Fremont County Airport
Airport Sustainability Plan

Developed on May 16, 2016

Acknowledgements

This report was produced using the Colorado Department of Transportation (CDOT) Division of Aeronautics Sustainability Tool Kit (Tool Kit). The Tool Kit provides guidance, instruction, and a simple process for each General Aviation (GA) airport in Colorado to create an Airport Sustainability Plan.

The CDOT Statewide GA Airport Sustainability Program is a first-of-its-kind project to provide tools and guidance for Colorado GA airports to prepare customized sustainability plans and identify ways to enhance sustainability within economic, operational, environmental, and social contexts. The program was funded in part by a grant from the Federal Aviation Administration (FAA) as part of its pilot program on sustainability planning.

Gratitude also to the Fremont county Finance Office and airport management for investing the time and effort to complete the Fremont County Airport Sustainability Plan.

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1 Introduction to Sustainability

Sustainability is a complex term that has several commonly used definitions depending on the industry. Most definitions of sustainability are based on a concept of a Triple Bottom Line (fiscal health, social responsibility, and environmental stewardship)[1]. For the airport industry, the Triple Bottom Line also includes operational efficiency to emphasize the importance of safety and efficiency at airports. The Airports Council International – North America (ACI-NA) defines sustainability for airports as:

"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" [2]

Sustainability is an important framework for airports because it represents a truly complete approach to efficiently and responsibly operating the core business in an increasingly complex system while helping identify opportunities for innovation. By applying sustainability principles, airports are using a framework that can help reduce costs, reduce risks, improve performance, build support, and create a positive work environment. Most importantly, this framework also helps airports plan for the future by making sure that the core service is stable while identifying ways to grow.

Figure 1.1 EONS Elements of Sustainability (Sustainable Aviation Guidance Alliance, SAGA)

Traditional business decision-making often uses budgetary or financial considerations as its basis, while neglecting or de-prioritizing other elements that do not have a simple dollar value. Applying the framework of sustainability allows for decision-makers to proactively plan for issues like reducing energy consumption or maintaining good community relations rather than just reacting to issues as they arise. It ensures that these traditionally non-core business issues are considered earlier, if appropriate, and are weighed alongside conventional business ideas. Airport sustainability as part of a business strategy can have many benefits, such as an improved user experience, reduced operational costs, reduced environmental footprints, improved community relations, growth in the regional economy, or opportunities to use new technologies.

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[1] The "triple bottom line" approach represents the three components of sustainable development: environmental, social, and economic. "Sustainable Development" was conceptualized by the Brundtland Commission of the United Nations in 1987, with the "triple bottom line" first fully expressed in John Elkington's Cannibals with Forks: The triple bottom line of 21st century business. Elkington, J. (1997). Cannibals with forks: The triple bottom line of 21st century business. Gabriola Island, BC: New Society Publishers.

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

2 Implementing Sustainability at Fremont County Airport

There is a wide range of regulations, policies, and local influences that affect how an airport is managed, organized, and operated. Some of these influences are established by the federal government, and others are established locally by the jurisdiction that owns and operates the airport. Further, airports use different types of planning and management approaches to guide airport operations and development. An Airport Sustainability Plan is specific to one airport and enables that airport to incorporate sustainability principles and initiatives into its organization and management practices within the context of these regulations, policies, and local influences.

It is important to ensure that sustainability is applied in a way that takes into account the uniqueness of the airport and its setting, operation, or organization. For instance, an action that might improve the energy efficiency of terminals in a major commercial airport may not be as effective or applicable in a smaller airport that provides less (or no) commercial service. In order to apply sustainability in a way that makes sense for a specific airport's unique characteristics, each Airport Sustainability Plan is created based on the resources available or relevant to an airport and the areas and characteristics that the airport identifies as most important (called focus areas).

Fremont County Airport staff have voluntarily prepared this Airport Sustainability Plan as a management tool to comprehensively integrate sustainability concepts into airport planning, management, operations, and development. The plan is structured in a way to allow airport management to capture sustainability practices that can enhance financial viability, improve operational efficiency, conserve natural resources, and express social responsibility. In creating and adopting this Airport Sustainability Plan, the staff of Fremont County Airport demonstrate their commitment to integrating sustainability into management decisions at the airport. Airport staff intend to use this plan as a roadmap for implementing sustainability initiatives that are tailored to the airport's size, service, location, and characteristics.

This Airport Sustainability Plan provides the structure to ensure a balanced and sustainable approach to managing its operations and facilities. To formalize the reasoning and importance of creating and following this plan, airport staff adopted this **Sustainability Mission Statement:**

> *"The Fremont County Airport aims to demonstrate financial responsibility without sacrificing the utmost level of safety that has always been at the core of all airport operations, and to continue to promote environmental stewardship and economic development that is beneficial to the airport and the communities that it serves."*

Fremont County Airport's Sustainability Mission Statement captures the purpose of Fremont County Airport's sustainability program and focuses on the needs and goals unique to the airport.

The Airport Sustainability Plan for Fremont County Airport must itself be sustainable and tailored to financial conditions, staff resources, and local environmental and social considerations. Therefore, these factors were taken into account when creating Goals and Initiatives to meet the Sustainability Mission Statement.

3   Fremont County Airport Sustainability Plan Development

The FAA has been active in promoting sustainability at airports and in 2010 issued guidance for airports to incorporate sustainability as part of their master plans or as individual Airport Sustainability Plans.[3] To facilitate the preparation of Airport Sustainability Plans in the State of Colorado, CDOT Aeronautics secured FAA funding and launched a program to develop a Sustainability Tool Kit that reduces the expense, time, and complexity involved for Colorado GA airports to create Airport Sustainability Plans.

