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

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Prepared for: Berea Community Development Corporation

Prepared by:

The Center for Public Management Maxine Goodman Levin College of Urban Affairs Cleveland State University

August 2010

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

Appendices



Feasibility of an Aerotropolis: Appendices

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Figure 1: Potentially developable properties greater than or equal to 5 acres

ABSTRACT: This is a companion report to the full technical report entitled, "Assessing the Feasibility of an Aerotropolis Around Cleveland Hopkins International Airport." This report contains the supporting documents including interview scripts, focus group protocol, a reference list and glossary, cooperative economic development agreements, airport case studies, a map of physical property characteristics, and endnotes for the appendices.

Key Words: Airport case studies, interview script, focus group protocol, airport glossary, cooperative economic development agreements

APPENDICES APPENDIX A: Aerotropolis Interview Script

Script for Interviews with emerging Aerotropolises (Dallas-Fort Worth, Denver International, Detroit Metro, LA/Ontario, Memphis International, Piedmont Triad International)

Name of person interviewed:	
Title:	
Ormanizations	
Organization:	
Emails	
Email:	
Dhanai	
Phone:	

Hello, my name is ______ and I'm with the Center for Public Management of the Levin College of Urban Affairs at Cleveland State University. We thank you for your time and for assisting with our research through this phone interview.

Our Center is conducting research to determine the feasibility of an aerotropolis for the Cleveland region. We identified your airport from our research as being an aerotropolis or having the characteristics of an aerotropolis. We would like to speak with you about your experiences involving the development of your aerotropolis. Your responses to our questions will be used to help the Cleveland Aerotropolis Team make decisions toward the feasibility of this type of initiative here in our region. Our questions today focus on governance, operations, developing a funding model and business incentives, and determining the overall geography of an aerotropolis. Let's begin...

- 1. Why and how did you move toward the concept of an aerotropolis? Was the aerotropolis concept a result of your development or expansion plans?
- 2. Please define/discuss the operational structure for your aero? Identify the partner/organizations/people/cities/counties involved. What is the governance structure for your aero? The funding model (how is it funded, what are its funding sources)? Identify the partners/ organizations/ people/ cities/ counties for these as well.
- 3. What is the geography of your aerotropolis (list the cities, townships, counties) and how did you define it? Does your aero geography encompass only a portion of any of your cities, townships or counties? If so, how does this impact the operations, governance, financing model, and incentive structure(s)?
- 4. Has the geography of your aero changed since the inception of your aero?
- 5. What benefits and/or incentives have the businesses or tenants within your aero received? Describe your incentive package for locating within the aero geography. How is your land zoned for your aero?
- 6. What types of industries are gravitating/locating within your aero? Is this consistent with your initial plan?
- 7. How has the aero impacted economic development activity in your region?
- 8. How has your city/county/region benefited from the aero?
- 9. What were your greatest challenges, if any, in developing the aero? What worked well? What would you have done differently?
- 10. Since your aero has been up and running, what are its current greatest challenges?
- 11. Is there anything further that you'd like to add?

APPENDIX B: Airport Interview Script

Introduce yourself. Identify yourself as being with the Center for Public Management of the Levin College of Urban Affairs at Cleveland State University. Thank them for their time and agreeing to assist us with our research through this phone interview.

Purpose: Our Center is conducting research to examine the potential for development surrounding the Cleveland-Hopkins Airport for the Northeast Ohio region.

Questions for Airport Interviews

- 1. Characteristics/Description: Complete any of the following information that you were unable to obtain in your research.
 - Airport total acreage; Is the airport located within the main city of the region?
 - Number of runways and length of each
 - Average number of flights per day
 - Average number of passenger and freight counts per day
 - Proportion of passengers to freight
 - Type and number of tenants located within the airport (square feet of tenant space; typical occupancy rate)
 - Types of businesses surrounding the airport (list major companies)
 - How is the land surrounding the airport zoned (industrial, commercial, residential, etc.)?
- 2. Structure / Operations / Governance
 - Who owns the airport (regional, city, county)? Please describe the day-today management (are the employees hired by the airport or by the city, county, etc.? Are they contracted?).
 - Please describe the operational structure of the airport (board of directors, advisory board, executive director, professional staff, etc.; # employees; types of departments).
 - Mission / vision statement
- 3. Funding Model
 - How are airport operations funded?
- 4. Incentives
 - How has your airport impacted economic development in your region?
 - What benefits and/or incentives are available to businesses or tenants locating within proximity of the airport? Describe the incentives package. (Foreign trade zone, tax credits, special taxing districts, TIFs, JEDDs, enterprise zones, etc.).
 - What airports do you consider to be your main competitors?

- Does your airport have an explicit economic development function / staff?
- 5. Development Activity
 - Why do you think development around their airport has been successful/what are the critical factors to success?
 - What types of industries locate around the airport? Does the land surrounding your airport fall primarily within one jurisdiction / city?
 - Describe the market for international, national and regional business related travel at your airport (what drives the need for these types of travel?). Are there particular companies that have specific destinations to which they need to travel?
 - Describe the market for international, national and regional freight at your airport (what drives the need for freight?).
 - How are you responding to customer demand for services? (What services are you providing on-site or off-site that create amenities that would help business customers locate near your airport? Such as access to roads, shuttle services, changing your master plan to accommodate amenities for visitors, businesses and so forth. Are you making it easier, better, cheaper for them to use your airport?). How does this tie into the regional, national and international economy?
 - How much acreage surrounding your airport is undeveloped? How much would be a good candidate for redevelopment? How much of this undeveloped acreage is owned by the airport? Is development planned for the open acreage? If yes, what is the time frame?
 - Are you familiar with the term "aerotropolis" (we'll have a brief definition handy in case the interviewee asks what it is)? Does your airport have any future plans that include developing the airport into an aerotropolis? If so, please discuss.
 - What do you consider to be the airport's greatest successes?
 - What do you consider to be the airport's greatest issues or challenges? Do you have a strategic plan or master plan that you could share with us?
 - As you think about how the airport fits in within your community...
 - Does your airport master plan consider adjacent development as a factor?
 - Do community master plans look to the airport as an economic driver?

APPENDIX C: Airport Tenant/Hospitality Focus Group Protocol

Stakeholder Session: Airport Tenants/Hospitality

Facilitator: Introduce self; welcome; thanks for participating in today's session.

In today's session we'll use a focus group approach to gather your thoughts, perceptions, and ideas on the concept of developing an Aerotropolis around Cleveland-Hopkins International Airport. A professor at the University of North Carolina at Chapel Hill, Dr. John Kasarda, coined the term Aerotropolis. His research has led him to this definition (you have this in your handout): "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." An aerotropolis is conceptually similar to a metropolis, with an airport city serving as the central business district of the aerotropolis. Geographically similar to the metropolis, the aerotropolis utilizes the airport as its central transportation node. We're also looking at the potential for economic growth resulting from designation as an aerotropolis.

Our questions are designed to get your input based on your experiences on how CLE impacts your businesses and what opportunities CLE might offer for your businesses. We'll go around the room and ask you to individually respond to each question. This will give everyone a chance to share his or her ideas. We realized that you've volunteered to be here today and we want to make the best use of your time. Our session today is 90 minutes and I'll do my best to keep us on time.

Let's begin by going around the room and having you introduce yourself...

Question 1: Based on your experience, how does CLE impact your business? What about CLE influences your business decisions? What is it about the airport that impacts your businesses? What changes at CLE would positively or negatively impact your business model?

Question 2: Please share with us in general, what you feel to be the strengths, weaknesses, opportunities, and threats for your businesses in the near future. First let's focus on the positive – Where do you see the strengths and opportunities for your businesses over the next five years? Now let's tackle the challenges – Where do you see the threats and weaknesses for your businesses over the next five years?

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Question 3: Given what you foresee as the strengths, weaknesses, opportunities, and threats for your businesses over the next decade, how would multiple communities working together to coordinate planning and development around the airport benefit you? Where do you see CLE going and how would it impact your business?

Question 4: Given what we assume would be a long-term alliance between Continental and United Airlines – the Star Alliance – what do you see as the opportunities and benefits for CLE? We know that Newark Airport will be limited to a certain number of flights in/out by 2013 and that Chicago Airport is congested. Therefore, it seems that CLE is a viable option for getting to Europe with wide-bodied planes. Could this impact your future decisions for passenger travel or freight/cargo in and out of Cle? Why/why not?

Question 5: What are we missing? What didn't we ask that you feel we should know?

APPENDIX D: Business Focus Group Protocol

Stakeholder Session: Business

Facilitator: Introduce self; welcome; thanks for participating in today's session.

In today's session we'll use a focus group approach to gather your thoughts, perceptions, and ideas on the concept of developing an Aerotropolis around Cleveland-Hopkins International Airport. The term Aerotropolis was coined by a professor at the University of North Carolina at Chapel Hill, Dr. John Kasarda. His research has led him to this definition (you have this in your handout): "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." An Aerotropolis is conceptually similar to a metropolis, with an airport city serving as the central business district of the Aerotropolis. Geographically similar to the metropolis, the Aerotropolis utilizes the airport as its central transportation node. We're also looking at the potential for economic growth resulting from designation as an Aerotropolis.

Our questions are designed to get your input based on your experiences on how CLE impacts your businesses and what opportunities CLE might offer for your businesses. We'll go around the room and ask you to individually respond to each question. This will give everyone a chance to share their ideas. We realized that you've volunteered to be here today and we want to make the best use of your time. Our session today is 90 minutes and I'll do my best to keep us on time.

Let's begin by going around the room and having you introduce yourself...

- 1. Based on your experience, how does CLE impact your business? (What about CLE influences your business decisions?) What changes at CLE would positively or negatively impact your business model?
- 2. How do you utilize CLE? Being relatively close to CLE, does proximity to the airport matter to you?
- 3. Please share with us in general, what you feel to be the strengths, weaknesses, opportunities, and threats for your businesses in the near future. First let's focus on the positive Where do you see the strengths and opportunities for your businesses over the next five years? Now the challenges Where do you see the threats and weaknesses for your businesses over the next five years?

- 4. How would multiple communities working together to coordinate planning and development around CLE benefit you? Where do you see CLE going and how would it impact your business?
- 5. Where do you see your business going for domestic and international freight and passenger travel and cargo over the next 10 years?
- 6. What are we missing? What didn't we ask that we need to know?

APPENDIX E: Economic Development/Community Organization Focus Group Protocol

Stakeholder Session: Economic Development/Community Organizations

Facilitator: Introduce self; welcome; thanks for participating in today's session.

In today's session we'll use a focus group approach to gather your thoughts, perceptions, and ideas on the concept of developing an Aerotropolis around Cleveland-Hopkins International Airport. A professor at the University of North Carolina at Chapel Hill, Dr. John Kasarda, coined the term Aerotropolis. His research has led him to this definition (you have this in your handout): "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." An aerotropolis is conceptually similar to a metropolis, with an airport city serving as the central business district of the aerotropolis. Geographically similar to the metropolis, the aerotropolis utilizes the airport as its central transportation node. We're also looking at the potential for economic growth resulting from designation as an aerotropolis.

Our questions are designed to get your input based on your experiences on what might be the highest and best use for development around the airport. We'll go around the room and ask you to individually respond to each question. This will give everyone a chance to share his or her ideas. We realized that you've volunteered to be here today and we want to make the best use of your time. Our session today is 90 minutes and I'll do my best to keep us on time.

Let's begin by going around the room and having you introduce yourself...

Question 1: On the flip charts is a list of the characteristics we've found to be common among the six recognized or identified Aerotropolises in the United States. Which of these characteristics are available or around (as appropriate) to CLE and this region? Why/why not?

Question 2: What are your expectations of an aerotropolis for this area? What activities should exist within an aerotropolis for this area? What do you feel is necessary for an aerotropolis to be successful here? Do you feel the infrastructure is currently in place to carry out the mission of an aerotropolis? Why/why not?

Question 3: Do you see people in the community effectively working together on utilizing CLE as an asset? What's your perception of collaboration within communities to make this work?

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Question 4: What do you see as the expected economic benefits of an Aerotropolis (attracting and retaining businesses, jobs, and so forth?) What is it that a functional Aerotropolis can deliver that would be helpful to economic development in this region?

Question 5: Given what we assume would be a long-term alliance between Continental and United Airlines – the Star Alliance – what do you see as the opportunities and benefits for CLE? We know that Newark Airport will be limited to a certain number of flights in/out by 2013 and that Chicago Airport is already congested. Therefore, it seems that CLE is a viable option for getting to Europe with wide-bodied planes. Could this impact future location decisions for passenger travel or freight/cargo in and out of Cle? Why/why not?

Question 6: What are we missing? What didn't we ask that you feel we should know?

APPENDIX F: Freight and Logistics Focus Group Protocol

Stakeholder Session: Freight and Logistics

Facilitator: Introduce self; welcome; thanks for participating in today's session.

In today's session we'll use a focus group approach to gather your thoughts, perceptions, and ideas on the concept of developing an Aerotropolis around Cleveland-Hopkins International Airport. A professor at the University of North Carolina at Chapel Hill, Dr. John Kasarda, coined the term Aerotropolis. His research has led him to this definition (you have this in your handout): "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." An aerotropolis is conceptually similar to a metropolis, with an airport city serving as the central business district of the aerotropolis. Geographically similar to the metropolis, the aerotropolis utilizes the airport as its central transportation node. We're also looking at the potential for economic growth resulting from designation as an aerotropolis.

Our questions are designed to get your input based on your experiences on how CLE impacts your businesses and what opportunities CLE might offer for your businesses. We'll go around the room and ask you to individually respond to each question. This will give everyone a chance to share his or her ideas. We realized that you've volunteered to be here today and we want to make the best use of your time. Our session today is 90 minutes and I'll do my best to keep us on time.

Let's begin by going around the room and having you introduce yourself...

Question 1: Are you located close to CLE? Does proximity to CLE matter to you? Why/why not?

Question 2: How much of your operations is centered in northeast Ohio? What's your service delivery area?

Question 3: Based on your experience, how does CLE impact your business? What about CLE influences your business decisions? What changes at CLE would positively or negatively impact your business model?

Question 4: Where do you see the northeast Ohio economy going for domestic and international freight over the next 10 years? Do you consider CLE a difficult airport to access for freight? Why/why not?

Question 5: Given what we assume would be a long-term alliance between Continental and United Airlines – the Star Alliance – what do you see as the opportunities and benefits for CLE? We know that Newark Airport will be limited to a certain number of flights in/out by 2013 and that Chicago Airport is already congested. Therefore, it seems that CLE is a viable option for getting to Europe with wide-bodied planes. Could this impact future location decisions for passenger travel or freight/cargo in and out of Cle? Why/why not?

