



Environmental Assessment

Proposed Facility Improvements for
Pangborn Memorial Airport, East Wenatchee,
Washington

General Aviation (GA) Terminal Building
Rehabilitation & Adaptive Re-Use



Prepared For:
Chelan-Douglas Regional Port
Authority
and
U.S. Department of Transportation
Federal Aviation Administration

Prepared By:
Ardurra Group, Inc.



Final February 19, 2024



FINAL

ENVIRONMENTAL ASSESSMENT

**General Aviation (GA) Terminal Building Rehabilitation &
Adaptive Re-Use**

Pangborn Memorial Airport
East Wenatchee, Washington

Prepared for:

Chelan-Douglas Regional Port Authority

and

U.S. Department of Transportation
Federal Aviation Administration

As lead Federal Agency pursuant to the National Environmental Policy Act of
1969

Prepared by:

Ardurra Group, Inc.

February 2024

**This Environmental Assessment becomes a Federal document when evaluated,
signed and dated by the Responsible Federal Official.**

ADAM WELLS
MERRILL

Digitally signed by
ADAM WELLS MERRILL
Date: 2024.03.08
10:14:26 -08'00'

March 8, 2024

Responsible Federal Official

Date

THIS PAGE INTENTIONALLY LEFT BLANK

Contents

- Chapter 1. Background..... 1
 - 1.1. Introduction 1
 - 1.2. Airport Overview and Background of Existing Facilities 1
 - 1.3. GA Terminal Building 5
 - 1.4. Proposed Action 6
 - 1.5. Proposed Timeline 6
- Chapter 2. Purpose and Need..... 8
 - 2.1. Purpose..... 8
 - 2.2. Need 8
 - 2.3. Requested Federal Actions 10
- Chapter 3. Alternatives 12
 - 3.1. Overview..... 12
 - 3.2. Alternatives Screening Process 12
 - 3.3. Alternatives Considered 12
 - 3.4. Action Alternatives..... 12
 - 3.5. No Action Alternative..... 17
 - 3.6. Alternatives Carried Forward for Analysis..... 17
- Chapter 4. Affected Environment, Environmental Consequences, and Mitigation 19
 - 4.1. Project Study Area..... 19
 - 4.2. Resources Relevant to the Proposed Action..... 20
 - 4.3. Potentially Affected Environmental Resources..... 25
 - 4.4. Air Quality..... 25
 - 4.5. Climate 28
 - 4.6. Department of Transportation, Section 4(f) 30
 - 4.7. Hazardous Materials, Solid Waste, and Pollution Prevention..... 33
 - 4.8. Historical, Architectural, Archeological, and Cultural Resources..... 39
 - 4.9. Land Use..... 43
 - 4.10. Natural Resources and Energy Supply 46
 - 4.11. Socioeconomic Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risks 48
 - 4.12. Visual Effects 56
 - 4.13. Cumulative Impacts 60
- Chapter 5. Record of Agency Coordination and Public Involvement 70
 - 5.1. Agency Coordination..... 70
 - 5.2. Public Involvement and EA review 70
 - 5.3. Final Environmental Assessment 71
 - 5.4. List of Preparers..... 71

List of Tables

Table 2-1: Forecasted Airport Activity and Operations..... 8
 Table 4-1: Relevant Environmental Resources..... 21
 Table 4-2: Construction Emissions Inventory for the Proposed Action..... 27
 Table 4-3: Construction Emissions Inventory for Alternative 2 27
 Table 4-4: Income and Poverty..... 49
 Table 4-5: Employment 50
 Table 4-6: Age, Education, and Housing 50
 Table 4-7: Race and Ethnicity 51
 Table 4-8: East Wenatchee Children's Resources..... 52
 Table 4-9: Child Population 52
 Table 4-10: Past Actions..... 61
 Table 4-11: Present Actions 62
 Table 4-12: Reasonably Foreseeable Future Actions 62
 Table 4-13: Summary of Anticipated Impacts..... 68
 Table 5-1: Agency Coordination..... 70

List of Figures

Figure 1-1: Vicinity Map..... 2
 Figure 1-2: Existing Airport Layout 4
 Figure 1-3: Existing GA Terminal Building 5
 Figure 3-1: Conceptual architectural rendering of the rehabilitated GA Terminal building (Proposed Action),
 presented by ALSC Architects..... 14
 Figure 3-2: Conceptual design of the floor plan of the rehabilitated structure (Proposed Action)..... 15
 Figure 4-1: General Project Study Area..... 20
 Figure 4-2: Land Use 44

Appendices

- Appendix A: Airport Layout Plan
- Appendix B: Agency Correspondence
- Appendix C: Cultural Resource Survey for the Pangborn Memorial Airport Capital Improvement Program 2020-2025
- Appendix D: Inadvertent Discovery Plan
- Appendix E: Section 4(f) Evaluation
- Appendix F: Phase I Environmental Site Assessment Report
- Appendix G: Public Engagement Summary
- Appendix H: List of Preparers

Acronyms and Abbreviations

A

AC	Advisory Circular
ACEIT	Airport Construction Emissions Inventory Tool
ADA	Americans with Disabilities Act
AIP	Airport Improvement Program
ALP	Airport Layout Plan
APE	Area of Potential Effect
AP-O	Airport Overlay District

B

BMP	Best Management Practice
-----	--------------------------

C

CEQ	Council on Environmental Quality
CF	Cubic Feet
CFR	Code of Federal Regulations
CH ₄	Methane
CMU	Concrete Masonry Unit
CO	Carbon Monoxide
CO ₂	Carbon Dioxide

D

DAHP	Department of Archaeology and Historic Preservation
DNL	Day-Night Noise Level
DOT	Department of Transportation

E

EA	Environmental Assessment
EDDA	Environmental Due Diligence Audit
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESC	Erosion and Sedimentation Control

F

FAA	Federal Aviation Administration
FBO	Fixed-Base Operator

G

GA	General Aviation
GHG	Greenhouse Gas

H

HFC	Hydrofluorocarbons
HVAC	Heating, Ventilation, and Air Conditioning

I

IBC	International Building Code
-----	-----------------------------

L

LF	Linear Feet
----	-------------

M

MALSR	Medium Intensity Approach Lighting System w/Runway Alignment Indicator Lights
MOA	Memorandum of Agreement
MOVES	Motor Vehicle Emission Simulator
MPU	Master Plan Update
MTCA	Model Toxics Control Act

N

N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAVAID	Navigational Aid
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	Nitrogen Dioxide
NRHP	National Register of Historic Places
NTSB	National Transportation Safety Board

O

O ₃	Ozone
----------------	-------

P

Pb	Lead
PFC	Perfluorocarbon
PM	Particulate Matter

R

RCRA	Resource Conservation and Recovery Act
------	----------------------------------------

REC Recognized Environmental Conditions

Acronyms and Abbreviations (continued)

S		USGCRP	U.S. Global Change Research Program
SF	Square Feet	UST	Underground Storage Tank
SHPO	State Historic Preservation Officer	V	
SIP	State Implementation Plan	VOC	Volatile Organic Compounds
SO ₂	Sulfur Dioxide	VOR	Very High Frequency Omnidirectional Range
SPCC	Spill Prevention, Control, and Countermeasure	W	
T		WSDOE	Washington State Department of Ecology
THPO	Tribal Historic Preservation Officer	WSDOT	Washington State Department of Transportation
TPH	Total Petroleum Hydrocarbons		
U			
USC	United States Code		
USFS	U.S. Forest Service		

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 1. Background

1.1. Introduction

This Environmental Assessment (EA) identifies and evaluates potential environmental effects related to the proposed rehabilitation and adaptive re-use of the General Aviation (GA) Terminal building, located at the Pangborn Memorial Airport (Airport). This EA also determines how identified impacts can be avoided, minimized, or mitigated.

The Federal Aviation Administration (FAA) is the lead federal agency required to ensure all airport development actions comply with the National Environmental Policy Act (NEPA). The EA was prepared pursuant to Section 102 (2)(c) of the NEPA as determined by the President's Council on Environmental Quality (CEQ) Regulations, Title 40 Code of Federal Regulations (CFR) §§ 1500-1508, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*, and all other applicable federal requirements.

1.2. Airport Overview and Background of Existing Facilities

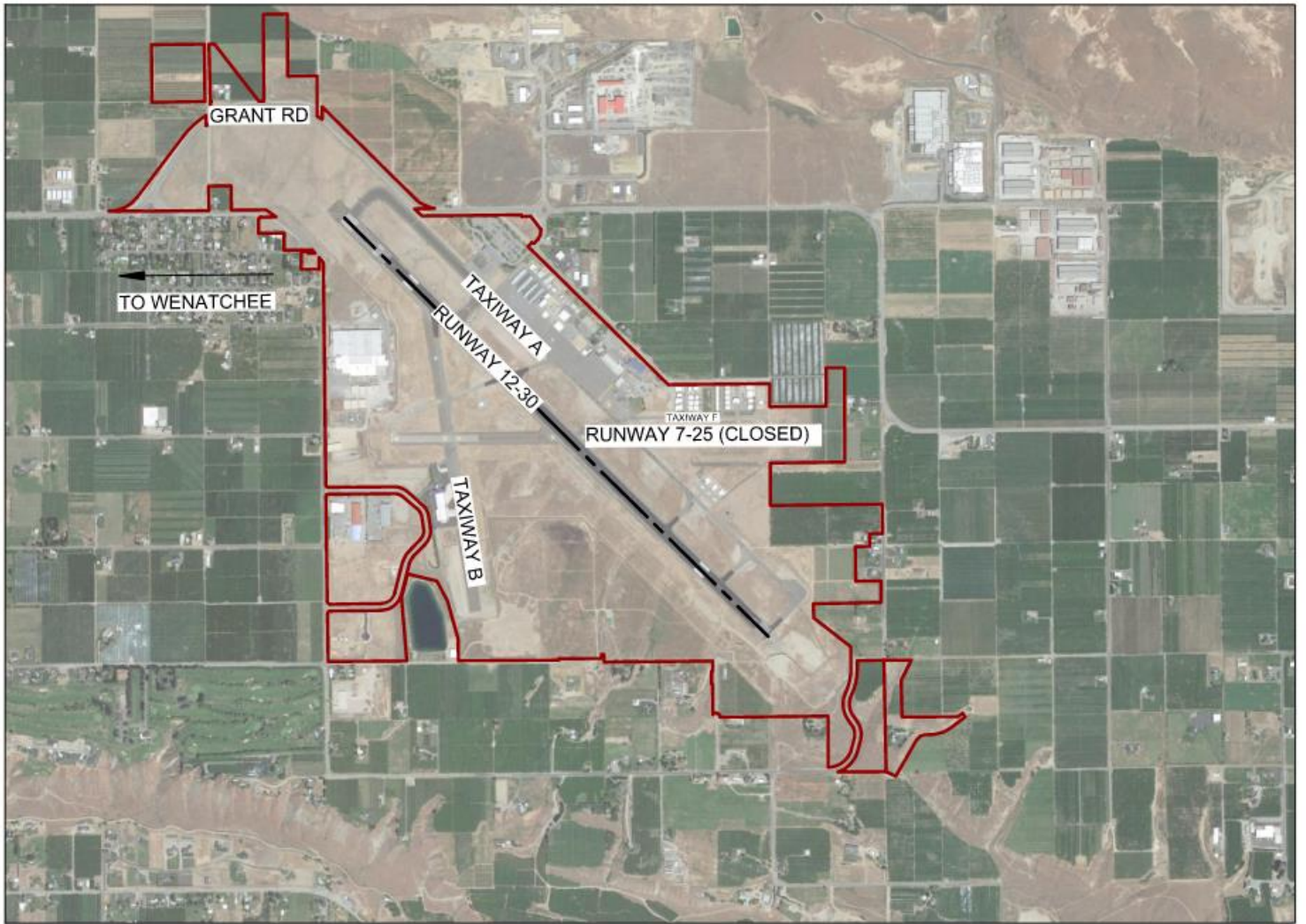
The Airport is owned and operated by the Chelan-Douglas Regional Port Authority (Sponsor) which is governed by an elected board of directors. The Airport is located southeast of Wenatchee, Washington. This unincorporated area of Douglas County is located in the north-central part of Washington State near the confluence of the Columbia and Wenatchee rivers and the eastern foothills of the Cascade Range. Airport property covers approximately 700 acres and is surrounded mainly by agricultural and rural residential land uses. As shown in **Figure 1-1: Vicinity Map**, the Airport is approximately one mile north of the Columbia River.

The National Plan of Integrated Airport Systems classifies the Airport as a primary non-hub commercial service facility. It is classified by the Washington State Department of Transportation (WSDOT) as a commercial service facility and has been designated as an essential public facility. These classifications indicate the Airport is a public-use facility with scheduled air carrier service. The Airport is the 6th busiest commercial service airport in the State of Washington.¹ The Airport's facilities are intended to accommodate narrow-body commercial jet transports and medium-to large-cabin General Aviation (GA) business jets. Other operations include scheduled air cargo, U.S. Forest Service (USFS), firefighting activities, agricultural aviation activities, medical flights, and military operations.

The Airport has a single runway, Runway 12-30, which is 7,000 feet long and 150 feet wide with a general northwest to southeast orientation. The Runway 12 end was extended by 1,300 feet in 2016 to serve the current and future critical aircraft operating at the Airport. It has precision instrument capabilities, including a recently constructed Medium Intensity Approach Light System with Runway Alignment Indicator Lights (MALSR). The Airport's crosswind runway, Runway 7-25, was closed in 2009 due to deteriorating pavement.

The Airport supports a full parallel taxiway (Taxiway A) which runs the length of Runway 12-30. Five taxiways (A-1 through A-5) connect Taxiway A to Runway 12-30. Terminal facilities are situated in the northeast quadrant of the Airport and include parking, an airline terminal, and a hangar complex.

¹ Mead & Hunt. *Pangborn Airport Master Plan*. P. 3



LEGEND

- AIRPORT PROPERTY BOUNDARY (~700 ACRES)
- - - RUNWAY 12-30 CENTERLINE



N:\1801693_Aviation\Sheets\EA\Exhibits\CURRENT\EXH1801693 - FIGURE 1-1 VICINITY MAP.dwg



FIGURE 1-1: VICINITY MAP

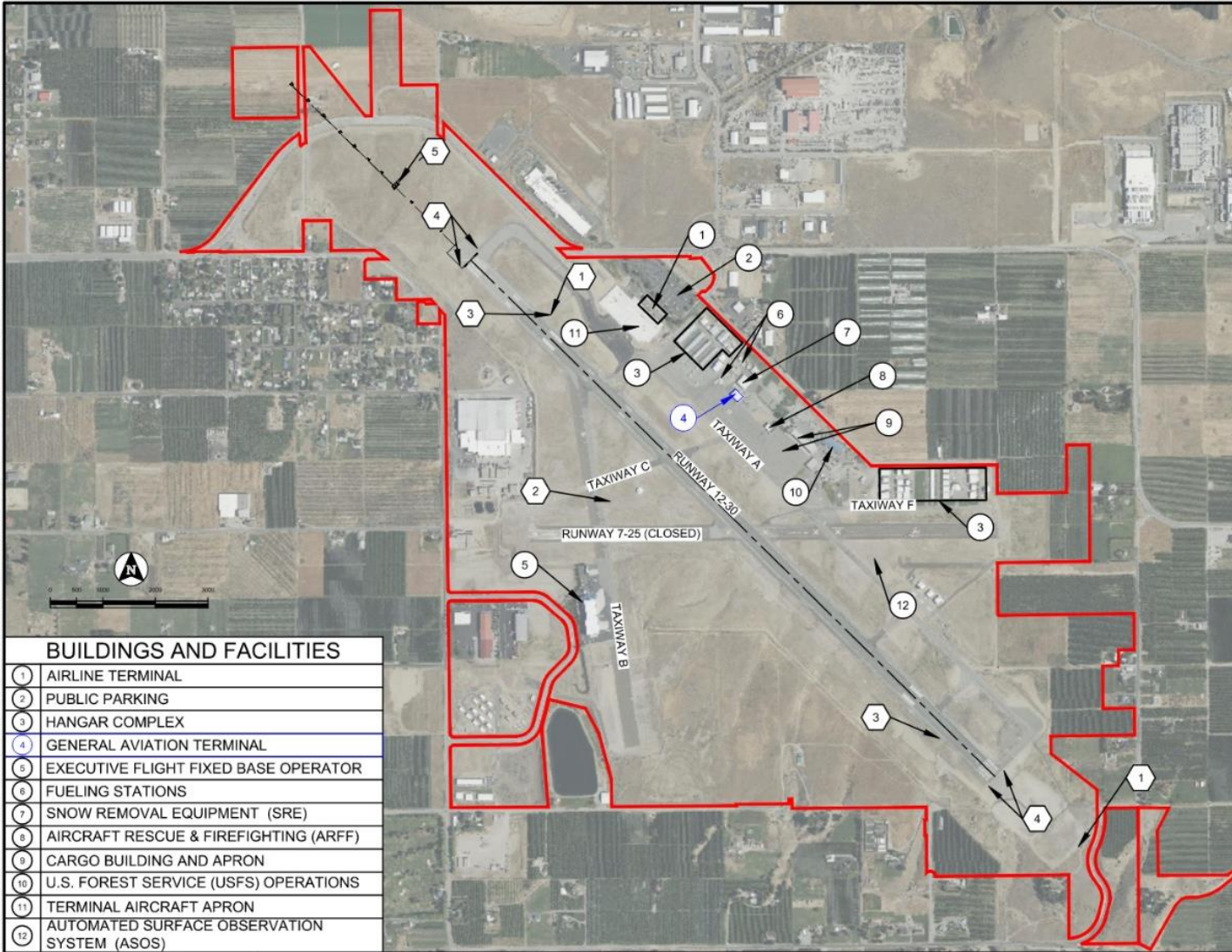


There is a terminal aircraft apron to serve commercial aircraft and GA parking aprons to serve fixed-wing aircraft and helicopters. GA aircraft hangars include 39 buildings with 76 storage units. The Airport also has an aircraft rescue and firefighting building and snow removal equipment facilities.

The Executive Terminal includes two operation and maintenance hangars where the Sponsor's offices are located. The Sponsor operates Fixed-Base Operator (FBO) services, which are provided at the GA and Executive Terminal areas. Services provided at both the GA and the Executive Terminals include ground handling, fueling, and pilot supplies. Additional services offered in the GA area include a rental car wash, fueling stations, and vehicle maintenance buildings. See **Figure 1-2: Existing Airport Layout** for the location of the GA Terminal building and key Airport facilities.

The Airport is required to maintain a current Airport Layout Plan (ALP) per 49 United States Code (USC) 47107(a)(16)(B). The GA Terminal building is identified on the ALP under Existing Buildings/Facilities number 9, as Fixed Base Operator. Improvements to the building are identified under Future Facilities number F8. Please refer to sheet 4 of **Appendix A: Airport Layout Plan**.

N:\220961\Task Order 22-12 - GA Terminal Plan Rvw03_Accident\Exhibits\Existing Airport Layout.dwg, 5/8/2023 8:44:07 AM, Sydney Anjem, DWG To PDF.plt
 © 2023 ARDURRA GROUP, INC. THIS INSTRUMENT IS THE PROPERTY OF ARDURRA. ANY REPRODUCTION, REUSE OR MODIFICATION OF THIS INSTRUMENT OR ITS CONTENTS WITHOUT SPECIFIC WRITTEN PERMISSION OF ARDURRA IS STRICTLY PROHIBITED.



LOOKING NORTHWEST AT RUNWAY 12-30 AND TAXIWAY A
 [PHOTO DATE: 11-8-16]

BUILDINGS AND FACILITIES	
1	AIRLINE TERMINAL
2	PUBLIC PARKING
3	HANGAR COMPLEX
4	GENERAL AVIATION TERMINAL
5	EXECUTIVE FLIGHT FIXED BASE OPERATOR
6	FUELING STATIONS
7	SNOW REMOVAL EQUIPMENT (SRE)
8	AIRCRAFT RESCUE & FIREFIGHTING (ARFF)
9	CARGO BUILDING AND APRON
10	U.S. FOREST SERVICE (USFS) OPERATIONS
11	TERMINAL AIRCRAFT APRON
12	AUTOMATED SURFACE OBSERVATION SYSTEM (ASOS)

NAVAIDS	
1	INSTRUMENT LANDING SYSTEM (ILS)
2	VHF OMNI-DIRECTIONAL RANGE (VOR)
3	PRECISION APPROACH PATH INDICATOR (PAPI)
4	RUNWAY END IDENTIFIER LIGHTS (REIL)
5	MEDIUM-INTENSITY APPROACH LIGHTING SYSTEM (MALSR)

LEGEND	
	AIRPORT PROPERTY BOUNDARY (~700 ACRES)
	RUNWAY 12-30 CENTERLINE

DATE: 5/8/23 JOB: 220965



FIGURE 1-2: EXISTING AIRPORT LAYOUT

1.3. GA Terminal Building

General aviation is a significant part of Airport operations. The existing GA Terminal building is a 6,400 square foot (80' X 80') structure built in 1956 as an aircraft hangar, and remodeled in 1967 (see **Figure 1-3**). A 1,760 square foot wood framed office building addition was constructed in the 1980s. Parking for the GA Terminal building is situated on its east side. The GA Terminal building was repurposed for its current use, which now serves as an FBO and flight school. In its current use, one aircraft is being stored in the building and it has a maximum occupancy of 110 people as determined by the International Building Code (IBC) and Douglas County standards.

