CHAPTER 6 – ENVIRONMENTAL ISSUES

6.1   Introduction

Airport sponsors must comply with a variety of environmental regulations, orders, guidelines, and procedures, many of which are updated, revised or replaced over time. As a result, compliance with pertinent environmental guidelines and regulations is an on-going and continuous process, particularly when improvement projects are being implemented. One example of a relatively new FAA requirement is the development of an airport recycling, reuse, and waste management program, which was promulgated in a memorandum dated September 30, 2014, and which is addressed in more detail below.

As noted in Chapter 2, there are sensitive environmental resources on and in the vicinity of Gunnison-Crested Butte Regional Airport (GUC), including wetlands south of the airport, as well as Tomichi Creek and Gunnison River (Figure 6-1). The sensitive resources which fall into the following categories:

- Wetlands
- Floodplains
- Historic Property
- Land Use and Noise
- Protected Species

It is not anticipated that any of those sensitive resources will be impacted by the proposed developments discussed in this Master Plan, including the rehabilitation of Runway 6-24 to be accomplished in 2016-2017.

Other sensitive environmental resources include protected species and habitat on and in the vicinity of the Airport. In November, 2014, the U.S. Fish and Wildlife Service (USFWS) determined that the Gunnison sage-grouse, a ground-dwelling bird found only in southwestern Colorado and southeastern Utah, requires the protection of the Endangered Species Act (ESA) as a threatened species. The USFWS also designated critical habitat (Figure 6-2).

Gunnison County has an active and comprehensive program to protect the Gunnison sage-grouse. The USFWS had adopted a preliminary draft rule to protect the species. The rule is a mechanism for the USFWS to exclude some activities from the requirements of the Endangered Species Act (activities that may be beneficial to the species).

FIGURE 6-1 - GUNNISON RIVER AND TOMICHI CREEK
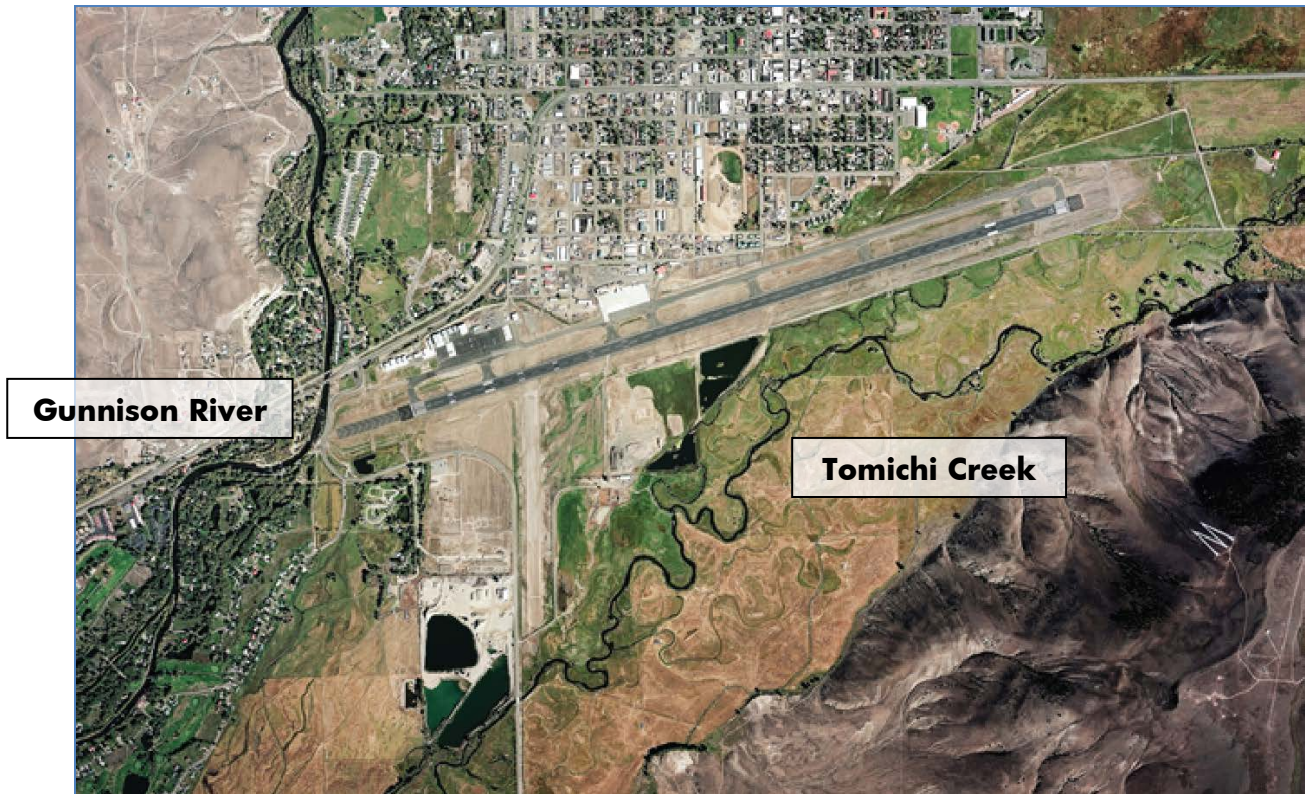
Source: GUC Airport Management Records

