

1.1 ENVIRONMENTAL OVERVIEW AND NEPA GUIDANCE

The purpose of considering environmental factors in airport master planning is to assist in evaluating current and future airport development, as well as provide information that will help expedite subsequent environmental processing. FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, are the FAA's environmental guidance for aviation projects/actions to comply with NEPA. However, it is important to note that while the environmental analysis included in this Master Plan Update is not in and of itself a NEPA document.

As part of Section 163 of the FAA Reauthorization Act of 2018, certain types of airport non-aeronautical development projects have limited regulation by the FAA and therefore, may not be subject to NEPA documentation.¹ If a project is subject NEPA, there are three levels of NEPA documentation depending on the scope of a proposed project and the potential environmental impacts associated with a proposed project. These include categorical exclusion (CATEX), environmental assessment (EA), and environmental impact statement (EIS). FAA Order 1050.1F² lists actions that the FAA has found in the past to not normally have a significant effect on the environment. Proposed projects that fall within the list found in FAA Order 1050.1F and do not have an extraordinary circumstance³ can be processed with a CATEX. For proposed projects that do not fall within the list specified as a CATEX in FAA Order 1050.1F, an EA must be prepared. At the completion of the EA, the FAA will issue a Finding of No Significant Impact (FONSI) or continue with an EIS. An EIS must be prepared if the environmental impacts associated with a proposed project are significant impacts that cannot be mitigated below the established significant threshold. At the completion of an EIS, the FAA will issue a Record of Decision (ROD).

1.2 EXISTING ENVIRONMENTAL CONDITIONS

SECTION 1.15 of this Master Plan Update describes the current environmental conditions at and around in the Airport in detail. The following subsections summarize the conditions described in detail in **SECTION 1.15** and provides the basis for determining the potential environmental effects of the Airport's Development Plan projects.

1.2.1 Air Quality

According to the U.S. Environmental Protection Agency (USEPA), the Airport, located in Salt Lake County, is in a "maintenance" area for CO and PM₁₀, and in a nonattainment area for PM_{2.5}, O₃, and SO₂.⁴

¹ Exceptions to Section 163: where FAA has regulation to ensure the safe and efficient operations of aircraft or the safety of people on the ground or property as it relates to aircraft operations, to ensure the Airport Sponsor receives fair market value for the use or disposal of property, or if the project is being proposed on property that was originally purchased with Airport Improvement Program (AIP) dollars.

² FAA, Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Sections 5-6.1 through 5-6.6.

³ FAA, Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Sections 5-2.

⁴ U.S. Environmental Protection Agency, Air Quality Green Book, Utah. Accessed: https://www3.epa.gov/airquality/greenbook/anayo_ut.html, May 2021.

1.2.2 Biological Resources

There are 28 federally- and state-threatened and- endangered species with the potential to be found in Salt Lake County, and 22 migratory bird species with the potential to be found at the Airport.^{5 6} According to the U.S. Fish and Wildlife Service (USFWS), there is no designated critical habitat at the Airport.⁷

1.2.3 Climate

Activities that require fuel or power are the primary stationary sources of greenhouse gases (GHGs) at airports. The majority of GHG emissions at airports are generated by aircraft and ground service vehicles (GSE); however, the Airport is transition to all electric GSE by March 2022.

1.2.4 Coastal Resources

Utah is not a coastal state. As such, the Airport is not within a coastal zone. Additionally, there are no Coastal Barrier Resource System (CBRS) segments within Airport property.⁸

1.2.5 Department of Transportation, Section 4(f)

The closest Section 4(f) property to the Airport is the Airport Trail bike path, a 2.8-mile bike path located in the southern portion of Airport property (see **Figure 1-X**).⁹ The closest Land and Water Conservation Fund (LWCF) site to the Airport is the Red Butte Canyon Research Area, located about six miles east of the Airport.¹⁰

1.2.6 Farmlands

According to the Natural Resource Conservation Service (NRCS), portions of Airport property contain farmland of statewide importance and prime farmland soil types.¹¹ However, according to Section 523.10(B) of the Farmland Protection Policy Act (FPPA), lands identified as urbanized areas by the U.S. Census Bureau are not subject to the provisions of the FPPA. The Airport is located in an urbanized area and therefore, on-Airport projects are not subject to the FPPA.

⁵ State of Utah Natural Resources, Division of Wildlife Resources, Utah Sensitive Species List. Accessed: <https://dwr.cdc.nr.utah.gov/ucdc/ViewReports/sscounty.pdf>, August 2018.

⁶ U.S. Fish and Wildlife Service, Information for Planning and Conservation (IPaC), Salt Lake County. Accessed: <https://ecos.fws.gov/ipac/location/HPRO53L6KFCCPNQX6POUGVLD/locations#migratory-birds>, August 2018.

⁷ U.S. Fish and Wildlife Service, Information for Planning and Conservation (IPaC), Salt Lake County. Accessed: <https://ecos.fws.gov/ipac/location/HPRO53L6KFCCPNQX6POUGVLD/locations>, August 2018.

⁸ U.S. Fish and Wildlife Service, Coastal Barrier Resources System Mapper. Accessed: <https://www.fws.gov/cbra/Maps/Mapper.html>, August 2018.

⁹ Salt Lake City Government, Transportation, Urban Trails. Accessed: https://www.slairport.com/assets/pdfDocuments/bike_map.pdf, September 2018

¹⁰ Land Water Conservation Fund, Utah. Accessed: <https://static1.squarespace.com/static/58a60299ff7c508c3c05f2e1/t/5b29566eaa4a99e30737b026/1529435758782/Utah+fact+sheet+6.13.18.pdf>, August 2018.

