

# Idaho Airport System Plan (IASP)-2008

## Scope of Work

### Introduction

The Idaho Airport System Plan (IASP)-2008 is being conducted to provide an analysis of the statewide aviation system that is needed to meet current and future needs. The IASP will provide Aeronautics with guidelines to continue the successful development of its aviation system, with an emphasis on planning for the airport system as a whole. Conducting a statewide aviation planning study requires specialized skills. While master planning, environmental analyses, and financial evaluations for individual airports are often relevant to the system planning process, statewide aviation system planning requires a more broad-based approach. A broad-based approach is necessary to incorporate a systematic process; in this process, the needs of each individual airport are considered within a broader framework for a more global client, Aeronautics. A successful statewide aviation system plan incorporates both top down and bottom up approaches.

The update to the IASP will be developed using an approach that articulates the current status of aviation and the aviation system in Idaho. The approach to the update of the IASP will assess current and future system deficiencies, while evaluating the impact of new technologies related to aviation.

A strategic approach will be used to conduct the IASP. The approach to the IASP will be to:

- Utilize proven methods consistent with the FAA's Advisory Circular on System Planning
- Be visionary in establishing future goals for the system
- Develop a process that is consistent with DOT planning for other modes of transportation
- Establish performance measures for system evaluation
- Consider the implications of new technology, including very light jets, on the airport system
- Benchmark the adequacy of the current aviation system
- Analyze potential NPIAS changes
- Assess needs related to economic development, air service, air cargo, and multimodal accessibility
- Determine the financial requirements of the system and prioritize future system development
- Provide an implementation plan to ensure adoption and action as a result of the plan
- Achieve and maintain interest in the status of the study
- Create sustainability in the planning process

Two significant studies are anticipated as part of the IASP – a Statewide Airport System Plan and an Economic Impact Analysis. The tasks associated with each of these studies are summarized below.

### Statewide Airport System Plan

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#### Task 1: Scoping

The specific needs of the IASP 2008 will be determined during the scoping process. The scoping process includes the following elements:

- Meeting with ITD-Aeronautics to discuss specific issues, concerns, and anticipated results
- Determination of number of airports to be included in "system" and level of effort to be spent on each type of airport

- Development of a scope of work that is acceptable to the Federal Aviation Administration (FAA) and ITD
- Development of a budget to conduct the scope of services
- Revisions to scope of work and budget to address funding availability

The scoping process involves significant coordination between the consultant team and ITD-Aeronautics to ensure that the goals for the project will be met through the study's conduct.

*Consultant Team Tasks:*

- Meet with ITD to discuss preliminary scope elements
- Prepare draft scope of work; revise based on comments received
- Prepare budget for revised scope of work
- Negotiate final scope of work and budget
- Prepare a Professional Services Agreement

*ITD-Aeronautics Tasks:*

- Provide input on scope elements
- Determine number of airports to be included in system and level of analysis for airports
- Review draft scope of work and provide comments
- Negotiate final scope of work and budget
- Prepare a Professional Services Agreement
- Coordination with FAA regarding funding, grant preparation, and award

**Task 2: Establish Project Advisory Committee (PAC)**

To provide guidance and support for implementation of the System Plan, establishment of a Project Advisory Committee (PAC) is recommended. Working with the consultant team, ITD-Aeronautics will identify the membership for and then create a PAC for the study. PAC members will be selected to ensure participation by a wide range of interests including but not limited to the following:

- Airports (both geographical distribution and airport size should be considered)
- State transportation (other modes)
- State economic development
- Idaho Airport Managers Association
- Idaho Aviation Association

One of the most important considerations in selecting PAC members is their ability to gain consensus from others to ensure the study's recommendations move forward.

The first meeting of the PAC will be used to:

- Establish/refine a vision for the airport system
- Identify goals for the airport system
- Agree upon measures that should be used to evaluate the airport system
- Identify benchmarks that should be employed to identify system adequacies and deficiencies or possible system duplications

It is intended that this meeting will take place at least one month after the project has been initiated to provide time for the consultant team to gather relevant information and prepare meeting materials that will ensure a successful meeting.

*Consultant Team Tasks:*

- Work with ITD on identification of PAC members
- Prepare materials for first PAC meeting

*ITD-Aeronautics Tasks:*

- Determine PAC membership
- Solicit commitment from PAC membership in writing
- Coordinate PAC meeting times and organize meeting locations

**Task 3: Establish System Goals and Performance Measurements**

The development of goals and measurements is a critical step in the system planning process. The primary goal of the Statewide Aviation System Plan is to capture data that enables ITD-Aeronautics to make informed decisions related to planning and developing the state airport system. To reach this goal, working with Aeronautics and the PAC that is established for the plan, the consultant team will coordinate efforts to first establish a long-term vision for Idaho's public-use airport system. Once a system vision is established, goals that will ultimately direct the State's airport system toward its established vision will be identified.

