in applicable federal, State, and local laws.

2.1 Aeronautical Activities

Any activity or service that involves, makes possible, facilitates, is related to, assists in, or is required for the operation of aircraft or another aeronautical activity or which contributes to or is required for the safety of such operations.

The following activities, without limitation, which are commonly conducted on airports, are considered aeronautical activities within this definition: aircraft charter, pilot training, aircraft rental, sightseeing, aerial photography, aerial spraying and agricultural

aviation services, aerial advertising, aerial surveying, air carrier operations (passenger and cargo), aircraft sales and service, sale of aviation fuel and oil, aircraft maintenance, sale of aircraft parts, and any other activity which, in the sole judgment of the SLCD, because of its direct relationship to the operation of aircraft or the Airport, can be appropriately regarded as an aeronautical activity.

2.2 Air Operations Area (AOA)

All Airport areas where aircraft can operate, either under its own power or while being towed. The Air Operations Area includes runways, taxiways, and apron areas.

2.3 Air Traffic Control (ATC)

The Federal Aviation Administration (FAA) air traffic control system and/or tower.

2.4 Aircraft Design Group

A grouping of aircraft based upon wingspan or tail height as designated by the FAA. Where an airplane is in two categories, the most demanding category shall be used. The groups are as follows:

Group I: Up to, but not including, 49 feet wingspan or tail height up to but not including 20 feet.

Group II: 49 feet up to, but not including, 79 feet wingspan or tail height from 20 up to but not including 30 feet.

Group III: 79 feet up to, but not including, 118 feet wingspan or tail height from 30 up to but not including 45 feet.

Group IV: 118 feet up to, but not including 171 feet wingspan or tail height from 45 up to but not including 60 feet.

Group V: 171 feet up to, but not including, 214 feet wingspan or tail height from 60 up to but not including 66 feet.

Group VI: 214 feet up to, but not including, 262 feet wingspan or tail height from 66 up to but not including 80 feet.

2.5 Aircraft Maintenance

Aircraft maintenance is considered to be the repair, maintenance, alteration, preservation, or inspection of aircraft (including the replacement of parts). Major maintenance includes major alterations to the airframe, power plant, and propeller as defined in federal regulations. Minor maintenance includes normal, routine annual inspection with attendant maintenance, repair, calibration, or adjustment of aircraft and its accessories. Aircraft assembly is included within the definition of aircraft maintenance.

2.6 Airframe and Power Plant Mechanic (A and P Mechanic)

Someone holding an FAA authorized aircraft mechanic certificate with both airframe and power plant ratings.

2.7 Airline Use Agreement (AUA)

The Airline Use Agreement (AUA) is a contract between the Salt Lake City Department of Airports and the airlines operating at Salt Lake City International Airport.

2.8 Airport

Airport refers to the land and improvements generally known and designated as the Salt Lake City International Airport. The improvements on the land consist of the runways, aircraft taxiways and parking aprons, the passenger and freight terminal buildings, hangars, vehicle roads and parking facilities, and all other improvements on such land. The term Airport shall also include any adjacent or nearby land hereafter acquired for purposes of the Airport and all improvements hereafter constructed on such land. Refer to Salt Lake City Code 5.01.2.2 for additional definition.

2.9 Airport Emergency Plan (AEP)

The Federal Aviation Administration's required emergency plan that governs actions during an emergency or disaster as specified in federal regulations.

2.10 Airport Layout Plan (ALP)

The plan of an airport showing the layout of existing and proposed facilities.

2.11 Airport Security Program (ASP)

The ASP is a document describing the Airport's plan to comply with provisions required by federal security regulations. The program is reviewed and approved by the Transportation Security Administration (TSA).

2.12 Apron

The apron is a surface in the Air Operations Area (AOA) where aircraft park and are serviced, refueled, loaded with cargo, and accessed by passengers.

2.13 Baggage Areas

The baggage claim and baggage make-up areas located at the Airport.

2.14 Based Aircraft

Any aircraft utilizing the Airport as a base of operation (other than occasional transient purposes) and registered at the Airport with an assigned tie-down or hangar space on the Airport or adjoining property that has direct taxiway access to the Airport.

2.15 Code of Federal Regulations (CFR)

The Code of Federal Regulations.

2.16 Commercial

That which involves or makes possible earnings, income, compensation (including exchange of service), or profit, whether or not such objectives are accomplished.

2.17 Common Use Gates

Any gate not assigned by the SLCDCA for preferential use by a Signatory Airline.

2.18 Concessionaire

A business entity with an active agreement paying the Airport either a percentage of revenue, a fixed sum, or other amount or fee for the ability to conduct business at the Airport.

2.19 Department of Homeland Security (DHS)

The Department of Homeland Security.

2.20 Directors

The Directors of the various Salt Lake City Department of Airports Divisions or a designee (i.e. the Director of Airport Operations).

2.21 Environmental Laws

Environmental Laws shall mean and include all federal, State, and local laws, statutes, ordinances, regulations, resolutions, decrees, or rules now or hereinafter in effect, as may be amended from time to time, and all implementing regulations, directives, orders, guidelines, and federal or state court decisions, interpreting, relating to, regulating or imposing liability (including, but not limited to, response, removal, remediation and damage costs) or standards of conduct or performance relating to industrial hygiene, occupational health and/or safety conditions, environmental conditions, or exposure to, contamination by, or clean-up of, any and all hazardous materials including, without limitation, all federal or State environmental liens or environmental clean-up statutes.

2.22 Executive Director

The Executive Director of the Salt Lake City Department of Airports or a designee.

2.23 Federal Aviation Administration (FAA)

An agency of the United States Department of Transportation with authority to regulate and oversee all aspects of civil aviation. The Federal Aviation Administration created by the Federal government under Public Law 89-670 and Executive Order 11340 dated March 30, 1967, or to such other governmental agency, which may be successor thereto or be vested with the same or similar authority.

2.24 Federal Inspection Services (FIS) Facility

The Federal Inspection Services facility currently housed in the Airport's International Terminal including United States Customs.

2.25 Fixed Base Operator (FBO)

As defined in Salt Lake City Code, Title 16, "Fixed Base Operator" means firms or Persons, subject to the provisions of a lease with the City, engaging in the selling, servicing, renting or leasing of new and/or used aircraft, parts, aircraft accessories and hardware; custom repair, overhauling and modification of general accessories and hardware; overhauling and modification of aircraft and/or aircraft equipment; and includes the conducting of charter flight services, aerial photography, advertising, mapmaking, aerial firefighting or crop dusting services.

2.26 Foreign Object Debris (FOD)

Any object located in an inappropriate location in the Airport environment that has the capacity to injure Airport or airline personnel and damage aircraft.

2.27 Fuel Handling

The transporting, storage, delivering, fueling, or draining of fuel or fuel waste products.

2.28 Ground Service Operators

All firms or Persons operating on the Airport under a contract with an air carrier to provide ground handling support service to aircraft including, without limitation: aircraft fueling (includes into- plane agents), loading/unloading aircraft baggage, mail and cargo, aircraft movement (includes towing), aircraft maintenance, interior/exterior aircraft cleaning, and aircraft water, lavatory, and deicing services.

2.29 Hazardous Waste

Hazardous waste is material known to be harmful to human health and the environment when not managed properly (regardless of concentration). A list of material considered to be hazardous waste is in federal code under the Environmental Protection Agency section, Title 40, CFR 261.2 Subpart D.

2.30 Hazardous Wildlife

Species of wildlife (birds, mammals, reptiles), including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to Airport facilities, or act as attractants to other wildlife that pose a strike hazard.

2.31 Master Plan

Documents and drawings illustrating the potential development of the Airport.

2.32 Movement Area (MA)

The runways, taxiways, and other areas of the Airport under the control of air traffic control towers, which are used for taxiing or hover taxiing, air taxiing, takeoff, and landing aircraft, exclusive of loading ramps and aircraft parking areas.

2.33 Non-Movement Area

Taxi lanes, aprons, and other areas not under the control of air traffic control towers.

2.34 Non-Signatory Airline

Non-Signatory Airline shall mean any air transportation company that has not entered into an Airline Use Agreement (AUA) with the SLCDCA.

2.35 Operator(s)

Any Person, business, or entity doing business or conducting activity at the Airport.

2.36 Person

Any individual, firm or organization, air carrier co-partnership, corporation, company, association, joint stock association, or body politic, and includes any trustee, receiver, assignee, or other representative thereof.

2.37 Preferential Use Gate

A gate assigned by the SLCDCA for preferential use by a Signatory Airline.

2.38 Public Areas

Sidewalks, concourses, corridors, lobbies, passageways, restrooms, terminals, elevators, escalators, and other space made available by the Airport for use by the public.

2.39 Refueling Vehicle

Any vehicle used for fuel handling, including, without limitation, fuel servicing hydrant vehicles and hydrant carts.

2.40 Regulatory Measures

Federal, State, county, local, SLCDA laws, codes, statutes, ordinances, orders, policies, rules and regulations in effect and as amended.

2.41 Release

Release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any toxic chemical.

2.42 Restricted Access Area

Non-public areas of the Airport that can't be accessed without proper identification. These areas include the Airport Operations Area, Security Identification Display Area, sterile, and secure areas, and in general terms, all areas inside the perimeter fence and those portions of buildings that provide access subject to security or operational restrictions.

2.43 Rules and Regulations

Rules and Regulations developed by the Salt Lake City Department of Airports that govern Airport operations. This includes any future amendments or supplements to the existing document.

2.44 Run-up

Aircraft engine operation above normal idle speed, the purpose of which is engine maintenance or testing, including engines operating for purposes of preparing for and taking off.

2.45 Salt Lake City Corporation

This reference includes Salt Lake City Corporation and its Departments including the Department of Airports.

- 2.46 Salt Lake City Department of Airports (SLCDA)
The Salt Lake City Department of Airports.
- 2.47 Security Identification Display Area (SIDA)
Areas of the Salt Lake City International Airport where everyone is required to continuously display an Airport-issued identification badge on their outermost garment unless under Airport-approved escort. These areas are indentified in the Airport Security Plan.
- 2.48 Signatory Airline
Signatory Airline refers to an air transportation company that is a party to the Airline Use Agreement (AUA) with the Salt Lake City Department of Airports.
- 2.49 Sterile Area
That portion of the Airport defined in the Airport Security Program that provides passenger access to boarding aircraft and to which access is generally controlled by the Transportation Security Administration through the screening of people and in accordance with federally required and approved security procedures and programs.
- 2.50 Taxi lane
The portion of the aircraft parking area used for access between taxiways and aprons and not within the movement area.
- 2.51 Taxiway
A defined path over which aircraft can taxi from one part of an airport to another (excluding the runway) and which is within the movement area.
- 2.52 Terminal
Terminal shall mean the passenger terminal buildings and the terminal aircraft aprons.
- 2.53 Third Party Operators
Entities that have contracts or agreements with tenants of the Salt Lake City Department of Airports to conduct work or commercial activity at the Airport. Third party operators also include tenant and contractor subs, vendors, and any and all invitees performing any commercial service on their behalf. Tenants are required to notify the SLCDA of any Third Party Operators conducting work or commercial activity on the Airport. The Third Party Operator must have a permit issued by the SLCDA.

2.54 Through-the-Fence Access

Access to the public landing area by aircraft based on off-Airport land adjacent to the Airport property.

2.55 Ticket Counters

Those areas made available by the SLCDCA for use by air carriers for ticketing passengers, receiving baggage, and similar activities.

2.56 Toxic Chemicals

A chemical or chemical category as listed in federal Environmental Protection Agency regulations.

2.57 Transient Aircraft

Any aircraft utilizing the Airport for occasional transient purposes and is not based at the Airport.

2.58 Transportation Security Administration (TSA)

The Transportation Security Administration.

2.59 Vehicle Service Road or Perimeter Road

A designated road for vehicles in the non-movement area.

2.60 Vehicles for Hire

Broadly defined as a fee-based, commercial vehicle. Detailed definitions are listed in applicable Salt Lake City Ordinances.

2.61 Wildlife Attractants

Wildlife attractants are considered to be any human-made structure, land-use practice, or human-made or natural geographic feature that can attract or sustain hazardous wildlife within the landing or departure airspace or the Airport's Air Operations Area. These attractants can include architectural features, landscaping, waste disposal sites, wastewater treatment facilities, agricultural or aquaculture activities, surface mining, or wetlands.

3. GENERAL RULES AND REGULATIONS

3.1 Abandoned or Derelict Property

Property shall not be abandoned on the Airport. Abandoned, derelict, or lost property at the Airport includes, without limitation, aircraft, vehicles, equipment, machinery,

baggage, or personal property. Property unclaimed by its proper owner or items for which ownership cannot be established will be handled in accordance with standard procedures and applicable law.

3.2 Accidents or Incidents

Accidents or incidents resulting in damage to property, injury requiring medical treatment, or interference with Airport operations shall immediately be reported to Salt Lake City Department of Airports Control Center at 801-575-2401.

3.3 Advertising Privileges

Advertising in the terminal area or on the Airport is regulated by an exclusive contract with an advertising concessionaire selected in a competitive process. No third party advertising is permitted. The SLCDCA has the sole discretion to determine the locations, type and content of the advertising displays. The SLCDCA may also permit temporary display privileges which are not considered to be advertising.

3.4 Airport Liability

The SLCDCA assumes no responsibility for loss, injury, or damage to people or property on the Airport or using the Airport facilities.

3.5 Automated External Defibrillators

Automated External Defibrillators (AEDs) are located for use by Airport first responders in and around the terminal complex. AEDs are stored in marked locations in the lobbies, concourses, and in several first responder vehicles. The locations of all tenant owned AEDs must be reported to the Airport Control Center at 801-575-2401.

3.6 Cleanliness of Airport

Tenant shall refer to its lease agreement for details regarding the maintenance and cleaning services that the SLCDCA provides, and those tasks for which the tenant is responsible. Leased areas will be periodically inspected by SLCDCA representatives to determine the acceptability, cleanliness, and general upkeep. Discrepancies will be noted and prompt corrective measures required of the tenant.

No Person shall place any solids in, or pour any liquid other than water down, floor drains, manholes, storm water drains or sewer connections.

Foreign Object Debris (FOD) containers shall be used only for disposal of foreign object debris found on the airfield.

3.7 Clear Zone

A four-foot clear zone must be maintained on the public side of the perimeter fence. The fencing will be a minimum of eight feet high with three strands of barbed wire along the top of the fence. These specific areas are identified in the Airport Security Plan, which defines the perimeter fence enclosing the Air Operations Area. All vehicles, equipment and material must be located at least four feet from the fence line.

3.8 Commercial Activities

Commercial activity of any kind requires the express written permission of the SLCDCA through a specifically authorized contract, lease, sublease, operating agreement, license, permit or written temporary permission and the payment of any required fees. A commercial activity permit may not be assigned or transferred and shall be limited solely to the approved activity.

3.9 Commercial Photography/Filming

No Person except representatives of the media during official assignments shall take still, motion, or sound pictures for commercial purposes on the Airport without permission of the Executive Director.

3.10 Compliance with Regulatory Measures

All Persons or entities occupying or using, engaging in an aeronautical activity on, or developing Airport land or improvements shall comply, at the Person's or entity's expense, with all applicable regulatory measures including, without limitation, those of the federal, State, and local government and any other agency having jurisdiction over the Airport, the businesses operating at the Airport, and the activities occurring at the Airport including the United States Department of Transportation (USDOT), the United States Department of Homeland Security (DHS), the Transportation Security Administration (TSA), the Federal Aviation Administration (FAA), the State of Utah (State), Salt Lake County (County), Salt Lake City (City), the Salt Lake City Department of Airports (SLCDA) including all as may be in effect and amended from time- to -time.

3.11 Construction and Alteration

All construction and alteration work requires the review and written approval of the SLCDCA. To obtain approval, tenants shall submit required documents and follow the requirements stated in the Tenant Improvement Guidelines which are available from the Administration and Commercial Services Division. In general, all proposed construction and alteration work must be compliant with all applicable federal, State, and local regulations; have all required permits; and be compliant with the SLCDCA Tenant Improvement Guidelines. In addition, for all construction and alteration work, the proponent must submit to the SLCDCA as-built drawings in the required format within 30 days of project completion.

