

Baton Rouge Metropolitan Airport Supplemental Environmental Assessment Runway 13/31 Runway Safety Area and Runway Protection Zone Improvements *October 2022 - DRAFT*



Contents

1.	Introduction1-1
1.1	Airport Overview1-1
1.2	Proposed Action 1-1
1.3	Document Organization1-4
2.	Purpose and Need 2-1
2.1	Introduction
2.2	Purpose of the Proposed Improvements2-1
2.3	Need for the Proposed Improvements 2-2
2.4	Proposed Action
3.	Alternatives
3.1	Alternatives Development
3.2	Alternatives Screening 3-9
3.3	Alternatives Being Analyzed in this EA
4.	Affected Environment 4-1
4. 4.1	Affected Environment 4-1 Air Quality
4. 4.1 4.2	Affected Environment
4. 4.1 4.2 4.3	Affected Environment
4. 4.1 4.2 4.3 4.4	Affected Environment
4. 4.1 4.2 4.3 4.4 4.5	Affected Environment
4. 4.1 4.2 4.3 4.4 4.5 4.6	Affected Environment.4-1Air Quality.4-2Biological Resources (including Fish, Wildlife, and Plants)4-5Climate.4-6Coastal Resources.4-7Department of Transportation Act, Section 4(f)4-7Farmlands.4-7
4. 4.1 4.2 4.3 4.4 4.5 4.6 4.7	Affected Environment.4-1Air Quality.4-2Biological Resources (including Fish, Wildlife, and Plants)4-5Climate.4-6Coastal Resources.4-7Department of Transportation Act, Section 4(f)4-7Farmlands.4-7Hazardous Materials, Solid Waste, and Pollution Prevention.4-9
4. 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8	Affected Environment
4. 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9	Affected Environment.4-1Air Quality.4-2Biological Resources (including Fish, Wildlife, and Plants)4-5Climate.4-6Coastal Resources.4-7Department of Transportation Act, Section 4(f)4-7Farmlands.4-7Hazardous Materials, Solid Waste, and Pollution Prevention.4-9Historical, Architectural, Archaeological and Cultural Resources.4-12
4. 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 4.10	Affected Environment.4-1Air Quality.4-2Biological Resources (including Fish, Wildlife, and Plants)4-5Climate.4-6Coastal Resources.4-7Department of Transportation Act, Section 4(f)4-7Farmlands.4-7Hazardous Materials, Solid Waste, and Pollution Prevention.4-9Historical, Architectural, Archaeological and Cultural Resources.4-12Natural Resources and Energy Supply.4-13
4. 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 4.10 4.11	Affected Environment



4.13	Visual Effects			
4.14	Water Resources			
4.15	Past, Present, and Reasonably Foreseeable Future Projects			
5.	Environmental Consequences 5-1			
5.1	Summary of Consequences 5-1			
6.	Agency and Public Involvement			
6.1	Public Involvement and Agency Coordination Approach and Process 6-1			
7.	List of Preparers			
7.1	Lead Agency			
7.2	Principal Preparers			
8.	References			
Appendix A: Air Emissions Assessment				
Appendix B: Phase 1 Environmental Site AssessmentB				
Appendix C: Draft Biological AssessmentC				
Appendix D: Traffic Noise AssessmentD				
Appendix E: Wetlands Assessment E				
Appendix F: Land Acquisition and Relocation Assessment F				
Appendix G:Agency and Public InvolvementG				
Appendix H: Response to Comments				
H.1	Public Hearing Comments ReceivedH-1			



List of Tables

Table 3.1:	Level 2 Screening Results	3-10
Table 5.1:	Environmental Consequences Matrix	5-4
Table 6.1:	Draft EA Available Locations	6-2
Table 6.2:	SOV Responses Summary	6-3



List of Exhibits

Exhibit 1.1:	Airport Location	1-6
Exhibit 1.2:	Proposed Action	1-7
Exhibit 3.1:	Alternative 1 Plank Road Elevated	
Exhibit 3.2:	Alternative 2 Hooper Road Elevated	
Exhibit 3.3:	Alternative 3 Hooper Road Elevated and Plank Road Elevated	
Exhibit 4.1:	Study Area	
Exhibit 4.2:	Farmlands	
Exhibit 4.3:	Land Use	
Exhibit 4.4:	Land Acquisition Comparison	
Exhibit 4.5:	Wetlands	
Exhibit 4.6:	Floodplains	



1. Introduction

1.1 Airport Overview

Baton Rouge Metropolitan Airport (BTR) is owned and operated by the City of Baton Rouge and Parish of East Baton Rouge. The Airport is located five miles north of Downtown Baton Rouge in the northwest portion of East Baton Rouge Parish (see Exhibit 1.1, Airport Vicinity Map). The Airport is easily accessed from Interstate 110 via Veterans Memorial Boulevard. The overall area of the Airport property is approximately 1,250 acres, which includes approximately 700 acres dedicated to aviation operations and uses, located on land owned by the Baton Rouge Metropolitan Airport, including some parcels with runway access. The Airport maintains three active runways, an extensive taxiway system with 14 taxiways, and an airfield system comprised of associated aprons, hold pads and electronic and visual navigational aids (see **Exhibit 1.1: Airport Location**).

1.2 Proposed Action

The Airport initiated a Master Plan Update in 2015, which was approved by the Metropolitan Council of the City of Baton Rouge and Parish of East Baton Rouge in December 2016. The primary objective of the Master Plan Update was to develop a general guide for the orderly, timely, and logical development of BTR so that it can continue to serve the aviation needs and support the economic development of the Baton Rouge region for the next 20 years.

An Environmental Assessment (EA) was initiated for the original project in 2017, and the Federal Aviation Administration (FAA) issued a Finding of No Significant Impact (FONSI) on June 13, 2018, which approved various safety and efficiency projects to provide a standard Runway Safety Area and Runway Protection Zone for Runway 31 at the Baton Rouge Metropolitan Airport (Airport). The FONSI followed the EA, which was completed in April of 2018, and the finding was published on June 13, 2018.

Following the issuance of the FONSI in 2018, the Louisiana Department of Transportation and Development (LADOTD) raised additional concerns related to traffic levels in the project area. LADOTD identified several refined alternatives which provide added traffic safety and a reduction of existing traffic impacts in the area. These alternatives include a series of grade separations which eliminate traffic lights in several locations.



After a comprehensive analysis of the approved action from the 2018 FONSI and the new refined alternatives from LADOTD, the preferred alternative is the relocation of Plank Road utilizing grade separations at Plank and Hooper Roads – east of the Airport. The Supplemental EA Preferred Alternative is the elevation of Plank Road at Hooper Road and elevation of Hooper Road at New Plank Road as depicted in **Exhibit 1.2: Preferred Alternative**.

In order to provide clarity on the full array of project components which were analyzed in this Supplemental Environmental Assessment (SEA) as well the original Environmental Assessment (EA) for the Runway 13/31 Runway Safety Area (RSA) and Runway Protection Zone (RPZ) Improvements, this section provides supplemental details related to the elements of the project and the analysis performed associated with those project elements.

The EA and the SEA analyzed the following project components:

Airfield Improvement Projects:

- Property Acquisition of approximately three (3) acres of land should be acquired for positive control of the land within the RPZ
- A standard 1,000-foot RSA will be graded per Federal Aviation Administration (FAA) Circular 150/5300-13
- Demolition of the existing Engineered Material Arresting System (EMAS)
- Construction of a 200 x 200-foot blast pad in place of existing EMAS
- With the relocation of Plank Road, the landing threshold can be shifted to the end of the pavement, thereby adding 315 feet of Landing Distance Available (LDA) to Runway 31 operations
- Grading, drainage, airfield electrical, and pavement markings to accommodate the landing threshold shift
- Modification of FAA Navigational Aids associated with the threshold shift including:
 - Relocation and replacement of the Runway 13 Localizer Antenna Array/Distance Measuring Equipment (DME) and equipment shelter
 - Replacement of the Runway 31 Visual Approach Slope Indicator (VASI) with a Precision Approach Path Indicators (PAPI)
 - Relocation/replacement of the Runway 31 Medium Intensity Approach Lighting System (MALS) and addition of an Equipment Shelter
- Amended arrival procedures associated with the landing threshold shift including:
 - The Precision Final Approach Fix (PFAF) on the Area Navigation (RNAV) [GPS] RWY 31 will move straight out the final approach (Southeast) 325.06 ft, keeping the altitude of 1700 ft Mean Sea Level (MSL) as the crossing altitude; angle of 3 degrees and Threshold Crossing Height (TCH) of 52 ft will not change
 - The DME Values on the Instrument Landing System (ILS) or Localizer (LOC) RWY 13 may change based upon the LOC Shelter and DME antenna moving approximately one tenth of a nautical mile. The fixes will not move, the



course/ground tracks will not move, only the published DME values may require a new value to be published

- Circling area may be increased by 314 ft to the southeast of the current area, compensating for the threshold moving; preliminary evaluation revealed no increase in minima
- Amended departure procedures associated with the landing threshold shift including:
 - Instrument Flight Rules (IFR) Departure procedure for Runway 13; will have fewer penetrations listed as "Low Close-in" penetrations eliminating the following:
 - Runway 13, pole 300' from the Departure End of Runway (DER), 549' left of centerline, 22' Above Ground Level (AGL)/91' MSL.
 - Vehicles on roadway 342' from DER, left and right of centerline, up to 15' AGL/84' MSL

Landside Development and Improvement Projects:

- Obstruction Removal
- Property Acquisition of 55 parcels impacted by the proposed Right of Way: two (2) parcels with single family residential homes and 53 commercial/industrial parcels.
- Realignment of perimeter road and fence
- Realignment of Plank Road including construction of approximately 0.65 miles of new roadway and requires changes to the right of way for approximately 2.5 miles of roadway
- Construction of related Plank Road tie-in with existing Hooper Road
- Introduction of two elevated bridge structures to better accommodate traffic movements

Coordination with resource agencies for Solicitation of Views (SOV) included the overall project area for any concerns related to the entirety of the project including the location of relocated Navigational Aids. A total of 77 SOV letters were sent regarding this project for BTR and depicted the overall project area. A summary of the concerns received were published in the EA and are also published in this SEA and no significant impacts or resources were identified associated with any of the project elements.

Aircraft Noise Modeling for this project included the implications of the threshold shift. This modeling included: the modification of FAA Navigational Aids associated with the threshold shift; amended arrival procedures associated with the landing threshold shift. This resulted in the model departure procedures associated with the landing threshold shift. This resulted in the model - aircraft being lower by 18 feet along the arrival path when compared to the no action condition. The noise associated with aircraft being 18 feet lower along the flight path was modeled and found to be negligible. Any other NAVAID change or flight procedure change that did not change the geometry (location) or altitude of the aircraft remained consistent in the model between the no action and the proposed action conditions. The Runway 13 departures were modeled for the proposed action to begin at the existing Runway 13 end of pavement and included the threshold shift at the 31 end of the runway. Again, noise modeling found the change to be negligible.



It was determined through the analysis of the EA and SEA that there were no significant impacts from the proposed project. This included the overall project area and all proposed elements, including navaid relocations and noise impacts included in the overall Runway 13/31 RSA and RPZ project.

1.3 Document Organization

This Supplemental Environmental Assessment (EA) is organized into the following chapters:

Chapter 1: Introduction – This chapter provides an overview of the Airport, describes the Proposed Action that is EA evaluates, and outlines the organization of the EA.

Chapter 2: Purpose and Need – This chapter identifies the problem being addressed (i.e., need) and describes what the Baton Rouge Metropolitan Airport is trying to achieve with the Proposed Action (i.e., purpose).

Chapter 3: Alternatives – This chapter provides a description of the No Action Alternative and identifies each of the alternatives that this EA considers or eliminates from detailed analysis.

Chapter 4: Affected Environment – This chapter provides an overview of the existing environmental conditions in the areas that the Proposed Action may affect. It also identifies past, present, and reasonably foreseeable future actions that may contribute to cumulative impacts when considered in combination with the Proposed Action.

Chapter 5: Environmental Consequences – This chapter describes the potential environmental effects that the Proposed Action and each reasonable alternative would have on the affected environment. Pursuant to regulations and the Council on Environmental Quality (CEQ) guidance documents, this chapter also discusses cumulative effects. That discussion focuses on the effects that the Proposed Action would have on environmental resources, in combination with the effects of those resources from past, present, and reasonably foreseeable future actions. Where appropriate, this EA contains figures and tables to clarify the analysis presented in this chapter.

Chapter 6: Agency Coordination and EA Distribution – This chapter describes the coordination process associated with the development of the EA.



Chapter 7: List of Preparers – This chapter identifies the individuals who prepared, contributed to, and reviewed this EA.

Chapter 8: References – This chapter lists the references used in the development of this EA.

Appendices – The appendices contain relevant material, analyses, or technical reports used in preparing this EA.









PROPOSED ACTION



2. Purpose and Need

2.1 Introduction

The purpose of this Supplemental Environmental Assessment (EA) is to disclose the potentially significant environmental, economic and social impacts resulting from the implementation of the proposed Runway 13-31 Runway Safety Area (RSA) and Runway Protection Zone (RPZ) Improvements for Baton Rouge Metropolitan Airport (herein referred to as 'BTR' or 'Airport') by new alternatives which would also address roadway traffic flow and safety. The Purpose and Need of the proposed Runway 13-31 RSA and RPZ improvements remains the same as the 2018 EA analysis.

This Supplemental EA has been prepared in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, the U.S. Department of Transportation, Federal Aviation Administration (FAA) Airport Environmental Handbook Order 5050.4B, National Environmental Policy Act Implementing Instructions for Airport Actions, (April 28, 2006), FAA Environmental Impacts: Policies and Procedures Order 1050.1F (July 16, 2015) and FAA Airports 1050.1F Desk Reference (July 2015). The FAA serves as the lead federal agency for this NEPA evaluation.

The objectives of this section are to define the purpose and need of the proposed action, where 'need' is defined as the problem facing the Baton Rouge Metropolitan Airport and 'purpose' is defined as the solution to the problem. This section will also identify the federal actions required and outline the timeframe in which the proposed actions discussed in this Supplemental EA will take place. Concurrently, as a part of the NEPA process is being coordinated with the US Army Corps of Engineers, New Orleans District, for Section 404/Section 10 of the Clean Water Act consultation.