System goals will be descriptors of an effective and efficient airport system. As part of this task, the consultant team will work together (with ITD-Aeronautics, PAC, and others as appropriate) to translate system goals into performance measures for the State's airport system. Performance measures identified in this task will be used subsequently in the plan to determine how the existing system of public-use airports is currently performing. By identifying benchmarks for each of the system performance measures, it will be possible to evaluate Idaho's current public-use airport system and to identify its adequacies and deficiencies. The benchmarking process ultimately enables Aeronautics to identify projects that have the ability to move the Idaho airport system toward its established vision. While the actual evaluation of the system to determine its adequacies and its deficiencies will take place in a subsequent study task, this task will identify system goals and performance measures that will be used to evaluate the Idaho airport system.

The results of this effort will be documented in a chapter, and the results will be used in subsequent tasks to evaluate Idaho's airport system and to direct the system's future development. The number of copies, review process, and coordination efforts related to this and subsequent tasks will be detailed in the Documentation and Coordination task.

*Consultant Team Tasks:*

- Meet with ITD-Aeronautics to develop draft system goals and performance measurements
- Develop chapter to summarize results
- Review chapter using QA QC process

*ITD-Aeronautics Tasks:*

- Provide input on draft system goals and performance measurements
- Review chapter and provide comments

**Task 4: Identify State, Regional and Local Airport Issues**

The exploration and identification of aviation issues in Idaho is an important task in the evaluation of the State's aviation infrastructure needs. Issues identified through this process will be categorized in terms of each issue's potential impact on the aviation system in a matrix format. Each issue will be discussed in appropriate detail to evaluate the current trends, which airports the issue is likely to impact, and the

degree of the impact on future development at the airport. This matrix will be used in the subsequent analysis of alternative aviation systems and the sensitivity analyses.

The issues task will be supplemented at the conclusion of the inventory task, during which additional issues may surface as a result of the coordination efforts on the local level. The results of this effort will be summarized in Task 5, Inventory.

Compatible land use is one of the most significant issues related to the long-term development potential of Idaho's airports. Guidelines developed in nearby states including Washington, Oregon, Utah, and California will be obtained and reviewed for consideration of their potential relevance to Idaho's airport compatible land use issues. In addition, as timing permits, the Transportation Research Board's (TRB's) Airport Cooperative Research Program (ACRP) project regarding compatible land use and the FAA's planned update of its compatible land use advisory circular will be reviewed and considered.

*Consultant Team Tasks:*

- Develop preliminary list of issues based on current knowledge
- Prepare matrix to categorize identified issues
- Update issues list, as appropriate
- Obtain, review, and summarize airport compatible land use guidelines from WA, OR, UT, CA
- Obtain, review, and summarize ACRP and FAA compatible land use materials
- Conduct 2<sup>nd</sup> PAC Meeting

*ITD-Aeronautics Tasks:*

- Provide input on draft issues
- Review matrix and provide comments
- Review summaries of land use guidelines and materials and provide comments
- Organize and participate in 2<sup>nd</sup> PAC Meeting

**Task 5: Conduct Inventory**

It is important that the inventory effort follows the development of goals and performance measurements to ensure that all data needed for measurement purposes is gathered in the inventory process. Through establishment of the goals and performance measurements, consideration will be given to the need for data beyond what may exist in existing Aeronautics and FAA files. Environmental considerations; state, regional and local airport issues; airport access; and intermodal connections will be included in the inventory analysis.

Maximum use will be made of existing data (5010 Forms, airport layout plans, aerial photography, master plans, and other data). An inventory data collection form will be developed that addresses all data needs for the IASP. Each airport's data collection form will be populated by the consultant team using existing data made available by Aeronautics and FAA, as well as data from the consultant team's files. This form will then be mailed to all airports to review and update based on current conditions.

To provide a greater understanding of existing and planned airport facilities, activities, and users, 40 airports will have an on-site inventory conducted. The selection of the 40 airports will be made in consultation with Aeronautics based on available data, recent changes, and need for additional information.

To address access and intermodal issues, each Metropolitan Planning Organization (MPO) in Idaho will be contacted to gather their comprehensive plan sections relevant to airports, access, and intermodal issues. These issues will be summarized in the inventory. Additional data to be summarized as part of

the inventory includes the existing airspace configuration, socioeconomic and demographic data and forecasts, and economic development activities.

To address airport compatible land use issues, current airport compatibility challenges for each airport in the System, land use control measures, airport land use issues at Idaho airports, and land use compatibility planning steps will be reviewed and summarized. Existing land use planning authority and other issues specific to Idaho's previous efforts at land use planning will be evaluated.

The output from this task will consist of an overview of the existing airport system. This information will be compiled to serve as a source of information for subsequent tasks. A chapter will be prepared that presents this information in tabular, narrative, and graphic form. In addition, an existing system map will be prepared that depicts locations and FAA roles of the airports. Maps prepared in the inventory effort will be GIS-based. These maps will be used subsequently in the benchmarking analysis that is conducted to determine adequacy of the existing airport system.

