



U.S. Department
of Transportation
**Federal Aviation
Administration**

Federal Aviation Administration
Southwest Region, Airports Division
Texas Airports Development Office

FAA-ASW-650
2601 Meacham Boulevard
Fort Worth, Texas 76137

May 18, 2015

Mr. Larry Brown
Director of Aviation
Brownsville South Padre
International Airport
700 Amelia Earhart Drive
Brownsville, TX 78521

Subject: Environmental Assessment for New Passenger Terminal, Brownsville South Padre
Island International Airport, Brownsville, TX

Dear Mr. Brown,

Enclosed please find a copy of the completed environmental Finding of No Significant Impact (FONSI) for the proposed New Passenger Terminal, Brownsville South Padre Island International Airport, Brownsville, TX. The FONSI should be attached to the Final Environmental Assessment (FEA) to form the completed FONSI.

If the City of Brownsville intends to follow through with the project as planned, you are requested to announce the availability of the FONSI by way of legal notice or other suitable announcement. The announcement should be similar to the following:

The Federal Aviation Administration (FAA), Southwest Region, after careful and thorough consideration of all facts and after coordination with appropriate local, state, and Federal agencies approved on May 19, 2015, an environmental Finding of No Significant Impact (FONSI) for the proposed construction and operation of the new passenger terminal at Brownsville South Padre Island International Airport, Brownsville, TX. The FONSI is available at the Airports Division, Texas Airports Development Office, FAA Southwest Region, 2601 Meacham Blvd, Room 692, Fort Worth, Texas 76137. Copies of the FONSI are also available at _____ and online at _____ (supply local city offices and website [if possible, but not necessary] where the FONSI will be available for review).

Please provide our office a copy of the notice after publication in at least one newspaper of general circulation for the project area.

Thank you for your cooperation in this matter. If you need any additional assistance, feel free to contact me at 817-222-5681 or at john.macfarlane@faa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "John MacFarlane", written in a cursive style.

John MacFarlane
Environmental Protection Specialist
Texas Airports Development Office

Enclosure

cc: Jerry Farrar, CH2M Hill

U.S. Department of Transportation
Federal Aviation Administration
Southwest Region

FINDING OF NO SIGNIFICANT IMPACT

New Passenger Terminal

Brownsville South Padre Island International Airport
Brownsville, TX

May 2015

1. PURPOSE AND NEED

1.1 Background

The Brownsville South Padre Island International Airport (BRO) is in the city of Brownsville, Texas, about 4 miles east of downtown, in Cameron County. Brownsville is located in the southernmost section of Texas with the Rio Grande River forming the southern boundary of the city, with Mexico and the city of Matamoros south of the river. Major roadways close to the airport include State Highway 4 (Boca Chica Boulevard) to the north and Billy Mitchell Boulevard (Farm to Market 2519) to the west. Billy Mitchell Boulevard provides access to the surface parking and terminal.

1.2 Purpose and Need

Pursuant to the National Environmental Policy Act (NEPA) and FAA Orders 1050.1E 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.

1.2.1 Purpose of the Proposed Project

The purpose of the Proposed Action is to replace the existing terminal with a new terminal that meets modern operational requirements and allows for forecasted growth in operations over the 20-year planning horizon.

1.2.2 Need for the Proposed Project

The following sections describe the need for the project, including deficiencies at the current terminal and the forecasted growth at the airport. These needs include:

- Terminal size, ramp size, and facilities do not meet current requirements for domestic and international arrivals and departures.

- Projected growth at BRO will increase the demand on the existing facilities, which will continue to not meet passenger needs.
- The layout and size of the current terminal will limit potential growth at BRO, including the potential for adding scheduled international flights.

2. PROPOSED ACTION AND FEDERAL ACTION

2.1 Proposed Action

The Proposed Action includes the following primary components:

- New passenger terminal
- Expanded apron
- Terminal parking
- Closure of Amelia Earhart Drive; construction of new south service access road
- Demolition of existing terminal building

These components are shown in Exhibit 2-1 of the attached EA. The construction of the Proposed Action would be phased to allow the existing terminal and apron to remain operational during construction. Adequate parking would be provided at all times during construction. A 5-phase construction process is proposed.