Question 6: What are we missing? What didn't we ask that you feel we should know?

APPENDIX G: Planner Focus Group Protocol

Stakeholder Session: Planners

Facilitator: Introduce self; welcome; thanks for participating in today's session.

In today's session we'll use a focus group approach to gather your thoughts, perceptions, and ideas on the concept of developing an Aerotropolis around Cleveland-Hopkins International Airport. The term Aerotropolis was coined by a professor at the University of North Carolina at Chapel Hill, Dr. John Kasarda. His research has led him to this definition (you have this in your handout): "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." An aerotropolis is conceptually similar to a metropolis, with an airport city serving as the central business district of the aerotropolis. Geographically similar to the metropolis, the aerotropolis utilizes the airport as its central transportation node. We're also looking at the potential for economic growth resulting from designation as an aerotropolis.

Our questions are designed to get your input based on your experiences on what might be the highest and best use for development around the airport. We'll go around the room and ask you to individually respond to each question. This will give everyone a chance to share their ideas. We realized that you've volunteered to be here today and we want to make the best use of your time. Our session today is 90 minutes and I'll do my best to keep us on time.

Let's begin by going around the room and having you introduce yourself...

Question 1: From a planner's perspective, how do you envision an aerotropolis impacting the region? What factors would you consider in determining whether an aerotropolis is feasible?

Question 2: (Maps are projected on screen). What do you see as the opportunities? Any drawbacks? Do you feel the infrastructure is currently in place to carry out the mission of an aerotropolis? Why/why not?

Question 3: Here's the zoning map. How might the current zoning and land use affect future development of an aerotropolis? Would changes to zoning increase the likelihood of an aerotropolis in this area, and if yes, explain (both the type of zoning required and how it would affect an aero)? How might planning issues across multiple jurisdictions be resolved in order to make an aerotropolis succeed?

Question 4: Given what we assume would be a long-term alliance between Continental and United Airlines – the Star Alliance – what do you see as the opportunities and benefits for CLE? We know that Newark Airport will be limited to a certain number of flights in/out by 2013 and that Chicago Airport is already congested. Therefore, it seems that CLE is a viable option for getting to Europe with wide-bodied planes. Could this impact future location decisions for passenger travel or freight/cargo in and out of Cle? Why/why not?

Question 5: What are we missing? What didn't we ask that you feel we should know?

APPENDIX H: Land Owner Focus Group Protocol

Stakeholder Session: Real Estate/Land Development/Land Owner

Facilitator: Introduce self; welcome; thanks for participating in today's session.

In today's session we'll use a focus group approach to gather your thoughts, perceptions, and ideas on the concept of developing an Aerotropolis around Cleveland-Hopkins International Airport. The term Aerotropolis was coined by a professor at the University of North Carolina at Chapel Hill, Dr. John Kasarda. His research has led him to this definition (you have this in your handout): "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." An aerotropolis is conceptually similar to a metropolis, with an airport city serving as the central business district of the aerotropolis. Geographically similar to the metropolis, the aerotropolis utilizes the airport as its central transportation node. We're also looking at the potential for economic growth resulting from designation as an aerotropolis.

Our questions are designed to get your input based on your experiences on what might be the highest and best use for development around the airport. We'll go around the room and ask you to individually respond to each question. This will give everyone a chance to share their ideas. We realized that you've volunteered to be here today and we want to make the best use of your time. Our session today is 90 minutes and I'll do my best to keep us on time.

Let's begin by going around the room and having you introduce yourself...

Question 1: From your perspective, how do you envision an aerotropolis impacting the region? What factors would you consider in determining whether an aerotropolis is feasible?

Question 2: (Maps are projected on screen). What do you see as the opportunities? Any drawbacks? Do you feel the infrastructure is currently in place to carry out the mission of an aerotropolis? Why/why not?

Question 3: Here's the zoning map. How might the current zoning and land use affect future development of an aerotropolis? Would changes to zoning increase the likelihood of an aerotropolis in this area, and if yes, explain (both the type of zoning required and how it would affect an aero)? How might planning issues across multiple jurisdictions be resolved in order to make an aerotropolis succeed?

Question 4: Do you see people in the community effectively working together on this? What's your perception of collaboration within communities to make this work? What changes need to occur in order for an aerotropolis to succeed in this region?

Question 5: Given what we assume would be a long-term alliance between Continental and United Airlines – the Star Alliance – what do you see as the opportunities and benefits for CLE? We know that Newark Airport will be limited to a certain number of flights in/out by 2013 and that Chicago Airport is already congested. Therefore, it seems that CLE is a viable option for getting to Europe with wide-bodied planes. Could this impact future location decisions for passenger travel or freight/cargo in and out of Cle? Why/why not?

Question 6: What are we missing? What didn't we ask that you feel we should know?

APPENDIX I: Site Selector Focus Group Protocol

Stakeholder Session: Site Selectors

Facilitator: Introduce self; welcome; thanks for participating in today's session.

In today's session we'll use a focus group approach to gather your thoughts, perceptions, and ideas on the concept of developing an Aerotropolis around Cleveland-Hopkins International Airport. A professor at the University of North Carolina at Chapel Hill, Dr. John Kasarda, coined the term Aerotropolis. His research has led him to this definition (you have this in your handout): "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." An aerotropolis is conceptually similar to a metropolis, with an airport city serving as the central business district of the aerotropolis. Geographically similar to the metropolis, the aerotropolis utilizes the airport as its central transportation node. We're also looking at the potential for economic growth resulting from designation as an aerotropolis.

Our questions are designed to get your input based on your experiences on what might be the highest and best use for development around the airport. We'll go around the room and ask you individually to respond to each question. This will give everyone a chance to share his or her ideas. We realized that you've volunteered to be here today and we want to make the best use of your time. Our session today is 90 minutes and I'll do my best to keep us on time.

Let's begin by going around the room and having you introduce yourself...

- Question 1. How important is an airport in site location? Why?
- Question 2: What has been your experience on the use of an aerotropolis strategy as a tool for economic development? Is an aerotropolis a factor in site selection? Are there businesses or industries sensitive to aerotropolises and look to locate within them?
- Question 3: Maps are projected on the screen. Of the available sites around the airport, where do you see the best opportunities? What would be the best opportunities for development around the airport?
- Question 4: (A) What features make these properties attractive to target for development? What makes this site attractive as a development opportunity?

(B) What could this combination of cities do to make this marketable? Is development within these communities a function of proximity to CLE or just general economic development?

- Question 5: What is it that a functional aerotropolis can deliver that would be helpful to economic development in this region? What factors would you consider in determining whether an aerotropolis is feasible?
- Question 6: What are we missing? What didn't we ask that we should know?

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APPENDIX K: Glossary

Aerotropolis: The word aerotropolis was coined by Dr. John Kasarda, Kenan Distinguished Professor of Strategy and Entrepreneurship and Director of the Kenan Institute of Private Enterprise at the University of North Carolina's Kenan-Flagler Business School. It refers to a new urban form which has begun to evolve around airports. Analogous in shape to the traditional metropolis made up of a central city and its rings of commuter-heavy suburbs, the Aerotropolis consists of an airport city and outlying corridors and clusters of aviation-linked businesses and associated residential development. An aerotropolis typically stretches up to 20 miles (30 kilometers) outward from some airports.¹

Airport City: The airport city lies at the core of the aerotropolis. The airport itself serves as a center for the region's multimodal transportation and commercial activity. Immediately surrounding the airport, are clusters of aviation-related businesses such as logistics parks, retail establishments and hotels. These businesses make up airport city, which is akin to a metropolitan central business district. Rings of suburbs radiate out the airport city. The size of the airport city varies among aerotropolises.²

Aircraft Operations: The airborne movement of aircraft in controlled or non controlled airport terminal areas, and counts at en route fixes or other points where counts can be made.³

Airport Operations: The number of arrivals and departures from the airport at which the airport traffic control tower is located. There are two types of operations: local and itinerant.⁴

Air Carrier (AC). An aircraft with seating capacity of more than 60 seats or a maximum payload capacity of more than 18,000 pounds carrying passengers or cargo for hire or compensation. This includes US and foreign flagged carriers.⁵

Air Cargo: Cargo is freight and mail loaded and unloaded (arriving and departing) at the airport. Freight is any property carried on an aircraft other than mail, stores and baggage. Mail comprises closed bags handed over by the postal service, whatever their contents may be. Does not include passenger baggage and trucked freight.⁶

Air Cargo: Total volume of freight, mail and express traffic transported by air. Includes the following: Freight and Express-commodities of all kinds, includes small package counter services, express services and priority reserved freight; U.S. Mail-all classes of mail transported for the U.S. Postal Service.⁷

Airport. An area on land or water that is used or intended to be used for the landing and takeoff of aircraft and includes its buildings and facilities, if any.⁸

Airport Operations. The number of arrivals and departures from the airport at which the airport traffic control tower is located. There are two types of operations: local and itinerant.

1. Local operations are those operations performed by aircraft that remain in the local traffic pattern, execute simulated instrument approaches or low passes at the airport, and the operations to or from the airport and a designated practice area within a 20-mile radius of the tower.

2. Itinerant operations are operations performed by an aircraft, either IFR, SVFR, or VFR, that lands at an airport, arriving from outside the airport area, or departs an airport and leaves the airport area.⁹

Air Taxi (AT). An aircraft designed to have a maximum seating capacity of 60 seats or less or a maximum payload capacity of 18,000 pounds or less carrying passengers or cargo for hire or compensation.¹⁰

Air Traffic. An aircraft operating in the air or on airport surfaces, exclusive of loading ramps and parking areas. Air Traffic Operations. All aircraft operations, excluding ground movement of aircraft vehicles and personnel.¹¹

All-Cargo and Mail Aircraft: Movements by aircraft and helicopters operated for commercial transport operations involving freight and/or mail, but not passengers.¹²

All-Cargo Carrier: One of a class of a carriers holding an All-Cargo Air Service Certificate issued under Section 418 of the Federal Aviation Act and certificated in accordance with Federal Aviation Regulations Part 121 to provide domestic air transportation of cargo.¹³

All-Cargo Carrier: An air carrier certificated in accordance with Federal Aviation Regulations (FAR) Part 121 to provide scheduled air freight, express, and mail transportation over specified routes, as well as to conduct nonscheduled operations that may include passengers.¹⁴

Apron: An area intended to accommodate the loading and unloading of passengers and cargo, the refueling, servicing, maintenance and parking of aircraft, and any movement of aircraft, vehicles and pedestrians necessary for such purposes. Also referred to as the "Ramp".¹⁵

Cargo: 1) Freight carried by a barge. 2) Property, mail and express; other than passengers transported.¹⁶

Cargo Aircraft: An aircraft that is used to transport cargo and is not engaged in carrying passengers. The terms cargo aircraft only, cargo-only aircraft and cargo aircraft have the same meaning.¹⁷

Cargo Transfer System: A component, or system of components functioning as a unit, used exclusively for transferring hazardous fluids in bulk between a tank car, tank truck, or marine vessel and a storage tank.¹⁸

Carrier Operations: Arrivals and departures of air carriers certificated in accordance with Federal Aviation Regulations (FAR) Parts 121 and 127.¹⁹

Class I Freight Railroad: Defined by the Interstate Commerce Commission each year based on annual operating revenue. For 1988, the threshold for Class I railroads was \$87.9 million. A railroad is dropped from the Class I list if it fails to meet the annual earnings threshold for three consecutive years.²⁰

Cost Per Enplaned Passenger: Cost per enplaned passenger (CPEP) is defined as all landing fees, airside usage charges, fuel flowage fees, terminal rents and other airline payments to airports divided by enplaned passengers. The median CPEP for all airports in a recent survey of airport rates and charges was between \$5-6, with large hubs having slightly higher costs than small and medium hubs.²¹

Empowerment zones/Renewal Communities: The Empowerment Zone tax incentives and the <u>Renewal Community tax incentives</u> are worth approximately \$11 billion to eligible businesses of all sizes in Empowerment Zones and Renewal Communities. These incentives encourage businesses to open, expand, and to hire local residents. The incentives include employment credits, a 0% tax on capital gains, increased tax deductions on equipment, accelerated real property depreciation, and other incentives. In the Empowerment Zones and Renewal Communities, the most widely used Community Renewal tax incentive is the employment credit, which provides tax benefits to businesses that employ residents from the designated areas. Recent years have shown a steady upward trend in utilization of this incentive. HUD estimates that approximately 480,000 jobs for EZ and RC residents generated over \$2 billion worth of employment credits for eligible employers throughout the country in 2007-2008.²²

Enplanement: Domestic, territorial, and international revenue passengers who board an aircraft in the states in scheduled and non-scheduled service of aircraft in intrastate, interstate, and foreign commerce and includes in transit passengers (passengers on board international flights that transit an airport in the US for non-traffic purposes).²³

Foreign Trade Zone (FTZ): Foreign Trade Zones (FTZs) were created in the United States to provide special customs procedures to U.S. plants engaged in international trade-related activities. Duty-free treatment is accorded items that are processed in FTZs and then re-exported, and duty payment is deferred on items until they are brought out of the FTZ for sale in the U.S. market. This helps to offset customs advantages available to overseas producers who compete with domestic industry. The Foreign-Trade Zones (FTZ) Board (composed of representatives from the U.S. Departments of Commerce and Treasury) has its operational staff in the International Trade Administration's Import Administration.²⁴

Freight: Property other than express and passenger baggage transported by air. Or, any commodity being transported.²⁵

Freight and Other Transportation Services Forwarding: Includes establishments that provide forwarding, packing, and other services incidental to transportation. Also included are horse-drawn cabs and carriages for-hire.²⁶

Freight Container: A reusable container having a volume of 64 cubic feet or more, designed and constructed to permit being lifted with its contents intact and intended primarily for containment of packages (in unit form) during transportation.²⁷

Freight Forwarder: An individual or company that accepts less-than-truckload (TLT) or less-than-carload (LCL) shipments from shippers and combines them into carload or truckload lots. Designated as a common carrier under the Interstate Commerce Act. Or, a broker that functions as an intermediary between shippers (consignors/ consignees) and carriers. Functions performed by a freight forwarder may include receiving small shipments (e.g., less than container load) from consignors, consolidating them into larger lots, contracts with carriers for transport between ports of embarkation and debarkation, conducts documentation transactions, and arrange delivery of shipments to the consignees.²⁸