*Consultant Team Tasks:*

- Develop draft airport inventory data collection form
- Compile data and populate forms, as appropriate
- Distribute and follow-up with each airport regarding form
- Conduct 40 on-site airport visits
- Contact MPOs to gather comprehensive plan data on airports, access, and intermodal issues
- Gather compatible land use data including issues, challenges, measures, and authority
- Inventory and assess compatible land use status and issues at each airport
- Develop chapter with tables to portray much of the existing conditions information
- Review chapter using QA QC process

*ITD-Aeronautics Tasks:*

- Provide copies of most recent airport master plans and ALPs
- Provide most current aerial photography available
- Provide copies of most recent airport inspection data
- Provide contact listing for all airports in system
- Provide copies of related compatible land use planning items
- Review and approve list of airports to visit
- Review chapter and provide comments

**Task 6: Conduct Role Analysis**

The FAA currently has a limited classification system for airports, primarily using the distinction of commercial versus general aviation. This classification system does not relate each airport's role to factors such as population, economic needs, geography, and accessibility. The system also does not take into consideration the types of activity occurring at each airport. The current Idaho airport roles are based on funding categories and also do not relate to aviation demand or needs within the system. The role analysis for the IASP will consider these factors, as well as aviation and non-aviation-related needs and airport functionality to develop a classification system for use in evaluating the airport system's performance. Specific facilities and services, also called system objectives, that relate to the role of the airport will be developed as part of this task. The system objectives will incorporate the FAA's current thinking related to Design Groups C and D versus Design Groups A and B, and will only address commercial service airports to a limited extent.

Potential factors to be used in the airport role analysis will be discussed with ITD-Aeronautics as part of the inventory process as there are data requirements for this analysis. The airport role analysis will consider the FAA and State's current classification systems, with enhancements to make the roles reflect the future needs of aviation technology. The use of the roles will be discussed during this task to provide a clear understanding of how the roles will be used in terms of policy decisions related to projects, funding, and other mechanisms. The naming convention of the roles will be discussed with ITD-Aeronautics and the PAC. The PAC held at the outset of the study can be used to discuss proposed roles and system objectives to obtain consensus regarding this important facet of the IASP.

*Consultant Team Tasks:*

- Provide listing of potential factors for role analysis
- Analyze factors for each airport
- Propose role naming convention and system objectives
- Develop chapter to present role analysis and recommendations
- Review chapter using QA QC process
- Organize 3<sup>rd</sup> PAC Meeting

*ITD-Aeronautics Tasks:*

- Review and comment on factors for role analysis
- Provide input on naming convention and system requirements
- Review chapter and provide comments
- Organize 3<sup>rd</sup> PAC and participate in meeting

**Task 7: Develop Aviation Forecasts**

The forecasting process in the IASP will focus on developing long-term projections that reflect the future need for aviation facilities in the State. Bottom up and top down methodologies recommended by the FAA will be utilized in the development of forecasts for indicators such as based aircraft, annual operations, enplanements, and air cargo activity. The type of aircraft anticipated to operate and base at the airports will also be projected.

Through discussions with ITD-Aeronautics, one methodology will be selected to develop forecasts for such indicators as based aircraft, annual operations, and enplanements. Factors such as socioeconomic growth at the county level, anticipated trends in the aviation industry, airport roles and types of activity by role, and changes in Idaho's aviation activity will be noted in the analysis. Data from the State's acoustical counter program will be incorporated, as appropriate and available.

Baseline data will be developed using the following sequence of sources:

- FAA Air Traffic Activity Data System (ATADS)
- FAA Terminal Area Forecast (TAF)
- FAA 5010 forms
- Airport inventory data collection forms
- Recent airport planning study forecasts completed in the State

Data will be provided by indicator (based aircraft, total operations, and enplanements) in Excel format, organized alphabetically by associated city, with the airport name following the associated city. These data tables will serve as the historical information for use in the forecasting effort.

The results of the forecast analysis will provide 5, 10, and 20-year projections of based aircraft and total operations for all airports. For the commercial service airports, activity projections will be developed based on data from recent airport planning studies or from the TAF.

*Consultant Team Tasks:*

- Develop baseline data using sequence of sources as noted
- Evaluate various forecasting methodologies and select one for each indicator
- Utilize available forecasts for commercial service airports
- Develop chapter to document forecast analysis and results
- Review chapter using QA QC process

*ITD-Aeronautics Tasks:*

- Provide forecasts to FAA review and comment
- Provide data from acoustical counter program
- Review baseline data for relative accuracy
- Review chapter and provide comments

**Task 8: Analyze System Adequacy**

With identified roles, as well as facility and service objectives established for each airport, the Idaho airport system will be evaluated in terms of its performance using the goal categories and performance measurements that were established at the outset of the study. This system evaluation provides a report card of the existing system's performance and provides a baseline for analysis of future aviation system needs. Factors such as accessibility (also referred to as mobility or convenience), aviation demand, safety and security, economic development, and instrument approach capabilities will be considered in the evaluation process. Functionality in terms of the types of users, both existing and projected, will also be analyzed and discussed in this evaluation process.