¹¹ Natural Resources Conservation Service, Web Soil Survey. Accessed: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, August 2018.

1.2.7 Hazardous Materials, Solid Waste, and Pollution Prevention

1.2.7.1 Hazardous Materials

Aircraft fuel constitutes the largest quantity of hazardous substances stored and consumed at the Airport. Fuel is stored on Airport property within a 261,491-square-foot fuel farm and an additional 10,700-square-foot general aviation fuel farm.

1.2.7.2 Solid Waste

The Salt Lake County Landfill is the only municipal solid waste landfill located in Salt Lake County.¹² This landfill is located two miles southwest of the Airport. This landfill is not expected to reach capacity until 2077.

1.2.7.3 Pollution Prevention

The Airport is required under the Airport's Utah Pollutant Discharge Elimination System (UPDES) stormwater discharge permit (UPDES Permit #UT0024988, approved on March 14, 2014) to have a Stormwater Pollution Prevention Plan (SWPPP). The Airport additionally has a Spill Prevention, Control, and Countermeasure Plan (SPCC).

1.2.8 Historical, Architectural, Archaeological, and Cultural Resources

The closest National Register of Historic Places (NRHP)-listed historic site is the Fisher, Albert, Mansion and Carriage House located approximately 1.75 miles southeast of the Airport.¹³ Additionally, the Fisher, Albert, Mansion and Carriage House is the closest Salt Lake City Historic Site.¹⁴

1.2.9 Land Use

Land uses within the immediate vicinity of the Airport include open space, commercial, mixed use transit station, single family and multi-family residential, and agricultural.¹⁵ The Airport is within Salt Lake County, zoned as a Special Purpose District (specifically an "Airport District") under the Salt Lake Municipal Code Title 21A – Zoning.

1.2.10 Natural Resources and Energy Supply

Natural resources (e.g., water, asphalt, aggregate, etc.) and energy use (e.g., fuel, electricity, etc.) at an airport is a function of the needs of aircraft, support vehicles, airport facilities, support structures, and terminal facilities. Rocky Mountain Power supplies electricity to the Airport. Dominion Energy provides natural gas services. Salt Lake City Department of Public Utilities provides water and sewer services. None of the natural resources that the Airport uses are in rare or short supply.

¹² Salt Lake County, Utah, Public Works & Municipal Services Department, Landfill. Accessed: <https://slco.org/landfill/>, September 2018.

¹³ U.S. Environmental Protection Agency, NEPAAssist. Accessed: <https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=salt+lake+city+airport>, August 2018.

¹⁴ Salt Lake City, Historic Districts and Buildings, Landmark Sites. Accessed: <https://www.slco.gov/historic-preservation/historic-districts-and-buildings/>, September 2018.

¹⁵ Salt Lake City, Salt Lake City Maps, Zoning. Accessed: <http://maps.slco.gov/mws/zoning.htm>, September 2018.

1.2.11 Noise and Noise-Compatible Land Use

There are residential land uses near the Airport. These areas may be sensitive to aircraft noise associated with the Airport. The Airport adopted a Noise Compatibility Program (NCP) in January 1999 as a result of their completed Part 150 Study outlining procedures to mitigate the impact of aircraft noise on non-compatible land uses, such as residential areas. Additionally, the Airport actively implements mitigation measures from the FAA-approved NCP, such as reducing night-time activity, utilizing departure tracks which avoid residential areas, etc. See **FIGURE 1-X** for current noise contours for the Airport.

1.2.12 Socioeconomic, Environmental Justice, and Children's Environmental Health and Safety Risks

The Airport is entirely within Census Tract 9800, Block Group 1, which has a population of zero. Therefore, the Salt Lake City, Utah Metropolitan Area, as defined by the U.S. Census Bureau, was used to describe the socioeconomic and environmental justice characteristics in the Airport area. The Salt Lake City, Utah Metropolitan Area has a total population of 1,154,504, 18.34 percent of which are minorities, and 11.14 percent of which are living below the poverty line. With regards to children's environmental health and safety risks, the closest school to the Airport is Meadowlark Elementary, approximately 1,500 feet east of the Airport.¹⁶

1.2.13 Visual Effects

1.2.13.1 Light Emissions

Various lighting features currently illuminate Airport facilities, such as the airfield (e.g., runways and taxiways), buildings, access roadways, automobile parking areas, and apron areas for the safe and secure movement of people and vehicles (e.g., aircraft, passenger cars, etc.).

1.2.13.2 Visual Resources and Visual Character

Structures at the Airport include, but are not limited to, the terminal building, fixed base operators, hangars, and maintenance buildings. As previously mentioned, the Airport is zoned as an Airport District and is developed in a manner that is consistent with this zoning.

1.2.14 Water Resources

1.2.14.1 Wetlands

Wetlands were identified during a survey of Airport property and have been mapped for future development considerations (see **FIGURE 1-43**). Wetlands shown on this figure were determined to be jurisdictional by the U.S. Army Corps of Engineers in 2004; however, jurisdictional determinations are only valid for a five-year period.

¹⁶ U.S. Environmental Protection Agency, NEPAassist, Places, Schools. Accessed: <https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=salt+lake+city+airport>, September 2018.

1.2.14.2 Floodplains

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the Airport area, there are floodplains within the Airport property (see **FIGURE 1-44**).¹⁷ The floodplains are located in the northwestern, western, and southern portions of Airport property.

1.2.14.3 Surface Waters

Three canals exist on Airport property: the Surplus Canal, the North Point Canal, and a city drain. In addition, two unnamed ponds are in the southern portion of Airport property (see **FIGURE 1-45**).

