

U.S. Department of Transportation  
Federal Aviation Administration  
Northwest Mountain Region  
Denver Airports District Office

Finding of No Significant Impact/  
Record of Decision

For the Runway & Terminal Area Improvement Projects  
At the Aspen/Pitkin County Airport  
Aspen, CO

July 2018

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## **I. Introduction**

This document serves as the Federal Aviation Administration's (FAA) Finding of No Significant Impact/Record of Decision (FONSI/ROD) and provides final agency determinations and approvals for the federal actions necessary to implement the proposed terminal and airfield improvement projects at the Aspen/Pitkin County Airport (ASE), owned and operated by Pitkin County (Airport Sponsor). This FONSI/ROD is based on the information and analysis contained in the attached Final Environmental Assessment (FEA), dated June 2018. This FEA has been prepared in accordance with the guidelines and requirements set forth by the Council on Environmental Quality (CEQ) and the FAA to implement the environmental review and disclosure provisions of the National Environmental Policy Act of 1969 (NEPA).

## **II. Background**

ASE is a publically owned and operated commercial service airport located in Pitkin County, Colorado approximately three miles northwest of the City of Aspen's Central Business District and approximately 38 miles southeast of the City of Glenwood Springs. ASE is situated west of Colorado Highway 82 and east of Owl Creek Road on the northern limits of the Aspen Area Urban Growth Area. Airside facilities at ASE include Runway 15/33 (8,006 feet long by 100 feet wide), a taxiway system, aircraft parking aprons and associated visual and electronic navigational aids. Landside facilities include a terminal building, hangars, ground access routes, automobile parking areas, fuel farm and storage facilities.

The Airport Reference Code (ARC) is a coding system used by the FAA to relate airport design criteria to the operational and physical characteristics of the airplanes that currently and are forecasted to operate at an airport. The ARC has two components. The first component is depicted by a letter (A-E) and relates to the aircraft approach speed. The second component is depicted by Roman numeral (I-IV) and relates to physical characteristics (aircraft wingspan or tail-height). ASE is a D-III airport that does not fully comply with D-III standards. The non-standard conditions include the separation distance between the runway and taxiway, the taxiway and parked aircraft, and runway and the holding position; runway width; and runway strength. As result, ASE has wingspan restriction that prohibits aircraft with a tip-to-tip wingspan of greater than 95' and landing weight in excess of 100,000 lbs. dual-wheel from operating at ASE.

In 2012, ASE completed a Master Plan Update and submitted an updated Airport Layout Plan (ALP) to the FAA. The Master Plan identified needed improvements on the east side area (including a passenger terminal replacement), a full parallel taxiway for the west side, and development for a potential second Fixed Base Operator (FBO). The Master Plan Update determined that the existing terminal configuration has resulted in many of the undersized areas that are unable to efficiently accommodate existing demand. The ALP was partially approved on a conditional basis in August of 2013 for projects on the east side, but not for projects on the west side. The conditional basis of the ALP approval was subject to subsequent NEPA compliance. No runway changes were recommended in the Master Plan because of the existing restrictions in place at ASE.

In 2014, Pitkin County commissioned an Air Service Study in response to changes that were starting to occur in aircraft fleet. That study found that the regional jets with wingspans less than 95 feet would be phased-out by commercial operators by 2028. Airlines are changing their aircraft fleet in response to air travel demand and it is expected that the aircraft serving ASE that meet the current restrictions will eventually be withdrawn from service in favor of larger aircraft with more seating. As a result, the airlines would not be able to provide similar scheduled commercial passenger air service at ASE in the future because the aircraft contained in their fleet would not meet those specifications. The Air Service Study analyzed options for ASE to retain commercial passenger service consistent to what exists today and the recommendations from that study were used to update the ALP in 2015 and were brought forward in this EA.

### **III. Proposed Action (Chapter 1 of the FEA)**

ASE is proposing to build a replacement terminal and make airfield improvements. The existing terminal is not able to efficiently accommodate the passengers who fly in and out of ASE while the airfield improvements are needed to meet FAA design standards.

The Terminal Area Improvements include:

- Construction of a replacement terminal;
- Construction of associated parking;
- Re-configuration of the terminal roadway and recirculation roadway;
- Integration of the passenger terminal with public transit;
- Relocation of ancillary facilities, such as rental car facilities;
- Demolition of existing passenger terminal facilities;
- Commercial service aircraft apron expansion; and
- Construction of a noise barrier along the general aviation apron area.

The runway improvements include:

- Shifting Runway 15/33 80' west, widening to 150' and strengthening to accommodate 150,000 pounds landing weight;
- Realignment of the perimeter road, Owl Creek Road, and Owl Creek bike path within the Colorado Department of Transportation's right-of-way;
- Relocation of associated navigational aids and runway/taxiway lighting;
- Removing current wingspan and weight limit restrictions;
- Piping of Owl Creek (for both the runway relocation and to address a wildlife hazard); and
- Amending flight procedures to accommodate the runway improvements.

The Proposed Actions are illustrated on Figure 1-1 in the Final EA. During the development of the Final EA it was discovered that Figure 1-1 did not include the entire proposed project. A portion of one of the navigational aids (the Medium Intensity Approach Lighting System with Sequenced Flashing Lights (MALSF)) which will be relocated as part of this project was not included on the figure though it was included in the analysis in the EA. Figure 1-1 has been updated to reflect the correct project boundary and study area which includes the entire MALSF lighting. In addition, the following figures were also updated to accurately reflect the study areas analyzed: Figure 3-1, Figure 3-4, Figure 4.2-1, Figure 4.6-1, Figure 4.8-1, Figure 4.14-1, Figure 4.14-2 and Figure 4.14-3.

#### **IV. Purpose and Need (Chapter 2 of the FEA)**

##### **A. Terminal Area Improvements**

The purpose and need for improvements to the passenger terminal at ASE are related to deficiencies in the current terminal, issues associated with the current roadway configuration and passenger parking, and deficiencies in the apron area where aircraft park. The existing terminal is unable to efficiently accommodate existing demand. Runway 15/33 Improvements

The purpose and need for the proposed runway improvements is to enable ASE to accommodate anticipated future aircraft and bring the airfield into compliance with the FAA standards and recommendations.

##### **B. Piping of Owl Creek Outside of Runway Improvements**

The purpose and need for the piping of Owl Creek outside of the runway improvements is to reduce the attraction of hazardous wildlife to Owl Creek. The 2012 wildlife hazard management plan (WHMP) identified Owl Creek as a hazardous wildlife attractant within the critical zone (area within 10,000 feet of an aircraft operation area).

#### **V. Agency Actions and Approvals**

The FAA actions, determinations, and approvals necessary for this project to proceed include:

- A determination that the environmental analysis prerequisites associated with any future Airport Improvement Program (AIP) funding application have been fulfilled pursuant to 49 USC 47101.
- Unconditional approval of the Proposed Action as shown on the 2015 ALP Update.
- Approval of modifications to the procedures for the shifted runway relocation.
- Relocation of navigational aids and runway/taxiway lighting.

#### **VI. Alternatives (Chapter 3 of FEA)**

In accordance with NEPA and FAA Orders 1050.1F and 5050.4B, and FAA design standards, the FEA identified and evaluated all reasonable alternatives.

##### **A. Alternatives Examined but Eliminated from Further Study**

The following alternatives were considered during the planning process and were dismissed from further consideration because they were determined not to be feasible and/or did not meet the Purpose and Need.

###### **1. Other Modes of Transportation**

- Travel by Automobile/Bus: Reliance on ground travel is not a realistic alternative to access the Aspen area given the added travel time, unreliable winter roadway conditions and heavy traffic.
- Substitute Telecommunication Technology for Air Travel: Telecommunication technology may relieve potential future business travel demand but would likely have no effect on recreational travel.

###### **2. Use of Other Area Airports**

Grand Junction Regional Airport and Eagle County Regional Airport are the two closest commercial service airports to ASE that could provide service. The added travel time and unreliable winter roadway conditions makes this alternative unrealistic.

### 3. Terminal Area Improvement Alternatives

#### ▪ Upgrade Existing Terminal

For this alternative, the existing terminal would be expanded and upgraded in its present location. Passengers and employees would experience significant inconveniences during construction given the constrained facilities. The age of the terminal building would make it difficult to resolve all of the facility deficiencies identified in Chapters 1 and 2 of the FEA.

