U.S. Department of Transportation
Federal Aviation Administration
Southwest Region
and
Texas Department of Transportation
Aviation Division

## Finding of No Significant Impact (FONSI) and Record of Decision (ROD)

Runway Shift and Other Improvements
Dallas Executive Airport
Dallas County, Texas

May 2017

### 1. INTRODUCTION

This document serves as a Finding of No Significant Impact (FONSI) and Record of Decision (ROD) for the proposed Federal Aviation Administration (FAA) actions and State actions necessary for the implementation of the Proposed Action and associated improvements at Dallas Executive Airport (KRBD), in Dallas, Texas. The City of Dallas, as owner of the airport, is the Airport Sponsor and proponent of the proposed airport improvements. The Proposed Action includes:

- Shifting the Runway 13 endpoint by 685 feet northwest and all associated improvements (including grading and drainage improvements).
- Displacing the Runway 31 threshold by 500 feet to the northwest.
- Displacing Runway 13 threshold by 1,085 feet to the northwest and implementing declared distances.
- Restriping Runway 13 to narrow the runway from 150 feet to 100 feet wide with 25 feet paired shoulders.
- Extending Taxiway B to the shifted Runway 13 end.
- Relocating the localizer, glideslope, runway lighting, and automated surface observation system (ASOS); replacing the visual approach slope indicator (VASI); and installing a new precision approach path indicator (PAPI) at RW 13-31.

The FAA is the federal agency responsible for the approval of the Proposed Action analyzed in the Environmental Assessment (EA). The FAA and the Texas Department of Transportation (TXDOT), Aviation (AVN) Division have determined that the Proposed Action will have no significant impact to the human environment.

#### 2. BACKGROUND

The Dallas Executive Airport, formerly Redbird Airport, is a general aviation facility owned and operated by the City of Dallas (the City). The airport's FAA identifier is KRBD. KRBD is located in Dallas County, Texas, in the southwestern portion of the City of Dallas.

## 3. PROPOSED FEDERAL AND STATE ACTIONS

## 3.1 Requested Federal Action

The Federal actions necessary for implementation of the proposed airport improvements are:

- Relocating the localizer, glideslope, runway lighting, and automated surface observation system (ASOS); replacing the visual approach slope indicator (VASI); and installing a new precision approach path indicator (PAPI) at RW 13-31.
- 2. Revising or amending all necessary air traffic procedures to accommodate the proposed action, including:
  - a. Runway 13 Conventional Obstacle Departure Procedure (ODP);
  - Runway 31 arrival Area Navigation (RNAV) Global Positioning System (GPS) Procedure;
  - c. Runway 31 arrival conventional procedure.
- 3. The determination of eligibility for Federal funding under 49 U.S.C. §47101 et seq for the proposed airport development.

## 3.2 Requested State Action

The State actions necessary for implementation of the proposed airport improvements are:

- 1. Unconditional approval of the portion of the Airport Layout Plan (ALP) depicting the proposed project as described within Section 3 of this document.
- 2. The determinations under 49 U.S.C. §47128 relating to the authority of the State to administer the State Block Grant Program including funding determinations in accordance with 14 CFR Part 156 and 49 USC §§47106 and 47107.

#### 4. PURPOSE AND NEED

Pursuant to NEPA and FAA Orders 1050.1F and 5050.4B, an Environmental Assessment (EA) must include a description of the purpose of a proposed action and the reasons it is needed. The purpose of and the need for the Proposed Action are discussed below.

The Purpose and Need of the proposed project is to comply with FAA guidance and policies to improve the safety and protection of people and property on the ground by correcting identified deficiencies in the Runway Protection Zone (RPZ) of Runway 13 and the Runway Safety Area (RSA), Runway Object Free Area (ROFA), and RPZ of Runway 31. TxDOT-AVN conducted an RPZ Analysis and Runway Shift Analysis of the current facility design. The report revealed deficiencies in airport design standards for the RSA and identified certain incompatible land uses within the RPZ.

FAA runway protection design standards for aircraft that currently use and are anticipated to use the facility are outlined in FAA Advisory Circular 150/5300-13A (FAA 2014). FAA Advisory Circular 150/5300-13A increased the dimensions and thresholds for the RPZ and ROFA, and runway designs for safety reasons for current airport operations as well as any future operations. The specific RSA and RPZ deficiencies at KBRD are that (1) the runway 31 RSA and ROFA are less than the FAA-required 1,000 feet and (2) the Runway 13-31 RPZ includes area outside of the airport boundary at both ends and includes incompatible land uses such as city streets, U.S. Highway 67, and residential/commercial properties. FAA memo Interim Guidance on Land Uses within Runway Protection Zone (FAA 2012b) encourages the airport owner to have "control over the RPZ land in order to achieve the desired protection of people and property on the ground. Although the FAA recognizes that in certain situations the airport sponsor may not fully control land within the RPZ, the FAA expects airport sponsors to take all possible measures to protect against and remove or mitigate incompatible land uses."

