Renton Municipal Airport

Sustainability Management PLAN

Renton Municipal Airport • Clayton Scott Field • Will Rogers/Wiley Post Memorial Seaplane Base

Barnard Dunkelberg Company
a Mead & Hunt company

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Abbreviations and Acronyms

ACI-NA	Airports Council International-North America
ACRP	Airports Cooperative Research Program
CIP	Capital Improvement Program
CO2e	Carbon Dioxide Equivalent (a measure of greenhouse gas emissions)
DNL	Day/Night Average Sound Level
EONS	"a holistic approach to managing an airport so as to ensure the integrity of the Economic viability, Operational efficiency, Natural Resource Conservation, and Social responsibility (EONS) of the airport."
FAA	Federal Aviation Administration
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
kWh	Kilowatt Hour
LED	Light Emitting Diode
MIRLs	Medium Intensity Runway Lights
PAPI	Precision Approach Path Indicator
RAAC	Renton Airport Advisory Committee
REIL	Runway End Identifier Lights
RNP	Required Navigation Performance
RNT	Renton Municipal Airport (abbreviated airport identifier)
TRB	Transportation Research Board of the National Academies

A. Executive Summary and Overview of the Process

Historically, the Renton Municipal Airport was run on a day-to-day, project-to-project basis. While this approach may have worked in the past, over time, the Airport has become an increasingly complex operation. These complexities strained the old model of management, and made it clear that a new management model was needed. Recently, Airport staff began searching for a better way to manage the facility and its complexities in a more sustainable manner.

At Renton Municipal Airport, "Sustainability" is the next step in the management evolution of the facility with the purpose of:

- **Increasing the Airport's competitiveness through lean operations;**
- **Optimizing the use of the Airport's limited assets ;**
- **Reducing environmental impacts of the facility; and**
- **Earning greater support from the community.**

Sustainable actions strive to balance the financial/operations, natural resources (environmental), and social considerations.

For Renton Municipal Airport, sustainability is the framework that can be used to address increasingly complex management. In managing the Airport, the staff need to not only address the ***Economic*** side of running the facility ***(Operations)***, but also the ***Natural Resources*** and ***Social*** characteristics. By adopting a new management approach, tenants and residents will be able to demonstrate the Airport's focus on creating **balance** between the Economic, Social and Environmental characteristics.

At Renton Municipal Airport, for the sustainability model to have any meaning, it is **critical** that Airport staff **track**, **measure**, and **report** its progress. Data currently collected (or soon to be collected) by Airport staff will be measured using a tracking tool developed specifically for this purpose. The tracking tool is aligned with the Airport's sustainability goals and objectives.

In seeking a new management model, the Renton Municipal Airport has voluntarily undertaken the preparation of a Sustainability Management Plan as part of the Federal Aviation Administration (FAA) Sustainability Pilot Program. In preparing this Plan, Airport Management adopted the following sustainability policy: **The Airport strives to become more financially viable, operationally efficient, while conserving natural resources, and being socially responsible**. This document identifies the Airport's approach to sustainability and the initial actions that Airport staff will endeavor to implement.

Overview of the Process

This first chapter of the Sustainability Management Plan describes of the definitions, summary of sustainability goals, implementation, schedule and calendar of sustainability activities through the year.

Definitions

(VISION, SUSTAINABILITY, CATEGORIES, GOALS, and INITIATIVES)

Throughout this document, the terms "Vision", "Definition of Sustainability", "categories", "goals" and "objectives" are used. These terms capture the approach that the staff of Renton Municipal Airport have embraced relative to implementing sustainable management practices at the Airport. The "Vision" articulates the values of the organization. The "definition of sustainability" identifies what sustainability means at Renton Municipal Airport (RNT). The Sustainability Management Plan then focuses on areas of interest, called "categories" in accordance with FAA's scope of work for the sustainability pilot projects.

The ultimate output of the study was to identify initiatives or actions that Airport staff might take to move towards achieving its goal of being more sustainable. To help clarify and direct the effort, "goals" and "objectives" within each focus area/category were established. Goals represent the purpose that initiatives are designed to achieve, and objectives are targets or information to further emphasize/direct the initiatives.

The Airport management obtained input concerning the categories for consideration in this
Sustainability Management Plan as well as goals and objectives through coordination with its citizen/tenant public input committee (the **Renton Airport Advisory Committee** – abbreviated **RAAC**). Categories focused the effort on interest areas such that specific sustainability goals/objectives and subsequent initiatives (described later in this document) could be identified. "Initiatives" represent the actions or programs that could be implemented to assist with making progress on achieving the goals/objectives.

Summary of Sustainability Goals

Because of the limited resources at small airports, it is important that the range of issues addressed in sustainability planning provides the most benefit possible to the facility, operations, environs, and community within those limiting factors. Through coordination with Airport management and the RAAC, sustainability goals were developed for categories identified as being most important, and including:

Airport Finance category

- **Providing an economically stable asset that contributes to the community; and,**
- **Balance expenditures with revenue to remain financially self-sufficient in the long- term.**
- **Improve revenue to provide for future development opportunities.**
- **Provide financial capacity that will enable the Airport to pursue sustainability initiatives in the future.**

Airport and Local Economic Values category

- **Attract airport tenants and aircraft operations that add economic value to the local economy.**
- **Continuously improve as a tier one supplier for Boeing aircraft manufacturing.**
- **Diversify tenants and aviation services for land and sea based operations.**
- **Increase employment.**

Community Outreach and Education category

- **Continuously improve the airport's relations with the surrounding neighborhoods and with airport tenants.**
- **Raise community awareness of airport services and value to regional employment.**

Energy Consumption /Greenhouse Gases category

- **Reduce energy consumption without adversely affecting the Airport or its tenants.**
- **Reduce Airport owned greenhouse gas emissions.**

Noise from Aircraft Operations category

- **Maintain 65 DNL noise contour on airport property.**
- **Minimize aircraft noise over neighborhoods.**

Operations, Maintenance, Capital Improvements of Airport Facilities category

- **Maintain a safe airport on a daily basis.**
- **Maintain airport and seaplane infrastructure in good condition.**

Water Quality category

- **Reduce stormwater runoff quantity.**
- **Improve stormwater quality.**

Chapter E of this document discusses the initiatives or actions that were identified which will assist the Airport with making progress toward achieving the goals.

Implementation

The process that Airport staff will use to implement the recommendations of the Sustainability Management Plan reflects the "plan, do, check, and act" cycle (described later in detail). To ensure that the principles of the process become part of the Airport's culture, action will be required on a regular basis.

The following items identify the actions that will be overseen by the Airport Manager, and over a calendar year, the management actions to be taken:

Daily Activities, as needed

- **Journal information about activities and circumstances affecting conditions at the Airport.**
- **Use the Sustainability Reporting Tool for review/screening of initiatives.**

Monthly Activities

- **Input of monthly data (electricity and fuel use, water fees/use, etc.) into the Sustainability Reporting Tool.**
- **Review and supplement sustainability initiatives in the Sustainability Reporting Tool.**

Quarterly Activities

- **Meet with Renton Airport Advisory Committee (RAAC) to review sustainability initiatives reviewed by airport staff during previous quarter.**

Annual Activities:

- **Input of annual data (i.e., annual operations, energy, financial data, etc.) by staff into the Sustainability Reporting Tool by mid-March for the prior year.**
- **Produce an Annual Report before mid-year that:**
  - Documents initiatives reviewed during the prior year and their ratings relative to the established sustainability goals.
  - Reports historic and current performance metrics relative to sustainability categories.