#### ▪ Construction of a Parking Garage

The 2012 Master Plan indicated that, by 2027, approximately 1,713 spaces would be needed to meet demand. A parking garage that could accommodate 1,300 spots was included in the Master Plan. Due to a lack of financial feasibility, this alternative will not be brought forward. The terminal planning will include the potential for a future parking garage, so that, if it does become financially feasible at some point in the future, the site will be able to accommodate it.

#### ▪ Offsite Parking

An offsite parking location was considered but then tabled given the expected City and County parking study that will consider parking solutions for the Roaring Fork Valley, including ASE.

### 4. Runway Alternatives

An Air Service Study (Study) examined multiple alternatives that would correct the existing non-standard conditions, allowing ASE to meet FAA design standards. Runway relocation and runway realignment are not feasible alternatives at ASE due to the constrained nature of the valley and the mountainous approach. Shifting to the east is not feasible due to existing constraints (terminal, Fixed Base Operator [FBO] facilities, and Highway 82). The Study examined 18 different alternatives for achieving the design standards. Pages 3.4-3.5 of the FEA provides information on the 18 alternatives considered and reasons for the elimination of the alternatives.

### 5. Piping of Owl Creek Alternative

Manipulation and Maintenance of Vegetation: The sections of Owl Creek located on either side of the runway have been disturbed and maintained by ASE to prevent wildlife hazards. On the west side of the runway, vegetation along Owl Creek is mowed giving the creek the appearance of a meandering ditch. On the east side of the runway within the study area, riparian plants, which include herbaceous species and cottonwoods, have been mowed and the trees trimmed. Hazardous wildlife is still attracted to Owl Creek even with the maintenance being completed by ASE. Therefore, this alternative was eliminated from further consideration.

## **B. Alternatives Carried Forward for Analysis**

### 1. No Action Alternative

The No Action Alternative consists of retaining existing ASE facilities (the runway, taxiway, terminal, roadway, and apron) as they exist today. The existing 95-foot wingspan restriction and the Modification to Standards would be kept in place.

Consequently, ASE could lose commercial passenger service in the future as aircraft would not be available that meet the current restrictions. Some form of commercial service is anticipated to still exist under this Alternative with the use of smaller, older turboprops; however, it would likely be greatly reduced. The No Action Alternative would not allow ASE to accommodate existing and future passenger and operational needs in the terminal area and would not address the FAA design standard deficiencies; however, pursuant to NEPA, this alternative was carried forward for environmental analysis.

## 2. Terminal Alternatives

Two terminal alternatives were carried forward for evaluation in the EA. Both terminal alternatives include the relocation and expansion of the terminal, reconfiguration of the terminal area roadways and parking, an expansion of the air carrier apron, relocation of ancillary facilities such as rental car facilities, and a noise wall over by the GA apron. It would also include demolition of the existing terminal facilities. The differences between the two terminal alternatives are related to architectural features – the size and footprint are the same for both alternatives.

**Terminal Alternative 1:** A split-level terminal that fits within the landscape where all functions are generally on a single level, and the split-level provides some grade mitigation opportunity.

**Terminal Alternative 2:** A hybrid of the nested/two-story concept that includes a setback appearance to make it less conspicuous within the landscape and a stack of the levels to allow for flexibility of space expansion in the future.

These alternatives were combined into one Terminal Alternative for consideration in this FONSI/ROD that focuses on the footprint of the proposed building.

## 3. Runway Alternative

This alternative includes shifting the runway 80 feet to the west, widening to 150 feet and strengthening to accommodate up to 150,000 pounds; piping of Owl Creek; relocating navigational aids and runway/taxiway lighting; updating flight procedures; and relocating the perimeter road, Owl Creek Road and Owl Creek Bike Path. This alternative would also remove the wingspan and aircraft weight restriction policy, allowing ASE to fully meet FAA D-III standards.

## C. Preferred Alternative (Chapter 3 of the FEA)

After careful consideration of the analysis of the impacts of the various alternatives considered and the ability of these alternatives to satisfy the identified purpose and need for the proposed action; and after review and consultation with various resource agencies, and after considering federal policy; the FAA hereby selects the Runway Alternative and Terminal Alternative as the Preferred Alternative in the FEA for federal support.

## **VII. Affected Environment (Chapter 3 of the FEA)**

ASE is located approximately two miles northwest of Aspen, Colorado on a bench about 200 feet above the Roaring Fork River. The town of Aspen is in a remote area of the Rocky Mountains' Sawatch Range and Elk Mountains, along the Roaring Fork River at an elevation just below 8,000 feet above sea level on the Western Slope, 11 miles west of the Continental Divide. Aspen is a ski resort town and year-round destination for outdoor recreation.

Much of ASE is relatively flat except for a few soil piles and topographic high points which support native sagebrush, oakbrush and Aspen/oakbrush communities. The vast majority of ASE has either been disturbed or manipulated through the development of the airport. Areas that were previously disturbed were seeded with a variety of native and non-native species. Owl Creek runs through the northern part of the property. In addition, there are two tributaries, four ditches, three wetlands and multiple irrigation laterals located on ASE property. The 100-year floodplain of Owl Creek is on the northern side of ASE. A surficial, mountainous aquifer associated with the Roaring Fork River lies under an area just north of ASE and the Town of Aspen. ASE currently has a National Pollution Discharge Elimination System (NPDES) Permit and a Storm Water Management Plan (SWMP).

The major land uses in the vicinity of ASE include government/institutional, open space/recreational, agricultural and residential. There is a large area of open space associated with the North 40 residential development immediately east of ASE that provides a buffer between ASE and residential uses. ASE owns numerous avigation easements in the surrounding area.

The North 40 Home Owners Association owns/operates three parks within the North 40 development. The largest of these parks, North 40 Park, is privately owned and operated by the North 40 HOA. The White River National Forest is approximately 1.5 miles east of ASE on the eastern side of the Roaring Fork River. Immediately south of the runway on ASE property is a segment of the Owl Creek bike path, which is owned and operated by Pitkin County. The Airport Business Trail runs along the eastern side of Highway 82 and is connected to ASE via an underpass. ASE is situated within the Scenic View Protection Areas associated with Colorado Highway 82 and Owl Creek Road. The closest Colorado State Park is the Arkansas Headwaters Recreation Area approximately 40 miles east of ASE. There are five properties within Pitkin County that have used funding from the Land and Water Conservation Fund including Iselin Park (2.7 miles away), Glory Hole Park (4.4 miles away), Aspen Trail System (4 miles away), North Star Ranch (5.6 miles away) and Wingo Junction Train Crossing (16 miles away).

A records search of the NRHP indicated that there are 36 historically significant sites within Pitkin County. The Maroon Creek Bridge is the closest National Register-listed historic resource to the APE. The 2015 Cultural Resources Survey reviewed all properties at ASE including buildings, hangars, and offices related to operations at ASE. The National Register-eligible Airport Ranch (5PT.538) was the only historic property identified within the study area. The Airport Ranch, which was determined eligible in 1988, consists of approximately 463 acres, and retains its nine contributing buildings and structures. Its boundaries are the ASE boundary to the east, the 7,800-foot contour line to the west, Owl Creek Road to the South, and a row of trees to the north. The Airport Ranch is located on the west side of ASE property. The ranch is outside the secured area fence, which surrounds the perimeter separating ASE from the ranch property, and therefore, is

located outside the APE. No other properties were found to meet the National Register Criteria for Evaluation within the APE. Most of ASE property is pre-disturbed, and previous archeological surveys have not identified any sites that are eligible for the National Register

Section 4(f) resources near ASE include Airport Ranch, Children's Memorial Park, Chuck Brandt Park, Harmony Park, Owl Creek Bike Path, and the Airport Business Center Trail. A small portion of the Owl Creek Bike Path is within the existing 65 DNL contour.

Pitkin County is currently designated as maintenance for PM<sub>10</sub> and as attainment for the remaining National Ambient Air Quality Standards (NAAQS) criteria pollutants. Pitkin County has been preparing carbon dioxide (CO<sub>2</sub>) emissions inventories for ASE since 2008. The most recent airport-wide emissions inventory was prepared for the year 2014, which reported airport-related emissions to be approximately 62,326 metric tons of CO<sub>2</sub>.