This Airport Sustainability Plan was developed by Fremont County Airport staff using the Sustainability Tool Kit in WIMS[4]. The user-friendly application in WIMS provides airports with a roadmap to develop customized plans that consider and include the following steps:

- ✓ **Developing a Sustainability Mission Statement to guide the philosophy about sustainability at the airport**
- ✓ **Establishing a Baseline Inventory**
- ✓ **Identifying Goals for the Focus Categories and Metrics to measure progress toward achieving Goals**
- ✓ **Identifying Initiatives (implementation actions) that will help the airport to achieve its Goals**
- ✓ **Creating an Implementation Plan for the overall Airport Sustainability Plan and for measuring progress**

This Airport Sustainability Plan is specific to Fremont County Airport and represents the airport's characteristics, the valuable input and experience of airport staff, and the short- and long-term Goals that the airport hopes to achieve. To demonstrate commitment to the plan and to implementing sustainability priciples at the airport, Richard Baker will review the plan annually to track and measure progress of the plan's Goals and Initiatives (see Section 7, Plan-Do-Check-Act Approach). Richard Baker is supported by additional airport staff including:

- Wesley Brandt
- Jim King

4   Airport Background

General aviation airports in the State of Colorado can be funded at three different levels: federal (i.e., FAA), state (i.e., CDOT), and/or local (e.g., counties, municipalities, authorities, associations, private, etc., as the airport sponsor).

Federal funding eligibility applies to those airports that are identified in the *National Plan of Integrated Airport Systems (NPIAS)* which may be eligible to receive grant monies through the FAA's Airport Improvement Program (AIP). The NPIAS identifies those airports included in the national airport

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[3] More information on FAA Sustainability and grant funding can be found online at http://www.faa.gov/airports/environmental/sustainability/
[4] WIMS is a web-based "cloud" solution developed by the Division of Aeronautics to help Division and airport staff track and manage the Colorado Discretionary Grant Program, airport capital improvement plans, avation fuel tax disbursements, and various statewide programs.

system and the role they serve. In the State of Colorado, there are 74 public-use airports of which 49 are identified as NPIAS airports (10 primary, commercial service and 39 non-primary, general aviation).

Fremont County Airport serves CANON CITY and surrounding areas and is classified as a Local airport according to the FAA National Asset Report. The airport is owned by Fremont County and had 13,778 aircraft operations (takeoffs and landings) in 2012. The airport employs approximately 3 employees (full-time equivalent).

Fremont County Airport does not have an air traffic control tower onsite within 620 total acres of airport property. Fremont County Airport has 2 runway(s) , the longest of which is 5,399 feet long and 75 feet wide. There were 79 based aircraft in 2012 and 1 fixed based operator(s) at the airport.

5   Sustainability Plan Process

In developing the Airport Sustainability Plan, Fremont County Airport staff identified Focus Categories, Goals, Metrics and Initiatives uniquely tailored to the airport. These components provide a framework for moving through the sustainability plan process. These terms are discussed in more detail in the following sections, but are briefly defined below:

> **Focus Category:** *Area of interest identified by the airport. Focus Categories narrow the scope of an Airport Sustainability Plan to those elements that are most important and applicable to the airport.*

> **Goal:** *Statement of a desired result, outcome, or level of attainment. Goals are used to realize the overall vision of the airport. They are organized by Focus Category.*

> **Metric:** *Means by which to measure progress in reaching a Goal over time.*

> **Initiative:** *Action that an airport might take to reach or make progress toward one or more Goals.*

It is important to understand the relationship among these components and how they provide a comprehensive process for achieving sustainability. For example, if the focus is on generating revenue, a Goal could be to maximize aeronautical revenue. This Goal could be measured in dollars. Increasing the number of based aircraft might be an Initiative (action) to help achieve this Goal. Figure 5.1 shows the relationships between Focus Categories, Goals, Metrics, and Initiatives.

 Relationship between Focus Categories, Goals, Metrics, and Initiatives
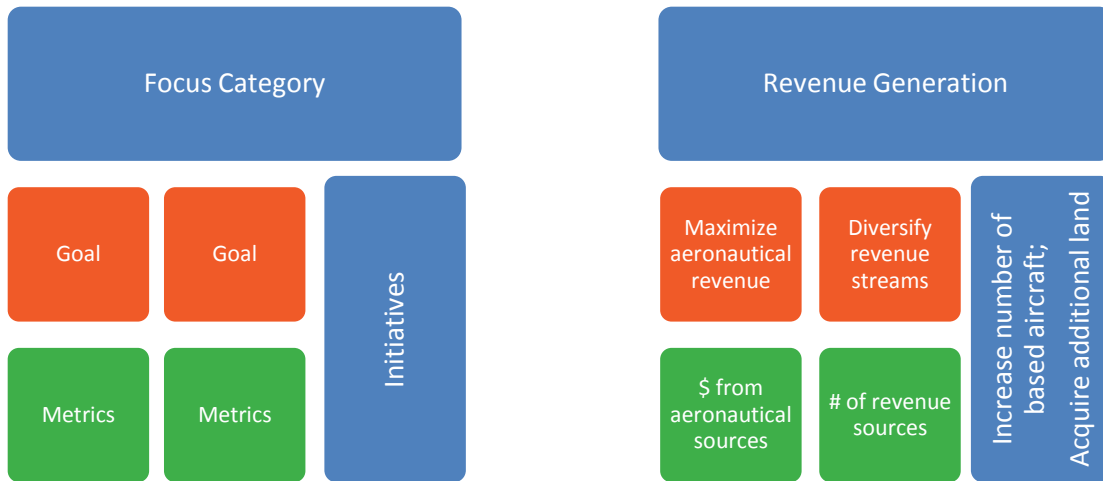
6   Focus Categories

Focus Categories are broad areas of interest on which an airport can focus with regard to sustainability. These may be problem areas for an airport (i.e., expenses or wildlife strikes) or they may be areas where an airport's performance could be better or warrants recognition for its efforts. Focus Categories make it easier to organize Sustainability Goals and Initiatives and to identify where an airport can find the greatest benefits.

