

United States Department of Transportation  
Federal Aviation Administration  
Southern Region  
Atlanta, Georgia

RECORD OF DECISION

FOR  
CINCINNATI/NORTHERN KENTUCKY  
INTERNATIONAL AIRPORT  
HEBRON, KENTUCKY  
December 19, 2001

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## I. INTRODUCTION/BACKGROUND

This Record of Decision (ROD) announces final agency determinations and approvals for those Federal actions by the Federal Aviation Administration (FAA) that are necessary to support the construction and operation of proposed airport improvements at Cincinnati/Northern Kentucky International Airport (CVG) requested by the Kenton County Airport Board (KCAB), the airport sponsor. The proposed improvements actions are necessary to increase airfield capacity, which would reduce delays at CVG, to accommodate existing and projected growth in aircraft operations and existing and projected hub operations. In addition, the proposed improvements are designed to accommodate air transportation demand for long-range aircraft departures to Asia or Eastern Europe and projected growth in passenger enplanements, as well as to provide for other related airport development.

This ROD provides the FAA's final determinations and approvals based on analysis described in detail in the Final Environmental Impact Statement (FEIS), Cincinnati/Northern Kentucky International Airport, dated September 2001, and approved October 3, 2001. The agency decisions are based on information contained in the FEIS and all other applicable documents available to the agencies and considered by them, which constitute the Administrative Record.

This ROD is issued in accordance with the requirements of the Council on Environmental Quality (CEQ), 40 Code of Federal Regulations (CFR) 1505.2. The principal features include:

- A statement of the agency's decisions;
- An identification of all alternatives considered by the FAA in reaching its decision, with a specification of the alternative or alternatives that are considered to be environmentally preferable; and

The mitigation measures adopted to avoid or minimize environmental harm from the alternative selected.

### FAA DETERMINATION

Based on environmental analysis and documentation in the FEIS and all applicable information, it is the FAA's final determination that the portion of the Cincinnati/Northern Kentucky International Airport revised Airport Layout Plan (ALP) that depicts improvements listed below is being approved. FAA is also determining approval for proceeding with the necessary actions to implement the approved ALP. These improvements are specifically described in Sections II and IV of this ROD, and were identified in the FEIS as Alternative 2c and include the following:

- A third north/south parallel runway, 8,000 feet long by 150 feet wide, located 4,300 feet west of the existing Runway 18R/36L, and all support facilities (i.e., additional taxiways or taxiway extensions, and associated lighting and NAVAIDs);
- A 2,000-foot western extension to Runway 9/27 to a total length of 12,000 feet, and all support facilities (i.e., additional taxiways or taxiway extensions, and associated lighting and NAVAIDs); and
- Terminal area expansion projects and ancillary facilities development (i.e., Gate expansions on Concourses A, B, and C; cargo buildings, rental car facilities, auto parking, and other ground support building construction). Some ancillary projects being refined in the Terminal Area Master Plan may require additional environmental review before being approved for construction.

CVG is a publicly owned passenger and air cargo airport operated by the KCAB. CVG is located in the northeast section of Boone County, Kentucky, approximately one mile south of the Ohio River and eight miles southwest of downtown Cincinnati.

The character of the airport has changed over the years; first as overall commercial air traffic has doubled and redoubled since World War II, and second as three airlines established major hubs at the airport. CVG is the second largest hub for Delta Air Lines, after Atlanta, and the principal hub for DHL and Comair.

This continued air traffic growth impacts the airfield as identified in the FAA *1998 Aviation Capacity Enhancement Plan* that showed over 20,000 hours in aircraft delay in 1997. In 2000, CVG supported 477,654 aircraft operations and ranked seventeenth in delays in the nation. The KCAB *1996 Master Plan Update* was the principal document that investigated methods to increase long-term airport capacity and reduce delay. The master plan process resulted in a conditionally approved

ALP, which identified the specific capital projects to reduce delay that were assessed in the FEIS.

The FAA conducted an independent validation of future airfield capacity and aircraft delay conditions, provided in Appendix S *Demand/Capacity Analysis*, of the FEIS, that compared the peak hour demand for arrivals and departures for 1999 (based on actual 1998 operations) and projected operations for 2005 to the capacity of the existing airfield. The peak hour demand at CVG exceeded capacity seven times during a normal operating day in 1999 and was projected to exceed capacity eight times during a normal operating day in 2005. These results confirm the need for the runway identified in the KCAB *1996 Master Plan Update* and *1998 Airport Delay Analysis*. The *1996 Master Plan* analysis determined that the most prudent and feasible option to provide increased peak-period operating capacity was to construct a third north/south parallel runway at a 4,300-foot separation west of the existing Runway 18R/36L. This triple parallel runway configuration would provide the necessary distances and clearances for simultaneous precision approach of three aircraft. The existing north/south parallel runways are separated by 6,243 feet.

The FAA determined that an EIS would have to be prepared for the proposed Federal actions needed to allow for airport development projects that the KCAB identified in the *1996 Airport Master Plan*. FAA initiated the EIS at essentially the same time as the KCAB initiated its Federal Aviation Regulation (FAR) Part 150 Study Update in August 1998.

### **FAR Part 150 Study Update**

The KCAB initiated an update of the KCAB *1992 Supplemental Part 150 Study* in 1998. Part 150 guidelines provide for the continual periodic reevaluation and submission of noise exposure maps at an airport. FAA requires an airport sponsor to reassess Noise Exposure Maps as aircraft operations or airfield configuration change. As most of the land use mitigation programs approved in the *1992 Supplemental Part 150 Study* have been completed, the KCAB determined that a Part 150 Study update was necessary.

The FAA issued the Record of Approval (ROA) on the KCAB *1999 FAR Part 150 Update* December 5, 2000. The Part 150 Study Update recommended the continuation or modification of eighteen noise abatement air traffic, land use compatibility, and implementation management measures, withdrew five measures and recommended nine additional measures. Eight measures had been completed or expired. The specific noise abatement (air traffic) measures and land use measures and the FAA approval action are described in the FEIS, Table ES-2, *1999 and 2005 Noise Abatement Air Traffic Measures and Associated Land Use Compatibility Measures*. Only one of the recommended measures (OP-16) applies to the operations for the proposed runway. A decision on approval of this measure was deferred until the environmental analysis for the proposed project was completed. Further discussion of this matter is included in Section IV, *DISCLOSURE/ANALYSIS OF ALTERNATIVES*, The complete text of the FAA ROA for the Part 150 Update is provided in Appendix P of the FEIS document.

### **Public Participation**

Chapter 1 of the FEIS provides a detailed outline of the involvement by the FAA, other governmental agencies (Federal, state and local) and the public during the environmental process. Early in the environmental process, Federal, state and local governmental agencies, as well as the public were afforded an opportunity to be briefed on the Proposed Project and to provide input on the potential environmental impacts that could occur if the Proposed Project were implemented. The FAA's coordination and consultation process began with the Agency and public scoping meetings and continued up to the preparation of this ROD, and provided an opportunity for the public to provide input to the FAA during the EIS process.

Prior to initiating the preparation of the environmental impact statement document, the FAA met with the Sponsor to discuss the problems of delay at the airport and identify the purposes and needs for the proposed project. Having determined that an EIS would be necessary to evaluate the proposed project, other alternatives, and the potential environmental impacts, the FAA selected a consultant team experienced in preparing National Environmental Policy Act (NEPA) environmental documents to assist the agency in preparing the study.

Using preliminary information prepared by the consultant, the FAA conducted Agency and Public Scoping meetings in August 1998. These meetings were held as part of an early and open process to determine the scope and significant issues to be analyzed in depth in the EIS. A Notice of Intent to prepare an EIS was published in the *Federal Register* on July 15, 1998. The FAA conducted the Agency Scoping Meeting August 18, 1998. Representatives from U. S. Environmental Protection Agency

(EPA); Federal Highway Administration; Ohio-Kentucky-Indiana Regional Council of Governments; Kentucky Division for Air Quality; Kentucky Transportation Cabinet; Northern Kentucky Area Planning Commission; Boone County Planning Commission; Boone County Board of Education; Boone County Schools; Diocese of Covington; City of Cincinnati Office of Environmental Management; Cincinnati City Planning Department; Hamilton County Department of Environmental Services; Hamilton County Engineers Office; Delhi Township; and Saylor Park Village Council were in attendance.

The Public Scoping meetings were conducted on August 18 and 19, 1998. Representatives of the FAA and the EIS consulting team and airport staff were available to respond to questions. The main purpose of the Scoping meetings was to introduce the Sponsor's purposes and needs for its proposed project and to receive comments on issues of environmental concern to be included and responded to in the EIS.

The scoping comments were used to ensure that issues of concern expressed by various Federal, state and local government agencies, as well as the public were addressed in the EIS. Comments received during the Scoping process are included in the Scoping document published as Volume III, Appendices A and B of the FEIS. Concerns noted by the public included aircraft noise, effects on schools, safety, air quality, acquisitions, road relocations, and alternatives analysis. More than 125 individual letters, comment forms, resolutions or petitions were received during the scoping process.

Four sets of public information workshops were conducted during the development of the EIS. Each workshop was conducted at two locations, one in Kentucky and one in Ohio, to afford residents access to the public information process. All of the EIS workshops, except for the Public Hearing, which was conducted after the Part 150 was approved, were held in conjunction with the KCAB Part 150 Noise Compatibility Program workshops. Separate workstations were set up to display the status of both the Part 150 analysis and the environmental process and preliminary findings to date. Public comment was solicited at all of the public information workshops in the form of written comments. Pre-printed blank comment forms were made available at a workstation set up specifically to provide attendees a seating area in the workshop to write and submit comments. The four concurrent workshops were held in August 1998 (EIS Scoping Meetings), March 1999, October 1999, and March 2000. A fifth workshop and the Public Hearing were held April 3 and 4, 2001, after the DEIS document was published and distributed to governmental and regulatory agencies, and the public to review. On March 2, 2001, a Notice of Availability for review and comment on the DEIS was published in the *Federal Register* (64 FR 58404). Public Notices were also published in the local newspapers and FAA issued a press release announcing the release of the document. Copies of the draft report were provided to government agencies, neighborhood groups and made available for review at several locations in the Greater Cincinnati/Northern Kentucky area as outlined in Appendix B *Public Involvement*. The written and oral comments along with the prepared responses are provided in the following appendices of the FEIS: Appendix W *Comments: Agency, Government, and Local Organizations*, Appendix X *Comments: April 2001 Workshop and Public Correspondence*, Appendix Y *Comments: April 2001 Public Hearing Transcripts*, and Appendix Z *Response to Comments*.

On October 12, 2001, pursuant to 40 CFR 1506.10, the EPA published a notice of the availability of the approved FEIS in the *Federal Register* (66 FR 198). Comments were received from EPA; Department of Interior; City of Cincinnati; Commonwealth of Kentucky, Department of Fish and Wildlife Services; and four letters from citizens in Ohio. Those comments have been responded to in Appendix A of this document. The FAA has considered all comments received on the FEIS. During this period consultation under Section 106 of the National Historic Preservation Act was concluded, which resulted in a Memorandum of Agreement (MOA) between FAA, KCAB, Kentucky Heritage Council and the Ohio Historic Preservation Office. The MOA addresses direct effects on one structure in Boone County, Kentucky and potential indirect effects on properties in Ohio eligible for listing on the National Register of Historic Places. The MOA is included in Appendix B. Additional discussion is included in Sections 5 and 6 of this ROD and Section 5.7 of the FEIS.

## II. THE PROPOSED PROJECT

The airfield improvement projects and terminal/ancillary projects that meet the projected demand and existing capacity needs established by the KCAB are shown on the revised ALP and include:

- A third north/south parallel runway, 8,000 feet long, located 4,300 feet west of the existing Runway 18R/36L, and all support facilities (i.e., additional taxiways or taxiway extensions, and associated lighting and NAVAIDs);
- A 2,000-foot western extension to Runway 9/27 to a total length of 12,000 feet, and all support facilities (i.e., additional taxiways or taxiway extensions, and associated lighting and NAVAIDs); and

- Terminal area expansion projects and ancillary facilities development (i.e., Gate expansions on Concourses A, B, & C; cargo buildings, rental car facilities, auto parking, and other ground support building construction). Some ancillary projects being refined in the Terminal Area Master Plan may require additional environmental review before being approved for construction.

The following actions are required to construct the airfield improvements:

- Extend Runway 9/27 1,000 feet to relocate the glide slope antenna for Runway 9 out of the obstacle free zone and approach surface for proposed Runway 35. (This action will be necessary if the proposed runway is constructed prior to the proposed 2,000-foot extension to Runway 9/27.)
- Relocate the Mid-Valley and other public utility pipelines, KY 20 (Petersburg Road), Conner Road, and Limaburg Road.
- Close Hossman Road permanently. The KCAB will petition Boone County to permanently close Hossman Road as a public road and right-of-way.
- Acquire and convert approximately 563 acres to airport property—the current use of this acreage is 349 acres in residential use, five acres of church property, and 209 undeveloped/vacant acres; relocate the occupants of approximately 188 residences, one business, and the Hebron Baptist Church.

Exhibit ES-1, *Future Airport Layout Plan (as revised)*, and Exhibit ES-2, *Proposed Project and Associated Actions*, included in the FEIS, Executive Summary, display the Sponsor's Proposed Project as depicted on the future ALP and studied in the FEIS.

**Runway Instrumentation:** Runway instrumentation permits landings during Instrument Meteorological Conditions (IMC). When the airport is reporting IMC, controllers may not have the flexibility to allow pilots to maintain visual separation from other aircraft. During IMC, pilots must operate aircraft under Instrument Flight Rules (IFR) and are required to use runway instrumentation to guide the aircraft's descent to the runway.

An analysis of 20 years of weather data was conducted to determine the average annual occurrence of IMC at CVG. It was found that IMC occur 10.87 percent of the time at CVG. There are three approach weather categories (CAT I, II, and III) with different ceiling and visibility minimums that combined make up the total of IMC conditions. The average annual occurrence of these categories is shown in the FEIS document in Chapter Two, Table 2-2, *Weather Conditions by Approach Category*. Meteorological conditions defined as CAT I occur the majority of the time (ten percent) during IMC. CAT II and III occur less than one percent of the time.

As shown in the FEIS document in Chapter Two, Table 2-3, *Landing Aids by Runway*, all runways are equipped for precision instrument approaches under IFR, CAT I conditions. However, Runways 36R and 36L can accommodate arrivals under IFR, CAT II/III conditions. The FAA will only implement the installation of NAVAIDs to accommodate CAT II/III conditions on other runways if studies and analysis by FAA Flight Procedures/Standards justify this equipment.

The north flow runways (36R and 36L) are currently equipped for CAT II/III approaches. Proposed Runway 35 should also be equipped for CAT II/III approaches. North flow is the primary flow during CAT II/III conditions and it is important that all three runways be equipped for CAT II/III approaches in order to maintain airport capacity during CAT II/III conditions or in the event that a runway is taken out of service. FAA has concurred that Runway 35 will open equipped as a CAT II/III runway with Approach Lighting System ALSAF-2. Commissioning of the proposed runway is scheduled for 2005.

The KCAB has indicated future plans to request that the south flow runways (18R and 18L) currently equipped for CAT I approaches, be upgraded to CAT II/III to maintain capacity during south flow CAT II/III conditions and in the event that a runway is closed. For those same reasons, KCAB would request that proposed Runway 17 be equipped for CAT II approaches. A third CAT III approach is not needed in south flow because south flow is not the primary flow during these conditions. FAA will evaluate this request if presented by the airport sponsor to determine if upgrade of the NAVAIDs are justified.