The day-night noise level (DNL) is used to describe the cumulative noise exposure over a 24-hour period with a 10 dB penalty added for noise during the nighttime hours (10:00pm – 7:00am). The base year for the FEA is 2015. There were 39,224 operations in 2015. The 65 DNL contour encompasses 182 acres and there are no noise-sensitive land uses within the existing 65 DNL contour (Figure 4-11.1).

There are permitted small generators of hazardous waste on and near ASE. These generators are identified as low risk and generally include materials such as fuel, oil, pesticides, and fertilizers.

The following resources are not present in the project area: coastal resources and farmlands.

### **VIII. Environmental Consequences of the Preferred Alternative (Chapter 4 of the FEA)**

Environmental impact categories identified in FAA Orders 1050.1F and 5050.4B were evaluated in the FEA. Environmental consequences of the No Action Alternative and the Preferred Alternatives are included in Chapter 4 of the FEA. Below is a summary of the findings.

Projects were analyzed separately in the FEA given the independent utility of each project and the plan to build only one project at a time; therefore, impacts were provided for the No Action Alternative, the Terminal Alternative and the Runway Alternative. A Combined Alternatives analysis was also completed for those resource categories that could be impacted by the implementation of both projects.

#### **A. Air Quality (Section 4.1 of FEA)**

##### ▪ No Action Alternative

No project-related construction would occur under the No Action, therefore there would be no construction related emissions. Emissions of all pollutants are anticipated to decrease relative to 2015 (base year) except for VOCs. VOCs are expected to increase slightly between 2015 and 2033 (from 45.4 tons in 2015 to 53.8 tons in 2033). These changes in emissions are largely due to the fleet mix changes as jet aircraft that meet the current wind span requirement are phased out of commercial service.

- Terminal Alternative

- Construction Emissions

- Construction of the terminal building is expected to occur between 2018 and 2022. Short-term construction emissions would occur with the construction of the terminal building. The total direct and indirect construction related emissions are below *de minimis* levels and are not expected to be significant (Table 4.1-5).

- Operational Emissions

- Comparing the emissions associated with the No Action alternative, the proposed terminal improvements would not materially change emissions. The taxi distance would decrease by 193 feet with the construction of the new terminal given its proposed location. As a result, the emissions expected with operation of the terminal improvements would be slightly less than the No Action (Table 4.1-6).

- Runway Alternative

- Construction Emissions

- Construction of airfield improvements is expected to occur between 2023 and 2027. Short-term construction related emissions would occur with the construction of the airfield improvements, however, none of the emissions are projected to exceed *de minimis* levels (Table 4.1-7).

- Operational Emissions

- A slight change in aircraft movement would occur with the construction of the airfield improvements. The runway would shift 80 feet to the west, which would result in an increase in taxi distance of approximately 160 feet. The most notable difference in emissions between the No Action and the Runway Alternative is the increase in NO<sub>x</sub>, which would increase by 26.1 tons (Table 4.1-8). This increase is associated with the bigger aircraft that would be operating in 2033. However, all expected emissions are below *de minimis* levels and are not expected to be significant.

- Combined Terminal and Runway Alternatives

- Construction emissions for both alternatives were not analyzed given that construction is not expected to overlap. By 2028, both projects would be complete and an operations emission inventory was prepared for the combined scenario. The combined terminal and airfield improvements would produce emissions similar to that of the airfield improvements only. In 2028, NO<sub>x</sub> and SO<sub>x</sub> emissions would increase while all other emissions would decrease. By 2033, VOC emissions would decrease while all other emissions would increase due to the change in aircraft operating at ASE. All emissions would be less than *de minimis* and are not expected to result in significant impacts.

**B. Biological Resources (Section 4.2 of the FEA)**

- No Action Alternative

- The No Action Alternative does not include any construction or land disturbance and would therefore not impact any wildlife, vegetation, or wetlands in the area.

- Terminal Alternative

The Terminal Alternative is located in an area that has been previously disturbed. Approximately 1.22 acres of seeded/graded habitat may be disturbed along with a portion of planted trees and existing landscaping. There are no creeks, streams, or rivers, and there is no substantial habitat for fish or animal species in the project area. The Roaring Fork River, located adjacent to ASE, is clearly separated from the study area via berms, Hwy 82, and other features. The FAA determined that the project will have no effect on Federally threatened or endangered fish, wildlife, or plants (**Appendix 2**).

- Runway Alternative

Direct impacts of the airfield improvements include the piping of Owl Creek within the fence line. Portions of Owl Creek are already piped within the project area. The piping will not impact the function of Owl Creek to transmit water to the Roaring Fork River. Water quality of Owl Creek will not be impaired and may actually improve with the reduction in debris/sediment that would be able to access the creek. Best management practices will be utilized during construction to minimize impacts to water quality. Piping will also impact vegetation on the banks of the creek (including the removal of approximately 1.5 acres of narrowleaf cottonwood/alder) and change an open water system to a terrestrial system. It is expected that birds, amphibians, reptiles, mammals, and invertebrates that once inhabited the area will move downstream to an area that remains open.

Vegetation impacts are also expected as a result of the airfield improvements. Managed areas that will be disturbed consist of seeded/graded areas and a small serviceberry/grass area. Construction impacts will change the physical landscape and alter plant and wildlife habitat. Areas that are disturbed during construction that are not permanently developed will be graded and seeded. Approximately 22 acres of managed vegetation will be permanently removed/disturbed.

Impacts to Federally-threatened or endangered fish, wildlife, or plants are not expected. Furthermore, the USFWS concurred with FAA's no effect determination (**Appendix 2**).

### **C. Climate/Greenhouse Gases (Section 4.3 of FEA)**

- No Action Alternative

No project-related construction would occur under the No Action and therefore, there would be no construction greenhouse gas emissions. With respect to operational emissions under the no action scenario, total airport operations are expected to increase slightly between 2015 and 2023 (from 14,199 in 2015 to 14,711 in 2023), but begin decreasing from 2028 through 2033 as curtailment of commercial air service over time would occur as airlines retire aircraft that meet the current wingspan limitation at ASE.

- Terminal Alternative

- Construction Emissions

The total quantity of greenhouse gas emissions to complete construction of a replacement terminal would be approximately 5,340 metric tons of CO<sub>2</sub>. Assuming 50% of the emissions occur in a peak construction year, those emissions would be 2,670 metric tons of CO<sub>2</sub>.

- Operational Emissions
 

Once construction is completed, aircraft taxi distance would decrease by approximately 193 feet. This reduced taxi distance would eliminate 27 to 29 metric tons of CO<sub>2</sub> on an annual basis. There would also be a decrease in the energy use per square foot based on increased efficiencies of the new terminal. However, since there would be an increase in the overall square footage, the change in energy use and thus greenhouse gases related to the terminal would not result in a significant change.
- Runway Alternative
  - Construction Emissions
 

Construction of the airfield improvement projects would generate approximately 5,385 metric tons of CO<sub>2</sub> emissions, which is expected to occur between 2023-2027. Assuming 50% of the emissions occur in a single year, approximately 2,693 metric tons of CO<sub>2</sub> would be emitted during the peak construction year.
  - Operational Emissions
 

Once construction is completed, there will be a slight change in the way aircraft move around on the airfield. The airfield changes would result in a taxi increase of approximately 160 feet in addition to a change in aircraft fleet mix. The proposed airfield projects would increase emissions relative to the No Action by 1,510 metric tons of CO<sub>2</sub> in 2028 and 5,626 metric tons of CO<sub>2</sub> in 2033. Although there is an increase over the No Action, the No Action emissions do not include the emissions that would result from vehicle traffic from other airports (e.g. Denver International Airport, Grand Junction, etc.) if ASE lost commercial service nor does the proposed action calculations reflect County policies put in place to reduce GHG emissions or the fact that the anticipated aircraft to use ASE is expected to be more fuel efficient.
- Combined Terminal and Runway Alternatives
 

Construction emissions for both alternatives were not analyzed given that construction is not expected to overlap. Once construction is completed, both projects will slightly change the taxi distances that will offset one another. The airfield improvements will have a notable effect on the aircraft fleet operating at ASE. The proposed combined terminal and airfield projects would increase CO<sub>2</sub> emissions relative to the No Action by 1,487 metric tons in 2028 and 5,597 metric tons in 2033. As stated above, these calculations for the No Action do not include the emissions that would result from vehicle traffic from other airports (e.g. Denver International Airport, Grand Junction, etc.) if ASE lost commercial service nor does the proposed action calculations reflect County policies put in place to reduce GHG emissions or the fact that the anticipated aircraft to use ASE is expected to be more fuel efficient.