KRBD plays an important role in the economic development of the regional economy. The airport is in the National Plan of Integrated Airport Systems (NPIAS). Considerable capital investments have been made to maintain the airport's ability to provide service that links regional, state and national aviation networks. The runway and associated runway protection and safety area improvements are also needed to maintain the airport's role in the regional economy and provide safe and efficient activities.

#### 5. ALTERNATIVES

Proposed improvements at KRBD focus on Runway 13-31 and its RSAs and RPZs. The development of alternatives follows the FAA method for performing a Runway Safety Area Determination (FAA Order 5200.8 Runway Safety Area Program). FAA Order 5200.8 states that the following alternatives must be considered, in order, to address RSA deficiencies:

- Construct the traditional graded RSA surrounding the runway.
- Relocate, shift, or realign the runway.

- Reduce the runway length where the existing runway length exceeds that which is required for the existing or projected design aircraft.
- Implement declared distances.
- Install Engineered Materials Arresting System (EMAS).
- A combination of runway relocation, shifting, grading, realignment, or reduction.

In addition to the above alternatives, the City included the No Action alternative and proposed alternative actions that maintain the maximum possible runway length in order to allow for the continued use of the runway by large aircraft. The alternatives also include analyses that address the RPZ deficiencies and actions.

## 5.1 Alternative 1: No Action – Using Existing Aviation Facilities.

The "No Action" alternative consists of allowing the airport to remain in its current condition; no new facilities or improvements would be added. The No Action Alternative would result in short-term financial savings and prevent any negative environmental or socioeconomic impacts potentially associated with the proposed activities. Runway 13-31's RSA, ROFA, and RPZ would remain deficient, would not meet FAA Order 5200.8, and the safety of aircraft, pilots, and persons on the ground would remain in jeopardy. The No Action Alternative would have no discernible environmental impact; however, it would have potentially negative impacts on the regional economy and transportation system. This alternative was retained for further analysis.

## 5.2 Alternative 2: Provide the Full Runway 31 Runway Safety Area.

This alternative would provide the full 1,000-foot RSA at the end of Runway 31 by lowering U.S. Highway 67 and its outer roadways. A bridge deck with soil embankment would be constructed to capture the full RSA. The Runway 13 RSA currently extends 1,000 feet and thus meets FAA standards. Southeast of Runway 31, the RSA's first obstruction is the airport perimeter fence at 507 feet, immediately followed by Highway 67. Then the Runway 31 RSA extends over an open field followed by a shopping center and residential area. This alternative would have low biological and ecological impact because most of the impacted areas are already developed. This alternative would be expected to have high social and economic impact due to disruption in traffic and dislocations of families and business. This alternative would require substantial property acquisition and subsequent displacement of many homes and businesses; and it would be cost-prohibitive. The cost of this alternative has a construction estimate of \$138 million. This alternative was not considered further in this EA because it is not practicable.

## 5.3 Alternative 3: Shifting Runway 13-31 Pavement 493 Feet.

This alternative proposes to shift Runway 13-31 to the northwest by removing 493 feet of pavement from the end of Runway 31 and adding 493 feet of pavement to the end of Runway 13. The shift would move the Runway 13 RPZ over commercial and residential property and the intersection of Ledbetter Drive and Westmoreland Road, thus increasing the incompatible land uses under the RPZ. Moreover, it would not achieve the FAA required ROFA, as the runway

shift would have to be 525 feet to achieve the ROFA. It would also require the relocation and recalibration of the instrument landing system (ILS) glideslope antenna, and the extension of the parallel Taxiway B. This alternative was not considered viable because the resulting RPZ would still include residences and businesses and therefore it does not meet the purpose and need of the project. For that reason, this alternative was not considered further in the EA.

## 5.4 Alternative 4: Improve Runway Protection Zone by Creating 400-Foot and 500-Foot Displaced Thresholds on Runway 13-31.

This alternative allows runway pavement to remain intact but utilizes displaced thresholds to change the declared distances allowed for take-off and landings. A displaced landing threshold would be placed 400 feet southeast of the end of Runway 13; and a 500-foot landing threshold would be placed northwest of the end of Runway 31. This would move both RPZs off the incompatible land uses, but it would artificially shorten the runway, and impact two of four declared distances used by pilots for take-offs and landings: the take-off run available (TORA) and landing distance available (LDA). While the take-off distance available (TODA) and accelerate-stop distance available (ASDA) would remain unchanged, the TORA would be reduced from 6,451 feet to 6,081 feet, reducing the take-off run calculation by 370 feet. The LDA would be reduced to 6,051 feet. This alternative would primarily impact take-off calculations by pilots of large business jet aircraft greater than 60,000 pounds. Any runway length below 6,000 feet would likely impact operation so as to prohibit some operators from regularly using KRBD. This alternative would have no discernible environmental or social impacts. It would provide for the full RSA for Runway 31 through the implementation of declared distances, but limit the runway operationally for certain aircraft. It is anticipated that some airport users currently based at the airport would transfer to other facilities if declared distances were implemented and the runway length was limited operationally. This alternative was retained for further analysis.

