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Assessing the Feasibility of an Aerotropolis Around Cleveland Hopkins International Airport, Executive Report

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**Assessing the
Feasibility of
an
Aerotropolis
Around
Cleveland
Hopkins
International
Airport:**

**Executive
Report**



This report was researched and prepared by the staff of the Center for Public Management and the Northern Ohio Data and Information Service (NODIS), Maxine Goodman Levin College of Urban Affairs, Cleveland State University, in partnership with Team NEO. Project management was provided by Claudette Robey, Assistant Director, Center for Public Management. Principal authors were Claudette Robey, Daila Shimek, Project Manager, and Caitlin Johnson, Ryan Foster, and Andrew Batson, Graduate Research Assistants, Center for Public Management; and Jim Robey, Ph.D., Vice President and Director of Research, Team NEO. Contributing author was Meredith Karger, Research Manager, Team NEO. Fran Stewart, professional editor and consultant, provided editorial guidance. Advising on analysis, and theoretical and methodological components were Kevin O'Brien, Director, Center for Public Management; and Brian Mikelbank, Ph.D., Professor, Levin College of Urban Affairs. Mapping and geographical analysis provided by Jim Wyles, Research Associate, Senior GIS Specialist, GISP, NODIS. For questions or information regarding this report, contact the Center for Public Management at 216.687.2188.

ABSTRACT: *This report provides an assessment of the feasibility of developing an aerotropolis around Cleveland Hopkins International Airport, Cleveland, Ohio. The report describes the methodology used to assess the feasibility, notes the needs and expectations of community stakeholders, profiles the challenges and successes of six emerging and potential U.S. aerotropolises, and discusses the operating experiences and challenges of 12 additional U.S. airports. Further, this report describes the demographic and economic aspects of the study cities, and discusses potential target industry opportunities. The findings suggest that it is feasible to develop CLE as an aerotropolis, and that CLE may not be suited for an aerotropolis as practiced at other domestic and international airports. Rather, the concept itself may be the platform for moving forward with a defined, staged strategy for development surrounding CLE and should be viewed as an opportunity to develop the concept to specifically fit the region and its economic circumstance.*

Key Words: *Aerotropolis, airport development, airport city, airport economic development, Cleveland Hopkins International Airport, economic development*

ASSESSING THE FEASIBILITY OF AN AEROTROPOLIS

Cleveland Hopkins International Airport (CLE) has been long regarded as a regional asset. Each week, more than 2,200 flights leave the airport, moving passengers and freight around the country. Beyond its convenience for recreational travelers, CLE is critical to potentially thousands of companies that rely on air access to conduct their business. Although known as a hub for Continental Airlines, CLE offers service from eight other branded passenger airlines and eight airlines offering cargo operations. The 11 million passengers served by the airport in 2009 contributed to the FAA ranking CLE as the 34th busiest airport in the U.S. Only about 400 workers are directly employed by the municipal airport system, but some 9,000 people work at CLE shops, food vendors, and various support activities. Those numbers are likely to rise given that the city of Cleveland awarded a 10-year contract last year to create an “air mall,” which is projected to feature 76,000 square feet of retail space. The economic impact of CLE to surrounding communities and all of Northeast Ohio is significant. Not only are regional businesses dependent upon air access, local businesses and their services are also tied to airport customers, including hotels, eating and drinking establishments, retail, and auto related services (such as rentals and gasoline). Despite this significant impact, community stakeholders have begun to question whether CLE could be leveraged through targeted development to be an even greater economic engine for both the market around CLE and the region.

In May 2008, representatives of communities and entities surrounding the airport came together to begin to explore creating a greater role for the facility in the overall regional economy. The cities of Berea, Brook Park, Cleveland, Olmsted Falls, and Parma, along with CLE and Cuyahoga County, commissioned the Center for Public Management of the Levin College of Urban Affairs at Cleveland State University in the fall of 2009 to conduct a study to examine the feasibility of developing an “aerotropolis” around CLE.

