

THE PIEDMONT TRIAD AEROTROPOLIS

Context

The term “aerotropolis” was coined by UNC-Chapel Hill professor Jack Kasarda to describe a new form of urban development comprising significant levels of concentrated aviation-focused enterprises and related businesses surrounding an airport and extending outward along connecting corridors a distance of 15 or more miles. An “airport city” is at the hub of the aerotropolis, and this dense concentration of airport-related businesses is to the aerotropolis what a central business district is to a conventional metropolis or metropolitan area.

Several business, demographic, and political trends are converging to underscore the economic significance of the emerging aerotropolis land form. Among them are globalization, speed-to-market, miniaturization and the related growing importance of air cargo to ship high value goods, mass customization, transportation costs, fast cycle logistics, and individual and business efficiencies. These factors are contributing to the development of large centers of economic activity surrounding airports in the U.S. and around the world. Though differences exist among aerotropolis, almost all include most if not all of the following components: industrial and business parks; hotels, restaurants, and hospitality venues; retail, transportation and logistics hubs; office parks; and entertainment and recreation venues, sometimes including convention and exhibition centers. Recreational facilities and even parks and other open spaces are also increasingly incorporated into airport city and aerotropolis master plans.

Piedmont Triad Regional Assets

While the Piedmont Triad, the nation’s 37th largest metro area, lacks the size of many of the world’s most notable aerotropolis, the Piedmont Triad has a unique and differentiating combination of assets that position the region to become a leading East Coast aerotropolis. The Piedmont Triad’s central East Coast location places it within a two-day truck haul of nearly 75 per cent of the U.S. population. The Piedmont Triad is centrally located between New York and Florida, Washington and Atlanta, and Charlotte and the Research Triangle region. As city and county political boundaries give way to more rational economic geographies, the Piedmont Triad is ideally situated in the rapidly growing I-85 corridor, located in the middle of the Charlotte-Piedmont Triad-Research Triangle megalopolis that includes over 6,000,000 people and many of the world’s most recognized companies, as well as distinguished research universities.

The Piedmont Triad region has a transportation infrastructure that is unparalleled on the East Coast. The region boasts five interstate highways—I-85, I-40, I-77, I-73, and I-74, providing excellent north-south and east-west access. These interstate highways, along with other interstate loops and connectors and an excellent network of 4-lane federal and state connecting highways, provide a superior surface transportation network with significant capacity for additional growth without confronting the congestion and gridlock prevalent in many peer metro regions. The Piedmont Triad is also located proximate to the ports of Charleston, Norfolk, Wilmington, and Morehead City, as a result of which many companies are locating major East Coast distribution centers in the region.

Perhaps the most distinguishing infrastructure asset of the Piedmont Triad region is the new FedEx Mid-Atlantic hub, scheduled to open in summer 2009. The FedEx hub has already had a profound economic impact on the Piedmont Triad region, catalyzing over \$1 billion in direct airport and related highway and business investment in the Piedmont Triad region. A new 9,000-foot runway, with one-mile separation from the existing 10,000-foot runway, will give PTI simultaneous flight capabilities and significant capacity for expansion, including direct cargo and passenger aviation activities, as well as manufacturing, distribution, and ancillary businesses.

Already the FedEx hub has been a magnet—attracting a diverse array of companies including Rheem, RalphLauren.com, Honda Aircraft Company, and a number of smaller biopharma companies. The Honda Aircraft project is particularly noteworthy, because it encompasses the global headquarters of Honda Aircraft Company, the company's global research and development center, the airframe manufacturing facility for the new very light HondaJet, and the nearby Honda Aero joint venture between Honda Aircraft and GE, which will build engines for the very light jet market at Alamance-Burlington Regional Airport. The FedEx hub gives the Piedmont Triad a unique and differentiating business advantage and further solidifies the Piedmont Triad as the best location for companies that manufacture, distribute, or transport products to East Coast markets.