Focus Categories are organized within the four elements of sustainability identified for airports and the aviation industry: **Economic Vitality**, **Operational Efficiency**, **Natural Resource Conservation**, and **Social Responsibility**. The Sustainability Tool Kit organized 15 Focus Categories within these elements to guide the development of your Airport Sustainability Plan. The Focus Categories are briefly described below:

6.1   Economic Vitality

6.1.1   Revenue Generation

Airport financial stability is crucial to an airport's long-term viability and independence. Airport finance includes all revenue and expenditures associated with operating, maintaining, and improving the facility. Sustainability Goals related to the Revenue Generation Focus Category involve analysis of financial health, revenue sources, and revenue reliability, along with factors like number of full-time employees, based aircraft, and operations.

6.1.2   Expense Generation

Airport facilities operate under a variety of regulatory and operational constraints that limit the flexibility in expenses and opportunities to cut costs. Responsibly reducing airport operating expenses provides the dual benefit of improving the airport's overall financial standing, as well as providing the airport with supplemental funding with which to advance other cost-saving or sustainable Initiatives.

6.1.3 Economic Development

Economic development enables the airport's overall growth financially, operationally, and physically. Goals within the Economic Development Focus Category emphasize maximizing operations, number of jobs supported, number of users served, and overall strength and reliability of airport characteristics. Sustainable economic development supports the longevity of the airport and provides a valuable asset to the community and local economy.

6.2 Operational Efficiency

6.2.1 Operations and Maintenance

The majority of airport staff time and financial resources are dedicated to the continued operation and maintenance of the airport. Considerable effort is expended to keep the airport running and improve the operational efficiency of airport assets for tenants, customers, and the surrounding community. Focusing on operations and maintenance presents a significant opportunity to incorporate sustainable practices into regular airport activities with a direct and measurable positive impact. Goals tied to operations and maintenance involve improving the overall functionality of the airport and emphasize improving aircraft operations, streamlining maintenance activities, and ensuring continued safety and service performance.

6.2.2 Asset Management

Sustainable construction and investment in land, capital, and human resources can contribute to a thriving airport and community. Goals within the Asset Management Focus Category are centered on efficiently managing the airport's facilities and employees.

6.2.3 Business Operations

The Business Operations Focus Category captures Goals and activities that enhance the airport's economic position and competitive advantages. Actions to establish business partnerships, secure long-term operating arrangements, improve the attractiveness of the airport for business, or strengthen the airport's revenue streams all serve to enhance business operations. Incorporating sustainability principles within the business operations of an airport maximizes efficiency and allows for multiple elements to be factored into decision-making.

6.3 Natural Resources

6.3.1 Energy

Energy is an important sustainability issue for an airport because reducing electricity, natural gas, and other fuel consumption can improve air quality, reduce greenhouse gas emissions, and increase cost savings.

6.3.2 Water

Preserving water quality and reducing water consumption are important issues across Colorado. Actions to reduce potable water consumption at airports offer opportunities to decrease both environmental and financial impacts on the airport. In addition, surface and ground water can be better protected from fuel and other spills and activities, such as aircraft de-icing, through improved stormwater and construction management practices.

6.3.3 **Waste**

Airports have multiple financial and environmental incentives to reduce total waste generated by airport activities and for users to increase the amount of waste diverted to recycling facilities. Reductions in purchasing, waste hauling, and regulatory fees can trim overall operating expenses, and initiating programs to improve material reuse and recycling can provide significant opportunities for positive community relations, grant funding, and corporate partnerships.

6.3.4 **Climate and Air Quality**

Greenhouse gas emissions have local and global impacts; consequences can be felt with stronger storm events resulting from climate change and air quality impacts from localized emissions. This Focus Category examines ways to reduce greenhouse gas emissions from airport facilities to reduce impacts on climate change and improve air quality.

6.3.5 **Natural Environment**

Being mindful of how airport activities and projects affect natural resources can reduce related conflicts and can contribute to overall sustainability. This Focus Category includes Goals related to avoiding wildlife strikes and minimizing negative environmental impacts on surroundings uses.

6.4 **Social Responsibility**

6.4.1 **Community**

Airports are complex businesses influenced by a wide variety of stakeholders, including federal and state agencies, local governments, community members, employees, tenants, and airport users. This category includes Goals related to outreach, education, airport and community values, and local community relations that can enhance the value (and perception of that value) of the airport in the community.

6.4.2 **Airport User**

For an airport to remain successful, it is important to optimize user experiences at the airport. The Airport User Focus Category looks at improving relationships with airport users, major regional businesses, businesses that rely on air travel or traffic, and businesses that rely on the airport for core business services.

6.4.3 **Employees**

The Employees Focus Category looks at the airport's internal worker satisfaction, work environment, and training and support structures. Critical to the successful operation and growth of airports, employees of the airport and airport tenants can significantly influence the success or failure of many other airport Initiatives. Goals related to improving relationships and investing in airport and airport tenant employees are foundational for improving overall airport sustainability and creating a stronger and more resilient operation.

6.4.4 **Noise**

Airport noise is a common impact of airport operations and can have a potentially negative impact on both the natural environment as well as the human environment. The Noise Focus Category includes Goals that take into consideration noise-related issues and land use compatibility. Regular and positive coordination with surrounding communities, affected neighbors, and stakeholders regarding potential noise issues help to maintain good relations in the community.

Because airports can vary drastically in size and complexity, they often have different priorities. For instance, energy consumption may be of importance for one airport, but less so for another. In developing this plan, Fremont County Airport staff identified Focus Categories they consider especially important and that address the unique circumstances at the airport (see **Table 6.1**). These Focus Categories form the content of the baseline inventory and help group and organize sustainability Goals and Initiatives for the airport.

Table 6.1 Focus Categories

Economic Vitality		Operational Efficiency		Natural Resources		Social Responsibility
☒	Revenue Generation	☒	Asset Management		Energy	Airport User
☒	Economic Development	☒	Operations and Maintenance	☒	Water	☒ Community
☒	Expense Reduction	☒	Business Operations		Climate and Air Quality	Employees
					Waste	Noise
					Natural Environment	

7 Goals and Metrics

Sustainability Goals are measurable targets that Fremont County Airport staff are seeking to achieve through their decision-making and actions. The selection of Sustainability Goals is dependent upon the aspirations and needs of the airport, which are largely driven by its characteristics, interests, outside pressures, and many other issues. Each Goal is tied to a specific Focus Category; however, some Goals may arguably fall under more than one Focus Category. Each Goal identified in the following sections provides a broad aspirational directive to help airport staff achieve the Sustainability Mission Statement.