2.2 Purpose of the Proposed Improvements

The purpose of the proposed Runway 13-31 RSA and RPZ improvements is twofold. First, the project will increase compliance with FAA design standards. Second, the project will replace existing physical infrastructure at or near the end of its useful life. This project will improve airfield facilities and safety so that the Baton Rouge Metropolitan Airport may



continue to serve as a regionally competitive, origin-destination airport for passenger aircraft operations. The Purpose of the proposed Runway 13-31 RSA and RPZ improvements remains the same as the 2018 EA analysis, to increase compliance with FAA design standards and replace existing physical infrastructure at or near the end of its useful life.

2.3 Need for the Proposed Improvements

The proposed improvements at BTR are needed to provide additional capabilities to safely and efficiently accommodate projected future levels of activity. The Runway 13-31 RSA and RPZ improvements are needed to fully meet current FAA design standards, to provide the maximum reasonable margin of safety for the runway environment, and to preserve the Airport's eligibility to receive federal funding assistance by complying with FAA design standards and federal obligations. These obligations are described by the Federal Grant Assurances which require airport operators to maintain their facilities in a safe and efficient manner for public use. Since land was not available to improve the RSA to meet current FAA standards, an Engineered Materials Arresting System (EMAS) was constructed on Runway 13-31. The EMAS is a bed of engineered materials built at the end of the runway to reduce the risk of a runway excursion. If an aircraft overruns the runway, its tires will sink into the lightweight EMAS material, and the plane will decelerate as it moves through the material. Furthermore, the EMAS requires replacement approximately every ten to fifteen years thereafter in order to comply with FAA safety standards. The current Emergency Materials Arresting System (EMAS) is nearing the end of its useful life and will require a near term replacement should these improvements not be made. The Need of the proposed Runway 13-31 RSA and RPZ improvements remains the same as the 2018 EA analysis, to fully meet current FAA design standards, to provide the maximum reasonable margin of safety for the runway environment, and to preserve the Airport's eligibility to receive federal funding assistance by complying with FAA design standards and federal obligations.

2.4 Proposed Action

The purpose of the proposed Runway 13-31 RSA and RPZ improvements will increase compliance with FAA design standards and will replace existing physical infrastructure at or near the end of its useful life. The proposed Runway 13-31 RSA and RPZ improvements will allow the Airport to establish a full standard RSA and remove all roadways from the RPZ. This will require the relocation of Plank Road and will allow the elimination of the Engineered Materials Arresting System (EMAS). The additional alternatives to meet the purpose and need of the project and analyzed in this document also address roadway traffic and safety concerns. These alternatives include a series of grade separations which eliminate traffic lights in several locations.



This project will improve airfield facilities and safety so that the Baton Rouge Metropolitan Airport may continue to serve as a regionally competitive, origin-destination airport for passenger aircraft operations.

In order to provide clarity on the full array of project components which were analyzed in this SEA as well the original EA for the Runway 13/31 RSA and RPZ Improvements, this section provides supplemental details related to the elements of the project and the analysis performed associated with those project elements.

The EA and the SEA analyzed the following project components:

Airfield Improvement Projects:

- Property Acquisition of approximately three (3) acres of land should be acquired for positive control of the land within the RPZ
- A standard 1,000-foot RSA will be graded per Federal Aviation Administration (FAA) Circular 150/5300-13
- Demolition of the existing EMAS
- Construction of a 200 x 200-foot blast pad in place of existing EMAS
- With the relocation of Plank Road, the landing threshold can be shifted to the end of the pavement, thereby adding 315 feet of LDA to Runway 31 operations
- Grading, drainage, airfield electrical, and pavement markings to accommodate the landing threshold shift
- Modification of FAA Navigational Aids associated with the threshold shift including:
 - Relocation and replacement of the Runway 13 Localizer Antenna Array/Distance Measuring Equipment (DME) and equipment shelter
 - Replacement of the Runway 31 Visual Approach Slope Indicator (VASI) with a Precision Approach Path Indicators (PAPI)
 - Relocation/replacement of the Runway 31 Medium Intensity Approach Lighting System (MALS) and addition of an Equipment Shelter
- Amended arrival procedures associated with the landing threshold shift including:
 - PFAF on the RNAV (GPS) RWY 31 will move straight out the final approach (Southeast) 325.06 ft, keeping the altitude of 1700 ft MSL as the crossing altitude; angle of 3 degrees and TCH of 52 ft will not change
 - The DME Values on the ILS or LOC RWY 13 may change based upon the LOC Shelter and DME antenna moving approximately one tenth of a nautical mile. The fixes will not move, the course/ground tracks will not move, only the published DME values may require a new value to be published
 - Circling area may be increased by 314 ft to the southeast of the current area, compensating for the threshold moving; preliminary evaluation revealed no increase in minima
- Amended departure procedures associated with the landing threshold shift including:
 - Instrument Flight Rules (IFR) Departure procedure for Runway 13; will have fewer penetrations listed as "Low Close-in" penetrations eliminating the following:



- Runway 13, pole 300' from the DER, 549' left of centerline, 22' AGL/91' MSL.
- Vehicles on roadway 342' from DER, left and right of centerline, up to 15' AGL/84' MSL

Landside Development and Improvement Projects:

- Obstruction Removal
- Property Acquisition of 55 parcels impacted by the proposed Right of Way: two (2) parcels with single family residential homes and 53 commercial/industrial parcels.
- Realignment of perimeter road and fence
- Realignment of Plank Road including construction of approximately 0.65 miles of new roadway and requires changes to the right of way for approximately 2.5 miles of roadway
- Construction of related Plank Road tie-in with existing Hooper Road
- Introduction of two elevated bridge structures to better accommodate traffic movements

Coordination with resource agencies for SOV included the overall project area for any concerns related to the entirety of the project including the location of relocated Navigational Aids. A total of 77 SOV letters were sent regarding this project for BTR and depicted the overall project area. A summary of the concerns received were published in the EA and are also published in this SEA and no significant impacts or resources were identified associated with any of the project elements.

Aircraft Noise Modeling for this project included the implications of the threshold shift. This modeling included: the relocation of FAA Navigational Aids associated with the threshold shift; amended arrival procedures associated with the landing threshold shift. This resulted in the model departure procedures associated with the landing threshold shift. This resulted in the model - aircraft being lower by 18 feet along the arrival path when compared to the no action condition. The noise associated with aircraft being 18 feet lower along the flight path was modeled and found to be negligible. Any other NAVAID change or flight procedure change that did not change the geometry (location) or altitude of the aircraft remained consistent in the model between the no action and the proposed action conditions. The Runway 13 departures were modeled for the proposed action to begin at the existing Runway 13 end of pavement and included the threshold shift at the 31 end of the runway. Again, noise modeling found the change to be negligible.

It was determined through the analysis of the EA and SEA that there were no significant impacts from the proposed project. This included the overall project area and all proposed elements, including navaid relocations and noise impacts included in the overall Runway 13/31 RSA and RPZ project.



3. Alternatives

Section 1502.14 of the Executive Office of the President's Council on Environmental Quality (CEQ) regulations implementing the National Environmental Policy Act (NEPA) requires that the federal decision-maker perform the following tasks:

- Evaluate reasonable alternatives to the proposed action, and, for alternatives that the agency eliminated from detailed study, briefly discuss the reasons for their elimination;
- Discuss each alternative considered in detail, including the proposed action, so that reviewers may evaluate their comparative merits;
- Include the no action alternative;
- Include appropriate mitigation measures not already included in the proposed action or alternatives; and
- Limit their consideration to a reasonable number of alternatives.

Following the CEQ regulations, this chapter of the Supplemental EA summarizes the screening analysis conducted to identify a range of alternatives for this evaluation. The summary of the alternatives screening analysis presents the following:

- An overview of the structure of the alternatives screening analysis;
- A list of alternatives considered, including the Proposed Action, and the No Action Alternative;
- A concise explanation of why some of the initial alternatives considered have been eliminated from further analysis; and
- A list of laws, regulations, executive orders (EOs) and associated permits, licenses, and/or review applicable to the alternatives under the screening analysis.

As discussed in **Chapter 2, Purpose and Need**, the purpose for the proposed improvements at Baton Rouge Metropolitan Airport is twofold. First, the project will increase compliance with FAA design standards. Second, the project will replace existing physical infrastructure at or near the end of its useful life. This project will improve airfield facilities and safety so that the Baton Rouge Metropolitan Airport may continue to serve as a regionally competitive, origin-destination airport for passenger aircraft operations. Based on concerns raised by LADOTD related to roadway traffic and safety in the project area, three additional alternatives have been identified to address roadway traffic and safety concerns. These alternatives include a series of grade separations which eliminate traffic lights in several locations.



All alternatives analyzed for this project included navigational aid relocation as well as projects associated with correcting deficiencies in the Runway 13/31 RSA and RPZ and changes on the airfield. Each of the alternatives analyzed included the following project components:

Airfield Improvement Projects:

- Property Acquisition of approximately three (3) acres of land should be acquired for positive control of the land within the RPZ
- A standard 1,000-foot RSA will be graded per Federal Aviation Administration (FAA) Circular 150/5300-13
- Demolition of the existing EMAS
- Construction of a 200 x 200-foot blast pad in place of existing EMAS
- With the relocation of Plank Road, the landing threshold can be shifted to the end of the pavement, thereby adding 315 feet of LDA to Runway 31 operations
- Grading, drainage, airfield electrical, and pavement markings to accommodate the landing threshold shift
- Modification of FAA Navigational Aids associated with the threshold shift including:
 - Relocation and replacement of the Runway 13 Localizer Antenna Array/Distance Measuring Equipment (DME) and equipment shelter
 - Replacement of the Runway 31 Visual Approach Slope Indicator (VASI) with a Precision Approach Path Indicators (PAPI)
 - Relocation/replacement of the Runway 31 Medium Intensity Approach Lighting System (MALS) and addition of an Equipment Shelter
- Amended arrival procedures associated with the landing threshold shift including:
 - PFAF on the RNAV (GPS) RWY 31 will move straight out the final approach (Southeast) 325.06 ft, keeping the altitude of 1700 ft MSL as the crossing altitude; angle of 3 degrees and TCH of 52 ft will not change
 - The DME Values on the ILS or LOC RWY 13 may change based upon the LOC Shelter and DME antenna moving approximately one tenth of a nautical mile. The fixes will not move, the course/ground tracks will not move, only the published DME values may require a new value to be published
 - Circling area may be increased by 314 ft to the southeast of the current area, compensating for the threshold moving; preliminary evaluation revealed no increase in minima
- Amended departure procedures associated with the landing threshold shift including:
 - Instrument Flight Rules (IFR) Departure procedure for Runway 13; will have fewer penetrations listed as "Low Close-in" penetrations eliminating the following:
 - Runway 13, pole 300' from the DER, 549' left of centerline, 22' AGL/91' MSL.
 - Vehicles on roadway 342' from DER, left and right of centerline, up to 15' AGL/84' MSL

Landside Development and Improvement Projects:



- Obstruction Removal
- Property Acquisition of 55 parcels impacted by the proposed Right of Way: two (2) parcels with single family residential homes and 53 commercial/industrial parcels.
- Realignment of perimeter road and fence
- Realignment of Plank Road including construction of approximately 0.65 miles of new roadway and requires changes to the right of way for approximately 2.5 miles of roadway
- Construction of related Plank Road tie-in with existing Hooper Road
- Introduction of two elevated bridge structures to better accommodate traffic movements

Coordination with resource agencies for SOV included the overall project area for any concerns related to the entirety of the project including the location of relocated Navigational Aids. A total of 77 SOV letters were sent regarding this project for BTR and depicted the overall project area. A summary of the concerns received were published in the EA and are also published in this SEA and no significant impacts or resources were identified associated with any of the project elements.

Aircraft Noise Modeling for this project included the implications of the threshold shift. This modeling included: the modification of FAA Navigational Aids associated with the threshold shift; amended arrival procedures associated with the landing threshold shift. This resulted in the model departure procedures associated with the landing threshold shift. This resulted in the model - aircraft being lower by 18 feet along the arrival path when compared to the no action condition. The noise associated with aircraft being 18 feet lower along the flight path was modeled and found to be negligible. Any other NAVAID change or flight procedure change that did not change the geometry (location) or altitude of the aircraft remained consistent in the model between the no action and the proposed action conditions. The Runway 13 departures were modeled for the proposed action to begin at the existing Runway 13 end of pavement and included the threshold shift at the 31 end of the runway. Again, noise modeling found the change to be negligible.

It was determined through the analysis of the EA and SEA that there were no significant impacts from the proposed project. This included the overall project area and all proposed elements, including navaid relocations and noise impacts included in the overall Runway 13/31 RSA and RPZ project.

3.1 Alternatives Development

3.1.1 Alternatives for the Relocation of Plank Road

Alternatives included an alignment for Plank Road outside of the Runway Protection Zone and improvements to Hooper Road from the existing Plank Road/Hooper Road intersection to the new relocated Plank Road/Hooper Road intersection. Alignment studies for Plank Road resulted in a selected alignment that minimized the length of relocation and right of way



impacts within the constraints of the required geometric design criteria. The proposed alignment of Plank Road is common to all of the build alternatives. It is proposed as a 4-lane divided roadway located outside of the RPZ and just east of the East Baton Rouge Parish Sanitary Sewer Storage Facility. The alignment proceeds in a northwest direction passing behind the Saintsville Church of God in Christ and then tying into existing Plank Road adjacent to the All Star North Chevrolet Dealership driveway. All alternatives are consistent with the 2018 EA for realignment of Plank Road outside the RSA and RPZ. The new alternatives contemplate grade separation rather than conventional at-grade intersections which were approved in the 2018 FONSI.

A summary of the alternatives for Plank Road relocation is presented in the following pages. These alternatives are shown as Figures 3.1 through 3.3.

Alternative 1 (Plank Road Elevated at Hooper Road and New Plank Intersections)

Alternative 1 maintains the alignment of Plank Road outside of the RSA and RPZ but replaces two conventional at-grade intersections with grade separations which provide added safety and reduce traffic impacts in the project area. Alternative 1 elevates Plank Road at both the Hooper Road and New Plank intersections. A traffic analysis was performed for existing intersections in the study area for the existing condition. This analysis showed that the signalized intersections of Plank Road at Harding Blvd./Hooper Rd. and Hooper Rd. at Mickens Rd. both have multiple failing movements on multiple approaches in the PM peak hour due to capacity constraints. This alternative would improve these failing traffic movements for the study area.

