

Introduction

Aviation is the fastest mode of transportation for traveling substantial distances. Commercial aviation allows citizens to travel to other states and internationally for business, personal business, or leisure. Commercial freight operations—including the major parcel companies—provide a means of delivering commercial goods across the nation.

General aviation supports business travel needs as well as providing for recreational flying. There are also important niche operations, such as medical helicopters.

Aviation activities also impact other aspects of the transportation system. For example, larger airports and their associated aviation-related businesses are significant generators of roadway travel demand, not only for air travelers but also for commercial vehicles as well as the commuting needs of airport employees.

The RFATS region benefits from close proximity to a major international airport and is fortunate also to have its own corporate/business airport. The region's challenge is to maximize the benefits of having these two complementary facilities.



Existing Facilities and Conditions

Charlotte Douglas International Airport

Although Charlotte Douglas International Airport (CLT) is located across the state line in North Carolina, the airport serves as the region's primary commercial airport, offering direct links to nationwide and international destinations. American Airlines uses Charlotte as a major hub for its domestic and international air travel operations.

Over the past ten years, CLT has experienced a 55 percent increase in passenger traffic. In 2015 it had become the nation's 8th busiest airport, with more than 22 million enplanements (passengers boarded).¹



¹ U.S DOT Bureau of Transportation Statistics.

To meet its growing needs, CLT recently completed an airfield and terminal capacity enhancement study, which together form the airport's master plan. This plan defines the future and long term airfield and terminal development and helps guide CLT's construction and development through 2035.

Proposed improvements (shown in **Table 10.1**) include expansion of multiple concourses, terminal renovation and expansion, and addition of a fourth parallel runway.

Table 10.1: CLT Master Plan Projects

Proposed Improvement	Status
Elevated Roadway and Terminal Curb Front Improvements	Construction (Completion - Summer 2018)
Concourse A Expansion - Phase I	Design (Completion - Spring 2018)
East Terminal Expansion - Phase II	Design (Completion - Spring 2018)
Terminal Renovations	Design (Completion - Fall 2019)
Concourse E Expansion - Phase VIII	Design (Completion - Spring 2018)
Air Traffic Control Tower	Design
Terminal Lobby Expansion	Planning (Completion 2020)
Fourth Parallel Runway	Planning (Completion - Fall 2022)
Concourse A Expansion - Phase II	Planning (Completion - Spring 2022)
Concourse B Expansion	Planning (Completion - Spring 2026)
Concourse C Expansion	Planning (Completion - Spring 2024)

Rock Hill/York County Airport

Rock Hill/York County Airport is a publicly-owned, general aviation SCII classified airport located approximately four miles north of the center of Rock Hill and approximately 17 miles from Charlotte Douglas International Airport (**Figure 10.1**).

The airport operates a 5,500-foot runway and encompasses nearly 500 acres. According to FAA statistics, it had more than 150 based aircraft and 36,000 aircraft operations for the year 2015.

Day-to-day airport business is performed by SkyTech, which leases the facilities on the west side of the airport from the City. Operations include general aviation local aircraft operations, general aviation itinerant operations, and a small number of military operations. Ground transportation includes rental car agencies and taxi service.