For each Goal in this plan, Fremont County Airport staff assigned a priority level, a unit of measurement (metrics), a frequency of measurement, and a current status. Some of the Metrics may be quantitative (for example, kWh of electricity), and some may be more qualitative (for example, does the airport consistently engage with the community – yes/no). Metrics were defined for each Goal so that progress can be tracked over time. This is especially useful to determine if ongoing sustainability efforts are successful or effective. Some Goals may include more than one type of Metric. For example, a reduction in energy usage can be tracked by usage (kWh) or cost of energy ($) or both.

Table 7.1 provides a summary of Fremont County Airport's specific Goals organized according to Focus Categories.

Table 7.1 Goal Summary

	Goal	Focus Category	Priority	Unit of Measure	Measurement Frequency	Status	Comments (If any)
1.	Better inform the community of the value of the airport.	Social - Community	High	Other	Bi-annually	In Progress	Invite the community to the airport through fly-ins and airshows.
2.	Expand opportunities for manufacturing testing.	Economic Vitality - Revenue Generation	High	Other	Bi-annually	In Progress	Working to improve office and hanger space.
3.	Improve and streamline existing operations and practices at the airport to stretch resources, improve flexibility, and improve accountability.	Operational Efficiency - Ops Maintenance	Medium	Dollars	Annually	In Progress	
4.	Increase aeronautical revenue.	Operational Efficiency - Business Ops; Economic Vitality - Revenue Generation; Economic Vitality - Economic Development	Medium	Dollars	Annually	In Progress	
5.	Increase economic impact of airport and value to local economy.	Social - Community; Economic Vitality - Economic Development	Medium	Dollars	Other	In Progress	Goal of 5% in 5 years
6.	Increase the average operating and economic life of airport assets.	Operational Efficiency - Asset Mgmt; Economic Vitality - Expense Reduction; Operational Efficiency - Ops Maintenance	Medium	Years	Annually	In Progress	
7.	Provide positive value for the local and regional area and maintain a "good neighbor" status.	Social - Community; Economic Vitality - Economic Development	Medium	Other	Annually	In Progress	

8.	Reduce indoor water consumption.	Natural Resources - Water; Economic Vitality - Expense Reduction	Medium	kGal	Annually	Not Started	Indoor water consumption can be reduced by installing low-flush toilets that would use significantly less water than the current full-flush toilets currently in use.

8 Initiatives

Sustainability Initiatives are the actions taken that are designed to move the airport toward achieving its Goals. Initiatives come in many forms, from implementing a specific project (such as upgrading lighting), to creating a program (such as employee training), to changing a long-term practice (such as how the airport collects revenue). The purpose of an Initiative is to make progress toward reaching or maintaining one or more Sustainability Goals.

Fremont County Airport staff have identified specific Initiatives (or actions), that they will take to achieve the Sustainability Goals identified in this Airport Sustainability Plan. For each Initiative, Fremont County Airport staff have assigned a person responsible for overseeing the Initiative, an estimated target completion date, an expected level of effort (low, medium, high), a general cost rating, and potential funding source(s). As Sustainability Initiatives are completed, refined, or suspended, airport staff will track and monitor progress toward meeting the Sustainability Goals in this plan.

In addition to the Initiatives built into the Sustainability Tool Kit, Fremont County Airport staff were provided various resources for identifying alternative Initiatives, including the Sustainable Aviation Guidance Alliance (SAGA) database, Envision Sustainability Infrastructure Rating System, and US Green Building Council (USGBC) Leadership in Energy & Environmental Design (LEED) program.

The Fremont County Airport's Initiatives are listed below in **Table 8.1**, grouped by Focus Category and by Goal. For a summary of all Initiatives, Focus Categories, Goals, and Metrics, see Section 9, *Implementation*.

8.1 Economic Vitality – Revenue Generation

GOAL: Expand opportunities for manufacturing testing.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Improve and/or expand airport facilities and services to include available office and hangar space, internet connectivity, airfield improvements, and weather information availability.	Wes	12/3/2016	Medium	$100,000	Airport Funding

work with aerospace manufacturers to promote aircraft testing.	Richard		Medium		

GOAL: Increase aeronautical revenue.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Conduct market rent study to determine if the airport is charging the appropriate rental rates. (If not, it may be an opportunity to increase rates.)	Wes		Low		
Get input from airport tenants on opportunities/needs for increasing revenue.	Richard		Low		
Install self-service fuel	Wes	12/3/2016	Low	$18,000	Airport Funding
Partner with local agencies (i.e. chamber of commerce, economic development, local officials... etc.)	Richard	12/3/2016	Medium	$300	Airport Funding

8.2   Economic Vitality – Expense Reduction

GOAL: Increase the average operating and economic life of airport assets.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Develop a Maintenance Management Plan to memorialize scheduled maintenance activities and evaluate ways to streamline and reduce maintenance burden.	Richard	12/3/2016	Medium	$400	Airport Funding

GOAL: Reduce indoor water consumption.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Install high-efficiency fixtures and dry fixtures to reduce potable water usage and wastewater volumes.	Wes	5/16/2018	Low	$1,000	Airport Funding

8.3   Economic Vitality – Economic Development

GOAL: Increase aeronautical revenue.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source

Conduct market rent study to determine if the airport is charging the appropriate rental rates. (If not, it may be an opportunity to increase rates.)	Wes		Low		
Get input from airport tenants on opportunities/needs for increasing revenue.	Richard		Low		
Install self-service fuel	Wes	12/3/2016	Low	$18,000	Airport Funding
Partner with local agencies (i.e. chamber of commerce, economic development, local officials... etc.)	Richard	12/3/2016	Medium	$300	Airport Funding