1.2.14.4 Groundwater

Airport property intersects two hydrologic units.¹⁸ The western portion of Airport property is within the Crystal Creek watershed (HUC 12 ID: 160202040404) and the eastern portion of Airport property is within the Jordan River watershed (HUC 12 ID: 160202040405).

1.2.14.5 Wild and Scenic Rivers

There are no wild and scenic rivers or river segments within the Airport area.¹⁹ The closest wild and scenic river, the Snake River, is over 170 miles northeast of the Airport.²⁰

1.3 ENVIRONMENTAL ANALYSIS OF THE AIRPORT DEVELOPMENT PLAN

For purposes of this Master Plan Update, the level of analysis described in this section is to advise the Airport of potential environmental impacts associated with the Development Plan (see **Chapter 4**). The following sections identify the key and applicable environmental resource categories as described in FAA Order 1050.1F for development projects that are outlined in the Development Plan and describes the appropriate level of NEPA documentation for each development project. Environmental resource categories include:

- » Air Quality
- » Biological Resources
- » Climate
- » Department of Transportation Section 4(f)
- » Farmland
- » Hazardous Materials, Pollution Prevention, and Solid Waste
- » Historical, Architectural, Archaeological, and Cultural Resources
- » Land Use
- » Natural Resources and Energy Supply

¹⁷ Federal Emergency Management Agency, Flood Map Service Center, Flood Insurance Rate Maps 49035C0140E (effective 9/21/2001), 49035C0137E (effective 9/21/2001), 49035C150G (effective 9/25/2009), 49035C0125G (effective 9/25/2009), 49035C0120E (effective 9/21/2001), 49035C0129G (effective 9/25/2009), and 49035C0139E (effective 9/21/2001).

¹⁸ U.S. Environmental Protection Agency, NEPAAssist, Water Features, Watersheds (HUC 12). Accessed: <https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=salt+lake+city+airport>, September 2018.

¹⁹ U.S. Environmental Protection Agency, NEPAAssist, Water Features, Wild and Scenic Rivers. Accessed: <https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=salt+lake+city+airport>, September 2018.

²⁰ U.S. National Park Service, Wild and Scenic Rivers Program, Interactive Map of NPS Wild and Scenic Rivers. Accessed: <https://www.nps.gov/orgs/1912/plan-your-visit.htm>, September 2018.

- » Noise and Noise-Compatible Land Use
- » Socioeconomics, Environmental Justice, and Children’s Health and Safety Risks
- » Visual Effects
- » Water Resources (includes Wetlands, Floodplains, Surface Waters, and Groundwater,)

Coastal resources and wild and scenic rivers are not included in this discussion because, as **SECTION 1.15** describes in detail and **SECTION 1.2** briefly describes, those resources are not within or near Airport property and would not be affected by the development projects. Additionally, only those environmental resource categories that could be affected by each development project are described in the following sections. It is also important to note that the environmental analysis included in this Master Plan Update is not in and of itself a NEPA document.

1.3.1 Runway Development Projects

1.3.1.1 Runway 16R-34L 2,500-foot Extension

This alternative would result in a 2,500-foot extension to the north of Runway 16R-34L resulting in a total length of 14,500 feet (see **FIGURE 4-2**). This project would require the relocation of existing high-tension power lines north of Runway 16R-34L to outside of the new Runway Protection Zone (RPZ).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project. Additionally, the change in aircraft fleet mix combined with the forecast increase operations at the Airport, may require an operational air quality emissions analysis for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment, and a permanent increase in emissions as a result of the forecast increase in aircraft operations and change to the fleet mix. An estimate of GHG emissions could be included in the construction and operational emission inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include ground disturbing activity on pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Increased operations and enplanements would also increase the generation of solid waste at the Airport. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise and Noise-Compatible Land Use: The aviation noise contours are anticipated to change as a result of this project. It is recommended that the Airport model new noise contours using the most recent

version of the Aviation Environmental Design Tool (AEDT) that accounts for the runway extension. However, there are no known noise sensitive resources²¹ in the direction of the runway extension.

Water Resources: This runway extension alternative would encroach upon a 100-year floodplain and a floodplain analysis may be required. Additionally, a little over two acres of wetlands would be affected by this runway extension. Additional wetland impacts could occur as a result of required changes to the surrounding roadways and taxiways. The Airport would be responsible for having these wetlands officially delineated in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: The reconstruction, resurfacing, extension, strengthening, or widening of an existing runway can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.1.2 Runway 16L-34R 2,498-foot Extension

This alternative would result in a 2,498-foot extension to the north of Runway 16L-34R resulting in a total length of 14,500 feet (see **FIGURE 4-2**). This project would require the relocation of existing high-tension power lines north of Runway 16R-34L to outside of the new Runway Protection Zone (RPZ).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project. Additionally, the change in aircraft fleet mix combined with the forecast increase operations at the Airport, may require an operational air quality emissions analysis for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey could be necessary for the NEPA documentation associated with this project.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment, and a permanent increase in emissions as a result of the forecast increase in aircraft operations and change to the fleet mix. An estimate of GHG emissions could be included in the construction and operational emission inventory.

²¹ FAA. (1985). Federal Aviation Regulations Part 150, *Airport Noise Compatibility Planning*, CFR 14, Chapter I, Subchapter I, Part 150, Table 1, January 18, 1985, as amended.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Increased operations and enplanements would also increase the generation of solid waste at the Airport. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise and Noise-Compatible Land Use: The noise contours are anticipated to change as a result of this project and it is recommended that the Airport model new noise contours that accounts for the runway extension; however, there are no known noise sensitive resources in the direction of the runway extension.