**D. Department of Transportation Act Section 4(f) (Section 4.5 of FEA)**

- No Action Alternative
 

There would be no direct impacts to Section 4(f) resources. The No Action Alternative would result in a change in noise as jet air carrier aircraft would be phased out over time and air carrier service would be limited to turboprop activity. GA charter jet operations are

anticipated to increase to account for the reduction in service via the air carriers. However, this change in aircraft does not change the noise exposure to the Owl Creek Bike Path.

- Terminal Alternative

No direct Section 4(f) resources would be impacted. The closest recreational resource to the terminal improvements is the Airport Business Trail connected to ASE via an underpass. Neither this trail nor the underpass would be affected by the Terminal Alternative. The site plans for the Terminal Alternative creates a better link to this underpass to allow improved pedestrian access to the terminal in the future. During construction, temporary impacts could occur to the underpass that access the terminal from the Airport Business Trail; however, these would be temporary and not significant. There are no changes in the 65 DNL contour as a result of this alternative; therefore, it is anticipated that the overall impacts to Section 4(f) resources will be beneficial once construction is completed.

- Runway Alternative

The Runway Alternative requires a shift of approximately 1,657 linear feet of the Owl Creek Bike Path to the west between 13 feet and 58 feet. During construction, there would be temporary access restrictions to Owl Creek Bike Path, but there is likely room in the CDOT ROW to either build a temporary bike path or allow users to use the road for a small section to minimize impacts. Complete closure is estimated to be about 6-9 months but with phasing and temporary routing, the bike path and/or road should be able to remain open during the majority of this time to minimize impacts. While Owl Creek may be closed for minor durations, these impacts would be temporary and would not be significant. Additionally, adequate notice will be provided prior to closure of the trail. ASE coordinated with users/owners of the bike path and found that the relocation of the bike path would not constitute a negative effect on the bike path, its uses, or its users.

Noise contours would shift slightly due to the change in fleet mix and the 80-foot runway shift, resulting in the 65 DNL noise contour extending over a small portion of Airport Ranch, a historically eligible property on the west side of ASE, and Owl Creek Bike Path. Airport Ranch is currently on ASE property and subject to the noise and activity associated with airport use. The slight change in the noise contours would not result in significant impacts to this resource. The 65 DNL noise contour already encompasses portions of the Owl Creek Bike Path. Because this bike path is currently subject to this level of noise associated with ASE, the slight shift in noise would not substantially impair the use of this resource.

The FAA has determined that the proposed project will result in a *de minimis* impact to the Owl Creek Bike Path. A *de minimis* impact is one that, after taking into account any measures to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), results in a determination that the project would not adversely affect the activities, features, or attributes qualifying the resource for protection under Section 4(f). The FAA informed Pitkin County of the intent to make a *de minimis* impact determination and Pitkin County concurred with the determination in an email dated March 4, 2018 (Appendix 4 of the FEA).

**E. Hazardous Materials, Solid Waste and Pollution Prevention (Section 4.7 of FEA)**

▪ **No Action Alternative**

The No Action alternative does not include construction and would not generate hazardous wastes or additional pollution. It also would not result in a change in volume of the existing solid waste.

▪ **Terminal Alternative**

○ **Hazardous Materials**

The Terminal Alternative would occur in an area that has no known hazardous sites. Construction activities can sometimes generate hazardous wastes and some construction materials consist of hazardous substances. Any hazardous waste materials generated during construction of the Terminal Alternative would be sent to an appropriately permitted facility.

○ **Solid Waste**

The increase in terminal square footage is intended to meet existing passenger needs and therefore is not expected to result in additional waste creation or create additional solid waste streams in the long term. Construction activities would create temporary increases in construction and demolition waste; however, this increase would be short-term and would not put undue strain on land disposal services, as the facility still has a 15-year lifespan. These construction activities would be temporary, non-significant and reduced through best management practices and the use of ASE's Sustainable Construction Management Plan.

○ **Pollution Prevention**

ASE implements several best management practices to address pollution prevention initiatives. These include maintaining and updating a site-specific spill prevention control and countermeasure plan, SWMP, and properly handling and storing hazardous materials. Pitkin County provides large recycling containers for the collection of cans, bottles, office paper, and newspapers inside ASE buildings and this would be extended into the new terminal building. The staff at ASE is responsible for the collection of the recyclable materials.

▪ **Runway Alternative**

The Runway Alternative occurs in an area that has been previously disturbed and contains no known hazardous material sites. The airfield improvements would not result in notable increases in the generation or handling of hazardous materials or solid wastes. There is a potential for a temporary increase of solid waste as a result of construction but the impacts would be temporary and would not put undue strain on the landfill. ASE's Sustainable Construction Management Plan will be utilized. There is also a potential for removal of fill from the site. Per the Sustainable Construction Management Plan, the contractor may be able to re-use this fill in the area. If such a re-use is not found, the contractor would likely need to truck it to a disposal site down valley at an appropriately permitted facility.

**F. Historical, Architectural, Archeological and Cultural Resources (Section 4.8 of the FEA)**

▪ No Action Alternative

The No Action Alternative would result in no development activities. Therefore, no direct impacts relative to archaeological, architectural, cultural, or historic sites would occur.

▪ Terminal Alternative

The existing terminal would be demolished when the new terminal is constructed. None of the existing buildings that would be affected by the terminal area projects are eligible for listing on the NRHP. All terminal projects occur on the east side of ASE and would not affect the Airport Ranch. The FAA issued a No Historic Properties Affected finding on November 17, 2016. The Colorado SHPO requested additional information on Airport Ranch in relation to the proposed projects. The FAA provided this information in an updated No Historic Properties Affected finding on January 31, 2017. The SHPO concurred with the finding in a letter dated February 6, 2017 (Appendix 3 of the FEA).

▪ Runway Alternative

The Runway Alternative would not impact the closest historic resource, Airport Ranch, which is outside the disturbance footprint for this project. The 80-foot lateral shift of the runway would cause a shift in noise contours 80 feet closer to the Airport Ranch. However, since Airport Ranch is currently on ASE property and it is subject to the noise and activity associated with that use, it would not change the character of the property. The FAA issued a No Historic Properties Affected finding on November 17, 2016. The Colorado SHPO requested additional information on the Airport Ranch in relation to the proposed projects. The FAA provided this information in an updated No Historic Properties Affected finding on January 31, 2017. The SHPO concurred with the finding in a letter dated February 6, 2017 (Appendix 3 of the FEA).

**G. Land Use (Section 4.9 of the FEA)**

▪ No Action Alternative

The No Action Alternative would have no adverse impacts on land use compatibility surrounding ASE.

▪ Terminal Alternative

The Terminal Alternative includes a relocated and expanded terminal facility, re-configured roadways and parking, and other associated improvements. Implementation of the Terminal Alternative would not result in the disruption of a community, the relocation of residences or businesses, or result in any changes to existing or planned land uses. The Terminal Alternative provide more direct connectivity to the existing mass transit stops, which is a positive impact of the proposed terminal project.

▪ Runway Alternative

The Runway Alternative is located almost entirely on ASE property. However, it would require the slight relocation of Owl Creek Road and the Owl Creek Bike Path, which are located on CDOT property. The road relocation would occur within the CDOT right-of-way and would be considered a compatible land use. Realignment of approximately 1,657 feet of the bike path 13 to 58 feet west of the existing path would not be considered to have a

negative effect on the bike path or its users. No changes to existing land use or zoning codes is anticipated.