In recent years, several on-site building assessments and multiple planning meetings with the Airport identified several verifiable deficiencies and potential hazards with the GA Terminal building. The identified deficiencies are related to architectural, electrical, civil engineering, structural, mechanical, and environmental concerns, further detailed in **Chapter 2**.



Figure 1-3: Looking northeasterly at the front of the existing GA Terminal building.

Photo courtesy of Plateau Archaeological Investigations.

1.4. Proposed Action

The Proposed Action is to rehabilitate and adaptively re-use the existing GA Terminal building to address known building deficiencies and potentially hazardous conditions in order to meet the needs of existing and future users.

1.5. Proposed Timeline

If approved, the Sponsor anticipates construction will take place during one construction season as early as the spring or summer of 2024.

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 2. Purpose and Need

2.1. Purpose

The purpose of the project is for the Airport to have a GA Terminal building that meets the needs of existing and future users through a safe, functional, accessible, and energy-efficient facility.

2.2. Need

The project is needed to sufficiently serve the traveling public, aircraft pilots and staff, and Airport staff. As stated in **Chapter 1**, building deficiencies, energy inefficiencies, accessibility barriers, and potentially hazardous conditions exist with the GA Terminal building that require immediate attention. The building is aged and outdated.

Airport operations are forecasted to increase in the next decade. As part of the 2017 Master Plan Update (MPU) planning process, forecasts were developed for the Airport using 2015 aviation data. These forecasts projected the following changes will occur during the 20-year planning horizon (2015–2035).

Table 2-1: Forecasted Airport Activity and Operations

FORECAST COMPONENT	2015 DATA*	2035 FORECASTED DATA*	PERCENT CHANGE
Based Aircraft	96	123	+28%
Air Cargo	1.15 million lbs.	2.01 million lbs.	+75%
Passenger Boardings	60,000	93,500	+56%
Operation Type			
Commercial	2,080	2,960	+42%
GA/USFS/Medical/Other	36,484	43,300	+19%
Air Cargo	1,500	1,750	+16%
Military	100	100	0%
Total Operations	40,164	48,200	+20%

* Source: MPU. Note per Table 2.8 in MPU: Forecast values rounded up to the nearest hundred, may not total. (Note: One flight equals two operations [landing and take-off]).

As shown in **Table 2-1**, GA operations at the Airport are expected to be 19% percent higher in 2035 than the 2015 baseline. Further, based aircraft, air cargo, and passenger boardings will increase by 28%, 75%, and 56%, respectively. This means more people using and relying upon the GA Terminal building and its services.

GA Terminal building deficiencies and potentially hazardous conditions, namely, those related to architectural, electrical, civil engineering, structural, mechanical, and environmental concerns, and the need to address them, are described in the sections below.

2.2.1. The Need to Address Building Deficiencies

Architectural Deficiencies

Damage to the exterior façade, masonry, paint, mortar joints, metal panel cladding, and building signage requires rehabilitation and replacement in order to keep the building in an adequate condition that is capable of serving the Airports' clients and the general public. Additionally, lack of insulation has caused damage to the masonry and has made it difficult to maintain indoor temperatures. Proper insulation is required to prevent further building damage and ensure the health and comfort of building users.

Electrical Deficiencies

Three primary electrical deficiencies associated with power supply and lighting need to be addressed.

Insufficient power supply has hindered the proper heating and cooling of the building. A power supply capable of achieving proper heating and cooling is needed to ensure the health and comfort of building users.

A mobile aircraft shore power unit requires relocation to the GA Terminal building. The building currently has a single-phase power supply which is insufficient for this purpose. Electrical upgrades to accommodate this power supply need are required.

The building has an obsolete T-12 fluorescent lighting system. In 2009, the U.S. Department of Energy began phasing out this type of lighting. The lighting system needs to be replaced to meet current standards.

Civil Engineering Deficiencies

Deficiencies associated with the septic system, stormwater conveyance, and ADA components exist, and need to be addressed.

The location of the current septic system and drain field is unknown. Without knowing the location of the system, it cannot be properly maintained and serviced. A replacement system is required in order to adequately meet the needs of the rehabilitated GA Terminal building.

Stormwater causes damage to the building due to the lack of a stormwater conveyance system and design flaws with the grade of the ground around the building. Water damage to the 1980s building addition is a result of the floor being 18 inches below the adjacent parking lot. A proper conveyance system needs to be installed to prevent stormwater from draining toward the building, causing water intrusion and damage to the building.

Due to the age of the building, it does not meet ADA standards, including those related to parking stalls, building entrance, and bathrooms. Current ADA components need to be installed to meet federal standards and to ensure safety and access is provided to all building users.

Structural Deficiencies

The roof presents a potential safety issue as it is overstressed and could eventually collapse, causing significant damage to the inside of the terminal or harm or loss of life to people within the building. Additionally, the roof needs to be rehabilitated to comply with IBC load requirements.

Mechanical Deficiencies

Most of the existing mechanical systems within the building, including the HVAC system and the building's plumbing, are beyond their service life and do not meet current building code efficiency requirements.

The building's HVAC system produces insufficient air flow, leading to problems maintaining proper indoor temperature. Additionally, the majority of ductwork is not insulated, which contributes to the inefficiency of the system. Replacing the existing HVAC and power systems, and adding proper insulation is necessary to maintain the comfort and health of building users. During the winter, the Airport experiences snow and

freezing temperatures. Having an operational heating and ventilation system is essential for the continued use of the building. Additionally, the hangar bay has no ventilation or exhaust. This needs to be installed to maintain proper airflow that ensures the safety of the users of the building.

The GA Terminal building's plumbing experiences reoccurring issues related to frozen pipes. Plumbing pipes require replacement to reliably provide water to the building and to maintain operation of the restrooms.

2.2.2. The Need to Address Potentially Hazardous Conditions Potential Environmental Deficiencies

The GA Terminal building was tested for the presence of potentially hazardous materials, including asbestos and lead. The preliminary findings of the testing were presented in reports dated May 25, 2023, which found quantities of asbestos in the vinyl flooring and in the black tar of the roof of the former oil heater room. Quantities found exceeded the EPA's 1% limit for allowable concentrations of asbestos within building materials. Testing results for building paint were below the 0.5% lead content limit in all painted surfaces tested, therefore, no safety hazard exists related to paint.

The existing GA Terminal building may pose health and safety risks as concentrations of asbestos exceeding EPA allowable limits were found in some building materials.

2.3. Requested Federal Actions

The FAA actions being requested by the Sponsor include:

- Unconditional approval of the ALP to depict those portions of the Proposed Action subject to FAA review and approval pursuant to 49 USC 47107(a)(16)(B).
- Determination that Environmental Analysis Prerequisites associated with any future AIP funding application have been fulfilled pursuant to 49 USC § 47101.

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 3. Alternatives

3.1. Overview

The NEPA process requires the FAA, as the lead federal agency, to identify and explore reasonable project alternatives. This chapter summarizes the process used to identify the alternative(s) analyzed in detail and provides a description of those alternatives.

3.2. Alternatives Screening Process

Evaluating the alternatives involved a two-level screening process. The first step was to consider the ability of each alternative to meet the Purpose and Need stated in **Chapter 2**. The second step involved an analysis of whether each alternative was feasible and prudent to implement. The term “feasible” refers to sound engineering principals (per FAA Order 5050.4B Page 10-10), while the term “prudent” refers to rational judgement. According to FAA Order 5050.4B, a project may be possible (feasible), but not prudent when one considers safety, policy, environmental, social, or economic consequences.

The alternatives that passed this screening process were then carried forward to **Chapter 4** for further analysis of how each alternative would potentially impact the affected environment as well as how those potential impacts could be avoided, minimized, or mitigated.

3.3. Alternatives Considered

There is no requirement regarding the number of alternatives that must be considered in an EA. The range of alternatives may be limited to the Proposed Action alternative and No Action alternative when there are no unresolved conflicts concerning alternative uses of available resources. Alternatives considered may also relate to the number of environmental issues involved.

For this project, three alternatives were considered:

- 1) Rehabilitate and adaptively re-use the existing GA Terminal building (Preferred Alternative / Proposed Action)
- 2) Demolish the existing GA Terminal building and construct an entirely new building.
- 3) Leave the existing GA Terminal building as is and do nothing (No Action Alternative).

NEPA requires that a No Action Alternative is considered as a baseline for the comparison of potential impacts to the Action Alternatives even though the No Action Alternative does not meet the stated Purpose and Need. The three alternatives are analyzed in detail in the following sections.

3.4. Action Alternatives

3.4.1. Alternative 1: Rehabilitate and Adaptively Re-Use the Existing GA Terminal Building (Proposed Action)

Alternative 1 would rehabilitate the GA Terminal building, while adaptively re-using elements of the existing structure. **Figure 3-1** depicts an architectural rendering of what Alternative 1 may look like following construction. **Figure 3-2** shows the proposed floor plan, based on conceptual designs.

Rehabilitation improvements of the existing 6,400 square foot GA Terminal building would include the following primary components: pilot’s lounge, public lounge, restrooms, locker rooms, showers, quiet rooms, and offices (FBO Office, Director’s Office and Assistant’s Office). A conference room and vestibule (485 square feet) would be added to the existing 6,400 square foot structure, for a total of 6,885 square feet. The locker rooms, showers, quiet rooms, offices, and conference room are ineligible for federal funding. The

1,760 square foot wood framed building addition constructed in the 1980s will be demolished and replaced with a covered outdoor area. The building would maintain the same maximum occupancy of 110 people.

Alternative 1 meets the Purpose and Need stated in **Chapter 2** as follows:

- Building deficiencies, including those related to the exterior façade, masonry, paint, mortar joints, metal panel cladding, roof and eaves, plumbing pipes, HVAC, power, lighting, septic, plumbing, stormwater conveyance systems, and building signage would be fixed through rehabilitation and replacement. Additionally, the rehabilitated building would be ADA-compliant and would include components such as ADA-accessible cabinets, grab bars, coat hooks, bathroom and shower stalls, and drinking fountains.
- The presence of asbestos exceeding EPA limits within building materials would be removed by qualified contractors during rehabilitation of the existing building.

The total cost to rehabilitate the existing GA Terminal building is estimated to be around \$5,000,000, which has been deemed feasible by the Airport. Alternative 1 meets the Purpose and Need stated in **Chapter 2** and is feasible and prudent to implement. Alternative 1 would take the least time to construct, and would utilize the existing building foundation, footings, building slab, and most of the CMU walls. Less materials would be used, and less construction waste would be generated. In an effort to maintain the historic character of the building, Alternative 1 would rehabilitate the building in a similar shape to the existing GA Terminal building, particularly the vaulted roof, which has been designed to capture the style and feeling of the period in which the GA Terminal was originally constructed. Due to these reasons, Alternative 1 was carried forward as the Proposed Action.



Figure 3-1: Conceptual architectural rendering of the rehabilitated GA Terminal building (Proposed Action), presented by ALSC Architects.

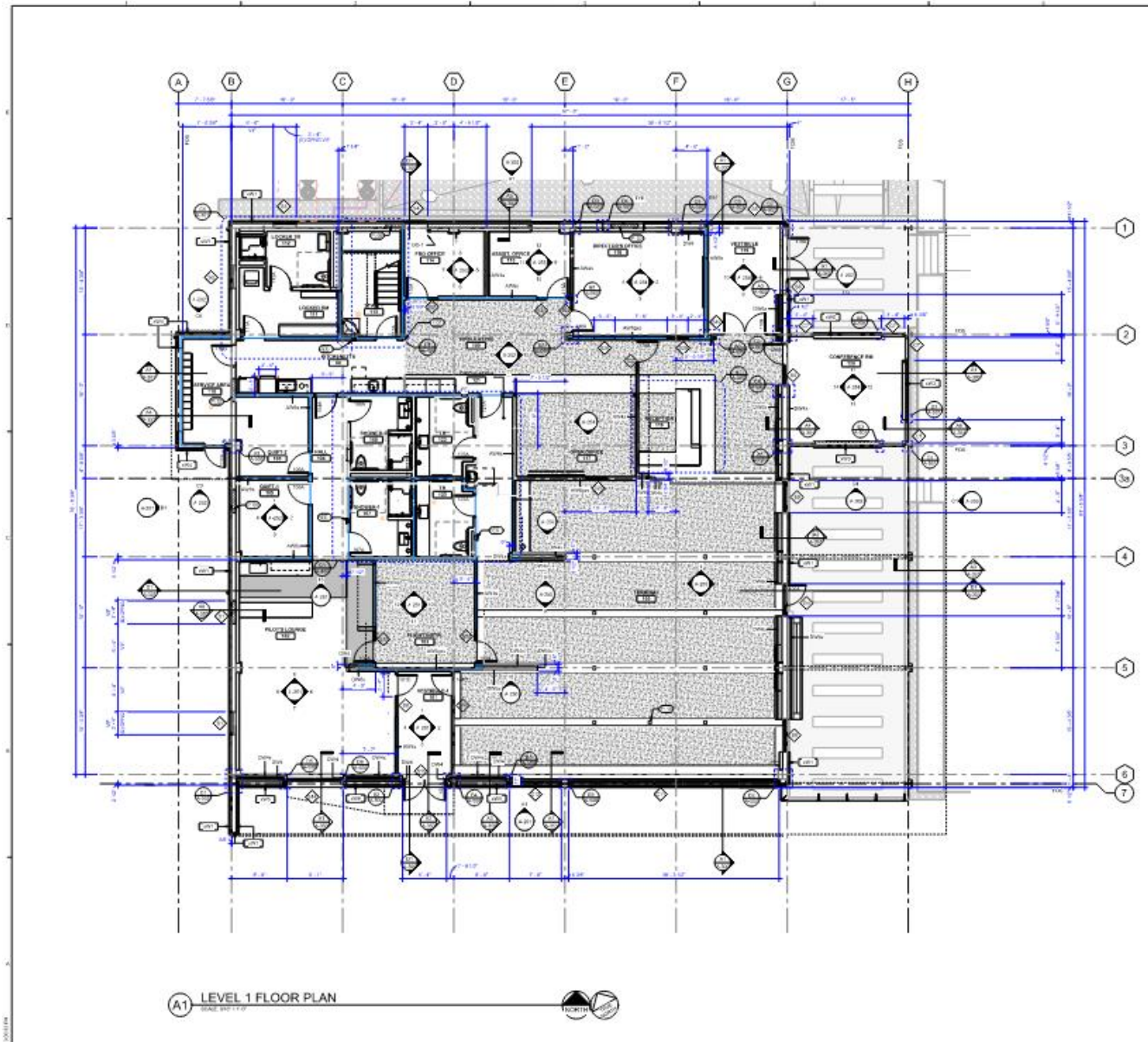


Figure 3-2: Conceptual design of the floor plan of the rehabilitated structure (Proposed Action).

3.4.2. Alternative 2: Demolish the Existing GA Terminal Building and Construct an Entirely New Building

This alternative would involve the complete demolition of the existing 6,400 square foot GA Terminal building and the 1,760 square foot addition. A new structure with the same or similar architectural design as the Airport's Executive Flight Building would be constructed in the place of the demolished structures.

Alternative 2 meets the Purpose and Need stated in **Chapter 2** as follows:

- Building deficiencies, including those related to the exterior façade, masonry, paint, mortar joints, metal panel cladding, roof and eaves, plumbing pipes, HVAC, power, lighting, septic, plumbing, stormwater conveyance systems, and building signage would be replaced with new building components after they were demolished. Additionally, the new building would be ADA-compliant and would include components such as ADA-accessible cabinets, grab bars, coat hooks, bathroom and shower stalls, and drinking fountains.
- The presence of asbestos exceeding EPA limits within building materials would be removed by qualified contractors prior to demolition of the existing building. The new building would not be constructed with any materials deemed potentially hazardous.

The total cost to demolish and reconstruct the existing GA Terminal building is estimated to be around \$5,000,000, which has been deemed feasible by the Airport. Alternative 2 meets the Purpose and Need stated in **Chapter 2** and is feasible and prudent to implement. Due to these reasons, Alternative 2 was carried forward for further analysis.

3.5. No Action Alternative

Under the No Action Alternative, the Airport would not rehabilitate the existing GA Terminal building, nor would it demolish and reconstruct it. No related improvements, changes, or actions would occur. The existing GA Terminal building would continue to be used in its current condition. As a result, the traveling public, aircraft pilots and staff, and airport staff would continue to experience the same conditions: namely, an overstressed roof, dilapidated building exterior, lack of ADA access, poor insulation, poor ventilation and heating, insufficient power, outdated lighting, damaged signage, plumbing and septic complications, and stormwater conveyance problems that would further deteriorate the building. Additionally, the building would continue to harbor potential environmental hazards related to the presence of asbestos. Should the Airport operations continue to grow as forecasted, this would only exacerbate the known problems through increased usage. As a result, the No Action Alternative does not meet the Purpose and Need of the project.

3.6. Alternatives Carried Forward for Analysis

Each Alternative will be evaluated in detail in **Chapter 4** of this EA. Alternative 1 (Proposed Action) and Alternative 2 meet the Purpose and Need stated in **Chapter 2** and are feasible and prudent to implement, therefore, they will be carried forward for further analysis. Although the No Action Alternative does not meet the stated Purpose and Need, it will be retained for further analysis in this EA to serve as a baseline for a comparison of the potential impacts stemming from the Proposed Action and Alternative 2 and in accordance with NEPA requirements.

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 4. Affected Environment, Environmental Consequences, and Mitigation

This chapter provides a description of the current physical, natural, and human environment within the Project Study Area established for this EA. It also includes a discussion of the environmental consequences that will result from implementation of Alternative 1: Rehabilitate and Adaptively Re-Use the Existing GA Terminal Building (Proposed Action) or Alternative 2: Demolish the Existing GA Terminal Building and Construct an Entirely New Building, and then identifies mitigation measures that can help reduce those impacts. The No Action Alternative serves as a baseline comparison. Data used to determine the affected environment were collected by reviewing existing documentation and databases, consulting with various individuals and agencies, and conducting field investigations. The analyses in this chapter are consistent with FAA Orders 1050.1F and 5050.4B.

Throughout this chapter, Alternative 1: Rehabilitate and Adaptively Re-Use the Existing GA Terminal Building (Proposed Action) is referred to as the “Proposed Action”, and Alternative 2: Demolish the Existing GA Terminal Building and Construct an Entirely New Building is referred to as “Alternative 2.” Collectively, they may be referred to as the “action alternatives.”

The chapter is divided into the following sections:

Project Study Area: Describes the area encompassing the footprint of the Proposed Action and Alternative 2 that was studied in order to identify known resources and to assess potential impacts to these resources.

Resources Relevant to the Proposed Action: Describes the environmental resources that are relevant to the Proposed Action and Alternative 2 and provides justification for that determination. Resources that are not relevant will not be affected by these Alternatives.

Potentially Affected Environmental Resources: Describes the environmental impact categories listed in FAA Order 1050.1F that the Proposed Action or Alternative 2 might affect.

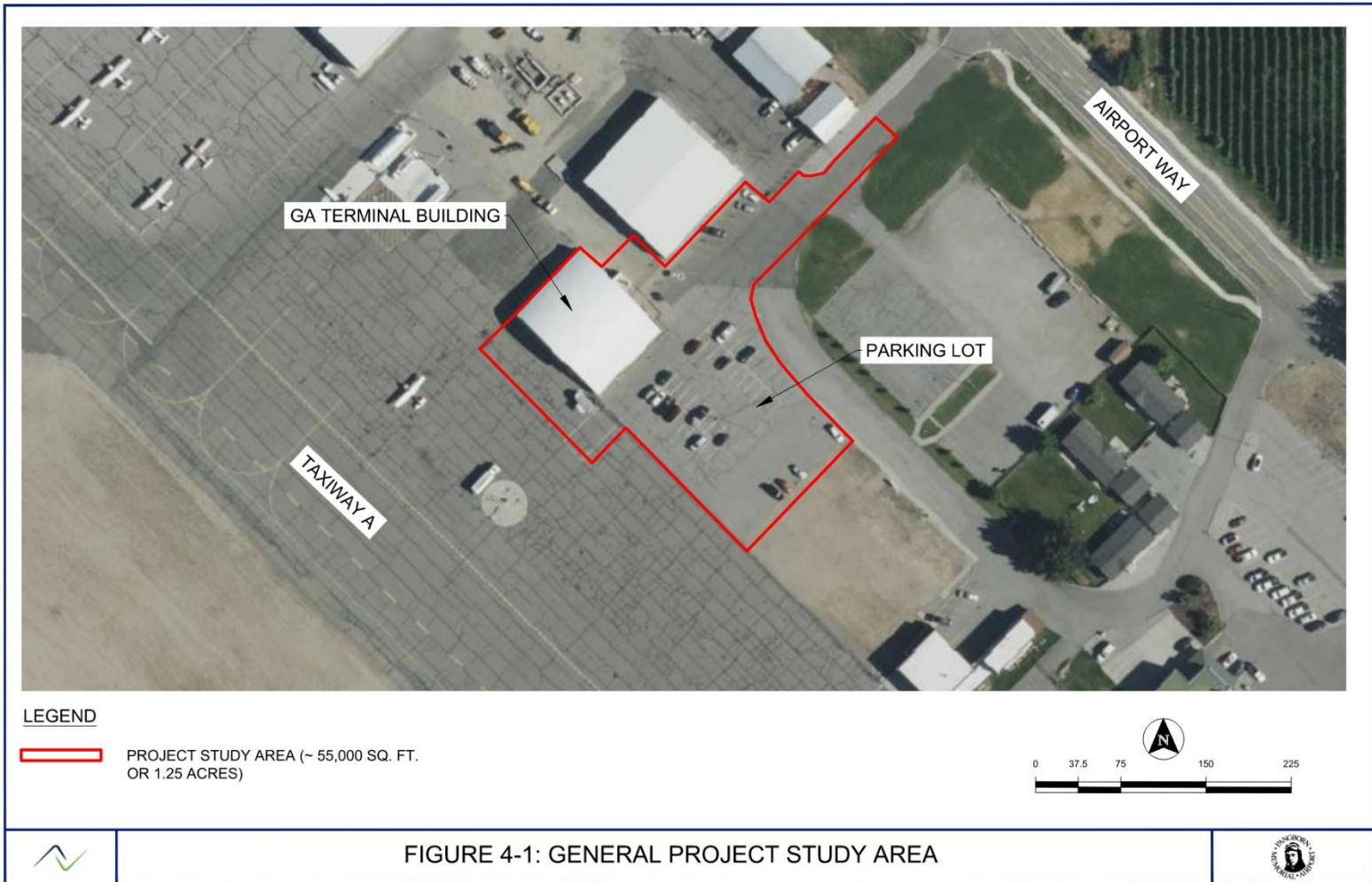
Cumulative Effects: Identifies and describes past, present, and reasonably foreseeable future actions that, when considered in combination with the Proposed Action, Alternative 2, or the No Action Alternative, could contribute to potentially significant cumulative impacts.

