FEDERAL AVIATION ADMINISTRATION
PORT COLUMBUS INTERNATIONAL AIRPORT
ENVIRONMENTAL IMPACT STATEMENT

EXHIBIT A
SCOPE OF WORK

March 13, 2006
(FINAL)

This Scope of Work outlines the tasks to be performed by Landrum & Brown, Incorporated and its subconsultants (Consultant Team), in assisting the Federal Aviation Administration (FAA) and Columbus Regional Airport Authority (CRAA), in the preparation of an Environmental Impact Statement (EIS) and related aviation planning studies at Port Columbus International Airport (CMH), located in Columbus, Ohio. In accordance with the National Environmental Policy Act (NEPA), the primary focus of this EIS is to identify the impacts of the Federal actions that result in the following development projects (Proposed Project):

- Construction of a replacement runway, 10,113 feet long, located approximately 700 feet south of the existing Runway 10R/28L
- Construction of additional taxiways to support the replacement runway
- NAVAIDs
- Proposed terminal development (defined as a development area that will encompass Phase I and II of the CRAA terminal development program and the number of gates, approximate square footage of the structure, number of levels and if any are underground, approximate curb frontage, and the number of passengers that the terminal would accommodate)
- Proposed aviation-related development
- Associated roadway relocations and construction
- Parking improvements (including both surface lots and parking garage)
- Property acquisition and relocation of residences, businesses, and farms as necessary
- Development of air traffic operational procedures for the replacement runway
- Proposed Part 150 noise abatement actions to be implemented upon receipt of the Record of Approval

All services will be conducted in accordance with FAA Order 5050.4B, Airport Environmental Handbook, and FAA Order 1050.1E, Policies and Procedures for Considering Environmental Impacts. This Scope of Work is written in a form that generally parallels these orders.

This Scope of Work includes project mobilization, scope and work plan preparation, implementation of a public involvement program, review of aviation forecasts and demand/capacity analyses, and the analysis, coordination and documentation required to prepare an EIS for the development program improvements.

In addition, the scope includes the review of comments received on the Draft EIS and the preparation of draft responses, aid in the preparation of a Final EIS, and review of comments received on the Final EIS and preparation of draft responses. The Final EIS will conform with and be processed in a manner consistent with Federal statutes, regulations, and guidelines. The final products will conform with the National Environmental Policy Act (NEPA) (42 USC 4231 et seq.); Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508); and applicable Department of Transportation (DOT) Orders, FAA Orders, and State of Ohio laws.

Should additional services be required, such as technical analyses not specified in this Scope of Work, they will be accomplished under an amendment to this agreement. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract. The schedule to accomplish the project, including anticipated review periods, is provided in Exhibit "B". The cost estimates for these services and expenses, are provided in Exhibit "C". The Scope of Work for the concurrent Part 150 Noise Compatibility Study Update, which contains noise mitigation tasks necessary for the EIS, is provided in Exhibit "D". Exhibit "E" contains scope items for which a reliable cost estimate is not possible prior to completing agency scoping and/or initial field work. It is anticipated that after agency scoping and field work is completed an amendment to this scope and cost estimate may be required. These scope items are: historic and archaeological field surveys, air quality/transportation conformity, and Part II of the Phase I & II Environmental Due Diligence Audits (EDDAs). The budgeted costs for these additional tasks can be found at the end of the Estimated Labor Costs and Estimated Expenses spreadsheet for the EIS.

Background

CRAA continuously undertakes planning efforts designed to meet passenger and facility demand well into the 21st Century. The recent Master Plan Update study, completed in 1999, identified numerous facility upgrades that may be required to maintain the Airport's ability to meet and exceed requirements and expectations.

The Master Plan Update study identified the need to evaluate the possibility of either expanding the existing passenger terminal or developing a new expanded terminal complex. Through the process of evaluating terminal options conducted between 2002 and 2004, the relocation of existing Runway 10R/28L was identified as an alternative which may provide both potential capacity enhancements and additional space for terminal development. The CRAA commenced two studies to evaluate this potential relocation. The first was the *Airfield Planning Report Associated with Replacement of Runway 10R/28L at Port Columbus International Airport*, which determined the optimum location and length of the relocated runway. The CRAA also undertook an *Environmental Overview Associated with Replacement of Runway 10R/28L at Port Columbus International Airport* (EO) with the purpose of evaluating the potential impacts of the proposed runway locations in order to determine the level of environmental processing that would be required through

NEPA. That document found that significant impacts are likely to result from the relocation of Runway 10R/28L. Therefore, the EO recommended that an EIS be prepared to evaluate the potential environmental impacts. The FAA has reviewed the planning and environmental studies and has determined that an EIS will be required based on the anticipated impacts. This Scope of Work provides for the necessary environmental documentation and processing to implement the above mentioned actions.

TASK 1: NOTICE OF INTENT

Task 1.1: Prepare Notice of Intent

The consultant team will assist the FAA in preparing the Notice of Intent (NOI) and preparing the Federal Register Notice. This will include preparing narrative and graphics to describe the Proposed Project and the EIS process.

TASK 2: FEDERAL SCOPING

To facilitate the preparation of the EIS the Consultant Team will assist the FAA to conduct "Scoping" early in the EIS process. Assistance will be provided to the FAA in the conduct of agency pre-scoping meetings, a formal agency scoping meeting, and a set of public scoping sessions for the general public, including the necessary graphics for presentation boards and handout materials. The public workshops will be conducted in the informal "open-house" structure as described in **Task 2.5** below. Assistance will be provided to the FAA to review the Scoping comments received from agencies and the pubic.

Task 2.1: Preparation of Scoping Information and Mailing Lists

Descriptive text and graphics for mailing to Federal, state, and local agencies and officials, and other interested parties will be developed for this task. The materials will describe the Scoping process, the EIS/NEPA process, and the nature of the Proposed Project under consideration. A project mailing list will also be developed which would include agencies and individuals who the FAA, the CRAA, and the Consultant Team identify as warranting personal notification of the Scoping meetings. This project mailing list will be maintained for use in planning future project meetings. Scoping information and mailing lists will incorporate the results of the agency pre-scoping meetings.

Task 2.2: Preparation of Meeting Materials/Notices

This task provides for organizational and strategy-defining meetings among the FAA, CRAA, and the Consultant Team members in establishing the times, locations, publicity, staffing, as well as equipping the Scoping meetings/workshops. It also includes determining the graphic and material/handout information required for each meeting/workshop and the preparation of said materials. Graphics and material/handout information will consist of display boards, handouts, comment forms, sign-in forms, comment registration forms (if verbal comment session was warranted), and meeting/workshop identification signs. This task will also include the Consultant Team assisting the FAA in developing and publishing the public notices to announce the Scoping meetings.

Task 2.3: Agency Pre-Scoping Meeting

Under this task, the Consultant Team will assist the FAA to prepare for, and conduct, Agency Pre-Scoping Meetings. These meetings will be attended by the FAA and two members of the Consultant Team and will take place at the agency's offices. Three (3) agencies have been identified for pre-scoping meetings: Ohio EPA (OEPA), United States EPA (USEPA), and the US Army Corps of Engineers (USACOE). The purpose of the pre-scoping meetings is to improve agency cooperation on the project and to assist in environmental streamlining. Meeting summaries will be prepared by the Consultant Team for each meeting.

Task 2.4: Formal Agency Scoping Meetings

(Agency Scoping meetings provide reviewing and regulatory agencies with an opportunity to learn about the Proposed Project and to provide input on the development of the Draft EIS. Agency contacts for the project would be identified and invited to participate.)

Under this task, the Consultant Team will assist the FAA to prepare for, and conduct, Agency Scoping Meetings throughout the EIS process. It is anticipated that these meetings will occur at milestone points in the study. Specifically these include:

- Initial Agency Scoping
- Development of Purpose and Need
- Alternatives
- Review of key environmental findings prior to Draft EIS being published

The role of the Consultant Team will be to assist FAA in briefing attendees on the Proposed Project, the status of associated airport and environmental studies, the EIS schedule, and the schedule for scoping the study. The Consultant Team will also assist the FAA in establishing a dialogue with the attendees for the purpose of identifying issues and concerns. The Consultant Team will prepare all meeting materials (i.e., handouts, written meeting notices, presentations, boards/displays, sign-in sheets), arrange the meeting logistics, and record comments (either by hand or through the use of the a court reporter). The agency scoping meetings would be held in Columbus. The first agency scoping meeting will be held during the same week as the public scoping workshops described in, **Task 2.5**. *In addition, separate air quality agency scoping meetings will be conducted following the agency scoping meeting for the purpose of coordinating the approach and methodology to be used for that analysis (see **Task 6.5.1** below).*

Meeting Total: Four (4) Agency Scoping Meetings

Task 2.5: Public Scoping Workshops

(Public Scoping workshops will provide the public with an opportunity to learn about the Proposed Project, the NEPA/study process, and to provide input on

the developing the Draft EIS. An open house/workshop meeting format would be proposed, with an opportunity for the public to provide written and verbal comments at the workshop and within the scoping period.)

The Consultant Team will assist the FAA to prepare and facilitate one set of public scoping workshops within the same week as the agency scoping meeting previously described in **Task 2.4**. At this time, it is assumed that an open-house style format will be used. The Consultant Team would assist the FAA in staffing the following five workshop stations (CRAA staff are encouraged to attend and participate in the workshops, but will not have an assigned station unless requested):

1) **Introduction** – Attendees will be greeted and briefed on why they have been asked to attend, how the workshop works, and how they can participate in the NEPA EIS process,
2) **NEPA Process** – Information will be provided on what is required under NEPA and how studies are conducted and coordinated.
3) **Proposed Project Description** – An overview will be provided about the recommendations carried forward from the planning efforts.
4) **Technical Studies** – The technical aspects and studies to be conducted as part of the EIS will be explained including noise modeling, cultural resources, endangered species, water quality, air quality, etc. This station will also provide a summary of the appropriate Federal regulations with which the FAA must comply in preparing the EIS.
5) **Comments** – FAA and Consultant Team will be available to answer questions and take comments. Comment sheets and a court reporter will also be provided.

The Consultant Team will prepare all meeting materials (i.e., handouts, written meeting notices, presentations, boards/displays, sign-in sheets, comment sheets, etc), arrange the meeting logistics, advertise the meetings, prepare media kits, and conduct a media briefing prior to the public workshops (as directed by the FAA). The FAA will review and approve all meeting materials, including advertising, prior to final printing. The FAA will provide the CRAA with the opportunity to review and comment on the meeting materials and advertising prior to finalizing each. *For the purposes of costing this task, advertising will be placed twice in the following local newspapers prior to the public meetings: the Columbus Dispatch, the Whitehall News (through Suburban News Publications), This Week Bexley, Gahanna and Reynoldsburg editions, the Call & Post Newspaper (Columbus edition), La Voz Hispana, and a Somali based newspaper (if one exists).*

Meeting Total: Two Public Scoping Workshops

Task 2.6: Review of Scoping Comments

For this task the comment letters, comment forms, and verbal comments pertaining to the Scoping process will be compiled and reviewed. A summary of the comments and their implications to the EIS process will be prepared. A summary of each scoping meeting/workshop will be developed and submitted to FAA and CRAA for review and comment. Final meeting summaries incorporating FAA and CRAA comments will be prepared. These summaries will be compiled into one comprehensive scoping document for the FAA and CRAA to review.

After reviewing all of the Scoping comments, the FAA will determine which comments should be addressed through the addition, modification, or deletion of potential EIS scope items outlined under the Scope. The EIS Scope of Services will be revised through an amendment to reflect those modifications prior to beginning work on the additional services.

TASK 3: DETERMINATION OF PURPOSE AND NEED

The purpose and need for the proposed replacement Runway 10R/28L, the new terminal, and other related improvements will be evaluated and documented in this task.

Task 3.1: Purpose and Need

This task will identify what problems or shortfalls will be alleviated by the proposed improvements and will result in defining a clear and concise project definition, purpose, and need. This will provide assurance to the FAA and the public as to the need for the Proposed Project. The previous work that has been completed on the Purpose and Need will be thoroughly reviewed and revised as necessary for inclusion in the EIS.