The study finds that the development of CLE as an aerotropolis is feasible and that the airport and the surrounding area has potential as an aerotropolis, but its particular challenges require the development of a strategy that fits the Cleveland area’s unique strengths and needs. The determination of feasibility was based on legal viability (can this be achieved within existing statutes), the capacity for development at CLE and within the geographic context of the study area, and the ability of CLE and the surrounding jurisdictions to continue to build upon their collaborative efforts and implement a strategy to move this forward. Through our analysis we learned that:

- There is no legal prohibition to moving forward with the development of CLE in the context of an aerotropolis

- The stakeholder communities and businesses want to move forward with this initiative
- There is an opportunity to build upon the collaboration that already exists among the study area jurisdictions
- There is available property within a reasonable distance from CLE that can serve as a foundation for new development opportunities

Based on research conducted for this study, the project team **recommends as a next (or first) step developing a formal agreement for establishing a collaborative group** that could begin to frame a strategy for moving forward with the development of an aerotropolis, with CLE as its nucleus. The study area jurisdictions would be a starting point for the collaborative group. It is feasible that the **second step would be to devise a strategy for planning this initiative, one that includes defining a geographic area in which to pilot the aerotropolis**. A small geography around CLE could initially be identified and then expanded as needed over time.

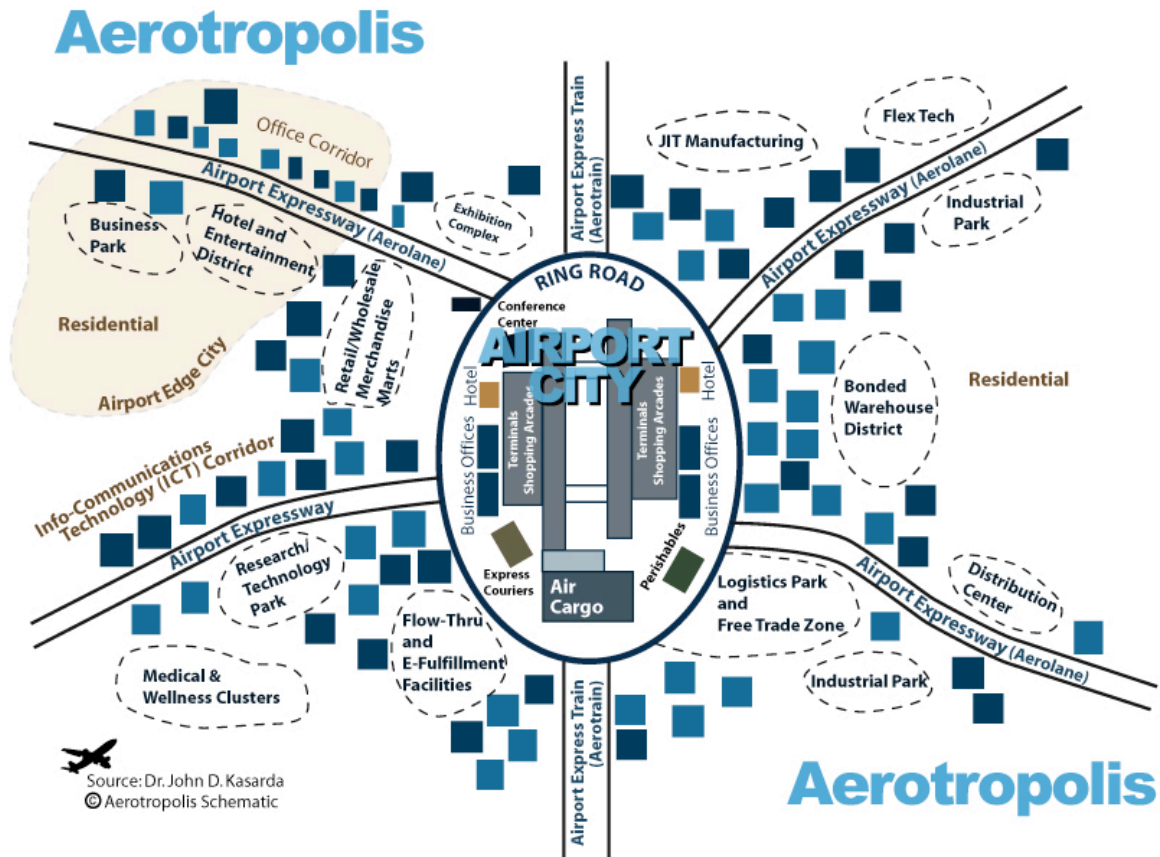
THE AEROTROPOLIS CONCEPT

The term “aerotropolis” debuted with urban planner Dr. John Kasarda, a professor at the University of North Carolina Chapel Hill (UNC). Derived from his years of researching airports throughout the world, Kasarda maintains that airports are economic assets and catalysts for development. Kasarda defines the aerotropolis as “an aviation linked urban form consisting of an airport surrounded by tens of thousands of acres of light industrial space, office space, upscale retail mix, business-class hotel accommodations, restaurants, entertainment, recreation, golf courses, and single and multi family housing.” He views airports as being similar to metropolitan central business districts, with airport cities serving as the central business district of the aerotropolis (Figure 1). Kasarda maintains that there are four basic drivers from which airport cities emerge:¹

