

MassDOT Aeronautics Division Capital Improvements Presentation

MassDOT Board Retreat – October 27, 2011



Presentation Agenda

- Capital Improvement Plan (CIP) Overview
- Airports Capital Improvement Plan (ACIP) & Airport Improvement Program (AIP): Process and Funding
- MassDOT's Capital Program
- Airport Infrastructure Projects Update
- Questions & Answers

CIP Overview

- Background
- Purpose
- Eligibility
- Identification of Airport Needs
- Role of the Aeronautics Division

Background

The Aeronautics Division awards grants to public use airports from two funding programs; the FAA’s Airport Improvement Program (AIP) and the Commonwealth’s Airport Safety & Maintenance Program (ASMP).

- Grants for **AIP** projects are typically given only to publicly-owned, public use airports listed in the National Plan of Integrated Airport Systems (**NPIAS**). (*The NPIAS identifies for Congress an estimate of long-term investments to meet national aviation needs.*) The federal share of most **AIP** projects is 95%, the remaining 5% is split equally between the state and the airport sponsor at 2.5% each.
- The **ASMP** leverages funds for safety, maintenance and security projects at airports that are not eligible for AIP funds. ASMP projects are typically funded at an 80% state share and a 20% local airport share.
- Projects eligible under the **AIP** are programmed by the FAA with input from state agencies into a statewide “Capital Improvement Plan” (**CIP**).

Purpose

The CIP is a requirement for funding consideration and serves as an important planning tool. When completed, the CIP shows the type of improvements that an airport plans to make in the next 5-year period.

- Alerts state and federal agencies of the airport's plans and allows those agencies to determine the allocation of existing funds.
- The CIP helps airports budget for their local share of the proposed projects because federal/state funding cannot cover all CIP costs.
- Submission of the airport's CIP serves as the first step in the eligibility process for the award of future AIP grants.
- The CIP is dynamic in that it often changes depending on several factors, including, but not limited to, the availability of funds and the readiness of the project.

Eligibility

The following types of capital improvement projects are eligible for federal and/or state funding. However, depending on the amount of available funding and state and federal priorities, not all eligible projects will receive funding. Eligible capital improvement projects may include but are not limited to:

- Airport Planning (feasibility study, master plan and airport layout plan)
- Land Acquisition
- Airfield Paving and Lighting
- Navigational Aids (NAVAIDS)
- Noise Mitigation
- Environmental Planning/Permitting/Mitigation & Obstruction Removal
- Runway, Taxiway and Apron Construction

Identification of Airport Needs

The starting point for all CIPs begins with an airport's ability to identify it's needs – both short-term and long-term.

- A Master Plan contains information about an airport's long-term capital improvement needs and can serve as a useful tool in helping airports complete their CIPs.
- Capital projects must be shown on an approved Airport Layout Plan (ALP) to be eligible for AIP funding. An ALP is a scaled drawing depicting existing and future facilities/property necessary for the operation and development of an airport.
- Projects identified in the CIP should address a safety, security, regulatory compliance or a capacity/demand issue or be cited in an airport's annual safety inspection.
- Construction of terminal buildings/hangars are eligible for AIP funding but generate a lower level of FAA funding since they are considered economic development projects.

Role of the Aeronautics Division

What is the role of the Aeronautics Division in project planning and development?

- In Massachusetts, the Aeronautics Division acts as the agent by which airport sponsors apply to the FAA for funding of airport development projects. From initial planning to: reviewing and approving project design, processing grant applications, through construction oversight of the project, approving payment requests, and finally, acceptance for closing out each project.
- The FAA and MassDOT share the same critical roles in project development. The only real difference is that MassDOT pays a smaller percentage of the project's total cost.

AIP & ACIP Process and Funding

- Airport Improvement Program (AIP) Funding
- FAA's National Priority Rating (NPR) System
- The Aeronautics Division's Statewide CIP Process
- FAA's Regional ACIP Process and Timeline

Airport Improvement Program (AIP) Funding

How does the FAA determine which projects will receive AIP funding, and what are the obligations of the airport sponsor?

- Because the demand for AIP funds exceeds the availability, the FAA bases distribution of these funds on current national priorities and objectives.
- AIP funding is prioritized based on *State Apportionment*, *Primary & Non-Primary Entitlements*, any existing *Carryover* funds for an airport and true *Discretionary* funds that are distributed according to a national prioritization formula.
- Sponsors who accept an AIP grant are accepting conditions and obligations associated with the FAA's grant assurances. These requirements include conditions and obligations to maintain the airport in a safe and serviceable condition, not grant exclusive rights, mitigate hazards to airspace and use airport revenue properly.