#### **H. Natural Resources and Energy Supply (Section 4.10 of the FEA)**

- **No Action Alternative**

There would be no significant impacts to natural resources or energy supply as a result of the No Action Alternative. The outdated terminal's energy use could negatively affect ASE in the future by continuing to operate on old, more energy intensive systems, which means less efficiency and higher costs. This alternative would restrict newer generation aircraft from flying into ASE. Generally, the newer generation aircraft are more fuel efficient; however, this is not expected to result in significant differences in fuel usage.

- **Terminal Alternative**

Construction of the Terminal Alternative would require the use of building materials and water. Materials would be sourced locally, if possible; however, due to the remote nature of the valley, the proposed improvements could result in minor increases in fuel consumption for those materials that must be transported into the valley. This increase would be short-term, temporary, and relatively small compared to the overall amount of resources available. The use of fuel to transport materials in combination with fuel used to power construction vehicles is not anticipated to exceed the existing capacity or future availability of fuel in the area. With the construction of the new terminal, aircraft would taxi to a location approximately 193 feet closer on average than the current terminal, which would result in a minor reduction in the amount of fuel used.

The proposed terminal improvements represent an increase in square footage compared to the existing terminal. In general, it is assumed that larger square footage would require additional energy for heating, cooling and lighting. However, in this case, the existing terminal is old and relies on outdated energy systems and technology. It is anticipated that, while the overall energy consumption of the proposed larger terminal might increase, it could be partially offset by more efficient technology. The efficiency of the terminal would be improved by incorporating state of the art technology and building innovations and with ASE's commitment to purchasing renewable wind power. Any potential increase in energy use is not expected to exceed existing or future available resources.

- **Runway Alternative**

The Runway Alternative would not change energy consumption on the airfield. The shift of the runway 80 feet to the west would result in slightly longer taxi distance (160 feet on average for total taxi distance). However, this increase in taxiing distance would not significantly impact fuel use. The impacts associated with the increase taxiing distance may be offset with the introduction of newer generation aircraft. It is predicted that over time these aircraft would be more efficient than the existing aircraft; therefore, there would not be a significant increase in use of aviation fuel at ASE related to this project.

Similar to the Terminal Alternative, materials would be locally sourced, if possible, but may be transported in, if necessary. Due to the remote nature of the valley, the transportation of the materials could result in an increase of fuel consumption. The increase in fuel

consumption would be short-term, temporary, and relatively small compared to the overall amount of resources available.

**I. Noise and Compatible Land Use (Section 4.11 of the FEA)**

▪ **No Action Alternative**

The No Action would not result in operational changes at ASE; therefore, there would be no changes to the average annual noise contours. However, there is the potential for a change in noise due to a change in fleet mix with the phase out of CRJ-700. The 65 DNL contour would encompass 165.2 acres in 2023 (Figure 4.11-2), 163.9 acres in 2028 (Figure 4.11-5), and 162.3 acres in 2033 (Figure 4.11-6). No noise-sensitive land uses are located within the 65 DNL contour. Noise levels would not increase noise by 1.5 dB or more for a noise-sensitive area within the 65 DNL or higher contour.

▪ **Terminal Alternative**

As with the No Action Terminal Alternative, there would be no operational changes, and there would be no significant noise impacts. The proposed alternatives would result in short-term noise increases from construction activities, but these are expected to be short term, and not significant. The noise contours would be the same as the No Action for 2023 (the 65 DNL would encompass 165.2 acres – Figure 4.11-2). No noise-sensitive land uses are located within the 65 DNL contour. Noise levels would not increase noise by 1.5 dB or more for a noise-sensitive area within the 65 DNL or higher contour

The Terminal Alternative includes the construction of a noise wall/berm on the ramp between the aircraft parking area and the North 40 community. These areas are not within the 65 DNL noise contour. The noise wall will reduce single-event noise from aircraft ground operations (running APUs to provide power to the aircraft when the engines are off) for the residences close to ASE on the other side of Highway 82. The noise wall analysis used an acoustical planning and modeling program called SoundPLAN (Version 7.4), created by Braunstein & Berndt GmbH. A 14-foot wall is proposed based on the height of an APU mounted on a tail of a business jet (no more than 10-12 feet above ground).

▪ **Runway Alternative**

Shifting the runway to meet FAA design standards would remove the current restrictions and allow all D-III aircraft to fly into ASE. The CRJ-700 would likely be replaced by a mix of next generation regional jets such as the CS100. Discussions with air carriers have indicated that the 737-MAX could potentially operate out of ASE with the runway shift, but would likely operate under payload restrictions in certain conditions. While no air carrier has officially expressed interest in operating the 737-MAX out of ASE, the aircraft was included in the noise analysis given the potential for it being used in the reasonably foreseeable future.

The INM program does not contain noise profiles for new generation aircraft, including the Bombardier CS100 and Boeing 737-MAX; therefore, FAA-approved substitution aircraft were used to more accurately model noise.

The proposed alternatives would result in short-term noise increases from construction activities, but these are expected to be short term, and not significant.

The first year of implementation (2028) assumes a phase-in of regional jets with a wingspan greater than 95 feet. For this scenario, the modeling assumed continued use of turboprops, a reduction in the CRJ-700 (as it starts to be phased out of the fleet), and a small number of narrow-body commercial jet (Boeing 737-MAX). Compared to the 2028 No Action, there would be an increase in the 65 DNL contour of 7.6 acres for a total of 171.4 acres. There are no noise sensitive land uses located in the 65 or greater DNL contour and the alternative would not increase noise by 1.5 dB or more over a noise sensitive area within the 65 DNL or higher contours; therefore, the noise impacts would not be significant.

The out year (2033) conditions assume a small number of turboprops will still be flying, with the majority of air carrier operations using new generation regional jets with wingspans greater than 95 feet and a small number of narrow-body commercial jet operations. Compared to the 2033 No Action, there would be an increase in the 65 DNL contour of 12.6 acres for a total of 174.9 acres. This action would not increase noise by 1.5 dB or more for a noise-sensitive area within the 65 DNL or higher contours given there are no noise sensitive land uses located in the 65 or greater DNL contour; therefore, there would be no significant impact.

**J. Socioeconomic Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risk (Section 4.12 of FEA)**

▪ No Action Alternative

The No Action Alternative would not improve the terminal nor would it allow lifting of the existing aircraft restrictions. While the No Action would have no adverse impacts on children’s health or environmental justice, there could be negative socioeconomic impacts. The terminal would continue to operate with spatial constraints, which could have a negative impact on tourism. The runway would continue to operate under the use restrictions and, as a result, commercial service would be impacted. This would likely result in a form of reduced commercial service to ASE. Some commercial service would likely continue in the future case, but it would need to be operated exclusively by turboprops. The economy in the Aspen/Snowmass Village area relies heavily on tourism and the transportation network. This could translate to an economic loss of nearly \$90 million annually by 2033, with the greatest impact on tourism sectors of the economy. This was calculated using the enplanement forecast and the estimate for visitor spending obtained from the 2013 CDOT Economic Impact Study for Colorado Airports. The Impact Study found that 74.4% of commercial airline passengers who arrive at ASE are visitors. Since retail sales tax is a major component of local government general fund revenues, government services and employment could also be affected; therefore, the restriction of commercial jet service in the future could result in negative socioeconomic impacts to the area.

▪ Terminal Alternative

○ Socioeconomic Impacts

The new terminal and associated terminal area projects are not anticipated to have any negative direct or indirect socioeconomic impacts during construction. Access to businesses on the east side of ASE and at the Airport Business Center (ABC) would be

maintained through construction. The existing terminal would remain open during construction of the new terminal. Therefore, any of the businesses within the terminal itself would not be significantly affected. There would be temporary positive socioeconomic impacts during construction by increasing employment opportunities and expenditures on local services and materials.

The Terminal Alternative would provide minor long-term positive socioeconomic impacts due to expanded concessions and increased visitor use. Since the Terminal Alternative is not expected to significantly increase the number of employees who work at ASE, no appreciable burden on the existing housing inventory is anticipated.

- Environmental Justice.

Terminal replacement would not increase noise, rather it would result in only a slight change to the location of ground related noise due to the change in the air carrier aircraft apron parking configuration. Additionally, the Terminal Alternative would include a noise wall that would help reduce the single event ground noise levels from Auxiliary Power Unit use on the general aviation apron area; therefore, the Terminal Alternative is not expected to result in any substantial negative or otherwise disproportionate impacts to any specific population groups.

