Section 2

Existing Setting

The Greenville-Spartanburg International Airport (GSP) is located in South Carolina on the county line separating Greenville and Spartanburg counties, approximately 15 miles southwest of downtown Spartanburg, 12 miles northeast of downtown Greenville, and 2 miles south of the City of Greer. The airport encompasses approximately 3,600 acres and currently has one runway, one passenger terminal, several general aviation facilities, two air cargo terminals, a cargo apron with a customs and immigration building, and numerous support facilities.

Figure 2-1 presents the existing facilities at the airport. A brief description of these facilities follows.

Airfield System

GSP’s runway 04/22 is 11,001-feet long and 150 feet wide. The runway currently accommodates Category IIIb precision approaches to Runway 04 and Category I approaches to Runway 22. East of the existing runway, land has been reserved to build a second parallel runway 8,200 feet long and 150 feet wide.

The airport’s primary taxiways consist of a parallel taxiway located 600 feet east of the runway centerline and an apron edge taxiway in front of the concourse, 300 feet east of the parallel taxiway. These taxiways are wide enough to accommodate the largest operating aircraft today (FAA Group V, B747-400). The 600-foot runway-taxiway separation is sufficient for future FAA Group VI aircraft, like the A380-800 aircraft.

The airport has several aircraft parking aprons that serve the passenger, general aviation, and cargo facilities. The air traffic control tower is located at the north end of Concourse B.

An ASR-8 radar operated by the FAA is located east of the passenger terminal complex. FAA proposes to replace this radar with a state-of-the-art ASR-11 radar at a new site in the near future.

Passenger System

The GSP passenger terminal was constructed in 1962 and expanded in 1989. It contains 13 gates in Concourses A and B, of which nine are currently served by passenger loading bridges. Table 2.1 provides information on aircraft gates at each concourse. The aircraft parking positions at the gates can accommodate a variety of Group II and Group III aircraft; however, the gate spacing requires closing an adjacent parking position when large Group III aircraft are present.

Table 2-1 Existing Aircraft Gates

<table>
<thead>
<tr>
<th>Concourse</th>
<th>Total Gates</th>
<th>Gates With Loading Bridges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concourse A</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Concourse B</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

The terminal building contains space for ticketing, check-in, baggage claim, security processing, rental car counters, offices, and amenities for passengers. In 2003, airline tenants included American Eagle, Continental, Delta, Northwest, United Express, and US Airways. Two bridges containing concession space and passenger amenities connect the terminal to the concourse.

General Aviation System

The airport has several general aviation tenant facilities operated by one fixed-base operator (FBO) located to the north of the passenger terminal (as shown in Figure 2-2). Facilities include three storage hangars, a maintenance hangar, and a terminal building. In 2003, these facilities accommodated as many as 26 aircraft based at the airport and numerous itinerant aircraft. Based aircraft tenants included the Barnet Company, Executive Aviation Group, Gibbs International, Michelin Tire, and Milliken Company.

Cargo System

The south cargo terminal, with 25 truck loading docks, is located south of the passenger terminal and serves operations for Airborne, Delta, Continental, Northwest, US Airways, UPS, and the US Postal Service. The north cargo area includes a 120,000 square foot Federal Express cargo terminal, an aircraft-parking apron, and a customs and immigration station. The 325,000-square-foot apron, with 126,400 square feet of adjacent paving for staging, was designed to accommodate two B747s.

Support Facilities System

GSP has several facilities and systems to support building and airfield operations, including the following:

- The airport rescue fire-fighting station with seven truck bays is located next to the air traffic control tower at the north end of Concourse B.
- The south cargo building, in addition to handling air courier freight, serves airline belly cargo and houses a US post office.
- The facilities maintenance and snow removal building is located at the south end of the passenger terminal apron.
- The catering facility is located in the basement of the concourse where the bridges connect to the terminal building.
- The central plant is also in the basement of the concourse adjacent to the catering facility.
- The fuel farm is located near the intersection of GSP Drive and Stevens Road. It is owned by the airport and operated by a FBO who trucks the fuel to the aircraft. The Airport Commission is planning to decommission this fuel farm and build a new one at the northwest corner of the airport property. The new site will have direct access to SC 101; an airside fuel truck service road to the new site has already been constructed.
- The passenger Federal Inspection Services (FIS) facility is located in the south end of Concourse A on the apron level. A separate FIS facility is located in the north cargo area, for processing of import cargo and air cargo crews.
- The National Weather Service facility is located on GSP Drive between SC14 and the passenger terminal, and includes a NEXRAD weather radar system. A six-station LLWAS (low-level wind shear alert system) is installed at the airport.
Commercial Development System

The airport currently has no on-site commercial development. A business park to the south of the airport on SC 14 is being developed and hotel facilities have been constructed several miles south on Interstate 85.

