

**Port Columbus International Airport  
Columbus, Ohio  
Record of Decision**

**Replacement Runway 10R/28L & Associated Development**

**August 2009**

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## **ATTACHMENTS**

1. Revised ALP 2/23/06
2. Selected Alternative (Exhibit 2-1 in FEIS)
3. Golf Course MOU (Appendix I in FEIS)
4. Air Force Plant 85 MOA (Appendix J in FEIS)
5. FEIS Comments
6. CRAA Air Quality activities
7. 2008 TAF Noise Contour Analysis

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**I. Summary of Decision**

The FAA has identified Alternative C3b as its Selected Alternative for this Record of Decision (ROD). FAA's Selected Alternative approves for construction and use, the Port Columbus International Airport (CMH or Airport) Replacement Runway 10R/28L and Associated Airside and Terminal Development, as shown in the revised Airport Layout Plan (ALP) dated February 23, 2006 (and included herein as Exhibit 1 in Attachment 1). This determination was based in part on FAA's review of the underlying environmental documentation including the Final Environmental Impact Statement (FEIS), the Section 4(f) Evaluation approved by the Federal Aviation Administration (FAA) on February 19, 2009, and the Section 106 Evaluation.

The Selected Alternative (Alternative C3b) includes the construction of a replacement runway 10,113 feet long, located 702 feet south of the existing Runway 10R/28L; development of new terminal facilities in the midfield area, with access from the south airfield; construction of additional taxiways to support the replacement runway; necessary navigational aids (NAVAIDs); proposed aviation-related development; associated roadway relocations and construction; parking improvements (including both surface lots and parking garage); property acquisition and relocation of residences and businesses; development of air traffic operational procedures for the replacement runway; and proposed Part 150 noise abatement actions.

Construction activities associated with implementing the Selected Alternative do not result in a change to the number of operations into and out of the Airport now or in the future. Instead, it seeks to accomplish the above stated action without precluding potential future development. This development is shown in Figure 1 in the ROD, and also shown as Exhibit 2-1 in the FEIS. Selected Alternative C3b includes the noise mitigation plan described in the FEIS and Section IV of this ROD. FAA has also made a final determination that the revised ALP, dated February 23, 2006 and included herein for proposed improvements at CMH is now determined to be unconditionally approved.

These improvements are also environmentally approved as being eligible to participate in funding through use of the Federal Airport Improvement Program (AIP) funds or passenger facility charges (PFCs) for eligible projects, assuming the independent requirements of these programs are met. Implementation of the Selected Alternative requires FAA approvals and actions described in the FEIS and Section II of this ROD. The Columbus Regional Airport Authority (CRAA or Airport Sponsor), as owner and operator of CMH and the project sponsor, has agreed to the terms of approval and the mitigation measures contained in this ROD.

In reaching this decision, the FAA has given careful consideration to: (a) the role of CMH in the national air transportation system; (b) the aviation safety and operational objectives of the project in light of the various aeronautical factors and judgments presented; and (c) the anticipated environmental impacts of the project.

## **II. Introduction and Background**

### Introduction

This ROD identifies the Selected Alternative and provides final FAA determinations and approvals for those Federal actions by the FAA necessary for the proposed improvements at CMH. FAA identifies its Preferred Alternative in the FEIS and designates the Selected Alternative in this ROD. As required by 40 CFR § 1505.2, the FAA's specific decision and identification of the Selected Alternative, is described in detail in Section IV of this ROD. In addition to the FAA's extensive analysis of potential environmental impacts, the FEIS, included the response to comments under the FAA's duties pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. § 4321, et seq.) and related environmental statutes.

The FAA's identification of the Selected Alternative signifies that the projects meet FAA standards for approval of the ALP and other FAA actions identified in this ROD. It does not, however, signify an FAA commitment to provide a specific level of financial support, which is a future decision that will be made in accordance with other FAA guidance. This ROD completes the FAA's thorough and careful environmental decision-making process, including FAA's public disclosure and review by the FAA decision-maker of the analysis of impacts described in the FEIS.

This ROD has been prepared and issued by the FAA in compliance with NEPA, the implementing regulations of the Council of Environmental Quality (CEQ) (40 CFR Parts 1500-1508), and FAA Orders 1050.1E and 5050.4B. This ROD is also used to demonstrate and document FAA's compliance with the procedural and substantive requirements and environmental, programmatic, and related statutes and regulations that apply to FAA decisions and actions on proposed airport expansion projects.

### **FAA Approvals and Actions**

This ROD provides final approval for the Federal actions necessary to support the replacement Runway 10R/28L construction and associated airfield and terminal area development. Federal approval and implementation of the proposed action involves the following FAA approvals and actions:

Air Traffic Organization. Air Traffic is responsible for establishing airspace structure, air traffic control sectors, flight routes, and air traffic control procedures including the use of runways. Specific Air Traffic actions implementing the proposed action will depend on any proposed changes in existing flight routes or air traffic control procedures that could affect the airspace requirements. These involve new or revised approach and departure procedures for Runway 10R/28L.

Air Traffic Organization – Technical Operations. The Technical Operations Group is responsible for the installation, operation, and maintenance of aids to navigation required to support the proposed action. For this project, CRAA will be responsible through a reimbursable agreement between the FAA and CRAA. The development that would be included in the reimbursable agreement for the project includes the replacement of all NAVAIDs associated with the relocated Runway 10R/28L. It will also involve new or revised approach and departure procedures for Runway 10R/28L.

Airports Division. Airports is generally responsible for approval of airport plans, administration of airport development grants, and environmental approval under NEPA. Development of the CMH project involves approval of the FEIS for the proposed project, unconditional approval of the revised ALP, and issuance and administration of any grant-in-aid funds for airport development projects.

Flight Standards/Flight Procedures Division. Flight Standards is responsible for ensuring the adequacy of flight procedures and operating methods in addition to setting certification criteria for air carriers, commercial operators, and airmen. Flight Procedures is responsible for the development of new or revised approach and departure procedures for Runway 10R/28L due to the new location of the threshold and the relocation of the Category I Instrument Landing System (ILS).

The following is a summary of FAA actions necessary for CRAA to implement the FEIS Preferred Alternative:

- Issuance of ROD;
- Determination of environmental eligibility for the issuance of Federal funding eligibility;
- Location and design approval of revised ALP depicting the proposed project;
- Approval of airspace structure, air traffic control sectors, flight routes, and air traffic control procedures including runway use, which involve new or revised approach and departure procedures for Runway 10R/28L;
- Approval of landing aids and approach and departure procedures for the relocation of the instrument landing system; and
- Certifications as to the safety of instrumentation, procedures, and airfield operations.

### **Airport Description**

CMH is owned and operated by the CRAA. The Airport is located on 2,191 acres of land in the City of Columbus, Ohio (as of March 2006). CMH is a medium-hub airport and is classified by the FAA as a primary, commercial service airport. CMH has two operational parallel runways. The runways (10R/28L and 10L/28R) are oriented in an east/west direction with lengths of 10,125 feet and 8,000 feet, respectively. A distance of 2,800 feet separates the runways. The Airport currently has CAT I instrument approaches on Runways 10R and 10L. Each runway end is equipped with an ILS. Runway ends 10R, 10L, and 28R have a Precision Approach Path Indicator.

The Airport's terminal area consists of one main processing building with three passenger concourses. The main terminal is a bi-level structure that contains airline ticketing, airport and airline operations offices, maintenance offices, a public lobby, major concessions, baggage make-up and baggage claim areas, and Federal Inspection Services for terminating international flights. The Airport has a total of 38 gates for both air carrier and commuter aircraft operations. CMH has an Air Traffic Control Tower.

## Project Background

The FEIS is a Federal document; it was prepared in accordance with NEPA. The FAA issued a Notice of Intent to prepare an EIS and to conduct public scoping in the April 21, 2006 Federal Register. The issues, impacts, and alternatives to be analyzed and discussed in the EIS were presented at the public and agency scoping meetings on May 31, 2006 and June 1, 2006. There were a total of ten (10) public information meetings through out the study process and five (5) Study Advisory Committee (SAC) meetings.

A Draft Environmental Impact Statement (DEIS) for the proposed replacement runway and terminal improvements at CMH was distributed on May 9, 2008 for review and comment. Public hearings were held on June 11 and 12, 2008, and the comment period ended on July 11, 2008.

Concurrently, with the development of the DEIS the CRAA prepared a 14 CFR Part 150 Study. The FAA accepted the Noise Exposure Maps (NEMs) on December 5, 2007 and approved the Noise Compatibility Program (NCP) by issuing a Record of Approval on May 19, 2008. The Part 150 Study looked at a combination of noise abatement, land use, and program management alternatives to reduce the noise around the Airport. The FAA evaluated four NCP scenarios from the Part 150 Study Update. The No Action NCP and NCP Scenario 4 are included in the FEIS for evaluation.

The FEIS and Section 4(f) Evaluation was distributed on March 20, 2009 and included the FAA response to comments on the DEIS. The comment period was from March 20, 2009 to April 20, 2009. Comments on the FEIS and Section 4(f) Evaluation and the FAA responses are included in Attachment 5 of this ROD.

The FAA and CRAA hosted a public information workshop on July 9, 2009 to present the proposed changes to the sound insulation program. The changes were a result of a reduction in the number of operations projected to occur at the Airport, which translated into a reduction in the number of homes eligible for sound insulation. More information is provided in Attachment 7 of this ROD.

The following is a history of events related to the Airport:

- July 8, 1929 – CMH was dedicated and officially began operating.
- 1936 – The Public Works Administration built an east/west runway at CMH.
- 1941 – The Federal government took over operation of CMH, lengthened the runways, and established the Naval Air Facility.
- 1952 – Runway 10R/28L was extended from 4,500 feet to 8,000 feet.
- 1953 – Terminal operations were moved from the Fifth Avenue terminal to a centrally-located site on the Airport.
- September 21, 1958 – the new \$4 million terminal was dedicated and began passenger service to Parkersburg, West Virginia.
- 1958-1959 – Runway 10L/28R was constructed.
- 1965 – The U.S. Customs Facility was established at the Airport and the Airport was officially named the Port Columbus International Airport.
- July 8, 1979 – CMH celebrated its 50<sup>th</sup> anniversary and the original terminal building was added to the National Register of Historic Places (NRHP).
- July 1989 – The City of Columbus renamed 17<sup>th</sup> Avenue, which is the main road into CMH, International Gateway.
- 1989 – Concourse A, a new seven gate \$15.5 million concourse opened.

- 1990s – Operations were transferred from the City of Columbus to the Columbus Municipal Airport Authority.
- 1996 – Concourse C opened.
- 1997 – Extension of Runway 10L/28R from 6,000 feet to 8,000 feet was completed.
- 1999 – Master Plan identified need for a third parallel runway and additional terminal capacity.
- 1999 – The first phase of the North Airfield project was completed; this included the extension of Bridgeway Avenue, new hangars, and office space for NetJets (formerly known as Executive Jet).
- 2000 – The need to reconstruct Runway 10R/28L pavement was identified.
- 2000 – The \$92 million parking garage was completed.
- 2001 – The Columbus Airport Authority became the CRAA, which operates Port Columbus, Rickenbacker, and Bolton Field.
- 2003 – A \$48.6 million Letter of Intent (LOI) was awarded for the crossover taxiway, centerline and touchdown zone lighting, high-speed taxiway exits, rehabilitation/relocation of Taxiway C, and the extension of Taxiway B.
- 2003 – The Program Management Team identified the relocation of Runway 10R/28L and the elimination of the third parallel runway as an alternative to provide expanded terminal envelope and airfield capacity.
- 2004 – After coordination with FAA, CRAA opted to overlay Runway 10R/28L to extend its useful life until 2012 and pursue a replacement runway.
- 2004 – CRAA returned \$13.3 million in LOI funding to the FAA for projects that would not be required with the replacement runway.
- April 25, 2004 – a new Air Traffic Control Tower was dedicated.
- 2005 – Airfield Planning Study recommended Runway 10R/28L be located 702 feet south of its current location.
- February 2006 – CRAA submitted partial ALP update to FAA for review; received conditional approval pending completion of a FEIS/ROD.
- March 2006 – EIS was initiated.
- May 2008 – DEIS was published. Part 150 Study RQA issued.
- July 2008 – Public comment period ended on the DEIS.
- March 20, 2009 – FEIS/Section 4(f) Evaluation published and Notice of Availability published in the Federal Register.
- March 20, 2009 – April 20, 2009 – Agency and public comment period on FEIS.
- July 9, 2009 – FAA and CRAA hosted a public information workshop on the new noise contours and sound insulation boundary.
- August 10, 2009 – The comment period ended for commenting on the revised noise contours.

### **Proposed Project – Selected Alternative**

The Selected Alternative which was identified as the Sponsor's Proposed Project in the FEIS includes the following components:

- Construction of a replacement runway 10,113 feet long, located 702 feet south of the existing Runway 10R/28L;
- Development of new terminal facilities, including a new terminal apron in the midfield area, with access from the south airfield;
- Construction of additional taxiways to support the replacement runway;
- Necessary NAVAIDs;
- Proposed aviation-related development (noise berm);

- Associated roadway relocations and construction (internal loop roadway modifications, relocated airport perimeter road);
- Parking improvements (including both surface lots and parking garage);
- Property acquisition and relocation of residences and businesses, as necessary;
- Construction and implementation of ancillary facilities to support the proposed development (expansion of the central utility plant, aircraft fueling system, airside/landside drainage improvements, expansion of the glycol collection and treatment system, and relocation of utility corridors);
- Development of air traffic operational procedures for the replacement runway; and
- Proposed Part 150 noise abatement actions to be implemented.

### **III. Purpose of and Need for Action**

The FAA prepared the FEIS, in accordance with the provisions of the CEQ regulations which directs Federal agencies to cooperate with state and local agencies "to the fullest extent possible" to reduce duplication between the NEPA and comparable state and local requirements. As such, the purpose and need complies with Ohio Environmental Protection Agency (OEPA) Section 401, Water Quality Certification requirements, per Ohio Administrative Code (OAC) 3745-1-54, demonstrating public need for the project. In addition, the FEIS satisfies Section 106 consultation for impacts to historic structures, as identified in 36 CFR 800.8, *Coordination with the National Environmental Policy Act*. The FEIS also included the U.S. Department of Transportation Section 4(f) consultation.<sup>1</sup> Information in the FEIS will also be utilized by CRAA in the U.S. Army Corps of Engineers (USACOE), Section 404 permit process.

The proposed FAA actions, which are the subject of the FEIS and this ROD, respond to the need for the proposed development at CMH. The requested actions are specifically linked to the requirements to reconstruct Runway 10R/28L and preserve the flexibility to accommodate capacity needs both on the airfield and in the terminal and landside areas.

CMH is an essential transportation resource centrally-located within the Columbus Metropolitan Region. As a result of the evaluations of the Airport's operations and facilities conducted during the CRAA's planning studies and the evaluations conducted under the EIS process, issues were identified at the Airport that affect its ability to maintain its critical transportation function, both now and in the near future. These issues must be addressed for CMH to continue to be an effective air carrier service provider.

