Chapter 1: Introduction

1.0 Introduction

The Indiana Department of Transportation (INDOT) Office of Aviation is charged by Indiana Code (IC) 8-21-1, with developing and continuously updating a state airport system plan that will best serve the interests of the state and its political subdivisions, and be coordinated with the national airport system plan prepared by the Federal Aviation Administration (FAA). The FAA's national airport system plan is known as the National Plan of Integrated Airport Systems (NPIAS). Generally, an airport must first be included in a state or metropolitan airport system plan to be included in the NPIAS; consequently, Indiana's airport system plan impacts the national air transportation system. Indiana's first comprehensive statewide airport system plan was produced in 1970. A major update to the plan was performed in 1981, and numerous revisions have occurred since. The 1981 update included reference to what became one of the entry criteria to the system – serving a part of Indiana's population that is not within a 30-minute drive time to a system plan airport.

Today, the Indiana State Aviation System Plan (ISASP) includes a collection of 69 airports considered to have state significance based on their location, usage, and role in Indiana's overall transportation network. The system has been developed over time with roots dating as far back as 70 years[1]. With an early goal of having an airport within 30 minutes of every Hoosier, Indiana's airport system has been developed to cover the state's population. Having achieved this goal, the number and location of airports in the ISASP have remained relatively unchanged over the past 20 years. As such, Indiana's airport system represents a well-developed network of strategically located facilities throughout the state that provides all Hoosiers with reasonably accessible and practical air transportation services.

With the general location of Indiana's airports undergoing only minor adjustments over the last 20 years, the focus for the ISASP has been toward the capacity and utility of the system. Capacity is achieved by developing infrastructure at an airport that allows it to meet a desired annual service volume, while utility is achieved through addressing critical aircraft needs (e.g., runway length) and accessibility (e.g., crosswind runways and instrument approaches during inclement weather). Since ISASP airports have been strategically developed over time in concert with projected aviation needs,

[1] Survey, Findings and Recommendations with respect to Indiana's Aviation Problems, Indianapolis: Governor's Commission on Aviation, 1944

Indiana's airport system can meet most increases in traffic volume demand in reasonable weather conditions with only relatively minor improvement. The 2003 ISASP supported this notion, as it indicated the system as a whole has excess capacity.

While capacity is generally in excess, certain specific challenges still remain in terms of utility where smaller airports attempt to serve larger corporate aircraft as their communities bid to attract new businesses and jobs. Additionally, as technology advances in the form of avionics and navigation, Indiana will need to continue developing its system in unison with these advances in order to remain competitive with other states that may be seeking to lure away business.

Although increasing airport utility and staying current with technological advancements in navigation are large challenges in and of themselves, the greatest challenge by far facing Indiana's aviation transportation officials is protecting and preserving the successful and extensive system of 69 airports and their respective 100 miles of runway. With $14.1 billion in economic output and the creation or sustentation of 69,000 jobs, this system is vital to Indiana's economic well-being and must be preserved.

1.1 Industry Advisory Committee (IAC)

The update of the ISASP included engaging an Industry Advisory Committee (IAC) in the study process to help review the goals and provide general feedback of the direction of the plan. The specific responsibilities of the IAC are shown below:

- Serve as an advisory body to the Project Team
- Represent the interests of the specific stakeholder group they have been asked to represent
- Provide insight on trends affecting Indiana's aviation system
- Represent the interests of Indiana residents
- Assist the project team with sharing and collaboration of information to their representative interest groups
- Provide input on system plan goals, missions, and performance criteria
- Review and comment on progress of project
- Actively engage in committee meetings
- Attend committee meetings or provide an adequate representative to attend in their place

The IAC included 11 members chosen by the INDOT Office of Aviation. The committee met twice over the course of the development of the ISASP, and included the following people:

IAC Members

- David Holt – Conexus Indiana
- Terry Rainer – Aviation Association of Indiana
- Mick Pittard – Retired Aviation Executive
- Don Silvey – Hamilton County Airport Authority
- Ed Volk – LaPorte County Airport Authority
- Rex Hinkle – Cook Aviation
- Dennis Wiss – Hulman Regional Airport
- Travis McQueen – Huntingburg Airport
- Stewart Schreckengast, Ph.D. – Purdue University
- Harry Minniear – Indiana State University
- Ben Mellow – FAA

INDOT, Office of Aviation Staff

- Kevin Rector – Manager
- Marty Blake – Aviation Planner
- Marcus Dial – Project Manager
- Nicholas McClain – Chief Airport Engineer
- James Kinder – Chief Airport Inspector
- Cora Nieman – Program Coordinator

