Creating an Aerotropolis

How Indianapolis Is Strategically Charting Its Airport's and Region's Future

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Indianapolis International Airport (IND), handling a total of 7.5 million passengers and 1.05 million metric tons of cargo in 2010, received much more than a facelift in 2008. A new state-of-the-art airport was opened adjacent to the old one on a greenfield site a mile wide and over two miles in length.

Led by its architecturally striking 1.2 million sq. ft. terminal chock full of shopping, dining, and cultural amenities, J. D. Power and Associates ranked IND North America's best in class for passenger experience in 2010. And, in February 2011, Airports Council International recognized IND as the top airport in North America in its annual Airport Service Quality awards for performance excellence.

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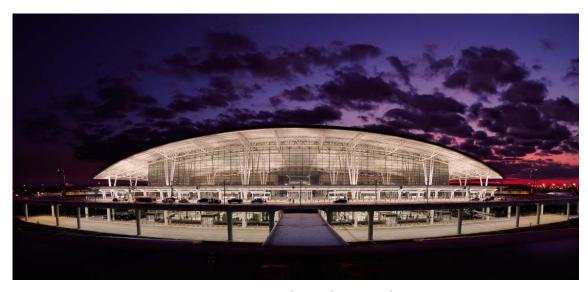


Image 1: New Indianapolis Terminal

Creating an Experience

The \$1.1 billion 40-gate terminal is impressive aeronautically, commercially, and visually. At its center is a pre-security 25,000 sq. ft. Civic Plaza with a 200-ft. diameter skylight providing views of the downtown Indianapolis skyline.



Image 2: Civic Plaza about here

Branches of Indianapolis' well-known shops, restaurants, and bistros circle the Plaza.

These are complemented by major chain retail outlets and eateries along with locally-themed restaurants and shops such as the Indianapolis 500 Grill (a sit-down restaurant) and Brickyard

Authentics (offering Indy 500 race car memorabilia). The Plaza also hosts a unique concept among U.S. airports—a one-stop shop incorporating merchandise and displays from eight local museums and cultural institutions.

Past security, 30,000 sq. ft. of locally-themed and national-chain shops and restaurants line IND's two concourses. European hand-blown glass walls and terrazzo floors depict accomplishments of the city in sports, life-sciences, and other areas. Public art brings all this together to project the history, economy, and character of Indianapolis.

A Logistics Engine

IND's greatest competitive strength is in cargo and air logistics. Serving as FedEx's second largest hub in the world (behind Memphis), IND's annual 1 million plus metric tons of cargo makes it the eighth largest cargo center in the U.S. and 21st largest globally, according to Airports Council International.

In early 2011, FedEx announced its fourth expansion of its facilities at IND since its hub opened there in 1988. The air express giant also announced it would launch new non-stop cargo flights to China, reinforcing its current nearly daily cargo flight from Hong Kong.



Image 3: IND FedEx

Leveraging FedEx and other air cargo services, IND is generating a growing niche in coldchain management and the rapid delivery of biopharmaceutical products. In addition to FedEx, Cargolux and Pace Air Freight specialize in time-sensitive, temperature-controlled cargo transportation at the airport.

The German 3PL, D. B. Schenker, has a large operation at IND's former United Airlines maintenance facility that reverted to airport ownership. In 2006, the airport partnered with Shenker to implement one of the most advanced cold-chain operations in the industry. This operation eliminates many risks associated with transporting temperature-controlled materials not only for Schenker but for numerous other biopharma and healthcare product distributors in the region. As a result, IND has become a magnet for attracting these distributors to the airport area and throughout the greater Indianapolis metropolitan region.

Aerotropolis Strategy

The Indianapolis Airport Authority (IAA) is presently embarked on an important mission to not only guide the growth and future prosperity of IND but also to make the airport an even stronger engine for regional economic development.

As with most airport authorities, IAA had previously focused largely on aeronautical infrastructure and investment. In the past year, under the visionary stewardship of its executive director and airport head, John D. Clark, the authority has developed a new strategic plan that involves (1) pursuing innovative approaches for increasing and diversifying non-airline revenues; (2) maximizing IND's land and infrastructure assets for both future aviation and commercial growth; (3) ensuring that IND is a cost-competitive airport for airlines to serve and commercial facilities to operate; and (4) allying with surrounding jurisdictions and other local stakeholders to stimulate additional private-sector investment, jobs, and taxes in outlying communities.

Key to this initiative is the planning and implementation of the aerotropolis model that will preserve land for IND's future aviation needs while ensuring that commercial development on IND's extensive property and outlying areas is economically efficient, aesthetically pleasing, and environmentally sustainable.