Highway SC80, a limited access four-lane highway running the length of the airport’s northwest property line, is under construction. This road will open the north side of the airport to commercial development, particularly hotels and business parks that accommodate travelers and others who require a convenient airport location for various business functions.

Ground Access System

Interstate 85, a six-lane north-south freeway on the east side of the airport, provides direct access to GSP via a full interchange. Vehicles approach the terminal from the interstate and circulate through a loop system with non-signalized intersections.

The airport can also be accessed at three other points. From the south, GSP Drive, a limited access road, connects to SC14 and runs perpendicular to the loop system to the air cargo and the general aviation areas. From the north, a limited access road connects to SC101 and serves the north cargo apron. From the northeast, Stevens Road provides direct access to the general aviation area from Brockman-McClimon Road. In addition, a dedicated road connects the north cargo apron directly to the BMW assembly plant property.

Access from Interstate 85 will be improved by upgrade of the airport interchange. The improvements will include separation of weaving lanes from the SC14 interchange to the south and the forthcoming interchange at Brockman-McClimon Road to the north.

Two parking garages have been constructed in the passenger terminal area, and surface parking lots have recently been expanded. The parking garages are located within the terminal loop system and provide short-term parking as well as spaces for rental car pickup and drop-off. Large surface lots adjacent to the loop system provide short-term, daily, and long-term parking. Table 2-2 summarizes the number of existing parking stalls.

Utilities System

There is no main utility corridor for the airport. Power, gas, telephone, fiber optic cables, water, and sanitary sewer are brought into the airport at different points. The terminal, south cargo, and general aviation facilities are served by utility connections on the south side of the airport; the north cargo area is served by utility connections on the north side of the airport from SC 101.

Duke Energy supplies power from a main line that runs parallel to Interstate 85 and enters the airport parallel to the main access road. Duke Energy has sufficient capacity to meet the future power demand of the airport.

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Telephone and fiber optics are under the jurisdiction of the Bell South network. Telephone service is supplied by lines entering the airport from the east along Stevens Road. Fiber optic service is supplied by a line entering the airport from the south along GSP Drive and running the full length of the airport to SC 101 just west of the north cargo apron.

Table 2-2 Existing Parking Stalls

<table>
<thead>
<tr>
<th>Parking Facility</th>
<th>Existing Stalls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td></td>
</tr>
<tr>
<td>Parking Garage A</td>
<td>1,098</td>
</tr>
<tr>
<td>Parking Garage B</td>
<td>1,529</td>
</tr>
<tr>
<td>Short-term open lot</td>
<td>232</td>
</tr>
<tr>
<td>Rental car area in “A”</td>
<td>270</td>
</tr>
<tr>
<td>Long-term</td>
<td></td>
</tr>
<tr>
<td>Daily open lot</td>
<td>400</td>
</tr>
<tr>
<td>Long-term open lot</td>
<td>1,097</td>
</tr>
<tr>
<td>Employee Lot</td>
<td>214</td>
</tr>
<tr>
<td>Total</td>
<td>4,840</td>
</tr>
</tbody>
</table>

Potable and fire water is supplied by the Greer Commission of Public Works. The main water line enters the airport from the west off Poplar Drive. It is a 12-inch line that reduces to an 8-inch pipe as it feeds the passenger terminal complex and adjacent facilities. The airport also has a 10-inch feed from SC 101 into the north cargo area.

The Greer Commission of Public Works supplies natural gas through lines entering the airport on the east along Stevens Road and from the south by a line entering the airport along GSP Drive.

The sanitary sewerage collection system on the airport is owned by the Airport Commission. The Greer Commission of Public Works has installed a pump station at the end of the collection system and pumps the sewage to their treatment facility.