Water Resources: Less than one acre of wetlands would be affected by the runway extension. Additional wetland impacts could occur as a result of required changes to the surrounding roadways and taxiways. The Airport would be responsible for delineating the wetlands and coordinating with the USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: The reconstruction, resurfacing, extension, strengthening, or widening of an existing runway can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.1.3 Runway 17-35 4,903-foot Extension

This alternative would result in a 4,903-foot extension to the north of Runway 17-35 resulting in a total length of 14,500 feet (see **FIGURE 4-2**).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project. Additionally, the change in aircraft fleet mix combined with the forecast increase operations at the Airport, may require an operational air quality emissions analysis for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment, and a permanent increase in emissions as a result of the forecast increase in aircraft

operations and change to the fleet mix. An estimate of GHG emissions could be included in the construction and operational emission inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise and Noise-Compatible Land Use: The noise contours are anticipated to expand as a result of this project and it is recommended that the Airport model new noise contours that accounts for the runway extension; however, there are no known noise sensitive resources in the direction of the runway extension.

Water Resources: About two acres of wetlands would be affected by this runway extension. Additional wetland impacts could occur as a result of required changes to the surrounding roadways and taxiways. The Airport would be responsible for delineating the wetlands and coordinating with the USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to accommodate the increase in stormwater runoff. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: The reconstruction, resurfacing, extension, strengthening, or widening of an existing runway can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.1.4 Runway 17-35 Realignment and Extension

This alternative would result in the realignment and extension to the north of Runway 17-35 resulting in a total length of 14,500 feet (see **FIGURE 4-2**).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project. Additionally, the change in aircraft fleet mix combined with the forecast increase operations at the Airport, may require an operational air quality emissions analysis for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment, and a permanent increase in emissions as a result of the forecast increase in aircraft operations and change to the existing fleet mix. An estimate of GHG emissions could be included in the construction and operational emission inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise and Noise-Compatible Land Use: The noise contours are anticipated to expand as a result of this project and it is recommended that the Airport model new noise contours that accounts for the runway realignment and extension; however, there are no known noise sensitive resources in the direction of the runway realignment and extension.

Water Resources: Less than about one acre of wetland would be affected by this runway extension. Additional wetland impacts could occur as a result of required changes to the surrounding roadways and taxiways. The Airport would be responsible for delineating the wetlands and coordinating with USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Realignment of an existing runway is not a project on the list of categorically excluded projects found in FAA Order 1050.1F. As such, an EA is anticipated to be the appropriate NEPA documentation for this project.

1.3.1.5 Runway 14-32 Closure and Conversion to a Taxiway

The FAA has identified two hot spots related to the configuration of Runway 14-32 (see **FIGURE 4-9**) resulting in incursions. This project would correct the hotspots relating to Runway 14-32 by closing the runway and converting a portion of the runway to a taxiway. Aircraft traffic would be accommodated on the other runways at the Airport.

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment. An estimate of GHG emissions could be included in the construction emission inventory.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise and Noise-Compatible Land Use: The noise contours are anticipated to change as a result of this project, and it is recommended that the Airport model new noise contours that accounts for the shifting of aircraft operations to other runways.

Water Resources: There are wetlands in the area of the runway. The Airport would be responsible for having these wetlands officially delineated in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Permanently closing a runway and using it as a taxiway can categorically excluded under FAA Order paragraph 5-6.4(cc) at small, low-activity airport. However, the Airport is not considered a small, low-activity airport and as such, an EA is anticipated to be the appropriate NEPA documentation for this project.

1.3.1.6 South Runway 16L-34R End Around Taxiway

This project includes the construction of an end around taxiway around the south end of Runway 16L-34R (see **FIGURE 4-10**) to reduce runway crossings and the risk of an incursion, reduce air traffic controller workload, provide for more timely and predictable gate arrivals, reduce fuel consumption and emissions, and to increase runway capacity and hourly throughput.

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey could be necessary for the NEPA documentation associated with this project.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment. An estimate of GHG emissions could be included in the construction emission inventory.

Section 4(f) Resources: Construction of this project would require the Airport Trail bike path, which is a Section 4(f) property, to be rerouted. This would constitute a physical use of a Section 4(f) property and would require coordination with the FAA and a potential DOT Section 4(f) analysis.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Water Resources: The south end around taxiway would cross the Surplus Canal, which runs through Airport property and is under the jurisdiction of the USACE. The Airport would be responsible for coordinating with the USACE in order to obtain a nationwide permit or individual permit and determine any appropriate mitigation for potential effects. Additionally, the Surplus Canal is part of the 100-year floodplain and this project would encroach upon the floodplain; therefore, a floodplain analysis would be required. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: The construction of a taxiway can be categorically excluded under FAA Order paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.2 Airfield Enhancement Development Projects

1.3.2.1 New and Removed Taxiways

Construction of Taxiways L, P, U, and V as well as a full parallel taxiway and highspeed exit taxiway for Runway 16L-34R, and the removal of Taxiways H6 and Q are proposed as part of the airfield enhancements project (see **FIGURE 4-11**). Additionally, Taxiway K5 is proposed for removal and replacement to meet current geometry standards. See **SECTION 4.4.2** for more details.

Air Quality: These taxiway projects would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with these projects.

