

## EXECUTIVE SUMMARY

### ES-1 INTRODUCTION

Rocky Mountain Metropolitan Airport (Airport) is a 14 CFR Part 139 certificated, reliever airport located approximately 13 miles northwest of downtown Denver.<sup>1</sup> The Airport is partially located in the City and County of Broomfield and partially in unincorporated Jefferson County. The airfield comprises approximately 1,830 acres and includes three runways; (1) Runway 11R/29L – 7,000 feet by 75 feet; (2) Runway 11L/29R – 9,000 feet by 100 feet; and (3) Runway 2/20 – 3,600 feet by 75 feet. These runways are supported by a system of eight parallel and connecting taxiways.

As a result of the Rocky Mountain Metropolitan Airport Master Plan Update (Master Plan)<sup>2</sup> in 2011, the Airport developed alternatives that were designed to meet facility demand requirements, satisfy strategic objectives and goals of the Airport, and adhere to safe operational standards set by the Federal Aviation Administration (FAA) and the Airport. A number of Runway Safety Area (RSA) alternatives were developed as part of the “Identification and Evaluation of Alternatives” in the Master Plan to comply with the National Environmental Policy Act (NEPA). These Master Plan alternatives were used as the basis from which to select the Proposed Action.

### ES-2 PURPOSE AND NEED FOR THE PROPOSED ACTION

**Purpose:** The Purpose of the Proposed Action is to comply with the U.S. Department of Transportation (DOT) Appropriations Act as prescribed by the Runway Safety Area Program (RSAP) provisions of FAA Order 5200.8<sup>3</sup> and implement compliance with the standards prescribed in FAA Advisory Circular (AC) 150/5300-13, Change 15,<sup>4</sup> for RSAs. As a 14 CFR Part 139 Airport, the Airport is obligated to follow FAA regulatory requirements for RSAs by September 30, 2015.

**Need:** The RSA for the west end of Runway 11L/29R is currently 600 feet beyond the Runway end. An additional 400 feet in RSA length beyond the Runway end are needed to comply with the FAA RSAP and the FAA RSA design requirement for 1,000 feet beyond the Runway end. All other RSA dimensions for Runway 11L/29R meet the FAA RSA design requirements and comply with the FAA RSAP. Thus, the Proposed Action would address the need for an additional 400 feet of RSA length beyond the Runway 29R departure end to achieve the FAA RSA design requirement totaling 1,000 feet.

### ES-3 ALTERNATIVES CONSIDERED

Section 1502.14 of the President’s Council on Environmental Quality (CEQ) Regulations requires that the lead agency evaluate reasonable alternatives in the Environmental

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<sup>1</sup> 14 CFR Part 139, *Certification of Airports*.

<sup>2</sup> Rocky Mountain Metropolitan Airport, *Airport Master Plan Update*, March, 2011.

<sup>3</sup> Federal Aviation Administration, Order 5200.8, *Runway Safety Area Program*, October 1, 1999.

<sup>4</sup> Federal Aviation Administration, Advisory Circular 150/5300-13, Change 15 *Airport Design*, current edition.

Assessment (EA) analysis.<sup>5</sup> The intent of the alternatives evaluation is to ensure that the alternatives that may enhance environmental quality or may have less detrimental effect on the environment have been considered. The Proposed Alternatives found to be prudent and feasible are analyzed in this EA:

**No Action Alternative:** In the No Action Alternative, the Airport would retain the current airfield and NAVAIDS configuration, and the current operating procedures would be continued. The RSA dimension for the departure end of Runway 29R would remain 600 feet beyond the end of pavement, and no roadway or intersection relocation would take place.

**Proposed Action:** The Proposed Action would involve maintaining the existing Runway 11L/29R threshold and creating a compliant 1,000-foot RSA dimension beyond the departure end of Runway 29R. Major airside components of the Proposed Action include:

- relocating the localizer array (Localizer), a component of the Runway's Instrument Landing System (ILS);
- constructing the Localizer equipment building;
- relocating underground electrical utilities;
- relocating a Vehicle Service Road (VSR) inside the Runway Object Free Area (ROFA);
- conducting earthmoving operations; and
- relocating perimeter fencing.