The Authority retained the consulting firm Landrum & Brown to develop its airport property land-use plan consistent with this model. As illustrated, the plan defines seven separate but integrated zones:

1. International Gateway and Commerce Center

- 2. Future growth of aviation activities
- 3. Future runway and air logistics
- 4. Regional Logistics and Business Complex
- 5. Educational and Technology Park
- 6. Multimodal Transport Park
- 7. Indianapolis Conservation and Recreation Complex

Zone 1, which is the airport's gateway, will be occupied by high-end offices and commercial facilities providing a positive first impression of the airport. It will be connected to the airport hotel and passenger terminal as well as to the multimodal transport park.

Zone 2, where the old passenger terminal was located, offers runway access. This zone will be used for logistics purposes and future aviation needs with the old terminal removed.

Zone 3 is to be reserved for a third parallel long-range runway along with air logistics facilities.

Zone 4, with proximity to air service providers, is targeted to fast-cycle logistics, customs brokers, freight forwarders, and facilities for e-fulfillment, light assembly, electronics repairs, and biopharma and drug distribution. The northeast corner of the site will have a passenger train stop on the Indianapolis-Chicago line that is planned for future high-speed rail, connecting the airport quickly to the downtown.

Zone 5 is dedicated to aviation and air logistics education and training along with related research and technology development on these topics.

Zone 6 links the off-airport rail system to an on-airport light rail connection to the terminal and airport hotel, as well as to gateway commercial facilities in zone 1.

Zone 7, a large conservation area will remain mostly undeveloped for environmental reasons but may see limited use for such functions as tree farms, botanical gardens, weekend fresh farm products, and park and recreation activities.

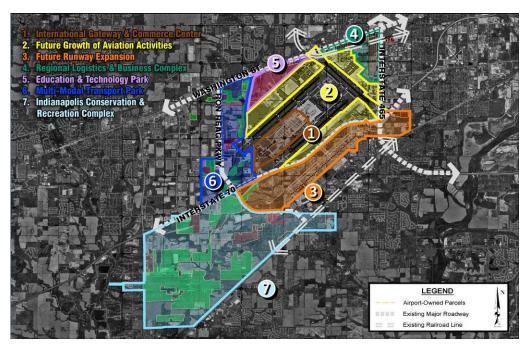


Image 4: IND Land-Use Plan

The land-use plan is designed for flexibility over the coming decades, even allowing for potentially yet to be known aviation-related commercial uses. At present, however, it is envisioned that just over half of the 800 acres of developable commercial land would be devoted to logistics, distribution, and light industry, just under a third for office and hospitality, and approximately 15 percent for retail and consumer services.

It is estimated that approximately 9,000 additional jobs will be created by these developments at build-out in 2040. Commercial development, which will primarily be done by

the private sector, is conservatively estimated to generate \$180 million in lease revenues for IAA over the next 30 years, but these could be substantially greater.

Impacts Beyond the Fence

As noted, an important objective of IAA's new strategy is to make IND an even stronger economic engine for generating investment, jobs, and taxes throughout the Indianapolis region. It is well-recognized that IND is instrumental to Indianapolis' huge sports tourism sector as well as to Indy's downtown corporations, hotels, and convention complex.

Less recognized is the large and growing role IND has been playing in making the region more competitive for high-tech manufacturing, logistics, and distribution. The nearby town of Plainfield, for instance, has more than 25 million square feet of light manufacturing, logistics, and distribution facilities, many of which were attracted by a combination of good interstate highway access and IND. These include both shared and dedicated logistics facilities to manage the distribution of time-critical pharmaceuticals, medical devices, and electronics.

The aerospace and defense sectors are also key targets for the airport region since extensive and reliable air cargo connectivity is critical to many of their constituent firms.

Already, the Indianapolis region has demonstrated success in attracting firms in these sectors such as Raytheon and Aero Engine Controls, a joint venture between Rolls-Royce PLC and Goodrich Corp.

Consistent with aerotropolis strategy, the airport authority plans to ally with local municipalities to attract business to the greater airport region and the downtown. As the Indianapolis Aerotropolis evolves, IAA foresees clusters of business and logistics parks,

shopping complexes, restaurants, hotels, and even academic institutions locating along a future airport ring road and along major connecting highways, including ones going directly to Indy's central business district.

3C's of Aerotropolis Success

The aerotropolis as an airport-integrated economic region requires region-wide coordinated planning. To achieve this reality, IAA has been meeting regularly with local municipalities and regional business leaders. The objective is two-fold: 1) to ensure that all stakeholders in the broader airport region are on board with IND's new commercial land-use plan and 2) to commence communication that would result in future Indianapolis Aerotropolis planning and coordinated actions to maximize mutual benefits for IND and the communities it serves.

IND, together with its nearby jurisdictions, offers all the ingredients to foster a successful Indianapolis Aerotropolis. Communication, cooperation, and coordination will be necessary, however, if this success is to be attained. IAA and the region's stakeholders clearly recognize the importance of the 3C's and appear committed to moving forward on all three fronts.

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