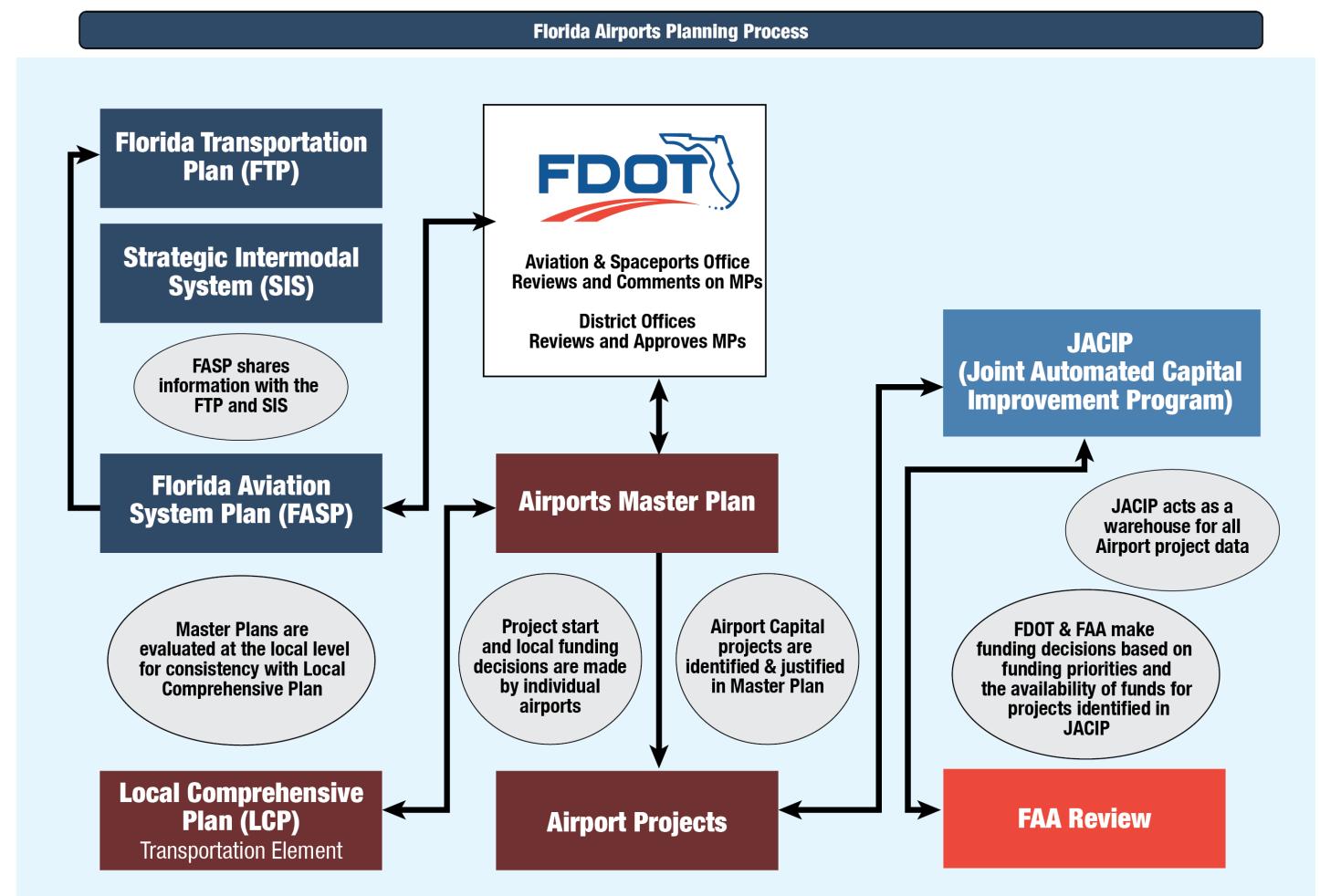


GUIDEBOOK FOR AIRPORT MASTER PLANNING

MASTER PLAN APPROVALS

Airport master plans are comprehensive documents that require airport sponsors to coordinate with the FAA and FDOT as well as other stakeholders. In addition to being reviewed by the FAA and FDOT, the elements of a master plan are evaluated at the local level for consistency with the local comprehensive plan. This process ensures compatibility with Federal, state, and local planning efforts.

