



# Destination CLT

**With a new runway and 9-gate concourse expansion on the way and plans to upgrade the existing terminal and commercially develop its surrounding land, these are exciting times for Charlotte Douglas International Airport, writes Joe Bates.**

**T**o many outside of the US, arguably Charlotte Douglas International Airport (CLT) is the surprise package of the nation's busiest passenger gateways as few expect it to be in the top 10.

Yet it held that lofty status in 2015 when it was the ninth busiest airport in the country, and its current 11th ranking still places it ahead of names such as Miami International Airport, Orlando International Airport, Houston's George Bush Intercontinental Airport and Newark-Liberty.

Driving its growth is the booming local economy and, of course, hub carrier American Airlines, which together with American Eagle operate more than 660 daily flights out of CLT to 150 destinations in the US and 25 countries across the globe.

In fact such has been the speed of CLT's growth over the last 10 years, during which time it has jumped from the 18th busiest airport in the US handling 29.7 million passengers annually in

2006 to the eleventh biggest welcoming 44.4 million in 2016, that it has started work on a \$2.5 billion capital development programme to ensure that it has the capacity to handle future growth.

Haley Gentry, CLT's deputy aviation director/chief business and innovation officer, says: "Our existing facilities are quite capacity constrained. We are already out of gates, and with conservative estimates predicting that passenger numbers will rise by an average of 2% to 3% annually over the next five to ten years, we need more capacity."

## New infrastructure

Called Destination CLT, the airport's blueprint for the future outlines plans for the addition of a fourth parallel runway, new 9-gate concourse expansion, new elevated roadway, the expansion of the terminal kerb and the renovation of its existing terminal building.

CLT has just begun the process of gaining a federally required Environmental Impact Study for the new 12,000ft runway, which would





become its fifth and longest runway, and effectively alleviate airfield congestion during peak hours, should it become reality.

If all goes to plan, CLT hopes to start construction of the new runway in 2020 ahead of a 2022 opening.

The new 9-gate concourse expansion, set to open in Spring 2018, is an extension to the existing Concourse A and will boast a mixture of narrow and wide-body gates that provide more operational flexibility for CLT's non-hub airlines to accommodate future growth.

The new elevated roadway is a major project in its own right that will widen the existing four-lane approach road to the terminal to 16 lanes (eight lower, baggage claim level, and eight upper, kerbside level) by the summer of 2018, to create more badly needed space for vehicle drop offs and pick ups.

The renovation of the existing terminal includes an East Terminal Expansion project that Gentry reveals is designed to improve passenger flows between the international concourse and regional gates and will allow for the addition of a new food court.

CLT expects the East Terminal Expansion project to be completed by 2019, by which time many of the original public spaces in the 1982 built terminal will have been modernised and revamped.

The upgrades will include new floors, ceilings, lighting, public address systems and facades in each pier, starting with Concourse B this year.

"Although they have been improved, there are parts of the airport that are not what we want them to be or passengers would expect from a leading US airport," admits Gentry.

"The modernisation of the terminal will create a very different look and feel and a much improved airport experience for our passengers. We are very excited about what's coming."

All the development projects are part of the 10-year first phase of Destination CLT, which in the longer term includes plans for more gates and another parallel runway.

Charlotte Douglas currently boasts one terminal with five concourses (A-E) that between them cover 1.8 million square feet and offer 97 gates.

### Project AMP

An equally, if not more ambitious project is CLT's Area Master Plan (AMP) for the land surrounding the airport, which it wants to drive and shape the development of to create new economic zones that specialise in 'manufacturing and distribution', 'services', and 'amenities'.

Under the umbrella of Project AMP, it lists aviation, aerospace and defence; logistics and distribution; advanced manufacturing; perishables, food and agribusiness; and specialised materials as the key components of the planned 'Manufacturing and Distribution' cluster.

Professional and scientific; technical and R&D; health and bio life science; finance and insurance; and IDT and big data are stated as the type of industries it wants to attract to the 'services' area.

While tourism and hospitality; exhibition and conference; retail and dining; attractions and entertainment; and education and skills training are earmarked for the 'amenities' zone.

All of the land chosen for the huge project is within a 25-mile radius of CLT, much of which is owned by the airport. If everything comes to fruition, it is projected that in 20 years time, Project AMP could be responsible for nearly 30,000 new jobs, have a real estate value of \$2.6 billion and earn the airport an extra \$110 million per year in ground lease revenue.

Gentry enthuses: "Our strategic plan includes the commitment to raising our non-aeronautical revenues to help maintain our financial self-sufficiency and, like most airports, these efforts have traditionally focused on inside the perimeter fence.

"We have, however, recently started to look beyond the fence and we are now also focused on the compatible development of the land envelope around the airport. We are very excited about it and believe that it is going to provide some excellent opportunities to boost our revenues."

The airport is already a huge economic generator for the city of Charlotte and surrounding region, pumping in excess of \$16 billion into the local economy, being responsible for some 225,000 jobs and a payroll of \$11.5 billion.