Task 3.2: Verify Aviation Forecasts

In order to verify the basis of the project's purpose and need, the annual aviation forecasts prepared for CMH in May 2004 and approved in March 2005 will be reviewed and updated to 2013 (the expected first year of operation for the proposed new runway) and 2018 for this EIS by the Consultant Team. This review will include use of the latest aviation activity statistics, identification and corroboration of the assumptions used in the previous forecasts, and preparation of updated annual forecasts of passengers and aircraft operations at a level of detail sufficient for use in the EIS.

Updated annual aviation forecasts will be expanded to the extent necessary for accurate noise exposure and air quality modeling to include a detailed fleet mix forecast. Emphasis will be placed on expanding the forecasts for scheduled passenger and cargo jet operations, day/night operational splits, major changes in cities served which change the typical distances and operating weights, and jet fleet mix. Fleet mix forecasts will be calculated for annual, average daily, and design day for use in this EIS.

Ten copies of a draft Project Memorandum of the updated aviation forecasts will be provided to the FAA for review and comment. Revisions will be made to the draft forecasts as directed by the FAA and ten copies of a final Project

Memorandum for **Task 3.2**, will be provided for formal FAA review. Adobe pdf files of the draft and final Project Memorandum will be provided to both the FAA and CRAA.

The forecasts developed for this task will be compared to the FAA's most recent Terminal Area Forecast (TAF) and each subsequent TAF that is developed during the study process. It is anticipated that the forecasts developed under this task will be approved by the FAA and therefore incorporated into the next TAF cycle. If at any point during the study the forecasts developed under this task differ from the TAF by more than 10 percent, then the Consultant Team will prepare written documentation of why the difference has occurred.

Task 3.3: Supporting Documentation

In support of the above analysis, this section will contain a discussion of the cumulative impacts and independent utility of other projects, a detailed description of the Federal action(s), time frame for implementation of the project(s), probable funding sources, and applicable statutes and regulations. The results of **Tasks 3.1** and **Task 3.3** will be documented in a preliminary project memorandum of the Purpose and Need section of the EIS. Ten copies and .pdf file of the document will be provided to the FAA.

TASK 4: ALTERNATIVES ANALYSIS

This task will address the viability of alternatives to the proposed action. In order to meet the spirit and intent of the National Environmental Policy Act (NEPA), the Consultant Team will develop feasible runway and terminal alternatives for evaluation in the EIS. To the extent possible, the *Airfield Planning Report Associated with Replacement of Runway 10R/28L at the Port Columbus International Airport* will be used as a basis for this analysis. The evaluation will focus on the relative advantages and disadvantages of each alternative. The alternatives for each improvement will be clearly and concisely compared, and will lead to the reasoning for the inclusion in (or elimination from) further evaluation. The project purpose and need, established under **Task 3**, will form the basis of the alternatives analysis outlined in this task. A series of development-related and nondevelopment-related alternatives will be developed that define on-site and off-site alternatives.

Task 4.1: On-Site Alternatives

An analysis will be performed to identify the feasibility of all alternatives to meet the stated purpose and need for the Proposed Project. A set of viable alternatives will be selected from this analysis for detailed evaluation in the environmental consequences section of the study. On-site alternatives to be examined in the detailed analysis will include the No-Build/No-Action Alternative, the Proposed Action Alternative, and feasible demand-management alternatives (if any). **(Note: For the purposes of costing, it is assumed that a total of three alternatives (plus the No-Action) will be studied in detail for each year (2013 and 2018). If more alternatives are determined to be appropriate for evaluation, the additional work would be accomplished under an amendment to this**

agreement. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.)

As part of the planning study completed for the replacement runway, a delay and capacity analysis was prepared to document the benefits of the Proposed Project. The consultant team will use that data and update it as necessary for the EIS document.

Task 4.2: Off-Site Alternatives

The ability of all reasonable off-site alternatives to meet the stated purpose and need of the project will be examined. The analysis will include an overview comparison of the advantages and disadvantages of non-aviation transportation modes (such as roadway, rail and mass transit), development of a new airport, shifting operations to Rickenbacker, and improvement of other existing airports as alternatives to the improvement of CMH. **If it is determined that detailed evaluation of any viable off-site alternatives is required, that work (such as capacity benefits and environmental impacts) will be examined under an amendment to this agreement. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.**

Task 4.3: Blended Alternative

The ability of a blended alternative to meet the stated purpose and need of the project will be examined. The blended alternative will explore a combination of non-development and development alternatives (such as off-peak pricing, traffic congestion management, and some level of development short of the Proposed Project).

Included in the review of alternatives by the Consultant Team will be the identification of dependent airport development and non-development actions that would be associated with the alternatives. Each of the alternatives will be clearly defined in text and illustrations. An early qualitative review of each alternative will be used to identify the range of alternatives to receive detailed assessment.

The results of the above analysis will be documented in a project memorandum for **Task 4**. Ten copies of the document and pdf files will be provided for FAA and CRAA review to select the alternatives to be considered in **Task 6**, Environmental Consequences.

TASK 5: AFFECTED ENVIRONMENT

This task will involve data collection and field investigations necessary to identify the background conditions from which environmental impacts of the Proposed Project will be compared. Both on-site and off-site conditions will be identified. The CRAA will provide the Consultant Team with copies of any available pertinent studies to ensure the consistency of data. Background information will be gathered from other relevant agencies for the various disciplines and concisely summarized in the EIS document in the specified format. Where appropriate, scope overlap with the concurrent Part 150 Study has been noted. In addition, where there is scope overlap, it will thereafter be determined whether the costs reside in the Part 150 or EIS scope or a combination.

Task 5.1: Base Mapping

Task 5.1.1: Study Area Definition, Land Use Data and Mapping

The area selected for land use analysis (called the General Study Area) will be established by the Consultant Team in consultation with the FAA and CRAA. The General Study Area will encompass an area larger than the anticipated 60 DNL (Day-Night Average Sound Level) contours of the proposed actions and their alternatives. The area where direct impacts would occur as a result of the proposed action and its alternatives will be designated as the Detailed Study Area (DSA).

Finished graphics of digital maps and physical maps at the largest possible scale for report purposes will be developed and used as base maps throughout the entire study and will show existing political jurisdictions, noise-sensitive land uses, noise-compatible land uses, major and minor streets and roadways, and major physical constraints, along with selected place names, road names, and names of geographical features. The Consultant Team will be responsible for the base maps and display board preparation. Digital mapping will be developed using a Geographic Information System (GIS).

Existing comprehensive plans, land use plans, zoning ordinances, and other documentation pertaining to land use planning and management in the vicinity of the airport will be obtained from local planning agencies and reviewed. Local planning agencies will be visited and the information contained in the Part 150 Study Update will be verified and updated as part of the interviews. The Consultant Team will be responsible for the preparation of meeting notes, production of agendas, handouts, and other materials. These interviews will also serve to establish communication between the planning agencies and the Consultant Team.

The GSA and DSA will be described in narrative and graphic formats sufficient enough to provide for an adequate analysis of the direct,

induced, and cumulative impacts. The FAA will review and approve this narrative and graphics.

This subtask is an overlap of Tasks 1.5 and 1.6 in the Part 150 Study Scope. Therefore, the costs for this subtask are included in the Part 150 Study.

Task 5.1.2: Land Use Field Checking

The Consultant Team will conduct a thorough windshield survey of the area within the General Study Area that is likely to be within a 60 DNL noise contour for any alternative. The area will be surveyed to confirm the location and number of existing housing units and identify new or planned noise-sensitive developments. In addition, the Consultant Team will identify and record the name, street address, and use of all other noise-sensitive facilities (schools, churches, libraries, hospitals, nursing homes) in the same area.

Task 5.1.3: EIS Specific Information

Other information for use in the Affected Environment section of this EIS will be gathered and inputted into the database. Such additional data will include public parks, 4(f)/6(f) properties, wildlife and waterfowl refuges, wetlands, floodplains, farmlands, recreation areas, and historic sites.

Task 5.2: Current Noise Environment

Task 5.2.1: Airfield Facilities and Operations

The physical facilities of the airfield will be selectively inventoried through the review of existing documents (including the airport's Capital Improvement Plan) and visual inspection of the airport.

Current operations data will be collected from all appropriate sources. This information will include existing and recent historical records of operations by aircraft type, time of day, aircraft weight and engine type (where available), and based aircraft ownership. Departure procedures used by the principal contributors to the noise environment will be collected for inclusion in the noise evaluation process.

This subtask will draw from existing and ongoing studies to the maximum extent possible. Its purpose is to provide information to the Consultant Team regarding the current facilities and operation of the airport and to provide the basis for the description of the affected environment.

This subtask is an overlap of Task 1.1 in the Part 150 Study Scope. Therefore, the costs for this subtask are included in the Part 150 Study.

Task 5.2.2: Radar Data Collection and Evaluation

The Consultant Team will request from CRAA that selected Total Airport Management Information System (TAMIS) and ANOMS radar data be provided. This data will be used to enable an evaluation of specific locations of flight tracks and the detailed departure profiles flown by principal aircraft types and carriers. This information will allow for an initial verification of aircraft flight tracks and operating characteristics unique to certain user groups.

This subtask is an overlap of Task 1.1 in the Part 150 Study Scope. Therefore, the costs for this subtask are included in the Part 150 Study.

Task 5.2.3: Current Noise Abatement Program

Airspace and air traffic control measures provided in the currently-approved 1999 Part 150 Study Update will be verified and updated. Current air traffic operational procedures will be discussed with Air Traffic Control management. The Consultant Team will be responsible for the preparation of meeting notes, production of agendas, handouts, and other materials. The noise abatement program currently in place is a combination of measures from the pre-existing conditions and the recommendations of the airport's Noise Compatibility Program. A clear definition of the currently-approved noise abatement program will be made to provide all study participants with an understanding of where the emphasis has been and where the measures now stand.

This subtask is an overlap of Task 1.3 in the Part 150 Study Scope. Therefore, the costs for this subtask are included in the Part 150 Study.

Task 5.3: Noise Measurement Program

Task 5.3.1: Program Design

The Consultant Team will analyze the radar data obtained in **Task 5.2.2** to conduct an evaluation of the specific locations of flight tracks and the detailed departure profiles flown by individual aircraft types and individual carriers. This information will allow for an initial verification of aircraft flight tracks and operating characteristics unique to certain user groups and provide input for the design of the noise-monitoring efforts.

A noise measurement program will be designed in consultation with CRAA staff and FAA. This program will focus on single-event noise levels for direct correlation with specific aircraft flight data.

Task 5.3.2: Identification of Noise Measurement Sites

General locations of noise measurement sites will be selected, based on preliminary operations, existing noise data, noise complaints, and ability to meet the technical requirements of the analysis. Most of the specific sites will be selected based on security/safety, line of sight to aircraft, proximity to other noise sources. In addition, the public and the CRAA may request specific sites that they wish to be included in the program. Proposed noise monitor locations, time, duration, and events will be reviewed with CRAA and FAA before noise monitoring will begin.

Task 5.3.3: Air/Ground Noise Monitoring

Single-event noise levels will be measured for the following situations: daytime flights, nighttime flights, and runups/ground noise. The measurement period will extend over one work week. Measurements will be conducted with two (2) portable noise monitors for specific times over this period.

Operators of the equipment will record relevant information observed during the measurement periods for inclusion in a report and use in correlation with collected data on known aircraft activity and comparison to information from the Integrated Noise Model (INM). To the extent practical, all measurements will be conducted in the vicinity of impacted areas. In each case, the ambient levels without aircraft activity will also be noted.

The focus of the measurement program will be the collection of SEL data for later correlation with specific flight operations on tracks at varying slant range distances as determined from data processing. The information from the noise measurement program will also be used to compare to the INM model information for validation. No 24-hour cumulative data will be collected. The time that each location will be measured will depend on the scheduling of traffic and the actual activity to which the site is exposed at the time of measurement.

Single-event noise measurements will be collected at approximately 25 sites in the CMH vicinity for correlation with radar and comparison of INM data.

Task 5.3.4: Radar Data Collection and Evaluation

In order to correlate flight activities with measured noise events and to obtain accurate flight track and performance profile data, radar data of the type requested in **Task 5.3.1** will be collected for periods of time during which noise is measured and three other times, representing all four seasons of the year. ARTS/STARS data will provide appropriate information on time, velocities, flight tracks, altitude profiles, and aircraft types. Data will be requested and processed to prepare a correlation with the noise levels recorded during the measurement period.