1. The airport’s ability to seek revenues from other than aeronautical sources
2. The availability of affordable land for commercial activities
3. The airport’s ability to increase passenger and cargo traffic
4. The airport as a catalyst for and ability to attract business development

¹ Kasarda, John D. (2008). The Evolution of Airport Cities and the Aerotropolis.

Aerotropolis Schematic



Source: Dr. John D. Kasarda
© Aerotropolis Schematic

Figure 1

Aerotropolises have emerged because of the advantages that airports provide in a global economy. Globally competitive businesses utilize the high-speed travel of airplanes for international communication and trade, allowing companies to minimize inventories, source parts globally, and provide fast and flexible responses to customer demands. Airport transportation corridors are also becoming desired locations for regional corporate headquarters, for travel intensive professions, and high tech industries that frequently undertake long distance travel.

RESEARCH METHODOLOGY

The project team conducted research on the aerotropolis concept to identify models of emerging aerotropolises across the United States, based on the research of Dr. Kasarda. Six were identified: Dallas-Forth Worth International Airport (DFW), Denver

International Airport (DIA), Detroit Metropolitan Wayne County Airport (DTW), Los Angeles/Ontario International Airport (ONT), Memphis International Airport (MEM), and Piedmont Triad International Airport (GSO). Twelve additional U.S. airports were researched to identify operating experiences and challenges, and potential plans for aerotropolis development. The 12 airports were determined based on input from the advisory group as those airports are considered as possessing characteristics comparable to CLE. Representatives from the six aerotropolises and the 12 airports were interviewed by telephone with regard to governance, operations, and development plans and activities. The 12 airports researched were:

- Atlanta Hartsfield-Jackson International Airport (ATL)
- Baltimore-Washington International Thurgood Marshall Airport (BWI)
- Chicago O'Hare International Airport (ORD)
- Cincinnati-Northern Kentucky International Airport (CVG)
- Port Columbus International Airport (CMH)
- General Mitchell International Airport (MKE)
- Indianapolis International Airport (IND)
- Minneapolis-St. Paul International Airport (MSP)
- Pittsburgh International Airport (PIT)
- Louisville International Airport (SDF)
- Seattle-Tacoma International Airport (SEA)
- Lambert-St. Louis International Airport (STL)

Focus groups were conducted in the Cleveland region with airport tenants, community organizations, planners, freight and logistics companies, interested businesses, and real estate developers and landowners and locally based national site selectors. These focus groups helped to determine both needs and expectations, identify perceived pros and cons, identify property assets and challenges, and obtain input on strategies for the development of a proposed aerotropolis. Interviews were conducted with I-X Center President Robert Peterson and Facilities Director Jeremy Levine, and CLE Director of Port Control Ricky Smith and his staff to gather their input, perceptions, and concerns on the development of a proposed aerotropolis, the current relationship between the I-X Center and CLE, and to identify opportunities that might evolve with the development of an aerotropolis. Facilitated sessions were also conducted during project meetings with the advisory group jurisdictions, who represent the economic development leadership of the study area, and CLE. These sessions were utilized to determine needs and expectations, identify perceived pros and cons, identify property assets and challenges, and obtain input on structure, governance and operations.

PHYSICAL PROPERTY OVERVIEW

The spatial focus of the project (Figure 2) included Cuyahoga County and the study

area, which is all or part of the jurisdictions of Berea, Broadview Heights, Brook Park, Brooklyn, Brooklyn Heights, Cleveland, Fairview Park, Middleburg Heights, North Olmsted, North Royalton, Olmsted Falls, Parma, Parma Heights, Seven Hills, and Strongsville. Through an iterative process, the project team worked with the advisory group jurisdictions to determine the study area and the one-mile buffer surrounding the study area.