As shown in the figure below, airport master plans are an integral component of airport development and funding. Through coordination with the FAA and FDOT, the airport sponsor can ensure their master plan is developed in accordance with Federal and state law and provides for the needs and opportunities of their airport, both now and in the future.



Prepared for the Florida Department of Transportation
Aviation and Spaceports Office
605 Suwannee Street
Tallahassee, Florida 32399

To obtain a copy, visit:
www.fdot.gov/aviation/flpub.shtm

COORDINATION & METHODOLOGY

To assist in the development of the Guidebook, the project team coordinated with the FAA, FDOT, and a Technical Advisory Committee (TAC). The TAC was comprised of members of the aviation community in Florida and provided input throughout the development of the Guidebook. Additionally, this Guidebook was developed to complement FAA AC 150/5070-6B, Airport Master Plans, by providing additional Florida-specific guidance and resources.



GUIDEBOOK FOR AIRPORT MASTER PLANNING

Airport master plans are used to define and implement the long-term development plans of an airport. This includes projecting future aviation demand and proposing facilities that can accommodate the projected growth at an airport. While the master planning process must consider the needs of airport tenants, users, and the public, safety considerations must be emphasized throughout the plan. Therefore, the Federal Aviation Administration (FAA) and the Florida Department of Transportation (FDOT) must be coordinated with throughout the development process.



The elements of a master plan vary in complexity and level of detail depending on the size, function, issues, opportunities, and conditions of the individual airport. A successful master plan is presented in a professional format that effectively communicates the research, process, and justification from which the final development plan was created.

PURPOSE AND OVERVIEW

The FDOT Aviation and Spaceports Office developed the FDOT Guidebook for Airport Master Planning (Guidebook) for use by airport sponsors, operators, and consultants at general aviation (GA) and commercial service airports throughout the state to assist in developing effective and attainable master plans. These plans are comprehensive analyses that ultimately illustrate an airport's development plans to meet the future aviation demand requirements in a safe and cost-effective manner.

The airport sponsor is ultimately responsible for approving the Airport Master Plan based on the contents of the plan and accuracy of the data. FAA and FDOT conditionally approve Airport Layout Plans based on Federal and state standards and the FDOT Guidebook for Airport Master Planning.

The Guidebook was developed as a singular reference for Florida airports completing an airport master plan, complimenting the existing resources provided by the FAA. The Guidebook provides Florida-specific information related to the additional requirements of FDOT, State Statutes, Administrative Codes, and other state agencies that are applicable to Florida airports beyond the FAA guidance.

All master plans developed for Florida airports must be developed in accordance with the Guidebook.



MASTER PLAN PROCESS

Each airport's characteristics, issues, opportunities, and role are unique. Therefore, planning elements, topics, and complexity of each master plan will vary. Typical elements include:

- » Determining the elements to be analyzed
- » Public outreach efforts
- » Data collection and existing conditions
- » Environmental considerations
- » Forecasting demand
- » Developing the recommended plan
- » Financial analysis

Though each master planning effort will be different, the general process that is followed will be similar. The graphic below highlights the overall master plan work flow. Of importance in the process are the Pre-Planning and Scoping components, which ultimately set the stage for a successful master plan.

MASTER PLAN PRODUCTS

While format and scope may vary, most master plans include the following elements:

Master Plan – A narrative report containing the data and justification of an airport's conceptual long-term facility development based on current and future conditions of the airport and aviation industry. The master plan document serves as the narrative that justifies and supports the recommendations depicted in the Airport Layout Plan (ALP).