Major Landside project components of Proposed Action would include:

- acquiring land;
- relocating wet and dry underground utilities;
- relocating a portion of State Highway 128 and Interlocken Loop roadways;
- relocating State Highway 128 and Interlocken Loop intersection;
- relocating a bicycle/pedestrian trail; and,
- conducting earthmoving operations.

#### **ES-4 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES WITH MITIGATION**

**Chapter 4, *Affected Environment***, addresses the area that would be affected by the Proposed Action and provides a general context of the Proposed Action. **Chapter 5, *Environmental Consequences***, addresses each of the environmental categories identified in FAA Order 1050.1E, Change 1.<sup>6</sup>

#### **Air Quality**

**Section 5.1** describes the existing air quality conditions in the vicinity of the Airport and discusses potential effects of the Proposed Action relating to air quality. Construction related emissions would be greater with the Proposed Action compared to the No Action Alternative.

<sup>5</sup> U.S. Code, 2007, *President's Council on Environmental Quality Regulations*, 40 CRR Part 1500-1508, July 1, 2007.

<sup>6</sup> Federal Aviation Administration, Order 1050.1E Change 1, *Environmental Impacts: Policies and Procedures*, March 20, 2006.

However, the proposed project-related construction emissions for the Proposed Action are within the prescribed *de minimis* levels established by General Conformity Rule of the Federal Clean Air Act (CAA).<sup>7</sup> Therefore, no significant air quality impacts would occur as a result of the Proposed Action.

### **Coastal Resources**

The Airport Study Area is not located within or adjacent to a designated coastal resource. Thus, the Proposed Action would not affect any coastal resource.

### **Compatible Land Use**

**Section 5.3** describes existing land use and zoning conditions within the Airport Study Area that could potentially be affected by the Proposed Action. Various regional and local agency plans and regulations were reviewed for applicability. **Section 5.13, Noise**, reviews the primary effects of noise on land use within the Airport Study Area.

The implementation of the Proposed Action would not result in any impacts to land uses in the Airport Study Area. In addition, existing plans and policies of local jurisdictions include provisions to encourage and require future land uses in the Airport Study Area to remain or become compatible with Airport operations. No significant adverse compatible land use impacts would occur with the implementation of the Proposed Action.

### **Construction Impacts**

**Section 5.4** describes the construction-related impacts associated with the Proposed Action. With the implementation of identified mitigation measures and best management practices (BMPs), the implementation of the Proposed Action would not result in any significant construction-related impacts.

Construction activities, while short-term in nature, have the potential to generate environmental impacts. Although construction practices along with Airport operational impacts are discussed on other sections, those impacts specific to construction are summarized in this section. With the implementation of identified mitigation measures and best management practices, the implementation of the Proposed Action would not result in any significant or construction-related impacts.

### **Department of Transportation Section 4(f) Lands**

**Section 5.5** describes the existing conditions and potential impacts of the Proposed Action on Department of Transportation Section 4(f) Lands. The Department of Transportation Act Section 303 (Section 4(f)) provides that the Secretary of Transportation will not approve any project that requires the use of any publicly-owned land of a public park, recreational area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the official having jurisdiction over those resources). Section 4(f) goes on to state that, subject to exceptions for *de minimis* impacts, the Secretary of Transportation (Secretary) may approve a transportation program or project requiring the use of such lands only if there is no prudent and feasible alternative that would

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<sup>7</sup> U.S. Code. 1970. *Clean Air Act*, 42 USC subsection 7401-7671q.

avoid using those resources, and the program or project includes all possible planning to minimize harm resulting from the use.

The Proposed Action would require the relocation of a bicycle/pedestrian trail in the Airport Study Area. The trail would be relocated prior to the beginning of roadway construction, resulting in no temporary or permanent effect of the public's use (function) of the property. Land and Water Conservation Funds (LWCF) were not used in the construction of the trail; therefore, this Action is not subject to Section 6(f) requirements. Thus, the Proposed Action would not cause any significant impact to direct or constructive use of any Section 4(f) Lands within the Airport Study Area.