Summary: This section presents a summary of the environmental impacts associated with the Proposed Action, Alternative 2, and the No Action Alternative.

4.1. Project Study Area

According to the Desk Reference for FAA Order 1050.1F, a study area can vary based on the impact category being analyzed. As shown in **Figure 4-1: General Project Study Area**, the boundary of the general Project Study Area encompasses approximately 55,000 square feet (1.25 acres) and is based on the action alternatives carried forward for analysis (Proposed Action and Alternative 2). The general Project Study Area includes areas of direct impacts related to construction, equipment and materials staging, and environmental testing.

Some impact categories, such as air quality and visual effects, may experience indirect impacts outside of the general Project Study Area, and therefore the specific Project Study Area for such impact categories may be larger to include indirect impacts. In accordance with FAA Order 1050.1F, both direct and indirect impacts are considered for each environmental impact category. Unless noted otherwise, the term “Project Study Area” refers to the general Project Study Area depicted in **Figure 4-1** within this EA.



As shown in **Figure 4-1**, the 55,000 square foot Project Study Area is located entirely within Airport property and Douglas County and represents the footprint of the Proposed Action and Alternative 2. Rehabilitation (Proposed Action) and demolition and reconstruction (Alternative 2) of the GA Terminal building are comprised of approximately 8,160 square feet (6,400 SF GA Terminal building + 1,760 SF building addition), all of which are located on existing Airport property. No land acquisition is required for the Proposed Action or Alternative 2.

4.2. Resources Relevant to the Proposed Action

This section describes all Environmental Impact Categories, also referred to as Resources, defined by FAA Order 1050.1F that are relevant to the Proposed Action, Alternative 2, or No Action Alternative. **Table 4-1** lists the resources, whether or not they are relevant, and justification for that determination. Resources that are not deemed relevant will not be discussed further in this EA.

Table 4-1: Relevant Environmental Resources

Environmental Resource	Relevant	Explanation and Effect Determination
Air Quality	Yes	Construction would generate air emissions; therefore, further review in this EA is warranted.
Climate	Yes	Construction would generate atmospheric greenhouse gas (GHG); therefore, further review in this EA is warranted.
Department of Transportation, Section 4(f)	Yes	Section 4(f) provides for the protection of significant publicly owned lands, including parks, recreation areas, wildlife and waterfowl refuges, or publicly- or privately-owned historic sites, of national, state, or local importance eligible for listing in the National Register of Historic Places (NRHP). The GA Terminal building is a designated eligible historic property; therefore, Section 4(f) review is necessary.
Hazardous Materials, Solid Waste, and Pollution Prevention	Yes	The GA Terminal building has been tested and is found to contain quantities of asbestos that exceed the EPA's 1% limit for allowable concentrations of asbestos within building materials. Additionally, rehabilitation of the building would generate solid waste; therefore, further analysis of this resource category is warranted.
Historical, Architectural, Archeological, and Cultural Resources	Yes	The Proposed Action and Alternative 2 aim to rehabilitate or demolish and reconstruct (respectively) the existing GA Terminal building, which is a designated eligible historic property; therefore, further analysis of this resource category is warranted.
Land Use	Yes	Section 1502.16(c) of the CEQ Regulations requires the discussion of environmental impacts including "possible conflicts between the proposed action and the objectives of Federal, regional, State, and local...land use plans, policies and controls for the area concerned." The FAA requires airport operators to ensure that actions are taken to establish and maintain compatible land uses around airports. Therefore, further analysis of land use is warranted for the Proposed Action and Alternative 2.
Natural Resources and Energy Supply	Yes	Sections 1502.16(e) and (f) of the CEQ Regulations require that federal agencies consider energy requirements, natural depletable resource requirements, and the conservation potential of alternatives and mitigation measures listed in NEPA documents. The construction and operation of the Proposed Action or Alternative 2 would involve consumption of natural resources and energy; therefore, this resource warrants further review.

Socioeconomic Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risks	Yes	The Proposed Action and Alternative 2 involve the rehabilitation/construction of an existing building within the Airport property, which would limit any potential for socioeconomic impacts on surrounding communities, however, impacts to other environmental resources could potentially cause impacts to this resource category. Therefore, further review is warranted.
Visual Effects	Yes	Visual effects deal broadly with the extent to which the proposed action or alternative(s) would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or the visual character of the existing environment. Implementation of the Proposed Action or Alternative 2 would change the appearance and characteristics of the existing GA Terminal building that may create visual effects; therefore, further analysis in this EA is warranted.
Biological Resources	No	The Project Study Area is completely developed and contains no biological resources or critical habitats. Agency coordination with Washington Department of Fish and Wildlife (WDFW) Habitat Biologist Eric Pentico, determined that “there are no perceived impacts to fish and wildlife functions and values with the proposed actions, and WDFW has no concerns regarding this proposal” (see Appendix B: Agency Correspondence). Implementation of the Proposed Action or Alternative 2 would not affect any flora or fauna species or their habitats as they are not present within the Project Study Area. Therefore, further analysis of biological resources in this EA is not necessary.
Coastal Resources	No	The Project Study Area is not within the Coastal Barrier Resources System ² as delineated by the U.S. Fish and Wildlife Service or Federal Emergency Management Agency coastal barrier maps; therefore, coastal resources are not present within the Project Study Area and further analysis in this EA is not necessary.
Farmlands	No	The Project Study Area is completely developed with impervious surfaces and contains no farmland. Neither the Proposed Action nor Alternative 2 have the potential to convert farmland to non-agricultural uses; therefore, further analysis in this EA is not necessary.
Noise and Noise-Compatible Land Use	No	According to FAA Order 1050.1F, the threshold for determining if an action would have a significant effect on noise is if any of the following would occur.

² U.S. Department of the Interior. Fish and Wildlife Service. 2019. Coastal Barrier Resources System Mapper. <https://www.fws.gov/CBRA/Maps/Mapper.html> (accessed May 16, 2023).

		<ul style="list-style-type: none"> • The action would increase noise in a noise sensitive area by Day-Night Noise Level (DNL) 1.5 dB or more when that area is already exposed to noise at or above the DNL 65 dB noise exposure level. • The action would increase noise in a noise sensitive area by DNL 1.5 dB or more and cause the noise exposure level to meet or exceed the DNL 65 dB level when compared to the no action alternative for the same timeframe. <p>A noise sensitive area, as defined in Paragraph 11-5.b.(8) of FAA Order 1050.1F, is:</p> <p>“[a]n area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites...”</p> <p>DNL levels near airports range from 75 DNL close to the runway complex to below 45 DNL at further distances. Sound levels associated with typical heavy construction equipment (e.g., haul truck, bulldozer) range from 80–120 dB and power tools commonly used in construction produce sound levels up to 115 dB.³ Long-term operation of the Proposed Action or Alternative 2 would not cause an increase in vehicular, aircraft, and ground service equipment traffic. Any increase in noise related to increased operations would be the result of the anticipated forecasted growth rather than the action alternatives. Due to the limited scope and nature of the Proposed Action and Alternative 2, construction would only result in a relatively minor and temporary increase in Airport-related noise. This temporary increase in noise would not affect any noise sensitive areas. Therefore, further analysis of this resource category in this EA is not necessary.</p>
Water Resources	No	<p>The Project Study Area does not contain any water resources, including wetlands, floodplains, surface water (including wild and scenic rivers), or groundwater. Although groundwater may exist beneath the Project Study Area, groundwater wells mapped by the Washington State Department of Ecology (WSDOE) Well Report Viewer⁴ indicate static groundwater levels in the area far exceed construction depths of the action alternatives. Of the 2 groundwater wells identified within a 1-mile radius of the Project Study Area, one had a static water level depth of 148 feet while the other well was drilled to a depth of 280 feet and never encountered water. No Sole Source Aquifers exist</p>

³ Seixas N. University of Washington Final Report: *Noise and Hearing Damage in Construction Apprentices*. 2004

⁴ WSDOE. Washington State Well Report Viewer. Accessed January 4, 2024, at <https://apps.wr.ecology.wa.gov/wellconstruction/map/WCLWebMap/default.aspx>

		<p>within or near the Project Study Area or the Airport, nor will they be impacted by the action alternatives. The nearest Sole Source Aquifer is approximately 57.5 miles west of the Project Study Area.⁵ The action alternatives do not involve discharges to, or modification of, any water body. The action alternatives will not result in an increase in impervious surfaces, and stormwater flow will be managed in accordance with existing Airport facilities. Water resources are not present within the Project Study Area and further analysis in this EA is not necessary.</p>
--	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

⁵ EPA. Sole Source Aquifers. 2023. Accessed January 5, 2024, at <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>

4.3. Potentially Affected Environmental Resources

The following sections evaluate potential impacts related to the alternatives (Proposed Action, Alternative 2, and the No Action Alternative) on each of the Environmental Impact Categories defined by FAA Order 1050.1F. Each section describes the affected environment (i.e., existing conditions) of each environmental impact category, the potential environmental consequences of the alternatives, and identifies mitigation measures to reduce those potential impacts.

4.4. Air Quality

The EPA has identified and set National Ambient Air Quality Standards (NAAQS) for six criteria air pollutants which include: Carbon Monoxide (CO), Lead (Pb), Nitrogen Dioxide (NO₂), 8-Hour Ozone (O₃), Particulate Matter (PM₁₀ and PM_{2.5}), and Sulfur Dioxide (SO₂). Areas where concentrations of these criteria pollutants are below (i.e., within) the threshold levels are designated as attainment areas. Areas where concentrations of these criteria air pollutants are above the threshold levels are designated as nonattainment areas. Areas with prior nonattainment status and have since transitioned to attainment are designated as maintenance areas. The WSDOE monitors and tracks emissions to make sure levels of these pollutants meet federal and state air quality standards. States with nonattainment areas must develop a State Implementation Plan demonstrating how the areas will be brought back into attainment of the NAAQS within designated timeframes.

According to the 40 CFR Part 93 Rule as cited in the Federal Presumed to Conform Actions Under General Conformity, “federal agencies must meet the criteria for establishing activities that are presumed to conform by either: (1) Clearly demonstrating that the total of direct and indirect emissions from the type of activities that would be presumed to conform would not: (i) Cause or contribute to any new violation of any standard in any area; (ii) Interfere with provisions in the applicable State Implementation Plan (SIP) for maintenance of any standard; (iii) Increase the frequency or severity of any existing violation of any standard in any area; or (iv) Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including emission levels specified in the applicable SIP; or (2) Providing documentation that emissions from the types of actions that would be presumed to conform are below the applicable *de minimis* levels established in 40 CFR § 93.153(b)(1) and (b)(2).”

The General Conformity Rule prohibits federal agencies from permitting or funding projects that do not conform to an applicable State Implementation Plan in EPA-designated nonattainment or maintenance areas. The FAA 1050.1F Environmental Desk Reference, Chapter 1.3.5, notes, “...the General Conformity Rule is only considered when a federal action is proposed to occur in an EPA-designated nonattainment or maintenance area”; thus, in “attainment” areas that meet air quality standards, the General Conformity Rule does not apply.

4.4.1. Affected Environment

The Project Study Area is located in Douglas County. However, due to the Airport’s proximity to Chelan County, the attainment status was examined for both counties. According to the WSDOE, which monitors air quality at 78 locations within the state, the closest monitoring station is in Chelan County and is located approximately 6.2 miles west of the Airport in Wenatchee, Washington. According to the EPA Green Book,

as of May 31, 2023, both counties are in attainment for all criteria air pollutants.⁶ Given the attainment status of the project area, a SIP is not in place and the General Conformity Rule does not apply.

4.4.2. Significance Threshold

According to FAA Order 1050.1F, the threshold for determining if an action would have a significant effect on air quality is if, “The action would cause pollutant concentrations to exceed one or more of the NAAQS, as established by the EPA under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.”

4.4.3. Environmental Consequences

To identify the potential impact an action would have on air quality, both the indirect and direct impacts need to be examined. This includes emissions that would occur as a result of any operational changes caused by the action as well as construction of the project. Following is a description of the potential impact the Proposed Action, Alternative 2, and the No Action Alternative will have on the existing air quality.

Proposed Action

(i) Operational Changes

The Proposed Action is not anticipated to result in any increase in airport operations greater than what is already forecast to occur and will not result in any operational changes at the Airport. Therefore, there will not be an increase in aircraft emissions associated with the long-term operation of the Proposed Action. Any increase in air pollutant emissions associated with an increase in aircraft, vehicular, and ground service equipment traffic will be the result of the anticipated forecasted growth and not related to improvements to the GA Terminal building.

(ii) Construction Emissions

Construction of the Proposed Action will result in short-term changes in air emissions due to temporary construction activities. These emissions both directly result (e.g., the use of construction equipment) and indirectly result (e.g., worker commutes to the site) from construction activities.

Construction is anticipated to begin in the spring/summer of 2024 and to be completed within one construction season. Using the Airport Construction Emissions Inventory Tool (ACEIT), emissions produced from the use of construction equipment and construction-related activities were calculated for each project component. The ACEIT Model derives emission factors from the EPA’s Motor Vehicle Emission Simulator (MOVES) and MOVES-Nonroad models to estimate emissions from on-road vehicles and non-road equipment. The ACEIT program quantifies construction emissions based on a user-defined project scenario that includes a project type, proposed construction activities, estimated construction duration, and construction equipment with corresponding fuel types. Each project-related emission includes an assumption of project activity parameters, such as mileage (for vehicles) or hours of use (for equipment use). Activity parameters are curated by the ACEIT program and are specific to the selected construction activity and equipment type. The ACEIT program then attributes an emission factor for all six criteria pollutants for each emission-producing activity in the project scenario. All six factors are default multipliers that are derived from the MOVES and MOVES-Nonroad modeling programs.

⁶ USEPA. Green Book, National Area and County-Level Multi-Pollutant Information, Washington. https://www3.epa.gov/airquality/greenbook/anayo_wa.html (retrieved June 15, 2023).

The ACEIT program models the above information to quantify the temporary construction emissions from on-road (vehicles), non-road (construction equipment), and fugitive dust sources. The values derived from these three (3) sources are then summed to produce the criteria pollutants values.

Table 4-2: Construction Emissions Inventory for the Proposed Action shows the temporary construction-related emissions of criteria pollutants related to the Proposed Action based on the ACEIT model.

Table 4-2: Construction Emissions Inventory for the Proposed Action

Year	Criteria Pollutants (Short Tons Per Year)					
	CO	NO2	PM10	PM2.5	SO2	VOC
2024	0.53	0.25	0.04	0.01	0.002	0.09

The emissions of criteria pollutants shown in **Table 4-2** are temporary and are not significant (i.e., *de minimis*). The construction emissions are considered normal and are not expected to adversely impact air quality. No post-construction vehicle emissions were calculated for the Proposed Action as it is not expected to increase daily traffic in the vicinity of the Project Study Area.

Alternative 2

(i) Operational Changes

Alternative 2 is not anticipated to result in any increase in airport operations greater than what is already forecast to occur and will not result in any operational changes at the Airport.

(ii) Construction Emissions

Construction of Alternative 2 will result in short-term changes in air emissions due to temporary construction activities. These emissions both directly result (e.g., the use of construction equipment) and indirectly result (e.g., worker commutes to the site) from construction activities.

Table 4-3: Construction Emissions Inventory for Alternative 2 shows the temporary construction-related emissions of criteria pollutants related to Alternative 2 based on the ACEIT model.

Table 4-3: Construction Emissions Inventory for Alternative 2

Year	Criteria Pollutants (Short Tons Per Year)					
	CO	NO2	PM10	PM2.5	SO2	VOC
2024	0.93	0.37	0.04	0.02	0.003	0.14

The emissions of criteria pollutants shown in **Table 4-3** are temporary and are not significant (i.e., *de minimis*). The construction emissions are considered normal and are not expected to adversely impact air quality. No post-construction vehicle emissions were calculated for Alternative 2 as it is not expected to increase daily traffic in the vicinity of the Project Study Area.

No Action Alternative

(i) Operational Changes

Under the No Action Alternative, airport operations will not change.

(ii) Construction Emissions

Under the No Action Alternative, no construction emissions will occur.

4.4.4. Summary and Conclusion

Proposed Action

The Proposed Action will not result in operational changes at the Airport and will result in a negligible (i.e., *de minimis*) temporary increase in criteria pollutants (NAAQS) during construction. Construction impacts will be short-term as they will only occur during the period of construction. Furthermore, the Project Study Area is located in an attainment status area for all criteria air pollutants and this temporary increase in emissions will not affect Chelan or Douglas County's attainment status. Therefore, no significant, adverse, or long-term impacts to air quality are anticipated that could lead to a violation of the NAAQS. As a result, the Proposed Action will have **no significant effect** on air quality.

Alternative 2

Alternative 2 will not result in operational changes at the Airport and will result in a negligible (i.e., *de minimis*) temporary increase in criteria pollutants (NAAQS) during construction. Construction impacts will be short-term as they will only occur during the period of construction. Furthermore, the Project Study Area is located in an attainment status area for all criteria air pollutants and this temporary increase in emissions will not affect Chelan or Douglas County's attainment status. Therefore, no significant, adverse, or long-term impacts to air quality are anticipated that could lead to a violation of the NAAQS. As a result, Alternative 2 will have **no significant effect** on air quality.

No Action Alternative

Under the No Action Alternative, the Airport would not improve the existing GA Terminal building, nor would it demolish it and reconstruct a new building. No implementation actions would occur in the Project Study Area, therefore, the No Action Alternative would have **no effect** on air quality.

4.4.5. Mitigation, Best Management Practices, and Permits

Although there will be **no significant effects** from construction of the action alternatives, and no specific mitigation is required, construction will be conducted in accordance with FAA AC 150/5370-10H, *Standards for Specifying Construction of Airports*. Additionally, the following best management practices (BMPs) will be implemented during construction to help reduce emissions associated with construction vehicles and equipment:

- Limit unnecessary equipment idling; and maintain equipment in good working condition.
- Include a site-specific fugitive dust control plan in the final construction designs associated with the building demolition to include spraying water and use of water trucks within the project footprint.

The local clean air authority for Douglas County is the WSDOE Central Regional Office. Due to the insignificant effect on air quality, no permits are anticipated for the Proposed Action or Alternative 2.

4.5. Climate

Research has shown that an increase in atmospheric greenhouse gas (GHG) emissions is significantly affecting the Earth's climate. These conclusions are based upon a scientific record that includes substantial contributions from the United States Global Change Research Program (USGCRP)—a program mandated by Congress in the Global Change Research Act to "assist the Nation and the world to understand, assess, predict, and respond to human-induced and natural processes of global change. In 2009, based primarily on the scientific assessments of the USGCRP, as well as the National Research Council and the Intergovernmental Panel on Climate Change, the EPA issued a finding that it was reasonable to assume that changes in our climate caused by elevated concentrations of GHG in the atmosphere endanger the public health and public welfare of current and future generations. In 2015, EPA acknowledged more recent scientific assessments that "highlight the urgency of addressing the rising concentration of carbon dioxide (CO₂) in the atmosphere."

4.5.1. Affected Environment

Research has shown there is a direct correlation between fuel combustion and GHG emissions. GHGs are gases that trap heat in the atmosphere and are primarily a result of burning fossil fuels, such as CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

FAA Order 1050.1F states that GHGs and climate change should be considered and evaluated as an impact category in FAA environmental documents, including both Environmental Assessments and Environmental Impact Statements. However, there are currently no federal standards for aviation-related GHG emissions and, as noted by the CEQ, "it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions; as such direct linkage is difficult to isolate and to understand."