After evaluation of the existing system, the next step will be to determine if the existing system is capable of meeting future needs in terms of accessibility, intermodal access, fleet changes, economic development, and technology changes. Prior to analyzing future aviation-related needs, the impacts of outside influences will be evaluated. These outside influences include areas of high population growth, anticipated transportation infrastructure improvements, intermodal connections, and state investment decisions that may impact the future airport system's needs. This analysis will identify Idaho's airport system needs to support future demographic changes, economic development, and transportation needs.

Much of the analysis in this task will be developed using Geographic Information Systems (GIS). GIS mapping will be developed to reflect the various airport drive times, tourism data, industry concentrations, and population coverage provided by the existing airport system, as well as the recommended airport system.

*Consultant Team Tasks:*

- Evaluate adequacy of existing and future airport system to meet economic development, accessibility, intermodal access needs, fleet changes, and technology changes, both existing and future
- Develop GIS mapping to reflect applicable analyses
- Develop chapter to document adequacy analysis
- Conduct 4<sup>th</sup> PAC meeting
- Review chapter using QA QC process

*ITD-Aeronautics Tasks:*

- Provide input on economic development factors, accessibility criteria, and intermodal opportunities
- Review chapter and provide comments
- Organize 4<sup>th</sup> PAC and participate in meeting

**Task 9: Evaluate Alternatives**

The analysis of how the existing system is performing will be used to determine where opportunities for improvement exist in Idaho. It is also important to consider the adequacy of the system in terms of outside influences, including airports in neighboring states (within 60 minutes drive time of Idaho border), which provide air access for Idaho residents. Each performance measurement will be reviewed to determine if its existing performance is satisfactory, or if it should be increased in the future. This process will help to set targets for each measurement's future compliance. Alternatives may focus on financing, an expanded versus reduced aviation system, private versus public airport roles, and environmental impacts that offer mitigation versus significant impacts.

An important consideration will be the system of airports included in the National Plan of Integrated Airport Systems (NPIAS). The existing NPIAS system will be evaluated for potential changes in the recommended system. All public-use airports in Idaho's airport system not currently in the NPIAS will be evaluated for potential inclusion in the NPIAS. In addition, specific attention will be paid to examining the current role classifications and existing NPIAS designations and each airport's ability to meet its role in the Idaho system. Analysis of the Valley County and Friedman Memorial-Hailey issues that relate to the ability of the existing airports to fulfill their role in the system, including their NPIAS role, will be conducted. This analysis will consider the current positions of ongoing studies in these two areas and the ability of airports in these regions to meet their role and function based on constraints.

The ability of airports to meet FAA standards will be considered in the analysis, with focus on those that are not capable of meeting standards but may have alternate airports in proximity that do meet standards or a replacement airport should be considered. It will be important to identify the latest funding structure and FAA policies related to the NPIAS prior to discussing potential changes with the FAA.

In those instances where an airport's role or NPIAS classification may need to change, discussions will be held with ITD-Aeronautics, the FAA and possibly the airport representatives to evaluate the potential for support for the recommendation from the local community. Significant changes to airport roles or classifications would require local support and this support should be measured prior to recommendations being finalized.

Based on the results of previous analysis related to airport compatible land use, an analysis of the constraints and impacts imposed on the aviation industry by incompatible surrounding land uses and the physical environment will be prepared. In addition, identification and evaluation of the feasibility of different approaches that can be taken to protect airports from encroachments will be made.

*Consultant Team Tasks:*

- Evaluate alternatives
- Conduct NPIAS analysis
- Analyze compatible land use alternatives
- Develop chapter to document alternatives analysis
- Review chapter using QA QC process

*ITD-Aeronautics Tasks:*

- Provide input on alternative strategies
- Review NPIAS findings
- Serve as liaison to the FAA and communities where significant role or classification changes are considered
- Review chapter and provide comments

**Task 10: Identify Recommended System of Airports**

Based on the findings of the existing system requirements evaluation and alternatives analysis, recommendations related to the future airport system needs will be developed. These needs will include systemwide issues and airport-specific needs and will address recommended NPIAS designations. Based on the results of the facility and service objective analysis, specific facility and service needs will be identified for each airport based on its future role in the Idaho airport system.

Capital improvement plans (CIPs) will be developed for each airport based on needs identified through this process, as well as coordination with federal, state, and local officials. Projects from ITD's Airport Pavement Management Plan will be incorporated into the CIPs to reflect total airport system needs. Costs for projects identified from the IASP will be developed based on the current cost information available from recent aviation projects in Idaho and in the FAA's Northwest Mountain Region. These capital needs will form the basis for a determination of funding levels needed to support the aviation system.

The consultant team will develop an Excel-based CIP system to input the projects for ITD-Aeronautics. This system will be developed to allow for expansion and use by ITD-Aeronautics in future updates of the CIP. A brief process manual will be developed to provide guidance to ITD-Aeronautics for future updates.

To ensure development of detailed CIPs for the smaller airports, on-site visits are planned for 35 airports. Discussions with ITD-Aeronautics will be held to determine which airports should be visited to obtain information on project needs. The selection of airports will be determined based on the greatest need to obtain data and input on the CIP development.