**Lighting:** In addition, changes to the existing airfield lighting systems would be necessary if the NAVAIDs for the existing runway system are upgraded to CAT II/III. The lighting associated with an upgrade in runway instrumentation includes replacing all of the existing Medium Intensity Approach Light Systems with High Intensity Approach Light Systems with

sequenced flashing lights on Runways 18R, 18L, 9, and 27. Also, Precision Approach Path Indicator lights would be installed on Runway 36L, 18L, and 36R, and would replace the Visual Approach Slope Indicator lights on Runway 18R. This will be evaluated in conjunction with the request for the NAVAIDs upgrade.

### **Concourse Expansion and Terminal Reconfiguration**

Concourse expansion and terminal reconfiguration projects are also on the Sponsor's ALP as revised. These projects are independent of the Proposed Project and would be necessary to accommodate the projected growth in passenger enplanements with or without the development of a new runway or runway extension and were also included in the analysis of the 2005 No Action Alternative (no airfield development). The following list includes the projects proposed for development in the terminal area:

- Expand Concourse A (14 additional gates) to accommodate a total of 37 aircraft gate positions.
- Expand Concourse B (two additional gates) to accommodate a total of 30 aircraft gate positions.
- Expand Concourse C (19 additional gates) to a total of 72 gates, by 2004-2005, along with the accessory space needed to support these gates. The development of additional gates would increase passenger processing capabilities.
- Consolidate Terminal 1 facilities and operations with Terminal 2 to prepare for the construction of a new Terminal 1. Expand Terminal 2 by approximately 14 gates to accommodate the two major airlines that currently occupy Terminal 1 (US Air and Northwest). Construct a new Terminal 1 when Delta requires an extension of Concourse A or when there is justification for a new terminal.

Approval of these facilities is limited to the increased gate capacity analyzed in the FEIS and listed in this ROD.

### **Proposed Ancillary Facilities**

Ancillary facilities that were identified in the KCAB *1996 Master Plan Update* as necessary to support the projected increase in air transportation demand at CVG are also being refined in the KCAB *Terminal Area Master Plan Study*. As a result, the placement, size, and design of ancillary facilities as initially defined in the *1996 Master Plan Update* could be revised. These ancillary facilities are not dependent or interdependent upon the approval of the airfield development projects and could occur regardless of the airfield development. Therefore, these projects are discussed as independent and separate projects in Chapter Six *Cumulative Impacts*, of the FEIS. They were also included in the analysis of the 2005 No Action Alternative. Projects being refined in the *Terminal Area Master Plan Study* analysis will be reviewed by the FAA at the time more project details are available to determine if additional environmental analysis is necessary. The FAA recognizes its obligation under NEPA and will conduct supplemental environmental analyses with regard to both the direct and cumulative impacts of those project elements prior to construction as required. Proposed ancillary-facilities actions are as follows:

- Construct Airline Commissary Building
- Construct New Northwest Midfield Access Road
- Expand Airfield Maintenance Building
- Expand East-Side Air Cargo and Ground Equipment Buildings
- Expand/Develop Ground Equipment Buildings
- Construct Freight Forwarder Building
- Relocate Joint-Use Air Cargo
- Construct Rent-a-Car Service Road and Consolidated Customer Service Center

### **Implement the Recommended Noise Abatement Air Traffic and Associated Land Use Compatibility Measures in the KCAB 1999 FAR Part 150 Study Update (Noise Compatibility Program).**

At the request of KCAB, the FAA would need to develop air traffic procedures necessary to implement the approved noise abatement air traffic measures in the KCAB *1999 FAR Part 150 Study Update* (the FAA issued its ROA on December 5, 2000). That approved Noise Compatibility Program (NCP) is the KCAB program to abate aircraft noise impacts and to mitigate incompatible land uses. The KCAB developed its recommended measures by re-evaluating and building upon the previously

approved and implemented measures in the KCAB *1992 Supplemental Part 150 Study*. The noise abatement air traffic measures address the operations on the existing airfield as well as the operation of a proposed third north/south parallel runway and a 2,000-foot westerly extension to Runway 9/27. The first measures that would be implemented are those that are not dependent upon the proposed airfield reconfiguration project. One noise abatement air traffic measure was developed for use with the proposed runway (Measure OP-16) and will only be implemented if the proposed runway is constructed. Additional discussion of OP-16 and its interaction with other operational procedures is included in Section IV, *DISCLOSURE/ANALYSIS OF ALTERNATIVES*, Alternative 2-Proposed Project, of this ROD.

The *1999 FAR Part 150 Study Update* contains Noise Exposure Maps for 1999 (existing condition) and 2005 (projected future condition). The proposed runway, if approved, was expected to become operational in 2005; therefore, 2005 was selected as the future analysis year for the Part 150 Study Update and the FEIS. The noise compatibility measures are listed in the FEIS, Executive Summary, Table ES-1, *1999 and 2005 Noise Abatement Air Traffic Measures and Associated Land Use Compatibility Measures*.

### III. PROPOSED FEDERAL ACTIONS AND APPROVALS

Chapter 2, Section 2.4 of the FEIS outlines the necessary Federal actions that must take place in order to implement the Sponsor's proposed project. The FAA's actions focus on approval of the revised ALP; development and approval of instrumentation and new and revised flight procedures; funding and grant approval processes for elements of the proposed project.

Separate Federal or state actions and determinations will be made by other appropriate agencies in accordance with established regulatory procedures. The FEIS discloses those matters to the extent that the FAA knows of them. The following is a summary of the necessary environmental and aeronautical actions and approvals:

- Determinations under 49 U.S.C. section 47107 (a)(16) that approve a revised Airport Layout Plan (ALP) reflecting the proposed airfield modifications together with requisite environmental approvals for those improvements under 40 U.S.C. section 4321-4347 and 40 CFR Parts 1500-1508. [It should be noted that the required determinations under 49 U.S.C. sections 47106 and 47107, pertaining to FAA grant-in-aid funding for ALP approved airport development must be deferred to the established process for considering a grant application for approval after an actual application for funding is received from the airport sponsor and has been determined to comply with all applicable Federal funding requirements.]
- Determinations and actions under 49 U.S.C. sections 40103 (b) and 44701 that provide for the establishment of modified flight procedures, and other rules or terms and conditions for the safe and efficient use, as well as management, of the navigable airspace.
- Determinations and actions, through the aeronautical study process that evaluates any off-airport obstacles that might be obstructions to the navigable airspace under the standards and criteria of 14 CFR Part 77.
- Determinations and actions, through the aeronautical study process that evaluated 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 CFR Part 157.
- Decisions and actions to develop 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. sections 40103 and 40113(a).
- Environmental basis for approval of eligible airport development components in conjunction with any subsequent and timely application for Passenger Facility Charge and Federal grant-in-aid funding.
- Certification that the proposed new runway and runway extension conform to FAA design criteria as required by 49 U.S.C. section 47105 (b)(3). Approval of protocols for maintaining coordination among sponsor offices, construction personnel, and appropriate FAA program offices, as required to, ensure safety during construction as specified in 49 U.S.C. section 47112(a).
- Determinations that air quality impacts associated with the proposed new runway and runway extensions conforms to applicable air quality standards under the Clean Air Act, as amended (42 U.S. C. Section 7506, Section 176 (c)(1), and 40 CFR Part 93).

As a result of the recent FAA-mandated national groundstops and subsequent reduction in all air traffic operations in the aftermath of the tragedies in New York, Washington, D.C., and Pennsylvania, the FAA has reevaluated the purpose and need for the proposed project presented in the FEIS. The FAA also received four letters from citizens of Ohio following the issuance of the FEIS questioning the need for the proposed project following the September 11 tragedies. The proposed airport development is a long-term planning and implementation solution for the established purposes and needs at CVG. The FAA concludes that the forecasts included in the FEIS are based on supported data and valid assumptions, and that the analyses for the proposed project and its need are still sound. Therefore, based on the information available at this time, the FAA believes the proposed project is still needed and supported at CVG.

With the development of the Proposed Project, the FAA would develop air traffic procedures for the operation of the proposed new runway, modify current flight procedures, and install the required NAVAIDs. In addition, the KCAB requests that the FAA implement the noise abatement air traffic procedures for the proposed runway as approved in the KCAB *1999 FAR Part 150 Study Update*. Measures that were refined or that are being continued from the *1992 Supplemental FAR Part 150 Study*, and are independent of the proposed airfield reconfiguration, do not require environmental approval for implementation. Another Federal action that would be required to implement the Proposed Project is issuance, by the U.S. Army Corps of Engineers (USACE), of a Section 404 permit related to potential impacts to jurisdictional streams and wetlands. A Section 401 permit for potential impacts to jurisdictional streams and wetlands would also be required from the Kentucky Division of Water (KDOW).

The development at CVG could be financed using a combination of private, state, and Federal funding. Potential funding may be requested from the following sources: the Federal grant-in-aid program (Aviation Trust Fund) authorized by the *Airport and Airway Improvement Act of 1982*, as amended (recodified at Title 49 USC (U.S. Code) § 47107 et seq.), and approval of an application to use Passenger Facility Charges, state grants, the issuance of new debt, tenant funds, and local airport funding. The Aviation Trust Fund is derived primarily by a nationwide airline passenger ticket tax. In addition to the capital projects themselves, the structure of the financing plan will ultimately affect the cost of implementation.

The Sponsor has submitted an application to the FAA for Federal assistance in the form of a Letter of Intent to finance eligible elements of the proposed project. However, no commitment for funding the Proposed Project can be made without FAA issuance of a ROD approving elements of the project. In accepting Federal aid for development projects, the airport Sponsor incurs obligations contained in written assurances that continue after the Proposed Project is financially complete. The Cincinnati/Northern Kentucky International Airport is presently an obligated airport.

#### **IV. DISCLOSURE/ANALYSIS OF ALTERNATIVES**

In addition to the relevant requirements of environmental statutes, the FAA, in its consideration of alternatives, has been mindful of its statutory charter to encourage the development of civil aeronautics and safety of air commerce in the United States (49 U.S.C. 40104). FAA has also considered the congressional policy declaration that airport construction and improvement projects that increase the capacity of facilities to accommodate passenger and cargo traffic be undertaken to the maximum feasible extent so that safety and efficiency increase and delays decrease (49 U.S.C. 47101(a)(7)).

While the FAA does not have the authority to control or direct the actions and decisions of the KCAB relative to planning for the Proposed Project, it does have the authority to withhold project approval, including Federal funding and the other Federal actions discussed in this ROD. It was from this perspective that the various alternatives were considered in terms of evaluating and comparing the impacts to determine whether there was an alternative superior to that proposed by KCAB, or whether the KCAB proposal would cause impacts warranting disapproval of the Federal actions discussed in this ROD, including the withholding of Federal funds for the Proposed Project.

The FAA must consider the range of reasonable alternatives, including the No-Action Alternative, that are feasible, practicable and prudent alternatives before it may approve Federal actions in support of the Sponsor's proposed project. In determining the best method to meeting the needs identified in Chapter 2 of the FEIS, the FAA evaluated a broad range of alternatives, including some alternatives that were eliminated from further evaluation because they would not meet the Sponsor's purposes and needs. Both off-site and on-site alternatives to the proposed project were evaluated in Chapter 3 of the EIS.

As discussed below, most of these alternatives were not feasible, reasonable, practicable or prudent; were not logistically achievable, not responsive to reducing delay, and not timely or too costly. Following is a summary of the alternatives considered.

### **No-Action Alternative**

Council on Environmental Quality (CEQ) regulations require the No-Action Alternative be considered in the environmental assessment of alternatives (40 CFR Part 1502.14 (d)). With the No-Action Alternative, the airfield would remain as it is today, with no new runway and no extension to Runway 9/27. There are a number of associated terminal and ancillary facility projects that are not dependent upon the Proposed Project and could be developed with or without the construction and operation of the proposed new runway or runway extension. Therefore, those projects were also included in the analysis of the 2005 No-Action Alternative to the extent that planning information was available. The associated terminal projects are expand Concourses A, B, and C. Other ancillary facilities that are planned are: construct an airline commissary building; expand air cargo and ground equipment buildings; construct an air freight forwarder building; and relocate the joint-use air cargo operators. The No-Action Alternative would not provide sufficient aircraft arrival and departure capacity during peak operation periods for CVG. Additionally, it would not provide sufficient runway length to accommodate projected air transportation demand (long range aircraft departures to Asia or Eastern Europe). Although not always reasonable, prudent, or practicable, the No-Action Alternative is a potential alternative under NEPA and Section 303(c) and served as the baseline for the assessment of future conditions/impacts.

The No-Action Alternative was not considered to be reasonable, practicable, or prudent in accomplishing the identified purposes and needs, but as required, was carried through detailed analysis of all impact categories contained in FAA Orders 1050.1D and 5050.4A.

### **Off-Site Alternatives**

#### **Use of Alternate Modes of Transportation and/or Telecommunications**

Alternate modes of transportation, such as rail, bus, or automobile, may offer feasible alternatives to freight shippers and air travelers, particularly those traveling 500 miles or less. At distances greater than 500 miles, surface transportation generally does not provide the time-efficient service demanded by air travelers. Approximately 61% of the origin and destination passengers at CVG are to and from 25 cities. Of these top 25, five cities are within 500 miles or less and have only 13.5% of the origin and destination passengers. Therefore other modes of transportation cannot meet the need of providing services needed by the air carrier passenger at CVG or significantly reduce the need to provide sufficient arrival and departure capacity during peak operating periods to maintain viable hub operations at CVG. Telecommunications offers the potential to reduce air travel to some extent but will not replace the need for air travel.

#### **Use of Other Airports**

The FAA considered the possible use of other airports or sites (including construction of a potential new airport) and the use of existing commercial service airports to meet the need for sufficient arrival and departure capacity. However, none of the other airports within the Air Trade Area (defined as the 12 county Cincinnati Consolidated Metropolitan Statistical Area (CMSA)) is capable of providing the necessary airfield requirements to support large aviation-related and air carrier hub service to meet the anticipated demand for the area. Developments to accommodate air carrier and major air cargo service would require an airport sponsor that wanted to develop such a facility and the expansion project would potentially require a minimum of 10 years to develop. No airport sponsor has expressed an interest in expanding airfield facilities to accommodate the CVG hub airlines. The EIS did not examine use of airports outside the Air Trade Area, as it would not serve the citizens in the Cincinnati CMSA. FAA cannot require that an airline move its hub operations from one airport to another, although capacity and adequate facilities could influence airline business decisions. The airlines have made considerable commitment to their use of CVG as a hub: decisions the FAA would support, if otherwise reasonable and consistent with appropriate development at CVG.

#### **On-Site Alternatives**

On-Site Alternatives considered included the Development Alternatives, Non-Runway Development Alternatives, Other

Technologies, and Activity or Demand-Management Alternatives.

Development Alternatives included the range of proposed development alternatives to expand the existing airfield (new runways and /or extension to existing runways), landside, and ancillary facilities to meet the sponsor's needs as identified in Chapter 3 of the FEIS,

Non-Runway Development Alternatives included those alternatives designed to increase capacity through physical airfield enhancements other than runway(s) development that could satisfy a portion of the established purpose and needs. Among the projects considered were taxiways, runway exits, and hold pads.

Other Technologies are being developed, that may ultimately reduce aircraft delay during poor weather. The goal of these technological opportunities is to increase capacity by aiding aircraft movement on the ground, on approach, and during departure. In addition, there are operational/air traffic procedural concepts that aim to make improvements through non-technological methods to postpone the need for physical improvements.

## **Alternatives Examined For Further Consideration**

### **Runway Development Alternatives**

The assessment of the on-site, development alternatives consisted of a two-phase evaluation of new runway development alternatives. The first phase examined a complete range of runway development options (including alternatives examined in the KCAB *1996 Master Plan Update*) in order to identify those that appeared to meet the project purpose and need and warranted more detailed review in the FEIS. The evaluation addressed potential new dependent or independent runways oriented north/south, east/west, at an angle and/or parallel to the existing runways. The second phase evaluation provided a more detailed assessment of the runway development alternatives that survived the first phase evaluation in order to identify the reasonable runway development alternatives carried forward in the FEIS for detailed analysis of potential environmental consequences. See Chapter Three *Alternatives*, to review all of the exhibits depicting the runway development alternatives.