4.5.2. Significance Threshold

While FAA Order 1050.1F does not provide a significance threshold for aviation-related GHG emissions, the CEQ specifically asks agencies to consider the potential effects an action would have on climate change as indicated by its GHG emissions and the implications of climate change for the environmental effects of an action.

4.5.3. Environmental Consequences

Proposed Action

Based on the ACEIT construction emissions inventory (**Section 4.4.3**), no significant or sustained increase in construction or vehicular traffic is anticipated as a result of the Proposed Action and the associated construction and vehicular emissions are expected to be negligible. Therefore, emissions resulting from the Proposed Action will be temporary and will not result in a significant or sustained increase in emissions of CO₂. The Proposed Action will not include actions that will likely cause or create a reasonably foreseeable increase in CO₂ emissions or have a reasonably foreseeable impact on the local, regional, or global climate.

Alternative 2

Based on the ACEIT construction emissions inventory, no significant or sustained increase in construction or vehicular traffic is anticipated as a result of Alternative 2 and the associated construction and vehicular emissions are expected to be negligible. Therefore, emissions resulting from Alternative 2 will be temporary and will not result in a significant or sustained increase in emissions of CO₂. Alternative 2 will not include actions that will likely cause or create a reasonably foreseeable increase in CO₂ emissions or have a reasonably foreseeable impact on the local, regional, or global climate.

No Action Alternative

Under the No Action Alternative, there would be no measurable impacts associated with GHG emissions or climate.

4.5.4. Summary and Conclusion

Proposed Action

The Proposed Action will not cause an increase in aircraft operations or change fleet mix at the Airport, though construction activities will result in a temporary, negligible increase in GHG emissions. Therefore, the Proposed Action will have **no significant effect** on the climate.

Alternative 2

Alternative 2 will not cause an increase in aircraft operations or change fleet mix at the Airport, though construction activities will result in a temporary, negligible increase in GHG emissions. Therefore, Alternative 2 will have **no significant effect** on the climate.

No Action Alternative

Under the No Action Alternative, the Airport would not improve the existing GA Terminal building, nor would it demolish it and reconstruct a new building, and no related improvements, changes, or implementation actions would occur in the Project Study Area. Therefore, the No Action Alternative will not result in additional GHG emissions beyond normal projected growth and will have **no effect** on climate.

4.5.5. Mitigation, Best Management Practices, and Permits

No mitigation, best management practices, nor permits are required because construction-related increases in GHG emissions are temporary and negligible or discountable.

4.6. Department of Transportation, Section 4(f)

Section 4(f) was initially codified in Title 49 of the United States Code (USC) § 1653(f) (Section 4(f) of the U.S. Department of Transportation Act of 1966). In 1983, § 1653(f) was reworded and recodified as Title 49 USC § 303, but still commonly referred to as Section 4(f). Congress amended Section 4(f) in 2005 when it enacted the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users.

Section 4(f) provides for the protection of significant publicly owned lands, including parks, recreation areas, wildlife and waterfowl refuges, or publicly- or privately-owned historic sites, of national, state, or local importance eligible for listing in the NRHP (Historic resources will be discussed in further detail in **Section 4.8: Historical, Architectural, Archeological, and Cultural Resources**). Section 4(f) protects these properties from use unless it is determined there is no feasible and prudent alternative and a project includes all possible planning to minimize harm. For Section 4(f) purposes, an action could physically or constructively use a Section 4(f) resource.

A physical use of Section 4(f) resources occurs if an action involves the actual physical taking of a Section 4(f) property through the purchase of land or a permanent easement, physical occupation of a portion or all of the property, or alteration of structures or facilities on the property. The temporary occupancy of a Section 4(f) property for construction-related activities does not usually constitute a physical use under Section 4(f).

A constructive use occurs when the project does not incorporate land from a Section 4(f) property (i.e., physical use), but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. A substantial impairment would occur only if the protected activities, features, or attributes of the Section 4(f) property that contribute to its significance or enjoyment are substantially diminished so the value of the Section 4(f) property, in terms of its significance and enjoyment, is substantially reduced or lost.

Section 4(f) requires that the FAA determine whether or not the impacts of the proposed action are *de minimis*. If impacts are determined not to be *de minimis*, a Section 4(f) Evaluation must be completed. The FAA may make a *de minimis* impact determination with respect to a physical use of Section 4(f) property if, after taking into account any measures to minimize harm, there is a Section 106 finding of No Adverse Effect or No Historic Properties Affected.

4.6.1. Affected Environment

An initial review of publicly available records was conducted to identify potential Section 4(f) resources located within the Project Study Area. These included records maintained by the National Park Service, the Washington State Department of Natural Resources, the NRHP, the City of Wenatchee, and Google Maps. The section below outlines identified Section 4(f) resources that are known to be in the project vicinity.

Parks and Recreational Resources

Publicly owned parks and recreational areas are considered to be Section 4(f) resources when they are of national, state, or local significance and open to the public. This can also include public school playgrounds if they are open to the general public during non-school hours for organized recreational purposes such as ballgames and other sporting events. Review of publicly available records did not identify any publicly owned parks and recreational resources within the Project Study Area.

Wildlife and Waterfowl Refuges

Publicly owned wildlife and waterfowl refuges are considered to be Section 4(f) resources when they are of national, state, or local significance and are open to the public. There are no wildlife or waterfowl refuges within the Project Study Area.

Historic Sites

Public and privately-owned historic sites are considered to be Section 4(f) resources when they are listed or eligible for listing in the NRHP regardless of whether they are open to the public. A Cultural Resource Survey was conducted at the Airport by Plateau Archaeological Investigations LLC (Plateau) in October 2020 to identify historic sites at the Airport that may be eligible for inclusion in the NRHP. The survey encompassed 172.6 acres that included the entire Airport property and adjacent areas. Based on the survey results, the FAA determined, and the Washington State Department of Archaeology and Historic Preservation (DAHP) concurred, that the three (3) architectural properties at the Airport and one (1) archeological site off Airport property were eligible for listing in the NRHP (see **Appendix B: Agency Correspondence**). The three architectural properties are the GA Terminal building (Project Study Area), Very High Frequency Omnidirectional Range Facility (VOR), and the Beacon Tower. The identified archeological site off Airport property is the East Wenatchee Clovis Site which is approximately 0.25-0.50 mile northeast of the Airport (**Appendix C: Cultural Resource Survey for the Pangborn Memorial Airport Capital Improvement Program 2020-2025**).

The Area of Potential Effect (APE) under Section 106 of the National Historic Preservation Act (Section 106) corresponds to the Study Area under Section 4(f). The APE was defined by the FAA in consultation with the State Historic Preservation Officer (SHPO) at Washington State's DAHP. Based on July 21, 2023, correspondence, the APE consists of the existing GA Terminal building and the adjacent parking lot, approximately 55,000 square feet (1.25 acres). Of the 4 properties eligible for listing in the NRHP, only the GA Terminal building is located within the APE. Further details on the GA Terminal building's historic nature and eligibility for listing in the NRHP are addressed in **Section 4.8**.

4.6.2. Significance Threshold

FAA Order 1050.1F, Exhibit 4-1 provides the FAA's significance threshold for Section 4(f) resources. This states a significant effect would occur if, "the action involves more than a minimal physical use of a Section 4(f) resource or constitutes a "constructive use" based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource." A substantial impairment occurs when the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished.

4.6.3. Environmental Consequences

The subsections below describe the potential impacts the Proposed Action and Alternative 2 will have on Section 4(f) resources. Agency Scoping Letters were mailed to tribes with historical ties to the area on June 20, 2023. Potentially affected tribes include the Confederated Tribes of the Colville Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Yakama Nation. The letters

requested information on impacts from the Proposed Action that are under their jurisdiction and any indirect impacts the Proposed Action may have. Should any impacts be foreseen by the tribes, the letter requested that they provide recommendations on how to avoid, minimize, or mitigate the effects. The comment period ended July 20, 2023 and no comments were received from the tribes. Agency coordination with DAHP is detailed in **Section 4.8**.

Proposed Action

(ii) Physical Use

The Proposed Action will rehabilitate and adaptively re-use the existing GA Terminal building; therefore, it will physically use a Section 4(f) resource, as it will involve the physical alteration of the building.

During construction, the Proposed Action will temporarily alter Airport operations as it relates to the function the GA Terminal building and FBO service, and temporarily restrict access to the GA Terminal building during construction. This temporary occupancy of a Section 4(f) property for construction-related activities does not constitute a physical use under Section 4(f).

(iii) Constructive Use

Since the Proposed Action will involve the physical use of the GA Terminal building, and no other Section 4(f) properties occur within the APE or vicinity, the Proposed Action will not constructively use Section 4(f) properties.

Alternative 2

(i) Physical Use

Alternative 2 will demolish and reconstruct the existing GA Terminal building; therefore, it will physically use a Section 4(f) resource, as it will involve the physical alteration of the building.

(ii) Constructive Use

Since Alternative 2 will involve the physical use of the GA Terminal building, and no other Section 4(f) properties occur within the APE or vicinity, Alternative 2 will not constructively use Section 4(f) properties.

No Action Alternative

Under the No Action Alternative, the GA Terminal building will not be physically or constructively used.

4.6.4. Summary and Conclusion

Proposed Action

Since the Proposed Action will result in an Adverse Effect on Historic Properties, specifically the GA Terminal building, as described in **Section 4.8.4**, the Proposed Action will physically use Section 4(f) resources. A Section 4(f) Evaluation was prepared by the FAA that determined there are no feasible and prudent alternatives to the use of Section 4(f) resources for the rehabilitation and reuse of the GA Terminal building (see **Appendix E**). The Proposed Action minimizes harm through the rehabilitation and reuse of the structure, which retains historic character, rather than demolition of the existing building and construction of a new building. However, these impacts will be mitigated as outlined in a Memorandum of Agreement (MOA) between the FAA, DAHP, and the Sponsor (described further in **Section 4.8.4** and summarized in **Section 4.6.4** below). Indirect impacts related to temporary restricted access to the GA Terminal building, and temporary construction-related light emissions, air emissions, and noise, are minor and will not constructively use the GA Terminal building. Through MOA mitigation measures, the Proposed Action will result in **no significant effect** to Section 4(f) resources.

Alternative 2

Since Alternative 2 will result in an Adverse Effect on Historic Properties, specifically the GA Terminal building, as described in **Section 4.8.4**, Alternative 2 will physically use Section 4(f) resources. The demolition of the

GA Terminal building does not meet the MOA mitigation measures agreed to by participating parties (that includes preservation of parts of the building) because the building will be demolished. Therefore, Alternative 2 will result in a **significant effect** to a Section 4(f) resource.

No Action Alternative

Under the No Action Alternative, the Airport would not improve the existing GA Terminal building, nor would it demolish it and reconstruct a new building, and no related improvements, changes, or implementation actions would occur in the Project Study Area. Therefore, the No Action Alternative would have **no effect** on Section 4(f) resources.

4.6.5. Mitigation, Best Management Practices, and Permits

Proposed mitigation for the impacts to the GA Terminal building related to the Proposed Action includes maintaining the approximate shape/style of the vaulted barrel roof and adaptively re-using the majority of the CMU walls to retain historical architectural elements of the building. A commemorative plaque acknowledging the history of the building following project completion will be publicly displayed within the rehabilitated building.

In the unlikely event that there is an unanticipated discovery of archeological material during construction, the contractor shall be required to adhere to the Inadvertent Discovery Plan (**Appendix D**). If a discovery occurs, construction activities will immediately stop, and the contractor will contact the Sponsor. The Sponsor will coordinate with the FAA, Tribes, and DAHP. Construction activities will not resume until the contractor is provided with a notice to proceed.

Since the Proposed Action will result in an Adverse Effect on Historic Properties, a *de minimis* impact determination cannot be made. FAA Order 1050.1F Section B-2.3 states that “when a project would involve the use of a Section 4(f) property and the FAA cannot make a *de minimis* impact determination, the FAA must prepare a Section 4(f) evaluation.” In accordance with FAA Order 1050.1F, a Section 4(f) Evaluation was completed and is available as **Appendix E**.

4.7. Hazardous Materials, Solid Waste, and Pollution Prevention

Hazardous materials are products or waste regulated by the EPA and WSDOE. These include substances regulated under the Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act (RCRA), and regulations for solid waste management, above ground storage tanks and underground storage tanks (USTs).

This section discusses hazardous materials, solid waste, and pollution prevention based on the following criteria:

- Potential waste that would be generated by the action alternatives and the potential impact that waste could have on environmental resources.
- The potential impact that waste would have on waste handling and disposal facilities.
- Potential hazardous materials that would be used during construction and operation of the action alternatives and any applicable pollution prevention procedures.
- The potential for encountering previous contamination by hazardous materials at the work site during construction and operation of the action alternatives.
- Whether the action alternatives would interfere with any ongoing remediation of any existing contaminated sites in the Project Study Area or in its immediate vicinity.

Quite often, the terms hazardous material, solid waste, and pollution are used interchangeably to refer to contaminants, industrial waste, or dangerous products. However, each of these terms has a specific technical meaning based on the relevant regulations. Hazardous materials, solid waste, and pollution prevention are federally regulated by the EPA and by the WSDOE at the state level.

4.7.1. Affected Environment

A Phase I Environmental Site Assessment (ESA) was completed by Budinger & Associates (Budinger) to research the current and historical uses of the Project Study Area. The purpose of this site assessment was to determine if any of these uses have impacted the soil or groundwater and, if so, determine if those impacts could pose a threat to the environment or human health. As reported in the Phase I ESA, the Airport is not currently listed as a known or suspected contaminated site. However, because of ongoing Airport activities (e.g., fuel storage), this assessment does include some environmental concerns. The Phase I ESA Report is included as **Appendix F**.⁷

Hazardous Materials

As part of the Phase I ESA, Budinger reviewed environmental databases maintained by the EPA and WSDOE for the properties located within the vicinity of the Project Study Area. These records describe historical information regarding the use of hazardous materials and assist in evaluating the potential for contamination within the Project Study Area. Budinger also performed an on-site investigation that included site reconnaissance and interviews of Airport personnel to document the environmental conditions existing within the Project Study Area. The findings and conclusions from the Phase I ESA Report related to potential hazardous materials are summarized in the following sections.

Activities (previously or currently) conducted by the Airport, its tenants, and nearby property owners require the storage and use of a variety of hazardous materials that could be released into the environment in the event of a spill, aircraft crash, or ground support equipment accident. These materials include gasoline, diesel, aircraft fuels, motor oils, heating oils, lubricants, cleaning solvents, paint, herbicides, pesticides, fertilizer, as well as airfield and aircraft deicing materials.

According to the WDOE Facility Database, 15 regulated sites with environmental permitting requirements are located on Airport property. These permits include National Pollutant Discharge Elimination System permits, RCRA permits, and dangerous waste management facility permits issued by WSDOE. These are commonly required for businesses with a history of repair or manufacturing. Acquiring these permits does not necessarily indicate a history of environmental or compliance issues.

The Airport and its tenants operate aboveground and UST for fuel and oil storage on Airport property. The storage systems are used for the fueling of ground support vehicles and equipment, fueling of GA and commercial aircraft, emergency power generators, and oils and lubricants for maintaining equipment. The systems are designed and operated in accordance with applicable state and federal regulatory requirements. The Phase I ESA Report inventoried 10 USTs within proximity to the Project Study Area. Of the 10 USTs, two (2) are operational aviation fuel storage tanks (both are unused and awaiting removal), two (2) are former gasoline storage tanks that are reported to have been closed-in-place since 1996 (one leaded and one unleaded), and six (6) have been removed (on or before 1996). The tanks that were removed contained unleaded gasoline, diesel, used heating oil/waste, and/or aviation fuel. The databases did not list any significant releases related to any of the USTs. According to Budinger, the soil types, proximity to the Project

⁷ Due to the significant length of the appendices attached to the site assessment, only the body of the report has been included in the appendix.

Study Area, results of previous environmental assessments, and the depth to groundwater, indicate none of the 10 UST sites pose a risk to the Proposed Action or Alternative 2.

G-Logics, Inc. performed a soil assessment in 2018 for areas near the UST sites (past and present) on Airport property. As part of this soil assessment, 42 exploratory borings with soil samples were taken (drilled to a maximum depth of 20 feet below the surface). One of these samples contained diesel-range total petroleum hydrocarbons (TPH)⁸ that exceed the Model Toxics Control Act (MTCA) cleanup levels. This sample is near the soil surface and was collected beside a UST that contained heating oil (henceforth referred to as UST 1). The contamination was determined to be limited in extent and likely a surficial spill site rather than a leak. This conclusion was supported as additional samples taken around UST 1 did not indicate the presence of TPH concentration above MTCA cleanup levels.⁹ The risk associated with the tank is considered low and is discussed further below.

Budinger visually inspected inside the GA Terminal building and identified two 5-gallon polyethylene fuel containers, two handheld herbicide sprayers, sporadic oil stains in the hangar garage, and fill and ventilation piping associated with UST 1 along the northeastern border of the building.

Budinger ultimately identified two Recognized Environmental Conditions (REC). As defined by ASTM E 1527-13, RECs are the "presence or likely presence of any hazardous substances or petroleum products in, on, or at a property." The first REC is associated with UST 1 and the high TPH concentrations in the underlying soils. The presence of these contaminated soils can potentially release vapor intrusion to the Project Study Area. The second REC are two side-by-side USTs directly west of the Project Study Area; both USTs are decommissioned with no information regarding their size or historical contents. Given their proximity to the Project Study Area, the two RECs are potential sources for hazardous materials.

In May 2023, Prism Environmental Services (Prism) performed an Asbestos and Lead Paint Building Survey on the interior and exterior of the Project Study Area. The asbestos survey involved a visual inspection, analysis, and assessment of building materials that included the sampling of surface material, thermal insulation, and other miscellaneous materials. In total, the asbestos survey took 30 samples that were delivered to SanAirLab for analysis. Of the 30 samples, five contained harmful levels of asbestos and exceeded the EPA Regulatory limit of 1% asbestos content. The samples exceeding the EPA Regulatory threshold are described below:

- Two samples of 20% asbestos minerals in the Tan/Orange Sheet Vinyl floor of the Lobby and Rear Exit areas, covering approximately 500 SF.
- One sample of 20% asbestos content in the Tan/Orange Sheet Vinyl floor Beige/White Sheet Vinyl floor of the Lounge and Kitchen areas, covering approximately 300 SF.
- Two samples of 8% asbestos minerals in the Black roofing tar over the former oil heater room, covering approximately 100 SF.

Prism conducted a Lead Based Survey by collecting paint chip samples along the interior and exterior surfaces of the Project Study Area. In total, 16 samples were taken and delivered to Accurate Analytical Testing for lead paint analysis. Each sample tested below the 0.5% EPA Regulatory threshold for lead content. Therefore, the Project Study Area does not contain harmful levels of lead-based paint. Any renovated materials

⁸ Scientists categorize TPH based on the number of carbon atoms present. Diesel range typically refers to petroleum hydrocarbons with a range of 10-28 carbon atoms.

⁹ MTCA cleanup levels are defined by WSDOE as concentrations of hazardous substances in the environment that are considered sufficiently "protective of human health and the environment under specified exposure conditions."

containing paint can be handled or disposed of as general construction debris, and the EPA's Lead, Renovation, and Paint regulatory rule does not apply.

Solid Waste

The EPA environmental databases and records referenced in Budinger's Phase I ESA Report indicated that there were no sites listed on the EPA's National Priorities List and no RCRA Solid Waste Management Units found within the Project Study Area.

4.7.2. Significance Threshold

The FAA has not established a significance threshold for hazardous materials, solid waste, or pollution prevention. However, it has identified factors to consider in evaluating the context and intensity of the potential environmental impacts. These factors include situations in which the Proposed Action or Alternative 2 would have the potential to:

- Violate applicable federal, state, tribal, or local laws or regulations regarding hazardous materials and solid waste management.
- Involve a contaminated site (e.g., a site listed on the National Priorities List).
- Produce an appreciably different quantity or type of hazardous waste.
- Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity.
- Adversely affect human health and the environment.

4.7.3. Environmental Consequences

Following is a description of the potential effects of hazardous materials, solid waste, and pollution prevention associated with the Proposed Action and Alternative 2.

Proposed Action

(i) Hazardous Materials

Operating the Proposed Action would not change the type or quantity of hazardous materials stored or used at the Airport. The Airport's operational above ground fuel tanks are located outside the construction footprint of the Proposed Action and will not be impacted. Further, asbestos-containing material was identified during the Asbestos and Lead Paint Building Survey and would be removed by an accredited asbestos removal contractor prior to the rehabilitation of the GA Terminal building.

The Project Study Area potentially includes soils that have been contaminated by petroleum or other hazardous materials. Most notably are the two RECs bordering the Project Study Area to the northeast and west. The first REC pertains to UST 1 which is situated on soils that are contaminated with TPH. Although UST 1 is decommissioned, the associated fill, and ventilation piping still abuts the northeastern side of the GA Terminal building. The ventilation piping does not contain hazardous materials and the Proposed Action is unlikely to disturb the potentially contaminated fill material related to UST 1 as it is overtopped, or encased, with paved surfaces. Therefore, the Proposed Action is unlikely to disturb hazardous materials at the first REC site.

The second REC site includes two side-by-side UST tanks, located directly west of Project Study Area; both USTs are decommissioned. Their contents and size are unknown. However, both USTs are overtopped with paved surfaces that will not be impacted by during construction of the Proposed Action. Therefore, the Proposed Action will not encounter hazardous materials at the second REC site.