GOAL: Increase economic impact of airport and value to local economy.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Partner with local economic development agecies to jointly attract business to the airport.	Richard		Low		Airport Funding
Work with local and regional tourist companies and agencies to promote the airport to GA users in conjunction with local and regional tourist attractions. Â Â	Richard		Low		
Work with local chamber of commerce and economic development agencies to identify local, regional, and national market conditions and trends and develop strategies to address demand.	Richard		Low		

GOAL: Provide positive value for the local and regional area and maintain a "good neighbor" status.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Continue working relationships with the local community leadership to reduce potential for development of non-compatible land uses.	Richard		Low		
Participate in community organizations, such as the Chamber of Commerce.	Richard		Low		Airport Funding
Partner with local economic development agecies to jointly attract business to the airport.	Richard		Low		Airport Funding

Provide a process for community members to weigh in on airport issues and concerns so that the airport can respond to them.	Richard	12/3/2016	Medium	$500	Airport Funding

8.4 Operational Efficiency – Operations and Maintenance

GOAL: Improve and streamline existing operations and practices at the airport to stretch resources, improve flexibility, and improve accountability.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Inventory current actual operational practices and procedures and revise existing and outdated procedural documentation to reflect current practices.	Wes	12/3/2016	Medium	$500	Airport Funding

GOAL: Increase the average operating and economic life of airport assets.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Develop a Maintenance Management Plan to memorialize scheduled maintenance activities and evaluate ways to streamline and reduce maintenance burden.	Richard	12/3/2016	Medium	$400	Airport Funding

8.5 Operational Efficiency – Asset Management

GOAL: Increase the average operating and economic life of airport assets.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Develop a Maintenance Management Plan to memorialize scheduled maintenance activities and evaluate ways to streamline and reduce maintenance burden.	Richard	12/3/2016	Medium	$400	Airport Funding

8.6 Operational Efficiency – Business Operations

GOAL: Increase aeronautical revenue.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Conduct market rent study to determine if the airport is charging the appropriate rental rates. (If not, it may be an opportunity to increase rates.)	Wes		Low		
Get input from airport tenants on opportunities/needs for increasing revenue.	Richard		Low		
Install self-service fuel	Wes	12/3/2016	Low	$18,000	Airport Funding
Partner with local agencies (i.e. chamber of commerce, economic development, local officials... etc.)	Richard	12/3/2016	Medium	$300	Airport Funding

8.7 Natural Resources – Water

GOAL: Reduce indoor water consumption.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Install high-efficiency fixtures and dry fixtures to reduce potable water usage and wastewater volumes.	Wes	5/16/2018	Low	$1,000	Airport Funding

8.8 Social Responsibility – Community

GOAL: Better inform the community of the value of the airport.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Expand community outreach to include radio and local print media.	Richard	12/3/2016	Medium	$100	Airport Funding

GOAL: Increase economic impact of airport and value to local economy.					
Initiatives(s) Linked to this Goal	Responsible Person	Target Completion Date	Level of Effort	Estimated Cost	Funding Source
Partner with local economic development agecies to jointly attract business to the airport.	Richard		Low		Airport Funding

Work with local and regional tourist companies and agencies to promote the airport to GA users in conjunction with local and regional tourist attractions. Â Â	Richard		Low		
Work with local chamber of commerce and economic development agencies to identify local, regional, and national market conditions and trends and develop strategies to address demand.	Richard		Low		

GOAL: Provide positive value for the local and regional area and maintain a "good neighbor" status.					
Initiatives(s) Linked to this Goal	**Responsible Person**	**Target Completion Date**	**Level of Effort**	**Estimated Cost**	**Funding Source**
Continue working relationships with the local community leadership to reduce potential for development of non-compatible land uses.	Richard		Low		
Participate in community organizations, such as the Chamber of Commerce.	Richard		Low		Airport Funding
Partner with local economic development agecies to jointly attract business to the airport.	Richard		Low		Airport Funding
Provide a process for community members to weigh in on airport issues and concerns so that the airport can respond to them.	Richard	12/3/2016	Medium	$500	Airport Funding

9 Implementation

9.1 Plan-Do-Check-Act Approach

Fremont County Airport staff are employing the Plan-Do-Check-Act approach to implement their sustainability efforts. This is a reliable implementation process to help ensure that the Initiatives identified in this Airport Sustainability Plan are put into action. The process also provides a framework for airport staff to monitor and adjust the plan to find the most effective or reliable approach in the future.

In alignment with the Plan-Do-Check-Act approach, airport staff have initiated the planning step for sustainability integration by developing this plan. Next, the airport staff will implement specific initiatives (Do), will track the outcome and progress of these initiatives (Check), and will adjust or re-evaluate the sustainability approach based on the results (Act). **Figure 9.1** illustrates this approach.

Airport Sustainability Plan Sustainability Implementation Approach

9.1.1 Planning for Sustainability (Plan)

Fremont County Airport staff created this Airport Sustainability Plan to define sustainability, identify sustainability Focus Categories, present baseline information, select Goals with associated metrics, and adopt Initiatives. This planning process is critical because it serves as the framework for the airport's sustainability program and determines the degree to which sustainability efforts are successful.

9.1.1.1 *Sustainability Team*

Sustainability influences a wide range of airport activities and practices. To effectively implement a sustainability program, Fremont County Airport staff developed this plan via direct input and support from airport personnel. Richard Baker is the person responsible for developing, implementing, reporting, and improving this plan. Richard Baker is supported by several additional airport staff with knowledge of specific operational fields. Supporting staff include:

- Wesley Brandt
- Fremont County Finance Office

9.1.2 Executing the Airport Sustainability Plan (Do)

Fremont County Airport staff assigned one airport staff member to be responsible for implementing and verifying each Initiative. The responsible staff member is not necessarily expected to achieve full implementation alone, but should be the manager and driver of that Initiative.