Due to the listing of the Gunnison Sage Grouse as threatened, GUC would be required to obtain a Section 10 permit from the USFWS for any activity that could impact the Gunnison Sage Grouse. However, certain airport activities that do not involve any federal involvement, such as routine airport maintenance activities (mowing, ground clearing, etc.), can be excluded from the rule. The FAA has noted that:

- The Airport Sponsor is responsible for this entire process.
- The FAA cannot fund any portion of the Section 10 permit process.
- A Section 10 permit is required for any action that may result in a Take.
- Mowing of sage brush habitat is an activity that is considered likely to result in take if Gunnison sage grouse use (either presently or historically) the area.

FIGURE 6-2 - GUNNISON SAGE GROUSE CRITICAL HABITAT
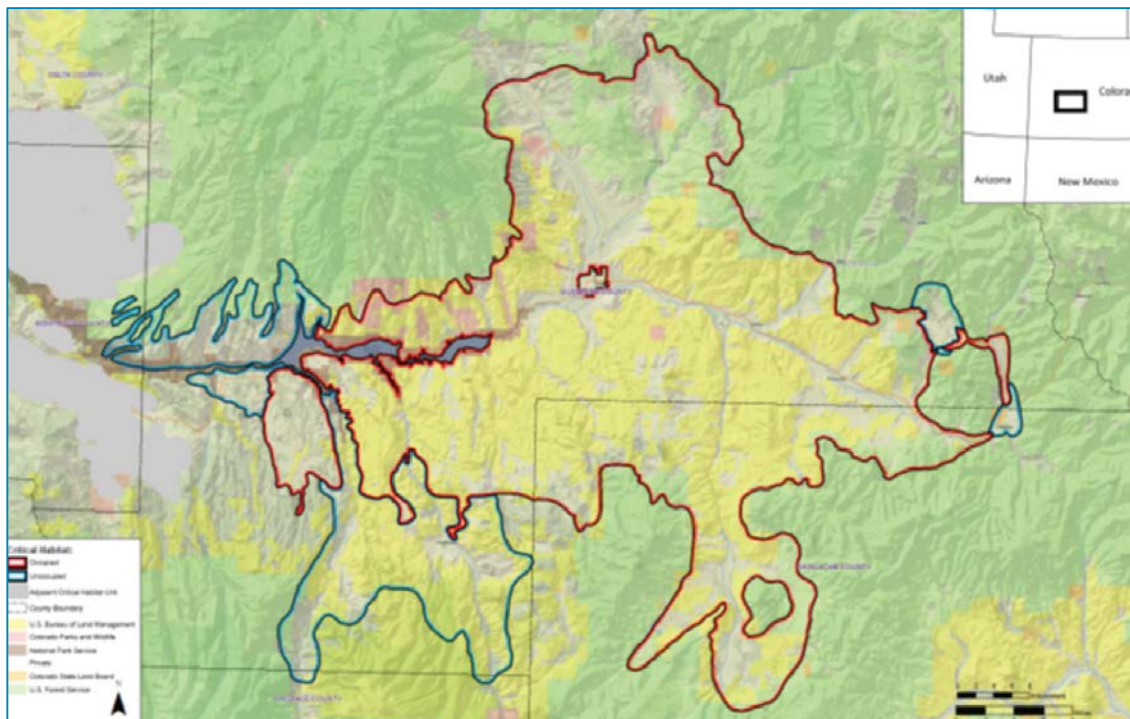
Source: U.S. Fish & Wildlife Service

6.2   Airport Recycling, Reuse, and Waste Management Plan

The Federal Aviation Administration (FAA) issued a memorandum on September 30, 2014 to provide guidance on preparing airport recycling, reuse, and waste reduction plans as an element of a master plan, master plan update, within a sustainability document, or as a standalone document. The guidance is mandatory when preparing a master plan or update (see Appendix 6-A).