# 5.5 Alternative 5a&b. Improve Runway Safety Area by Creating 97-Foot or 125-Foot Displaced Threshold on Runway 31.

There are two alternatives that utilize declared distance options without physically shifting the runway.

5a. This alternative would displace the landing threshold on Runway 31 by 97 feet to meet the 600-foot prior to landing threshold airport design requirement for Runway 31. It would not provide the required 1,000 feet of RSA for the departure end of Runway 13. This alternative would require the replacement of existing lead-in lights with a medium intensity approach lighting system (MALS) on Runway 31. It would reduce the ASDA and LDA on Runway 13 to 5,958 feet in length and it would reduce the Runway 31 LDA by 97 feet, and requires the relocation of the glideslope antenna. However, this alternative does not resolve the RPZ issues, as the Runway 13 RPZ would still extend off airport property and over commercial uses, and the Runway 31 RPZ would still extend beyond airport property and include commercial and residential properties. It also does not

- provide a fully compliant ROFA. This alternative was retained for further analysis.
- 5b. This alternative is identical to alternative 5a except that it would displace the landing threshold on Runway 31 by 125 feet, thereby reducing the Runway 13 ASDA and LDA to 5,926 feet. It would also shorten the Runway 31 LDA to 6,326 feet. This alternative considers the possibility that the FAA would require the full 1,000-feet of ROFA to be provided on the departure end of Runway 31. This alternative would have no discernible environmental impact, but would result in a reduction of the ASDA below 6,000 feet which would pose significant operational and economic impact on existing airport users. This alternative was retained for further analysis.

## 5.6 Alternative 6a&b: Shift Runway 13 by 535 Feet and Create a Displaced Threshold on Runway 31.

- 6a. This alternative proposes extending Runway 13 by 535 feet and displacing the landing threshold on Runway 13 by 97 feet to maintain the ASDA and LDA at 6,493 feet. The runway pavement extension would occur on relatively flat ground, but the required Taxiway B pavement extension would require earthwork to bring the ground to the desired elevation. This alternative would require the relocation of the localizer antenna and the installation of a new MALS on Runway 31 end. This alternative would also increase the available length of ASDA, LDA, TORA, and TODA for Runway 31, but does not completely resolve the approach RPZ issues over incompatible land uses. Extending the runway would have minor environmental impacts, as land that is somewhat in a natural state would be converted to pavement and maintained grass. This alternative was retained for further analysis.
- 6b. This option is identical to option 8a above except that it displaces the landing threshold on Runway 13 by 125 feet. This option would meet the ROFA requirement for a full 1,000-foot beyond runway end of Runway 31. It would have the same environmental impacts as Option 6a. This alternative was retained for further analysis.

## 5.7 Alternative 7: Shift Runway 13 by 685 Feet and Create a 97-Foot Displaced Threshold on Runway 31.

This alternative is similar to 6a above, with the exception that it proposes a 685-foot runway length shift on Runway 13 and a 97-foot displaced threshold on Runway 31. It would include a 1,085-feet extension of Taxiway B parallel to Runway 13. This would shift the Runway 13 RSA to the current property line. This alternative would not meet the FAA's ROFA design standard. The resultant ASDA and LDA for Runway 31 would be 6,643 feet, an increase of 100 feet. Moreover, the Runway 31 ASDA and LDA would exceed 7,000 feet. Like several of the previous alternatives, it would require the replacement of the Runway 31 lead-in lights with a MALS, and the relocation of the localizer antenna. It also results in an increased area of

incompatible uses within the shifted RPZ on Runway 13. This alternative would have the same environmental impacts as Alternative 6a and 6b. This alternative was retained for further analysis.

# 5.8 Alternative 8: Create a 100-Foot Displaced Threshold and Engineered Materials Arresting System (EMAS) on Runway 31.