Task 5.3.5: Comparison With INM Data Libraries

The noise measurement data and the radar data from **Task 5.3.2** and **Task 5.3.3** will be compared with the data libraries of the INM to determine the applicability of the input assumptions and any default assumptions of the models. As warranted, based on these findings and materials gathered from the principal carriers under **Task 5.3.1**, input assumptions will be adjusted to reflect actual flight conditions at CMH. Adjustments will not be made to the algorithms in the models or to the noise curves (noise/distance relationships established by the FAA). Any

modifications to the standard INM data library will be closely coordinated with the FAA and CRAA.

Task 5.4: Existing Noise Exposure

Task 5.4.1: INM Preparation

Data collected from previous work tasks will be used in conjunction with the FAA's Integrated Noise Model (INM), Version 6.1, to determine current (2006) aircraft noise exposure levels. Baseline operational levels will be calculated based on the most recent 12-month data from NTP. Special attention will be given to all currently adopted noise abatement procedures for the airport.

This subtask is an overlap of Task 2.1 in the Part 150 Study Scope. Therefore, the costs for this subtask are included in the Part 150 Study.

Task 5.4.2: Development of Baseline Noise Exposure Contours

Contours of 60, 65, 70, and 75 DNL will be prepared for the conditions representative of base year 2006 from INM Version 6.1. In addition, a grid point analysis will be performed. A regularly spaced grid will be created that encompasses an area 9,000-feet wide by 21,000-feet long, with a regular interval of 3,000 feet. The regularly spaced grid will cover the centerline of initial procedural departure tracks now in place, as well as primary straight-in approach tracks. In addition, a grid point will be placed at the location of all noise-sensitive facilities (schools, churches, hospitals, nursing homes, libraries) in the General Study Area. Noise levels in DNL, Time-Above, Lmax, SEL, and Leq will be reported at each regularly spaced and noise-sensitive grid location.

The items listed above in this subtask are an overlap of Task 2.2 in the Part 150 Study Scope. Therefore, the costs for these elements of this subtask are included in the Part 150 Study. The elements listed below are not included in the Part 150 Study Scope and will be included in the EIS Cost.

In addition to the elements listed above, the noise monitoring terminal (NMT) data will be collected from the CRAA for the period covering the Existing Baseline conditions. This data will be used to evaluate the noise contours through a separate grid point analysis. The findings of this analysis will be shared with FAA and CRAA. If necessary, revisions to INM input data will be made.

Federal actions which may result in changes to air traffic procedures or routes of flight, are subject to additional Air Traffic Screening for impacts outside of the 60 DNL. In order to prepare this analysis, a noise level

change assessment will be necessary. The data that will be required for that analysis will be developed for the Existing Baseline in this subtask. (See **Task 6.1.3** for more information on the supplemental analysis).

Task 5.4.3: Impact of Existing Aircraft Noise

Population and housing impacts will be calculated in terms of absolute numbers of dwelling units located in the significant ranges of the DNL contours of existing noise exposure. The Consultant Team's in-house model will be utilized to determine population levels within each noise contour. The resulting impact totals, by noise level, and the single number rating for each 5 dB increment will establish a base for existing conditions against which future and alternative airport operating configurations may be compared for noise abatement effectiveness.

Current noise exposure contours will also be assessed for land use impacts including impacts to noise-sensitive uses such as churches, schools, hospitals, libraries, nursing homes, and other such uses. Impacted land uses will be tabulated and identified on a map.

This subtask is an overlap of Task 2.3 in the Part 150 Study Scope. Therefore, the costs for this subtask are included in the Part 150 Study.

Task 5.4.4: Existing Baseline Update

Due to the anticipated duration of the EIS, the Existing Baseline may become dated and therefore require updating for more current conditions. After the Draft but prior to the Final EIS, the Existing Baseline will be updated with the latest available data. As part of this analysis, the operating levels, fleet mix, runway use, and flight tracks will be updated. Noise contours and grid point analysis as described above will be updated as well.

Task 5.5: Future Baseline Noise Exposure

This entire task is included in the Part 150 Study Scope and Cost. However, the Future Baseline contours were prepared during 2004 in support of the Environmental Overview. These tasks will have to be updated based on changes in the year being assessed and the updated forecasts (Task 3.2). Therefore, the cost for this task is included in the EIS cost. The resulting noise contours will be used in both the EIS and the Part 150 Study.

Task 5.5.1: INM Preparation

An INM noise exposure contour analysis will be prepared based on the aviation forecasts updated in **Task 3.2**. Version 6.1 of the INM will be used for this and all succeeding tasks. The noise scenario modeled will be without new noise abatement actions, for the airfield configuration as it is expected to occur in 2013 and 2018 without the proposed improvements.

Contours of equal noise exposure of 60, 65, 70, and 75 DNL will be calculated. This evaluation will provide the basis of the Future Baseline (No Action) noise maps for the airport.

Task 5.5.2: Development of Future Baseline Noise Exposure Contours (2013 and 2018)

Contours of 60, 65, 70, and 75 DNL will be prepared for the forecast conditions for the operating years 2013 and 2018, using INM Version 6.1. In addition, a regular grid point analysis off each runway end will be performed at those sites identified in **Task 5.4.2** above.

Task 5.5.3: Future Impacts on Existing Population

Using the same methodology discussed under **Task 5.4.3** to determine existing noise impacts, the estimated impacts on population, dwelling units, and noise-sensitive land uses will be determined for the noise exposure conditions for the future time frame.

As discussed in **Task 5.4.2**, data necessary for air traffic screening will be collected to support future analysis.

Task 5.6: Description of the Affected Environment

The Consultant Team will prepare a concise description of the area affected by alternatives. The affected environment will be described by the following:

- Location map, vicinity map and Airport Layout Plan;
- Description of existing and planned land uses and zoning in the affected airport vicinity, including affected residential areas, public parks, wildlife and waterfowl refuges, designated areas of critical habitat, uplands, wetlands, floodplains, farmlands, recreation areas, and historic and archaeological sites;
- Location of nearby schools and places of public assembly, hospitals and adjacent jurisdictions affected by the development-related alternatives;
- Future planned activities in the General Study Area.

TASK 6: ENVIRONMENTAL CONSEQUENCES

This task will involve the technical analyses of the direct and indirect environmental effects of the Proposed Project and other reasonable alternatives for the specific environmental impact categories. For each impact category one of the following courses of action will be followed in determining the scope of material to be prepared by the Consultant Team for the EIS.

- If analysis indicates the impacts are not significant, a brief but complete statement to this effect, including the reasons and reference to the appropriate section(s) of FAA Orders 1050.1E and 5050.4A, will be prepared by the Consultant Team and used in preparing the DEIS.

- If initial analysis indicates the impacts are significant, the Consultant Team will recommend and perform additional analyses according to the requirements of FAA Orders 1050.1E and 5050.4A. If additional analysis is beyond the requirements of FAA Orders 1050.1E and 5050.4A, the Consultant Team will provide the FAA with the recommended course of action.

This section will also address any mitigation measure alternatives that may be required to reduce adverse effects. Due to the nature of the Proposed Project, it is anticipated that significant environmental impacts may not occur in some of the required disciplines. However, all impact categories will be fully addressed in the EIS. The following alternative scenarios will be examined in these tasks (if other alternatives are required, an amendment to the scope of services will be required):

- 2006 Baseline Condition
- Alternative 1: 2013 No-Action
- Alternative 2: 2013 Alternative Proposed Runway Alternative
  - Air Traffic Option A: With the Part 150 Actions
  - Air Traffic Option B: Without the Part 150 Actions
- Alternative 3: 2018 No-Action
- Alternative 4: 2018 Proposed Action Alternative
  - Air Traffic Option A: With the Part 150 Actions
  - Air Traffic Option B: Without the Part 150 Actions
- Alternative 5: 2018 Proposed Runway Alternative with Expansion of Existing Terminal
  - Air Traffic Option A: With the Part 150 Actions
  - Air Traffic Option B: Without the Part 150 Actions

The elements of the noise compatibility planning process are unique to FAR Part 150. However, the information derived from these tasks provide the basis for mitigation commitments to be included in the EIS and subsequent Record of Decision. The Part 150 Study Update will be conducted simultaneously with the EIS. Tasks unique to the Part 150 process are provided in Exhibit D of this Scope of Work and include:

- Approved air traffic measures in the Record Of Approval of the Part 150, will be incorporated, as appropriate, into all future development alternatives.
- Noise Abatement Alternatives
- Evaluation of Current Program
  - Identification of Additional Noise Abatement Alternatives
  - Modeling and Evaluation of Alternative Procedures
  - Noise Abatement Alternatives Technical Conference

- Modeling and Evaluation of Feasible Alternatives

- Land Use Management Alternatives
  - Evaluation of Current Program
  - Evaluation of Alternatives
  - Land Use Alternatives Technical Conference
- Part 150 Noise Compatibility Plan
- Selection of Noise Abatement Measures
  - Evaluation of Impacts
  - Selection of Recommended Land Use Measures
  - Selection of Implementation Measures
  - Implementation Actions/Schedule/Costs
- NEM/NCP Documentation

TASK 6.1: NOISE

The potential change of noise impacts as a result of the proposed improvements will be examined through the modeling of existing and future (2013 and 2018) noise levels, and by considering approved FAA guidelines for land use compatibility determinations. Quantification of impacts will be assessed through the use of the GIS database developed under **Task 5.1** and will include a quantification of impacts of housing units, population, and other noise sensitive land uses, such as school, churches, nursing homes, and USC Section 303c properties. These impacts will be evaluated under **Task 6.2** in accordance with FAR Part 150 Land Use Compatibility Guidelines.

The effect of the operation of the Proposed Project on noise exposure will be evaluated. Using the forecasts prepared from **Task 3.2**, the Consultant Team will use the FAA's Integrated Noise Model (INM) to evaluate noise exposure levels for the years 2013 and 2018. Version 6.1 of the INM will be used. The INM evaluation will include a noise contour analysis and a grid analysis, described below:

Task 6.1.1: Noise Contour Analysis

Noise contours in the DNL metric will be developed for each scenario in increments of 60, 65, 70 and 75 dBA. The contours will be compared to baseline land uses and the FAA noise compatibility guidelines contained in FAR Part 150 to estimate land use compatibility impacts. The area of each land use type, location of sensitive sites, the number of homes and population within the noise contours will be estimated. Areas of noise sensitive land uses receiving an increase of 1.5 dB DNL or greater, within the 65 DNL, comparing the scenario to the future baseline, will be identified and quantified.

As recommended by the Federal Interagency Committee on Noise (FICON), if noise sensitive areas at or above 65dB DNL would experience an increase of 1.5dB DNL or more with the proposed action as compared to the baseline alternative, the noise analysis will identify and describe the noise-sensitive areas and number of persons between 65 and 60 DNL that would receive an increase of 3dB or more for that year.

Task 6.1.2: Noise Grid Point Analysis

The detailed grid analysis feature of the INM will be used to determine the DNL and single-event levels, including Time-Above, Lmax, SEL, and Leq, for each alternative at specific locations in the vicinity of CMH, as set forth in **Task 5.3.1**. The results of the analyses will be compared for each of the scenarios evaluated.

Task 6.1.3: Air Traffic Noise Screening Analysis

Changes in air traffic procedures and/or routes of flight require at a minimum an Air Traffic Noise Screening Analysis. The purpose of this analysis is to determine what changes in noise levels below 60 DNL will be present. Specifically, the screening analysis is attempting to determine if changes in flight procedures above 3,000 feet AGL will result in 5 dB increases in noise within the 45 DNL contour. This analysis will be conducted using the ATNS model and INM grid point analysis. The inputs include noise level data from existing and future baseline conditions, as well as from all alternatives that change flight procedures. This analysis and the findings will be documented in the EIS.

Task 6.2: Compatible Land Use

Most of the information needed to complete the land use evaluation will be available from the results of the work on **Task 6.1**. From that data base, the Consultant Team will prepare an analysis of the impacts of the airport development and operational alternatives on these uses. Included in the land use impact analysis will be a description of noise impacts based on the findings of **Task 6.1** - Noise Impacts. Land use compatibility will be evaluated and addressed.