Debris generated during construction activities may disturb asbestos-containing materials and proper disposal of this hazardous waste will require an accredited asbestos removal contractor. Since asbestos was identified

in the Project Study Area, the U.S. EPA must be notified ten (10) working days in advance for all renovations or demolitions that disturb 260 LF, 160 SF, or 35 CF of materials that contain asbestos. The Chemical Waste Management of the Northwest disposal site will be used to dispose of asbestos and any other hazardous waste. This site has a remaining capacity of 30+ years.¹⁰

(ii) Solid Waste

Construction of the Proposed Action would generate construction debris that would cause a short-term, temporary increase in the quantity of solid waste generated at the Airport. The selected general contractor would be responsible for disposing of any solid waste and recyclable material in accordance with all federal, state, and local rules and regulations. The Greater Wenatchee Regional Landfill and Recycling Center has the capacity to accommodate all solid waste generated by the construction activities and is expected to stay open throughout the duration of construction.¹¹

(iii) Pollution Prevention

Construction activities are not anticipated to affect or pollute any of the approximately 40 groundwater wells located on Airport property, but outside of the Project Study Area. Proper use, storage, inspection, and maintenance of construction equipment will minimize potential releases of petroleum or other hazardous materials, while onsite. Accidental spills and waste materials generated by the construction equipment will be properly disposed of at an appropriately permitted facility. A temporary Erosion and Sedimentation Control (ESC) plan and a Spill Prevention, Control, and Countermeasure (SPCC) plan will be in place during construction to further minimize the potential of petroleum or hazardous materials from contaminating the site.

Under the Proposed Action, the Airport will continue to store petroleum and hazardous materials as a part of regular operations, which will comply with federal, state, and local rules and regulations. The Airport will update its SPCC plan prior to construction, as needed, and will maintain compliance with the applicable regulatory requirements.

Alternative 2

(i) Hazardous Materials

As Alternative 2 would be constructed within a similar footprint to the Proposed Action and would serve the same function as the Proposed Action, construction and operation of Alternative 2 would not change the type or quantity of hazardous materials stored or used at the Airport. Additionally, Alternative 2 would not encounter or disturb hazardous materials at the REC sites. Asbestos-containing material would be removed by an accredited asbestos removal contractor prior to the demolition of the GA Terminal building. The U.S. EPA would be notified ten (10) working days in advance of the demolition.

(ii) Solid Waste

Demolition of the GA Terminal building proposed in Alternative 2 would increase the amount of construction debris generated. The selected general contractor would be responsible for disposing of any solid waste and recyclable material in accordance with all federal, state, and local rules and regulations.

(iii) Pollution Prevention

Construction activities of Alternative 2 are not anticipated to affect or pollute any of the approximately 40 groundwater wells located on Airport property, but outside of the Project Study Area. The same safety measures described above for the Proposed Action would be employed for Alternative 2 for pollution prevention.

¹⁰ Chemical Waste Management of the Northwest. <https://www.wmnorthwest.com/landfill/chemicalwaste.htm> (retrieved June 2023).

¹¹ Greater Wenatchee Landfill and Recycling Center. <https://www.wmnorthwest.com/landfill/wenatchee.htm> (retrieved June 2023).

No Action Alternative

Under the No Action Alternative, Hazardous Materials, Solid Waste, and Pollution will not change at the Airport.

4.7.4. Summary and Conclusion

Proposed Action

Under the Proposed Action, any hazardous waste materials generated will be handled and disposed of in accordance with applicable federal, state, and local laws and regulations. This includes the asbestos-containing material that was identified in the interior and exterior surfaces of the GA Terminal building. All asbestos will be handled by an accredited asbestos removal contractor and disposed of at a licensed facility like the Chemical Waste Management of the Northwest. Therefore, the Proposed Action would not violate any applicable federal, state, tribal, or local laws or regulations regarding hazardous materials and solid waste management.

The two REC sites contain potentially hazardous materials and are in the vicinity of the Project Study Area. However, both sites are overtopped with impervious surfaces that the Proposed Action will not penetrate, subsequently leaving the underlying soils undisturbed. The USTs will be decommissioned and removed under a separate and independent project, resulting in the elimination of the RECs.

Construction and operation of the Proposed Action will not involve a contaminated site listed on the National Priorities List or result in the Airport producing an appreciably different quantity or type of hazardous waste.

During construction, the Proposed Action does involve hazardous materials (e.g., fuels and solvents), and will temporarily generate solid waste. However, the overall potential for negative impacts will be reduced by requiring the contractor to ensure debris and waste materials are properly disposed of, follow the ESC plan and BMPs, and be prepared to address any on-site spills through the SPCC plan. Furthermore, the Proposed Action is not anticipated to adversely affect human health or the environment. Therefore, it will have **no significant effect** on hazardous materials, solid waste, or pollution prevention activities.

Alternative 2

Handling and disposal of hazardous materials will be done the same as the Proposed Action, and will not violate any applicable federal, state, tribal, or local laws or regulations regarding hazardous materials and solid waste management. Alternative 2 will not disturb either REC site, and will not involve a contaminated site listed on the National Priorities List, or result in the Airport producing an appreciably different quantity or type of hazardous waste.

During construction, the Proposed Action does involve hazardous materials (e.g., fuels and solvents), and will temporarily generate solid waste. Alternative 2 will involve the same hazardous materials as the Proposed Action but will generate more solid waste. However, the overall potential for negative impacts will be reduced by requiring the contractor to ensure debris and waste materials are properly disposed of, follow the ESC plan and BMPs, and be prepared to address any on-site spills through the SPCC plan. Furthermore, Alternative 2 is not anticipated to adversely affect human health or the environment. Therefore, it will have **no significant effect** on hazardous materials, solid waste, or pollution prevention activities.

No Action Alternative

Under the No Action Alternative, the Airport would not improve the existing GA Terminal building, nor would it demolish it and reconstruct a new building, and no related improvements, changes, or implementation actions would occur in the Project Study Area. Therefore, the No Action Alternative will have **no effect** on hazardous materials, solid waste, or pollution prevention activities.

4.7.5. Mitigation, Best Management Practices, and Permits

Although there will be **no significant effect** on hazardous materials, solid waste, or pollution prevention activities from the Proposed Action or Alternative 2, and no specific mitigation is required, BMPs will be employed during construction. These will include the following measures:

- An ESC plan and SPCC plan will be implemented during construction to minimize the potential of petroleum or hazardous materials from contaminating the site.
- Prior to removal of the building materials containing asbestos, appropriate agencies will be notified, and the materials will be properly disposed of by an accredited asbestos material removal contractor at an appropriately permitted facility.
- Ensuring the proper use, storage, inspection, and maintenance of construction equipment to minimize spills or accidental releases of hazardous materials.
- Developing a hazardous materials response plan to identify precautions, training requirements, and response measures to be taken to prevent and contain spills and accidental releases of hazardous materials.
- When possible, construction debris associated with the Proposed Action or Alternative 2 will be recycled.
- Designate a contained area for equipment storage, short-term maintenance, and refueling.
- Inspect vehicles and equipment daily for leaks and repair immediately.
- Conduct major vehicle maintenance and washing off site.
- Ensure all spent fluids (e.g., motor oil) and used vehicle batteries are collected, stored, or recycled as hazardous waste at an appropriate site.

4.8. Historical, Architectural, Archeological, and Cultural Resources

Historical, architectural, archeological, and cultural resources encompass a range of sites, properties, and physical locations relating to human activities, society, and cultural institutions. These resources include past and present expressions of human culture and history in the physical environment that can include archeological sites, structures, objects, and districts considered to be important to a culture or community. These resources can also include aspects of the physical environment like natural features or the plant and animal life of a particular region that are a part of the traditional ways of life associated with community values and institutions.

4.8.1. Affected Environment

To identify potential historical, architectural, archeological, and cultural resources located at the Airport, a Cultural Resource Survey was completed October 2020 by Plateau. The Cultural Resource Survey is included as **Appendix C: Cultural Resource Survey for the Pangborn Memorial Airport Capital Improvement Program 2020-2025 and Inadvertent Discovery Plan**. Based on the Cultural Resource Survey and agency correspondence that followed, the GA Terminal building was determined eligible for listing in the NRHP.

As described in **Section 4.6**, agency correspondence dated July 21, 2023 resulted in DAHP concurring with the FAA's definition of the APE, which consists of the existing GA Terminal building and the adjacent parking lot, approximately 55,000 square feet (1.25 acres).

Historical and Architectural Resources

The 2020 Cultural Resource Survey encompassed 172.6 acres that included the entire Airport property and adjacent areas. The survey documented twenty-nine (29) potentially historic resources on and adjacent to Airport property. It also included an evaluation of the Pangborn Memorial Airport as a whole for

consideration as a historic district. In order to determine if a resource is eligible for listing in the NRHP, it must be at least 50 years in age and significant in American history, archeology, architecture, engineering, or culture, and meet one of the criteria for NRHP eligibility. These four eligibility criteria are as follows:

- **Criterion A:** The property is associated with events that have made a significant contribution to the broad patterns of our history.
- **Criterion B:** It is associated with the lives of persons significant in our past.
- **Criterion C:** It embodies the distinctive characteristics of a type, period, or method of construction; represents the work of a master; possesses high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction.
- **Criterion D:** It yields, or may be likely to yield, information important in prehistory or history.

Historic resources must also retain integrity of location, setting, design, material, workmanship, feeling and association to convey significance under Criterion A, B, C or D. If a resource is found to be significant and to retain integrity, it is recorded as potentially eligible for listing in the NRHP.

Of the 29 identified properties, the FAA determined that only three (3) were eligible for listing in the NRHP, namely, the GA Terminal building (Property ID #721677), Beacon Tower (Property ID #721566), and Very High Frequency Omnidirectional Range (VOR) Facility (Property ID #721709). Of the 3 properties eligible for listing in the NRHP, only the GA Terminal building is located within the APE. The Pangborn Memorial Airport was not eligible for listing in the NRHP as it did not meet the criteria for establishment as a Historic District. Please refer to **Appendix C** for more details on these findings.

The Cultural Resource Survey conducted by Plateau resulted in their recommendation that the GA Terminal building is eligible for inclusion in the NRHP under Criterion C. Plateau's report describes the structure as a vaulted hangar with a single-story room centered on the east face, and a one-story office across the southeast face (added circa 1966-1968). It has concrete block walls with standing seam metal "verges," and the office has T 1-11 siding. Typical windows of the hangar are pivot with steel casings and rowlock course headers, while those of the office are single or triple, sliding or fixed, with metal casings and no sill. The main entrance to the hangar is a sliding metal bay door, while the office entrance is a double-leaf glass door.¹²

The GA Terminal building remodel that occurred in 1967 maintained the historical characteristics of the building, and the structure has not significantly changed since that point in time. Therefore, Plateau determined that the structure has retained the integrity of its design, workmanship, materials, feeling, location, and association to the Airport as a hangar that supports general aviation activities, which makes it eligible under Criterion C. In a consultation letter sent by the FAA to the Washington State Department of Archaeology and Historic Preservation (DAHP), dated March 23, 2021, the FAA determined that the GA Terminal building (Property ID: 721677) was eligible for listing in the NRHP under Criterion C. The DAHP responded on April 7, 2021, concurring with the FAA determination that the GA Terminal building was eligible for inclusion in the NRHP. The agency correspondence is documented in **Appendix B**.

Archeological and Cultural Resources

The review of the DAHP Database did not reveal any archeological sites or cultural resources known to exist within the APE. While outside of the APE and will not be affected by the project, it is important to note the presence of the East Wenatchee Clovis Site, which is located approximately 0.25–0.50 mile northeast of the

¹² Plateau Archaeological Investigations, LLC. *Cultural Resource Survey for the Pangborn Memorial Airport Capital Improvement Program 2020-2025*, East Wenatchee, Washington, October 2020.

Airport. This site was originally recorded in 1987 and is defined as a Clovis Cache. This is a rare type of archeological assemblage representing some of the earliest tool forms in North America. This Clovis Site is of cultural importance to the Confederated Tribes of the Colville Reservation due to ancestral significance of the discovered items.

Traditional cultural places are important because of the role a property can have in a community's historically rooted beliefs, customs and practices. Although these places can be difficult to identify and evaluate from the perspective of a particular culture, an initial search of pertinent publications can be helpful in identifying the types of properties that may be expected. A review of publicly available resources was performed to identify any traditional cultural places known to be located within the APE. While many resources referenced the region, none of them were directly documented within the APE.

4.8.2. Significance Threshold

The effects of an action on historical, architectural, archeological, and cultural resources are evaluated under both the National Historic Preservation Act (NHPA) and the NEPA. The FAA does not provide a significance threshold for these resources; however, it does provide factors to consider in evaluating the context and intensity of the potential impact an action would have on these resources.

Factors include the NHPA determination for the action through the Section 106 process (no historic properties affected, no adverse effect, or adverse effect) and if the action involves more than a minimal use of a Section 4(f) resource. Per 36 CFR 800.5(a), "An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association [...] Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative."

Under the NEPA, effects or impacts means changes to the human environment from the Proposed Action, Alternative 2, or No Action Alternative that are reasonably foreseeable and includes direct effects, indirect effects, and cumulative effects. Direct effects are caused by the action and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Cumulative effects are explained at the beginning of **Chapter 4**.

4.8.3. Environmental Consequences

Following is a description of the potential impacts the Proposed Action and Alternative 2 will have on the existing historical, architectural, archeological, and cultural resources and a discussion of how this determination is made.

Resources eligible for inclusion in the NRHP are covered by Section 106 of the NHPA and Section 4(f) of the Department of Transportation (DOT) Act. Section 106 requires the FAA to evaluate direct and indirect impacts the Proposed Action or Alternative 2 would have on historical, architectural, archeological, and cultural resources. The FAA's evaluation must include consultation with the SHPO, THPO, and other relevant agencies. Ultimately, one of the following determinations is made:

- **No Historic Properties Affected:** This determination is made when no historic properties are present in the APE.
- **No Adverse Effect on Historic Properties:** This determination is made when an action will have no effect on historic properties.

- **Adverse Effect on Historic Properties:** This determination is made when an action will have an effect on historic properties. If this determination is made, the FAA must find a way to avoid, minimize, or mitigate those impacts.

Proposed Action

(i) Historical and Architectural Resources

As noted in **Section 4.8.1**, the Airport's GA Terminal building is the only eligible historic property within the APE. The Proposed Action will rehabilitate the GA Terminal building in a manner that involves the alteration of its distinctive characteristics that makes it eligible for listing on the NRHP, thereby the Proposed Action will have an **Adverse Effect on Historic Properties**.

(ii) Archeological and Cultural Resources

As noted in **Section 4.8.1**, the 2020 Cultural Resources Survey did not identify any eligible archaeological or cultural resources within the APE. Therefore, the Proposed Action will result in **No Historic Properties Affected** in regard to archaeological and cultural resources.

(iii) Section 106 Consultations

As described in **Section 4.8.1**, consultation occurred between FAA and DAHP in 2021 that resulted in the determination that the GA Terminal building was eligible for inclusion in the NRHP under Criterion C. Due to its historic eligibility, any action (including the Proposed Action) that will have an effect on the building is deemed to be an **Adverse Effect on Historic Properties**. On June 2, 2023, a letter was sent to agencies and stakeholders with relevance to the project, soliciting feedback on impacts from the project that are under their respective jurisdictions. Recipients included the Tribal Chairmen of three relevant tribes: Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Colville Reservation, and the Confederated Tribes of the Warm Springs Reservation of Oregon. Please refer to **Appendix B** for agency correspondence. An MOA between the FAA, DAHP, and the Sponsor will be developed and implemented to take into account the adverse effect of the Proposed Action on the historic GA Terminal building. The MOA will detail the mitigation measures agreed upon.

Alternative 2

(i) Historical and Architectural Resources

Alternative 2 will demolish the GA Terminal building, therefore, it will have an **Adverse Effect on Historic Properties**.

(ii) Archeological and Cultural Resources

The 2020 Cultural Resources Survey did not identify any eligible archaeological or cultural resources within the APE, therefore, Alternative 2 will result in **No Historic Properties Affected** in regard to archaeological and cultural resources.

(iii) Section 106 Consultations

Any action (including Alternative 2) that will have an effect on the building is deemed to be an **Adverse Effect on Historic Properties**. As noted above, the June 2, 2023, letter was sent to agencies and stakeholders with relevance to the project, soliciting feedback on impacts from the project that are under their respective jurisdictions.

No Action Alternative

The No Action Alternative will have **no effect** on existing historical, architectural, archeological, and cultural resources.

4.8.4. Summary and Conclusion

Proposed Action

Under the NHPA, the Proposed Action will have an **Adverse Effect on Historic Properties** within the APE, namely, the GA Terminal building. Under the NEPA, the Proposed Action will have a **significant effect** on historic resources. Mitigation and minimization measures agreed upon within the MOA and described in **Section 4.8.5** will be implemented as part of the Section 106 process. Through implementation of mitigation and minimization measures, the Proposed Action will have **no significant effect** on historical, architectural, archeological, and cultural resources.

Alternative 2

Under the NHPA, Alternative 2 will have an **Adverse Effect on Historic Properties** within the APE, namely, the GA Terminal building. Under the NEPA, Alternative 2 will have a **significant effect** on historic resources. The demolition of the GA Terminal building does not meet the MOA mitigation measures agreed to by participating parties (that includes preservation of parts of the building) because the building will be demolished. Therefore, Alternative 2 will result in a **significant effect** on historical, architectural, archeological, and cultural resources.

No Action Alternative

Under the No Action Alternative, the Airport would not improve the existing GA Terminal building, nor would it demolish it and reconstruct a new building, and no related improvements, changes, or implementation actions would occur in the APE. Therefore, the No Action Alternative would have **no effect** on historical, architectural, archeological, and cultural resources.

4.8.5. Mitigation, Best Management Practices, and Permits

Under NRHP Criterion C, the construction of the GA Terminal building embodies the distinctive characteristics of a type: hangar. Its construction, including its vaulted barrel roof and its CMU walls, also represents the distinctive characteristics of two periods, 1956 and 1966-1968. As agreed upon by the FAA, DAHP, and the Sponsor in the MOA, the Proposed Action will rehabilitate the building while maintaining the vaulted barrel roof and the majority of the CMU walls. The rehabilitated building will also publicly display a commemorative plaque acknowledging the history of the building.

4.9. Land Use

Compatible land use around an airport increases safety and minimizes the effects of aircraft noise and environmental impacts. Section 1502.16(c) of the CEQ Regulations requires the discussion of environmental impacts including "possible conflicts between the proposed action and the objectives of Federal, regional, State, and local...land use plans, policies and controls for the area concerned." The FAA requires airport operators to ensure that actions are taken to establish and maintain compatible land uses around airports.

4.9.1. Affected Environment

The Study Area for land use analysis includes the 1.25-acre Project Study Area in conjunction with land uses surrounding the Airport Property Boundary, as depicted in **Figure 4-2: Land Use**. The Project Study Area resides within the Airport property boundary, located in an unincorporated area of Douglas County. Land use within the Project Study Area and the Airport property boundary and those abutting the property boundary to the northeast are General Industrial (I-G). Neighboring the Airport to the northwest, west, and southeast includes a mixture of Commercial Agriculture 10 (AC-10), Rural Resource 2 (RR-2), and Rural Resource 5 (RR-5) land uses. Following is a discussion of the existing land uses and an analysis for planned and future land uses within the Land Use Study Area.