FAA's National Priority Rating (NPR) System

The FAA uses a numerical system as a tool for prioritizing airport development. The National Priority System (NPS) equation generates values between 0 and 100 with 100 being the most consistent with FAA's national goals.

- ACIP project codes represent specific types of airport development. The highest ratings are given to safety, security, reconstruction, standards/capacity in that order.
- A numerical rating only cannot account for most qualitative factors that may affect the importance of an airport development project. State and Local priorities, environmental issues, impact on safety/performance, airport growth and many other factors should also contribute to the development of the ACIP.
- MassDOT assigns NPR numerical ratings to all projects in their 5-year CIP to prioritize the needs of the individual airports and the state airport system and to balance them against the availability of limited FAA discretionary dollars.

The Aeronautics Division's Statewide CIP Process


The Aeronautics Division meets with the FAA and state airport sponsors annually to discuss proposed capital improvements that are eligible for AIP funding to develop their statewide CIP for public-use airports.

- In Massachusetts, the Aeronautics Division conducts the CIP meetings for the General Aviation airports receiving non-primary entitlements (\$150k/Yr) and submits a 5-year CIP program for those airports to the FAA NE Region.
- The FAA NE Airports Division conducts the CIP meetings for the “Primary” airports (those with scheduled charter or air passenger service) eligible to receive between \$1M-\$2M in primary entitlements based on enplanements and sets the funding priority for the state’s primary airports.
- After the FAA has reviewed the State’s 5-year CIP for the non-primary airports, they meet with the Aeronautics Division to review the state’s entire capital program. If no revisions to the CIP are needed, the FAA merges the primary/non-primary entitlement CIPs from the 6 NE states into a Regional Airports Capital Improvement Plan (ACIP) that is sent to FAA HQ in Washington, DC. .

The FAA’s Regional ACIP Process

The ACIP Process Timeline	
July-August	Letters will be sent out to airports and state sponsors notifying them about the ACIP process and the schedule. Joint Planning Conferences will be held.
August-September	FAA New England Region planners meet in house to discuss potential ACIP issues and priorities.
October-January	CIP meetings are held with State/Airport sponsors. The FAA NE Airports Division conducts CIP meetings for the State's Primary Airports (those with charter and air passenger services) and MassDOT Aeronautics Division conducts CIP meetings for the non-primary General Aviation airports.
NLT Feb 28th	Deadline for major comments/revisions on CIP's from the sponsors.
March-April	National Program guidance is provided and the draft Regional ACIP is completed.
April 30 th	Sponsors acknowledge/accept the program as amended. All comments must be received by Apr 30 th .
May	The Regional ACIP process is completed.
June 1st	ACIP "Snapshot" sent to Washington

MassDOT Aeronautics Division's Capital Funding

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- Leveraging of Federal Funds
 - Airport Safety & Maintenance Program Projects
 - Creating the Capital Program for the Aeronautics Division.

Leveraging of Federal Funds

The Aeronautics Division requires all AIP-eligible airports to explore all means possible to leverage federal funding and explore alternative funding sources for airport projects before applying to MassDOT for Airport Safety and Maintenance Program (ASMP) grants.

- By leveraging the maximum amount of federal dollars for AIP projects, MassDOT is able to better program their capital funds for statewide routine/preventive maintenance projects deemed ineligible under the AIP program. These projects may include vegetation management plans, statewide crack repair projects, and security projects for general aviation airports. These projects provide a very significant benefit for the privately-owned public use airports in the State which aren't eligible for AIP funding.
- The FAA share for AIP projects is currently 95%. MassDOT's share for these grants is 2.5% with a matching airport share giving MassDOT a **federal leverage ratio of 38:1**.

Airport Safety & Maintenance Program (ASMP)

Recognizing the fact that not all airports are eligible for federal AIP funding and none are eligible for AIP funding for routine maintenance, MassDOT initiated a grants-in-aid program known as the ASMP for this very purpose.

- State grants for projects under the ASMP are only given to airports in the Massachusetts Statewide Airport System Plan (MSASP).
- Projects are often programmed for routine maintenance to address deficiencies noted in an annual state inspection, but airport planning and new construction are also considered eligible projects under ASMP.
- The ASMP program is the only state funding program available to privately-owned public use airports in the Commonwealth.