The Piedmont Triad Kasarda Reports

The socioeconomic analysis undertaken as part of the FedEx environmental impact study projected the creation of approximately 20,000 new Piedmont Triad regional jobs as a direct result of the FedEx hub. Dr. Kasarda of UNC-Chapel Hill believes that estimate materially understates the impact of the FedEx hub, which when combined with the other location and infrastructure assets of the Piedmont Triad region, creates the foundation of the emerging Piedmont Triad Aerotropolis that will increase new employment far beyond that projection.

The Piedmont Triad Partnership (PTP)—the regional economic development organization representing the 12-county Piedmont Triad Region surrounding Greensboro, Winston-Salem, and High Point—hired Dr. Kasarda to study the potential of the Piedmont Triad to capitalize on its location and surface and air infrastructure assets for even greater economic advantage. In his June 2007 report entitled “Leveraging Piedmont Triad International Airport and other Regional Assets for Piedmont Triad Regional Competitive Advantage,” Kasarda confirmed the unique opportunity available to the Piedmont Triad region:

“Given the Piedmont Triad’s logistics and other assets to be soon reinforced by the FedEx Mid-Atlantic hub, the Region has a propitious opportunity to create a world-class, differentiating competency in multi-modal air logistics that can strengthen its traditional manufacturing economy and attract new economy industries such as microelectronics, pharmaceuticals, medical devices, and aerospace equipment. Indeed, the Piedmont Triad’s confluence of location, interstate highways, PTI and its new FedEx hub provide the Region competitive advantage that can help brand the Piedmont Triad nationally and globally in the same way that RTP and research have branded the Raleigh-Durham-Chapel Hill area and financial services have branded Charlotte. Beyond branding, the Piedmont Triad’s combination of logistics assets give the Region true economic advantage (its unique selling proposition) that

can have the potential to drive the creation of tens of thousands of new jobs across the entire 12-county Region.”

Based on the regional opportunity described in the 2007 Kasarda report, the PTP engaged Dr. Kasarda to undertake a follow-up study to identify specific steps that need to be undertaken in the Piedmont Triad to maximize the aerotropolis opportunity. That report, entitled “The Piedmont Triad Aerotropolis Plan: From Guidelines to Implementation,” describes a number of specific initiatives to integrate airport planning, urban land use and infrastructure planning, and business planning, to leverage the benefits of the emerging aerotropolis.

Current Status

The anchor of the Piedmont Triad aerotropolis is Piedmont Triad International Airport (PTI), a 4,000-acre campus that already employs thousands in aviation-related services. With the opening of the FedEx hub and the new Honda Aircraft facilities, as well as expansions at other airport-based companies, employment at PTI will increase significantly in the next few years. The Piedmont Triad Airport Authority is integrating aerotropolis principles into its updated master plan, with particular emphasis on building a world-class air cargo capability and sites for aviation-related businesses.

Because PTI is centrally located in the polycentric Piedmont Triad region, the surrounding cities and counties are all developing industrial sites and business parks to position themselves to host the companies that will be attracted to the Piedmont Triad region to take advantage of the extended business day benefits offered by late night deliveries to the FedEx hub. FedEx Ground has recently purchased a tract near PTI for a new Ground hub, giving the Piedmont Triad a powerful combination of Express and Ground options for FedEx customers.

A group of Piedmont Triad leaders from business, government, academia, and philanthropy is developing a set of regional strategies around the Piedmont Triad Aerotropolis vision. This leadership engagement includes a focus on education and workforce development to ensure a supply of trained workers for the companies that will choose to locate in the Piedmont Triad. This unprecedented collaborative effort underscores the transformational opportunity available to the Piedmont Triad region, and the commitment of the region to embrace it.

Future Outcomes

The Piedmont Triad has been North Carolina’s manufacturing and transportation center for generations. The future of manufacturing will be based on speed, innovation, and agility, and the Piedmont Triad, with its location advantages, its world-class infrastructure, including the FedEx hub, eleven 4-year colleges and universities, and 9 community colleges, has all of the resources needed to drive economic growth and prosperity for the next 50 years and beyond.

The Piedmont Triad is poised to grow dramatically, but not at the expense of quality of life. The region’s dispersed population and employment, combined with a world-class surface transportation network, assure that the Piedmont Triad will have the capacity to accommodate the rapid growth without compromising the amenities that make the region a wonderful place to live and do business.