Climate: These projects would result in a temporary increase in emissions from construction vehicles and equipment. An estimate of GHG emissions could be included in the construction emissions inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because these projects would include ground disturbing activity on pervious ground, an archaeological survey may be required for the NEPA documentation associated with these projects.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with these projects would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Water Resources: Construction of Taxiways L, P, U, and V could affect wetlands. The Airport would be responsible for having these wetlands delineated in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: The new and removed taxiways can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the projects would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.2.2 Deicing Facilities

Projects associated with deicing facilities at the Airport would include a new eight-position runway-end deice pad for Runway 16R, an expansion to the Runway 16L deice pad between Runway 16L-34R and the Runway 17 threshold, and potential relocation of the deice pads serving Runway 16L-34R to the west (see FIGURE 4-11).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would temporarily increase emissions from construction vehicles and equipment, including GHG emissions. The increase would be temporary and minor. An estimate of GHG emissions could be calculated in the construction emissions inventory.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Water Resources: This project could potentially affect existing wetlands in the areas where the deicing facilities would be constructed. The Airport would be responsible for delineating the wetlands and coordinating with the USACE in order to determine their jurisdictional status and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. The deicing facilities would increase impervious surface at the Airport; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. The project would not increase the amount of glycol-contaminated stormwater runoff at the Airport; but would provide more efficient and effective ways to handle glycol-contaminated stormwater runoff. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm

Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: The construction of the deicing facilities can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(d). Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.3 Terminal Concourse Expansion Development Project

The terminal concourse expansion development would include new building construction, along with taxiway pavement/rehabilitation, new apron pavement/rehabilitation, new shoulder pavement/rehabilitation, a new vehicle service road, replacement crossfield taxiways, removal of a fuel farm, and existing on-Airport structures (see **FIGURE 4-15**).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project. Additionally, the change in aircraft fleet mix combined with the forecast increase operations at the Airport, may require an operational air quality emissions analysis for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment, and a permanent increase in emissions as a result of an increase in forecast aircraft operations. An estimate of GHG emissions could be included in the construction and operational emission inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include ground disturbing activity on pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. The addition of new gates to the terminal would also result in the generation of additional solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise and Noise Compatible Land Use: The noise contours are anticipated to change as a result of this project, and it is recommended that the Airport model new noise contours that accounts for aircraft operations associated with the new terminal concourse.

Water Resources: This project could potentially affect existing wetlands in the area of the project. The Airport would be responsible for delineating wetlands and coordinating with the USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. Additionally, the construction of the concourse expansion would increase impervious surface at the Airport; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. The

contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Non-aeronautical development, such as new service roadways, may not be subject to FAA approval authority in compliance with Section 163.²² However, if the FAA does not have approval authority, the construction of the service road can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(a). The new building construction can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h), provided it does not substantially expand those facilities outside of the FAA's presumed to conform list (72 Federal Register 41565). The construction, repair, reconstruction, resurfacing, extension, strengthening, or widening of a taxiway can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project. If this project is considered to substantially expand the terminal concourse buildings, an EA may be necessary.

1.3.4 North Air Cargo Alternatives

There are two preferred alternatives for the future cargo expansion locations (see **SECTIONS 1.3.4.1** and **1.3.4.2** for details).

1.3.4.1 Ultimate Cargo Site 2

Future cargo expansion would include new air cargo building construction along with a new taxiway pavement/rehabilitation, new apron pavement/rehabilitation, new shoulder pavement/rehabilitation, and new roadway and vehicle parking construction (see **FIGURE 4-16**).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project. Should the Airport experience either a change in aircraft fleet mix or a significant increase in cargo operations associated with this project, an operational air quality emissions analysis for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would temporarily increase emissions from construction vehicles and equipment, including GHG emissions, and a permanent increase in emissions as a result of forecast cargo aircraft operations. An estimate of GHG emissions could be calculated in the construction and operational emissions inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Operation of the new cargo facilities would result in an increase in solid waste

²² See Section 163 of the FAA Reauthorization Act of 2018.

at the Airport as well. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise: The noise contours are anticipated to change as a result of this project, and it is recommended that the Airport model new noise contours that accounts for the increase in cargo operations.

Water Resources: This project could potentially affect existing wetlands in the area. The Airport would be responsible for delineating the wetlands and coordinating with the USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Non-aeronautical development, such as new roadways and vehicle parking, may not be subject to FAA approval authority in compliance with Section 163.²³ However, if the FAA does not have approval authority, the construction of the new roadway can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(a). The new cargo building construction can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h), provided it does not substantially expand those facilities outside of the FAA's presumed to conform list (72 Federal Register 41565). Construction of vehicle parking associated with the new cargo building can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(f). The construction, repair, reconstruction, resurfacing, extension, strengthening, or widening of a taxiway and apron can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project. If this project is considered to substantially expand the cargo facilities, an EA may be necessary.

1.3.4.2 Ultimate Cargo Site 3

Future cargo expansion would include a new cargo building along with new taxiway pavement/rehabilitation, new apron pavement/rehabilitation, new shoulder pavement/rehabilitation, and new roadway and vehicle parking construction (see **FIGURE 4-16**).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project. Should the Airport experience either a change in aircraft fleet mix or a significant increase in cargo operations associated with this project, an operational air quality emissions analysis for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would temporarily increase emissions from construction vehicles and equipment, including GHG emissions, and a permanent increase in emissions as a result of forecast cargo aircraft

²³ See Section 163 of the FAA Reauthorization Act of 2018.

operations. An estimate of GHG emissions could be calculated in the construction and operational emissions inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Operation of the new cargo facilities would result in an increase in solid waste at the Airport as well. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise and Noise-Compatible Land Use: The noise contours are anticipated to change as a result of this project, and it is recommended that the Airport model new noise contours that accounts for the increase in cargo operations.