After the future Idaho airport system needs have been identified, an analysis of the financial needs of the recommended system will be conducted. This analysis will evaluate statewide airport development needs and will be presented in aggregate format, as well as an individual table for each airport.

Based on the evaluation of alternative methods related to land use, specific recommendations that are focused on the particular land use challenges affecting Idaho airports will be prepared. These recommendations will form the basis for development of specific compatible land use guidelines.

*Consultant Team Tasks:*

- Develop recommended airport system
- On-site airport inspections of 35 airports
- Conduct facility and service objective analysis to identify projects
- Incorporate existing federal, state and local airport projects into CIP, denoting source of CIP project
- Develop Excel-based CIP system for ITD-Aeronautics that allows for future updates of CIP
- Identify land use recommendations and develop compatible land use guidelines
- Develop chapter to document recommended airport system
- Review chapter using QA QC process

*ITD-Aeronautics Tasks:*

- Provide input on recommended airport system
- Provide hard copies of current CIPs for all airports for 20-year period, including costs for all projects, as well as current priority system
- Provide projects from Airport Pavement Management Plan
- Review chapter and provide comments

**Task 11: Prepare Policy Analysis and Investigation Recommendations**

With the funding needs identified, an analysis of priorities, revenues, and other policies will be conducted. Idaho's existing and historical funding, including taxes and aircraft registration programs, will be compiled and compared to structures in other nearby states including Oregon, Washington and Montana. This analysis will relate how the existing policy structure impacts current funding decisions. The previous analyses will identify specific areas of the State or project types that are most deficient throughout the State. The existing FAA and State priority systems will be reviewed in comparison to the results of the system evaluation to determine if changes in policy may help to address deficiencies.

The existing airport priority system will be reviewed as it relates to the IASP analysis of airport roles, system requirements, and recommendations. The types of projects eligible for funding and their priority based on the analysis of the system's performance will be reviewed. Special projects will also be considered as part of the priority system evaluation.

Once the financial needs are determined, the total amount of unfunded projects will be identified based on current budgetary levels.

*Consultant Team Tasks:*

- Determine projects to meet IASP system requirements and recommendations and develop cost estimates
- Provide draft of total financial needs to ITD-Aeronautics for preliminary review that includes projects by airport in a tabular, user-friendly Excel format
- Review airport priority system
- Develop chapter to document financial needs assessment, including unfunded needs based on current budgetary levels
- Conduct 5<sup>th</sup> PAC meeting
- Review chapter using QA QC process

*ITD-Aeronautics Tasks:*

- Conduct preliminary review of financial needs
- Review chapter and provide comments
- Organize 5<sup>th</sup> PAC and participate in meeting

**Task 12: Prepare Implementation Plan**

The implementation plan will describe an appropriate process to ensure the implementation of the study's recommendations and will include a list of action items for the State, metropolitan areas, and individual airports, as appropriate. The list of action items will include a description of each action item, responsible parties, schedule, financial requirements, special conditions, and approvals that must be obtained. Means for measuring the effectiveness of the recommendations will also be developed. System performance measures will be developed for future measurement of how investment in the aviation system is yielding improved performance. Potential policy changes and the need for additional studies will also be identified.

*Consultant Team Tasks:*

- Address policy issues affected by recommendations
- Identify action items for the State, metropolitan areas, and individual airports, as appropriate
- Develop chapter to document implementation plan
- Review chapter using QA QC process

*ITD-Aeronautics Tasks:*

- Provide current aviation policies
- Review chapter and provide comments

**Task 13: Documentation and Coordination**

Throughout the IASP, coordination will be essential to the successful outcome of the study. Several methods are proposed to ensure this coordination:

- Consultant team conference calls every other week
- Calls with ITD-Aeronautics to discuss study progress and findings every other week
- Monthly progress reports included with invoices

In addition to internal coordination, public consultation regarding the aviation system will be sought. Various methods for obtaining input will be discussed and determined with ITD-Aeronautics, with the primary tool likely to be development and promotion of a consultant website for the study. The website can be developed to provide different access for the public versus invited PAC members to view documentation, study progress, and provide comments.

It is intended that each task represents a chapter in the technical report. As each draft chapter is completed and processed according to the QA QC checklist, it will be submitted to ITD-Aeronautics for review and comment. At ITD-Aeronautics' discretion, each draft chapter may be distributed to the PAC established for the IASP for additional review and comment. Draft distribution is intended to be made via electronic means, primarily email, to ITD-Aeronautics and the PAC, as appropriate. All comments are to be compiled by ITD-Aeronautics for submission to WSA; a single submission of comments provides for consistency and efficiency in the revision process. It is anticipated that one revision will be made to the chapters during their initial development, with a final revision at the conclusion of the study.

When all chapters are complete, a draft final technical report will be produced for review and comment by ITD-Aeronautics. This draft final technical report will be the basis for the executive summary. A 16-page full-color format executive summary of the major findings will be developed and submitted to ITD-Aeronautics for review and comment. It is anticipated that two reviews of the executive summary will be completed by ITD-Aeronautics, one primarily for design and one for content.