Alternative 2 (Hooper Road Elevated at Plank & New Plank Intersections)

Alternative 2 maintains the alignment of Plank Road outside of the RSA and RPZ but replaces two traditional intersections with grade separations which provide added safety and reduce traffic impacts in the project area. Alternative 2 elevates Hooper Road at both the Plank Road and New Plank intersections. A traffic analysis was performed for existing intersections in the study area for the existing condition. This analysis showed that the signalized intersections of Plank Road at Harding Blvd./Hooper Rd. and Hooper Rd. at Mickens Rd. both have multiple failing movements on multiple approaches in the PM peak hour due to capacity constraints. This alternative would improve these failing traffic movements for the study area.

Alternative 3 (Hooper Road Elevated at New Plank Intersection and Plank Road Elevated at Hooper Road)

Alternative 3 (Hooper Road Elevated at New Plank and Plank Road Elevated at Hooper Road) maintains the alignment of Plank Road outside of the RSA and RPZ but replaces two traditional intersections with grade separations which provide added safety and reduce traffic impacts in the project area. Alternative 3 elevates Hooper Road at the New Plank



intersection, and Plank Road is elevated at Hooper Road. A traffic analysis was performed for existing intersections in the study area for the existing condition. This analysis showed that the signalized intersections of Plank Road at Harding Blvd./Hooper Rd. and Hooper Rd. at Mickens Rd. both have multiple failing movements on multiple approaches in the PM peak hour due to capacity constraints. This alternative would improve these failing traffic movements for the study area.









BTR

BATON ROUGE ROPOLITAN AIRPO







HOOPER/HARDING ROAD ELEVATED AT PLANK & NEW PLANK INTERSECTIONS





ALTERNATIVE 2





ALTERNATIVE 3 HOOPER/HARDING ROAD ELEVATED AT NEW PLANK & PLANK ELEVATED AT HOOPER/HARDING





3.2 Alternatives Screening

A total of three alternatives for the relocation of Plank Road (LA 67) were identified. All the proposed alternatives satisfy the purpose and need of the project while also improving roadway traffic flow and safety in the project study area.

The screening analysis was designed to determine the alternatives that would be considered reasonable in terms of traffic operation and safety, traffic flow and accessibility, access to existing businesses, and additional impacts for each environmental category beyond the previously approved at grade signalized intersections which met the purpose and need of the project.

A summary of the results of the screening process is shown in **Table 3.1**.



	ALT 1	ALT 2	ALT 3
Access	Pass	Pass	Pass
Traffic Flow and Accessibility	Pass	Pass	Pass (provides greatest accessibility)
Air Quality	NA	NA	NA
Biological Resources	NA	NA	NA
Climate	NA	NA	NA
Coastal Resources	NA	NA	NA
Department of Transportation Act, Section 4(f)	NA	NA	NA
Farmlands	NA	NA	NA
Hazardous Materials, Solid Waste, and Pollution Prevention	Pass	Pass	Pass
Historical, Architectural, Archaeological, and Cultural Resources	NA	NA	NA
Land Use	NA	NA	NA
Natural Resources and Energy Supply	NA	NA	NA
Noise and Compatible Land Use (Roadway Noise)	6 residences and 2 other uses	3 residences and 3 other uses	5 residences and 2 other uses
Socioeconomics, Environmental Justice, And Children's Environmental Health and Safety Risks	NA	NA	NA
Visual Effects (Light Impacts)	Several Residences impacted	No Impact	No Impact
Water Resources	1.7 acres (wetland)	1.7 acres (wetland)	1.7 acres (wetland)
Past, Present, and Reasonably Foreseeable Future Projects	NA	NA	NA
Decision	Pass	Pass	Preferred

Table 3.1: Level 2 Screening Results

Source: K&G Team Alternatives Screening Analysis, 2022



3.3 Alternatives Being Analyzed in this EA

3.3.1 No Action Alternative

As required by the National Environmental Policy Act (NEPA) a no-action alternative must be considered. This alternative would be to continue with the previously approved at grade signalized intersections for the relocation of Plank Road identified in the 2018 FONSI. The no-action alternative does not allow the airport to increase compliance with FAA design standards. A traffic analysis was performed for existing intersections in the study area for the existing condition. This analysis showed that the signalized intersections of Plank Road at Hooper Rd. and Hooper Rd. at Mickens Rd. both have multiple failing movements on multiple approaches in the PM peak hour due to capacity constraints. This alternative would not improve any of these failing traffic movements for the study area.

3.3.2 Sponsor's Preferred Alternative

Alternative 3 (Plank Road Elevated at Hooper Road and Hooper Road Elevated at New Plank) is the alternative that meets the screening criteria and provides improved traffic flow and safety at a greater level than the no-action alternative (previously approved at grade signalized intersections for the relocation of Plank Road) while also minimizing light impacts to residential units and providing for greatest access to existing businesses in the study area.

3.3.3 Alternatives Considered but Eliminated

As discussed above, three alternatives were considered for the relocation of Plank Road to meet the requirements for the Runway 13-31 RSA and RPZ improvements while also improving roadway traffic flow and safety in the project study area. All three build alternatives were carried forward for more detailed analysis. This section provides an overview of the selected alternatives.

Alternative 1 (Plank Road Elevated at Hooper Road and New Plank Intersections)

Alternative 1 meets the screening requirements, and provides improved operations and safety over the no-action. However, this alternative was found to have visual effect impacts (lighting impacts) for several residences in the area of New Plank Road. Therefore, it is not recommended as the preferred alternative.

Alternative 2 (Hooper Road Elevated at Plank & New Plank Intersections)

Alternative 2 meets the screening requirements and provides improved operations and safety over the no-action alternative. However, this alternative was found to have far greater access impacts to existing businesses in the Hooper Road intersection with the existing Plank Road. Therefore, it is not recommended as the preferred alternative.



4. Affected Environment

This chapter describes the existing environmental conditions that the Proposed Action may affect, as required by Federal Aviation Administration (FAA) Orders 1050.1F and 5050.4B. This information establishes a baseline for use in determining the potential effects of the Proposed Action and No Action Alternative.

For the Supplemental EA, this chapter focuses on the refined alternatives' study area existing conditions. **Exhibit 4.1** depicts the study area of the refined alternatives considered in this Supplemental EA and the 2018 EA study area. For efficiency purposes, resource category descriptions that remain the same as the 2018 EA are stated as such. This chapter describes the existing conditions for the following environmental resources:

- Air Quality (Section 4.1)
- Biological Resources (Section 4.2)
- Climate (Section 4.3)
- Coastal Resources (Section 4.4)
- Department of Transportation Act, Section 4(f) (Section 4.5)
- Farmlands (Section 4.6)
- Hazardous Materials, Solid Waste, and Pollution Prevention (Section 4.7)
- Historical, Architectural, Archeological and Cultural Resources (Section 4.8)
- Land Use (Section 4.9)
- Natural Resources and Energy Supply (Section 4.10)
- Noise and Compatible Land Use (Section 4.11)



- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks (Section 4.12)
- Visual Effects (Section 4.13)
- Water Resources (Section 4.14)
- Past, Present, and Reasonably Foreseeable Future Projects (Section 4.15)

4.1 Air Quality

This chapter discusses specific aspects of the environment in the vicinity of the proposed actions and how those aspects may be impacted by the build alternatives or by the no-action alternative. Please refer to Appendix A for further details regarding air quality.

On December 15, 2016, the U.S. Environmental Protection Agency re-designated the Greater Baton Rouge Nonattainment Area (BRNA) to attainment for the 2008 8-hour ozone standard. EPA approved the state's 10-year plan for maintaining attainment of the 2008 8-hour ozone standard in the area and determined that the BRNA continues to attain the 2008 8-hour ozone National Ambient Air Quality Standard and has met the criteria for re-designation to attainment¹.

With this designation, federal activities proposed in East Baton Rouge Parish are generally considered not to be subject to the State's general conformity regulations as promulgated under Louisiana Administrative Code² Determining Conformity of General Federal Actions to State or Federal Implementation Plans. However, in the past, the Louisiana Department of Environmental Quality (LDEQ) requested a general conformity applicability determination for the proposed improvements. Changes in air emissions at the airport could generally result from three sources: increased emissions from aircraft, emissions from vehicular traffic due to changes in the road configuration, and emissions from construction equipment during project construction. There are no air emissions changes due to the construction of any of the alternatives.

² LAC 33:III.14.A



¹ Durant & Hubbard, 11/01/2016





BTR

BATON ROUGE METROPOLITAN AIRPOR



STUDY AREA

4.1.1 Standards and Pollutants

Air emissions from vehicular traffic will not increase as a result of the proposed intersection improvement projects. Passenger vehicular traffic into and out of the airport is not forecast to increase. The improvements at the intersections will result in improved traffic flow.

Estimates were prepared for the total nitrogen oxides (NOx), volatile organic carbon (VOC), and carbon monoxide (CO) emissions anticipated to be released into the atmosphere during construction of either of the elevated alternates.

This estimate is based on air emissions resulting from the operation of heavy equipment during construction activities. Preliminary construction planning estimates were utilized to estimate construction equipment usage. Emission factors for the diesel powered equipment were taken from EPA Report No. NR-009d, "Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling- Compression-Ignition" and EPA Report "Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling- Compression-Ignition" and EPA Report "Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling-Spark Ignition NR-010f," July 2010. To obtain conversion of calculated hydrocarbon emissions to Volatile Organic Compound (VOC) emissions the EPA report, "Conversion Factors for Hydrocarbon Emission Components, NR-0002d, July 2010" was used. Gasoline emission factors were contained in AP-42: Compilation of Air Pollutant Emission Factors, as described in **Appendix A: Air Emissions Assessment**. Previously, emissions resulting from the installation of hot mix asphalt were examined and found to be insignificant (<0.01 tons). Emissions from storage of diesel fuel and motor gasoline are insignificant.

4.1.2 Environmental Impacts

4.1.2.1 Direct Emissions: Construction of Either Elevated Alternate

Estimates were prepared of the total nitrogen oxides (NO_x), volatile organic carbon (VOC), and carbon monoxide (CO) emissions anticipated to be released to the atmosphere during construction of the subject project. It was estimated that approximately 10.52 tons of NO_x emissions, 0.63 tons of VOC emissions, and 0.38 tons of CO emissions will be released into the atmosphere during project construction (2019-2021). This equates to 5.26 tons per year (tpy) of NO_x emissions, 0.32 tpy of VOC emissions, and 0.19 tpy of CO emissions will be released into the atmosphere during project construction (2022-2024). The Baton Rouge area is currently in attainment for all air quality parameters, following over 20 years of non-attainment with the ozone standard. The level of significance in the project area for conformity determinations is 100 tons/year for each of the criteria pollutants except for VOCs, for which a level of 25 tons applies. All pollutants are significantly below these thresholds. The calculations are presented in **Appendix A: Air Emissions Assessment**.

4.1.2.2 Indirect Emissions

Indirect emissions are defined as those that occur as a result of moving equipment on the portion of the project area during construction. These are included in the above totals.



4.1.3 Summary of Findings

Direct and indirect emissions were calculated for activities conducted for all alternatives. Emissions were determined to be under the threshold of significance for the pollutants evaluated.

4.2 Biological Resources (including Fish, Wildlife, and Plants)

4.2.1 Biotic Communities

The long-term loss of wildlife habitat is addressed by the Fish and Wildlife Coordination Act (16 U.S.C. 661). Coordination with appropriate agencies is required if a proposed action has the potential to affect or eliminate potential wildlife habitat.

Previously Federal, State, and local agencies were contacted (see **Appendix C: Draft Biological Assessment**) to determine if biotic communities in the Airport environs would be adversely affected by the implementation of the proposed action. Correspondence was received from the United States Fish and Wildlife Service, the State of Louisiana Department of Wildlife and Fisheries, and the Louisiana Department of Agriculture and Forestry. All of these agencies indicated that the proposed action would not significantly impact important fish or wildlife habitats.

Because the proposed action is not expected to cause any adverse effects upon biotic communities, no mitigation measures would be required. Please refer to Appendix C for further details regarding biological resources.

4.2.2 Threatened and Endangered Species of Flora and Fauna

The term "endangered species" refers to any member of the animal kingdom (mammal, fish, or bird) or plant kingdom (seeds, roots, etc.) that is in danger of extinction throughout all or a portion of its range. The term "threatened species" refers to those members of the animal or plant kingdom that are likely to become endangered within the foreseeable future.

Endangered and threatened species are identified and protected by the Endangered Species Act of 1973, as amended in 78, 32, 88 and 2004. Section 7 of the Endangered Species Act requires that all Federal agencies consult with the U.S. Fish and Wildlife Service regarding any Federal action that may affect a federally listed species. This requirement applies to all Federal land management decisions and actions. Such consultations often require preparation of a biological evaluation or assessment by the Federal action agency (ESA, 1973).



The November 6, 2020, list of endangered, threatened and candidate species maintained by the Louisiana Wildlife and Fisheries agency was reviewed. No new species have been added since the previously completed EA and no additional natural habitats with important fish and wildlife resources are included in the preferred alternative; therefore, no impacts are anticipated.

The Biological Assessment is attached as **Appendix C: Draft Biological Assessment** which is from the 2018 EA and is still valid. The Biological Assessment determined there would be no impacts to Threatened or Endangered Species due to the originally proposed project. Even with the proposed changes to the roadway alignments, this determination remains valid.

4.3 Climate

The description of climate change and greenhouse gas emissions remains the same as the 2018 EA analysis. Currently, there are no air quality permit standards for the evaluation of greenhouse gas emissions (GHG) that are emitted from construction activities. For the no-action alternative, there will be no projected increase or decrease in greenhouse emissions, which are considered in metric tons equivalent of CO^2 . There will be short term emissions associated with any of the build alternatives. The tons per year of CO^2 were calculated in the Air Quality Analysis and were determined to be 473 tons/year.