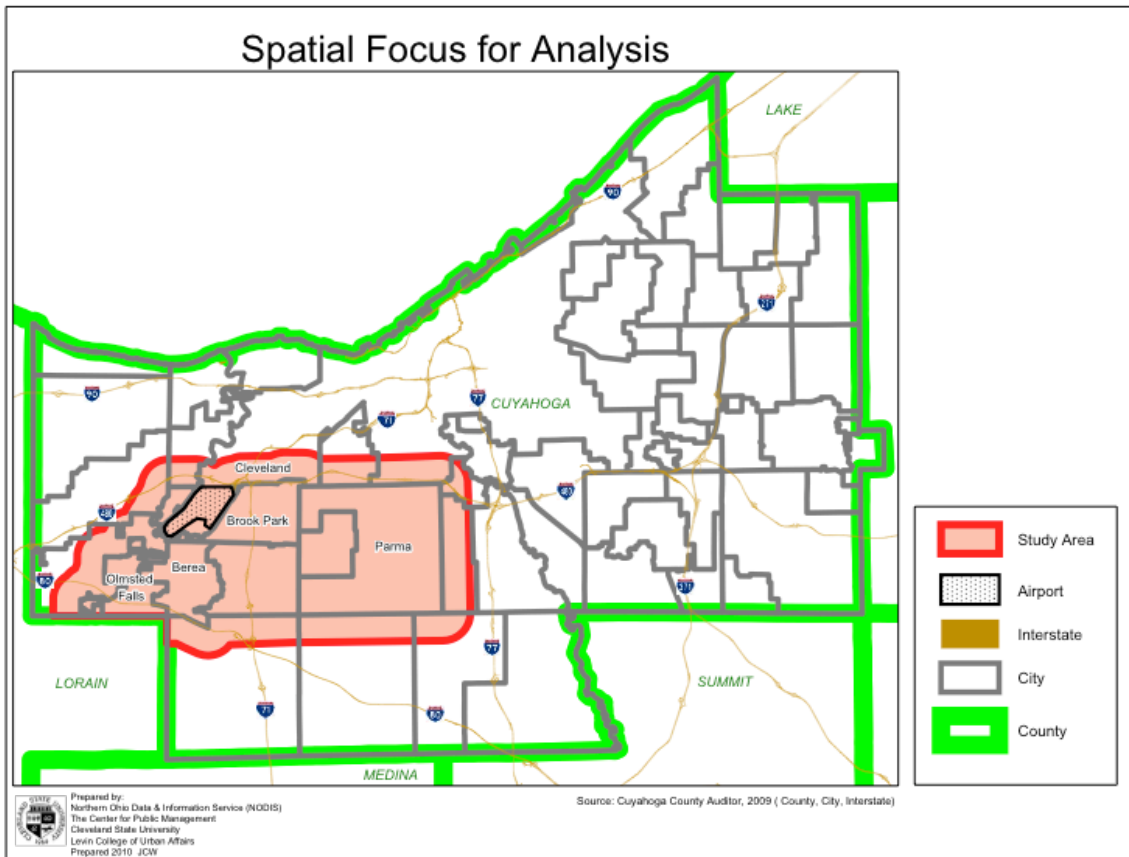


Figure 2

CLE AND AMERICA'S AEROTROPOLISES

CLE's 1,900-acre campus is about a 10-minute commute from downtown Cleveland. Interstate 480 affords east/west access and I-71 allows north/south access to the airport, while access to the Ohio Turnpike is just six miles south of CLE. The capacity to land wide-body planes increased recently with the completion of one runway expansion to 9,956 feet. CLE can accommodate 80-80 arrivals/departures per hour in optimal weather (2004 FAA ranking), and Continental's hub status at CLE increases flight options and helps to strategically position the airport for economic development

recruitment efforts. Among the largest employers within a five-mile radius of CLE are NASA Glenn Research Center, Sysco Food Services, Ford Motor Company, Amerimark Direct, and Industrial Security Services. There are also several types of like-industry targets (Table 1) that would benefit from proximity to an aerotropolis already significantly represented around CLE – Manufacturing, Professional, Scientific and Technical Services, Management of Companies (essentially headquarter locations), and Administrative and Support (possible back office and call-center types of locations).