With all revisions made to the technical report and executive summary, the following deliverables will be made:

- 10 hard copies of the Final Technical Report
- 10 hard copies of the Airport Compatible Land Use Guidelines
- 50 CDs containing Technical Report, Executive Summary, and Guidelines in PDF format
- 1,000 full-color Executive Summaries

Five meetings of the PAC are included as part of this scope of work. These meetings are planned for key milestones in the study when input and guidance is most important to the planning process. In addition to the five PAC meetings, four additional internal meetings with ITD-Aeronautics and six local meetings

(Idaho-based staff) are anticipated. In addition, two presentations to the Idaho Airport Managers Association and two presentations to the Idaho Aviation Association are planned, as is one final presentation to the Idaho Transportation Board at the conclusion of the study.

### **Economic Impact Analysis**

To produce a sound economic impact study, a comprehensive data gathering effort is needed. The Idaho Airports Economic Impact Study will identify the economic value of individual airports in Idaho. The value of conducting an airport economic study lies within the ability of that study to educate the public and others, including elected officials, on the economic value of the airport within their community. It is important that the economic impact results are developed and documented in a manner that can be justified and explained in layman terms. The consultant team will work to ensure the results meet these goals for the project.

#### **Task 1: Conduct Data Collection and Surveys for Direct/First Round Impacts**

The first step in this task will be to notify all airports related to the study's start up. All airports will then be contacted to obtain lists/contacts for all of their on-airport tenants and businesses. These tenants include on-airport businesses such as airlines, FBOs, air cargo operators, flight schools, charter and aircraft rental companies, corporate flight departments, airport management, aircraft sales, specialty providers and others.

When initial contacts are made with each of the airports, airport management will also be asked to provide information on annual operations (including the portion of the airport's annual operations that are thought to be connected to visiting aircraft); commercial enplanements (if applicable and the percent of enplaning passengers that are thought to be visitors); based aircraft by type; and ways in which the airport benefits the health, safety and welfare of the market area it serves. Initial requests for information on non-aviation businesses that rely on each airport to support their operations will also be made at this time. Airport managers will also be asked to identify either on-site military or visiting military aircraft that use their airport.

While the process of collecting a comprehensive list of all businesses and tenants located at Idaho airports is ongoing, the consultant team will be working with ITD-Aeronautics to develop a survey that will be used to collect study related information from these tenants. At a minimum, the following information will be gathered from tenants/businesses at Idaho airports:

Type of business	Annual taxes
Number of current on-airport employees	Qualitative benefits of the airport
Annual payroll	Non-aviation businesses using the airport
Average annual capital investment	Timeline changes

An important part of the tenant/business surveys will be obtaining a recent history of average annual capital investment for the airport and for its individual tenants. "Construction" impacts are included in the direct/first round category.

ITD-Aeronautics will have input into developing all surveys, and will review and approve these surveys before they are distributed by mail directly to each of the airport tenants at the public general aviation and commercial airports in Idaho.

Approximately one week after the surveys are mailed, the consultant team will follow up with each of the tenants to make sure that they received the survey. At that time, the consultant team will be able to answer any initial questions that tenants may have. During this call, the consultant team will also notify

each tenant when/if a visit will be made to their airport and to arrange a meeting time and place. The consultant team will ask tenants to complete their survey prior to the visit. Approximately 40 of the system airports will be visited by a member of the consultant team; the remaining airports will be contacted via mail and phone.

The most important meeting at all airports will be with airport management. Follow up telephone interviews will be conducted to verify and complete information on the tenant surveys as needed.

*Consultant Team Tasks:*

- Notify all airports of study efforts
- Develop surveys for airport management and tenants
- Follow up via phone with all tenants
- Conduct up to 40 on-site airport visits to gather additional data

*ITD-Aeronautics Tasks:*

- Provide contact list for all airport managers
- Provide introduction letter with appropriate signature for use in study notification
- Provide letter with appropriate signature to request data
- Provide available data on grants to airports for previous three years
- Review and approve surveys for distribution

**Task 2: Conduct Data Collection and Surveys for Indirect/First Round Impacts**

"Indirect" impacts, which are also classified as first round impacts, consist of expenditures by visitors arriving at an airport either via commercial service or general aviation aircraft. For each airport, the following will be estimated:

- The number of annual enplaned commercial passengers that are visitors using each airport
- The number of annual commercial enplanements that are international visitors
- The number of general aviation aircraft that are true visiting aircraft
- The number of passengers and pilots per visiting general aviation aircraft

These factors will be determined using airport-specific records, data from ITD, data from USDOT and FAA databases, and information from this study's surveys. The consultant team will also research information on visitor travel patterns and spending that is currently available from various secondary data sources in the State.

