

Airports, Airport Cities, Airport Corridors, Aerotropolises & Economic Development

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Economic Importance of Airports is an Old Concept

Basic economic impact studies show regional importance of airports

Airport Business Activities		Off-Airport
Airport Administration & operation	Janitorial and Cleaning Services	Suppliers
Construction, Engineering & Consulting	Security	Wages Spent in Economy
Passenger Airlines	Parking and Misc (i.e., non-profit orgs)	Visitor Spending (lodging, meals, retail, entertainment, etc...)
Freight Airlines and Couriers	Ground Transportation (taxis, buses, limos)	
Catering Firms (non-airline owned)	Freight Forwarders	
FBOs & other General Aviation & Aviation Services	Rental Cars	
	Airport Eating & Drinking Concessions	
	Airport Retail Store Concessions	

Leveraging an Airport as a Regional Economic Development Asset

Hub airports may attract a wide range of land uses including industrial, commercial, retail and residential units

These are the economic contributions of airports that are spread throughout a regional economy

- Reliance on air cargo/Just-in-time deliveries
- Business travel
- Suppliers to airport businesses
- Housing for airport workers and workers in other dependant businesses
- Special Events & Access to High Priced Resorts

Example: How ATL Supports Kia Motors

“ATL...[allows] our international and interstate travelers to quickly and conveniently access our plant. Already, we have hosted visitors from every continent except Antarctica. It’s more than important that KMMG stay connected internationally; it’s essential”. *Statement by Kia Motors*



Airport Cities/Aerotropolises Exist Without Title

ATL 2009 (Hartsfield Jackson Atlanta International Airport)

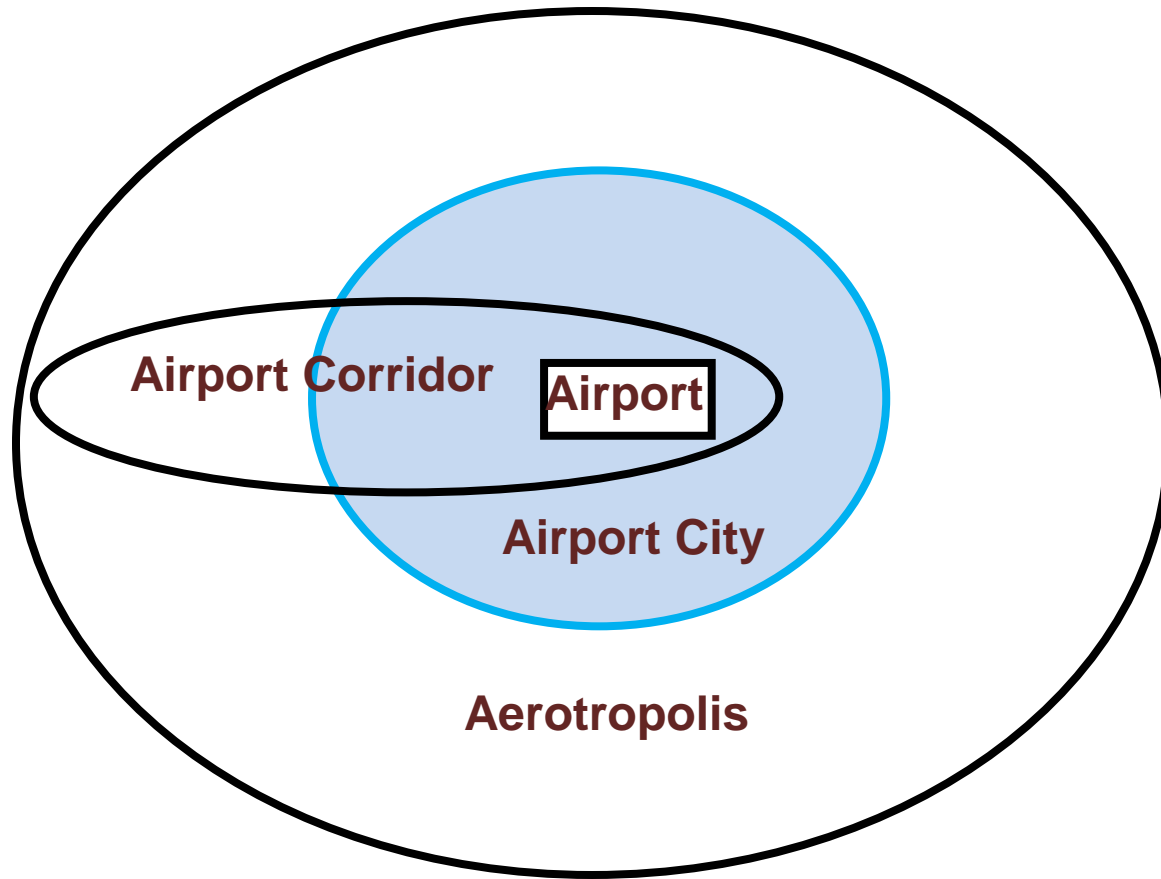
- Jobs on Airport – 58,000
 - Jobs Off Airport (metro-Atlanta)
 - Suppliers to on-airport businesses/agencies 33,000
 - Supported by spending of workers' income 59,000
 - Supported by visitor spending (initial round) 170,000
 - Suppliers to businesses that receive visitor spending & Spending of workers income 83,000
 - Production Jobs that rely on air cargo 31,000
- TOTAL 434,000