There are no significance thresholds for aviation GHG emissions, nor has the FAA identified specific factors to consider in making a significance determination for GHG emissions. There are currently no accepted methods of determining significance applicable to aviation projects given the small percentage of emissions they contribute. CEQ has noted that, "it is not currently useful for the NEPA analysis to attempt to link specific climatological changes, or the environmental impacts thereof, to the particular project or emissions, as such direct linkage is difficult to isolate and to understand."³ Accordingly, it is not useful to attempt to determine the significance of such impacts.

Because there are currently no standards for determining levels of significance of these emissions, there is no anticipated significant impact to climate from the build alternatives.

³ CEQ (2010), Draft Guidance, Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, 75 Federal Register 8046 (February 23, 2010). Available at: http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100218-nepa-consideration-effectsghg-draft-guidance.pdf



4.4 Coastal Resources

The description of coastal resources remains the same as the 2018 EA analysis. The location of the project is unchanged. The proposed project in not located in the Coastal Zone boundary and no features of the project are considered coastal barrier resources. Therefore, no impacts to the coastal zone or coastal barrier resources will occur.

4.5 Department of Transportation Act, Section 4(f)

The description of resources regarding Section 4(f) of the Department of Transportation Act remains the same as the 2018 EA analysis. According to correspondence received in the 2018 EA, there are no Section 4(f) properties impacted by the proposed project. Therefore, no significant impacts to Section 4(f) lands are expected with the proposed action and no mitigation measures would be required.

4.6 Farmlands

The United States Department of Agriculture defines 'prime farmland' as follows:

"Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding." (USDA Handbook No. 18, 1993).

A letter requesting the prime farmland was sent to USDA on May 15, 2017 and again on September 14, 2017. Additionally, the Natural Resources Conservation Service (NRCS) website was reviewed concerning the presence of prime farmlands. This has not changed from the 2018 EA. The amount of prime farmland indicated based on the preferred alternative is approximately 1 acre. It does not appear that the area designated as prime farmland has been used within the recent past for agricultural production because it remains heavily wooded. Additionally, it traverses an area that will likely be considered as jurisdictional wetlands.







FARMLANDS



4.7 Hazardous Materials, Solid Waste, and Pollution Prevention

4.7.1 SOLID WASTE

The Resource Conservation and Recovery Act (RCRA) of 1976, as amended (42 U.S. C. § 6901) set forth the standards for management of solid waste in the United States. Solid waste is expected to be generated as a result of the following activities: clearing and grubbing, demolition of existing paving along Plank Road, removal of the EMAS system, construction of the new roadway and addition of travel lanes. Most of these wastes are anticipated to be managed in Construction and Demolition (C&D) landfills. Construction debris will consist of non-reusable lumber, containers, etc. Materials that are taken to the C&D landfills are recycled where possible into re-usable mulch and fill materials. All materials will be managed in accordance with local requirements. The project is not expected to generate an appreciably different quantity or type of solid waste or use a different method of collection than is typical for the construction industry. Generation of solid waste will also occur during the demolition of structures. Approximately 3,500 yd³ of concrete parking lot and paving will be removed from the existing shopping center. Existing State regulations require that construction debris be managed in both C&D landfills or in solid waste landfills. For wastes that contain asbestos or lead paint, specific procedures may be required depending on the level of such materials present. At the intersection of Plank Road and Hooper Road, concrete debris will be generated as a result of removing existing shopping center parking lot and driveway pavement. It is anticipated this will be recycled.

During field investigations, solid wastes were observed at 5407 Hooper Road, including miscellaneous vehicles, metal and wood components, and machinery. At the eastern edge of the trace proposed for access from Plank Road to the Leadership Institute, mounds of building foundations and other construction debris were encountered. These materials will need to be properly characterized and disposed of.

At the location of the improved connection to T.B. Herndon Avenue, an abandoned roadbed was noted. This material may be potentially re-used in the proposed improvements.

4.7.2 Hazardous Materials and Hazardous Wastes

Numerous materials meeting the definition of "hazardous" are typically used during the demolition and construction phases of the proposed project, the most common of which is fuel. These materials must be managed in accordance with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (HCS) (29 CFR 1910.1200, 2012). This standard requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to downstream users to communicate information on these hazards. The employer is required to inform employees of the hazards associated with each compound and provide appropriate training and personal protective equipment. Additionally, for 'oils' (including fuel) in quantities on-site greater than 1320


gallons, the construction site operator must have a prepared Spill Prevention Control and Countermeasure Plan (SPCC) as described in Section 311 of the Clean Water Act (CWA) and found at 40 CFR 112. Additionally, DEQ requires that the 1320-gallon threshold incudes all additional hazardous substances (such as paints or sealers) that are not specifically defined as oils be included in the SPCC plan. The operator must keep containers in good condition, assure that they are labeled, and provide necessary equipment for responding to leaks or spills.

Few hazardous wastes, which are defined as a subset of solid wastes under RCRA, are generated during construction activities. Exceptions are fuel spills which may result in generation of saturated soils that would be considered as hazardous if the flash point is less than 140°F. Each generator is responsible for characterizing and managing any hazardous waste which must be disposed properly in a permitted landfill. Waste must be placed in containers such as roll off boxes or bins, and managed to prevent precipitation infiltration. Only permitted transporters may transport the material to the designated landfill.

Because the build options will require the acquisition of property used for industrial purposes in the past and demolition of structures and soil excavation will be needed, it will be necessary to properly characterize the generated wastes. The locations of the properties that have past industrial uses are described in detail in the Phase I Environmental Site Assessment (ESA) prepared for this project (**Appendix B**). Two sites located on the north side of Hooper Road at the location of the proposed Plank Road/McClelland Drive intersection were investigated during a Phase II investigation. Constituents of Concern were below Louisiana Department of Environmental risk assessment screening standards.

This Supplemental EA investigated impacts associated with the build alternatives that include elevated sections at Plank/Hooper Road and relocated Plank Road/McClelland Drive. Because the elevated sections will require some piling placement, estimated to be at least 80' below ground surface, additional reviews of existing remediation information were performed. In addition to sites identified in the Phase I ESA, there are four locations within the study area of the Plank Road/Hooper Road grade separation that are reported to have soil and/or groundwater contaminants present. The sites are the former Chevron station at 4716 (Old) Hooper Road, Plank Food Mart at 8085 Plank Road, the Circle K at 7997 Plank Road, and Circle K at 8133 Plank Road. The Louisiana Department of Environmental Quality has issued "No Further Action at this Time" letters for all sites; however, no soils may be removed from the sites without approval by the LDEQ. The first two sites also have deed restrictions filed with the parish Clerk of Court notifying potential purchasers of site conditions (Appendix B). A Phase II investigatory plan for this area, along with relocated Plank Road/McClelland Drive locations that will also include piling placement, should be implemented during the design phase. The plan will be developed and submitted to LDEQ prior to implementation for concurrence. If contaminated soil and/or groundwater is encountered during the investigation, an appropriate remedial plan will be developed and implemented in order to prevent downward migration of contaminants.



Any wastes meeting the definitions of hazardous as described in 40 CFR Part 261 must be managed in a permitted hazardous waste landfill.

4.7.3 **Pollution prevention**

Solid wastes will be generated during the demolition and construction phases. Proper testing of the wastes will be needed to determine the appropriate disposal methodology. Currently there is adequate capacity within the project vicinity to manage C&D waste, solid waste, or hazardous waste. Removal of these wastes from the uncontrolled environment to a permitted facility will provide a positive environmental impact.

Waste materials will be generated during the demolition and construction process, and hazardous materials will be used as well. Generated wastes must be characterized by the generator and managed in accordance with State and Federal regulations. Existing disposal capacity is adequate for the generated wastes. Pollution prevention programs will be implemented for any of the build alternatives to minimize production of solid, hazardous, and surface water pollution.

In addition to the recycling of removed roadway portions, parking lot pavement, and use of cleared wood materials into mulch, additional pollution prevention measures will be implemented for the build alternatives. These measures include:

- Preparation of and adherence to a site-specific Storm Water Pollution Prevention Plan (SWP³) as required under LPDES regulations;
- Preparation of a site-specific Spill Prevention, Control and Countermeasure Plan (SPCC) for more than 1,320 gallons of fuel and/or hazardous substances on-site.

These plans require that the contractor identify specific procedures and equipment for:

- Management of runoff during construction;
- Maintenance of runoff protection systems, such as berms and silt fences;
- Periodic inspection of runoff controls;
- Institute vegetative cover and maintain after construction;
- Provide secondary containment for fuels and hazardous substances;
- Provide methods of removal for spills and leaks.

The implementation of site-specific Stormwater Pollution Prevention Plans and Spill Prevention Control and Countermeasure Plans during construction will assist in reducing pollution resulting from construction.



4.8 Historical, Architectural, Archaeological and Cultural Resources

The description of resources regarding historical, architectural, archeological, and cultural resources remains the same as the 2018 EA analysis. During the 2018 EA process, Federal, State, local agencies and Federally-recognized tribes were notified to determine whether the implementation of the proposed action would adversely affect known archaeological sites or historical properties. Additionally, coordination was conducted with potentially impacted Federally recognized Indian Tribes.

Correspondence received from the Louisiana Department of Culture, Recreation, and Tourism indicated that no known archaeological sites or historic properties would be affected by the proposed action and there are no historical or cultural resources adjacent to the proposed project. No potential impacts to cultural resources were identified or received from Indian Tribes. The proposed project is not anticipated to impact historical, architectural, archeological, or cultural resources, no mitigation measures are required. However, should construction associated with the proposed action unearth any archaeological resources, the provisions of emergency discovery would apply, and the appropriate agencies would be contacted.

4.9 Land Use

East Baton Rouge Parish is located in the southeastern part of Louisiana along the east bank of the Mississippi River and has a total land area of 292,314 acres. The primary city, Baton Rouge, is the capital city of Louisiana. As of 2020, the parish was estimated to have a population of 456,781. The parish enjoys a diversified economy including numerous governmental offices and agencies, Louisiana State University and Southern University, numerous petrochemical manufacturing facilities, and a strong health care industry.

Baton Rouge is the farthest inland port on the Mississippi River that can accommodate ocean going tankers and cargo carriers. It is also the tenth largest port in the U.S. Ships transfer their cargo (grain, crude, cars, containers) at the Port of Baton Rouge onto rails and pipelines (to travel east-west) or barges (to travel north).

East Baton Rouge Parish has a semi-tropical climate and, in the past, was a significant producer of agricultural commodities. Since the 1960's, significant industrial and residential expansion has occurred and the parish is no longer primarily rural. Geologically, the parish is considered to be a part of the Prairie Complex that lies across southeastern Louisiana, with elevations typically 50 to 150 feet above mean sea level. The soils found here are considered to be made up of late Pleistocene deposits. The area surrounding the Baton Rouge Metropolitan Airport is made up of a mix of commercial light industrial and residential communities. The proposed project is located within an area known as Brownfields, which



is unincorporated. The area in which the project is located is shown in **Exhibit 4.2: Land Use**. Brownfields has a mix of mostly residential buildings with some light industrial and commercial enterprises. New commercial construction has taken place mostly west of the intersection of Hooper Road and Plank Road, including restaurants, service stations, etc. A major soft-drink manufacturing facility and car dealership have been constructed within the last 15 years on Plank Road, north of Robique Road.

It is anticipated that land use in the project area will change from mostly undeveloped along relocated Plank Road to a mix of uses.

4.10 Natural Resources and Energy Supply

The description of natural resources and energy supply remains the same as the 2018 EA analysis. The amount of energy required to construct the proposed improvements will be in the form of fuel for construction and demolition activities. This is a small-scale project in the metropolitan statistical area and is not expected to result in any measurable diminution of energy supplies. Impacts to natural resources (i.e. forested wetlands) will be offset by mitigation, when required.

4.11 Noise and Compatible Land Use

4.11.1 ROADWAY NOISE

The traffic noise for residents along Plank Road and Hooper Road within the proposed project boundary was analyzed using the Federal Highway Administration (FHWA) approved Traffic Noise Model, version 2.5 (TNM). In accordance with the DOTD Noise Policy, noise impacts were analyzed for the existing highway configuration and for the proposed build alternatives. Impacts were examined for the existing traffic levels (2017), and the design year (2037) traffic levels.

For Alternative 1, 16 properties, including six residences and two other sensitive uses, will have noise levels above the DOTD Standard of 66 decibels (dBA). (See Noise Analysis, **Appendix D: Traffic Noise Assessment**). Other commercial receivers will have noise levels above 71 decibels (dBA), which is the DOTD standard. Of the 16 receivers, 5 will have increases greater than 10 dBA.

For Alternative 2, 16 properties had significant noise increases. Three residences and two other sensitive uses will have noise levels above 66dBA. Eight of the remaining properties experienced a greater than 10 dBA increase.



The preferred Alternative, Alternative 3, a "hybrid" of Alternatives 1 and 2 includes an elevated north-south section at existing Plank/Hooper Roads, and an elevated east-west section of Hooper Road at the new Plank/Hooper Road intersection. For this configuration, a total of 17 properties were impacted, including five residences and two other sensitive uses. Five properties experienced increases of greater than 10 dBA.

Additional evaluation of alternatives may be prepared at the 60% design level to determine if a barrier is feasible and reasonable.

It is anticipated that post-construction, a total of 8, 6, and 7 properties for Alternatives 1, 2 and 3, respectively, will have noise impacts. These are summarized in the Tables included in **Appendix D**.

4.11.2 Aircraft Noise

This section presents the assessment of the affected environment for aircraft noise at BTR. The refined alternatives do not change aircraft noise in any way. Therefore, there is no change in aircraft noise as is depicted in the 2018 EA.



BATON ROUGE METROPOLITAN AIRPORT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT









LAND USE

4.12 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

The description of resources regarding socioeconomics, environmental justice, and children's environmental health and safety risks remains the same as the 2018 EA analysis.

Regarding socioeconomics, the 2015 census data within the East Baton Rouge Parish remains unchanged for the proposed project. The proposed project will require additional residential and business relocation for implementation. Additional land acquisition is also required. **Exhibit 4.4** provides the 2018 EA land acquisition/relocation parcels and the Supplemental EA land acquisition parcels. All other potential socioeconomic impacts remain the same as the 2018 EA analysis.