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<sup>1</sup> Section 4(f) of the Department of Transportation Act of 1966 is currently codified as 49 U.S.C. § 303(c). Consistent with FAA Order 1050.1E, Appendix A, paragraph 6.1a, Section 303(c) will be referred to as Section 4(f).



Additionally, the CRAA updated the Part 150 Noise NCP for CMH<sup>2</sup> in accordance with 14 CFR Part 150 and proposes the implementation of actions designed to abate aircraft noise. These measures need to be environmentally assessed to disclose the environmental consequences of the actions and to ensure that operational changes that reduce noise do not create other adverse environmental impacts.

The first issue is the need to reconstruct existing Runway 10R/28L. The current runway is in a state of pavement deterioration. Given the findings of the previous planning studies and the potential relocation of Runway 10R/28L, the CRAA opted to overlay the runway in 2004 with less asphalt (thinner overlay) instead of undertaking an overlay with more structural value (thicker overlay) that was recommended.<sup>3</sup> This overlay extends the useful life of the pavement to approximately 2009/2010. Additional patching and paving will be required to maintain the pavement as usable past 2010.

The purpose of and the need for the Agency Action is to reconstruct Runway 10R/28L in a way that preserves the Airport's current and future flexibility to accommodate capacity needs both on the airfield and in the terminal and landside areas.

In an effort to provide for current and future flexibility at the Airport, additional benefits that support airfield and terminal and landside flexibility include:

- Long-term airfield capacity and delay reduction during peak operating periods;
- Sufficient terminal capacity to accommodate projected passenger growth;
- Sufficient ancillary facilities to support the projected increase in air transportation demand; and
- Enhance the human environment by reducing noise impacts on the surrounding communities.

The cumulative effect of the many issues at CMH is evident in all aspects of the Airport's operations. Structurally sound runways, delay reduction, and lack of passenger handling facilities affect the utility and function of the Airport. The purpose for the proposed Federal Action is to address these needs in a comprehensive, integrated plan for improvement. The integrated nature of airport infrastructure and operations results in a ripple effect across disciplines when an issue is not addressed. Conversely, when infrastructure and/or operations are improved, a beneficial ripple occurs across disciplines. For this reason, each issue must be addressed in order to wholly fulfill the purpose and need for the project.

The following paragraphs provide a summary discussion of the needs to remedy the issues identified above. Each need statement is shown below. In the FEIS Chapter Three, multiple alternatives were evaluated and compared various configurations of options that can fulfill the purpose and need for the project by addressing these issues. The alternatives that were evaluated are also summarized in Section IV of this ROD.

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<sup>2</sup> The Final Part 150 Study Update for Port Columbus International Airport was submitted to the FAA for approval in November 2007. The FAA accepted the NEMs on December 5, 2007. The FAA issued a Record of Approval on the NCP on May 19, 2008.

<sup>3</sup> *Preliminary Engineering Report, Runway 10R-28L & Taxiway C Rehabilitation, Rehabilitation and Reconstruction Analysis*, April 2001, prepared by R.W. Armstrong.

### The need to reconstruct Runway 10R/28L

The CRAA has a continuous pavement management plan. In 2000, the CRAA did pavement evaluation and design studies for Runway 10R/28L. Based on the visual inspection of the pavement condition and associated engineering evaluations, recommendations were made to improve the serviceability of the runway. Some areas of the runway were determined to be in need of full depth or structural repair.

The CRAA examined two options: rebuild Runway 10R/28L at the same location or build a replacement runway in another location. One benefit of relocating Runway 10R/28L addresses, in part, the need for maintaining flexibility in the current and future terminal envelope. By relocating the runway, a sufficiently sized terminal development envelope would be created. The CRAA, recognizing the potential benefits of replacing the runway in another location, decided to move forward with a short-term runway overlay project and defer larger pavement investments to a future, more optimum location on the airfield.

### The need to provide long-term airfield capacity, delay reduction during peak operating periods, and airfield efficiency

The consideration of long-term airfield capacity and delay reduction during peak operating periods is intended, not to increase current capacity, but to avoid unwarranted elimination of options that might prove necessary in the future. Overall levels of traffic or peak hour traffic are accommodated by the length of the runways, the orientation and separation of the runways, the navigational instrumentation on each runway end, and the remainder of airfield infrastructure.

*Runway Length.* In order to develop a runway length requirement, it was necessary to identify a critical aircraft. This was accomplished by reviewing the latest forecast of aviation activity. The existing and forecasted operations at the Airport were sorted by type of aircraft and destination, the distance to each destination, and the aircraft operator. The critical aircraft at CMH are the 737-700 and the A320, which operate to Houston and Las Vegas.

Runway length requirements for the replacement runway were determined through a combination of methodologies, including Aircraft Manufacturers' Airport Compatibility manuals and Aircraft Performance tables. Because the level of accuracy varies with each methodology, a combination of these methods was used that takes into account the aircraft that operate at CMH, the actual and predicted destinations, and the load factors.

The analysis recommended that Runway 10R/28L maintain its length of 10,125 feet. However, additional analysis was completed to determine the best location for each runway threshold. This additional analysis included FAA clearance and geometric criteria, the location of NAVAIDS and approach lighting systems, airspace obstructions, and other site restrictions. Based on all of the analysis completed, the overall length recommended in the ALP is 10,113 feet, which is 12 feet shorter than the existing Runway 10R/28L.

The runway length requirements are not dependent on a certain level of operations at the airport and therefore would not change based on the recent release of the 2008 Terminal Area Forecast (TAF) which shows a decline in operations at the Airport.

*Runway Separation.* Currently, the Airport has two runways that are separated by 2,800 feet. This separation allows the two runways to operate independent simultaneous arrivals and departures during visual flight rules (VFR) conditions. However, the existing airfield loses the ability to perform simultaneous arrivals during instrument flight rules (IFR) conditions. These

conditions are taken into account when calculating the Annual Service Volume (ASV), which is the theoretical limit of the number of annual operations an airfield can efficiently accommodate. At CMH, with the existing airfield, the ASV is between 370,000 and 410,000 annual operations.

FAA Order 5090.3C, *Field Formulation of the National Plan of Integrated Airport Systems*, Table 3-2 specifies that the airport sponsor should initiate planning studies to evaluate means of increasing airfield capacity when annual operations approach 60 to 75 percent of the calculated ASV. The existing airfield reached 56 to 62 percent of the estimated ASV in 2006. The forecast of activity for CMH included two scenarios, Base-Growth and High-Growth<sup>4</sup>. By 2013, the existing CMH airfield configuration is projected to reach 67 to 74 percent of ASV under the Base-Growth conditions and 70 to 78 percent ASV under the High-Growth conditions. Both forecast scenarios project continued growth in operations for the Airport, and as a result, the percentage of ASV would continue to increase.

Analysis for the long-term needs during peak operating periods was conducted using the FAA Airport and Airspace Simulations Model (SIMMOD). Simulations were conducted with aircraft traffic flowing to the east for both VFR and IFR.

*Navigational Instrumentation.* The Airport currently has CAT I instrument approaches on Runways 10R and 10L. Although CMH does not presently support CAT II/III instrument approaches, maintaining the capability and flexibility in the future was deemed an important operational objective by the CRAA and the FAA Air Traffic Control Tower as planning for the replacement runway was occurring. It was determined that a minimum relocation of 702 feet south of the existing Runway 10R/28L would allow CAT II/III instrument approaches to occur to the Runway 10R end.

*Other Airfield Improvements.* Currently, Runway 10R/28L has a full-length parallel taxiway on both the north and south sides of the runway. The optimum taxiway layout from an efficiency perspective is to have a dual parallel taxiway system on the north side of Runway 10R/28L with high-speed exits. This will allow free flow of traffic to and from the terminal area and the runway ends. To the south of Runway 10R/28L, a full-length single taxiway is needed to provide access to Airport users located in the south airfield area.

#### The need to provide sufficient terminal capacity to accommodate projected passenger levels

The existing terminal configuration cannot accommodate more than five (5) Million Annual Enplaned Passengers (MAEP). The CRAA studied various terminal concepts and forecasts and determined that for long-term demand, the Airport would need to accommodate 9 MAEP. Analysis of the existing passenger terminal facilities determined the capacity of the existing terminal by increasing the number of passengers within the peak hour until demand exceeded the available capacity of the various terminal elements. The peak hour passenger volume was converted into an annual passenger volume using the peak hour/average day/peak month mathematical relationship. The annual passenger volume was then compared to the projection of annual enplanements in order to associate this level of activity to a specific year in the forecast. The Sponsor's forecast predicted that this level would be reached in 2018.

The 2008 TAF is the most current FAA forecast at the time of this ROD. As seen in Table 1, enplanements are not projected to reach 5 MAEP in the 2008 TAF until after 2025. There are

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<sup>4</sup> The High-Growth Scenario was evaluated in the FEIS for disclosure purposes only and can be found in Appendix P.

several factors that led the FAA to lower the TAF, including but not limited to industry related changes due to the economy and unstable fuel prices, general declines in aviation levels, and the downturn of the economy. Based on the 2008 TAF, the 5 MAEP level would not be reached until after 2025, however, due to the consideration of long-term airfield capacity and delay reduction during peak operating periods, the intention of providing a terminal envelope is to avoid unwarranted elimination of options that might prove necessary in the future. As the existing terminal ages, the CRAA will need to evaluate the construction of the new terminal, not solely based on reaching 5 MAEP but rather the overall integrity of the terminal structure and the usability of existing facilities.

The need to provide sufficient ancillary facilities to support the projected increase in air transportation demand

As a part of relocating Runway 10R/28L 702 feet south of its existing location and providing for an expanded and flexible terminal envelope, additional ancillary facilities will be required to support this development. These additional facilities are: an additional auto parking garage; development of access roadways to support the new terminal and parking garage; the relocation of a Big Walnut Creek tributary stream (ravine) in the east airfield into a stormwater detention basin; and future development of presently undeveloped areas.

The need to enhance the human environment by reducing noise impacts on the surrounding communities

The CRAA completed an update to their Part 150 Study during the development of the EIS. The FAA signed the Record of Approval (ROA) on May 19, 2008. The newly developed, recommended, and approved measures in the Part 150 Study ROA were included in the EIS for environmental review and approval. The new or modified air traffic measures would change the operating system of the airfield to reduce delay and increase capacity while providing a means to minimize noise impacts on the surrounding communities. Residential structures newly impacted by the 65 Day-Night Average Sound Level (DNL) noise contour would be eligible for mitigation under the Part 150 Study.

a. Aviation Activity Forecasts

It is the FAA's policy that forecasts used to make decisions about the timing and scale of major investments must be reasonable. In instances where the airport sponsor's forecast is too high, the result can be premature or unneeded development, and where the forecast is too low, the result can be an understatement of environmental impacts. It is therefore the policy of the FAA to review the sponsor's forecasts to ensure that they are realistic and provide adequate justification for airport planning and development. Airport sponsor forecasts that vary considerably from the forecasts prepared by FAA must be resolved.

FAA Forecasts

Each year the FAA issues a national forecast of aviation activity, as well as forecasts of aviation activity at towered airports. The specific airport forecast is called the Terminal Area Forecast (TAF). It is based in large part on current activity and trend analysis with some modifications based on local conditions. The forecast of operations is based on historical relationships between the airport's specific operations and national economic variables influencing aviation activity. The TAF assumes unconstrained demand but takes into account local and national conditions, as well as conditions within the aviation industry.

### Comparison of CRAA and FAA TAF Forecasts

The CRAA prepared sponsor forecasts for the Part 150 Study Update and the EIS in 2006, using 2005 as the base year. The FAA reviewed the forecasts and compared them to the current 2005 TAF. The sponsor forecasts and TAF were within ten percent for enplanements and operations for the 5 year milestone and within 15 percent for the 10 year milestone. The sponsor forecasts and TAF were within acceptable planning limits and were approved on January 9, 2007. Since the start of the EIS, the FAA has updated the TAF three times. The sponsor forecast and the four versions of the TAF are presented in Table 1 and 2.

**Table 1. Enplanement Forecasts**

Year	Sponsor's Forecast	TAF 2005	TAF 2006	TAF 2007	TAF 2008
2005	3,306,753	3,374,708	3,263,061	3,262,881	3,263,061
2006	3,376,675	3,429,853	3,277,049	3,276,052	3,274,398
2007	3,503,800	3,487,962	3,360,252	3,457,606	3,725,889
2008	3,641,500	3,549,192	3,448,447	3,583,566	3,699,074
2009	3,784,600	3,613,712	3,541,933	3,714,313	3,129,929
2012	4,214,900	3,828,828	3,857,415	4,137,176	3,410,846
2018	4,986,100	4,374,991	4,680,673	4,890,204	4,029,204

Note: The numbers came directly from the published TAF.

**Table 2. Operation Forecasts**

Year	Sponsor's Forecast	TAF 2005	TAF 2006	TAF 2007	TAF 2008
2005	210,480	222,531	222,531	222,531	222,531
2006	210,322	226,363	193,521	193,521	193,521
2007	214,650	230,283	197,093	174,616	174,616
2008	219,610	234,294	200,721	179,432	162,606
2009	224,690	238,397	204,445	184,392	141,972
2012	241,600	251,291	216,228	200,200	152,187
2018	271,450	277,670	240,734	226,499	172,334

Note: The numbers came directly from the published TAF.

During the development of the EIS, conditions in the aviation industry changed. Skybus Airlines started and ceased service at the Airport during the development of the EIS. The operation of Skybus prompted the FAA to evaluate the high-growth scenario forecasts for environmental impacts. The analysis was completed prior to release of the DEIS and was for disclosure purposes only. The high-growth forecast scenario can be found in the FEIS Appendix P. Although Skybus provided service for approximately 12 months, the increase in operations did not affect the purpose of and need for the Sponsor's Proposed Project, to reconstruct Runway 10R/28L in a way that preserves the flexibility of the airside and landside and terminal envelope.

CMH is predominately an origin and destination market, meaning that many of the enplanements begin and end their travel at CMH; therefore, the Airport does not depend solely on one airline for a majority of its operations and enplanements. The Airport currently has eleven airlines operating at the Airport. No one airline provides a majority of the service.

Additionally, CMH is not experiencing the industry-wide capacity reductions that many airports are experiencing. Since the departure of Skybus, the Airport has received new service from AirTran and will not be negatively impacted from the recent Delta-Northwest merger because the Airport does not have route duplication of existing flights from either airline.

The FAA used the sponsor forecasts for the development and analysis in the DEIS and the FEIS. When the 2008 TAF was published, there were significant near-term decreases in operations and enplanements at airports throughout the country, including CMH. The primary factors supporting this forecast were general economic conditions, recent declines in aviation activity levels and unstable fuel prices.