Freight Forwarding: Establishments primarily engaged in undertaking the transportation of goods from shippers to receivers for a charge covering the entire transportation, and in turn making use of the services of various freight carriers in effecting delivery. Establishment pays transportation charges as part of its costs of doing business and assumes responsibility for delivery of the goods. There are no direct relations between shippers and the various freight carriers performing the movement.²⁹

General Aviation: Movements of aircraft and helicopters belonging to: companies with an air taxi or air work license; an individual, a flying club or a company whose main objective is not to provide revenue passenger transport. Or, all civil flying except that of air carriers. Or, that portion of civil aviation which encompasses all facets of aviation except air carriers. Or, all civil aviation activity except that of air carriers certificated in accordance with Federal Aviation Regulations (FAR) Parts 121, 123, 127, and 135. The types of aircraft used in general aviation activities cover a wide spectrum from corporate multi-engine jet aircraft piloted by professional crews to amateur-built single engine piston acrobatic planes, balloons, and dirigibles.³⁰

General Cargo: General cargo consists of those products or commodities such as timber, structural steel, rolled newsprint, concrete forms, agricultural equipment that are not conducive to packaging or unitization. Break-bulk cargo (e.g., packaged products such as lubricants and cereal) are often regarded as a subdivision of general cargo. Or, the tonnes of cargo assessed at the general rate of tolls as defined in the St. Lawrence Seaway Tariff of Tolls.³¹

Industrial development revenue bonds (IDRB): Municipal debt securities issued by a government agency on behalf of a private sector company and intended to build or acquire factories or other heavy equipment and tools.³²

Intermodal: Used to denote movements of cargo containers interchangeably between transport modes, i.e. motor, water and air carriers, and where the equipment is compatible within the multiple systems.³³

Intermodal Container: A freight container designed and constructed to permit it to be used interchangeably in two or more modes of transport.³⁴

Intermodal Passenger Terminal: An existing railroad passenger terminal which has been or may be modified as necessary to accommodate several modes of transportation, including intercity rail service and some or all of the following: intercity bus, commuter rail, intra-city rail transit and bus transportation, airport limousine service and airline ticket offices, rent-a-car facilities, taxis, private parking, and other transportation services.³⁵

Intermodal Transport: Enables cargo to be consolidated into economically large units (e.g., containers, bulk grain railcars) optimizing use of specialized intermodal handling equipment to effect high-speed cargo transfer between ships, barges, railcars, and truck chassis using a minimum of labor to increase logistic flexibility, reduce consignment delivery times, and minimize operating costs.³⁶

Intermodal Transportation: Use of more than one type of transportation; e.g., transporting a commodity by barge to an intermediate point and by truck to destination.³⁷

Intermodalism: Typically used in three contexts: 1) most narrowly, it refers to containerization, piggyback service, or other technologies that provide the seamless movement of good and people by more than one mode of transport. 2) more broadly, intermodalism refers to the provision of connections between different modes, such as adequate highways to ports or bus feeder services to rail transit. 3) In its broadest interpretation, intermodalism refers to a holistic view of transportation in which individual modes work together or within their own niches to provide the user with the best choices of service, and in which the consequences on all modes of policies for a single mode are considered. This view has been called balanced, integrated, or comprehensive transportation in the past.³⁸

Landed Cost: The dollar per barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).³⁹

Landed Weight: The weight of an aircraft providing scheduled and non-scheduled service of only property (including mail) in intrastate, interstate and foreign air transportation.⁴⁰

Landing Fees: Landing fees are paid by signatory and non-signatory airlines, meaning those who have signed a standing Airport Use Agreement and those who have not. These fees are collected for aircraft that land at the Airport and are calculated based upon each individual aircraft's weight.⁴¹

Mainline flight: A mainline flight is a flight operated by an airline's main operating unit, rather than by regional alliances, regional code-shares or regional subsidiaries.⁴²

New Market Tax Credits (NMTC): The New Markets Tax Credit (NMTC) spurs investment of private sector capital in distressed communities by providing a tax credit for taxpayers who make qualified equity investments (QEIs) in designated Community Development Entities (CDEs). The credit provided to the investor totals 39 percent of the investment in a CDE and is claimed over a seven-year credit allowance period. In each of the first three years, the investor receives a credit equal to five percent of the total amount paid for the stock or capital interest at the time of purchase. For the final four years, the value of the credit is six percent annually. Investors may not redeem their investments in CDEs prior to the conclusion of the seven-year period.⁴³

Passenger Enplanements: The total number of passengers boarding an aircraft.⁴⁴

Passenger Facility Charge (PFC): Public agencies controlling a commercial service airport can charge enplaning passengers using the airport a \$1, \$2, or \$3 facility charge. Public agencies must apply to the FAA and meet certain requirements in order to impose a PFC. ⁴⁵ A tax authorized by Congress, approved by FAA, assessed by airports and collected by airlines (on behalf of airports) as an add-on to the passenger airfare. PFCs are used by airports to fund FAA-approved projects that enhance safety, security or capacity; reduce noise; or increase air carrier competition. The PFC program authorizes the collection of fees up to \$4.50 for every enplaned passenger at commercial airports controlled by public agencies.⁴⁶

Revenue Passenger Enplanements: The total number of passengers boarding aircraft. Includes both originating and connecting passengers. 2) Total number of revenue passengers boarding aircraft in scheduled service including origination, stopover or connecting passengers.⁴⁷

Signatory airlines: Airlines that choose to sign the use agreement that establish them as Signatory Airlines. They receive preferential leased space. Non-signatory airlines must sublease space or be handled by a signatory airline.⁴⁸

APPENDIX L: Cooperative economic development agreements

Ohio Revised Code

701.07 Cooperative economic development agreements.

(A) The legislative authority of one or more municipal corporations, by ordinance or resolution, and the board of township trustees of one or more townships, by resolution, may enter into a cooperative economic development agreement under this section. The board of county commissioners of one or more counties may become a party to a cooperative economic development agreement upon the written consent of the legislative authority of each municipal corporation and the board of township trustees of each township that is a party to the agreement.

Before entering into a cooperative economic development agreement pursuant to this section, the parties to the agreement shall jointly hold a public hearing concerning the agreement. The parties shall provide to residents of the territory affected by the agreement at least thirty days' public notice of the time and place of the public hearing in one or more newspapers of general circulation in that territory. During the thirty-day period prior to the public hearing, each party to the agreement, except the state or any state agency or any person or private entity that becomes a party to the agreement under division (C)(10) or (F) of this section, shall make available for public inspection a copy of the proposed agreement.

(B) A cooperative economic development agreement may be amended at any time in the same manner as it was initially authorized. A cooperative economic development agreement shall designate the territory the agreement covers.

(C) A cooperative economic development agreement may provide for any of the following:

(1) The provision of joint services and permanent improvements within incorporated or unincorporated areas;

(2) The provision of services and improvements by a municipal corporation in unincorporated areas;

(3) The provision of services and improvements by a county or township within the territory of a municipal corporation;

(4) The payment of service fees to a municipal corporation by a township or county;

(5) The payment of service fees to a township or a county by a municipal corporation;

(6) The issuance of notes and bonds and other debt obligations by a municipal corporation, county, or township for public purposes authorized by or under a cooperative economic development agreement and provision for the allocation of the payment of the principal of, interest on, and other charges and costs of issuing and servicing the repayment of the debt;

(7) The issuance of industrial development notes, bonds, and debt obligations by a municipal corporation to finance projects in territory located outside the municipal corporation but located within the territory covered by a cooperative economic development agreement and provision for the allocation of the payment of the principal

of, interest on, and other charges and costs of issuing and servicing the repayment of the debt. To implement division (C)(10) of this section, a municipal corporation may undertake projects under Chapter 165., 761., or 902. of the Revised Code even though the project is in territory located outside the municipal corporation.

(8) The territory to be annexed to a municipal corporation when agreed to by the municipal corporation to which annexation is proposed and the township in which the territory to be annexed is located;

(9) Any periods of time during which no annexations will occur and any areas that will not be annexed during the period when agreed to by the municipal corporation and township affected by the annexation moratorium;

(10) Agreements by a municipal corporation and a township, or by a municipal corporation and a county, with landowners or developers of land that is to be annexed, or with both such landowners and land developers, concerning the provision of public services, facilities, and permanent improvements. Any person or other private entity described in division (C)(10) of this section that enters into an agreement with a municipal corporation and a township, or with a municipal corporation and a county, pursuant to this division shall be considered to be a party to the agreement.

(11) The application of tax abatement statutes within the territory covered by the cooperative economic development agreement;

(12) Changing township boundaries under Chapter 503. of the Revised Code to exclude newly annexed territory from the original township and providing services to that territory;

(13) The earmarking by a municipal corporation for its general revenue fund of a portion of the utility charges it collects in territory located outside the municipal corporation but located within the territory covered by a cooperative economic development agreement, but only if the cooperative economic development agreement does not cover any matters relating to annexation;

(14) Payments in lieu of taxes, if any, to be paid to a township by a municipal corporation. These payments may be in addition to or in lieu of other payments required by law to be made to the township by that municipal corporation.

(15) Any other matter pertaining to the annexation or development of territory, whether the territory is owned by a governmental entity or a person or private entity.

As used in division (C)(2) of this section, "improvement" includes, but is not limited to, sewers, roadways, public utilities, and the acquisition of land.

(D) Cooperative economic development agreements shall not be in derogation of the powers granted to municipal corporations by Article XVIII, Ohio Constitution, or any other provisions of the Ohio Constitution or of a municipal charter, nor shall municipal corporations and townships, or municipal corporations and counties, agree to share proceeds of any tax levy, although such proceeds may be used to make payments authorized in a cooperative economic development agreement.

(E) If any party to a cooperative economic development agreement believes any other party has failed to perform its part of any provision of the agreement, including the failure to make any payment of moneys due under the agreement, the complaining party shall give notice to the other party clearly stating what breach the complaining party believes has occurred. The party receiving the notice has ninety days from the

receipt of that notice to cure the breach. If the breach has not been cured within that ninety-day period, the complaining party may sue for the recovery of the money due under the agreement, sue for specific enforcement of the agreement, or terminate the agreement by giving notice of termination to all other parties.

(F) In order to assist economic development or to provide appropriate state functions and services to any part of the state, the state or any state agency may become a party to a cooperative economic development agreement upon the approval of the governor and the written consent of the legislative authority or governing board of each government entity that is a party to the agreement and upon the approval of each person or private entity described in division (C)(10) of this section that is party to the agreement.

(G) A cooperative economic development agreement entered into under this section is in addition to any other agreements authorized by law between municipal corporations and counties or between municipal corporations and townships.

(H) The powers and authorizations provided for under this section and under any cooperative economic development agreement entered into pursuant to this section shall be liberally construed to allow parties to enter into cooperative economic development agreements and to carry out such an agreement by providing government improvements and facilities and services, by promoting and supporting economic development, by creating and preserving employment opportunities, and by allowing for the sharing by counties and townships in the benefits of economic development even if the economic development does not occur in an unincorporated area. Effective Date: 03-22-1999

APPENDIX M: Airport Case Studies

Atlanta Hartsfield-Jackson Airport (Atlanta, GA)

Characteristics/Description

Atlanta Hartsfield-Jackson's Airport (ATL) 4,700-acre campus is located about 10 miles south of downtown Atlanta between Interstates 85 (I-85) and 75 (I-75). Campus boundaries include part of the city of Atlanta and neighboring Hapeville, which are both in Fulton County. The campus also includes the city of College Park, which is located in Clayton County.⁴⁹ ATL is owned by the city of Atlanta and operated by the city's department of aviation.⁵⁰

Based on maps from both Fulton County and the Atlanta Development Authority, ATL is zoned for commercial use. Directly to the airport's east is a large tract of land zoned for industrial use. Most of the land immediately north of the airport is zoned for residential use.⁵¹ Currently, very little land surrounding the airport is available for development.⁵²

ATL was the nation's busiest passenger airport and the 14th busiest cargo airport in 2008.⁵³ ATL views Charlotte-Douglas International Airport, Dallas/Fort Worth International Airport and Orlando International Airport as its main competitors.⁵⁴ The Atlanta area is also served by more than 20 regional airports including six of which are designated as reliever airports for ATL.⁵⁵ More than 2,700 flights arrive and depart ATL each day. ATL serves 156 national destinations and more than 80 international destinations in 50 countries.⁵⁶ According to the FAA's "2004 Air Capacity Benchmark Report," in optimal weather conditions, ATL is capable of handling 180 to188 arrivals and departures per hour. The airport is able to accommodate this demand because of its five runways: three are 9,000 feet, one is 10,000 feet, and one is 11,889 feet.⁵⁷

ATL has been the world's busiest passenger airport since 1998.⁵⁸ In 2008, the airport served more than 90 million passengers, the majority of who are transfer passengers.⁵⁹ About nine million, or 10 percent of ATL's passengers, are flying internationally. The airport is in the process of constructing a 12-gate international terminal that will connect to the existing 28-gate international concourse.⁶⁰ ATL averages nearly 250,000 passengers and more than 1,300 domestic departures per day. According to the FAA, ATL ranked first in the nation with more than 43.8 million enplanements in 2008.⁶¹ Seventeen mainline, 12 regional, and three charter airlines service ATL.⁶²

In 2008, 2.3 billion pounds of cargo landed at ATL.⁶³ Fourteen mainline cargo airlines and four charter cargo airlines service the airport. ATL has two million square feet of on-airport cargo warehouse space and more than 1.5 million square feet of cargo handling space. Three main air cargo complexes are located at ATL: North, Midfield, and South. Each has its own refueling and support system. All three complexes have dockside access to the surrounding interstate highways.⁶⁴ According to the Atlanta Air Cargo

Association, more than 100 licensed customs brokers and 200 domestic and international freight forwarders operate at ATL.⁶⁵ In 2009, 1.2 billion pounds of domestic and international cargo moved through Atlanta, the majority of which was international cargo with 683 million pounds moved. Also in 2009, two new international carriers, Singapore Air Caro and Great Wall Airlines, began operations at ATL. Each week, 10 cargo flights to Europe and 27 cargo flights to Asia leave ATL. The top commodities shipped into Atlanta include textiles, manufactured goods, machinery, car parts, and electronic goods. The top commodities moved out of Atlanta include industrial machinery, dairy products and eggs, electrical machinery, medical or surgical equipment, and articles of iron and steel. More than 19,000 direct and indirect jobs in Atlanta and more than 38,000 jobs in Georgia are related to ATL's air cargo operations, which generated about \$10.7 million in revenue in 2009.⁶⁶

Tenants

ATL houses many businesses. ATL's terminals contain nearly 300 concession outlets, including 114 food and beverage shops, 182 retail and convenience outlets, and two duty-free stores. The airport is in the process of adding 75 new specialty retail stores such as spas, wine bars, and high-end retailers.67 A 2005 economic impact study identified ATL as the region's largest employer with 56,000 jobs tied directly to the airport.⁶⁸

The Jacoby Group is redeveloping the former Ford plant in Hapeville into "Aerotropolis Atlanta," which will be a mixed-use development on the plant's 130-acre site. Aerotropolis Atlanta is located at the juncture of I-75, the Southern Crescent Transit Center, and ATL's new international terminal. According to the *Atlanta Journal Constitution*, phase one was expected to be completed by fall 2009. Build-out is estimated to take 10 years. The development will consist of a light industrial business park, a 4,000-space airport parking lot, restaurants, hotels, and office space.