Airport staff should hold regular internal meetings to review the Action Plan (Table 9.1), provide progress updates on various Initiatives, identify new opportunities, and coordinate assistance. Any decisions will be documented as part of maintaining and updating the Airport Sustainability Plan.

Airport staff will execute the actions in this plan with the aim of making progress toward achieving its Sustainability Goals. By implementing this Airport Sustainability Plan, the airport will be developing a culture of sustainability and will begin to reshape the core practices and processes at the airport to reflect a stronger consideration for long-term sustainability.

9.1.3 Checking Sustainability Progress (Check)

As most GA Airports have limited financial and staffing resources, Fremont County Airport staff will monitor and track Initiatives to the best extent possible. Monitoring and tracking of Initiatives is not intended to be exhaustive, but will be sufficiently detailed to allow the airport to evaluate the success and progress of Initiatives and Goals. For example, if an Initiative is to install new energy efficient lighting, monitoring utility bills should indicate reduced electricity consumption and operating costs that the airport can track as a net benefit toward its energy efficiency and financial Goals. Even if airport staff find that an Initiative is not producing an expected result, the result will be tracked so that the plan can be revised to eliminate or revise that Initiative or the airport can identify an alternative Initiative.

The Sustainability Tool Kit stores all annual data and metrics for each year that Fremont County Airport provides information and is a helpful mechanism for tracking and evaluating success. Airport staff should produce regular reports to provide status updates on the Initiatives, as well as the overall implementation of the Airport Sustainability Plan. The progress reports should contain a narrative description of the reporting period's activities; an update for each of the Initiatives in the Action Summary; and a section noting any particular challenges, difficulties, or barriers that airport staff believe are impeding the implementation of any specific Initiative. Fremont County Airport staff will share these reports with CDOT Aeronautics to help the agency identify opportunities for collaboration, funding programs, or areas of needed assistance.

9.1.4 Learning From and Improving Implementation (Act)

This Airport Sustainability Plan is a living document, meaning that after planning, implementation, and tracking, Fremont County Airport staff will revise the plan to provide even better ways to address sustainability moving forward. In revising its Airport Sustainability Plan, airport staff will consider the question, "What did we learn and how can we do it better next time?" They will identify aspects of the process that can be improved; review the Focus Categories, Goals, and Initiatives; and process the Metrics used to monitor and measure results to determine what changes should be made to the different components of this plan. Airport staff will conduct this periodic review and update the Airport Sustainability Plan as necessary, which should include annual management review and approval.

All of the updates and revisions will be recorded in WIMS to help ensure consistent implementation and to monitor all prior considerations, actions, and reasoning behind any updates. According to the Implementation Commitment, Richard Baker will review the plan Quarterly.

9.2 Action Plan

This Airport Sustainability Plan prescribes a clear and simple implementation strategy that consolidates the planning information in the previous sections into an Action Plan (see **Table 9.1**) that will be used to track progress and inform decision-making at the airport. Through this plan, airport staff are committed to implementing the identified Sustainability Initiatives, taking a complete and sustainable approach to airport planning, operations, and development.

Public participation and community outreach is an integral part of implementing an Airport Sustainability Plan.   It is important to inform local city governments, county commission boards, neighbors, airport users, and employees of the commitments and sustainability progress at the airport. Involving these stakeholders in the implementation process could help to gain support for the airport and its long-term plans.   Fremont County Airport will use the following methods to conduct outreach about the sustainability plan:

- Social media posts
- Newsletter
- Regularly scheduled meetings (with XYZ entity or organization)
- Presentations (at local meetings or conferences)_
- Email news blasts
- Airport events
- Flyers

Table 9.1 Action Plan

	Initiative	Focus Category	Associated Goals	Responsible Party	Level of Effort	Estimated Cost	Target Date	Funding Resource	Status
1.	Conduct market rent study to determine if the airport is charging the appropriate rental rates. (If not, it may be an opportunity to increase rates.)	Operational Efficiency - Business Ops Economic Vitality - Revenue Generation Economic Vitality - Economic Development	Increase aeronautical revenue.	Wes	Low				In Progress
2.	Continue working relationships with the local community leadership to reduce potential for development of non-compatible land uses.	Social - Community Economic Vitality - Economic Development	Provide positive value for the local and regional area and maintain a "good neighbor" status.	Richard	Low				In Progress
3.	Get input from airport tenants on opportunities/needs for increasing revenue.	Operational Efficiency - Business Ops Economic Vitality - Revenue Generation Economic Vitality - Economic Development	Increase aeronautical revenue.	Richard	Low				In Progress
4.	Participate in community organizations, such as the Chamber of Commerce.	Social - Community Economic Vitality - Economic Development	Provide positive value for the local and regional area and maintain a "good neighbor" status.	Richard	Low			Airport Funding	In Progress
5.	Partner with local economic development agecies to jointly attract business to the airport.	Social - Community Economic Vitality - Economic Development	Increase economic impact of airport and value to local economy. Provide positive value for the local and regional area and maintain a "good neighbor" status.	Richard	Low			Airport Funding	In Progress
6.	work with aerospace manufacturers to promote aircraft testing.	Economic Vitality - Revenue Generation	Expand opportunities for manufacturing testing.	Richard	Medium				In Progress