### **Farmlands**

**Section 5.6** describes the location and potential impacts to prime or unique farmland within the Airport Study Area. The Farmland Protection Policy Act (FPPA) regulates Federal actions with the potential to convert farmland to non-agricultural use.<sup>8</sup> The FPPA is intended to minimize the impact that Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that, to the extent possible, Federal programs are administered to be compatible with state and local units of government and with private programs and policies to protect farmland.

No land within the Airport Study Area designated as prime, unique or statewide and locally important farmland exist and no portion of the Airport Study Area is zoned for agricultural use. No areas currently under cultivation would be converted to nonagricultural use as a result of the Proposed Action. Therefore, no impacts to areas designated as prime, unique, or locally statewide important farmlands would occur as a result of the Proposed Action.

### **Fish, Wildlife, and Plants**

**Section 5.7** describes the fish, wildlife, and plant communities within the Airport Study Area as well as the potential impacts that could result from the implementation of the Proposed Action. The Proposed Action would not significantly or permanently affect the commonly occurring animal populations present in the Airport Study Area. The Proposed Action vegetation clearing would be performed outside of the bird nesting season to avoid direct impacts to migratory bird habitat. Proposed Action vegetation clearing within a May to August timeframe falls within the annual nesting window and would require fine-scale systematic nest surveys. For 23 of the 25 Federal and state listed species discussed in **Appendix D, Biological Report**, construction would have no effect because there is either no habitat or all have little to no potential to exist in the Airport Study Area. Two of the 25 federal and state listed species (the common garter snake and northern leopard frog) have a small chance of occurrence and may incur slight impacts in the Airport Study Area. With their wide-spread distribution, however, any individuals that are affected would not negatively affect regional populations.

### **Floodplains**

**Section 5.8** describes the existing conditions and potential impacts related to floodplains associated with the Proposed Action. No adverse affects related to floodplains would occur as a result of the Proposed Action. Neither encroachment of the 100-year floodplain nor added impervious surface would generate stormwater in excess of the conveyance or storage

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<sup>8</sup> U.S. Code, 1981. *Farmland Protection Policy Act of 1981*, 7 USC Subsection 4200, December 22, 1981.

capacity. None of the project elements would be constructed within the 100-year floodplain; thus, no floodplain encroachment impacts would occur.

### **Hazardous Materials, Pollution Prevention, and Solid Waste**

**Section 5.9** describes the existing conditions and potential impacts related to hazardous material and pollution prevention of the Proposed Action. The identified sources of potential hazardous materials include aircraft refueling, aircraft maintenance, aircraft washing, fire fighting aircraft, vehicle maintenance, chemicals used in field maintenance, waste disposal, and historic leaks and spills.

The Proposed Action would require the use of heavy construction equipment such as graders, bulldozers, and refueling trucks. Any solid waste generated during construction activities would likely consist of construction-related waste and, perhaps, asphalt. This construction-related solid waste would not result in the capacity of the Foothills Landfill to be exceeded. Subsurface disturbance would occur during construction activities. There is a potential for release of petroleum, hydraulic fluids, engine oil, and associated chemicals during construction operations. However, standard BMPs would be implemented to contain these spills as a matter of practice and contractual obligation.

### **Historic, Architectural, Archeological, and Cultural Resources**

**Section 5.10** describes the existing conditions and potential impacts related to historic, architectural, archaeological, and cultural resources as a result of the Proposed Action. No previous cultural resource surveys or previously documented sites were identified within the Airport Study Area. Based on the results of a Paleontological Report (See **Appendix F, Cultural Resources Report**, for a full description of the findings), immediate paleontological clearance is recommended, and paleontological monitoring during construction of the Proposed Action is not likely to result in the discovery of scientifically significant fossils from either the *Laramie Formation* or *Verdos Alluvium*. As a result, there are no direct or indirect impacts caused by the Proposed Action. Thus, the Proposed Action would not cause any significant impacts to historic, architectural, archaeological, and cultural resources.