3.12 Cooking Appliances

Tenants and their employees are prohibited from placing and operating barbeque grills and other similar appliances (including deep fat fryers) on the ramp or in break areas. Microwave ovens and other reasonable cooking appliances (electric skillets, crock pots, etc.), monitored by the tenant, are the only permissible personal cooking appliances allowed for use by tenant employees. These appliances are to be used in designated break areas only and the tenant is solely responsible for their safe operation.

Permission may be granted to tenants for special events involving barbeque grills. These special events are to be limited to company-wide activities that include employee recognition, specific company-based milestones, or charitable fund-raising activities. Such special events should include the attendance of tenant leadership.

To request permission, tenants must submit a written request at least two weeks in advance to the Department of Airports via the Tenant Relations Coordinator. The request will specify the nature of the event and the proposed date, time, and location. Advanced written permission is required prior to the event and approval will be provided in a timely manner. All tenant requests will conform to the following criteria:

- Events will occur at specially designated outdoor locations on the ramp. Event activities will occur outside the view of Airport customers and will not impact regular Airport operations.
- No permanent or long-term storage of any barbeque grill is allowed on the ramp.
- Barbeque grills and other supplies may be transported to the designated location two hours before the start time for the event. All barbeque grills, supplies, and debris are to be removed from the designated location within ninety minutes after the event ends.
- At least one 20# ABC fire extinguisher and a water source (hose or water bucket) will be kept at the designated location during the event.
- Additional requirements and restrictions may be set based on the type of event according to the discretion of the Airport.
- The Airport reserves the right to change details of the special event or rescind permission at any time based on operational or safety requirements of the Airport.

The Airport also encourages tenants to use the picnic pavilion north of the airport complex which is equipped with picnic tables and a barbeque grill. Advance written permission is also required to use this space.

3.13 Cost Recovery for Property Damage and Personal Injury

The SLCDCA shall recover expenses incurred from any Person causing injury or property damage of any kind.

The liable party will be billed for charges to repair Airport property damage including the cost of labor. Payment will be guided by standard accounting procedures.

3.14 Emergency Operations

Actions pertaining to emergency or disaster operations will be governed by the Airport Emergency Plan (AEP) as amended and on file with the SLCDCA Operations Division. The Airport also has a Family and Friends Assistance Support Plan on file designed to support the airlines and involved agencies during major aircraft accidents.

3.15 Energy Management Program

The Airport has instituted an Energy Management Program to promote energy conservation in the design and operation of its facilities. Tenants and other users of the Airport are urged to establish energy conservation measures within their leased area and to support the Airport's program. The program minimizes the energy consumed for heating, cooling, lighting, etc. and reduces annual building operation costs. The program operates without a detrimental reduction in service.

The Airport's Maintenance Division deploys energy conservation initiatives, conducts energy conservation studies, monitors use and develops procedures to conserve as much energy as possible in Airport facilities.

3.16 General Conduct

No Persons shall use or otherwise conduct themselves upon any portion of the Airport in any manner contrary to the intended use or posted directions applicable to that area. No entity shall use, keep, or permit the Airport to be occupied or used in a manner offensive or objectionable to the SLCDCA or other users for any reason, or interfere in any way with other occupants or those conducting business at the Airport.

Loitering and panhandling is prohibited as outlined in Salt Lake City Code.

3.17 Insurance Certificates

Airport tenants, users, vendors, contractors, subcontractors, and all other commercial operators on Airport property shall provide the SLCDCA with a Certificate of Insurance demonstrating the required insurance limits are in place. Without exception, all insurance certificates and the policies they represent shall list the Salt Lake City Corporation as an Additional Insured.

3.18 Licenses, Permits, Certifications and Ratings

Operators shall obtain and comply with the requirements of all necessary licenses, permits, certifications, or ratings for the conduct of operator's activities at the Airport as determined by the SLCDCA or any other duly authorized agency prior to engaging in any activity at the Airport. Upon request, operators shall provide copies of such

licenses, permits, certifications, or ratings to the SLCDCA within five business days or as contractually specified. Operators shall keep in effect and post in a prominent place all necessary or required licenses, permits, certifications, or ratings. Tenant or operator will additionally refer to individual lease agreements with the SLCDCA for further requirements, if applicable.

No air carrier shall conduct scheduled operations at the Airport without entering into a Non-Signatory Agreement or Signatory Agreement with the SLCDCA and providing documentation of a current insurance policy and security, all in accordance with the SLCDCA's specifications. A Non-Signatory agreement may be held by any air carrier holding the necessary certificates from federal or State agencies having jurisdiction to provide air transportation of passengers, mail or cargo at the Airport and who elects not to become a Signatory Airline.

3.19 Lost and Found

Anyone finding a lost, misplaced, or abandoned article in the public area shall turn it in to the Lost and Found office or to a SLCDCA representative. The Lost and Found office is open Monday - Friday from 8:00 a.m. to 5:00 p.m. and can be reached at (801) 575-2427. During other hours, Lost and Found can be reached by calling the Control Center at (801) 575-2400/2401. People seeking lost items can reclaim them at the SLCDCA's Lost and Found office. Items not claimed are dealt with according to Salt Lake City Ordinance.

3.20 Media Response

Media inquiries will be managed by the SLCDCA Public Relations and Marketing Director or a designee. Media inquiries involving tenant oriented or related issues will be forwarded to the tenant for response. Airport records and reports will be released upon written request.

In order for the media to gain access beyond the security screening checkpoints, the Department of Airports, the Transportation Security Administration and the sponsoring tenant (i.e., airline, concessionaire) must approve a plan submitted in advance of the activity. All security access procedures must be followed.

3.21 Painting

Doping processes, painting, or paint stripping shall be performed only in those facilities approved for such activities and in compliance with applicable law, without limitation, and the Airport's Storm Water Pollution Prevention plan.

3.22 Preservation of Property

No one shall destroy or cause to be destroyed, injure damage, deface, or disturb, in any way, property of any nature located on the Airport. Anyone causing or responsible for such injury, destruction, damage or disturbance to Airport-owned property shall report

such damage to the Operations Division and shall reimburse the SLCDCA the full amount of repair and replacement of property.

No Person shall take or use any aircraft, aircraft parts, instruments, tools owned, controlled, or operated by any Person while on the Airport or within its hangars, except with the written consent of the owner or operator thereof. No individual or group shall prevent the lawful use and enjoyment of the Airport by others. Any activity which results in littering, environmental pollution, or vandalism on the Airport is not permitted and violators are subject to arrest. Prosecution and fines are determined by applicable law. Any individual or group observing damage, destruction or disturbance on the Airport should contact the SLCDCA Control Center at (801)575-2401.

3.23 Payment of Rents, Fees, and Charges

Airport users shall pay the rents, fees, or other charges specified by the SLCDCA for engaging in activities. Users' failure to remain current in the payment of any and all rents, fees, charges, and other sums due to the SLCDCA shall be grounds for revocation of any agreement or approval authorizing the conduct of activities at the Airport.

3.24 Radio and Wireless Communications

All Airport users at the Airport using any types of radio frequency systems and equipment shall comply with the following:

- a. Prior to any equipment installation and system startup, any use of a radio frequency spectrum shall be reviewed by the SLCDCA.
- b. Tenant shall operate any and all of its communications equipment (wired or wireless) in a manner that will not cause interference with operations of the Airport. Upon notification from the SLCDCA, the FAA, the Airport Police or Fire Department of any interference caused by operator or lessee, tenant shall cease all communications operations, transmissions, and uses on the Airport. Tenant may not resume communications until the SLCDCA has so notified the user.
- c. All systems and equipment shall be compliant with all applicable federal, State, local, and SLCDCA's regulations. Operators are required to hold a valid license from the Federal Communications Commission (FCC) for the right to use the radio frequency spectrum.
- d. The Airport retains the right to terminate the use of a radio frequency system or interfering equipment if it impacts Airport operations or services.

3.25 Releasing Copies of Public Records

It is the policy of the SLCDCA, in accordance with the Freedom of Information Act and the Utah Government Records Access and Management Act (GRAMA), to make available public records and reports upon written request. The request should include the requesting person's name, mailing address, daytime telephone number, and a

description of the record requested that identifies the record with reasonable specificity, along with any other pertinent information. The written request is acceptable via facsimile, email, or letter. A form is available from the SLCDA Administration and Commercial Services Division, and may also be obtained at: www.slairport.com, About the Airport, Doing Business with the Airport, GRAMA.

3.26 Rental of SLCDA Conference Rooms, Space and Meeting Equipment

The Salt Lake City Department of Airports permits tenants to rent conference rooms, space and equipment on a limited basis. Airport conference rooms, board room and the International Terminal lobby are available at the sole discretion of the SLCDA for a fee. Use of the International Terminal shall be in accordance with the operational needs of the building including passenger processing, activation of the security screening checkpoint and the work of U.S. Customs and Border Patrol.

Space rental of Airport controlled areas is available in four hour increments. Each additional hour after the initial four hours will be charged at one quarter of the four hour rate. Depending on the room or space rented, the rates range from \$100-\$400 for four hours. Information technology support, tables, chairs and set-up are available for an additional charge. A complete fee schedule and authorization form is available from the Airport Receptionist. At least ten days of advance notice is required. The tenant will be billed after the space is used and payment is due within 30 days.

3.27 Response to Public Input

It is the policy of the SLCDA to respond promptly to public input with the intent to enhance public relations, learn from the public's experiences, improve customer service and share feedback with employees. The SLCDA will act promptly on suggestions and will correct situations encountered by the public as determined feasible. The SLCDA will forward input from the public on tenant oriented topics to the tenant for response.

3.28 Restricted Access Areas

No one shall enter any restricted area posted as being closed to the public, except those assigned to duty therein, authorized by the Executive Director, authorized under federal regulation and all applicable security directives, and passengers under appropriate supervision or entering the apron area for the purposes of enplaning and deplaning.

3.29 Sanitary Sewer System

The only material authorized to be discharged into the Airport's sanitary sewer system is waterborne waste that can be treated at the Salt Lake City wastewater treatment plant operated by Salt Lake City Public Utilities. Refer to Salt Lake City Code Title 17.

All personnel using the triturators shall be properly trained and shall follow the directions on posted signs.

3.30 Storm Drainage System

In compliance with the Airport's Utah Pollutant Discharge Elimination System (UPDES) permit, the only material authorized to be discharged into the Airport's storm drainage system is non-contaminated storm water runoff. No other material may be intentionally or accidentally placed, poured, spilled, flushed, or by any other method, introduced into any storm water grate, inlet, or pipe.

It is unlawful for anyone to place into the storm drainage system any waste or other substances in such a way as will be or may become offensive. This includes unnatural deposits, floating debris, oil scum, etc. It also includes nuisances such as color, odor, taste or conditions which produce undesirable effects on aquatic organisms or in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish or aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures.

The following substances are permitted in the storm drainage system: discharge from fire fighting activities, fire hydrants, potable water, irrigation drainage, lawn watering, external building washing which does not involve detergents or other compounds, pavement wash waters where spills or leaks of toxic or hazardous material have not occurred and where no detergent or other compounds have been used, air conditioning condensate, springs, uncontaminated ground water and foundation or footing drains where flows are not contaminated.

Tenants engaged in activities subject to regulation by the Airport's UPDES permit shall develop and maintain as current, a Storm Water Pollution Prevention Plan (SWPPP) as outlined in the permit. Such a plan shall be submitted to the Airport for approval and will be part of the Airport's SWPPP.

3.31 Sign and Graphic Standards

The SLCDA strictly controls sign appearance, messaging, quality and placement. The SLCDA manages signage in order to: increase the ease of movement throughout its facilities, eliminate clutter, guarantee uniformity and insure visual appeal and appropriate content.

The SLCDA manages the appearance and placement of all interior and exterior signs displayed in and around the Airport. This applies to signs requested by employees, tenants, agencies, contractors and other Airport users. Signs must be of a professional quality. No handwritten or poorly manufactured signs will be permitted.

The SLCDA requires that tenants submit sign design and plans for approval prior to construction and installation. The Customer Tenant Relations Coordinator in the Administration and Commercial Services Division will review and approve sign proposals.

Tenants are responsible for the design, fabrication, installation, and cost of signs in their leased areas. The SLCDCA reserves the right to remove non-compliant or unauthorized signs and charge the cost of the removal and associated repairs to the tenant.

The SLCDCA will provide interior and exterior signs within public areas and certain leased areas visible to the general public. The cost of design, manufacturing and installation is charged to the appropriate cost center.

3.32 Solicitation, Demonstrations, Free Speech

Those desiring a public forum at the Airport, to use the premises to solicit or to distribute printed material must submit a written request to the Director of Operations, who may issue a permit authorizing these activities.

The Airport will provide a reasonable public forum that does not disrupt operations, disrupt passengers or other customers, impede access, interfere with employees on duty or jeopardize security. The Airport will control time, place and manner of demonstrations or activities conducted on its property.

If a violation to a federal, State or local regulation occurs, the responsible individual shall be notified. If the violation is not immediately corrected, the party shall not be permitted to continue the activity on Airport property.

3.33 Smoking

In accordance with the Utah Indoor Clean Air Act, smoking is prohibited except in designated areas and 25 feet from a public door. Smoking is strictly prohibited while fueling aircraft.

3.34 Special Events

Special events require coordination, regulation, and authorization of the SLCDCA. Request for authorization shall be in the form of a letter to the Executive Director. Certain activities shall require an executed lease, operating agreement or permit with the Airport. The SLCDCA reserves the right to decline events or activities that will interfere with operations or intended use of its property.

3.35 Tenant Signage/Advertisements

Tenants desiring to advertise new routes and other airline or tenant-specific promotions shall request permission from the SLCDCA through the Customer and Tenant Relations Coordinator. Upon approval, the SLCDCA will permit new route advertisements to be displayed not earlier than 30 days before the new service begins, and not longer than 30 days after it has begun, unless a written exception is provided by the SLCDCA.

Written advertisements, signs, notices, circulars or handbills may be posted or distributed only with the prior written permission of the SLCDCA.

The SLCDCA has the right to remove any sign, placard, picture, advertisement, banner, or notice in any such manner as the SLCDCA may designate.

Signage installed on the Airport must meet the specifications approved by the SLCDCA.

Tenants will be billed by the SLCDCA for new signs and changes to existing signs. New airlines starting service at Salt Lake City International Airport will be reimbursed for these charges if the airline is actively operating at the Airport after one year. Airlines or other tenants requesting changes to signs due to marketing initiatives, voluntary relocations, name changes, etc. must pay for the changes. Costs for changes due to airline mergers, airlines that leave the market or go out of business will be borne by SLCDCA. The Airport's sign fabrication department will review requested sign changes or additions, provide cost information and ensure consistency with the Airport's sign system. Tenants will contact the Airport's Customer and Tenant Relations Coordinator to initiate this process including requesting sign changes, additions and a quote for associated costs.

3.36 Third Party Operators

A permit from the SLCDCA must be obtained and prior approval given before a third party operator conducts any commercial activity at the Airport.

3.37 Through-the-Fence Access

Through-the-fence access is prohibited at the Airport. The SLCDCA does not permit access to the public landing area by aircraft or for other aeronautical activities from land adjacent to, but not part of, the airports it manages.

3.38 Trash and Other Waste Containers

The SLCDCA shall designate areas to be used for garbage receptacles. Tenants, operators and other users of the Airport shall not move or otherwise relocate SLCDCA's placed trash and waste containers. Garbage, empty boxes, crates, trash, papers, refuse, or litter of any kind shall not be placed, or deposited on the Airport, except in the receptacles provided specifically for that purpose. The burning of garbage, empty boxes, crates, trash, papers, refuse, or litter of any kind on the Airport is prohibited. Trash and other waste containers at the Airport shall only be used for trash generated on Airport property. Trash and other waste container areas shall be kept clean and sanitary at all times.

