

APPENDIX 1

Definitions of Sustainability

Definitions of Sustainability

The following text provides a description of the various definitions of sustainability typically used by airports and the aviation industry.

Airports Council International – North America (ACI-NA): The ACI-NA definition is:

“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.”

EONS is an acronym used to recognize: Economic/financial, Operational, Natural and environmental resources, and Social. While many definitions of sustainability refer to the triple bottom line (i.e., Social, Environment, and Economic), stewardship of EONS resources incorporates the importance of airport operational efficiency.

Brundtland Commission Definition: A broad, generally-accepted definition is one developed in 1983 by the Brundtland Commission. The United Nations convened the Brundtland Commission (also known as the World Commission on Environment and Development) to address a growing concern “about the accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development.” The UN General Assembly recognized that problems were global in nature and determined that it was in the common interest of nations to establish policies for sustainable development, and thus established the commission. The Brundtland Commission definition of sustainability is:

“development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Global Reporting Initiative (GRI): Recognizing that the definition and metrics associated with measuring progress toward sustainability differ by industry, and that reporting of sustainability even within the same industry can vary, professionals in the industry began to call for a standard reporting process during the early 1990s. Evolving out of CERES (a Boston area consulting company) with the support of the United National Environmental Programme, was the development of the Global Reporting Initiative (GRI). GRI is a network-based organization that has developed the world’s most widely used sustainability reporting framework. GRI has adopted the Brundtland Commission’s definition and is currently developing industry-based

protocols for sustainability plans. Several U.S. airports are members of GRI and participating in the development of the airport specific protocol, which is currently in final draft form.

Transportation Research Board Definition: The Transportation Research Board (TRB), in its 2005 conference proceedings titled “Integrating Sustainability into the Transportation Planning Process,” envisioned sustainability at its most basic level as:

“one that meets the transportation and other needs of the present without compromising the ability of future generations to meet their needs.”

Basically, TRB adopted the Brundtland Commission’s definition with the addition of the word “transportation.” TRB is one of six major divisions of the National Research Council— a private, nonprofit institution that is the principal operating agency of the National Academies in providing services to the government, the public, and the scientific and engineering communities. The National Research Council is jointly administered by the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

A program administered by the TRB is the Airport Cooperative Research Program (ACRP). In 2008, ACRP sponsored a project Synthesis Report S02-02, *Airport Sustainability Practices* that defined airport sustainability practices as “a broad term that encompasses a wide variety of practices applicable to the management of airports.” The report refers to practices that ensure:

- *Protection of the environment, including conservation of natural resources.*
- *Social progress that recognizes the needs of all stakeholders.*
- *Maintenance of high and stable levels of economic growth and employment.*

Renton Municipal Airport Sustainability Management Plan Inventory of Existing Conditions

INTRODUCTION. This inventory identifies the current conditions relative to the Sustainability Management Plan. This baseline enabled an understanding of the issues and assisted with developing goals and metrics to measure progress toward achieving the sustainability goals. This inventory documents baseline (existing) conditions for those resources not evaluated in separate standalone reports.

The baseline data for these categories are described below. This information represents what is known about the Airport relative to the initial focus 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.

Airport Setting

Renton Municipal Airport is a general aviation airport that serves Renton, Washington and other nearby communities (Figure 1, *AIRPORT LOCATION MAP*). The City of Renton is located on the south shore of Lake Washington. The Cedar River, which runs through the City and adjacent to the Airport itself, provides the area with natural resources and park areas (Figure 2, *AIRPORT VICINITY MAP*). The City of Renton is home to approximately 83,000 residents and is a fast growing community in the Puget Sound area. Additionally, it is home to several large companies including The Boeing Commercial Airline Company, which is located immediately adjacent to the Renton Municipal Airport. Located central to several interstates, easy access to the greater Seattle area, is available from within Renton, via both individual and public transportation.

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 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. Seaplane operations from the Will Rogers-Wiley Post Memorial Seaplane Base, located at the north end of the Airport along the shore of Lake Washington, also contribute to the level of activity at the Airport.

Facilities

The Airport has a single grooved asphalt and concrete runway (Runway 16/34) with a full parallel taxiway on the west side and a partial parallel taxiway on the east side. Runway 16/34 has a length of 5,379 feet and a width of 200 feet, with a threshold displacement of 340 feet at the south end, resulting in a usable length of 5,029 feet. The Airport's property covers approximately 170 acres (Figure 3, *EXISTING AIRPORT LAYOUT*). A blast fence is located approximately 500 feet south of the displaced threshold to protect surface vehicles of the adjacent roadways.

Seaplane operations occur in a 5,000 feet by 200 feet waterlane located in Lake Washington. Access to the seaplane facilities is located on the northwest corner of airport property. The seaplane facilities include a floating seaplane dock and amphibious ramp, parking facilities, and an access road.

Airfield support facilities include an Air Traffic Control Tower, located midfield on the west side of the Airport, above the office of the City of Renton's airport administrative offices. The tower is open daily from 7:00 am to 8:00 pm October through April and 7:00 am to 9:00 pm daily from May through September. The airport maintenance area is located within the City owned Quonset Hut. The Airport also contains numerous conventional and T-hangar space and tie-downs, as illustrated in Figure 3. Aircraft fuel on the Airport is provided by ProFlight Aviation. They provide 100LL AvGas and JetA fuel.



Figure 1
Airport Location Map

Renton Municipal Airport Sustainability Management Plan

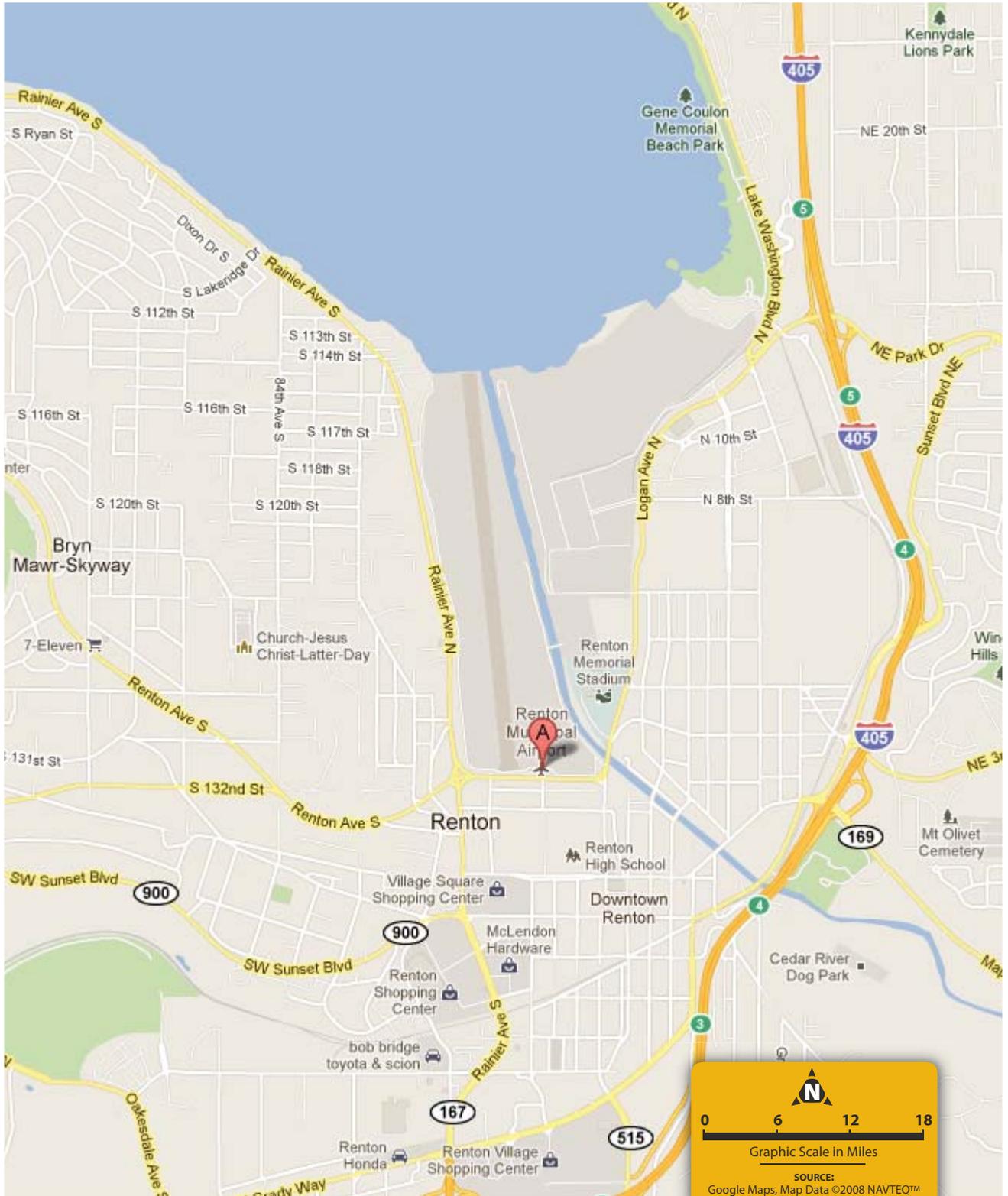


Figure 2
Airport Vicinity Map

Renton Municipal Airport Sustainability Management Plan

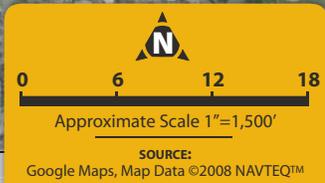


Figure 3
Existing Airport Layout

Aircraft Operations

Over the past 10 years, aircraft operations at Renton Municipal Airport have oscillated, both increasing and decreasing several times. Operations have generally been between 80,000 and 114,000 total operations. An aircraft operation is defined as either a landing or a takeoff, as such; total operations represent the sum of all landings and takeoffs at an airport. According to tower operation counts, fiscal year 2010, there were approximately 80,679 operations at the Airport. Air carrier aircraft (those capable of carrying more than 60 passengers) are primarily Boeing Company operations. However, it should be noted that the Boeing operations do not contain passengers, but rather are operations flying newly constructed aircraft to other locations for the next step in the manufacturing/ delivery process. **Table 1** below list historic aircraft operations, and the future forecast operations are included in **Table 2**.

Table 1
EXISTING AIRCRAFT OPERATIONS 2001-2010 (FISCAL YEAR)

Year	Itinerant Operations				Itinerant Total	Local Operations		Total Local	Total Operations
	AC	AT	GA	Military		Civilian	Military		
2001	406	2,375	41,353	261	44,395	65,810	16	65,826	110,221
2002	438	1,268	41,681	74	43,461	69,779	20	69,799	113,260
2003	189	638	37,138	38	38,003	58,332	2	58,334	96,337
2004	203	939	35,669	40	36,851	50,375	0	50,375	87,226
2005	242	1,035	32,851	33	34,161	46,697	2	46,699	80,860
2006	334	1,274	34,063	58	35,729	47,250	0	47,250	82,979
2007	336	1,306	40,459	72	42,173	52,240	2	52,242	94,415
2008	347	1,087	39,437	12	40,883	60,039	6	60,045	100,928
2009	341	729	36,188	5	37,263	45,974	32	46,006	83,269
2010	402	1018	34,874	132	36,426	44,000	253	44,253	80,679

Source: Existing data from Renton Municipal Airport Tower Counts, 2010

AC = Air Carrier (Anything capable of carrying more than 60 – primarily Boeing Company launches)

AT = Air Taxi (For passenger/freight, on-demand, non-scheduled flights with a max of 30 seats)

GA = General Aviation

Itinerant operations - An itinerant operation is an operation performed by an aircraft that lands at an airport, arriving from outside the airport area, or departs an airport and leaves the airport area

Local operations - Local operations are those operations performed by aircraft that remain in the local traffic pattern, execute simulated instrument approaches or low passes at the airport, and the operations to or from the airport and a designated practice area within a 20-mile radius of the tower.

Table 2
FORECAST AIRCRAFT OPERATIONS 2011-2020

Year	Itinerant Operations				Local Operations			Total Local	Total Operations
	AC	AT	GA	Military	Itinerant Total	Civilian	Military		
2011	400	1,342	34,674	130	36,546	42,483	427	42,910	79,456
2012	400	1,347	35,094	130	36,971	42,858	427	43,285	80,256
2013	400	1,352	35,519	130	37,401	43,236	427	43,663	81,064
2014	400	1,357	35,949	130	37,836	43,616	427	44,043	81,879
2015	400	1,362	36,385	130	38,277	43,999	427	44,426	82,703
2016	400	1,367	36,825	130	38,722	44,386	427	44,813	83,535
2017	400	1,372	37,270	130	39,172	44,777	427	45,204	84,376
2018	400	1,377	37,720	130	39,627	45,171	427	45,598	85,225
2019	400	1,382	38,176	130	40,088	45,569	427	45,996	86,084
2020	400	1,387	38,638	130	40,555	45,970	427	46,397	86,952

Source: The above numbers indicate future forecast operations, which are taken from the FAA Terminal Area Forecast (TAF) dated 2010.

AC = Air Carrier (Anything capable of carrying more than 60 –primarily Boeing Company launches)
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Surface Water Management Fees is the largest expense in the Water Resources category.

Water Resources

Surface Water: The City of Renton Surface Water Management department classifies the Airport as a Medium Intensity stormwater discharge source. This intensity level designation is calculated by the total area of impervious surface on the Airport divided by the total Airport area. The total area of the Airport is approximately 167 acres and of this area, approximately 69.6% (nearly 108 acres) of the total airport property is covered by impervious surface.

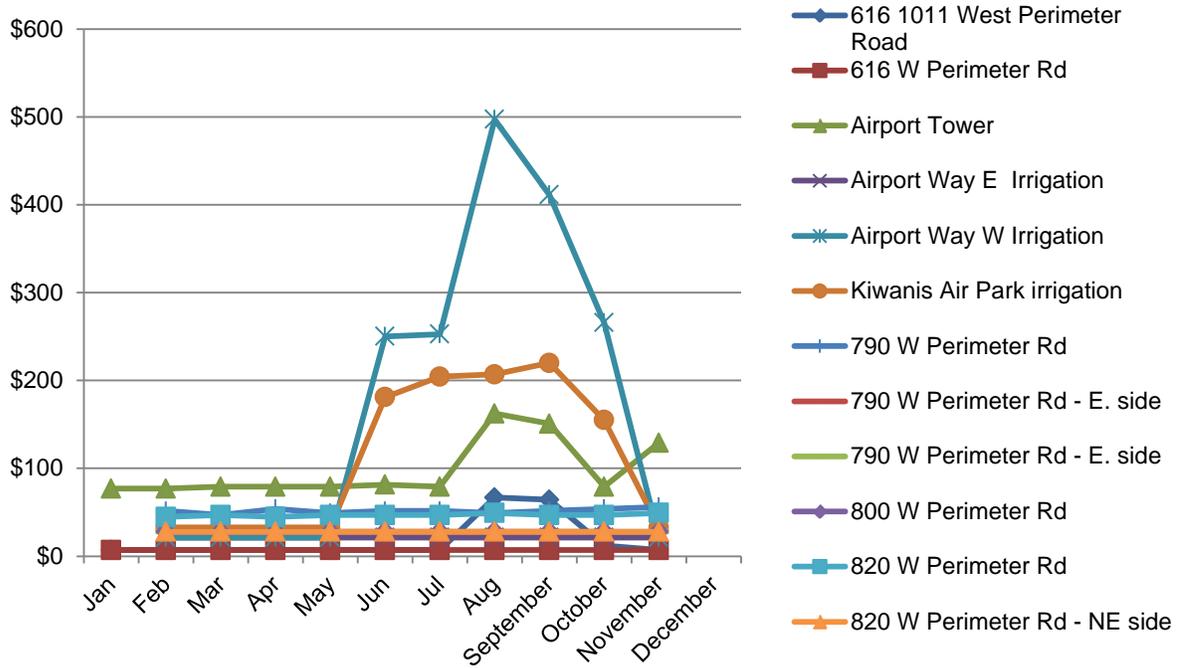
The Airport is billed at medium intensity rates for all of the impervious surface covered area on the Airport. This charge has increased from approximately \$4,000 per month in 2007 to \$9,300 per month in 2012 and is projected to rise substantially in the near future as overall storm water rates rise in the City. The surface water charge to the Airport is collected by City Surface Water Management Department to maintain and operate approximately 274 miles of storm pipe, associated catch basins and other public storm systems throughout the City. At this time, the Department

considers the airport storm drainage system to be a privately owned system and not part of the overall City's storm drainage system. Therefore, the Airport capital budget (Fund 422) contains a line item for maintenance of the Airport storm drainage system. 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 storm water conveyance system.