Estimates of expenditures by visitors who arrive via the commercial airlines will be derived from information collected via a commercial service passenger survey (as needed) and through secondary data sources. To complete this task, information on each of the following will be sought:

Trip purpose	Expenditures for food
Length of stay	Expenditures for ground transportation
Domestic vs. international traveler	Expenditures for entertainment
Expenditures for lodging	Expenditures for retail

Information will also be sought from visitors who arrive in Idaho via general aviation aircraft. The consultant team will identify a series of FBOs around the State who are willing to assist in distributing surveys to visitors. These surveys will be postage paid so that they can be directly returned to the consultant team for analysis. The consultant team will work with ITD to identify FBOs to participate in

this effort, the timeframe for the visiting passenger survey, and the length of time the survey should be distributed. From visitors who arrive in Idaho via general aviation aircraft the following will be collected:

Number of persons arriving on visiting aircraft	Expenditures for food
Trip purpose	Expenditures for ground transportation
Length of stay	Expenditures for entertainment
Expenditures for lodging	Expenditures for retail

*Consultant Team Tasks:*

- Develop surveys for commercial passengers and general aviation visitors
- Obtain data on visitors to Idaho
- Conduct appropriate number of commercial passenger surveys

*ITD-Aeronautics Tasks:*

- Review and approve surveys for distribution

**Task 3: Estimate First Round Impacts (Direct and Indirect Impacts)**

Data collected in this task will enable the consultant team to determine the number of jobs, annual payroll and annual economic activity (output) that is associated with airport tenants/businesses, capital improvements, and visitors who arrive in Idaho via commercial carriers or general aviation aircraft.

For on-airport tenants and businesses, employment, payroll, average annual capital improvements, and total annual economic impact will be calculated from survey information obtained from the airports and their tenants. Employment and annual payroll related to visitors who arrive in Idaho via commercial airlines or general aviation aircraft will be estimated using ratios that relate total annual spending by visitors to employment and payroll. Visitor spending will be determined via efforts described in Task 2.

Estimates of air cargo impacts and impacts associated with international visitors will be estimated in this task, as data permits. In addition, first round impacts will also reflect the impact of capital improvements completed by airport tenants or by the airports themselves. Only on-airport air cargo benefits will be estimated.

*Consultant Team Tasks:*

- Determine jobs, payroll, and output for each airport
- Estimate air cargo and international visitor impacts

*ITD-Aeronautics Tasks:*

- Review estimates of impacts for each airport for appropriateness

**Task 4: Estimate Second Round Impacts (Induced Impacts)**

The consultant team will obtain Idaho-specific statewide multipliers such as IMPLAN. The multipliers for this task will be determined based on their consistency with prior Idaho economic impact studies and may be regional in nature. The consultant team will construct a spreadsheet model that will assess the economic impact of each airport in the State through the various employment categories that provide aviation benefits. The multipliers will be used to estimate second round and ultimately the total economic impacts for each airport and the State by corresponding impact categories. ITD will review the multipliers and output prior to being finalized.

The model used in this task will replicate how first round impacts associated with airport businesses/tenants and visitors continue to re-circulate in Idaho's economy, creating successive waves of employment, payroll, and annual economic activity.

*Consultant Team Tasks:*

- Obtain Idaho-specific multipliers
- Construct spreadsheet model to assess total economic impact of each airport

*ITD-Aeronautics Tasks:*

- Review multipliers and output

**Task 5: Estimate Total Annual Economic Impacts**

Output from the model developed in Task 4 will support the presentation of total economic impacts in terms of the following three economic impact measures:

- Economic Activity or Output
- Earnings (Payroll plus benefits)
- Jobs

These three impact measures are inter-related, but must be expressed separately.

In addition, the unique benefits associated with each airport in the State will be identified so that they can be incorporated into each airport's individual summary report.

*Consultant Team Tasks:*

- Determine total economic impact of each airport
- Distribute draft data to each airport for review and comment

*ITD-Aeronautics Tasks:*

- Review total economic impact of each airport
- Provide letter to request airport review of draft data

**Task 6: Economic Impact of Boise Airport**

While the same general economic impact methodology will be employed for Boise Airport as the other commercial service airports, the size of this facility and the large number of tenants warrants a separate task. The consultant team will coordinate with airport management at Boise to obtain necessary data (capital program, list of on-airport tenants, number of employees). Surveys will be sent to airport management and all on-airport tenants. ITD and Boise will approve all surveys prior to the surveys being issued. Information on visitors and their length of stay and expenditure patterns will be obtained from secondary data sources. Second round impacts will be calculated based on the airport's first round impacts. Results will be reviewed with ITD and Boise staff before they are integrated into the statewide study.

*Consultant Team Tasks:*

- Employ similar methodology specifically for Boise Airport
- Coordinate with airport management to obtain necessary data

*ITD-Aeronautics Tasks:*

- Provide contact at Boise
- Review findings for Boise

**Task 7: Value Added Business Benefits**

The economic benefits of aviation related businesses located on Idaho's public commercial or general aviation airports will be discussed as part of this study's first round impacts. There are, however, additional benefits that should be noted to reflect the total benefit of the airport system as it relates to businesses throughout the State. There are many employers who without access to commercial and/or general aviation airports would be forced to cut operations in Idaho or worse yet, relocate outside the State. As a result of the life style choices, many businesses have moved to Idaho. In many cases, however, their ability to exist in Idaho is tied to their ability to travel to other parts of the country and the world.