The discussion of alternatives examined for further analysis also included the runway extension alternatives, the ancillary and terminal facilities planned and being further refined and examined through the KCAB *Terminal Area Master Plan*, and the implementation of noise abatement and operational air traffic procedures.

### **First Phase Alternatives Evaluation**

The complete range of runway development alternatives was grouped into four categories based on runway configuration:

- **New runways oriented at an angle to the existing airfield:** Options that consist of angled runways would not meet the stated need to provide sufficient aircraft arrival and departure capacity during peak operating periods to maintain viable hub operations at CVG. Additionally, angled runways would require numerous residential acquisitions and would direct aircraft overflights to previously unexposed residential communities, including the community of Burlington, residential areas west of Hebron and Florence in Boone County, and Crescent Park, Erlanger, and Lakeside Park in Kenton County. Therefore, the angled runway option was not carried forward for further analysis.
- **New dependent parallel runways:** Two sets of dependent runways would not meet the stated need to provide sufficient aircraft arrival and departure capacity during peak operating periods to maintain viable hub operations as discussed in Chapter Two *Purpose and Need*. The construction of dual dependent parallel runways (in a north/south or east/west alignment) could not be completed by 2005, when the capacity increase is projected to be needed. That is because two new runways would be needed in a north/south configuration and three new runways would be needed in an east/west configuration. Potential noise impacts would increase with the north/south alignment because Runway 9/27 would not be used during the daytime; the north/south runways would be used instead. Potential noise impacts would also increase with the east/west configuration because aircraft would be directed over communities that have not previously experienced aircraft overflights, including the communities of Villa Hills, Erlanger, Crescent Springs, Fort Mitchell, and Lakeside Park in Kenton County, and residential areas west of Hebron in Boone County. Therefore, the dual dependent runway option was not carried forward for further analysis.

- **New east/west oriented independent parallel runways:** Options that proposed one new east/west runway would not meet the stated need for peak period capacity. Options that proposed two new east/west runways would meet the stated need to provide sufficient aircraft arrival and departure capacity during peak operating periods. However, the development of two new runways would take longer to design and construct than the time period in which the improvements are projected to be needed. Both configurations would expose previously unaffected noise-sensitive populations to aircraft overflights, including the communities of Villa Hills, Erlanger, Crescent Springs, Fort Mitchell, and Lakeside Park in Kenton County, and residential areas west of Hebron in Boone County. Therefore, neither of these options was carried forward in the analysis of environmental consequences.
- **New north/south oriented independent parallel runways:** The options with a proposed new north/south runway located at a lateral separation distance of 4,300 feet or greater west of Runway 18R/36L have the potential to meet the need to provide sufficient aircraft arrival and departure capacity during peak operating periods to maintain viable hub operations. Since land acquisition for only one runway would be required, the acquisitions could be completed more quickly and construction time would be less. Therefore, variations on this group of runway options were further assessed by the FAA in the *Second Phase Alternatives Evaluation*.

### **Second Phase Alternatives Evaluation**

The second phase airfield evaluation examined, in greater detail, the development alternatives that included the construction and operation of a third north/south independent parallel runway located west of the existing runways. From the first phase airfield evaluation, it was determined that this runway orientation would best meet the stated need to provide sufficient aircraft arrival and departure capacity during peak operating periods to maintain viable hub operations. The remaining alternatives were compared for aeronautical and operational merits, potential impacts to streams and potential community disruption (resulting from proposed runway construction), location of new aircraft flight paths (resulting from operations on the proposed runway), and the time frame for construction relative to land acquisitions and roadway relocations or closures. Alternatives with obviously high or disproportionate environmental impacts, without substantial offsetting aeronautical or construction benefits, were not environmentally or financially reasonable and, therefore, not carried forward in the analysis of environmental consequences.

Potential impacts to local waterbodies (streams); new aircraft flight corridors and the potential acquisition of residential properties were selected as three of the evaluation criteria in this alternatives analysis and evaluation. Streams were selected because the land surrounding the existing airfield is interspersed with numerous streams; consequently, construction around the airport would likely result in stream impacts. New aircraft flight corridors was selected because operation of a new runway could affect areas of incompatible land use not currently overflowed by departing or arriving aircraft. While a detailed impact analysis of those criteria was not prepared for the Phase 2 evaluation, the locations of streams and new flight corridors were used to evaluate the general relative reasonableness and viability of each alternative.

The potential acquisition of residential units directly affected by construction of a proposed runway was considered for each alternative as a direct impact. In addition, depending upon the amount of residential acquisition, the social fabric of a neighborhood/subdivision/community could be affected. That could include, but may not be limited to, businesses, schools, and other public services. Relocation of existing roads was also used in the evaluation because of its potential effect on local surface transportation patterns and accessibility to public services. The disclosure of impacts for all environmental categories, as required by NEPA, is provided for the Proposed Project and its alternatives in Chapter Five *Environmental Consequences*.

The second phase alternatives evaluation included six runway alternatives. Alternatives A, C, D, E, and F included a new north/south parallel runway with 4,300 feet of lateral separation from Runway 18R/36L. (This assumed that the requisite FAA special equipment would be available to allow independent approaches in all weather conditions at that lateral runway separation.) Alternative B was a newly designed runway configuration with a lateral runway separation distance of 6,000 feet from Runway 18R/36L in order to avoid an intersection with Runway 9/27.

Alternatives A through D included a runway 10,000 feet long and Alternatives E and F included a shorter runway length of 8,000 feet. A 10,000-foot runway would provide the needed capacity and give the Terminal Radar Approach Control and Air Traffic Control Tower the most flexibility to manage traffic into and out of the airport because all parallel runways would be of similar length and could accommodate most passenger aircraft operating at CVG. An 8,000-foot runway would primarily be an arrival runway that would be able to accommodate landings by virtually all aircraft operating at CVG and takeoffs by commuter

aircraft (turboprops and regional jets) and most large jets serving the hub. A runway of 8,000 feet, used primarily by arrivals, would be sufficient to provide the airfield capacity needed throughout the planning period, as evaluated in the *Demand/Capacity Analysis* provided in Appendix S of the FEIS, since arrival capacity is the primary need. The Boone County Planning Commission had also indicated that it could not support plans for a runway of 10,000 feet in length.

The third north/south parallel runway alternatives are briefly described and advantages or disadvantages of each are summarized below. Each runway alternative was evaluated for its ability to meet the capacity needs; time to be constructed (2005); operational advantages and disadvantages; stream impacts; roadway impacts and potential impacts on the community due to acquisitions or aircraft overflights. Documentation of the analysis and exhibits showing the each alternative is contained in the FEIS, Chapter 3, Section 3.2.1.2.

**Alternative A** — one 10,000-foot parallel runway, located 4,300 feet west of existing Runway 18R/36L. The proposed runway would intersect Runway 9/27 with 7,000 feet to the north of Taxiway K and 3,000 feet to the south of Taxiway K (this alternative corresponds to the *1996 Airport Master Plan* Alternative 15). Alternative A was not carried forward for further analysis due to the aeronautical and operational disadvantages of multiple runway crossings and slightly longer taxi times. The pavement intersection with Runway 9/27 would result in the three parallel north/south runways becoming the predominant runways used during daytime hours. This conflicts with the KCAB commitment to maximize use of Runway 9/27 to concentrate or place aircraft over less densely populated non-sensitive land uses in order to minimize noise impacts. Also construction and operation of Alternative A could cause additional and unnecessary community disruption because of the runway being used for departures, utilizing new flight paths over residential areas that do not presently have aircraft overflights. This would not meet the KCAB's stated need to minimize or reduce impacts on the surrounding community (FEIS, Chapter 2, Section 2.3).

**Alternative B** — one 10,000-foot parallel runway, located 6,000 feet west of existing Runway 18R/36L. A separation of 6,000 feet is the minimum separation required to avoid an intersection with existing Runway 9/27. If Runway 9/27 were extended by 2,000 feet to the west, as proposed, (see Chapter Three *Alternatives*, Section 3.2.1.3 for the discussion of runway extensions), the proposed runway would need to be located 8,000 feet west of existing Runway 18R/36L to avoid an intersection with Runway 9/27. (This alternative corresponds to the *1996 Airport Master Plan* Alternative 7.) Alternative B was not carried forward for further analysis due to the aeronautical disadvantage of multiple runway crossings and the higher level of air traffic coordination that would be required between the proposed runway and Runway 9/27 (due to intersecting flight paths). That would result in Runway 9/27 not being used for departures during daytime hours. The aircraft taxi distances with this alternative would be longer than with other alternatives because of the 6,000 feet of lateral separation west of the existing airfield. As stated in Chapter Two *Purpose and Need*, and the demand and capacity analysis in Appendix S, the increase in airfield capacity would be needed by 2005. Alternative B could not be implemented within the 2005 time frame because of the extensive property acquisition and relocation program that would be required. This alternative would require the largest acquisition of residences and relocation of people. Additionally, this alternative would not minimize or reduce impacts to the surrounding communities and it could cause additional and unnecessary community disruption. This alternative therefore was not carried forward for further analysis.

**Alternative C** — one 10,000-foot parallel runway, located 4,300 feet west of existing Runway 18R/36L and north of Runway 9/27; the runway would not intersect Runway 9/27. (This alternative was evaluated in the *1996 Airport Master Plan* as Alternative 14.) Because of the 10,000-foot length, the third parallel runway proposed in Alternative C would be used for departures resulting in intersecting flight paths that would require more air traffic coordination. The high level of air traffic coordination with Runway 9/27 operations would cause Runway 9/27 to not be used effectively or efficiently. Additionally, this alternative could not be implemented within a reasonable time frame (2005) to provide the needed aircraft arrival and departure capacity due to the additional property acquisition and conversion and residential relocation program that would be required. Furthermore, this alternative would not minimize or reduce impacts to the surrounding residential communities. Therefore, Alternative C was not carried forward for further analysis.

**Alternative D** — one 10,000-foot parallel runway, located 4,300 feet west of existing Runway 18R/36L and south of Runway 9/27; the runway would not intersect Runway 9/27. (This alternative was not presented in the *1996 Master Plan Update*.) Alternative D would require a high level of air traffic coordination with Runway 9/27, which would result in the proposed runway not being used effectively or efficiently because of intersecting flight paths. Also, this alternative would have longer taxi distances when compared to the other alternatives and multiple runway crossings for aircraft to access the terminal core area. Alternative D could not be implemented within a reasonable time frame to provide the needed increase in airfield capacity due to the extensive property acquisition and conversion and residential relocation program that would be required. This alternative

also has extensive stream impacts; it would not minimize or reduce impacts to the surrounding residential communities; and it could cause significant and unnecessary community disruption. Therefore, Alternative D was not carried forward for further analysis.

**Alternative E** — one 8,000-foot parallel runway, located 4,300 feet west of existing Runway 18R/36L and north of Runway 9/27; would not intersect Runway 9/27. (This alternative corresponds to the *1996 Airport Master Plan* Alternative 17 and is the Sponsor's Preferred Runway Alternative.) The third parallel runway would only be used for approximately one percent of departures due to its length, therefore requiring less air traffic coordination. Alternative E was the Sponsor's Preferred Runway Alternative because it met the stated need to provide sufficient aircraft arrival and departure capacity during peak operating periods to maintain viable hub operations within the 2005 timeframe. The potential aircraft noise and community disruption impacts would be less than the other alternatives. Alternative E also would provide the aeronautical and operational benefit of having the least air traffic coordination and operational dependency with Runway 9/27, shorter taxi distances to the terminal area, and only one runway crossing to access the terminal. Therefore, Alternative E was carried forward in the FEIS analysis.

**Alternative F** — one 8,000-foot parallel runway, located 4,300 feet west of existing Runway 18R/36L, south of Runway 9/27; would not intersect Runway 9/27. (This alternative was not presented in the *1996 Master Plan Update*.) Alternative F was not carried forward for further analysis due to the aeronautical disadvantages of multiple runway crossings and longer taxi distances and its lack of operational benefits. Further, this alternative would have extensive stream impacts; it would not meet the stated need to minimize or reduce impacts to the surrounding communities; and it could cause significant and unnecessary residential community disruption.

As the FAA independent alternatives analysis determined, discussed above in *First Phase Alternatives Evaluation*, the development of a third north/south independent parallel runway located west of the existing airfield would best meet the stated need. Therefore, the preferred runway alternative and three other of the 18 alternatives first developed by the KCAB Master Plan Project Coordination Committee were included in the FEIS second phase alternatives evaluation (Alternatives A, B, C, and E). Two additional alternatives for a north/south independent parallel runway (Alternatives D and F) that could potentially meet the stated arrival and departure capacity need at CVG were also included in the FEIS.

A new independent runway with 4,300 feet of lateral separation would provide the needed arrival and departure capacity in peak periods; however, the actual physical location of such a runway could increase or decrease capacity and operational efficiency. Therefore, aeronautical and operational criteria (the level of air traffic coordination with other runways, taxi distances, and number of runway crossings) and its impact on airfield capacity were used in the evaluation of alternatives.

### **Alternatives Subject of Detailed Environmental Analysis**

The FAA analysis and systematic evaluation of project alternatives resulted in one runway development alternative and runway extension alternative being retained for detailed environmental analysis. Those airfield projects along with implementation of the terminal and ancillary projects and the 1999 Noise Compatibility Program / 2005 Noise Compatibility Program (1999 NCP/ 2005 NCP) would provide a Proposed Project which addresses the operational demands and the need to minimize noise impacts at CVG. Therefore, the FAA evaluated the KCAB's request for approval in the FEIS analysis to disclose the potential environmental impacts that would result from implementation of the Proposed Project. The Proposed Project and the No-Action Alternative, as required by NEPA, were carried forward in the analysis of environmental consequences.

### **Alternative 1 – 2005 No-Action Alternative**

The 2005 No-Action Alternative, *Alternative 1a: 2005 No-Action and Alternative 1b: 2005 No-Action and Implement the 1999 NCP*, would result in the airfield capacity remaining essentially as it is today but with the projected (2005) increase in aircraft operations. Therefore, the following future requirements, as identified in Chapter Two *Purpose and Need* would not be satisfied: the need for sufficient aircraft arrival and departure capacity during peak operating periods for the passenger hub and the need to provide sufficient runway length to accommodate projected air transportation demand (long range aircraft departures to Asia or Eastern Europe).

The FAA included two air traffic options in the evaluation of the 2005 No-Action Alternative. Air Traffic Option 1 would continue the NCP from the previously approved *1992 Supplemental Part 150 Study*, without the implementation of the approved NCP

noise abatement air traffic measures in the *1999 FAR Part 150 Study Update*. The approved land use compatibility measures would be implemented. Air Traffic Option 2 provides for the implementation of the KCAB noise abatement air traffic measures as approved in the NCP in the *1999 FAR Part 150 Study Update*.

With Air Traffic Option 1, no new noise abatement air traffic measures would be implemented. This option assumed that the operational measures in the approved 1999 NCP are not implemented and the approved measures from the KCAB *1992 Supplemental FAR Part 150 Study* would continue to guide the aircraft noise abatement procedures. This alternative was carried forward in the analysis to evaluate and determine the benefits of noise abatement measures approved in the 1999 NCP against the existing 1992 NCP.

With Air Traffic Option 2, air traffic procedures in the *1999 FAR Part 150 Study Update* would continue the measures in the previously approved NCP. Those procedures would abate existing and the projected 2005 aircraft noise impacts through the improved adherence to noise abatement flight tracks over compatible land use corridors. Therefore, this option provides a viable approach to meeting the stated need to minimize or reduce impacts on the surrounding community. Those measures would not, however, contribute directly to satisfying the need for sufficient aircraft arrival and departure capacity during peak operating periods for the passenger hub, thus reducing delay, or provide sufficient runway length to accommodate potential air transportation demand (long-range aircraft departures to destinations in Asia and Eastern Europe). The noise abatement air traffic measures for the existing airfield are listed in Chapter Three, Section 3.2.1.6 *Noise Abatement and Operational Air Traffic Options*.