Water Use: The City of Renton provides water and sewer service to the south half of the Airport, and Bryn Mawr-Skyway (unincorporated area) provides water and sewer to the northwest quadrant. The total cost for billing and wastewater to both jurisdictions equals approximately \$7,841. This includes \$6,550 through water consumption, \$991.80 from surface water charges at the old restaurant site, and the remaining \$298 from wastewater charges at the tower. The largest expense in the water use category comes from the irrigation provided through Airport Way W Irrigation. Other large uses include Kiwanis Air Park Irrigation, Airport Way E Irrigation, the Airport Tower, and wastewater. In total, irrigation accounts for about 48% of the total water expense. Potential reduction measures could include moisture sensors to ensure that no overwatering occurs. Generally these expenses peak in June through October during the growing season, with approximately 70% of the costs being incurred in these months. The breakdown of water use is illustrated in **Figure 4**.

Since 2010, the Airport has used deicing fluid for occasional use during winter storms. The Airport stores approximately 4,505 gallons of potassium acetate liquid deicer on the property, and has used approximately 3,445 gallons of liquid deicer from 2010 through the spring of 2011.

Figure 4
Water Usage by Facility (\$), 2010



Source: Sustainable Business Consulting, 2011.

Employees

The Airport employs six full time regular employees and five full time seasonal employees. Airport employees include an airport manager, assistant airport manager, project manager, airport secretary, two airport maintenance workers, and five seasonal airport safety workers. An employee commuting survey was completed in 2011 with a participation rate of 100%. In terms of employee work commuting, 96% of travel consists of single occupancy driving, 2% motorcycle use, and 2% 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. The Metro Transit center is approximately one mile south of the airport offices and the City provides free transit passes to regular City employees who use Metro Transit. However, the results of the survey indicated that no employees participated in this program, and notes from the survey included comments due to cutbacks in transit service and criminal activity at the transit center, use of the Metro bus service was not attractive. The results from this survey are detailed in the Appendix 5.

Community

The City of Renton encompasses approximately 16 square miles of land near the south end of Lake Washington. Located generally in a triangle between Seattle, Bellevue, and Tacoma gives Renton a central location to the economic centers of the state. According to 2010 Census data, Renton is currently home to approximately 93,910 people and many of these people work for the Boeing Corporation, which is an important part of the area's economy.

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.

A number of community objectives and policies relative to the airport are noted in the Comprehensive Plan. These objectives and policies (as noted in Appendix 2) are designed to ensure a sustainable airport.

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. The current committee includes approximately 49% tenants and 51% members of the public. Through this committee, the Airport has identified areas of community concern (including noise, aesthetics, and economics). This coordination resulted in a Business Plan for the Airport that addressed many of the concerns and aimed to make the Airport more financially, environmentally, and socially sound.

Additionally, the Airport hosts tours for local pre-schools and organizations such as the Boy Scouts. The Airport also participated in the women in aviation week and in 2010 was named the most "Female Pilot Friendly Airport in the United States."

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 2009 City of Renton Comprehensive Plan shows the airport property as an "Employment Area Industrial." The area east of the airport, on the other side of Cedar River is shown as "Urban Center North" with a small area of residential single family. South of the Airport, the Comprehensive Plan indicates that the area is a mix of "Commercial Corridor," "Urban Center Downtown," and a small section of "Single

Family Residential.” West of the Airport is designated as a mix of “Commercial Corridor,” and “Single Family Residential” with small pockets of “Multifamily Residential.” The Land Use is depicted in **Figure 5**.

Because of noise concerns, a number of land use goals are reflected in the City's Comprehensive Plan designed to address aircraft noise and land use conflicts (as noted in Appendix 2). In addition to these City-outlined measures, 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 Whisper Tracks to standardize and digitize their voluntary noise abatement plan for inclusion onto the web in order to reach a larger audience of pilots.

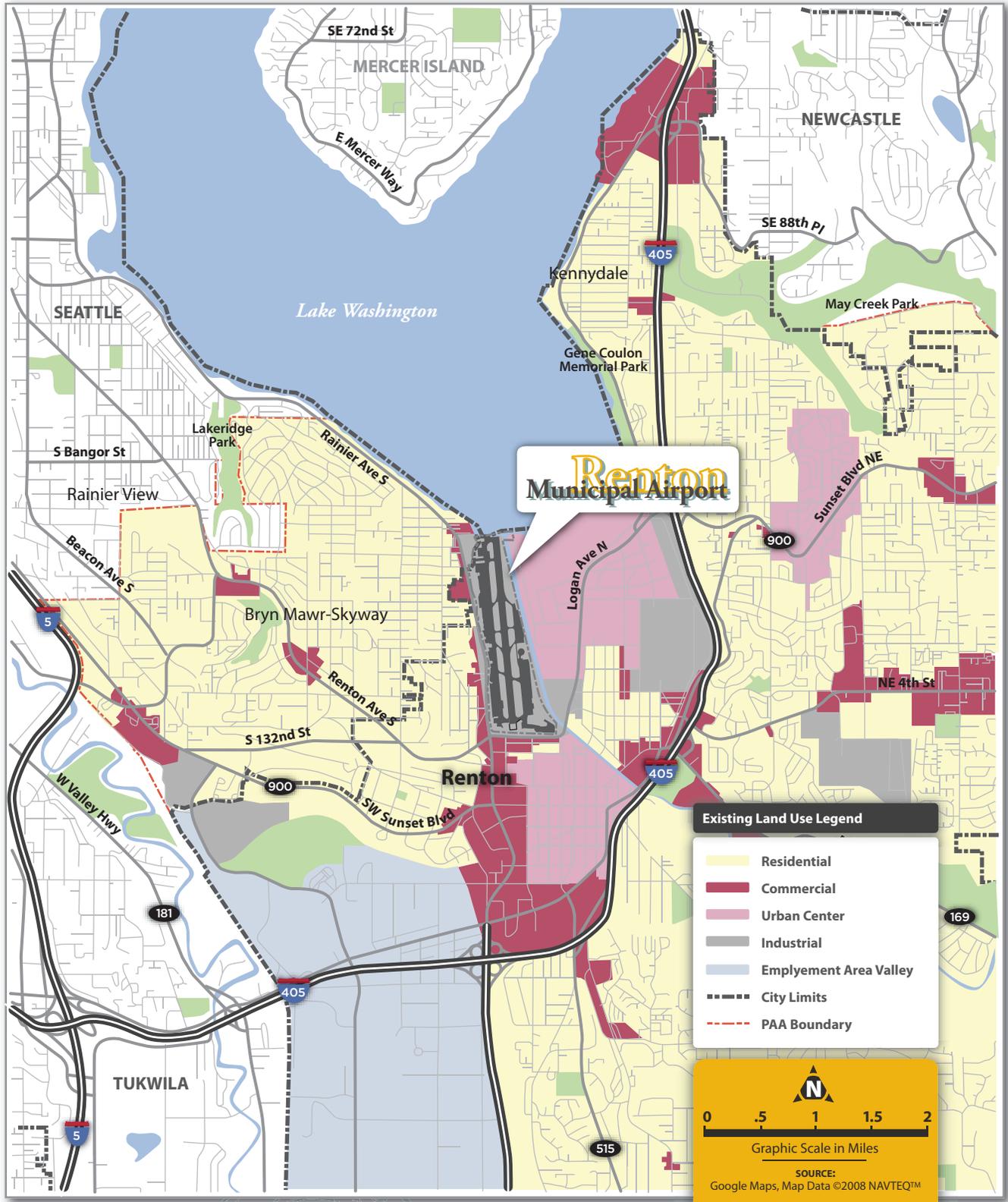


Figure 5
Generalized Existing Land Use

Renton Municipal Airport Sustainability Management Plan

APPENDIX 3

**Renton Municipal Airport
2010 Carbon Footprint**



Renton Municipal Airport 2010 Carbon Footprint

Prepared for the Renton Municipal Airport
By Sustainable Business Consulting

September 2011

TABLE OF CONTENTS

OVERVIEW	3
STATEMENT OF GHG EMISSIONS.....	3
2010 CARBON FOOTPRINT RESULTS.....	5
ENVIRONMENTAL METRICS	6
KEY FINDINGS	7
APPENDIX A: METHODOLOGY.....	9
APPENDIX B: EMPLOYEE FEEDBACK.....	10
APPENDIX C: ADDITIONAL EMISSION SOURCES.....	11
APPENDIX D: ENERGY USAGE BENCHMARKING.....	12

OVERVIEW

Sustainable Business Consulting worked with the Renton Municipal Airport to create its 2010 baseline carbon footprint to support the creation of the Sustainability Management Plan, as part of a national pilot program for conducting airport sustainability planning in conjunction with the Federal Aviation Administration (FAA). The objective of the project is to help the Airport develop a plan to reach its long-term sustainability goals by analyzing the environmental, social and economic aspects of sustainability and how it relates to the organization. The analysis here reflects the first phase of this project.

STATEMENT OF GHG EMISSIONS

The following report presents the greenhouse gas (GHG) emissions from Scope 1 and Scope 2 sources from airport-owned facilities including: electricity, natural gas, airport-owned fleet vehicles and equipment.

The carbon footprint was calculated using the Greenhouse Gas Protocol methodologies created by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). This protocol is the most widely used international accounting tool for understanding, quantifying, and managing GHG emissions. For more detailed information on how we calculated each emissions source please see Appendix A.

Timeframe

These GHG emissions have been prepared based on a reporting year of January 1 to December 31, 2010.

Greenhouse gases

All GHG emissions figures are in metric tons of carbon dioxide equivalents (CO₂e) for ease of comparison and include three of the six greenhouse gases covered by the Kyoto Protocol—carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and sulfur hexafluoride (SF₆) emissions were not included in our reporting because they are not deemed as a material source of greenhouse gases for the Airport. This follows the accepted methodology and best practice from the WRI, Climate Registry and WBCSD.

Organizational Boundary

Emissions have been reported from facilities where the Airport has operational control as well as any emissions source where the airport pays the utilities (as defined by the GHG Protocol).

Operational Boundary

All Scope 1 (direct GHG emissions) and Scope 2 (indirect GHG emissions excluding Scope 3) have been reported for operations within the organizational boundary. The following emissions are included in this inventory:*

Scope 1	Natural Gas Fleet Vehicles and equipment
Scope 2	Electricity purchased from the grid

* The City of Renton calculated its 2009 Municipal and Community inventory and included a larger scope in its GHG calculations including some Scope 3 emissions sources. The municipal inventory included building energy use, fleet fuel, electricity from water/wastewater pump stations, refrigerants, traffic/street lights, business travel and commuting. In its community inventory the City includes transportation (vehicle/air miles), solid waste, and residential/commercial/industrial energy use.

A list of Scope 3 emissions not included in this report is located in Appendix C.

Geographic Scope

GHG emissions that fall within the organizational and operational boundaries have been reported for all global operations.

Emission factors

The emissions associated with the activities above were calculated using primary data for energy and fuel use, then multiplied by relevant carbon emission factors.

Emissions Source	Emission factor used
Energy	Puget Sound Energy, 2009: City of Seattle Greenhouse Gas Inventory & King County's Inventory
Fleet	EPA Climate Leaders

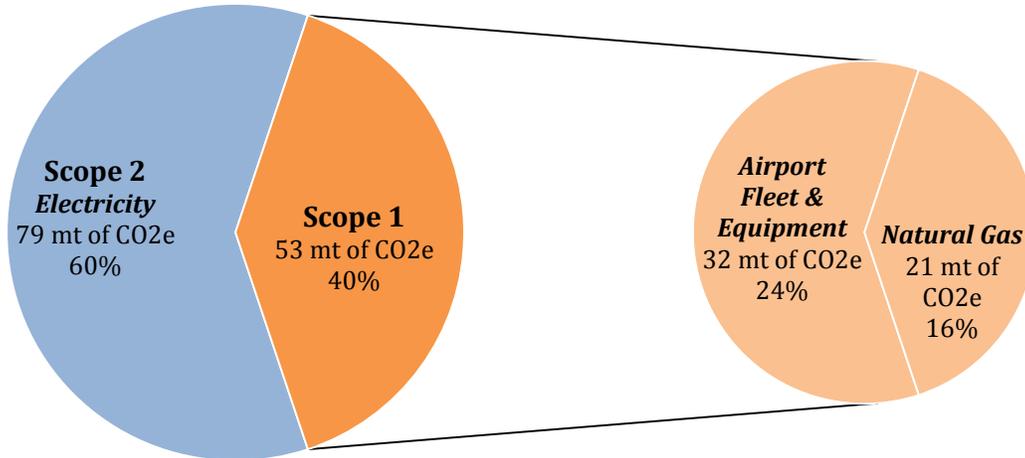
Materiality

Emissions from the following sources have not been reported as they contribute, in aggregate, less than 5% to overall Scope 1 and Scope 2 emissions:

- Refrigeration gas losses (the airport uses three small residential air conditioners for cooling offices and small spaces)

2010 CARBON FOOTPRINT RESULTS

2010 Carbon Emissions 132 mt of CO₂e



Results by Emissions Source

Emissions Source	Quantity	Metric tons of CO ₂ e	% of Total
Scope 1			
Natural Gas (therms)	3,928	21	16%
Airport Fleet & Equipment (miles)	19,490	32	24%
Total Scope 1 Emissions		53	40%
Scope 2			
Electricity (kilowatts)	205,519	79	60%
Total Scope 2 Emissions		79	60%
TOTAL AIRPORT EMISSIONS		132	100%

Results by Greenhouse Gas (in metric tons of CO₂e)

Emissions Source (Metric Tons of CO ₂ e)	Carbon Dioxide CO ₂	Methane CH ₄	Nitrous Oxide N ₂ O	Total Emissions
Scope 1	52.977	0.009	0.042	53.027
Scope 2	79.425	-	-	79.425
Total	132.402	0.009	0.042	132.452

ENVIRONMENTAL METRICS

Category	Quantity	Metric
Total Carbon Emissions	132 mt of CO ₂ e	Annual emissions of 26 cars. 15 mt of CO ₂ e/employee
Energy (Natural Gas & Electricity)	1,154,272 megajoules	Heating 12 homes for a year. 436 therms/employee 22,835 kWhs/employee

Additional Metrics (Categories not included in the Carbon Footprint)

Category	Quantity	Metric
Commuting	23,006 miles	8 trips across the US. 2,556 miles/employee
Waste	28 tons	Mass equivalent to 2 fully loaded garbage trucks. 3 tons/employee 24% of waste diverted to recycling & composting.
Fleet	19,490 miles	6.9 trips across the US. 2,166 miles/employee

KEY FINDINGS

Energy

As anticipated, the majority of the Airport's emissions come from its Scope 2 electricity usage from its facilities and field lighting. Both the boundary of the footprint and building size are the reason why these emissions equate to 60% of the carbon footprint.