4.12.1 Socioeconomics

4.12.1.1 Social Impacts

The proposed project is located within the census tract designated as "Brownfields" within East Baton Rouge Parish. According to the United Census (https://www.census.gov/quickfacts/fact/dashboard/brownfieldscdplouisiana.eastbatonroug eparishlouisiana/POP010220). As of April 1, 2020, there were a total of 5,145 people living within this tract. The census tract borders the neighboring places of Baker, Baton Rouge, and Central, Louisiana. Also, in 2020 the median household income was \$51,304. The mostly likely racial or ethnic group to be impoverished in this tract is African American, since this demographic constitutes 77.1% of the population. On average, wages are distributed more evenly in Brownfields, Louisiana than they are nationally, according to the ACS. However, the national salary according to the Bureau of Labor Statistics for 2020 was \$55,744.

There are 20.7% of the population living below the poverty line in this area compared with 23.7% in 2017. The largest demographic is Female, at 54.4%. Over 8% of the people living in poverty in this area are African American, followed by White and Hispanic. The overall race and ethnicity in the area is primarily African American, at 77.1%, followed by White at 19.7%, Asian at 2.3%, and with the remainder Hispanic at 0.5%, American Indian, 0.3%, and two or more races 0.2%.

The number of persons employed in the tract has increased from a total reported in 2015 of 2,422 employees to a total of 3,128 in 2020. The most common employment sectors are health care and social assistance, retail and manufacturing. The area also has a large population of military personnel who served in Vietnam, at 1.25 times greater than any other conflict.



The median property value in 2017 was reported to be \$132,700, and in 2020, the median property value had increased by 1.013% to \$134,500. This trend reversed the previously report median value in 2015 which was a decline of 2.78% from the prior year.

4.12.1.2 Relocation of Residences and/or Businesses

For the preferred alternative, two residential relocations and 22 business relocations may be required in order to provide adequate space for the roadway improvements along Hooper Road and Harding Boulevard.

Two businesses, both gas stations, will have their access drastically limited by the project's roadway right of way requirements. Due to the nature of the business at the gas stations, this action could have a negative impact on the business's long-term viability. Though only portions of each of these properties are required for the project's construction, the full property acquisition may be justified and warranted at the business's discretion due to the changes in access.

The entirety of the one business and the church may not be needed to meet the project's roadway right of way requirements, however, due to DOTD's control of access standards which will no longer allow left turns into traffic, access is significantly reduced to these parcels beyond what was planned in the original EA with at-grade signalization. These standards also eliminate left turns across traffic into parking lots. Though only portions of each of these properties are required for the project's construction, the full property acquisition may be justified and warranted at the business and church's discretion due to the changes in access.

There will be a one-year deadline beyond the project completion put in place for the three businesses and church to choose full acquisition. If they choose not to participate by that one-year deadline, the full property will not be acquired.

Due to the low number of home relocations, there will be negligible resultant social impacts from same. There will be two HUD house relocations required for the preferred alternative along Plank Road south of Hooper Harding. Additionally, 24 businesses will be relocated, and 53 parcels zoned commercial/industrial will be acquired. This area is depicted in **Exhibit 4.4: Land Acquisition and Relocation Parcels**. Additional information is available in **Appendix F: Land Acquisition and Relocation Assessment**.

The initial review of land acquisition for this project did not include any additional right-of-way for the roadway widening along Hooper Road. Further project definition of the preferred alternative resulted in the potential need for additional land along Hooper Road for roadway right-of-way. The additional right-of-way potentially needed for the project is a little more than 2 acres. Additional details related to the expansion of the right-of-way can be found in **Appendix F**.



4.12.1.3 Alteration of Surface Traffic Patterns

The existing surface traffic patterns will be altered and temporarily disrupted by the construction of the preferred alternative. The creation of grade separation and thus elimination of signalized intersections will improve traffic efficiency in the project area.

4.12.1.4 Disruption of Established Communities

The construction of the preferred alternative will result in the relocation of two residences. Of the 5355 parcels used in the past for commercial/industrial activity, 33 are currently vacant.

4.12.1.5 Diversion of Orderly, Planned Development

No known planned developments are located within the project area that would be impacted by the preferred alternative.



BATON ROUGE METROPOLITAN AIRPORT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT





BATON ROUGE IETROPOLITAN AIRPOR



4.12.1.6 Creation of Appreciable Change in Employment

The construction activity typically results in a temporary increase in local employment. However, 2422 businesses will be purchased and relocated due to this project's right of way requirements and access to business issues. There are similar businesses and employment opportunities in the vicinity. In November 2021, the unemployment rate in Baton Rouge was 3.5%, below the national average of 4%.

4.12.1.7 Induced Socioeconomic Impacts

Both short-term and long-term socioeconomic impacts are anticipated if the preferred alternative is implemented. Short-term adverse impacts include inconvenience to the traveling public and nearby residents from construction activities. Short-term employment may rise due to construction activities. Long-term impacts may include the addition of commercial/light industrial development properties along relocated Plank Road. The addition of the flyovers are expected to improve traffic flow and reduce conflict points. As discussed in the 2018 EA, no significant socioeconomic impacts are anticipated as a result of the proposed project.

4.12.2 Environmental Justice

As defined by US Department of Transportation, Federal Aviation Administration, FAA 1050.1F, "Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. (Order 1050.1F, February, 2020). Meaningful Involvement means that:

- people have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- the public's contribution can influence the regulatory agency's decision;
- their concerns will be considered in the decision making process; and
- the decision makers seek out and facilitate the involvement of those potentially affected. (Order, par 2.5, 2015).

In order to meet the requirements for meaningful public involvement by minority and lowincome populations, an early outreach program was initiated for the project. This included meetings with local public officials and an open house meeting where members of the affected area were invited to participate in a casual review form. At the publication of the Draft EA, a formal public meeting will be held to provide additional public comment.



4.12.2.1 Mitigation Measures

For those persons directly impacted by the proposed relocations, it will be necessary to provide mitigation. Because "adverse impacts" under environmental justice U.S. Department of Transportation (DOT) Order 5610.2(a) is defined as: "...the totality of significant individual or cumulative human health include...displacement of persons, businesses, farms, or nonprofit organizations; increased traffic congestion, isolation, exclusion, or separation of minority or low-income individuals within a given community or from the broader community..." (DOT Order 5610.2(a), 5/2/2012). The residential relocation impacts will be primarily to African American residents (based on Census data), and it may be appropriate to address additional mitigation measures. Additionally, during the acquisition process, the potential for disproportionately high and adverse effect on minority and low-income populations will be addressed. These are effects that according to FAA 1050.1F are adverse impacts that:

- 1. "Are predominately borne by a minority population and/or a low-income population; or
- 2. Will be suffered by the minority population and/or low-income population and are appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population."

DOT Order 5610.2(a) indicates that mitigation and enhancement measures and offsetting benefits can be taken into consideration when determining if there are disproportionately high and adverse effects from a project.

4.12.2.2 Summary of Findings

For the build alternatives, only two residential relocations will be required. Because the adverse impacts during construction will be temporary, no additional mitigation and enhancement measures and offsetting benefits are required. However, 24 businesses will be purchased and relocated due to this project's right of way requirements and access to business issues. As discussed in the 2018 EA, no significant environmental justice impacts are anticipated as a result of the proposed project.

4.12.3 Children's Environmental Health and Safety Risks

As identified in Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks"⁴, it is necessary to evaluate the effects Federal actions may have on children. The risks include those that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil or products they might use or be exposed to.

⁴ 62 FT 19885, April 23, 1997



There are several residences in the project area where children may reside. The Leadership Academy on Hooper Road hosts athletic and other activities that children may attend. Currently, children may be exposed to exhaust from existing traffic and this would continue with the no-action alternative. Because the residences and the Leadership Academy are outside of the construction area of any of the build alternatives there will be no discernable impact. The implementation of OSHA compliance practices during construction will further minimize any off-site exposure to the chemicals used during construction such as fuels and paints. There will be a small increase in vehicle emissions for the residences located along Hooper Road for the preferred alternative due to the moving of the northbound traffic from its current location to the intersection at McClelland Drive. This increase does not trigger additional conformity review under the Clean Air Act; so, it is not anticipated to be a significant impact[§].

4.13 Visual Effects

The category of Light Emissions includes any lights that emanates from the light source into the surrounding environment. For the proposed build alternatives, the primary impact will be the addition of light emissions from the elevated sections at both Plank Road and to the relocated portion of Plank Road at McClellan Drive. For the alternative that includes elevated Plank Road at McClelland Drive, south bound headlights may impact several residences. No significant changes to the Runway 13-31 and RSA area are anticipated.

The existing lighting along Hooper Road at grade will be repositioned; therefore, no significant impacts are anticipated.

4.14 Water Resources

4.14.1 Wetlands

Executive Order 11990, Protection of Wetlands⁶, is implemented by U.S. DOT Order 5660.1A, Preservation of the Nation's Wetlands [2004]. The Executive Order requires federal agencies to avoid, to the extent possible, the adverse effects associated with the destruction or modification of wetlands wherever there is a practical alternative. FAA Order 5050.4B, Airport Environmental Handbook, requires that these orders be reviewed to determine their applicability⁷.

⁷ Order 5050.4B, 2006



⁵ Ex. Order 13045, 1997

⁶ Order 11990, 1977

The basic Federal wetlands law Section 404 of the Federal Water Pollution Control Act Amendments (Clean Water Act) defines the term wetlands as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas[®]."

As set forth in Section 404 of the Clean Water Act, jurisdictional wetlands are determined based on the criteria set forth in the 1987 U.S. Army Corps of Engineers (USACOE) Wetland Delineation Manual. Pursuant to Section 404, a permit must be obtained from the USACOE prior to any activity that involves the discharge of dredged or fill materials into a wetland⁹.

The regulatory definition of a jurisdictional wetland is outlined under the Clean Water Act at 33 CFR § 328.3 (c)(4), and further guidance is found in the EPA/USACE Memorandum "Clean Water Act Jurisdiction" following the U.S. Supreme Court's Decision in Rapanos v. United States and Carabell v. Army Corps of Engineers et al. In Louisiana, the U.S. Army Corps of Engineers, New Orleans District, is responsible for the administration of the program regulating wetlands. Additionally, the Louisiana Department of Environmental Quality is responsible for administering Section 404 of the Clean Water Act to ensure the proposed action will not have an adverse impact on the water quality impacted by the project. A wetlands delineation project was conducted for the proposed build alternatives and the report is included in **Appendix E: Wetlands Assessment**. It was concluded that approximately 1.7 acres of jurisdictional wetlands will be affected by the build alternatives associated with the proposed Leadership Institute additional access and the Cypress Road driveway extension. Therefore, a permit under Section 404 of the Clean Water Act and appropriate mitigation for the loss of the wetlands will be required^{10,11}. Consultation with the New Orleans District, U.S. Army Corps of Engineers regarding Section 404/Section 10 is a part of the NEPA process. A map is provided in Exhibit 4.4: Wetlands.

The construction of the proposed alternate driveway access roads will result in the loss of approximately 1.7 acres of jurisdictional wetlands.

To compensate for unavoidable wetland impacts, the Baton Rouge Metropolitan Airport will propose to contract with an acceptable wetlands mitigation bank overseen by the U.S. Army Corps of Engineers, New Orleans District. The amount of mitigation required will depend on the final design layout, and the mitigation ratio as determined by the selected mitigation bank.

¹¹ Clean Water Act Jurisdiction, 2008



⁸ CWA, 1987

⁹ Delineation Manual, 1987

¹⁰ CWA, 1972

The proposed build alternatives will have long term impacts to jurisdictional wetlands that will be mitigated by acquiring compensatory mitigation at approved wetlands mitigation bank. There are no navigable waters within the boundary of the proposed project and consequently, no impacts to navigable waters will occur.

4.14.2 Floodplains

Executive Order 11988, Floodplain Management, (Exec. Or. 11988, 42 Red. Reg. 26951, May 25, 1977) and U.S. DOT Order 5650.2, Floodplain Management and Protection, requires that all FAA actions must avoid floodplains if a "practicable alternative" is available. For regulatory purposes, floodplains are low lying areas that are discussed in percent likelihood of inundation occurring within one year. Thus, an area with a 1% chance of inundation is referred to as the "base flood" or, more commonly, the "100-year" flood. The Federal Emergency Management Agency (FEMA) is the implementing agency for the flood plain regulations. East Baton Rouge Parish has developed a floodplain management program that requires construction within the base flood areas be "mitigated." That is, an equal amount of floodplain capacity must be provided for the volume of base flood area impacted. As shown on **Exhibit 4.5: Floodplains**, the project area is not located within the base flood area so no flood plain fill mitigation will be needed.¹². There is no change to floodplains impacts from the preferred alternative.

There are no impacts to floodplains, and consequently, no floodplain impacts will result from the project.

¹² The National Flood Insurance Act, (44 CFR part 60).



BATON ROUGE METROPOLITAN AIRPORT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT





BATON ROUGE METROPOLITAN AIRPORT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT





FLOODPLAINS

4.14.3 Surface Water

A review of historic USGS topographic maps was completed to identify current and historic surface water features¹³. There is a ditch located near Ford Street that eventually reaches Roberts Canal and may be considered as "other waters" by the U.S. Army Corps of Engineers. The ditch discharges into Roberts Canal and, thence, into the Comite River. The Comite joins the Amite River near Denham Springs, Louisiana. The ultimate receiving water is Lake Maurepas.

It is anticipated that the build alternative may result in the filling of part of the unnamed ditch and installation of a culvert. Because the U.S. Army Corps of Engineers has typically exerted jurisdiction over similar surface water features under Section 10 of the Rivers and Harbors Act, it is possible that a Section 10 permit will be required prior to alteration of the ditch¹⁴. This will not be known until permitting of the project occurs. If a Section 10 permit is required, the Airport Sponsor will take all necessary steps to acquire the permit.

4.14.3.1 Water Quality, Water Supply, and Stormwater Control

The Federal Water Pollution Control Act (the Clean Water Act) requires that airport proprietors establish water quality standards and control discharges into surface and subsurface waters¹⁵. Particular concerns include the preservation of existing drainage, the protection of aquifers from fuel spills and aircraft washing runoff, and control of sedimentation and erosion during construction.

Industrial plant operations, including airports, are required to obtain stormwater permits under the 1987 amendments to the Clean Water Act. The National Pollutant Discharge Elimination System (NPDES) permit requires submission of information regarding existing programs to control pollutants and field screening of major outfalls to detect improper discharges. All discharges of stormwater runoff must be identified and characterized, including those containing deicing fluids, liquid fuels, and chemicals used for maintenance. This project would not result in any discharge of these aviation wastes and primary concern would be construction related actions.