This alternative proposes using an engineered compressible concrete material that is placed beyond the Runway 31 end for the purpose of safely stopping an aircraft overrun. EMAS is not considered a substitute for aircraft undershoots, so 600 feet of RSA is still necessary prior to the Runway 13 and Runway 31 landing thresholds. Therefore, a 100-foot displaced landing threshold would be required for Runway 31. The FAA considers the installation of EMAS as an acceptable substitute to providing the full departure end of the RSA. It is designed to minimize the potential for structural damage to the aircraft by exerting predictable deceleration forces on the landing gear as the EMAS material crushes. The proposed EMAS system would consist of a 265-foot by 170-foot surface, leading into a 235-foot by 170-foot EMAS bed. To allow for emergency equipment, an area 500 feet long by 200 feet wide would be prepped and stabilized. This alternative would serve as the full 1,000-foot RSA for Runway 31 without reducing the length of the runway. This alternative would have slightly greater environmental impacts than Alternative 7 due to the land clearing for the construction of the EMAS system. This alternative was retained for further analysis.

# 5.9 Alternative 9: Combination Approach of Shifting Runway 13 by 685 Feet and Creating Displaced Thresholds (The Proposed Alternative).

This alternative combines previously described alternatives to meet RSA, ROFA, and RPZ standards. The alternative proposes to shift Runway 13 by 685 feet northwest and displace the Runway 13 threshold by 1,085 feet and the Runway 31 threshold by 500 feet. These changes would shift both approach RPZs away from incompatible land uses. It would require the extension of Taxiway B on the Runway 13 end and the relocation of navigational aids, visual approach aids, and runway and taxiway lighting. This is the proposed alternative. This alternative best meets the FAA's goal of eliminating incompatible land uses within the RPZ. This alternative would have the same environmental impacts as Alternative 6a and 6b. This alternative was retained for further analysis.

# 5.10 Alternative 10: Combination Approach of Shifting Runway 13 by 685 Feet and Installing EMAS.

Alternative 10 is similar to Alternative 9, except that instead of creating a displaced threshold on Runway 31, EMAS would be installed as described in Alternative 8. The use of EMAS would increase the ASDA and LDA distances and allow the end of Runway 31 to provide the full 1,000-foot equivalent RSA. This alternative would have similar environmental impacts as Alternative 8. This alternative was retained for further analysis.

## 5.11 Summary

Some of the above alternatives are not practicable due to cost or because they would not meet the airport's purpose and need. Alternative 2, realigning the runways, would not improve the runway system, would be prohibitively expensive due to the required carthwork, and would disturb large areas of undeveloped land. Alternative 3 (runway shift) would not meet the airport's purpose and need because it would move Runway 13's RPZ over more incompatible land uses. For these reasons, Alternatives 2 and 3 were not considered further in the EA.

The remaining alternatives can be divided into groups based on potential environmental impacts. The first group includes alternatives with no runway shifts. Alternatives 4, 5a, and 5b rely solely on declared distances and displaced thresholds to address the airport's RSA and RPZ deficiencies. These alternatives involve a minimal amount of construction because creating a displaced threshold would not require earthwork. Because the environmental impacts of these alternatives are identical, Alternatives 4, 5a, and 5b were assessed together.

The second group includes alternatives that shift Runway 13 in addition to creating displaced thresholds. These include Alternatives 6a, 6b, 7 and 9. These alternatives involve a minor amount of disturbance associated with clearing, grading and paving to shift Runway 13 by 535 or 685 feet and the extension of Taxiway B. Because the environmental impacts of these alternatives are nearly identical, Alternatives 6a, 6b, 7 and 9 were considered together. This group includes the proposed action, Alternative 9.

The third group, consisting of Alternatives 8 and 10, include a combination of actions that 1) shift Runway 13; 2) create displaced thresholds; and 3) construct an EMAS on Runway 31. Because the environmental impacts of these alternatives are nearly identical, Alternatives 8 and 10 were assessed together.

In summary, the EA considered the following groups of alternatives listed below:

- 1. No Action
- 2. Displaced Thresholds Only (Alternatives 4,5a and 5b)
- 3. Runway 13 Shift (Alternatives 6a, 6b, 7 and 9)
- 4. Runway 13 Shift and EMAS (Alternatives 8 and 10)

## 6. ENVIRONMENTAL CONSEQUENCES

The environmental impacts, if any, of the proposed alternatives were examined in the EA according to the FAA Orders 5050.4B and 1050.1F. The environmental impacts of the No Action and the Proposed Action alternatives are presented in this section.