The entity with the most energy usage in terms of electricity is the Airport Tower due to the energy intensive activity within the facility (servers, air flight control room, etc). The monthly average electricity usage per square foot for the Tower was 3.9 kWh/sq ft, which is relatively average when benchmarked against national airports. See Appendix D for more information on energy usage for national airports.

Interestingly, the Road Field Lights at 616 W Perimeter Road has similar energy usage to the Kwanzaa hut at 790 W Perimeter Road.

The facility at 820 W Perimeter Road is currently used as a storage facility but is heated at various times during the year.

Facility	kWh	% of Total
616 W Perimeter Road Airport Tower/FAA/Office	80,120	39%
616 W Perimeter Road Field Lights	32,842	16%
790 W Perimeter Road	32,732	16%
820 W Perimeter Road	29,640	14%
749 E Perimeter Road	11,291	6%
Blast Fence Obstruction Lights	7,090	3%
Seaplane Base Parking Lot Lights	6,218	3%
600 W. Perimeter Shop/Hangars	2,260	1%
NDB/East Side Radio Trans.	1,260	1%
Seaplane Base Dock Lights	2,066	1%
TOTAL ELECTRICITY	205,519	100%

Facility*	Sq Ft	Monthly Avg. kWh/Sq Ft
616 W Perimeter Road Airport Tower/FAA/Office	1,717	3.9
790 W Perimeter Road	1,268	2.2
820 W Perimeter Road	6,100	0.4

*Square footage information was available for these facilities only.

Two facilities operated by the Airport require natural gas usage including the sewage pump station and the building at 790 W Perimeter Road. The sewage pump station was a two stage pump but when one of the stages blew out the Airport replaced both, which cut the pump's energy consumption in half.

Facility	Therms	% of Total
Apron C Sewer Lift Station	2,200	56%
790 W Perimeter Rd	1,728	44%
TOTAL NATURAL GAS	3,928	100%

Facility	Sq Ft	Monthly Avg. therms/Sq Ft
790 W Perimeter Road	1,268	0.1

*Square footage information was available for these facilities only.

Vehicle and Equipment Fleet

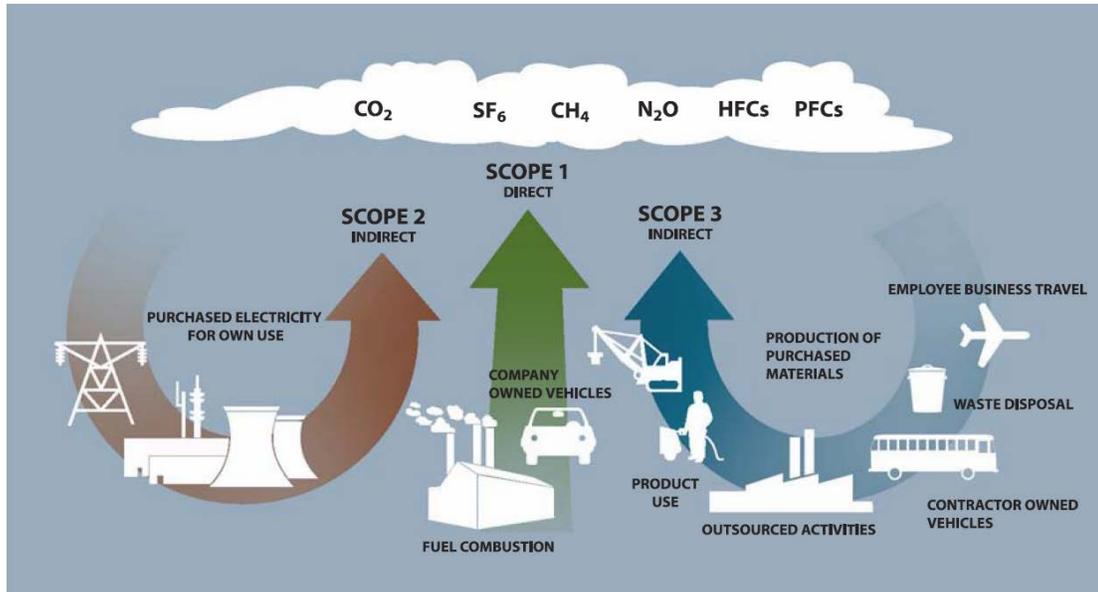
Emissions from Airport-owned vehicles and equipment equate to approximately 24% of emissions, coming in second only to electricity purchased. Implementing programs to increase fuel efficiency or decrease miles travelled can positively impact Renton's inventory given that the average miles per gallon of Renton's fleet is 8.

Vehicle Type	MPG	Gallons of Fuel
Light Truck 1 D087: Ford 350 Fltbed w/ Tilt	5	383
Light Truck 2 C233: 2006 Ford F150	13	230
Light Truck 3 C234: 2007 Ford F150	7	263
Light Truck 4 C235: 2008 Ford F250 4x4 SC	7	1,673
Miscellaneous Equipment: Mower	1	1,030
TOTAL FUEL	-	3,579

APPENDIX A: METHODOLOGY

Boundary and Scope

Sustainable Business Consulting (SBC) helped Renton Airport choose its boundary and scope that are consistent with the methodologies of the WRI. We adhere to the following WRI created classification system to define our emissions scope:



Energy

SBC used electricity and natural gas data collected directly from utility bills and Puget Sound Energy's emissions factors reported in the City of Seattle's Greenhouse Gas Inventory and King County Inventory to calculate emissions in this category.

Fleets

Renton provided gallons of fuel consumed by its onsite vehicles and miscellaneous equipment (mower). Miles per gallon per each vehicle was calculated by dividing miles travelled (odometer readings) by gallons consumed. All vehicles and equipment use unleaded gasoline and are owned by the Airport. Emissions were calculated based on the EPA Climate Leader's emission factors for passenger car and light duty vehicles using unleaded gasoline.

APPENDIX B: EMPLOYEE FEEDBACK

Employee Commuter Survey Results

The following represents the most common responses to optional, open-ended questions from the Commuting Survey which was distributed to all Renton Airport employees in July 2011.

The primary purpose of the survey was to collect commuting data for the carbon footprint, but it was also used to gather input on what the Airport could do differently or better to help its employees reduce business-related environmental impacts.

What do you think the Renton Airport as an organization should focus on to reduce our carbon emissions and environmental impacts, with respect to:

AREA	OPPORTUNITIES
Commuting	<ul style="list-style-type: none"> • Help staff continue to use alternative modes of transportation <i>(Since metro service cutbacks & criminal activity increased at the transit center, I've stopped riding the bus. In 2008 & 2009 I rode the bus 33% of my commute.)</i>
Energy Use	<ul style="list-style-type: none"> • Install energy efficient lighting systems for all buildings (timers on light switches, etc) • Switch out single pane windows for double pane and increase insulation in specific buildings • Replace old HVAC units in specific buildings
Fleet	<ul style="list-style-type: none"> • Consider electric vehicles for on-airport use by staff • Acquire a snow broom truck for runway to reduce deicer use and plowing
Waste & Recycling	<ul style="list-style-type: none"> • Recycle yard waste at the airport
Paper Use	<ul style="list-style-type: none"> • Encourage the use of electronic files (eliminate printing copies for legal and auditors)
Water Use	<ul style="list-style-type: none"> • Plant drought tolerant and airport friendly native plants
Tenants	<ul style="list-style-type: none"> • Encourage the deployment and use of recycling containers, require O/W separators on all new buildings along with "wash rack" facilities for aircraft washing

APPENDIX C: ADDITIONAL EMISSION SOURCES

Additional Emissions Sources

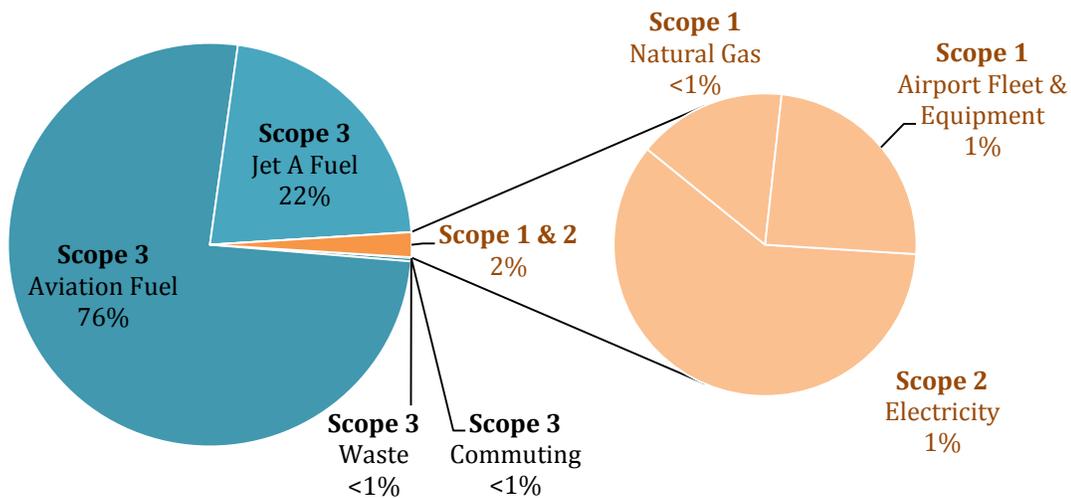
The following additional Scope 3 emissions sources were not included in Renton’s inventory but were elements that were measurable and if were included the weight of the Airport’s emissions would shift greatly towards its tenants who consume Aviation Fuel (76%) and Jet A fuel (22%) as these two contribute to approximately 98% of the carbon footprint. Additionally, tenant energy consumption from hangars and buildings rented from the Airport were not included.

Data for business travel was not captured which is why this analysis is not included at this time.

Emissions Source	Scope	Metric tons of CO2e	Percent of Total
Commuting	3	9	0.1%
Waste	3	12	0.2%
Aviation Fuel	3	5,016	76%
Jet A Fuel	3	1,439	22%
Business Travel	3	-	-
Scope 1 & 2 combined	1 & 2	132	2%
TOTAL		6,608	100%
*Avoided emissions from recycling/yard	3	(5)	-

Additional Emissions Sources

(not included in the footprint)



APPENDIX D: ENERGY USAGE BENCHMARKING

	Square Footage	Annual Avg. Electricity Cost/Sq ft	Monthly average kWh/sq ft
Pittsburgh International Airport (PIT)	1,825,169	\$3.96	4.92
Salt Lake City International Airport (SLC)	1,149,546	\$1.27	2.63
Cincinnati-Northern Kentucky International Airport (CVG)	1,919,000	\$2.24	4.25
Cleveland Hopkins International Airport (CLE)	916,774	\$3.96	3.94
Seattle-Tacoma International Airport (SEA)	2,500,000	\$7.05	4.17
Portland International Airport (PDX)	1,533,698	\$1.25	2.52
Ronald Reagan Washington National Airport (DCA)	537,585	\$8.53	7.03
Hartsfield Atlanta International Airport (ATL)	5,318,759	\$2.74	3.2
Dallas-Fort Worth International Airport (DFW)	2,876,000	\$2.73	3.34
Fort Lauderdale-Hollywood International Airport (FLL)	900,913	\$2.97	3.84

Source: Clean Airport Partnership, *"Airport Survey: Energy Use, Policies, and Programs for Terminal Buildings"*, 16, May 2003.

APPENDIX 4

Financial Baseline & API Analysis



Renton Municipal Airport

Financial Baseline and API Analysis Final

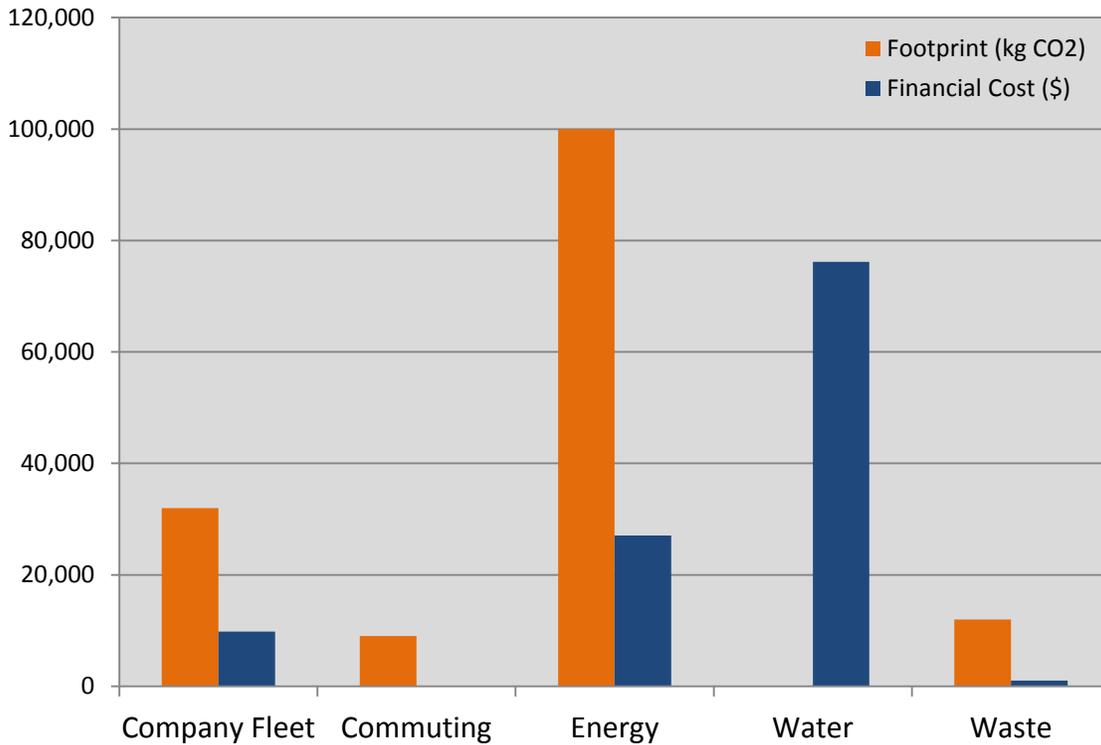
This report has been prepared for the Renton Municipal Airport and is intended to evaluate the financial situation of the Renton Municipal Airport and its opportunities for improved performance through sustainable business practices. Update: This report has been revised from an earlier report generated in November. Revised based upon new data from Renton Municipal Airport. April 2012.