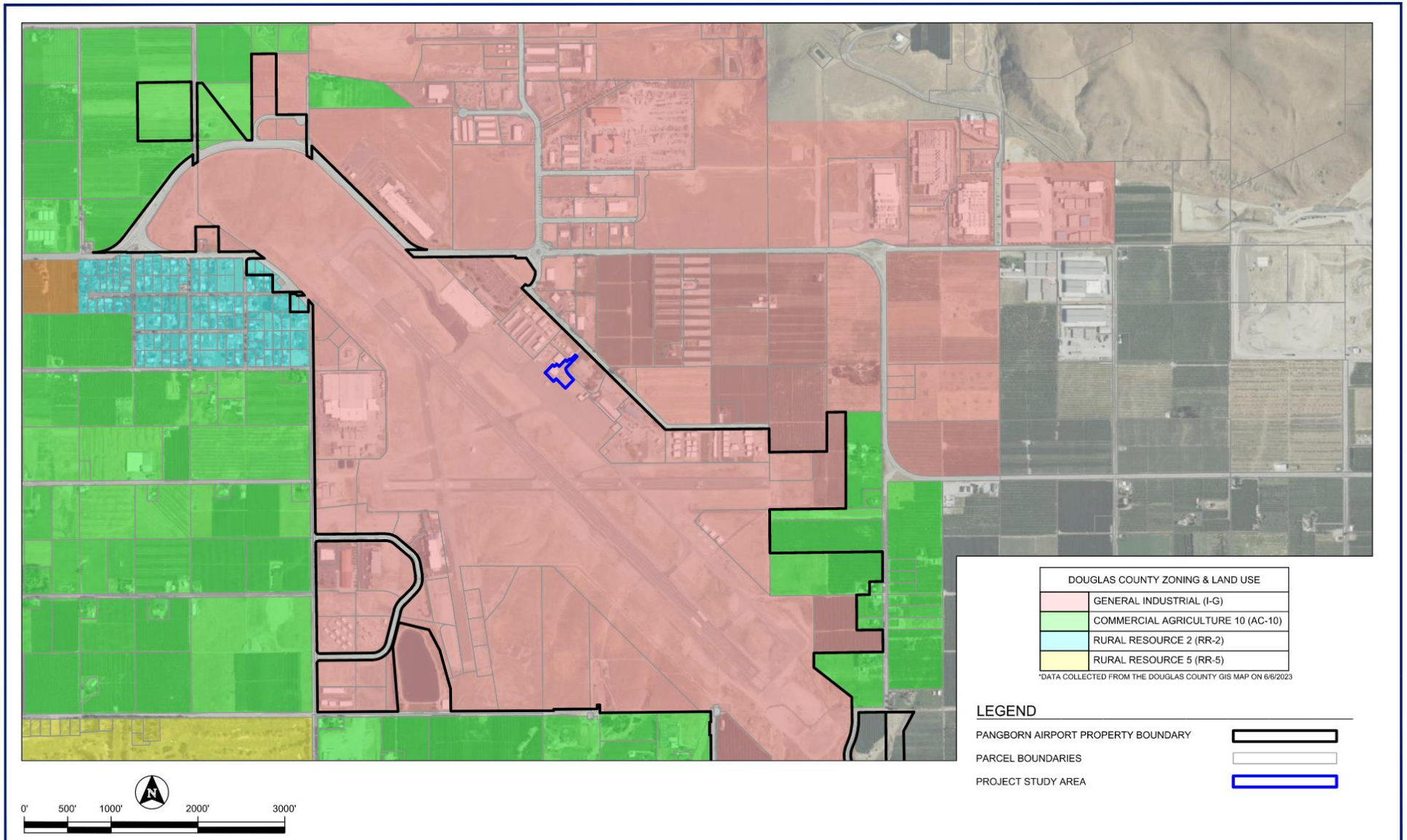


FIGURE 4-2: LAND USE



Existing Land Uses

As shown on **Figure 4-2**, using data from current Douglas County Geographic Information Systems, the Airport contains an I-G designation as it is incorporated in the Pangborn Industrial Service Boundary.¹³ Land adjacent to the Airport is predominantly zoned as I-G and AC-10 with intermixed parcels of RR-2 and RR-5 to the west and southwest, respectively. Douglas County Zoning Code describes both rural resource districts as low-density areas intended to accommodate less intensive agricultural and related uses like hobby farms, stables, open space, and similar land uses. The maximum density in RR-2 districts is one dwelling unit per two acres with one accessory dwelling unit allowed per parcel. The maximum density in RR-5 districts is one dwelling unit per five acres with one accessory dwelling unit allowed per parcel.¹⁴ The Project Study Area is only neighbored by I-G land uses to the north and east.

Douglas County Code Chapter 18.65 established the Airport Overlay District (AP-O) for land adjacent to the Airport to prevent encroachment on airspace and incompatible land use.¹⁵ Douglas County Code corresponds with federal regulation 14 CFR Part 77 airspaces and compatible land uses and adheres to Washington State Legislature, Airport Zoning Chapter 14.12.¹⁶

Planned and Future Land Uses

Douglas County Zoning and the Airport Overlay District

Planned and future land use is regulated by the AP-O. The purpose of this district "is to protect the viability of the Pangborn Memorial Airport as a significant resource to the community by encouraging compatible land uses, densities and reducing hazards that may endanger the lives and property of the public and aviation users."¹⁷ As the name implies, the AP-O overlays the existing Douglas County zoning districts. Densities and land use requirements of the underlying zoning districts are consistent with the National Transportation Safety Board (NTSB) standards and provide for maximum protection to the public health, safety, and general welfare of the community and for those citizens working and residing within the airport influence area.

4.9.2. Significance Threshold

The FAA does not provide a significance threshold or specific independent factors to consider for land use impacts. However, it does state that determining if significant effects exist is normally dependent on related categories, for example, the disruption or relocation of communities or induced socioeconomic impacts.

4.9.3. Environmental Consequences

Proposed Action

Land uses or activities deemed to be incompatible with aviation and aviation safety are prohibited within the AP-O. The Proposed Action will rehabilitate the existing GA Terminal building, which will continue to serve the same functions. The Proposed Action is compatible with aviation and aviation safety, will not require the acquisition or transfer of lands, is confined to Airport property, will not change the existing or future zoning or land use within the Land Use Study Area, and is consistent with Airport development under the approved 2019 ALP (see **Appendix A: Airport Layout Plan**).

¹³ Douglas County, WA. Zoning Map of Douglas County. Accepted and Effective on September, 2021. Accessed on June 5, 2023. <https://www.douglascountywa.net/DocumentCenter/View/254/Rural-Douglas-County-Comprehensive-Plan-Map-PDF>

¹⁴ Douglas County Countywide Comprehensive Plan. Accessed on June 5, 2023.

<https://www.douglascountywa.net/DocumentCenter/View/2154/Countywide-Comprehensive-Plan-Approved-2021>

¹⁵ Douglas County WA. Chapter 18.65. AP-O Airport Overlay District. Ordinance TLS 22-02-02B. Accessed June 5, 2023.

<https://www.codepublishing.com/WA/DouglasCounty/html/DouglasCounty18/DouglasCounty1865.html#18.65>

¹⁶ Washington State Legislature. Chapter 14.12, Airport Zoning. Accessed June 6, 2023. <https://app.leg.wa.gov/rcw/default.aspx?cite=14.12>

¹⁷ Douglas County WA. Chapter 18.65. AP-O Airport Overlay District. Ordinance TLS 22-02-02B. Accessed June 5, 2023.

<https://www.codepublishing.com/WA/DouglasCounty/html/DouglasCounty18/DouglasCounty1865.html#18.65>

Alternative 2

Alternative 2 will demolish the existing GA Terminal building and construct a new building that will also serve the same functions. Alternative 2 is compatible with aviation and aviation safety, will not require the acquisition or transfer of lands, is confined to Airport property, will not change the existing or future zoning or land use within the Land Use Study Area, and is consistent with Airport development under the approved 2019 ALP (see **Appendix A: Airport Layout Plan**).

No Action Alternative

The No Action Alternative will not change or impact land use at the Airport.

4.9.4. Summary and Conclusion

Proposed Action

The Proposed Action will occur in the same general footprint of the existing GA Terminal building, which is currently compatible with Douglas County zoning and land uses. The Proposed Action will not change the existing or future zoning or land uses in the Project Study Area or at the Airport, nor will it present conflicts with the objectives of Federal, regional, State, and local land use plans, policies, and controls. Therefore, the Proposed Action will have **no significant effect** on land use.

Alternative 2

Alternative 2 will occur in the same general footprint of the existing GA Terminal building, which is currently compatible with Douglas County zoning and land uses. Alternative 2 will not change the existing or future zoning or land uses in the Project Study Area or at the Airport, nor will it present conflicts with the objectives of Federal, regional, State, and local land use plans, policies, and controls. Therefore, Alternative 2 will have **no significant effect** on land use.

No Action Alternative

Under the No Action Alternative, the Airport would not improve the existing GA Terminal building, nor would it demolish it and reconstruct a new building, and no related improvements, changes, or implementation actions would occur in the Project Study Area. Therefore, the No Action Alternative would have **no effect** on land use.

4.9.5. Mitigation, Best Management Practices, and Permits

Construction and operation of the Proposed Action or Alternative 2 will have **no significant effect** on land use. Therefore, no specific mitigation or BMPs are required or proposed. A Douglas County building permit will be approved before construction begins.

4.10. Natural Resources and Energy Supply

Sections 1502.16(e) and (f) of the CEQ Regulations require that federal agencies consider energy requirements, natural depletable resource requirements, and the conservation potential of alternatives and mitigation measures listed in NEPA documents. Executive Order 13123, *Greening the Government through Efficient Energy Management*, supports the expansion and use of renewable energy within facilities and activities. It also requires federal agencies to reduce petroleum use, total energy use, associated air emissions, and water consumption in facilities. Though specific significance thresholds for natural resource consumption and energy supply have not been established by the FAA, the proposed action should be examined for the potential to cause demand to exceed available or future supplies of these resources.

4.10.1. Affected Environment

The Airport is located in an industrial and well-developed area with adequate access to electricity, natural gas, water, sewer services, consumable resources, and fuel storage. These resources are not in short supply in

the region. Airport infrastructure is powered by the Douglas County Public Utility District, natural gas is provided by Cascade Natural Gas, and potable water is serviced by East Wenatchee Water District, while irrigation water is managed by the Greater Wenatchee Irrigation District. Gas and diesel fuel are readily available locally and typically power airport ground vehicles and equipment. Further, the Airport offers full-service refueling for aircraft, containing three (3) Jet-A underground storage tanks and one (1) 20,000-gallon aboveground storage tank for storing aviation fuel (100LL) (refer to **Section 4.7** for additional information). Airport personnel and its tenants regularly use consumable resources in support of the services they provide as well as the operation and maintenance of various airside and landside facilities.

4.10.2. Significance Threshold

The FAA has not established a significance threshold for natural resources and energy supply. However, it does provide several factors to consider in evaluating the context and intensity of the potential impacts. These factors include situations involving demands on natural resources or energy that exceed the available or future supply of these resources.

4.10.3. Environmental Consequences

Proposed Action

Construction activities associated with the Proposed Action will result in a temporary increase in the Airport's consumption of natural resources and energy. These resources include a variety of construction materials (i.e., wood, metal, concrete, siding, etc.), electricity, fossil fuels, and water (non-potable water may be used for dust control). The transportation of construction materials and operation of heavy equipment will increase the Airport's fossil fuel consumption. These resources are not rare or in short supply, and the quantity required for the Proposed Action will not place an undue strain on regional materials.

The Proposed Action will upgrade the GA Terminal building's electrical, HVAC, plumbing, septic, and lighting systems. Following construction, the Proposed Action may marginally reduce the natural resource and energy demands due to improved efficiencies in the lighting and HVAC systems, and improved building insulation. Natural resources and energy needed for the continued operation of the Proposed Action is available locally and within the supply capabilities of the utility companies that service the Airport.

Alternative 2

Construction activities associated with Alternative 2 will result in a temporary increase in the Airport's consumption of natural resources and energy similar to that described for the Proposed Action. Following construction, Alternative 2 may marginally reduce the natural resource and energy demands due to improved efficiencies in the lighting and HVAC systems, and improved building insulation. Natural resources and energy needed for the continued operation of Alternative 2 is available locally and within the supply capabilities of the utility companies that service the Airport.

No Action Alternative

The No Action Alternative will not change the existing usage of natural resources and energy.

4.10.4. Summary and Conclusion

Proposed Action

Due to the limited scope and nature of the Proposed Action, construction will only result in a relatively minor and temporary increase in the Airport's consumption of natural resources and energy. This temporary increase will not cause a strain on the availability or supply of any required resources. The long-term operation of the Proposed Action may result in a marginal reduction in natural resource and energy demands due to improved building efficiencies. Natural resources and energy needed for the continued operation of the Proposed

Action is available locally and is within the supply capabilities of the utility companies that service the Airport. Therefore, the Proposed Action will have **no significant effect** on natural resources and energy.

Alternative 2

The construction and operation of Alternative 2 will expend a similar amount of natural resources and energy as the Proposed Action. Alternative 2 will have **no significant effect** on natural resources and energy.

No Action Alternative

Under the No Action Alternative, the Airport would not rehabilitate the existing GA Terminal building, renovate the electrical, HVAC, septic, and lighting systems, nor would it demolish the GA Terminal and reconstruct a new building and utilities. Therefore, no related improvements, changes, or implementation actions would occur in the Project Study Area and the No Action Alternative would have **no effect** on natural resources and energy.

4.10.5. Mitigation, Best Management Practices, and Permits

Although there is **no significant effect** to natural resources or the energy supply from implementation of the Proposed Action or Alternative 2 and no specific mitigation is required, sustainable design elements will be considered during the design phase of the project. Additionally, BMPs will be employed to minimize any potential impacts. These will include the following measures:

- Construction equipment will not be kept idling longer than necessary.
- When possible, waste will be reduced, and materials will be recycled or reused.
- Principles of environmental design and sustainability will be referenced during facility design and planning in terms of waste minimization and resource conservation.

4.11. Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks

Socioeconomics is an umbrella term used to describe aspects of a project that are either social or economic in nature. A socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected by the proposed action and alternative(s). These broad indicators are used to identify the effect the Proposed Action or Alternative 2 may have on the social fabric of the surrounding community.

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. Title VI of the US Civil Rights Act of 1964, as amended,¹⁸ Executive Order 12898,¹⁹ and DOT Environmental Justice Order 5610.2(a)²⁰ require that no minority or low-income person shall be disproportionately adversely affected by any project receiving federal funds. For transportation projects, this means that no particular minority or low-income person may be disproportionately isolated, displaced, or

¹⁸ Title VI of the Civil Rights Act of 1964 statutes and regulations overview. Accessed January 4, 2024. <https://www.justice.gov/crt/fcs/TitleVI-Overview>

¹⁹ Executive Order 12898 of February 11, 1994 – Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations. Accessed January 4, 2024, at <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>

²⁰ USDOT Environmental Justice Order 5610.2(a). Accessed January 4, 2024, at [https://www.transportation.gov/transportation-policy/environmental-justice/departments-transportation-order-56102a#:~:text=DOT%20Order%205610.2\(a\)%20sets,%2C%20rulemaking%2C%20and%20policy%20formulation.](https://www.transportation.gov/transportation-policy/environmental-justice/departments-transportation-order-56102a#:~:text=DOT%20Order%205610.2(a)%20sets,%2C%20rulemaking%2C%20and%20policy%20formulation.)

otherwise subjected to adverse effects. Potential impacts are assessed in terms of property acquisitions or relocations, changes in access to employment areas, and other changes in low-income and minority communities/neighborhoods.

Pursuant to Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* 62 Federal Register 19885, (April 21, 1997),²¹ federal agencies are directed, as appropriate and consistent with the agency’s mission, to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. The FAA is encouraged to identify and assess environmental health risks and safety risks that the agency has reason to believe could disproportionately affect children.

4.11.1. Affected Environment

The Project Study Area is located within Census Tract 9503, Block Group 3 of Douglas County.²² However, due to the sparse population of this block group, and in an effort to fully account for the population served by the Airport, the study area used for the analyses of these resources includes the City of East Wenatchee and Douglas County; a distance of approximately 3.5 miles from the Project Study Area. The data used to analyze the existing conditions surrounding the Airport was obtained from the U.S. Census Bureau 2022 American Community Survey²³ and the EPA’s EJSCREEN tool.²⁴

Socioeconomics

The following socioeconomic inventory presents elements of the human environment such as income, poverty, employment, population, and housing within the project vicinity.

(i) Income and Employment

Understanding the incomes of individuals, as well as the labor force and current number of employed and unemployed persons located in the region, will allow for a comparison between the current condition and projected impacts associated with the Proposed Action and Alternative 2. **Table 4-4: Income and Poverty**, identifies income and poverty data for East Wenatchee and Douglas County in comparison to Washington and the rest of the United States.

Table 4-4: Income and Poverty

Income and Poverty	East Wenatchee	Douglas County	Washington	United States
Median Household Income	\$78,312	\$79,422	\$91,306	\$74,755
Poverty Rate	6.9%	7.9%	10.0%	12.6%
Children under 18 in Poverty	11.3%	9.5%	11.4%	16.3%

Source: U.S. Census Bureau, 2022 American Community Survey

²¹ Executive Order 13045 of April 21, 1997 – Protection of Children from Environmental Health Risks and Safety Risks. Accessed January 4, 2024, at <https://www.gpo.gov/fdsys/pkg/FR-1997-04-23/pdf/97-10695.pdf>

²² State of Washington. Office of Financial Management. Accessed January 4, 2024, at <https://ofm.wa.gov/washington-data-research/population-demographics/gis-data/census-geographic-files>

²³ U.S. Census Bureau. ACS 5-Year Estimates Comparison. Accessed January 4, 2024, at https://data.census.gov/profile?q=050XX00US53017_160XX00US5320155&y=2022&d=ACS%205-Year%20Estimates%20Comparison%20Profiles

²⁴ EPA. Environmental Justice Screening and Mapping Tool (Version 2.2). Accessed January 4, 2024, at <https://ejscreen.epa.gov/mapper/>

Table 4-5: Employment, shows employment characteristics for East Wenatchee and Douglas County in comparison to Washington and the rest of the United States.

Table 4-5: Employment

Employment	East Wenatchee	Douglas County	Washington	United States
Civilian Labor Force	7,200	21,545	4,029,420	169,852,882
Employed	6,889	20,627	3,865,941	162,590,221
Unemployed	311	918	163,479	7,262,661
Unemployment Rate (as a % of the labor force)	4.3%	4.3%	4.1%	4.3%

Source: U.S. Census Bureau, 2022 American Community Survey

(ii) Population and Housing

Identifying information regarding the region's population (including age and education level) and housing data allows for a comparison between the current condition and projected impacts associated with the Proposed Action and Alternative 2. **Table 4-6: Age, Education, and Housing**, shows the baseline population, education, and housing characteristics for East Wenatchee and Douglas County in comparison to Washington and the rest of the United States.

Table 4-6: Age, Education, and Housing

Age, Education, and Housing	East Wenatchee	Douglas County	Washington	United States
Total Population	14,158	42,938	7,705,281	331,449,281
Age				
Median age	35.3	37.8	38.4	38.8
Persons under 5 years	6.7%	6.3%	5.4%	5.6%
Persons under 18 years	27.5%	25.1%	21.1%	22.1%
18 years and older	72.5%	74.9%	78.9%	77.9%
65 years and older	15.0%	17.8%	16.8%	16.8%
Education				
High school or higher	83.7%	81.8%	92.2%	89.6%
High school or equivalent degree	30.7%	27.6%	21.5%	26.1%
Some college, no degree	24.3%	23.2%	21.2%	19.1%
Associate's degree	9.9%	9.2%	10.0%	8.8%
Bachelor's degree	14.3%	15.6%	23.8%	21.6%
Graduate or professional degree	4.5%	6.2%	15.7%	14.0%
Housing				
Housing units	5,479	17,318	3,202,241	140,498,736
Owner-occupied housing	55.6%	62.5%	61.7%	59.4%
Median value of owner-occupied housing	\$374,000	\$366,800	\$569,500	\$320,900

Age, Education, and Housing	East Wenatchee	Douglas County	Washington	United States
Average household size	2.75	2.75	2.48	2.54

Source: U.S. Census Bureau, 2022 American Community Survey and 2020 Decennial Census

Environmental Justice

According to the EPA's EJSCREEN tool, the total population located within the Airport's Census Block Group (Census Tract 9503, Block Group 3), is 1,597 and the population density is 220.3 per square mile. **Table 4-7: Race and Ethnicity**, shows race and ethnicity data for East Wenatchee and Douglas County in comparison to Washington and the rest of the United States. Income and poverty data was previously shown in **Table 4-4: Income and Poverty**. As shown in these tables, the population of East Wenatchee and Douglas County is predominantly white with a minority of people considered to be an environmental justice population. Likewise, the poverty rate is 6.9% in East Wenatchee and 7.9% in Douglas County which is not considered to be a significant proportion of the population.

Table 4-7: Race and Ethnicity

Race and Ethnicity	East Wenatchee	Douglas County	Washington	United States
Total Population	14,158	42,938	7,705,281	331,449,281
Race and Ethnicity				
White	67.3%	64.8%	66.6%	61.6%
Some other race	15.7%	17.9%	6.7%	8.4%
Two or more races	13.5%	14.2%	10.9%	10.2%
American Indian and Alaska Native	1.5%	1.6%	1.6%	1.1%
Asian	1.2%	1.0%	9.5%	6.0%
Native Hawaiian and Pacific Islander	0.2%	0.1%	0.8%	0.2%
Black or African American	0.5%	0.3%	4.0%	12.4%
Hispanic or Latino	31.3%	34.1%	13.7%	18.7%
Language Spoken at Home				
English	74.3%	71.5%	78.9%	78.0%
Language other than English	25.7%	28.5%	21.1%	22.0%
Spanish	23.6%	27.2%	8.8%	13.3%
Other Indo-European languages	1.2%	0.7%	4.3%	3.8%
Asian and Pacific Islander languages	0.9%	0.6%	6.6%	3.6%
Other languages	0.1%	0.0%	1.4%	1.2%
Foreign Born	13.3%	15.4%	15.3%	13.9%

(Source: U.S. Census Bureau, 2022 American Community Survey)

Children's Environmental Health and Safety Risks

Impacts to children are considered separately in NEPA reviews because children may experience a different intensity of impact as compared to an adult exposed to the same event. Children under age 5 are especially susceptible to environmental hazards due to the fact they are more heavily exposed to toxins in proportion to

their body weight, and therefore may experience higher rates of exposure to toxins, pollutants, and pathogens.

Areas of particular concern for children’s environmental health and safety risks include schools, day cares, children’s health clinics, and child-friendly recreational facilities. According to the EPA’s EJSCREEN tool, none of these resources are located within the Airport’s Census Block Group. Facilities located within East Wenatchee are shown in **Table 4-8: East Wenatchee Children’s Resources**.