Biennial Activities (every two years):

- **Reconsider the sustainability goals and initiatives and adjust as necessary.**
- **Review the Sustainability Report Tool and adjust as necessary.**
- **Improve quarterly and annual reporting templates, if warranted.**
- **Discussion with RAAC about performance and goals, and identify suggested initiatives for the upcoming year.**
- **Evaluate these implementation steps, and revise as necessary.**

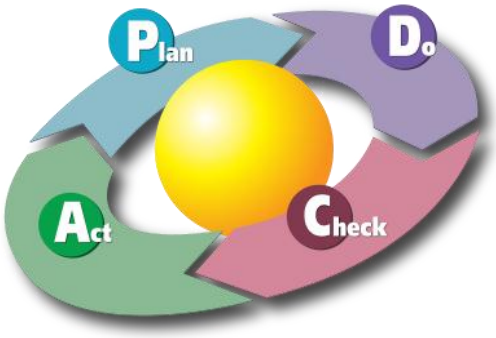
Calendar of Sustainability Management Plan Activities

MONTH	ACTIONS TO BE UNDERTAKEN
Every Month	Journal airport trends and conditions Evaluate and document initiatives Input monthly utility data
January	
February	Meet with RAAC – Present 4th quarter initiatives
March	Input year end data for prior year into the Sustainability Reporting Tool
April	
May	Staff review/assessment of prior year performance Produce annual report for prior year
June	Meet with RAAC – Present prior year performance and 1st quarter initiatives
July	
August	Meet with RAAC –Present 2nd quarter initiatives
September	
October	
November	Meet with RAAC – Present 3rd quarter initiatives
December	

Through the above implementation process, the Airport management staff will track progress toward its sustainability goals. While periodic checks will be performed, a comprehensive review of the categories/issues, goals, objectives, metrics, and reporting procedures will be conducted every two years. The purpose of the biennial review is to make adjustments based on experience, lessons learned, changing conditions, input from stakeholders, and changes in the needs of the categories. Chapter F provides a step-by-step process for this re-evaluation.

The implementation approach reflects the belief that successful implementation of sustainability practices should be transparent and involve the "plan, do, check, act"[1] process. This Sustainability Management Plan itself (and the subsequent chapters) represents the first step - the "plan" portion of the process. Implementation of the initiatives, including the data collection, represents the "do" portion of the process. After implementing initiatives, establishing a "check" process (which is effectively a review/report effort) is needed.

[1] Also called the Deming Cycle.



The Sustainability Management Plan process developed a tool (Sustainability Reporting Tool) for tracking and reporting progress. As time progresses, Airport staff may need to identify areas where additional efforts or focus may be warranted. The “act” portion represents adjustments to the implementation based on what has been learned during the "do" and "check" steps.

This entire “plan, do, check, act” process is vital to the success of a sustainability program because it guides implementation of sustainability initiatives, tracks their success over time, and highlights ways to improve the program in the future, leading to even more sustainable measures in the future.

B. Sustainability for Renton Municipal Airport

This chapter introduces the definition of sustainability as it applies to Renton Municipal Airport, and lists Renton's initial sustainability categories of interest. These categories enable Airport staff to focus on specific sustainability goals and objectives, which are outlined in **Chapter C**.

Renton Definition of Sustainability

While in general, sustainability refers to balancing financial, environmental, and social considerations in decision making, each organization often takes various different approaches to defining sustainability. The sustainability definition depends largely on the individual airport, environmental, and community factors. Because of this, in order to create a successful sustainability plan, Airport staff must first determine how to describe sustainability on their terms, keeping in mind their existing vision statement and the individualized airport, environmental, and community characteristics.

Most parties that embark on sustainability planning use one of the more commonly cited sustainability definitions as a foundation and then attach various values or policies applicable to that organization to create an individualized sustainability policy. A review of the existing definitions of sustainability provides a method to create an individualized understanding of sustainability that meets Renton Municipal Airport's needs, while still recognizing

that this definition can evolve over time. Ranges of sustainability definitions were considered during the first phase of this project. These range of sustainability definitions in the aviation industry and worldwide are included in **Appendix 1**. Based on the Airport's focus on operational and financial viability within the context of complex social and environmental characteristics, Renton Municipal Airport decided to embrace the definition of sustainability as endorsed by the Airports Council International-North America (ACI-NA). ACI-NA's definition of sustainability is:

Holistic Approach

"a holistic approach to managing an airport so as to ensure the integrity of the Economic viability, Operational efficiency, Natural Resource Conservation and Social responsibility (EONS) of the Airport."

Renton Sustainability Vision

After cementing a sustainability definition for Renton Municipal Airport, the next step in the Sustainability Management Plan process was to consider how the sustainability values can be embraced at Renton Municipal Airport. In order to embrace sustainability more visibly, airport staff worked with the project team and RAAC to identify an airport sustainability vision.

After discussion, the staff at the Airport identified the following sustainability vision:

- **Provide a high standard for safety and customer satisfaction;**
- **Provide a high standard for operational efficiency;**
- **Provide an economically stable asset that contributes to the community; and,**
- **Demonstrate environmental stewardship and community/social responsibility.**

The sustainability vision was developed in consideration of the definition of sustainability outlined previously, and the City of Renton's Vision Statement (detailed in **Appendix 1**).

As a general aviation airport, Renton Municipal Airport does not have the resources that are often available to other larger airports that have dedicated sustainability or environmental, community, and financial staff members. Therefore, for the Renton Municipal Sustainability Management Plan to be successful, the approach taken must be done to balance the resources available, while meeting the sustainability vision detailed above.

For something to be sustainable, it must not jeopardize the organization's ability to meet their fundamental responsibilities. There are three fundamental actions that Renton Municipal Airport is responsible for, including:

- **Day-to-day operation and maintenance of the airport facility;**
- **Periodic capital improvement at the Airport; and**
- **Airport Business Management that includes maintaining responsible partnerships with tenants, neighbors, regulators, and other stakeholders.**

The Sustainability Management Plan for Renton Municipal Airport must itself be sustainable and, therefore, be tailored to balance financial and staff resources, local social concerns, and environmental considerations. When making decisions and taking action, the Airport Manager will apply the principle of sustainability by considering the effects of their decisions/actions on the focus areas or categories.

Sustainability Categories

This Sustainability Management Plan was prepared under a grant from the FAA's Sustainability Pilot Program. That program provided a template scope of services, which airports participating in the program tailored to their local needs. Included in that template scope is the term "categories." In general, airports participating in the pilot program have adapted that term to represent interest areas or study area focus.

Through coordination with the RAAC, the "categories" for consideration in this Sustainability Management Plan were selected. A category is an area of focus that has been identified as important for the Airport and community. Categories create a foundation to focus the development of specific sustainability goals/objectives and subsequent initiatives described later.

Input from the RAAC helped identify important issues relating to the goals and objectives. For the tenants, issues identified included competitive lease rates and other financial measures to make the use of the Airport more attractive and affordable. Residential community members

VISION

Sustainability at Renton

Goals • Objectives • Initiatives

indicated that noise and visual impact of the Airport on the surrounding neighborhoods were of concern. Additional categories and issues will likely be addressed in the future as the Plan is updated. The following categories were selected:

- **AIRPORT FINANCE:** Airport financial stability is crucial to its long-term viability, and the viability of tenant businesses. Airport finance includes all revenue and expenditures associated with the operation, maintenance, and improvement of the facility.

- **AIRPORT AND LOCAL ECONOMIC VALUES:** The ability for the Airport to retain aircraft manufacturing jobs for citizens, generate revenue while maintaining reasonable lease rates for airport businesses, and receiving federal financial assistance is vital to its ability to maintain and improve economic conditions at the Airport locally, regionally, and nationally.

- **COMMUNITY OUTREACH AND EDUCATION:** The Airport is a visible member of the local community, City of Renton, and Puget Sound Region. While most individuals in those areas do not have direct contact with the Airport, the aircraft using the facilities are often noticed. Further, the community is directly and indirectly benefited from economic activity occurring at the Airport.

- **ENERGY CONSUMPTION/GREENHOUSE GASES:** Energy is an important sustainability issue for Renton Municipal Airport because reducing energy/fuel use can improve air quality and reduce greenhouse gases, and reduce operating costs for the Airport. The City of Renton recognizes that greenhouse gas emissions have a global effect, with consequences felt regionally due to the potential for climate change and sea level rise.

- **NOISE FROM AIRCRAFT OPERATIONS**: Aircraft noise over residential areas is a long-time concern of both the Airport and surrounding communities. Aircraft noise is experienced from a wide range of activities at the Airport, ranging from flight schools to Boeing aircraft operations.

- **OPERATIONS AND MAINTAINANCE OF AIRPORT FACILITIES:** The majority of Airport staff time and financial resources is dedicated to the continued maintenance and operation of the facilities. Considerable effort is expended to keep the facility running while striving to enhance conditions for users of the Airport, as well as the surrounding neighborhoods. Operations and maintenance activities represent the best opportunity for incorporation of sustainability into both the management and structure of the Airport.

- **WATER QUALITY:** Due to the close proximity of Cedar River and Lake Washington, water quality is an important part of the airport environment. Stormwater run-off from the Airport increases the potential for impacts on water quality and habitat in the area. Additionally, a reduction of potable water consumption at the Airport can reduce operating costs.