Sustainable Business Consulting
4/19/2012

Contents

- 2010 Carbon Impact and Financial Impact Comparison 3
- Cash on Hand for Operations and Capital Investment 5
- Revenues..... 5
- Airport Performance Indicators 6
 - Yearly Revenue 7
 - Airport Revenue Sources by Year 8
- Expenses 10
 - Overall Operational Expense Categories 10
- Budget 11
 - Management Expenses 12
 - Maintenance Expenses 13
 - Indirect Expenses 13
- Energy 14
- Water 15

2010 Carbon Impact and Financial Impact Comparison

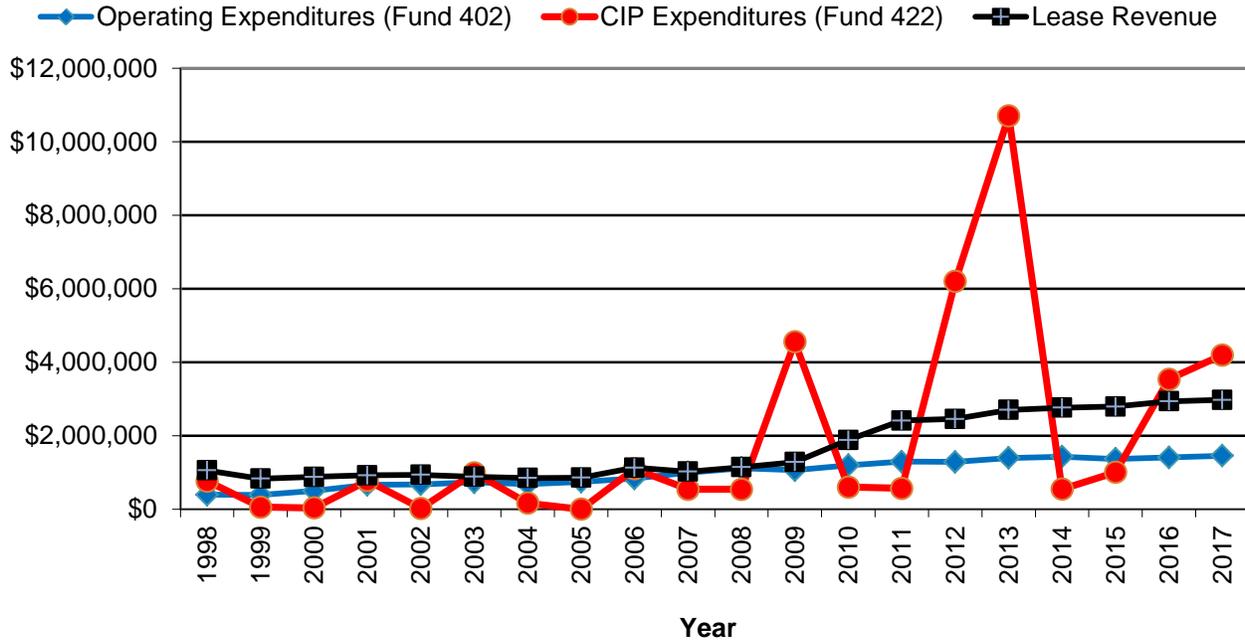


	Carbon Impact		Financial Impact	
	Footprint (kg CO ₂)	% of Total	Financial Cost (\$)	% of Total
Company Fleet	32,000	20.7%	\$ 9,804	8.6%
Commuting	9,000	5.8%	\$ -	0.0%
Energy	100,000	65.8%	\$ 27,046	23.7%
Water	0	0.0%	\$ 76,185	66.8%
Waste	12,000	7.7%	\$ 1,047	0.9%
Total	152.46	100%	\$ 114,082	100%

From a financial perspective, water and energy consumption place the highest burden on Renton Municipal Airport. Conversely, the carbon footprint indicates that energy consumption and the company fleet are the greatest sources of GHG emissions. Carbon emissions associated with water consumption likely have an impact on carbon emissions but fell outside the scope of the carbon footprint conducted for the airport.

Both financial measures as well as GHG metrics should determine the best course of action for sustainable business strategies.

Revenue vs. Expense by Year



2009 Capital expenditure increase due to:

Runway resurfacing \$3.9 Million

2012 Capital expenditures due to:

Taxiway Bravo reconstruction (Phase I) \$2.9 Million

Dredging design and construction \$762,689

Airport office renovation \$495,410

Storm water system rehab \$350,000

2013 Capital expenditures due to:

Taxiway Bravo reconstruction (Phase II) \$9.7 Million

820 building demolition \$637,313

2016 Capital expenditures due to:

Taxiway Alpha Overlay \$3.3 Million

2017 Capital expenditures due to:

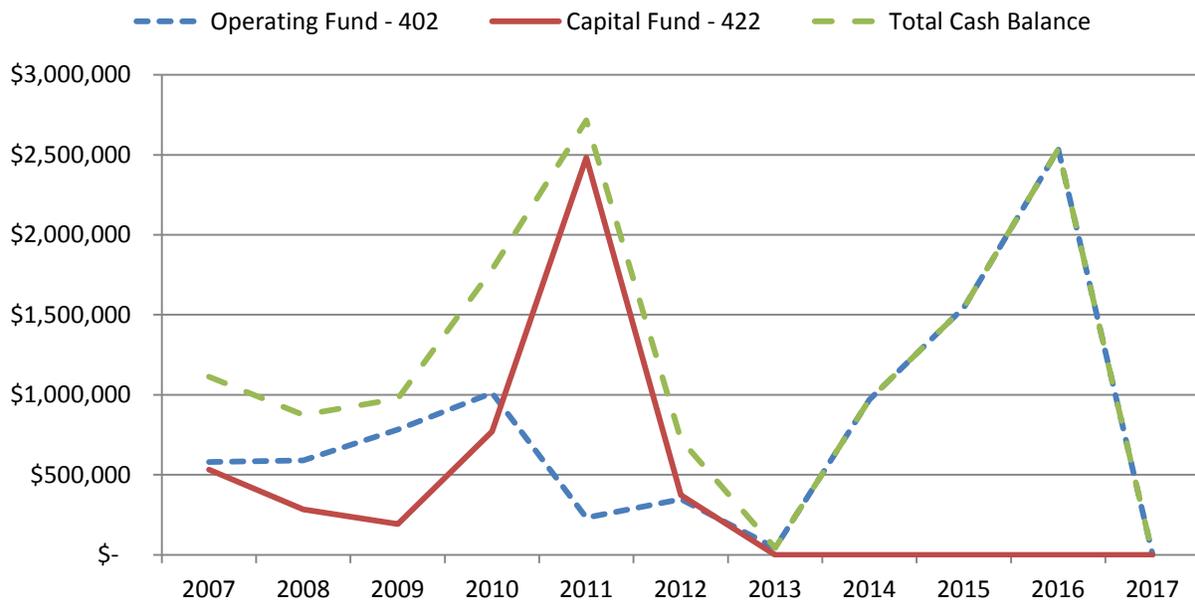
Taxiway Alpha Overlay \$3.2 Million

Seaplane Launch Ramp Construction \$420,000

Cash on Hand for Operations and Capital Investment

Renton Municipal Airport has two funds (402 and 422) which hold all cash for operations and capital investment, respectively. Data for the graph below is based on actual data for years 2007-2011 while the data for years 2012-2017 are forecasts.

Operating and Capital Cash Balance: 2007-2017



Revenues

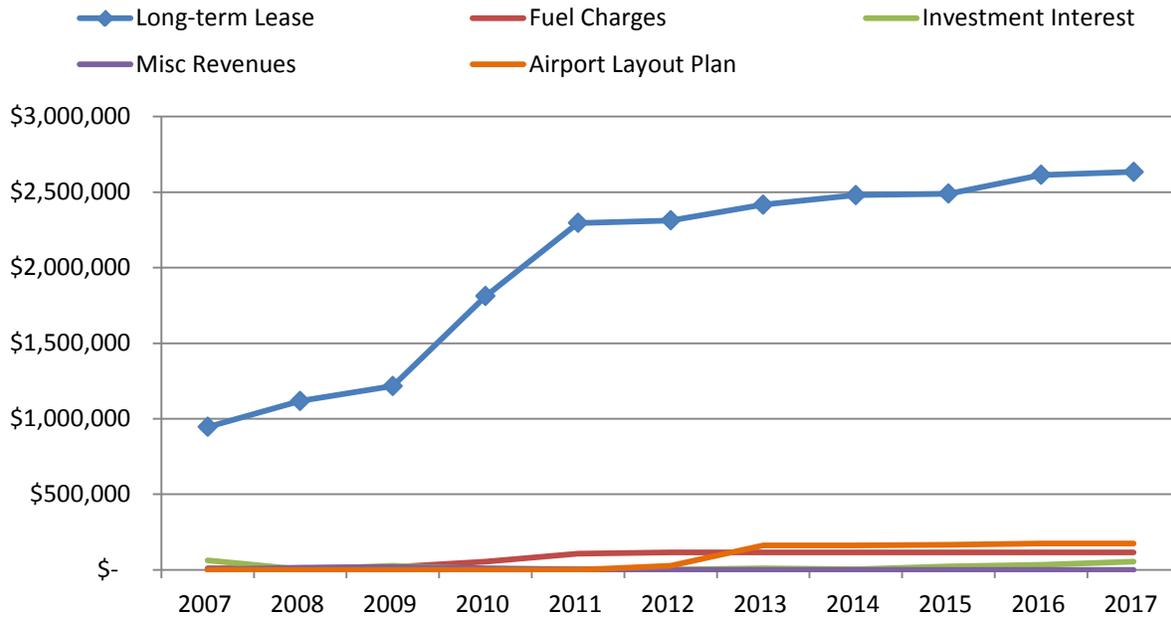
95% of revenue for Renton Municipal Airport is derived from their long-term leases of airport property and buildings. Additional sources of revenue include fuel sales, investment interest and recommended facility enhancement projects outlined in the Airport Layout Plan. The proposed projects illustrated in the Airport Layout Plan will generate additional income once constructed (starting in 2012). This additional revenue is derived mainly from additional leases on these newly constructed facilities.

Airport Performance Indicators

The following metrics have been identified as accurate methods of measuring airport performance within both the financial and environmental arenas. When available, data from nearby SeaTac has been included for comparison.

Category	2010 API	Renton	SeaTac
Operational	Annual Aircraft Operations	80,679	
Energy	Electricity Consumption: Year to Year Change (kWh)	-59,804	
Energy	Utilities Cost: Year to Year Change (\$)	-\$13,011	
Energy	Utilities Cost: per sq foot of tower (\$/sqft)	\$4.63	\$7.05
Energy	Utilities Cost: per sq foot of 790 (\$/sqft)	\$2.74	\$7.05
Energy	Utilities Cost: per sq foot of 820 (\$/sqft)	\$0.52	\$7.05
Energy	Utilities Cost: per operation (\$/operation)	\$1.29	
Environmental	Carbon Footprint: Total (mt CO2e)	132	
Environmental	Carbon Footprint: Scope 1 (mt CO2e)	53	
Environmental	Carbon Footprint: Scope 2 (mt CO2e)	79	
Environmental	# of NOVs		
Environmental	Operations per noise complaint	733.45	
Environmental	# of Noise Complaints: Year to Year Change (# more complaints)	45	
Environmental	# of Stage 2 operations per year		
Environmental	% of total waste that is diverted	24%	
Environmental	Water and Sewer Cost per operation (\$/Operation)	\$0.94	
Financial	Operating Cost per operation(\$/Operation)	\$14	
Financial	Net operating income per operation (\$/Operation)	\$10	
Financial	Personnel Cost per operation (\$/Operation)	\$7	
Fuel	Fuel Flowage Fees (\$)	\$55,021	
Gen Aviation	Hangar Rental and Ground Lease Income (\$)	\$1,811,191	
Grants	Grants received in 2010 (\$)	\$1,333,822	
HR	Salary + Wages + Benefits: as a % of Op Costs	52%	
HR	Salary + Wages + Benefits: per employee	\$63,383	
HR	Benefits as a % of total compensation	25%	
HR	Operations per employee	8,964	
Maintenance	Maintenance costs: per sq ft of tower (\$/sqft)	\$35	
Property/Contract	% of leasable property under contract		

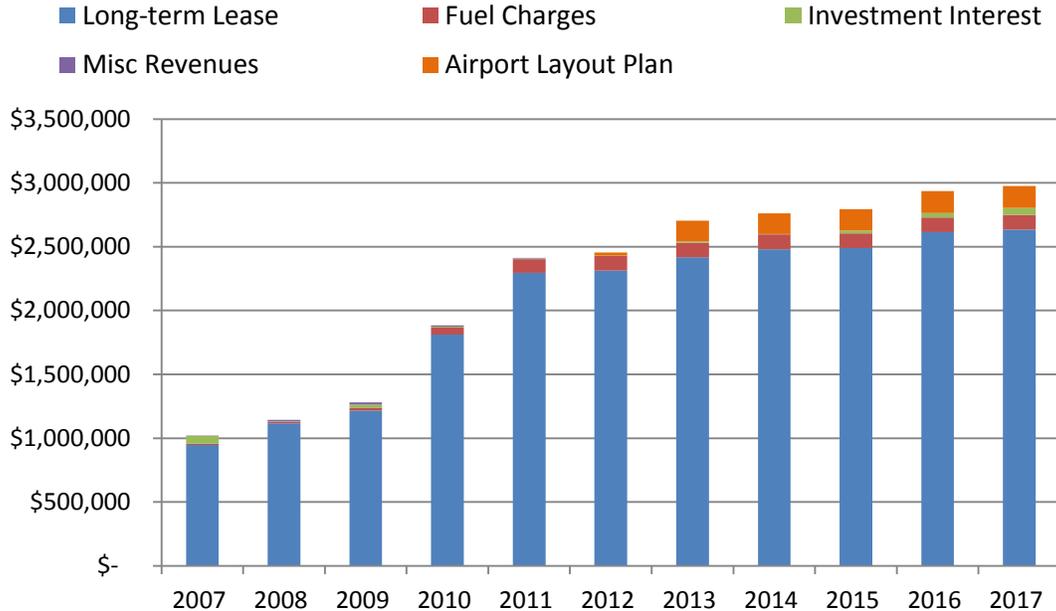
Yearly Revenue



A proposed new lease from Boeing on Area 9 is the cause of a nearly \$1 million increase in operating revenue over two years in 2010-2011. The new lease in area 9 includes the North Bridge Access Parcel, Apron A & B, Aircraft Pos A-2 through A-9, Compass Rose, Buildings 5-08, 5-09, 5-45, 5-50, Fuel Farm and Substation B-1.

There is an increase in airport fuel charges from \$20k to \$115k in 2010-2011 due to the addition of Boeing in Area 9.

Airport Revenue Sources by Year



Because the airport does not derive income directly from landing/takeoff fees, they are limited to the aforementioned sources of revenue to increase income. By increasing the value of the leased land and buildings, the airport may increase the value charged for each lease area. Improvements to leased facilities can take the form of resource consumption improvements that would reduce the financial burden of the tenants. These may include but are not limited to:

- Energy Efficiency Retrofits
- Lighting Upgrades
- Water Consumption Conservation Measures
- Waste Reduction Initiatives

Increasing fuel charges may also provide a viable source on additional revenue and is scheduled to increase from 1% of revenue to 4% with the expansions outlined by the Airport Layout Plan.

Recommendation:

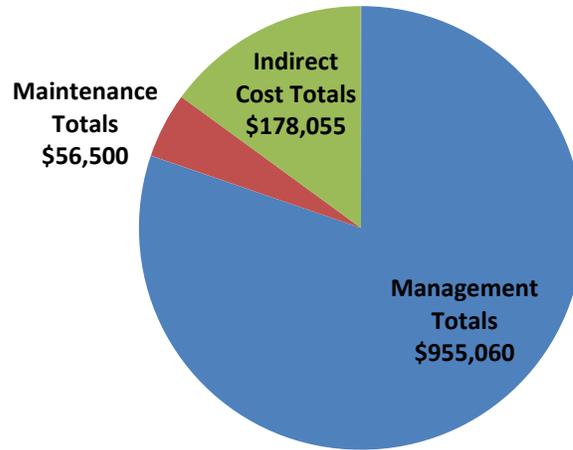
Revenue Generation: Currently, each Tenant pays their own utilities which makes it difficult to see the financial benefit of energy/water/waste savings.

Option: Find a way to incentivize tenants with slightly lower lease rates if they reduce utility usage.