The land use impacts of each of the alternatives will be evaluated. The Consultant Team will compare each alternative to the existing land uses of the area involved. The quantity of noise-sensitive land uses (school, churches, nursing homes) affected by each alternative will also be considered. For vacant land, the zoning laws of the county and/or municipalities involved will be examined to determine if the alternatives would be compatible with the existing zoning ordinances. Similar comparisons will be made with official master plans and known development projects which have been endorsed by local governments.

In addition, land use mitigation actions will be identified as necessary for each runway development alternative.

Task 6.3: Social Impacts

This task will identify and describe the primary social, ethnic, and other interest groups in the area. An overview of individual social groups and subgroups will be provided and their concerns and position relative to the proposed airport improvements. To the extent possible, information from residents and secondary sources will be considered.

Task 6.3.1: Relocation and Community Disruption

Each of the alternatives will be evaluated with respect to those issues associated with relocation of existing residences and business and community disruption which may be caused by CMH development alternatives. The following impacts will be described:

- Number of homes and people required to be relocated
- Potential impact to local school enrollment and tax base due to the acquisition and relocation of homes and people
- Businesses and farms that may be required to be acquired and relocated
- Description of structures that may be required to be relocated or acquired
- Impacts to park districts or other special purpose government districts
- Changes in business patterns
- Disruption of existing communities and community development plans

Disruption caused to the surface transportation network will be addressed under **Task 6.20**. Based on existing inventories of available housing and interviews with local relocation agencies, the availability of suitable housing stock will be determined. The availability of suitable relocation facilities in the vicinity for potential business relocations and possible changes in business patterns of the area will also be assessed qualitatively.

A relocation plan will be prepared that will conform to the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

Task 6.3.2: Environmental Justice

Impacts of the alternatives will be assessed with regard to compliance with Federal environmental justice guidelines (Executive Order 12898) to determine if there would be a disproportionate adverse impact to minority and/or low income communities. It is known that areas to the west of Runway 10R/28L are predominately minority (African American and Hispanic). Public participation and follow up discussions will be an important resource in coordinating with these groups and identifying their particular relationships in terms of both beneficial and adverse impacts associated with project alternatives. Additional detail will be provided as needed to document varying impacts upon these groups.

TASK 6.4: INDUCED SOCIOECONOMIC IMPACTS

The potential for any induced socioeconomic impacts will be assessed to the extent that they are influenced by the operation of CMH, particularly as related to the implementation of a project alternative. The impact analysis will consider both beneficial and adverse induced economic impacts, changes in the economic structure of the area, and economic opportunities and potential displacements resulting from shifts in economic demand.

Task 6.4.1: Demographic Impacts

The information gathered in previous studies will be supplemented with additional data to identify and describe the existing economic and demographic trends in the CMH area to the extent that they may be affected by the development of CMH. The analyses will focus on the historical characteristics of the economy and projections of economic and demographic growth based on available statistical information. Historical trend data will be presented and summarized to document the existing social, economic, and demographic characteristics of the area. Future economic and demographic projections for the years 2013 and 2018 will be obtained from existing sources. Specific attention will be placed upon the relative characteristics of specific population sub-groups including age, income, social groups, and ethnic groups for analysis of environmental justice.

The information developed during the data collection phase of this project will provide the basis of the "without project" forecasts. Based on evaluations of growth potential and constraints identified in the Affected Environment section, impacts of project alternatives will be evaluated. The following information will be examined both with and without the project alternatives:

- Business development (service, construction, recreation, manufacturing, etc.)
- Employment and income; direct, indirect, and induced.
- Employment opportunities by income, ethnic and social group (based upon labor pool analysis, and evaluation of job creation requirements).
- Potential job or income displacement generated by project alternatives.
- Population growth potential; direct, indirect, and induced population impacts (note that this analysis will be based upon the labor requirements considering potential for employment by local labor force).
- Changes in demographic patterns generated by population growth.

Task 6.4.2: Real Estate Value and Property Tax Base

Based upon the identification of induced development in each of the affected taxing jurisdictions impacts upon real estate values and property tax bases will be assessed for each development alternative. Potential impacts to income, ethnic, and social groups will also be addressed.

Task 6.4.3: Infrastructure Impacts

An inventory and description will be prepared of those significant infrastructure components in the area that have the potential to be influenced by the proposed actions. The analysis will consider all significant infrastructure components which have the potential to directly influence, or to be directly impacted by the proposed actions. Such infrastructure components will include roadways, water and wastewater capacity, and public facilities such as schools.

Task 6.5: Air Quality

The Port Columbus International Airport (CMH) is located within Franklin County, Ohio, which has been designated by the U.S. Environmental Protection Agency (USEPA) as nonattainment for both the eight-hour ozone (O_3) and fine particulate matter ($PM_{2.5}$) Federal air quality standards. As such, the Proposed Action Alternative at CMH will be subject to the general conformity provisions under the Clean Air Act (CAA, including the 1990 Amendments), which is required to ensure compliance to the Ohio State Implementation Plan (SIP).[1] Further, the number of annual enplanements at CMH exceeds the Federal Aviation Administration (FAA) screening criteria of 2.6 million indicating an evaluation (dispersion modeling) of compliance to the National Ambient Air Quality Standards (NAAQS) will be included in the air quality assessment.

Under the CAA general conformity regulations, emissions from the Proposed Action Alternative for CMH will be limited to a net increase of 100 tons per year of nitrogen oxides (NO_x) and volatile organic compounds (VOCs) emissions, the ozone precursor pollutants. The 100-ton emission limit for NO_x and VOC will be referred to as the "applicable de minimis thresholds" for the CMH Proposed Action Alternative. At this time, there are no de minimis thresholds established for $PM_{2.5}$ nonattainment areas. The assessment of general conformity will require the preparation of emission inventories to compare the "no-build" with the "with project" emissions of NO_x and VOC under the Proposed Action Alternative for the future "build out" years 2013 and 2018. In addition, comparative emission inventories (build vs. no-build) will be required for the year of maximum emissions (usually a construction year), the year of expected ozone attainment projected in the current SIP, and the SIP emission budget year (refer to Exhibit E).

[1] The CMH Proposed Action Alternative would not be exempt from the provisions of CAA general conformity requirements, nor is the project presumed to conform as described in 40 CFR Part 93. Further the CRAA expects to receive funding and approval from the FAA for the Proposed Action Alternative, which would likely increase emissions of Federally-regulated air pollutants, particularly during periods of construction. Therefore, the Proposed Action Alternative is subject to the general conformity regulations of the CAA.

Guidelines published in the FAA *Air Quality Procedures for Civilian Airports & Air Force Bases (April 1997)* indicate the NAAQS comparison evaluation should include dispersion analyses reflecting existing baseline conditions, the future build-out years 2013 and 2018, and include dispersion analyses for all reasonable alternatives under consideration in the EIS, including the Proposed Action Alternative, as given under **Task 6**.

The air quality assessment will require completion of the following tasks:

1. Air quality agency scoping and coordination
2. Data collection and development of data for computer model input
3. Preparation of emission inventories
4. Emissions dispersion analyses
5. Conformity and SIP compliance evaluations
6. NAAQS compliance evaluations

Task 6.5.1: Air Quality Agency Scoping and Coordination

Various agencies and individuals must be involved when developing the approach to the air quality assessment for an airport project because Federal, State, and local requirements must all be considered. This coordination, and subsequent analyses, are time consuming and need to be addressed early in the assessment process. The purpose of air quality scoping is to obtain concurrence from the relevant agencies with regard to procedure and methodology. The scoping meetings are a forum for data gathering and guidance.

Each air quality scoping meeting will include a presentation by the Consultant Team's air quality manager outlining the proposed approach to the air quality assessment, the status of the assessment, and outstanding data requirements that could be available from the scoping participants. Following each scoping meeting, participants will be asked to comment on the presentation in an effort to obtain concurrence on procedure and methodology. A draft Technical Report will be distributed to the scoping participants and the FAA Office of Environment and Energy for further comment prior to release of the Draft EIS.

The Consultant Team will conduct five air quality scoping meetings with the appropriate air quality agencies and individuals, which may include, but would not be limited to, FAA, CRAA, USEPA Region 5 (Chicago), Ohio EPA Division of Air Pollution Control (ODAPC, Central District Office), and

the Mid-Ohio Regional Planning Commission (MORPC). The Consultant Team's air quality manager will be responsible for the preparation of meeting notes, production of agendas, handouts, and other materials.

Task 6.5.2: Data Collection and Development of Data for Computer Model Input

The use of three computer models will be required to complete the air quality assessment including the FAA Emissions and Dispersion Modeling System (EDMS), the USEPA CAL3QHC roadway intersection "hot spot" dispersion model, and the USEPA MOBILE motor vehicle emissions factor model. The "raw" data obtained under this task will be developed for direct input into the models.

Initially, the Consultant Team will review existing studies relating to air quality in Franklin County to obtain data that may already be available and also to maximize the technical understanding of existing and past air quality conditions. Included in this review will be the following:

- Recent or ongoing air quality studies
- State Implementation Plan (SIP)
- Transportation Improvement Plan (TIP) and Transportation Plan (TP)
- Local and regional air quality studies
- Local and regional transportation studies

Data will be requested for the 2006 Baseline (existing) conditions and all alternatives given under Task 6. In addition, data relating to the construction years (2011 through 2017) will be required. The data requirements will include the following:

a. Aircraft Fleet: Tables summarizing the aircraft fleet under the 2006 Baseline and all alternatives given under **Task 6**, where the data will reflect the peak-hour operations, by specific aircraft type (Boeing 737-500, Regional Jet, etc., as opposed to categories of aircraft, i.e. jets, turboprops, commuters, etc), to be developed under Task 3.2.

b. Airport Operational Statistics: Airport operational statistics are used in computer air quality modeling to reflect the most realistic description of existing and future airport operations. Data will be obtained through on-site surveys conducted by Consultant Team or from the noise analysis conducted under **Task 5.2** and **Task 6.1**. Data requirements include:

- Average taxi time, by aircraft type
- Average departure queue time, by aircraft type
- Gate use, by aircraft type
- Taxiway use, by aircraft type

- Runway use, by aircraft type
- Average departure queue time, by runway end
- Average departure queue length, by runway end
- Hourly, daily, and monthly operational profiles
- Ground support equipment assignments

c. Digital Airport Layout Diagram: The current and future approved Airport Layout Plans (ALP) in digital form, to be provided by the CRAA, to be used for obtaining Cartesian coordinate grid points for dispersion analyses.

d. Surface Transportation: Existing automobile traffic information will be critical for the determination of carbon monoxide (CO) concentration levels along on-airport roadways, and in on-airport parking lots and parking garages. The following data will be required for each intersection selected for analysis, which will be determined under Task 6.5.1:

- USEPA MOBILE vehicle emissions factors as used for regional surface transportation modeling, to be obtained from the MORPC
- Peak-hour traffic counts for the exits and/or entrances to the major on-airport parking lots and parking garages, particularly those lots and garages for which modifications/relocations will be proposed. This data will also account for the rental car facilities. Data to be provided under Task 6.20 or will be obtained by the Consultant Team.
- Peak-hour traffic counts for the on-airport roadway system, particularly the curbfront areas for flight departures and arrivals, including posted traffic speeds. Data to be provided under Task 6.20 or will be obtained by Consultant Team. ***Modeling for vehicular traffic located on off-airport roadways is not within this Scope of Work.***

e. Stationary Sources: A complete collection of data for stationary emissions sources, particularly those that may be modified under any of the project alternatives, was completed in 2004 for CMH and tenant sources. This will need to be updated to the baseline year. Additional data to be provided by CRAA (if available) or developed by the Consultant Team will include:

- Heating plants (boilers)
- Incinerators
- Fuel storage tanks (underground and above ground tanks)
- Aircraft engine maintenance
- Solvent degreasing operations (conducted outside)

- Surface coating (painting) operations (conducted outside)
- Emergency generators
- Training fires (Aircraft Rescue and Fire Fighting operations, ARFF)

Types of information required for these sources will include:

- Source location
- Fuel type, paint type, solvent type, engine type, etc.
- Associated equipment use (fire trucks, generators for paint application)
- Annual fuel use/throughput, annual paint/solvent use, etc.
- Capacity, size, or other physical or operational characteristics of the source
- Frequency of use

f. Construction Equipment: Data will be required with regard to construction phasing and construction equipment schedules for all construction years. The phasing schedules will include the type of equipment planned for use for each construction phase/task and the monthly hours of operation of each unit of equipment. The required data will be obtained by Consultant Team.

g. Background Pollutant Concentrations: A dispersion analysis for CMH must report the "design concentration" of each pollutant and averaging period regulated by the NAAQS (excluding lead and ozone). The design concentration will be the sum of the concentration of each criteria or precursor pollutant estimated by modeling at specified receptor locations, together with the existing background concentration of that pollutant averaging period as determined through USEPA monitoring. The background concentration of CO, sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and nitrogen dioxide (NO_2) will be obtained through the USEPA AirData website or determined by the MORPC.

h. Meteorology: Computer modeling for air quality depends upon the area's meteorology as well as the characteristics of the emissions sources. Average annual data is required for the emission inventories, whereas a full year of weather data (surface and upper-air) is required for dispersion analyses. Meteorological data will be obtained from the National Climatic Data Center and will include:

- Average annual temperature
- Average annual mixing height

- One full year of on-site hourly surface aviation observations
- One full year of on-site, or most appropriate, upper-air observations, corresponding to the year available for surface observations

The specific year of weather data used for the dispersion analysis will be determined through air quality scoping (refer to Exhibit E).