Table 1

NAICS Code	10-Minute Radius		25-Minute Radius	
	Companies	Employees	Companies	Employees
11 - Agriculture, Forestry, Fishing, & Hunting	30	94	255	1,106
21 - Mining, Quarrying, Oil & Gas Extraction	4	11	49	3,426
22 - Utilities	14	208	60	2,107
23 - Construction	1,074	5,590	5,541	34,747
31-33 - Manufacturing	813	25,584	4,068	129,098
42 - Wholesale Trade	704	6,895	3,726	43,295
44-45 - Retail Trade	1,756	20,251	7,523	69,603
48-49 - Transportation & Warehousing	403	9,730	1,621	26,748
51 - Information	234	8,897	1,241	24,549
52 - Finance & Insurance	667	4,192	3,274	41,512
53 - Real Estate, Rental & Leasing	552	3,978	3,039	21,841
54 - Professional, Scientific, & Technical Services	1,350	7,164	8,523	59,019
55 - Management of Companies & Enterprises	22	170	111	554
56 - Administrative & Support, Waste Management & Remediation	891	6,718	4,903	44,921
61 - Education Services	196	8,139	1084	54,415
62 - Health Care & Social Assistance	1,124	21,757	5,400	113,460
71 - Arts, Entertainment, & Recreation	161	1,791	920	9,717
72 - Accommodation & Food Services	621	9,996	2,568	46,134
81 - Other Services (except Public Admin)	1,390	7,746	7,118	39,461
92 - Public Administration	85	10,322	681	52,816
Totals	12,091	159,233	61,705	818,529

Analysis of the six emerging aerotropolises and interviews with their representatives provide opportunities to explore key attributes for realizing the benefits of an aerotropolis. These airports are not necessarily the largest or most centrally located in

the U.S., and in most cases, there has been a conscious choice to consider the airport as an asset to build around. One overarching trait identified as common to all six emerging aerotropolises is the ability of these airports to plan, market, and sustain an ongoing dialogue on connectivity between the airport and its surrounding communities. Whether that dialogue centers on land use and development, communications and technology, traffic and transportation networks, or cargo and passenger accessibility, these airports have continued to collaborate with their communities and strategize for anticipated growth. Table 2 and Table 3 depict CLE as compared to the six emerging aerotropolises.

Table 2

	Total operations per year (2009)	Capacity (arrivals & departures/hr)	FAA cargo ranking (2008)	Cargo, landed weight (2008, million lbs)	International cargo	FAA passenger ranking (2008)	Enplanements (2008, in millions)	Number of passenger airlines	International (passenger) flights	Average landing fees/1,000 lbs (2009, signatory airlines)	Passenger facility charge (2009)	Airport operating revenue (2008, in millions)	Airport operating expenses (2008, in millions)
Operations and financial data													
Cleveland (CLE)	200,272	80-80	65	376	no	34	5.4	9	yes	\$3.50	\$4.50	\$111.4	\$129.1
Airport City													
Dallas/Ft Worth (DFW)	638,782	270-279	11	3,228	yes	4	27.2	18	yes	\$4.37	\$4.50	\$627.2	\$566.0
Denver (DEN)	611,888	210-219	22	1,250	yes	5	24.3	16	yes	\$2.73	\$4.50	\$570.8	\$373.8
Detroit (DTW)	432,589	184-189	35	708	yes	14	17.0	16	yes	\$2.83	\$4.50	\$291.0	\$360.0
Memphis (MEM)	339,007	148-181	1	19,500	yes	36	5.4	9	yes	\$1.42	none	\$111.5	\$51.9
Ontario (ONT)	99,254	200-200	12	2,700	yes	56	3.0	9	no	\$2.76	\$4.50	\$90.8	\$80.4
Piedmont (GSO)	82,186	115	56	463	no	86	1.1	7	no	\$1.61	none	\$27.5	\$21.0