Tenant trash and waste containers shall be emptied with sufficient frequency to prevent overflowing and shall be cleaned with sufficient frequency to prevent the development of offensive odors.

3.39 Use of Roads and Walks

Travel on the Airport other than on designated roads and walks are prohibited. Nothing, including vehicles or objects, shall block any designated road or walk unless required for maintenance or Airport operational need.

3.40 Use of South Perimeter Path

Because of its proximity to the airfield and associated equipment, access to the South Perimeter Path (SPP) is restricted and controlled by the Airport's Operations Division. During periods of increased security threat levels, the south perimeter path gates may be locked and access may be denied.

Path users are required to have sanctioned Airport identity badges issued through the Access Control department to open gates during their locked hours. Individuals that have an identity badge in relationship to their employment can request access to the path be added.

For those who do not hold a badge in relationship to their employment, there is a one-time fee of \$15. Individuals must pass a background check performed by the SLCD Police Department and be aware that a security threat assessment will also be conducted before access will be granted. A passport, a certified birth certificate, a driver's license or other proof of identity as determined by Access Control is required with an application.

Pedestrian gates to the path are locked except from April 1 – September 30 when they are open from 5:00 a.m. to 10:00 p.m. and from October 1 – March 31 when they are open from 7:00 a.m.-7:00 p.m.

Vehicle gates are locked at all times and access is provided based on operational need.

3.41 Wildlife Hazard Management Plan

The Airport's Wildlife Hazard Management Plan is administered by the Airport Operations Division in coordination with other Airport Divisions and federal, State and local agencies.

The comprehensive approach outlined in the plan is aimed at eliminating hazardous wildlife in the Airport environment. Actions are centered on habitat elimination, hazing and lethal control. Another main facet is logging, reporting and tracking hazardous wildlife in order to learn their patterns, report statistics and measure the program's effectiveness.

Habitat management techniques include: control of the use of water and standing water, landscaping requirements, fence installation and maintenance, management of existing plants, insect and rodent control and disruption of roosting and nesting areas.

Hazing activities include the use of pyrotechnic cracker shells and cartridges, spotlights, sirens, paint ball guns and noise emitting cannons on the airfield. Species are discouraged to loiter on Airport property and are sometimes physically relocated.

The Airport has a permit to conduct lethal control of wildlife and follows federal, State and local regulations when conducting this preventive measure.

An Airport Operations Officer is assigned to wildlife control 12-hours a day from dawn until dusk. In tandem, all Airport Operations Officers on the airfield and adjacent areas conduct wildlife control as a part of their assigned duty. The Airport also employs a wildlife biologist to assist in administering the program.

4. SAFETY, SECURITY, AND AIRPORT ACCESS CONTROL

4.1 Restricted Areas

No one shall enter any restricted area except those:

- a. Directly engaging in work or an aviation activity that must be accomplished therein
- b. Having prior authorization of SLCDCA through its Access Control program
- c. Under appropriate escort
- d. Employed by or representing the FAA, TSA, or DHS

4.2 Role of the Transportation Security Administration (TSA)

The TSA is responsible for checkpoint security screening, including passengers, employees and baggage, at the Airport. The SLCDCA will work closely with the TSA and Airport tenants to promote a secure environment.

4.3 Weapons, Explosives, and Incendiaries

Possession and use of any weapons, explosives or incendiaries on the Airport shall be in compliance with all applicable regulatory measures, including those of TSA regarding the transport of weapons on aircraft.

Only law enforcement officers, authorized air carrier or Airport employee, or member of an armed force of the United States on official duty, shall carry or transport any firearm, explosive device, or similar weapon in the Airport restricted area unless it is unloaded and secured within a locked carrying case or container, or is otherwise protected from discharging or being discharged by an industry-approved trigger lock or other safety device.

Only law enforcement officers, members of an armed force of the United States, a correctional officer, authorized air carrier employee, authorized Airport employee, or

other specifically authorized under applicable law, shall carry any weapon in the Airport terminal unless the weapon is unloaded, in a locked carrying case, brought for the purpose of transport and declared to the airline. Upon request of a law enforcement officer, weapons that are carried by unauthorized individuals but not intended for transport shall be removed from the terminal or placed in the custody of the SLCDA Police Department.

Discharge of any weapon on the Airport is prohibited, except in the performance of official duties or in the lawful defense of life or property.

Except for firearms belonging to authorized law enforcement officers, firearms may not be stored within the restricted area or sterile area unless approved.

4.4 Access Control and Enforcement

The SLCDA imposes rules pertaining to security to provide for the safety and security of people and property traveling through the Airport and in order to comply with legal requirements mandated by the U.S. Department of Homeland Security by and through its Transportation Security Administration.

Failure to comply with the security rules, the Airport Security Program, and applicable federal regulations may result in TSA civil penalties and enforcement action by the SLCDA. The Airport Security Coordinator reserves the right to exercise reasonable discretion in determining the enforcement action prescribed based on the circumstances of the security violation. Anyone found in violation of the security rules is subject to the following:

First Offense:

- a. The identification badge will be confiscated until security retraining has been completed.
- b. A \$50 badge reinstatement fee will be assessed to the individual. The company will be notified of the violation and will be required to provide details on their planned actions to preclude future violations.
- c. Airport Police will take appropriate actions to address the offense, which may include issuing a criminal citation.

Second Offense (within a two-year period):

- a. The identification badge will be confiscated until security retraining has been completed.
- b. A \$100 badge reinstatement fee will be assessed to the individual.
- c. The individual will be suspended from working in a restricted area for three days.

- d. The company will be notified of the violation and will be required to provide feedback on actions taken to preclude future violations.
- e. Airport Police will take appropriate action to address the offense, which may include issuing a criminal citation.

Third Offense (within a two-year period)

- a. The identification badge will be permanently revoked and the individual will lose his or her ability to hold an Airport-issued identification badge.
- b. Airport Police will take appropriate action to address the offense, which may include issuing a criminal citation.

4.5 Keys and Locks

The SLCDCA controls locks and keys in Airport-owned facilities, including tenant leased premises and complies with the TSA key and lock program standards. Requests for the issuance of keys must be made following an application process through the Access Control Office. After the request has been processed, keys will be available for distribution at the Access Control Office.

All Airport-owned space is required to be fully accessible to the SLCDCA. If extraordinary security is required to a specific area beyond that expected of ordinary workspace, an “off-system” key will be made as long as the SLCDCA has access to it during emergencies.

Only tenants who are contractually tied to the Department of Airports will be issued keys to rented space. Their subcontractors, suppliers or subleases will be required to go through the tenant for access. If the tenant desires to supply keys for joint use, they must seek prior approval from the SLCDCA. The approval does not relieve the tenant of the responsibility to maintain the security of the space as outlined in federal, State and local regulations.

The SLCDCA may change the key and lock system at its discretion to prevent a security compromise.

Tenants apply for keys with the SLCDCA’s Operations Division with designated forms by an authorized tenant representative. The representative must submit a list of all of the individuals to be provided with keys. The Airport will require these individuals to sign for the keys. The tenant is responsible for tracking the keys and insuring their return to the SLCDCA when their employee no longer requires the key. Keys may not be transferred from tenant employee to tenant employee. Keys may not be duplicated. Each new recipient is required to submit a request and sign for a key. A charge for each non-returned key will be assessed to the tenant.

Replacement fees for keys will be assigned as follows:

Fee Assessed to Individual:

Lost Key Replacement	\$10.00
Fees Assessed to Company:	
Key not returned upon termination:	\$10.00
Re-key of door:	\$50.00 for core and \$10.00 per key
Refund for returned lost/stolen key: \$5.00	

4.6 Airport Security Badge Fees

The Access Control Office issues airport identification/access badges, provides fingerprinting services for the purpose of obtaining criminal history records, and submits biographical information for the TSA-required security threat assessment for qualified applicants. The primary responsibility for controlling and returning airport issued identification badges rests with the designated company authorized signer.

The Department of Airports has established the following fee structure for badging services. Fees are non-refundable unless noted otherwise.

Fingerprint/Security Threat /Assessment Fees

\$30.00	Fee for TSA-required background check (fingerprints and security threat assessment)
\$ 9.00	Fee for individuals requiring a security threat assessment only

Companies are invoiced on a monthly basis for all fingerprints/threat assessments conducted for their employees.

Ground Transportation Driver Fees

\$95.00	Initial Badge Fee
\$42.00	Reissue Badge Fee

General Aviation Hangar Tenant Fees

\$00.00	No Charge for First Two Badges per Hangar Tenant
\$25.00	Each Additional Badge

Bike Path Fees

\$15.00	Initial Badge Fee
\$15.00	Replacement Fee for a Lost/Stolen Card

Replacement Fees for Lost/Stolen Badges

\$50.00	(No charge assessed on a stolen badge if police report is submitted)
\$25.00	Refund for returned lost/stolen badge (if returned prior to expiration)

Non-Returned Badge Fees

\$100.00	Per badge not returned when no longer needed
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The non-returned badge fee is assessed to the company. The \$100.00 fee will be refunded if the badge is returned prior to the expiration date.

Contractor (Construction) Badges

A badge deposit is required on each construction project based on the project cost as shown in the following table. The full deposit amount must be submitted before badges and vehicle ramp permits may be issued. At the completion of the project, a \$250 fee for each non-returned badge, \$50 fee for each non-returned vehicle ramp permit, and \$100 for each non-returned key will be deducted from the deposit and the remaining balance refunded. The deposit must be submitted by the General Contractor.

<u>Contract Value</u>	<u>Required Deposit Per Project</u>
\$0 to \$500,000	\$5,000
\$500,001 to \$1,000,000	\$10,000
\$1,000,001 to \$5,000,000	\$15,000
\$5,000,001 to \$10,000,000	\$20,000
\$10,000,001 to \$25,000,000	\$25,000
\$25,000,001 to \$50,000,000	\$50,000
\$50,000,001 to \$100,000,000	\$75,000
Over \$100,000,000	\$100,000

The deposit is in addition to the \$30.00 non-refundable fee to conduct the TSA-required fingerprint check and security threat assessment (STA). These fees are invoiced to the general contractor on a monthly basis as background checks are processed throughout the duration of the project.

5. AIRCRAFT OPERATIONS

5.1 Compliance to Rules and Regulations

No Person shall navigate, land, service, maintain, or repair any aircraft on the Airport, fly from the Airport, or conduct any aircraft operations on or from the Airport other than in conformity with current Federal Aviation Administration and all federal, State, local, and other applicable rules and regulations.

Aircraft operators shall obey all pavement markings, signage, and lighted signals unless instructed otherwise by the ATC or the SLCDA.

Operating an aircraft constructed, modified, equipped, or loaded as to endanger, or be likely to endanger people or the property of any entity, is prohibited.

5.2 Requirements for Aircraft

No aircraft shall land at or take-off from the Airport unless it is equipped with a properly functioning two-way radio capable of communicating with the ATC. If an aircraft is being towed, two-way radio communication must be maintained except in tenant-leased areas.

5.3 Clearance May be Refused

The Executive Director may suspend or restrict any or all aircraft operations on the Airport whenever such action is deemed necessary in the interest of safety.

5.4 Taxiing

While taxiing on the airfield:

- a. Aircraft shall travel at speeds that will ensure complete control at all times.
- b. While awaiting take-off clearance, aircraft shall not taxi past the holding lines painted on the taxiway.
- c. No aircraft shall execute 180-degree turns on runways and taxiways.
- d. Aircraft will not taxi between a gate or building and another aircraft being pushed back or powered back except under the guidance of someone on the ground and wing walkers.
- e. Aircraft other than those of tenant operators will not have access to leased areas except with prior approval coordinated by the lessee through the Airport Duty Manager.
- f. Aircraft not granted access to leased areas will be directed to the Transient Aircraft parking area.
- g. Aircraft power back operations are not authorized at the Airport without the express approval of the Airport Duty Manager.

5.5 Gate Use Management Procedures

Requests to use common use gates will be forwarded to Airport Operations. A common use gate master schedule will be maintained. Airport Operations will review the master schedule at the beginning of each shift to determine the availability for the use of common use gates. When an airline needs to use a common use gate on a temporary basis, an airline representative must contact Airport Operations to schedule the use of the gate. Gate approvals are given on a first-come, first-served basis. When airline needs a common use gate on a regular scheduled basis (not leased), the airline must send a request to Airport Operations who will approve or disapprove the request. The airline is then advised. The period of use and scheduling of gates is at the discretion of the SLCDA.

Preferential use gates will be allocated as dictated in the most recent Airport Use Agreement. Preferential use gates will be available for use by other airlines during time periods that the gate is not in use by the Signatory Airline.

Routine requests for the use of a preferential gate will be forwarded to Airport Operations. Airport Operations will coordinate gate use with the preferred airline and approve or disapprove

the request as appropriate. If the request is approved, the use will be noted on the master gate schedule and both airlines will be notified. Unscheduled or emergency use of a preferential gate by other airlines will be coordinated through Airport Operations.

Routine parking of aircraft off the assigned gate must be requested in writing and approved by Airport Operations. If approved, Airport Operations will coordinate the location and add the flights to the master gate schedule.

Non-routine or emergency parking of more than one aircraft at a gate must be requested through and approved by the Airport Duty Manager. If approved, Airport Operations will coordinate the location and add the flights to the master gate schedule

- a. When an Airline stacks aircraft beyond the bounds of each leased terminal apron, the airline shall pay fees as designated in the Airport Use Agreement according to aircraft size.
- b. All overnight parking (RON) of aircraft on non-leased areas must be approved by the Airport Operations Division in writing. Parking approvals are given on a first-come, first-served basis. Overnight parking will be recorded by Airport Operations personnel at 3:00 a.m. daily and fees will be charged as designated in the Airport Use Agreement.

5.6 Passenger Loading Bridge Operation and Maintenance

The Airport will carefully coordinate preventive bridge maintenance and damaged bridge repair with the airlines and contractors.

The airlines that operate at the Airport are responsible for the following:

- a. Insuring that only airline employees or airline representatives may operate passenger loading bridges.
- b. Training passenger loading bridge operators including orientation to the manufacturers' guidelines and Airport requirements.
- c. Monitoring the condition of all bridges. An authorized representative must promptly notify the Airport of maintenance, janitorial or repair work via the Control Center at (801) 575-2401.
- d. Directing requests in excess of standard maintenance to the Airport's Customer and Tenant Relations Coordinator at (801) 575-2938.
- e. Coordinating with the Airport and contractors to facilitate work on passenger loading bridges.
- f. Determining if an aircraft may remain at the gate during passenger loading bridge maintenance and repair.

5.7 Aircraft Parking and Storage

Aircraft shall be parked only in those areas designated for such purpose and shall not be positioned in such a manner so as to block a runway, taxiway, taxi lane or fire hydrant, or obstruct access to terminal gates, loading bridges, hangars, parked aircraft, or parked vehicles in accordance with Salt Lake City Code, Title 16 and established Airport policies.

Aircraft operators shall ensure parked and stored aircraft are properly secured as set forth in federal regulations.

Remote ground service equipment storage areas may be made available on an as-needed or pro-rata basis and will be designated by the Executive Director.

5.8 Disabled Aircraft or Aircraft Involved in an Accident

Any aircraft or parts thereof interfering with the normal runway or taxiway traffic shall be removed from such runway or taxiway. If the owner, pilot, or agent fails to comply with such request and the Executive Director finds such aircraft or parts interfering with the safe operation of the Airport, the Executive Director or designee may cause removal of such aircraft or parts at their discretion and as they deem appropriate under the circumstances. The full risk and expense of such removal shall be assessed against the owner without liability of any nature to the Airport, the Executive Director.

- a. An aircraft involved in an accident on the Airport may not be removed from the scene of the accident until authorized by the SLCDCA who shall receive authorization to remove the aircraft from the FAA or NTSB, when applicable.
- b. Once authorization to remove the aircraft has been issued, the aircraft operator shall be responsible for the safe and prompt removal of disabled aircraft and parts to a non-movement area.
- c. If immediate arrangements are not made (so that the Airport can return to full operational status without unreasonable delay), the SLCDCA may have the aircraft removed at the aircraft operator's risk and expense without liability for damage arising from or out of such removal.
- d. Disabled aircraft shall be removed as soon as possible.