2.2 Requested Federal Action

The requested FAA actions include the following:

- FAA unconditional approval of the Airport Layout Plan reflecting the Proposed Action
- Potential issuance of Airport Improvement Program grants for construction

3. ALTERNATIVES

A range of alternatives has been considered to meet the needs identified in Chapter 3 of the attached EA. These alternatives include ways to achieve the stated purpose and need that are within the sponsor's or FAA's purview, as well as those outside the FAA's jurisdiction. Alternatives within the purview of the FAA and the City of Brownsville include the expansion of the existing BRO terminal or construction of a new terminal. Other types of alternatives, such as the use of other modes of transportation that may reduce the need for improvements at BRO, are not within the control of the City of Brownsville or the FAA.

3.1 Alternatives Eliminated from Detailed Consideration

- Replacing the Airport – This alternative would entail substantially greater environmental, social, and/or economic costs than the Proposed Action.

- Using Another Airport – Other airports that provide similar service are farther from the key destinations that BRO serves and would require out-of-direction travel for those seeking to travel to the Brownsville South Padre Island area.
- Using Other Modes of Transportation or Communications – This alternative would not meet the purpose and need for the Proposed Action.

3.2 Alternatives Screening

The Terminal Area Master Plan evaluated a total of three alternatives, with two of those having two sub-alternatives each. These alternatives were selected based on the terminal building, airside, and landside requirements identified as part of the plan:

- Alternative 1 is the renovation and expansion of the existing terminal from 35,000 to 50,000 square feet (sq. ft). This would be accomplished by adding 20 to 40 feet to the front of the terminal and infilling bays on the north and east sides along with completely renovating and reconfiguring the existing areas. This alternative would require many phases of construction and demolition during which passengers and building operators would be inconvenienced and relocated. This concept would only work for the short-range needs of the airport. It would not be easily expandable in the future. Furthermore, this alternative would not allow the operation of commercial aircraft larger than the regional jets without penetration of the Part 77 surfaces, thereby limiting aircraft type and growth of the airport to meet the forecasted need.
- Alternative 2 is the construction of a new landside terminal building in the existing terminal parking area to the west. This building would contain new ticketing/check-in, baggage handling/screening, security screening, baggage claim, rental car, and landside concessions/amenities. The existing terminal would remain in operation during the construction of the new building, and in a phased construction the existing building would be converted to airside holdrooms and international arrivals. A new link would connect the landside and airside structures containing the arrivals corridor and outbound security queues and processing. This concept requires phased construction. However, this alternative would still restrict the operation to regional jet aircraft. A variation of this concept is to construct a complete new terminal to the west rather than retain the existing terminal for holdrooms and gates. This concept variation would be a complete terminal building containing all of the required facilities, and new holdrooms and boarding bridges and an expanded terminal apron and would allow the operation of larger commercial jets without penetrating the Part 77 surface.
- Alternative 3 is the construction of a complete new unit terminal in the area north of the existing terminal. This concept would allow the initial construction of a terminal to meet mid-term requirements, and the terminal could be expanded in the future to serve long-range needs. The existing terminal could be repurposed or demolished as required after operations are moved over to the new terminal. No construction phasing would be required, but the new terminal site would require removal of four existing buildings after existing tenants are relocated to other airport sites. It would also impact the operations of

the existing general aviation ramp and fixed-based operators. For a detailed description of the screening process, see Section 3.3 in the attached EA.

3.3 Alternatives Considered in Detail

3.3.1 No Action Alternative

The No Action Alternative must be considered in detail under NEPA and FAA orders. Under this alternative, no physical development requiring environmental review approvals under NEPA would be undertaken. The No Action Alternative would not be able to accommodate the same level of activity as the Proposed Action, and the lack of proposed terminal improvements would inhibit the ability of the airport to provide an acceptable level of service.

3.3.2 Proposed Action

Alternative 2B2, a variation of Alternative 2, would construct a two-level terminal with second-level holdrooms and gates. The initial phase of the 55,000 sq. ft. project would be sufficient for the mid-term 20 year forecasted demand. The Proposed Action also includes the expansion of the current terminal apron, relocated parking, closure of Amelia Earhart Drive, construction of new south service access road, and the demolition of the existing terminal building.

4. ENVIRONMENTAL CONSEQUENCES

FAA evaluated the potential impacts associated with the proposed action by following the guidance in FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *the National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions* in accordance with NEPA and Council on Environmental Quality (CEQ) regulations. FAA Orders require the evaluation of specific environmental impact categories. Chapter 5 of the EA provides an analysis of anticipated environmental impacts resulting from the proposed action. In accordance with NEPA, the FAA compared the proposed action alternative to the no build alternative in evaluating potential impacts.