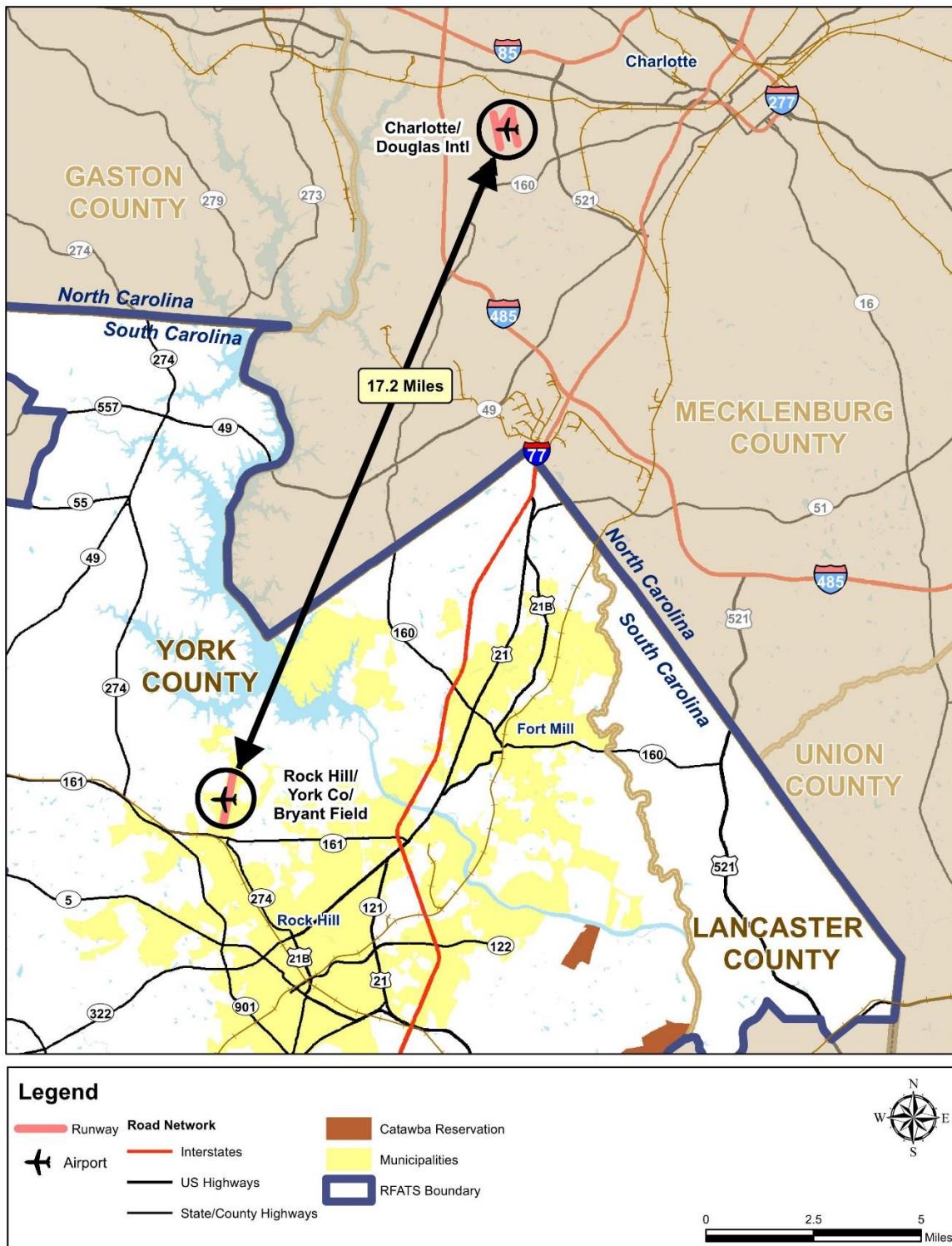
Development of an airport to serve the Rock Hill area was first initiated in 1956 with the creation of an Airport Commission. Under a management agreement between the City of Rock Hill and York County, the City remains the official sponsor of the airport, but both local governments contribute equally in funding. The Airport Commission makes recommendations to the City on the airport's policies and operations as well as advising the City and County on planning matters and capital improvements.



The City and County have contracted with SkyTech to handle day to day management of the airport.



Figure 10.1 | Physical Relationship of Charlotte-Douglas International and Rock Hill-York County Airports



Rock Hill-York County Airport's SCII classification indicates that it ranks in the second category of a four-tier system of airports, classified according to level of activity and purpose. As explained in the South Carolina Airport Systems Plan (2008), the state's airports can be grouped into four categories:

- **Commercial Service Airports** (category SCI) are airports with scheduled services and at least 10,000 passenger boardings annually.
- **Corporate/Business Airports** (category SCII) are urban/multi-jurisdictional airports with a runway of at least 5,000 feet and full services. They are seen as having a high economic impact, and 30 to 50 percent of their activity is in corporate aviation. The Rock Hill-York County Airport falls into this category.
- **Business/Recreation Airports** (category SCIII) are rural airports with a runway of at least 3,600 feet and moderate economic impact.
- **Recreational/Local Service Airports** (category SCIV) are low-activity airports with a runway of less than 3,600 feet and limited facilities. They have a low economic impact and may have constraints to expansion.

Rock Hill-York County Airport is designated by the FAA as a “reliever” for Charlotte-Douglas International Airport. This indicates the potential to attract more general aviation users who wish to avoid the growing congestion at CLT, both in terms of airport activity and using the area highways to get to and from their landside destinations. Adding more hangar space is one of the prerequisites for attracting more users to Rock Hill-York County Airport, as further discussed below.



Aerial image of the Rock Hill/York County Airport with 5,500' runway

Other Aviation Facilities in the Region

In addition to its publicly-owned airport, the RFATS region includes one privately-owned heliport located at Piedmont Medical Center in Rock Hill.

Future Plans

Airport Master Plan for Rock Hill-York County Airport

Since its opening in 1960, Rock Hill-York County Airport facilities have expanded under the direction of a series of Master Plans, and with the help of a series of federal grants. The airport experienced particularly rapid growth during the 1970s and early 1980s, both in operations and the number of aircraft based there. Subsequent Master Plans in 1983, 1994, and 2003 included further development of the airport infrastructure.