Based on discussions with Airport staff and the Renton Airport Advisory Committee, future expansion of this Plan may consider inclusion of: Waste, Natural Habitats, Construction Management, and Air Quality. These issues and others were initially considered but, ultimately, not included in this initial Plan because of the limited amount of baseline and future information available and the additional staff and financial costs that would be incurred by the Airport when tracking. As the implementation progresses, the limiting factors are expected to subside and consideration of additional issues/categories may be warranted.

The following chapter, ***Current Conditions***, includes detailed inventory of the baseline conditions related to the above categories, as available.

C. Current Conditions

This chapter identifies the current conditions relative to the key focus of the initial Sustainability Management Plan. The baseline enabled an understanding of the issues. With that understanding, goals and objectives could be considered, as well as aid in identifying metrics to measure progress. This chapter documents baseline (existing) conditions in the focus areas (categories).

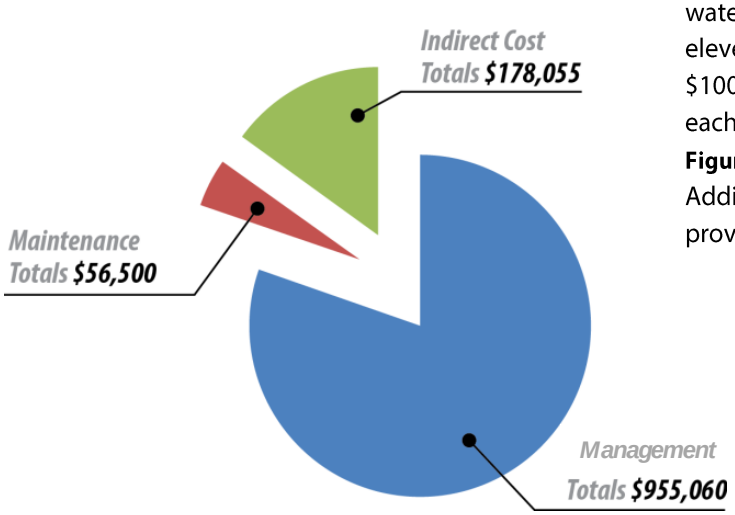
A summary of the baseline data for these categories is described below and detailed in **Appendix 2**. This information represents what is known about the Airport relative to the initial sustainability categories in the current, short-, medium- and long-term time frames. It is important to note that some information is not available in certain categories and must be estimated. As such, to disclose the data confidence, the data sources are identified as measured, or estimated.

Airport Setting

Renton Municipal Airport is a general aviation airport that serves Renton, Washington and other nearby communities. The City of Renton is located on the south shore of Lake Washington. The City of Renton is home to approximately 94,000 residents and is a fast growing community in the Puget Sound area.

The Airport provides regional aviation services for air charter, air taxi, corporate, business, and recreational flyers. With over 80,000 annual aircraft operations, the Airport is used primarily by single engine piston aircraft. The Boeing Commercial Airplane Company facilities at and near Renton Municipal Airport are used to manufacture Boeing 737 aircraft. Boeing is an economic contributor to the Puget Sound area economy, as well as regionally and nationally. Will Rogers-Wiley Post Memorial Seaplane Base is located at the north end of the Airport, along the shore of Lake Washington.

Figure C1
Overall Operational Expense Categories, Budgeted 2012
Source: Sustainable Business Consulting, 2012.



Financial

The information included in this section identifies the financial baseline for the Airport and provides insight to those areas that create the heaviest burden on the Airport financially.

Sources of Revenue: Ninety-five percent of revenue collected at Renton Municipal Airport is derived from their long-term leases of airport property and buildings. The remaining sources of revenue today and in the future are from fuel sales, investment interest, and facility enhancement projects. Facility enhancement projects will generate additional income once constructed with the additional revenue derived primarily from leases on newly constructed facilities. A new lease with Boeing starting in 2010 resulted in a nearly $1 million annual increase in operating revenue.

Operating Expenses: Operational expenses for Renton Municipal Airport were separated into three general categories: Staffing Expenses, Maintenance Expenses, and Indirect Costs. Eighty percent of the costs are associated with Staffing Expenses. Indirect Costs (interest, insurance, etc.) are the second largest category and account for about sixteen percent of total expenses. Electricity, gas, water, sewage, and fuel account for approximately eleven percent of the total expense budget (over $100,000 a year). More detailed information about each of these categories for 2012 is included in **Figure C1**, *Overall Operation Expense Categories.* Additional information about the airport finances is provided in **Appendix 4**.

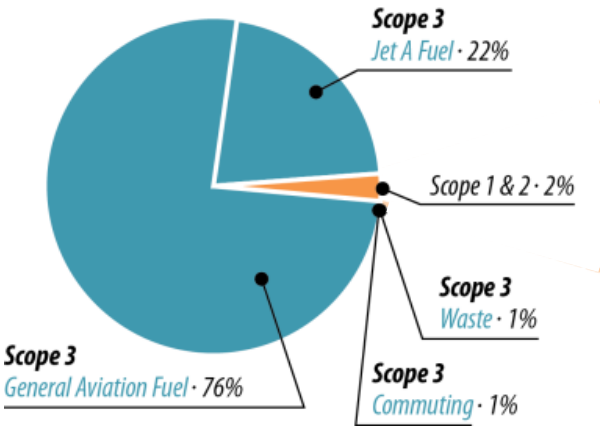
Capital Improvement Program Expenses: The Airport has experienced a few years of high capital expenditures in order to maintain and renew the airport infrastructure. Additional capital projects are planned to occur in the future. These expenses are documented in **Appendix 4.**

Greenhouse Gas Emissions Inventory

A Greenhouse Gas Emissions (GHG) inventory was completed for the key sources and other sources located on the Airport that are owned by the City, based on 2010 conditions. Including all airport-related sources, activity at Renton Municipal Airport generates approximately 6,608 metric tons of greenhouse gases (CO2e - carbon dioxide equivalent gases). Of the 6,608 metric tons of CO2e, the City of Renton only has direct control (referred to as Scope 1 or 2 emissions) over approximately 132 metric tons of CO2e, approximately two percent of the emissions at the Airport. The breakdown of emissions can be seen in **Figure C2**, *EMISSIONS SOURCES BY TYPE, 2010.*

Figure C2
Emissions Sources by Type (2010)

Source: Sustainable Business consulting, 2011.



Energy Utilities – Emissions and Cost

A large quantity of the Airport's greenhouse gas emissions comes from its electricity usage from its facilities and field lighting and equates to approximately sixty percent of the emissions that are owned and controlled by the Airport and resulted in a large portion of the Airport's operating budget. The Airport Traffic Control Tower/FAA Offices/Airport Offices are the largest users of electricity due to energy intensive activities occurring within the facilities such as computer servers, air flight control rooms, etc. Over the course of the past three years, electricity use at the Airport decreased slightly from a high of 228,224 kWhs in 2008, to a low of 205,519 kWhs in 2010.

Water Resources

The Airport is billed at medium intensity rates for all of the impervious surface covered area on the Airport. This charge has increased from approximately $4,000 per month in 2007 to $9,300 per month in 2012, and is projected to rise substantially in the near future as overall storm water rates rise in the City. Currently, the Airport has a total of $94,766 budgeted for City Surface Water Management fees in 2012, but this budgeted amount did not account for a recent increase in the stormwater fees, which have now risen to $111,000. Approximately half of the airport's impervious surface is discharged directly into the Cedar River and does not rely on the City's stormwater conveyance system.

The City of Renton provides water and sewer service to the south half of the Airport, and Bryn Mawr-Skyway Water and Sewer District provides water and sewer to the northwest quadrant. The largest expense in the water use category comes from the irrigation provided through Airport Way

West Irrigation. In total, irrigation accounts for about forty-eight percent of the total water expense. Generally, these expenses peak in June through October during the growing season, with approximately seventy percent of the costs being incurred in these months.

Airport Vehicle Fleet and Related Emissions

The Airport owns several vehicles for use by airport staff for general airport operation and maintenance, including four light trucks. Additionally, the Airport owns a large mower that is used to maintain airport landscaping. Emissions from airport-owned vehicles and equipment represent approximately twenty-four percent of airport-owned and controlled emissions, second only to electricity.

Employees

The Airport employs six full time regular employees and five full time seasonal employees. An employee commuting survey was completed in 2011 with a participation rate of one hundred percent. In terms of employee work commuting, ninety-six percent of travel consists of single occupancy driving, two percent motorcycle use, and two percent bicycle use, with an average commuting distance of 29 miles round-trip. No parking fees are charged for employees, and parking is located directly next to the entrance/office.