Table 4-8: East Wenatchee Children's Resources

East Wenatchee Children's Resources	Distance From Project Study Area
Schools	
Clovis Point Elementary School	2.30 miles southwest
Kenroy Elementary School	2.82 miles west
Sterling Junior High School	3.11 miles northwest
Eastmont High School	3.11 miles west
Wee Wildcat Preschool	3.11 miles west
Robert E. Lee Elementary School	4.31 miles northwest
Eastmont Junior High School	3.28 miles northwest
Ulysses S. Grant Elementary School	2.67 miles southwest
Canyon View Group Home	3.34 miles west
Childcare	
MG Childcare	2.15 miles northwest
Ribbons and Rainbows Preschool	3.54 miles northwest
Eva's Daycare	3.59 miles northwest
Children's Progressive Daycare	3.64 miles west
Health Clinics	
Confluence Health Clinic	5.62 miles west
Columbia Valley Community Health Center	5.33 miles northwest
Pacific Northwest Wellness Center	3.67 miles west
Parks	
Tedford Park	2.75 miles southwest
Kenroy Park	3.00 northwest
Eastmont Community Park	3.18 miles west
Ballard Park	4.37 miles northwest

(Note: Distance is approximate and measured “as the crow flies.”)

Table 4-9: Child Population, shows the total child population and the age distribution for children in East Wenatchee and Douglas County in comparison to Washington and the rest of the United States.

Table 4-9: Child Population

Child Population	East Wenatchee	Douglas County	Washington	United States
Total Child Population	3,869	10,837	1,644,027	72,325,602

Child Population	East Wenatchee	Douglas County	Washington	United States
Population Under 5	937 (6.7%)	2,723 (6.3%)	421,722 (5.4%)	18,358,199 (5.5%)
Population ages 5-9	1,156 (8.2%)	2,966 (6.9%)	464,035 (6.0%)	19,770,314 (5.9%)
Population ages 10-14	1,134 (8.1%)	3,239 (7.5%)	473,406 (6.1%)	21,220,214 (6.4%)
Population ages 15-17	642 (4.6%)	1,909 (4.4%)	284,864 (3.7%)	12,976,875 (3.9%)

(Source: U.S. Census Bureau, 2022 American Community Survey)

4.11.2. Significance Threshold

The FAA does not provide a significance threshold for socioeconomic, environmental justice, or children’s environmental health and safety risks. However, it does provide a number of factors to consider in evaluating the context and intensity of potential environmental impacts. These include when the action would have the potential to:

- Induce substantial economic growth in an area.
- Disrupt or divide the physical arrangement of an established community.
- Cause extensive relocation when sufficient replacement housing is unavailable.
- Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities.
- Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities.
- Produce a substantial change in the community tax base.
- When the action would result in significant impacts in other environmental impact categories and disproportionately affect an environmental justice population.
- When environmental impacts affect an environmental justice population in a way that the FAA determines to be unique or significant to that population.
- When the action would have the potential to lead to disproportionate health or safety risks to children.

4.11.3. Environmental Consequences

Following is a description of the potential impact the Proposed Action and Alternative 2 would have on the region's socioeconomic, environmental justice populations, and children’s environmental health and safety risks.

Proposed Action

(i) Socioeconomics

The long-term operation of the Proposed Action is not expected to cause or create an increase in aircraft operations at the Airport beyond normal projections. Land use in the general vicinity will remain the same following construction and will not disrupt the community.

The Proposed Action will rehabilitate the existing GA Terminal building and will not require any businesses, families, or individuals to be relocated. As such, the effects of the Proposed Action will only be short term and related to temporary construction activities.

Construction of the Proposed Action is not expected to affect the region's social conditions or impact community cohesion, religious institutions, or otherwise disrupt the local community. As described in **Section 5.2: Public Involvement and EA Review** and **Appendix G: Public Engagement Summary**, the Sponsor hosted

an Open House Poster Session at the Airport informing the public of the Proposed Action and the ongoing EA. The Proposed Action received overwhelming positive feedback and support from the public.

(ii) Income and Employment

Construction of the Proposed Action will not result in an increase in Airport operations or change the number of people employed at the Airport or cause the incomes of those employees to change.

The Proposed Action will result in the employment of construction workers, however, construction will be short-term and temporary. This employment could result in some minor positive impacts to the local economy as a result of increased expenditures on local services and materials. However, the economic effect would not be great enough to result in a significant impact to the local tax base. Workers employed to construct the Proposed Action would likely be local to the area and already employed in the construction industry. As such, construction of the Proposed Action would not significantly affect the area's labor force or alter commuter patterns.

(iii) Population and Housing

The temporary construction of the Proposed Action would not cause a shift in population growth or change population growth patterns.

It is likely the construction workers would be from East Wenatchee or Douglas County and would not require temporary housing or affect the region's housing environment. The Proposed Action does not involve land acquisition and would not result in any individuals or families being displaced or relocated.

(iv) Environmental Justice

The long-term operation of the Proposed Action is not expected to cause or create an increase in aircraft operations at the Airport beyond normal projections, nor cause an increase in vehicular, aircraft, and ground service equipment traffic that could lead to noise impacts to surrounding communities. The rehabilitation of the GA Terminal building will be visually compatible with existing Airport infrastructure and will have negligible visual effects to surrounding communities (refer to **Section 4.12: Visual Effects**). Construction of the Proposed Action will not have a significant effect on air quality, climate, hazardous materials, or water resources. Therefore, the Proposed Action will not impact any population surrounding the Airport.

(v) Children's Environmental Health and Safety Risks

The long-term operation of the Proposed Action is not expected to cause or create an increase in aircraft operations at the Airport beyond normal projections, nor cause an increase in vehicular, aircraft, and ground service equipment traffic that could lead to noise impacts to nearby schools, day cares, children's health clinics, child-friendly recreational facilities, or similar resources. Light emissions from the Proposed Action will not affect sensitive land uses such as the children's resources listed above.

Construction of the Proposed Action will not have a significant effect on air quality, climate, hazardous materials, or water resources. As such, the effects of the Proposed Action will only be short term and related to temporary construction activities. Construction of the Proposed Action would not require the acquisition or relocation of any schools, day cares, children's health clinics, child-friendly recreational facilities, or similar resources. The Proposed Action would not increase environmental health and safety risks or exposure of environmental contaminants to children in the surrounding community. Construction emissions resulting from the Proposed Action would be temporary and would only occur during the period of construction.

Alternative 2

(i) Socioeconomics

The long-term operation of Alternative 2 is not expected to cause or create an increase in aircraft operations at the Airport beyond normal projections. Land use in the general vicinity will remain the same following construction and will not disrupt the community.

Alternative 2 would demolish and reconstruct the existing GA Terminal building and would not require any businesses, families, or individuals to be relocated. As such, the effects of Alternative 2 would only be short-term and related to temporary construction activities.

Construction of Alternative 2 is not expected to affect the region's social conditions or impact community cohesion, religious institutions, or otherwise disrupt the local community.

(ii) Income and Employment

Construction of Alternative 2 will not result in an increase in Airport operations or change the number of people employed at the Airport or cause the incomes of those employees to change.

Alternative 2 would result in the employment of construction workers, however, construction would be short-term and temporary. This employment could result in some minor positive impacts to the local economy as a result of increased expenditures on local services and materials. However, the economic effect would not be great enough to result in a significant impact to the local tax base. Workers employed to construct Alternative 2 would likely be local to the area and already employed in the construction industry. As such, construction of Alternative 2 would not significantly affect the area's labor force or alter commuter patterns.

(iii) Population and Housing

The temporary construction of Alternative 2 would not cause a shift in population growth or change population growth patterns.

It is likely the construction workers would be from East Wenatchee or Douglas County and would not require temporary housing or affect the region's housing environment. Alternative 2 does not involve land acquisition and would not result in any individuals or families being displaced or relocated.

(iv) Environmental Justice

The long-term operation of Alternative 2 is not expected to cause or create an increase in aircraft operations at the Airport beyond normal projections, nor cause an increase in vehicular, aircraft, and ground service equipment traffic that could lead to noise impacts to surrounding communities. The newly constructed GA Terminal building would be visually compatible with existing Airport infrastructure and would have negligible visual effects to surrounding communities (refer to **Section 4.12: Visual Effects**). Construction of Alternative 2 will not have a significant effect on air quality, climate, hazardous materials, or water resources. Therefore, Alternative 2 will not impact any population surrounding the Airport.

(v) Children's Environmental Health and Safety Risks

The long-term operation of Alternative 2 is not expected to cause or create an increase in aircraft operations at the Airport beyond normal projections, nor cause an increase in vehicular, aircraft, and ground service equipment traffic that could lead to noise impacts to nearby schools, day cares, children's health clinics, child-friendly recreational facilities, or similar resources. Light emissions from Alternative 2 would not affect sensitive land uses such as the children's resources listed above.

Construction of Alternative 2 would not have a significant effect on air quality, climate, hazardous materials, or water resources. As such, the effects of Alternative 2 would only be short term and related to temporary construction activities. Construction of Alternative 2 would not require the acquisition or relocation of any schools, day cares, children's health clinics, child-friendly recreational facilities, or similar resources. Alternative 2 would not increase environmental health and safety risks or exposure of environmental contaminants to children in the surrounding community. Construction emissions resulting from Alternative 2 would be temporary and would only occur during the period of construction.

No Action Alternative

The No Action Alternative would not rehabilitate the GA Terminal building or demolish and reconstruct it, therefore, it would not affect socioeconomics, environmental justice populations, or children's environmental health and safety.

4.11.4. Summary and Conclusion

Proposed Action

The Proposed Action is not likely to cause or create an increase in aircraft operations beyond normal projections and will not induce substantial economic growth in an area. The Proposed Action will have no significant effect on public services, income, employment, housing, population growth, or low income or minority populations in the vicinity of the Airport. Likewise, the Proposed Action will have no effect on the individual or cumulative environmental health of low income and minority populations, or children's environmental health and safety. Therefore, the Proposed Action will have **no significant effect** on socioeconomics, environmental justice populations, or children's environmental health and safety within the vicinity of the Airport.

Alternative 2

Alternative 2 is not likely to cause or create an increase in aircraft operations beyond normal projections and will not induce substantial economic growth in an area. Alternative 2 will have no significant effect on public services, income, employment, housing, population growth, or low income or minority populations in the vicinity of the Airport. Likewise, Alternative 2 will have no effect on the individual or cumulative environmental health of low income and minority populations, or children's environmental health and safety. Therefore, Alternative 2 will have **no significant effect** on socioeconomics, environmental justice populations, or children's environmental health and safety within the vicinity of the Airport.

No Action Alternative

Under the No Action Alternative, the Airport would not rehabilitate or demolish and reconstruct the GA Terminal building, and no related improvements, changes, or implementation actions would occur in the Project Study Area. Therefore, the No Action Alternative would have **no effect** on socioeconomics, environmental justice populations, or children's environmental health and safety.

4.11.5. Mitigation, Best Management Practices, and Permits

Construction and operation of the Proposed Action or Alternative 2 will have **no significant effect** on socioeconomics, environmental justice populations, or children's environmental health and safety. Therefore, no specific mitigation measures or BMPs are proposed.

4.12. Visual Effects

Visual effects deal broadly with the extent to which the proposed action or alternative(s) would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or the visual character of the existing environment. Visual effects can be difficult to

define and assess because they involve subjectivity. For clarity and uniformity, visual effects are broken into two categories: 1) Light Emissions; and 2) Visual Resources and Visual Character.

Light emissions include any light that emanates from a light source into the surrounding environment. Examples of sources of light emissions at an airport include airfield and apron flood lighting, navigational aids, terminal lighting, parking facility lighting, roadway lighting, safety lighting on launch pads, additional lighting to support nighttime commercial space launches, and light generated from such launches. Glare is a type of light emission that occurs when light is reflected off a surface (e.g., window glass, solar panels, or reflective building surfaces).

Visual resources include buildings, sites, traditional cultural properties, and other natural or manmade landscape features that are visually important or have unique characteristics. Visual resources may include structures or objects that obscure or block other landscape features. In addition, visual resources can include the cohesive collection of various individual visual resources that can be viewed at once or in concert from the area surrounding the site of the proposed action or alternative(s). In unique circumstances, the nighttime sky may be considered a visual resource.

Although there are no special purpose laws or requirements specific to light emissions or visual effects, some visual resources are protected under federal, state, or local regulations. Some of these protected visual resources include scenic roadways, wild and scenic rivers, national scenic areas, scenic easements, trails protected under the National Trails System Act, biological resources, parks, recreation areas, wildlife or waterfowl refuges, historic properties, and other features protected under other federal, state, or local regulations. Additional laws protecting resources that may be affected by visual effects include Section 106 of the NHPA, Section 4(f) of the DOT Act, the Wild and Scenic Rivers Act, and the Coastal Zone Management Act as well as state and local regulations, policies, and zoning ordinances that apply to visual effects.

4.12.1. Affected Environment

The identified study area for visual effects encapsulates the 1.25-acre Project Study Area (Figure 4-1). The Proposed Action and Alternative 2 are within a developed area of Douglas County with several existing light sources from the airfield and surrounding commercial and residential land uses which contribute to the overall visual environment.

The following is a description of the existing sources of light emissions within the Project Study Area and the visual character of the surrounding area.

Light Emissions

The Project Study area currently has lighting necessary for the operation of the GA Terminal building. This includes building interior and exterior lighting, and lighting for the adjacent parking lot.

Visual Resources and Visual Character

The visual character of the Project Study Area consists of the GA Terminal building and the adjacent parking lot. Beyond the Project Study Area, there are various airside and landside facilities and structures including runways, taxiways, parking lots, a hangar complex, a cargo building, apron areas, hangars, maintenance areas, aircraft parking areas, maintained airport landscaping, and farmlands. Outside of the Airport property, there are low-density residential areas to the west, a large-lot residential area to the south, and industrial areas to the north and east of the Airport. The entire area is situated between the Rocky Mountain and Cascade Mountain ranges.

As previously discussed in Section 4.8 and throughout this document, the GA Terminal building is the NRHP-eligible historic resource with relevance to the project. Other Section 4(f) and cultural resources described in

Section 4.6 and 4.8 are located both on and off Airport property, outside of the Project Study Area. There are no other visual resources located in the vicinity of the Airport including scenic roadways, wild and scenic rivers, national scenic areas, scenic easements, trails, biological resources, parks, recreation areas, wildlife, waterfowl refuges, or other features protected under other federal, state, or local regulations.

4.12.2. Significance Threshold

FAA Order 1050.1F does not provide a significance threshold for visual effects. However, it does provide a number of factors to consider in evaluating the context and intensity of potential environmental impacts. For light emissions, these factors include the degree to which the action would have the potential to:

- Create annoyance or interfere with normal activities from light emissions.
- Affect the visual character of the area due to the light emissions including the importance, uniqueness, and aesthetic value of the affected visual resources.
- Block or obstruct the views of visual resources.

4.12.3. Environmental Consequences

Visual effects are subjective, and their significance is typically defined by the community or a jurisdictional agency. While permissible light emissions and visual effects are not explicitly addressed in the Douglas County Code, the Airport is located within Douglas County's Airport Overlay District. The purpose and provisions of this district are described in Douglas County Code Chapter 18.65, *AP-O Airport Overlay District*. As previously described in Section 4.9: *Land Use*, the purpose of this district "is to protect the viability of the Pangborn Memorial Airport as a significant resource to the community by encouraging compatible land uses, densities and reducing hazards that may endanger the lives and property of the public and aviation users."

In Chapter 18.65.050L, the Douglas County Code also describes that as part of all property purchases or transfers, property owners within the overlay district are required to sign an affidavit acknowledging the subject property is located within an airport protection zone and that "the subject property may experience inconvenience, annoyance, discomfort and loss of quiet enjoyment arising from the noise, fumes, illumination, smoke, vibration and hours of operation" due to Airport activities. Therefore, Airport facilities within the Airport Overlay District that increase light emissions necessary for Airport operations are acceptable per Douglas County Code.

Light emissions impacts of a project action are determined based on the degree to which the action would have the potential to create annoyance or interfere with normal activities, and the degree to which the action would have the potential to affect the visual character of the area due to the light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources.

Visual resources and visual character impacts of a project action are determined based on the degree to which the action would have the potential to affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources; the degree to which the action would have the potential to contrast with the visual resources or visual character in the study area; and the degree to which the action would have the potential to block or obstruct the views of visual resources including whether these resources would still be viewable from other locations.

Proposed Action

(i) Light Emissions

Construction and operation of the Proposed Action will occur within the same general footprint of the existing GA Terminal building. The Proposed Action will install lighting necessary for the proper operation of the GA

Terminal building. Installed lighting will not be significantly different from what currently exists in and around the building and, therefore, will remain consistent with uses as established in the Douglas County Airport Overlay District and Douglas County Code. Light emissions associated with the Proposed Action do not have the potential to create annoyance or interfere with normal activities, nor does it have the potential to affect the visual character of the area.

(ii) Visual Resources and Visual Character

The Airport has been in operation since approximately 1940 and Airport lighting features have been present for decades. The proposed GA Terminal building lighting is in line with typical airport lighting and is appropriate per the Douglas County Code Chapter 18.65, AP-O Airport Overlay District. As such, the Proposed Action should not create an annoyance among the community or cause any interference with normal activities. In addition, it will not block or obstruct views of visual resources and will be in character with the existing Airport facilities.

The GA Terminal building is the only historic property located within the Project Study Area. The Proposed Action will be constructed within the same general footprint of the existing GA Terminal building and will maintain similar dimensions and lighting; therefore, the Proposed Action is not anticipated to affect the visual character of the Project Study Area. The Proposed Action is consistent with typical aeronautical development at the Airport.

Short-term, temporary visual impacts during construction may include views of construction equipment. It is not anticipated that the Proposed Action will have a long-term effect on the visual character of the area because the GA Terminal building will be constructed within the same general footprint as the existing building and will maintain similar dimensions and characteristics. Additionally, the Proposed Action will be visually consistent with other buildings and facilities elsewhere within the Airport property.

Alternative 2

(i) Light Emissions

Construction and operation of Alternative 2 will occur within the same general footprint of the existing GA Terminal building, and will be similar to that described for the Proposed Action. Light emissions associated with Alternative 2 do not have the potential to create annoyance or interfere with normal activities, nor does it have the potential to affect the visual character of the area.

(ii) Visual Resources and Visual Character

Alternative 2 will be constructed within the same general footprint of the existing GA Terminal building and will maintain similar dimensions and lighting; therefore, Alternative 2 is not anticipated to affect the visual character of the Project Study Area. Alternative 2 is consistent with typical aeronautical development at the Airport. Short-term, temporary visual impacts would be similar to those described for the Proposed Action, and are not anticipated to have a long-term effect on the visual character of the area and will be visually consistent with other buildings and facilities elsewhere within the Airport property.

No Action Alternative

The No Action Alternative will not change the visual environment.

4.12.4. Summary and Conclusion

Proposed Action

The Proposed Action is not anticipated to create an annoyance or interfere with normal activities due to light emissions, will not affect the visual character of the area, nor block or obstruct views of any visual resources. Light emissions of the Proposed Action are anticipated to be similar to emissions from the existing building. The

Proposed Action will be constructed within the same general footprint of the existing GA Terminal building and will maintain similar dimensions; therefore, it is not anticipated to affect the visual character of the area. Therefore, the Proposed Action will have **no significant effect** on visual effects.

Alternative 2

Alternative 2 is not anticipated to create an annoyance or interfere with normal activities due to light emissions, will not affect the visual character of the area, nor block or obstruct views of any visual resources. Light emissions of Alternative 2 are anticipated to be similar to emissions from the existing building. Alternative 2 will be constructed within the same general footprint of the existing GA Terminal building and will maintain similar dimensions; therefore, it is not anticipated to affect the visual character of the area. Therefore, Alternative 2 will have **no significant effect** on visual effects.

No Action Alternative

Under the No Action Alternative, the Airport would not rehabilitate the GA Terminal building and install associated lighting, or demolish it and reconstruct a new building with new lighting, therefore, no related improvements, changes, or implementation actions would occur in the Visual Effects Study Area. Therefore, the No Action Alternative would have **no effect** on visual effects.

4.12.5. Mitigation, Best Management Practices, and Permits

Although there will be **no significant effect** to visual effects from the Proposed Action or Alternative 2, and no specific mitigation measures or BMPs are required, the following measures will help minimize potential impacts:

- Lighting required for the operation of the Proposed Action and Alternative 2 will only be used during operational hours.
- Final designs will meet local planning standards and airport design guidelines in order to minimize any visual changes to the environment.

4.13. Cumulative Impacts

This section discusses the past, present, and reasonably foreseeable future actions that, when considered in combination with the Proposed Action or Alternative 2, could potentially contribute to cumulative impacts to the environmental resource categories discussed in this chapter. It also presents an assessment of these cumulative impacts, while the No Action Alternative serves as the reference point, and it discusses the methodology used to assess these cumulative impacts.

The CEQ regulations define cumulative impacts as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time” (40 CFR § 1508.7). Essentially, cumulative impacts can be viewed as the total combined impacts the action alternatives and other known or reasonably foreseeable actions would have on the environment.

4.13.1. Past, Present, and Reasonably Foreseeable Future Actions

This section lists the past, present, and reasonably foreseeable future actions in the vicinity of the Project Study Area. In general, the study area used to analyze cumulative impacts for each environmental impact category was the Project Study Area as shown on **Figure 4-1**, unless specifically noted in an environmental impact category. The resources used to compile this list include projects identified in the MPU, Douglas County

planning documents, and documentation provided by the Sponsor. This list includes actions dating back to 2014 and actions expected to take place as far as 5-10 years in the future from the present day.