Revenues from leases are currently \$2.30 million of \$2.41 million in total revenues. Both of the above options would require renegotiation of the contracts, which may or may not be feasible given the current relationships with tenants. This is something that should be piloted in any new leases or renewals in 2012 and 2013.

Expenses

Overall Operational Expense Categories

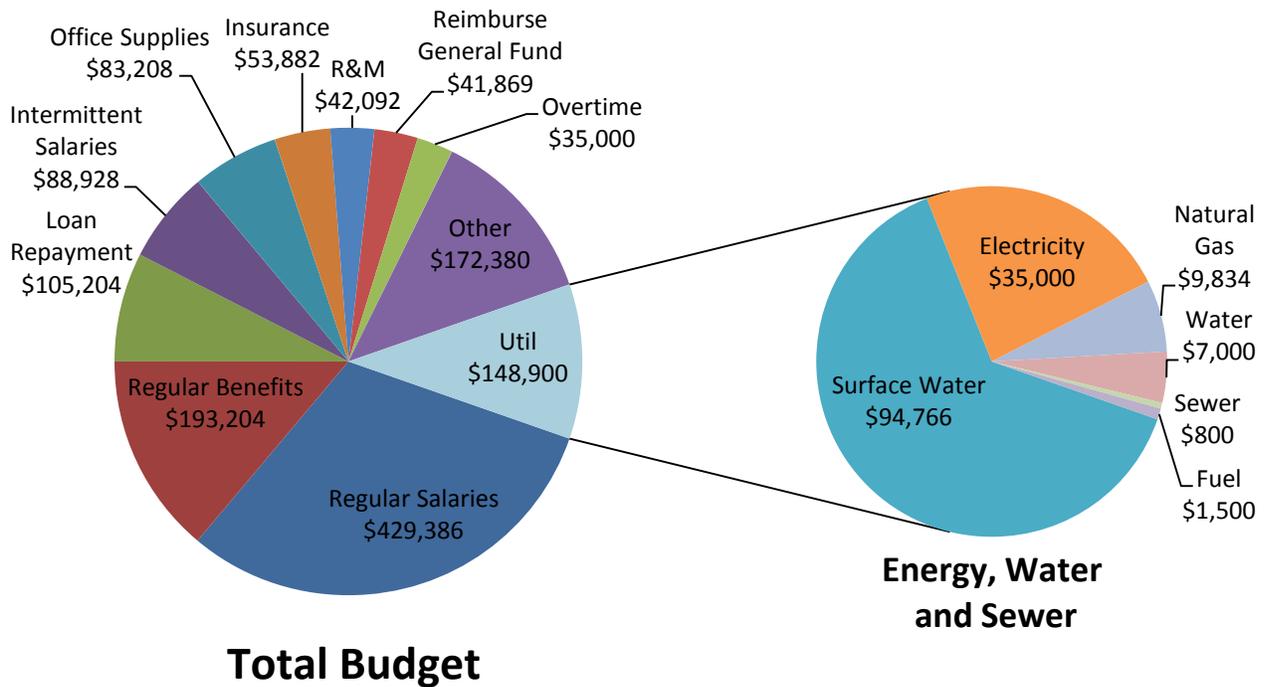


Expenses for Renton Municipal Airport are broken down into three general categories: Management Expenses, Maintenance Expenses and Indirect Costs. 80% of the costs incurred during the operation of the airport are associated with Management. This category includes personnel salary and benefits, travel expenses, utilities and other expenses associated with management operations.

Indirect costs are the second largest expense category and account for 16% of total expenses. This category includes interest payments, information services, insurance and various non-maintenance related equipment. All of the expenses listed here are internal city costs that other City of Renton departments charge the airport for various equipment and services.

The remaining area of expense includes maintenance expenses such as equipment purchases, shop supplies and repairs. More detailed information on this data can be found on the following pages.

Budget



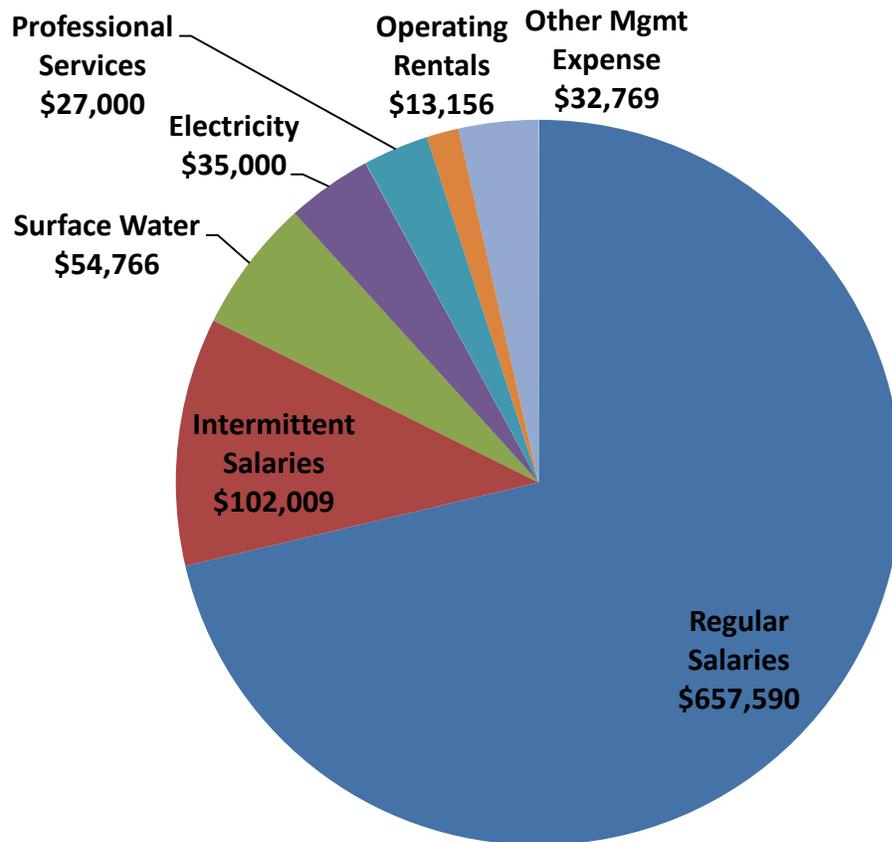
Electricity, gas, water, sewage and fuel account for 11% of the total expense budget.

Surface water is billed from the city based on acreage and infiltration rate, and equates to approximately \$8,000 per month. As of September 2011, the airport had \$55,000 budgeted for surface water; however, this amount did not account for an increase in the stormwater billing rates. The airport has since increased the budgeted amount and this is reflected in the graphic above.

Recommendation:

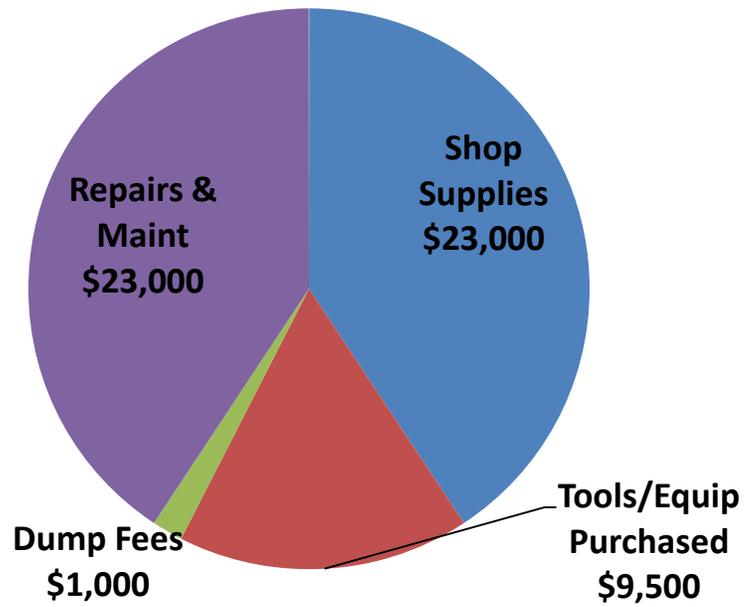
An option for improvement would be to work with city of Renton to have this fee reduced in exchange for implementing a stormwater catchment/ infiltration/ bioswale system. The retained water from this system can be used for irrigation which will further reduce irrigation costs.

Management Expenses

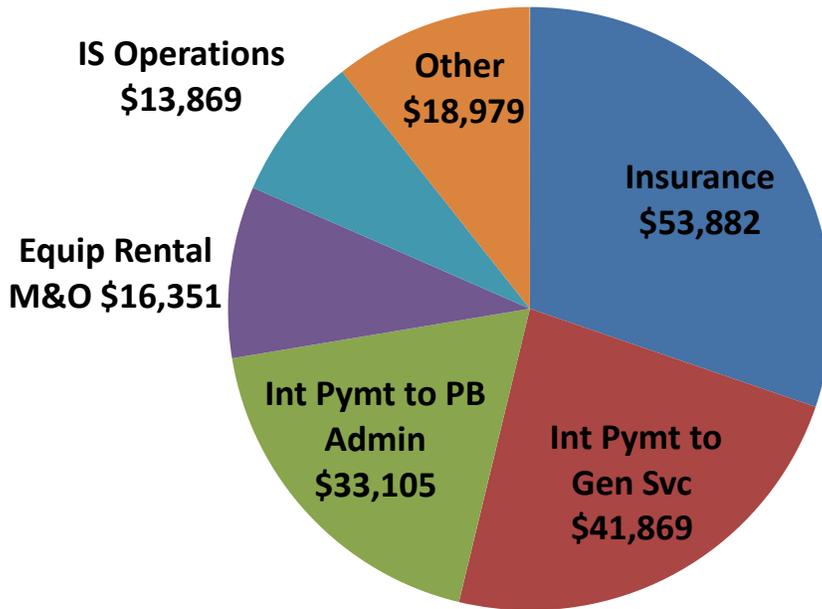


The airport's utility payments provide a great opportunity for increased environmental performance coupled with reduced financial burden. The utility expenses total over \$100,000 annually and include electricity, water use, sewer and natural gas consumption.

Maintenance Expenses

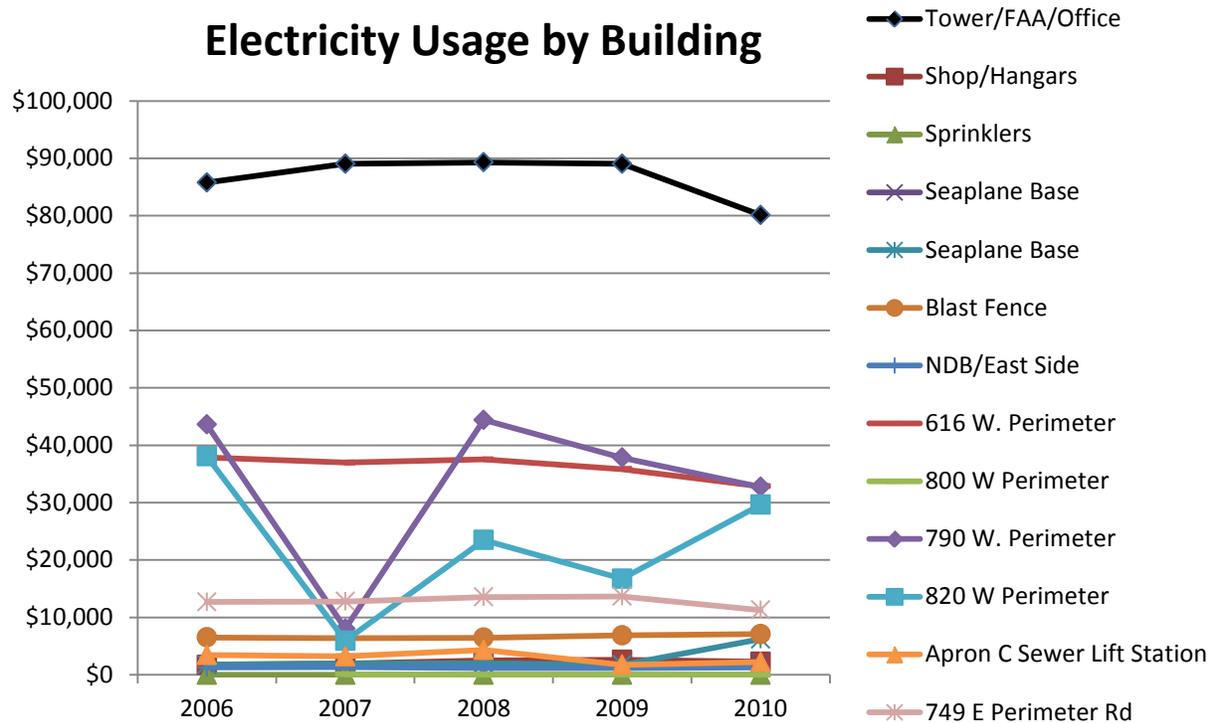


Indirect Expenses



Energy

Annual Expense: \$24k-\$32k per year



Largest energy User –

Tower/FAA/Office @ 616 W Perimeter – \$8k/yr (80k-90k kWh/yr)

2010 Saw a 10% decrease in kWh usage

Other Large Energy Users –

Field Lights @ 616 W. Perimeter – \$3.5k/yr (32k-37k kWh/year)

Airport Maintenance Shop @ 790 W Perimeter – \$3.4k-\$5k/year (32k-45k kWh/year) – 2007 dropped to 8k kWh.

820 W Perimeter – Unleased (73,849 sq ft), Kenmore & Kaynan, AirO Ramp, Old Boeing Avionics

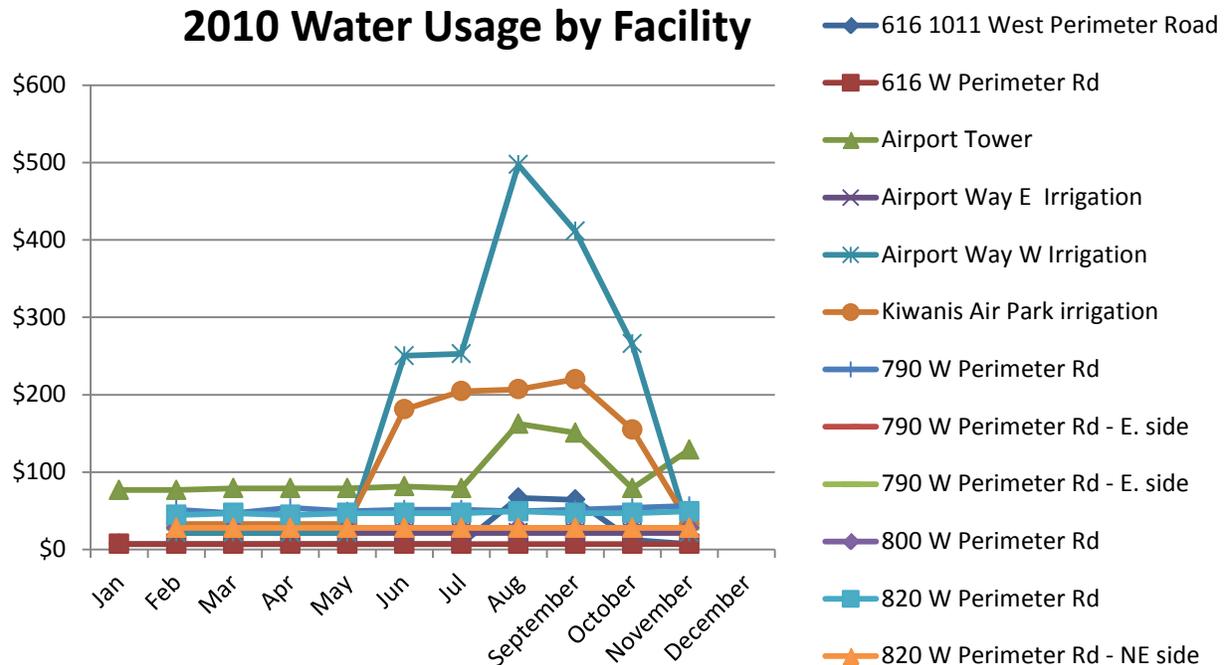
\$1.8-\$3.9k/yr (14k-38k kWh/yr) - 2007 dropped to 6k kWh.