Water Resources: This project could potentially affect existing wetlands in the area. The Airport would be responsible for delineating wetlands and coordinating with USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Non-aeronautical development, such as new roadways and vehicle parking, may not be subject to FAA approval authority in compliance with Section 163.²⁴ However, if the FAA does not have approval authority, the construction of the new roadway can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(a). The new cargo building construction can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h), provided it does not substantially expand those facilities outside of the FAA's presumed to conform list (72 Federal Register 41565). Construction of vehicle parking associated with the new cargo building can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(f). The construction, repair, reconstruction, resurfacing, extension, strengthening, or widening of a taxiway and apron can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project. If this project is considered to substantially expand the cargo facilities, an EA may be necessary.

1.3.5 Landside Development Projects

1.3.5.1 2100 North Roadway Realignment

Should Runway 16L-34R be extended (see SECTION 1.3.1.2), a portion of 2100 north would pass through the proposed new RPZ and would need to be realigned (see FIGURE 4-11).

²⁴ See Section 163 of the FAA Reauthorization Act of 2018.

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would temporarily increase emissions from construction vehicles and equipment, including GHG emissions. The increase would be temporary and minor. An estimate of GHG emissions could be calculated in the construction emissions inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Water Resources: The road realignment could encroach upon a 100-year floodplain and a floodplain analysis would be required. Additionally, this project could potentially affect existing wetlands in the area. The Airport would be responsible for delineating the wetlands and coordinating with the USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Non-aeronautical development, such as roadway realignments, may not be subject to FAA approval authority in compliance with Section 163.²⁵ However, if the FAA does not have approval authority, the construction of the road realignment can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(a). Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.5.2 Employee Parking

The South Employee Parking Lot would be located in a new lot in the southern portion of the Airport near the proposed south Runway 16L-34R End Around (see **Figure 4-25**). This south employee parking lot would use a 1-bus system and would not include on-site screening prior to busing of employees.

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey could be necessary for the NEPA documentation associated with this project.

²⁵ See Section 163 of the FAA Reauthorization Act of 2018.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment. An estimate of GHG emissions could be included in the construction emission inventory.

Section 4(f) Resources: Construction of this project would require the Airport Trail bike path, which is a Section 4(f) property, to be rerouted. This would constitute a physical use of a Section 4(f) property and would require coordination with the FAA and a potential DOT Section 4(f) analysis.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Water Resources: The south employee parking lot has the potential to affect existing wetlands in the area and would cross the Surplus Canal, which runs through Airport property and is under the jurisdiction of the USACE. The Airport would be responsible for delineating wetlands and coordinating with the USACE in order to obtain a nationwide permit or individual permit and determine any appropriate mitigation for potential effects. Additionally, the Surplus Canal is part of the 100-year floodplain and this project would encroach upon the floodplain; therefore, a floodplain analysis would be required. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. The contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Non-aeronautical development, such as an employee parking lot, may not be subject to FAA approval authority in compliance with Section 163.²⁶ However, if the FAA does not have approval authority, the construction of the employee parking area can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h). Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.5.3 Preferred Comprehensive Landside Development

The comprehensive landside development includes the following projects: public parking, consolidated rental car facilities, additional public services (Park n' Wait lot and Service Center), employee parking (see SECTION 1.3.5.2), commercial vehicle staging, and future landside expansion (see FIGURE 4-25). All of the projects, except for the employee parking (see SECTION 1.3.5.2) and the future landside expansion projects, would occur on existing paved and developed land.

Air Quality: These projects would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with these projects.

²⁶ See Section 163 of the FAA Reauthorization Act of 2018.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project with the exception of the employee parking and future landside expansion projects, since these projects are proposed to be located on pervious ground.

Climate: These projects would temporarily increase emissions from construction vehicles and equipment, including GHG emissions. The increase would be temporary and minor. An estimate of GHG emissions could be calculated in the construction emissions inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because the future landside expansion and the employee parking projects (see SECTION 1.3.5.2) would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the comprehensive landside development would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Water Resources: The future landside expansion and the employee parking projects (see SECTION 1.3.5.2) could potentially affect existing wetlands in the area. The Airport would be responsible for delineating wetlands and coordinating with the USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Non-aeronautical development, such as parking areas, may not be subject to FAA approval authority in compliance with Section 163.²⁷ However, if the FAA does not have approval authority, the construction of the public parking, consolidated rental car facilities, additional public services (Park n' Wait Lot and service center), and commercial vehicle staging can all be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h). Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project. The future landside expansion project may not be subject to FAA approval authority in compliance with Section 163, depending on the proposed use and if certain conditions are met.²⁸ However, if the FAA does not have approval authority, the project can categorically excluded under FAA Order 1050.1F, paragraph 5-6.1(b) provided the use of the land does not trigger extraordinary circumstances and the proposed land use is a use found in FAA Order 1050.1F as a categorically excluded use. However, if the proposed land use is not a categorically excluded action, an EA may be necessary.

²⁷ See Section 163 of the FAA Reauthorization Act of 2018.

²⁸ See Section 163 of the FAA Reauthorization Act of 2018.

1.3.6 Support Facility Development Projects

1.3.6.1 Airline Maintenance, Airport Maintenance, and ARFF Facility

The relocation and expansion of the airline and airport maintenance buildings, as well as relocation of the aircraft rescue firefighting (ARFF) Station #12 would occur under this project (see **FIGURE 4-26**).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would temporarily increase emissions from construction vehicles and equipment, including GHG emissions. The increase would be temporary and minor. An estimate of GHG emissions could be calculated in the construction emissions inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Water Resources: This project could potentially affect existing wetlands in the area. The Airport would be responsible for delineating the wetlands and coordinating with the USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Non-aeronautical development, such as the airline and airport maintenance buildings, may not be subject to FAA approval authority in compliance with Section 163.²⁹ However, if the FAA does not have approval authority, the construction of the relocated airline and airport maintenance buildings and the ARFF Station #12 can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(f). Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

²⁹ See Section 163 of the FAA Reauthorization Act of 2018.