A number of resources will not be impacted by implementation of the proposed action and will not be discussed in this Finding of No Significant Impact (FONSI). However, because implementation of the proposed action has the potential to impact the following resource categories, FAA's review is more detailed.

4.1 Noise

The potential for changes in noise exposure due to the Proposed Action was assessed based on forecasted changes to aircraft operations and fleet mix. The Proposed Action would allow for larger passenger aircraft to operate at the airport as compared to the No Action.

For projects in which the planned changes involve only operations and fleet mix (and not flight tracks, flight profiles, or airfield layout) the procedure for assessing noise exposure for an airport NEPA assessment is two tiered:

1. Conduct a noise screening analysis using the FAA's Area Equivalent Method (AEM) model. If a significant noise impact results, proceed to step 2.
2. Conduct detailed noise contour modeling and develop a noise exposure map using the FAA's Integrated Noise Model (INM).

AEM was used to compute the change in noise exposure for the Proposed Action as compared to the No Action Alternative, for both the build-year of 2018 and future year of 2028. Inputs to AEM were the daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) numbers of landing and takeoff cycles for each aircraft type in the forecast fleet mix. The output from AEM consisted of the area enclosed by the 65-decibels (dB) day-night average sound level (DNL) contour for the No Action Alternative and Proposed Action, and the percentage change in the contour area.

In 2018, the Proposed Action would not result in a significant noise impact. As shown in Table 5-2 of the attached EA, the Area Equivalent Model (AEM) analysis indicated a 1.8 percent increase in the area encompassed by the 65-dB DNL contour, which is less than the 17 percent threshold. Likewise in 2028, the Proposed Action would not result in a significant noise impact because the AEM analysis indicated a 4.0 percent increase in 65-dB DNL contour area. Therefore, there would be no significant impacts related to noise as a result of the Proposed Action. Additional information is provided in Appendix E of the attached EA.

4.2 Air Quality

As shown in Table 5-4 of the attached EA, in 2018, operational emissions associated with the No Action Alternative would range from 1 to 193 tons depending on the pollutant or pollutant precursor. With the Proposed Action, emission totals would range from 1 to 192 tons. When the emission totals with the Proposed Action are compared to totals with the No Action Alternative, the results indicate that the Proposed Action would increase emissions of NO_x and SO_x up to one ton while decreasing emissions of CO, VOCs, and PM up to one ton. These increases and decreases in emission totals are a direct result of projected changes to the total aircraft operations at BRO and changes to the aircraft fleet mix with the Proposed Action.

As shown in Table 5-5 of the attached EA, in 2028, operational emissions associated with the No Action Alternative would range from 1 to 187 tons depending on the pollutant or pollutant precursor. With the Proposed Action, emission totals would range from 1 to 185 tons. When the emission totals with the Proposed Action are compared to totals with the No Action Alternative, the results indicate that the Proposed Action would increase emissions of NO_x and SO_x up to two tons while decreasing emissions of CO, VOC, and PM up to one ton. These increases and decreases in emission totals are also a direct result of projected changes to the total aircraft operations at BRO and changes to the aircraft fleet mix with the Proposed Action.

The Proposed Action in 2018 and 2028 allows larger regional jets with more passenger seats to service BRO compared to the No Action Alternative, which reduces the number of aircraft operations needed to meet the forecasted passenger demand. By reducing the number of aircraft operations, emissions for CO, VOCs, and PM would decrease for the Proposed Action when

compared to the No Action Alternative for 2018 and 2028. All of the project-related changes in emissions are below the applicable *de minimis* levels.

4.3 Water Quality

The Proposed Action would be largely restricted to areas that are currently paved or are other developed impervious surfaces, and would not materially increase the amount or alter the nature of surface water runoff when compared to the No Action Alternative. The Proposed Action would require paving approximately three acres of currently undeveloped area. The additional impervious surfaces are currently mowed grass and landscaped areas. This would be an increase of less than 1 percent in impervious surfaces over existing conditions. The airport would be required to maintain standards specified in their National Pollutant Discharge Elimination System (NPDES) permits for discharges into public waters. The new impervious surface would not introduce any new contaminants that would require additional treatment that is not already part of the drainage system.