Airport Layout Plans – A set of drawings that illustrate the existing airport facilities, including FAA and FDOT design standards, and proposed developments. The ALP drawing set is approved by the FAA and FDOT and is used to determine funding eligibility.

Capital Improvement Plan – A table displaying the estimated costs, schedule, and other pertinent information for the capital development projects identified in the master plan and routine maintenance projects.



ROLES AND RESPONSIBILITIES

To ensure an appropriate master plan is developed, there are several key entities that must be involved throughout a master plan, each with their own roles and responsibilities. It is important to involve these entities in the scoping process so that the final deliverable is comprehensive and meaningful to all of the plan's users. Below is a listing of the entities that are essential to involve throughout the master planning process as well as a brief description of their roles and responsibilities.

Airport Sponsor – Leads the study, public outreach efforts, and ensures the final deliverable is realistic and meaningful for the development of the airport. It is the responsibility of the sponsor to ensure that the master plan complements and supports the airport's other plans and goals.

FAA – Provides technical guidance and assistance throughout the master planning process to ensure planning is consistent and compliant with current standards. The FAA also approves aviation forecasts, the critical design aircraft, and the ALP for airports that are in the National Plan of Integrated Airport Systems (NPIAS).

FDOT – Provides technical guidance and assistance throughout the master planning process to ensure the plan is consistent with current standards, state regulations, and the Florida Aviation System Plan. FDOT ultimately approves the plan after it is approved by the airport sponsor.

Stakeholders – Provide additional input on key issues and comment on deliverables as appropriate. Involvement of stakeholders ultimately helps to ensure that the plan considers the desires of the stakeholders and will help build consensus. Stakeholders can include: Metropolitan Planning Organizations, Regional Planning Councils, and local residents or organizations. A complete list of potential stakeholders to consider is provided in the Guidebook.

PUBLIC INVOLVEMENT

Public involvement allows for a greater understanding of the opportunities and constraints of the airport and support by stakeholders. Therefore, FAA and FDOT guidance recommends the creation of a Public Involvement Program (PIP) that is appropriate based on the complexity of the project and the need to address local factors. At a minimum, there should be one advisory meeting and one public outreach meeting, but it is recommended that efforts be expanded to include other activities such as advisory committees, workshops, public hearings, websites, social media, newsletters, or surveys.

RECOMMENDED DEVELOPMENT PLAN

The master plan process provides an analysis of what additional facilities are required beyond the existing airport infrastructure to accommodate forecasted aviation demand while meeting Federal, state, and local regulations. This includes FAA and FDOT design standards, impacts from emerging trends, environmental conditions, and stakeholder input.

As there is typically more than one solution available, alternatives should be evaluated to arrive at the most appropriate recommendation that meets the current and future needs of all airport users as well as keeping within the strategic vision of the airport sponsor. Sponsors evaluate development recommendations based on a set of criteria (ex: operational performance or fiscal factors) that is identified during the planning process. The criteria used will differ based on the type of development being evaluated. For example, the criteria will most likely be different for the analysis of runway expansion alternatives versus obstruction removal. The outcome of this evaluation is a Recommended Development Plan, which is illustrated on the ALP and the associated costs and schedule estimated in the CIP.

FINANCIAL FEASIBILITY

The financial feasibility task ensures that the projects identified in the Recommended Development Plan and listed in the CIP are in line with anticipated available funding based on the proposed implementation schedule. The financial feasibility analysis identifies funding sources and provides a plan for funding projects in the short-, medium-, and long-term time frames. Funding sources may include the FAA, FDOT, private funds, municipal bonds, airport concession and lease revenues, or other sources. It is important to ensure that the CIP is realistic as it demonstrates an ability to fund the local share of projects. The CIP is then input into the FAA's System of Airport Reporting (SOAR) as well as the Joint Automated Capital Improvement Program (JACIP), which is utilized to assist the FAA and FDOT in future funding decisions. The financial feasibility element should work in concert with the facilities implementation element to ensure that the recommendations of the plan can be implemented.