There are a number of associated terminal and ancillary facility projects that would support the proposed airfield development. However, those projects are not dependent upon the Proposed Project and could be developed with or without the construction and operation of the proposed new runway or runway extension. Therefore, those projects were also included in the analysis of the 2005 No-Action Alternative. The associated terminal and ancillary facilities projects are: expand Concourses A, B, and C; expand/realign parking for rent-a-car, passengers, and employees; redevelop Terminals 1 and 2; construct an airline commissary building; expand air cargo and ground equipment buildings; construct an air freight forwarder building; and relocate the joint-use air cargo operators. Although the 2005 No-Action Alternative does not meet the stated purpose and need, it is feasible, and therefore was an alternative assessed in the FEIS both with and without the implementation of the 1999 NCP noise abatement air traffic measures. Those analyses are presented and carried forward in the analysis of environmental consequences, as:

- Alternative 1a: 2005 No-Action Alternative 1b: 2005 No-Action and Implement the 1999 NCP
- Alternative 1b: 2005 No-Action and Implement the 1999 NCP

The noise contours associated with the 2005 No-Action alternatives are discussed in the FEIS, Chapter Five, Section 5.1 *Noise*.

## **Alternative 2 – Proposed Project**

The Proposed Project was carried forward in the FEIS analysis of environmental consequences as Alternative 2. This alternative consists of the following development projects: Preferred Runway (a third north/south parallel runway, 8,000 feet long, located 4,300 feet west of existing Runway 18R/36L with parallel and connecting taxiways and associated lighting and NAVAIDs), Preferred Extension (a 2,000-foot westerly extension to Runway 9/27 with parallel and connecting taxiways and associated lighting and NAVAIDs relocation), and terminal and ancillary facility projects, as discussed in detail in Chapter Three *Alternatives*, Sections 3.2.1.4 and 3.2.1.5 (*Ancillary Facilities Projects* and *Terminal Facilities Projects*).

To provide an incremental comparative analysis of the potential impacts of implementing the Proposed Project, the FAA assessed the following two major components independently of the other in the detailed analysis of environmental consequences in Chapter Five: a) construction of the proposed runway extension without a third north/south parallel runway (Preferred Extension), and b) construction of the third north/south parallel runway without the proposed 2,000-foot runway extension (Preferred Runway). The construction of both projects was also assessed to make up the Proposed Project. Because both runway development projects are independent of each other and each could independently meet specific needs, as defined in Chapter Two *Purpose and Need*, the incremental analysis of the projects disclosed the potential environmental impacts that may result from those projects separately and together. These components of the Proposed Project are

designated as Alternative 2a, Alternative 2b, and Alternative 2c. These analyses are presented, and carried forward in the analysis of environmental consequences as:

- Alternative 2a: 2005 Preferred Extension
- Alternative 2b: 2005 Preferred Runway
- Alternative 2c: 2005 Proposed Project (includes preferred extension and preferred runway)

The implementation of air traffic procedures was also evaluated with three alternatives being environmentally assessed in the FEIS. The KCAB developed its Noise Compatibility Program with the goal to maintain existing noise abatement procedures. Retaining the existing noise abatement procedures limited the options for aircraft departures off the proposed runway when the airport is in north flow. Recognizing that the noise abatement procedures would not optimize efficiency, FAA determined that it needed to include analysis and disclosure of alternative flight patterns in the EIS. In addition, several letters were received which raised safety and efficiency issues from implementing the north flow noise abatement procedures. FAA considered these issues in its evaluation of proposed departure procedures.

- Air Traffic Option 1: No Noise Compatibility Program Implementation
- Air Traffic Option 2: Implement Approved Noise Compatibility Program - 1999 NCP/2005 NCP- Sponsor's Preferred Air Traffic Option.
- Air Traffic Option 3: Alternate North Flow Operational Procedures: In the event that the noise abatement operational procedures (Option 2) would substantially reduce capacity due to greater than anticipated operations or changes in the airspace/airfield configuration, alternate north flow departure procedures would need to be implemented. Implementation of this option is dependent upon the approval and construction of the proposed runway. However, two previously approved departure procedures (OP-6 and OP-8) would be replaced and the recommended noise abatement departure procedure for the new runway (OP-16) would not be approved.

**OP-6:** Departing Runway 36L, overfly the Ohio River by turning left after reaching 0.5 n.m. beyond the localizer (ICVG) to a 330-degree heading. *Approved Measure.*

**OP-8:** Increase noise abatement departure routes to four n.m. from runway overflight end or 5,000 feet MSL. (This measure applies to Runway 36R.) *Approved Measure.*

**OP-16:** Departing Runway 35, turn left at 4.2 DME from the CVG very high frequency omni-directional range, to a 325-degree heading to overfly the Ohio River; or fly an ANAV departure procedure directing aircraft over the Ohio River for four n.m. *New Noise Abatement Procedure*

In the absence of a formally defined departure path for proposed Runway 17/35, the FAA would develop flight procedures (arrival/departure) applying the applicable standards, which include a required 15-degree divergence (see Section 3.2.1.6 *Noise Abatement and Operational Air Traffic Options*). If the currently approved noise abatement departure procedures are not maintained for departures during north flow because of capacity constraints, Air Traffic Control indicated the following departure procedures are feasible:

- Runway 36R – 15-degree right turn.
- Runway 36L – Straight-out (runway heading) for four n.m. or 4,000 feet Above Ground Level.
- Proposed Runway 35 – 15-degree left turn.

FAA carefully considered the noise abatement goals of the KCAB and air traffic operational and efficiency issues. From an airfield operational perspective, Air Traffic Option 3 is reasonable and practicable and would conform to established FAA Air Traffic Control standards for simultaneous parallel runway departures. From an air traffic operational perspective, those departure procedures would provide the most efficient way to depart aircraft when in north flow. However, as discussed previously, the anticipated use of proposed Runway 17/35 would be primarily for arrivals and it is not likely that the proposed runway and the existing runways would be used simultaneously for departures. Air Traffic Option 3 was carried forward for detailed environmental analysis in the event the noise abatement measure for the proposed runway could not be implemented

and Option 3 was required for capacity for north operations.

From a noise abatement perspective, Air Traffic Option 3 is not prudent because by changing the two existing runway noise abatement departure paths additional overflight impacts would occur. A straight-out departure off of Runway 36L would negate the KCAB noise abatement air traffic procedures for north flow operations following the Ohio River that were established in the 1992 NCP. The incompatible land uses north of the Ohio River would be subjected to aircraft overflights from departures on Runway 36L; aircraft do not currently depart over those areas. The area north of Runway 36L consists of densely populated, established neighborhoods that already receive aircraft arrival noise and overflights. The added noise from departing aircraft during north flow operations would compound the noise effects north of the Ohio River. Similarly, a 15-degree right turn for aircraft departures on Runway 36R would create overflight impacts in areas that historically have received neither departure nor arrival overflights.

FAA coordinated internally and has determined that the Noise Abatement Operational Procedures for north flow (Air Traffic Option 2) can be implemented safely and noise abatement measure OP-16 is approved. In a North operation, the proposed runway and the existing Runway 18R-36L will operate as dependent runways. Air Traffic Control will provide in trail separation for aircraft departing Runways 35 and 36L. In the event that a change in operational procedures were necessary in the future, FAA would evaluate the need for the change, the potential effects and its obligation under the National Environmental Policy Act.

There would be no potential conflicts for departures during south flow and the flight corridors defined by the current noise abatement procedures would likely be maintained because these procedures provide the most logical means for maintaining the required 15 degrees of separation. The currently approved departure procedures defined for existing Runways 18L and 18R provide for 15 degrees of separation. A standard 15-degree right turn assigned to aircraft departing proposed Runway 17 would also comply with the established FAA Air Traffic Control standards.

### **Sponsor's Preferred Alternative**

The Sponsor's preferred long-term airport development alternative is the proposed project identified in the FEIS as Alternative 2. The Sponsor's preference for Alternative 2 is based on the analysis of the long-term airport capacity and delay in its 1996 Master Plan Update. The master plan update identified the specific capital projects that could reduce delay during peak periods of aircraft operations. The 1996 Master Plan analysis determined that the most prudent and feasible option to provide increased peak-period operating capacity was to construct a third north/south parallel runway at a 4,300 foot separation west of the existing Runway 1R/36L.

### **Environmentally Preferred Alternative**

As required by the CEQ (40 CFR Part 1502.14(e), a federal agency must identify its preferred alternative in the FEIS and must identify the environmentally preferable alternative (40 CFR Part 1505.2 (b) at the time of its decision. The environmentally preferred alternative is the alternative which best promotes the national environmental policies incorporated in Section 101 of NEPA. In general, this would be the alternative resulting in the least adverse impacts to the human environment and which best protects natural and cultural resources.

Though not specifically stated in the EIS, the analysis clearly shows that the No Action alternative is the environmentally preferred alternative as defined by CEQ. Chapter 5, Environmental Consequences, of the FEIS documents that with No Action alternative, there would be no significant impacts to the environment. With no airfield construction, there would be no impacts to wetlands or streams, historic structures, biotic communities, surface transportation and no changes in flight corridors. There would be increases in solid waste with the terminal and ancillary projects that are proposed to be constructed with or without the airfield projects. When compared to the Proposed project, only air quality impacts would be greater with the No action alternative due to increased aircraft delays. Based on the environmental evaluation criteria used in the FEIS, Chapter 3, Alternatives, to analyze and compare the proposed runway alternatives against the No-Action Alternative, no significant environmental impacts would occur with the No-Action Alternative. However, there would be an increase in frequency of use of the existing flight corridors proportionate to projected growth in flight operations.

While the No-Action Alternative, had less environmental impacts, it would not provide sufficient aircraft arrival and departure

capacity during peak operating periods for a passenger hub and sufficient runway length to accommodate projected air transportation demand (long range aircraft departures to Asia or Eastern Europe). FAA's 1999 Aviation Capacity Enhancement Plan projects that without airfield improvements CVG would be one of 21 large-hub airports in the United States where the average delay would exceed five minutes. Delays at one airport, particularly at a major hub, build and spread throughout the system causing delays at other airports.

Based on analysis conducted during the EIS, the proposed runway project would reduce delay cost at CVG in excess of \$70 million annually (FEIS, Table 5.4-6, *Aircraft Delay Cost With and Without Project*).

The No-Action Alternative analysis in the FEIS considered two air traffic abatement options. With Air Traffic Option 1, the existing air traffic noise abatement measures approved in the 1992 Supplemental Part 150 update would continue and the approved noise abatement air traffic measures in the 1999 FAR Part 150 Study Update would not be implemented. These noise abatement measures were approved in the ROA for the 1999 FAR Part 150 Study Update and are proposed to refine the existing air traffic departure procedures. These procedures were evaluated in the EIS to show the incremental differences of implementing the procedures, but implementation of the procedures are not dependent on approval of the proposed airfield projects in this ROD.

Air Traffic Option 2 would involve the implementation of the KCAB's noise abatement air traffic measures as approved in the NCP in the 1999 FAR Part 150 Study Update. Implementation of Air Traffic Option 2 under the No-Action Alternative would abate existing and projected 2005 aircraft noise impacts through the improved adherence to noise abatement flight tracks over compatible land use corridors. Those measures would not however, contribute directly or indirectly to meeting the need for sufficient aircraft arrival and departure capacity during peak operating periods for the passenger hub or provide sufficient runway length to accommodate potential air transportation demand (long range aircraft departures to destinations in Asia and Eastern Europe). Detailed comparative analysis with the No-Action Alternative and the Selected Alternative is provided in Chapter 5 of the FEIS.

### **Selected Alternative**

The FAA does not initiate airport development projects. However, the FAA may consider the Sponsor's preferences in evaluating alternatives that would meet the needs for the National Airspace System and operations at CVG, and FAA's environmental responsibilities. The Sponsor identified its recommendations for future development to meet the needs at CVG in its Master Plan.

The role of the FAA is not to redesign an unacceptable proposal, but the FAA does have the authority and responsibility to evaluate and to approve or disapprove a proposal. Because the processes to develop proposals for a Master Plan and ALP are extensive, the FAA works with the airport Sponsor to ensure proposed airport development projects comply with FAA rules and regulations and will operate in a safe, efficient, and environmentally compatible manner.

FAA has completed the appropriate environmental review and the necessary steps in the NEPA process, including:

- Careful consideration of alternatives and the ability of the alternatives to satisfy the identified purpose and need for the proposed project.
- Evaluation of the potential impacts of the alternatives carried forward including the determination that Alternative 2 with implementation of appropriate mitigation measures can go forward.
- Review and consideration of public testimony, of comments submitted in response to the DEIS and FEIS, and of coordination with Federal, state, and local agencies.

Therefore, FAA finds Alternative 2, the proposed project, to be a feasible, reasonable, practicable, and prudent alternative to meet the purpose and need for providing sufficient arrival and departure capacity at CVG.

With the proposed project, improvements can be made which would provide sufficient aircraft arrival and departure capacity at CVG. The FAA's selection of Alternative 2 as the preferred alternative incorporates mitigation measures described in Chapter 5 of the FEIS and later sections of this ROD. Having thus considered the policies set forth in 49 U.S.C. Sections 40104 and

47101, the ability of the available alternatives to meet the purpose and need, and the environmental impact of the alternatives, the FAA's approval of the preferred alternative signifies that the project meets requirements of FAA for approval of the agency action as discussed in Section III of this ROD.

The FEIS identified and analyzed a wide range of both location and airfield design alternatives for meeting the purposes and needs presented in Chapter Two *Purpose and Need*. The FAA independently reviewed and analyzed a comprehensive range of operational, economic, engineering, and environmental criteria in assessing whether alternatives would be reasonable, feasible, prudent, and practicable. The FAA independently reviewed the KCAB master planning process and concluded that it was acceptable and appeared to be consistent with the public policy objectives of the *National Transportation Policy* and the *Intermodal Surface Transportation Efficiency Act of 1991*.

The Proposed Project was designed to satisfy the airport Sponsor's stated purpose and need. The FAA believes the range of alternatives evaluated were reasonable and there was no alternative that was superior to the runway alternative proposed by KCAB. Therefore, the proposed project was selected for detailed analysis in the FEIS to disclose the potential environmental impacts.

### **Other Actions Associated with the Proposed Project**

The FEIS also assesses the installation of NAVAIDs, airspace use, approach and departure procedures associated with the airside development; and the proposed terminal area projects identified in the *1996 Master Plan Update*.

The U.S. Army Corps of Engineers would have to issue a 404 permit to allow for construction of any of the development alternatives. All of the development alternatives have the potential for impacts to local waterbodies. Kentucky Highway 20, Connor Road, Limaburg Road and Hossman Road would have to be relocated or closed. With the multiple roadway relocations, there were six possible configurations for Alternative 2b and 2c. These configurations were analyzed to determine the impact to biotic communities and waterbodies and discussed in depth in the FEIS document, Chapter Five, Sections 5.9 *Biotic Communities*, and 5.11 *Wetlands*. A summary of the potential impacts to perennial streams, intermittent, ephemeral, streams, topographic drains, ponds, and wetlands is provided in the FEIS, Executive Summary, Table ES-3, *Potential Waterbody Impacts*.

In order to accomplish the airfield development items, the following associated actions would have to be taken. The associated actions to relocate area roadways and pipelines may be implemented, depending upon jurisdictional authority and funding, by the KCAB, Boone County Water, Mid-Valley Oil, Cinergy, Owen Electric, Intermedia Cable, Cincinnati Bell, Sanitation District No. 1, the KYTC, and the FAA. Potential funding may be obtained from the Federal Highway Administration, the KYTC, FAA, and/or KCAB.