4.14.3.2 Environmental Impacts

Federal, State, and local agencies were previously notified to determine whether the implementation of the proposed action would adversely affect water quality, the water supply, or stormwater control. In its response, the Louisiana Department of Environmental Quality (LDEQ) did not raise any objections to the project, however they indicated that the use of

¹⁵ Clean Water Act, (33 U.S.C. 1251-1376)



¹³ USGS Topographic Map, Comite, LA, SW ¹/₄ Zachary 15' quadrangle, 1963, revised 1970, 1980

¹⁴ 33 USC 403, 1899

best management construction practices would be required to protect ground water of the region.

The proposed project may have impacts to water resources should any of the alternatives be implemented. However, these impacts may be classified as short-term and measures will be selected and used to help mitigate the impacts. Impacts can be grouped into those that include the following categories: wetlands, floodplains, surface waters, including "Waters of the United States", groundwater, and wild and scenic rivers. If present, each of these categories of water feature may be subject to regulatory authority as described in the following sections.

4.14.4 Wild and Scenic Rivers

According to the Louisiana Department of Wildlife and Fisheries and a search of all applicable databases, there are no wild or scenic rivers located within the project area.

4.14.5 Groundwater

A water well search was performed to identify current and historic groundwater use in the project area. A total of 96 wells were identified within a one-mile radius. As noted in the Phase I Environmental Assessment report (found in **Appendix B**), the majority of these wells were designated as "domestic use." The Baton Rouge area overlies the Southern Hills aquifer system and has an abundant supply of high-quality groundwater, although concerns have been raised regarding the presence of saltwater intrusion into lower strata. According to the Capital Area Groundwater Conservation Commission, over 170 million gallons per day of fresh water are provided to users throughout the five parishes within the system. There are deep pilings associated with the proposed alternatives that are anticipated to impact the near-surface productive sand lenses of the aquifer; so, due to the presence of known "recognized environmental conditions" including releases of petroleum hydrocarbons, consultation with the Louisiana Department of Environmental Quality (LADEQ) will be done during the design phase¹⁶. This project would not result in any discharge of aviation wastes and primary concern would be construction related actions. There are no identifiable impacts at this time; however, should any impacts be identified during the design and construction process, they would be coordinated directly with LADEQ.

4.14.5.1 Sole Source Aquifer

Consultation with the Louisiana Department of Environmental Quality (DEQ) was initiated on May 15, 2017. To date, no findings of impact to the aquifer have been documented by DEQ.

¹⁶ Capital Area Ground Water Conservation Commission, n.d.



If needed, remediation activities will be implemented which may include removal of contaminated soils and/or groundwater.

4.14.5.2 Storm Water

The Federal Water Pollution Control Act (the Clean Water Act) requires that Airport proprietors establish water quality standards and control discharges into surface and subsurface waters. Particular concerns include the preservation of existing drainage, the protection of aquifers from fuel spills and aircraft washing runoff, and control of sedimentation and erosion during construction. During any required permitting processes of the project, should the preferred alternative involve the relocation of facilities within the expanded Runway 13-31 Protection Zone, it will be evaluated for impacts to the existing facility Storm Water Pollution Prevention Plan. If there are any impacts, the plan should be revised as needed to account for these activities.

Any of the build alternatives will create additional impervious surfaces as a result of the roadway realignments. However, there are also planned removals of existing pavement from Plank Road and Old Hooper Road. It is important to note that implementation of either of the build alternatives will also result in the removal of some existing impervious surfaces.

Design and engineering of the proposed action would include stormwater control elements that would tie into the existing roadway stormwater system. All drainage facilities will be designed to comply with FAA Advisory Circular AC No. 150/5320-5D criteria local and regional drainage laws, flood control master plans, and the Uniform Regulations for the Control of Drainage. All stormwater control facilities would be designed so as to not adversely affect downstream areas as a result of concentrated, diverted, or increased flows and would include provisions to limit contamination of stormwater¹⁷.

Sedimentation and erosion impact during construction of the proposed action would be avoided by the use of "best management practices" for erosion and sediment control, as described in AC 150/5320 15, CHG 1, Management of Airport Industrial Waste¹⁸. Best management practices include the use of control devices such as silt fencing, diversion berms, or other applicable devices approved by the Soil Conservation Service.

No other adverse effects on water quality, water supply, or stormwater control are expected under the proposed action because all necessary mitigation measures would be incorporated into the construction procedures for the proposed Runway 13/31 RSA and RPZ project due to the creation of additional impervious surface.

¹⁸ Management of Airport Industrial Waste, 2008



¹⁷ AC No. 150/5320-5D-Airport Drainage Design, 2013.

4.14.5.3 Summary of Findings

Design and engineering of the proposed action would include stormwater control elements that would tie into the existing roadway stormwater system. All drainage facilities will be designed to comply with FAA Advisory Circular criteria, local and regional drainage laws, flood control master plans, and the Uniform Regulations for the Control of Drainage. All stormwater control facilities would be designed so as to not adversely affect downstream areas as a result of concentrated, diverted, or increased flows and would include provisions to limit contamination of stormwater.

Sedimentation and erosion impact during construction of the proposed action would be avoided by the use of "best management practices" for erosion and sediment control. Best management practices include the use of control devices such as silt fencing, diversion berms, or other applicable devices approved by the Natural Resource Conservation Service.

No other adverse effects on water quality, water supply, or stormwater control are expected under the proposed action because all necessary mitigation measures would be incorporated in the construction procedures for the proposed Plank Road relocation and implementation of the RSA improvements.

4.15 Past, Present, and Reasonably Foreseeable Future Projects

The Council on Environmental Quality (CEQ) Regulations define a cumulative impact as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-Federal) or person undertakes such other actions" (40 CFR § 1508.7). Cumulative impacts can be viewed as the total combined impacts on the environment of the proposed action or alternative(s) and other known or reasonably foreseeable actions.

The Past, Present, and Reasonably Foreseeable Future Projects remains the same as the 2018 EA analysis.



5. Environmental Consequences

5.1 Summary of Consequences

The potential environmental consequences as a result of the preferred alternative include:

- Loss of 1 acre of prime farmland;
- Impacts to 1.7 acres of jurisdictional wetlands, which will be mitigated;
- Short-term increase in air pollutants from construction activities;
- Relocation of two residential units;
- Relocation of 24 businesses;
- Relocation of one church
- Noise increase to 5 residential units and two other noise sensitive units along Hooper Road, mitigation may be possible, further design of project will be required
- Minor noise increases from construction and change in traffic patterns.

Past improvements to Plank Road and Harding Boulevard have resulted in the addition of several light industrial and commercial operations. Within the past three years, additional senior housing residences have been constructed. Constructing the preferred alternative can reasonably be expected to continue this trend along the relocated portion of Plank Road.

Significant cumulative impacts are not anticipated due to construction of the preferred alternative.

This section contemplates the full array of project components which were analyzed in this Supplemental Environmental Assessment (SEA) as well the original Environmental Assessment (EA) for the Runway 13/31 Runway Safety Area and Runway Protection Zone Improvements. These project components include:

Airfield Improvement Projects:

• Property Acquisition of approximately three (3) acres of land should be acquired for positive control of the land within the RPZ



- A standard 1,000-foot RSA will be graded per Federal Aviation Administration (FAA) Circular 150/5300-13
- Demolition of the existing EMAS
- Construction of a 200 x 200-foot blast pad in place of existing EMAS
- With the relocation of Plank Road, the landing threshold can be shifted to the end of the pavement, thereby adding 315 feet of LDA to Runway 31 operations
- Grading, drainage, airfield electrical, and pavement markings to accommodate the landing threshold shift
- Modification of FAA Navigational Aids associated with the threshold shift including:
 - Relocation and replacement of the Runway 13 Localizer Antenna Array/Distance Measuring Equipment (DME) and equipment shelter
 - Replacement of the Runway 31 Visual Approach Slope Indicator (VASI) with a Precision Approach Path Indicators (PAPI)
 - Relocation/replacement of the Runway 31 Medium Intensity Approach Lighting System (MALS) and addition of an Equipment Shelter
- Amended arrival procedures associated with the landing threshold shift including:
 - PFAF on the RNAV (GPS) RWY 31 will move straight out the final approach (Southeast) 325.06 ft, keeping the altitude of 1700 ft MSL as the crossing altitude; angle of 3 degrees and TCH of 52 ft will not change
 - The DME Values on the ILS or LOC RWY 13 may change based upon the LOC Shelter and DME antenna moving approximately one tenth of a nautical mile. The fixes will not move, the course/ground tracks will not move, only the published DME values may require a new value to be published
 - Circling area may be increased by 314 ft to the southeast of the current area, compensating for the threshold moving; preliminary evaluation revealed no increase in minima
- Amended departure procedures associated with the landing threshold shift including:
 - Instrument Flight Rules (IFR) Departure procedure for Runway 13; will have fewer penetrations listed as "Low Close-in" penetrations eliminating the following:
 - Runway 13, pole 300' from the DER, 549' left of centerline, 22' AGL/91' MSL.
 - Vehicles on roadway 342' from DER, left and right of centerline, up to 15' AGL/84' MSL

Landside Development and Improvement Projects:

- Obstruction Removal
- Property Acquisition of 55 parcels impacted by the proposed Right of Way: two (2) parcels with single family residential homes and 53 commercial/industrial parcels.
- Realignment of perimeter road and fence
- Realignment of Plank Road including construction of approximately 0.65 miles of new roadway and requires changes to the right of way for approximately 2.5 miles of roadway
- Construction of related Plank Road tie-in with existing Hooper Road
- Introduction of two elevated bridge structures to better accommodate traffic movements



Coordination with resource agencies for SOV included the overall project area for any concerns related to the entirety of the project including the location of relocated Navigational Aids. A total of 77 SOV letters were sent regarding this project for BTR and depicted the overall project area. A summary of the concerns received were published in the EA and are also published in this SEA and no significant impacts or resources were identified associated with any of the project elements.

Aircraft Noise Modeling for this project included the implications of the threshold shift. This modeling included: the modification of FAA Navigational Aids associated with the threshold shift; amended arrival procedures associated with the landing threshold shift. This resulted in the model - aircraft being lower by 18 feet along the arrival path when compared to the no action condition. The noise associated with aircraft being 18 feet lower along the flight path was modeled and found to be negligible. Any other NAVAID change or flight procedure change that did not change the geometry (location) or altitude of the aircraft remained consistent in the model between the no action and the proposed action conditions. The Runway 13 departures were modeled for the proposed action to begin at the existing Runway 13 end of pavement and included the threshold shift at the 31 end of the runway. Again, noise modeling found the change to be negligible.

It was determined through the analysis of the EA and SEA that there were no significant impacts from the proposed project. This included the overall project area and all proposed elements, including navaid relocations and noise impacts included in the overall Runway 13/31 RSA and RPZ project.



Table 5.1: Environmental Consequences Matrix

ENVIRONMENTAL RESOURCES	IMPACTED	CONSEQUENCE
Air Quality	YES	Short term increase in air pollutants from construction activities. Emissions were determined to be under the threshold of significance for the pollutants evaluated.
Biological Resources	NO	
Climate	NO	
Coastal Resources	NO	
Department of Transportation Act, Section 4(f)	NO	
Farmlands	YES	Loss of 1 acre of prime farmland.
Hazardous Materials, Solid Waste, and Pollution Prevention	NO	
Historical, Architectural, Archeological and Cultural Resources	NO	
Land Use	YES	Loss of two residential HUD units, businesses, and 53 commercial parcels
Natural Resources and Energy Supply	NO	
		Minor noise increases from construction and change in roadway traffic pattern.
Noise and Compatible Land Use	YES	Five residential units and two other sensitive uses
Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks	NO	
Visual Effects	NO	
Water Resources	YES	Impacts to 1.7 acres of jurisdictional wetlands, which will be mitigated if it cannot be avoided in final engineering of roadway alignment. ¹⁹
Past, Present, and Reasonably Foreseeable Future Projects	NO	

Source: K&G Team Analysis, 2022

¹⁹ Anticipated Wetland Mitigation will be done by purchase of Wetland Mitigation Credits at a ratio of 2 to 1 per communication between EA team and Army Corps of Engineers



5.1.1 Air Quality

Direct and indirect emissions were calculated for activities conducted with the preferred alternative. Emissions were determined to be under the threshold of significance for the pollutants evaluated.

5.1.2 Biological Resources (including Fish, Wildlife, and Plants

A Biological Assessment report was prepared at the recommendation of the U.S. Fish and Wildlife Service in the previous EA. The Biological Assessment determined there would be no impacts to Threatened or Endangered Species due to the proposed projects. Impacts to other biological resources including bottomland hardwood habitat will be long-term. Loss of jurisdictional bottomland hardwood will be offset by wetlands mitigation.

5.1.3 Climate

For the no-action alternative, there will be no projected increase or decrease in greenhouse emissions. Short term emissions will be experienced with the proposed alternative. According to the Air Quality Analysis performed, 473 tons/year of CO² were calculated to be emitted from construction activities. Since standards for determining levels of significance of these emissions do not exist, there is no anticipated significant impact to climate from the build alternatives.

5.1.4 Coastal Resources

The project is not located within the Coastal Zone boundary, therefore no impacts to the coastal zone will occur.

5.1.5 Department of Transportation Act, Section 4(f)

No Section 4(f) properties will be impacted by the proposed project and no mitigation measures will be required.

5.1.6 Farmlands

The preferred alternative will impact approximately 1 additional acre of prime farmland. It does not appear that the area designated as prime farmland has been used within the recent past for agricultural production because it remains heavily wooded.

5.1.7 Hazardous Materials, Solid Waste, and Pollution Prevention

The build alternatives will require the acquisition of property used for past industrial purposes and require structure demolition and soil excavation. These properties are described in the Phase I Environmental Site Assessment. Two sites are located on the north side of Hooper



Road at the location of the proposed intersection, and the other one is located on Martin Road. Typical constituents of concern can include heavy metals, hydrocarbons, and solvents. Any wastes meeting the definitions of hazardous, as described in 40 CFFR Part 261 must be managed in a permitted hazardous waste landfill.

The implementation of site-specific Stormwater Pollution Prevention Plans and Spill Prevention Control and Countermeasure Plans during construction will assist in reducing pollution resulting from construction.