5.9 Aircraft Accident and Incident Reports

- a. Aircraft operators involved in aircraft incident or accident on the Airport resulting in injury or death or damage to property shall make a full and prompt report of the accident to the SLCDCA Police Department and Airport Operations, complete any necessary reports or forms, and comply with all applicable provisions of Federal Aviation Administration (FAA) and National Transportation Safety Board (NTSB) Regulations. Damage to property includes damage to a runway, taxiway, taxi lane, apron, signage, or navigational aid, light, or fixture.

- b. Copies of incident reports may be obtained from the Airport by submitting a written GRAMA request.

5.10 Aircraft Assembly, Cleaning, Maintenance, and Repair

- a. Aircraft assembly constitutes maintenance and is permitted only in areas designated for that use, and in hangars approved for that activity.

- b. Aircraft Cleaning

- 1) Aircraft cleaning shall be performed only in areas designated for such use.
- 2) Tenants performing aircraft cleaning must obtain a discharge permit for vehicle washing effluent from the Salt Lake City Department of Public Utilities
- 3) Cleaning practices using flammable materials are prohibited. Cleaning practices using combustible materials are prohibited within any building or within 50 feet of any building, aircraft, vehicles, fuel storage facility, or fueling operation.
- 4) Use of any Class 1-A liquid (as defined in federal regulations) is prohibited.

- c. Aircraft Maintenance and Repair

- 1) Aircraft maintenance and repair is permitted only in areas pre-approved by the SLCD.A.
 - a) With exception of preventive maintenance, repair and maintenance of general aviation aircraft shall be confined to designated areas within an FBO's leased premises.
 - b) Preventive maintenance may be performed on aircraft located on tie downs and in T-hangars if appropriate measures are taken to collect and store any fluids that may be released.
 - c) Minor maintenance of air carrier aircraft may be performed at the gate positions in the passenger terminal area if appropriate measures are taken to collect and store any fluids that may be released. For all other work, the aircraft must be moved to the air carrier's maintenance area or to an area designated by SLCD.A.
- 2) Aircraft painting may only be performed in buildings approved for that activity.

5.11 Helicopter Operations

- a. All helicopters at the Airport shall take-off, land, or taxi only from established, Airport approved, parking pads, designated ramps or Airport taxiways and runways.

- b. Helicopters shall park or operate only in the areas designated for such operations.
- c. Helicopters shall not be operated within 200 feet of any area where light aircraft are parked or operating, unless such area is specifically established for helicopter operations.
- d. Helicopters shall not be taxied, towed, or otherwise moved with rotors turning unless there is a clear area of at least 40 feet in all directions from the outer tips of the rotors.
- e. Helicopters are prohibited from landing, taking off, or air taxiing between structures less than 120 feet apart.
- f. Over-flight of a structure on the airfield by helicopters must be conducted without hazard to people or property.
- g. Trailers or dollies shall be utilized to tow helicopters to parking pads for flights. Helicopter tow vehicles and trailers shall not be left at the SLCDA public use parking pads.
- h. Helicopter owners, operators towing vehicles or trailers being utilized at the Airport must make prior arrangement with Airport Operations for approval and location of towing equipment.

5.12 Noise Abatement Procedures

- a. Aircraft operators based at the Airport shall become familiar with, and adhere to, the noise abatement measures outlined in the Airport's Noise Compatibility Program and Federal Aviation Regulations (FAR) Part 150 Study.
- b. Copies of the Airport's Noise Compatibility Program are available at the SLCDA administrative offices.
- c. Aircraft operators shall use procedures that result in minimum noise to areas surrounding the Airport. This includes, but is not limited to, avoiding low altitude maneuvers. Optimum power settings and operating altitudes shall be maintained consistent with safe operating procedures for the aircraft.
- d. Flights over populated areas shall be avoided to the extent consistent with safety.

5.13 Specialized Aeronautical Activities

- a. Hot air balloon operations, parachute drops, banner or glider towing, ultra light aircraft and similar operations are prohibited at Salt Lake City International Airport.
- b. Such specialized activities may be approved on a special events basis with prior written approval from the SLCDA and with coordination with the FAA.

5.14 Air Traffic Rules

The air traffic rules as established by the FAA and currently in effect are hereby adopted by reference and made a part of these rules as fully as if the same and each and all of them were set forth herein.

6.0 AIRCRAFT FUELING AND HANDLING

Only authorized personnel trained in the safe operation of the equipment used and in procedures required shall fuel aircraft. Fueling equipment shall be maintained in safe operating condition and in compliance with federal, State and local regulations and fire codes.

Operators will be required to indemnify the SLCDCA and Salt Lake City Corporation for all loss, claim or damage incurred as a result of the operator's handling and dispensing of fuel on the Airport.

6.1 Fueling Permits

Fuels (quantities greater than five gallons) shall only be stored and dispensed on the Airport by those entities having a permit with the SLCDCA authorizing the fueling operation and approving the fuel storage facilities, refueling vehicles, and related equipment.

6.2 Third Party Operators

Third Party Operators contracted to do fueling will be held responsible for the entire operation. Tenants must notify the SLCDCA, in advance, regarding Third Party Operators conducting any commercial activity at the Airport. The Third Party Operators must have a permit from the SLCDCA before operating on the Airport.

6.3 Fueling Operations

All fueling operations will be conducted in accordance with applicable federal, State, and local rules and regulations and fire codes.

Transferring Fuel:

- 1) No flammable or combustible liquid shall be dispensed into or removed from the fuel system of an aircraft within aircraft hangars.
 - 2) No flammable or combustible liquid shall be dispensed into or removed from a container, tank, vehicle, or aircraft except in a location approved by the SLCDCA Fire Chief or a designee.
- b. Smoking is prohibited during fueling activities.
- c. Bonding (Grounding) Requirements
- 1) All fuel transfer apparatus shall be metallicly interconnected with the tank, chassis, axles, and springs of every aircraft fueling unit.

- 2) Every aircraft fueling unit is required to have substantial heavy-duty cable of sufficient length to service the aircraft.
- 3) No Person shall transfer fuel into or out of any aircraft without bonding that fueling or defueling vehicle to the aircraft.

e. Fuel spill prevention and procedures

Any Person involved in the fueling or draining of aircraft shall exercise care to prevent overflow or spillage of fuel.

6.4 Fuel Spill Notifications/Requirements/Responsibility

Each fueling operator is responsible for keeping supplies including approved absorbent material, a vacuum or other mechanical device in close proximity to possible spill areas.

The operator is also responsible for training anyone involved in fueling to mitigate a spill.

The handling and removal of fuel contaminated material is under the direction of the SLCDA and will be in accordance with all applicable federal, State and local regulations.

In the event of a fuel spill, regardless of the amount spilled, the operator must immediately stop fueling, take steps for containment of the spill and notify the Airport Control Center at (801) 575-2401 or via two-way radio. The fueling may not continue until Airport Operations has determined that it is safe to do so.

Primary responsibility for the prevention of fuel spills rests with the airline, refueling operator, FBO or other entity that caused the spill. They are also responsible for the clean-up of fuel spills including the proper disposal of any contaminated material used in the process.

Disposal of pre-flight testing fuel is to be disposed of in compliance with all federal, State and local regulations and in containers designated for this purpose. It is the responsibility of the airline or entity performing pre-flight fuel testing to provide such containers and train personnel in their use.

Violations will be issued for failure to comply with fueling rules and regulations including the removal of individual's Airport issued ID badges.

6.5 Operation of Fueling Equipment

- a. Compatible with design, during fueling operations, there shall be adequately trained personnel available to quickly shut off the flow of fuel from the servicing equipment in an emergency. Locking of self-closing nozzles or automated shut-offs in an open position, even momentarily, shall be prohibited. Kinks and short loops in fueling hoses shall be avoided. The fuel nozzle shall never be allowed to drag along the ground.

- b. Refueling vehicles, fueling pumps, meters, hoses, nozzles, funnels, fire extinguishers, and bonding devices used during fueling operations shall be maintained in safe operating condition and in good working order and repair.
- c. Operators shall have on hand at all times accessible and sufficient spill control equipment including containment booms, socks, pillows, pads, etc. to control spills and releases occurring in their leased area. The operator is responsible for cleaning up fuel and other spills and releases. Operators shall store contaminated spill control material and equipment in containers in accordance with federal regulations until they are properly disposed.
Operators are required to insure that:
 - 1) Each refueling vehicle has a “first responder” spill kit.
 - 2) Each fuel storage facility maintains a spill kit with the following items as a minimum: 50 ft. long – three inch diameter spill sock, five pillows, 50 pads, 25 wipes, five disposable bags with ties, and a United States Department of Transportation (USDOT) approved container. All spill control items shall be rated for hydrocarbon use.
 - 3) They do not install self-service fueling islands, except as approved by the Executive Director.

6.6 Maintenance and Storage of Refueling Equipment and Facilities

- a. Maintenance and servicing of refueling vehicles shall be performed outdoors or in a building that is approved by the SLCDCA and the Fire Department specifically for this purpose. Operators shall document and maintain vehicle maintenance and agency inspection records. These records shall be made available to the SLCDCA upon request.
- b. Refueling vehicles shall be stored outside and not less than 50 feet from a building or other structure, storm water conveyances, drains, catch basins, or ditches. Refueling vehicles shall be parked in a manner that provides a minimum of ten feet of separation between vehicles and any other vehicle or aircraft and a minimum of 20 feet from a storm water inlet. Unless otherwise authorized by the Fire Department, no more than five gallons of fuel may be stored in fuel cans, and all fuel cans shall be spring-loaded, self-closing approved containers.

6.7 Fuel Flowage Fees

- a. A fuel flowage fee set in Salt Lake City Code, Title 16 is payable to the SLCDCA for all aviation fuel (not including motor vehicle fuel delivered to operators at the Airport).
- b. Each operator shall pay the fuel flowage fee for all fuel delivered to its premises, trucks, and/or storage tanks, excluding fuel delivered by the SLCDCA.
- c. Operators shall furnish to the SLCDCA on or before the 15th day of the next succeeding month, a written statement setting forth the total number of gallons of fuel delivered to

its premises, trucks, and/or storage tanks during the preceding month. The format for reporting must be in a form acceptable to the SLCDCA. Operators shall pay the fueling fees determined to be owed no later than ten days after the date of the SLCDCA statement.

- d. Operators shall keep and maintain adequate books and records to establish and verify the accuracy of the fuel volumes reported to the SLCDCA. The SLCDCA's authorized representative shall have the right, to examine, inspect or audit an operator's books and records for the purpose of verifying the accuracy of the fuel volumes reported by an operator.

6.8 Off-Premises Fueling

Fueling activities shall be limited to an operator's leased premises unless the following conditions are met:

- a. Operator's lease, use or other agreement or fueling permit expressly permits off-premises fueling.
- b. Operator's levels of insurance are sufficient to cover the increased liability associated with off-premises fueling, as determined by the SLCDCA.

6.9 Training

- a. All personnel engaged in fueling operations shall be trained in accordance with federal regulations and the Airport's Airport Certification Manual.
- b. Records of training and qualifications of everyone engaged in fueling operations shall be maintained as required by federal regulation. Training records shall be made available for review and/or inspection by the SLCDCA, the Airport Fire Department, or the Airport Police Department at any time.

6.10 Transient Fueling Operations

The SLCDCA reserves the right to inspect and approve transient fueling operations (such as seasonal fire fighting). They will pay applicable fuel flowage charges and are required to fuel aircraft only in designated areas.

7. SNOW AND DEICING OPERATIONS

7.1 Snow Removal

The Airport is responsible for snow removal operations except within tenant leased areas. Snow removal operations will be conducted in accordance with the Airport's FAA approved Snow and Ice Control Plan.

7.2 Deicing Fluid Storage

Aircraft deicing fluids shall only be stored and dispensed on the Airport by those entities having received authorization from the Airport. Operators will be required to indemnify the SLCDCA and Salt Lake City Corporation for all loss, claim or damage incurred as a result of the operator's handling and dispensing deicing fluids on the Airport.

7.3 Aircraft Deicing Operations and Procedures

- a. Aircraft deicing will be conducted in accordance with the Salt Lake City International Airport Deice Plan. Management of bulk aircraft deicing fluid (ADF) shall be conducted in compliance with SLC Rules and Regulations, the Fire Code of the City and County of Salt Lake, and all applicable federal, State, local laws and regulations.
- b. Aircraft shall be positioned in such a manner that the spray from performing deicing does not contaminate other vehicles or people. Aircraft shall be positioned on the pads in a manner which ensures that all runoff of ADF applied to the aircraft will fall within the ADF collection system.
- c. Airlines conducting deicing operations with engines running must follow their established company procedures as described in written company manuals.
- d. Primary and secondary aircraft deicing is only allowed on established SLCDCA's approved deice pads as depicted in the most current Airport Deice Plan.
- e. Limited deicing is allowed for emergency snow removal from engine cowlings at the gate if it is required to deice the cowlings prior to engine start. All limited gate deicing will be preapproved by the Airport Duty Manager. Fluid generated by limited deice operations will be collected by a glycol recovery vehicle.
- f. Exceptions to the Airport's Deice Plan must be approved by Airport Operations and the Airport Environmental Divisions. Costs of alternatives will be the responsibility of the requesting aircraft operator or tenant.
- g. Only propylene glycol based fluids shall be used for aircraft deicing at the Airport. No other products are permitted.
- h. Spills of any type or size (e.g., ADF, fuel, hydraulic fluid) must be reported immediately to the SLCDCA Control Center at (801) 575-2401. Spills must be contained and cleaned up by the responsible party in accordance with all applicable federal, State, and local laws and regulations.
- i. The disposition of unused or "out-of-spec" fluids from deice vehicles is the responsibility of the airlines and must be handled in accordance with all federal, State, and local laws and regulations.
- j. Deicing vehicles and support equipment shall be parked in designated parking places and will not be parked in aircraft operating areas unless actively engaged in deice operations

or in support of aircraft in the gate. Parking locations shall be approved by Airport Operations.

7.4 Transient Deicing Operations

Transient de-icing operations will be conducted by Airport approved and authorized deicing service providers in accordance with the Airport's most current deice plan.

7.5 Usage Reporting

Each carrier applying deicing fluid shall submit a monthly report detailing the type and amount of fluid applied. The SLCDCA will provide the form to each ADF applicator. If an FBO performs this service, the FBO will submit the report on behalf of the carrier.

8. **MOTOR VEHICLE OPERATIONS**

8.1 General Provisions (in addition to the provisions in Salt Lake City Code, Title 16)

- a. Vehicle operations on the Airport in a careless, negligent, unsafe, or reckless manner; in disregard of the rights and safety of others; without due caution and care; or at a speed or in a manner which endangers or is likely to endanger people or property, are prohibited.
- b. Unless otherwise posted, on-street vehicle parking is not allowed.
- c. Vehicles shall not be operated at a speed greater than is reasonable and prudent under the conditions and having regard for actual and potential hazards, traffic, use of the street or road, or so as not to endanger people or property.
- d. Vehicle operators shall provide proper signals and obey all traffic lights, signs, mechanical, or electrical signals, and pavement markings unless directed otherwise by the SLCDCA Police Department.
- e. Tugs and baggage carts shall be returned to designated storage areas immediately following unloading. No more than five carts may be towed at one time. During high winds, single carts must be attached to a tug, another cart or otherwise secured.

Baggage carts and other equipment left outside of designated storage areas are subject to relocation at the tenant's expense and a fine. The tenant will be charged \$200 per vehicle or piece of equipment each day that it remains in violation. If equipment is found to impede operations of another tenant or the Airport, the DOA will relocate it and charge the tenant for costs of removal and storage. The DOA will issue a warning before assessing fines or relocating equipment.