The purpose of this document is to review GUC's recycling, reuse, and waste program and provide guidance on ways to reduce waste and improve recycling and reuse at the facility as part of the Master Plan in compliance with the FAA's memorandum. This document serves to meet that requirement and will:

- Review existing practices and solid waste sources (waste audit)
- Review the feasibility of solid waste recycling at the Airport
- Summarize operation and maintenance (O&M) requirements
- Review waste management contracts
- Identify potential cost savings or revenue generation
- Provide recommendation to minimize solid waste generation

6.2.1   Facility Description and Background

GUC is located in Gunnison County, Colorado and approximately 28 miles from the Town of Crested Butte and 31 miles from the Town of Mt. Crested Butte. GUC is owned by the County of Gunnison. Additional facility information is contained in **Chapter 1**, *Inventory*.

The Airport is a key asset for the viability and economic health of Crested Butte, Gunnison County, as well as neighboring towns throughout the region. GUC experienced a decrease in aircraft operations and based aircraft in the recent past; however, they are forecasted to increase over the next 20 years, as described in **Chapter 3**, *Forecast of Aviation Activity*. GUC had approximately 7,627 operations and 25 based aircraft in 2014. It is forecasted that in 2034 GUC will have approximately 10,052 operations and 35 based aircraft.

6.2.1.1   Existing Waste Sources

The identification and evaluation of airport waste sources can be complicated. There are many different groups, agreements, operational styles, and collection/disposal processes that play into the overall generation of waste. GUC airport management identified five primary sources of waste at the Airport; the Hangars/Tenants, GA Terminal, Commercial Terminal Building, ARFF/SRE/Airport MGR/Admin, and Airfield. See Figure 6-3 for each area's location. Of these five sources, the FBO/Terminal Area was found to produce the most solid waste.

FIGURE 6-3 - SOURCES OF WASTE

Source: GUC Airport Management and Jviation, Inc.

The sources of waste can be further broken down by how much control the Airport has on the generation and disposal of waste. The three levels of control are:

1. Areas the Airport has direct control of waste management (public space, office space, terminal building, airfield). These areas are controlled by the Airport and they are able to introduce recycling, reuse, and waste reduction programs directly.

2. Areas the Airport has no direct control but can influence waste management (tenants). These are areas owned by the Airport; however, they are leased out to tenants. The Airport can recommend recycling, reuse, and waste reduction programs be used and can include language in the tenant contracts, but realistically can't control what is done.

3. Areas the Airport has no control or influence over waste management. These are areas the Airport neither owns or leases (none of which are included in this chapter).

Table 6-1 shows the identified areas of waste generation, what waste is generated, how the waste is collected, if any reduction and/or recycling programs are in places, and what level of control the airport has.

6.2.1.2   Current Waste Management Programs

Gunnison County, the Town of Crested Butte, and the Airport all have recycling and waste reduction programs in place for their residents and customers. These programs and services include the following items:

6.2.1.2.1   Gunnison County

Gunnison County provides both recycling and waste disposal services for the communities within Gunnison County through their Solid Waste Management Program. The recycling program provides drop off, pick up, processing, and educational services. Products accepted in the recycling program include: aluminum, alkaline batteries, corrugated cardboard, glass (brown, green, and clear), magazines/catalogues, office paper, plastics (numbers 1 and 2), and tin/steel cans.[1]

The Gunnison County Landfill accepts a variety of items (with a fee). The items accepted include: general waste, appliances, asbestos, beneficial use, car wash sludge, clean wood, compacted waste, concrete (less than 12-inch diameter), ground construction debris, mattresses/box springs, refrigerator/freezer, special waste, tire rim, and tires (loader, passenger, and truck).[2]

6.2.1.2.2   Town of Crested Butte

The Town of Crested Butte also provides both recycling and waste disposal services through Waste Management. Waste Management collects waste and recyclables via curbside bins. Recyclables can also be dropped off at the Riverland Transfer State. Items accepted for recycling include: aluminum/tin/steel cans, plastics (numbers 1, 2, 3, 4, 5, 6, and 7), glass (any color), and paper goods (newspaper, magazines, phone books, office paper, and corrugated cardboard).[3]