5.1.8 Historical, Architectural, Archaeological and Cultural Resources

The project area is not known to be associated with any high probability of prehistoric occupation. Therefore, the proposed project is not expected to impact currently undiscovered archaeological resources. If during construction any archaeological resources are unearthed, then the provisions of emergency discovery would apply and the appropriate agencies contacted. Since no adverse impacts upon historic, architectural, archaeological, or cultural resources are anticipated, no mitigation measures will be required.

5.1.9 Land Use

The project area is located in the northeastern portion of East Baton Rouge Parish in an unincorporated area known as Brownfields. In addition to the airport facility, the area is made up of mostly commercial light industrial and residential communities. Some newer commercial construction exists west of the Hooper Road/Plank Road intersection and on Plank Road north of Robique Road. Two residential HUD units, 24 businesses and one church will be relocated in the preferred alternative.

Two businesses, both gas stations, will have their access drastically limited by the project's roadway right of way requirements. Due to the nature of the business at the gas stations, this action could have a negative impact on the business's long-term viability. Though only portions of each of these properties are required for the project's construction, the full property acquisition may be justified and warranted at the business's discretion due to the changes in access.

The entirety of the two businesses and the church may not be needed to meet the project's roadway right of way requirements, however, due to DOTD's control of access standards which will no longer allow left turns into traffic, access is significantly reduced to these parcels beyond what was planned in the original EA with at-grade signalization. These standards also eliminate left turns across traffic into parking lots. Though only portions of each of these



properties are required for the project's construction, the full property acquisition may be justified and warranted due to the changes in access.

There will be a one-year deadline beyond the project completion of construction to be put in place for the four businesses and church to choose full acquisition. If they have chosen not to participate by that one-year deadline, the full property will not be acquired.

It is anticipated that land use in the project area will change from mostly undeveloped along relocated Plank Road to a mix of uses.

5.1.10 Natural Resources and Energy Supply

The proposed project will require energy in the form of fuel for construction and demolition activities. Since the project is small in scale, it is not expected to result in any measurable diminution of energy supplies. Any impacts to natural resources (i.e. forested wetlands) will be offset by compensatory mitigation.

5.1.11 Noise and Compatible Land Use

5.1.11.1 Roadway Noise

Impacts were examined for both the existing traffic levels (2017 being the most recent data collection) and the design year (2040) traffic levels. The change in noise levels was found to be minor and didn't reach the level of significance. For the "no build" alternative, 13 residential structures and one additional receiver were found to have current noise levels above the DOTD standards of 66 decibels (dBA). A total of 13 residential structures and two receivers would be above the 66 dBA level in 2040, if the no build alternative is selected.

Though 13 residential structures and one additional receiver were found to have current noise levels above the DOTD standards of 66 decibels (dBA), none of the receivers were determined to have a noise level increase of 10 dBA or greater over the

existing noise level with the preferred alternative. As there are no impacts greater than 10 dBA, no noise abatement measures were considered as defined in the State of Louisiana Department of Transportation and Development Highway Traffic Noise Policy. Greater detail can be found in **Appendix D: Traffic Noise Assessment**.

5.1.11.2 Aircraft Noise

The refined alternatives do not change aircraft noise in any way. Therefore, there is no change in aircraft noise as is depicted in the 2018 EA.



5.1.12 Socioeconomics, Environmental Justice, and Children's environmental Health and Safety Risks

5.1.12.1 Socioeconomics

If the build alternatives are implemented, both short-term and long-term socioeconomic impacts are likely to occur. Short-term adverse impacts include inconvenience to the traveling public and nearby residents from construction activities. Neighborhood cohesion along Hooper Road will be disrupted by the construction. Short-term employment may rise due to construction activities. Long-term impacts may include the addition of additional commercial/light industrial development properties along relocated Plank Road.

5.1.12.2 Environmental Justice

The proposed project will require relocation of two residences and 22 businesses and 33 vacant commercial/industrial parcels which are vacant. Within the project area, the population found is mostly lower-income and minority (African-American). Although short-term impacts will occur, the construction of the project is not expected to have a significant impact and disproportionate effect on this population.

5.1.12.3 Children's Environmental Health and Safety Risks:

Some children may reside within the project area. For the "no build" alternative and all the "build" alternatives, any children residing within the project area could be exposed to traffic exhaust. The Leadership Academy on Hooper Road hosts athletic and other activities that children may attend. However, no discernable impacts will impact children at this facility. Further, the implementation of OSHA compliance practices during construction will minimize any off-site exposure to the chemicals used during construction such as fuels and paints. Air emissions from vehicular traffic are not expected to increase as a result of the proposed alternative.

5.1.13 Visual Effects:

For the proposed build alternatives, the primary impact will be the repositioning of existing roadway lighting for existing Plank Road to the relocated portion of the road. The existing lighting along Hooper Road at grade will be repositioned; therefore, no significant impacts are anticipated.

5.1.14 Water Resources

The proposed project may have impacts to water resources should any of the alternatives be implemented. However, these impacts may be classified as short-term and measures will be selected and used to help mitigate the impacts. Impacts can be grouped into that that include the following categories: wetlands, floodplains, surface waters, including "Waters of the United States", groundwater, and wild and scenic rivers. The presence of any of these



water features may be subject to regulatory authority. A summary of impact to the water resources in the proposed project area are discussed in the following sections.

5.1.15 Wetlands and Navigable Waters

The build alternatives will result in impacts to 1.7 acres of jurisdictional wetlands. Because the design requirements applicable to the proposed Plank Road relocation are fixed, it is not possible to re-route the roadway to avoid wetland impacts. Therefore, a permit under Section 404 of the Clean Water Act and appropriate mitigation for the loss of the wetlands will be required. The amount of mitigation required will depend on the final design layout and the mitigation ration as determined by the selected mitigation bank.

Based on environmental analysis and correspondence with the U.S. Army Corps of Engineers, no navigable waters exist at the project site.

5.1.15.1 Floodplains

The project area is not located within the base flood area, as developed by the East Baton Rouge Parish floodplain management program. Therefore, the project will not require floodplain fill mitigation.

5.1.15.2 Surface Water

A small, unnamed, meandering ditch or swale that is mostly concrete-lined begins near Robique Road and flows south. At Hooper Road, the ditch flows south via culverts and proceeds southerly through Zion City subdivision and then to the east. The ditch discharges into Cypress Bayou, and then, into the Comite River and ultimately Lake Maurepas. The build alternative may result in the filling of part of the unnamed ditch and, the drainage would then be re-routed. The fill and relocation of the ditch may require a U.S. Army Corps of Engineers Section 10 permit.

5.1.15.3 Groundwater

The project area overlies the Southern Hills aquifer system. No deep piling penetrations were identified and, therefore no significant impacts are anticipated to groundwater resources.

5.1.15.4 Stormwater

Due to project roadway realignments, the build alternatives will remove existing impervious surface and create new imperious surfaces. During design and construction, stormwater control elements will tie into the existing roadway stormwater system and all drainage facilities will be designed to comply with FAA Advisory Circular criteria, local and regional drainage laws, flood control master plans, and the Uniform Regulations for the Control of Drainage. These facilities will be designed so as to not adversely affect downstream areas as a result of concentrated, diverted, or increased flows and would include provision to limit



contamination of stormwater. Also, during construction, "best management practices" for erosion and sediment control will be observed.

No other adverse effects on water quality, water supply, or stormwater control are expected under the proposed action because all necessary mitigation measures would be incorporated into the construction procedures for the proposed Plank Road relocation and implementation of the RSA improvement.

5.1.16 Past, Present, and Reasonably Foreseeable Future Projects

The present proposed project is a continuation of evaluating potential environmental impacts of implementing ongoing improvement activities at the Baton Rouge Metropolitan Airport as outlined in the current Baton Rouge Metropolitan Master Plan. Since 2004, the Airport has systematically made improvements in accordance with FAA standards. The purpose of the current project is to introduce needed changes that will reduce safety risks to airport operations.

The proposed project will require a committed amount of resources, time, and funding. Beneficially, the proposed project will provide much needed improvements to the Baton Rouge Metropolitan Airport. If implemented, the Airport will benefit from increased safety, enhanced productivity, and extended life span of the facility. The traveling public will also benefit from the proposed improvements.

All proposed project alternatives will create minor short-terms impacts to water resources, land use, and societal concerns. These impacts will be due to construction activities and, will be offset by best management practices observed during the construction phase of the project. The most significant impact will be the disturbance of approximately 1.7 acres of wetlands. However, this will be offset by mitigation.

The build alternatives will relocate a portion of Plank Road and provide grade separation eliminating the need for two traditional intersections, which will result in several important benefits. Traffic congestion, traffic flow, and available land will be direct benefits. Available land to build for redevelopment should provide incentives in new development as the area is made more accessible and attractive to businesses and residents. New development will result in potential increased economic opportunities for employers and employees. Improved opportunities of households to take advantage of relocation opportunities should also result in increased property availability, property values, and improvement community cohesion. Before, where the area was economic growth opportunities to employers and households, which will benefit local populations and economy.



6. Agency and Public Involvement

6.1 Public Involvement and Agency Coordination Approach and Process

The Environmental Assessment (EA) coordination process described in this chapter provided interested agencies and the public the opportunity to comment on the potential effects of the construction and operation of the Proposed Action.

As the National Environmental Policy Act (NEPA) and Federal Aviation Administration (FAA) Order 1050.1F require, a public involvement process was conducted. This process provided the opportunity for public and agency input regarding the Proposed Action analyzed in this EA. The public and agency involvement process was initiated to:

- Provide information about the Proposed Action's purpose and need and the alternatives the EA discusses.
- Obtain feedback about the above information from the public and agencies interested in and affected by the Proposed Action (i.e., interested parties).
- Inform those interested that the EA will provide a full and fair discussion of project related environmental effects.
- Provide timely public notices to the interested parties so that they may submit comments and participate in public open meetings concerning the Proposed Action.
- Record comments received from interested parties.

6.1.1 Informational Meeting/Hearing

In order to meet the requirements for meaningful public involvement by minority and lowincome populations, an early outreach program was initiated for the project. This included meetings with local public officials and an open house meeting where members of the affected area were invited to participate in a casual review form. The open house information is included in **Appendix G: Agency and Public Involvement**. Another open house will be held after the publication of the Draft Environmental Assessment where additional public comments will be gathered.



6.1.2 Other Agency/Public Involvement

During the Section 404/Section 10 permitting process, additional public input will be solicited during the Public Notice portion of the process. Public notice will be solicited by both the U.S. Army Corps of Engineers, and the Louisiana Department of Environmental Quality, Water Quality Certification process.

6.1.3 Distribution of Draft EA

BTR will publish a notice of availability for the Draft EA in *The Advocate*. As **Table 6.2** shows, the Draft EA will be available for a 30-day Public review (30-days after the notice of availability advertisement) at BTR's administrative office during normal business hours, on the Airport's website (www.flybtr.com), and at two local libraries.

Table 6.1: Draft EA Available Locations		
LOCATION NAME	ADDRESS	
Baton Rouge Metropolitan	9430 Jackie Cochran Dr. Suite 300 Baton Rouge, LA 70807	
Baton Rouge Metropolitan Airport Website (electronic copy)	www.flybtr.com	
	7711 Goodwood Blvd Baton Rouge, LA 70806	
Scotlandville Branch Library	7373 Scenic Highway Baton Rouge, LA 70807	

Source: Kutchins & Groh, 2022

Electronic copies were provided to agencies who have requested a copy of the Draft Supplemental EA for review. Agencies and the public will be provided the opportunity for an agency meeting and public open house during the 30-day Draft EA review period. Agency and public comments on this Draft EA will be addressed, as appropriate, in the Final Supplemental EA.



Table 6.2: SOV Responses Summary

OWNER/AGENCY	COMMENT/OBJECTION	RESPONSE
Chitimacha Tribe Kimberly S. Walden, THPO	Our records and oral traditions do not indicate that a specific Chitimacha archaeological site or Traditional Cultural Property is within the APE and could be affected; therefore we have no objection to the implementation of the proposed activity; however, if human remains or cultural resources are discovered, you should stop immediately and contact me and the Louisiana State Historic Preservation Office.	Response Noted
Louisiana Department of Culture, Recreation & Tourism – Division of Archaeology Kristin P. Sanders, State Historic Preservation Officer	No known historic properties will be affected by this undertaking. Therefore, our office has no objection to the implementation of this project. This effect determination could change should new information come to our attention.	Response Noted
Linda Piper, Environmental Scientist Manager	Effective March 21, 2017, East Baton Rouge Parish was designated by EPA as an ozone attainment area with a maintenance plan under the 8-hour standard (81 FR 95051, December 27, 2016). As part of the ozone maintenance area, federal activities proposed in East Baton Rouge Parish may be subject to the State's general conformity regulations as promulgated under LAC 33:III.Chapter 14, Subchapter A, Determining Conformity of General Federal Actions to State or Federal Implementation Plans. In order to determine if the proposed project in East Baton Rouge Parish is subject to the full requirements of the general conformity regulations, the project sponsor must first make a general conformity applicability determination. This determination can be made by summing the total of direct and indirect volatile organic compound (VOC) and nitrogen oxide (NOx) emissions caused by the project. If the net total of VOC and NOx emissions is determined to be less than the prescribed de minimis level of 100 tons per year per pollutant, then this action will comply with the conformity provisions of Louisiana's State Implementation Plan (SIP) and the Air Planning and Assessment Division will not object to implementation of the project.	As presented in Section 4.1.2.1 thru Section 4.1.3 of this document, for 2022-2024, this project's air quality contributions are calculated as 5.26 tons per year (tpy) of NOx emissions and 0.32 tpy of VOC emissions, well below the de minimis level of 100 tpy per pollutant to comply with the conformity provisions of Louisiana's State Implementation Plan (SIP).
	determination to Linda Piper, Linda.Piper@LA.GOV.	