Table 3

	Self defined aerotropolis?	Aerotropolis/airport city governance	Size of aerotropolis	Aero targeted industries	Aero funding resources	Number of runways	Runway size (ft.)	Size of airport property (ac.)	Room for expansion?	Airport miles to downtown
Cleveland (CLE)	N/A	N/A	N/A	N/A	N/A	3	6,012; 9,000; 9,956	1,900	Y	10
Airport City	Characteristics									
Dallas/Ft Worth (DFW)	N	N/A	N/A	N/A	N/A	7	1 at 8,500; 1 at 9,000; 1 at 9,300; 4 at 13,400	17,920	Y	24 ¹ ; 26 ²
Denver (DEN)	N	Metro Denver Aviation Coalition (private/public)	N/A	N/A	N/A	6	5 at 12,000; 1 at 16,000	33,920	Y	31
Detroit (DTW)	Y	Aerotropolis Development Corp	60,000 acres	Businesses that focus on transportation, supply chain, or shipment services	Member communities	6	3 at 8,500; 2 at 10,000; 1 at 12,000	6,400	Y	22
Memphis (MEM)	Y	Memphis Aerotropolis Steering Committee	25 mile radius around MEM	tourism and logistics	Grants from Memphis City Council	3	9,000; 9,320; 11,120	3,900	Y	9
Ontario (ONT)	N	N/A	N/A	logistics, distribution	N/A	2	10,200; 12,200	1,700	Y	35 ³
Piedmont (GSO)	Y	Aerotropolis Leadership Board	12-county region	Advanced Manufacturing Creative Enterprises and the Arts Health Care Logistics and Distribution	WIRED Grant, \$7 million in private dollars	3	6,380; 9,000; 10,001	4,000	Y	N/A

¹ to Dallas, TX

² to Fort Worth, TX

³ to downtown Los Angeles, CA

Incentives of Emerging Aerotropolises

Incentives among the six U.S. aerotropolises and the 12 case study airports included tax credit programs, tax abatement programs, tax increment financing zones, and enterprise zones. These incentives are not specific to aerotropolis initiatives, but are statewide economic development programs that can be applied within the aerotropolis geography. Many of the airports issued bonds to fund infrastructure projects and economic development efforts. Foreign trade zones (FTZs) were also identified at each aerotropolis either on airport grounds or within close proximity. Four of the six aerotropolises studied (Detroit, Denver, Memphis, and Piedmont) have created an organization comprised of public and private leaders to advocate for their airports and assist with planning and economic development efforts. These organizations also offered “fast track” services to help companies expeditiously obtain permits, zoning variances, and funding.

Three of the aerotropolises studied, Detroit, Dallas, and Memphis, offer types of economic development tools specific to airport development. In Detroit, the Aerotropolis Development Corporation is working with legislators to gain the authority to offer tax incentives to businesses. Currently, the Michigan House of Representatives is reviewing legislation that would introduce several new aerotropolis-related concepts into existing economic development incentive legislation for the purpose of attracting and retaining a critical mass of qualified aerotropolis businesses (QABs) around major Michigan airports. QABs are defined as new businesses to the region that focus on transportation, supply chain, or shipment services. Currently, this is the only aerotropolis where this type of specialized economic development legislation was found. The legislation would allow for the creation of up to 10 Next Michigan Development Corporations (NMDCs). The corporations must comprise at least two local governments, one of which must be a county.

In Dallas, the airport has entered into an interlocal agreement with its host cities to encourage economic development at DFW. The agreement provides for sharing of certain tax revenues attributed to property within the airport boundaries. Host cities receive one-third of local property tax revenue from developments, while the remaining two-thirds are shared by the cities of Dallas and Fort Worth.

In Memphis, one of the major tools used to cultivate an aerotropolis around MEM is the Memphis-Shelby County Payment in Lieu of Taxes (PILOT) program. This tax incentive program provides approved companies with a property tax freeze. This enables qualifying companies to develop or expand operations, but pay taxes based on the value of the land before it was developed, rather than paying based on the land value with the improvements or additional development. Tennessee also enacted a bill to exempt aircraft lubricants, aircraft repair parts, aircraft accessories, and aircraft

simulators used by airport-related businesses from sales tax.

Pending Federal Aerotropolis Legislation

At the federal level, legislation was recently introduced on May 6, 2010 entitled the Aerotropolis Act of 2010 (H.R. 5236). If enacted, the legislation would ensure funding eligibility for aerotropolis transportation system projects under the Federal Highway Administration's Projects of National and Regional Significance program. The bill defines an aerotropolis transportation system as "a planned and coordinated multimodal freight and passenger transportation network that, as determined by the Secretary, provides efficient, sustainable, and intermodal connectivity to a defined region of economic significance centered around a major airport." For a project to qualify, it does not need to be in a self-defined aerotropolis region. Instead, the eligibility of the project is determined by the Secretary of Transportation based on the aerotropolis definition above.² Currently, the bill is being reviewed by the Subcommittee on Highways and Transit.