A number of resources will not be impacted by implementation of the proposed action and will not be further discussed in detail in this Finding of No Significant Impact (FONSI). These categories include: Coastal Resources; Department of Transportation Act, Section 4(f); Farmlands; Compatible Land Use; Socioeconomic Impacts, including Environmental Justice and

Children's Environmental Health and Safety Risks; Natural Resources and Energy Supply; and Wild and Scenic Rivers. Implementation of the proposed action has the potential to impact the following resource categories:

## 6.1 Air Quality

- 6.1.1 No Action Alternative Implementation of the No Action alternative would not prevent the continued growth of air traffic and its related atmospheric emissions. Most aircraft users would continue to use KRBD without the proposed or alternative upgrades. Any aircraft users that could not be accommodated as a result of selecting the No Action alternative would likely transfer to another airport still within the Dallas/Fort Worth metroplex where emissions would continue to be released.
- 6.1.2 Runway 13 Shift Alternatives (Includes Proposed Alternative) Implementation of these alternatives would reduce the amount of runway available to aircraft for landing (LDA) on Runway 13 to below 6,000 feet. These alternatives would have a greater likelihood of impacting the number of business jet aircraft using the airport than the Displaced Threshold Only alternatives. These alternatives mean some aircraft will have steeper take-off and landing. Implementation of the Proposed Alternative is not expected to cause an increase in operations, compared to the No Action Alternative. Overall air quality in the region would not be impacted by implementation of these alternatives. A construction emissions inventory was completed for the Proposed Alternative. Construction emissions are not anticipated to exceed air emission thresholds of 100 tons per year (tpy) for VOCs and 100 tpy for NO<sub>x</sub> according to CAA General Conformity Rule from the USEPA. Due to the fact this project will be completed in phases over three years, we do not expect to exceed air emissions thresholds.

## 6.2 Fish, Wildlife, and Plants (Biological Resources)

- 6.2.1 No Action Alternative Implementation of this alternative would create no impacts on fish, wildlife or plants because no construction would take place.
- 6.2.2 Runway 13 Shift Alternative (Includes Proposed Alternative) Implementation of these alternatives would result in the disturbance of a grassy area that is presently mowed and maintained. A 3.6-acre area of grass at the end of Runway 13 would be converted to pavement to accommodate the proposed runway and taxiway extension. Additionally, 19.9 acres of trees would need to be removed to meet FAA requirements regarding the ROFA and glideslope critical area. The removal of any trees listed on the City of Dallas protected tree list would be mitigated for in accordance with a City of Dallas approved mitigation plan. Tree clearing will be performed in accordance with a City of Dallas approved tree protection plan, which will include the use of construction fencing denoting the limits of construction to ensure only the necessary trees will be removed. Implementation of these alternatives could minimally impact small wildlife such as moles, shrews, rabbits, and birds that may presently use the mowed and treed area.

Implementation of these alternatives would not be expected to impact fish. If

clearing of the treed area will occur during the migratory bird nesting period, a certified biologist will conduct surveys prior to clearing to ensure birds and nests are not disturbed. No threatened, endangered, or candidate species are believed to utilize the project area, although potential habitat for the American peregrine falcon and the timber/canebrake rattlesnake is located within the project area. The American peregrine falcon is a potential migrant through the area, but does not breed or winter in the area so if the species did utilize the project area, impacts to this species would not be expected. The timber/canebrake rattlesnake is a habitat generalist but prefers wooded areas and habitats with dense groundcover. While there is wooded habitat within the proposed project area, dense groundcover is a narrow strip found along the transitional area between the maintained grass and wooded areas and wouldn't be sufficient to support the species. Based on the absence of preferred habitat, the species is not expected to utilize the proposed project area and therefore no impacts are expected.

#### 6.3 Climate

- 6.3.1 No Action Alternative Implementation of the No Action alternative would not prevent the continued growth of air traffic and its related atmospheric emissions. Most aircraft users would continue to use KRBD without the proposed or alternative upgrades. Any aircraft users that could not be accommodated as a result of selecting the No Action alternative would likely transfer to another airport still within the Dallas/Fort Worth metroplex where emissions would continue to be released.
- 6.3.2 Runway 13 Shift Alternatives (Includes Proposed Alternative) Implementation of these alternatives would reduce the amount of runway available to aircraft for landing (LDA) on Runway 13 to below 6,000 feet. These alternatives would have a greater likelihood of impacting the number of business jet aircraft using the airport than the Displaced Thresholds Only alternatives. These alternatives mean some aircraft will have a steeper take-off and landing. Implementation of the Proposed Alternative is not expected to cause an increase in operations, compared to the No Action Alternative. Overall air quality, including greenhouse gases, in the region would not be impacted by implementation of these alternatives. A construction emission inventory was completed and construction emissions are not anticipated to exceed air emission thresholds of 100 tons per year (tpy) for volatile organic compounds and 100 tpy for NO<sub>x</sub> set forth in the Clean Air Act General Conformity Rule established by the USEPA.

Based on FAA data, operations activity at KRBD, relative to aviation throughout the United States, represents less than 1% of U.S. aviation activity. Therefore,

assuming that greenhouse gases occur in proportion to the level of activity, greenhouse gas emissions associated with existing and future aviation activity at KRBD would be expected to represent less than 0.03% of U.S.-based greenhouse gases. Therefore, we would not expect the emissions of greenhouse gases from this project to be significant.