Since the purpose of and the need for the Agency Action is not to affect the number of operations at the Airport, either in the short term or the long term, the Airport Sponsor believes (and the FAA's Airports Division, Great Lakes Region concurs) that the Sponsor's conservative forecast remains reasonable for this environmental analysis. For example, any capacity benefits of the Selected Alternative are not in the form of delay reduction during peak operating periods or increasing operations and enplanements, but to avoid unwarranted elimination of options that might prove necessary in the future. In addition, FAA has considered the impacts associated with the 2008 TAF in this ROD.

The purpose and need also requires consideration of terminal needs. The Selected Alternative allows for a sufficiently sized terminal development envelope and provides for additional separation that will allow simultaneous arrivals in IFR conditions and the potential for use of CAT II/III instrument approaches to occur to the Runway 10R end when warranted. These actions will be evaluated when operations support the need. The Selected Alternative does not preclude these actions from occurring in the future. The FAA has considered that this slight delay in the need for terminal capacity based on the 2008 TAF does not preclude the need to allow for the expanded terminal envelope for the future, if needed.

#### **IV. Alternatives Analysis**

The CEQ requires that the Federal decision-maker objectively evaluates all reasonable alternatives within the jurisdiction of the Federal agency. For alternatives that were eliminated from the Detailed Study Area (DSA), the Agency should briefly discuss the reasons for their having been eliminated and disclose the potential environmental consequences for each alternative, including a No Action alternative and other reasonable alternatives, including the FAA's Preferred Alternative.

Federal guidelines, as set forth in NEPA concerning the environmental review process, require that all reasonable, feasible, prudent, and practicable alternatives that might accomplish the objectives of a proposed project be identified and evaluated. Therefore, in compliance with NEPA<sup>5</sup> and other special purpose environmental laws, the FAA independently reviewed and analyzed the alternatives that could achieve the established purpose of and need for the project.

The alternatives that the FAA considered included off-site and on-site alternatives, and a No Action alternative. As a requirement of NEPA, a No Action alternative must be carried forward in the assessment of environmental impacts<sup>6</sup>. The No Action alternative for CMH states that the airfield configuration would remain as it is today, without reconstructing or relocating the runway

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<sup>5</sup> 40 CFR § 1502.14.

<sup>6</sup> 40 CFR § 1502.14(d).

or developing a new midfield terminal area. The No Action alternative serves as the baseline for comparison for the assessment of future conditions and impacts.

The alternatives analysis identified and evaluated a range of alternatives that could meet the stated purpose and need statement. The primary need for the project is to reconstruct Runway 10R/28L, coupled with the reduction of long-term airfield delay in the future, and additional terminal capacity through an expanded development envelope. Each alternative was then screened for operational, environmental, and cost considerations. After the screening analysis, the alternatives that met the purpose and need statement, including the No Action alternative were carried forward in the EIS process. The environmental analyses completed in the FEIS utilized the same Sponsor's Forecast for the alternatives analyses. The FAA determined in the FEIS that there are two runway alternatives that were carried forward for environmental analysis. The FAA reviewed the alternatives analysis in light of the 2008 TAF and found the FEIS analysis remained valid.

### **Alternatives Considered and Eliminated**

#### **On-site alternatives**

##### **i. Non-Runway Construction Alternatives**

Five non-runway construction on-site alternatives were evaluated to improve airport geometry, to determine their potential to reduce the need for reconstructing Runway 10R/28L, and for providing long-term airfield and terminal capacity at CMH. These include:

- Construction of high-speed exits on Runway 10R/28L;
- Construction of high-speed exits on Runway 10L/28R;
- Construct dual crossover taxiways;
- Precision Runway Monitoring System; and
- Activity or Demand Management.

None of the non-runway construction alternatives meet the purpose and need statement. They were eliminated from further consideration in the FEIS because these alternatives do not address the need for Runway 10R/28L to be reconstructed at CMH.

##### **ii. Runway Construction Alternatives**

#### **Alternative B1: Reconstruct Runway 10R/28L in Current Location**

Alternative B1 maintains the existing runway layout at CMH. A full reconstruction of Runway 10R/28L at its current length (10,125 feet) and in its current location is proposed in Alternative B1. The north runway, 10L/28R would be maintained in its present location. Other runway development on Runway 10R/28L includes the addition of high-speed taxiways and the addition of runway centerline lights and touchdown zone lights. There would be no additional terminal development or changes to the air traffic procedures or implementation of the NCP in this alternative.

Alternative B1 was eliminated from further consideration because it does not meet the purpose of and need for the project when evaluated against providing for airside, terminal, and landside flexibility for future development.

Alternative B2: Reconstruct Runway 10R/28L in Current Location and Relocate Runway 10L/28R 700 Feet to the North

Alternative B2 would reconstruct Runway 10R/28L in its current location and at its current length (10,125 feet). However, Runway 10L/28R would be relocated 700 feet north of its existing location to provide for a larger terminal development envelope. Additional airfield development would include the construction of two parallel taxiways to support Runway 10L/28R, the extension of the crossover taxiway, and centerline and touchdown zone lights for Runway 10R. The terminal development envelope would be expanded to the north of the existing terminal area. Proposed air traffic procedures to the new Runway 10L/28R would be implemented.

The physical and environmental impacts for this alternative are significant and include the reduction of the north airfield development area, potential impacts to Big Walnut Creek (floodplains, wetlands, and water quality), and potential height impacts due to highways I-270 and I-670.

Alternative B2 was eliminated from further consideration because it does not meet the purpose of and need for the project when evaluated against operational, environmental, and cost considerations.

Alternative C1: Relocate Runway 10R/28L 1,500 Feet to the South

Alternative C1 relocates Runway 10R/28L to the south 1,500 feet. This provides runway separation of 4,300 feet which would allow for dual simultaneous IFR approaches without the need for additional ATC equipment. The runway would be 10,113 feet long and have two parallel taxiways located north of the runway. This would also create a larger terminal development envelope. Proposed air traffic procedures to the new Runway 10R/28L would be implemented.

The physical and environmental impacts for this alternative are significant. The Columbus International Aircenter, Seven-Up Bottling Company, and Airway Industrial Park would all have to be acquired and demolished. The NRHP-listed passenger terminal building and other potentially NRHP-eligible properties would have to be demolished.

Alternative C1 was eliminated from further consideration because although it meets the purpose and need statement, when the environmental and cost considerations were evaluated they were greater than the other alternatives considered.

iii. Terminal Construction Alternatives

Alternative T1: Expand Existing Terminal

Alternative T1 includes the expansion of the existing passenger terminal to accommodate forecasted demand of nine (9) MAEP and approximately 75 total gates in a single terminal. The expansion or reconfiguration of the existing terminal building would be limited to the existing terminal envelope and was paired with the runway alternatives that did not relocate either Runway 10R/28L or 10L/28R. Alternative T1 does not meet the purpose and need statement to provide for current and future flexibility to accommodate capacity needs both on the airfield and terminal and landside areas.



### Alternative T3: Midfield Terminal Development Envelope – North Airfield

Alternative T3 includes the development of a new terminal facility in the midfield area with aircraft access from the north airfield area. This terminal alternative was paired with the runway alternatives that evaluated relocating Runway 10L/28R (Alternative B2). Although Alternative T3 meets the purpose and need statement, when it was combined with the runway alternatives B2, it was eliminated from further consideration due to operational, environmental, and cost considerations.

#### iv. Noise Compatibility Alternatives

### Alternative NCP 1

NCP 1 included the following noise abatement alternatives:

- NA-D: When wind, weather, and operational considerations allow arrivals landing during the nighttime (10:00 p.m. to 7:00 a.m.) to use a visual side step approach to Runway 28L;
- NA-E: Implement a 15 degree divergent turn off of Runway 28R, after crossing the runway end to a 295-degree heading, only during peak operating periods when traffic warrants;
- NA-I: Nighttime (10:00 p.m. to 7:00 a.m.) departures off of Runway 10R turn immediately left 10 degrees before turning on course;
- NA-R: Renew efforts to maximize east flow (arrive and depart Runway 10L/10R); and
- NA-W: Construct a noise berm/wall.

NCP 1 decreased the number of homes in the 65+ DNL noise exposure contour from the Future (2012) baseline noise exposure contour by 228 homes. In addition, NCP 1 decreased the number of homes in the 60-65 DNL noise exposure contour by 447 homes. Although there were decreases in the number of homes in the 65+ DNL and the 60-65 DNL noise exposure contours, this alternative was eliminated from further consideration because NA-D was eliminated from the Final Part 150 Study due to the FAA's safety concern for using a visual side step for noise abatement purposes.

### Alternative NCP 2

NCP 2 included the following noise abatement alternatives:

- NA-D: When wind, weather, and operational considerations allow arrivals landing during the nighttime (10:00 p.m. to 7:00 a.m.) to use a visual side step approach to Runway 28L;
- NA-E: Implement a 15 degree divergent turn off of Runway 28R, after crossing the runway end to a 295-degree heading, only during peak operating periods when traffic warrants;

- NA-R: Renew efforts to maximize east flow (arrive and depart Runway 10L/10R); and
- NA-W: Construct a noise berm/wall.

NCP 2 decreased the number of homes in the 65+ DNL noise exposure contour from the Future (2012) Baseline noise exposure contour by 228 homes. In addition, NCP 2 decreased the number of homes in the 60-65 DNL noise exposure contour by 469 homes. This scenario reported the greatest reduction in impacts (including below the 65 DNL). However, Measure NA-D was eliminated from the Final Part 150 Study due to FAA safety concerns for using a visual side step approach for noise abatement purposes. Therefore, this alternative was eliminated from further consideration.

### Alternative NCP 3

NCP 3 included the following noise abatement alternatives:

- NA-E: Implement a 15 degree divergent turn off of Runway 28R, after crossing the runway end to a 295-degree heading, only during peak operating periods when traffic warrants;
- NA-R: Renew efforts to maximize east flow (arrive and depart Runway 10L/10R);
- NA-V: Implement head to head operations during calm winds at nighttime for all aircraft (includes a left 15-degree departure turn off of Runway 10R); and
- NA-W: Construct a noise berm/wall.

NCP 3 decreased the number of homes in the 65+ DNL noise exposure contour from the Future (2012) Baseline noise exposure contour by 84 homes. In addition, NCP decreased the number of homes in the 60-65 DNL noise exposure contour by 123 homes. Although there were decreases in the number of homes in the 65+DNL and 60-65 DNL noise exposure contours, this alternative was eliminated from further consideration because NCP 4 resulted in fewer overall noise impacts.

### Off-site alternatives

Two categories of off-site alternatives were evaluated: use of other airports/regional management and other modes of transportation and/or telecommunications.

#### i. Use of Other Airports

The use of other airports alternative does not meet the purpose and need statement to provide for current and future flexibility to accommodate capacity needs both on the airfield and terminal and landside areas. In addition, neither the FAA nor CAAA can direct how airlines conduct their network operations<sup>7</sup>. Consequently, implementation of this alternative would require new

<sup>7</sup> Suburban O'Hare Commission v. Dole, 787 F.2d 186, 192 (7<sup>th</sup> Cir. 1986) and Citizens Against Burlington, 938 F2d 190 (D.C. Cir. 1991).

authority to provide control over airline service patterns at CMH and possibly other airports, which is (1) in direct conflict with the deregulation of the airline industry that occurred in 1978, and (2) beyond the capability of the FAA. The use of other airports does not meet the purpose and need statement to reconstruct Runway 10R/28L.

## ii. Other Modes of Transportation/Communication

Other modes of transportation or communication were considered in the FEIS. They were highway, conventional and high-speed rail, and telecommunications. While the use of highways, conventional and high-speed rail, or telecommunications could supplement some airport use, it would not replace the need for air travel. The use of other modes of transportation does not meet the purpose and need statement to provide for current and future flexibility needs both on the airfield and terminal and landside areas.

## **Alternatives Considered in Detail**

Three alternatives were considered in detail in the FEIS: No Action, Alternative C2b, and Alternative C3b – the Proposed Action.

### Alternative A: No Action alternative

The No Action alternative, also referred to as Alternative A in the FEIS assumes that Runway 10R/28L is maintained in place without the full reconstruction recommended by the CRAA pavement management report. Instead of a full reconstruction, the runway would continue to undergo smaller overlays and localized reconstruction on portions of the runway. There would be no development of a new passenger terminal envelope. The airfield configuration and existing air traffic procedures would remain as they are today. The approved Part 150 measures would not be implemented. The No Action alternative would result in frequent maintenance activities and frequent closure of the runway to perform maintenance. This alternative cost could approach the cost of fully reconstructing the runway over time. The No Action alternative is carried forward through the FEIS as required by NEPA for environmental considerations.

### Alternative C2: Relocate Runway 10R/28L 800 Feet to the South

Alternative C2 includes the relocation of Runway 10R/28L 800 feet to the south of its current location. This alternative was selected and evaluated because the 1999 Master Plan included a third parallel runway, located 800 feet south of the existing Runway 10R/28L, and the Terminal Study used this separation as a starting-point for developing the terminal program criteria.

Replacement Runway 10R/28L would be 10,113 feet long and would have three parallel taxiways. Two parallel taxiways would be north of the runway, including converting the existing Runway 10R/28L to a parallel taxiway. One parallel taxiway would be south of the runway. The existing taxiways and crossover taxiways would be extended 800 feet south to meet the proposed runway. High-speed exits, landing lights, centerline and touchdown zone lights would also be constructed on the proposed Runway 10R/28L.

Alternative C2 would also include the acquisition of 35 residences (36 parcels) for the Runway 10R Protection Zone, removal of portions of the Columbus International Aircenter, impacts to

two hangars, the construction of a stormwater detention basin, and the reconfiguration of the Airport Golf Course.

Alternative C3: Relocate Runway 10R/28L 702 Feet to the South (Sponsor's Proposed Project)

Alternative C3 includes the relocation of Runway 10R/28L 702 feet south of its existing location. The runway would be 10,113 feet long. The distance of 702 feet was chosen because it provided enough distance between the runways to offer a sufficiently large terminal development envelope, and at the same time allowed for the preservation of a future CAT II/III approach to be obtained on the Runway 10R end.

Three new parallel taxiways, two located on the north side of the runway and another located south of the proposed runway would be constructed to support and provide aircraft access to and from the proposed runway. The existing taxiways and crossover taxiway would be extended south to meet the new parallel taxiways and proposed runway. High-speed exits, landing lights, centerline and touchdown zone lights would be constructed on the proposed Runway 10R/28L.

Alternative C3 would include the acquisition of 35 residences (36 parcels) in the Runway 10R Protection Zone, the removal of a non-functioning ramp control tower on the top of Building 7 located in the Columbus International Aircenter, the removal of one aircraft hangar on the south airfield, and the reconfiguration of the Airport Golf Course. This is the airfield part of the Sponsor's Proposed Project.

Alternative T2: Midfield Terminal Development Envelope – South Airfield (Sponsor's Proposed Project)

Alternative T2 includes the development of new terminal facilities in the midfield area with access from the south airfield. This terminal development alternative was paired with runway alternatives that relocated Runway 10R/28L. The proposed terminal development envelope meets the terminal design criteria, and balances the airfield and terminal layouts for CMH. This is the terminal development part of the Sponsor's Proposed Project.