	Initiative	Focus Category	Associated Goals	Responsible Party	Level of Effort	Estimated Cost	Target Date	Funding Resource	Status
7.	Work with local chamber of commerce and economic development agencies to identify local, regional, and national market conditions and trends and develop strategies to address demand.	Social - Community Economic Vitality - Economic Development	Increase economic impact of airport and value to local economy.	Richard	Low				In Progress
8.	Install high-efficiency fixtures and dry fixtures to reduce potable water usage and wastewater volumes.	Economic Vitality - Expense Reduction Natural Resources - Water	Reduce indoor water consumption.	Wes	Low	$1,000	05/16/2018	Airport Funding	Not Starte
9.	Expand community outreach to include radio and local print media.	Social - Community	Better inform the community of the value of the airport.	Richard	Medium	$100	12/03/2016	Airport Funding	Planned
10.	Improve and/or expand airport facilities and services to include available office and hangar space, internet connectivity, airfield improvements, and weather information availability.	Economic Vitality - Revenue Generation	Expand opportunities for manufacturing testing.	Wes	Medium	$100,000	12/03/2016	Airport Funding	Planned
11.	Install self-service fuel	Operational Efficiency - Business Ops Economic Vitality - Revenue Generation Economic Vitality - Economic Development	Increase aeronautical revenue.	Wes	Low	$18,000	12/03/2016	Airport Funding	Planned
12.	Partner with local agencies (i.e. chamber of commerce, economic development, local officials... etc.)	Operational Efficiency - Business Ops Economic Vitality - Revenue Generation Economic Vitality - Economic Development	Increase aeronautical revenue.	Richard	Medium	$300	12/03/2016	Airport Funding	Planned
13.	Develop a Maintenance Management Plan to memorialize scheduled maintenance activities and evaluate ways to streamline and reduce maintenance burden.	Operational Efficiency - Asset Mgmt Economic Vitality - Expense Reduction Operational Efficiency - Ops Maintenance	Increase the average operating and economic life of airport assets.	Richard	Medium	$400	12/03/2016	Airport Funding	Planned

	Initiative	Focus Category	Associated Goals	Responsible Party	Level of Effort	Estimated Cost	Target Date	Funding Resource	Status
14.	Provide a process for community members to weigh in on airport issues and concerns so that the airport can respond to them.	Social - Community Economic Vitality - Economic Development	Provide positive value for the local and regional area and maintain a "good neighbor" status.	Richard	Medium	$500	12/03/2016	Airport Funding	Planned

10 Baseline Inventory

The Baseline Inventory provided in this section offers a snapshot of the existing conditions at Fremont County Airport upon which the Goals and Initiatives were selected and will be the starting place from which the airport will track progress toward meeting its Goals.

10.1 Summary Airport Characteristics

Table 10.1 provides an overview of Fremont County Airport's core characteristics.

Table 10.1 Summary of Core Airport Characteristics

Focus Category	Airport Characteristics	Value
General/Operational	Associated City	Canon City
General/Operational	Identifier	1V6
General/Operational	Full-time Airport Employees	3
General/Operational	Aircraft Operations (2012)	13,778
Economic/Financial	Airport Economic Impact (2013) ($)	$6,775,000
Economic/Financial	Total Land (acres)	620
Economic/Financial	Number of FBOs	1
Natural Resources - Energy	Annual Electricity Consumption (kWh)	18,175
Natural Resources - Water	Annual Potable Water Consumption (kGal)	50
Natural Resources - Waste	Solid Waste Generation (cubic yards)	192
Natural Resources - Climate/Air Quality	GHG Emissions (Scope 1 and 2) (MTCO2e)	Not Entered
Natural Resources - Natural Environment	Wildlife Strikes	0
Social	Noise Complaints	8

Source: Fremont County Airport

10.2 Detailed Airport Characteristics

This section presents an inventory of existing economic, operational, environmental, and social conditions. This information helped Fremont County Airport identify areas for improvement and provides a baseline level from which to track improvement over time.

10.2.1 Economic

Fremont County Airport is responsible for generating approximately $6,775,000 for the local and regional economy according to the CDOT 2013 Economic Impact Study. These economic contributions stem from on- and off-airport employment that supports the administration, operation, and maintenance of the airport; activities associated with tenants or businesses at each airport; on-airport investment in improvements; and off-airport spending by visitors who arrive at the airport by air. The

economic contributions of these activities were measured through jobs, associated payroll, and economic output.

Fremont County Airport staff plan to actively manage the financial affairs of the airport and strive to achieve or enhance financial self-sufficiency. Movement toward (or stability of) financial self-sufficiency is crucial to the airport's long-term viability. To accomplish this, airport staff can measure and track the financial performance of the airport by understanding and analyzing the airport's financial statements (e.g., Statement of Net Assets, Statement of Financial Activities, and Statement of Cash Flows). Associated metrics that indicate the financial performance of the airport include based aircraft, fuel volumes, aircraft operations, etc.

Some of the primary financial data points that are measured and tracked in this Airport Sustainability Plan include aeronautical and non-aeronautical operating revenues and costs of goods sold, operating expenses, operating income, non-operating sources of funds, non-operating uses of funds, change in net assets, total assets, total cash reserves, and total liabilities. **Table 10.2** provides an overview of the Fremont County Airport's financial performance in 2014.

Table 10.2 Financial Data for Fremont County Airport, 2014

Airport Characteristics	Value
Total Operating Revenues (Aeronautical) ($)	$465,373
Total Operating Revenues (Non-Aeronautical) ($)	$2,242
Total Operating Revenues ($)	$467,615
Total Cash Reserves ($)	$153,884
Total Operating Expenses ($)	$623,380
Total Assets ($)	$6,243,493
Total Liabilities ($)	Not Entered

Source: Fremont County Airport

Airports can produce revenue in various ways. Some engage in the sale and delivery of aviation products and services while other airports use a private, third-party company (for example, an FBO) to provide aeronautical products, services, and facilities. In addition many airports derive revenue from the leasing of land and/or facilities including non-aeronautical uses. **Table 10.3** provides an overview of the airport's revenue sources.

Table 10.3 Indicators that Can Influence Financial Performance, 2014

Airport Characteristics	Value
Rentable Land (acres)	120
Rented Land (acres)	15
Total Facilities (square feet)	21,450
Rented Facilities (square feet)	12,750
Jet Fuel Sold ($)	$197,027
AvGas Sold ($)	$204,824
Total Aviation Fuel Sold ($)	$401,851
Jet Fuel Sold (Gallons)	46,547
AvGas Sold (Gallon)	37,115
Total Aviation Fuel Sold (Gallons)	83,662
Types of Aviation Fuel Sold	100LLA
Local Subsidies ($)	$158,141
State Fuel Tax Revenue ($)	$6,740
Federal Grants ($)	$182,644
State Grants ($)	$15,220

Source: Fremont County Airport

Revenue sources include fuel sales, hangar rent, and land leases.