In addition to Aerotropolis Atlanta, a number of other developments are springing up around ATL. As part of ATL's \$6 billion capital improvement program, the airport also built a consolidated rental car complex located in the College Park portion of the campus. Passengers renting cars travel via people mover—or SkyTrain—to the new complex. The complex cost \$642 million.⁶⁹ As a result, the Georgia Convention Center relocated near the rental car complex on the hope that being near the new complex would increase the number of visitors to the convention center. Already airport officials say the move has helped to change the convention center from a primarily local venue to an international gathering place.⁷⁰ Consequently, two Marriot hotels, and a new office complex have moved to the area. The \$230 million mixed-use project, called the Gateway Center, is being developed by Atlanta-based Grove Street Partners. The development will also be connected to ATL via the airport's people mover.⁷¹

CRB Realty plans to develop homes, offices, stores, and warehouses on 2,500 acres along South Fulton Parkway, six miles south of ATL.⁷² Zoned for "town center mixed

use," Parkway South will be a "live-work-shop-play community."⁷³ Additionally, Kraft Foods and BMW have both expressed interest in building facilities near ATL. BMW's plans to build a training facility, however, have stalled due to the recession.⁷⁴

Atlanta is also served by a strong distribution and logistics network. Multiple trucking firms base terminals in the city. Two private railroads, CSX and Norfolk Southern, both operate large intermodal facilities in Atlanta.⁷⁵ Immediately to the east of the airport is Southside Industrial Park. The 250-acre industrial park is in an area zoned for light industrial use, which permits storage, wholesaling, processing, and light manufacturing.⁷⁶ The Atlanta Airport Distribution Center is also located near the airport on the Southside Industrial Parkway.⁷⁷

Structure/Operations

Since the airport authority has not formally adopted an aerotropolis strategy, it does not have an aerotropolis board. However, Dr. John Kasarda visited ATL in 2008 to discuss the airport's role in regional economic development. He encouraged the formation of a public-private partnership. While ATL does not oversee any development beyond airport boundaries, the airport supports the aerotropolis concept.⁷⁸ Thus far, however, the name "Aerotropolis Atlanta" appears to be a branding strategy employed by Jacoby Development Inc., a firm which specializes in sustainable, mixed-used projects. Aerotropolis Atlanta will be feeding off the momentum of Jacoby's "live-work-play" community in Midtown Atlanta, Atlantic Station, which was built on the site of the old Atlantic Steel plant. Many credit the development with rejuvenating midtown Atlanta.⁷⁹

In the absence of an aerotropolis partnership or organization, economic development around the airport is encouraged and assisted by the Airport Area Chamber of Commerce (AACOC), a nonprofit organization comprised of members from both the public and private sectors.⁸⁰ The Greater Atlanta Economic Alliance also plays a role in development at and around ATL. The alliance is a 501(c)(3) organization that runs the Hartsfield-Jackson Development Program - a \$6.2 billion expansion. Since its founding in 2000, one of the alliance's main goals has been to "disseminate information about the Hartsfield-Jackson Atlanta International Airport's multi-billion dollar capital improvement project."⁸¹ The Alliance is run by a board of directors comprised of leaders from the public and private sectors and academia.⁸² Both the chamber of commerce and the alliance work to market ATL as an economic asset. The city of Atlanta Aviation Department also plays a key role in marketing ATL.⁸³

Governance

The city of Atlanta owns and operates ATL, which falls under the direction of the city's Department of Aviation. All airport policy must be approved by the Atlanta City Council.⁸⁴ An airport general manager oversees the day-to-day operations at the airport. The current airport general manager has been in place since 1998.⁸⁵ Reporting to the

general manager are separate executives who oversee six different divisions within the airport: information services, operations maintenance and security, airport planning and development, airport commercial development, public affairs, and finance. About 600 people are directly employed by the department of aviation.⁸⁶ The airport's mission is to "be the world's best airport by exceeding customer expectations."⁸⁷ The airport's business development unit oversees the effort to bring new carriers into the airport and attract new passenger service.⁸⁸

An economic impact study calculated ATL's effect on the 28-county Atlanta-Sandy Springs-Marietta Georgia Statistical Area.⁸⁹ More than 120 municipalities are within this MSA.⁹⁰ Development around the airport is a cooperative initiative between three different governments. For example, the development authorities of Clayton and Fulton counties – along with the city of College Park – are jointly overseeing the redevelopment of 3,400 acres south of the airport.⁹¹

The AACOC is based primarily in Fulton County. The chamber's ultimate objectives are "to advertise and encourage orderly and proper business growth and expansion; to promote the airport area as a desirable place to live, work, and to prosper."⁹² The Greater Atlanta Economic Alliance was founded to promote ATL's expansion project, but also to help minority and female-owned businesses in the area. Its mission is "to build, sustain, and grow the capacity, capability, and opportunities for small, female and minority owned enterprises within the construction, transportation, and related industries."⁹³

Funding

ATL is a self-sustaining operation funded through tenant rents and landing fees.⁹⁴ Landing fees at ATL are approximately \$1 per 1,000 lbs. Passenger facilities charges are \$4.50 per enplaned passenger.⁹⁵ A recent report found that 60 percent of ATL's total operating revenue (\$386.2 million in 2008) comes from "non-aeronautical" sources such as retail and parking.⁹⁶ Landing fees account for \$58 million of ATL's 2008 revenue.⁹⁷ ATL's \$6 billion capital development program, which includes the new runway construction and a rental car center, was financed through the sale of bonds and passenger facility charges.⁹⁸

Most of the development around the airport is privately financed. For example, Steven D. Bell & Co., D.H. Griffin Co., and a Ted Turner family entity have partnered with Jacoby Development Inc. to develop Aerotropolis Atlanta.⁹⁹ Grove Street Partners' Gateway Center development is financed by a group of investors led by U.S. Bank, including SunTrust, Wachovia, and Touchmark.¹⁰⁰

Incentives

Airport area developers are taking advantage of a number of tax incentives to help finance projects. Jacoby Development Inc. received a \$6 million New Tax Market Credits (NTMC) Ioan from Imagine Downtown Inc, an affiliate of the Atlanta Development Authority and Central Atlanta Progress. In addition, Jacoby received a \$24 million Iow-interest Ioan for the Aerotropolis Atlanta project.¹⁰¹ The founder and CEO of Jacoby Development Inc. plans to install solar cells on top of the development's parking structure. Because of the incorporation of green technology, Jacoby Development's CEO hopes part of the project will be financed by funds from the American Reinvestment and Recovery Act.¹⁰²

Because the city of College Park owns the site of Grove Street Partner's Gateway development, the property is exempt from taxes. Instead of paying taxes the company will make regular payments to the city. The development is partially financed by proceeds from payment in lieu of taxes (PILOT) bonds.¹⁰³

More than 2,000 acres within the Parkway South development are part of an Opportunity Zone within Union City. A company locating to this zone is eligible for a state tax credit of \$3,500 per employee for five years after the date of the hire. There are no restrictions on the type of job and a company may choose to spread the credit out over 10 years. A company must create only two or more jobs in order to qualify. There is no upper salary limit on eligible jobs.¹⁰⁴

The Atlanta Department of Development (ADA) gives special attention to "emerging markets" and has designated five economic development corridors. The Jonesboro Road Corridor is located to the airport's east and the Metropolitan Parkway corridor is directly to the airport's north.¹⁰⁵ Within each corridor are "intersections that have been assessed in terms of potential and readiness for growth." These are called development nodes.¹⁰⁶ ADA's web site provides a list of corporate incentives available for development in emerging markets. Incentives include small business loans, grants, conduit loans, and state tax credits, tax allocation districts (TAD), and New Market Tax Credits (NMTCs).

The Metropolitan Parkway corridor is a TAD. TADs are meant to facilitate redevelopment in blighted or underdeveloped areas. The costs of redevelopment are financed through the sale of bonds based on future incremental increases in property taxes generated by new developments. TADs also utilize tax increment financing. A tax increment is the difference between the amount of property taxes generated when the TAD is established and the amount generated after the TAD has been designated. Any increase in property tax revenues are put in a special fund that will help cover the TAD's redevelopment costs.¹⁰⁷

Metropolitan Parkway is also designated as a NMTC area. NMTCs are part of the Department of Housing and Urban Development's Renewal Community program.

NMTCs are financed by \$17 billion in federal tax incentives allotted for Renewal Communities throughout the nation.¹⁰⁸ In order to receive this benefit, private sector companies must help distressed communities in one or more of the following ways: creating or maintaining jobs for low-income persons or residents of a distressed area; increasing wages for low-income workers and financing; or assisting businesses that provide benefits such as healthcare or childcare to low-income persons or residents of a low-income area. NMTC recipients will receive seven-year loans with below market interest rates and interest only payments.¹⁰⁹

The Joneboro Road corridor has been designated an Urban Enterprise Zone (UEZ). Like TADs, UEZs are meant to encourage development in areas where it might not otherwise occur. UEZs are designated at the request of the developer or property owner. If approved, Atlanta then grants the owner or developer tax reductions over a 10-year term.¹¹⁰

In addition, FTZ 26 is located in the Atlanta area. FTZ 26 has nine subzones including one at Atlanta Tradeport, just east of ATL. Other locations include Peach Tree City, Columbus, and Canton.¹¹¹

Baltimore/Washington International Thurgood Marshall Airport (Glen Burnie, MD)

Characteristics/Description

Baltimore/Washington International Thurgood Marshall Airport (BWI) is located in Glen Burnie, Maryland. BWI is owned and operated by the Maryland Aviation Administration (MAA). The MAA also operates Martin State Airport (MTN), which serves as a general aviation airport. Baltimore is part of the larger Baltimore-Washington combined statistical area (Baltimore-Washington CSA).¹¹² The Baltimore-Washington CSA is the highest income, most educated, and fourth largest CSA in the United States, with a population of over eight million people.¹¹³

There are two other commercial airports in the Baltimore-Washington CSA: Ronald Reagan Washington National Airport (DCA) and Washington Dulles International Airport (IAD). Both DCA and IAD are operated by the Metropolitan Washington Airports Authority. In 2009, IAD was the busiest airport in the CSA, based on number of passengers, followed by BWI and then DCA. BWI acts as the low cost carrier airport in the region.¹¹⁴ BWI considers DCA, IAD, PHL, and to a lesser extent Harrisburg International Airport (MDT) to be its main competitors.¹¹⁵

BWI encompasses 3,596 acres. There are four runways at the airport. Three of the runways intersect at their midpoint forming an asterisk shape. The runway lengths are 10,502 feet, 9,501 feet, 6,000 feet, and 5,000 feet.¹¹⁶ The passenger terminal at BWI is

approximately two million square feet with five concourses (four domestic, one international), and 69 gates.¹¹⁷

There are 40 airlines operating at BWI that include commuter, charter, and cargo airlines. There are four scheduled cargo airlines operating at BWI, including Astar Air Cargo/ABX Air, FedEx, FedEx/Mountain Air, and UPS. There are 25 scheduled commercial airlines operating at BWI providing service to 64 domestic destinations and six international destinations. The top five origin and destination airports to or from BWI in 2008 were Orlando, Atlanta, Tampa, Boston, and Providence. Southwest Airlines is the largest airline at BWI with 53 percent of the passenger market share. BWI is Southwest airline's fourth largest market overall and its largest on the east coast. Southwest currently offers 159 daily departures to 41 destinations from BWI and operates out of its own terminal, which was completed in 2005. AirTran is the second largest carrier at BWI, with 18 percent of the passenger market share.

There were a total of 268,016 aircraft operations at BWI in 2009–a decrease of 3.5 percent from 2008.¹¹⁹ In 2009, BWI also had an average of 672 scheduled domestic passenger flights per day, 14 scheduled international nonstop flights and 10 cargo flights per day.¹²⁰ BWI has the capacity in optimum weather conditions for between 106 and 120 arrivals and departures per hour.¹²¹ In 2008, the FAA ranked BWI 23rd in the United States for passenger enplanements and 57th for landed weight of cargo based on 10.2 million passenger enplanements and 456.1 million pounds of landed weight.¹²²

The Office of Commercial Management (OCM) supervises the contracts for the concessions program, rental car operations, and commercial property. Currently there are 43 food and beverage tenants and 32 retail tenants at BWI as part of the concessions program. There are eight rental car companies operating out of the newly completed \$134.8 million consolidated rental car facility located on a 100 acre site on the west side of the airport. All of the logistics and cargo operations at BWI are located at the Air Cargo Center. The Air Cargo Center includes 10 cargo buildings with a combined 414,906 square feet of warehouse space, a foreign trade zone, air cargo ramps that can accommodate up to 24 aircraft, and direct nose-in access for 15 aircraft. There are 29 commercial tenants located at the Air Cargo Center, including the United States Postal Service, Fed Ex, UPS, and DHL.¹²³ In total, there are approximately 9,717 employees at BWI.¹²⁴

In 2004, the BWI/Linthicum Small Area Plan was adopted by the Anne Arundel County Commission. The study area was defined as a 12,500 acre circular tract of land with BWI at the epicenter. The study included a land use/zoning survey and a development plan for the area. The zoning for the area is 48 percent residential, one percent commercial, 36 percent industrial, and 15 percent open space. Actual land uses for the study area were not fully consistent with the zoning. Residential uses account for 23 percent of the planning area. Industrial and commercial uses comprised only 15 percent of the planning area. Transportation (BWI airport and transportation infrastructure) comprises about 30 percent of the planning area. Agricultural uses, open space, and

recreation areas comprise nearly 15 percent of the land area, the vast majority of which is contained in the Patapsco Valley State Park. Government and institutional uses account for less than three percent of the land area, and the remaining 15 percent is vacant. The bulk of the vacant land in the area is industrially-zoned land.¹²⁵

