

CHAPTER 1

INTRODUCTION

This chapter is an overview of the Aviation System Capital Investment Plan (CIP). The CIP is based on Office of Management and Budget (OMB) funding targets.

This plan will change as OMB targets and Federal Aviation Administration (FAA) mission needs change. Schedules are shown in calendar years (CY).

Background

The U. S. National Airspace System (NAS) is the largest, busiest, most complex, and technologically advanced aviation operation in the world. The FAA provides the NAS infrastructure to support all air operations within the United States and certain ocean areas. This responsibility extends from air traffic control (ATC), aviation safety, and security to international coordination. Also, the FAA's responsibility has been expanded to include oversight for commercial space transportation.

To maintain or enhance current safety and efficiency levels in the face of growing demand, the FAA uses an investment planning framework based on mission analysis and planned capabilities outlined in the NAS Architecture. The CIP reflects this planning effort. CIP projects will systematically improve and expand the current NAS by capitalizing on new technologies and procedures and efficiently using available resources.

Purpose and Scope of the Plan

The CIP provides the framework for capital investments in the FAA. It also responds to Section 504(b)(1) of the Airport and Airway Improvement Act of 1982 (Title V, P.L. 97-248), which requires the FAA to submit an annual plan describing NAS modernization efforts. The CIP is distributed widely and serves primarily as a source document for basic information on capital investment projects comprising the FAA's Facilities and Equipment (F&E) program.

Relationship to Other Plans

In addition to the CIP, major planning tools in the FAA include the FAA Strategic Plan; FAA Annual Performance Plan; NAS Architecture; FAA Plan for Research, Engineering, and Development (R,E&D Plan); NAS Plan Hand-Off Justification Papers; National Plan of Integrated Airport Systems (NPIAS); and the Aviation Capacity Enhancement Plan

(ACEP). All of these planning efforts influence the CIP.

- The FAA Strategic Plan reflects Secretarial planning and policy guidance, as outlined in the Department of Transportation (DOT) Strategic Plan, and is the umbrella that ensures all FAA plans are executed in a coordinated manner. It provides strategic direction and sets long-term goals with outcome measures. Programs described in the CIP support goals set by the FAA Strategic Plan.
- The FAA Annual Performance Plan contains performance goals that have measurable target levels of performance and are consistent with the strategic plan. CIP programs support performance goals.
- The NAS Architecture is a comprehensive plan for modernizing the NAS well into the 21st century. It outlines capabilities and proposed timelines needed to meet goals identified in the FAA Strategic Plan. CIP programs are implemented to obtain capabilities outlined in the NAS Architecture.
- The R,E&D Plan also supports FAA strategic goals. Among the various FAA plans, the relationship between the CIP and the R,E&D Plan is unique. The R,E&D Plan and the CIP jointly take a project from initial concept exploration through deployment. Through these interrelated capital plans, the FAA will institute projects to achieve operational benefits for the entire aviation community.
- The NAS Plan Hand-off Justification Papers plan links F&E programs to Operations (OPS) programs and to the operational environment. It identifies resource changes required to transition to and operate in the operational environment as a result of implementing CIP programs.
- The FAA's third capital plan is the NPIAS (a report submitted by the Secretary of Transportation). The NPIAS defines resource requirements needed to establish and expand the national system of airports. It identifies airports and development projects eligible for grants under the Airport Improvement Program (AIP). The plan draws selectively from local and state airport de-

velopment plans. The NPIAS precipitates requirements for F&E projects in the CIP.

- The ACEP plays a key role in the FAA's effort to increase airport capacity and efficiency without compromising the safety of passengers or the environment. The plan identifies the cause and extent of capacity and delay problems currently associated with the U.S. air traffic system; projects the effects of increased air traffic on airport capacity over the next decade; and outlines CIP and other projects intended to reduce capacity-related problems.
- The CIP also supports other planning efforts. For example, the Future FAA Telecommunications Plan correlates telecommunications network requirements with NAS implementation strategies described in the CIP. Another is the National Plan for Civil Aviation Human Factors. The CIP also supports the various training plans prepared by agency lines of business that identify training requirements to support the capabilities outlined in the NAS Architecture.

Structure of the Plan

The CIP consists of four chapters and four appendices:

Chapter 1 describes the CIP's background and scope.

Chapter 2 outlines some of the planning considerations used to determine what programs make up the F&E baseline. It provides an overview of the FAA's mission, services, organization, and capital assets. It

explains how the CIP process relates to other FAA planning efforts. Additionally, the chapter summarizes user demand and provides a high-level description of benefits resulting from investing in F&E programs.

Chapter 3 provides a high-level overview of NAS modernization activities as described in the NAS Architecture Version 4.0. It identifies major programs needed to implement capabilities outlined in the Architecture. It also highlights the relationships among some of the major CIP programs and maps the NAS Architecture/CIP programs to FAA strategic goals.

Chapter 4 describes current F&E programs, organized by NAS functional area: automation, communications, facilities and associated systems, mission support, navigation and landing, surveillance, and weather. These descriptions answer the basic journalistic questions of who, what, when, how, and why. The chapter also summarizes new mission needs expected to require funding over the next 5 years.

Appendix A is a glossary of acronyms and abbreviations.

Appendix B maps CIP programs from the old structure and numbering system to the new structure and numbering system.

Appendix C maps CIP programs from the new structure and numbering system to the old structure and numbering system.

Appendix D contains a list of definitions.