### **Light Emissions and Visual Impacts**

**Section 5.11** describes the existing conditions and potential impacts related to light emissions and visual effects of the Proposed Action. The Proposed Action may result in temporary sources of lighting within the Airport Study Area if construction activities are conducted during nighttime hours. As far as permanent sources of lighting, additional street lights would be needed to align with the new relocated roadway. Thus, the implementation of the Proposed Action would not result in any significant impacts to light emissions or visual effects within the Airport Study Area.

### **Natural Resources, Energy Supply, and Sustainable Design**

**Section 5.12** describes the existing conditions and potential impacts related to energy supply and natural resources associated with the Proposed Action. The Proposed Action would temporarily increase use of consumable materials. Once placed, these consumable materials would be supplemented with regular and routine maintenance. Energy use in implementing the Proposed Action would be temporary and primarily focused on fuel for construction related vehicles. Since the need for consumable materials and energy would be met by existing

resources, the temporary increase would not result in a significant impact in the use of energy supply or natural resources.

### **Noise**

**Section 5.13** addresses noise impacts associated with the Proposed Action. The Proposed Action was evaluated on traffic and construction noise. Aircraft noise was not included in this evaluation because no significant changes in aircraft flight paths, fleet mix, levels of operations, or runway geometry were anticipated based on forecast included in **Appendix J, Aviation Forecast**. The implementation of the Proposed Action would not result in any significant impacts associated with noise within the Airport Study Area according to Federal Highway Administration (FHWA) and Colorado Department of Transportation (CDOT) noise assessment guidelines.

### **Secondary Impacts**

**Section 5.14** addresses the induced and secondary impacts of the Proposed Action on the Airport Study Area. Such impacts can include shifts in patterns of population movement and growth, changes in the demand for public services, and changes in business and economic activity.

The Proposed Action would not result in any changes in number of aircraft operations or number of passengers at the Airport. The relocated State Highway 128/Interlocken Loop intersection would not improve capacity for either roadway or the intersection. Therefore, no changes in population movement and growth, or changes in demand of public services would occur.

### **Socioeconomic Impacts, Environmental Justice, and Children's Environmental Health and Safety Risks**

**Section 5.15** describes the socioeconomic impacts, environmental justice, and children's environmental health and safety risks associated with the Proposed Action. These impacts include any potential relocation of residences or businesses, any disruption in local traffic patterns, and any action causing a disproportionate risk to children's health and safety. The Proposed Action would only result in temporary traffic detours associated with construction of the project elements. Thus, there would no significant impact with the implementation of the Proposed Action.

### **Water Quality**

**Section 5.16** addresses the water quality impacts of the Proposed Action. An additional 0.68 acres of impervious surface would be created by the implementation of the Proposed Action. This additional increase in impervious surface leading to additional stormwater discharge would not cause water quality parameters to exceed state standards in receiving waters; would not cause National Pollution Discharge Elimination System (NPDES) permit limits to be exceeded; would not cause permit benchmarks to be exceeded at a level for which a mitigating action plan cannot be developed; and would not cause monitoring or water supply wells in the area to show an increase in toxic substances. Thus, there would be no significant impact to water quality.

### **Wetlands**

**Section 5.17** describes the wetlands within the Airport Study Area and the potential impacts associated with the Proposed Action. A total of seven wetlands covering 0.36 acres have been identified within the Airport Study Area. Five of the seven were designated as jurisdictional wetlands. Based on the project elements of the Proposed Action, 0.027 acres of a non-jurisdictional wetland would be affected. However, no construction or encroachment would occur on jurisdictional wetlands; thus, there would be no significant impact to wetlands.

### **Wild and Scenic Rivers**

**Section 5.18** discusses the status and location of the Wild and Scenic Rivers (WSR) within proximity to the Airport Study Area. According to the National Rivers Inventory (NRI), maintained by the National Park Service (NPS), no WSRs exist within the Airport Study Area. Thus, the Proposed Action would not affect any WSR.

### **Cumulative Impacts**

**Section 5.19** discusses all the past, present, future actions that could have incremental direct and indirect impacts associated with the Proposed Action. The Airport would require and employ BMPs to minimize the impacts associated with the Proposed Action. No significant contributions to cumulative impacts would occur under the Proposed Action. The implementation of the Proposed Action would not result in any significant cumulative impacts.

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