1.3.6.2 Commercial Service Fuel Farm Relocation

Relocation of the commercial service fuel farm facility would occur under this project (see **FIGURE 4-27**). The relocated fuel farm would tie into the existing pipeline.

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would result in a temporary increase in emissions from construction vehicles and equipment. The increase would be temporary and minor. An estimate of GHG emissions could be included in the construction emissions inventory.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations. The project would increase the amount of hazardous materials stored at the Airport. Additionally, the Airport would need to update its SPCC plan and SWPPP to account for the project.

Water Resources: This project could potentially affect existing wetlands in the area. The Airport would be responsible for delineating wetlands and coordinating with the USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. With regards to surface water and groundwater, the project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Bulk fuel storage facilities are not a project on the list of categorically excluded projects found in FAA Order 1050.1F. As such, an EA is anticipated to be the appropriate NEPA documentation for this project.

1.3.6.3 General Aviation Leasehold Development

Three zones have been identified for general aviation (GA) development (see **FIGURES 4-28 and 4-29**). Zones 1 and 2 are to be managed by the Airport's fixed base operators (FBO's) while Zone 3 will be under direct development by the Airport. Development is to include new apron pavement/rehabilitation, new building construction, and new roadway and parking construction.

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project. Should the Airport experience either a change in aircraft fleet mix or a significant increase in GA

operations associated with this project, an operational air quality emissions analysis for the NEPA documentation associated with this project.

Climate: The project would temporarily increase emissions from construction vehicles and equipment, including GHG emissions. The increase would be temporary and minor. An estimate of GHG emissions could be calculated in the construction emissions inventory.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Noise and Noise-Compatible Land Uses: The noise contours are anticipated to change as a result of this project, and it is recommended that the Airport model new noise contours that accounts for the additional GA operations.

Water Resources: The project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff; however, the existing stormwater drainage system is anticipated to be able to accommodate the increase in stormwater runoff. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: The construction of the new roadway and parking can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(a). The new building construction can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h). The construction, repair, reconstruction, resurfacing, extension, strengthening, or widening of an apron can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.6.4 ARFF Training Facility

The new aircraft rescue firefighting (ARFF) training facility location was identified for development near ARFF Training Sites 1 and 2 shown in **FIGURE 4-30**. A new access roadway and parking would also be constructed as part of this project.

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would temporarily increase emissions from construction vehicles and equipment, including GHG emissions. The increase would be temporary and minor. An estimate of GHG emissions could be calculated in the construction emissions inventory.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Water Resources: This project could potentially affect existing wetlands in the area (see **FIGURE 4-30**). The Airport would be responsible for delineating wetlands and coordinating with USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. The project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff. Stormwater runoff analysis may be needed to ensure that the new non-aeronautical development can accommodate the new impervious surface with the existing infrastructure. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: Non-aeronautical development, such as new roadways and parking areas, may not be subject to FAA approval authority in compliance with Section 163.³⁰ However, if the FAA does not have approval authority, the construction of the new roadway and parking can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(a). The new building construction can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h). Absent extraordinary circumstances or significant impacts that cannot be mitigated, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.3.7 Non-Aeronautical Land Use Development Project Opportunities

A portion of the north east quadrant of the Airport was identified for non-aeronautical use to supplement the Airport's existing revenue stream (see **FIGURE 4-31**).

Air Quality: This project would temporarily increase emissions from construction vehicles and equipment. A construction emissions inventory may be necessary for the NEPA documentation associated with this project.

Biological Resources: Because threatened and endangered species have the potential to be found at the Airport, a biological survey may be necessary for the NEPA documentation associated with this project.

Climate: The project would temporarily increase emissions from construction vehicles and equipment, including GHG emissions. The increase would be temporary and minor. An estimate of GHG emissions could be calculated in the construction emissions inventory.

³⁰ See Section 163 of the FAA Reauthorization Act of 2018.

Hazardous Materials, Pollution Prevention, and Solid Waste: Construction associated with the project would generate solid waste. Waste would be handled and disposed according to federal, state, and local rules and regulations.

Historical, Architectural, Archaeological, and Cultural Resources: Because this project would include disturbing pervious ground, an archaeological survey may be required for the NEPA documentation associated with this project.

Land Use: The project would need to ensure that proposed non-aeronautical development was compatible with land use zoning as well as with FAA regulations.³¹

Water Resources: This project could potentially affect existing wetlands in the area. The Airport would be responsible for delineating wetlands and coordinating with USACE in order to determine their jurisdictional status, and any appropriate mitigation for potential effects. Assuming that the wetlands are jurisdictional, the Airport would be responsible for obtaining a nationwide permit or individual permit, depending on the extent of the potential impacts. The project would increase impervious surface area at the Airport. This increase in impervious surface would increase the volume of stormwater runoff. Stormwater runoff analysis may be needed to ensure that the new non-aeronautical development can accommodate the new impervious surface with the existing infrastructure. Additionally, the contractor would be responsible for preparing a SWPPP under a UPDES Construction Storm Water Permit prior to the start of ground disturbing activities, and all construction activities would be required to comply with the provisions set forth in that permit.

