

Memo

Project: Colorado Aerotropolis Visioning Study

Subject: Examples of Aerotropolis Cities and Aerotropolises Worldwide

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Many cities around the world have established their own version of an aerotropolis. In some cases these aerotropolises happened organically as the city and airport grew in conjunction with one another; in other cases the aerotropolis was planned and created with the vision of a global city in mind.

There are upwards of 80 aerotropolis cities and aerotropolises either operational or developing across the globe (Kasarda 2013). Dr. John D. Kasarda and Greg Lindsay authored Aerotropolis: The Way We'll Live Next (Kasarda 2011), which describes the aerotropolis phenomenon and how cities are responding to the global market by developing a structured city with the airport at its center. A successful aerotropolis better serves workers, suppliers, executives, and goods to respond to the ubiquity of jet travel, overnight shipping, and global business networks. Kasarda contends that the places with the fastest ground access to jobs and industry near airports win a greater share of global economic activity driven by air travel.

The following overviews provide a sample of aerotropolises from around the globe. These examples demonstrate that other cities around the world are developing aerotropolises to compete in the global marketplace. Many of these examples show that the cities intend to develop an Aerotropolis despite limits in terms of land or other resources. In contrast, DIA has numerous resources: current and future runway capacity, vast acreage of developable land on and off airport property, and access to multiple highways and rail lines. These factors

indicate Colorado has great potential for a vibrant aerotropolis.

Dallas-Fort Worth International Airport

Dallas-Fort Worth International Airport (DFW Airport) is a true aerotropolis success story and is credited with much of North Texas' economic growth. The Dallas-Fort Worth Metropolitan Area (DFW Metro Area) covers a 12-county region in North Central Texas, and the establishment of DFW Airport required collaboration and cooperation with all of these counties. This was not an easy



feat; however DFW Airport is now a major economic engine of the metro area (Dallas Fort Worth International Airport 2015).

Business activities in the DFW Metro Area supported by air cargo moving through DFW Airport generate \$16.7 billion in total annual economic activity. Recurring operations at DFW Airport directly or indirectly generate \$31.6 billion in regional economic activity and supports over 143,000 jobs in the DFW Metro Area. Additionally, visitor spending for concessions and travel related expenses boost state and local tax revenues by an additional \$115 million each year. Finally, DFW Airport still has several thousand acres of property available for future Aerotropolis-related development (Dallas Fort Worth International Airport 2015).

Detroit Metropolitan Airport

Despite recent economic hardships,
Detroit may have a brighter future.
With more industrial engineers and
spending more money on research and
development than other regions,
Detroit has the potential to develop an
aerotropolis of its own (Kasarda 2011).
In fact, Detroit began touting the idea
of an aerotropolis in 2003, but it
wasn't until 2008 that Wayne County
Executive Robert Ficano began to
seriously push the aerotropolis
concept. The proposed aerotropolis will
encompass 60,000 acres of land around
Detroit Metropolitan Airport and would



combine Detroit Metropolitan and Willow Run Airports (Crain's Detroit Business 2013).

A quasi-public corporation, including many leaders from surrounding counties and townships as well as the Wayne County Airport Authority and local business leaders, was created to oversee the development of an aerotropolis (Crain's Detroit Business 2013). However, despite the formation of the corporation and desire to build an aerotropolis, there have been numerous setbacks in its development, largely due to political instability and controversy (Detroit Free Press 2014). This may change; however, as Wayne County moves toward a potential multi-million dollar deal with a Colorado company to develop land within the proposed aerotropolis project (Crain's Detroit Business).

Edmonton International Airport (Alberta)

In 2009 aviation officials and representatives from the City of Leduc and Leduc County in Alberta, began collaborating on a roughly 530-acre aerotropolis project just south of Edmonton International Airport. Leaders of the project hope to turn the area into a major development that would include hotels, restaurants, exhibition and conference centers, and attract manufacturing and distribution firms. The aerotropolis development would benefit the

Nisku Energy Park, which employs more than 28,000 tradesmen, as well as the 700-acre Port Alberta development site, a warehousing and distribution hub on airport property (City of Leduc 2015).

Incheon International Airport (Seoul)

Incheon International Airport (Incheon) in South Korea is one of the world's busiest airport hubs, and a primary reason for its creation was to establish trade and travel with China. Trade with China would allow for new markets to open up to billions of people. The airport is strategically located for this purpose as it is just 2 hours flying time from Shanghai and Beijing and 4 hours from many other large cities in China (Korea FEZ 2012).