Community

The City of Renton Comprehensive Plan Update of 2009 describes the Airport as, "more than a transportation facility. It is also a vital element to Renton's commercial and industrial economy, providing aircraft services, manufacturing support, flight training, and other airport activities." The plan includes objectives and policies to support increased aviation activities and appropriate mitigation of adverse impacts when possible. In recent years, Airport staff members have worked on improving public outreach. The Renton Airport Advisory Committee was created to provide a link between the Airport and the community and stakeholders, including tenants, local business owners, and members of the public.

Noise

Land use around the Airport generally consists of open water to the immediate north (Lake Washington) and east (Cedar River), and an urban mix of commercial, manufacturing/ industrial, public use, and residential surrounding the rest of the Airport. The Airport tracks citizen complaints about aircraft noise. Complaints are received through letters, emails, and phone calls and are logged and tracked by the Airport. There does not appear to be a consistent pattern in the number of noise complaints (as compared in **Appendix 2**). The number of noise complaints has ranged from 16 to 217 annually over the course of 2000-2011 and has increased and decreased variably over this time period. Further, there does not appear to be a relationship between the number of total aircraft operations or classes of activity and noise complaints. Additionally, the Airport created a voluntary Noise Abatement Brochure to help reduce noise impacts and increase pilot awareness of noise sensitive land uses around the Airport. The Airport has worked with the Flight School to help increase the use of these procedures, when able, and also has developed a set of voluntary ground run-up procedures to further reduce impacts. The Airport is also working with a consultant who has standardized, digitized and marketed the voluntary noise abatement plan for inclusion in electronic "flight bags" in order to reach a larger audience of pilots.

D. Sustainability Goals and Objectives

Sustainability "**goals**" are the purpose toward which an initiative is directed or focused. Sustainability "**objectives**" are directed at the specifics of which the initiatives are intended to accomplish. Objectives are sometimes called targets. Where numeric targets are not defined, the objectives provide additional information about the focus of the goal. **This chapter lists the goals and objectives developed for the Renton Municipal Airport Sustainability Management Plan**. Progress for each of the sustainability goals/objectives will be tracked in comparison to the existing baseline conditions outlined in the previous chapter.

The Airport vision is to be:

- **The provider of safe, efficient, and customer-friendly general aviation facilities and services;**
- **The airport of choice for aviation in Renton, the Kent Valley, and cities on the eastern shore of Lake Washington; and,**
- **The launch site for Boeing aircraft manufacturing.**

Development and Evolution of Sustainability Goals/Objectives

The Airports vision statements have been paired with the sustainability categories to become the basis for developing specific sustainability goals. The goals have been refined through input received from the RAAC.

Sustainability goals were proposed after the baseline inventory was completed, as the context of the issue was needed to develop applicable goals. The RAAC members were able to focus in and examine not only the objectives of this Sustainability Management Plan, but also the objectives of the Airport as a whole and how goals might relate to current conditions and community concerns. Further, the discussion of goals provided the Airport and the RAAC members an opportunity to articulate their specific desires for the future of the facility.

Through a series of progressively more detailed meetings with the Airport and members of the RAAC, the current list of goals and objectives were established for each of the sustainability resource categories. As the Sustainability Management Plan is put into practice and implemented, the goals/objectives will need to be further refined to account for ever-changing conditions. In many cases, it will be determined that additional or perhaps more ambitious goals/objectives can be established. Conversely, there may be goals/objectives that need to be lowered or removed because of the inability to achieve or track progress as conditions change. As implementation progresses, Airport management may wish to amend goals/ objectives as appropriate and modify the initiatives, tracking, and implementation tools.

The following provides a description of the sustainability goals developed for each resource category currently considered in this Plan:

Airport Finance Category

GOAL:

Balance expenditures with revenue to remain financially self-sufficient in the long-term.

KEY OBJECTIVE:

To maintain fiscal balance to ensure that the Airport can continue to operate, maintain, and improve the facilities without sources of revenue beyond those either generated at the Airport or provided by the FAA. The Airport, historically, was not always self-sufficient and it has been able to become so through fiscal discipline and budgeting.

GOAL:

Improve revenue to provide for future development opportunities.

KEY OBJECTIVE:

To improve revenue sufficient to meet operations and maintenance costs and allow for strategic improvements that provide benefit to both Airport users and the surrounding communities. Currently, the Airport generates enough revenue to undertake modest facility improvements with financial assistance from the FAA. Current financial resources require that many of the facility improvement projects

get pushed into the future, well beyond when needed.

GOAL:
Provide financial capacity that will enable the Airport to pursue sustainability initiatives in the future.

KEY OBJECTIVE:
To improve financial capability to facilitate the undertaking of sustainability improvement projects that may have a higher initial cost, but provide a much lower total cost and provide a greater return on investment. By providing adequate financial resources up front, the Airport can reduce its long-term financial commitments and provide facilities that better balance operational, environmental, social, and financial considerations.

Airport and Local Economic Values Category

GOAL:
Attract airport tenants and aircraft operations that add economic value to the local economy.

KEY OBJECTIVE:
To provide facilities and services that attract users and tenants and maximizes benefits to the Airport and local community. Generally, tenants that provide services to users, increase employment at the Airport, and maintain financially stable businesses are most beneficial to the Airport and local economy.

GOAL:
Continuously improve as a tier one supplier for Boeing aircraft manufacturing.

KEY OBJECTIVE:
To maintain and enhance the Airport in a manner that achieves benefit for Boeing, the Airport, and the community. The Boeing Commercial Airplane Company, located adjacent to the Airport, manufactures Boeing 737 aircraft and uses the airfield for their initial flights, and is an economic driver locally, regionally, and nationally.

GOAL:
Diversify tenants and aviation services for land and sea based operations.

KEY OBJECTIVE:
To provide a variety of services and tenants at the Airport to make the Airport more desirable for other tenants and users. To diversify types of business and operations to provide stability when one or more sectors of aviation experience changes or declines.

GOAL:
Increase private sector employment on the Airport property.

KEY OBJECTIVE:
To provide opportunities for the Airport and its tenants to increase employment at the facility, as well as provide economic benefits that increase employment regionally. Increases to employment generally, as well as regionally, have the effect of stimulating the economy at the Airport.

Community Outreach and Education Category

GOAL:
Continuously improve the airport's relations with the surrounding neighborhoods and with airport tenants.

KEY OBJECTIVE:

To maintain and enhance the open communication between the Airport, surrounding neighborhoods, and airport tenants. To partner in collaborative efforts to provide benefits to the community and to the Airport. The Airport is a visible member of the local neighborhoods, City of Renton, and Puget Sound Region's economy. While most individuals in those areas do not have direct contact with the Airport, the aircraft using the facilities are often noticed.

GOAL:

Raise community awareness of airport services and value to regional employment.

KEY OBJECTIVE:

To assist the understanding of the benefits that the Airport provides both directly and indirectly. The Airport serves as an economic engine for regional employment and services. There are a large number of jobs and services that are dependent upon the facilities and services provided at the Airport.

Energy Consumption / Greenhouse Gases Category

GOAL:

Reduce energy consumption without adversely affecting the Airport or its tenants.

KEY OBJECTIVE:

To operate the Airport in a manner that reduces energy consumption without negatively affecting the facility and its users. Reducing energy consumption generally decreases financial expenditures, as well as reduces the amount of greenhouse gas and other emissions generated at the Airport.

GOAL:

Reduce Airport owned greenhouse gas emissions.

KEY OBJECTIVE:

To reach or exceed the goal of fifteen percent reduction in greenhouse gas emissions by 2020 through gains in efficiency and reduced energy consumption.

Noise from Aircraft Operations Category

GOAL:

Maintain 65 DNL noise contour on airport property.

KEY OBJECTIVE:

To maintain aircraft noise levels in neighborhoods to below 65 DNL, which is the federally recognized threshold for land use compatibility. Currently, the 65 DNL does not extend beyond airport property into residential neighborhoods.

GOAL:

Minimize aircraft noise over neighborhoods.

KEY OBJECTIVE:

To improve the noise environment for neighborhoods in the vicinity of the Airport. Aircraft often overfly residential areas during take-off, landings, and pattern flight training. The Airport desires to both minimize total aircraft noise exposure over neighborhoods, while providing a facility that is accommodating and open to users. Currently, the Airport maintains a noise abatement brochure, tracks noise complaints, and works with pilots and the FAA to identify voluntary measures that minimize overall noise levels.