Alternative NCP 4 (Sponsor's Proposed Project)

NCP 4 includes the following noise abatement alternatives:

- NA-E: Implement a 15 degree divergent turn off of Runway 28R, after crossing the runway end to a 295-degree heading, only during peak operating periods when traffic warrants;
- NA-R: Renew efforts to maximize east flow (arrive and depart Runway 10L/10R); and
- NA-W: Construct a noise berm/wall.

NCP 4 decreased the number of homes in the 65+ DNL noise exposure contour from the Future (2012) Baseline noise exposure contour by 227 homes. In addition, NCP 4 decreased the number of homes in the 60-65 DNL noise exposure contour by 164 homes. This alternative was selected to be paired with each of the runway build alternatives to be considered in the FEIS.

a. Sponsor's Proposed Project

The Sponsor's Proposed Project is collectively referred to as Alternative C3b. It is a combination of Alternative C3, T2, and NCP 4.

b. Environmentally Preferred Alternative

The environmentally preferred alternative is the alternative that would cause the least damage to the biological and human environment and would best protect, preserve, and enhance the Section 4(f) resources and historical, archaeological, cultural, and natural resources. The Sponsor's Proposed Project has environmental impacts to compatible land use, noise, wetlands, Section 4(f), and Section 106.

The No Action alternative has fewer or no environmental impacts to wetlands, Section 4(f), and Section 106 as compared to the Sponsor's Proposed Project. The No Action alternative would have the greatest impact on noise by increasing the number of residents exposed to noise from 507 (Alternative C2b) and 473 (Alternative C3b) to 693 (No Action). The No Action alternative would have the least impact on the remaining environmental impact categories.

The FAA has determined that the environmentally preferred alternative is the No Action alternative.

c. Selected Alternative

The FAA has completed appropriate aviation technical review and has concluded that the Preferred Alternative can be implemented and is consistent with considerations of safety, efficiency, and utility. The FAA has also considered that the Preferred Alternative evaluated in the FEIS has undergone extensive public review. In addition, the FAA has considered that CRAA and FAA have completed coordination with the Department of the Interior (DOI), Ohio Historic Preservation Office (OHPO), the City of Columbus, and the Advisory Council on Historic Preservation (ACHP) to resolve impacts identified in both the DEIS and the FEIS.

After careful consideration of the analysis of the impacts of alternatives and the ability of these alternatives to achieve the identified purpose of and need for this project, and after review and consideration of the testimony at public hearings and of comments submitted in response to the distribution of the DEIS and FEIS, and of coordination and consultation with Federal, State, and local agencies, the FAA finds the Sponsor's Proposed Project to be the only prudent and feasible alternative to achieve the purpose of and need for the Agency Action, and therefore has identified the FEIS Preferred Alternative as the Selected Alternative. (See discussion of alternatives that were considered and eliminated in Chapter 3 of the FEIS and Section IV of this ROD which remain valid).

The FEIS environmental analyses utilized the same forecast for the No Action alternative and two runway construction alternatives. This is consistent with the purpose and need. Therefore, consideration of the potential environmental impacts resulting from application of the 2008 TAF to the No Action alternative and two construction alternatives will result in either the same impacts for construction related activities or fewer impacts due to airfield activities.

The Selected Alternative includes the relocation of Runway 10R/28L 702 feet to the south which also allows for a sufficient terminal envelope and provides for current and future capacity needs. The runway relocation provides for additional separation that will allow simultaneous arrivals in

IFR conditions. In addition, the relocation allows the potential for use in CAT II/III instrument approaches to occur to the Runway 10R end when warranted. These actions will be evaluated when operations support the need. The Selected Alternative is also prudent from a cost standpoint. Since the cost to maintain the runway is relatively equal to the cost to relocate the runway, it makes economic sense to relocate the runway and obtain the additional runway and terminal envelope benefits. Failure to relocate the runway now would result in the Sponsor incurring even more capital cost when more terminal space is required and the runway is shifted in the future.

The FEIS identified that the existing terminal configuration cannot accommodate more than 5 MAEP. The CRAA studied various terminal concepts and forecasts and determined that for long-term demand, the Airport would need to accommodate 9 MAEP. Analysis of the existing passenger terminal facilities determined the capacity of the existing terminal by increasing the number of passengers within the peak hour until demand exceeded the available capacity of the various terminal elements. The peak hour passenger volume was converted into an annual passenger volume using the peak hour/average day/peak month mathematical relationship. The annual passenger volume was then compared to the projection of enplanements in order to associate this level of activity to a specific year in the forecast. The Sponsor's forecast predicted that this 9 MAEP level would be reached in 2018.

When the 2008 TAF is considered in relation to the planned terminal development, the enplanements are not projected to reach 5 MAEP in the 2008 TAF until after 2025 (see Table 1). This clearly impacts the terminal development analysis; however, there are other issues that should be considered. As the existing terminal ages, the CRAA will need to evaluate the construction of the new terminal, not only based on reaching 5 MAEP, but rather on the overall integrity of the terminal structure itself to remain a safe and efficient terminal. In addition, environmental impacts resulting from terminal development will be based on passenger demand, not on runway relocation. In other words, relocating the runway will not automatically induce terminal development; rather it will not preclude future planned development envisioned by the Sponsor's Proposed Development.

The noise compatibility program scenario (NCP 4) of the Selected Alternative includes the following noise abatement alternatives:

- NA-E: Implement a 15 degree divergent turn off of Runway 28R, after crossing the runway end to a 295-degree heading, only during peak operating periods when traffic warrants;
- NA-R: Renew efforts to maximize east flow (arrive and depart Runway 10L/10R); and
- NA-W: Construct a noise berm/wall.

NCP 4 decreased the number of homes in the 65+ DNL noise exposure contour from the Future (2012) Baseline noise exposure contour by 227 homes. In addition, NCP 4 decreased the number of homes in the 60-65 DNL noise exposure contour by 164 homes. The 2008 TAF would result in a smaller noise contour. See Section V of this ROD for further explanation.

## V. Environmental Impacts and Mitigation

In accordance with CEQ regulations, FAA Orders 1050.1E and 5050.4B, the FAA will take appropriate steps through Federal grant assurances and conditions, and the ALP approval to ensure that the Airport Sponsor implements mitigation measures identified in the FEIS and this ROD as conditions of project approval.

### Summary of Findings by Impact Category or Issue

This section provides a brief summary of the major findings of the issues and impact categories addressed in the FEIS. The FEIS Chapter 5 contains a detailed analysis of each impact category. As discussed in Section II Of this ROD, the FAA recently released the 2008 TAF. FAA has included a discussion of the potential environmental impacts associated with using the 2008 TAF in the environmental analysis. Basically, the impacts related to construction related activities would remain the same, while impacts related to airfield operations would be less.

**No impacts or issues.** After careful consideration it was found that the Selected Alternative will have no adverse environmental consequences on the following environmental resource categories identified in FAA Order 5050.4B:

- Coastal Barriers;
- Coastal Zone;
- Farmlands;
- Light Emissions and Visual Effects; and
- Natural Resources and Energy Supply.

The use of the 2008 TAF in the environmental analysis would not impact these resource categories.

**Air Quality.** The pollutants considered in the FEIS are criteria pollutants, those pollutants for which ambient air quality standards have been established by the U.S. Environmental Protection Agency (USEPA) and the Ohio Environmental Protection Agency (OEPA). These pollutants have been identified by the FAA as potentially critical pollutants associated with airports. Franklin County currently exceeds the Federal standard for emissions of Particulate Matter (PM<sub>2.5</sub>) and Ozone.

The four criteria pollutants analyzed in the FEIS were NO<sub>x</sub>, VOC, PM<sub>2.5</sub>, and the precursor pollutant, SO<sub>x</sub>. Federally-sponsored airport development must conform to the Ohio State Implementation Plan (SIP) in accordance with the criteria and procedures established in the SIP as specified by USEPA in 40 CFR Part 51, Subpart W, *Determining Conformity of General Federal Actions to State of Federal Implementation Plans*. According to Subpart W, a conformity determination (with the SIP) is required for each criteria pollutant if the emissions in a nonattainment or maintenance area for that pollutant caused by the Federal action (Selected Alternative) would equal or exceed a specified annual emission rate when compared to the No Action alternative or would be 10 percent or more of the nonattainment or maintenance area's emission inventory for the pollutant in the SIP.

Annual pollutant emissions for NO<sub>x</sub>, VOC, PM<sub>2.5</sub>, and the precursor pollutant, SO<sub>x</sub> were calculated using the FAA-required and USEPA-approved Emissions and Dispersion Modeling System (EDMS), Version 4.5. Based on scoping coordination meetings with the OEPA, the

2009 attainment year and the 2010 budget year were included in the air quality assessment, as well as the identification of the year when emissions for the Selected Alternative are expected to be the greatest on an annual basis.

Based on the emissions inventory, the Selected Alternative have *de minimis* impact on NO<sub>x</sub>, VOC, PM<sub>2.5</sub>, and SO<sub>x</sub> and have a total emissions less than 10 percent of the SIP's emission inventory and do not exceed the 100 tons per year emission rate, therefore, a General Conformity Determination was not required for the Selected Alternative. The Selected Alternative net emissions were also compared to the 10 percent limit defining regional significance in the Transportation Improvement Plan. It was determined that the emissions were far less than the 10 percent limit and thus the project complies with the plan included in the Ohio SIP to reduce emissions in Franklin County.

Attachment 6 of this ROD shows a table of air quality mitigation elements that the CRAA currently uses or is evaluating for use with future projects. Potential air quality impacts resulting from the use of the 2008 TAF in the environmental analysis would result in less potential air quality impacts than those identified in the FEIS analysis. Air quality impacts resulting from construction activities would remain the same as discussed in the Construction Impacts section.

**Compatible Land Use.** The compatibility of existing and planned land use in the vicinity of an airport is usually associated with noise impacts related to an airport, and was analyzed in the FEIS. Residential uses are incompatible at DNL 65 or greater. The 2012 No Action alternative, based on the Sponsor's forecast, would include 693 total residential units in the 65+ DNL. A total of 336 have not been mitigated for and would require sound insulation to be made compatible. Four noise sensitive facilities are located in the 65+ DNL. The 2012 Selected Alternative, based on the Sponsor's forecast, would include 473 total residential units in the 65+ DNL; 225 would require sound insulation to be made compatible. There are no noise sensitive facilities located in the Selected Alternative 2012 65 DNL noise contour. Because the 2008 TAF decreases the number of airfield operations, the resulting DNL 65 or greater contour would be smaller. The FAA completed a sensitivity analysis that compared the forecast numbers used in the FEIS and the 2008 TAF to compare the reduction in operating levels that was presented in the 2008 TAF. Based on this analysis, the FAA determined that the number of homes eligible to receive sound insulation is 84. The sensitivity analysis can be found in Attachment 7 of this ROD. Monitoring and mitigation commitments can be found in Section V and VIII of this ROD.

For the Selected Alternative the CRAA will acquire 35 residences (36 parcels) in the East Columbus Neighborhood for the new Runway Protection Zone (RPZ) for Runway 10R/28L. The homes are located on the easternmost edge of the neighborhood and bordered by CMH property on two sides. The 35 residences (36 parcels) to be acquired represent a small percentage of the homes in the entire East Columbus Neighborhood. The homes will be acquired under the regulations for the *Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24)*. The homes will be demolished and the land will be converted from residential to open space, which is compatible with the land uses of a RPZ. CRAA has already purchased eleven and demolished ten properties. The FAA sent CRAA a letter on January 16, 2007 advising CRAA that early acquisition of properties prior to an environmental finding would not influence the FAA's decision. The use of the 2008 TAF in the environmental analysis would not impact the size of the RPZ needed for Runway 10R/28L.

After the property acquisition is complete along 13<sup>th</sup> Avenue, the CRAA will construct a noise berm or noise berm/wall along the new Airport property line. The noise berm/wall would serve



to reduce noise as well as reduce visual impacts from the removal of the houses and trees in the relocated RPZ.

The stormwater detention basin improvements for Outfall 004 are located in the vicinity of the 94<sup>th</sup> Aerosquadron Restaurant. One entrance driveway and 24 parking spaces would be replaced in-kind west of the present location. There are currently two driveway entrances into the restaurant, so access to the restaurant would be maintained during the construction and relocation.

**Construction Impacts.** Construction activities involve clearing existing land; and excavating the site to remove any existing pavement, trees, vegetation, utility lines, and other structures. The site work would include grading, paving, installing utilities, and constructing support facilities. These activities pose no unusual construction methods and are routinely carried out through the Metropolitan area without groundwater or surface water impacts. The construction activity is not expected to generate any liquid or solid wastes that pose a threat to groundwater. The construction contractor is required to remove all waste materials generated during construction. Waste materials would likely include debris, demolition material, packaging, and excess construction materials, all typical of construction sites.

Temporary control measures would be specifically identified through the application of an erosion control plan prepared during the project's design stage as identified in FAA AC 150/5370-10C, *Standards for Specifying Construction of Airports* and Item P-156, *Temporary Air and Water Pollution, Soil Erosion, and Siltation Control*, to ensure that there are no long-term impacts to the existing drainage systems or water quality in the area. Temporary and permanent erosion controls include, but are not limited to: exposing the minimum area of erodible earth; applying temporary mulch with or without seeding; use of temporary crossing protection of watercourses; and temporary slope drains, benches, dikes, dams, sediment basins, and filter fabric/silt fencing.

Additional elements of an erosion and sediment control plan would include an interconnected system of erosion and stormwater runoff controls, including best management practices and structural erosion control methods, such as phased clearing and grading; confining construction to the dry season whenever possible; sediment traps and ponds; interceptor dikes and swales; mulching; filter fabric fencing; hydroseeding; and terracing. Also, revegetation of areas disturbed by construction activity would take place as soon as possible.

In the case of any conflict between standard requirements and other regulatory standards, the pollution control regulations and laws that are the most stringent would be applied. Additionally, temporary and permanent erosion and pollution control measures may be instituted during construction activities if they become necessary.

Adverse impacts to water quality due to erosion and subsequent sedimentation are primary concerns during an airport construction project. The increase in suspended sediment concentrations, caused by an increase of eroded materials entering waterways, could induce impacts on aquatic life in the Airport environs. Impacts could also result from pollutants released from construction materials and equipment, such as fuels, lubricants, bitumen, concrete, and wash water from concrete mixing. To prevent discharge of these materials into surface water and groundwater, all materials would be confined to the work site. Additionally, precautions would be taken to limit and minimize the potential for spills.

The primary mechanism for delivery of sediment from construction and borrow sources is stormwater runoff. A National Pollutant Discharge Elimination System (NPDES) for stormwater discharge and a Stormwater Pollution Prevention Plan (SWPPP) would be required for project construction. The CRAA will also need to file a Notice of Intent (NOI) with the OEPA because the work site is larger than 5 acres. The NOI will state that the CRAA would comply with the erosion, sediment, and stormwater control measures presented in OEPA's General Permit for Construction Activities.