The tenant is responsible for tugs, baggage carts and other equipment brought on the airfield by employees, guests, clients, patrons, contractors, subtenants, approved licensees, contractors etc.

The tenant may request written permission from the DOA to park or store equipment on a temporary basis outside of the designated storage areas.

- f. Except in case of emergency or operational necessity, no vehicle shall leave paved areas.
- g. Airport employees or users may not ride any self-propelled vehicle device such as bicycles, skate boards, long boards, roller skates/blades, scooters, ATVs, and three-wheelers in the Airport secure area, terminals, buildings, or facilities. Employees using these vehicles or devices will disembark and walk them into an assigned work area. An exception is made for Airport Police and wheelchairs for those with disabilities, and with written permission for construction and other special projects.
- h. Traffic on perimeter roads, enplaning and deplaning drives, public thoroughfares, and parking areas of the Airport is limited to those vehicles properly licensed to operate on public streets and highways. The operation of baggage tugs and other ramp equipment in these areas is prohibited.
- i. No ground service operator shall provide services on the Airport without successfully passing the Airport's Basic Drivers Training providing documentation of a current insurance policy meeting the Airport's specifications and having paid the appropriate fees or charges.
- j. Operators of vehicles, which because of design or function restrict operator visibility to sides and rear of vehicles, shall utilize someone else for guidance while backing up.
- k. Use of cell phones and electronic music devices is strictly prohibited when driving on the Aircraft Operation Area (AOA). Drivers must fully stop their vehicle in a safe manner away from aircraft and vehicle traffic to conduct cell phone conversations. Hands-free devices may be used as long as the driver can control distraction and they don't interfere with driving. Texting, operating electronic music devices or any other distracting activity while driving on the AOA is prohibited. Listening to music, using earphones or headphones while driving or working on the airfield is prohibited.
- l. Operators of motor vehicles shall avoid idling.
- m. Remote ground service equipment (GSE) space will be designated and fees assessed in accordance with the Airline Use Agreement (AUA).

8.2 Vehicle Licensing and Equipment

- a. Except for vehicles that are exclusively used on the AOA, all vehicles shall meet proper State licensing, registration and inspection requirements.
- b. Vehicles shall not be operated on the Airport unless they are in sound mechanical condition, with working lights, horn, brakes and other equipment suitable to the task.
- c. Vehicles operating or parking inside the security fence shall be registered with the SLCDA and clearly display a current vehicle permit or sticker. Non-traditional vehicles

are not required to have a vehicle permit or sticker. These are defined as a vehicle, through original design, intent or manufacture that was not intended for use on public streets. This includes: motorized aircraft tugs, belt loaders, ATV's, forklifts, golf carts, and similar vehicles. However, these vehicles must be identified with the name of the company or organization operating it.

8.3 Vehicle and Equipment Washing, Cleaning and Maintenance

- a. Tenant owned vehicles and equipment are required to be washed, rinsed and maintained in a manner consistent with environmental regulations. Therefore, cleaning and maintaining vehicles and equipment is allowed only in facilities designated by the SLCDCA for these purposes. A tenant must have the SLCDCA's approval prior to the installation and operation of alternative facilities.
- b. Putting a solvent, detergent or other cleaning substance on a vehicle or piece of equipment and then taking it to a rinsing area is prohibited.
- c. Contractors may construct temporary facilities to rinse vehicles prior to leaving the Airport if such rinsing is to reduce fugitive dust emissions. This type of facility and those used to rinse ready mix concrete trucks require the approval and monitoring of the SLCDCA.
- d. The SLCDCA reserves the right to suspend vehicle or equipment rinsing.
- e. Vehicle and equipment maintenance must be conducted in areas equipped to capture any fluids that may be released. Under no circumstance is maintenance to be done over soil, storm drains or unprotected asphalt.
- f. Materials and waste generated by vehicle and equipment maintenance shall immediately be removed from the area and disposed of in an environmentally protective manner.
- g. Temporary maintenance sites require the prior approval from the SLCDCA and will be monitored.

8.4 Terminal Area

- a. Anyone operating equipment or vehicles within the passenger terminal building area will abide by all posted speed regulations in these areas with the exception of emergency vehicles responding to an incident.
- b. Anyone operating equipment prior to entering into or exiting from any area where vision is impaired, shall bring the equipment to a complete stop and verify that it is safe to proceed before continuing.
- c. All vehicles operated in the terminal building shall be maintained in good condition at all times and be free of oil and gas leaks. Battery-type vehicles shall be recharged in well-ventilated areas designated by Airport Operations. Each operator shall keep areas clean of vehicle liquid spills.

- d. Permanent parking of internal combustion engine-driven vehicles is prohibited in any of the terminal buildings. Storage of surplus or infrequently used vehicles is prohibited. The parking of tugs or towing vehicles while baggage carts are loaded is permitted. This regulation is not intended to prohibit the normal operation of airline baggage handling.

8.5 Air Operations Area

- a. All vehicles operating on the AOA must display clear identification as to the company, tenant, or contractor with which they are affiliated.
- b. Vehicle operators shall always yield the right-of-way to aircraft, emergency vehicles (or equipment) and pedestrians. Vehicles shall not be driven under passenger loading bridges.
- c. Seatbelt use is required by all personnel when traveling on marked roadways.
- d. Vehicles shall not be operated in such a manner or within such proximity of an aircraft as to create a hazard or interfere with the safe operation of the aircraft.
- e. Prior to operating vehicles on the AOA, all vehicles operators shall attend and pass the Airport Basic Drivers Training Program.
- f. The SLCDCA may restrict vehicles to a certain portion or segment of the AOA. Such restrictions shall prohibit vehicle operations outside designated areas.

8.6 Aircraft Movement Area

- a. No vehicles (including refueling vehicles) are permitted on runways and taxiways without specific approval from the SLCDCA and ATC.
- b. All vehicle operators with approval for unescorted access into the movement area must successfully complete the Airport's Movement Area Drivers' Training program (Red Badge Training).
- c. All vehicles and equipment operators and personnel shall obtain clearance from ATC prior to entering the movement area and shall comply with instructions issued while on the movement area.
- d. Upon receiving clearance, vehicle operators shall ensure that no aircraft is approaching before entering the movement area.
- e. All vehicles operating in the movement area shall be equipped with a functioning two-way radio capable of communicating with the ATC. All other vehicles require a SLCDCA escort.
- f. In the event a vehicle in the movement area experiences radio failure, the vehicle must vacate the area utilizing perimeter roads or other non-controlled routes. If exit via non-

controlled route is not possible, the vehicle operator shall indicate radio failure by facing the vehicle towards the FAA control tower and flashing the vehicle's headlights. Thereafter, the vehicle operator shall operate the vehicle in accordance with the standard colored light signal directions given by ATC. The operator can request to be escorted out of the movement area by contacting Airport Operations via radio or cell phone.

- g. Evidence of valid title or current rental or lease agreement for the vehicle shall be kept in the vehicle and available for inspection.

8.7 Vehicle Maintenance

Except for minor repairs that are necessary to remove such vehicle(s) from the Airport, and except as expressly provided otherwise in an agreement with SLCDCA, private vehicles shall not be cleaned or maintained anywhere on the Airport. Vehicles operated by commercial operators or lessees shall be cleaned or maintained only in areas designated by the SLCDCA.

8.8 Operator Licensing and Permits

- a. Vehicle operators must have a valid Utah vehicle operator's license of the class needed for the vehicle being operated and evidence of insurance (as required by State law and the SLCDCA) to operate a vehicle on the Airport.
- b. Evidence of valid title or current rental or lease agreement for the vehicle shall be kept in the vehicle and available for inspection.
- c. No Person shall operate a vehicle or motorized equipment in the restricted areas of the Airport without a SLCDCA identification badge and other such authorization as may be required.

8.9 Ground Transportation

- a. Definitions:

Airport: The Salt Lake City International Airport.

Airport Shared Ride Vehicle: Any authorized Ground Transportation Vehicle operating under contract with the Department of Airports to provide airport shared ride service to and from the Salt Lake City International Airport.

Applicant: An individual who has submitted an application to the Department to obtain a Ground Transportation Vehicle Operators Badge.

Authorized Ground Transportation Business: Any Business operating any Ground Transportation Vehicle, which has a current, valid Business license as required by the City and which:

- 1) Registers the Business in accordance with the requirements established by the Department, and
- 2) Is current with all fees or charges imposed by the Department and City.

Automobile: Any motor vehicle with passenger seating for five (5) persons or less, not including the driver.

Bus: Any licensed motor vehicle operated on the streets and highways for hire on a scheduled or nonscheduled basis with a seating capacity of twenty-five (25) or more passengers, not including the driver.

Bus Plazas: Airport parking lots used for loading and unloading passengers and baggage traveling by chartered Bus, and for other vehicles as permitted by the Department.

Business: A voluntary association legally formed and organized to carry on a Business in Utah in the legal name of the association, including without limitation a corporation, limited liability company, partnership, or sole proprietorship.

Business License Office: The division of building services and licensing of Salt Lake City Corporation, or its successor.

Car Rental Load/Unload Curbs: Traffic lanes serving Airport car rental facilities.

City: Means the governmental agencies and geographical landmass of Salt Lake City, Utah.

Civil Notice: A written notice of a ground transportation violation as provided under this chapter.

Courtesy Vehicle: Any motor vehicle regularly operated on Salt Lake City streets for transportation of customers and/or baggage without making a specific separate charge to the passenger for such transportation.

Delivery Areas: Areas at the airport designated by the Department for use by vehicles making deliveries.

Department: The Salt Lake City Department of Airports.

Department Automated Vehicle Identification (AVI) Tag: An electronic transponder used to identify vehicles and provide the Department with vehicle data and billing information.

Department Director: The Executive Director of the Salt Lake City Department of Airports.

Department Inspection: An inspection of a Ground Transportation Vehicle by the Department to verify that the vehicle meets the standards set by the Department Director, Department Rules and Regulations, applicable contracts, and applicable City ordinances, including without limitation the exterior and interior of the vehicle and all associated vehicle licensing, safety, and insurance requirements.

Department Inspection Seal: A sticker or seal issued by the Department to signify that a Ground Transportation Vehicle has passed the required Department Inspection. These Department Inspection Seals are non-transferable and no Ground Transportation Vehicle may be operated without such seal.

Department Rules and Regulations: Rules and regulations developed and adopted by the Department Director to govern commercial ground transportation operations within the City.

Fixed Schedule: Ground Transportation Service operating on a regular time schedule previously announced as to time of departure and arrival between definitely established and previously announced points along definitely established and previously announced routes regardless of whether passengers or freight are to be carried.

Ground Transportation Appeal Committee: A committee established by the Department Director to hear and rule on appeals, suspensions, and other matters related to ground transportation in and connected with the City.

Ground Transportation Business: Any Business operating any Ground Transportation Vehicle.

Ground Transportation Desks: Desks located within the Airport terminal buildings for use as a point of contact with customers when authorized.

Ground Transportation Service: The transportation of passengers by a Ground Transportation Business.

Ground Transportation Vehicle: Any motor vehicle used for the transportation of persons using Salt Lake City streets for commercial purposes regardless of whether a fee or fare is collected, which includes, but is not limited to, any Airport Shared Ride Vehicle, Automobile, Bus, Courtesy Vehicle, Hotel Vehicle, Limousine, Minibus, Special Transportation Vehicle, Specialty Vehicle, Taxicab, Van, or Trailer being towed by a Ground Transportation Vehicle.

Hearing Officer: A Hearing Officer of the Salt Lake City Justice Court.

Hotel Vehicle: Any motor vehicle regularly operated by a Ground Transportation Business under contract to or directly by a motel, hotel, or other lodging Business, to provide transportation of customers and/or baggage for the contracted establishment for which transportation the customer is charged a separate fee or fare, and which is subject to a contract filed with the Department providing for operating the vehicle.

Limousine: Any vehicle described by its manufacturer or aftermarket manufacturer as a Limousine or a luxury vehicle such as, but not limited to, a Cadillac Escalade, Chevrolet Suburban, Lincoln Town Car, or Mercedes Benz, with a driver furnished, who is dressed in professional Business attire or a chauffeur's uniform. A Limousine may be deemed a Hotel Vehicle if the service provided is prearranged and minimum fare is charged as provided in this chapter.

Minibus: Any motor vehicle with a passenger seating capacity of thirteen (13) to twenty-four (24) persons, not including the driver.

Model Year: The age of a motor vehicle based upon the manufacturer's date of manufacture. The year shall be calculated as beginning January 1 of the Model Year, regardless of the month of manufacture, purchase, or licensing with the City.

New Ground Transportation Vehicle: A vehicle which is of the most recent Model Year and with less than 1000 miles on the odometer.

Off-Airport Parking Shuttle: Authorized Ground Transportation Vehicles used for the transport of passengers and their luggage to and from car rental facilities that are based off airport properties.

Parking Garage Through Lanes: Traffic lanes through the Airport's short term parking Garage without entering parking areas or paying a parking fee.

Persons with Disabilities: Those persons who are not acutely ill, who do not require the services of an ambulance, and who need or desire special transportation equipment or accommodation for physical or mental infirmities.

Scheduled Service: Transportation provided by an Authorized Ground Transportation Business on a Fixed Schedule posted with and approved by the Department in advance of such transportation.

Special Transportation Vehicle: Any motor vehicle for hire, other than an Airport Shared Ride Vehicle, ambulance, or Taxicab, which vehicle is designed, equipped, and used for the transportation of Persons With Disabilities.

Specialty Vehicles: Any vehicles that are unique in their design, or built for a specific purpose, including but are not limited to, special conversion vehicles and classic or collector Automobiles, but excluding Special Transportation Vehicles.

Staging Facilities: Parking lots where Authorized Ground Transportation Vehicles may park and drivers may wait for customers at the Airport as further described in these commercial ground transportation rules.

Starter: A person appointed by and representing a Ground Transportation Business who is responsible for managing the coordination of vehicles and passenger transportation for that Business.

Taxicab: A motor vehicle with a seating capacity of five (5) passengers or less, not including the driver, or a Van with a passenger seating capacity of six (6) to twelve (12), not including the driver, used in the on-demand, for hire transportation of passengers or baggage over public streets and not operated over a fixed route or upon a Fixed Schedule, but which is subject for contract hire by persons desiring special trips from one point to another, as provided under Chapter 5.72 of this title, or its successor chapter, and authorized to operate in Salt Lake City by contract with the Department.

Temporary Operations: A ground transportation business that operates on a limited or temporary basis within the City according to a written waiver executed by the Department Director according to Salt Lake City ordinance 5.71.160.

Terminal of Transportation: A facility or location having the primary purpose of facilitating Ground Transportation Services, such as, but not limited to, the Salt Lake City Intermodal Hub.

Trailer: A wheeled vehicle designed to be pulled by a motor vehicle for the transportation of freight, luggage, or other items.

Van: Any licensed motor vehicle other than those designated as a Limousine with a passenger seating capacity of six (6) to twelve (12), not including the driver.

Vehicle Operators Badge or Operators Badge: An identification badge issued by the Department to an individual to signify that the individual has met the requirements to operate a Ground Transportation Vehicle.

b. State and City Registration and Licensing. All Ground Transportation Businesses must be registered by the state of Utah and licensed by the City.

- 1) Businesses must register with the Utah Department of Commerce.
Department of Commerce
Heber Wells Building
160 East Broadway
Salt Lake City, Utah 84111
801-530-6646
- 2) Businesses must obtain a Salt Lake City Business license.
Salt Lake City Department of Business Licensing
451 South State Street #225
Salt Lake City, Utah 84111
801-535-6644
- 3) After completion of steps a. and b., above, Businesses must register with the City, obtain Department Inspection Seals from the City and obtain Vehicle Operators Badges for all drivers from the City.
Salt Lake City Department of Airports
Department of Ground Transportation
PO Box 145550

Salt Lake City, Utah 84114-5550
801-908-7205 or 801-908-7204
www.slairport.com/badging

- 4) All Department Automated Vehicle Identification (AVI) Tags, Department Inspection Seals and Operator or Starter badges are the property of the Department and must be surrendered upon termination or demand by the Department.
- c. Fees. No Person shall operate a Ground Transportation Business within the City without first having paid all applicable fees. Ground transportation fees are established using the full cost recovery method. Depending on the service, fees are calculated as a combination of costs, including without limitation direct costs incurred by Airport personnel, facility and operating expenses, supplies and equipment costs, and allocated administrative costs. Current fees shall be set forth in a published Ground Transportation Fee Schedule. Fees will be reviewed and adjusted if necessary by Airport personnel on an annual basis.
- d. Ground Transportation Vehicle Requirements.