- Relocate and/or construct a tunnel on KY 20.
- Three alignment alternatives were proposed for the relocation of KY 20 and all proposed alignments would be constructed on future airport property that would be acquired for the development of proposed Runway 17/35. The selection of one of the three roadway alignments over the other was dependent upon coordination and concurrence with the KYTC. Alignment A was selected as the preferred alignment. Alignment A is referred to as the southern route and included the construction of a tunnel under the RSA and Runway OFA. This alignment places KY 20 just north of the north end of the proposed new runway.
- Relocate the Mid-Valley Pipeline and other public/private utilities, currently located west of existing Runway 18R/36L, farther to the west of the airfield, but remaining on airport property purchased for runway construction. (Those relocation projects are associated with the construction of proposed Runway 17/35.)
- Relocate the Mid-Valley Pipeline and other public/private utilities, currently located west of existing Runway 9/27, farther to the west of the airfield, but remaining on airport property purchased for the runway extension construction. (Those relocation projects are associated with the construction of the Runway 9/27 extension.)
- Relocate Limaburg Road to the west of its existing alignment, and west of the airport perimeter road and the proposed extension to Runway 27. The realigned segment of this road would remain on existing airport property and the grade lowered a sufficient degree to keep clear of the approach surface and light lane. (This relocation project is associated with the construction of the extension to Runway 9/27.)
- Close Hossman Road permanently. Because Boone County initially indicated that it might not want to close this road,

the FAA also examined the relocation/replacement of Hossman Road to the west of proposed Runway 17/35. Option A: KCAB would petition Boone County to close Hossman Road and build a replacement road west of the proposed runway. Option B: KCAB would petition Boone County to permanently close Hossman Road as a public road and right-of-way. Boone County has recently agreed with the concept of closing Hossman Road and putting funds into other road projects as a functional replacement for Hossman Road in the airport vicinity.

- Relocate Conner Road to maintain connection of the eastern section of the road to its intersection with KY 20. Options for relocating this section of roadway are very limited due to the location of the proposed future airport property line, existing residential units, and the proposed relocated alignment of KY 20. Conner Road would be aligned to connect with the relocated KY 20 segment.
- Acquire approximately 563 acres of land necessary for the construction of proposed Runway 17/35 and the standard Runway Protection Zone (RPZ) (on the north end of the runway). This acreage includes approximately 188 residential units, one business, and the Hebron Baptist Church. See FEIS, Appendix V, Table V-1 Exhibit ES-8, *Proposed Property Acquisition: 2005 Proposed Project with KY 20 Alignments A and B*; Exhibit ES-9, *Proposed Property Acquisition: 2005 Proposed Project with KY 20 Alignment C*

## **V. SIGNIFICANT ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

The FEIS documents and discloses potential environmental impacts of the Proposed Project, its component parts, and the No Action alternative in Chapter Five *Environmental Consequences*, and Chapter Six *Cumulative Impacts*. Chapter 7 summarizes impacts of the project and Table 7-2, *ENVIRONMENTAL MITIGATION SUMMARY MATRIX* lists the mitigation measures.

KCAB has the primary responsibility for implementation of the mitigation measures. FAA has discussed with KCAB the requirements for mitigation in conjunction with implementation of the proposed project. The FAA will have oversight responsibility and will monitor the implementation of the mitigation measures as necessary. Mitigation measures necessary to avoid or minimize significant environmental impacts, as well as identified or adopted monitoring and enforcement programs, are summarized below. The FAA finds that all practical means to avoid or minimize environmental harm have been adopted, through appropriate mitigation planning, in compliance with all applicable environmental laws, regulations, and statutes.

In accordance with 40 CFR 1505.3, the FAA will take appropriate steps, as described in this ROD, through Federal funding grant assurances and conditions, and ALP approvals, to ensure that the following mitigation actions are implemented during Proposed Project development. The approvals contained in this ROD are specifically conditioned upon full implementation of these mitigation measures.

A detailed environmental analysis of the potential environmental impacts resulting from the implementation of the selected alternative was accomplished as part of the FEIS. Potential impacts to environmental resources were assessed for the year 2005, the first year that the new runway and associated development is projected to be constructed and operational. The EIS presented projected activity levels and the associated noise and air quality environmental impacts, for the Proposed Action and No-Action Alternatives, through the year 2011. Development that is not reasonably foreseeable at this time and not approved within this ROD, but which may become viable for possible implementation at a later date, would be subject to appropriate environmental review at that time.

This section provides a summary of the impacts and mitigation measures that would be implemented with construction of the Proposed Project (Alternative 2c).

### **Noise / Compatible Land Use / Social Impacts including Environmental Justice**

#### *Impacts*

The 2005 noise exposure contour with the Proposed Project would encompass 12.6 square miles of land (6.0 square miles is currently airport-owned). Approximately 243 existing residential units would be located in the 65 DNL noise contour; 53 of these units would be acquired for the construction of the proposed runway; 190 units would be offered mitigation through the

KCAB 1992/1999 NCPs. These 190 units are in the existing 1999 noise contours and the mitigation through the NCP has begun. One church (Hebron Baptist Church), located in the 2005 65 DNL noise exposure contour, would be acquired for the construction of the proposed runway. Twenty-one residential units outside of the 65 DNL noise contour would be within both the area of 3 dB increase in noise exposure between the 60 to 65 DNL noise contours, and within a 1,700-foot wide by 8,000-foot long area off the Runway 35 end. The Federal Interagency Committee on Noise (FICON) recommended that agency mitigation options should include noise sensitive areas that are projected to have a 3dB or greater increase in noise exposure between the 60-65 DNL contours. The KCAB has previously identified mitigation in its Part 150 NCP for 1,700 foot by 8000-foot areas off the ends of each runway end. With KY 20 Alignment A, the selected alignment, 188 residential units (564 people) would be acquired for runway construction and roadway construction, including 349 acres of residential property and 209 acres of undeveloped/vacant land. In addition to the residences required for construction of the proposed runway, noise from aircraft operations on the new runway with Air Traffic Option 2 and construction related activities would impact 47 additional residential units for a total of 235 (188 + 47).

- 20 units in Hickory Glen subdivision (disruption of established communities)
- 6 units along Elijah Creek Road (change in character of surrounding land use)
- 21 units in area of 3 dB increase within the 60-65 DNL noise contour (plus 5 additional units for Air Traffic Option 3)

An auto repair business (D&A Auto Repair, less than one acre) and the Hebron Baptist Church (approximately five acres) would need to be acquired and relocated. The church administration owns property on Limaburg Road where it is planning to build a new church.

Appendix V of the FEIS document, Table V-1, *Property Identified for Acquisition*, lists addresses of property that would be acquired. All acquisitions would be conducted in accordance with 49 CFR Part 24 *Uniform Relocation Assistance and Real Property Acquisition Policies Act*.

The community of Hebron businesses and public services would not be impacted by the relocation of KY 20, Conner Road, and the closure of Hossman Road. The proposed intersection of KY 20 and Conner Road would be closer to the community of Hebron and to the business district, providing the same level or improved accessibility.

The Proposed Project or its alternatives would not disproportionately impact any minority and/or low-income persons or households. Therefore, this project is in compliance with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*.

### *Mitigation*

Mitigation will be offered to owners of the 47 residential units listed under *Impacts*. The KCAB will establish a Negotiated Purchase Program in its acquisition office to mitigate potential impacts from aircraft noise, disruption to established communities, and a change in the character of the surrounding land uses due to the development, construction, and operation of the proposed runway and the roadway relocation projects. A Negotiated Purchase is the purchase of real property through negotiation, i.e. the offer of fair market value. The Negotiated Purchase Program would involve the payment of relocation assistance and moving expenses, in accordance with the requirements of the *Uniform Relocation Assistance and Real Property Acquisition Policies Act*. Participation in the program would be voluntary on the part of the property owner. The Negotiated Purchase Program was selected as the form of mitigation because it could effectively mitigate the potential impacts of the Proposed Project if 100 percent participation of the property owners were achieved. Through this program, property would be acquired through negotiated purchase (no condemnation), residents would be relocated, and the property would be converted to land uses compatible with airport operations (airport/transportation, commercial, or industrial). This would prevent further development of incompatible land uses. The EPA suggested in its comments that acquisition should be mandatory for these residences. It is not FAA policy to require acquisition if the property is not needed for the project and the residents wish to remain on their property.

The Negotiated Purchase Program would be similar to the voluntary acquisition approved in the KCAB *1999 FAR Part 150 Study Update* and both would provide relocation assistance for the homeowner. Implementation of the Negotiated Purchase Program is dependent on approval of the project in this FAA ROD on the Final EIS. Implementation of the approved Part 150

voluntary acquisition program (to mitigate existing aircraft noise impacts) is not dependent on environmental analysis. The areas proposed for construction acquisition and acquisition as mitigation for the proposed project are shown in Chapter Five, Section 5.2 *Compatible Land Use*, Exhibit 5.2-2, *Proposed Property Acquisition and Negotiated Purchase with KY 20 Alignments A & B*. The property identified for mitigation through voluntary acquisition in the approved KCAB 1999 NCP/2005 NCP is shown on Exhibit 5.2-1, *Areas Where Part 150 Voluntary Acquisition Would Lead to a Change in Land Use*.

### **Induced Socioeconomic**

#### *Impacts*

In 1999, the average cost of aircraft delay was \$24.65 per minute of operation. By 2005, this cost is projected to increase to \$25.96, if the airfield remains as it is today.

The annual delay cost at CVG was approximately \$52.3 million in 1999. Based on the derived all-weather average aircraft delays for each airfield alternative and the average aircraft direct operating costs for 2005, the operating costs were calculated according to annual forecast operations. For the year 2005, delay costs without the Proposed Project are anticipated to rise to almost \$124.7 million annually; with the Proposed Project, delay costs would be \$53.9 million. Thus an annual aircraft operating cost savings of \$70.8 million in 2005 would result from the implementation of the Proposed Project as shown in the FEIS, Chapter 5, Section 5.4.2.

Because most of the people being displaced would relocate within Boone County, there would be a slight reduction in Boone County property tax revenues in the short-term. Even if all of the residents within the proposed airport expansion construction area were to relocate outside of Boone County, the effect on property tax revenues would be minimal (approximately 1.2 percent of total tax revenue). This information is documented in the FEIS, Chapter Five, Section 5.4.3 Population Movement and Growth.

#### *Mitigation*

Because there will be no significant long-term negative impacts on tax revenues, no mitigation measures are required.

### **Section 303(c) Formerly DOT Act Section [4(f)] Resources; 6(f) Properties; and Historic, Architectural, Archaeological, and Cultural Resources**

#### *Impacts*

Implementation of the Proposed Project would directly impact the William Rouse House, a historic structure that is eligible for inclusion in the *National Register of Historic Places* and a Section 303(c) property. The William Rouse House is potentially eligible for the *National Register* under two criteria: A. The structure is associated with events that have made a significant contribution to the broad patterns of our history, and C. It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that represent a significant and distinguishable entity whose individual components may lack distinction. The William Rouse House is associated with Germanic settlement in Boone County during the early 19<sup>th</sup> Century. It is a significant expression of log construction in Boone County and maintains a high degree of integrity. The structure would have to be acquired and removed to allow for construction of the new runway resulting in actual use of the property. The removal of the William Rouse House is necessary to obtain sufficient separation (4,300 feet) between the proposed runway and existing Runway 18R-36L to allow for simultaneous approaches. The documentation and exhibits showing the area of potential effect are contained in the FEIS, Chapter 5, Section 5.7.

Federal statute Title 49 USC 303(c) was previously known as Section 4(f) of the *Department of Transportation Act of 1966*. It states:

"The Secretary may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of a historic site of national, State, or local significance (as determined by

the Federal, State, or local officials having jurisdiction over the park, area, refuge or site) only if-

- (1) there is no feasible and prudent alternative to using that land; and
2. the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

Section 106 of the *National Historic Preservation Act* requires consultation with the State Historic Preservation Officer in order to determine if historic properties are located in the geographic area within which direct and indirect impacts generated by the Proposed Project and its alternatives could reasonably be expected to occur. These potential direct and indirect impacts may consequently cause a change in the historic, architectural, and/or archaeological qualities possessed by the property. Section 106 provides specific procedures whereby these impacts are evaluated, avoided, minimized, or, if necessary, mitigated.

FAA consulted with the Kentucky Heritage Council and the Boone County Historic Preservation Office to identify potential historic structures in the vicinity of the airport, the area of potential effect. The area of potential effect included the construction area (direct effect) and the area within the 65DNL noise contour from the proposed project (indirect effects). The William Rouse House is located on the west side of the airport and would be affected by all of the build alternatives that would provide sufficient separation (4300 feet) to allow simultaneous aircraft approaches. At the request of the Ohio Historic Preservation Office, the City of Cincinnati (Sayler Park Village Council), Cincinnati Historic Preservation Office, and St. Aloysius-on-the-Ohio Church and School, were invited to be consulting parties in the Section 106 process. The issue of concern for Ohio was potential indirect impacts in the City of Cincinnati (Sayler Park), and specifically St. Aloysius Church and School, which will receive overflights of aircraft arriving on proposed runway 35. Sayler Park is outside the future (2005) 65DNL noise exposure contour but near the area of projected 3dB increase in noise. FAA determined that there would be no adverse effect, on historic structures in Sayler Park based on existing and projected noise exposure contours. FAA entered into consultation with the Ohio Historic Preservation Office in an effort to resolve the concerns raised by Sayler Park. As the applicant for approval of the proposed project, KCAB was also included in the Section 106 consultation process.

### *Mitigation*

The FAA and the KCAB have negotiated a MOA with the Kentucky Heritage Council and Ohio Historic Preservation Office per the requirements of Section 106 of the *National Historic Preservation Act of 1966* and will implement the provisions identified in the MOA concerning cultural resources. Specific requirements negotiated in the MOA concerning the disposition of the William Rouse House include recordation according to the requirements for State Equivalent Historic American Buildings Survey and Historic American Engineering Record Documentation, consultation with the Kentucky Heritage Council to relocate this structure within Boone County, and removal of the structure in accordance with standards that will minimize the effect on the historical integrity of the structure. Negotiations are also underway with a private entity to dismantle the structure and relocate it in Boone County. Relocating the structure would not result in an irretrievable loss of a historic resource because its existing condition and historical attributes would be preserved.

As part of the Section 106 process, the FAA met with all consulting parties. A result of that meeting was a commitment to conduct noise monitoring and additional noise analysis at the St. Aloysius Church and School of Sayler Park, a *National Register Eligible* structure, is included as a requirement under the MOA. (KCAB had already made a commitment to conduct noise monitoring and additional noise analysis to the City of Cincinnati and Hamilton County based on measures in its NCP update.) If the noise analysis indicates an increase in aircraft noise impacts such that the church or school would be within the 65 DNL noise contour, or that the church or school may meet other eligibility criteria for sound insulation, the FAA and KCAB shall initiate consultation with Ohio Historic Preservation Office and other interested parties to insure that soundproofing would be done in accordance with criteria that would preserve the historical integrity of the structure. St. Aloysius Church and School is not equipped with an air conditioner and must leave its windows open during hot weather. Initial noise monitoring will be done in 2002 to determine if it meets FAA eligibility criteria for sound insulation under existing conditions. Sayler Park has existing exposure to aircraft noise from aircraft departing 36L.

The MOA was executed on November 29, 2001. The Federal Aviation Administration, the Kentucky Heritage Council, the Ohio Historic Preservation Office, and the Kenton County Airport Board were signatories to the MOA. Boone County Historic Preservation Office, City of Cincinnati, St. Aloysius Church and School, Cincinnati Preservation Association, and Sayler Park

Village Council were invited to sign the MOA as concurring parties. A copy of the MOA is included in Appendix B of this ROD.

Based upon the planned mitigation (discussed in the FEIS, Chapter Seven *Summary*), the FAA concludes that there has been all possible planning to minimize any harm resulting from the actual and constructive use of historic properties. There were no feasible, prudent and reasonable alternatives that would meet the Purpose and Need to increase peak period arrival capacity at CVG and avoid the William Rouse House. In addition all possible planning to minimize harm to the William Rouse House has been accomplished.