Airport City, Airport Corridor & Aerotropolis

Applied to agglomeration economies on and off airport formed due to airport operations

- Terms are used somewhat interchangeably
 - Airport Cities defined as an airport and proximate land outside the fence
 - Airport corridor is development along a direct surface transportation connection from an airport
 - Aerotropolis is more expansive, related to a region influenced by an airport

Airport Related Economic Development Concepts



Source: Adapted from Peneda, Reis and Marcario, *Critical Factors for Development of Airport Cities*, Transportation Research Record, Journal of the Transportation Research Board, No. 2214

Land Set-Asides for Economic Development Related to Airports and Other Modes in US

Foreign Trade Zones (airports, marine ports, and land borders)

- Airports that are Customs Port of Entry are able to use Foreign Trade Zones (FTZ) to increase cargo volume
- Marketed to companies involved with international trade. Companies defer, reduce or eliminate customs duties on products admitted to the zone
- Foreign-trade zones are designated sites licensed by the Foreign-Trade Zones Board of the US Department of Commerce

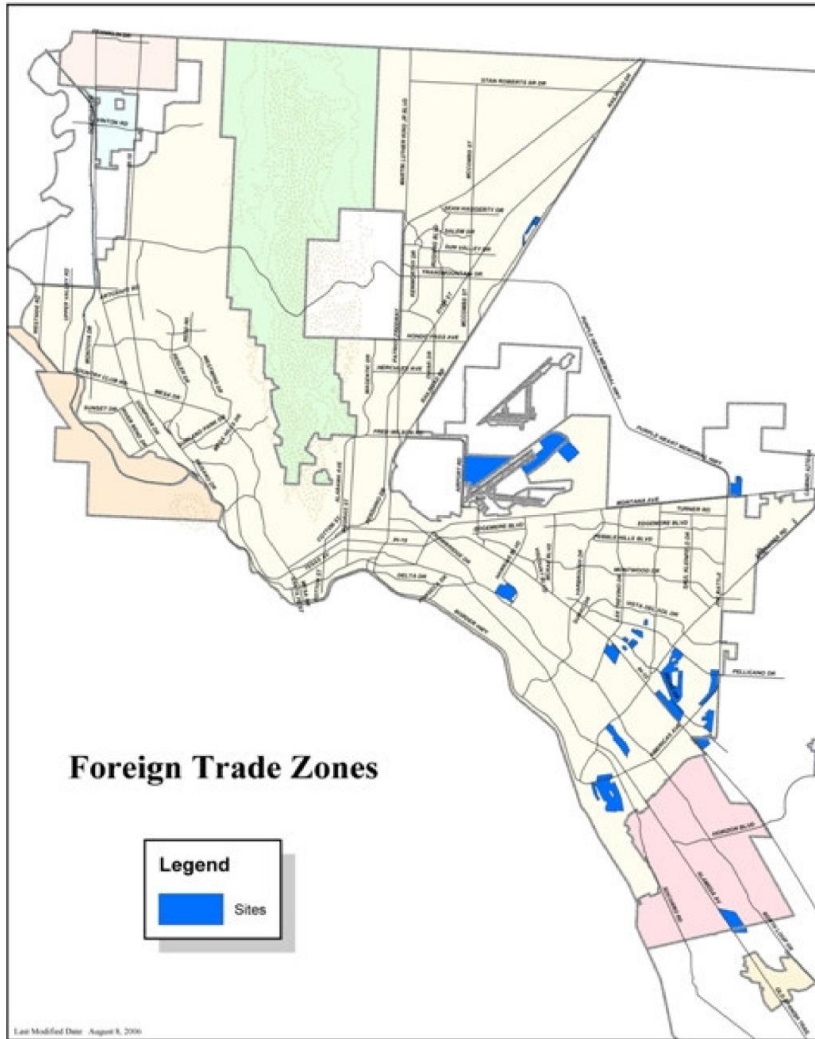
Marine Districts

- Zoning designating land in the vicinity of fishing harbors and deep water ports for marine-related industrial uses only.
- Viewed as a way to preserve important economic sectors that create thousands of often industrial and logistics jobs

Foreign Trade Zones- Land Dedicated to Leverage Air Cargo

Airport/Airport Operator	State	Airport/Airport Operator	State
Dallas/Fort Worth International Airport Board	TX	JFK Intl. Airport	NY
Greater Orlando Aviation Authority	FL	St. Joseph County Airport Authority	IN
Maryland Aviation Administration	MD	Operator: Richland-Lexington Airport	SC
Mobile Airport Authority	AL	Washington Dulles Foreign-Trade Zone	VA
City of Albuquerque Aviation Department	NM	Great Falls International Airport Authority	MT