Heavy equipment used during construction would require fueling, routine maintenance, and potentially minor repairs while on site. There is a risk of minor spills or leaks of petroleum products during maintenance and equipment refueling. This risk is typical of any construction project involving similar activities. The contractor is responsible for the implementation of measures to prevent petroleum spills and the reporting and clean-up requirements for any petroleum spills that occur during construction.

Potential air quality impacts from construction include fugitive dust associated with demolition and construction; fugitive dust along haul routes; exhaust and machinery-related emissions from construction equipment and haul vehicles on the site and along haul routes; and potential vehicular congestion in the vicinity of construction sites and on haul routes. Analysis determined that air quality impacts during construction would be temporary and would not create a new violation of Federal or State air pollution standards.

Utilizing the 2008 TAF in the environmental analysis would not change the potential impacts resulting from construction, since the runway construction project remains the same.

**Department of Transportation Act, Section 4(f).** Section 4(f) of the 1966 Department of Transportation Act states that the Secretary of the U.S. Department of Transportation may not approve a project that requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance. The Act requires that no project be approved unless there is no feasible and prudent alternative to using that land and planning for the project includes all possible measures to minimize harm resulting from the use of the land.

The area of potential effect is the Airport Golf Course, Section 106 resources, and the 65+ DNL contours.

- i. Airport Golf Course.* The Airport Golf Course opened in 1966 on land owned by the City of Columbus. The CRAA owns the golf course property and leases it to the City of Columbus to manage as a golf course. The golf course was opened after the construction of Runway 10R/28L. As a result, the original design of the golf course was heavily influenced by the requirements to maintain setbacks and clear zones around the approach lighting system to Runway 28L. Implementation of the Selected Alternative would result in shifting the approach lighting system 702 feet south to line up with the proposed new centerline for Runway 10R/28L. This would result in the reconfiguration of at least nine (9) holes on the golf course to meet the FAA siting requirements. The golf holes may not be located between the new Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights (MALSR). Golf shots will not be allowed between the new light towers and golf shots will be played away from or toward the lights but not over them. Golf activities should not be closer than 20 feet to the MALSR light lane.

The CRAA and the City of Columbus entered into negotiations on the reconfiguration of the Airport Golf Course. A Memorandum of Understanding (MOU) between the City of Columbus and the CRAA was entered into on December 12, 2008, which stipulates the requirements of the Airport Golf Course reconfiguration. The Airport Golf Course will be made whole after the reconfiguration. The DOI stated on February 6, 2009 that "we would agree that there is no feasible or prudent alternative to the use of the golf course, and the mitigation for the impacts to the golf course are acceptable". A copy of the MOU is located in Attachment 3 of this ROD.

- ii. Section 106 Resources.* One historic structure would be impacted by the Selected Alternative – the Air Force Plant 85, Building 7 Ramp Tower. Air Force Plant 85 is an NRHP-eligible district due to the aircraft manufacturing activities that occurred at the site and the architectural significance of the original structures, which were designed by Albert Kahn.

Since its original construction in 1943, Building 7 has undergone a number of improvements and additions, one of which was the addition of the Ramp Tower in 1953. The removal of the Ramp Tower is an adverse effect because it will modify the existing structure which is a contributing building to the Air Force Plant 85 historic district.

The FAA consulted with the OHPO, the ACHP, and other affected parties and prepared a Memorandum of Agreement (MOA) on the development of appropriate mitigation measures, which was executed on March 5, 2009. A copy of the MOA is located in Attachment 4 of this ROD.

- iii. Other Section 4(f) Resources.* There would be changes to park noise levels associated with the Selected Alternative. The four parks are Land and Water Conservation Act funded Pizzurro Park, Airport Golf Course, Brittany Hills Park, and Krumm Park. Due to the uses at these parks, it was determined that neither the use nor the value of the parks would be diminished by the level of noise and thus would not constitute a constructive use. In February 6, 2009 correspondence received from the DOI stated it "agreed that there would not be any additional impact to those resources from this project and agrees with the no constructive use determination".

There are six historic structures that are listed, eligible for listing, or possibly eligible for listing in the NRHP that would be located in the 65 DNL contour. Of the six potentially significant historic structures, one is residential and has already received sound insulation through the CRAA's sound insulation program. None of the structures would receive noise levels at or above the 75 DNL. Additional information on the historic structures can be found in Section V of the ROD under Historical, Architectural, Archeological, and Cultural Resources.

The use of the 2008 TAF in the environmental analysis would result in the same impacts to the Airport Golf Course and the Section 106 resources. The conclusions identified for the noise impacts for the Other Section 4(f) Resources would not change based on the 2008 TAF.

**Fish, Wildlife, and Plants.** This section consists of the affected environment for biotic communities and threatened, endangered, candidate, and proposed Federal- and state-listed species.

CMH is located in Franklin County, which is a highly urbanized area. Although this part of the County has been largely altered by development, many species of native plants continue to exist in remnant habitats on or around the Airport. Within the DSA of the Selected Alternative, many of the existing biotic communities, defined as vegetative associations and their associated wildlife, are limited man-made habitats, such as previously disturbed fields and ditches that are used for storm water conveyance. A biological assessment was completed for the DSA. Four vegetation communities were identified in this assessment: open water habitats, forests, old-field, and wasteground.

- i. *Open Water Habitats.* There are three ponds located in the DSA. These ponds are water hazards associated with the Airport Golf Course, which is located east of the Airport on Hamilton Road. The ponds appear to be hydrologically isolated from Big Walnut Creek. They are classified as palustrine, excavated, unconsolidated bottom systems with an intermittently exposed hydrologic regime.
- ii. *Forests.* There are three main forested areas within the DSA. Two are located west of Stelzer Road (approximately 29 acres) and are dominated by silver maple (*Acer saccharinum*), sugar maple (*Acer saccharum*), common privet (*Ligustrum vulgare*), arrow-wood (*Viburnum dentatum*), and European buckthorn (*Rhamnus frangula*). The third area borders the Airport Golf Course and Big Walnut Creek (approximately 17 acres), east of the Airport. The upper slopes are dominated by sugar maple (*Acer saccharum*) and northern red oak (*Quercus rubra*). The lower slopes are dominated by sycamore (*Platanus occidentalis*) and green ash (*Fraxinus pennsylvanica*). Understory plants include common privet (*Ligustrum vulgare*), bush honeysuckle (*Lonicera maackii*), and pawpaw (*Asimina triloba*).
- iii. *Old-Field.* There is an old-field area west of Stelzer Road. It includes redtop (*Agrostis gigantea*), Canada thistle (*Cirsium arvense*), tall fescue (*Festuca elatior*), birdsfoot trefoil (*Lotus corniculatus*), everlasting pea (*Lathyrus latifolius*), old-field panic grass (*Panicum accuminatum*), and common goldenrod (*Solidago canadensis*). It is approximately 90 acres.
- iv. *Wasteground.* Wastegrounds are mowed and maintained right-of-ways and fields in and around residential, industrial, and commercial properties. This consists of approximately 1,592 acres of the DSA. The wasteground consists of weedy species, including oxeye daisy (*Chrysanthemum leucanthemum*), chicory (*Cichorium intybus*), wild carrot (*Daucus carota*), northern crabgrass (*Digitaria sanguinalis*), quack grass (*Elytrigia repens*), tall fescue (*Festuca elatior*), English plantain (*Plantago lanceolata*), Kentucky bluegrass (*Poa pratensis*), yellow foxtail grass (*Setaria glauca*), birdsfoot trefoil (*Lotus corniculatus*), red clover (*Trifolium pratensis*), and white clover (*Trifolium repens*).
- v. *Threatened and Endangered Species.* Coordination was completed with the U.S. Fish and Wildlife Service (USFWS) and Ohio Department of Natural Resources (ODNR) for rare, threatened, or endangered species that might occur in the proposed project area for the Selected Alternative. The proposed project area falls within the range of the following threatened and endangered species: Scioto madtom (*Noturus trautmani*), northern riffleshell mussel (*Epioblasma torulosa rangiana*), clubshell mussel (*Pleurobema clava*), Indiana bat (*Myotis sodalis*), bald eagle (*Haliaeetus leucocephalus*), snuffbox mussel (*Epioblasma triquetra*), elephant-ear mussel (*Elliptio crassidens*), northern brook lamprey (*Ichthyomyzon fossor*), blacknose shiner (*Notropis heterolepis*), golden-winged warbler (*Vermivora chrysoptera*), spotted darter (*Etheostoma maculatum*), one Federal candidate

species, rayed bean mussel (*Villosa fabalis*), and two state species of concern, the four-toed salamander (*Hemidactylium scutatum*), and the smooth green snake (*Opheodrys vernalis*). There are no occurrences of any of the species listed within 1 mile of the proposed project area.

Approximately 21 suitable roost trees and foraging habitat for the Indiana bat were present within the second-growth forest areas of the project area along Big Walnut Creek. However, no individual bats were observed during the survey. Trees along Big Walnut Creek are not anticipated to be cut down. If it is determined that the trees along Big Walnut Creek need to be trimmed, additional coordination with the USFWS will be required to ensure that there are no impacts to the Indiana bat. Any tree clearing after 2009 will need to be coordinated with USFWS to ensure there are no impacts to the Indiana Bat.

The proposed project is within the range of the bald eagle. The location of bald eagle activity changes frequently. Therefore, closer to the actual date of construction the CRAA must obtain an updated status of the bald eagle activity in the area. If bald eagle activity is found to occur within ½ mile of the project area, then the CRAA must coordinate with the ODNR – Division of Wildlife.

The use of the 2008 TAF in the environmental analysis would not change the potential impacts identified in the FEIS to Fish, Wildlife, and Plants.

**Hazardous Materials, Pollution Prevention, and Solid Waste.** Previous assessments of the former Air Force Plant 85 (now known as the Columbus International Aircenter) found hazardous materials in a number of buildings and sites near the project area. The Selected Alternative will impact the Ramp Tower on Building 7. Other structures, not associated with Air Force Plant 85, include Hangar 3 and the homes located along 13<sup>th</sup> Avenue. All of these structures will be demolished and may contain asbestos and/or lead paint. Hazardous materials from demolition activities would be removed in accordance with 40 CFR Parts 260-280, 49 CFR Parts 171-199, and OAC 3745-20.

The majority of former Air Force Plant 85 was remediated to the criteria set forth by the OEPA. However, due to the nature of Air Force operations, there may be areas of localized contamination that still remain. To reduce the potential for exposure to hazardous materials and minimize contaminant releases, the CRAA is committed to using pollution prevention design methods to limit soil excavation and other ground disturbance for the Selected Alternative. All personnel would be made aware of the site conditions and informed to remain cognizant of potential changes to the soil.

A comprehensive investigation of the vacant hangar would be completed to determine if there are any unaccounted for underground storage tanks (USTs). If there are USTs present, their contents would be characterized and disposed of and their closure in accordance with the Bureau of Underground Storage Tank regulations located in OAC Chapter 1301-7. The transformers located on the FAA antenna would be handled appropriately to minimize the number of workers exposed to and limit further contaminant release that would be associated with its demolition.

Each of the properties that would be acquired and demolished on 13<sup>th</sup> Avenue would have a Phase I EDDA prepared to identify any hazardous materials that could be in the area prior to demolition.

All wastes generated from abatement and/or demolition may be required to be evaluated or characterized to determine if they are hazardous, pursuant to OAC Chapter 3745-52-11. Hazardous waste construction debris is regulated under Ohio Revised Code (ORC) Title 37, Chapters 3734 and 3745 and OAC Chapters 3754-49-57, 205, 266, 65, 66, 67, 68, 69, 256, and 270. If other hazardous waste is encountered during the demolition activities, then they would be managed and disposed of in accordance with 40 CFR Parts 260-280 and 49 CFR Parts 171-199. The demolition and construction activities would also include appropriate safety precautions and training for construction personnel. These activities would be performed or overseen by individuals trained to monitor and identify the presence of hazardous materials. OSHA regulations 29 CFR § 1926.62 and § 1926.1101 apply to the demolition and clean-up of lead-based and asbestos areas. FAA AC 150/5370-2E, *Operational Safety on Airports During Construction*, also includes requirements that are related to this.

The construction activities associated with this action would also be regulated under 42 U.S.C. §§ 13101 and 13102 for hazardous materials, hazardous wastes, and hazardous substances that are used, generated, or disturbed, in accordance with Executive Orders 12088, 13101, 13148 and FAA Orders 1050.10B, 1050.14A, 1050.15A, and 1050.18. Additionally, in the event that unknown contaminants are discovered during construction, or a spill occurs during construction, work in the area would stop until the National Response Center is notified at 1-800-424-8802.

The use of the 2008 TAF in the environmental analysis would not change the potential impacts identified in the FEIS resulting from Hazardous Materials, Pollution Prevention, and Solid Waste.

**Historical, Architectural, Archeological, and Cultural Resources.** There are a number of significant historic sites located near the Airport and project site. The Selected Alternative would result in the removal of a Ramp Tower that is located on top of Building 7 of the former Air Force Plant 85. Air Force Plant 85 is eligible for listing on the NRHP as a historic district due to the aircraft manufacturing activities that occurred at the site and the architectural significance of the original structures, which were designed by Albert Kahn.

Since its original construction in 1943, Building 7 has undergone a number of improvements and additions, one of which was the addition of the Ramp Tower in 1953. The FAA determined that removal of the Ramp Tower would constitute an adverse impact because it would modify the existing structure which is a contributing building to the Air Force Plant 85 district. However, the Ramp Tower was not part of Albert Kahn's original work and was built after the time when Air Force Plant 85 was being used for the manufacturing activities that made it eligible for the NRHP. The FAA made a determination of an adverse effect; however, removal of the structure is not considered a significant impact. This removal would return the site to a condition where it is closer to its original layout and architecture.

An archeological investigation of the project area was completed. No archeological sites of significance were found. The Stelzer Cemetery was located and identified through field work. The Stelzer Cemetery was originally relocated to the Mifflin Township Cemetery in the 1930s; with the improvement of technology the investigation found human remains and various artifacts in the general location of what was believed to be the Stelzer Cemetery. The Stelzer Cemetery is not considered a historical resource. However, the CRAA has coordinated with the Stelzer family on the final disposition of the findings in the cemetery. The Stelzer family concurred with the finding and recommendations for resolution in the MOA.

The FAA coordinated the findings of the Building 7 Ramp Tower on Air Force Plant 85 and the Stelzer Cemetery with the OHPO and the ACHP. A MOA was executed by the CRAA, the FAA, and the OHPO on March 5, 2009 that details the stipulations on the removal of the Ramp Tower and disposition of the Stelzer Cemetery. The MOA can be found in Attachment 4 of this ROD.

The use of the 2008 TAF in the environmental analysis would not change the potential impacts identified in the FEIS to Historical, Architectural, Archeological, Cultural Resources.

