PennDOT Multi-Modal Planning & Implementation Services
2007 State Aviation System Plan (SASP) Update

Technical Summary

Prepared
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FINAL

Introduction and Goals & Objectives

During the scoping process of the 2007 Pennsylvania State Airport System Plan (SASP) Update, four elements of the 2002 SASP were identified for study. The four elements included several sub-tasks and were defined as follows.

Element 1 – SIGNIFICANT CHANGES

Propose innovative solutions to the current inventory tables and airport classifications within the 2002 SASP. Determine the best method for updating revised SASP data.

- **Task 1.1 –** Revisit the performance criteria, scoring and functional levels for the "advanced" airport category and establish a new classification for the most advanced airports in the system (i.e. Commercial Service).
- **Task 1.2 –** Review and update the system plan data for all airports contained in Chapter 2, "Inventory", of the 2002 SASP and convert the updated data from the SASP spreadsheets into an easily accessible data management tool for BOA use.
- **Task 1.3 –** Assess the "state of the system" in terms of airport amenities and services performance criteria for airports within the "commercial service," "advanced," and "intermediate" classifications

Element 2 – NPIAS COVERAGE

Examine the adequacy of the number of Pennsylvania airports in the National Plan of Integrated Airport Systems (NPIAS) to determine if the Commonwealth has proper coverage from airports of national significance. Develop a standardized process to determine which airports should or should not be in the NPIAS.

- **Task 2.1** – Review NPIAS threshold standards and guiding principles and compare to the 64 AIP eligible Pennsylvania airports in the NPIAS.
- **Task 2.2** – Perform case studies on SASP airports to determine if they should be in the NPIAS.
- **Task 2.3** – Assess how well the NPIAS airports in the Commonwealth meet the threshold criteria and guiding principles and the extent to which BOA funding supports this.[1]

Element 3 – SYSTEM CAPACITY NEEDS AND PRIORITIZATION

Develop a process that enables PENNDOT to analyze and prioritize projects that provide the greatest benefit to the system based on the incremental operational contribution to the system and on project cost.

- **Task 3.1** – Define performance criteria that enable the BOA to identify projects that provide the greatest system operational benefit.
- **Task 3.2** – Define demand versus capacity at the Commonwealth's key airports
- **Task 3.3** – Review and analyze BOA and FAA project ranking process – included
- **Task 3.4** – Develop a simple benefits analysis for proposed projects in terms of their operational contribution to the system.

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[1] This task also includes a NPIAS Coverage Map that presents the overall coverage of NPIAS airports throughout the Commonwealth based on a 30-minute ground travel time.

- **Task 3.5** – Assemble the components of the project contribution analysis into a decision-support matrix.

Element 4 – IDEAL FUNDING LEVELS

Provide the BOA a tool to establish ideal or realistic funding levels that are supportable and based on typical project implementation timelines and on statewide funding demand for any four-year period.

- **Task 4.1 –** Identify the components of the project readiness continuum and describe their integral parts.
- **Task 4.2 –** Develop project implementation timelines that include major milestones for various project types and the typical durations between milestones.
- **Task 4.3 –** Estimate ideal or realistic funding levels based on the implementation timelines and four-year funding demand.

Compilation of the 2007 SASP Update Report

Table 1 shows the relationship between the elements, tasks, and chapters of the Executive Summary.

Table 1 – Contents of Technical Summary

Element	Task	Technical Summary Chapter
1	Airport System Classifications	1
	Review and Refresh Airport Inventory Data	2
	State of the System Analysis	3
2	NPIAS Threshold Standards	4
	NPIAS Case Studies	5
	Confirm Suitability of NPIAS Standards	6
3	Performance and Coverage Criteria	7
	Project Identification and Prioritization	
	Project Ranking Process	
	Decision Support Matrix	
4	Project Readiness Continuum	8
	Project Implementation Timelines	
	Ideal or Realistic Funding Levels	