## Airline agreements

Gentry describes 2016 as a good year for Charlotte Douglas because of a significant increase in local and international traffic (see traffic mix below), the continued upward trend in cargo volumes and the “milestone” renegotiation of its lease agreement with the airlines.

She notes that the new lease agreement provides more “favourable terms” for the airport in terms of airline fees for the usage of its facilities, and paves the way for future expansion without jeopardising CLT’s status of providing the lowest cost per enplaned passenger (CPE) at a major US hub.

“The new agreement with our signatory airlines replaces a master lease agreement that was 35 years old and, in reality, created for a market and cost base that no longer exists,” she comments.

Gentry points out that many of the airline alliances that we know today didn’t exist back then, nor did some of their affiliate carriers or agencies like the Transportation Security Administration (TSA).

“The new deal is better for everyone as it has allowed us to take the principles from the old agreement and modify and modernise the terms to meet today’s business environment,” she explains.

“The methodology for calculating our rates and charges is now much clearer and we are recovering more of our costs.”

## Cargo on the rise

She adds that it was also a good year for cargo, the airport experiencing a significant 14% rise in volumes as it handled 154,477 tons of freight during 2016.

The upturn was driven by CLT’s integrated carriers FedEx and UPS as well as the entrance into the Charlotte market of all-cargo carrier, ABX Air. And the upturn has continued into the first half of 2017 with volumes soaring by 22% over the same period a year ago.

“We are glad to see this market grow as we had a very strong cargo market in the 1990s, so it is very satisfying to see the volumes coming back,” says Gentry.

## Making a difference

Arora Engineers is currently involved in several key projects at Charlotte Douglas International Airport (CLT) that will have a significant impact on the gateway’s operational efficiency.

“The Terminal Lobby Expansion project will have a huge impact in terms of passenger access and processing,” says Wilson Rayfield of Gresham, Smith and Partners, which along with DAS Architecture is the prime design consultant for this part of Destination CLT.

The project is designed to reduce and consolidate the number of security checkpoints to create more space for self-service areas to ensure speedier and more efficient check-in for passengers and their baggage. More self-service technology should also free up airport staff to move around the terminal and engage with passengers.

In addition, Arora is implementing new technologies to monitor and notify passengers about wait times; providing analytics on how many passengers use the ticketing area at different times during the day; and will utilise digital signage to improve the passenger experience.

Arora will also streamline the management of the digital content of the signs from a single software platform and integrate it with the CLT website and mobile app. This, it says, will allow for much easier and quicker content updates and create consistency across several different information platforms.

David Grigg, Arora’s vice president and Geospatial Practice lead says: “Our efforts with these projects will help CLT build a solid foundation of data, information and procedures that enhance its situational awareness of important airport issues and make its daily operations more efficient.”





CLT's cargo facilities include a 570,000 square foot Air Cargo Center and a 200-acre intermodal complex operated by Norfolk Southern that offers rail and truck operations to east coast seaports.

It is also home to Foreign Trade Zone #57 and is the region's permanent magnet Foreign Trade Zone #17 site.

### Traffic mix and route development

Although 2016 was actually a static year for passenger growth at Charlotte Douglas due to a slight dip in airline load factors, the airport believes that a 10% rise in international traffic and 7% increase in travellers beginning their journey at CLT show that the market is healthy and growing.

New services also mean that CLT now offers more than 700 daily departures and non-stop international flights to 34 destinations across the globe that include Frankfurt, Havana, Munich, Montréal and London, which in 2016 was boosted by a second American Airlines flight to Heathrow.

"This is all positive news for the airport," enthuses aviation director, Brent Cagle. "It shows more people are choosing the Charlotte region to call home, which in turn creates additional local demand for service."

"The airport has always believed that a key to our success lies in our ability to retain connecting service while growing local traffic. Our growth in local traffic will ultimately work to promote competition in the market and help attract additional international destinations."

New York, Washington DC, Chicago, Boston and Los Angeles are the top O&D markets served from Charlotte Douglas, which principally

serves as a transfer hub due to the presence of American Airlines. Indeed, connecting flights currently account for 72% of CLT's traffic and American Airlines is responsible for bulk of it.

### Cost efficiency

Charlotte Douglas is the second largest hub for American Airlines after Dallas/Fort Worth (DFW) and, without doubt, its presence is key to the success of the North Carolina gateway.

In addition to its route network out of CLT, it employs 10,800 staff locally with a payroll of \$913 million and, in the words of Gentry, "American Airlines is very important to the economic vitality of our community".

Why has it stuck with Charlotte Douglas when other former US hubs haven't been so lucky?

"Because Charlotte is unique from the standpoint that it is extremely cost efficient," enthuses Gentry. "Cost efficiency is, and always has been, a main priority for us and we have a way of producing one of the lowest costs per enplaned passenger in the business."

"Let's be honest, American Airlines isn't here because they like us, they are here because of costs and they make good revenue. It has been able to grow and sustain its development in Charlotte over many years and I don't think that it could have achieved this success at many other airports."

Sounds like CLT and American have been a good match for each other, and with so many new facilities on the way, there is no end in sight for this success story.