CLE AND COMPARABLE AIRPORTS

Just as with the six emerging aerotropolises, one overarching characteristic was common to all but one of the 12 comparable U.S. airports – their ability to collaborate to plan, market, and sustain an ongoing regional or multijurisdictional dialogue on airport development. Other than what was reported by MKE in Milwaukee, collaborative planning across multiple jurisdictions was the key to successful airport development. These collaborative efforts spanned multiple states, counties, and cities. MKE reported the lack of a unified economic development strategy and struggles to maintain coordinated, regional economic development collaboration among its jurisdictions. Table 4 depicts CLE as compared to the 12 U.S. airports.

² Aerotropolis Act of 2010, H.R. 5236, 111th Cong. Print.

Table 4

Airport	Number of runways	Runway size (ft.)	Size of airport property (acres)	Room for expansion?	Miles to downtown	Total operations per year (2009)	Capacity (arrivals & departures/hr.)	FAA cargo ranking (2008)	Cargo, landed weight (2008, in million lbs)	International cargo	FAA passenger ranking (2008)	Enplanements annually (2008 in millions)	Number of passenger airlines	International (passenger) flights	Average landing fees/1,000 lbs (2009, average signatory airlines)	Passenger facility charge (2009 average)	Airport operating revenue (2008, in millions)	Airport operating expenses (2008, in millions)
Cleveland (CLE)	3	6,012; 9,000; 9,956	1,900	yes	10	200,272	80-80	65	376	no	34	5.4	9	yes	\$3.50	\$4.50	\$111.4	\$129.1
Atlanta (ATL)	5	3 at 9,000; 1 at 10,000; 1 at 11,889	4,700	very little	10	970,258	180-188	14	2,344	yes	1	43.8	17 mainline, 12 regional, 3 charter	yes	\$1.00	\$4.50	\$386.2	\$181.7
Baltimore (BWI)	4	5,000; 6,000; 9,501; 10,502	3,596	yes	13 ³ ; 34 ⁴	268,016	106-120	57	456	yes	23	10.2	14	yes	\$3.71	\$4.50	\$170.4	\$167.3
Chicago (ORD)	7	2 at 7,500; 7,967; 8,075; 10,005; 2 at 13,000	7,627	no	19	827,899	190-200	8	4,207	yes	2	33.7	53	yes	\$4.91	\$4.50	\$684.3	\$579.3
Cincinnati (CVG)	4	8,000; 10,000; 11,000; 12,000	7,000	yes	17	222,791	120-125	93	207	yes	32	6.6	18	yes	\$3.53	\$3.50	\$105.3	\$66.8
Columbus (CMH)	2	8,000; 10,125	2,185	no	8	146,064	N/A	34 ¹	731	yes	52 ²	3.4	10 commercial	yes	\$3.40	\$4.50	\$80.3	\$54.8
Indianapolis (IND)	3	7,280; 10,000; 11,200	7,700	yes	14	171,322	N/A	6	5,128	yes	46	4.1	10	yes	\$1.95	\$4.50	\$157.8	\$170.9
Louisville (SDF)	3	7,250; 8,580; 11,890	1,200	yes	7	146,492	109	3	10,455	yes	66	1.8	9	no	\$1.48	\$3.00	\$63.3	\$57.7
Milwaukee (MKE)	5	4,183; 4,800; 5,868; 8,012; 9,690	2,180	limited	5	169,693	110	45	558	yes	50	3.9	15	yes	N/A	\$4.50	\$64.9	\$53.4
Minneapolis (MSP)	4	8,000; 8,200; 10,000; 11,006	3,400	limited	7	432,604	114-120	23	1,123	yes	16	16.4	15	yes	\$2.24	\$4.50	\$241.6	\$126.7
Pittsburgh (PIT)	4	8,101; 9,708; 10,502; 11,500	8,840	yes	15	148,135	152-160	46	491	yes	43	4.3	12 mainline	yes	\$2.83	\$4.50	\$131.9	\$85.0
Seattle (SEA)	3	8,500; 9,425; 11,500	2,500	limited	16	317,873	80-84	18	1,494	Yes	17	15.8	60+	yes	\$2.96	\$4.50	\$358.3	\$195.2
St. Louis (STL)	4	7,602; 9,000; 9,003; 11,000	3,970	yes	11	209,313	104-113	62	426	no	31	6.7	13	yes	\$7.96	\$4.50	\$134.6	\$141.0

¹ Rickenbacker
² Port Columbus
³ to Baltimore
⁴ to Washington, D.C.