#### 6.4 Land Use

- 6.4.1 No Action Alternative Implementation of the No Action alternative would do nothing to address the runway deficiencies that currently exist on Runway 13-31. These deficiencies consist of RPZs and RSAs that extend over areas considered incompatible with aircraft takeoffs and landings. Implementation of this alternative would result in the continued existence of incompatible land uses under the RPZ and RSA of Runway 13-31.
- 6.4.2 Runway 13 Shift Alternatives (Includes Proposed Alternative) Implementation of these alternatives would reduce the extent of incompatible land uses under the RPZ and RSA of Runway 13-31. A fully compliant RSA and ROFA can be met through the shifting of the Runway 13 end and displacing the Runway 13 and 31 thresholds as described in the EA, and implementing declared distances. The declared distances allow the RPZ on both runway ends to "move in" toward airport property reducing non-compatible land use.

## 6.5 Noise and Noise Compatible Land Use

- 6.5.1 No Action Alternative Implementation of this alternative would create no impacts on noise contours because no changes to the existing runways would occur.
- 6.5.2 Runway 13 Shift Alternative (Includes Proposed Alternative) Implementation of these alternatives would lengthen the 65 annualized day/night average sound level (DNL) contours by the amount of the runway extension (i.e. 535 or 685 feet). The Proposed Alternative would increase the length of the 65 DNL contour by approximately 685 feet; however, the 65 DNL contour remains entirely within airport property. Implementation of the Proposed Alternative is not expected to cause an increase in operations, compared to the No Action Alternative. Therefore, there are no significant noise impacts expected to result from the preferred alternative.

## 6.6 Light Emissions (Visual Effects)

6.6.1 No Action Alternative- Implementation of this alternative would create no impacts on light emissions because no changes to the existing lighting would occur.

Runway 13 Shift Alternative (Includes Proposed Alternative) - Implementation of these alternatives would increase the number of runway and taxiway lights along

the additional 685 feet of runway and 1,085 feet of taxiway. This increase in lighting would not in itself cause interference with normal activities, because most of the airport is presently surrounded by trees that mitigate light impacts to the surrounding neighborhoods.

## 6.7 Surface Waters (Water Resources)

- 6.7.1 No Action Alternative Implementation of the No Action alternative would have no impact on water quality because no runway construction would take place that involves disturbing or moving earth, or removing vegetation. Other sources of water pollution would not be expected to increase or decrease if this alternative was implemented.
- 6.7.2 Runway 13 Shift Alternative (Includes Proposed Alternative) Implementation of these alternatives could result in short-term water quality degradation due to devegetation and earthwork associated with shifting the Runway 13 end and extending the parallel taxiway. Impacts would typically be associated with suspended solids inadvertently entering streams during runoff events. To minimize and mitigate possible impacts to water quality, stormwater best management plans (BMPs) would be implemented, as required in a construction Storm Water Pollution Prevention Plan (SWPPP). The specific BMPs are designed to prevent waterborne solids from entering the stream; and work would not begin on the project until the SWPPP is prepared. Some long-term impacts to water quality could also occur due to the conversion of approximately 3.6 acres of mowed and maintain grass to impervious surface, which could increase runoff intensity and the risk of erosion and pollutant transport.

Implementation of these alternatives would not require that any natural stream channels be rerouted. However, there is a culverted stream that runs under the end of Runway 13. The culverted portion of stream that extends under the end of Runway 13 will be extended with the proposed construction width of Taxiway B. Nationwide Permit 14, Linear Transportation Projects, allows for impacts to streams without submittal of a Preconstruction Notification (PCN) if the impacts do not exceed 1/10 of an acre of stream impacts. Additionally, the culverted section of the drainage channel located southwest of the existing glideslope antenna will also be extended to allow for the FAA required glideslope critical area, based on the proposed glideslope antenna relocation. Nationwide Permit 18, Minor Discharges, allows for impacts to streams without submittal of a PCN if the impacts do not exceed 10 cubic yards of material placed below the ordinary high water mark (OHWM) of the stream. Impacts of less than 1/10 acre or less than 10 cubic yards are considered to be minimal and therefore do not require coordination with the USACE; however, a letter was submitted to the USACE requesting confirmation and the USACE indicated they do not provide confirmation for projects without a permit application. As shown in Table 6-2 of the attached EA, the proposed impacts will be no more than 0.022 acres or 9.6 cubic yards, less than the 1/10 of an acre or 10 cubic yard trigger for a PCN to the

USACE. Although a PCN is not required, the project will still be required to abide by the requirements of NWP 14 and NWP 18.

## 6.8 Cumulative Impacts

Consideration of potential cumulative impacts applies to those impacts resulting from implementation of the Proposed Action. The consideration of cumulative impacts addresses the potential for individually minor but collectively significant impacts to occur over time.