**Noise.** Airport noise is one of the principal concerns of the Selected Alternative. The CRAA conducted a Part 150 Study Update concurrently with the EIS. A ROA of the Part 150 Study Update measures was approved by the FAA on May 19, 2008

The FEIS noise assessment was based on a forecast developed concurrently for the Part 150 Study Update and the EIS. It was prepared in August 2006. The noise assessment assumed 241,600 annual operations for the 2012 No Action and 241,600 annual operations for the 2012 Selected Alternative, which would be the first year of operation of the Selected Alternative. The 2018 No Action alternative assumed 271,450 and the 2018 Selected Alternative assumed 271,450 annual operations for noise assessment.

The 2012 No Action alternative, based on the Sponsor's forecast, impacts 693 housing units; 357 housing units have already been mitigated under a previous Part 150 Study and 336 housing units have not been mitigated. The 336 housing units that have not been mitigated are either homes that have been eligible for sound insulation in the past, but were not insulated because the homeowner declined sound insulation, or homes were not previously eligible.

The 2012 Selected Alternative impacts 473 housing units; 248 housing units have already been mitigated and 225 housing units have not received mitigation because they declined sound insulation in the past or they were previously not eligible.

The 2018 No Action alternative has 819 housing units; 382 housing units have already been mitigated and 437 housing units have not received mitigation because they declined sound insulation in the past, when offered or they were previously not eligible.

The 2018 Selected Alternative has 656 housing units; 256 housing units have already been mitigated and 400 housing units have not received mitigation because they declined sound insulation in the past, when offered or they were previously not eligible.

New noise contours were generated for evaluation in the ROD. The new noise contours were generated to evaluate the potential impacts to the noise contour and potential mitigation for the Selected Alternative. The FAA released the 2008 TAF in December 2008, which shows a downward trend in operations and enplanements as a result of the general economic downturn, recent declines in aviation activity, and unstable fuel prices.

The FAA and CRAA hosted a public information workshop on July 9, 2009 to present the noise contours that were generated using the 2008 TAF. The public was afforded an opportunity to review the documentation and provide comments. The public comment period was from July 9, 2009 to August 10, 2009. The FAA received no comments during the public comment period.

Noise contours were generated for existing (2008) and the 2012 Selected Alternative using the published 2008 TAF numbers. The 2012 Selected Alternative noise contour was used to

determine the proposed noise mitigation boundary. Based on this analysis, there are approximately 33 homes within the 65 DNL or greater contour that have not been previously mitigated. The FAA agreed to a block rounding approach for the area, therefore, there are 84 homes that will receive sound insulation as mitigation if the Selected Alternative is implemented. This proposed mitigation is less than was presented in the FEIS based on the decrease in overall noise.

Aviation activity forecasts will be monitored throughout the construction of this project. The Sponsor's forecast shows operations returning to more robust aviation activity at CMH earlier than the 2008 TAF shows. If aviation activity increases, beyond those numbers modeled in the ROD sensitivity analysis using the 2008 TAF, then the Sponsor should generate new noise contours using the most current published TAF. The FAA will then evaluate the need to expand the noise mitigation boundaries based on the operation of activity at that time.

The CRAA will also be required upon one year after completion of the runway reconstruction project contained in the Selected Alternative, to prepare a 5-year forecast of operations and enplanements and to update the Part 150 Noise Study and Noise Exposure Map showing the current and 5-year condition.

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

*i. Socioeconomic.* Socioeconomic impacts are assessed to determine the effect that the Selected Alternative would have on the social and economic fabric of the surrounding communities. The types of socioeconomic impacts that typically arise from airport development are:

- Extensive relocation of residents without the availability of sufficient replacement housing;
- Extensive relocation of community businesses that would create severe economic hardship for the affected communities;
- Disruptions of local traffic patterns that would substantially reduce the levels of service of the roads serving the airport and its surrounding communities; and
- A substantial loss of community tax base.

The Selected Alternative requires the purchase of 35 residences (36 parcels) be completed for the relocated RPZ in the East Columbus Neighborhood. The 35 residences are the easternmost properties on 13<sup>th</sup> Avenue and are bounded by CMH property on two sides. An assessment of the availability of comparable housing was completed in the FEIS Chapter 5.3 and Appendix H.

A negotiated purchase program will be offered to the 35 residences (36 parcels) in the area. A negotiated purchase program is the purchase of real property through negotiation and would involve the payment of relocation assistance and moving expenses, consistent with the regulations applicable to the *Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24)*.



Based on the replacement housing assessment, approximately 26 percent of the properties in the acquisition area are owner-occupied properties with the average market price of residential units west of the Airport being \$44,580 to \$64,000. A real estate market survey showed that sufficient housing exists in Franklin County to accommodate the proposed relocation of the owner-occupied homes. The selected communities have housing types that are comparable to that of the housing in the East Columbus Neighborhood and dwellings that would meet the implementing regulations found at 49 CFR Part 24, 42 U.S.C. §§ 4601 et seq., that replacement housing be decent, safe, and sanitary.

The East Columbus Neighborhood has a high concentration of rental properties, so single-family rental properties were also surveyed as a part of the project. Tenant-occupants will be offered rental assistance payments based on either a comparison of market rents or on an income basis. There may be cases where the tenant-occupied rent supplements are expected to exceed the statutory limits. Housing of last resort procedures must be considered and applied as necessary to provide comparable replacement housing. Based on the market survey that was completed in August 2007, the average rent supplement is expected to exceed the statutory limits for assistance payment under the *Uniform Relocation Assistance and Real Property Acquisition Policies Act*. Therefore, the CRAA will be using 49 CFR Part 24.206(a), the housing of last resort for the East Columbus Neighborhood.

Relocation would be complete prior to the opening of the replacement runway to air traffic which would conform to the requirements of 49 CFR Part 24 that calls for an orderly and humane relocation process. The use of the 2008 TAF in the environmental analysis would not result in a change to the number of relocated properties.

- ii. *Environmental Justice (EJ)*. All of the environmental impact categories were reviewed and evaluated to determine whether there would be any disproportionate impacts to minority and low-income populations.

The assessment of impacts associated with the proposed acquisition area requires an understanding of the minority population and median income for the East Columbus Neighborhood. Within the East Columbus Neighborhood approximately 21.7 percent of the population is white, 67.7 percent is black, and 10.6 percent is other races. The median income for this area is \$22,304. The poverty threshold was established by the HUD for the Columbus Metro Fair Market Rent Area for 2007 and was used as the low-income threshold. The poverty threshold for a one-person household is \$13,500. A household containing four persons would be considered below the poverty level if their household income were less than \$19,300. No additional analysis was conducted because neither the area within the 65 DNL noise contour of the existing conditions nor the East Columbus Neighborhood would be identified as a low-income community.

Within the 2012 No Action Alternative 65 DNL Noise contour, approximately 14.8 percent of the population being white, 77.5 percent being black, and the remaining 7.7 percent of the population consists of other races.

Within the 65 DNL noise contour of the 2012 Selected Alternative, approximately 25.5 percent of the population being white, 66.1 percent being black, and the remaining 8.4 percent consist of other races.

As a result of implementing the Selected Alternative, significant noise increases would occur. The area of significant increase is located east, west, and south of the Airport and racially distributed with 31.1 percent of the population being white, 59.2 percent being black, and the remaining 9.7 percent being of other races.

Based on this analysis, it was determined that the significant noise impacts associated with the Selected Alternative that would occur over areas include a smaller percentage minority population than the No Action alternative. In addition, the proposed area of acquisition for the Selected Alternative is not distinctly different from the racial makeup of the East Columbus Neighborhood; therefore, the Selected Alternative would not disproportionately impact any minority populations within the airport environs.

The use of the 2008 TAF in the environmental analysis would not result in a change to the environmental justice impacts. Even though the noise contour would be initially smaller, for the short-term, when traffic levels return to 2012/2018 analyzed levels the environmental justice impacts would be the same.

*iii. Children's Environmental Health and Safety Risks.* The Selected Alternative was evaluated in the FEIS Chapter 5.3.3 for children's environmental health and safety risks. According to the Ohio Department of Health, the primary children's health concern statewide is asthma and related lung disorders. Based on the analysis contained in the FEIS Chapter 5.5, neither the No Action nor the Selected Alternative would create air quality conditions that would worsen breathing conditions for children. Based on analysis contained in the FEIS Chapter 5.6, neither the No Action nor the Selected Alternative would result in the release of harmful agents into surface or groundwater resources above levels permitted by the regulations of both the State of Ohio and the Federal government. The implementation of the Selected Alternative would not result in the release of or exposure to significant levels of harmful agents in the water, air, or soil that would affect children's health or safety. The use of the 2008 TAF in the environmental analysis would not result in a change to the FEIS identified Children's Environmental Health and Safety Risks.

**Water Quality.** This impact category addresses surface water quality. The development of the Selected Alternative will primarily require modifications of stormwater management in Basins 1, 2, 3, 4, and 6. Runway 10R/28L currently drains into several large conveyance box culverts that carry tributary flows to Turkey Run (Outfall 001), Mason Run (Outfall 002 and 003), and Big Walnut Creek (Outfalls 004 and 006). The Selected Alternative will require a relocated runway collection system and will also impact flow routing from upstream areas of CMH. The CRAA would need to complete the following stormwater mitigation for the development for the Selected Alternative:

*i. Water Supply.* Potable water is supplied to the Airport by the City of Columbus Hap Cremean Water Plant. Raw water for the three City of Columbus drinking water plants is drawn from surface water from the Scioto River, Big Walnut Creek, and Hoover and Alum Reservoirs. Raw water is supplemented by ground water from a south well field area in southeastern Franklin County. There are three wells located on CMH property, all located outside the DSA for the Selected Alternative. There are five wells located south of CMH, on the former Air Force Plant 85 property and south of 5<sup>th</sup> Avenue. There are nine wells located north of CMH, near Johnstown Road and I-270. None of the wells are located within the vicinity of the development of the Selected Alternative.

ii. *Ground Water Hydrology.* CMH lies within the Tills Plans of the Central Lowland Physiographic Province. Ground water is present in three major aquifer systems that are present in Franklin County: Devonian limestone aquifers, Mississippian sandstone aquifers, and glacial outwash aquifers. The Airport is located above Devonian limestone and glacial outwash aquifers. The typical depth of the ground water table at CMH is 15 to 30 feet.

The soils present along CMH's southern boundary belong to the Bennington-Pewamo (generally wet to ponded and poorly permeable soils) and Urban Land Bennington Complex (poorly permeable soils) Associations. The area between Mason Run and Big Walnut Creek, on the eastern side of CMH, is comprised of soils belonging to the Bennington-Urban Land Complex Association and lies over relatively impermeable shale bedrock. This shale is rarely used for water supply, except in limited weathered zones where it serves as an effective confining layer separating the limestone aquifers from the more permeable overlaying deposits.

iii. *Basin 1.* The 48-inch diameter storm sewer will need to be connected to a new 10-foot by 6-foot runway box culvert running from the south end of the existing Red Parking Lot to the existing 12-foot by 5-foot culvert under Aircenter Drive. This new box culvert would replace the existing box culvert. In addition, the detention basin at Aircenter Drive would need to be constructed with a total capacity of 107.5-acre feet to meet the regulatory requirements for the management of water quantity and quality associated with the development.

iv. *Basins 2 and 3.* The development of Basins 2 and 3 would require restrictions on discharges to Mason Run per the City of Columbus Division of Sewerage and Drainage (DOSD). Flow restriction orifices would be placed within a drainage structure downstream of the drainage confluence for Basins 2 and 3. This restriction would meet the limits described within the DOSD Manual for discharges to Mason Run for the critical storm and 100-year storm. All excess stormwater that cannot be discharged to Mason Run would be diverted through a gravity sewer to the detention basin at Aircenter Drive (42-acre feet for Basin 2 and 3). Flows up to 140 cubic feet per second could be diverted to the detention basin at Aircenter Drive, which meets the regulatory requirements for management of water quantity and quality associated with the Selected Alternative.

v. *Basin 4.* The USACOE approved the jurisdictional wetland and stream delineation for the DSA in the FEIS. The determination identified the ravine at Outfall 004 as a jurisdictional stream (Stream 2). Therefore, the development of a detention basin, including the installation of an outlet restriction, would be subject to Section 404 of the Clean Water Act (CWA). Also, a Water Quality Certification under Section 401 of the CWA would be required from the OEPA to obtain a permit under the CWA 404 from the USACOE. The project would also have to comply with Ohio's Water Quality Standards, defined in OAC Chapter 3745-1. Also, if increased loadings to the stream occur, then the project is subject to Ohio Anti-Degradation (OAC 3745-1-05). Additional information on this is located under the *Wetlands* section of this ROD.

The CRAA has developed and implemented a SWPPP for airport industrial activities, as required by the CMH NPDES permit. The SWPPP includes descriptions of BMPs that the Airport and its tenants incorporate into regular activities to minimize the potential for contamination of stormwater discharges. The CRAA has also developed and implemented a

SPCC program to address the control and containment of unanticipated spills of petroleum products at the facility.

The CRAA has a Wastewater Discharge permit from the City of Columbus, Department of Public Utilities for the discharge of spent deicing fluid and deicing stormwater into the sanitary sewer system. The Wastewater Discharge permit includes self-monitoring and reporting requirements for daily flow, daily average CBOD<sub>5</sub>, Total Kjeldahl Nitrogen (TKN), and pH. CRAA is also required to comply with the City of Columbus Sewer Use and Regulations and pursuant to the Director's Regulations in the Columbus City Codes Chapter 1145.

The use of the 2008 TAF in the environmental analysis would not result in a change to the FEIS impacts identified for Water Quality.

**Wetlands.** In 2003, the entire CMH property was delineated and classified. In 2006, the DSA for the Selected Alternative was re-delineated through field verification. The DSA is 1,750 acres. Wetland communities in the DSA include palustrine broad-leaf deciduous forests and palustrine emergent wetlands. Approximately 9.95 acres of wetlands were delineated in the DSA. Approximately 1.95 acres (20 percent) of the delineated wetlands are palustrine forests and 8.00 acres (80 percent) are palustrine emergent. There are approximately 8,292 linear feet of streamcourse in the DSA.

The Selected Alternative will impact a total of 1,005 linear feet of streamcourse, including filling and culverting 592 linear feet of an unvegetated ditch south of the existing runway and modifying 413 linear feet of a ravine south of Sawyer Road to create a stormwater basin. The Selected Alternative will grade and fill 0.65 acres of wetlands (0.33 acres for the runway development and 0.32 for the terminal development).

The CRAA will work jointly with the USACOE to obtain a Section 404 permit and the OEPA to comply with the OEPA Anti-Degradation Rules. The CRAA will mitigate off-site to reduce the impacts that flooded areas or wetlands could have on attracting waterfowl and other animals that are considered non-compatible and hazardous with aviation. The CRAA will follow the recommendations in FAA AC 150/5200-33A, *Hazardous Wildlife Attractants on or Near Airports*.