MassDOT Aeronautics Division's Capital Program

The Aeronautics Division obtains its funding for airport planning and development projects from the General Appropriations account and from Transportation Bond Issues, both of which are approved by the State Legislature.

- The Aeronautics Division's capital budget is established based on the funding required to support eligible AIP & ASMP projects that are programmed in the Division's capital improvement program for the upcoming state fiscal year.
- With respect to geographic concentration, MassDOT has done a good job "*spreading the wealth*" in terms of state capital spending across the Commonwealth.
- The bond cap for Aeronautics Division's 2011 capital program was \$16,987,231 and we closed out the FY at \$16,721,000 or 98.4% of target.

Airport Infrastructure Projects Update

- Barnstable Airport Terminal Construction
- New Bedford Regional Airport - Runway Safety Area Improvements
- Pittsfield Municipal Airport - Runway Safety Area Improvements

Airport Infrastructure Project Update



Barnstable Airport

Terminal Construction

- Began Construction November 2010
- Construction Scheduled to be completed by November 1, 2011
- Cost of Construction - \$ 16,912,277
 - MassDOT - \$13,083,900
 - Town of Barnstable - \$ 3,828,377

Airport Infrastructure Project Update

New Bedford Regional Airport

Runway Safety Area Improvements

- Phase 1a – Obstruction Removal - Complete
- Phase 1b – Construction of Mitigation Areas - Ongoing
- Phase 2 – Construction of Safety Areas
- Cost of Project - \$ 17,511,760
 - Federal - \$ 9,686,707
 - MassDOT - \$ 7,000,000
 - City of New Bedford - \$ 825,053



Airport Infrastructure Project Update

Pittsfield Municipal Airport

Runway Extension & Safety Area Improvements



- Phase I – Obstruction Removal & Construction of Mitigation Area – 90% Complete
- Phase II – Construction of Safety Areas and Runway Extension – Scheduled to begin mid November
- Cost of Project - \$ 22,074,553
 - Federal – \$ 6,000,000
 - MassDOT – \$13,383,381
 - City of Pittsfield - \$ 2,691,172

FAA & MassDOT Acronyms

- **ACIP: Airports Capital Improvement Plan** – ... the FAA's need-based 3 to 5 year regional capital plan for airport projects.
- **AIP: Airport Improvement Program** – ... the annual funding program that provides federal assistance for planning and development at the nation's public use airports.
- **ALP: Airport Layout Plan** – ...an ALP is a scaled drawing depicting existing and future facilities/property necessary for the operation and development of an airport.
- **AMP: Airport Master Plan** – ... explains and justifies the long-term needs of an airport with the goal of providing guidance for future development.
- **ASMP: Airport Safety and Maintenance Program** – ... a grants-in-aid program initiated by MassDOT to assist airport sponsors who aren't eligible to receive federal funding. The ASMP program serves to leverage state funds for safety, maintenance and security projects. The ASMP program also assists AIP eligible airports with routine maintenance/equipment requests that aren't considered eligible under AIP guidelines.

FAA & MassDOT Acronyms

- **CIP: Capital Improvement Plan** – ... an airport's need-based 3 to 5 year capital plan for airport planning/development projects or a term for a state's capital improvement program.
- **Leverage Ratio** – ... a ratio of federal to state spending that shows the return on investment for capital projects.
- **Massachusetts Statewide Airport System Plan** – ... provides a practical and financial roadmap for the long-term development of a safe and efficient airport system.
- **NPIAS: National Plan of Integrated Airport Systems** – ... an estimate of long-term investment to meet national aviation needs that is prepared by the FAA and sent to Congress every two years. There are approximately 3,700 airports in the NPIAS.
- **NPR: National Priority Rating** – ... a numerical system used as a tool for prioritizing airport development.

FAA & MassDOT Acronyms

- ***NPR: National Priority System Equation***– ... an equation that generates values between 0 and 100, with 100 being the most consistent with FAA goals.
- ***RSA: Runway Safety Area*** – ... the surface surrounding the runway prepared or suitable for reducing the risk or damage to airplanes in the event of an undershoot, overshoot or excursion from the runway.
- ***State Apportionment***– ... an FAA formula based on state population and land mass used in calculating Airport Improvement Program funding.

Questions and Answers