BWI is an economic engine for the region. It is estimated that BWI supports 99,913 jobs and \$5.1 billion in business revenue for the state of Maryland.¹²⁶ The area surrounding BWI is highly developed. Close to the airport is the mall at Arundel Mills, which is a large retail center containing over 225 stores. The mall is Maryland's number-one tourist attraction, welcoming 14 million visitors per year and collecting sales revenues of more than half a billion dollars.¹²⁷ There are more than 30 hotels in the BWI area. The BWI area is home to a growing defense, security, and information technology sector. The driving force behind the growth in this sector has been Fort George G. Meade (Ft. Meade). Ft. Meade is home to all five branches of the military service and over 80 tenant organizations including the National Security Agency. The economic impact of Ft. Meade is estimated at \$4 billion dollars and 108,000 employees. The Jacob France Institute found that the BWI area is home to 169 employers and nearly 37,000 employees.¹²⁸ Gary Luczak, chairperson of the BWI Development Council, explains that development around BWI has been so successful because "there is a good understanding by the State, Anne Arundel County, and the local community that BWI is one of Maryland's largest economic engines. There is also pro-active effort by the MAA to coordinate and stay involved with local business groups, including the local Chambers of Commerce."129

Structure/Operations

BWI and MTN are operated by the MAA. The MAA also develops and regulates aviation activities at Maryland's 36 public use airports. The MAA employs 480 people.¹³⁰ The MAA is lead by an executive director. The executive director has a senior staff of four deputy directors, two directors, and legal counsel, who manage the daily operations of the various departments. The MAA reports to the Maryland Aviation Commission (MAC) who oversees its operations. Members of the MAC are appointed by the governor of Maryland to three-year terms. The mission of the MAA is "to foster the vitality of aviation statewide and promote safe and efficient operations, economic viability and environmental stewardship."¹³¹ According to chairperson of the BWI Development Council, BWI's greatest success is its "commitment to developing as a low-cost airport, including appropriate development and operating costs. This low-cost model leads to more origin and destination passengers and the associated revenues from parking." Conversely, increasing international flights and cargo activity remains BWI's greatest challenges.¹³²

The MAA works closely with the community to encourage economic development at the airport and in the BWI area. BWI's work with the Anne Arundel County Commission and BWI/Linthicum Small Area Plan has created a blueprint for growth in the area. The MAA also works with the BWI Business Partnership (BWIBP) to encourage planning and

development in the BWI area. Although BWI is actively working to encourage development around the airport, it does not have future plans of becoming an aerotropolis. Interestingly, Mitch Weber, president of Heffner & Weber Companies, a design and construction firm in Baltimore, has begun to use the term aerotropolis in some of his proposed development projects around BWI.¹³³

The BWIBP was founded in 1985 by public and private leaders to ensure that transportation infrastructure and transportation services in the area kept pace with the growing employment base. Growing the infrastructure, in tandem with other development taking place in the region around BWI, was recognized as a key element in area planning. The BWIBP now includes nearly 175 businesses and government agencies. The BWIBP has become the collective voice of the BWI area. The vision of the BWIBP is "one in which our residents, employees and visitors live, work and enjoy an environment where jobs are strong, and the workforce is highly developed. Throughout the region, people can move easily and efficiently on highways, transit systems and through our Airport, while retaining important guality of life standards." The BWIBP is currently working to improve rail connections and the capacity of the local road network. It is working with the state of Maryland on transportation funding and workforce development. The BWIBP is also working to promote the BWI area, and in particular, expand tourism as an economic development driver. Funding for the BWIBP comes from membership dues. Dues are based on company type, size, and presence in the area. Dues levels range from \$650 to more than \$2,500 per year for member companies. Non-profit organizations that support the partnership's mission may qualify for a non-profit membership rate.¹³⁴

Funding for BWI's development projects is provided exclusively by user fees, as are the funds needed to conduct the airport's day-to-day operations. These funds are principally generated through direct charges such as rents and fees collected from the airlines, tenants, and passengers. Total operating revenues at BWI in 2008 were \$170.4 million and total operating expenses were \$167.3 million. Landing fees at BWI for 2009 were \$3.71 per 1,000 pounds for signatory airlines. The cost per enplaned passenger at BWI in 2009 was \$9.28, below both DCA and IAD. The passenger facilities charge at BWI is \$4.50¹³⁵

The Maryland Department of Business and Economic Development (MDBED) has a number of incentives and programs to encourage continued development around BWI. The MDBED strives to attract new businesses, stimulate private investment, encourage the expansion and retention of existing companies, and provide Maryland businesses with workforce training and financial assistance. The department markets local products and services at home and abroad. The MDBED offers business information and economic analysis, site location services, incentive tax credits, financing assistance, and training programs. Maryland also has four foreign trade zones including one at BWI. The BWI foreign trade zone specializes in air freight and other high-value goods. The BWI foreign trade zone consists of six sites encompassing over 65 acres.¹³⁶

Chicago O'Hare International Airport (Chicago, IL)

Characteristics/Description

Chicago O'Hare International Airport (ORD) is located in Chicago, Illinois. ORD is owned by the city of Chicago and operated by the Chicago Department of Aviation (CDA). The CDA operates a second commercial airport in Chicago called Midway International Airport (MDW). There is a third airport, the Gary/Chicago International Airport (GYY) which is located in Gary, Indiana, that also serves the Chicago metropolitan statistical area (MSA).¹³⁷ The three airports collectively serve the commercial airline industry in the Chicago MSA, which is the third largest metropolitan area in the United States.¹³⁸ A regional collaboration effort between the states of Indiana and Illinois produced the Gary/ Chicago Regional Airport Authority (GCRAA), which oversees the growth of the three airports individually and the airport system as a whole.¹³⁹

ORD encompasses 7,627 acres. ORD currently has seven runways, five of which intersect. The runway lengths are two at 13,000 feet, one at 10,005 feet, one at 8,075 feet, one at 7,967 feet, and two at 7,500 feet. ORD is currently undertaking an extensive infrastructure project called the O'Hare Modernization Program, which will reconfigure ORD's intersecting runways into a more modern, parallel layout. The \$6.6 billion program is estimated to reduce weather-related delays by 95 percent and overall delays by 79 percent. The new configuration will have eight runways, six running parallel east to west and two running parallel northeast to southwest. The runway lengths will include three at 7,500 feet, and one each at 8,071 feet, 10,600 feet, 11,245 feet, 11,600 feet, and 13,000 feet.¹⁴⁰

ORD has 53 scheduled passenger airlines and 23 scheduled cargo airlines. The airport is a hub for both American Airlines and United Airlines. In 2008, ORD served 70.8 million passengers (enplaned and deplaned) and handled almost three billion pounds of cargo. ORD completed a total of 827,899 flight operations in 2009 making it the busiest airport in the United States based on flight operations. Cargo totaled only one percent of all flight operations.¹⁴¹ The FAA ranked ORD second in the United States for the number of passenger enplanements (33.7 million) and eighth for landed cargo weight (4.2 billion pounds) in 2008.¹⁴² In 2004, the flight capacity in optimum weather conditions at ORD was between 190 and 200 arrivals and departures per hour.¹⁴³ The O'Hare Modernization Program is expected to improve capacity at ORD by six percent in good weather and 12 percent in adverse weather.¹⁴⁴

The concessions program at ORD is managed by the CDA. There are 79 food and beverage tenants and 40 retail tenants. In total, ORD has 130,250 square feet of retail space. In 2008, the concessions program generated approximately \$328.2 million dollars in sales.¹⁴⁵

There are currently two main cargo areas at ORD that have warehouse, build-up/teardown, and parking facilities. The South West Cargo Area, which comprises nine buildings, accommodates the majority of the airport's all-cargo flights. The North Cargo Area, which is a converted former military base, also receives air freighters. There are two satellite cargo areas (East Cargo Area and South Cargo Area) that have warehouse and build-up/tear-down facilities, but aircraft cannot park at these locations. The freight is trucked to and from aircraft, which park on other ramps. In February 2009, the CDA announced that Aeroterm U.S. Inc. would develop more than 55 acres of land and 750,000 square feet of building space for cargo facilities in the northeast area of ORD. This would approximately double ORD's cargo capacity. It will include four cargo processing facilities and airside aircraft parking spaces. The new facilities will be able to accommodate a new, larger generation of aircraft. The development will include truck docks, employee parking areas, comprehensive security controls, and an expansion of the existing northeast fuel farm. Construction of the first phase of development is expected this year.¹⁴⁶

The Chicago O'Hare Master Plan, completed by Landrum & Brown in 2004, contains a land use map depicting that the area surrounding ORD is highly developed. Compatible land uses and zoning in the communities surrounding ORD are regulated through the Chicago-O'Hare International Airport Zoning Regulations. In the immediate area surrounding the airport there is a mix of zoning including single family, commercial, and park space designations. To the southwest of ORD is the Bensenville Industrial Corridor, which occupies approximately 515 acres of land. This corridor contains office. warehousing, and industrial land uses. The Elk Grove Village to the northwest of ORD contains the largest planned industrial, commercial, and warehousing complex in the Chicago region. This district includes over 3,500 acres of land. To the north of ORD and adjacent to the Elk Grove Village is the Des Plaines Industrial District. This area is comprised of 2,336 acres of industrial, manufacturing, warehousing, and distribution facilities. The surrounding communities have developed convention and business support facilities that focus on serving the traveling and business communities using ORD. Located just east of ORD is the Rosemont's business district. This district consists of hotels, restaurants, business services, private corporations, and a convention center, all of which derive direct economic benefit from their location near ORD.¹⁴⁷

The Chicago MSA is defined as a seven-county region including Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will. Chicago MSA is approximately 9,500 square miles and has a population of approximately 9.5 million. It is ranked third in the U.S. for number of business establishments by metro area (354,751 establishments) and is home to 33 Fortune 500 Companies.¹⁴⁸ In the city of Chicago alone there are 24 designated industrial corridors. A 2009 Colliers industrial report found that over 140.5 million square feet of industrial facilities exist in the O'Hare submarket with a vacancy rate of 12 percent.¹⁴⁹ The O'Hare submarket is defined as an approximately 20 square-mile area surrounding the airport. A 2009 Colliers suburban office report found that

there is over 13.4 million square feet of office space in the O'Hare submarket with a vacancy rate of 24 percent.¹⁵⁰

Tourism is a major industry in Chicago and plays a significant role in the activity through ORD. McCormick Place, Chicago's main convention center, hosts more than 100 conventions, trade shows, and conferences each year, which attract close to three million visitors from around the world annually. McCormick Place is comprised of four buildings that have a combined total of 2.6 million square feet of exhibit space. It is the nation's largest convention center.¹⁵¹ There are 84 hotel properties within a five-mile radius of McCormick Place. These properties contain 30,547 total rooms, and 1.4 million total square feet of meeting space. The average occupancy rate for 2008 in the central business district was 72.1 percent.¹⁵²

Structure/Operations

The CDA is responsible for the management, planning, operation, and maintenance of ORD, as well as MDW. The CDA is directed by the Department of Aviation Commissioner who is appointed by the mayor of Chicago. The mission of the CDA is to "maintain the safest and most efficient transportation hub in the world, one where people come together to exchange ideas, innovate and create a direct, positive impact on the region and world's economy." ¹⁵³ As ORD and MDW reached capacity and flight delays became an increasing issue in the 1990s, discussions began about creating a third commercial airport in Chicagoland to accommodate increasing air travel demands. The CDA came to the decision not to build a third airport, but to partner with the State of Indiana and develop GYY as the third airport of the Chicagoland aviation system.¹⁵⁴

The CGRAA was created on April 15, 1995 through a compact between the city of Chicago and the city of Gary. The GRAA is a legally separate organization from the CDA. The CGRAA is directed by a 12-member board whose members are appointed by the governors of Indiana and Illinois and the mayors of Gary and Chicago. The Authority is empowered to oversee, support, coordinate, and plan for the continued development, enhancement and operation of the three airports. Under this collaboration between the two states, up to \$2 million annually is put into a fund to support the growth and development of infrastructure at Gary/Chicago International Airport. Over the course of the agreement the fund will approach \$15 million.¹⁵⁵

ORD has not defined itself as an aerotropolis. However, DuPage County has studied the development around the airport and looked at future economic development opportunities. The report, entitled the "West O'Hare Corridor Economic Development Study," was completed in 2006. The report acknowledges that significant development is occurring around ORD and looks to maximize the economic benefit of the airport. The report focuses on transportation infrastructure, economic impacts, land use, and implementation strategies. A total of 11 opportunity zones were identified in the report for future industrial, office, and mixed use developments. These zones include undeveloped and underdeveloped properties, highly visible properties at key

intersections (intersections with high traffic volumes, potential for development or redevelopment), and land that could be affected by the addition or expansion of roadway and transit lines.¹⁵⁶

ORD is actively engaged in a program to increase its cargo operations in conjunction with the cargo facilities project scheduled to begin this year. In support of ORD's efforts, the Chicagoland Chamber of Commerce created the Transportation Infrastructure Committee to work on an air cargo initiative. The goal of the committee is to coordinate efforts among the business community, local governments and the Congressional delegation to maximize federal funding for the region, including the modernization of regional aviation facilities, increased investments in transit systems, and increased investments in freight rail and intercity passenger rail.¹⁵⁷

The operations of the airport are self-supporting. Airport users generate revenues to fund all operating expenses and debt service requirements. Capital projects are funded through the issuance of bonds and operating revenues. In 2008, ORD had total operating revenues of \$684.3 million and total operating expenses of \$579.3 million. The airport had total liabilities equaling \$6.2 billion, most of which was in the form of revenue bonds and notes. Most of the liabilities are attributed to the [\$6.6 billion] O'Hare Modernization Program.¹⁵⁸ The landing fee at ORD in 2009 was \$4.91 per 1,000 pounds. ORD also imposed a \$4.50 passenger facility charge (2009) on each enplaned passenger.¹⁵⁹

The city of Chicago has an array of incentives to spur economic development. There are over 140 tax increment financing districts in Chicago, as well as three empowerment zones and six enterprise zones. Businesses have access to industrial development revenue bonds, enterprise zone facility bonds, small business development loan funds, new market tax credits, small business improvement funds, and laboratory facilities funds. The Laboratory Facilities Fund Program is intended to promote the growth of second stage or graduate technology firms by funding up to 25 percent of eligible base lab construction costs.¹⁶⁰