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[1] Gunnison County, Recycling, http://www.gunnisoncounty.org/230/Recycling, Accessed November 2015.
[2] Gunnison County, Landfill Rates, http://www.gunnisoncounty.org/documentcenter/view/2402, Accessed November 2015.
[3] Town of Crested Butte, Trash/Recycling Information, http://www.crestedbutte-co.gov/index.asp?SEC=0B9387A9-653A-4B4A-835C-8AE39EA1499A&Type=B_BASIC, Accessed November 2015.

6.2.1.2.3   Gunnison-Crested Butte Regional Airport

The Airport itself is actively involved in recycling and strives to make recycling easy for its visitors, tenants, and staff. The Airport provides 11 trash and four recycling bins throughout the Terminal. Additionally, the Airport provides two outside dumpsters, one located west of the FBO and one in the airport operations building parking lot.

The Airport and its tenants collect a variety of items to include oil, plastic, paper, aluminum, glass, batteries, tires, oil filters, and cardboard. These items are collected by airport staff and tenants. Waste and recyclables are then removed from the Airport through a contract with Golden Eagle Trash Services.

6.2.2   Review of Recycling Feasibility

Currently, GUC participates in a basic recycling program. They provide trash and recycling bins throughout the Terminal area and allow tenants to participate in the recycling program if they desire. Challenges identified with the current program are:

- Visitors are uneducated on what materials can and cannot be recycled
- GUC does not *require* tenants to have recycling containers in place or participate in airport initiatives. However, the Airport does encourage their tenants to participate as possible.

The Airport recognizes these challenges and plans to post education material near recycling bins notifying visitors what items can be recycled. The Airport also plans to encourage tenants to participate in their recycling program.

TABLE 6-1 - WASTE GENERATION AREAS AT GUC

Area	Waste Generated	Current Solid Waste Collection	Current Waste Reduction/Recycling	Control
Area 1: Hangars/Tenants	Oil, sump fuel, batteries, tires, oil filters, misc. trash	Oil collection tank, fuel sump tank, contract recycling (batteries/tires), contract dumpster	Golden Eagle Trash Services (dumpster), Oil is reclaimed; independent contractors collect the remaining sump fuel, tires, and batteries.	Direct
Area 2: GA Terminal	Cardboard, food, paper, aluminum cans, glass bottles, magazines, misc. trash	Contract Dumpster	Golden Eagle Trash Services (dumpster, City's Recycling Center, Oil is reclaimed, glycol is reclaimed.	Influence
Area 3: Commercial Terminal	Cardboard, plastics, paper, bathroom trash, misc. trash	City recycle (cardboard, plastic, paper), contract dumpster (trash)	Golden Eagle Trash Services (dumpster, City's Recycling Center, Oil is reclaimed, glycol is reclaimed.	Direct
Area 4: ARFF/SRE/Airport MGR/Admin	Cardboard, aluminum, tin, plastic, oil, paper, misc. trash, glycol.	City recycle, contract dumpster, glycol is reclaimed	Golden Eagle Trash Services (dumpster, City's Recycling Center, Oil is reclaimed, glycol is reclaimed.	Direct

Area	Waste Generated	Current Solid Waste Collection	Current Waste Reduction/Recycling	Control
Area 3: Airfield	General debris found on airfield. Construction material (asphalt, concrete, wood, metal)	Collected by construction contractor and/or airport staff, unusable waste deposited into Airport Dumpsters.	None	Direct

Source: Central Colorado Regional Airport staff and Jviation

6.2.3   Operation and Maintenance Requirements

The operations staff is currently responsible for the collection and disposal of all waste throughout the airport's GA and commercial terminals and airfield. The recyclables are placed in dumpsters provided by Golden Eagle Trash Services.

6.2.4   Review of Waste Management Contracts

GUC currently has a contract in place with the Golden Eagle Trash Services to remove recyclables and other solid waste. The waste is collected on a weekly basis and taken to the County Recycling Center or landfill as applicable.

Contracts with existing tenants do not require tenants to participate in any recycling programs or provide recycling bins for customers and employees. It is recommended that the Airport add language to future contracts that requires tenants to provide recycling bins and participate in the city's program.