The ODNR recommends that if stream impacts are proposed, that no in-water work be conducted between April 15<sup>th</sup> and June 30<sup>th</sup> to reduce the impacts to aquatic species and habitat.

The use of the 2008 TAF in the environmental analysis would not result in a change to the FEIS impacts identified for wetlands since the new runway would be constructed.

**Cumulative Impacts.** Cumulative impact is the effect on the environment that results from the incremental effect of a proposed action or alternative when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or nonfederal) or person undertakes that action.

The FAA and CRAA have considered the effects of the Selected Alternative taken together with past, present, and reasonably foreseeable future actions that would be cumulative with the Selected Alternative. All potentially affected impact categories were considered. Past projects at CMH and at other facilities in the vicinity of CMH were those projects that occurred before or during 2007. Present projects are defined as those completed in 2008 and 2009. Foreseeable future actions are projects to be completed between 2009 and 2018, which is the planning

horizon of the FEIS. A detailed analysis of the cumulative impacts can be found in the FEIS Chapter 7.

Past projects that were considered as a part of the cumulative impact analysis include: the addition of the terminal switchback ramp; the red parking lot; and the perimeter road (phase 1 and 2). Present projects include: Stelzer Road/International Gateway Interchange; Crossover Taxiway; Airport Loop Roadway Project; and Stormwater Detention of Turkey Run. The reasonably foreseeable future actions include: the consolidated rental car facility; the City of Gahanna Hike/Bike Path Extension; NetJets Corporate Campus; and the replacement employee parking lot.

The cumulative impacts of the Selected Alternative, when coupled with the other projects in the area, could have potential impacts in the following environmental impact categories: air quality; compatible land use; construction; Department of Transportation Section 4(f); hazardous materials; historic, architectural, archaeological, and cultural resources; natural resources and energy supply; noise; and wetlands.

- i. Air Quality. The air quality assessment of future conditions presented in the FEIS Chapter 5.5 is required to include all reasonably foreseeable future conditions associated with emission sources at the Airport. All known and quantifiable past, present, and reasonably foreseeable future actions relating to emission sources at the Airport for 2012 and 2018 were analyzed in the FEIS. Cumulatively, present, or reasonably foreseeable future projects, when combined with the Selected Alternative, would have no potential to cause significant adverse air quality impacts.
- ii. Compatible Land Use. The most notable impact to the existing or future land use patterns around CMH includes the acquisition of 35 residences (36 parcels) on 13<sup>th</sup> Avenue for the RPZ for the Selected Alternative. The Consolidated Rental Car Facility project included the acquisition of 66 acres of residential and vacant land and the NetJets Corporate Campus will require approximately six (6) acres of land acquisition and the relocation of five (5) businesses. These projects would maintain compatible land use around CMH.
- iii. Construction. Construction activities are usually short-term and temporary in nature and do not usually cause a significant adverse environmental impact. The construction impacts of implementing the Selected Alternative will not have any long-term adverse impacts. Short term impacts are usually mitigated using BMPs, as outlined in FAA AC 150/5370-10A, *Temporary Air and Water Pollution, Soil Erosion and Siltation Control*. The same mitigation for the short-term construction impacts for reasonably foreseeable projects can be combined with those of the Selected Alternative and, therefore, will not result in significant or adverse impacts.
- iv. Department of Transportation Section 4(f). The only project that can be reasonably foreseen to have an impact on Section 4(f) resources is the Gahanna Hike/Bike Trail. The City of Gahanna did not have a proposed layout for the Hike/Bike Trail at the time of the FEIS, so no formal analysis could be completed on its potential impact; however, it is unlikely that the Hike/Bike Trail would impact the Airport Golf Course. Therefore, combining the impacts of those with the Selected Alternative would not result in additional impacts to Section 4(f) resources.
- v. Hazardous Waste. The Selected Alternative discusses the potential impacts on known hazardous materials. None of the past, present, or reasonably foreseeable projects result

in, or have the potential to result in, hazardous material impacts. Therefore, combining the impacts of those with the Selected Alternative would not result in additional impacts from hazardous materials.

- vi. Historical, Architectural, Archaeological, and Cultural Resources. The Selected Alternative will have an adverse effect on Air Force Plant 85, Building 7, an NRHP-eligible resource. The FAA determined that it was an adverse impact but that it is not considered significant because the Ramp Tower is not essential to the historic nature of the site.

None of the other past, present, or reasonably foreseeable projects result in, nor have the potential to result in impacts to historic structures, archaeological sites, or cultural resources. Therefore, combining the impacts with those of the Selected Alternative would not result in additional impacts to historic structures.

- vii. Natural Resources and Energy Supply. The Selected Alternative will increase the use of natural gas, fuel, and electricity. However, the energy suppliers in the area can accommodate the need. None of the increased demand for energy or building supplies would result in significant or adverse impacts due to the overall small amount that is anticipated for each past, present, or reasonably foreseeable project. Therefore, combining the impacts with those of the Selected Alternative would not result in significant or adverse impacts.

- viii. Noise. The Selected Alternative will impact 473 housing units in the 65+ DNL contour. None of the past, present, or reasonably foreseeable projects will result in or have the potential to result in noise impacts. Therefore, combining the impacts with those of the Selected Alternative would not result in additional noise impacts.

- ix. Water Quality. The Selected Alternative would contribute to water quantity increases that cannot currently be addressed by the CRAA's current stormwater management programs. The CRAA is currently updating its Stormwater Master Plan to address the cumulative impacts that results from the implementation of the Selected Alternative and the projects listed Chapter 7 of this FEIS.

- x. Wetlands. The Selected Alternative will impact a total of 0.65 acres of wetlands (0.33 for Runway 10R/28L and 0.32 for the terminal) and 1,005 linear feet of stream. The following past, present and reasonably foreseeable projects have impacts to wetlands or streams:

- Red Parking Lot – 0.17 acres of wetlands;
- Perimeter Road – 0.08 acres of wetlands;
- Stelzer Road/International Gateway Interchange – 0.06 acres of wetlands;
- Airport Loop Roadway and associated parking improvements – 0.421 acres of wetlands;
- Consolidated Rental Car Facility – 2.877 acres wetlands;
- NetJets Corporate Campus – potentially 3 acres of wetlands;
- Stormwater Detention Basin for Turkey Run – 1.62 acres of wetlands; and
- Replacement Employee Parking Lot – unknown at this time.

A total of 8.878 acres of wetlands is anticipated to be impacted by the Selected Alternative and past, present, or reasonably foreseeable projects. A total of 1,005 linear feet of stream is anticipated to be impacted by the Selected Alternative and past, present, or

reasonably foreseeable projects. The CRAA is working with the USACOE on an overall wetland mitigation master plan to mitigate the impacted wetlands off-site and within the same watershed.

When the Selected Alternative, past, present, and reasonably foreseeable projects are analyzed in the impact categories, it can be concluded that the level of cumulative impacts anticipated to occur in these environmental impact categories would not be considered significant due to the types of projects proposed, the extent of the built environment in which they will occur, and the options considered or implemented to mitigate unavoidable impacts. Consideration of the 2008 TAF within the cumulative impacts analysis would not change this conclusion. For example, construction related cumulative impacts would remain the same while cumulative impacts based on airfield capacity (Sponsor's Forecast) would be less.

## **VI. Public and Agency Involvement**

The public and Federal, State, and local agencies were afforded an opportunity to participate in the EIS process and to provide input for FAA consideration in the development of the EIS. The FAA created the Study Advisory Committee (SAC) which consisted of the Federal, State, and local agencies that provided resource or community input. The FAA considered all comments submitted by the general public and the agencies throughout the EIS process.

As a part of the public involvement process, the FAA briefed the Federal, State, and local agencies, as well as the public on the Airport Sponsor's Proposed Project and the alternatives that were carried forward for detailed evaluation in the FEIS. The FAA held a scoping meeting for the agencies on May 31, 2006 and public scoping meetings and workshops for the public on May 31, 2006 and June 1, 2006. The FAA and CRAA hosted 6 other public workshops (July 11 and 12, 2006; December 5 and 6, 2006; April 24 and 25, 2007), and 2 public hearings on the DEIS (June 11 and 12, 2008).

The DEIS was issued on May 9, 2008 and the public comment period ran through July 11, 2008. Comments were received on the DEIS from Federal, State, and local agencies, as well as the general public. The FAA reviewed and prepared responses to all substantive comments received on the DEIS. This information is provided in the FEIS Appendix R.

The FAA coordinated with the following Federal, State, and local agencies during the development of the FEIS:

- U.S. Environmental Protection Agency
- U.S. Department of the Interior
- U.S. Fish and Wildlife Services
- U.S. Army Corps of Engineers
- Ohio Environmental Protection Agency
- Ohio Department of Natural Resources
- Ohio Historic Preservation Office
- Ohio Department of Transportation
- Mid-Ohio Regional Planning Commission
- City of Columbus
- Columbus Regional Airport Authority

The FAA and CRAA worked together during the development of the FEIS and the preparation of the Part 150 Study Update. This was demonstrated by the creation of a SAC for the EIS and a Planning Advisory Committee (PAC) for the Part 150 Study. The members of the committees are located in the FEIS Appendix A.

## **Comments on the FEIS and Responses**

The FAA prepared responses to comments received on the DEIS, Section 106, and Section 4(f) and presented them in the FEIS Appendix R. The FAA prepared responses to comments received on the FEIS, which are presented in Attachment 5 of this ROD.

## **VII. Agency Findings**

### **Clean Air Act, § 176(c)(I) Conformity Determination Regarding Replacement Runway 10R/28L and Associated Terminal Development at the Port Columbus International Airport (42 U.S.C. § 7506(c)).**

The determination prescribed by this statutory provision is a precondition of FAA support or approval of the airport development projects. The USEPA regulations generally governing the conformity determination process are found at 40 CFR Part 93, Subpart B, §§ 93.114 through 93.159, 40 CFR Part 50, and 40 CFR Part 51, Appendix W.

CMH is located in Franklin County which is in nonattainment for ozone and PM<sub>2.5</sub> emissions. The pollutants of concern include PM<sub>2.5</sub>, the precursor pollutants for ozone development, NO<sub>x</sub> and VOC, and the PM<sub>2.5</sub>, precursor pollutant, SO<sub>x</sub>. These four pollutants are the “pollutants of concern” and the applicable *de minimis* threshold is 100 tons per year for each pollutant for each alternative. Based on the analysis, the net emissions increase under the Selected Alternative would be limited to less than 100 tons per year for each of the four pollutants of concern to be compliant under General Conformity. The net emissions for the Selected Alternative will meet or not exceed the *de minimis* threshold for NO<sub>x</sub>, VOC, SO<sub>x</sub>, or PM<sub>2.5</sub>. Therefore, the Selected Alternative is assumed to conform to the Ohio SIP and the project would not cause significant adverse air quality impacts in Franklin County. Based on this analysis, a General Conformity Determination is not necessary and the project alternatives are assumed to comply under the Ohio SIP, as long as the net emissions are not regionally significant.<sup>8</sup>

Attachment 6 of this ROD shows a table of air quality mitigation elements that the CRAA currently uses or is evaluating for use with future projects.

### **Clean Water Act, Section 404 (33 U.S.C. § 1344) and, Executive Order 11990, Protection of Wetlands.**

This executive order requires all Federal agencies to avoid providing assistance for new construction located in wetlands, unless there is no practicable alternative to such construction, and all practicable measures to minimize hard to wetlands are included in the action. When considering practicable measures, the FAA may take into account economic, environmental, transportation, and other pertinent factors.

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<sup>8</sup> Air Quality Procedures for Civilian Airports & Air Force Bases, Section 2.1.5, NAAQS Assessment, April 1997, FAA.



The USACOE issued a jurisdictional determination in 2003. As a part of the FEIS, the CRAA submitted an update to the jurisdictional determination for the DSA and received concurrence from USACOE in 2008.

The Selected Alternative will impact 0.65 acres of jurisdictional wetlands and 1,005 linear feet of stream. The CRAA is currently working with the USACOE on a conceptual mitigation plan that would take into account all reasonable and foreseeable impacts to wetlands for projects at the CMH, including projects identified in the FEIS. The FAA has concluded that no practicable alternative exists to development of the selected alternative because the other alternatives either fail to meet the purpose and need or they results in the same adverse impacts on wetlands as shown in Chapter 3 and Chapter 5.10 of the FEIS. The CRAA will obtain Section 404 and 401 permits from the USACOE and OEPA, respectively, prior to starting construction of the runway and terminal projects.

**Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. § 470 et seq., 36 CFR Part 800).**

The FAA used 36 CFR § 800.8 to comply with the requirements of Section 106. The Selected Alternative identified two potential historic structures – Air Force Plant 85 Building 7 and the Nationwide Hangar. The FAA determined that there would be an adverse effect on a NRHP-eligible resource, Air Force Plant 85 Building 7. However, the Ramp Tower was not a part of Albert Kahn's original work and was built after the time when Air Force Plant 85 was being used for the manufacturing activities that make this a NHRP-eligible resource. All efforts were made to avoid, minimize, or mitigate the impacts to Air Force Plant 85. The FAA completed coordination with the OHPO and the ACHP. The coordination for all Section 106 resources is located in the FEIS Appendix J. A copy of the MOA which stipulates the mitigation can be found in Attachment 4 of this ROD.

The second structure, Hangar 3 (Nationwide Hangar) is neither currently eligible nor considered eligible for the NRHP at this time. The OHPO concurred with this finding on December 19, 2008, in the FEIS Appendix J.

**For actions that include the use of lands subject to Section 4(f) of the DOT Act including significant historic sites, there is no prudent and feasible alternative to using that land, and the project includes all possible planning to minimize harm resulting from the use (49 U.S.C. § 303(c)).**

The Selected Alternative would trigger the application of 49 U.S.C. § 303(c), formerly known as Section 4(f) of the Department of Transportation Act, with regard to properties protected under that Act. The Selected Alternative will require the reconfiguration of the Airport Golf Course, a recreational resource, and the removal of the Building 7 Ramp Tower associated with Air Force Plant 85, a NRHP-eligible resource. There are no prudent and feasible alternatives to the reconfiguration of the Airport Golf Course or the removal of the Building 7 Ramp Tower.

The FAA initiated Section 4(f) consultation for the Airport Golf Course with the CRAA, City of Columbus, and the DOI. The Airport Golf Course will be reconfigured in-kind with a financial agreement between the CRAA and the City of Columbus to assist in offsetting the reduction in revenues that will occur when the Airport Golf Course is being reconfigured. The City of Columbus and CRAA signed a MOU on December 12, 2008 that details the stipulations upon which the Airport Golf Course will be made whole and comparable to its existing layout.

Coordination can be found in the FEIS Appendix I and a copy of the MOU in Attachment 3 of this ROD.

The FAA initiated the NHPA Section 106 process and consulted with the ACHP, the OHPO, and the other interested parties on the Building 7 Ramp Tower in the Air Force Plant 85 complex. The CRAA, the OHPO, and the FAA entered into a MOA detailing the stipulations on the removal of the Building 7 Ramp Tower in the Air Force Plant 85 complex. A copy of the MOA can be found in the FEIS Appendix J and as Attachment 4 of this ROD.