The city of Chicago has an Industrial Corridor Program with 24 designated industrial corridors. The program is designed to make Chicago's industrial environment competitive by bringing business and community interests together to plan and implement improvements in dedicated industrial areas. The objective of the program is to create industrial environments that meet the needs of existing companies while anticipating and encouraging future development.¹⁶¹

The state of Illinois has eight foreign trade zones, one of which is located within the city of Chicago. The Chicago Foreign Trade Zone 22 (CFTZ) is managed by the Illinois International Port District. The CFTZ has two general-purpose zone sites. One site is at the Illinois International Port and the other is located near ORD. There are currently 12 subzones within the CFTZ. The businesses that operate within these subzones are Ford Motor Company, Abbott Laboratories, BP Pipeline North America, Citgo Petroleum

Corporation, EXXON Mobil, Henkel Corporation, Premcor Refining Group, Northrop Grumman Corporation, Michelin North America Incorporated, Medline Industries Incorporated, Sony Electronics Incorporated, and Crate & Barrel.¹⁶²

Cincinnati/Northern Kentucky International Airport (Hebron, Kentucky)

Characteristics/Description

The Cincinnati/Northern Kentucky International Airport (CVG) is located in Hebron, Kentucky. Although Hebron is located within Boone County, CVG is owned and operated by the neighboring Kenton County. Kenton County is also located in Kentucky. The decision to locate CVG in Boone County dates back to 1941, when officials were looking for a site to build a new airport. At the time, Boone County had plenty of suitable farm land that was flat, inexpensive, and near the city. Early in 1941, Boone County officials agreed to sponsor the project as long as neighboring Kenton County paid for the land purchase.¹⁶³ CVG is the primary passenger and cargo airport for the Cincinnati metropolitan statistical area (Greater Cincinnati). Greater Cincinnati includes counties in Ohio, Kentucky, and Indiana.¹⁶⁴

CVG encompasses 7,000 acres. It has four runways. Three of the runways are parallel and can accommodate simultaneous landings. These three runways are positioned north-south at lengths of 8,000 feet, 10,000 feet, and 11,000 feet. The fourth runway is positioned east-west and is 12,000 feet long.¹⁶⁵

CVG has nonstop service to more than 80 destinations. In 2008, 18 passenger airlines provided scheduled service at CVG and nine cargo airlines provided cargo service. CVG is a hub for Delta Airlines although operations have been scaled back since Delta merged with Northwest Airlines. In January 2009, Delta's operations at CVG declined by 12 percent. Then in September 2009, Delta decreased its international operations by another 15 percent. CVG served 13.6 million passengers in 2008 (enplaned and deplaned). This is a decrease of 40 percent from the peak of activity in 2005. CVG handled 96.8 million pounds of air mail and cargo in 2008. This is an increase of 10 percent from 2007 and mainly due to DHL reopening its sorting hub at CVG. Overall there were 222,791 flight operations at CVG in 2009.¹⁶⁶ The FAA ranked the airport 93rd in the U.S. for cargo landed weight (207 million pounds) in 2008 and 32nd for passenger enplanements (6.6 million).¹⁶⁷ CVG has the capacity in optimum weather conditions to handle between 120 and 125 arrivals and departures per hour¹⁶⁸

The Commercial and Business Development Department is in charge of the concessions program, as well as commercial development and leasing at CVG. There are 35 food and beverage establishments and 35 retail establishments at CVG.¹⁶⁹ The airport has one hotel, the Cincinnati Airport Doubletree, which operates 177 rooms.¹⁷⁰ There are four car rental businesses and four parking facilities in operation.¹⁷¹ There are

three freight forwarders at CVG with a combined facility space of 7,000 square feet. There are four air cargo facilities at CVG occupied by Delta (103,000 square feet), the United States Postal Service (57,332 square feet), and DHL (150 acres). The remaining cargo airlines utilize a joint-use facility. The CVG 2025 Master Plan calls for a corporate hanger to be built by 2015. The report also identifies a large tract of land to be developed for cargo operations between the years of 2016-2025.¹⁷² There are currently three facilities that are vacant, including two aircraft hangers and one office and warehouse facility.¹⁷³

CVG is located in the south-west corner of Greater Cincinnati. A land use map of the area surrounding the airport, which was created by Landrum & Brown in 2006, shows that the western side of the airport is predominately agricultural with a small amount of single-family residential. The east side of the airport has predominately commercial, industrial, and single-family residential land uses. ¹⁷⁴ Boone County has zoned the majority of the land surrounding the airport either business park, commercial, or industrial.¹⁷⁵ Although CVG is landlocked to the east by development, the airport has the ability to expand to the west fairly easily due to the amount of undeveloped land.¹⁷⁶

In a 2003 Economic Impact Analysis, CVG was found to produce approximately \$4.5 billion in economic activity and support an estimated 56,000 jobs. At the time of the report the airport directly employed 15,224 employees with wages and salaries of \$783 million.¹⁷⁷ Nine Fortune 500 companies have established headquarters in the tri-state region making it among the top 10 markets for the number of Fortune 500 companies.¹⁷⁸ Cincinnati has a high concentration of companies in a number of key industries including aerospace, automotive, biotechnology, brand design and creative services, chemistry, financial services, and consumer goods. The Cincinnati USA Partnership for Economic Development is focused on retaining and attracting businesses in these growing clusters. In particular, there are more than 400 businesses and 180,000 local employees in the aerospace industry. Greater Cincinnati is also home to over 200 companies in the biotechnology cluster, over 300 companies in the chemical/plastics industry, and over 200 companies in the brand design and creative services industry.¹⁷⁹

Structure/Operations

The Kenton County Airport Board (KCAB) was created on June 3, 1943 and has jurisdiction, control, possession, and supervision of CVG. The KCAB is comprised of 19 members representing a broad spectrum of the community on both sides of the Ohio River. All members play an integral role in overseeing airport operations and all board members have an equal vote in their respective committees, where all actions originate. The KCAB is directed by an executive director and chief executive officer (CEO). In December 2009, CVG moved to a new organizational structure with the creation of an executive tier that will report to the executive director and CEO. The executive tier consists of the chief administrative officer, the chief financial officer, and the chief operating officer. The goals and objectives of the airport as described in the 2025

Master Plan are to improve compatible land use/community partnership, improve air service, improve airfield performance/reduce congestion and delay, improve airspace performance, improve all weather reliability, reduce airport operating costs/enhance revenues, and to maintain leadership in customer service.¹⁸⁰

The operations of the airport are self-supporting. Revenues are generated through airport user fees, which fund all operating expenses and debt service requirements. Capital projects are funded through the issuance of bonds and operating revenues. In 2008, CVG had total operating revenues of \$105.3 million and total operating expenses of \$66.8 million. The airport had total liabilities equaling \$239.5 million, most of which was in the form of revenue bonds and paper notes. ¹⁸¹ The passenger facility charge was an average of \$3.50 (\$4.50 from January through April and \$3.00 from May through December) per enplaned passenger in 2009. CVG operates under a residual landing fee formula where airlines are charged landing fees based on their expected use of the facilities. Under this formula, at the end of the year any surplus revenue would be credited to the airlines and any deficit is charged to them in calculating airline landing fees for the following year. In 2009, the landing fee was approximately \$3.53 per 1,000 pounds.¹⁸²

CVG has not defined itself as an aerotropolis. However, the Boone County Planning Commission has recognized the development that is occurring around the airport and included recommendations for the future development around the airport in its 2005 Boone County Comprehensive Plan. The report states that industrial growth in Boone County has been the strongest around the airport, and that the benefits of the airport should be optimized to promote economic development. The report also states that industrial development should be encouraged to locate near the airport and that new residential development shall not occur in areas with existing or proposed day/night noise levels of 65 decibels from aircraft.¹⁸³

The development at and around CVG has received the support of both the public and private sectors. In 2008, the Regional Air Service Development Committee was created under the leadership of the Cincinnati USA Regional Chamber. The committee includes a group of airport and community leaders focused on increasing service and making CVG more competitive with surrounding airports. The members of the committee include Cincinnati USA Regional Chamber of Commerce, Greater Cincinnati Convention and Visitors Bureau, Northern Kentucky Chamber of Commerce, Northern Kentucky Convention and Visitors Bureau, and the Tri-County Economic Development Agency.¹⁸⁴

Because the Greater Cincinnati area includes the states of Ohio, Kentucky, and Indiana, the types of incentives offered differs by where a business locates. Generally, the three states offer similar types of incentives including job creation tax credits, tax increment financing districts, job training tax credits, low interest loans, infrastructure financing, and research and development investment funds. Cincinnati is the grantee of Foreign Trade Zone No. 46. The foreign trade zone is 1,667 acres in total size and is separated

into four sites. Three of the sites are located in Ohio and one site is located in Kentucky. The individual sites include 160 acres in Hamilton County, OH, 832 acres in Clermont County, OH, 490 acres in Brown County, OH, and 185 acres in Boone County, KY. Businesses operating within the foreign trade zone include General Electric Aircraft Engines, Honda, Nine West Distribution Corporation, Ashland Marathon Petroleum, Cincinnati Machine/UNOVA, and Avon.¹⁸⁵

Port Columbus International Airport (Columbus, OH)

Characteristics/Description

Port Columbus International Airport (CMH) is located in Columbus, Ohio. CMH is part of the Columbus Regional Airport Authority (CRAA). The CRAA includes CMH, which acts as the primary passenger airport; Rickenbacker International Airport (LCK), which acts as the primary cargo airport; and Bolton Field (TZR), which acts as a reliever airport for the system. The CRAA is an independent, special purpose political subdivision of the State of Ohio, which was created in 1990 as a "body corporate and politic" by the Columbus City Council.¹⁸⁶ The CRAA is governed by a nine-member board of directors, and owns and oversees the operations of the three airports. Development around the airport is overseen by a separate organization called the Port Columbus Area Development Partnership (PCADP). The PCADP, which comprises the four communities adjacent to the airport, has identified 6,000 acres surrounding the airport for strategic planning and economic development.¹⁸⁷

CMH comprises 2,185 acres and has two parallel runways measuring 8,000 feet and 10,125 feet. CMH is served by 10 scheduled commercial airlines. There are 160 daily departures and more than 30 nonstop destinations flying out of CMH.¹⁸⁸ CMH does not have any nonstop flights to Europe or Asia. However, it offers regularly scheduled nonstop international service to Toronto, Canada and seasonal nonstop service to Cancun, Mexico.¹⁸⁹ Southwest Airlines is the largest carrier at CMH with 26 percent of the market share, followed by US Airways with 16 percent. In 2008, CMH had 6.9 million passengers, a 10.5 percent decrease from 2007.¹⁹⁰ The FAA ranked CMH 52nd in the U.S. for annual passenger enplanements with 3.4 million (9,300 passengers per day).¹⁹¹ CMH handled 14.3 million pounds of cargo in 2008 (3,900 pounds per day), a six percent increase from 2007. CMH handles only seven percent of the total cargo handled at LCK, which is ranked 34th by the FAA in terms of cargo-landed weight (731.0 million pounds).¹⁹²

The properties department manages concession development opportunities at CMH. Its focus is to provide quality services that meet the varying needs of its passengers. There are currently 19 food and beverage tenants and 13 retail tenants located at CMH.¹⁹³ NetJets, a fractional jet ownership company, is also located at CMH. In 2008, NetJets made a commitment to stay and expand its headquarters on CMH grounds. Included in that commitment will be a \$220 million campus expansion as NetJets consolidates its

New Jersey and Columbus offices.¹⁹⁴ On September 11, 2009, NetJets announced that the consolidation was being put on hold due to economic conditions.¹⁹⁵ Sister company to NetJets, FlightSafety International, has also planned a new training center at CMH. In total, over 800 new jobs will be added over a five- to six-year period.¹⁹⁶

CMH employs 23,520 people with an annual payroll of approximately \$624.8 million. The economic impact of CMH is estimated at \$2.2 billion. The CRAA has a total employment of 29,994 with an annual payroll of \$793.1 million. The economic impact of the CRAA is estimated at \$2.7 billion. LCK alone supports an estimated 900 air cargo-related jobs. ¹⁹⁷

There is a significant amount of intermodal activity in Columbus, especially around CMH and LCK. There are three intermodal (train and truck) yards in Columbus capable of handling more than 600,000 lifts (number of containers transferred) per year including the new \$70 million Norfolk Southern facility at the Rickenbacker Global Logistics Park. The Rickenbacker Global Logistics Park is located at LCK and is one of the largest integrated logistics complexes in the U.S. The logistics park is expected to create an estimated 20,000 jobs and have an estimated economic impact of over \$15 billion over the next 30 years.¹⁹⁸

In the Columbus metropolitan statistical area, there are 27 industrial parks and more than 210 million feet of warehousing and distribution.¹⁹⁹ Within the 6,000 acre development area identified by the PCADP, there are 1,000 businesses and 30,000 jobs with an estimated \$500 million annual payroll. A land use study conducted for the PCADP found that the land surrounding the airport is highly developed. Coordination between the surrounding cities and the airport has been a critical success factor for development around the airport. To the south of the airport is a large industrial park. To the north of the airport is a large single-family residential development. To both the east and west of the airport, there is a mix of uses including industrial, commercial, office, and residential. The land surrounding CMH is highly developed leaving the airport little opportunity for new development.²⁰⁰

Structure/Operations

The CRAA began operations on November 10, 1991. In Jan 2003, the assets and liabilities of the former Rickenbacker Port Authority were merged into the Columbus Municipal Airport Authority; the remaining entity was renamed the Columbus Regional Airport Authority.²⁰¹ The CRAA was created to provide Columbus and all of Central Ohio with a centralized management of the CMH, LCK, and TZR airports; a community approach to business development; and better coordination of airport roles while also offering cost-savings by realizing efficiencies. A nine-member board of directors, jointly appointed by the city of Columbus and county of Franklin, governs the Authority. The mayor of Columbus appoints four members, the county commissioners appoint four members, and one member is jointly appointed. The mission of the CRAA is "to operate Port Columbus, Rickenbacker and Bolton Field airports in a manner that provides

passengers, businesses and the community the highest level of safety, satisfaction and economic benefit."²⁰²

CMH has the advantage of being the largest commercial passenger airport in central Ohio. However, CMH views Cincinnati/Northern Kentucky International Airport, Dayton International Airport, and Akron-Canton Airport as its main competitors for passenger traffic. CMH works to keep its fares as low as possible to retain its customer base and attract customers from competitor's markets.²⁰³

The airport has maintained a well-balanced supply of airlines. No airline at CMH has more than 25 percent of the total market share. Having a balanced offering of airlines has helped kept fares low. This is one of the airports greatest successes viewed by the Manager of Communications at CMH. Conversely, one of the airport's greatest challenges currently is balancing the security demands of the Transportation Security Administration and FAA with customer service.²⁰⁴

Funding for the Authority's development projects is provided exclusively by user fees, as are the funds needed to conduct the airport's day-to-day operations. These funds are principally generated through direct charges such as rents and fees collected from the airlines, tenants, and passengers. In 2008, the total operating revenues of the CRAA were approximately \$80.3 million, and the total operating expenses were approximately \$54.8 million. The CRAA had \$172.8 million in total liabilities, most of which was in the form of revenue bonds and paper notes.²⁰⁵ Landing fees at CMH in 2009 were \$3.40 per 1,000 pounds for signatory airlines. The passenger facility charge in 2009 was \$4.50 per passenger.²⁰⁶

PCADP was announced in 2007 by Columbus Mayor Michael B. Coleman. The mission of the PCADP is to "work in partnership to make the area a premier jobs center and to create and retain jobs for their citizens by promoting investment, cooperation, and coordination for business development opportunities." The PCADP is positioning the area to compete effectively for new jobs and is actively recruiting companies outside Central Ohio.²⁰⁷ Although the PCADP is encouraging business development around the airport, CMH does not have any plans that include developing into an aerotropolis.²⁰⁸ The PCADP working group was composed of 16 members from the city of Columbus (eight individuals), city of Gahanna (two individuals), city of Whitehall (one individual), CRAA (two individuals), Chalmers P. Wylie Veterans Clinic (one individual), and Franklin County (two individual). The working group included seven planners, seven economic developers, the deputy director of the veterans clinic, and the president of the CRAA.