Council on Environmental Quality (CEQ) Regulations, Section 1508.7, define cumulative impacts as the incremental impacts of the action when added to the past, present, and reasonably foreseeable future actions regardless of the agency (federal or non-federal) undertaking such actions. The Proposed Action in combination with other foreseeable future projects in the indirect study area would not reach or exceed thresholds of significance.

## 7. PUBLIC INVOLVEMENT AND AGENCY COORDINATION

#### 7.1 Public Involvement

Under 40 CFR §1501.4, federal agencies are required to involve environmental agencies, applicants, and the public, to the extent practicable, in preparing an EA. Following release of the Draft EA document, an open house and public hearing were held to present and receive input on the findings presented in the Draft EA. The primary components of the agency coordination and public involvement program for the EA included:

- The Notice of Availability (NOA) for the Draft Environmental Assessment (DEA) was published in the *Dallas Morning News* and in Spanish in *Al Dia Dallas*, on September 4, 2016.
- The DEA was provided for public viewing at the Hampton-Illinois Branch Library, 2951 South Hampton Road; Polk-Wisdom Branch Library, 7515 Library Lane; Thurgood Marshall Recreation Center, 5150 Mark Trail Way; and the Dallas Executive Airport located at 5303 Challenger Road.
- The DEA was provided on the Dallas Executive Airport's website, www.dallesexecutiveairport.com, on September 4, 2016.
- An open house and a public hearing were held on October 6, 2016. The 30-day Public Comment Period ended on October 17, 2016. Four written comments and two verbal comments were received.

## 7.2 Agency Coordination

Agency consultation was conducted by the FAA and City of Dallas Department of Aviation (DOA) to explain the Proposed Action and solicit comments and questions. All coordination has been documented in the EA. The following agencies were consulted by the City of Dallas Department of Aviation as part of the Draft EA development and Section 106 process:

- Texas Historical Commission in its role as State Historic Preservation Officer
- U.S. Army Corps of Engineers
- Texas Commission on Environmental Quality (TCEQ) Water Quality Division
- City of Dallas
- U.S. Fish and Wildlife Service

### 8. CONDITIONS AND MITIGATION

As prescribed by 40 CFR §1505.3, the FAA shall take steps as appropriate to the action, such as through special conditions in grant agreements, property conveyance deeds, releases, airport layout plan approvals, and contract plans and specifications and shall monitor these as necessary to assure that representations made in the EA and FONSI will be carried out. Specific conditions of approval associated with this project are listed below:

- Construction activities would be subject to requirements of the Texas Pollutant Discharge Elimination System General Permit to Discharge Wastes (TXR150000) for construction sites and the Airport's established Stormwater Pollution Prevention Plan (SW3P) and an approved City of Dallas Tree Protection Plan for the site.
- A certified biologist will conduct nest surveys prior to tree clearing to ensure birds and
  nests are not disturbed. Should any active nests be identified, the trees will be clearly
  marked and fenced using construction fencing to identify and protect the trees with nests.
  Marked trees will not be disturbed until the nestlings have fledged.
- Mitigation measures shall be incorporated into the project to include use of BMPs during construction to minimize erosion and sedimentation; controlling runoff; and controlling waste and spoils disposal to prevent ground contamination.
- Mitigation measures shall be incorporated into the project to include use of BMPs during construction to minimize fugitive dust and to minimize mobile and stationary emissions sources.

#### 9. FINDINGS

Throughout the development of the airport, including the proposed improvements described above, the FAA and TxDOT-AVN have made every effort to adhere to the policies and purposes of NEPA, as stated in CEQ Regulations for Implementing NEPA, 40 CFR §1500-1508. The FAA and TxDOT-AVN have concentrated on the truly significant issues related to the action in question. The FAA and TxDOT-AVN determined that the Proposed Action is in compliance with FAA Order 1050.1F 6-3.b(2), and is consistent with community planning as documented in the Master Plan (City of Dallas 2015 Dallas Executive Airport Master Plan). In its determination whether to prepare an Environmental Impact Statement (EIS) or process the EA as a FONSI, the

FAA and TxDOT-AVN weighed its decision based on an examination of the EA, comments from Federal, state, and local agencies, as well as all other evidence available to the FAA.

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of NEPA and other applicable environmental requirements. I also find the proposed Federal action, with the required mitigation referenced above, will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to section 102(2)(C) of NEPA. As a result, FAA and TxDOT-AVN have determined that preparation of an EIS is not necessary for this proposed action and is therefore issuing this FONSI.