OWNER/AGENCY	COMMENT/OBJECTION	RESPONSE
U.S. Army Corps of Engineers, New Orleans District Brett Herr, Branch Chief, Lake Pontchartrain and Vicinity Branch	We have reviewed your project, as proposed, and determined that a Department of the Army permit under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act will not be required. Any changes or modifications to the proposed project will require a revised determination.	Response Noted
U.S. Department of Agriculture, Natural Resources Conservation Service Mitchell J. Mouton, State Soil Scientist	I have reviewed the above referenced project for potential requirements of the Farmland Protection Policy Act (FPPA) and potential impact to Natural Resources Conservation Service projects in the immediate vicinity. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to	Response Noted.
	nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements can be forest land, pastureland, cropland, or other land, but not water or urban built-up land.	
	The project map and narrative submitted with your request indicates that the proposed construction area is in an urban area and therefore is exempt from the rules and regulations of the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549.	
	in the vicinity.	

Source: Kutchins & Groh Team Analysis, 2022



6.1.4 Final EA

The Final EA will be made available at the Airport's administrative office and on the Airport's website.


7. List of Preparers

7.1 Lead Agency

The FAA is the lead agency for the preparation of this EA. Responsibility for review and approval of this EA rests with the FAA. The following FAA staff members were involved in the preparation of this EA:

Tim Tandy, Environmental Protection Specialist

7.2 Principal Preparers

Responsibility for preparation of this EA rests with the Baton Rouge Metropolitan Airport Commission. Listed below are the persons responsible for the preparation of this EA.

7.2.1 Baton Rouge Metropolitan Airport Commission

Mike Edwards, Director of Aviation

7.2.2 Kutchins & Groh

Bradley C. Kutchins, P.E. B.S., Civil Engineering. 33 years of experience. Responsible for contractual oversight of the EA preparation and client coordination.

7.2.3 Compliance Consultants

Mary M. Field, P.E. BS Civil Engineering, MS Environmental Engineering. 37 years experience. Responsible for project management and EA preparation.

Stephen D, Field, P.E. BS, MS, PhD. Environmental Engineering. 44 years experience. Responsible for noise analysis and air quality oversight.

Ashley Leggitt, DVM. Nine years' experience. Responsible for biological resources and wetlands evaluation.



Jason Field, P.E. BS Civil Engineering, MBA. 15 years' experience. Responsible for floodplain analysis, drainage and hydraulic impacts, noise model.

Dixie Gregory, BS, Business Management/Psychology. 32 years experience. Responsible for document research and technical writing/preparation.

7.2.4 GoTech

Rhaoul A. Guillaume, Sr., P.E., F.ASCE B.S., Civil Engineer, 50 years of experience. Responsible for oversight / coordination and meeting attendance.

7.2.5 W.D. Schock Company

Leigh Lasley, President and CEO. 29 years experience. Responsible for contractual oversight of the EA preparation and client coordination.

Cindy (Boudreaux) Kelly, Assistant Project Manager. 24 years experience. Responsible for research.

Michael DeFelice, over 30 years experience, MAI, SRA, Real Estate Appraiser & Analyst

7.2.6 Newhouse and Associates, LLC

Monica R. Newhouse, B.S. Aerospace, M.B.A. Information Decision Sciences. 26 years of experience. Responsible for overall document preparation and technical writing.



8. References

LA DOTD Minimum Guidelines (2017). Retrieved from. wwwsp.dotd.la.gov/inside_LA DOTD/Divisions/Engineering/Road-Design/Memorandum/Minimum Design Guidelines.pdf.

LADOTD's Engineering Directives and Standards Manual (EDSM) IV.2.1.4, "Median Openings on Divided Multi-Lane Roadways"

LADOTD's Complete Streets Design Guide

LADOTD Policy for "Median Openings on Divided Multi-Lane Roadways", EDSM IV.2.1.4

Baton Rouge 2037 Metropolitan Transportation Plan

Federal Water Pollution Control Act, 33 CRF § 328.3(a) amended 1972, (1977).

EPA/USCOE Memorandum, "Clean Water Act Jurisdiction" (June 6, 2007).

Office of Transportation and Air Quality, "Conversion Factors for Hydrocarbon Emission Components, NR-002d": U.S. Environmental Protection Agency, EPA420-R-10-015 July 2010.

Office of Transportation and Air Quality, "Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling- Compression-Ignition, NR-009d": U.S. Environmental Protection Agency, EPA420-R-10-018 July 2010.

Office of Transportation and Air Quality, "Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling- Spark-Ignition, NR-010f": U.S. Environmental Protection Agency, EPA420-R-019-NR-010f July 2010

Office of Transportation and Air Quality (1991), "AP-42: Compilation of Air Pollutant Emission Factors; Volume II, Mobile Sources": U.S. Environmental Protection Agency. Table 3.3-1

EPA/USACE Memorandum, "Clean Water Act Jurisdiction" (Jun.6, 2007)

Rapanos, et ux., et al. v United States, 547 U.S. 715) (on writing certiorari to the U.S. Court of Appeals for the 6th Circuit), Vacated and Remanded, No. 04-1034, 126 S. Ct. 2208 (2006), 376 F. 3d 629 (6th Cir. 2004), consolidated with June Carabell, et al. v. Army Corps



of Engineers et al, 547 U.S. 715 (Jun. 19, 2006), No. 04-1384, 391 F. 3d 704 (6th Cir. 2004).

Executive Order 11988, Floodplain Management, 42 Federal Register 26951, (May 25, 1977). U.S.DOT Order 5650.2 Floodplain Management and Protection, Office of Environment and Safety (April 23, 1979).

Executive Order 11988, Floodplain Management, 42 FR 26951, (May 24, 1977).

The National Flood Insurance Act of 1968, (44 CFR, part 60).

USGS Topographic Ma, Cimite, LA , SW ¹/₄ Zachary 15' Quadrangle, 1963, revised 1970, 1983.

Rivers and Harbors Appropriation Act of 1899, Section 10, (33 USC 403), (Mar. 3, 1899).

Letter from United States Department of the Interior, Fisher and Wildlife Service, Louisiana Ecological Services Field Office dated 12, 2017.

Carey Lynn Perry, Program Manager Natural Heritage Program, State of Louisiana, Department of Wildlife and Fisheries, Office of Wildlife, dated June 16, 2017.

Coastal Barrier Resources Act (CBRA), Public Law 97-348 (96 Stat. 1653; <u>16 U.S.C. 3501</u> et seq.), enacted October 18, 1982.

Brownfields, LA (2015). Retrieved from https://daatsusa.io.profile.geo.brownfields-la/.

Broach, D. (2017). Louisiana flooding range shown in new interactive map. Retrieved from. <u>http://www.nola.com/environment/index.ssf/2016/08/louisiana_flood_map.html/</u>.

U.S. Department of Transportation, Federal Aviation Administration, FAA 1150.1F. Retrieved from <u>http://222.faa.gov/regulations_policies/orders_notices</u>.

Department of Transportation Order 5610.2(a). Retrieved from. <u>https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/order_56102a/</u>.

Durant, J. & Hubbard, J. EPA Proposed to Redesignate Baton Rouge, LA, as attaining ozone standard (22/02/3026). Retried from. https://www.epa.gov/newsrelease/EPA-proposes-redesignate-baton-rouge-la-attaining-ozone -standard.

LA Admin. Code. tit. 33 pt. 111§ 14.A (March 2017)



Federal Water Pollution Control Act, as amended (also known as the Clean Water Act of 1977, 33 U.S.C. 1251-1387 (1987).

.Rivers and Harbors Appropriation Act of 1899, 43 U.S.C. § 401, et seq., Section 10.

Capital Area Ground Water Conservation Commission (n.d.). Education, Groundwater Use in Baton Rouge and Saltwater Encroachment. Retrieved from. http://www.cagwcc.com/site 2015/education.htm.

Federal Aviation Administration Advisory Circular 150/5320-15, CHO/Management of Airport Industrial Waste September 8, 2008). Retrieved from. <u>https://www.faa.gov/regulations_policies;advisory_circulars/index.cfm/go/document.informa</u> <u>tiondocumentID/74205</u> (September 8, 2008).

Section 4(f) of the Department of Transportation Act (March 16, 2016). Retrieved from. <u>https:///www.tranist.dot.gov/regulations-and-guidance/environmental-programs/section-4f-department-transportation-act</u>.

National Historic Preservation Act of 1966 as amended Exec. Or. 11593, 36 Fed. Reg. 8921, 16 U.S.C. 470 et seq. (May 13, 1971).

Archaeological and Historic Preservation Act of 1974, as amended, 16 U.S.C. §§ 460-469c (1974).

Fish and Wildlife Coordination Act of 1958, 16 U.S.C. §§ 661-666c (1958). Retrieved from. https://www.fws.gov/laws/lawsdigert/fwcoord.html.

Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544 (1973). Retrieved from. https://www.fws.gov/endangered/esa-library/pdf/ESAwll.pdf

Protection of Wetlands, Department of Homeland Security, FEMA, Executive Order 11990, 42 Fed. Reg. 26961 (May 24, 1977). Retrieved from. <u>https://www.fema.gov/executive-order-11990-protection-wetlands-1997</u> (March 7, 2017).

U.S. Department of Transportation, Order 5660.1A (June 3, 2004) [NEED TO FIND ON WEB]

FAA Order.4A Handbook 2 (October 8, 1985) {NEED TO FIND ON WEB]

Clean Water Act, section 404, 33 U.S.C. § 1344 (1987).

USACOE Wetland Delineation Manual, Technical Rpt Y-87-1. Retrieved from. <u>https://www.cpe.rutgers.edu/wetlands/1987-army-corps-wetland-delineation-manual</u>. Pdf. (January 1987).



DOT Order 5650.2, Floodplain Management and Protection. [FIND ON WEB]

National Flood Insurance Act, 40 C.F.R. part 60.

Coastal Barrier Resources Act of 1982, as amended by the Coastal Barrier Improvement Act of 1990, 16 U.S.C. §§ 3501-3510 (1990).

LA Coastal Zone Boundary Map. Retrieved from. <u>https://www.dnr.louisiana.gov/assets/OCM/CoastalZoneBoundary/CZB2012/maps/Overvie</u> w_of_Revised_CZB.pdf.

Soil Science Division Staff. 2017. Soil Survey Manual, C. Ditzler, K. Scheffe, and H. C. Moner (eds.). USDA Handbook 18. Government Printing Office, Washington, D.C. Retrieved from.

https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/soils/ref/?cid=nrcs142p2_054262.

Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. § 6972 as amended by the Solid Waste Disposal Act of 1980 (SWDA), 42 U.S.C. § 6901 (1976), the Hazardous and Solid Waste Amendments of 1984, and the Federal Facility Compliance Act of 1992, (FFCA), 42 U.S.C §§ 6901-6992 (k) (1992).

Hazardous Communication Standard, U.S. Department of Labor, Occupational Safety and Health Administration, 29 C.F.R. part 1910.1200 (2012) Retrieved from. <u>https://www.osha.gov/pls/oshaeb/owadisp.show_document?p_table=standard&p_id=10099</u>

Resource Conservation and Recovery Act, or RCRA of 1980 (40 CFR 240-299)

U.S. Environmental Protection Agency, Clean Water Act Jurisdiction, following the U.S. Supreme Court's Decision in Rapanos v. United States and Carabell v. United States (December 2, 2008). Retrieved from. <u>https://www.epa.gov/sites/production/files/2016-02/documents-jurisdiction-following-Rapanos/20208.pdf</u>.

FAA Advisory Circular AC No. 150/5320-5D-Airport Drainage Design (2013). Retrieved from.

https://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/d ocumentNumber/150_5320-5.

Endangered Species Act of 1973, as amended in 78, 82, 88 and 2004.

U.S. Army Corps of Engineers (USACOE) Wetland Delineation Manual (January 1987).



American FactFinder - Census Bureau. Retrieved from. https://daatsusa.io.profile.geo.brownfields-la/.

Spearing, Darwin, "Roadside Geology of Louisiana", Darwin Spearing, Mountain Press Publishing Co., 1995.

Broach, D., NOLA Times Picayune, "Louisiana flooding range shown in new interactive map (October 16, 2017. Retrieved from. http://www.nola.com/environment/index.ssf/2016/08/louisiana_flood_map.html.

FAA 1050.1F- "environmental Impacts: Policies and Procedures, July 16, 2015.

Federal Highway Administration, U.S. DOT Order 5610.2(a), "Environmental Justice Order (May 2, 2012). Retrieved from.

https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/orders/order_56102 a/

LAC 33, part III "Air" chapter 14 subchapter A, Determining Conformity of General Federal Actions to State or Federal Implementation Plans (April 2014). Retrieved from. http://deq.louisiana.gov/assets/docs/Air/Asbestos/AsbestosRegulations.pdf.

EPA Report No. NR-009d, "Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling- Compression-Ignition, July 2010. Retrieved from. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100i1UI.pdf.

EPA Report "Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling-Spark Ignition NR-010f," July 2010. Retrieved from. https://nepis.epa.gov/Exe/ZyPDF.cgi/P1008/YF.PDF?Dockey=P10081YF.PDF.

U.S. Environmental Protection Agency report, "Conversion Factors for Hydrocarbon Emission Components. NR-002d, July 2010. Retrieved from. https://nepis.epa.gov/Exe/ZyPDF.cgi/P1008RP.PDF?Dockey=P10081RP.PDF.

Gasoline emission factors were contained in AP-42: Compilation of Air Pollutant Emission Factors, Table 3.3-1(October, 1996).

EPA National Pollutant Discharge Elimination System (NPDES) (1972). Retrieved from https://www.epa.gov/npdes.

(USGS Topographic Map, Comite, LA, SW ¹/₄ Zachary 15' quadrangle, 1963, revised 1970 1980).

National Register of Historic Places (1966). Retrieved from. https://www.nps.gov/nr).



Executive Order 11988, Floodplain Management, found at 42 Federal Register 26951, (May 25, 1977).

U.S. DOT, Order 5650.2, Floodplain Management and Protection, (4-23-79). Retrieved from. https://www.fhwa.dot.gov/engineering/hydraulics/policymemo/order56502.pdf.

Coastal Barrier Resources Act (CBRA), Public Law 97-348 (96 Stat. 1653; <u>16 U.S.C. 3501</u> <u>et seq.</u>), enacted October 18, 1982, 348; 96 Stat. 1653; 16 U.S.C. 3501 et seq.), which was later amended in 1990 by the Coastal Barrier Improvement Act (CBIA, P.L. 101 - 591; 104 Stat. 2931). Retrieved from. https://www.fema.gov/media-library-data/20130726-1720-25045-7368/coastal_barrier_2012.pdf

EPA, Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997)