- Children's Environmental Health and Safety Risks.

There are no schools, parks, or playgrounds within the Study Area or within the 65 DNL or greater noise contour that might be affected by noise or other impacts associated with the proposed Terminal Alternative; therefore, impacts to children's environmental health and safety are not expected.

- Runway Alternative

- Socioeconomic Impacts

Businesses at ASE would not be negatively impacted by construction because no on-airport development areas or airport access would be affected. Traffic on Owl Creek Road from construction activities could be affected temporarily, but it would not affect any businesses. Temporary positive socioeconomic impacts during construction include an increase in employment opportunities and spending on local services and materials.

This alternative would likely have significant positive socioeconomic effects. The ability for commercial airlines to operate D-III aircraft without any restrictions would allow continued growth in tourism, which is the primary economic driver in the region. The growth in enplanements would also generate economic benefits as a result of the dollars spent in the local economy. By 2028 the runway relocation could result in an increase of 46,574 annual visitors with an initial off-airport economic benefit of approximately \$107,166,000. By 2033 the initial economic benefit of the runway relocation could rise to nearly \$170,712,000. This was calculated using the enplanement forecast and the estimate for visitor spending obtained from the 2013 CDOT Economic Impact Study for Colorado Airports.

There is limited room to accommodate additional visitors in the existing lodging inventory based on historic occupancy data. However, additional lodging facilities have

received development approvals in both Aspen and Snowmass Village. In addition, there has been significant growth in the number of Rent-By-Owner (RBO) units. Comparing the combined monthly practical capacity shows that the capacity of the RBO units and the future lodging units is nearly double the number of potential new lodging guests, even for the peak months in 2033. Therefore, the proposed runway shift would not exceed the future capacity of the Aspen/Snowmass Area lodging inventory and would not create development pressure for additional lodging units.

- Environmental Justice

There would be no negative noise or relocation impacts on any population groups. The Runway shift would change the fleet mix to the newer commercial service aircraft, which are generally quieter than their CRJ-700 predecessors; therefore, the Runway Alternative is not expected to result in any substantial negative or otherwise disproportionate impacts to any specific population groups within the Study Area.

- Children's Environmental Health and Safety Risks

The Runway Alternative is not expected to result in any environmental health risks or safety risks for children. No schools, parks, or playgrounds are within the Study Area or within the 65 DNL or greater noise contour that might be affected by noise or other impacts associated with the Runway Alternative.

#### ***K. Visual Effect (Section 4.15 of the FEA)***

- No Action Alternative

The No Action Alternative would not alter the existing lighting patterns or visual environment at ASE.

- Terminal Alternative

To reduce visual impact to the community, the design of the terminal facility would reflect the community vision, incorporating colors and textures that fit into the landscape visually and aesthetically by complementing the surrounding area. Landscaped areas and a potential green roof would provide aesthetic views from vantage points outside of the terminal. Sky-lights and large windows would optimize daylight within the terminal and provide scenic views of Buttermilk Ski Area for travelers inside the terminal.

The greater expanse of pavement associated with roadway and parking reconfiguration would not have a significant impact on visual quality, as it would be similar to the existing visual character of ASE. Existing trees would be kept to the extent possible to screen changes from Highway 82. Light emissions associated with the proposed terminal area improvements would be similar to those of the existing terminal. Neither would impede any scenic views and would not diminish the existing character of the area.

Short-term, temporary visual impacts would occur during construction of the terminal area improvements. These impacts would include views of construction equipment, placement of fill, and construction related light emissions.

- Runway Alternative

The shifted runway, equipment, and lighting and widened runway would be similar in appearance to existing conditions. The NAVAIDS and lighting would not change significantly

and would be re-located to maintain a similar relationship to the runway. The potential new location of these elements would be closer to the west side of ASE; therefore, these elements could be more visible to viewpoints west of ASE. The visual character would not change drastically from existing conditions; therefore, these improvements are not expected to result in any significant impacts.

Relocation of the perimeter road, Owl Creek Road, and Bike Path and the piping of Owl Creek would not result in significant impacts to visual character. The visual appearance of these elements would not change, and would therefore not have any significant impacts on the visual environment. Temporary impacts to visual resources could result from construction activities. However, these impacts would not be significant.

**L. Water Resources (Section 4.14 of FEA)**

▪ No Action Alternative

This alternative does not include any development and therefore, would not adversely impact any wetlands, floodplains, or water resources.

▪ Terminal Alternative

The Terminal Alternative is proposed in a previously disturbed area on the east side. No wetlands, floodplains, or other water resources are located within this area. Therefore, there wouldn't be any direct impacts on wetlands, floodplains, or other water resources.

The Terminal Alternative would result in a slight increase in impervious surface on the east side due to a larger terminal footprint and the larger apron size. Stormwater runoff from paved airport surfaces typically contains low concentrations of some metals, petroleum compounds, rubber and rubber removal compounds, and airplane and pavement deicers. The deicing pad runoff would continue to flow into an underground storage tank. During non-deicing storm events, stormwater will be captured in a subsurface drainage system that ties to a new trench drain and drain line that will also capture the flows on the commercial ramp. This stormwater will flow to the north and be directed to a drainage feature that will be installed just south of the existing terminal building. This drainage feature will comply with the FAA wildlife Advisory Circular. This alternative would require a change to the NPDES Permit for ASE in the project area to account for the increase in stormwater runoff and to meet stormwater runoff requirements. An update to ASE's SWMP for industrial stormwater will likely be required.

All necessary permits and approvals for the project would be obtained before construction activities take place.

▪ Runway Alternative

The Runway Alternative would slightly change the drainage patterns, but would not substantially change or impact the existing drainage system or the aquifers on or near ASE property. Relocating and widening the runway would alter the stormwater runoff slightly, but the design and permitting would account for the change in impervious surface. The NPDES Permit and the SWMP would need to be updated to reflect the changes. This alternative would not impact water quality standards, contaminate public drinking water, or contaminate an aquifer used for public water.

The project includes the piping of 1,670 feet of Owl Creek, a Water of the US. Sections of Owl Creek on either side of the runway within airport property would be impacted. Piping of Owl Creek will result in the loss of open water and disturb vegetation. Since the piping of Owl Creek will reduce sedimentation and wildlife hazards, this is viewed as beneficial. However, piping Owl Creek will also reduce access to 1,670 LF of Owl Creek. Organisms that cannot access the piped section of the creek are likely to migrate to habitat that is of better quality and adjacent to the piped section. Impacts to Owl Creek warrant an Individual Permit under the Clean Water Act, per discussions with USACE, due to the length of stream that will be placed in a culvert.

The Runway Alternative would also result in direct impacts to the Owl Creek floodplains with the piping of Owl Creek. The piping would be designed to maintain the conveyance and storage capacity of the existing floodplain. Coordination with FEMA will be maintained throughout the project to avoid and minimize impacts to floodplains. Despite the proposed floodplain modifications, the existing drainage patterns downstream of ASE (i.e., Roaring Fork) will not be changed as a result of the proposed project. The proposed project would not result in significant impacts to the floodplain because they would not result in (1) a considerable probability of loss of human life, (2) likely future damage associated with the encroachment that could be substantial in cost or extent, or (3) a notable adverse impact on the floodplain's natural and beneficial floodplain values.

No wetlands would be impacted as a result of the Runway Alternative.

#### ***M. Traffic Study (Section 4.15 of the FEA)***

- **No Action Alternative**

The No Action Alternative would not result in a substantial change to the traffic conditions. Vehicle movements would increase in the future due to the anticipated projected growth at ASE that would occur with or without the proposed projects. The No Action would represent a reduction in enplanements compared to Runway Alternative due to the reduction in commercial jet service, as the CRJ-700s are slowly phased out of the commercial fleet over time. As the CRJ-700s are phased out, they would be replaced with turboprops and other GA jets that fit within the wingspan restriction, reducing the overall enplanements compared to Runway Alternative in both the 2028 and 2033 scenarios; therefore, the No Action Alternative would have no significant effect on traffic conditions.