Operations, Maintenance, and Capital Improvement of Airport Facilities Category

GOAL:

Maintain a safe airport on a daily basis.

KEY OBJECTIVE:

To continue to provide a facility that meets or exceeds safety standards set by the FAA for a FAR Part 139 Airport when feasible. The Airport's and FAA's top mandate is aviation safety. To meet safety requirements, the Airport must continue to operate and maintain the facility with a high level of diligence on a daily basis. Examples of maintenance activities include pavement repairs, perimeter security improvements, trimming and mowing of vegetated areas, removal of wildlife hazards and attractants, lighting improvements and replacement, and many more.

GOAL:

Maintain airport and seaplane infrastructure in good condition.

KEY OBJECTIVE:

Maintain airport pavements to a Pavement Condition Index value of 60 for all runway and taxiway pavements experiencing aircraft loads of more than 60,000 pounds to safely accommodate Boeing production aircraft. Maintain the seaplane facilities, which include a floating seaplane dock and launch ramp and at least six feet of depth necessary for floatplane access of the launch ramp.

Water Quality Category

GOAL:

Reduce stormwater runoff quantity.

KEY OBJECTIVE:

Reduce the amount of stormwater leaving the Airport to lower the environmental impacts associated with urban stormwater discharges.

GOAL:

Improve stormwater quality.

KEY OBJECTIVE:

To improve the natural environment at the Airport and in surrounding neighborhoods. Stormwater quality affects groundwater, natural habitats, and aquatic species. The Airport is immediately adjacent to the Cedar River and Lake Washington, which both support sensitive habits, salmon, and public swimming areas.

E. Initiatives for Meeting Goals and Objectives

Sustainability "initiatives" exist and proposed actions or projects undertaken by the Airport in conjunction with the conduct of their three primary activities: 1) operation, 2) maintenance, and 3) capital improvement of the facility. **The purpose of an Initiative is to make progress toward reaching or maintaining one or more sustainability-based goals.**

The Airport has initiated numerous initiatives associated with their three primary activities (operations, maintenance, and capital improvements). In addition to existing initiatives, new initiatives have been identified through the development of this Plan. While the intent of individual initiatives is to assist with moving toward achieving a goal, in many cases, that initiative may also be neutral or negative toward meeting another goal. In those instances, the Sustainability Management Plan will assist the decision makers when balancing these types of considerations.

Development and Evolution of Sustainability Initiatives

After initial sustainability goals were established for the categories selected for this Sustainability Management Plan, the project team developed a list of potential initiatives for the respective goals. The initial set of initiatives was then refined by the Airport Management.

Sustainability Initiatives are the actions that could be taken to meet the defined goals and objectives.

As part of the Sustainability Management Plan, several Renton Airport Advisory Committee meetings were conducted to review, revise, and prioritize a draft list of sustainability initiatives. During one meeting, participants provided comments on the potential range of initiatives and then, through a polling process, identified those initiatives that they each individually believed to be of importance. The results of that effort are noted in **Appendix 6**.

As sustainability initiatives are completed, refined, or suspended, Airport staff will track and monitor the progress toward meeting the established goals of the Sustainability Management Plan. Perhaps more important, the implementation of the Plan should itself serve as a tool to enable the Airport to evaluate actions and projects in order to determine if they lead toward sustainability. Following is the list of initiatives identified by the Airport Staff and Renton Airport Advisory Committee as being most important. The full list of initiatives identified and considered during the development of this Plan is included in **Appendix 5**. It is expected that the below list will be supplemented with additional initiatives and refined by change or removal of initiatives as implementation progresses. The implementation process is further outlined in ***Chapter A***.

The following initiatives were identified:

Airport Financials Initiatives

AF1. Update Cash Flow Model monthly

AF2. Track monthly utility charges

AF3. Partner with energy firms to consider renewable energy projects on residual airport lands that offset airport costs or generate revenue

AF4. Initiate a total cost of ownership system for making decisions

Airport and Local Economic Value Initiatives

EV1. Prepare for greater lease area needs associated with Boeing 737 Max program

EV2. Precision Approach – Develop RNP approach/departure procedures

EV3. Attract an avionics repair shop as an airport tenant

EV4. Partner with energy firms to consider renewable energy projects that offset airport costs or generate revenue

Community Outreach and Education Initiatives

CO1. Continue airport tours for at least five Renton-based community groups annually

CO2. Conduct one annual airport open house

CO3. Establish airport internships and/or public education programs

CO4. Conduct events such as displays of historical information, woman flight, aircraft, etc.

CO5. Use social media, such as the airport website, to disseminate information regarding operational changes

CO6. Seek opportunities to use the old Renton Chamber of Commerce site to engage the public in the importance of aviation in Renton

Energy Conservation/ Greenhouse Gases Initiatives

EC1. Lighting upgrade for buildings (Buildings 616 and 790)

EC2. Remove old natural gas and propane heating units and replace with high efficiency heaters

EC3. Partner with utility to examine energy efficiency initiatives

Noise from Aircraft Operations Initiatives

NO1. Annually update brochure for Voluntary Noise Abatement procedures

NO2. Continue to encourage Renton-based and other flight schools in the area to train students to "fly quiet"

NO3. Continue to contract with firms to electronically disseminate Renton's existing noise abatement procedures

NO4. Evaluate berms and blast fences for additional attenuation

Operation, Maintenance, and Capital Improvement of Airport Facilities Initiatives

OM1. Replace the Seaplane launch ramp

OM2. Complete the Maintenance Dredging and Shoreline Mitigation project to maintain proper water depths for seaplanes to access the Lake

OM3. Develop a "green" landscaping and maintenance practices plan (i.e., limit chemical, water and energy use, use of native materials, etc.)

OM4. Perform annual facility surveys and prioritize maintenance items for the year

OM5. Update the Pavement Management Plan for the Airport to track the pavement condition of the runway, all taxiways and ramps, and all parking lots and perimeter road pavements

OM6. Complete the development of an airport maintenance management plan by December 2013 to memorialize scheduled maintenance activities

Water Quality Initiatives

WQ1. Consider installing pervious pavements when repaving parking lots, where appropriate/available

WQ2. Install swales or rain garden type treatments where possible to improve stormwater quality

WQ3. Utilize low-toxicity herbicides - Plant nitrogen-fixing vegetation

WQ4. Install moisture sensors and timers for all irrigation systems

Description of Initiatives

Table E1 includes a brief description of each initiative, as well as expected benefits, and any barriers/effects to be avoided and minimized.

For the Benefits column of **Table E1**, each initiative is examined relative to the previously identified sustainability focus categories including: a) airport financial, b) airport and local economic values, c) community outreach and education, d) energy conservation/greenhouse gases, e) noise from aircraft operations, f) operation and maintenance of the Airport, and g) water quality. This helps to illustrate the relative benefits of each initiative across multiple categories, as many initiatives have benefits in more than one sustainability category. This was accomplished through use of the Sustainability Reporting Tool.

The Barriers/Effects to be Avoided column describes any mitigating circumstances that could make an initiative difficult to implement, as well as any potential negative effects in other sustainability categories that might offset the benefits described in the benefits column. For example, initiatives that stimulate business at the Airport could have a negative effect on noise due to potential increases in operations.