In conjunction with Incheon is the planned aerotropolis development, Songdo International Business District



(Songdo). This global business hub opened in 2009 and is designated as a Free Economic Zone, meaning tax benefits are provided by the Korean government for foreign firms and foreigners, as well as a simpler regulatory regime. Songdo provides office and convention space, hotels, residential and retail developments, schools, health care facilities, and recreation spaces (Songdo IBD 2015). Just 20 minutes from Incheon and 1 hour from Seoul, Songdo aspires to be the world leader in the high-tech industry, and already Samsung, Cisco, and IBM have large offices located in the city (Korea FEZ 2012). Construction of Songdo will be complete in roughly 2020 (Songdo IBD 2015).

Los Angeles International Airport

A 2012 edition of Travel and Leisure magazine named Los Angeles International Airport (LAX) the second worst airport in the U.S. despite relocating 2,000 residents from 1965 to 1979 and demolishing over 800 homes on 430 acres of oceanfront land (Untapped Cities 2012). However, as one of the country's busiest airports, LAX has plans to change its reputation with a \$5.25 billion expansion. The airport is currently in the midst of \$3 billion in upgrades and is on-track to overtake O'Hare as the second largest airport in the U.S. (Flight Global 2014). Ongoing and upcoming improvements to LAX include an access modernization program that will improve the efficiency to access and egress the airport, the development of a new rental car parking facility, and the expansion of runways (The Atlantic 2015).

Louisville International Airport

United Parcel Service (UPS) headquarters are located in Louisville Kentucky because of its location within the continental US. The company employs more than 20,000 people in and around the city. Recognizing the worth of UPS and other Aerotropolis related development,

local officials were willing to tear apart the airfield's outdated cruciform runways from World War II and replace them with parallel runways, despite having to displace businesses, residences, and entire neighborhoods. This now allows jumbo jets to takeoff and land simultaneously, increasing the attractiveness to not only UPS but other businesses desiring aviation access. (Kasarda 2011).

Memphis International Airport

Memphis, Tennessee depends on FedEx for a great deal of its employment and economic activity. Memphis International Airport is the cargo superhub for FedEx, which employs roughly 30,000 people in the Memphis area. In total Memphis International Airport generates approximately 166,000 jobs. As a result of FedEx, Memphis is considered one of the world's leading airports in cargo. However airport leaders are not solely reliant on FedEx for economic growth. Airport leaders are looking ahead to the next wave of Aerotropolis growth in the cargo industry, which they see as being biotech and biosciences distribution and leadership. In this industry drugs and treatments can utilize the airport's overnight services and climatecontrolled distribution operations (Memphis International Airport 2007).

O'Hare International Airport (Chicago)

According to the Chicago Tribune, in a recent survey of passenger satisfaction, O'Hare International Airport ranked 96th among 100 world airports. In the 1970s, the Federal Aviation Administration noted that O'Hare would be outdated by the end of the 20th century and suggested building a much larger airport somewhere in the Midwest. Consequently, a tri-state commission

lack of collaboration and regional

was formed to study the best location for such an airport. However, due to a





consensus on location, the plan for a new aerotropolis-type airport was never implemented. As a result of its restricted size and lack of opportunities to grow, air cargo operations at O'Hare have steadily declined with both United and American Airlines shifting their domestic traffic to other airports. Many believe that O'Hare has outlived its life expectancy; however, the potential site of the new airport is too contentious, and the plan is to instead invest billions of dollars into the current airport (Chicago Tribune 2015).

Philadelphia International Airport, Pennsylvania.

Despite limited available land, city officials have recently developed aggressive plans for a concentrated development area around the airport that would include offices, restaurants, retail stores, and more.

Schiphol International Airport (Amsterdam)

The Netherlands is known today as a major grower and international exporter of flowers; however, the Dutch floral industry has been around for centuries. In 1593 a botanist arrived with an unusual wildflower - the tulip. Since then the production, sale, and export of tulips and other flowers has taken off. In 1928 KLM, the flag-carrier airline of The Netherlands, invented the perishables business, airlifting 7,500 hundred tons of flowers, fruits, and vegetables to London in that year alone. By 1973 nearly three quarters of all floral exports originated in The Netherlands. Consequently, Amsterdam Schipol International Airport plays a



very important role in the global economic market, and it is not by chance that the largest flower auction in The Netherlands is just 6 miles from the airport (Kasarda 2011).

The planned Aerotropolis resulting from Amsterdam's global economic importance is the airport city, Amsterdam District Zuidas, a 670-acre city with office space, restaurants, residential units, a university, a medical center, and The Netherlands' largest convention center located just 6 minutes from the airport (City Film TV 2012).

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