Minimum vehicle inspection requirements:

- 1) Vehicles must meet all ordinance required age, mileage and salvage / branded title restrictions and requirements.
- 2) Exteriors of vehicles must be clean.
- 3) Vehicles, including bumpers and body molding, must be straight and aligned and free of all exterior damage, except for dents no larger than six inches (6") in diameter and rust spots no larger than one inch (1") in diameter.
- 4) Windshields must be free of cracks and chips larger than one inch (1") in diameter or length that are within the acute area as defined by the State of Utah. All other glass and mirrors shall be free of cracks and chips larger than one inch (1") in diameter or length.
- 5) The foot brake pedal must not be capable of being depressed beyond a point one inch (1") from the floor of the car.
- 6) Free play in the steering mechanism shall not exceed standards established by the State of Utah.
- 7) Vehicle exterior paint shall be maintained in good condition and repair, with no faded, oxidized, or non-matching paint.
- 8) Vehicle wheels shall have matching wheel covers, or be equipped with matching custom wheels.

- 9) Tire tread depth shall be not less than one-sixteenth $\frac{2}{32}$ " of an inch for rear tires, nor less than one-eighth $\frac{4}{32}$ " of an inch on any front tire when measured on any portion of the tire's tread grooves, with no cuts or breaks in sidewalls. Measurements shall not be made where any tie bar, hump, or filet is located. No re-grooved, recapped, or retreaded tires shall be used on the front axles of the vehicle, but may be used on the rear axles.
 - 10) Engine and engine compartment shall be clean and free of uncontained combustible materials.
 - 11) All fluid leaks shall be repaired immediately.
 - 12) Vehicle suspension system shall be maintained so that there are no sags due to weak or broken springs and no excessive motion when the vehicle is in operation because of weak or defective shock absorbers.
 - 13) All parts affixed to the undercarriage of the vehicle shall be permanently affixed and in good repair.
 - 14) Vehicle interiors shall be clean and sanitary, and free of dirt, oil, litter, or offensive odors; all seats and other interior surfaces shall be in good repair and free of tears, springs and sharp objects. Dashboard covers may be used, but shall be professionally manufactured.
 - 15) Vehicle trunks or luggage storage compartments shall at all times be maintained free of oil, dirt, debris and personal property, except for property belonging to a current passenger or property used by the driver in connection with operating a Ground Transportation Vehicle.
 - 16) All equipment used for the ease, convenience or safety of drivers and passengers, including, but not limited to, signage, doors, windows, carpets, door and window handles, ashtrays, heaters, air conditioners, radios and seatbelts, shall be maintained in a good and operable condition.
 - 17) Special Transportation Vehicles are subject to additional inspection requirements set forth in Salt Lake City Code Sections 5.71 and 5.76.
- e. Signage. All Ground Transportation Vehicles with exterior signs or color schemes used for identifying purposes, whether such identifying information is placed on such vehicle voluntarily or in accordance with applicable ordinances or statutes, shall meet the following requirements:
- 1) Signs and other identifying information shall comply with all applicable ordinances or statutes.
 - 2) Signs shall be professionally produced and permanently affixed on both sides of the vehicle, and shall identify the name of the Authorized Ground Transportation Business with which the vehicle is associated and other

information as required by law. In cases of companies that operate vehicles for separate Business locations with the same name, the vehicle signage shall include the location of the Business being served by each particular vehicle. No sign may be handwritten.

- 3) Lettering size shall be no smaller than one inch (1") in height. The color of the lettering shall contrast with the background color.
- 4) All vehicles shall be properly and adequately numbered and identified in conformance with this chapter and other applicable statutes and ordinances. Identifying signage shall be in good repair.

f. Temporary Operations

- 1) Every Ground Transportation Vehicle operating on a temporary basis must have a copy of the written authority to operate as granted by the Department Director in the vehicle at all times.
- 2) Application for temporary operations or exemptions must be made in writing to the Department Director and must include stated reasons for the request and any supporting documentation the petitioner wants to be considered.

g. Drivers and Starters. All persons operating a Ground Transportation Vehicle must have a valid Vehicle Operators Badge issued by the Department.

- 1) Applications for a Vehicle Operators Badge may be made to the Salt Lake City Department of Airports Ground Transportation Office during Business hours. Application forms are available at the office or online at: <http://www.slairport.com/badging>
- 2) The Applicant must sign a statement acknowledging receipt of a copy of applicable Salt Lake City ground transportation ordinances and rules and regulations.
- 3) Previous to the issuance of a Vehicle Operators Badge, the applicant will be required to successfully demonstrate:
 - a) The applicant's knowledge of the city and map reading capabilities.
 - b) The applicant's ability to understand, read, write and speak basic English.
 - c) The applicant's understanding of principles of common courtesy.
 - d) The applicant's understanding of how to address the needs of disabled passengers.
- 4) Submission of an application for a Vehicle Operators Badge constitutes the Applicant's consent to a background check and any associated investigative efforts by the City and the City's right to discuss and divulge any findings or recommendations to the Applicant's employer.
- 5) No refund of monies will be made once application for a Vehicle Operators Badge has been made and the applicant has paid the required fee.

- 6) The Applicant must be twenty one (21) years old or older.
- 7) The Applicant must not be an individual required to register pursuant to the Utah penal code, section 77-27-21.5, Utah Code Annotated, sex offender registration, or its successor section.
- 8) The Applicant must have a current motor vehicle license with all required endorsements.
- 9) The Applicant must submit written evidence that an Authorized Ground Transportation Business will employ or retain the Applicant upon issuance of an Operators Badge.
- 10) The Applicant must submit two (2) forms of identification, at least one of which must have been issued by a government authority and includes a photo.
- 11) Submission of an application for a Vehicle Operators Badge constitutes the Applicant's consent to a background check and any associated investigative efforts by the City and the City's right to discuss any findings or recommendations with the Applicant's employer.
- 12) No Applicant shall be issued an Operators Badge if such background check for the Applicant demonstrates that the Applicant has a disqualifying criminal offense, as defined below.
- 13) If an Applicant's criminal record discloses an arrest for any disqualifying criminal offense without indicating a disposition, the Department must determine, after investigation that the arrest did not result in a disqualifying offense before issuing an Operators Badge.
- 14) Before making a final decision to deny an Operators Badge, the Department must advise the Applicant that the FBI criminal record discloses information that would disqualify him or her from receiving such Operators Badge and provide the Applicant with a copy of the FBI record if he or she requests it in writing.
- 15) An Applicant whose criminal record discloses a disqualifying criminal offense may seek to complete or correct information contained in his or her criminal record by contacting the local jurisdiction responsible for the information and the FBI. Within thirty (30) days after being advised that the criminal record received from the FBI discloses a disqualifying criminal offense, the Applicant must notify the Department in writing of his or her intent to correct any information that he or she believes to be inaccurate. The Department must then receive a copy of the revised FBI record or a certified true copy of the information from the appropriate court prior to granting the Operators Badge. If the Department receives no such notification within thirty (30) days that the Applicant intends to seek a correction, the Department may make a final determination based on the information available to the Department.

- 16) Criminal record information provided by the FBI pursuant to this chapter may be used only to carry out the background check requirements in this chapter. The Department shall maintain criminal history background check records and other information of a personal nature in a confidential manner. The FBI criminal record shall be maintained until one hundred eighty (180) days after the termination of a Vehicle Operators Badge, including any subsequent renewals, and the FBI criminal record shall then be destroyed.
- 17) Any person with a valid Vehicle Operators Badge has a continuing obligation to disclose to the Department within twenty four (24) hours any disqualifying criminal offense.
- 18) If the Department determines to deny the application of any Applicant, the Department shall inform Applicant in writing of the reason(s) for such denial, including any disqualifying criminal offenses in the Applicant's criminal record.
- 19) An Applicant has a disqualifying criminal offense if the Applicant has (A) been convicted of, (B) found not guilty by reason of insanity or (C) plead guilty to, (D) entered a plea of no contest, (E) or entered into a plea in abeyance with the courts in any jurisdiction in connection with any of the offenses listed below, or of a conspiracy or attempt to commit any such offenses, during the five (5) years before the date of the Applicant's application for an Vehicle Operators Badge:
 - a) Murder.
 - b) Assault or aggravated assault.
 - c) Kidnapping or hostage taking.
 - d) Rape, aggravated sexual abuse or other sex crimes, including, but not limited to, unlawful sexual activity with or sexual abuse of a minor, enticing a minor over the internet, unlawful sexual intercourse or conduct, object rape or sodomy, forcible sexual abuse, aggravated sexual assault, sexual exploitation of a minor, incest, lewdness or obscene acts, sex acts for hire, or soliciting.
 - e) Stalking.
 - f) Urinating in public or other disorderly conduct at a time when the Applicant was engaged in operating a Ground Transportation Business.
 - g) Unlawful possession, use, sale, distribution, or manufacture of an explosive or weapon.
 - h) Extortion.
 - i) Robbery, burglary, theft or bribery.
 - j) Distribution of, or intent to distribute, a controlled substance.
 - k) Felony arson.
 - l) Felony involving a threat.
 - m) Felony involving willful destruction of property.
 - n) Felony involving dishonesty, fraud, or misrepresentation.
 - o) Possession or distribution of stolen property.
 - p) Felony involving importation or manufacture of a controlled substance.

- q) Illegal possession of a controlled substance punishable by a maximum term of imprisonment of more than one year.
 - r) Reckless driving, driving while under the influence of alcohol or a controlled substance, or being in or about a vehicle while under the influence of alcohol or a controlled substance with the intent of driving.
 - s) Felony involving a driving offense.
 - t) Aircraft registration violations under 49 USC section 46306.
 - u) Interference with air navigation under 49 USC section 46308.
 - v) Improper transportation of hazardous material under 49 USC section 46312.
 - w) Aircraft piracy under 49 USC section 46502.
 - x) Interference with flight crew members under 49 USC section 46504.
 - y) Crimes aboard aircraft under 49 USC section 46506.
 - z) Carrying a weapon or explosive aboard an aircraft under 49 USC section 46505.
 - aa) Conveying false information and threats under 49 USC section 46507.
 - bb) Aircraft piracy outside the United States under 49 USC section 46502(b)
 - cc) Lighting violations involving transporting controlled substances under 49 USC section 46315
 - dd) Unlawful entry into an aircraft or airport area contrary to security regulations under 49 USC section 46314.
 - ee) Destruction of an aircraft or aircraft facility under 18 USC section 32.
 - ff) Violence at airports under 18 USC section 37.
 - gg) Espionage, sedition or treason.
- h. Appeals. Request for appeal of revocation, suspension, or denial of renewal of an operator's badge, AVI tag or inspection seal.
- 1) Request for an appeal must be made in writing to the Department Director at:

Salt Lake City Department of Airports
 Department of Ground Transportation
 PO Box 145550
 Salt Lake City, Utah 84114-5550
 - 2) The request must state the following:
 - a) Whether applicant desires an expedited appeal, which shall be reviewed by the department director on an expedited basis or whether applicant desires to appeal directly to the Ground Transportation Appeal Committee;
 - b) Reasons why the Applicant believes he or she has complied with the applicable requirements;
 - c) Reasons why the department's action is in error.
 - 3) The appellant must file the request for appeal within fourteen (14) calendar days from the date the department takes the action being contested. The Ground Transportation Appeals Committee will only consider an appeal which is properly and timely filed.

- 4) If appellant requests an expedited appeal, the department shall investigate the facts and the department director shall issue a written decision to appellant within 3 business days of the receipt of the request for appeal that meets the requirements set forth herein. If the department director does not reverse the action that is the subject of the appeal, the department director shall impanel a Ground Transportation Appeals Committee within 3 business days of the decision not to reverse the action.

- 5) If appellant requests an appeal directly to the Ground Transportation Appeals Committee or if a Ground Transportation Appeals Committee is impaneled as set forth in paragraph D, above, the following procedures shall be followed:
 - a) Within five (5) days from receipt of a request for appeal, the department director shall impanel a Ground Transportation Appeals Committee that consists of three (3) persons selected by the department director to hear the specific appeal. The Ground Transportation Appeals Committee will set a hearing date which will allow it to hear the matter in a reasonable time frame.
 - b) Appellant may appear in person before the Ground Transportation Appeals Committee designated to hear the appeal and may be represented by a person of his or her choice, confront any witness whose testimony is to be considered, and examine the evidence the committee will consider in making its decision.
 - c) The Ground Transportation Appeals Committee shall hear the appeal and determine whether the appellant has shown by a preponderance of the evidence that the action being appealed was erroneous and should be reversed. The Ground Transportation Appeals Committee may not take action beyond a determination whether to uphold or reverse the action that is the subject of the appeal.
 - d) The Ground Transportation Appeals Committee is not required to follow the Utah Rules of Civil Procedure or the Utah Rules of Evidence.
 - e) The hearing will be open to the public and recorded. The Ground Transportation Appeals Committee may close a hearing if it complies with the Utah Open and Public Meetings Act.
 - f) The decision of the Ground Transportation Appeals Committee shall be filed no later than five (5) days after the date of the hearing.
 - g) The decision of the Ground Transportation Appeals Committee is the final internal appeal in the City.

- i. Appearance Standards for Drivers and Starters. Drivers of Ground Transportation Vehicles and Starters representing commercial Ground Transportation Businesses within the city shall adhere to the following standards.
 - 1) Clothing and uniforms standards must be industry accepted business casual or greater.
 - 2) Must wear enclosed shoes or boots or sandals with socks.

- 3) Must maintain hair, beards or mustaches in a clean and groomed condition.
- 4) Must maintain clothes in a clean and repaired condition.
- 5) Must be free from offensive odor.
- 6) Must at all times display the Department issued badge of the company they represent.

j. Behavior and Conduct Standards for Drivers and Starters. The drivers of Ground Transportation Vehicles and Starters representing commercial Ground Transportation Businesses within the city shall adhere to the following standards of conduct.

- 1) Drivers and Starters shall refrain from conduct, language and behavior that is insulting, offensive, threatening, disruptive or disturbing to passengers or others.
- 2) Within the constraints of operations as outlined in ordinance, when Ground Transportation Vehicles are available for transport, drivers shall provide transportation to paying passengers and their property.
- 3) Drivers and Starters shall obey all applicable rules, regulations, laws and ordinances, and shall maintain all appropriate licenses.
- 4) Drivers shall not carry animals or nonpaying riders while transporting passengers in their vehicles, except that by the request of a passenger, drivers may carry service animals or animals enclosed in a carrier or other enclosure. Drivers may carry nonpaying passengers when so requested by driver's employer for training or other job related purposes.
- 5) Drivers shall transport any paying passengers who present themselves for transport in nonelectric wheelchairs and shall offer reasonable assistance to such passengers, except that if a passenger must be lifted into the vehicle, the driver may request the passenger to contact a Special Transportation Vehicle.
- 6) Drivers shall furnish a receipt for payment of a fare.
- 7) Drivers shall follow any transportation routes predetermined by the driver's employer, or if such routes are not predetermined, drivers shall either take the shortest reasonable route to a destination, or shall follow a specific route requested by a passenger.
- 8) At Terminals of Transportation, Starters or other Ground Transportation Company employees may only solicit for business at locations approved by the Department Director.
- 9) Persons providing meet and greet services must be employees of a licensed Authorized Ground Transportation Business and have with them the name of

the passenger or group being met. This information must be provided to any Department official requesting it. Representatives of Ground Transportation Businesses must not solicit any passengers other than those they are scheduled to meet. Meet and greet services must be conducted in a manner that will not obstruct the normal flow of pedestrian traffic.