TABLE D1 STAKEHOLDER PRIORITY SUSTAINABILITY INITIATIVES

Airport Financial Initiatives	*Description*	*Primary Benefits*	*Barriers/Effects to be Avoided/ Minimized*
Update Cash Flow Model Monthly	Tracking of monthly cash flow to highlight potential areas for improvement/ opportunities.	- Financial	-Time intensive
Track monthly utility charges	Focus on airport-owned facilities' consumption of energy, water, etc.	- Financial - Energy Conservation/ GHG	- Time intensive
Partner with energy firms to consider renewable energy projects on residual lands that offset airport costs or generate revenue	Examine potential of installing solar panels, geothermal, wind turbines, etc. to help offset airport costs, reduce energy consumption/ GHG emissions, and potentially increase revenue.	-Financial -Airport/ Local Economic Value -Community Outreach -Energy Conservation/ GHG Reduction	-Potential initial costs, but ROI could be high; partnership may be able to offset initial costs (lease agreements)
Initiate a total cost of ownership system for making decisions	Examine financial/operational decisions within a framework of cost of implementation, maintenance, and operation within the life cycle.	- Financial - Airport/ Local Economic Value - Energy Conservation/ GHG - Reduce Operation and Maintenance Impacts	-Initial cost to develop, but return over the long-term

Airport and Local Economic Values	*Description*	*Primary Benefits*	*Barriers/Effects to be Avoided/ Minimized*
Prepare for greater lease area needs associated with Boeing 737 Max program	Examine the needs of Boeing under the expansion of lease area resulting from an increase in 737 production.	- Financial - Airport/ Local Economic Value	-Noise (additional aircraft operations) -Water Quality
Precision Approach - Develop RNP approaches/departure procedures	Develop a Required Navigation Procedure for approach/ departure for aircraft with the necessary navigation equipment.	- Financial - Airport/ Local Economic Value - Community Outreach - Energy Conservation/ GHG - Reduce Noise	-Not all aircraft are equipped with the necessary avionics equipment to fly precision approach procedures
Attract an avionics repair shop as an airport tenant	Attract an avionics shop to help diversify economic base and expand amenities for local users.	- Financial - Airport/ Local Economic Value - Community Outreach	-Noise (additional aircraft operations)

Partner with energy firms to consider renewable energy projects that offset airport costs or generate revenue	Examine potential of installing solar panels, geothermal, wind turbines, etc. to help offset airport costs, reduce energy consumption/GHG emissions, and potentially increase revenue.	- Financial - Airport/ Local Economic Value - Community Outreach - Energy Conservation/ GHG Reduction	-Potential initial costs, but ROI could be high; partnership may be able to offset initial costs (lease agreements)

Community Outreach and Education	***Description***	***Primary Benefits***	***Barriers/Effects to be Avoided/Minimized***
Continue airport tours for at least five Renton-based community groups annually	Conduct airport tours for interested community groups and members.	- Airport/ Local Economic Value - Community Outreach	-Time for Airport staff
Conduct one annual airport open house	Conduct an annual airport open house for the community to visit the airport facilities and learn about airport programs and contributions.	- Community Outreach	-Time for Airport staff
Establish airport internships and/or public education programs with a sustainability component	Create positions, such as internships, to help the Airport implement and track their sustainability projects, while providing experience for students looking for hands-on experience in sustainability.	- Airport/ Local Economic Value - Community Outreach	-Financial -Time for Airport staff
Conduct events such as displays of historical info, woman flight, aircraft, etc.	Research and develop special events such as: historical aircraft displays/flights, a focus on women in aviation or other public interest events to promote the Airport.	- Airport/ Local Economic Value - Community Outreach	-Time for Airport staff
Seek opportunities to use the old Renton Chamber of Commerce site to engage the public in the importance of aviation in Renton	Create an information sharing site to share information on potential benefits of aviation.	- Airport/ Local Economic Value - Community Outreach	-Time for Airport staff

Energy Conservation/ Greenhouse Gases	*Description*	*Primary Benefits*	*Barriers/Effects to be Avoided/Minimized*
Lighting upgrade for buildings (Buildings 616 and 790)	Upgrade lighting to high efficiency for buildings 616 and 790.	- Financial - Energy Conservation/ GHG - Reduce Operation/ Maintenance	-Initial cost of lights; should be offset by reduction in consumption
Remove old natural gas and propane heating units and replace with high efficiency heaters	Replace old heating units with high efficiency heating units.	- Financial - Energy Conservation/ GHG - Reduce Operation/ Maintenance	- Initial cost of lights; should be offset by reduction in consumption
Partner with utility to examine energy efficiency initiatives	Examine partnership alternative with the utility company to implement energy efficiency initiatives beyond those identified previously.	- Financial - Community Outreach - Energy Conservation/ GHG - Reduce Operation/ Maintenance	-Time for Airport staff -Initial implementation costs; should be offset by reduction in consumption

Noise from Aircraft Operations	*Description*	*Primary Benefits*	*Barriers/Effects to be Avoided/Minimized*
Annually update brochure for Voluntary Noise Abatement procedures	Update the Voluntary Noise Abatement Brochure every year to include new procedures or additional information.	- Community Outreach - Reduce Noise - Reduce Operation/ Maintenance	-Time of Airport staff
Continue to encourage Renton- based and other flight schools in the area to train students to "fly quiet"	Provide a more robust fly quiet training for student pilots to ensure that they understand the noise sensitivities and methods they can use to reduce their impact.	- Airport/ Local Economic Value - Community Outreach - Reduce Noise - Reduce Operation/ Maintenance	-Time of Airport staff
Continue to contract with firms such as Whispertrack to electronically disseminate RNT's existing noise abatement procedures	Provide additional methods of dissemination of fly quiet information for pilots and tenants of the Airport to ensure that they understand the noise sensitivities and methods they can use to reduce their impact.	- Airport/ Local Economic Value - Community Outreach - Reduce Noise - Reduce Operation/ Maintenance	-Time of Airport staff

Evaluate berms and blast fences for additional attenuation	Examine the potential to construct a berm or blast fence for additional noise attenuation.	- Airport/ Local Economic Value - Community Outreach - Reduce Noise	- Financial: Initial cost of study/berms

Operation, Maintenance, and Capital Improvement of Airport Facilities	***Description***	***Primary Benefits***	***Barriers/Effects to be Avoided/Minimized***
Replace the Seaplane launch ramp	Replace the existing seaplane launch ramp with updated facilities.	- Airport/ Local Economic Values - Reduce Operation/ Maintenance	-Cost of replacement -Potential water quality impacts during construction
Complete the Maintenance Dredging and Shoreline Mitigation project to maintain proper water depths for seaplanes to access the Lake	Dredge the seaplane base.	- Airport/ Local Economic Values - Reduce Operation/ Maintenance - Water Quality	-Cost -Potential impact on seaplane operation during mitigation -Potential increase in wildlife hazards
Develop a "green" landscaping and maintenance practices plan (i.e., limit chemical, water and energy use, use of native materials, etc.)	Create a landscaping and maintenance plan with green practices to reduce consumption of materials and impact on surrounding resources.	- Community Outreach - Reduce Operation/ Maintenance - Water Quality	-Cost of plan development; ROI
Perform annual facility surveys and prioritize maintenance items for the year	Annually perform a survey to examine and prioritize maintenance items for the following year.	- Financial - Reduce Operation/ Maintenance - Water Quality	-Time of Airport staff
Update the Pavement Management Plan for the Airport to track the pavement condition of the runway, all taxiways and ramps, and all parking lot and perimeter road pavements	Update the Pavement Management Plan to ensure that pavement on the Airport is adequately maintained and replaced as needed.	-Reduce Operation/Maintenance -Airport/Local Economic Values	-Time of Airport staff
Complete the development of an airport maintenance management plan by December 2013 to memorialize scheduled maintenance activities	Provide a method to track and ensure maintenance activities are being completed on time and as needed.	-Reduce Operation/Maintenance -Airport/Local Economic Values	-Time of Airport staff

Water Quality	*Description*	*Primary Benefits*	*Barriers/Effects to be Avoided/Minimized*
Consider installing pervious pavements when repaving parking lots where appropriate/available	Where appropriate, install pervious pavements when replacing pavement.	- Reduce Operation/ Maintenance - Water Quality	-Financial: Additional cost
Install swales or rain garden type treatments where possible to improve stormwater quality	Install swales or rain gardens.	-Reduce Operation/Maintenance -Water Quality	-Financial: Additional cost to install
Utilize low-toxicity herbicides - Plant nitrogen-fixing vegetation	Use low-toxicity pesticide/herbicides on the airport property.	- Airport/ Local Economic Value - Reduce Operation/ Maintenance - Water Quality	-Additional cost
Install moisture sensors and timers for all irrigation systems	Install moisture sensors for irrigation to prevent overwatering.	- Financial - Water Quality - Reduce Operation/ Maintenance	-Cost of implementation; ROI

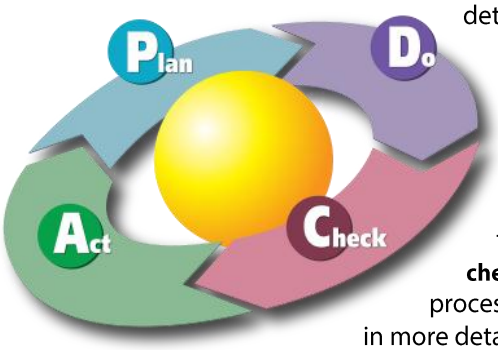
F. Sustainability Management Plan Implementation - Decision Making, Implementation, and Tracking

This chapter describes the steps for implementation of the Sustainability Management Plan, including the purpose and use of the Sustainability Reporting Tool. This Tool is intended to build upon the planning information outlined in the previous chapters (sustainability goals and initiatives), and to help the Airport navigate remaining portions of the process. The Sustainability Reporting Tool provides a means to track the performance metrics relative to the established sustainability goals and objectives, as well as a template for evaluating and reporting on initiatives for implementation.