The Department of Interior issued a letter dated November 6, 2001, giving its concurrence that there is no prudent and feasible alternative and stating that it has no objection to the Section 4(f) approval of this project by the Department of Transportation Federal Aviation Administration.

## **Biotic Communities**

### *Impacts*

Implementation of the Proposed Project with KY 20 Alignment A with Conner Road Option 1 (permanently close Hossman Road) would result in the conversion of approximately 263.5 acres of mixed deciduous/ beech-maple forest, 143.3 acres of old field, 11.0 acres of scrub/shrub, 50.3 acres of agricultural land, 3.6 acres of jurisdictional wetlands, and 3.4 acres of jurisdictional open water ponds to urban-industrial turf.

Potential impacts to aquatic communities would likely consist of direct loss of habitat through culverting, an increase in turbidity, increases in stream temperatures as a result of forest canopy loss, reduction in dissolved oxygen levels and species diversity, and an increase in stormwater runoff.

### *Mitigation*

Ten vegetation communities were identified within the study area: 1) mixed deciduous forest, 2) beech-maple forest, 3) old field-pasture, 4) scrub/shrub, 5) urban-industrial-residential, 6) agricultural land, 7) palustrine broad-leaved deciduous forest wetlands, 8) palustrine scrub/shrub wetlands, 9) palustrine emergent wetlands, and 10) open water. Loss of the forested areas would result in loss of wildlife habitat. Impacts to the two forested areas of these vegetation communities, mixed deciduous forest and beech-maple forest, will be mitigated by the KCAB pursuant to the NEPA. Consultation between the FAA and KCAB determined that a 1:1 replacement mitigation ratio would be appropriate for the impacts to the forest communities. The FAA identified the Boone Conservancy, a not-for-profit conservation group located in Boone County, as the best available organization to accomplish the proposed mitigation for impacts to forest communities for the following reasons:

- It has knowledge of areas in the greatest need to be conserved,
- Mitigation will be provided in the same geographic/county as the impacts, and
- The mitigation area(s) will be preserved in perpetuity.

KCAB has entered into a Memorandum of Understanding with the Boone Conservancy, contingent upon FAA issuing its ROD approving the proposed project, to pay funds to the Boone Conservancy for reforestation of land or preservation of forested land in Boone County. The Memorandum of Agreement is included in Appendix D of this ROD. The final contract will be developed by attorneys for KCAB after the ROD and executed by the KCAB and the Boone Conservancy. Mitigation for forest impacts will be accomplished by an in-lieu fee payment to the Boone Conservancy at a rate of an estimated \$1,000 per acre of forest impacted. This monetary rate was established as the amount required to reforest one acre of open land. At a 1:1 mitigation ratio, the fee would be approximately \$270,000. The in-lieu fee payment to the Boone Conservancy may be used for either the reforestation of open lands or the preservation of existing forested areas. The contract will contain measures to ensure that the fees are used for reforestation. On-site mitigation of these forest impacts is not considered viable because of safety and line of sight issues for aircraft operations.

Mitigation for impacts to aquatic communities is discussed in Wetlands. Detailed discussion of waterbody impacts, permitting,

and mitigation is provided in the FEIS, Chapter 5, Section 5.11.

Best Management Practices as provided in FAA Advisory Circular 150/5370-10A, Standards for Specifying Construction of Airports will be followed during the proposed construction to minimize the impacts to biotic communities from siltation and erosion. The KCAB will include language in its contracts to require adherence to the best management practices specified in FAA AC 150/5370-10A. The KCAB will update its NPDES permit for the airport expansion project from the KDOW. The KPDES permits have sampling requirements to monitor adherence to water quality standards.

## **Water Quality**

### *Impacts*

Two sanitary lines and two water transmission lines would be relocated as part of the implementation of the project. Additionally, a new water transmission line would be installed. The relocation of the sanitary and water transmission lines would have temporary impacts on the service of the existing utilities. The proposed runway extension would potentially impact a section of U.S. Geological Survey (USGS) stream that is an upper reaching tributary of Gunpowder Creek. The deicing agents required for future airport operations would increase from 380,961 gallons per year in 1999 to a projected number of 515,298 gallons per year in 2005. The implementation of the proposed terminal and ancillary facilities would produce additional stormwater runoff at CVG.

### *Mitigation*

Two box culverts will be installed in conjunction with the construction to prevent potential impacts to water quality in a section of stream located in the area of the proposed runway extension. The area of the proposed development for the third parallel north/south runway will be drained by utilizing open channels and closed sewer systems and will be designed to maintain existing runoff rates. The proposed stormwater drainage and detention basin system will be incorporated into the SWBMPP and the Groundwater Protection Plan, as necessary, to minimize potential impacts.

Existing runoff rates to Elijah Creek were estimated at 1,187 cubic feet per second during a 25-year storm event. Post development rates are projected to increase to 2,300 cubic feet per second, but will be reduced to pre-development runoff rates through a proposed stormwater detention basin included in the design of the project. The detention basin will be located in the northern portion of the proposed development between Runway 18R/36L and the third parallel runway and south of Interstate-275.

The KDPEs permits, SWBMPP, and Groundwater Protection Plan will continue to be updated and modified as required by the KDOW to efficiently manage the projected increase in residual runoff and minimize impacts.

## **Wetlands**

### *Impacts*

The environmental field surveys identified the following waterbodies within the study area: 9,061 feet of perennial streams, 33,238 feet of intermittent streams, 23,019 feet of ephemeral streams, and 11,984 feet of topographic drainages, 5.2 acres of wetlands, and 6.8 acres of ponds. Implementation of the Proposed Project, with KY 20 Alignment A and with Conner Road Option 1, and permanently closing Hossman Road, would impact approximately 0.1 acres of jurisdictional ponds, 3.3 acres of non-jurisdictional ponds, 2.3 acres of jurisdictional wetlands, 1.3 acres of non-jurisdictional wetlands, 1,958 linear feet of perennial streams, 18,966 linear feet of intermittent streams, 9,047 linear feet of ephemeral streams, and 8,030 linear feet of non-jurisdictional topographic drainages.

## **Permitting and Mitigation Activities for Jurisdictional Waterbodies**

Coordination and consultation activities with the USACE and KDOW were initiated during the scoping in August 1998. Follow-up meetings and site visits were held in May 2000, in December 2000 and January 2001. A final site visit and pre-application

meeting was held in February 2001. Coordination with the USACE determined that an Individual Permit under Section 404 of the Clean Water Act (CWA) would be required for the construction of all of the proposed build alternatives assessed in the FEIS. Permitting under Section 401 of the CWA through KDOW would also be required. Obtaining the Section 404 and 401 water quality permits is the responsibility of the airport owner (KCAB) and representatives from KCAB were included in the consultation with the USACE and KDOW. The USACE is responsible for issuing the Federal 404 water quality permit and the KDOW is responsible for issuing the state water quality 401 permit.

The Section 404(b) (1) guidelines of the CWA and 1990 MOA between the EPA and USACE require an alternatives analysis to determine potential impacts to wetlands and waters of the United States. The alternatives analysis prepared for the FEIS (see Chapter Three *Alternatives* in the FEIS document) indicates that there would be an unavoidable loss of waters of the United States for all of the build alternatives. The MOA establishes a common policy of sequential mitigation: (1) avoiding waterbody impacts, (2) minimizing waterbody impacts, and (3) compensatory mitigation. FAA conducted steps one and two, avoiding and minimizing water impacts, as part of the FEIS alternatives analysis and discussed in the FEIS document in Section 5.11.3, *Avoidance of Waterbodies*. Step three, compensatory mitigation, requirements for the build alternatives, is discussed below.

Compensatory mitigation should be onsite, where feasible, and in physical proximity (same watershed) if onsite is not feasible. Compensatory mitigation should provide, at a minimum one-for-one acreage replacement. This may be used as a reasonable estimate for no net loss of functional values if additional information is not available. Potential compensatory mitigation alternatives to address the unavoidable impacts to waterbodies associated with the build alternatives include restoration of existing stream and wetland habitats or the creation of new habitat within the watershed. Typically, the EPA and the USACE stress the restoration or enhancement alternative over waterbody creation. The following steps are the established practice for preparing a mitigation plan for a Proposed Project:

- Coordinate with the USACE, FWS, and EPA;
- Delineate onsite waterbodies;
- Calculate waters of the United States affected by the project; and
- Perform field studies to identify potential mitigation sites.

The first three steps were completed during the development of the EIS. The final step was to be delegated to the Northern Kentucky University Environmental Resource Management Center (NKU/ERMC), which was expected to be the party responsible for implementation of the mitigation. After the decision on the 404 permit, NKU would submit a proposed mitigation site to the Corps of Engineers for approval. The NKU/ERMC has developed a stream in-lieu fee program that has been accepted by the USACE as a viable tool for the mitigation of stream impacts at CVG. The USACE has also initially indicated that in-lieu fee mitigation of \$100 per lineal foot of mitigated stream is appropriate mitigation for impacts that will occur as a result of implementation of the Proposed Project. The KCAB has been informed that the USACE has approved in-lieu fees as mitigation for stream impacts. During the pre-application meeting in February 2001, the USACE indicated that a 1:1 mitigation ratio could mitigate for stream impacts and that in-lieu of fees can be used. Through discussions with the USACE, FAA determined that the NKU/ERMC would also be an appropriate vehicle to utilize for the mitigation of wetland impacts. NKU/ERMC could restore or create riparian wetlands adjacent to the restored streams; this would provide an in-kind replacement of wetland functions. All of the impacted wetlands are hydrologically connected to the impacted streams; therefore, a wetland restoration project combined with the stream restoration projects would provide for similar habitat and flood retention, as that impacted by the proposed project. If the proposed mitigation is approved in the 404 permitting process, an appropriate in-lieu fee for wetland impacts would have to be negotiated with NKU/ERMC and the USACE.

In a letter written December 10, 2001, the USACE requested that additional mitigation investigation be conducted to determine if there are appropriate sites within Boone County that could be used for stream restoration and wetlands mitigation. The KCAB will have its consultant to perform the additional investigation as part of the 404 permitting process. The Corps of Engineers confirmed that the mitigation investigation could be accomplished with the 404 permitting process and the permit application amended if a suitable mitigation site within Boone County is found.

It is not practicable for the KCAB to perform on-site mitigation. There are four main factors that make on-site mitigation not practical:

- FAA AC 150/5200-33, Hazardous Wildlife Attractants on or Near Airports, prohibits the construction of waterbodies on-

site, as a means of mitigation because of safety issues. Waterbodies are a wildlife attractant. If waterbodies were enhanced or created on-site, there could be a potential increase in wildlife-aircraft collisions.

- There is insufficient space on-site to perform the necessary mitigation.
- There is a lack of stream on-site suitable for restoration.
- CVG is an expanding facility. While some areas of the west airfield may not currently impact some streams, the entire area between RW 18R/36L and the proposed runway has been designated aviation related development. The grading and drainage plan will affect the entire area. Because approved mitigation plans generally require the mitigated waterbody to be maintained in perpetuity, this would not be a viable option on an active airfield.

During the February 2001 final site visit, the USACE and KDOW determined which of the identified waterbodies were "waters of the U.S." Streams that displayed an ordinary high water mark were jurisdictional. This included perennial, intermittent, and ephemeral streams. Ponds were considered jurisdictional if connected to a stream and wetlands were considered jurisdictional if connected or adjacent to a stream and extended beyond the ordinary high water mark. The final jurisdictional determination by the USACE in May 2001 identified perennial, intermittent, and ephemeral streams, five wetlands, and one pond within the study area as "waters of the U.S." Discussions with the USACE during the EIS process concerning the functions and values of the ephemeral streams indicated that mitigation for impacts to ephemeral streams would not be necessary. The only function and value that these potentially impacted ephemeral streams provide is the conveyance of stormwater; these do not provide aquatic habitat for most organisms. (See the FEIS document, Chapter Five, Section 5.11.1, *Baseline*, for a thorough discussion of the jurisdictional determination.) Appendix L of the FEIS contains copies of correspondence and the jurisdictional determination letter of May 2001 from the USACE.

Based on preliminary indications by the USACE, the sponsor requested a 1:1 mitigation ratio for impacts that require the restoration and/or enhancement of degraded streambeds in the Section 404/401 permit application filed August 28, 2001. For the implementation of the Proposed Project, approximately 20,924 lineal feet of streambed mitigation would be required. There are jurisdictional pond and wetland impacts of 0.1 acre and 2.3 acres, respectively. Final stream and wetland mitigation ratios will be determined through the public notice process during the Section 404 permitting process and will include agency input from EPA, USF&W, KDOW and Kentucky Department of Fish and Wildlife Resources (KDFWR). EPA has indicated its basic agreement that the jurisdictional determination is a reasonable evaluation but has expressed concern about the compensatory mitigation. KDFWR has also expressed its concern about the proposed wetlands mitigation (letter dated November 6, 2001). EPA indicated in its November 7, 2001, letter that it would provide comments to the USACE during the review process for the 404 permit. The mitigation plans will be determined in coordination with the USACE and EPA during the Section 404 permitting process. (The Executive Summary of the permit application is included in Appendix M *404/401 Permit* in the FEIS.)

All potential waterbody impacts within the proposed airport expansion construction area have been considered and disclosed in the FEIS, including those not claimed as jurisdictional by the USACE. Section 401 of the CWA requires each state to certify that state water quality standards will not be violated for activities which:

1. involve issuance of a Federal permit or license; or
2. require discharges into "waters of the United States."

The USACE will not issue a Section 404 Permit until a Section 401 Certification has been issued or waived by the Commonwealth of Kentucky. The permit application included all activities that are reasonably related to the Proposed Project. No permit can be granted for the filling of streams or wetlands unless the USACE has determined that the benefits of the Proposed Project outweigh the potential damages. In addition, the Proposed Project must comply with Section 404(b)(1) guidelines, which stresses that practicable alternatives must be evaluated during the permitting process.

#### *Impacts and Mitigation for Non-Jurisdictional Wetlands*

During the February 2001 final site visit and Section 404/401 permit pre-application meeting, the USACE and KDOW determined that eleven wetlands, totaling 2.4 acres, and 22 farm ponds, totaling 6.7 acres, identified within the study area were not jurisdictional waterbodies under the CWA. The proposed project will impact 1.3 acres of these non-jurisdictional wetlands and 3.3 acres of farm ponds. Impacts to non-jurisdictional wetlands will be mitigated by the KCAB pursuant to the FAA's obligation under NEPA and Executive Order 11990, *Protection of Wetlands*.

NEPA also establishes a policy of sequential mitigation for wetlands similar to 404. As discussed previously, avoidance and minimization were accomplished during the EIS process. A thorough discussion of potential compensatory mitigation alternatives was presented in the discussion for the impacts to jurisdictional waterbodies. On-site mitigation for waterbody impacts is not possible for the reasons previously cited. Therefore, off-site mitigation is the only possible alternative. NKU/ERMC was considered the best available vehicle to provide sufficient and successful mitigation techniques to the impacts to non-jurisdictional wetlands. The predominant non-jurisdictional waterbodies that may be impacted are artificial ponds. NKU/ERMC could create farm ponds with wetland fringe and low-lying areas near topographic drainages; this would provide an in-kind replacement of wetland functions. Additional investigation for mitigation sites will be conducted, as requested by the USACE, during the 404 permitting process.

The FAA has determined that a 1:1 mitigation ratio for non-jurisdictional wetland impacts could adequately compensate for impacts to these low quality waterbodies. Approximately 1.3 acres of wetlands and 3.3 acres of pond mitigation will be required. The KCAB will be required to provide mitigation for the impacts to non-jurisdictional wetlands in conjunction with the project. An agreement between KCAB and NKU/ERMC would fulfill this mitigation requirement if NKU/ERMC were approved to initiate a wetland mitigation program in conjunction with its stream mitigation program. However, the investigation for suitable sites within the Boone County area may provide other opportunities for mitigation. FAA has determined that the non-jurisdictional wetlands will be mitigated using the same process as the jurisdictional wetlands in the 404 permit.

