

Section 1

Introduction

Need for an Updated Airport Master Plan

The Greenville–Spartanburg International Airport (GSP) is a center of transportation for the Upstate of South Carolina. The airport is also a major contributor to the local economy through revenue generation, employment, and enhancement of the competitiveness of local business.

Over the past 20 years, GSP has experienced significant growth in commercial operations. Only during the past two years, following the events of 9/11 and economic slowdown, has traffic declined somewhat. Several developments near the airport, including a new BMW assembly plant, have been completed and may require airport support in the near future. The long-term growth trends are expected to continue and, thus, expansion of GSP's facilities to meet the Upstate's future aviation and business demands is critical.

GSP Development Plan

The GSP Airport Commission maintains an updated master plan strategy to guide the near-term development of the airport in the context of a long-term strategy. Key documents include:

- In 1991, a master plan study entitled the “Horizon Plan” was developed for GSP by the LPA Group, Incorporated. The study explored the short-, mid-, and long-term aviation needs and recommended facility configurations to meet those needs. Key recommendations included lengthening of the runway to 11,001 feet and the addition of five gates to the concourse building.
- In March 1996, Bechtel Infrastructure completed a study that investigated the need for land acquisition for additional runway expansion, the adequacy of land use and reservation within the airport property, and the business opportunities near the airport.
- In March of 1997, Bechtel Infrastructure completed an update of the 1991 master plan. This update revised growth strategies for

the airfield, terminal, cargo, ground access, and parking configurations to improve operations and levels of service. The master plan also recommended land acquisition for access improvements and noise mitigation.

The aviation industry has seen significant changes in the past 5 years. New e-ticketing technologies have evolved. Low-cost carriers have thrived. Since the events of September 11, 2001, the Federal Government has mandated new costly security procedures. Travel demands have declined. Several major airlines are facing bankruptcy.

To address these major changes of the aviation industry, the GSP Airport Commission has contracted Bechtel Infrastructure to update the 1997 master plan by reviewing, validating, and revising the original master plan to meet the evolving needs of the Upstate.

This document summarizes the recommendations of the planning effort, the details of which have been developed with GSP Airport management. A systems approach, described below, has been used to define GSP's requirements and evaluate the alternatives.

Airfield System. Covers all areas where aircraft operate, including runways, taxiways, taxilanes, aprons, ground service equipment, staging and roads, and air traffic control tower.

Passenger System. Covers all facilities associated with passenger use at the airport, including passenger terminal and concourses.

General Aviation System. Covers facilities for based and itinerant general aviation aircraft at GSP.

Cargo System. Covers both freight and belly cargo (space in the “belly” of commercial aircraft) facilities at GSP including terminal buildings, trucking docks, and truck staging areas.

Support Facilities System. Covers airport rescue and fire-fighting facilities, facility maintenance complex, catering facility, ground service equipment maintenance facility, utility plant, triturator/incinerator, public safety and health facility, meteorological facilities, fuel farm, and administration building.

Commercial Development System. Covers any potential commercial opportunities such as aircraft maintenance facility, pilot training center, and business parks.

Ground Access System. Covers roadways, terminal curbs, parking, rental car facilities, and taxi marshaling.

Building layouts are not included in this report and will be examined as part of conceptual design studies performed by others.

Report Organization

This report focuses on the preferred configuration for each system. Documentation for the alternatives analyses was provided to GSP Airport management during the development of the master plan update. The document is organized into the following sections:

- *Section 1, Introduction,* presents the need for an updated master plan and discusses how the report is organized.
- *Section 2, Existing Setting,* describes the existing facilities at the airport.
- *Section 3, Development Concept,* presents the GSP vision and goals, the land use plan, and the preferred ultimate airport layout plan.
- *Section 4, Traffic Projections,* summarizes annual and peak period traffic projections for passengers, cargo, and aircraft operations.
- *Sections 5 through 11* present the preferred configuration for the airfield, passenger, general aviation, cargo, support facilities, commercial development, and ground access systems.
- *Section 12, Phasing,* addresses the phasing strategy for airport development.