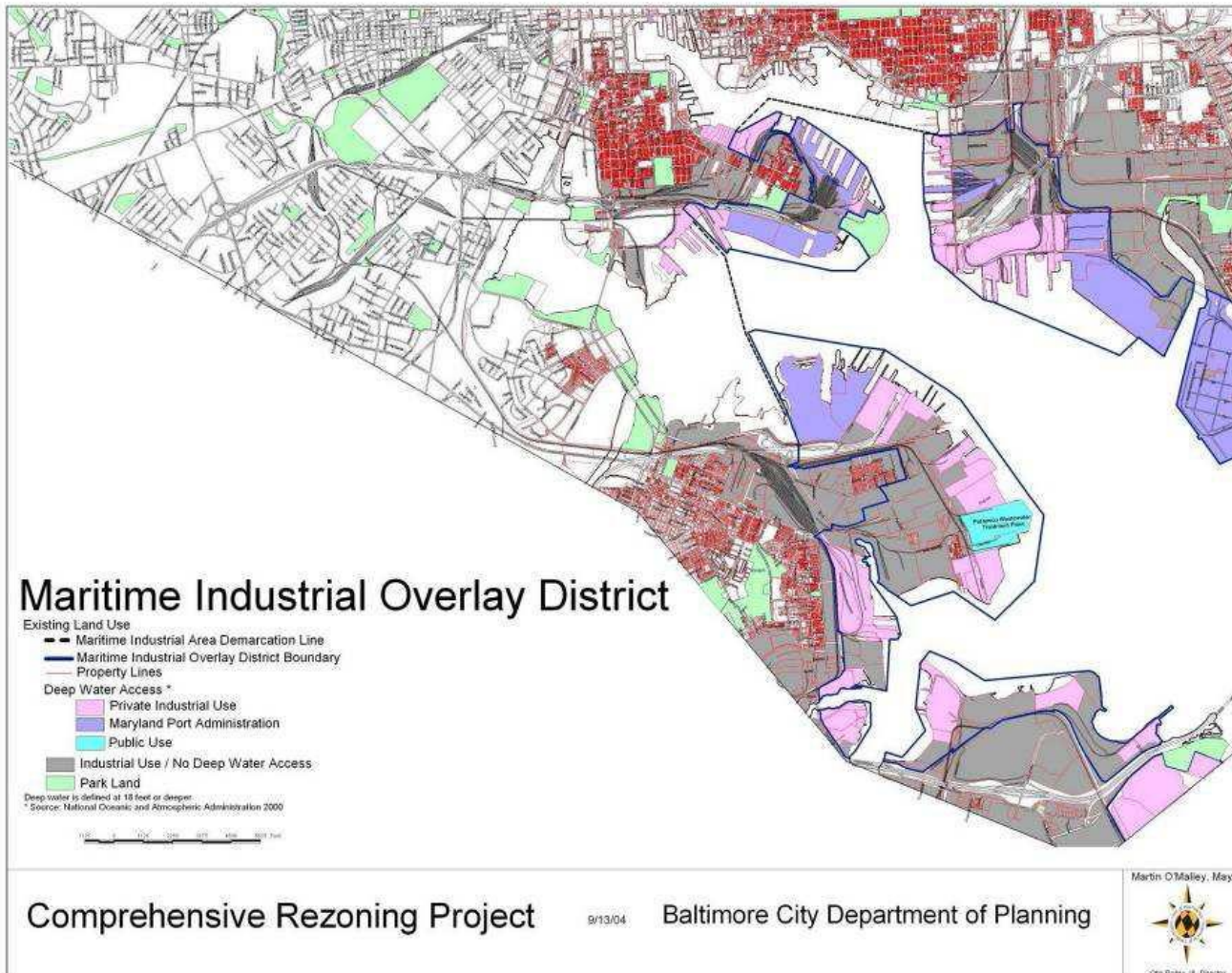
El Paso International Airport (FTZ #68)



- Created in 1981 to establish, maintain and operate a 60-acre site within Butterfield Trail Industrial Park.
- Today, El Paso FTZ is the fifth largest US general-purpose zone dollar volume, reaching a figure of \$2 billion in FY 1999 and the largest FTZ on the U.S./Mexico Border.
- 21 sites containing 3,443 acres within El Paso County.
- 70 firms use the FTZ, handling more than 200 different items from more than 80 countries.

Marine Districts

- Where regulatory measures are adopted to support & encourage uses specific to a transportation facility or feature
- Examples include:
Baltimore, MD;
Gloucester, MA



Airport Cities/ Airport Corridors/ Aerotropolises in the US



DULLES CORRIDOR - Area includes more than 575,000 jobs, 30,000 business establishments

Picture of Tyson's Corner, 13 miles from IAD (Dulles Intl. Airport)