The product of the PCADP working group is the PCADP Joint Economic Development Strategy. The document identifies a 6,000 acre area surrounding the airport for strategic planning and economic development and specifically 15 opportunity sites within that area for future development. The area encompasses four government entities including the cities of Columbus, Gahanna, and Whitehall, and Mifflin Township. PCADP identified aeronautical, professional/scientific/technical, accommodations/ food/retail, manufacturing, and wholesale trade as the business types most appropriate for locating around CMH. Goals were set for the PCADP, which include:

- Economic development efforts should focus on the business sectors most appropriately located around CMH
- Infrastructure in the partnership planning area should be protected and enhanced
- Future development should be consistent with and not impede any future expansion of CMH
- The CRAA should continue to make physical improvements to the airport facilities, expand air service, and enhance passenger and business amenities
- The Partnership should create joint marketing tools to implement the economic development vision of the plan
- The Partnership should work jointly to address environmental constraints and opportunities.

CMH and the CRAA have incentives to encourage development at and around the airports. A recent example is the approximately \$80 million in tax incentives that NetJets received to stay and expand at CMH. The incentives came in the form of \$60 million in tax credits and abatements from the city and state and \$20 million in incentives from the CRAA.²⁰⁹ The CRAA is the grantee of Foreign Trade Zone No. 138, which is a nearly 5,000-acre piece of land near LCK that provides tax benefits to businesses. The CRAA also has the ability to issue revenue bonds to provide financial assistance to private sector entities for the acquisition and construction of industrial and commercial facilities. Lastly, the CRAA has created a new agreement to share 75 percent of its annual net operating income (after debt service) and capital fund requirements. The revenue sharing will be paid to CMH's signatory airlines in the form of rent credits and will lower their costs of doing business at CMH.

General Mitchell International Airport (Milwaukee, WI)

Characteristics/Description

General Mitchell International Airport (MKE) sits on a 2,180 acre (3.405 square miles) plot in Milwaukee County, about five miles south of Milwaukee, Wisconsin's central business district. The airport is bounded to the north by Layton Avenue, to the east by Canadian Pacific (CP) Railway's track, to the south by College Avenue, and to the west by Howell Avenue and the CP Railway track. The airport serves as the primary commercial airport of Milwaukee, southeast Wisconsin, and Northern Illinois.²¹⁰

In 2009, MKE's total aircraft operations totaled 169,693 (air carrier (55,068), general aviation (13,387), and military flights (1,800)), or about 466 flights per day.²¹¹ The airport has five runways (9,690 feet, 8,012 feet, 5,868 feet, 4,800 feet, and 4,183 feet) on which, in 2009, there were almost 3.9 million enplaned passengers,²¹² and, according

to 2006 FAA Advisory Circular 150/5060-5 methodology calculations, with a maximum capacity of 110 takeoffs and landings per hour.²¹³ The Air Carrier Activity Information System (ACAIS) ranked the airport 50th in passenger boardings, with 3.9 million in 2008.²¹⁴ Domestic passenger flights operate out of a single 777,000 square foot terminal housing 42 aircraft gates servicing 15 national and regional airlines, including Air Canada, AirTran, America West, American Eagle, Continental Express, Delta, Funjet Vacations, Midwest Express, Northwest Airlines, Skyway, United Express, US Airways, and US Airways Express. International travelers are serviced through a single gate in a separate 5,000 square foot terminal.²¹⁵ According the ACAIS, MKE's cargo operations rank 45th largest in the country, with a total landed weight of about 558.0 million pounds of cargo in 2008.²¹⁶ The airport's cargo facilities are comprised of two multi-tenant buildings, 38,000 square feet and 126,000 square feet, as well as 63,300 square yards of aircraft parking. FedEx, UPS, and the U.S. Postal Service operate out of these facilities, in addition to several smaller cargo operators, freight forwarders, and the cargo operations of several passenger airlines.²¹⁷

In addition to the 15 airlines that operate out of MKE, the airport leases on-site property and buildings (outside of the terminal structure) to 20 aviation-related businesses.²¹⁸ Additionally, MKE leases space to 14 retail and food service establishments within the terminals.²¹⁹ The land use around the airport consists of the following:

- single-family residential (all types of detached residential units)
- multi-family residential (all types of attached residential units)
- commercial (retail and office)
- mixed use (combinations of residential and commercial)
- industrial (manufacturing and warehousing)
- transportation (airport, road right-of-way and railroads)
- public (public institutions and city or county owned properties used for governmental purposes)
- recreational (publically or privately owned property for parks, golf, and conservation areas)
- agricultural (raising crops/livestock)
- surface water (ponds and lakes)²²⁰

Structure/Operations

A master plan was recently completed that included several upgrades to the airport, but did not mention surrounding development. The airport's master plan includes expansion of the airport's current terminals and roadways connected to terminal buildings, relocation of corporate hangars, expansion of the existing parking structure, reconfiguration of an adjacent intersection, acquisition of land for a new runway and construction of that runway, as well as taxiway and air cargo improvements. Though continued development of the airport is contained within the airport's planning efforts, it is not engaged in plans to develop an aerotropolis.²²¹

Governance and Funding

MKE is currently a public airport—owned, operated, and funded by Milwaukee County, Wisconsin—though pressure has been mounting to privatize the airport or lease the airport to help resolve Milwaukee's budget deficit.²²² The airport falls under the county's department of public works and is governed by the County Executive Board and a 25-member elected board of supervisors. The airport staff is made up of 175 employees overseen by the airport director. This staff of employees is responsible for implementing the county's policies and the airport's daily operations.²²³

In 2008, the airport's operating expenses were approximately \$53.4 million, with operating revenues of \$64.9 million. Revenue is broken down into three types: aeronautical operating revenue, non-aeronautical operating revenue, and non-operating revenue. About half of the airport's revenue is derived from non-aeronautical operating expenses, such as land and non-terminal facility rents, terminal retail rents, parking, and rental cars. The remainder of revenue is roughly split between aeronautical operations (consisting of fees charged to airlines) and non-operating revenue, mostly comprised of passenger facility charges (\$4.50 per emplaned passenger in 2009²²⁴) and grants. Landing fees at MKE were not available for 2009, but are \$2.62 per 1,000 pounds of landed weight for 2010.²²⁵ A breakdown of the airport's 2008 revenue is displayed in Table 1.²²⁶

Table 1: Revenue, 2008

	Total Dollars	Percent of Total
Aeronautical Operating Revenues		
Landing Fees	\$13,270,173	16.04%
Terminal Charges	\$4,180,516	5.05%
Apron charges/tie-downs	\$1,163,945	1.41%
FBO revenue: contract/sponsor operated	\$438,931	0.53%
Cargo and hangar rentals	\$1,025,295	1.24%
Fuel sales	\$372,051	0.45%
Other	\$2,334,486	2.82%
Subtotal	\$22,785,397	27.54%
Non-Aeronautical Operating Revenue		
Land and non-terminal facilities	\$431,168	0.52%
Terminal - food and beverages	\$2,159,520	2.61%
Terminal - retail stores	\$1,689,553	2.04%
Terminal - other	\$625,794	0.76%
Rental cars	\$8,440,253	10.20%
Parking	\$27,472,094	33.20%
Other	\$1,321,836	1.60%
Subtotal	\$42,140,218	50.93%
Non-Operating Revenue		
Interest Income	\$2,973,340	3.59%
Grants	\$6,167,855	7.45%
Passenger facility charges	\$8,657,320	10.46%
Other	\$17,918	0.02%
Subtotal	\$17,816,433	21.53%
Total	\$82,742,048	100.00%

Source: City-data.com. Retrieved from http://www.city-data.com/airports/

The goal of the county in operating the airport is to anticipate and plan for growth so that the airport can meet the needs of southeastern Wisconsin's economy. The vision for MKE consists of the following factors:²²⁷

- is customer friendly
- is readily accessible
- meets the air travel needs of the southeastern Wisconsin region
- operates safely, securely, and efficiently
- is financially self-supporting, and is a cost effective place for airlines to do business
- reflects the business-like character Metropolitan Milwaukee

- is a good neighbor
- develops in a way that incorporates planning for compatible land uses
- is an engine for growth of the economy
- is an integral component of the region's network of other transportation modes
- fosters compatible economic development opportunities for adjacent communities and areas
- generates employment opportunities²²⁸

Incentives

A number of financial and support incentives are available for businesses relocating to Milwaukee. Incentives programs are sponsored by the Milwaukee Department of City Development and the Milwaukee Economic Development Corporation.

A variety of tax incentives are available to businesses relocating to and in Milwaukee. The tax incentives include a Renewal Community tax incentive,²²⁹ which is targeted at businesses relocating to one of the city's targeted Renewal Community areas. Additional relocation incentives include Development Zone Tax Credits,²³⁰ Technology Zone Tax Credits,²³¹ New Market Tax Credits (see glossary), and Job Creation Tax Credits. Further tax incentives are available for environmental remediation of property within the city's designated Development Zone.²³²

The city of Milwaukee's department of city development (DCD) Neighborhood and Business Development Team offers its own incentives to new businesses. Such incentives include Business Improvement Districts (BIDs),²³³ capital improvement program funds,²³⁴ façade grants,²³⁵ Main Street Milwaukee,²³⁶ and Retail Investment Funds (RIFs).²³⁷

The Milwaukee Economic Development Corporation (MEDC) offers additional financial and assistance incentives. The financial incentives include an array favorable borrowing options including the Second Mortgage Program,²³⁸ Small Business Administration 504 Debenture Program,²³⁹ Capital Access Program,²⁴⁰ and Industrial Revenue Bonds.²⁴¹ MEDC also provides site selection assistance for industrial and commercial businesses, as well as environmental assessments and assistance with brownfield redevelopment projects.²⁴²

The city of Milwaukee is also located in the Foreign Trade Zone of Wisconsin (FTZ NO: 41).²⁴³

Indianapolis International Airport (Indianapolis, IN)

Characteristics/Description

The Indianapolis International Airport (IND) is located in Indianapolis, Indiana. IND is the largest airport in Indiana (7,700 acres) and serves as the primary commercial and cargo airport for the greater Indianapolis region.²⁴⁴ IND is owned and operated by the Indianapolis Airport Authority (IAA). The IAA also operates five general aviation airports in the Indianapolis region including Eagle Creek Airpark, Hendricks County Airport, Metropolitan Airport, Mt. Comfort Airport, and the Indianapolis Downtown Heliport.²⁴⁵

IND recently completed a major \$1.1 billion airport project in which the IAA closed it former terminal and opened a new airport complex. The project included a new terminal, an attached parking garage, two surface parking lots, a new apron, and new air traffic control tower, as well as a new I-70 interstate entrance and roadway system. The new terminal named in honor of Colonel Harvey Weir-Cook consists of two concourses, each containing 20 boarding gate areas.²⁴⁶

There are currently three runways at IND. One runway, which is 7,280 feet, is positioned east-west. The remaining two runways are parallel, running north-south, and respectively are 10,000 feet and 11,200 feet.²⁴⁷ The airport's long-range master plan calls for a fourth (third parallel) runway to be built southeast of I-70 at some point in the future. In preparation for the future runway, in 2002, the Indiana Department of Transportation realigned and rebuilt a portion of the Interstate highway running through the south end of the airport's property.²⁴⁸

IND is served by 10 airlines averaging 154 daily nonstop departures to 37 destinations. IND has nonstop scheduled service to two international destinations: Toronto, Canada and Cancun, Mexico. In 2009, aircraft operations at IND were 171,322. IND handled 8.2 million passengers (enplaned and deplaned) in 2008, down 1.4 percent from 2007. Of these, 4.1 million (an average of 11,233 per day) were enplaned passengers. The FAA ranked IND 46th in the U.S. for passenger enplanements and sixth for cargo landed weight. IND had 5.1 billion pounds landed weight in 2008 (an average of 14 million pounds per day).²⁴⁹ IND serves as a hub for FedEx Express and is a focus city for AirTran Airways.²⁵⁰ FedEx remains the largest contributor of cargo volume at the airport (97.3 percent), followed by Trade Winds (2.4 percent), and Cargolux (0.2 percent).²⁵¹

As it prepared to open the new airport complex, the IAA successfully negotiated and executed over 60 new concession agreements consisting of food and beverage, news and gift, specialty retail, ATM, advertising, personal services, vending, and car rental offerings. The IAA's new concession program was recognized by *Airport Revenue News* in February 2009 as having the best concession program among airports with four million to 10 million enplaned passengers.²⁵² There are eight rental car companies operating at IND in the new consolidated ground transportation center. There are 23

food and beverage tenants and 32 retail tenants at IND. There are approximately 12,000 people employed at the airport, of which 450 are employed by the IAA.²⁵³

IND is home to the second largest FedEx Express operation in the world. IND is the nation's eighth largest cargo facility and is ranked 21st in the world.²⁵⁴ In 2008, IND completed construction expanding the FedEx Express sorting facility by more than 600,000 square feet. In conjunction with the facility expansion, IND added 14 additional aircraft parking spaces adjacent to the current cargo apron. As part of the expansion agreement, FedEx Express extended its lease at IND by 12 years, from 2016 to 2028.²⁵⁵

IAA is actively engaged in collaborating with local, national, and international businesses, freight forwarders, and cargo airlines to pursue new services and/or streamlining shipping operations. The Indianapolis region is home to a large logistics industry cluster. Indianapolis's central location in the United States, and the fact that it has the most highway convergences in the nation, makes it a great place to locate logistics companies. The region is home to 1,500 logistics-focused companies employing over 89,000 employees. In addition to FedEx's operations, Cargolux, Europe's largest air cargo carrier, also has scheduled service out of IND. The Indianapolis region has two rail-switching yards, one operated by CSX in Hendricks County and one operated by Norfolk Southern in Madison County. There are 115 distribution centers in the Indianapolis region and 94 trucking companies.