- **Terminal Alternative**

The potential impacts of the No Action and the Terminal Alternative would be the same since the proposed terminal improvements would not have any impact on the number of enplanements at ASE. Similar to the No Action Alternative, vehicle movements would increase in the future due to more enplanements; however, these increases are expected to occur whether or not the terminal improvements are implemented. The Terminal Alternative would have no significant impact on traffic conditions. .

Minor modifications to the surface traffic routing at ASE could occur with implementation of the Terminal Alternative, but the airport roads would tie into existing intersections and would not substantially alter the traffic accessing ASE. It is anticipated that more people

will use rideshare, public transit, shuttles or taxis to ASE since auto parking will not be expanded as part of the proposed project. This should not substantially impact traffic (though it may have a small reduction in trips), it could add to circling time if people who wish to park cannot find a spot.

There would be short-term impacts to traffic relative to construction activities. Routes used for the transportation of materials or construction equipment to ASE would be selected to minimize impacts to the local surface transportation network. Additionally, the contractor would use standard construction traffic techniques to maintain traffic during construction and follow the ASE Sustainable Construction Management Plan for ASE.

Overall, implementation of the Terminal Alternative would not have a significant effect on surface transportation in either 2023 or in the out year of 2028.

- Runway Alternative

The Runway Alternative would result in temporary changes to the traffic patterns on Owl Creek Road during construction. However, these impacts would be temporary and not significant. Routes used for the transportation of materials or construction equipment on the surface roads to ASE would be selected to minimize impacts to the local surface transportation network. Additionally, the contractor would use standard construction traffic techniques to maintain traffic during construction and follow ASE's Sustainable Construction Management Plan.

The proposed Runway Alternative would have a higher number of enplanements compared to the No Action Alternative. While the total number of operations would be consistent, enplanements would be higher than the No Action due to the phasing out of commercial aircraft in the No Action scenario. These enplanements would represent additional trips on the roadways and intersections on and surrounding ASE. Additionally, the Runway Alternative would relocate Owl Creek Road. However, this relocation is within the existing CDOT right of way and would not result in any significant impacts.

In 2028, passenger trips are anticipated to result in an average 1,181 daily vehicle trips including 188 peak-hour trips compared to 1,032 daily vehicle trips including 164 peak-hour trips. The Baltic Avenue and CO-82 intersection would continue to operate at an LOS D with an average delay of 50.1 seconds per vehicle. Because the LOS remains the same, the implementation of the runway improvements would not have a significant impact on the surrounding surface transportation network.

In 2033, passenger trips are anticipated to result in an average 1,329 daily vehicle trips including 211 peak-hour trips compared to 1,121 daily trips including 178 peak hour trips under the No Action Alternative. The Baltic Avenue and CO-82 intersection is forecast to operate at an LOS E with an average delay of 61.1 seconds per vehicle. An LOS E reflects an intersection that operates at capacity and is considered typical for an urban, crowded four-way intersection where major traffic movements conflict with turns. Although the LOS will decrease in relation to the No Action (2033) scenario, the intersection will still function. Therefore, it can be determined that the proposed runway improvements would not have a significant impact on the surrounding surface transportation network.

#### ***N. Cumulative Impacts (Section 4.16 of the FEA)***

To adequately understand the potential environmental affects related to cumulative impacts, it is important to document the past, present, and reasonably foreseeable projects. For purposes of the proposed projects, the review of past projects follows the desk reference guidance, "Present impacts of past actions that are relevant and useful are those that may have a significant cause-and-effect relationship with the direct and indirect impacts of the proposed action and alternative(s)." Present actions are those that are occurring in the same general time frame that could have cumulative impacts. Reasonably foreseeable projects include actions that are not remote or speculative (generally meaning they are included in planning documents). See Section 4.16.1.1 of the Final EA for the list of past, present, and reasonably foreseeable projects.

Several resources categories would have no impact and therefore would have no potential for cumulative impacts. The categories that are excluded from further discussion are Coastal Resources, Farmlands, Historic Resources, Hazardous Materials, Land Use, and Visual Impacts.

- **Air Quality:** Because the proposed projects would generate emissions during construction as well as ongoing operational emissions, consideration was given to air quality implications for all past, present, and future actions. The pollutant of concern is PM10 because Pitkin County is in a maintenance area for this pollutant. The proposed terminal and airfield projects are expected to result in short-term construction emissions as well as emissions in the out year, both of which are substantially lower than the *de minimis* threshold for PM10. Other past, present, and reasonably foreseeable projects would add PM10 emissions, but would collectively be small and primarily temporary; therefore, cumulative air quality impacts are not expected to be significant.
- **Climate:** The cumulative impact of the proposed terminal and airfield projects on the global climate when added to other past, present, and reasonably foreseeable future actions is not currently scientifically predictable. At present, there are no calculations of the extent to which measures individually or cumulatively may affect aviation's CO2 emissions. Moreover, there are large uncertainties regarding aviation's impact on climate. Aviation has been calculated to contribute approximately 3% of global CO2 emissions; this contribution may grow to 5% by 2050. Actions are underway within the U.S. and other nations to reduce aviation's contribution through such measures as new aircraft technologies, renewable alternative fuels, more efficient air traffic management, market-based measures and environmental regulations including an aircraft CO2 standard. The U.S. has ambitious goals to achieve carbon-neutral growth for aviation by 2020 compared to a 2005 baseline, and to gain absolute reductions in greenhouse gas emissions by 2050.
- **Section 4(f):** While the Runway Alternative would require the relocation of the Owl Creek Bike Path, this relocation was determined to not adversely affect the use of the bike path. No 4(f) resources would be significantly affected by noise. When considered with the past, present and reasonably foreseeable projects, there would be no cumulative impacts to Section 4(f) resources as a result of either Proposed Action.
- **Socioeconomic:** The No Action would result in the loss of commercial service, which would be a substantial impact on the economy of the Roaring Fork Valley. This is unusual in that

in this case, the No Action would provide the largest socioeconomic impact. This impact would likely create induced impacts relative to the economy within the valley. Most of the other past, present and reasonably foreseeable projects in the area (such as the enhancements to roadways, bridges and housing) would provide benefits to the economy. Therefore, the No Action, while it would provide large negative socioeconomic impact in the area, would not have cumulative negative impacts relative to other project as the other projects would generally benefit the economy. The Proposed Actions, when considered with past, present, and reasonably foreseeable future projects, would not result in significant cumulative socioeconomic impact.

- **Water Resources:** There are no impacts to wetlands under the Proposed Actions; however, 1,670 LF of Owl Creek would be piped as part of the airfield improvements. The projects would occur in areas where the open channel, and riparian and floodplain area of Owl Creek have been maintained to improve safety conditions. The Proposed Actions are not intended to increase capacity; therefore, cumulative impacts to water resources such as increased development near the ASE are unlikely to occur in the present and reasonable future. None of the other past or present projects listed above have had a significant impact on Owl Creek. Additionally, none of the reasonably foreseeable projects would impact Owl Creek. Therefore, there are no known cumulative impacts on Owl Creek as a result of past, present or reasonably foreseeable projects.

Based on the analysis described above, there would be no significant cumulative impacts as a result of the proposed actions.

#### **IX. Environmental Mitigation (Chapter 4 of FEA)**

ASE has committed to the following mitigation measures as part of the Preferred Alternatives:

- Complete pre-construction surveys and spatial/seasonal buffers would be utilized to minimize construction impacts to common wildlife and migratory birds. Surveys will be coordinated with the FAA prior to construction.
- Obtain an individual permit for all work within Waters of the US that fall under the jurisdiction of the USACE. All mitigation included in the permit that is approved by the USACE will be completed in accordance with the terms of the permit.
- Ensure no vehicle or material storage occurs in wetland areas or other sensitive areas.
- Utilize phasing and temporary routing to minimize closures to the Owl Creek Trail and/or Owl Creek Road. Adequate notice will be provided prior to any closure of the Owl Creek Trail and/or Owl Creek Road.
- Design the piping of Owl Creek to maintain flood storage capacity on ASE property.
- Include Best Management Practices (BMPs) to limit construction impacts. The contractor would be required to carry out dust and erosion control procedures, such as watering to control dust, seeding with a temporary cover crop in work areas that are temporarily inactive, and installation/maintenance of silt fence. This also includes the installation of silt curtains and berms, to the extent possible, to isolate the work area during fill placement to prevent temporary impacts on water quality in Owl Creek. These requirements would be included in

the project drawings and specifications under the FAA standard specification Item P-156, "Temporary Air and Water Pollution, Soil Erosion, and Siltation Control" (AC 150/5370-10).