Sloce Date: 5/22/17

Date: 5/23/2017

RECOMMENDED	
FOR	APPROVAL:

Ben Guttery

Manager, Texas Airports

District Office

APPROVED:

Ignació Flores

Director, Office of Airports

Southwest Region

APPROVED:

Dave Fulton

Division Manager

TxDOT-AVN

## DECISION AND ORDER

Runway Shift and Other Improvements
Dallas Executive Airport
Dallas County, Texas

## May 2017

The FAA has identified Alternative 9: Combination Approach of Shifting Runway 13 by 685 Feet and Creating Displaced Thresholds as the FAA's preferred alternative. FAA must now select one of the following courses of action:

- a. Approve agency actions necessary to implement the Proposed Project, or
- b. Disapprove agency actions to implement the Proposed Project.

Approval would signify that applicable federal State Block Program requirements relating to airport development and planning have been met and would permit:

- Shifting the Runway 13 endpoint by 685 feet northwest and all associated improvements (including grading and drainage improvements).
- Displacing the Runway 31 threshold by 500 feet to the northwest.
- Displacing Runway 13 threshold by 1,085 feet to the northwest and implementing declared distances.
- Restriping Runway 13 to narrow the runway from 150 feet to 100 feet wide with 25 feet paired shoulders.
- Extending Taxiway B to the shifted Runway 13 end.
- Relocating the localizer, glideslope, runway lighting, and automated surface observation system (ASOS); replacing the visual approach slope indicator (VASI); and installing a new precision approach path indicator (PAPI) at RW 13-31.

Not approving these agency actions would prevent the Proposed Action from being implemented.

I have carefully considered the FAA's goals and objectives in relation to the various aeronautical aspects of the Proposed Project as discussed in the EA. The review included: the purpose and need that this project would serve; the alternative means of achieving the purpose and need; the environmental impacts of these alternatives; and mitigation of impacts.

Under the authority delegated by the Administrator of the FAA and the authority granted to the State of Texas under the State Block Grant Program, the undersigned find that the Proposed

Action, shift of Runway 13-31 and other improvements, is reasonably supported. Therefore, the following agency actions, discussed more fully in the FONSI, are directed to be taken including:

- 1. The FAA directs that actions be taken to:
  - A. Carry out the federal environmental approval necessary to proceed with processing an application for Federal funding of those development items qualifying under 49 USC 47101 et seq. for the implementation of the Proposed Action as described in the EA and FONSI. Any such FAA grant approved for implementation of the Proposed Action shall be subject to acceptance by the sponsor of the various conditions of approval, particularly those related to the development of mitigation measures identified in the approved EA/FONSI;
  - B. Revise or amend under provisions of 49 U.S.C. 40103, all necessary air traffic procedures to accommodate the Proposed Action, including:
    - a. Runway 13 Conventional Obstacle Departure Procedure (ODP);
    - b. Runway 31 arrival Area Navigation (RNAV) Global Positioning System (GPS) Procedure;
    - c. Runway 31 arrival conventional procedure
  - C. Relocate the localizer, glideslope, runway lighting, and automated surface observation system (ASOS); replace the visual approach slope indicator (VASI); and install a new precision approach path indicator (PAPI) at RW 13-31.
- 2. TxDOT-AVN directs that actions be taken to:
  - A. Provide unconditional approval of the portion of the Airport Layout Plan (ALP) depicting the Proposed Action as described within Section 3 of the EA.
  - B. Make determinations under 49 U.S.C. Sections 47128 relating to the authority of the State to administer the State Block Grant Program including funding determinations in accordance with 14 CFR Part 156 and 49 USC §§47106 and 47107.

The FAA and TxDOT-AVN have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, FAA and TxDOT-AVN find the proposed Federal and State Block Grant actions are consistent with existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental requirements. The FAA and TxDOT-AVN also find the proposed Federal and State Block Grant action will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to section 102(2)(C) of NEPA. As a result, FAA will not require an EIS for this action.

The undersigned, therefore, now approve and direct action as needed, to carry out our respective agency actions outlined above under Proposed FAA Actions and State Actions required for the

shift of Runway 13-31 and associated improvements described under the Proposed Action in the EA and this FONSI/ROD. These actions are directed to be taken, and determinations and approvals are made, under the authority of 49 U.S.C. §§40104, 40103, 40113, 44502, 46110, 47101, 47105, 47106, 47107, 47120, 47122, and 47128.

Ignacio Flores

Director, Office of Airports

Southwest Region

5/23/2017

Dave Fulton

Division Manager

TxDOT-AVN

## Right of Appeal

This order constitutes final agency action and order of the Administrator under 49 U.S.C. 46110. Any party having a substantial interest may appeal this order to the United States Court of Appeals for the District of Columbia Circuit or in the court of appeals of the United States for the circuit in which the person resides or has its principal place of business, upon petition, filed within 60 days after entry of this order.