6.2.5   Potential for Cost Savings or Revenue Generations

The Airport contracts with the Golden Eagle Trash Services to rent the recycling and trash dumpsters. The following fees are associated with the trash and recycling collection and removal:

- 2-yd dumpster: $27.50per month for trash dumpsters and removal
- 4.2-yd dumpster: $46 per month for recycling dumpsters and removal

As the amount of recyclable material and waste increases, the costs associated with removal will also increase. As such, the best way to reduce waste while also minimizing costs would be to keep as much material on-airport as possible. Without adding much implementation costs, the Airport could collect on-site the following materials:

- Green waste such as grass clippings, leaves, and small branches for composting. Compost could be used by the Airport or sold as a revenue stream.

6.2.6   Plan to Minimize Solid Waste Generation

GUC voluntarily participates in a recycling program. However, the Airport is aware that their recycling, reuse, and waste reduction program can be improved through a few simple practices such as:
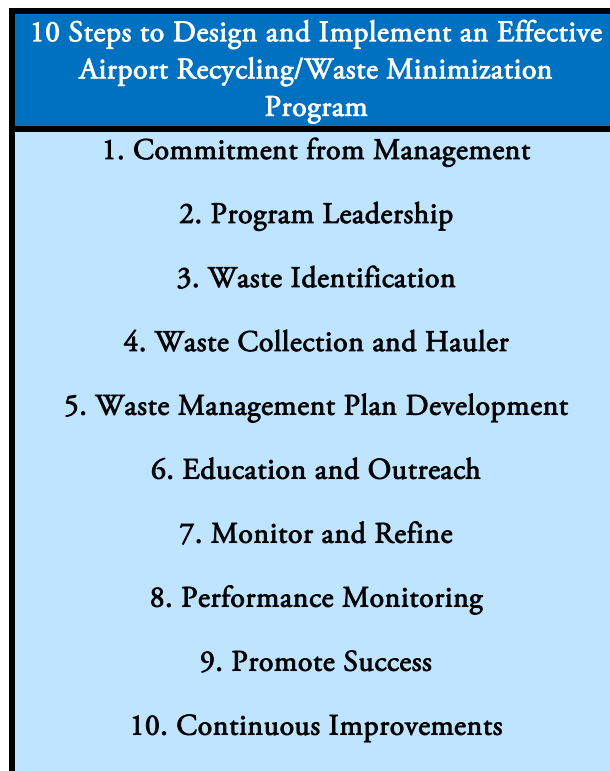
- Provide adequate signage with recycling bins clearly showing type of materials accepted.

- Provide educational material to tenants and airport employees on what material should be recycled and the appropriate business contacts.

- Add recycling, reuse, and reduce waste requirements to future tenant leases.

- When feasible, purchase products made from recycled material and encourage tenants to do so as well.

The above-mentioned practices are relatively basic; however, the success of implementing a long-term recycling, reuse, and waste reduction program requires management buy-in, staff commitment, planning, and follow-up.

Figure 6-4 outlines "10 Steps to Design and Implement an Effective Airport Recycling/Waste Minimization Program" as recommended by the FAA in their *Recycling, Reuse and Waste Reduction at Airports – A Synthesis Document*[4].

FIGURE 6-4 - STEPS TO DESIGN AND IMPLEMENT RECYCLING PROGRAM

10 Steps to Design and Implement an Effective Airport Recycling/Waste Minimization Program
1. Commitment from Management
2. Program Leadership
3. Waste Identification
4. Waste Collection and Hauler
5. Waste Management Plan Development
6. Education and Outreach
7. Monitor and Refine
8. Performance Monitoring
9. Promote Success
10. Continuous Improvements

Source: FAA, *Recycling, Reuse and Waste Reduction at Airport – A Synthesis Document,* 2013

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[4] FAA, *Recycling, Reuse and Waste Reduction at Airport – A Synthesis Document*, 2013

6.2.7   Conclusion

GUC has a basic recycling program in place; however, with minimal effort and expense they could implement some very basic procedures to improve their program and reduce the amount of solid waste they generate. Through coordination with local entities GUC could play a more active role in recycling, reusing, and reduce solid waste. The Airport should follow these steps when implementing their recycling program.