Low Energy Users

Sprinklers @ 244 W. Perimeter Road - \$10 charge per month but no energy usage. If these are not being used, the account may be cancelled to eliminate this small charge.

Water

Total Cost for Surface Water: \$6,551



Largest User: Airport Way W – Irrigation

Other Large Users: Kiwanis Air Park Irrigation, Airport Way E, Airport Tower

Water Billing: Irrigation accounts for 48% of all water expense.

Water expenses peak in June-October due to higher irrigation costs in these months. 70% of water related costs are incurred in these months.

Recommendation:

The use of drought-tolerant plants and xeriscaping may provide a viable alternative to the high degree of irrigation required in the summer months. Additionally, the airport should work with its tenants and community to determine which irrigated grass areas could be allowed to “go brown” during the summer months. This probably is not feasible for external facing landscaping that the community regularly views, but is possible for the interior.

APPENDIX 5
Sustainability Initiatives

Sustainability Initiatives Evaluation

As sustainability initiatives are completed, refined, or removed, 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 Sustainability Management 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 a list of initiatives developed during the Sustainability Management Plan. It is expected that the below list will be supplemented with additional initiatives and refined by change or remove of initiatives as implementation progresses.

Airport Financials

1. Update Cash Flow Model Monthly
2. Lease one vacant parcel annually
3. Track monthly utility charges
4. Lease the 300 Rainier Avenue Building in 2012
5. Partner with energy firms to consider renewable energy projects on residual lands that offset airport costs or generate revenue
6. Develop an Asset Management System which links future capital and operating components of revenues and expenses
7. Create "sub-funds" within the CIP to reserve capital capacity for specific categories of infrastructure, and link to portions of the revenue streams
8. Increase fuel sales
9. Initiate a total cost of ownership system for making decisions
10. Renegotiate leases to reflect more energy efficient building upgrades
11. Create sustainable design standards for new spaces
12. Incorporate sustainability into leases
13. Install water meter/monitor to crosscheck payments
14. Seek government rebates for energy efficiency projects

Airport and Local Economic Values

Initiatives:

1. Prepare for greater lease area needs associated with Boeing 737 Max program
2. Attract an avionics repair shop as an airport tenant
3. Demolish old Boeing Avionics Building (Building 820)
4. SE Corner Land Acquisition and Demolition of Existing Structures
5. North Airport Entrance Rehabilitation
6. Partner with energy firms to consider renewable energy projects that offset airport costs or generate revenue
7. Use Vendors that Reclaim Products
8. Develop tenant diversity categories and targets
9. Develop educational partnerships for skills development and workforce recruiting
10. Remove/recycle/replace inefficient buildings
11. Establish green building/procurement standards

Community Outreach and Education

Initiatives:

1. Continue Airport Tours for Renton Based Community Groups
2. Host RAAC Quarterly Meetings
3. Host Annual Tenant Breakfast meeting
4. Install new banner advertisement on blast fence
5. Conduct tenant needs survey
6. Conduct annual airport open house
7. Partner with local schools to assist with airport programs/Competitions for Ideas
8. Partner with Chamber on a "Chinook Book" type of coupon or perks book for residents and tenants
9. Prepare sustainability scorecard, and post the results on websites and other public forums
10. Improve web presence
11. Green projects summary communications
12. Establish airport sustainability internships, stewardships, and/or public education programs
13. Provide articles highlighting airport actions to Renton Reporter
14. Encourage EAA to conduct "Young Eagle" flights at Renton Airport
15. Conduct events such as displays of historical information, woman flight, aircraft, etc.
16. Share information with impact neighbors for understanding causes and developing solutions

Energy Conservation/ Greenhouse Gases

Initiatives:

1. Purchase New Infield Mower
2. Lighting Upgrade for buildings (Buildings 616 and 790)
3. Exterior lighting upgrades for buildings (buildings 749 and 600)
4. Remove old natural gas heating units and replace with high efficiency heaters
5. Partner with utility to examine energy efficiency initiatives
6. Seek partnership for installation of electric charging stations for electric vehicles
7. Ensure New Building Heating/Ventilation Equipment Does Not Use Chlorofluorocarbon or Hydrochlorofluorocarbon Refrigerants
8. Tenant lighting upgrades (LED)
9. Tower HVAC overhaul
10. Insulate Airport Maintenance Building (Quonset Hut)
11. Reduce annual utility usage by 5%
12. Improve air quality by reducing idle time, stop and go, ancillary vehicles, and similar activities.

Noise from Aircraft Operations

Initiatives:

1. Precision Approach - Develop RNP approaches/departure procedures
2. Annually Update Brochure for Voluntary Noise Abatement Procedures
3. Enhance "fly quiet" training for land based and seaplane pilots and tenants
4. Evaluate berms and blast fences for additional attenuation
5. Provide leadership to ongoing research on aviation noise impacts and mitigation
6. City of Renton and RAAC to take proactive position as it relates to future noise concerns
7. Seek tenants to least noise impacts
8. Require fly quiet training/familiarization into future airport leases
9. Clear visible noise complaint process for public

Operation and Maintenance of Airport Facilities

Initiatives:

1. Reconstruct Taxiway B
2. Annually update Wildlife Hazard Management Plan
3. Airside/Landside Separation (perimeter fencing and gates)
4. Continue annual Runway Safety Action Team meetings
5. Apron C storm drain pipe repair
6. Annual storm water catch basin cleaning
7. Control invasive weeds on airport
8. Fire Water System Rehab
9. Seaplane launch ramp replacement
10. Maintenance Dredging and Shoreline Mitigation for seaplane facilities
11. Conduct pilot project on alternative grasses
12. Develop a pavement management program
13. Install two Airfield Cameras
14. Airport Office Renovation
15. Develop asset management system and evaluate changes in qualities and quantities of preventive maintenance and renewal activities for each asset class
16. Explore light duty electric vehicles for airport fleet or "right sizing" fleet by replacing older trucks with cars as available
17. Develop a "green" landscaping and maintenance practices plan (i.e., limit chemical, water and energy use, use of native materials, etc.).
18. Use of deicing fluids on the runway
19. Purchase runway broom and plow truck
20. Perform annual survey and prioritize maintenance items for the year
21. Replace trees that could provide hazard to cars and airport, while not attracting birds

Water Quality

Initiatives:

1. Install pervious pavements when repaving parking lots, where appropriate/available
2. Develop a Database of Bulk Storage Containers, Chemical Use Database, and Develop a Chemical Storage Policy
3. Utilize Low-toxicity Pesticides/Herbicides - Plant Nitrogen-fixing Vegetation
4. Utilize Low Toxicity/Low Biochemical Oxygen Demand Deicing Materials
5. Removal of excess or redundant pavement
6. Rainwater catchment/bioswale system to reduce runoff
7. Add water separators for hangars. Incorporate into new facilities
8. Perform vehicle and equipment maintenance indoors, when possible
9. Install moisture sensors for irrigation
10. Consolidate Stormwater Protection Plan and pass it along to tenants

The following tables illustrate a range of potential initiatives the Airport will consider when working to achieve each of the sustainability goals. Chapter D includes the same information for only those initiatives that were identified as stakeholder priorities (denoted in the table below). To assist in reviewing the initiatives, the tables include a description of the initiative, as well as the potential benefits, any barriers/effects to be avoided and minimized, and the relative financial and time/effort cost for airport staff.

For the Benefits column, each initiative is examined relative to the previously identified sustainability focus categories including:

- Airport Financial
- Airport and Local Economic Values
- Community Outreach and Education
- Energy Conservation/Greenhouse Gases
- Noise from Aircraft Operations
- Operation and Maintenance of the Airport
- 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.

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.

The Financial Cost column graphically illustrates the relative cost of an initiative, denoted by a red dollar sign for a net cost and a green dollar sign for initiatives with a financial benefit for the Airport. In many cases, there is an initial cost to implement an initiative, but it results in a net-positive financial benefit for the Airport over the long term, based on the Return on Investment (ROI). In these cases, the reader will note both green and red dollar signs denoting this cost/benefit relationship for those initiatives. The more dollar signs, the more relative cost or benefit an initiative will have.

The Time/Effort Column graphically illustrates the relative cost to the Airport in terms of staff time. Renton Municipal Airport has a limited staff and therefore increases in burden on staff required to implement the initiatives needs to be taken into account. In this column, the clock red clock graphic illustrates the relative time impact on airport staff, and the green clock graphic illustrates a time savings for staff. In many cases, there is an initial cost of time/effort to implement an initiative, but it results in a net-positive benefit for long-term staff time. In these cases, the reader will note both green and red dollar clock graphics denoting this cost/benefit relationship for those initiatives. The more clocks in a cell, the more relative time required or saved as a result of the initiative.

The final column (Stakeholder Priorities) illustrates the results of the stakeholder coordination conducted on the initiatives. The draft initiatives were presented to the Renton Airport Advisory Committee to review, discuss, revise and prioritize the draft list of sustainability initiatives. During the Renton Airport Advisory Committee meeting conducted January 31st, 2012, members of the Committee provided verbal 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 polling was conducted by providing each member of the Renton Airport Advisory Committee a series of dots. Three dots were provided for each category and the Committee members were asked to place the three dots on those three initiatives that they felt were most important; however, individuals were not required to place all of their dots. Additionally, each Committee member was provided with three additional dots that could be placed on any initiative within any category to identify the 1st, 2nd, and 3rd most important initiatives across the full range. All these rankings were compiled and those initiatives that were selected as Stakeholder Priorities are denoted with a star and a yellow highlighted cell.

Initiatives: Table Legend



: Low level of time/effort cost for Airport staff



: Medium level of time/effort cost for Airport staff



: High level of time/effort cost for Airport staff



: Low level of time/effort savings



: Medium level of time/effort savings



: High level of time/effort savings



: Time/effort cost, Offset by time/effort savings

\$: Low financial cost

\$\$: Medium financial cost

\$\$\$: High financial cost

\$: Low financial return

\$\$: Medium financial return

\$\$\$: High financial return

\$**\$**: Cost/financial return offset

*****: Denotes Stakeholder Priority

Sustainability Initiatives

<i>Airport Financial Initiatives</i>	<i>Description</i>	<i>Primary Benefits</i>	<i>Barriers/Effects to be Avoided/Minimized</i>	<i>Financial Cost</i>	<i>Time/Effort</i>	<i>Stakeholder Priorities</i>
Update Cash Flow Model Monthly	Tracking of monthly cash flow to highlight potential areas for improvement/opportunities.	-Financial	-Time intensive	\$		*
Lease one vacant parcel annually	Focus on strengthening the Airport's leased area base.	-Financial -Airport/ Local Economic Value	- Noise (additional aircraft operations) - Water Quality	\$\$		
Track monthly utility charges	Focus on Airport owned facilities' consumption of energy, water, etc.	- Financial - Energy Conservation/ GHG	- Time intensive	\$		*
Lease the 300 Rainier Avenue Building in 2012	Focus on leasing 300 Rainier Avenue building to help stimulate growth at the airport.	- Financial - Airport/ Local Economic Value	- Time intensive - Noise (additional aircraft operations)	\$\$		
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).	\$\$\$ \$\$\$		*

<i>Airport Financial Initiatives</i>	<i>Description</i>	<i>Primary Benefits</i>	<i>Barriers/Effects to be Avoided/Minimized</i>	<i>Financial Cost</i>	<i>Time/Effort</i>	<i>Stakeholder Priorities</i>
Develop an Asset Management System which links future capital and operating components of revenues and expenses	Develop a system to help allocate funds and better manage assets and reduce impact of operation and maintenance on the Airport.	-Financial -Airport/ Local Economic Value -Energy Conservation/ GHG -Reduce Operation and Maintenance Impacts	-Time cost upfront, followed by time savings.	\$		
Create "sub-funds" within the CIP to reserve capital capacity for specific categories of infrastructure, and link to portions of the revenue streams	Initiative would help track funds by categories and revenue streams.	-Financial -Airport/ Local Economic Value -Energy Conservation/ GHG -Reduce Operation and Maintenance Impacts	-Low time cost, but requires updating at various points over the long term.	\$		
Increase fuel sales	Strive to increase revenue from fuel sales, which could occur through additional marketing, new leases, etc.	-Financial	-Noise (additional aircraft operations)	\$\$\$		
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 lifecycle.	-Financial -Airport/ Local Economic Value -Energy Conservation/ GHG -Reduce Operation and Maintenance Impacts	-Initial cost to develop, but return over the long term.	\$\$		*
<i>Airport Financial Initiatives</i>	<i>Description</i>	<i>Primary Benefits</i>	<i>Barriers/Effects</i>	<i>Financial</i>	<i>Time/</i>	<i>Stake-</i>

			<i>to be Avoided/Minimized</i>	Cost	Effort	holder Priorities
Renegotiate leases to reflect more energy efficient building upgrades	Work with lease-holders to take into account upgrades to buildings and financial benefits from energy consumption reduction.	-Financial -Airport/ Local Economic Value -Energy Conservation/ GHG	-Initial time consumption to work with lease-holders	\$		
Create sustainable design standards for new spaces	Develop sustainable standards for new buildings, facilities, etc. constructed on the Airport. This could include the creation of a sustainable construction management plan.	-Financial -Airport/ Local Economic Value -Community Outreach -Energy Conservation/ GHG -Water Quality	-Initial time/cost to develop -Potentially higher implementation/construction costs	\$\$ \$\$		
Incorporate sustainability into leases	Develop sustainability requirements for leaseholders to meet as part of a lease agreement.	-Financial -Airport/ Local Economic Value -Community Outreach -Energy Conservation/ GHG -Reduce Operation/ Maintenance -Water Quality	-Initial time consumption to work with lease-holders	\$		

Airport Financial Initiatives	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Install water meter/monitor to crosscheck payments	Track water consumption and payments to determine use compared to cost.	-Financial -Airport/ Local Economic Value -Water Quality	-Initial cost to install monitors, but potential to save money if opportunities to reduce consumption are identified or if consumption/payment do not track	\$ \$		
Seek government rebates for energy efficiency projects	Research local, state and federal programs for energy efficiency or renewable energy rebates to reduce energy consumption at the Airport.	-Financial -Airport/ Local Economic Value -Community Outreach -Energy Conservation/ GHG -Reduce Operation/ Maintenance	-Initial cost to research/install, but high potential ROI	\$\$\$ \$\$\$		

<i>Airport and Local Economic Values</i>	<i>Description</i>	<i>Primary Benefits</i>	<i>Barriers/Effects to be Avoided/Minimized</i>	<i>Financial Cost</i>	<i>Time/Effort</i>	<i>Stakeholder Priorities</i>
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	\$\$		*
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)	\$\$		*
Demolish old Boeing Avionics Building (Building 820)	Remove old building to create additional space for facilities/lease	-Financial -Airport/ Local Economic Value -Water Quality	-Cost, but with potential long term benefits	\$\$ \$\$		
SE Corner Land Acquisition and Demolition of Existing Structures	Acquire property and remove buildings to provide additional space for Airport use/facilities/leases.	-Financial -Airport/ Local Economic Value -Community Outreach	-Cost, but with potential long term benefits	\$\$ \$\$		
North Airport Entrance Rehabilitation	Update the north Airport entrance to be more pleasing and to fit with the community "feel."	-Airport/ Local Economic Value -Community Outreach	-Cost to update	\$\$		