10.2.2 Operational

An aircraft operation is defined as either a landing or a takeoff. As such, total operations represents the sum of all landings and takeoffs at an airport. In 2012, there were approximately 13,778 operations at Fremont County Airport. Historical and forecasted operations for the airport are included in **Table 10.4**.

Table 10.4 Operational Data at Fremont County Airport, 2014

Airport Characteristics	Value
Service Level	General Aviation
Category	Local
Tower	No
Based Aircraft (2012)	79
Based Aircraft (2040)	175
Airport Full-time Employees (#)	3
Average Employee Tenure (years)	13
Number of Runways (#)	2
Length of Main Runway (feet)	5,399
Width of Main Runway (feet)	75
Enplanements (2014)	0
Enplanements (2040)	0
Aircraft Operations (2012)	13,778
Aircraft Operations (2040)	13,778
Runway Closure Time (hours)	6
Sustainable Criteria in Purchasing Policies, Leases, or Contracts	Yes
Aircraft Incidents (#)	2
Aircraft Accidents (#)	1

Source: Fremont County Airport

10.2.3 Natural Resources

10.2.3.1 *Energy*

Energy consumption can be a very large expenditure at an airport. Energy conservation initiatives can therefore have a considerable and positive impact on both an airport's financial health and environmental footprint. **Table 10.5** shows energy consumption data for Fremont County Airport.

Table 10.5 Annual Energy Data, 2014

Airport Characteristics	Value
Total Utility (elec, nat gas, fleet fuel) Cost ($)	$23,400
Electricity Consumption (kWh)	18,175
Electricity Cost ($)	$15,017
Renewable Electricity (kWh)	0
Natural Gas Consumption (therms)	22,770
Natural Gas Cost ($)	$2,350
Fleet Fuel Consumption (gallons)	1,969
Fleet Fuel Cost ($)	$6,033
Airport Vehicles/Equipment (#)	7

Source: Fremont County Airport

10.2.3.2 *Water*

Conservation of water can reduce costs at the airport, thereby improving financial viability. Further, because drought is a normal, recurrent feature of Colorado's climate, water conservation can benefit the environment both locally and regionally. **Table 10.6** presents water use and costs for Fremont County Airport.

Table 10.6 Annual Water Data, 2014

Airport Characteristics	Value
Sewer Cost ($)	$630
Potable Water Cost ($)	$1,553
Potable Water Consumption (kGal)	50
Non-potable Water Cost ($)	$0
Non-potable Water Consumption (kGal)	0
Water Quality Violations (#)	0

Source: Fremont County Airport

10.2.3.3 *Waste*

Airports regularly produce both solid and hazardous waste. Proper disposal of those wastes help to minimize the impacts to surrounding natural environment. In 2014, the airport generated approximately 192 cubic yards of waste. Waste disposal costs for 2014 were $768 for the airport. **Table 10.7** shows waste data for the airport.

Table 10.7 Annual Waste Data, 2014

Airport Characteristics	Value
Solid Waste Generation (cubic yards)	192
Waste Disposal Costs ($)	$768
Recycling Program	No
Recycled Waste (cubic yards)	Not Entered
Recycling Disposal Costs ($)	$0
Hazardous Waste Generated Annually (Tons)	0
Hazardous Materials Used Annually ($)	$0

Source: Fremont County Airport

10.2.3.4 *Climate and Air Quality*

Sources of pollutants and greenhouse gas emissions at an airport include aircraft, ground support equipment, and airport-based vehicles, such as trucks and rescue vehicles. In addition, airport facilities and infrastructure, such as airport boilers and fuel tanks, contribute to air quality at the airport. Approximate Scope 1 and 2 (airport-controlled) greenhouse gas emissions were calculated from energy inputs in the baseline inventory (see **Table 10.8**).

Table 10.8 Climate and Air Quality Data, 2014

Airport Characteristics	Value
Greenhouse Gas Emissions (Scopes 1 and 2) (MTCO2e)	Not Entered
Indoor Air Quality Improvement Measures Implemented (Y/N)	Yes
Alternative Transportation Options (#)	Not Entered

Source: Fremont County Airport

10.2.3.5 *Natural Environment*

Airports must consider the impact of their operations on the surrounding natural environment and reduce those impacts whenever possible. **Table 10.9** documents the number of wildlife strikes that occurred at the Fremont County Airport in 2014.

Table 10.9 Natural Resources Data, 2014

Airport Characteristics	Value
Wildlife Strikes	0

Source: Fremont County Airport

10.2.4 Social Responsibility

An airport is an important, visible member of the local community. While most individuals do not have direct contact with the airport, the aircraft using the facility are often noticed. Because the community is both directly and indirectly affected by the airport, it is important to consider social factors in the baseline. **Table 10.10** includes information about interactions, both positive and negative, with the surrounding community.

Table 10.10 Annual Social Data, 2014

Airport Characteristics	Value
Security Incidents (#)	1
Noise Complaints (#)	8
Community Collaborations/Events (#)	5
User Complaints (#)	6
Media Updates (Y/N)	Yes
Recognition for Sustainability Practices (Y/N)	No
Internships (Y/N)	No

Source: Fremont County Airport

11 Conclusion

This Airport Sustainability Plan outlines a roadmap for the integration of sustainability throughout the operations and management of Fremont County Airport. In developing this plan, Fremont County Airport staff are taking advantage of a great opportunity to improve services and incorporate sustainability into planning decisions to aid the airport in achieving its specific goals and initiatives.

Fremont County Airport staff will continue to use the CDOT Sustainability Program in order to update and review this plan each year into the future. This plan is meant to be a living document, meaning that airport staff will continue to revise the plan based on changing conditions at the airport or changes in focus areas or goals. In this way, the plan will provide for even better ways to address sustainability moving forward.