6.3   Terminal Development Program

The Federal Aviation Administration (FAA) is required to adopt policies and procedures to ensure compliance with the National Environmental Policy Act (NEPA), as well as implementing regulations issued by the Council on Environmental Quality (CEQ). FAA issued Order 1050.1, *Environmental Impacts: Policies and Procedures*, to ensure compliance with NEPA. The latest edition, FAA Order 1050.1F, was issued on July 16, 2015 (Appendix 6-B).

The provisions of the FAA Order and the CEQ Regulations apply to actions directly undertaken by the FAA, as well as to actions undertaken by a non-Federal entity where the FAA has authority to condition a permit, license, or other approval. The requirements in FAA Order 1050.1F apply to, but are not limited to grants, loans, contracts, leases, construction and installation actions, procedural actions, research activities, rulemaking and regulatory actions, certifications, licensing, permits, plans submitted to the FAA by state and local agencies for approval, and legislation proposed by the FAA. As a result, airport improvements at GUC that are funded by the FAA fall within FAA Order 1050.1F.

Once the FAA determines that NEPA applies to a proposed action, such as the Terminal Development Program at Gunnison, the FAA needs to decide on the appropriate level of review. The three levels of NEPA review are:

- Categorical Exclusion (CATEX)
- Environmental Assessment (EA)
- Environmental Impact Statement (EIS)

As noted by the FAA: "A CATEX refers to a category of actions that do not individually or cumulatively have a significant effect on the human environment, and for which, neither an EA nor an EIS is required. A CATEX is not an exemption or waiver of NEPA review; it is a level of NEPA review. If a proposed action falls within the scope of a CATEX, and there are no extraordinary circumstances, an EA or EIS is not required."

FAA Order 1050.1F, Chapter 5, Categorical Exclusions, note that "Extraordinary circumstances are factors or circumstances in which a normally categorically excluded action may have a significant environmental impact that then requires further analysis in an EA or an EIS. For FAA proposed actions, extraordinary circumstances exist when the proposed action." The FAA defines extraordinary circumstances as actions that may impact:

- Natural, ecological, scenic resources

- Resources protected by Fish & Wildlife Coordination Act –wetlands, floodplains, coastal zones, wilderness areas, etc.

- Natural, ecological, scenic resources of federal, state, tribal, or local significance

- A division or disruption of an established community

- Increased congestion from surface transportation

- Noise sensitive areas

- Air quality

- Water quality, sole source aquifers, public water supply system

- If impacts are likely to be "highly controversial" on environmental grounds

- Inconsistencies with federal, state, tribal, local laws relating to environmental issues

- Impacts on residential or commercial use of business properties

Based on currently available information, it is not anticipated that the proposed Terminal Development Program will trigger any of the extraordinary circumstances listed above.

Chapter 5, *Categorical Exclusions*, of FAA Order 1050.1F notes that actions in paragraphs 5-6.1 through 5-6.6 normally do not individually or cumulatively have a significant effect on the human environment. Projects within the Terminal Development Program at GUC fall under Paragraph 5-6.4, as described below:

- Construction or expansion of facilities—such as terminal passenger handling and parking facilities or cargo buildings, or facilities for non-aeronautical uses at existing airports and commercial space launch sites—that do not substantially expand those facilities

- New gardening, landscaping, and/or maintenance of existing landscaping that does not cause or promote the introduction or spread of invasive species that would harm the native ecosystem; use of landscape practices that reflect recommendations provided in *Guidance for Presidential Memorandum on Environmentally and Economically Beneficial Landscape Practices on Federal Landscaped Grounds*; and that do not attract wildlife that is hazardous to aviation.

- Upgrading of building electrical systems or maintenance of existing facilities, such as painting, replacement of siding, roof rehabilitation, resurfacing, or reconstruction of paved areas, and replacement of underground facilities.

It is recommended that the Airport oversee the preparation of the Terminal Concept Study prior to initiating design of the terminal renovation program. The Terminal Concept Study will define and evaluate the range of options within the renovation concept, such as whether the renovated should remain as a two-story building or be converted to a single-level building, and present those options to the County to decide on the preferred building configuration.

Based on the adopted alternative, the Terminal Concept Study will develop detailed cost estimates, funding sources, and project timeline for implementation. Once the Terminal Concept Study is completed, the appropriate NEPA level analysis will need to be prepared, and in this case, it is anticipated to be a CATEX based upon the above information. The FAA will need to review and approve that documentation prior to initiating the design and construction of the Terminal Development Program.