Guide: Implementation of the Sustainability Management Plan

This section further defines the implementation of the Sustainability Management Plan and acts as a roadmap for how the pieces fit together. This Plan will be used to assist in decision making when considering most current and future actions.

Because of the importance of the Implementation element, the process outlined below is supplemented with a Sustainability Reporting Tool that was developed for this project. The use of the tool will help the Airport be transparent in its consideration of sustainability, visualize the relationship between initiatives and goals, and determine a balanced approach to addressing the goals.



Each step in the "plan, **do**, **check**, **act**" process is described in more detail below.

Plan

The Sustainability Management Plan represents the first step in the "plan" portion of the process. Defining sustainability and establishing sustainability categories (areas of focus), collecting baseline information, identifying goals and objectives, and the identifying initiatives are all a portion of the planning aspect. In the future, as subsequent steps in the cycle occur, additional consideration of categories/issues, baseline condition(s), and goals will likely be necessary.

Implement (Do)

Implementation of the initiatives represents the "do" portion of the process. This involves accomplishing the recommendations in this document and making progress toward achieving the goals and objectives. By "doing," the Airport will be developing a culture of sustainability and will begin to reshape the practices and processes for completing many of its tasks associated with operation, maintenance, and capital improvement of the facility.

Report (Check)

After implementing initiatives, the "check" process encompasses the reporting aspect of the implementation process. As initiatives are implemented, the next step is to track and check the process toward meeting the goals and objectives. Renton Municipal Airport has limited financial and staffing resources and, as such, the management and tracking of the Plan must not consume an inordinate amount of time. If tracking and checking become too difficult, the implementation of the entire sustainability effort will falter. Implementation and checking require the use of tools for tracking success and identifying areas of additional required effort. This project has developed a tool to aid the Airport in tracking progress.

Refine (Act)

The "act" portion represents what has been learned during the "do" and "check" steps. This involves answering the question of, "What did we learn and how can we do it better next time?" by re-evaluating the issues/categories, goals, and objectives and metrics. During this stage of the cycle, adjustments are often identified.

Steps for Implementing

The following specific steps are recommended for implementing the sustainability goals and objectives. These steps represent various stages in the "Plan, Do, Check, Act" cycle and are steps that the Airport may wish to implement in subsequent iterations of the cycle. Chapter A contains a proposed schedule and indication of parties responsible for these steps.

STEP 1:

Discuss Categories of Interest or Concern

WHO: Airport Staff and the Renton Airport Advisory Committee

WHAT: Identify areas of existing issues, concerns, or interest based on stakeholder and community concerns. Some of the questions that should be considered include: What aspects would you like to change/improve? Are there resources or issues of interest/concern, such as air quality, noise, water quality, financial, etc.? These issues represent categories of focus. The categories may be general in nature, as these categories of interest become the baseline for more specific sustainability goals.

WHEN: This process was initially completed as part of this initial development of the Sustainability Management Plan. Meetings were held with stakeholders to determine the categories or areas of interest. As the Plan evolves, the categories/interest areas should be reviewed biennially.

STEP 2:

Create Baseline Inventory[2]

WHO: Airport staff

WHAT: Conduct a Baseline Inventory for those categories/interest areas identified in Step 1. The information gathered in this step provides the baseline for monitoring progress toward achieving a goal described in subsequent steps. The Baseline Inventory is in Chapter C.

WHEN: The Inventory was initially compiled and completed. Airport staff will update this information representing actual performance on a regular basis (Step 6) as listed in Chapter A of this report. The type of information provided in the Inventory should be updated periodically depending on changes in goals.

STEP 3:

Identify Specific Goals

WHO: Airport staff with input from stakeholders

WHAT: Categories of interest (Step 1) paired with the baseline information (Step 2) may be refined further in this step. From an understanding of actual performance, goals and objectives may need to be modified or expanded. Goals and objectives highlight specific areas of improvement and should be measurable so that progress can be tracked and reported.

WHEN: Goals and objectives were initially identified in the Sustainability Plan process. These categories, goals, and objectives may need to be updated as part of the "Act" process in Step 9.

STEP 4:

Develop Initiatives

WHO: Airport staff with input from stakeholders

WHAT: This step involves brainstorming of specific actions (called initiatives) that could be taken to meet the goals/objectives outlined in Step 3. Generally, an initial screening of initiatives is done to determine those that are potentially feasible. A "laundry list" of initiatives is included in **Appendix 5** of this document. The list is sorted by category and includes general considerations such as relative cost (financial and staff time), as well as identifies the potential overlap or

[2] Note: there are times when Steps 2 and 3 may be reversed. An inventory may be needed to help frame/establish a goal. In other cases, the issue may be well understood and a goal can be established before collection of the more detailed data.

considerations related to other goals and objectives.

WHEN: As with Steps 1-3, this Step was initially completed as part of the initial Sustainability Management Plan process. Initiatives should be updated in the "act" process, which involves checking the success of implemented initiatives (See Step 9).

STEP 5:
Prioritize Initiatives

WHO: Airport with help from Tracking Tool and input from Stakeholders

WHAT: Initially, initiatives are generally identified for each specific goal/objective but, as stated above, in many cases, an initiative may affect several different categories in either a positive or a negative way. For example, a water quality measure to install pervious pavement in parking lots may help to meet water quality goals but, due to cost, it could negatively affect financial goals. Additionally, an initiative such as upgrading lighting to be more energy efficient could result in an initial cost, but with significant cost savings over the life of the initiative (resulting in helping meet both financial and energy-related goals). Therefore, to prioritize the implementation of initiatives, the effect that the initiative would have across all categories should be reviewed prior to implementing one initiative over another. For this Step, a Sustainability Initiative Tracking Tool has been developed to assist the Airport in this planning element. For any initiative, the Airport can use the Tracking Tool to determine the initiative's relative score against the sustainability goals to help narrow down potential initiatives. This would include:

- **A listing of initiatives considered for implementation during the period.**
- **The relative "score" of the initiatives toward meeting the sustainability goals/objectives.**
- **Identify those initiatives moving forward toward implementation.**
- **Consider obtaining input from the Renton Airport Advisory Committee.**

WHEN: This was initially completed as part of preparing the initial Sustainability Plan, but will be updated by the Airport Manager at least biennially in the future based on the lessons learned (Step 9).

This report and the Sustainability Initiative Tracking Tool serve as the first iteration in the "Plan" stage of the process (Steps 1-5). The Tool includes the categories, goals, and objectives, as well as the Baseline Inventory, and the initial list of initiatives as documented by this initial report. As sustainability process and principles are implemented at Renton Municipal Airport, the Airport Manager will revisit the Plan to make improvements and adjustments as needed, but this Plan will serve as a foundation for further iterations of Steps 1-5.

STEP 6:
Improve Baseline Information Gathering and Recording

WHO: Airport staff

WHAT: The Tool accompanying this Plan is intended to assist with both identifying the information useful to tracking sustainability, as well as provide the location for staff to maintain the data. This step will build upon the information gathered in the Baseline

Inventory (Step 2) to keep it up to date as initiatives are implemented to enable tracking in later steps.

WHEN: After identifying categories/goals/objectives, it is important to keep up the logging of metrics important to tracking those features on a regular basis. In general, the information within the tool will need to be updated on either a daily, monthly, quarterly, or annual basis, depending on the metric.