Task 6.5.3: Preparation of the Emission Inventories

Emission inventories will be prepared for the 2006 Baseline and all the project alternatives listed under Task 6. The emission inventories will be used to determine general conformity compliance under the Clean Air Act and will be used as the basis for the dispersion analyses required for the NAAQS comparison evaluation. The emission inventories will be prepared using the most recent publicly released version of the FAA-required and USEPA-approved Emissions and Dispersion Modeling System (EDMS). The emission inventories will include estimated emission rates for the following criteria and precursor air pollutants:

- Carbon monoxide (CO)
- Nitrogen oxides (NO_x)
- Sulfur oxides (SO_x)
- Volatile organic compounds (VOC) (and hydrocarbons, HC)
- Particulate matter, course (PM_{10}) and fine ($PM_{2.5}$)

The general conformity assessment will require an evaluation of NO_x and VOC emissions. The inventories will include emissions of all the precursor and criteria pollutants, except lead [2]and ozone, [3] for use as a basis for the dispersion analyses.

The emission inventories will be prepared using USEPA-approved methodologies and emission data. A list of all the input data used to estimate project emissions, such as emission factors and operational specifications, will be included in the document.

Task 6.5.4: Emission Dispersion Analyses

When an improvement project is proposed for an airport that serves at least 2.6 million annual passengers, the FAA recommends that the air quality assessment include dispersion analyses to determine whether the action will comply with the National Ambient Air Quality Standards(NAAQS). Records indicate that CMH exceeds the FAA

[2] Airport air quality assessments do not routinely include estimates of lead emissions because airports typically are not a significant source of lead emissions. The chief source of lead emissions at airports is the combustion of leaded aviation gasoline in piston-engine aircraft. FAA *Air Quality Procedures for Civilian Airports & Air Force Bases*, April 1997.

[3] Ozone emissions are considered on a regional level and are not evaluated on a project-level basis. Ozone emissions are evaluated by considering the emission rate of the ozone precursor pollutants NO_x and VOC.

passenger criteria; therefore, dispersion analyses for comparison to the NAAQS will be included in the air quality assessment.

The dispersion analyses will reveal the concentration of airport-related pollutants at selected receptor locations. Background concentrations will be added as appropriate to determine the design concentration, which will be compared to the NAAQS to determine compliance.

The dispersion analyses will be conducted based on the emission inventories prepared using EDMS with the additional of data relating to the operational conditions at CMH. The dispersion analyses will be conducted using the latest available published version of the FAA-required and USEPA-approved EDMS.

Task 6.5.5: Conformity Applicability and Evaluation of Compliance

The applicability of general conformity under the CAA shall be reviewed whenever a Federal action meets the following criteria:

- located within a nonattainment area or maintenance area for one or more of the NAAQS criteria pollutants,
- reasonably assumed to cause emissions of criteria or precursor pollutants over and above baseline levels,
- not exempt, and,
- not presumed to conform.

Franklin County is included in an eight-hour ozone and $PM_{2.5}$ nonattainment area and meets all the remaining criteria listed above. Consequently, the Proposed Project at CMH will require a review with respect to the CAA general conformity regulations, which are intended to ensure that emissions from Federal actions will not violate the provisions of the state implementation plan (SIP). Specifically, a Federal action must conform as given in Section 176(c)(1) of the CAA:

> (c)(1) No department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an implementation plan after it has been approved or promulgated under Section 110. The assurance of conformity to such an implementation plan shall be an affirmative responsibility of the head of such department, agency, or instrumentality. Conformity to an implementation plan means:
>
> (A) Conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards and achieving expeditious attainment of such standards; and
>
> (B) that such activities will not:

(i) cause or contribute to any new violation of any standard in any area;

(ii) increase the frequency or severity of any existing violation of any standard in any area; or,

(iii) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

A review of transportation conformity would only be required if the project alternatives were to include a highway or transit project not already included on a conforming Transportation Improvement Program (TIP) or Transportation Plan (TP). The responsibility for preparing a transportation conformity assessment rests with the MORPC not the FAA. If a transportation conformity assessment will be required for the CMH project, there could be requirements concerning off-site impacts of motor vehicles that the FAA will be expected to coordinate with the MORPC (refer to Exhibit E). **These additional services are not included in this Scope of Work. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.**

Task 6.5.6: NAAQS Compliance Assessment

Regardless of the attainment status of Franklin County, the size of the airport, as determined by the number of annual enplanements, indicates the Proposed Project should be assessed against the NAAQS. The results of the dispersion analyses will be evaluated and design concentrations will be modeled for comparison to the NAAQS (excluding lead and ozone). When a NAAQS compliance assessment is required, the analysis must meet 40 CFR Part 93.158(b)(1 and 2):

(b) The areawide and/or local air quality [dispersion] modeling analyses must:

(1) Meet the requirements in 40 CFR Part 93.159; and

(2) Show that the action does not:

(i) cause or contribute to any new violation of any standard in any area; or

(ii) increase the frequency or severity of any existing violation of any standard in any area.

***In the event the project alternatives violate 40 CFR Part 93.159 mitigation may be required. Refer to Exhibit E*. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.**

Task 6.6: Water Quality

The effects of the Proposed Project on water quality and quantity (e.g., runoff volumes) will be examined and documented. Methods to control peak flow and mitigate pollutant discharges from ongoing and new operations including deicing and fueling will be presented in this section. CMH's most recent drainage master plan and the airport's on-going engineering plans and analysis will be utilized to the fullest extent for much of data needed for this section. CMH's existing Deicing Study was completed in the mid-1990s to address compliance with CMH's NPDES permit. The Proposed Project will likely affect the quantity and quality of stormwater runoff. Additionally, the potential impacts of discharging collected deicer to the City of Columbus' Division of Sewerage and Drainage and their ability to treat deicer-laden stormwater that cannot be discharged to the receiving streams will be assessed.

Surface and groundwater resources in the vicinity of CMH will be identified and described. Baseline water quality information will be collected and verified. Impacts associated with the alternatives will be evaluated and, as required, mitigation measures will be recommended. An airport-specific deicing simulation will be used to facilitate the evaluation. The impacts and necessary mitigation measures of the following scenarios will be evaluated.

- 2006 Baseline Condition
- Alternative 1: 2013 No-Action
- Alternative 2: 2013 Alternative Proposed Runway Alternative
  - Air Traffic Option A: With the Part 150 Actions
  - Air Traffic Option B: Without the Part 150 Actions
- Alternative 3: 2018 No-Action
- Alternative 4: 2018 Proposed Action Alternative
  - Air Traffic Option A: With the Part 150 Actions
  - Air Traffic Option B: Without the Part 150 Actions
- Alternative 5: 2018 Proposed Runway Alternative with Expansion of Existing Terminal
  - Air Traffic Option A: With the Part 150 Actions
  - Air Traffic Option B: Without the Part 150 Actions

Potential mitigation might include additional stormwater detention facilities, deicing capture, storage and treatment facilities, and other measures to ensure compliance with FAA AC 150/5370-10A Standards for Specifying Construction at Airports, as well as Ohio EPA's General Permit for Stormwater Discharges from Construction Activities, CMH's Individual Permit for Stormwater Discharges from Industrial Activities, and the City of Columbus' Stormwater Drainage Manual (expected to be finalized in March 2006).

The Consultant Team will coordinate with Federal, state, and local agencies to determine permit requirements and mitigation plans needed to complete this

work. An assessment of remediation requirements and potential impacts will also be documented in the EIS. The evaluation of the potential impacts of the proposed improvements upon the potable water supply in the area will be considered in **Task 6.4.3**.

The Consultant Team will obtain a Governor's Air and Water Quality Certificate, pursuant to 49 USC 47106(c)(1)(B). Airport Improvement Program applications for airport projects involving the location of a new runway may not be approved unless the Chief Executive Officer of the state in which the project is located, or the appropriate state official, certifies in writing that there is "reasonable assurance" that the project will be located, designed, constructed, and operated in compliance with applicable water quality standards. The Consultant Team will obtain certification from the Ohio Governor's Office indicating that the Proposed Project will comply with all applicable water quality standards. Certification will be issued in the form of a Governor's Air and Water Quality Certificate.

A general discussion of the cumulative impacts of CMH development and other development proposals in the vicinity will be addressed qualitatively.

Task 6.7: USC Section 303(C) Lands (Formerly Known As Section 4(F))

A complete and detailed analysis of all potential Section 303(c) properties (parks or recreational areas) as well as Section 6(f) (Land & Water Conservation Fund Lands) will be conducted as a part of the EIS. Such properties will be identified, described and the potential impacts to them evaluated. Consideration will be given to all potential uses of Section 303(c) and 6(f) lands including direct use (such as acquisition or demolition) and constructive use (such as increased noise levels or changes in access). **If a formal Section 303(c) statement is required, it will be accomplished under an amendment to this agreement. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.**

Task 6.8: Historic, Architectural, Archaeological, And Cultural Resources

Under the authority of Section 106 of NHPA, the FAA must, prior to expenditure of funds or issuance of a license or permit for the undertaking, take into account the effect the Proposed Project may have on any property listed or eligible for listing in the National Register of Historic Places. This effort involves the identification of National Register eligible and listed properties in the undertaking's Area of Potential Effects (APE) and consultation with the Ohio State Historic Preservation Officer (SHPO).

The APE for archaeological and historic resources consists of all lands currently owned by CMH that are involved in the proposed improvements, parcels to be acquired by CMH as part of the improvements, and those areas within the 65 DNL noise contours of the Proposed Project contours.

The consultation will include one meeting at the SHPO office in Columbus, Ohio to be attended by the FAA and the Consultant Team. Prior to the consultation meeting a detailed literature review will be conducted to identify all known cultural resources as well as delineate previously surveyed areas within the 65 DNL noise contour for the year 2013, associated with the new Runway 10R/28L. Known sites and structures will be mapped on project mapping and an inventory list of known resources with the determination of eligibility indicated will be prepared and keyed to the mapping. In addition, areas of disturbance will be outlined. This information will be provided to the SHPO prior to the consultation meeting.

If additional studies are required, they will be accomplished under an amendment to this agreement. See Exhibit E, Task E.3 for additional scope text. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.

Task 6.9: Biotic Communities

All biotic communities, including flora and fauna which exist in the immediate area of the Proposed Project, will be inventoried and documented. A field review will be completed that will include an assessment of current conditions and verification of the findings of previous environmental surveys. Lists of animal and plant species known or having the potential to occur in the area will be compiled from available data and field reviews and presented in the EIS. The potential impacts to these communities due to the construction and operation of the proposed improvements and alternatives will be quantified and compared. The results will be coordinated with the appropriate local, state and Federal agencies, including the U.S. Fish and Wildlife Service.

Task 6.10: Endangered And Threatened Species Of Flora And Fauna

The effect of the Proposed Project upon state and federally listed plants and animals and their habitats will be evaluated. Examination of previously prepared materials and coordination with appropriate agencies will be required under this task. The Consultant Team will assist the FAA in preparing written consultation with the US Fish and Wildlife Service and all relevant state regulatory agencies in order to determine the potential presence of any rare, threatened, or endangered species or habitats within the project area.