### *Summary of Impacts*

Jurisdictional waterbodies within the study area include: 9,061 feet of perennial streams, 33,238 feet of intermittent streams, 23,019 feet of ephemeral streams, 2.8 acres of wetlands, and 0.1 acre of pond. Non-jurisdictional waterbodies, wetlands and ponds, identified within the study area include: 11 wetlands totaling 2.4 acres and 22 ponds totaling 6.7 acres.

### *Impacts of Alternative 2c: Proposed Project*

#### Jurisdictional Waterbodies

- Perennial Streams = 1,958 feet
- Intermittent Streams = 18,966 feet
- Ephemeral Streams = 9,047 feet
- Wetlands = 2.3 acres
- Ponds = 0.1 acre

#### Non-Jurisdictional Waterbodies

- Wetlands = 1.3 acres
- Ponds = 3.3 acres

### Mitigation

A 1:1 mitigation ratio for impacts to both jurisdictional and non-jurisdictional waterbodies was proposed in the EIS and the Section 404/401 application has been presented in this EIS. The NKU/ERMC would be utilized to provide mitigation for waterbody impacts if approved in the 404 wetlands permit. An in-lieu fee of \$100 per linear foot of mitigated stream has been established by the NKU/ERMC and USACE as appropriate. The in-lieu fee will not apply to the ephemeral streams as their only function on the airport is to convey stormwater. The drainage plan for the airport will be designed to compensate for this function. KCAB will negotiate with NKU/ERMC to establish an appropriate in-lieu fee for each acre of mitigated wetlands if the program to provide mitigation for wetlands is approved. Mitigation for both jurisdictional and non-jurisdictional impacts will be required for the proposed project presented in the FEIS.

This FAA ROD stipulates that no construction or disturbance activities will occur until receipt of all Section 401/404-related permits. Appropriate mitigation plans will be finalized in coordination with the USACE and EPA during the Section 404

permitting process.

## **Floodplains**

### *Impacts*

A portion of an upper reaching tributary of Gunpowder Creek would be impacted by construction of the project. Two box culverts and channel improvements having a total length of 1,750 feet would be constructed to allow for stream continuity. No impact to the 100-year floodplain or the Elijah Creek would occur.

### *Mitigation*

Although no 100-year floodplains exist along this tributary, the design of both box culverts would ensure that any structures located downstream would not be affected by potential flooding in the event of a 100-year storm.

Because culverts will be located within the floodplain of the Gunpowder Creek tributary and the streambed would be disturbed, the Floodplain Management Section of the Division of Water, Department of Environmental Protection, Kentucky Natural Resources and Environmental Protection Cabinet will require that a permit be approved prior to any construction. These culverts are included in the 404/401 permit application.

Based on engineering support analysis, the area of the proposed runway will be drained by utilizing open channels and closed sewer systems and will generally follow existing drainage patterns towards Elijah Creek. Runoff rates to Elijah Creek prior to development were estimated at 1,187 cubic feet/second, but would be reduced down to pre-development runoff rates through a proposed detention basin that will be constructed on an unnamed tributary of Elijah Creek. The detention structure will be located north of KY 20 and south of Interstate-275.

## **Light Emissions**

### *Impacts*

There would be potential roadway light emissions impacts to the Hickory Glen II subdivision from the relocation of Conner Road closer to the subdivision.

### *Mitigation*

The KCAB will assure that the final engineering design and construction of the Conner Road realignment will preserve or supplement the existing stand of trees to serve as a natural buffer to potential roadway light emissions to the Hickory Glen II subdivision. The KCAB will reevaluate the quality of this buffer after the roadway is constructed to assure that light emission impacts to the adjacent residential area would not be significant.

## **Construction**

### *Impacts*

Construction projects may temporarily disrupt regional traffic and inconvenience or disturb the residents, business, and customers of those businesses adjacent to the construction project. Construction may temporarily affect soil erosion, noise levels, air quality, and water quality, solid and hazardous waste, and surface transportation. Temporary changes in airfield operations may occur during construction. Beneficial impacts would include: construction employment, payroll tax revenues from the employment of construction workers, and capital expenditures for materials and equipment.

### *Mitigation*

Temporary control measures would be specifically identified and implemented through the application of an erosion control plan prepared during project design, as identified in FAA AC 150/5370-10, *Standards for Specifying Construction of Airports*. The contractor will have to submit a Storm Water Best Management Practices Plan (SWBMPP) for the project. Implementation of the SWBMPP will prevent runoff from areas surrounding the site from flowing across the disturbed area, slow down runoff across the site, and remove on-site runoff before it leaves the site.

A more detailed construction-phasing plan will need to be developed by the KCAB to allow the development to proceed without causing substantial airfield delays and congestion. This will likely be included in the construction plan and specifications though it is not a requirement.

All necessary precautions for the removal of hazardous materials will be coordinated with the appropriate state and local permitting agencies.

An update to the NPDES stormwater discharge permit, issued by the KDOW, will be required for the construction of the Proposed Project. Under the National Stormwater Program, the EPA regulates stormwater discharges from construction sites containing clearing, grading, and excavation activities, if the disturbed land area is five acres or more. To comply with the EPA regulations, the KCAB will have to file a "Notice of Intent" form to indicate that the operator of the construction site will comply with the erosion, sediment, and stormwater control measures presented in the EPA general permit for construction activities. Additionally, the Individual Section 404 Permit issued by the USACE and an Individual Section 401 Water Quality Certificate are required prior to project construction. See Appendix M 404/401 Permit.

Disruption of traffic flow and inconvenience to regional motorists will be temporary conditions during the relocation of portions of KY 20, Connor Road and Limaburg Road. These impacts will be mitigated through proper planning to provide alternate access and should pose no substantial problem beyond the construction period.

## **Surface Transportation**

### *Impacts*

No permanent impacts of any degree would occur to surface transportation. The permanent closure of Hossman Road would not result in significant surface transportation impacts because it handles a small volume of local traffic. The closure of Hossman Road would divert traffic to the intersection of Limaburg Road and KY 20 that would add to the volume of vehicles at the intersection. Based on the analysis in Chapter Five, Sections 5.5 *Air Quality* and 5.20 *Surface Transportation*, the installation of a traffic light would be sufficient to mitigate and minimize the impact to the intersection. A traffic light was installed at this intersection independent of the Proposed Project during the preparation of the EIS.

### *Mitigation*

In exchange for the closure of Hossman Road, KCAB would make funds available to Boone County that would be used to reimburse Boone County for roadway improvements or maintenance to the roadways in the vicinity of the airport that would serve as a functional replacement for Hossman Road.

## **VI. AGENCY FINDINGS/DETERMINATIONS**

In accordance with applicable law, the FAA makes the following findings/determinations for the Proposed Project, based upon the appropriate information and data contained in the FEIS.

### **A. Historic Sites/Properties Planning to Minimize Harm (49 U.S.C. Section 303(c)) and Section 106, National Historic Preservation Act**

FAA has determined that there is no feasible and prudent alternative to the use of the William Rouse House, which is eligible for the National Register of Historic Places and a Section 303 (c) property; and all possible planning to minimize harm to the property from such use was accomplished.

The William Rouse House, which is eligible for the *National Register of Historic Places* and a Section 303 (c) property, would be directly impacted by the construction of the Proposed Project, requiring its acquisition and removal, as documented in the FEIS Chapter 5, Section 5.7 and Section 5 of this ROD.

Federal statute Title 49 USC 303(c) was previously known as Section 4(f) of the *Department of Transportation Act of 1966*. It states:

"The Secretary may approve a transportation program or project (other than any project for a park road or parkway under section 204 of title 23) requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of a historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge or site) only if-

(1) there is no feasible and prudent alternative to using that land; and

(2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

The William Rouse House is located on the west side of the airport and would be affected by all of the build alternatives evaluated in Chapter 3 of the FEIS that would provide sufficient runway separation (4300 feet) to allow simultaneous aircraft approaches. FAA concluded that there is no prudent and feasible alternative to the removal of the William Rouse House from the site.

The FAA and the KCAB have negotiated a MOA with the Kentucky Heritage Council and Ohio Historic Preservation Office per the requirements of Section 106 of the *National Historic Preservation Act of 1966* and will implement the provisions identified in the MOA concerning cultural resources. Specific requirements negotiated in the MOA concerning the disposition of the William Rouse House include recordation according to the requirements for State Equivalent Historic American Buildings Survey and Historic American Engineering Record Documentation, consultation with the Kentucky Heritage Council to relocate this structure within Boone County, and removal of the structure in accordance with standards that will minimize the effect on the historical integrity of the structure. Negotiations are also underway with a private entity to dismantle the structure and relocate it in Boone County. Relocating the structure would not result in an irretrievable loss of a historic resource because its existing condition and historical attributes would be preserved.

The Department of Interior issued a letter dated November 6, 2001, giving its concurrence that there is no prudent and feasible alternative and stating that it has no objection to the Section 4(f) approval of this project by the Department of Transportation Federal Aviation Administration.

Accordingly, while there is no feasible and prudent alternative to the use of the William Rouse House directly impacted by the construction of the Proposed Project, which requires its acquisition and removal at its current site; all possible planning to minimize harm to the property from such use is accomplished through removal of the structure in accordance with standards that will minimize the effect on its historical integrity and relocating the structure within Boone County.

#### **B. Air and Water Quality Standards (49 U.S.C. Section 47106(c)(1)(B)).**

There is reasonable assurance that the project will be located, designed, constructed, and operated with applicable air and water quality standards.

The Governor of the Commonwealth of Kentucky certified that there is a reasonable assurance that the Proposed Project will meet all applicable air and water quality standards December 18, 2001 (Appendix C of this ROD). The FEIS was coordinated

with the Natural Resources and Environmental Protection Cabinet, Department for Environmental Protection.

**C. Conformity With the State Implementation Plan-Section 176 Clean Air Act Amendments (42 U.S.C. Section 7401-7671(q)).**

Based upon the air quality assessment in the FEIS and its appendices, the FAA concluded that the Proposed Project would be *de minimis* under Section 176(c)(1) of the *Clean Air Act Amendments of 1990*, and conforms pursuant to 40 CFR Part 93, Subpart B and would be compliant to the NAAQS under 40 CFR Part 50.

The determination of General Conformity prescribed by the Clean Air Act Amendments of 1990 (CAAA) statutory provision is a precondition for Federal Agency support or approval of airport development projects. The U.S. Environmental Protection Agency (USEPA) regulations generally governing the conformity determination process are found at 40 CFR Part 93, Subpart B, Sections 93.153 through 93.160, 40 CFR Part 50, and 40 CFR Part 51, Appendix W.

During the time the FEIS was being prepared, the Metropolitan Cincinnati Interstate Air Quality Control Region (Cincinnati ACQR), which includes Boone County, Kentucky, was determined to be in attainment for the one-hour concentration of ozone and was designated an ozone maintenance area, effective July 5, 2000. Therefore, the review to determine compliance to the General Conformity Rule was conducted through the air quality assessment of the FEIS using the maintenance area thresholds defined in 40 CFR Part 93, Section 93.153, which limited the net increase in emissions of nitrogen oxides and volatile organic compounds to 100 tons per year.

Subsequent to the redesignation and the publication of the FEIS, the Federal Appeals Court vacated the redesignation effective September 11, 2001. At that time, the Cincinnati ACQR was returned to ozone nonattainment status, including Boone County, Kentucky, where the airport is located. Consequently, the nonattainment area thresholds defined in 40 CFR Part 93, Section 93.153 would apply. However, the nonattainment area thresholds applicable to an ozone nonattainment area outside an ozone transport region, such as Boone County, would be 100 tons per year for nitrogen oxides and volatile organic compounds, which are the identical thresholds that were applicable when the FEIS air quality assessment was conducted. Therefore, the change in attainment status of Boone County would not change the conclusions of the air quality assessment for the FEIS.

In either case, maintenance or nonattainment, the FAA needed to determine whether the Proposed Project would be consistent with the Kentucky State Implementation Plan for air quality and whether the Proposed Project would cause or contribute to any new violations of the National Ambient Air Quality Standards (NAAQS) in the Proposed Project area.

The General Conformity review conducted for the FEIS demonstrated that Alternative 2c: 2005 Proposed Project with KY 20 Alignment A and the Closure of Hossman Road (Proposed Project) would be *de minimis* under 40 CFR Part 93 Subpart B and would result in ambient pollutant concentration levels below the NAAQS as prescribed under 40 CFR Part 50 and adopted by reference for the State of Kentucky, including Boone County.

The FEIS air quality assessment showed that the Proposed Project would not increase the frequency or severity of any existing violations of any NAAQS and that the Proposed Project would not delay timely attainment of the NAAQS or any required interim emission reduction in the Proposed Project area as described in the Kentucky State Implementation Plan.

In addition, the air quality assessment demonstrated that the Proposed Project would not be regionally significant either for the Proposed Project year of 2005 or for the Kentucky SIP milestone years of 2008 and 2010. Consequently no further requirement for analysis under the CAAA with respect to the General Conformity Rule was required and the Proposed Project is presumed to conform to the Kentucky SIP and under Section 176(c)(1) of the CAAA.

**D. Proposed Project Conforms to the Avoidance and Minimization of Harm to Wetlands (Executive Order 11990, as amended).**

The FEIS, Chapter Five, Section 5.11 *Wetlands* documents that the selected alternative (Alternative 2c, KY 20 Alignment A, permanently close Hossman Road) will affect approximately 2.3 acres of jurisdictional wetlands, 1.3 acres of non-jurisdictional

wetlands, 1,958 linear feet of perennial streams, 18,966 linear feet of intermittent streams, 9,047 linear feet of ephemeral streams and 8,030 linear feet of non-jurisdictional topographic drainages. As noted in the FEIS Chapter Five, Section 5.11 *Wetlands*, the USACE has worked with the FAA to ensure that all practicable measures will be taken to minimize harm to wetlands, impacted through development of the selected alternative. An application for a Section 404 permit and Section 401 Water Quality Permit has been filed. The USACE in consultation with the Kentucky Department of Environmental Protection, will complete its processing of a Section 404 permit and Section 401 certification, required for the KCAB to proceed with development impacting wetlands. The Proposed Project approvals in this ROD and this wetlands determination are expressly conditioned upon permit approval and conditions to be outlined by the USACE, and upon the KCAB accomplishing the wetlands mitigation measures identified in the FEIS and any USACE permit approval.

Although it is generally preferable to attempt to mitigate wetland loss through replacement wetlands in the same watershed, this is not the case where such replacement would create man-made wetlands in the vicinity of airport aircraft movement areas. FAA AC 150/5300-33, dated May 1, 1997, states the FAA policy that wetland mitigation projects located within 10,000 feet of airports serving turbine-powered aircraft (such as CVG), present a safety hazard as attractants of wildlife that significantly increase the risk of bird/aircraft strikes.

As detailed in the FEIS Chapter Seven *Summary*, a wetland mitigation program has been developed to offset the impacts of the Proposed Project, at a 1:1 mitigation ratio for impacts to both jurisdictional and non-jurisdictional waterbodies. The Northern Kentucky University Environmental Resource Management Center (NKU/ERMC) would be utilized to provide mitigation for waterbody impacts if approved under the Section 404 permit. An in-lieu fee of \$100 per linear foot of mitigated stream has been established by the NKU/ERMC and USACE. KCAB will negotiate with NKU/ERMC to establish an appropriate in-lieu fee for each acre of mitigated wetland. Final mitigation requirements will be determined during the Section 404 permit application and review process by the USACE.