- 10) Hand held signs must have the name of the passenger, group, or company being met and may not exceed twenty four inches wide or eighteen inches in height. Signs must meet standards of professionalism accepted in the industry. For example: black board with attachable lettering / white board with company name attached and with the ability to write in the passenger or group name below / paper signs must be computer generated or professionally produced and may not be hand written.
- 11) Representatives of Ground Transportation Businesses must not engage a passenger who is in the process of speaking to another Ground Transportation Business's representative and may address the traveling public only when approached. The practice of calling out to potential passengers to draw them to the representative's location is strictly prohibited.

- k. Petition for Exemption, Waivers, or Temporary Operations. All petitions for exemption, waiver, or Temporary Operations must be made in writing addressed to the Department Director at:

Salt Lake City Department of Airports
Department of Ground Transportation
PO Box 145550
Salt Lake City, Utah 84114-5550

The Department Director will review petitions for exemption, waiver or temporary operations and will provide a written decision to the petitioner within a reasonable time.

- l. Hotel Vehicle Contracts. Authorized Ground Transportation Companies performing services as a Hotel Vehicle must file and maintain a copy of the contract for each contracted establishment with the Department and inside each vehicle operating as a hotel vehicle.
- 1) Each contract must be signed by the manager or principal of the contracted establishment and must include a full description of the services contracted.
 - 2) The Department will review each contract for content necessary to establish that a business relationship has been formed that would constitute the Authorized Ground Transportation Company being granted authority to operate as a Hotel Vehicle.
- m. Airport Commercial Ground Transportation Operations – General Requirements

- 1) No vehicle for hire shall load or unload passengers at the Airport in any place other than that designated by the Department Director.
- 2) Placing, throwing, or dropping of waste, refuse, or rubbish upon any taxi or Bus stand, roadway, street, or adjacent sidewalk thereto is strictly forbidden.
- 3) Ground transportation employees shall refrain from feeding birds and other animals within a 5-mile radius of the Airport.
- 4) The owners or operators of all vehicles for hire, their employees, invitees, and those doing business with them shall conduct themselves in a professional, orderly and proper manner at all times.
- 5) No owner or operator of a vehicle for hire or any Person at any time, while on the Airport, by words, gestures, or otherwise shall solicit, persuade, or urge any Person to use or hire any vehicle for hire or other means of transportation or conveyance at the Airport.
- 6) Any driver of a vehicle for hire who violates any of these Rules and Regulations shall be subject to immediate expulsion from the Airport and will not be allowed to re-enter the Airport without the permission of the Department Director. Also, such driver's Vehicle Operators Badge or Starters Badge may be revoked and / or the drivers permission to operate a Ground Transportation Vehicle with the City.
- 7) Any Ground Transportation Business failing to comply with these Rules and Regulations or which permits, encourages, or allows any of its representatives to violate these Rules and Regulations shall be subject to exclusion from the Airport and/or cancellation of the permit to operate on the Airport.
- 8) Ground Transportation Businesses shall render all possible cooperation to the SLCDCA in enforcing Salt Lake City Code and these Rules and Regulations.

n. Commercial Lanes

- 1) Authorized Ground Transportation Businesses must use the Commercial Lanes unless otherwise directed by the Department.
- 2) Drivers must remain with vehicles at all times. Signs and markings must be strictly obeyed. Loading and unloading must take place in designated areas. No loading or unloading of passengers shall be conducted in a through lane. All vehicles must use areas along the Commercial Lanes that correspond to the following colored zones:

Green / Blue	Department of Airports Buses only – Load
Yellow	Taxicabs only - Load

Orange

Courtesy Vehicles / Hotel Vehicles / Vans / Limousines /
Minibuses and Taxi's – Load/Unload

- 3) Double Parking is prohibited in all areas at all times. Vehicles must be parked parallel to the curb, providing a through lane at all times. All loading and unloading must take place on the curb or in designated areas.

o. Staging Facilities

- 1) Unless otherwise approved by the Department, the Staging Facilities are the only location that Ground Transportation Vehicles may park while staging at the airport.
- 2) Ground Transportation Vehicles are to wait in the Staging Facilities area, and proceed to the Commercial Lanes, Bus Plazas or other authorized areas only when customers are ready to actively load or unload.
- 3) All Authorized Ground Transportation Businesses may use the Staging Facilities. The Department may designate Parking areas for different types of vehicles. Authorized Ground Transportation Businesses may use these areas when drivers and vehicles must wait for their group or party to arrive, or when making deliveries, or when directed by the Department.
- 4) Drivers must remain in the Staging Facility area at all times except when meeting a customer, or when making a delivery.
- 5) The areas set aside and designated by signs as the pick-up and drop-off points for the Airports parking lot shuttle bus are to be used only by the Airport shuttle bus; no other vehicle may use this area at any time.
- 6) Persons using the Staging Facility will leave the facility clean and shall not be disruptive or abusive to other users.
- 7) The Staging Facility area is designed for short-term use. Staging in this area or on any other Airport property is limited to one hour due to the limited space and accommodations, unless posted otherwise.
- 8) Drivers must park vehicles in designated Parking stalls only. Each Authorized Ground Transportation Business shall have equal access to the Parking locations. All Parking stalls may be used by one such Business. However, each time a vehicle of another authorized user arrives, the operator with the most vehicles in the Parking area must relocate one vehicle to make room for the other user(s). This procedure shall be followed until all Parking spaces are filled.
- 9) Fees may be established and charged for the use of Staging Facilities or other areas of the Airport grounds.

p. Bus Plazas

- 1) Authorized Ground Transportation Vehicles may use Bus Plazas to load and unload passengers.
- 2) No Staging is authorized in the Bus Plazas.
- 3) No Parking is permitted unless specifically directed or authorized by the Department.

- q. Parking Garage Through Lanes
 - 1) Only UTA buses, approved off airport car rental shuttles, and approved delivery vehicles shall use these facilities unless other vehicles are directed or permitted to use these facilities by the Department.
 - 2) Drivers shall remain with the vehicle. Only active loading and unloading is permitted.
 - 3) No Parking is permitted unless specifically directed by the Department.

- r. Delivery Areas
 - 1) Only delivery vehicles shall use these facilities. The Department may designate separate Delivery Areas to accommodate different kinds of deliveries, such as tenant deliveries and other deliveries.
 - 2) Tenant deliveries and others as directed by the Department may use Delivery Areas located at loading docks adjacent to the terminals. In these areas, drivers shall remain with the vehicle. Only active loading and unloading is permitted.
 - 3) Non-tenant deliveries and others as directed by the Department shall use Delivery Areas located at the Staging Facility area. In this area, the driver may park in the designated Delivery Area and proceed to the terminals on foot. Parking is only allowed in the Delivery Area located in the Staging Facility area when needed for purposes of making a delivery.

- s. Taxicabs
 - 1) All Taxicabs entering the Airport for the purpose of obtaining a fare shall proceed to the Taxicab Staging area until there is an available slot open at one of the designated Taxicab stands.
 - 2) When a slot becomes available at one of the Taxicab stands, the Taxicab first in line shall proceed to the Taxicab stand and occupy the open slot.
 - 3) Should there be no other Taxicab waiting in the Taxicab Staging area and an open slot at one of the Taxicab stands, the driver may proceed directly from the Taxicab Staging area to the open slot at such Taxicab stand.
 - 4) No more than the approved number of Taxicabs may stage at the Taxicab Staging area. Taxicabs that are in excess of the approved maximum number will be required to immediately leave the Airport property.
 - 5) When permitted under prevailing security requirements, there are established Taxicab stands at the Airport that are designated exclusively for Taxicabs entering the Airport for the purpose of obtaining a fare. Such

stands shall be marked by signs and the use of the stands shall be subject to the following rules:

- Drivers shall stay within ten feet (10') of their Taxicabs while parked at any of the Taxicab stands.
- No more Taxicabs shall occupy any Taxicab stand at any one time than there are designated slots (marked by signs). The number of Taxicab slots at each Taxicab stand may be changed from time to time by the Department.

- 6) All Taxicabs must use the restricted Commercial Lanes.
- 7) Taxicabs may unload on the curb in the Commercial Lanes (orange zone) and may upon customer request unload in the car rental plaza or Parking Garage Through Lanes. Taxicabs must load in designated taxi stands only (yellow zone).
- 8) The Taxicab driver must remain with the vehicle.
- 9) A Taxicab driver may only leave the vehicle unattended in the Staging Facility area.

t. Limousines / Hotel / Motel Courtesy Shuttles / Hotel Vehicles / Scheduled Service Providers / Off-Airport Parking Shuttles

- 1) Must use the restricted Commercial Lanes and follow any direction given by Airport personnel.
- 2) May unload on the curb in the Commercial Lanes (orange zone) and may upon customer request unload in the car rental plaza or Parking Garage Through Lanes.
- 3) May load in the Bus Plazas and on the curb in the Commercial Lanes.
- 4) Tenant providers with a Ground Transportation Desk may load in areas assigned to these tenants in the commercial lanes.
- 5) The driver must remain with the vehicle.
- 6) The driver may only leave the vehicle unattended in the Staging Facilities area. Special needs requests will be accommodated, if possible and need to be pre-arranged with a Landside Operations Supervisor at 801-575-2401.

u. Buses

- 1) Must use the public drop off lanes and follow any direction given by Airport personnel.
- 2) Must load / unload on the curb of the public drop off lanes

- 3) May load / unload in Bus Plazas upon request and approval of a Landside Officer.
 - 4) Bus Plazas are for active loading and unloading only.
 - 5) The driver must remain with the vehicle.
 - 6) The driver may only leave vehicle unattended at the Staging Facility area.
- v. Utah Transit Authority (UTA)
- 1) Must load and unload in Department designated UTA zones only.
 - 2) The driver must remain with the vehicle.
- w. Off-Airport Rental Car Companies
- 1) Must load and unload on the Car Rental Load/Unload Curb area of the Parking Garage Through Lanes or in other locations as directed by the Department.
 - 2) The driver must remain with the vehicle.
 - 3) Special needs requests will be accommodated, if possible and need to be pre-arranged with a Landside Operations Supervisor at 801-575-2401.
 - 4) No Staging or Parking is permitted.
- x. Special Transportation Vehicles
- 1) Must use the restricted Commercial Lanes.
 - 2) Must load / unload in a Bus Plaza or elsewhere as directed.
 - 3) The driver must remain with the vehicle.
 - 4) Special needs requests will be accommodated if possible and need to be pre-arranged with a Landside Operations Supervisor at 801-575-2401.
 - 5) The driver may only leave the vehicle unattended at the Staging Facility area.

y. Delivery Vehicles

- 1) Must use a designated Delivery Area.
- 2) Tenant deliveries may use the Delivery Areas adjacent to the terminals, and must remain with the vehicle.
- 3) Non-tenant deliveries may use Delivery Area near the Staging Facility area, and may park and leave the vehicle unattended.
- 4) The driver must adhere to all regulatory signs.
- 5) The Department may direct deliveries in other locations.

z. Ground Transportation Desks. Ground Transportation Desks within the airport are for use by the tenants assigned to the desks under Department contract only. In addition to any contractual obligations, the following restrictions apply to the use of these desks:

- 1) Only Ground Transportation Business representatives displaying a current Department issued Ground Transportation Starter or loader badge are authorized to use Ground Transportation Desk.
- 2) Desks may not be used to provide pamphlets, advertising or for any other purpose than to coordinate ground transportation operations with the public and the authorized ground transportation company.
- 3) Ground Transportation Desks are the only location that fares, rates, and services may be discussed with the traveling public.
- 4) Desks are to be kept clean and empty when not in use. Businesses must display a message board that advises their customers of where to call for information or reservations and provide a telephone for customer use when a representative is not present. The display must meet the graphic standards of the Department and may not include any rates, tariffs, or destinations.
- 5) Signs identifying exclusive contracted groups may be displayed at the Ground Transportation Desks after providing the Landside Operations Manager with a letter from the contracted group signifying that the Authorized Ground Transportation Business has an exclusive contract for transportation with the group or organization, and receiving approval from the Landside Operations Manager. Signs are limited to information necessary to identify groups. Signs may be displayed on the overhead sign display only.
- 6) Authorized Ground Transportation Businesses must use only their assigned desk locations. Businesses may enter into contracts with other Authorized Ground Transportation Businesses or other entities to handle ground transportation Starter services for the contracted party. Any such agreement must be in writing and a copy must be filed with the Department.

- 7) Authorized Ground Transportation Business representatives and drivers are to call groups of passengers by name and not by destination only. This is to prevent the inadvertent loading of another Authorized Ground Transportation Business's passengers.
- aa. Accessing Daily Desks. In addition to the Ground Transportation Desks made available through bid contracts, the airport may provide Ground Transportation Desks to others for use on a temporary basis. The following procedures apply:
- 1) Requests must be made no sooner than thirty (30) days and no later than seven (7) days before the time when the user wants to obtain access. Users must request use on the form provided by the Department.
 - 2) Daily Desk use will be authorized for no more than seven (7) days in any thirty (30) day period. The Department may authorize longer periods of use when it is determined that it is in the best interest of the Airport or its passengers.
 - 3) Users must provide the Department a current copy of all tariffs, Scheduled Service times and destinations, and a copy of any contracts for groups or Business transportation services.
 - 4) The Department may require that an assigned user share a Daily Desk, or vacate the Daily Desk, in order to accommodate the needs of the Airport.
 - 5) Daily Desk users may not permit use by any other party.
 - 6) The fee for use of a Daily Desk will be established by the Department. The fee must be paid no less than three (3) Business days in advance of the time of use, or no use will be allowed. No refunds will be given for cancellation of an approved occupancy.

8.10 Parking and Standing

- a. Vehicles shall be parked only in those areas designated for such purpose.
- b. Vehicles shall not be parked or stopped:
 - 1) In such a manner so as to obstruct a parking lot, driveway, road, walk, crosswalk, fire lane, runway, taxiway, taxi lane, etc. They cannot obstruct access to hangars, parked aircraft or other vehicles.
 - 2) In any space marked for parking in such a manner that the vehicle occupies more than one marked space

- 3) Within a bus stop, taxicab, or commercial vehicle zone (except for vehicles authorized by the SLCDCA to use such areas)
 - 4) On the side of a road or within four feet of either side of a security fence
 - 5) On the road side of any stopped or parked vehicle (double parking)
 - 6) Within 15 feet of a fire hydrant or within a fire lane or restricting the access to or from the fire lane
- c. Service vehicles (including utility company, government owned, delivery, etc.) shall park in specially reserved and marked areas or areas designated for such purpose.
 - d. Automobiles, motorcycles, boats, jet skis, snowmobiles, dune buggies, race cars, recreational vehicles, trailers, etc., may not be abandoned, stored or improperly parked on Airport property.
 - e. Vehicles that have been abandoned, stored or improperly parked on Airport property are subject to impoundment.
 - f. Tenant employee parking regulations are outlined in the Airport Use Agreement.

8.11 Impoundment of Motor Vehicles

No vehicle shall be impounded from a public roadway except under the direction and coordination of Airport Police and Airport Operations. When an unattended vehicle is impounded because it is used in violation of a traffic code, a traffic violation ticket must first be attached to such vehicle. In all other cases where the SLCDCA Police Department has ordered a vehicle to be held for investigative, evidentiary, or other purposes, the officer must attach to each impounded vehicle an impounding ticket, signed by the towing contractor as a witness, indicating the reason for impounding, the location from which it is removed and the time of removal. Vehicles may be impounded from areas off the public roads in accordance with State law.

9. **TERMINAL OPERATIONS**

9.1 General Conduct

No person shall ride, walk, sit, or stand on a baggage conveyor system (or any part thereof). Escalators are intended for the safe transport of passengers and baggage. Skycap baggage dollies, freight, strollers, wheelchairs, oversized baggage and furniture shall not be taken on escalators. Elevators are provided for transporting these and similar items. Children shall not be left unattended or allowed to play on escalators, elevators, or baggage devices.