Task 6.10.1: Endangered Species - Surveys

Investigations will be conducted in compliance with the Endangered Species Act. Particular attention will be paid to the potential impacts of the improvement alternatives upon protected species which are permanent or migratory inhabitants of the area.

For costing purposes, assumptions for Endangered and Threatened Species of Flora and Fauna include:

- Potential Indiana bat habitat will be identified. However, it is not expected that the Indiana bat will be listed as occurring at the site, based on previous assessments. As such, the costs do not include Section 7(c) consultation concerning the Indiana bat. If signs of Indiana bat are identified, mist net surveys and Section 7(c) consultation would be conducted under an amendment to this agreement. **Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.**
- The total survey area is defined by the Detailed Study Area (approximately 750 acres).
- Prior experience in this area of Franklin County, Ohio indicates that six state-listed species will require surveys.

Task 6.11: Wetlands And Streams

Most of the Port Columbus International Airport has been subject to wetland and stream delineation in 2003. The results of that work have been reviewed by the US Army Corps of Engineers. In a letter dated August 21, 2003 they ruled that 7.07 acres of jurisdictional wetlands and 11.97 acres of jurisdictional streams/ditches are present at the site. The remaining wetlands and streams are not jurisdictional and are regulated by the Ohio Environmental Protection Agency. The field survey accomplished for **Task 6.9** will also include delineation of both jurisdictional and non-jurisdictional wetlands and streams in the current project area that have not been subject to previous recent delineation. The areas that are covered by the jurisdictional determination will be walked to identify if any significant changes have occurred to any of the known wetlands and to identify if any new wetlands have developed. This accounts for approximately 600 of 750 total acres within the project area. The remaining 150 acres include areas east and west of the airport that were not covered by the jurisdictional determination. These areas will be treated to a complete wetland delineation as described below.

This will include the collection of data and information necessary to determine the boundaries of wetlands under the jurisdiction of the U.S. Army Corps of Engineers (ACOE) and the State of Ohio, Environmental Protection Agency (OEPA). This will include:

- Determination of the landward extent of the Waters of the United States pursuant to the 1987 Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1).
- Development of a written jurisdictional report for submittal to the ACOE and OEPA which contains a description of the methods used in the jurisdictional determination, results of the determination (including wetland determination data sheets), and recent aerial mapping (scale not greater than 1-5,000) showing the approximate extent of existing wetland jurisdictional boundaries.
- Preparation of a written assessment of the current condition and relative value of the functions being performed by the wetlands. This report will also contain types, number and areas of existing vegetation.
- Acquisition of written verification of jurisdictional lines from the ACOE. This will include conducting field reviews of the project area with the ACOE and survey of agreed to boundaries in necessary.

Potential impacts to all wetlands and streams as a result of the construction and operation of the improvement alternatives will be evaluated. Wetland areas will be evaluated under the current State and Federal guidelines for jurisdictional wetlands. During the DEIS process, coordination with the Army Corps of Engineers, the Natural Resource Conservation Service, the U.S. Fish and Wildlife Service, the Ohio Environmental Protection Agency, and other appropriate agencies will take place by the FAA with the assistance of the Consultant Team to delineate and confirm jurisdictional wetlands, habitat values, non-wetland waters of the U.S., and potential mitigation.

This task also includes the identification and characterization of all stream beds in order to satisfy the Ohio Department of Natural Resources, Division of Water. **It is anticipated that additional effort will be required to obtain permits for wetland impacts and to coordinate wetland mitigation. Exhibit E includes a general work scope necessary to obtain permits under Sections 401 and 404 of the Clean Water Act and Isolated Wetland Permits from the Ohio EPA and will be revised after consultation with the necessary agencies. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.**

Task 6.12: Floodplains

The effect of the proposed improvements and viable alternatives upon designated floodplains and floodways will be determined in compliance with Executive Order 11988. Such areas will be identified through Federal Emergency Management Administration Flood Insurance Rate Maps. The evaluation will consider the direct and indirect potential of the actions to impact floodplains. In addition, the requirements of applicable state and local regulations will be identified and complied with. Where floodplain/floodway impacts are determined to occur, conceptual mitigation measures will be provided by the Consultant Team and included in the EIS. The results will be coordinated with the appropriate flood management authorities. **This Scope**

of Work does not include the preparation of detailed floodplain mitigation plans. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.

Task 6.13: Coastal Zone Management and Coastal Barriers

The Consultant Team will document the absence of potential coastal barrier impacts resulting from the proposed alternatives in accordance with the Coastal Barrier Improvement Act of 1990.

Task 6.14: Wild and Scenic Rivers

Based on prior environmental studies at CMH, no nearby rivers have been identified or designated as candidates for classification as wild or scenic rivers. To confirm this observation, the Consultant Team will investigate the current status and classification of rivers within the area of potential impact in accordance with the Wild and Scenic Rivers Act (PL 90-542). The Consultant Team will evaluate the effect of each of the viable alternatives on any river areas under the jurisdiction of the Wild and Scenic Rivers Act.

Task 6.15: Farmland

Farmland values will be identified based upon the criteria of the Farmland Protection Act. Within potential acquisition areas, prime farmlands will be identified and delineated with data and information from the Natural Resource Conservation Service (NRCS). Coordination with the NRCS will take place to identify prime farmland (including direct or indirect conversion) impacts. The NRCS's National Agricultural Land Evaluation and Site Assessment (LESA) methodology and Form AD-1006, Prime Farmland Conversion Rating will be used to determine impacts on farmlands.

Task 6.16: Energy Supply and Natural Resources

The effect of the Proposed Project on energy supplies and natural resources will be evaluated and documented. This will include the effects due to flight operations, including ground support equipment, and natural gas and electrical energy utilization. Data from the EIS air quality analysis and the airport's delay simulation assessment will be used to qualitatively assess the effects of the proposed action on energy supply and natural resources. Through coordination with utility companies and fuel suppliers, the supply and capacity to meet expected future energy needs resulting from the proposed action will also be disclosed. The analysis will also include an assessment of the use of natural resources that may be in limited supply, such as oil, gas, mineral, or other natural resource reserves.

Task 6.17: Light Emissions

The Consultant Team will evaluate the impact of the development alternatives in terms of the airport-related light emissions impacting off-airport land uses. The data collection element of the light emission task will include determining

the location of existing lighting at the airport. The FAA Airports District Office and the CRAA will be contacted to identify any known existing light emission impacts.

The potential for the intrusion of additional light emissions in sensitive areas will be evaluated. The analysis will consider the effects of new and or relocated airport lighting systems and light emissions from aircraft. The location and type of lighting associated with the development alternatives will be evaluated for off-airport impacts. This evaluation will consist of reviewing the proximity and projection of lighting associated with the development alternatives and locating possible impacts. Should off-airport light emission impacts result from the alternatives, mitigation measures such as an earth berm or light baffles will be identified and evaluated.

Task 6.18: Solid Waste Impacts

The potential impacts of the proposed improvements upon solid wastes will be determined. The forecasts of activity developed in **Task 3.2** will be used to estimate any increase in solid waste generation as a result of the proposed improvements. Consultation with the Solid Waste Authority of Central Ohio will be made to determine the capacity of existing and proposed solid waste disposal facilities will and their ability to accommodate the increased demand estimated. The analysis will also consider if the proposed improvements will directly affect any solid waste site and if the location of sites complies with the proximity requirements of FAA Order 5200.5A and Policy and Procedures Memorandum (PPM) 5210.2, as amended.

Task 6.19: Construction Impacts

Construction impacts associated with the proposed development will be investigated. The possible short-term environmental impacts related to constructing the development alternatives will be assessed. The analysis will focus on the following issues:

- Construction equipment noise
- Air and water pollution
- Hazardous waste
- Solid waste removal
- Aircraft noise impacts due to operation of the airport during construction

The Consultant Team will be responsible for providing the following data pertaining to potential construction impacts from the Proposed Project and alternatives:

- Location of a centralized construction staging area
- Conceptual sedimentation, erosion control, and general volumes of water flows
- Disturbance of drainage systems (water quality)

- Volumes of fill
- Location of barrow pits and estimated transportation route to construction

In addition, FAA construction guidelines and required permits will be outlined. The Consultant Team will assess the potential impacts related to the construction of each of the alternatives evaluated in detail. Many of the potential impacts will have been covered under previous portions of the environmental analysis (i.e. noise, air quality analysis). Potential construction impacts, not covered under other portions of the assessment, will be analyzed in this section. This assessment will include a general description of the type and nature of each construction activity and the nature of the impact and its associated mitigation method. In addition, the potential for impacts resulting from possible hazardous waste sites and underground storage tanks based on input from the EDDA tasks will be assessed. (**Task 12**).

Temporary measures, needed to mitigate construction impacts, will be identified. These could include such items as erosion control, temporary detention basins and construction material haul routes. Reference shall be made to AC 150/5370-10 "Standards for Specifying Construction of Airports" and Item P-156 "Temporary Air and Water Pollution, Soil Erosion and Siltation Control".

Task 6.20: Surface Transportation

The Consultant Team will coordinate with the Ohio Department of Transportation, Franklin County engineers, and the City of Columbus to address associated surface transportation impacts during the conduct of the EIS. Surface transportation impact analyses will include:

- Impacts on Interstate, State, County and City roads, including noise, congestion, and disruption
- Disruption and deficiencies resulting from alternative development actions

The Consultant Team will be responsible for gathering and/or providing the following data pertaining to the roadways located within the airport environs which will be impacted by the Proposed Project:

- Possible roadway relocations and alignments
- Disturbance of drainage systems (water quality)
- Changes in community access and response times for fire, police, and life squad
- Traffic analysis to include: level of service, intersection analysis, turning movements, numbers of lanes, signalized intersections, stop signs, speeds, volumes (before and after runway construction), and vehicle mix

- Locations of lights and NAVAIDS with respect to relocated and existing roadways
- Documentation of the engineering planning assumptions and source of design parameters (county, state)

Analysis of this data will include forecasts of traffic considering historic trends, existing and planned development, and infrastructure capacity to accommodate growth. Traffic forecasts will be identified, in consideration of planned public and/or transit improvements.

The access analysis will be based upon the data available in the *Airfield Planning Report* and supplemented with information currently available from CMH, Franklin County, the City of Columbus and the Ohio DOT. The roadway system, under each scenario, will be described by the following characteristics:

- Satisfactory - operating at or below capacity
- Minor deficiency - operating above capacity
- Major deficiency - operating significantly above capacity

Included in the review will be an illustration of major intersection deficiencies. Upon identification of the impact on the roadway system of the various alternatives, impacts of the roadway conditions on adjacent municipal functions (fire, police, snow removal, etc.) will be reviewed. Emphasis will also be placed on identifying roadway conditions which are disruptive to area businesses and residents.

Task 6.21: Hazardous Materials

Sites containing hazardous substances or environmental contamination can have an impact on soils, surface water, groundwater and air quality within the project area. Former Air Force Plant 85, located immediately to the south of CMH, is listed on the National Priorities list and has been extensively investigated and remediated by the Air Force. Prior to the airport receiving a portion of the former Plant 85 property from the Air Force, the CRAA conducted grided sampling to assess the current environmental condition of the property. Additionally, the former AirNet facility and existing rental car storage lots are located within the proposed development area.

This section will provide a general overview of the environmental condition of the proposed development area. This information will be used to determine the effect the Proposed Project will have on the potential environmental sites and how the sites could effect the cost of development. This assessment will involve the following:

- Review of existing relevant CRAA and Air Force reports and studies
- Review of tenant's environmental reports and studies
- Environmental agency database survey
- Review of historical aerial photos

- Interviews with knowledgeable parties
- Visual survey of the area

Using this information, the known or perceived presence of areas containing hazardous contamination will be identified and evaluated. The potential costs, conflicts, and delays associated with hazardous materials and contaminated sites will be identified to the level currently required by the FAA.