Industrial Development by Chicago's O'Hare Airport

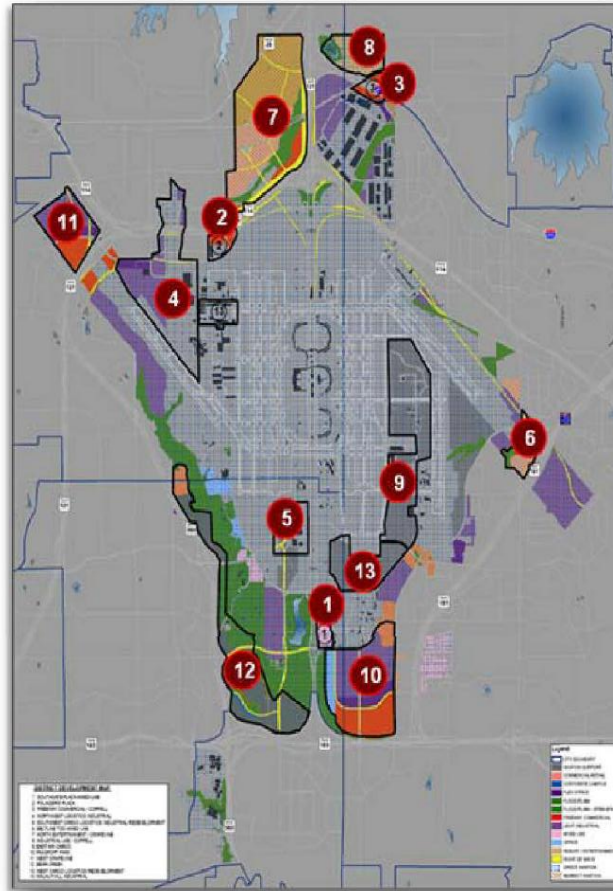


DFW – FTZ: Strategy for commercial use of airport property in regional vicinity

Business Model Analysis

Development Districts Map

- 1 Southgate Plaza (Mixed-Use)
- 2 Founders' Plaza (Mixed-Use)
- 3 Coppell Freeway Commercial
- 4 Northwest Logistics
- 5 Southwest Cargo
- 6 Beltline TOD (Mixed-Use)
- 7 North Entertainment (Mixed-Use)
- 8 Coppell Industrial
- 9 East Air Cargo
- 10 Passport Park (Mixed-Use)
- 11 West Grapevine (Industrial)
- 12 Bear Creek (Corporate Office)
- 13 Walnut Hill (Industrial)



➤ DFW Use Plan focuses on over 5,200 acres for commercial use and open space in Eules, Irving, Grapevine & Coppell

➤ Targeted development includes: commercial retail, commercial, hospitality/entertainment, corporate campus, office, flex office, industrial, TOD (DART and commuter rail lines), aviation support, and aviation related uses

Schiphol Airport City



Schiphol Airport City Contribution to the Dutch Economy

Schiphol Business Complex	Passenger Spending	Airport Related Investment
As of 10/31/2010, a total of nearly 60,000 people were employed at a total of 514 companies located at Schiphol.	170,000 Jobs	120,000 Jobs (including airport and business complex)

- Schiphol Airport City includes 300 acres, 5.8 million square feet of building space. Real estate is divided up nearly evenly into office and warehouse.
- Leverages a total of 290,000 jobs, and a contributes € 26 billion (approximately \$33 billion) to the Dutch economy

Source: Wall Street Journal and The Schiphol Group

Schiphol Land Use & Planning

The Netherlands owns about a 70% stake in Schiphol Group

- Owning the property makes it different from other airport “cities”, where outside developers often buy & develop properties
- Manage business mix, both for planning purposes and for attracting complementary businesses that boost the value of the airport location

Province of North-Holland regulates land use in the Schiphol area, including occupancy based on so-called ‘airport-relatedness’ criteria

- The closer the parcel of land is to the airport, the more airport-related the business

Initially, land was sold that directly bordered airport

- As the impact of the airport on the region expanded, so did the scale of development to the regional level.
- Current trend is to develop multiple locations and to offer the sites to various target groups in the airport area.



Concluding Thoughts: Do Airport Cities Matter?

Not From An Economic Development Perspective if:

- They are convenient locations for real estate development that would take place elsewhere, but they may be beneficial from a planning/land use policy/concentrated development perspective
- They service basic functions of commerce that are generated by airports (hotels and other visitor spending, freight forwarding, production & shipping of air cargo)

Yes, if

- An airport city is used to pro-actively leverage the airport-asset to attract investment that otherwise would not be part of the airport's economic impact

What separates an airport-city (or airport corridor or aerotropolises) from the economic impact/contribution we see generated by medium or major hub airports?

- Land use controls, land use set asides are what separates the economic development lure of an “airport city” from the likely economic development value of a hub airport