<i>Airport and Local Economic Values</i>	<i>Description</i>	<i>Primary Benefits</i>	<i>Barriers/Effects to be Avoided/Minimized</i>	<i>Financial Cost</i>	<i>Time/Effort</i>	<i>Stakeholder Priorities</i>
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).	\$\$\$ \$\$\$		*
Use Vendors that Reclaim Products	Research use of vendors that reclaim products to increase re-use of materials.	-Airport/ Local Economic Value -Community Outreach	-Potentially higher costs	\$\$		
Develop tenant diversity categories and targets	Examine the existing tenants and develop a plan to find additional tenants within specific categories to increase diversity at the Airport.	-Financial -Airport/ Local Economic Value -Community Outreach -Reduce Operation/ Maintenance	-Noise (additional aircraft operations) -Water Quality	\$\$		
Develop educational partnerships for skills development and workforce recruiting	Work within the community to increase partnerships for improvement of employees and recruiting.	-Airport/ Local Economic Value -Community Outreach	-Time intensive	\$		

Airport and Local Economic Values	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Remove/recycle/replace inefficient buildings	Examine older buildings for efficiency and remove those that are inefficient and considered redevelopment where applicable.	<ul style="list-style-type: none"> -Airport/ Local Economic Value -Energy Conservation/ GHG reduction -Reduce Operation/ Maintenance 	-Airport financial impacts in the short term	\$\$		
Establish green building/procurement standards	Develop standards for new buildings and procurement of sustainable materials for Airport projects.	<ul style="list-style-type: none"> -Airport/ Local Economic Value -Community Outreach -Energy Conservation/ GHG -Reduce Operation/ Maintenance -Water Quality 	-Time consuming for research and development.	\$		

<i>Community Outreach and Education</i>	<i>Description</i>	<i>Primary Benefits</i>	<i>Barriers/Effects to be Avoided/Minimized</i>	<i>Financial Cost</i>	<i>Time/Effort</i>	<i>Stakeholder Priorities</i>
Continue Airport Tours for Renton Based Community Groups	Conduct Airport tours for interested community groups and members.	-Airport/ Local Economic Value -Community Outreach	-Time for Airport staff	\$		*
Host Renton Airport Advisory Committee Quarterly Meetings	Hold advisory committee meetings with stakeholders to discuss pertinent Airport/community issues.	-Airport/ Local Economic Value -Community Outreach	-Time for Airport staff	\$		
Host Annual Tenant Breakfast meeting	Provide an annual breakfast for tenants to increase connections between tenants and help create an Airport “community.”	-Airport/ Local Economic Value -Community Outreach	-Cost for food	\$		
Install new banner advertisement on blast fence	Advertise pertinent events, accolades or updates on the blast-fence banner to increase community awareness of the Airport.	-Airport/ Local Economic Value -Community Outreach	-Cost	\$\$		*
Conduct tenant needs survey	Distribute a tenant needs survey to identify the “wants and needs” of the tenants and help increase long-term stability and relationships with existing tenants.	-Airport/ Local Economic Value -Community Outreach	-Cost of survey	\$		
Conduct 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	\$		*

<i>Community Outreach and Education</i>	<i>Description</i>	<i>Primary Benefits</i>	<i>Barriers/Effects to be Avoided/Minimized</i>	<i>Financial Cost</i>	<i>Time/Effort</i>	<i>Stakeholder Priorities</i>
Partner with local schools to assist with airport programs/Competitions for Ideas	Create a partnership with local schools to have students help with airport programs or provide a competition for ideas on sustainability actions that could be implemented at the Airport.	-Community Outreach	-Time for airport staff	\$		
Partner with Chamber on a "Chinook Book" type of coupon or perks book for residents and tenants	Create a partnership with the Chamber to offer a coupon book for the community related to airport tenants/businesses.	-Airport/ Local Economic Value -Community Outreach	-Airport Financials; initial cost of incentives, but could stimulate use of Airport	\$		
Prepare sustainability scorecard, and post the results on websites and other public forums	Prepare a scorecard to illustrate the successes of the sustainability program at the Airport and publish on the websites and in other locations.	-Airport/ Local Economic Value -Community Outreach	-Time for airport staff	\$		
Improve web presence	Improve the web presence of the Airport through additional use of the website, social media and other industry sites.	-Financial -Airport/ Local Economic Value -Community Outreach	-Time for airport staff	\$		
Green projects summary communications	Summarize green projects accomplished at the Airport and communicate the successes through methods such as the internet, brochures, conferences, etc.	-Airport/ Local Economic Value -Community Outreach	-Time for airport staff and cost of printing	\$		

<i>Community Outreach and Education</i>	<i>Description</i>	<i>Primary Benefits</i>	<i>Barriers/Effects to be Avoided/Minimized</i>	<i>Financial Cost</i>	<i>Time/Effort</i>	<i>Stakeholder Priorities</i>
Establish airport sustainability internships, stewardships, and/or public education programs	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	\$		*
Provide articles highlighting airport actions to Renton Reporter	Write and distribute press releases on airport actions to the local paper to highlight programs and accolades related to the Airport and increase visibility of airport assets.	-Airport/ Local Economic Value -Community Outreach	-Time for airport staff	\$		
Encourage EAA to conduct “Young Eagle” flights at Renton Airport	Encourage the EAA to conduct Young Eagle flights for emerging pilots at the Airport.	-Airport/ Local Economic Value -Community Outreach	-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	\$		*
Share information with impact neighbors for understanding causes and developing solutions	Create an information sharing site to share information on potential impacts in operations etc. that could impact the surrounding communities.	-Airport/ Local Economic Value -Community Outreach	-Time for airport staff	\$		*

Energy Conservation/Greenhouse Gases	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Purchase New Infield Mower	Purchase a new, more efficient infield mower to reduce fuel burn, increase efficiency and reduce GHG emissions.	-Financial -Energy Conservation/ GHG -Reduce Operation/ Maintenance	-Initial cost of equipment; should be offset by reduction in consumption	\$\$ \$\$		
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	\$ \$		*
Exterior lighting upgrades for buildings (buildings 749 and 600)	Upgrade exterior lighting to high efficiency for buildings 749 and 600.	-Financial -Community Outreach -Energy Conservation/ GHG -Reduce Operation/ Maintenance	-Initial cost of lights; should be offset by reduction in consumption	\$ \$		
Remove old natural gas 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	\$\$ \$		*

Energy Conservation/Greenhouse Gases	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
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.	\$\$ \$\$		*
Seek partnership for installation of electric charging stations for electric vehicles	Look at partnership with tenants, the City, or community stakeholders to install electric charging stations at the Airport.	-Financial -Community Outreach -Energy Conservation/ GHG	-Airport Financials; initial cost of implementation,	\$\$		
Ensure New Building Heating/Ventilation Equipment Does Not Use Chlorofluorocarbon or Hydrochlorofluorocarbon Refrigerants	Construct new buildings with HVAC systems and appliances that do not use chlorofluorocarbons or hydrochlorofluorocarbon refrigerants.	-Financial -Energy Conservation/ GHG	-Cost of implementation	\$\$		
Tenant lighting upgrades (LED)	Upgrade tenant lighting for LED. Examine partnerships to provide the funds to complete these upgrades.	-Financial -Energy Conservation/ GHG	-Initial costs for airport/tenants; ROI	\$ \$		
Tower HVAC overhaul	Replace the HVAC system in the tower with a new, energy efficient model.	-Financial -Energy Conservation/ GHG	-High initial cost; long-term ROI	\$\$\$ \$\$\$		

Energy Conservation/Greenhouse Gases	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Insulate Airport Maintenance Building (Quonset Hut)	Upgrade the insulation for the Airport Maintenance Building to reduce heating/cooling costs and associated energy consumption.	-Financial -Energy Conservation/ GHG	-Initial costs for airport; ROI	\$\$ \$\$		*
Reduce annual utility usage by 5%	Reduce the Airport's annual utility use by 5% through energy efficiency sustainability measures.	-Financial -Community Outreach -Energy Conservation/ GHG	-Expense for implementing initiatives; ROI	\$\$ \$\$		
Improve air quality by reducing idle time, stop and go, ancillary vehicles, and similar activities	Reduce emissions by decreasing idle time, stop and go, etc. through on-airport programs such as coordination with users.	-Financial -Community Outreach -Energy Conservation/ GHG	-Time for airport staff	\$		

Noise from Aircraft Operations	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Precision Approach - Develop RNP approaches/departure procedures	Develop a Required Navigation Procedure for approach/departure for aircraft with the necessary navigation equipment.	<ul style="list-style-type: none"> -Financial -Airport/ Local Economic Value -Community Outreach -Energy Conservation/ GHG -Reduce Noise -Reduce Operation/ Maintenance 	-Not all aircraft are equipped to fly these procedures	\$		*
Annually Update Brochure for Voluntary Noise Abatement Procedures	Update the Voluntary Noise Abatement Brochure every year to include new procedures or additional information.	<ul style="list-style-type: none"> -Community Outreach -Reduce Noise -Reduce Operation/ Maintenance 	-Time of staff	\$		*
Enhance "fly quiet" training for land based and seaplane pilots and tenants	Provide a more robust fly quiet training for pilots and tenants of the Airport to ensure that they understand the noise sensitivities and methods they can use to reduce their impact.	<ul style="list-style-type: none"> -Airport/ Local Economic Value -Community Outreach -Reduce Noise -Reduce Operation/ Maintenance 	-Time of airport staff	\$		*

Noise from Aircraft Operations	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
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	\$\$\$		*
Provide leadership to ongoing research on aviation noise impacts and mitigation	The Airport will provide leadership to continually research and attempt to mitigate noise impacts where able.	-Airport/ Local Economic Value -Community Outreach -Reduce Noise	-Time for airport staff -Financial: Costs for studies/implementation	\$\$		
City of Renton and Renton Airport Advisory Committee to take proactive position as it relates to future noise concerns	The Renton Airport Advisory Committee and the City will work together to address noise issues now and in the future.	-Airport/ Local Economic Value -Community Outreach -Reduce Noise	-Airport Financials; initial cost of implementation,	\$\$		
Seek tenants with least noise impact	The Airport, where able, will seek tenants with the least noise impact, but taking into account financial, operational and other social conditions.	-Airport/ Local Economic Value -Community Outreach -Reduce Noise	-Potential cost to Airport in terms of revenue depending on tenant lease type.	\$		

Noise from Aircraft Operations	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Require fly quiet training/familiarization into future airport leases	Require that all new tenants take fly quiet training as part of their lease agreement.	-Airport/ Local Economic Value -Community Outreach -Reduce Noise	-Time of airport staff	\$		
Clear visible noise complaint process for public	Institute and keep up with a clear, visible noise complaint process for the public.	-Community Outreach -Reduce Noise	-Time of airport staff	\$		

Operation and Maintenance of Airport Facilities	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Reconstruct Taxiway B	Reconstruction Taxiway B	-Airport/ Local Economic Value -Reduce Operation/ Maintenance	-Financial: large initial cost	\$\$\$\$		
Annually update Wildlife Hazard Management Plan	Update the Wildlife Hazard Management Plan to include any new information and ensure the best possible information and practices are included in the plan	-Airport/ Local Economic Value -Community Outreach -Reduce Operation/ Maintenance	-Study cost	\$		
Airside/Landside Separation (perimeter fencing and gates)	Increase the effectiveness of the airside/landside separation through the addition of perimeter fencing and gates.	-Community Outreach -Reduce Operation/ Maintenance	-Financial cost	\$\$		
Continue annual Runway Safety Action Team meetings	Continue to hold annual runway safety action team meetings to increase safety at the Airport.	-Airport/ Local Economic Value -Reduce Operation/ Maintenance	-Time of airport staff	\$		

Operation and Maintenance of Airport Facilities	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Apron C storm drain pipe repair	Repair the Apron C storm drain pipe	-Reduce Operation/Maintenance -Water Quality	-Time for airport staff -Financial cost	\$\$		
Annual storm water catch basin cleaning	Annually clean the storm water catch basin.	-Reduce Operation/Maintenance -Water Quality	-Airport Financials; cost of cleaning	\$\$		
Control invasive weeds on airport	Control/reduce the invasive weed species on Airport lands.	-Community Outreach -Reduce Operation/Maintenance	-Cost of implementation	\$		
Fire Water System Rehab	Rehabilitate the fire water system on the Airport.	-Reduce Operation/Maintenance	-Cost of rehab	\$\$		
Seaplane launch ramp replacement	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	\$\$		*
Maintenance Dredging and Shoreline Mitigation for seaplane facilities	Mitigate along the shoreline for impacts on the shoreline from the seaplane base dredging.	-Airport/ Local Economic Values -Reduce Operation/Maintenance -Water Quality	-Cost -Potential impact on seaplane operation during mitigation -Potential increase in wildlife hazards	\$\$\$		*

Operation and Maintenance of Airport Facilities	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Conduct pilot project on alternative grasses	Research the use of alternative grasses to reduce mowing and other maintenance activities.	<ul style="list-style-type: none"> -Financial -Airport/ Local Economic Values -Energy Conservation/ GHG -Reduce Operation/ Maintenance -Water Quality 	-Initial cost of implementation	<p style="text-align: center;">\$</p> <p style="text-align: center;">\$</p>		
Develop a pavement management program	Develop a pavement management program	<ul style="list-style-type: none"> -Financial -Airport/ Local Economic Values -Noise Reduction -Reduce Operation/ Maintenance -Water Quality 	-Time for airport staff	\$		
Install two Airfield Cameras	Install two cameras on the airfield.	<ul style="list-style-type: none"> -Airport/ Local Economic Values -Reduce Operation/ Maintenance 	-Financial Cost	\$\$		

Operation and Maintenance of Airport Facilities	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Airport Office Renovation	Renovate and update the Airport offices.	-Community Outreach -Energy Conservation/ GHG -Reduce Operation/ Maintenance	-Cost of Updates; ROI	\$\$ \$\$		
Develop asset management system and evaluate changes in qualities and quantities of preventive maintenance and renewal activities for each asset class	Develop a system to help evaluate changes and best allocate resources for maintenance and management on the Airport.	-Financial -Airport/ Local Economic Values -Energy Conservation/ GHG -Reduce Operation/ Maintenance	-Initial cost of study	\$		
Explore light duty electric vehicles for airport fleet or "right sizing" fleet by replacing older trucks with cars as available	Replace/update airport vehicles with electric or other green vehicle types.	-Financial -Energy Conservation/ GHG -Reduce Operation/ Maintenance	-Cost of vehicles; ROI	\$ \$		
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	\$ \$		*

Operation and Maintenance of Airport Facilities	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Use of deicing fluids on the runway	Use deicing fluids on the runway in bad weather.	-Energy Conservation/ GHG -Reduce Operation/ Maintenance	-Financial -Community Outreach	\$		
Purchase runway broom and plow truck	Purchase an updated runway broom and plow truck.	-Airport/ Local Economic Values -Reduce Operation/ Maintenance		\$ \$		
Perform annual survey 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	\$		*
Replace trees that could provide hazard to cars and airport, while not attracting birds	Examine the trees in the area to determine if they would be wildlife attractants or hazardous to cars.	-Community Outreach -Reduce Operation/ Maintenance -Water Quality	-Financial	\$		