Project Team

- Maria Muia, Ph.D. – Woolpert, Inc., Project Team Lead
- Stephanie Ward – Mead & Hunt, Inc., Project Team
- Regan Massey – Mead & Hunt, Inc., Project Team
- Tammy Butler Robinson – Engaging Solutions, Inc., Project Team

1.2 System Plan Airport Inclusion Criteria

Since Indiana's system is extensive and already serves the vast majority of the state's population, there appears to be little, if any, need to change the number and/or location of airports that make up the ISASP. However, since the future is hard to predict, INDOT must maintain practical criteria for entry into the system. INDOT emphasizes that any proposal to add a new airport must demonstrate the airport's ability to function effectively long-term. No new airport should be added if its operation would harm the commercial health or long-term future of an existing facility already included in the ISASP, unless that facility is scheduled to close. In addition, any proposal to add a new airport must be backed by a public or private sponsor willing to undertake responsibility for its long-term development. Since these proposals can be controversial, a substantial amount of support must be demonstrated by local populations or officials.

New primary, commercial, and reliever airports will be held to the same criteria that the FAA has set for their inclusion in the NPIAS. New general aviation airports must have at least 10 based aircraft (or commitments from 10 aircraft owners to be based at the facility for airports undergoing construction), AND meet one of the following criteria:

- **Provide airspace relief to another facility** – the new facility is required to demonstrate its ability to reduce operations at a nearby reliever or commercial service airport that are causing airspace difficulties for the affected airport.
- **Provide additional capacity that is lacking at an existing airport** – the new facility is required to demonstrate its ability to reduce operations at another facility that is at over 60 percent capacity and cannot be expanded in a cost-effective manner to meet the additional demand.
- **Provide a cost effective solution to accommodate a social or environmental problem** – the new facility is required to demonstrate that aviation demand at an existing facility cannot be accommodated in a cost-effective manner for social or environmental reasons.
- **Provide access for a population, employment, or income base** – the new facility is required to provide aviation facilities for a significant segment of population, employment, or income base currently located outside a 20-mile radius or 30-minute drive time of another facility included in the ISASP. The new facility is also required to demonstrate demand equivalent to that required to meet federal eligibility and not be competitive with another system plan airport.
- **Provide emergency services to a geographic region or a specific facility** – the new facility must demonstrate a critical need for the service.
- **Provide substantial economic development to a geographic region** – the new facility must demonstrate its economic impact, including the jobs it creates/sustains.

1.3 Core Principles

The ISASP provides a macro-level overview of the state's airport system and includes airport categorization criteria, projected growth in aviation activity, and system-wide development cost estimates. Its foundation, however, consists of seven core aviation principles. While it is inevitable that Indiana will encounter unforeseeable challenges over time, the core principles establish a reference guide to assist in the decision making process when unexpected issues arise. These principles include:

Principle 1: Maintain safety and security standards.
Principle 2: Preserve the existing system.
Principle 3: Protect airport airspace.
Principle 4: Support and encourage revenue-generating projects.
Principle 5: Encourage development that is supportive of the economy.
Principle 6: Consider environmental impacts of development.
Principle 7: Meet aviation demands of today, while preparing for future changes and industry advancements.

1.4 System Goals

As an integral part of Indiana's transportation system, ISASP airports should provide reasonably convenient access to Indiana's population and businesses in a safe and serviceable manner. While Indiana has a relatively well-developed airport system (that has been successfully developed in concert with the state's aviation demand), improvements are still needed. The system's maturity also requires significant resources to maintain it. As such, where resources are available, these goals (in no particular order) have been established for the ISASP:

Goal 1: Maintain pavement condition index (PCI) within 5 points of minimum service level appropriate for the primary runway.
Goal 2: Enforce Indiana Administrative Code (IAC) minimum standards for airports and encourage applicable FAA standards.
Goal 3: Support instrument approach enhancements for airports that do not meet recommended minimums for their respective airport category.
Goal 4: Foster airport airspace zoning for all airport categories; where hurdles exist to implementing zoning, encourage coordination between airport boards and zoning boards for airport manager review of building requests near airports and within flight paths.

Goal 5: Encourage development of pavement maintenance management systems at all system airports.

Goal 6: Assist in the periodic update of an airport economic impact study.

Goal 7: Pursue relationships that support aviation awareness programs and outreach opportunities.

Goal 8: Utilize Airport Improvement Program (AIP) funds to perform planning projects and encourage airports to update airport layout plans (ALP) older than 10 years

Goal 9: Encourage compatible land use near airports.

Goal 10: Document 5-year airport development needs annually.

1.5 Summary

Using the core principles and the system goals as the foundation, the ISASP provides a blueprint for development of Indiana's aviation system over the next 20 years. This document will serve as a guide for policy-makers and INDOT staff to prioritize and coordinate development and funding for each of the 69 public-use airports in the system.