Task 6.22: Other Considerations -- Cumulative Impacts Analysis

Any other environmental considerations which may be applicable or pertinent to the Proposed Project will be addressed. The Proposed Project's relationship to other plans, directives, and goals of the Columbus area will be qualitatively studied. The major elements of other proposed development action will be discussed. The cumulative impacts of all the proposed improvements, when combined with the existing and reasonably foreseeable future (generally five years beyond build-out year) projects within the area, will be discussed in the tasks described above for the appropriate impact category. In addition, a qualitative discussion of the potential positive and negative consequences of the proposed improvements upon other communities will be provided.

TASK 7: DRAFT REPORT PREPARATION

The Consultant Team will be responsible for preparing, printing, and distribution the Preliminary DEIS and DEIS.

Task 7.1: Preliminary Draft EIS

The Consultant Team will document the results of the project coordination and analyses in a PDEIS to be submitted to the FAA for review and comment. A total of **Ten (10) copies** and pdf files of the document will be prepared and distributed by the Consultant Team. PDEIS exhibits will be produced in black and white unless it is necessary to produce an exhibit in color for legibility.

Task 7.2: Draft EIS Preparation

The comments on the PDEIS will be incorporated into the document. **One hundred (100)** hard copies and **One hundred (100)** CDs of the document will be prepared and distributed by the Consultant Team to local libraries, municipal buildings, CRAA, and FAA. **If additional copies are determined to be necessary, they will be printed and charged on a per copy basis through Task 11.9.** The Consultant Team will develop a distribution list and a distribution letter for the FAA to print on FAA letterhead. The Consultant Team will be responsible for reproduction and distribution of the letter and DEIS. The Consultant Team will supervise the preparation of the newspaper notice of availability and publishing the notice. For costing purposes, it is assumed that the notice of availability will be published two times in three local newspapers. The DEIS will also be available on the project website (See **Task 9.7**).

Task 7.3: DEIS Comment Analysis

The Consultant Team will compile all comments received on the DEIS, including letters, comment forms, website comments and court reporter transcripts. Comments directed to the FAA or CRAA will be forwarded to the Consultant Team for processing. Comment submittals will be inventoried through a computerized database system. All comments will be reviewed, summarized, and cross referenced to the commentor. **If it is determined by the FAA that it is necessary to perform additional analyses significantly beyond that contemplated in this Scope of Work or if the total number of comments received exceed 500, the additional analyses or responses to comments will be performed as an amendment to this Scope of Work. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.** The comments and responses will be organized into a format to be included within an appendix to the FEIS.

Comments will be catalogued into a database using Microsoft Excel for Windows or a comparable database that can be easily translated into Microsoft Excel for Windows. The following process will be used:

- Each comment document received by the Consultant Team will be assigned a sequential identification number.
- The Consultant team will review each comment document and identify and enter into the database the following information:
- Name and address of the commentor.
- Document Identification number.
- Based on an encoding system approved by the FAA, identify potential impacts or other issues raised in the comment document.
- The Consultant Team will prepare a list of issues based on comments received, including a summary statement of each issue.

The Consultant Team will identify comments on the DEIS and make recommendations as to which category of response are needed and the Consultant Team will prepare responses adequately addressing them. The FAA will review all comments, taking into account and evaluating the Consultant Team's draft responses for disposition. It is expected that comments will require one of two types of action. Either the matter has been discussed adequately in the DEIS or it has not been discussed adequately. In the former case, the Consultant Team will draft a complete explanation of the adequacy of the DEIS with respect to the comment, with a reference to the appropriate section(s) of the DEIS. In the latter case, the Consultant Team will recommend, and perform if so directed by the FAA, necessary additional investigations or studies and/or prepare additional or modified material for inclusion in the FEIS in response to the comment. **If any additional analyses or studies are required due to comments on the DEIS, that work will be completed under an amendment to this agreement. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.** In the event the additional studies or investigations are prepared by others, the Consultant Team will be

responsible for supervising its adequacy and recommending to the FAA an appropriate response to the comment. The FAA will oversee this process and approve the substantive issues that will receive responses. The FAA will determine the adequacy of the responses.

TASK 8: FINAL EIS REPORT PREPARATION

The FAA will furnish guidance and participate in the preparation of the FEIS and will independently evaluate the FEIS prior to its approval and take responsibility for its scope and content. The FAA and the Consultant Team will coordinate to insure the adequacy of the FEIS. Subsequent to this, the Consultant Team will aid the FAA in the preparation of the FEIS as described below.

Task 8.1: Preliminary Final EIS

The Consultant Team will update and revise the Draft EIS to formulate a Final EIS. Necessary revisions will be included into the text and additional sections, such as the summary of the public hearing(s), the comment/response appendices and any additional analyses. **Ten copies and pdf files** of the document will be prepared and distributed by the Consultant Team to the FAA for review.

Task 8.2: Final EIS Preparation

Comments on the PFEIS will be incorporated into the document as directed by the FAA. **One hundred (100)** hard copies and **One hundred (100)** CDs of the FEIS document will be prepared and distributed by the Consultant Team to local libraries, municipal buildings, CRAA, and FAA. **If additional copies are determined to be necessary, they will be printed and charged on a per copy basis through Task 11.9.** The Consultant Team will develop a FEIS distribution list and a distribution letter for the FAA to print on FAA letterhead. The Consultant Team will be responsible for reproduction and distribution of the letter and FEIS. The Consultant Team will supervise the preparation of the newspaper notice of availability and publish the notice. For costing purposes, it is assumed that the notice of availability will be published two times in three local newspapers. The DEIS will also be available on the project website (See **Task 9.7**).

Task 8.3: FEIS Comment Analysis

The Consultant Team will itemize and catalog comments received in response to the FEIS. Comments directed to the FAA will be forwarded to the Consultant Team for processing. Comment submittals will be inventoried through a computerized database system. All comments will be reviewed and summarized and cross referenced to the commentor. **If it is determined by the FAA that it is necessary to perform additional analyses significantly beyond that contemplated in this Scope of Work or if the number of comments received exceed 200, the additional analyses or responses to comments may be performed as an amendment to this Scope of Work. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.**

The comments and responses will be organized into a format to be included within an appendix to the Record of Decision (ROD).

Comments will be catalogued into a database using Microsoft Excel for Windows or a comparable database that can be easily translated into Microsoft Excel for Windows. The following process will be used:

- Each comment document received by the Consultant Team will be assigned a sequential identification number.
- The Consultant Team will review each comment document and identify and enter into the database the following information:
  - Name and address of the commentor.
  - Document identification number.
  - Based on an encoding system approved by the FAA, identity potential impacts or other issues raised in the comment document.
- The Consultant Team will prepare a list of issues based on comments received, including a summary statement of each issue.

The Consultant Team will identify comments on the FEIS and make recommendations to which responses are needed and adequately address them. The FAA will review all comments, taking into account and evaluating the Consultant Team's draft responses for disposition. It is expected that comments will require one of two types of action. Either the matter has been discussed adequately in the FEIS or it has not been discussed adequately. In the former cases, the Consultant Team will draft a complete explanation of the adequacy of the FEIS with respect to the comment, with a reference to the appropriate section(s) of the FEIS. In the latter case the Consultant Team will recommend, and perform if so directed by the FAA, necessary additional investigations or studies and/or prepare additional or modified material for inclusion in the FEIS in response to the comment. **If any additional analyses or studies are required due to comments on the FEIS that work will be completed under an amendment to this agreement. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.** In the event the additional studies or investigations are prepared by others, the Consultant Team will be responsible for supervising its adequacy and recommending to the FAA an appropriate response to the comment. The FAA will oversee this process and approve the substantive issues that will receive responses. The FAA will determine the adequacy of the responses.

TASK 9: PUBLIC INVOLVEMENT

An extensive public involvement program will be implemented to allow interested agencies, groups and individuals the ample opportunity to review and comment on the study. During the course of study, all views will be carefully weighed and solutions developed which will serve the common interests of all parties. The public, concerned with the future design of CMH, comprises many groups around the airport area. These include the abutting neighborhoods, airport users, regional

business and civic groups, and local media. A program to involve neighborhood residents which includes focus groups/special presentations, public workshops, newsletters and a web site is outlined below. Since the airport is a facility serving the entire region, a program to reach groups, such as airport users, who are beyond the airport boundary is also required. The following tasks contain the Consultant Team's recommendations for communicating with these important constituencies.

Planning Advisory Committee Meetings are unique to the FAR Part 150 planning process. However, the concept can be translated to the EIS process through the use of a Study Advisory Committee (SAC) that can assist in fulfilling the public input requirements of NEPA. The Part 150 Study Update will be conducted simultaneously with the EIS. Therefore, where practical, public input meetings will be coordinated to occur on the same days and at the same locations so that the public is neither confused nor burdened with having to attend multiple meetings. Tasks unique to the Part 150 are provided in Exhibit D of this Scope of Work.

Task 9.1: Study Advisory Committee Meetings

A Study Advisory Committee (SAC) will be convened for the duration of the EIS process. It is anticipated that many of the members of the Part 150 PAC will also be included on the EIS SAC (non-PAC members will include regulatory agencies). Therefore, when practical, PAC and SAC meetings will be held on the same date and at the same location. There will be two agendas and the meetings will be scheduled back to back to reduce the burden on PAC/SAC participants. The Part 150 Study Update includes five (5) Planning Advisory Committee (PAC) meetings to discuss Part 150 issues. After or before those meetings, the EIS SAC will be held to discuss EIS issues and status. In addition, three additional PAC meetings, focused entirely on EIS issues, will be held at key milestones after the completion of the Part 150 study. See Exhibit D for a description of the Part 150 PAC process.

Meeting Total: Eight (8) SAC meetings

Task 9.2: Project Mailing Lists

Mailing lists will be assembled and maintained based on the Consultant Teams' list for the EIS Agency Scoping Meeting notification and the Agency Scoping Meeting attendance list. This list will include Federal, state and local agencies, Federal, state and local elected officials, organizations, interest groups and attendees of the Agency Scoping Meeting. An additional mailing list will include interested citizens. These mailing lists will be created and maintained throughout the study by the Consultant Team. CRAA will provide to the Consultant Team their current mailing lists.

Task 9.3: Focus Group Meetings/Special Presentations

The Consultant Team will schedule and attend twelve (12) focus group meetings/special presentations with small groups of individuals with specific concerns. These meetings/presentations will provide additional consultation in addressing concerns in a forum that may allow greater emphasis on localized

issues which affect the overall project progress. The makeup and location of these meetings will be determined from prior committee or public meetings. For example, focus group meetings/special presentations may be conducted for the local planning commissions, city councils, county commissions, neighborhood associations, etc. Memorandums will be prepared by the Consultant Team after each meeting for inclusion in the EIS and for distribution to the FAA.

Meeting Total: Twelve (12) Focus Group/Special Presentations

Task 9.4: Public Workshops

Four (4) pairs (eight total) of public workshops will be conducted during this EIS. The CRAA and FAA will participate in the development of meeting materials with the FAA having final approval for the use of any and all materials at the workshop and in presentations. The CRAA has conducted workshops in pairs, one on the east side of the airport and another on the west side, on the same evening. The intent for this EIS would be to continue holding a pair of workshops on the east and west side of the airport, but to hold them on consecutive nights versus on a single night.

The first pair of workshops will be the Public Scoping Workshops, held at the beginning of the study. These are scoped and costed under **Task 2.5**.

The second pair of workshops will be accomplished about one-third through the study to provide the results of the EIS purpose and need analyses and the evaluation of alternatives and after completion of the Part 150 NEM update to review new findings on noise impacts and discuss potential mitigation measures. Baseline existing information about the affected environment will also be presented.

A third pair of workshops will occur about halfway through the EIS study and will include the information at the first workshop as well as the results of the preliminary environmental impact analyses (environmental consequences) and the development and evaluation of Part 150 alternatives. The third pair of workshops will present the preliminary findings and disclosure of impacts of the EIS and the recommended Part 150 noise compatibility plan.

The fourth pair of workshops will be held in conjunction with a pair of Public Hearings after the release of the Draft EIS. The scope and cost for these workshops is under **Task 9.5**.

The workshops will be held in an informal open-house format late in the afternoon to early in the evening for a period of three hours. Each pair of workshops will be held over two consecutive days. Representatives from the FAA and the Consultant Team will staff the meeting during the entire period to talk individually with citizens about their concerns. CRAA staff are not assigned specific positions in the workshops, but are welcome to attend and work stations at their discretion. The Consultant Team will furnish board-mounted graphics (maps, charts, etc.) to be on display so that citizens can become familiar with the issues and impacts of the project and to locate their

respective residence or business relative to the project. A handout will be provided to all attendees which summarizes the project to date. The public may provide comments in writing on forms located at the meeting.