9.2 Terminal Maintenance

- a. The responsibility for the maintenance of Airport space is specified in each lease agreement as referenced in the Airport Use Agreement (AUA).
- b. If the SLCDA responds to a maintenance emergency, the tenant or operator will be billed.

9.3 Trash Disposal and Recycling

- a. All tenants are required to properly handle, recycle, and dispose of their own refuse in the Terminal, unless otherwise stated in the tenant's lease agreement. Tenants shall refer to their lease agreements for further details. Tenant employees are required to have SIDA badges to access refuse disposal and recycling containers.
- b. Food and beverage concession facilities must install and maintain used cooking oil liquid grease collection equipment. Concessionaires are solely responsible for all costs associated with the interception, collection, and appropriate disposal of fats, oils, and grease generated by their operations on the premises, and for compliance with all related laws.

If a grease spill occurs, the concessionaire is required to immediately report the spill to the responsible Commercial Manager and Environmental Specialist. Concessionaires will be billed for all clean-up costs incurred by the SLCDA for cleaning up grease spills. The SLCDA has the specific right to conduct inspections, without notice, of all grease interception, collection and transport systems and equipment to ensure that the required level of maintenance is being provided. The results of these inspections will be provided to the concessionaires in writing. Subject to the notice requirement set forth below, if the SLCDA determines that a concessionaire is not adequately maintaining its grease interception and collection systems and equipment, the SLCDA will have the right to hire a third party to undertake the maintenance and repair of concessionaire's grease interception and collection systems and equipment, at concessionaire's sole cost, for the remainder of the concessionaire's lease term. Notwithstanding the foregoing, the SLCDA will provide up to 2 written notices in any year to a concessionaire, with a time for cure, before it may exercise its option to contract with a third party to perform maintenance of concessionaire's grease interception and collection systems and equipment. The SLCDA also reserves the right to recover the cost of repair or maintenance of its grease waste, sanitary waste, sanitary sewer and other facility systems that are damaged or adversely impacted by a concessionaire's failure to properly maintain its equipment or properly dispose of fats, oils, or grease as required above.

c. Recycling Program.

- 1) The SLCDA maintains a centrally located solid waste and cardboard recycling center with trash and recycling. Refuse from tenants operations, deliveries, and storage areas shall be contained in a designated area. Tenant managers will advise employees on how, where, and what to recycle to ensure compliance with the SLCDA recycling program. Temporary storage or disposal of refuse in places other than the designated solid waste and recycling bins is not permitted.

Placing recyclable materials into waste compactors bound for the landfill is prohibited. Dumping of boxes, pallets, or other materials, particularly in or near storage rooms and access hallways, is considered a life and safety hazard, and is prohibited.

- 2) It is the responsibility of the tenant to store and dispose of oversize items that cannot be disposed of or recycled using the standard containers provided by the SLCD. The SLCD may occasionally host special events to collect, salvage and recycle items that cannot be easily placed into the compactor or recycling containers. Tenants will be alerted to these events.
- 3) For questions and/or information about recycling, call the SLCD's Environmental Programs Manager.

9.4 Concession and Service Privileges

The SLCD will develop concession solicitations, agreements and practices that result in a customer service oriented environment providing variety and quality products and services to customers. Contracts will be granted on a competitive, non-exclusive basis. Lease terms will typically be awarded on a five to ten year basis.

The SLCD has established an Airport Concession Disadvantaged Business Enterprise (ACDBE) program in accordance with regulations of the U.S. Department of Transportation (USDOT), 49 CFR Part 23. It is the policy of the SLCD to ensure that ACDBEs, as defined in Part 23, have an equal opportunity to participate in concession opportunities. A complete policy statement is available from the SLCD's Liaison Officer, Paul Marshall, at: paul.marshall@slcgov.com.

To ensure that Airport concession facilities are built and maintained to appropriate standards, concessionaires will be required to invest minimum amounts as part of the solicitation process. The investment will, whenever practical, be depreciated by the concessionaire over the agreement term. Improvement buy-outs, either by the SLCD or by a successor concessionaire, will be limited.

9.5 Concessions Hours of Operation and Conduct

Concessionaires requiring a temporary closure of their concession for audit, store remodeling, maintenance work, inventory, or other purposes, must advise the SLCD in writing, at least 3 days in advance of the closure and receive the SLCD's approval. This written notice should include the proposed date for closure and purpose of the closure, as well as the specific date set for re-opening. If closure is approved by the SLCD, a professionally produced sign must be placed in public view advising Airport customers of the closure and the date for re-opening.

Retail and food and beverage concessions are expected to be open at all times during the designated hours specified in the lease. Concessionaires should make every effort to be open on time and stay open during inclement weather, or other emergency situations, in order to provide services to the traveling public, especially if delayed flights are involved.

If concession operations call for closure or curtailment of hours because of an emergency, strike, lockout, or other cause, notification of such an event should be made immediately to the SLCDCA Control Center at (801) 575-2401.

The SLCDCA maintains high standards for its own employees and encourages concessionaires to employ personnel eager to assume a high standard of service to the public. Employees are expected to be courteous at all times and shall refrain from acting in a loud, boisterous, or otherwise improper manner. Concessionaires are encouraged to include extensive customer service training for employees, as well as a thorough orientation of the Airport, so that employees can correctly answer Airport customer questions regarding Airport facilities, directions, etc. Complaints received by the SLCDCA concerning a concessionaire's employee or employees will be forwarded to concessionaire for response. The concessionaire will respond in a timely and appropriate manner in coordination with the SLCDCA. Appropriate dress, grooming and hygiene are required of all employees who serve the public.

9.6 Vending Machines

Vending machines exist in Airport public areas and are available to the public and employees. Tenants desiring to install vending machines within their leased space may do so with the SLCDCA approval. Tenants are responsible for ensuring that the machines are removed from the premises when vacating them and for any utility upgrades or improvements that may be necessary for the installation of such machines.

9.7 Decorations

Tenants requesting to display decorations of any type including holiday decorations within the public area of their leasehold must submit a written request to the SLCDCA for prior approval. Natural Christmas trees, boughs, wreaths, or other natural decorations are a fire hazard and are not permitted.

All decorations shall be either fire retardant or treated with fire retardant. Decorations must be placed safely and in accordance with all fire prevention practices. Decorative lighting shall conform to uniform fire and electrical code requirements. Representatives of the Fire Department will be available to review proposed decorations to determine if they comply with the requirements of the rules.

9.8 Advertising, Promotions, Signage

- a. The SLCDCA maintains a separate advertising contract for advertising and promotional displays throughout the Airport. If an individual tenant is interested in advertising in the public areas of the terminals or on the concourses, the SLCDCA's advertising concessionaire should be contacted directly regarding available spaces. Contact information for the SLCDCA's advertising concessionaire can be obtained from the Commercial Manager and is posted on the Airport web site. All other tenant advertising and promotion requests shall be made in writing to the Airport's Customer and Tenant Relations Coordinator.

- b. Individual concessionaires are encouraged to hold in-store promotions. Promotional displays or merchandise considered objectionable by the SLCDCA must be taken down or removed upon notice from the Concessions Operations Manager. Promotional material for concessionaire's other stores (e.g., flyers, brochures, posters etc.) are only allowed within their leased area(s), unless otherwise approved, in writing, by the SLCDCA.
- c. Concessionaires are encouraged to creatively merchandise and display their products. Displays considered objectionable or not proprietary by the SLCDCA must be taken down or removed upon written notice from the Commercial Manager.
- d. Airport customers should have clear access to merchandise. Access is defined as an individual's clear and unobstructed entry into and through the concession without barriers or obstacles. All concessionaires are required to comply with the Americans with Disabilities Act (ADA).
- e. Concessionaires may use music systems in their leased space. Music must be licensed in accordance with the law. Volume levels should not be audible outside the concession at any time or compete with the Airport paging system, or other audio systems.
- f. Staffed exhibits or sales promotions are prohibited.
- g. Adhesive stickers and temporary and/or hand-written signage in the public areas of the Airport, unless approved by the Executive Director, are strictly prohibited. Tenants shall not allow adhesive stickers, bumper stickers, and decals to be placed anywhere in tenant leased space. Labels for tenant inventory purposes on tenant-owned equipment must be placed out of public view.

9.9 Animals at the Airport

Animals within the terminals must be in a crate or kennel, or other approved container, except for the working law enforcement animals or service animals that are trained (or being trained) and registered to assist people with disabilities.

a. Injured Animals

For assistance with injured or lost animals, please call the Airport Control Center at 801-575-2401.

b. Domestic Animals and Animals in Transport

With the exception of working law enforcement animals or service animals that are trained and registered to assist people with disabilities, it is not acceptable for employees at the Airport to bring domestic animals to work. Airline personnel handling animals in transport should ensure that crates and/or carriers are properly secured, and under no circumstances should animals in transport be allowed out of the carrier on the Airfield. Animals should also not be left unattended in the crate or carrier. Carriers should be kept under close supervision and in climate controlled environments.

However, if an animal escapes from the crate or carrier, an immediate call to the Airport Control center is required.

c. Relief Areas

In accordance with federal regulation, the SLCDCA provides animal relief areas for service animals that accompany passengers who are departing, connecting, or arriving at the Airport. Locations adjacent to gate hold areas require escort by airline or Airport personnel. Additional service animal and pet relief areas are provided in front of the terminals at 3 locations that can be accessed without escort. Animal owners are responsible for the immediate removal and disposal of animal waste.

d. Feeding Non-Domesticated Animals

Feeding birds or other non-domesticated animals on Airport property or in the vicinity is not permitted.

e. Pets including dogs, cats, fish and other domesticated animals are not permitted in offices or other areas leased from the Department of Airports. An exception is made for law enforcement and service animals.

9.10 Placement of Coin Operated News Racks

The SLCDCA regulates the time, place and manner of the placement of coin operated news racks. No news racks will be placed in the Airport without prior permission from the SLCDCA. News racks are not allowed in unsecured terminal areas. Installation of news racks at approved sites shall be at the sole cost and maintenance of the distributor and must conform to SLCDCA's standards regarding safety, security, traffic flow and aesthetics.

The distributor shall endeavor to keep the news racks full and will post a sign indicating the publication can be purchased at the concessions if the rack is empty. The distributor will also post a notice indicating how customers can recover money lost while using the news rack.

It is required that publications in the news racks adhere to a "content neutrality" standard. The SLCDCA may prohibit the distribution of any materials through the news racks which are considered to be pornographic, objectionable or harmful to minors.

The SLCDCA reserves the right to remove or relocate news racks at its discretion and will do with advance notice to the distributor. Distributors will be charged a fee and will be required to maintain specified insurance coverage and have documentation to that effect.

10. **TENANT RULES AND REGULATIONS**

10.1 Landscaping Requirements

Landscaping around Airport facilities can attract wildlife that is hazardous to aircraft operations. Wildlife hazards can be reduced by using plant varieties and spacing that is less attractive to

hazardous wildlife species. The SLCDA has an FAA approved wildlife hazard management plan. This plan requires incorporating reduction of wildlife attractions in landscape design by reducing the number of trees planted and selecting species least desirable to wildlife. All tenant landscape alterations and/or improvements must conform to this plan. A copy of the Wildlife Hazard Management Plan can be obtained by calling the Airport Operations.

10.2 Tenant-to -Tenant Access

Tenants will coordinate access to each other's space with each other. Those desiring access may be asked to park in an alternative area and be required to walk to the work area. The Airport Operations Division will assist tenants where disputes cannot be managed between them.

10.3 Tenant Accident and Incident Reporting Requirements

Tenants must immediately report property damage, accidents and incidents to the SLCDA via the Control Center at (801) 575-2401. Neglecting this duty may result in enforceable action up to and including a class B misdemeanor citation. Those involved must also immediately notify their supervisor and follow company accident reporting guidelines.

The party that makes contact with the Control Center must remain at the scene of the reportable situation until a SLCDA representative responds, documents the event and completes a report.

10.4 Hangar and Fixed Base Operator Inspections

It is the policy of the SLCDA to inspect aircraft storage hangars on a regular basis with sufficient notice to tenants. The SLCDA also reserves the right to conduct inspections of any hangar at any time to verify compliance with safety practices and lease requirements. Tenants will be officially notified of any violations discovered and will be given 30 days to correct the situation.

10.5 Ownership of Tenant Improvements

Fixtures, installations, additions, alterations and improvements made by the tenant on Airport premises becomes the property of the SLCDA upon the termination or expiration of the tenant contract without compensation to the tenant. The tenant may remove trade fixtures and equipment ten days prior to the contract end provided that damage to the infrastructure that may occur in the process is immediately repaired.

Tenants shall not remove or demolish, in whole or in part, any improvements to the premises without prior consent from the SLCDA. The SLCDA may require the tenant to replace whatever is removed. Tenants should refer to their lease agreement with the SLCDA for other contract termination requirements.

10.6 Employee Parking

The SLCDCA will make best efforts to provide employee parking for terminal tenant employees at a rate consistent with actual cost recovery. Tenant employees must be based or work at Salt Lake City International Airport.

11. FIRE REGULATIONS

Fire regulations at Salt Lake City International Airport are in accordance with, but not limited to, all federal, State, and local laws, standards, rules, regulations, policies, procedures, recommendations and fire codes, etc.

11.1 General Provisions

- a. The Salt Lake City Fire Department conducts regular inspections of all tenant space, including storage areas, for the purpose of fire prevention and to ensure compliance with fire safety practices. An inspection report will be issued to the tenant after each inspection containing information relating to findings of non-compliance and/or recommendations by the inspector with a date of re-inspection to ensure that the required corrections have been completed. The tenant is responsible for responding with corrective action to items identified during the inspection that are within the tenant's premises, within the timeframe identified on the inspection report. The Salt Lake City Fire Department will work with the tenants to ensure compliance with the fire safety practices and codes. The Salt Lake City Fire Department levies fines for non-compliance with fire code requirements. Tenants can report potential fire code problems, or concerns about fire safety to the Fire Department.
- b. The Rules and Regulations shall not be construed as granting any form of exclusion from any fire codes and/or building codes. All fire codes and ordinances must be obeyed.

11.2 Hazardous Materials

- a. All tenants, shippers, individuals and others, who handle, store, transport or use hazardous materials at Salt Lake City International Airport must comply with the applicable law, fire codes, and FAR 139 Title 49 of the Code of Federal Regulations.
- b. The SLCDCA retains the right to limit or exclude any types, quantity or use of hazardous materials at the Airport.
- c. The SLCDCA reserves the right to inspect all premises where any hazardous material is handled, stored, or used without limitation.

12. FIBER OPTIC INFRASTRUCTURE AND TELECOMMUNICATIONS

- a. Fiber optics and associated equipment and space will be regulated, managed, and monitored by the SLCDCA. SLCDCA owns and manages all conduit routes, cable trays, and raceway routing outside tenant's exclusive leased space.

- b. All authorized tenant cabling installations outside of leased space is for the sole use of said tenant. No sub-letting (with or without compensation) to other parties will be permitted without written authorization from the Executive Director.
- c. No tenant, lessee or other Airport user shall make any telecommunications modifications or connections of any nature within the Airport complex without prior written authorization from the Executive Director. This directive also applies to the existence of equipment and facilities of any kind in telecommunications rooms, nodes or spaces.
- d. Airport telecommunications systems include, but are not limited to, all copper, coaxial, and fiber optic cabling, fiber optic backbone, station cabling and termination systems (wire line and/or wireless based), DSL, Local Area Networks (LAN), voice, data, video systems and elements owned and operated by SLCDA or its telecommunications operators and/or concessionaires.
- e. This directive applies to but is not limited to: fire alarm systems, security access systems, closed circuit television systems (CCTV), and the voice paging system, the public wireless network (Wi-Fi), the Parking and Revenue Control System (PARCS) and the Building Automation System (BAS).
- f. Tenants or others desiring to make wiring, cabling or any nature of telecommunications infrastructure changes/improvements must formally request permission and approval with a Tenant Work Permit from the SLCDA Administration and Commercial Services Division.