The overall increase in impervious surface would be minor, could be accommodated with the existing airport storm drainage system, and would not introduce new pollutants. Runoff from the new impervious areas would receive the same treatment as the other stormwater at the airport. The increased volume of passengers, aircraft, and surface vehicles would result in an increase in water usage and wastewater generation; however, the increases can be accommodated by the City of Brownsville and would not result in any significant impacts.

4.4 Hazardous Materials, Pollution Prevention, and Solid Waste

Prior to demolition of any existing buildings, the buildings would be inspected to determine whether there are any hazardous materials in any of the building components, such as asbestos or lead-based paint. If any hazardous materials are found, the appropriate measures would be implemented to remove and decommission identified hazards prior to demolition.

There would be low potential for encountering contaminated sites during construction because the database searches did not identify any sites in the Proposed Action area. Available guidance for handling of hazardous materials during construction would reduce the chances of hazardous material spills. For these reasons, the Proposed Action would not result in any hazardous waste impacts that exceed the threshold of significance.

4.5 Floodplain

A portion of the existing terminal and terminal apron are located within the 100-year floodplain. The new terminal associated with the Proposed Action moves the building to the west by about 75 feet. The new terminal would be located outside of the floodplain boundary and the existing terminal would be demolished and the apron expanded within the footprint of the demolished terminal. The Proposed Action does not result in any increases in impervious surfaces within the floodplain and would not result in any changes to the base flood elevation. The Proposed Action would not result in any impacts that exceed the threshold of significance.

4.6 Cumulative Impacts

To contribute to an adverse cumulative impact on a specific environmental resource, the Proposed Action must first generate some direct or indirect adverse environmental effect in that category. The analyses of environmental consequences presented in the attached EA determined that, although the Proposed Action would not have impacts on any environmental resource that exceed the threshold of significance, construction and/or operation of the Proposed Action would have adverse effects on some resources below these thresholds (see Table 5-8 of attached EA).

5. PUBLIC INVOLVEMENT

The Draft EA was announced by way of a Notice of Availability (NOA) and was available for review by the general public, government agencies, and interested parties beginning on March 17, 2015 for a period of 30 days. The NOA also provided notice for floodplain encroachment per Executive Order 11988. Demolition of the existing terminal and expansion of the terminal apron would occur within a regulated floodplain. The new terminal building will be outside of the regulated floodplain. The Draft EA was available online at <http://www.flybrownsville.com>. It was also available for review at the following locations:

- Brownsville South Padre Island International Airport, 700 Amelia Earhart Dr., Brownsville, TX 78521 – Office of Airport Director
- City of Brownsville – City Hall, 1001 E. Elizabeth St, Brownsville, TX 78520 – Office of the City Secretary
- Cameron County Courthouse – 964 E. Harrison Street, Brownsville, TX 78520 – Office of County Clerk
- City of Brownsville Public Library – 2600 Central Blvd, Brownsville, TX 78520

6. 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 State of Texas Stormwater Permit for Construction and BRO's established Stormwater Pollution Prevention Plan (SW3P).
- Mitigation measures shall be incorporated into the project to include use of best management practices (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.


- Prior to demolition of any existing buildings, buildings would be inspected for hazardous materials, such as asbestos or lead-based paint. If hazardous materials are found, the appropriate measures would be implemented to remove and decommission identified hazards prior to demolition.

7. FEDERAL FINDINGS

Throughout the development of the airport, including the proposed improvements described above, the FAA has 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 has concentrated on the truly significant issues related to the action in question. In its determination whether to prepare an Environmental Impact Statement (EIS) or process the EA as a FONSI, the FAA 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.

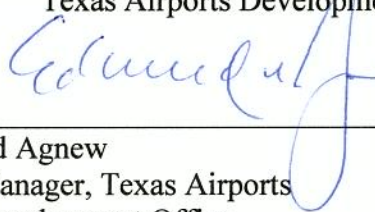
I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 and other applicable 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 has determined that preparation of an EIS is not necessary for this proposed action and is therefore issuing this FONSI.

RECOMMENDED
FOR APPROVAL:


John MacFarlane
Environmental Protection Specialist
Texas Airports Development Office

DATE: 5/10/15

APPROVED:


Ed Agnew
Manager, Texas Airports
Development Office

DATE: 5/18/15