As with the PAC/SAC meetings, when practical, the public information workshops will be coordinated with the Part 150 Public Information Workshops in terms of date/time and locations. When the public information workshops for the two studies are coordinated, the meetings will be clearly delineated and separate. This will be accomplished either through a two-room venue or through another equal means. There will be two sign-in sheets, two handouts, and two separate presentations of materials.

The Consultant Team will advertise the meetings, prepare media kits, and conduct a media briefing prior to the public workshops (as directed by the FAA). FAA will review and approve all meeting materials, including advertising, prior to final printing. *For the purposes of costing this task, advertising will be placed one time in the following local newspapers prior to the public meetings: the Columbus Dispatch, the Whitehall News (through Suburban News Publications), This Week Bexley, Gahanna and Reynoldsburg editions and the Call & Post Newspaper (Columbus edition.) Depending on the response from the Agency Public Workshops (Task 2.5), a determination will be made to continue advertising in the La Voz Hispana and the Somali papers. If it is determined to continue publishing in these papers, the additional expense will be authorized on a task order basis through* ***Task 11.9****.*

The Consultant Team will bear all costs of advertisement for notification and will provide for the meeting facility and equipment including chairs, tables and easels, as needed for the meetings. The workshops will be summarized in a memorandum to the project file.

Meeting Total: Four (4) pairs of Public Workshops (8 total).

Task 9.5: Public Hearings with Workshops

The Consultant Team will be responsible for arranging the appropriate locations, times, hearing officer, and verbatim transcript (court reporter) for a public hearing. The hearing will be held at approximately 30 days after the release of the Draft EIS. The objective of the hearing will be to provide a brief summary of the EIS findings and to hear the comments and concerns of the public, and representatives of applicable government agencies. Each hearing will be conducted simultaneously with an informal workshop, staffed by the FAA, and Consultant Team representatives, in which pertinent information will be displayed (See **Task 9.4** for description of meeting tasks). Written

comments or private oral comments (documented by a court reporter) will be accepted during the hearing. As applicable, this hearing may serve as the public hearing for the 401/404 permit process and other permit processes.

The Consultant Team will coordinate the timely advertising for community notification at least 30 days prior to the hearing and provide the FAA with a draft Federal Register Notice of Public Hearings in accordance with FAA requirements. FAA has ultimate responsibility for determining that the hearing and all required notification is implemented in accordance with FAA policy. The Consultant Team will prepare advertisements for the hearing, be responsible for court reporting, bear all costs of advertisement, and will provide for the meeting facilities and equipment including chairs, tables, and easels, as needed for the meetings. The results of the public hearing will be documented for use by the Consultant Team in preparing a summary of public involvement and in preparing a response to public comments.

Task 9.6: Meeting Graphics

Graphics will be prepared by the Consultant Team for use in all public meetings. Presentation media will include 30" x 40" display boards and plotted maps, handouts, slides and overhead transparencies. Up to one hundred (100) new presentation boards will be prepared throughout the EIS. These will be EIS specific boards. The Part 150 Study has an allocation for preparing Part 150 specific boards. There are some 'generic' noise boards that may be used by both the Part 150 and the EIS. There is no additional cost for the use of these boards by either study. Presentation boards will be used to educate attendees on the EIS process, describe methodologies, display inventory information, show results of impact assessments, demonstrate the potential alternatives, and define the exact recommendations. Many materials will also be prepared as page-size handouts during the course of the study for focus groups and/or special presentations. Completed presentation boards and electronic files will be provided to the FAA and CRAA for their use during and after the study.

Task 9.7: Web Site

In an effort to distribute data quicker and more efficiently, the Consultant Team will create, host, and maintain an EIS website that will be accessed directly and through the CRAA website. The general topics that will be covered on the website will be:

- FAQ's
- Background
- EIS Scoping Process
- Scope of Work for EIS
- Proposed Project
- Alternatives to the Proposed Project
- Airport Vicinity Land Use Plan
- Draft EIS
- Opportunities for Public Comment on the EIS

- Announcements on Public Release of EIS for Comment
- For more information
- Schedule
- Comments on the DEIS
- Record of Decision
- Glossary
- Links

Comments will be received on the website. The FAA will review and approve all information prior to it being placed on the website. Draft and Final EIS documents will be available on the site, as well as, handouts from the public workshops. Other material may be placed on the site at the discretion of the FAA. The website will include links to other appropriate website, such as the CRAA and the FAA websites for the convenience of the site users.

TASK 10: CONCEPTUAL DESIGN ACTIVITIES

As necessary, the Consultant Team will supplement the conceptual design work that was completed in *the Airfield Planning Report Associated with Replacement of Runway 10R/28L*. It is anticipated that additional analysis will need to be done to identify slopes (cut/fill amounts) and to identify the construction limits of the projects.

TASK 11: PROJECT MANAGEMENT AND DECISION SUPPORT ACTIVITIES

Task 11.1: Project Update Meetings

Preparation of the EIS will require substantial coordination among the FAA, CRAA staff, and the Consultants on technical, strategic and processing issues. This coordination will occur on a semi-formalized, regular basis, with allowances for more formal periodic meetings at strategic mileposts in the study. This task provides for meeting time and preparation time for monthly coordination telecom meetings. This budget will provide for the Project Manager and one accompanying professional at each meeting, although additional personnel might attend under funding from other applicable work tasks. The Consultant Team will be responsible for preparation of all meeting agendas, handouts, and the preparation/distribution of meeting minutes.

Meeting Total: 36 two hour meetings (based on 36 month schedule)

Task 11.2: FAA Coordination Meetings

Presentations of the findings of the EIS will be made by the Consultant Team to the FAA in mid-project. These presentations will focus on providing information on the study and its potential mitigation commitments, and on the responses of the public and agencies to the DEIS. Ten (10) presentations to the FAA will be conducted in either Detroit at the ADO office or in Chicago at the Region office on preliminary findings throughout the duration of the study. Provisions will be made by the Consultant Team to have the meeting available via a web-based sharing program such as Net-Meeting to insure wide

attendance among the FAA. The budget for this task allows for two Consultant Team members to attend each meeting. However, more team members may attend under separate budgets.

Meeting Total: 10 meetings (location TBD, but assumed in Detroit and/or Chicago)

Task 11.3: FAA/Sponsor Leadership Meetings

The FAA and CRAA will meet quarterly throughout the study to discuss the project and its findings to date. The Consultant Team will not attend these meetings, however it will assist the FAA in support of presentation materials for the meetings. This includes preparing agendas, handouts, powerpoint presentations and large scale graphics, as necessary. Meeting summaries will be the responsibility of either the FAA or the CRAA, not the Consultant Team.

Task 11.4: Assist with Draft Record of Decision/Record of Approval Preparation

The Consultant Team will assist the FAA in support of the preparation of the Draft Record of Decision (ROD) for the EIS. Such assistance may include organization and review of the comments received on the Final EIS and providing the FAA with supporting information for the preparation of the preliminary draft(s) of the ROD.

Task 11.5: Processing FAA Freedom of Information Act (FOIA) Requests

The Consultant Team will assist the FAA in processing Freedom of Information Act (FOIA) requests. Upon the receipt of an FAA FOIA request, the FAA will forward the request, stating the specific information requested along with any applicable FAA information which the Consultant Team may not have, to the Consultant Team. The Consultant Team will be responsible for the compilation, copying, and distribution of the releasable information. The FAA will be responsible for preparing the transmittal letter on FAA letterhead and providing it to the Consultant Team. Before distribution is made, the FAA will review the information to ensure that the information is consistent with the FAA's FOIA requirements. The FAA will determine what materials are to be denied, that the denied materials is to be identified and sign the transmittal letter. For each FOIA request, the Consultant Team will prepare a complete list of the documents provided and those denied. The document lists will contain sufficient information to identify each document such as the type document, date, originator, receiver, subject matter, etc. The document lists shall be contained in the response to the FOIA request. A copy of the FOIA transmittal letter along with the document list shall be provided to the FAA**. If the amount budgeted is exceeded, the additional assistance will have to be authorized under an amendment to this agreement. Work will not be started on additional services until the FAA approves the scope and the CRAA amends the contract.**

Task 11.6: Assemble and Maintain Document Record and Index

The Consultant Team will maintain documents that may be included in the file considered for the Administrative Record (AR). It will consist of a complete, well organized, standardized database of each document and **three copies** (3) of all documents relating to the EIS to be used by the FAA in its decision-making process (Record of Decision). This will include documentation used in the preparation of the EIS, including but not limited to, various types of correspondence, appendices, exhibits, references, maps, computer runs, and other supporting documentation not covered by copyright laws, necessary for the full legal record. The database will identify the sequential numbering of the documents as received, the date of the document, the originator of the document, the recipient of the document, the subject of the document, the type of document (e.g. letter, memorandum, map, working paper, etc.) and inclusive pages of the document. The Consultant Team will provide the FAA and CRAA with a cumulative to-date printout of the database as part of the monthly progress report.

The AR documents will be maintained chronologically, with pages numbered consecutively. The material will be compiled and presented to the FAA in three-ring-view-back binders. The Consultant Team will provide to the FAA the original and one copy (made from the original after pages are numbered) of all materials complied.

At some point during the initial phase of the EIS, the Consultant Team will demonstrate the functionality of the database and organization of the AR for FAA concurrence. All work products produced by the Consultant shall be available to the FAA in both hard copy and form and on CD using Microsoft Word for Windows or a compatible word processor that can be easily translated into Microsoft Word for Windows.

Task 11.7: Project Management

This task involves the routine coordination and management of the project. It includes monthly project progress report preparation, meeting minutes preparation, subcontractor coordination, work plan updates, and project close-out procedures and the like.

The Consultant Team will submit, along with an invoice, monthly written status reports on the progress of their work to the FAA, with concurrent copies to CRAA. The monthly reports will describe the present status of each aspect of the work, any problems encountered, the amount of work accomplished, a comparison of actual accomplishments to the goals established for the period and work anticipated to be accomplished in the coming month. In the event that established goals have not been met, the monthly report will describe the reasons for slippage and actions to be undertaken in order to return to schedule. The monthly report will also describe recommendations for modifications to the Scope of Work, changes in methodology or schedules for completion, decisions or conclusions which would alter the course of the study, and dates of upcoming meetings.

Task 11.8: Consultant Team Coordination Meetings

The Consultant Team will hold internal, ½ hour, twice monthly telecoms on the project status, schedule, and deliverables. Three (3) of these meetings will occur in Landrum & Brown's Cincinnati office.

Meeting Total: 72 meetings (assumes 36 month project duration)

Task 11.9: Special Considerations/Extra Tasks

The Consultant Team has extensive experience in the types of environmental studies such as the one considered in this Scope of Work. That experience has demonstrated that the success of the environmental process, and the ability to deliver the work products on time and within the budget, is critically dependent upon variables which are often beyond our control. Examples include, but are not limited to: accuracy and availability of data from previous studies and clients' files, special requirements of committees involved, additional meetings required to coordinate environmental issues on behalf of the FAA and CRAA, additional technical analysis requested by regulatory agencies and not provided for in the scope, change from Order 5050.4A to 5050.4B, changes to the analytical models used for impact assessment (in particular, a change to INM or EDMS versions during the course of the studies), and extraordinary numbers of required reviews of the Consultant Teams' draft work products. These types of issues may constitute extra services and/or expenses above those contemplated by this work scope and the associated cost proposal. As the studies progress, it will be incumbent upon the Consultant Team to bring to the attention of the FAA and CRAA, in a timely fashion, any unforeseen difficulties such as those stated above and negotiate appropriate additional compensation necessary to fund those extra costs. Changes to be approved by the FAA and CRAA authorizes the expense through a task order before the work is initiated.

Task 11.10: Electronic Document Control

The Consultant Team will develop and maintain a password protected website to allow the FAA and their designees (e.g. CRAA) access to project files. The system will version files and will allow access for retrieving and editing files. The Consultant Team will address any questions and maintain the files on the system.

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This Scope of Work will be performed in accordance with the Memorandum of Understanding executed between the Columbus Regional Airport Authority and the FAA.