STEP 7: Select Sustainability Initiatives to Implement

WHO: Airport staff

WHAT: This step builds upon Step 5 by taking the initiatives that made the "first cut" during the planning process and analyzing its potential benefits within the context of present day conditions. It is expected that a small number of initiatives from the list developed in Step 5 would be examined during the year to determine those that would be feasible and most effective based on consideration of existing conditions such as funding, time/effort requirements, prioritization, etc. The following sub-steps should be followed:

- **Review against goals using the Tool (may already be completed in Step 5).**
- **Examine funding sources.**
- **Review cost required.**
- **Review effort required.**
- **If the initiative meets the sustainability goals/objectives and is feasible, the initiative should be undertaken.**

Depending on the type of initiative, this Step might include coordination with stakeholders, including the Renton Airport Advisory Committee, to detail the review of the initiatives and report the outcome. It is recommended that the reporting be conducted once per quarter and include:

- **A listing of initiatives considered for implementation during the period.**
- **The relative "score" of the initiatives toward meeting the sustainability goals/objectives.**
- **Identify those initiatives moving forward toward implementation.**

If favorable and feasible, the Airport would secure funding, staff time, or other resources, as necessary to accomplish the initiative.

WHEN: It is expected that once at the start of every calendar year, the Airport would pick a small number of Sustainability Initiatives to focus on for that 12-month period. The implementation of these initiatives during the year would depend on changing factors such as the availability of funding and prioritization. For instance, a project intended to reduce energy use might have a higher prioritization if there are grants to install high efficiency lights, or if the Airport decides that reducing energy consumption is a primary goal for that year.

STEP 8:
Check Success against Metrics

WHO: Airport staff

WHAT: This Step takes the information updated within the Inventory in Step 6. The information documented on the metrics should be examined to determine if the initiatives had the predicted effect in helping meet the goals. For example, if new energy efficient lighting was installed as an initiative, the utilities would be examined to determine if the bill/kWh use went down. If it did, then the decrease in cost/energy use would be confirmed and the Airport would track a net benefit toward their energy efficiency and financial goals. If there was no corresponding decrease, then it would be important to note that and proceed to Step 9. This Step would include the use of the Implementation Tool to examine the changes (positive or negative) that were a result of implementing initiatives under the Plan. This will include a summary of:

- **List of initiatives implemented over the past year.**
- **Key metrics for the year with a comparison to recent past years.**
- **Summary of initiatives considered and their relative value toward meeting the sustainability goals/objectives.**

WHEN: Information should be kept updated as part of Step 6, but examined once a year (or as needed, post implementation) to review changes. For implementation of this Plan, it is recommended that the Airport prepare an annual summary reporting key metrics, initiatives implemented, progress, and planned initiatives. The focus of the report should be on what was the goal/objective, was progress made toward achieving the goal/objective, and an indication of any barriers that may have prevented progress.

STEP 9:
Review and Improve

WHO: Airport Staff

WHAT: This Step involves identifying those aspects of the process that could be improved. It involves examining the results of the annual metrics review report created as part of Step 8 to determine if any changes need to be made to the plans categories of interest, goals/objectives, metrics needing to be tracked, implementation tool, etc. This will involve updates to the Plan (this document), the list of prioritized initiatives, the steps, the metrics, or the implementation tool as necessary. In some cases, the need to improve performance will be quantitative (Were the specific numerical goals/objectives achieved?) and in other cases qualitative, based on personal judgment. In all cases, the conclusions should be documented, so as to be transparent.

During this step, the Airport Manager will likely summarize changes and addendums to the Sustainability Management Plan through presentations to the Renton Airport Advisory Committee, which would then be posted to the Airport and City's websites, and otherwise made available to the community. This step does not necessitate that the entire Plan be revised. Instead, each component of the Plan could be scrutinized as the implementation progresses to determine where improvements can be made or changes are needed based on updated conditions.

WHEN: The Sustainability Management Plan can be revised both formally, through the revision to the Plan documents, and informally, through changes made through addendums or notes. It is recommended that regular notes and addendums be

tracked as they arise. However, it is recommended that all of the key components of this Plan be re-evaluated at least once every two years initially and then annually after the process has been ingrained. With time, perhaps as soon as two to three years, there will be sufficient baseline information and experience to be able to more easily keep the components of this Plan current.

STEP 10:
Adjust Steps 1-9 as Necessary

WHO: Airport Staff

WHAT: Start at Step 1 and adjust the process as necessary, based on what was learned in the previous iteration of the process.

WHEN: It is recommended that regular notes and addendums be tracked as they arise. However, it is recommended that all of the key components of this Plan be re-evaluated at least once every two years initially and then annually after the process has been ingrained.

The steps in the Guide detailed above were followed and documented in the following chapters for the first iteration of the Sustainability Management Plan. This will serve as a guideline for future iterations as conditions change.

Sustainability Reporting Tool

As described briefly in the sections above, concurrent with development of this Sustainability Management Plan, a "Tool" has been developed to assist with the initial implementation of the Plan. The purpose of the tool is to assist the Airport with the evaluation of initiatives, tracking, and reporting aspects of the Plan. Like this Plan, the Tool serves as a starting point and will need to maintained, updated, and refined to incorporate lessons learned and improve its functionality and usefulness. The use of the Tool will help the Airport visualize the relationship between initiatives and goals/objectives and help strive for balance. It is important to note that the more consistently the Tool is applied, the more useful it is likely to be in the future.

The Tool is intended to provide the following capabilities:

- **List and track initiatives identified to meet the sustainability goals/objectives.**
- **Visualize success of initiatives that meet or do not meet goals/objectives.**
- **Track and summarize the relative benefits and/or impairments of initiatives relative to each sustainability goal/objective (i.e., does an initiative meet the goals/objectives?).**
- **Track key metrics.**
- **Visualize how sustainability categories are tracking.**
- **Summarize and report metrics with percent change over time.**
- **Visualize change in key metrics over successive years.**
- **Determine the success of the Plan and potentially highlight areas for improvement.**

General reporting and the tools used to conduct review of progress toward sustainability goals are described in the following pages, giving basic instructions and examples of how to use the Tool. It also includes sample output reports from the Tool to be used for tracking, coordinating, and reporting.

The Tool is split into four primary areas and color coded in the Excel Spreadsheet: Instructions (**WHITE** tab), Graphical Dashboard of Performance (**GREEN** Tab), Sustainability Initiatives Evaluation (**PURPLE** Tabs), and Sustainability Category Tracking (**ORANGE** Tabs).

Tab 1 – Instructions (WHITE): The Instructions give a short overview of the tabs, as contained in this document as well.

Tab 2 – Report Card (GREEN): The Green Tab is a graphical depiction of a number of metrics that were identified to help measure the success of implementing sustainability initiatives relative to the goals/objectives. These graphics in the Green Tab allow the Airport to visually see the data that is input in other areas of the Tool.

Tab 3 – Potential 2012 Initiatives (PURPLE): The Purple Tabs contain information regarding evaluation of the sustainability initiatives. As stated in **Step 7** of the Guide, the Airport will generally pick a number of initiatives to focus on within that calendar year. Those initiatives would be added into this Potential Initiatives tab of the Tool to narrow the focus of initiatives of interest for that year.

Tab 4 – 2012 Initiatives in Detail (PURPLE): For each initiative of interest, the Airport should fill out the Initiatives in the Detail Tab. This tab constitutes a general "test" of an initiative against the goals/objectives for each sustainability category. The Airport would fill in "positive," "negative," or "neutral" for each goal or objective and the Tool will provide a general "score" of how well the initiative meets the overall sustainable vision (economic, operations, natural environment, and social). If all the boxes in this test are generally shaded neutral or green, then the initiative generally passes this test. Although this acts as a good way to identify and narrow potential initiatives, it is important to note that there may be a compelling reason to implement an initiative that may not be favorable in all categories, based on additional factors. But, in general, this Tool will assist the Airport in identifying the best potential sustainability initiatives with respect to the overall goals and objectives.

Tab 5 – 2012 Initiatives Summary (PURPLE): Once an initiative is implemented, the Airport will fill out the Initiatives Summary Tab. This aspect of the Tool tracks the sustainability initiatives implemented and allows the Airport to see a relative score of the initiatives against the tracking metrics (Orange Tabs). This Tool assists the Airport in identifying the performance and will help determine if additional measures or adjustments are needed to help meet the Airport goals and objectives.

Tabs 6 – 14 Metrics (ORANGE): These tabs represent the tracking of the sustainability metric identified for each major category including: aircraft operations, airport financials, economic values, community outreach, energy, noise, operations and maintenance, and a summary of all the categories. These sheets should be updated as new annual information becomes available and entered in the spreadsheet in the blue data cells. Information in the Report Card Tab (GREEN) and the Summary Tab (ORANGE), should update automatically reflecting the added data. This portion of the Tool allows the Airport to review the success of the initiatives (**Step 8**), identify areas of improvement (**Step 9**), and update the process as necessary (**Step 10**).

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