- Update the SWMP in association with the NPDES Construction Permit.
- Mitigate water quality impacts including flow control and treatment BMPs in accordance with federal, state, and local regulations.
- Design all water drainage/treatment features to meet FAA AC 150/5200-33B (*Hazardous Wildlife Attractants On or Near Airports*).
- All phases of construction would be performed in accordance with FAA AC 150/5370-10, Standards for Specifying Construction of Airports.
- Contaminated soil and water will be handled and disposed of in accordance with applicable federal, state and/or local regulations.
- In the event that cultural or archaeological resources are discovered during construction, all work will stop until ASE notifies SHPO and the FAA Denver Airports District Office (DEN-ADO). ASE shall protect the area until cultural/archaeological resource concerns have been appropriately addressed, and ASE shall take action to comply with the National Historic Preservation Act, the Native American Graves Protection and Repatriation Act, and the Archaeological Resources Protection Act, as appropriate.
- During construction, in the event that previously unknown contaminants are discovered or if a reportable spill occurs, work shall cease until ASE notifies appropriate local, state, and Federal agencies.

The following mitigation is voluntary and may be implemented by ASE:

- Odors from vehicle emissions during construction would be controlled by muffler systems on the vehicles.
- Dust from construction activities would be controlled by the use of a water truck that will water the construction site at least once daily.
- Emissions from equipment and vehicles would not exceed state and national air quality standards.
- Construction equipment engines would be turned off when idle for more than 5 minutes.
- New terminal will meet current building code (which will be substantially more energy efficient than the 1971 terminal that it will replace).
- Partnerships with Rocky Mountain Institute (as part of the design committee).
- Consideration of energy efficiencies in building design, and when selecting materials and energy sources (i.e., renewable and geothermal energy sources).
- Improve airside geometry (i.e., ramp configuration), which currently has sloping pavement – making this flat will improve push in and push out of aircraft.
- Use of energy-efficient methods throughout the construction period.
- Maximize the use of natural lighting, LEDs and other energy reducing technologies in the terminal and other airport facilities.
- Contractors will adhere to ASE's Sustainable Construction Management Plan.

- Construction of a noise wall to help reduce existing single event noise from the general aviation apron.
- Final design would need to go through local approvals and meet local planning standards, including the Airport Design Guidelines and the Highway 82 Corridor Plan Standards.

## **X. Public and Agency Coordination**

Public involvement is a vital component of the NEPA process. The EA started with scoping in 2015 that included the development of a Community Input Committee (CIC). CIC and public meetings occurred on February 23, 2015; April 16, 2015; September 10, 2015; October 22, 2015; February 16/17, 2016; September 29, 2016 and January 19, 2017. Five notices for each public meeting were placed in the local papers, online, via radio on the local station, as well as through social media and press releases. Comments were accepted at all these meetings. Presentations to the BOCC were made throughout the project and these meetings were open to the public. Pitkin Connect Online Public Town Hall was utilized throughout the process to gather input on various topics. The Draft EA was released for agency and public review on August 23, 2017. Comments were accepted through October 3, 2017. To facilitate comments, public hearings were held on September 25 and 26, 2017. 30 comments from the public were received during the public comment period. Outreach materials, comments, notices of the meetings, and responses to comments are contained within Appendix 11 of the FEA.

## **XI. Agency Findings**

The FAA makes the following determinations for the project based upon careful review of the attached FEA, comments received on the Draft EA, the supporting administrative record, and appropriate supporting information.

The following determinations are prescribed by the statutory provisions set forth in the Airport and Airway Improvement Act of 1982, as codified in 49 USC §47106 and 47107.

- A. *The Project is reasonably consistent with existing plans of public agencies for development of the area surrounding the airport (49 USC §47106(a)(1)).*

The determination prescribed by this statutory provision is a precondition to agency approval of project grant funding applications. Extensive coordination regarding the Preferred Alternative has taken place among federal, state and local agencies. The Preferred Alternative is not in conflict with the comprehensive planning and goals of Pitkin County or the Town of Aspen. Evidence of public and agency coordination can be found in Appendices 4, 8, 9 and 11 of the FEA.

The Pitkin County Planning Commission is authorized to institute zoning regulations by e 1973 Colorado Revised Statutes, Title 30, Article 28, Section 111, Title 24, Article 65.1, Section 101, and Title 24, Article 67, Section 101, et. seq. as amended and are hereby declared to be in accordance with all provisions of these statutes. ASE is encumbered by five different zone districts: PUB, P-I, AR-2, AR-10, and RS-20. Pitkin County Land Use Code provides the restrictions that are included with these zoning designations.

B. The interests of the community in or near which the project may be located have been given fair consideration (49 USC §47106(b)(2)).

The determination prescribed by this statutory provision is a precondition to agency approval of airport development project grant funding applications. The Draft EA was published and made available for public review on August 23, 2017. The Airport Sponsor held public hearings on September 25 and 26, 2017, after the release of the Draft EA (Appendix 11). The public comment period ran from August 23, 2017 – October 3, 2017. Comments were received and responses were completed. In addition, the project has been discussed at numerous public meetings over the three years:

- Public Meetings/Open Houses: February 2015, March 2015, April 2015, September 2015, October 2015, February 2016, September 2016, January 2017 and September 2017.
- Community Impact Community Meetings: February 2015, September 2015, October 2015, February 2016, September 2016, and January 2017.
- Board of County Commissioners Meetings (open to the public): January 2015, September 2015, December 2015, April 2016, December 2016, July 2017, and November 2017.

Pitkin County, the Town of Aspen, and ASE all recognize that the Preferred Alternative has the potential to provide economic benefits to ASE, the County and the Town by providing reliable commercial service in the future.

C. The airport sponsor has taken, or will take, actions to restrict land use in the airport vicinity, including adoption of zoning laws, to ensure the uses are compatible with airport operations (49 USC §47107(a)(10)).

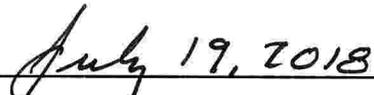
The determination prescribed by this statutory provision is a precondition to agency approval of airport development project grant funding applications. As a recipient of AIP funding, the Airport Sponsor has signed grant assurances that require them to take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. The Pitkin County Planning Commission is authorized to institute zoning regulations by e 1973 Colorado Revised Statutes, Title 30, Article 28, Section 111, Title 24, Article 65.1, Section 101, and Title 24, Article 67, Section 101, et. seq. The Pitkin County Planning Commission has designated five different zoning districts within ASE property: PUB, P-I, AR-2, AR-10, and RS-20. Pitkin County Land Use Code provides the restrictions that are included with these zoning designations.

## **XII. Decision and Order**

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action, namely the Preferred Alternative, is consistent with existing national environmental policies and objectives as set forth in Section 101 (a) of NEPA and other applicable environmental requirements and is not a major federal action significantly affecting the quality of the human environment or otherwise, including any condition requiring consultation pursuant to Section 102(2)(c) of NEPA. As a result, the FAA will not prepare an Environmental Impact Statement.

This decision does not constitute a commitment of funds under the Airport Improvement Program (AIP); however, it does fulfill the environmental prerequisites to approve applications for grants of AIP funds for the proposed project in the future. (49 U.S.C § 47101)

Accordingly, under the authority delegated to me by the Administrator of the FAA, I approve and direct that agency action be taken to carry out implementation of the Preferred Alternative

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David C. Suomi

Date

Regional Administrator

FAA Northwest Mountain Region

### Right of Appeal

This FONSI/ROD constitutes a final order of the FAA Administrator and is subject to the exclusive judicial review under 49 USC § 46110 by the US Circuit Court of Appeals for the District of Columbia or the US Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate US Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 USC § 46110. Any party seeking to stay implementation of the ROD must file an application with the FAA prior to seeking judicial relief as provided in Rule 18(a) of the Federal Rules of Appellate Procedure.