As part of this task, non-aviation business surveys will be developed in conjunction with ITD-Aeronautics staff. The exact number of surveys to be mailed will be determined in conjunction with ITD-Aeronautics. FAA's IFR database will be used to reach out to businesses that rely on Idaho airports. Airport management will also be called upon to provide local non-aviation business users. Some of the questions that will be asked of the non-aviation business users could include:

- Number of employees in Idaho
- Number of annual commercial airline trips taken by all these employees
- Annual company budget for commercial airline travel
- Reliance on general aviation either through outright ownership, fractional ownership, rental, or charter
- Reliance on commercial or general aviation for customers, suppliers, or vendors who travel to Idaho to do business with the responding Idaho employer
- Use of air cargo and overnight shipping
- Importance of proximity to commercial and or general aviation airport related to selecting their business location in Idaho
- Possible reduction in workforce or annual sales without access to airports/aviation services

*Consultant Team Tasks:*

- Develop and conduct statewide business survey
- Extract data on IFR activity at each airport

*ITD-Aeronautics Tasks:*

- Review and approve statewide business survey

**Task 8: Tax Impacts**

While airports do not generally pay taxes, airports and aviation services still help to contribute to state and local tax bases. The degree to which aviation-related taxes can be estimated for this study to some extent relies on accessibility and tax record keeping within the State and on the local level. During Task 1 of this study, the consultant team will collect information on taxes paid from airport businesses.

Statewide rates of taxation on income, sales, food and beverage and hotels will be considered at minimum in this analysis. Tax benefits will be estimated for each of the study airports.

*Consultant Team Tasks:*

- Obtain relevant tax data
- Evaluate tax impacts for each airport

*ITD-Aeronautics Tasks:*

- Provide contact to obtain relevant tax data

**Task 9: Qualitative Benefits**

Airports throughout Idaho provide notable economic benefits that will be measured in earlier tasks of this study. To fully understand and represent all benefits that are associated with airports in Idaho, it is also important to document qualitative benefits that are supported by each of the airports. Typically, these benefits are related to health, welfare and safety activities that the airports help to support. Examples of qualitative benefits are firefighting activities, emergency medical flights, and/or law enforcement activities. Qualitative benefits help to improve the quality of life for everyone in Idaho, even those who never use one of the airports or the many aviation services they offer.

As part of the data collection and survey efforts that will be undertaken in Task 1 of this study, specific examples of qualitative benefits associated with each of the public airports will be sought. At the conclusion of this study, individual economic impact reports will be prepared for each of Idaho's public general aviation and commercial airports; each airport's qualitative benefits will be documented in these reports.

*Consultant Team Tasks:*

- Determine qualitative benefits of each airport

*ITD-Aeronautics Tasks:*

- Provide input on known qualitative benefits

**Task 10: Timeline Economic Impact Changes**

As airports in Idaho have grown and changed, their respective economic impacts have changed too. As part of this task, the consultant team will provide a timeline for each of the airports that highlights, to the extent possible, changes in demand, airport activity, facilities, and tenants that have characterized each airport and that have changed between the two economic impact reporting periods. Off-airport developments in the area that may have an impact on economic activity at specific system airports will be noted to the extent possible.

From airport and ITD records, information from the prior economic impact studies, and surveys that will be completed as part of this update, the consultant team will be able to provide quantitative and anecdotal information that characterizes each airport for each of the three economic impact reporting periods. This comparison will enable the consultant team to highlight changes that have taken place. This information will be summarized in each airport's individual economic impact report. Having this information will help each airport understand and support the findings of this report.

*Consultant Team Tasks:*

- Compare results from 2008 study to previous study

*ITD-Aeronautics Tasks:*

- Provide review and input on comparison

**Task 11: Documentation and Coordination**

The results of the study will be recorded within the following reports:

- Idaho Airport Economic Technical Report
- Airport Economic Report

When all sections of the study are complete, a draft final technical report will be produced for review and comment by ITD-Aeronautics. With all revisions made to the technical report, the following deliverables will be made:

- 10 hard copies of the Final Technical Report
- 50 CDs containing Technical Report and all airport reports in PDF format
- 20 copies of each airport's report

Each airport will have a separate full-color report. The report will be prepared using an 11 X 17 format. Electronic files for each airport will be provided to ITD and the individual airports for printing. Information that could be included in each individual Airport Report includes the following:

- Role of the airport
- An airport photo, as available from existing data source
- Airport facilities
- Aviation demand
- An economic benefit of the airport; including air cargo benefits if appropriate
- Qualitative benefits of the airport
- Tax benefits
- Timeline benefits of the airport

Four meetings are anticipated to review material and discuss the study findings. Meetings will be held at key junctures to discuss the project with ITD-Aeronautics as needed. The final meeting will be a formal presentation of the study at one of the State's aviation conferences. The consultant team will supply all necessary handouts and presentation materials for all meetings.