NEPA Documentation Guidance: The release of Federally obligated land for non-aeronautical development may not be subject to FAA approval authority in compliance with Section 163.³² However, if the FAA does not have approval authority, the development can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.1(b) provided the use of the land does not trigger extraordinary circumstances and the proposed land use is a use found in FAA Order 1050.1F as a categorically excluded use. However, if the proposed land use is not a categorically excluded action, an EA may be necessary.

1.4 APPROACHES TO NEPA DOCUMENTATION

This section outlines the NEPA approach associated with the development projects described in the short term (1-10 years) period of the Construction Implementation Plan (CIP) (see **SECTION XXX**). Projects included in **SECTION 1.3** include projects in both the short-term and long-term CIP periods; however, due to the likelihood of changes to project implementation time frames, the long-term projects are not discussed in this section. It is recommended that projects connected in function, place, and/or time be evaluated in the same NEPA document in an effort to save time and money. Connected actions (projects that do not have independent utility from another project) must be considered in the same NEPA document to avoid segmentation. **TABLE 1-1** describes the projects within the short-term CIP and their appropriate NEPA documentation.

Prior to starting NEPA documentation for a development project at the Airport, the Airport or its contractor should coordinate with the FAA Denver Airports District Office (ADO) Environmental Protection

³¹ FAA. (1985). Federal Aviation Regulations Part 150, *Airport Noise Compatibility Planning*, CFR 14, Chapter I, Subchapter I, Part 150, Table 1, January 18, 1985, as amended.

³² See Section 163 of the FAA Reauthorization Act of 2018.

Specialist (EPS) to officially determine if the project qualifies under Section 163 and if not, determine the appropriate level NEPA documentation (e.g., CATEX, EA, EIS).

TABLE 1-1 CIP NEPA APPROACH

CIP Year	CIP Project	Project Discussion Section Number	NEPA Document	FAA Approval Authority Per Section 163 Guidelines
2021/2022	North Cargo Area Expansion	1.3.4	CATEX	Yes
2023	Public Parking Construction Phase I - Employee Lot	1.3.5.2	CATEX	No
2023	Runway 14-32 Removal	1.3.1.5	EA	Yes
2023	Taxiway K2 Crossfield Connection Construction	1.3.2.1		Yes
2023	Taxiway Q Removal	1.3.2.1		Yes
2024	Runway 16L North Deicing Pad Facilities Upgrades	1.3.2.2		Yes
2026	Initial 4000W Roadway Relocation	1.3.4.1	CATEX	No
2027	West Portion Taxiway V Construction	1.3.2.1	CATEX	Yes
2028	East Portion Taxiway V Construction	1.3.2.1		Yes
2029	East Portion Taxiway U Construction	1.3.2.1		Yes
2030	Taxiway S Deice Pad Construction	1.3.2.2	CATEX	Yes

Source: RS&H, 2021.

1.4.1 North Cargo Area Expansion

The construction of the new roadway can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(a). The new cargo building construction can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h), provided it does not substantially expand those facilities outside of the FAA’s presumed to conform list (72 Federal Register 41565). Construction of vehicle parking associated with the new cargo building can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(f). The construction, repair, reconstruction, resurfacing, extension, strengthening, or widening of a taxiway and apron can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e), provided that the project would not cause significant erosion or sedimentation, would not cause a significant noise increase over noise sensitive area, or cause significant impacts to air quality. Absent extraordinary circumstances, a CATEX is anticipated to be the appropriate NEPA documentation for this project. If this project is considered to substantially expand the cargo facilities, an EA may be necessary.

1.4.2 Public Parking Construction Phase I – Employee Lot

Non-aeronautical development, such as an employee parking lot, can be approved under Section 163 if certain conditions are met.³³ However, if Section 163 does not apply, the construction of the employee parking area can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(h). Absent

³³ See Section 163 of the FAA Reauthorization Act of 2018.

extraordinary circumstances, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

1.4.3 Runway 14-32 Removal, Taxiway K2 Crossfield Connection Construction, Taxiway Q Removal, and Runway 16L Deicing Pad Facilities Upgrades

The appropriate form of NEPA documentation would be an EA that combines the Runway 14-32 removal, Taxiway K2 crossfield connection construction, removal of Taxiway Q, and upgrades to Runway 16L deicing pad facilities projects. These projects should be combined due to joint utility and proximity in time. An EA is anticipated to be the required NEPA documentation for this group of projects because permanently closing a runway and using it as a taxiway can only be categorically excluded under FAA Order paragraph 5-6.4(cc) at small, low-activity airports. The Airport is not considered a small, low-activity airport and as such, an EA is anticipated to be the appropriate NEPA documentation for this project.

1.4.4 Initial 4000W Roadway Relocation

Non-aeronautical development, such as new roadways and vehicle parking, can be approved under Section 163 if certain conditions are met.³⁴ However, if Section 163 does not apply, the relocation of the roadway can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(a).

1.4.5 West Portion Taxiway V Construction, East Portion Taxiway V Construction, East Taxiway U Construction

The appropriate form of NEPA documentation would be a CATEX that combines the construction the west portion of Taxiway V, east portion of Taxiway V, and east Taxiway U. These projects should be combined due to joint utility and proximity in time. The construction of the taxiways can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(e).

1.4.6 Taxiway S Deice Pad Construction

The appropriate form of NEPA documentation would be a CATEX. The construction of the deicing facilities can be categorically excluded under FAA Order 1050.1F, paragraph 5-6.4(d). Absent any extraordinary circumstances, a CATEX is anticipated to be the appropriate NEPA documentation for this project.

³⁴ See Section 163 of the FAA Reauthorization Act of 2018.