Past Actions

Table 4-10: *Past Actions* lists the projects completed in the vicinity of the Project Study Area since 2014.

Table 4-10: Past Actions

Project Name	Description	Date of Completion
Land Acquisition	Acquisition of 20 parcels (approximately 44.7 acres) north and south of Grant Road.	2014
Business Relocation	Relocation of a pallet storage warehouse near the Airport.	2014
Residential Relocation	Relocation of 12 residential dwellings near the Airport.	2014
Tree and Structure Removal	Clearing and grubbing of approximately 32 acres including demolition of one business and 12 residential buildings.	2014
Utilities Relocation	Relocation of utilities located within the right-of-way of Grant Road and Union Avenue prior to road relocations.	2015
Road Relocation	Relocation of Grant Road and Union Avenue.	2015
Navigational Aid (NAVAID) Relocation	Relocation of existing NAVAIDS including runway threshold lighting, Precision Approach Path Indicator lights, Runway End Identifier Lights, and Instrument Lighting System glide slope antenna.	2016
Runway and Taxiway Extension	Reconstruction and extension of Runway 12 by 1,300 feet to achieve a total runway length of 7,000 feet.	2016
USFS Site Improvements	Improvement of existing USFS site; new helipad and perimeter fencing.	2020
MALSR Improvements	Installation of MALSR lighting system at the approach end of Runway 12.	2022
Airline Aircraft Apron Improvements & Glycol Collection**	Expand and reconstruct the existing terminal apron. Install a glycol collection system and deicing basin to the north and an aircraft deicing pad on the south side of the terminal apron.	2022
Terminal Apron Reconstruction	Reconstruction of the terminal apron.	2022

(Source: 2013 Airport EA)

**Capital Improvement Plan developed with the 2019 MPU)

Present Actions

Besides the Proposed Action, **Table 4-11:** *Present Actions* lists other projects that are occurring within the vicinity of Project Study Area at this time.

Table 4-11: Present Actions

Project Name	Description	Current Status
General Aviation Terminal Apron Underground Storage Tanks Removal	Removal of 6 Underground Storage Tanks from area around the GA Terminal building and within the GA Terminal apron.	In Design/Permitting
Relocate and Reconstruct Taxiway A**	Reconstruct and relocate the majority of Taxiway A, bringing it closer to the runway. The taxiway will be constructed to meet FAA standards for both the current and future critical aircraft.	In Construction

** Capital Improvement Plan developed with the 2019 MPU)

Reasonably Foreseeable Future Actions

Table 4-12: Reasonably Foreseeable Future Actions lists the projects expected to take place in the vicinity of the Project Study Area before the end of 2025. Projects considered include other projects using Federal-Aid money, such as the FAA Airport Improvement Program; Airport capital improvement projects; and WSDOT Statewide Transportation Implementation Plan, which identifies future transportation projects in Douglas County. A NEPA determination will be completed for future projects and inclusion in **Table 4-12** does not constitute inclusion in the Proposed Action or Alternative 2.

Table 4-12: Reasonably Foreseeable Future Actions

Project Name	Description	Current Status
Building Pads**	Development of four building pads located to the west side of the airfield.	Anticipated 2023
Taxiway B Extension and Executive Hangar Site	Extend Taxiway B and develop area for several hangar building pads.	Anticipated 2023
Employee Parking Lot**	Construct a parking lot directly north of the terminal building.	Anticipated 2024
Executive Hangar Sites**	Develop sites located east and west of the Airport for hangars.	Anticipated 2024
Grant Road and Nevada Intersection Improvement*	Reconstruct the intersection of Grant Road and Nevada Ave to improve safety and increase capacity.	Anticipated 2024
Airfield Fencing, Gate Improvements***	Improvement of the Airports fence and gate.	Anticipated 2025
Grant Road and Mary Ave Intersection Improvement*	Reconstruct the intersection of Grant Road and Mary Ave to improve safety and increase capacity.	Final phase anticipated 2025
Traffic Signal Improvement*	Improve failing LOS for streets west of Airport	Anticipated 2025
Grant Road and Nile Ave Intersection Improvement*	Reconstruct the intersection of Grant Road and Nile Ave to improve safety and increase capacity.	Anticipated 2025
Grant Road and S Van Well Ave Intersection Improvement*	Reconstruct the intersection of Grant Road and S Van Well Ave to improve safety and increase capacity.	Anticipated 2025
S Van Well Ave and 4th St SE Intersection Improvement*	Reconstruct the intersection of S Van Well Ave and 4th St SE to improve safety and increase capacity.	Anticipated 2025

Project Name	Description	Current Status
Runway Reconstruction, Taxiway Relocation, Blast Pad Construction **	Reconstruct Runway 12-30 (including Runway 12 blast pad). Reconstruct and relocate northern section of Taxiway A to bring closer to Runway 12-30. Construct Runway 30 blast pad.	Anticipated 2025
Airline Terminal Expansion ***	Construct a two-story addition to the existing passenger terminal to accommodate forecasted growth.	Anticipated 2026
Airport Operations Building ***	Construct an airport operations building.	Anticipated 2027
Air Traffic Control System **	Installation of remote air traffic control system.	Anticipated in the next five years
GA Hangars*	Removal and replacement of GA hangars.	Anticipated in the next five years
Perimeter Route *	Construction of Airport perimeter vehicle route.	Anticipated in the next five years
USFS Site Improvements *	Improvement of existing USFS site.	Anticipated in the next five years
Airfield Development*	Development of west and south sides of the airfield.	Anticipated in the next five years
ARFF Building*	Removal of ARFF building.	Anticipated in 5-10 years
New Westside Taxiway*	New westside taxiway: conversion of former Runway 7-25 to hangar taxiway (50-foot wide).	Anticipated in 5-10 years
Terminal Parking Area **	Expand the terminal parking area to the east and reconfigure and improve parking lot.	Anticipated in 5-10 years

(Source: *Douglas County 2021-2022 WSDOT State Transportation Improvement Plan;

**Capital Improvement Plan developed with the 2019 MPU)

***CIP Data Sheets submitted to FAA 10/11/2022

4.13.2. Cumulative Impact Analysis

This analysis uses the information previously presented in **Chapter 4** to determine the potential cumulative impacts to which the Proposed Action or Alternative 2 would contribute. Cumulative impacts are only considered for the resources the Proposed Action or Alternative 2 would affect. The Proposed Action or Alternative 2 cannot contribute to cumulative impacts for resources it does not affect. As previously discussed, biological resources, coastal resources, farmlands, noise and noise-compatible land use, and water resources will not be affected by the Proposed Action or Alternative 2. Therefore, these resources will not be addressed in this analysis.

Each past, present, and reasonably foreseeable future action was analyzed for its potential to impact the same resources impacted by the Proposed Action or Alternative 2. An impact is determined to be significant according to the same thresholds of significance used in the previous evaluation of each category.

Air Quality

(i) Proposed Action

A significant impact to air quality could occur if the Proposed Action, in conjunction with past, present, and reasonably foreseeable future actions, caused an exceedance of one or more NAAQS. Currently, all of Douglas and the neighboring Chelan County, are in attainment for NAAQS criteria pollutants. The Proposed Action will not produce or result in an increase in the operation of aircraft or surface vehicles at the Airport. Therefore, it will not result in a long-term increase in emissions. Temporary air quality impacts during construction are short-term and have been determined to be *de minimis* (i.e., too small to be meaningful). In addition, none of the past, present, and reasonably foreseeable future planned projects are anticipated to have substantial long-term impacts on air quality. Construction activities associated with the Proposed Action are short-term construction projects designed to address structural deficiencies and potentially hazardous conditions at the existing GA Terminal building. Overall, implementation of the Proposed Action, in addition to other past, present, reasonably foreseeable projects, will result in **no significant cumulative impacts** to air quality.

(ii) Alternative 2

Alternative 2 is similar in scope to the Proposed Action as described above. Alternative 2, in addition to other past, present, reasonably foreseeable projects, will result in **no significant cumulative impacts** to air quality.

Climate

(i) Proposed Action

The Proposed Action is not likely to cause or create an increase in aircraft or surface vehicles operating at the Airport. Therefore, it will not result in a long-term increase in GHG emissions. Some temporary emissions are expected from construction equipment during implementation. However, mitigation measures and BMPs will be implemented to minimize produced emissions. Further, construction activities associated with the Proposed Action are short-term construction projects designed to address structural deficiencies and potentially hazardous conditions at the existing GA Terminal building. None of the associated construction activities are anticipated to result in a significant long-term increase in emissions. Therefore, the Proposed Action, when considered with the past, present, and reasonably foreseeable future actions, will result in **no significant cumulative impacts** to climate.

(ii) Alternative 2

Alternative 2 is similar in scope to the Proposed Action as described above. Alternative 2, in addition to other past, present, reasonably foreseeable projects, will result in **no significant cumulative impacts** to climate.

Department of Transportation Act, Section 4(f)

(i) Proposed Action

The Proposed Action would physically use the GA Terminal building, which is a Section 4(f) resource. However, adverse effects of the Proposed Action will be mitigated as agreed upon in the MOA, resulting in no significant effect. Besides the Proposed Action, none of the past, present, and reasonably foreseeable future projects listed are anticipated to affect Section 4(f) resources. Therefore, the Proposed Action, when considered with the past, present, and reasonably foreseeable future actions, will result in **no significant cumulative impacts** to DOT Section 4(f) resources.

(ii) Alternative 2

The demolition of the GA Terminal building proposed in Alternative 2 does not meet the MOA mitigation measures agreed to by participating parties (that includes preservation of parts of the building) because the

building will be demolished. Therefore, Alternative 2 will result in a significant effect to a Section 4(f) resource. Besides Alternative 2, none of the past, present, and reasonably foreseeable future projects listed are anticipated to affect Section 4(f) resources. Therefore, Alternative 2, when considered with the past, present, and reasonably foreseeable future actions, will result in **no significant cumulative impacts** to DOT Section 4(f) resources.

Hazardous Materials, Pollution Prevention, and Solid Waste

(i) Proposed Action

The Phase I Environmental Site Assessment found two REC sites that contain potentially hazardous materials and are in the vicinity of the Project Study Area. However, both sites are overtopped with impervious surfaces that the Proposed Action will not penetrate, subsequently leaving the underlying soils undisturbed.

Construction and operation of the Proposed Action will not involve a contaminated site listed on the National Priorities List or result in the Airport producing an appreciably different quantity or type of hazardous waste.

During construction, the Proposed Action does involve the use of hazardous materials (e.g., fuels and solvents), and will temporarily generate solid waste. However, the overall potential for negative impacts will be reduced by requiring the contractor to ensure debris and waste materials are properly disposed of, follow the ESC plan and BMPs, and be prepared to address any on-site spills through the SPCC plan. Furthermore, the Proposed Action is not anticipated to adversely affect human health or the environment.

The existing GA Terminal building contains quantities of asbestos that exceed the EPA's 1% limit for allowable concentrations of asbestos within building materials. However, the asbestos would be removed by an accredited asbestos removal contractor prior to the rehabilitation of the GA Terminal building, thereby reducing risk to human health at the Airport. The Proposed Action and future actions will generate solid waste during construction and have the potential to release pollutants; however, the increase in solid waste will be temporary and connected directly to construction. Adhering to local regulations, implementation of BMPs and proper use, storage, inspection, and maintenance of construction equipment used during construction will prevent potential releases of petroleum or other hazardous materials. Therefore, the Proposed Action, when considered with past, present, and reasonably foreseeable future actions will result in **no significant cumulative impacts** to hazardous materials, pollution prevention, or solid waste.

(ii) Alternative 2

Alternative 2 is similar in scope to the Proposed Action as described above. Alternative 2, in addition to other past, present, reasonably foreseeable projects, will result in **no significant cumulative impacts** to hazardous materials, pollution prevention, or solid waste.

Historical, Architectural, Archeological, and Cultural Resources

(i) Proposed Action

Three properties (including the GA Terminal building) on the Airport have been determined individually eligible for listing in the NRHP. Two of the properties are located outside of the APE and will not be affected by the Proposed Action. Construction of the Proposed Action will adversely impact the GA Terminal building. Adverse effects of the Proposed Action under the NHPA will be minimized and mitigated as agreed upon in the MOA. Therefore, the Proposed Action, when considered with past actions or the reasonably foreseeable future actions, will result in **no significant cumulative impacts** to historical, architectural, archeological, or cultural resources.

(ii) **Alternative 2**

The demolition of the GA Terminal building proposed in Alternative 2 does not meet the MOA mitigation measures agreed to by participating parties (that includes preservation of parts of the building) because the building will be demolished. However, when considered with past actions or the reasonably foreseeable future actions, Alternative 2 will result in **no significant cumulative impacts** to historical, architectural, archeological, or cultural resources.

Land Use

(i) **Proposed Action**

The Proposed Action is compatible with aviation and aviation safety, will not require the acquisition or transfer of lands, is confined to Airport property, will not change the existing or future zoning or land use within the Land Use Study Area, and is consistent with Airport development under the approved 2019 ALP. Implementation of the Proposed Action will result in no significant impact to land use. Therefore, the Proposed Action, when considered with past actions or the reasonably foreseeable future actions, will result in **no significant cumulative impacts** to land use.

(ii) **Alternative 2**

Alternative 2 is similar in scope to the Proposed Action as described above. Alternative 2, when considered with past actions or the reasonably foreseeable future actions, will result in **no significant cumulative impacts** to land use.

Natural Resources and Energy Supply

(i) **Proposed Action**

The Proposed Action will temporarily increase natural resources and energy consumption during construction. This short-term increase can be accommodated through regional sources without creating a strain or shortage on any required resource. Over the long term, the Proposed Action will marginally reduce the natural gas and energy demands due to improved building insulation and more efficient lighting and HVAC systems. Natural resources and energy required for the continued operation of the Proposed Action are available locally and are within the supply capabilities of the service providers for the Airport. Therefore, the Proposed Action, when considered with past, present, and reasonably foreseeable future actions, will result in **no significant cumulative impacts** to natural resources or energy supplies.

(ii) **Alternative 2**

Alternative 2 is similar in scope to the Proposed Action as described above. Alternative 2, when considered with past actions or the reasonably foreseeable future actions, will result in **no significant cumulative impacts** to natural resources and energy supply.

Socioeconomic Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risks

(i) **Proposed Action**

The listed future projects involve temporary construction activities and occur in the same geographic location as the Proposed Action. Based on review of the population data in the area, it is assumed that no adverse impacts to socioeconomics, environmental justice, or children’s environmental health and safety will occur based on the environmental consequences determined for the Proposed Action. Therefore, the Proposed Action, when considered with past actions or the reasonably foreseeable future actions, will result in **no significant cumulative impacts** to socioeconomics, environmental justice, or children’s environmental health and safety.

(ii) Alternative 2

Alternative 2 is similar in scope to the Proposed Action as described above. Alternative 2, when considered with past actions or the reasonably foreseeable future actions, will result in **no significant cumulative impacts** to socioeconomics, environmental justice, or children’s environmental health and safety.

Visual Effects

(i) Proposed Action

Construction activities may temporarily increase and produce light emissions during implementation. The increased light emissions are minimal and can be limited through construction timing and angular adjustments. The rehabilitated GA Terminal building may include installation of additional exterior lighting around the structure and adjacent parking spaces. However, the Proposed Action will be constructed within the same general footprint of the existing GA Terminal building, maintaining similar dimensions and light emissions that conform to the nature of the existing structure. Therefore, implementation of the Proposed Action, when combined with other past, present, or reasonably foreseeable future projects will result in **no significant cumulative impacts** to visual effects.

(ii) Alternative 2

Alternative 2 is similar in scope to the Proposed Action as described above. Alternative 2, when considered with past actions or the reasonably foreseeable future actions, will result in **no significant cumulative impacts** to visual effects.

4.13.3. Conclusions

Based on the review and findings of known completed, ongoing, planned, and proposed projects in the vicinity of the Airport, it is concluded that the Proposed Action or Alternative 2, when added to past, present, and reasonably foreseeable future projects, will result in **no significant cumulative impacts** to these environmental impact categories.

This conclusion was reached because:

- The Proposed Action results in no effects or *de minimis* effects (i.e., so small as to be negligible or insignificant).
- Although Alternative 2 results in a significant effect to a Section 4(f) resource and an adverse effect to a historic property, no past, present, or reasonably foreseeable future actions in the vicinity of the Project Study Area impact these resources, thereby avoiding a significant cumulative impact.
- The impacts associated with the construction of the Proposed Action or Alternative 2 are temporary in nature.
- Mitigation measures and BMPs will be implemented for the Proposed Action that should result in no measurable effects to any of the resources discussed above.

4.13.4. Summary of Anticipated Impacts

Potential impacts from construction and the long-term operation of the Proposed Action or Alternative 2 for each environmental resource category are summarized in **Table 4-13: Summary of Anticipated Impacts**.

Table 4-13: Summary of Anticipated Impacts

Environmental Resource	Alternatives		
	Proposed Action	Alternative 2	No Action Alternative
Air Quality	No Significant Effect	No Significant Effect	No Effect
Biological Resources	No Effect	No Effect	No Effect
Climate	No Significant Effect	No Significant Effect	No Effect
Coastal Resources	No Effect	No Effect	No Effect
Department of Transportation, Section 4(f)	No Significant Effect	Significant Effect	No Effect
Farmlands	No Effect	No Effect	No Effect
Hazardous Materials, Solid Waste, and Pollution Prevention	No Significant Effect	No Significant Effect	No Effect
Historical, Architectural, Archeological, and Cultural Resources	Adverse Effect to historic properties to be mitigated via established MOA resulting in No Significant Effect	Adverse Effect to historic properties without mitigation option agreed to by the MOA parties, resulting in Significant Effect	No Effect
Land Use	No Significant Effect	No Significant Effect	No Effect
Natural Resources and Energy Supply	No Significant Effect	No Significant Effect	No Effect
Noise and Noise-Compatible Land Use	No Effect	No Effect	No Effect
Socioeconomic Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risks	No Significant Effect	No Significant Effect	No Effect
Visual Effects	No Significant Effect	No Significant Effect	No Effect
Water Resources	No Effect	No Effect	No Effect
Cumulative Impacts	No Significant Effect	No Significant Effect	No Effect

THIS PAGE INTENTIONALLY LEFT BLANK

Chapter 5. Record of Agency Coordination and Public Involvement

As required by NEPA and FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, this EA included a public involvement process. This process provided the opportunity for public and agency input regarding the Proposed Action discussed in this EA and was initiated to:

- Provide information about the Purpose and Need for the Proposed Action and the alternatives discussed in the EA.
- Obtain feedback about the above information from the public and agencies interested in and affected by the Proposed Action.
- Inform those interested parties that the EA will provide a full and fair discussion of project-related environmental effects.
- Provide timely public notices to interested parties so that they may submit comments and participate in public meetings concerning the Proposed Action.
- Record comments received from interested parties.

5.1. Agency Coordination

FAA conducted agency coordination over a 30-day period from June 2 – July 2, 2023 (**Appendix B**). FAA conducted coordination with the respective tribes and DAHP over a 30-day period from June 20 – July 20, 2023. No comments were received. **Table 5-1: Agency Coordination**, documents all agency coordination that occurred.

Table 5-1: Agency Coordination

Agency	Contact Name	Date Correspondence Received	Comments
WDFW	Eric Pentico Region 2 Habitat Biologist 509-754-4624 ext. 215 eric.pentico@dfw.wa.gov	June 7, 2023	There are no perceived impacts to fish and wildlife functions and values with the proposed actions, and WDFW has no concerns regarding this proposal.

5.2. Public Involvement and EA review

Public involvement is a vital component of the NEPA process. The Sponsor hosted its annual Festival of Flight community event at the Airport on July 8, 2023, from 9AM to 3PM, which occurred in conjunction with an Open House Poster Session used to inform the public of the ongoing EA and solicit comments to be considered in preparation of the EA (see **Appendix G: Public Engagement Summary**).

The Draft EA was available for public review for a period of 30 days, from January 15, 2024, through February 15, 2024, at the Wenatchee Public Library and on the Pangborn Memorial Airport website (<https://www.flywenatchee.com/ga-terminal-ea-public-release/>). For individuals who could not obtain the Draft EA and associated appendices electronically and wanted a paper copy or USB mailed to them, a request could have been made to Vince Barthels at vbarthels@ardurra.com or (509) 951-9564.

Written comments were accepted by email at vbarthels@ardurra.com, or sent to the following address:

Vince Barthels
Ardurra
ATTN: Pangborn Memorial Airport EA Comments
1717 S. Rustle Street, Suite 201
Spokane, WA 99224

Written comments must have been emailed by 11:59 p.m. (PDT) on February 15, 2024, or postmarked by February 15, 2024. (For comments received via email, a confirmation reply would have been sent.)

5.3. Final Environmental Assessment

Agency comments received throughout the entire Draft EA process were considered in the development of the Final Environmental Assessment. No public comments were received during the public comment period from January 15, 2024, through February 15, 2024.

5.4. List of Preparers

A list of key contributors to this EA is included as **Appendix H: List of Preparers**.

THIS PAGE INTENTIONALLY LEFT BLANK