The current Airport Layout Plan was completed in June 2016. Its goal is “to provide guidelines for future airport development which will satisfy aviation demand in a cost-effective, feasible manner, while resolving aviation, environmental, and socioeconomic issues of the community.”

Table 10.2 provides a summary of the forecasts for the Rock Hill – York County Airport throughout the 20-year Airport Layout [Plan](#)- planning period.

Table 10.3 summarizes the airport’s facility requirements and lists the phases in which various facilities will be needed, as driven by demand.

Proposed improvements in the 20-year airport improvement program are categorized into one of three development phases:

- Phase I (2016-2021)
- Phase II (2022-2026)
- Phase III (2027-2035)

The airport is not projected to reach its capacity or volume service limits within the 20-year planning period. However, it is anticipated that the nature of the based aircraft will evolve to larger craft, requiring a longer runway and additional hangar space.

Table 10.2: Aviation Forecast Summary, Rock Hill-York County Airport

	2015 (Existing)		2016		2021		2026		2035	
	Forecast	TAF	Forecast	TAF	Forecast	TAF	Forecast	TAF	Forecast	TAF
BASED AIRCRAFT										
Single-Engine Piston	133		137		153		170		200	
Multi-Engine Piston	12		12		13		14		15	
Turboprop	0		0		2		3		5	
Jets	5		5		5		6		7	
Helicopters	2		2		3		3		5	
Total Based Aircraft	152	133	156	133	176	133	196	133	232	133
AIRCRAFT OPERATIONS										
GA Local	25,015	25,015	25,692	25,015	28,986	25,015	32,279	25,015	38,208	25,015
GA Itinerant	10,500	10,500	10,785	10,500	12,167	10,500	13,550	10,500	16,039	10,500
Air Taxi	400	400	410	400	463	400	516	400	610	400
Military	85	85	89	85	100	85	111	85	132	85
Total Operations	36,000	36,000	36,972	36,000	41,712	36,000	46,452	36,000	54,984	36,000
Operations per Based Aircraft	237	237	237	237	237	237	237	237	237	237
Source: Federal Aviation Administration, "FAA APO Terminal Area Forecast Detail Report," < http://aspm.faa.gov/ >, accessed January 14, 2015.										
Talbert, Bright & Ellington, Inc., January 2015.										

Table 10.3: Facility Requirements Summary, Rock Hill-York County Airport

Facility	Existing	2016	Phase 1	Phase 2	Phase 3
			2021	2026	2035
Runway 02/20	5,500' x 100'	5,500' x 100'	6,555' x 100'	6,555' x 100'	6,555' x 100'
Taxiway	1 Full-Parallel				
T-Hangar Units	97	130	149	165	194
Conventional Hangar (sf)	36,900 sf	66,100 sf	84,712 sf	100,859 sf	130,050 sf
Total Apron Area (sf)	410,650 sf	76,478 sf	88,654 sf	98,507 sf	116,766 sf
Terminal (sf)	7,366 sf	7,366 sf	8,679 sf	11,264 sf	12,829 sf

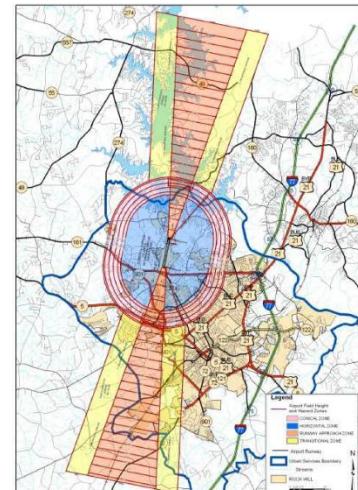
Source: Talbert, Bright & Ellington, Inc., January 2015.

Based on these forecast operations, the Airport Layout Plan calls for a range of improvements including a 6,555 foot runway and nearly 13,000 square feet of terminal area. The plan also recommends doubling the number of T-hangar units for aircraft storage by 2035.

Future Airport Development

Some additional land may be required to extend the runway as recommended in the 2016 Airport Layout Plan.

The City of Rock Hill and York County have adopted an Airport Overlay District aimed at protecting the interests of the airport and surrounding areas. This includes land use standards and restrictions for areas around the airport.



Stakeholder Input

The public involvement process generated no major issues relating to aviation.

Recommendations

- RFATS should work with the Airport Commission to study whether, and how, the forecast congestion at Charlotte Douglas International Airport (CLT) will affect likely demand on the Rock Hill/York County Airport and its potential for growth.
- RFATS stakeholders should remain involved in the planning of any expansion at CLT. CLT has a major impact on both airspace management and the commercial prospects of Rock Hill-York County's public airport.
- The City of Rock Hill and York County should continue to protect citizens, businesses, and the airport itself from noise-incompatible land uses by approving development in accordance with the adopted Airport Zoning Overlay.