In terms of avoidance, review of the alternatives evaluation prepared in Chapter 3 of the FEIS indicated that there is no prudent and feasible alternative to the relocation or removal of these Section 4(f) resources. Therefore, in the adoption of Alternative C3b as the Selected Alternative, the FAA finds that there is not prudent and feasible alternative to using that land, and the project includes all possible planning to minimize harm resulting from the use. This decision is based in part upon the mitigation identified in Attachment 3 and 4 of this ROD, and the FAA concludes that there has been all possible planning to minimize any harm resulting from the actual and constructive use of the Section 4(f) resources.

#### **Endangered Species Act, Section 7(c) Consultation [16 U.S.C. §§ 1531-1544].**

A biological assessment was completed for the proposed project area. Extensive field surveys were conducted in 2006 and found no State- or Federally-listed plant or animal species or critical habitat in the project area. During that survey, approximately 21 suitable roost trees and foraging habitat for the Indiana bat was present within the second-growth forest areas of the project area along Big Walnut Creek. However, no individual bats were observed during the survey. It is not anticipated that trees along Big Walnut Creek will be removed for the Selected Alternative. Should there be a need to trim the trees located in the project area, further coordination with the USFWS will be completed to determine if there will be any impacts to the Indiana bat. In order to verify that there would be no impacts to the bald eagle, the CRAA will contact the ODNR, prior to construction to obtain an updated status of the bald eagle's activity in the area.

Concerning the clubshell mussel, northern riffleshell mussel, rayed bean mussel, and the Scioto madtom individuals or habitats, the USFWS determined that "due to the project type, size, and location, the project should not impact these species or their habitat. The USFWS recommends that tree trimming and removal be minimized as much as possible. Tree trimming and removal in areas other than the riparian corridor of Big Walnut Creek should occur between September 30 and April 1 to avoid potential impacts to the Indiana bat."

The Selected Alternative will not impact any State- or Federally- listed threatened, endangered, or candidate species. The FAA has completed consultation with the USFWS under the Endangered Species Act, Section 7(c).

#### **The interests of the communities in or near where the project may be located were given fair consideration (49 U.S.C. 47106(b)(2)).**

The determination prescribed by this statutory provision is a precondition of FAA approval of airport development project funding applications. The airport planning process for the Selected Alternative started with the 1999 Master Plan. It was later refined between 2001 and 2006. A partial ALP update was conditionally approved on February 23, 2006 that showed a proposed layout for a relocated Runway 10R/28L and proposed terminal building. During the planning

and environmental review process, numerous opportunities were provided to comment on the proposed development. Nearby communities and residents were provided an opportunity to express their opinions at a public scoping meeting, public information workshops, the public comment period for the DEIS and FEIS, and a public hearing. Representatives of the affected municipalities and communities served on a SAC during the preparation of the DEIS. Thus, the FAA has determined that throughout the environmental process, beginning at its earliest planning stages, fair consideration was given to the interest of communities in or near the project location.

**There are no disproportionately high or adverse human health or environmental effects from the project on minority or low-income population (Executive Order 12898).**

Environmental justice concerns were addressed in the FEIS Chapter 5.3 and Section V of this ROD. It was determined in the FEIS that there would be no minority or low-income communities that would be disproportionately affected by the Selected Alternative.

**Opportunity for Public Hearing (49 U.S.C. 47106(c)(1)(A)(i)).**

The FAA held a public hearing on June 11 and 12, 2008.

**Certification from the Airport Sponsor that the airport management board has voting representation from the communities in which the project would be located or that the sponsor has advised communities they have the right to petition the Secretary of Transportation about a proposed project (49 U.S.C. 47106(c)(1)(A)(ii)).**

The CRAA provided certification to this statement on August 13, 2009.

**Certification from the Airport Sponsor verifying that, on request from the Metropolitan Planning Organization (MPO) in the area where the project is located, the sponsor has made the following information available to the MPO: (a) a copy of the proposed ALP amendment depicting the proposed action and (b) a copy of the airport master plan describing or depicting the action (49 U.S.C. 47106(c)(1)(A)(iii)).**

The CRAA provided certification to this statement on August 13, 2009.

**The FAA has given this proposal the independent and objective evaluation required by the Council on Environmental Quality (40 CFR § 1506.5).**

As the FEIS outlined, a lengthy process led to the ultimate identification of the Selected Alternative, disclosure of potential impacts, and selection of appropriate mitigation measures. This process began with the FAA's competitive selection of an independent EIS contractor, continuing throughout the preparation of the DEIS and the FEIS, and culminating in this ROD. The FAA provided input, advice, and expertise throughout the planning and technical analysis, along with administrative direction and legal review of the project. From its inception, the FAA has taken a strong leadership role in the environmental evaluation of this project and has maintained objectivity.

**The project is consistent with existing plans of public agencies for development of the area surrounding the airport (49 U.S.C. § 47106(a)(1)) and Executive Order 12372.**

The determination prescribed by this statutory provision is a precondition to FAA approval of airport project funding applications. It has been the long-standing policy of the FAA to rely heavily upon actions of metropolitan planning organizations to satisfy the project consistency requirement of 49 U.S.C. 47106 § (a)(1)<sup>9</sup>. Furthermore, both the legislative history and consistent FAA interpretations of this statutory provision make it clear that reasonable, rather than absolute, consistency with these plans is all that is required.

Under provisions of both Federal and State law, the MORPC has been designated as the MPO for the Columbus Metropolitan Area and given primary responsibility for transportation planning in the region. The Selected Alternative lies entirely within the boundaries of the City of Columbus. Therefore, the Selected Alternative will be consistent with the comprehensive plan of the MORPC.

**Relocation assistance will be provided in accordance with the Uniform Relocation and Real Property Acquisition Policies Act (42 U.S.C. § 4601, et seq.).**

These statutory provisions, imposed by Title II of the Uniform Relocation and Real Property Acquisition Policies Act of 1970, require that state or local agencies, undertaking Federally-assisted projects that cause the involuntary displacement of persons or businesses, must make relocation benefits available to those persons or businesses impacted.

As detailed in the FEIS Chapter 5.3 and Section V of this ROD, the Selected Alternative will displace 35 residences (36 parcels). The FAA will require the CRAA to provide fair and reasonable relocation payments and assistance payments pursuant to the provisions of the Uniform Relocation and Real Property Acquisition Policies Act. Comparable decent, safe, and sanitary replacement properties are available on the open market.

It was determined in the FEIS Chapter 5.3 that the CRAA will be using and complying with the housing of last resort procedures as detailed in 49 CFR Part 24 § 206(a).

**Appropriate action, including the adoption of zoning laws, has been or will be taken to the extent reasonable to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations (49 U.S.C. 47107(a)(10)).**

In accordance with State law, the ODOT has promulgated rules that established the Tall Towers Act (H.B. 15). This law requires all proponents of any construction in the vicinity of a public airport which might penetrate the 14 CFR Part 77 surfaces to notify the ODOT Office of Aviation of the proposed construction and obtain approval of the construction.

The CRAA, along with local municipalities have worked together in the CMH Part 150 Study Program to establish areas that would be deemed non-compatible with airport operations. The FAA reviewed and approved the Part 150 Study on May 19, 2008. As a part of that approval the FAA approved land use measure 12 (LU-12), to develop an Airport Land Use Management District (ALUMD) based on the 2023 Noise Exposure Map/Noise Compatibility Program noise contour, other geographic, and jurisdictional boundaries. The measure's implementation

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<sup>9</sup> Suburban O'Hare Com'n v. Dole, 787 F2d 186, 199 (7<sup>th</sup> Cir., 1986).

outlines how the CRAA will work with the MORPC and other local jurisdictions to incorporate the ALUMD into the municipalities' current land use planning documents.

#### **Effect on Natural Resources (49 U.S.C. 47106(c)(1)(B)).**

Under this statutory provision, the FAA may approve funding of an airport development project involving the location of a new runway or major runway extension having a significant adverse effect on natural resources, only after determining that no possible and prudent alternative to the project exists and that every reasonable step has been taken to minimize the adverse effect.

The FAA finds that the Selected Alternative would have significant adverse impacts in the categories of noise and compatible land use and Section 4(f) properties (Airport Golf Course and historic properties) without the mitigation described in Section V of this ROD. However, of all the build alternatives identified in Chapter 3 of the FEIS, Alternative C3b has the least environmental impacts; therefore, the FAA finds that no possible and prudent alternative exists to the project as described in Section IV of this ROD. Finally, the FAA has determined that all reasonable steps have been taken to minimize any significant adverse effects on natural resources through mitigation.

The FAA has decided to condition approval of the proposed alternative upon the mitigation measures described in the FEIS and Section V of this ROD. This condition will be enforced through a special assurance included in future Federal airport grants to the Columbus Regional Airport Authority.

#### **VIII. Conditions of Approval**

The approvals contained in this ROD are specifically conditioned on full implementation of the following measures. These conditions of approval will be included as a special grant condition in future Federal airport grants to the CRAA.

The mitigation measures that will be implemented are those listed in the FEIS Chapter 6, Summary of Impacts and Mitigation. These measures are hereby adopted in this ROD (Also see Section V and VIII of this ROD). The principal measures are the following:

- Compliance with the stipulations in the MOA among the FAA, the OHPO, and the CRAA (see Attachment 4) that includes the preparation and implementation of a mitigation plan for Air Force Plant 85 Building 7 Ramp Tower and for the resolution of the Stelzer Cemetery.
- Implementation of the ROA for the Part 150 Study Update.
- Implementation of, and compliance with, the commitments of CRAA specified in the MOU between the City of Columbus and the CRAA for the Airport Golf Course (See Attachment 3 of this ROD).
- Adherence to local construction permit and ordinances to avoid and minimize impacts during construction.
- Compliance with applicable water quality standards.

- Compliance with environmental control measures in a currently issued NPDES permit.
- Compliance with a USACOE 404 permit and OEPA 401 permit.

These mitigation measures constitute the practicable means to avoid or minimize environmental harm from the project and are hereby adopted. The FAA will monitor their implementation as necessary to assure that they are carried out as project commitments.

- During the construction of the Selected Alternative, the TAF will be monitored for changes as compared to the 2008 TAF. If significant changes (greater than 15 percent) are forecasted in future TAFs that are published during the construction of the Selected Alternative, then CRAA will prepare a sensitivity analysis and the FAA will consider amending the sound insulation boundary as presented in Attachment 7 of this ROD.
- Upon one year after completion of the runway reconstruction project contained in the Selected Alternative, the CRAA will prepare a 5-year forecast of operations and enplanements and will update the Part 150 Noise Study and Noise Exposure Maps showing the current condition.
- CRAA and the project contractors will obtain the appropriate permits prior to construction. FAA grant agreements with CRAA will include grant assurances that these standard permits are obtained prior to commencement of construction.
- Provisions set out in a NPDES General Construction Storm Water Permit will be adhered to and incorporated into development plans for the Selected Alternative. All conditions of the NPDES permit are made conditions of the approval of this ROD.
- Development of an erosion control plan during the design phase will be required by the FAA (FAA Advisory Circular 150/5370-10) prior to commencement of construction.

## IX. FAA Decision and Order

In the FEIS Section ES 3.7 the FAA identified the Sponsor's Proposed Project as the FAA's Preferred Alternative. FAA must now select one of the following choices:

- Approve agency actions necessary to implement the proposed project, or
- Disapprove agency actions to implement the proposed project.


Approval would signify that applicable Federal requirements relating to airport development and planning have been met and would permit CRAA to proceed with the proposed development and possibly receive Federal funding and/or approval to impose and use PFC funds for eligible items. Not approving these agency actions would prevent CRAA from proceeding with the implementation of the Selected Alternative.

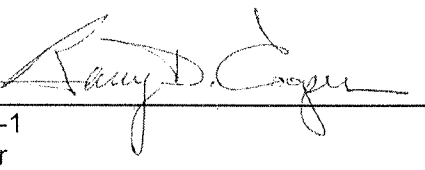
Decision: I have carefully considered the FAA's goals and objectives in relation to various aeronautical aspects of the proposed development action discussed in the FEIS. The review included: the purpose and need that the project would serve, the alternative means for achieving the purpose and need, the environmental impacts of these alternatives, and the mitigation necessary to preserve and enhance the human, cultural, and natural environment.

Under the authority delegated to me by the Administrator of the FAA, I find that the project in this ROD is reasonably supported. I therefore, direct that action be taken to carry out the FAA actions to implement the Selected Alternative of this ROD, including:

- Unconditional approval of the revised partial ALP for the project summarized in the FEIS Chapter 2, which constitutes the proposed development.
- Federal environmental approval for the CRAA to establish eligibility to participate in funding through use of Federal AIP funds or PFCs for eligible projects, assuming the independent requirements of these programs are met (49 U.S.C. § 47191, *et seq.* and 49 U.S.C. § 40117).
- Determination and actions, through the aeronautical study process of any off-airport obstacles that might be obstructions to the navigable airspace under the standards and criteria of 14 CFR Part 77 and evaluate the appropriateness of proposals for on-airport development from an airspace utilization and safety perspective based on aeronautical studies conducted pursuant to the processes under the standards and criteria of 14 CFR Part 157.
- Development of air traffic control and airspace management procedures to establish and maintain safe and efficient handling and movement of air traffic into and out of the airport under 49 U.S.C. §§ 40103 and 40113; development and approval of revision to Standard Instrument Approach Procedures (SIAP), Standard Instrument Departure Procedures (SID), Standard Approach Routes (STAR) procedures, implementation of a 15 degree divergent turn off of Runway 28R, after crossing the runway end to a 295-degree heading only during peak operating periods when traffic warrants, and the renewal of efforts to maximize east flow (arrive and depart Runways 10L/10R) for the replacement Runway 10R/28L and existing Runway 10L/28R (14 CFR Part 97).

- Determinations that the proposed new airfield layout and geometry, including runways and taxiways, conform to FAA design criteria. Approval of protocols for maintaining coordination among sponsor offices, construction personnel, and appropriate FAA program offices, ensuring safety during construction.

RECOMMENDED BY:  8/19/09  
Jeri Alles, AGL-600  
Manager, Airports Division  
Great Lakes Region  
Date

APPROVED BY:  8/17/09  
Barry D. Cooper, AGL-1  
Regional Administrator  
Great Lakes Region  
Date



## **Right of Appeal**

This ROD constitutes the Federal approval for the actions identified above and any subsequent actions approving a grant of Federal funds to the CRAA. Today's action is taken pursuant to 49 U.S.C. Subtitle VII, Parts A and B, and constitutes a final order of the Administrator subject to review by the Courts of Appeals of the United States in accordance with the provisions of 49 U.S.C. § 46110. Any party seeking to stay the implementation of this ROD must file an application with the FAA prior to seeking judicial relief, as provided in Rule 18(a), Federal Rules of Appellate Procedure.