Comparable Airport Incentives

A review of the 12 case study airports' tax incentives revealed that two, Columbus and Louisville, offer unique airport incentive programs. In Columbus, Ohio, the Columbus Regional Airport Authority (CRAA) created a new agreement with the airport's signatory airlines to share 75 percent of its annual net operating income (after debt service) and capital fund requirements. The revenue sharing will be in the form of rent credits, which may lower the airlines' cost of doing business at CMH.

In Louisville, Kentucky, a 3,000-acre zone south of the airport was established as a tax increment financing district to fund infrastructure improvements that would encourage industrial improvements. The Louisville Renaissance Zone Corporation (LRZC) was created to oversee development in the 3,000-acre zone. The LRZC and the Louisville Regional Airport Authority (LRAA) are separate organizations, but the members of their respective boards of directors are the same. In 2006 when UPS was looking to expand operations at SDF, the airport authority board approved the sale of 434 acres of surplus property for \$4.1 million to the LRZC. That same day, the LRZC approved the sale of 60 acres of that land to UPS at a cost of \$36,000 an acre.

CLE'S AEROTROPOLIS OPPORTUNITIES AND CHALLENGES

Facilitated discussions and interviews with stakeholders revealed opportunities and challenges to developing CLE as an aerotropolis, yet none prohibit proceeding with plans to move forward this initiative. Comments emerging from these discussions can provide possible strategies and/or next steps for CLE and the study area jurisdictions so that they may effectively move forward with a collaborative aerotropolis strategy. Common themes from the stakeholder discussions and interviews were:

- Continued collaboration among stakeholders is essential to realizing the development of an aerotropolis with CLE as the airport city
- An independent or quasi-independent group overseeing planning, strategy, and funding for an aerotropolis is needed to move this forward
- A collective vision for CLE is essential, one that includes a well-planned, synchronized economic development strategy
- Preserving Continental Airlines as a hub is vital not only to the development of an aerotropolis, but also vital to business retention and attraction
- Assembling large landscapes of contiguous developable land was viewed as essential to enhancing the development of CLE as an aerotropolis
- Improving connectivity to CLE is viewed as critical to accessing the airport and generating business and passenger activity

- Upgrading the current state of freight operations and facilities at CLE would enhance the development of an aerotropolis

MOVING FORWARD

The development of CLE as an aerotropolis is feasible and a successful leadership model will ensure and sustain this effort. What is clear from analysis is that CLE has potential as an aerotropolis, but its particular challenges require the development of a strategy that fits the Cleveland area's unique strengths and needs.

The geography of economies and the benefits of economic development transcend political boundaries. The development of an aerotropolis at and around CLE represents a relatively narrow geography within a larger, regional economy; therefore, the needs, the benefits, and the actions of such a development activity exceed the boundaries of any individual city. Continued collaborative leadership will sustain and guide this effort.

Short-Term

Research throughout this study indicates that the concept of an aerotropolis is feasible for CLE. It is logical to take small steps to begin this initiative, **the first step being to develop a formal agreement for establishing a collaborative group** that could begin to frame a strategy for moving forward with the development of an aerotropolis, with CLE as its nucleus.

It is feasible that the **second step be to devise a strategy for planning this initiative, one that includes defining a geographic area in which to pilot the aerotropolis development.** A small geography around CLE could first be identified and then expanded as needed over time.

Longer-Term

Suggested longer-term steps toward framing an aerotropolis focusing on CLE are:

- Developing a framework (or aero-based plan for growth) for staging development on and around the airport over time
- Planning for aggregating land for clustering business activity and enhancing development opportunities on and around the airport campus
- Developing an economic development strategy to guide development and focus business retention and attraction potential on and surrounding the airport
- Preserving Continental as a hub at CLE and working with Continental to assess market demand for increasing the number of domestic and international flights

Feasibility of an Aerotropolis

- Working to create a more business friendly resource center at the airport, located outside of airport security, with meeting rooms and facilities for business activities

Moving forward with these steps will help CLE become a greater economic engine for the region. Only six U.S. airports have taken proactive steps toward realizing the benefits of an aerotropolis. This represents an opportunity for CLE to more fully integrate air transportation into the economy. A vibrant airport – one that links the region to the global economy by connecting northeast Ohio-based companies to their U.S. and international operations and linking international and domestic businesses to activities in Northeast Ohio – is a foundational necessity for the region. Cleveland’s airport campus is an asset and a viable site for further development opportunities.