The FAA finds that there is no practicable alternative to the proposed development's use of the 2.3 acres of jurisdictional wetlands and 1.3 acres of non-jurisdictional wetlands and the 1,958 linear feet of perennial streams and the 18,966 linear feet of intermittent streams located on the airport. This is due to the location of the proposed replacement runway and runway extension being determined by the only feasible and prudent sites at the airport.

Considering these and other reasons described more fully in Chapter Three *Alternatives* of the FEIS, and taking into consideration cost, existing air traffic control and aviation technology and logistics, in light of the overall purpose of the Proposed Project, the FAA finds that there is no practicable alternative to the wetland loss associated with the proposed development.

**E. Certification under 49 U.S.C. 44502(b) (formerly Section 308 of the Federal Aviation Act of 1958, as amended).**

I certify that the proposed improvement project is reasonably necessary for use in air commerce or for national defense.

**F. Encroachment on Floodplain Has No Practicable Alternative and Action Conforms to Applicable State and Local Standards (*Executive Order 11988*).**

Executive Order 11988, together with the implementing USDOT Order 5650.2, *Floodplain Management*, establishes a policy to avoid supporting construction within a 100-year floodplain where practicable, and where avoidance is not practicable, to ensure that the construction design minimizes potential harm to or within the floodplain.

A portion of an upper reaching tributary of Gunpowder Creek would be impacted. Two box culverts and channel improvements having a total length of 1,750 feet would be constructed to allow for stream continuity. Although no 100-year floodplains exist along this tributary, the designs of both culverts would ensure that any structures located downstream would not be affected by potential flooding in the event of a 100-year storm. No impact to Elijahs Creek would occur.

Because culverts would be located within the floodplain of the Gunpowder Creek tributary and the streambed would be disturbed, the Floodplain Management Section of the Division of Water, Department of Environmental Protection, Kentucky Natural Resources and Environmental Protection Cabinet will require that a permit be approved prior to any construction. A

Section 404 permit will also be required. This is included in the application for the 404 permit.

Based on engineering support analysis, the area of the proposed runway would be drained by utilizing open channels and closed sewer systems and would generally follow existing drainage patterns towards Elijahs Creek. Runoff rates to Elijah Creek prior to development were estimated at 1,187 cubic feet/second, but would be mitigated down to pre-development runoff rates through a proposed detention basin to be constructed on an unnamed tributary of Elijahs Creek. The detention structure would be located north of KY 20 and south of Interstate-275.

As concluded in the FEIS and explained in Section IV, *Disclosure / Analysis of Alternatives* of this ROD, there is no practicable alternative to the selected alternative. Development of this alternative achieves the purposes and needs for the Proposed Project in the most cost-effective manner with the least impact on the surrounding land uses.

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

Under this statutory provision, after consultation with the Secretary of the Interior and the Administrator of the EPA, the FAA may approve funding of a new runway having a significant adverse effect on natural resources, only after determining that no practicable and prudent alternative to the Proposed Project exists and that every reasonable step has been taken to minimize the adverse effect.

FAA has consulted with the Corps of Engineers, the Departments of Interior and the EPA. The FAA finds that the selected alternative would have significant adverse impacts in the categories of biotic communities and wetlands without mitigation described in Chapter Seven *Summary*, of the FEIS. As discussed and analyzed in the FEIS, there is no other alternative to satisfy the purpose and needs of the Proposed Project, we have concluded that no practicable and prudent alternative exists to development of the proposed alternative. As discussed in detail in Chapters Five and Seven of the FEIS, and documented in Section V of this ROD, every reasonable step has been taken to minimize significant adverse environmental effects resulting from the Proposed Project on streams, wetlands and biotic communities.

The FAA has determined that all reasonable steps have been taken to minimize any significant adverse effects on natural resources through mitigation and planning and design to avoid and minimize these impacts. The proposed project will not result in the use of any other natural resources in short supply. Construction materials are generally available locally and the quantities needed are not projected to disrupt supply locally or in the surrounding area. (The FEIS, Appendix N, *Energy Supply and Natural Resources*, and Chapter 5, Section 5.16, contain the assessment analysis of Energy Supply and Natural Resources.)

#### **H. Involuntary Displacement Requires Relocation Assistance (42 U.S.C. Section 4601 et seq.).**

Title II of the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970* (42 U.S.C. Section 4601 et seq.) and implemented by 49 C.F.R. Part 24, require that state or local agencies, undertaking Federally-assisted projects which cause the involuntary displacement of persons or businesses, must make relocation benefits available to those persons displaced.

As discussed in the FEIS, Chapter Five, Section 5.3 *Social Impacts Including Environmental Justice*, 188 residential units (564 people) would be acquired for runway construction and roadway construction, including 349 acres of residential property and 209 acres of undeveloped/vacant land. An additional 47 residential units would be impacted by noise or construction, for a total of 235 (188 + 47). These include:

- 20 units in Hickory Glen subdivision (disruption of established communities)
- 6 units along Elijah Creek Road (change in character of surrounding land use)
- 21 units in area of 3 dB increase with the 60-65 DNL noise contour

An auto repair business (D&A Auto Repair, less than one acre) and the Hebron Baptist Church (approximately five acres) would need to be acquired and relocated. The church administration owns property on Limaburg Road on which it is planning

to build a new church.

Appendix V of the FEIS identifies the addresses of property that would be acquired. All acquisitions would be conducted in accordance with 49 CFR Part 24 *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*.

Because the KCAB would pursue a change in land use for the parcels that would be acquired or offered participation in a Negotiated Purchase Program, the FAA will require the KCAB to provide fair and reasonable relocation payments and assistance payments pursuant to the provision of the *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970*. Comparable decent, safe, and sanitary replacement properties are available on the open market. Relocation assistance must be provided as mitigation for the project whether or not Federal funds are received.

#### **I. Fair Consideration (49 U.S.C. 47106(b)(2)).**

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 Proposed Project location.

The regional planning process over the past decade and the environmental process for this project-specific EIS, which began in 1998 and extended to this point of decision, provided numerous opportunities for the expression of and response to issues put forward by communities in and near the Proposed Project location, as documented in the FEIS, Chapter 1 and Section 1 of this ROD. Nearby communities and residents have had the opportunity to express views during the Draft Environmental Impact Statement (DEIS) public comment period, at a Public Hearing, as well as during the review period following public issuance of the FEIS. The FEIS Appendices W, *Comments: Agency, Government, and Local Organizations*, and Z, *Response to Comments*, documents correspondence and responses during the EIS process. Comments received in response to the FEIS are contained in Appendix A of this ROD.

#### **J. Consistency with Local Plans-49 U.S.C. 47106(a)(1)**

The FAA finds that the Proposed Project is reasonably consistent with the existing plans of public agencies authorized by the state in which the airport is located to plan for the development of the area surrounding the airport. The FAA is satisfied that it has fully complied with 49 U.S.C. 47106 (a)(1). In making its determination under 49 U.S.C. 47106 (a) (1), the FAA has considered the planning efforts of local governments (Boone County, Kenton County, Hamilton County, and the city of Cincinnati) and has recognized that they have no direct authority over airport operations.

The determination prescribed by this statutory provision is a precondition to agency 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). Furthermore, both the legislative history and consistent agency interpretations of this statutory provision make it clear that reasonable, rather than absolute consistency with these plans is all that is required.

Under the provisions of both Federal and state law, the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) has been designated as the metropolitan planning organization for the Cincinnati metropolitan area and given primary responsibility for transportation planning in the region. On July 9, 2001, OKI notified the FAA that it supported the expansion plan. OKI stated that it "recognizes the significance and importance of the Cincinnati/Northern Kentucky International Airport for its affect [sic] on the tri-state's regional economy. Therefore, OKI supports the FAA effort to move forward with airport expansion plans through the preparation of an EIS."

OKI reviewed overall airport plans relating to the proposed modifications for roadways necessary for the Proposed Project, as outlined in Chapter 5, Section 5.20 of the FEIS

OKI indicated that these proposed modifications are not included in the transportation improvement plan, as published in OKI document, *Looking Ahead: 2020 Metropolitan Transportation Plan (MTP)*. None of the roadway projects associated with the Proposed Project are included on the list of committed projects or on the list of recommended long-range projects included in the 1998 Metropolitan Transportation Plan. Since the proposed roadway modifications would not be funded or approved under

Title 23 U.S.C. or the *Federal Transit Act*, they are not subject to the requirements under section 176(c) of the Clean Air Act (as amended in 1990). In addition, the proposed modifications would not alter the accessibility to any Federal highway.

The proposed expansion is consistent with local land use planning of jurisdictions in the vicinity of the airport as described in Chapter Five, Section 5.2 *Compatible Land Use*, subsection 5.2.5 *Consistency with Comprehensive Plans*, of the FEIS. However, the FAA has also reviewed and considered the substantial documentation demonstrating that the KCAB has agreed to implement mitigation measures to minimize the impacts of the proposed development actions on surrounding communities. The Proposed Project would not be expected to result, after mitigation, in any significant increases of noise on land of neighboring jurisdictions.

The FEIS assessment of comprehensive planning activities examined the planning policies and documents for areas where aircraft noise could potentially affect land use compatibility. The only jurisdiction that lies within the 65 DNL noise contour, or that would be impacted by the proposed airport construction projects, is Boone County. The *Boone County Comprehensive Plan* was adopted in February 2001. That plan documents the possibility of future long-term airport development in the form of a new runway west of the existing airfield (the same runway and runway location that is assessed in the FEIS). Therefore, the Proposed Project: Alternative 2c, is consistent with the Boone County Comprehensive Plan. Special studies prepared by the Boone County Planning Commission and OKI (*1996 Boone County Transportation Plan*, *Northeast Boone County Major Investment Study*, and *Looking Ahead: 2020 Metropolitan Transportation Plan*) are consistent with the development of the Proposed Project because those documents include the development of proposed Runway 17/35.

Several other localized Boone County planning documents reference the airport and include provisions to accommodate the projected growth of the airport. The proposed projects in the immediate area around the airport identified in those documents are summarized in the FEIS in Chapter Four *Affected Environment*, Section 4.2.1 *Planning Studies*. A discussion of the cumulative impacts of future airport and non-airport (local, state, Federal, and private) projects, which have been already been designed, funded, and environmentally assessed, is provided in the FEIS document, Chapter Six *Cumulative Impacts*. For a more detailed discussion of these projects, see Chapters Four and Six in the FEIS.

As discussed in the FEIS, Chapter Two, Section 2.1 *The Proposed Project*, the airport operates in south flow approximately 80-85 percent of the time; therefore, proposed Runway 17/35 would primarily operate as an arrival runway from the north. Areas of Saylor Park, Delhi Township, and Green Township would be under the proposed arrival flight track to Runway 17 during south flow. Those areas are not currently under any of the existing arrival flight tracks to the airfield. Current development plans identified within Saylor Park include two four-unit condominiums proposed for the 7500 block of Gracely Drive. Two five-lot single-family subdivisions have also been proposed on Monitor Street. Those two developments would be located west of the proposed flight track to Runway 17. The only other new development identified is the construction of a new barge terminal near the Muddy Creek Sewer Treatment Plant, which would be compatible with airport operations. Delhi and Green Townships have approximately 13 percent undeveloped/vacant land use, and two to three percent agricultural land use. Saylor Park, Delhi Township, and Green Township would not be impacted by the construction activities associated with proposed Runway 17/35, nor would these jurisdictions be impacted by the future 65 DNL noise contour.

#### **K. Compatible Land Uses (49 U.S.C. Section 47107(a)(10)).**

The FAA requires satisfactory assurances, in writing from the sponsor, that appropriate action, including the adoption of zoning laws, has been or will be taken to restrict, to the extent reasonable, the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft.

The KCAB is presently obligated by these assurances. The KCAB has worked extensively with Boone County to disclose proposed airport development plans and noise contours to ensure compatible land use in the airport vicinity.

FEIS Chapter Five, Section 5.2 *Compatible Land Use* describes the current status of zoning and land use planning for lands near the airport. The airport has an existing noise compatibility program, designed to either reduce noise at the source or mitigate the noise received by sensitive land uses in the airport vicinity. As explained in the FEIS, with planned mitigation, development of the Proposed Project will not result in any significant noise impacts on non-compatible land uses.

The FAA has concluded that existing and planned noise reduction programs and planned changes in land uses as mitigation

for the project at CVG provide for appropriate action to ensure compatible land use in the airport vicinity.

## VII. DECISION AND ORDER

The FAA, with the cooperation and participation of the KCAB has engaged in a lengthy and extensive process relating to the screening of a range of reasonable alternatives and selection of an alternative that best fulfilled the identified purpose and need for development of the Sponsor's airport. The environmental review process included FAA's selecting a consultant to assist in its conducting and preparing the environmental documents to disclose and analyze the environmental impacts of the proposed project and the necessary Federal actions. The process also has included appropriate planning and design for the avoidance, minimization, and/or compensation of impacts, as required by NEPA, the Council on Environmental Quality's implementing regulation, other special purpose environmental laws, and applicable FAA environmental directives.

The FAA decision is based on a comparative examination of environmental impacts for each of the alternatives studied during the environmental review process. The FEIS has disclosed the potential environmental impacts for each of the alternatives, and it provides a fair and full discussion of any significant impacts.

The FAA has determined that environmental and other relevant concerns presented by interested agencies and private citizens have been addressed sufficiently in the FEIS, hereby acknowledged and fully and properly considered in the decision-making resulting in this ROD. The Federal Aviation Administration concludes there are no outstanding environmental issues to be resolved by it with respect to the proposed project.

The No-Action Alternative fails to meet the purpose and need for the proposed project. For reasons summarized earlier in this ROD, and supported by disclosures and analysis detailed in the FEIS, the FAA has determined that the Sponsor's proposed project, Alternative 2, is a reasonable, feasible, practicable and prudent alternative for a Federal decision in light of the Sponsor's established goals and objectives. An FAA decision to take the actions and approvals required by the Sponsor is consistent with its statutory mission and policies supported by the findings and conclusions reflected in the environmental documentation and this ROD.

After reviewing the Final EIS and all of its related materials, I have carefully considered the FAA's goals and objectives in relation to various aeronautical aspects of the proposed development actions discussed in the FEIS, including the purpose and need to be met by this project, the alternative means of achieving them, the environmental impacts of these alternatives, the mitigation necessary to preserve and enhance the environment, and the costs and benefits of achieving the purpose and need in terms of efficiency and fiscally responsible expenditures of Federal funds.

ACCORDINGLY, under the authority delegated to me by the Administrator of FAA, I find that the projects described in this ROD are reasonably supported and I therefore direct the action be undertaken to carry out the agency actions previously discussed and described as follows:

- Determinations under 49 U.S.C. Section 47106 and 47107 pertaining to FAA funding of airport development (including approval of a revised Airport Layout Plan [ALP]; 49 U.S.C. Section 47107 (a) (16);
- Determinations under 49 U.S.C. Section 47101, *et seq.* of project eligibility for Federal grant-in-aid funds under Section 47104.
- Determination and actions under 49 U.S. C. Section 44718 (14 CFR Part 77) evaluating obstructions to navigable airspace;
- Determinations and actions under 49 U.S.C. Sections 40103 (b), and 44701 designing, developing, approving and implementing new flight procedures, missed approach procedures, providing for establishment of modified flight procedures, and other rules of terms and conditions for the safe and efficient use, as well as management, of the navigable airspace;

While this decision does not approve Federal funding for the proposed airport development and does not constitute a Federal funding commitment, it does provide the environmental findings and approval for proceeding to funding actions in accordance with the established procedures and applicable requirements upon receipt of a timely application for Federal grant-in-aid from

the Sponsor.

This ROD presents the Federal Aviation Administration's final decision and approvals for the actions identified, including those taken under the provision of Title 49 of the United States Code, Subtitle VII, Parts A and B. These actions constitute 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. Section 46110.

*Issued in College Park, Georgia*

*/s/* **12/19/2001**

Carolyn Blum                      Date

Regional Administrator

Southern Region