Water Quality	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Install 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	\$\$\$		*
Develop a Database of Bulk Storage Containers, Chemical Use Database, and Develop a Chemical Storage Policy	Develop a database of chemical containers and storage for reference by staff.	-Community Outreach -Reduce Operation/Maintenance -Water Quality	-Time of staff	\$		
Utilize Low-toxicity Pesticides/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	\$		*
Utilize Low Toxicity/Low Biochemical Oxygen Demand Deicing Materials	Use low toxicity/low biochemical demand deicing materials.	-Airport/ Local Economic Value -Reduce Operation/Maintenance -Water Quality	-Additional cost	\$		
Removal of excess or redundant pavement	Remove additional/excess pavement, where able.	-Financial -Energy Conservation/ GHG -Water Quality	-Increase Operation/Maintenance time	\$		

Water Quality	Description	Primary Benefits	Barriers/Effects to be Avoided/Minimized	Financial Cost	Time/Effort	Stakeholder Priorities
Rainwater catchment/bioswale system to reduce runoff	Implement a rainwater catchment/bioswale system to reduce runoff.	-Reduce Operation/ Maintenance -Water Quality	-Airport Financials -Increase Operation/ Maintenance time	\$\$		
Add water separators for hangars. Incorporate into new facilities	Add water separators into existing and new facilities.	-Airport/ Local Economic Value -Water Quality	-Financial	\$\$		
Perform vehicle and equipment maintenance indoors, when possible	For all vehicle maintenance (when possible), perform indoors.	-Water Quality	-Financial	\$		
Install moisture sensors for irrigation	Install moisture sensors for irrigation to prevent overwatering.	-Financial -Water Quality -Reduce Operation/ Maintenance	-Cost of implementation; ROI	\$		*
Consolidate Storm Water Protection Plan and pass it down to tenants	Consolidate stormwater protection plan and ensure that tenants are informed of the plan and its elements.	-Airport/ Local Economic Values -Reduce Operation/ Maintenance -Water Quality	-Time of airport staff	\$		

APPENDIX 6

**Sustainability Initiatives Polling
Results**

Sustainability Management Plan Initiatives RAAC Meeting Polling Summary

INTRODUCTION. As part of the ongoing Sustainability Management Plan, Renton Municipal Airport conducted a Renton Airport Advisory Committee (RAAC) meeting to review, discuss, revise and prioritize the draft list of sustainability initiatives. During the RAAC meeting conducted January 31st, 2012, members of the RAAC provided verbal 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 polling was conducted by providing each member of the RAAC a series of dots. Three dots were provided for each category and the RAAC members were asked to place the three dots on those three initiatives that they felt were most important; however, individuals were not required to place all of their dots. Additionally, each RAAC member was provided with three additional dots that could be placed on any initiative within any category to identify the 1st, 2nd, and 3rd most important initiatives across the full range.

The following provides a description of the suggested edits to the initiatives, as well as a tally of the dots placed by each. Text edits and additions are shown in **red** text.

Airport Financials

Initiatives	Total Dots	Total First Priority	Total Second Priority	Total Third Priority
1. Update Cash Flow Model Monthly	1			
2. Lease one vacant parcel annually				
3. Track monthly utility charges	5			
4. Lease the 300 Rainier Avenue Building in 2012	4			
5. Partner with energy firms to consider renewable energy projects on residual lands that offset airport costs or generate revenue	7			
6. Recycle Used Oil				
7. Develop an Asset Management System which links future capital and operating components of revenues and expenses	5		1	
8. Create "sub-funds" within the CIP to reserve capital capacity for specific categories of infrastructure, and link to portions of the revenue streams				
9. Increase fuel sales	4		1	
10. Initiate a total cost of ownership system for making decisions	7		1	
11. Renegotiate leases to reflect more energy efficient building upgrades	2			
12. Create sustainable design standards for new spaces	2			
13. Incorporate sustainability into leases				
14. Install water meter/monitor to crosscheck payments	1			
15. <u>Seek government rebates for energy efficiency projects</u>	1			
Total	39		3	

Airport and Local Economic Values

Initiatives	Total Dots	Total First Priority	Total Second Priority	Total Third Priority
1. Prepare for greater lease area needs associated with Boeing 737 Max program	7		1	
2. Attract an avionics repair shop as an airport tenant	7	2	1	2
3. Demolish old Boeing Avionics Building (Building 820)				
4. SE Corner Land Acquisition and Demolition of Existing Structures	5			
5. North Airport Entrance Rehabilitation	3			
6. Partner with energy firms to consider renewable energy projects that offset airport costs or generate revenue	8	2		
7. Use Vendors that Reclaim Products				
8. Develop tenant diversity categories and targets				
9. Develop educational partnerships for skills development and workforce recruiting	1			
10. Remove/recycle/replace inefficient buildings	5			
11. Establish green building/procurement standards	2			
Total	38	4	2	2

Community Outreach and Education

Initiatives	Total Dots	Total First Priority	Total Second Priority	Total Third Priority
1. Continue Airport Tours for Renton Based Community Groups	5			
2. Host RAAC Quarterly Meetings	1			
3. Host Annual Tenant Breakfast meeting	2			
4. Install new banner advertisement on blast fence				
5. Conduct tenant needs survey	2			
6. Conduct annual airport open house	6		1	
7. Partner with local schools to assist with airport programs/Competitions for Ideas	3			
8. Partner with Chamber on a "Chinook Book" type of coupon or perks book for residents and tenants				
9. Prepare sustainability scorecard, and post the results on websites and other public forums	2			
10. Improve web presence				
11. Green projects summary communications	1			
12. Establish airport sustainability internships, stewardships, and/or public education programs	6			1
13. <u>Provide articles highlighting airport actions to Renton Reporter</u>	4			
14. <u>Encourage Alaska Airlines to conduct "Young Eagle" flights at Renton Airport</u>	1			
15. <u>Conduct events such as displays of historical info, woman flight, aircraft, etc.</u>	5		1	
16. <u>Share information with impact neighbors for understanding causes and developing solutions</u>	4		1	
Total	42		3	1

Energy Conservation/ Greenhouse Gases

Initiatives	Total Dots	Total First Priority	Total Second Priority	Total Third Priority
1. Purchase New Infield Mower	1			
2. Lighting Upgrade for buildings (Buildings 616 and 790)	5			
3. Exterior lighting upgrades for buildings (buildings 749 and 600)				
4. Remove old natural gas heating units and replace with high efficiency heaters	9			1
5. Partner with utility to examine energy efficiency initiatives	8		1	
6. Seek partnership for installation of electric charging stations for electric vehicles	2			
7. Ensure New Building Heating/Ventilation Equipment Does Not Use Chlorofluorocarbon or Hydrochlorofluorocarbon Refrigerants	2			
8. Tenant lighting upgrades (LED)	3			
9. Tower HVAC overhaul	2			1
10. Insulate Airport Maintenance Building (Quonset Hut)	2			
11. <u>Reduce annual utility usage by 5%</u>	2			
12. <u>Improve air quality by reducing idle time, stop and go, ancillary vehicles, and similar activities</u>	2			
Total	38		1	2

Noise from Aircraft Operations

Initiatives	Total Dots	Total First Priority	Total Second Priority	Total Third Priority
1. Precision Approach - Develop RNP approaches/departure procedures	7	1	1	
2. Annually Update Brochure for Voluntary Noise Abatement Procedures	6			
3. Enhance "fly quiet" training for pilots and tenants	5			
4. Evaluate berms and blast fences for additional attenuation	5	1		
5. <u>Provide leadership to ongoing research on aviation noise impacts and mitigation</u>	4			
6. <u>City of Renton and RAAC to take proactive position as it relates to future noise concerns</u>	2			
7. <u>Seek tenants with least noise impact</u>	3	2		
8. <u>Require fly quiet training/familiarization into future airport leases</u>				
9. <u>Clear visible noise complaint process for public</u>	3			
Total	35	4	1	

Operation and Maintenance of Airport Facilities

Initiatives	Total Dots	Total First Priority	Total Second Priority	Total Third Priority
1. Reconstruct Taxiway B			1	2
2. Annually update Wildlife Hazard Management Plan	1			
3. Airside/Landside Separation (perimeter fencing and gates)	1			
4. Continue annual Runway Safety Action Team meetings				
5. Apron C storm drain pipe repair	2			
6. Annual storm water catch basin cleaning	1			
7. Control invasive weeds on airport	1			
8. Fire Water System Rehab	1			
9. Seaplane launch ramp replacement	6	1		
10. Maintenance Dredging and Shoreline Mitigation for seaplane facilities	7	3	1	1
11. Conduct pilot project on alternative grasses				
12. Develop a pavement management program	2			
13. Install two Airfield Cameras	1			
14. Airport Office Renovation				
15. Develop asset management system and evaluate changes in qualities and quantities of preventive maintenance and renewal activities for each asset class	3		1	1
16. Explore light duty electric vehicles for airport fleet or "right sizing" fleet by replacing older trucks with cars as available				

Operation and Maintenance of Airport Facilities (continued)

Initiatives	Total Dots	Total First Priority	Total Second Priority	Total Third Priority
17. Develop a “green” landscaping and maintenance practices plan (i.e., limit chemical, water and energy use, use of native materials, etc.).	5			1
18. Use of deicing fluids on the runway				
19. Purchase runway broom and plow truck	4			
20. <u>Perform annual survey and prioritize maintenance items for the year</u>	5	1		
21. <u>Replace trees that could provide hazard to cars and airport, while not attracting birds</u>	1			
Total	41	5	3	5

Water Quality

Initiatives	Total Dots	Total First Priority	Total Second Priority	Total Third Priority
1. Install pervious pavements when repaving parking lots <u>where appropriate/available</u>	7			
2. Develop a Database of Bulk Storage Containers, Chemical Use Database, and Develop a Chemical Storage Policy	5			
3. Utilize Low-toxicity Pesticides/Herbicides - Plant Nitrogen-fixing Vegetation	8		1	1
4. Utilize Low Toxicity/Low Biochemical Oxygen Demand Deicing Materials	4			1
5. Removal of excess or redundant pavement	1			
6. Rainwater catchment/bioswale system to reduce runoff	4			
7. Add water separators for hangars. Incorporate into new facilities	3			
8. Perform vehicle and equipment maintenance indoors, when possible				
9. Install moisture sensors for irrigation	4			
10. <u>Consolidate Storm Water Protection Plan and pass it down to tenants</u>	2			
Total	38		1	2

Airport Financials

1	Update Cash Flow Model Monthly	1						
2	Lease one vacant parcel annually							
3	Track monthly utility charges	1	1	1	1	1	5	
4	Lease the 300 Rainier Avenue Building in 2012	1	1	1	1	4		
5	Partner with energy firms to consider renewable energy projects on residual lands that offset airport costs or generate revenue	1	1	1	1	1	1	7
6	Recycle Used Oil							
7	Develop an Asset Management System which links future capital and operating components of revenues and expenses	1	1	1	1	1	5	
8	Create "sub-funds" within the CIP to reserve capital capacity for specific categories of infrastructure, and link to portions of the revenue streams							
9	Increase fuel sales	1	1	1	1	1	5	
10	Initiate a total cost of ownership system for making decisions	1	1	1	1	1	1	8
11	Renegotiate leases to reflect more energy efficient building upgrades	1	1	2				
12	Create sustainable design standards for new spaces	1	1	2				
13	Incorporate sustainability into leases							
14	Install water meter/monitor to crosscheck payments	1						
15	Seek gov rebates for EE upgrades	1						
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24								
25	NO Opinion							

Community Outreach and Education

1	Continue Airport Tours for Renton Based Community Groups				5
2	Host RAAC Quarterly Meetings				
3	Host Annual Tenant Breakfast meeting		2		
4	Install new banner advertisement on blast fence				
5	Conduct tenant needs survey		2		
6	Conduct annual airport open house				6
7	Partner with local schools to assist with airport programs/Competitions for Ideas		3		
8	Partner with Chamber on a "Chinook Book" type of coupon or perks book for residents and tenants				
9	Prepare sustainability scorecard, and post the results on websites and other public forums		2		
10	Improve web presence				
11	Green projects summary communications				
12	Establish airport sustainability internships, stewardships, and/or public education programs				7
13	Provide articles highlighting airport actions to "Renton Reporter"		4		
14	Encourage AA to hold "Young Eagles" flights @ airport				
15	Other events: Displays of historical/women's or other aircraft				6
16	Share info. w/ impacted neighborhoods for causes + solutions				5
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19					
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24					
25	NO Opinion				



Aircraft Noise

1	Precision Approach - Develop RNP approaches/departure procedures	9
2	Annually Update Brochure for Voluntary Noise Abatement Procedures <i>& Distribution</i>	6
3	Enhance "fly quiet" training for pilots and tenants	5
4	Evaluate berms and blast fences for additional attenuation	6
5	Provide leadership to ongoing research on aviation noise impacts + mitigation	4
6	City of Renton + RAAC take proactive position as it relates to <u>future noise concerns</u>	2
7	Seek tenants w/ least noise impact as part of study	5
8	Require "Fly quiet" training ^{for tenants} into future airport leases	
9	Clear, visible noise compliance process for public	3
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25	NO Opinion	



Operation and Maintenance of Facilities

1	Reconstruct Taxiway B	11	3
2	Annually update Wildlife Hazard Management Plan		
3	Airside/Landside Separation (perimeter fencing and gates)		
4	Continue annual Runway Safety Action Team meetings		
5	Apron C storm drain pipe repair		2
6	Annual storm water catch basin cleaning		
7	Control invasive weeds on airport		
8	Fire Water System Rehab		
9	Seaplane launch ramp replacement		7
10	Maintenance Dredging and Shoreline Mitigation for Seaplane Airport		12
11	Conduct pilot project on alternative grasses		
12	Develop a pavement management program		2
13	Install two Airfield Cameras		
14	Airport Office Renovation		
15	Develop asset management system and evaluate changes in qualities and quantities of preventive maintenance and renewal activities for each asset class		5
16	Explore light duty electric vehicles for airport fleet or "right sizing" fleet by replacing older trucks with cars as available		
17	Develop a "green" landscaping and maintenance practices plan (i.e., limit chemical, water and energy use, use of native materials, etc.).		6
18	Use of deicing fluids on the runway		
19	Purchase runway broom and plow truck		4
20	Perform annual survey + prioritize maintenance items for next 12 months		6
21	Replace trees that could provide hazard to cars, airport, not attracting birds		
22			
23			
24			
25	NO Opinion		

Water Quality

1	Install pervious pavements when repaving parking lots <i>where appropriate/available</i>	Water Quality	7										
2	Develop a Database of Bulk Storage Containers, Chemical Use Database, and Develop a Chemical Storage Policy	Water Quality	5										
3	Utilize Low-toxicity Pesticides/Herbicides - Plant Nitrogen-fixing Vegetation	Water Quality	10										
4	Utilize Low Toxicity/Low Biochemical Oxygen Demand Deicing Materials	Water Quality	5										
5	Removal of excess or redundant pavement	Water Quality	1										
6	Rainwater catchment/bioswale system to reduce runoff	Water Quality	4										
7	Add water separators for hangars. Incorporate into new facilities	Water Quality	3										
8	Perform vehicle and equipment maintenance indoors, when possible	Water Quality	4										
9	Install moisture sensors for irrigation	Water Quality	4										
10	<i>CONSOLIDATE SWPP AND FLOW IT DOWN TO TENANTS</i>	Water Quality	2										
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25	NO Opinion	Water Quality											