IND is located on the far southwest side of Marion County, on the fringe of suburban development. The airport is bound by I-70 to the south, I-465 and I-65 to the east, and I-74 to the north. The land to the north and east of the airport is highly developed. Conversely, the land to the south and west is less developed. Agricultural uses bound the airport to the west and south as intermediary uses in preparation for future airport expansion. The majority of the land to the north of the airport is residential with some commercial uses. The airport has three large commercial and industrial districts to the east, south, and west.²⁵⁷ The zoning around the airport is predominately commercial; this includes the current commercial land uses and the undeveloped land to the west of the airport. The neighborhoods to the north of the airport are zoned single family residential.²⁵⁸

Indianapolis Insight, the comprehensive land use plan for Marion County, addresses the regional impact of IND. Marion County is working to make the most of air-related cargo and passenger opportunities surrounding the airport. The Indianapolis Insight promotes the coordination of land use and zoning policies with neighboring, Hendricks County, Morgan County, and the towns of Plainfield and Mooresville to ensure compatible uses in land near the airport. The report goes on to say, "new airport related development would likely be in large-scale projects, requiring overall master plans. These projects may straddle governmental boundaries, but need to be uniformly planned and developed. Development standards should not vary because of jurisdictional

boundaries. Opportunities for competitive and efficient development projects should not be compromised when they may include more than one local government."²⁵⁹

Structure/Operations

IAA was established as a municipal corporation by the Indiana General Assembly in 1962 to own, develop, and operate the six airports in the Indianapolis metropolitan area. The IAA is governed by a board of eight voting members appointed by the mayor of Indianapolis and officials from Marion and Hendricks counties. The board also has three non-voting members representing Hamilton, Hancock and Morgan counties. The board has three standing committees, including the Human Resources committee, the Finance and Audit Committee, and the Reliever Airports Committee.²⁶⁰

IAA has recently completed some major operational changes as it closed and mothballed its former terminal and opened the new airport complex. Among the changes, IAA hired a new executive director and CEO who came to IND from a position as executive director and CEO of the Jacksonville Aviation Authority.²⁶¹ The IAA created a new five-year strategic plan that is in the early stages of implementation. Measures for benchmarking success are in place, as the IAA staff is working to increase operational efficiency, continue excellent customer service, and grow the business to support economic development in central Indiana.²⁶² As part of its new business model, the IAA announced several changes to the senior leadership team including three new hires to the positions of chief operating officer, chief information officer, and director of business development as well as a realignment of two other staff members to the positions of special advisor and general counsel.²⁶³

With construction complete on the new airport complex, the IAA has now shifted its focus to the mothballed terminal and surrounding underutilized land. On March 19, 2010, the IAA approved a \$1.3 million contract with Landrum & Brown for a comprehensive study that will guide future land use and development at IND. The goals of the study are to define uses that do not constrain ongoing or future airport operations, which create an acceptable rate of return for the authority and which support economic development and job creation. The study is expected to take seven months to complete. The study will have seven components including a property assessment, aviation considerations, development patterns, a market assessment, preliminary plans, an evaluation of concepts, and final recommendations.²⁶⁴

In January 2010, John Kasarda, who pioneered the aerotropolis as a business concept, met with the IAA board, key airport staff members, and a select group of business and civic leaders. The IAA is exploring best practices for strategically leveraging its airport system for maximum economic advantage in Indianapolis and throughout central Indiana. "We are pleased to have Dr. Kasarda visit us," John Clark, said of the meeting. "As we move forward, I am mindful of the importance of taking a synergistic, inclusive approach to airport planning. My goal is to nurture and grow business at Indianapolis International and our other properties intelligently to generate good returns for the city and the entire region."²⁶⁵

The IAA is a municipal corporation separate from the city of Indianapolis and is financially self-sustaining. Revenues are generated through airport user fees, including landing fees, terminal rents, and passenger facility charges. In 2008, total operating revenues at IND were \$157.8 million (a decrease of 4.6 percent) while total operating expenses equaled 170.9 million (an increase of 24.8 percent). The increase in expenses is attributable to the depreciation expenses of the old and new terminals. In 2008, total liabilities equaled nearly \$1.6 billion. Landing fees in 2009 were \$1.95 per 1,000 pounds of landed weight for signatory airlines. Passenger facility charges in 2009 were \$4.50 per enplaned passenger. The IAA also collects a customer facility charge of \$3 per rental car transaction per day, for up to 14 days on all car rental companies operating at the airport. ²⁶⁶ The estimated economic impact of IND is \$3.3 billion annually.²⁶⁷

The state of Indiana has an array of tax incentives for locating and expanding businesses in Indiana. Its tax incentives include property tax abatement, sales tax exemptions, job creation tax credits, research and development tax credits, tax increment financing, and enterprise zones.²⁶⁸ The IAA is also the grantee of a foreign trade zone (FTZ). Oversight of the greater Indianapolis FTZ is performed by an 11-member board selected by the IAA. There are five primary zones, one is the airport and the other four are business parks located around Indianapolis.²⁶⁹

Lambert-St. Louis International Airport (St. Louis, MO)

Lambert-St. Louis International Airport (STL) sits between Interstate 270 (I-270), I-170 and I-70, 11 miles north of downtown St. Louis. The airport is owned by the city of St. Louis and operated by the city of St. Louis Airport Authority.

The airport is largely sited on unincorporated St. Louis County property. Although STL is owned by the city of St. Louis, it is not contiguous with the city. Airport property extends into several municipalities including Bridgeton, Hazelwood, St. Ann, Kinloch, Berkeley, and Edmundson. STL encompasses 1,845 acres within the fenced area and 2,125 acres outside the fenced area.²⁷⁰ STL serves as the primary airport for the St. Louis, Missouri/Illinois MSA, which is within 500 miles of one-third of the nation's population and 1,500 miles of the entire population of North America. According to a recent study, STL has a \$5.1 billion annual economic impact on the St. Louis region, which comprises 16 counties and more than 2.8 million people.²⁷¹ The region also includes part of Illinois.²⁷²

While the region is also served by a system of reliever airports including MidAmerica Airport, the Spirit of St. Louis Airport, St. Louis Regional Airport, and St. Louis Downtown Airport., STL is the principal gateway for commercial air service. Additionally,

the St. Louis region has the third largest rail center in the county with six Class I railroads. Located at the convergence of the Mississippi, Missouri, and Illinois rivers, St. Louis is home to the second largest inland port in the United States.²⁷³

Most of land to the north of the airport is zoned for industrial use. There are also areas zoned for recreation and commercial use. To the airport's west, most of the land is either vacant or zoned for agriculture. To the south, the majority of land is zoned for single-family use. Some areas are also zoned for recreation, commercial, and institution use. To the airport's east, land is mainly vacant or zoned for agriculture. Beyond that, most of the land is zoned for single-family use.²⁷⁴

STL is in the northern portion of St. Louis County, which has an estimated 10 million square-feet of vacant industrial buildings or undeveloped property zoned for industrial use. Development of all the vacant property is estimated to take 30 years. The airport itself has 150 vacant acres with airfield access and 1,500 to 1,600 acres without airfield access.²⁷⁵

STL has four runways: three are 150 feet wide and one is 200 feet wide. The 9,003 foot and 11,000 foot runways are parallel and the intersecting runway is 7,602 feet long. The newest runway, which measures 9,000 feet, is also a parallel runway. It is located to the northwest of the others.²⁷⁶ According to the FAA's 2004 capacity benchmark report, in optimal weather conditions STL can accommodate 104 to 113 arrivals and departures per hour, in marginal weather conditions, the benchmark drops to 91 to 96 flights per hour. However, the report was published before the addition of the newest runway. The FAA estimated that the runway would increase the benchmark rate in marginal conditions.²⁷⁷

With more than 6.7 million enplaned passengers, STL was ranked 31st in the U.S. in 2008 in terms of passengers served by 13 passenger carriers: Air Canada, Air Choice One, AirTran, American//Eagle, Cape Air, Continental/Continental Express, Delta/Delta Connection, Frontier Airlines, Midwest Connect, Southwest Airlines, United/United Express, US Airways/US Airways Express, and USA3000.²⁷⁸ In 1993 and 1994, the airport created a master plan to expand. As a result, the fourth runway was completed in 2006. Until 2001, STL was a hub for TWA, which was eventually bought by American Airlines. This has presented the airport's greatest challenge. American implemented a program to dismantle the passenger hub. The loss of hub flights resulted in a rapid decrease in air traffic. In 2000, STL hit its peak for passenger traffic at 30.6 million annual passengers.²⁷⁹ By 2009, the airport's passenger traffic dropped to 12.8 million passengers annually.²⁸⁰. By mid-year 2010, the American Airlines system.²⁸¹ When STL was still a TWA hub, the airport had 10 or 12 international destinations. Today, international flights primarily consist of travel to Canada, Mexico and the Caribbean.²⁸²

Cargo

STL has been trying to increase its cargo capacity. STL is currently ranked 62nd in the nation for air cargo with 426 millions pounds in 2008.²⁸³ Four cargo carriers service the airport: Integrated Airline Services, Inc., DHL International GmbH, Federal Express, and United Parcel Service.²⁸⁴ According to STL Airport Planning Manager Dana Ryan, the airport's primary competitors are airports that are able to provide scheduled heavy lift air service and "there is a direct desire line between St. Louis and Chicago."²⁸⁵

In December 2009, airport officials signed a lease with AeroTerm LLC to redevelop 76 acres (that contain a former Boeing manufacturing plant) into a cargo facility. As part of the agreement, AeroTerm will pay STL \$1.5 million and invest at least \$40 million in the site. The new facility is thought to be pivotal in attracting Chinese freight carriers.²⁸⁶ Missouri's governor hopes to convince Chinese officials to establish STL as the Midwestern hub of air cargo transport between the United States and China. The STL infrastructure is sufficient to accommodate cargo flights to and from China.²⁸⁷ Currently, however, the St. Louis region does not manufacture a great deal of international air cargo. Most of the air cargo sent from the airport is UPS or FedEx envelopes and packages. The region is trying to determine what material would be sent to China should the airport become the location of the international hub. Interest has been expressed in the region's agricultural products, especially high quality pork and beef.²⁸⁸

Tenants

Within the airport terminals, STL is home to tenants such as The Paradies Shops, Pretzel Time, Great American Bagel, BookMark, and rental car agencies.²⁸⁹ About 14,500 people are employed by airlines, vendors, and service companies at STL.²⁹⁰ The major non-tenant is Boeing Defense, Space & Security, a subsidiary of the Boeing Company, which operates the company's defense research and defense manufacturing business. The campus occupies about 100 acres on-airport and another 450 acres adjacent to the airport property. Between 16,000 and 17,000 people are employed at Boeing's STL location.²⁹¹

Two major development areas, North Park and Hazelwood, are located on the airport's outside-the-fence location. STL sold property to McEagle Properties LLC to develop these areas.²⁹² The 151-acre Hazelwood Logistics Center is close to Ford, General Motors, Covidien, Boeing, and GKN Aerospace.²⁹³ Clayco Realty Group is working with McEagle to develop the 550-acre NorthPark, which is located along STL's eastern perimeter. The land was once occupied by residents but was purchased by the airport with FAA funds as part of the noise compatibility program. NorthPark's master plan calls for the creation of 5.5 million square feet of retail, office, manufacturing, and distribution facilities.²⁹⁴ The pharmaceutical company, Express Scripts, recently commenced construction of a distribution center at NorthPark.²⁹⁵

A third commerce center is being built on the site of a former Ford assembly plant that closed in 2006. The site is being prepared for a \$250 million project, Aviator Business Park. Panattoni Development Co. bought the property from Ford Motor Co. and has since razed the entire Ford complex to develop the 2.7 million square-foot business park.²⁹⁶

More than 125 companies operate major distribution facilities in the Greater St. Louis Region. Together, they occupy more than 10 million square feet. These companies include Dial Corporation, Hershey Foods, AmPad Anheuser-Busch and Coca-Cola.²⁹⁷

Structure/Operations

The St. Louis Airport Authority is currently developing a master plan study to forecast aviation demand over the next 20 years. The plan focuses on air cargo opportunities, long-term terminal needs and improvements to support growth in aviation activity. In addition, the plan looks for new ways to spur economic growth.²⁹⁸ STL completed an earlier master plan in the mid-1990s that focused on airport expansion and increasing capacity.²⁹⁹

According to Dana Ryan, STL has not yet developed a branding strategy, aerotropolis or otherwise. After the master plan is complete, STL will likely turn to marketing. Ryan said if the airport is able to retain properties that had been purchased for the noise abatement program; it could explore developing a strategy similar to the one used by the Dallas Fort Worth International Airport.³⁰⁰.

Governance

Although STL sits on unincorporated county property, the city of St. Louis owns and operates the airport. The St. Louis Airport Authority oversees airport operations. The airport authority is made up of the airport commission, the airport director, and more than 550 full-time employees.³⁰¹ The commission consists of the director of airports, who also serves as the commission chair; the president of the board of aldermen, the comptroller of the city of St. Louis and the chairperson of the Transportation and Commerce Committee of the board of aldermen. Six members of the commission are appointed by the mayor and five members are appointed by the St. Louis county executive. One member is appointed by St. Charles County, Missouri and another one is appointed by St. Clair County, Illinois.³⁰²

Because the airport lies within the boundaries of several cities and serves a two-state, multi-county region, regional cooperation is extremely important. The East-West Gateway serves as a forum for problem solving and planning for the Greater St. Louis region. The organization is overseen by a 21-member Board of Directors. The board is comprised of chief elected officials from the city of St. Louis; Franklin, Jefferson, St. Charles and St. Louis counties in Missouri; and Madison, Monroe, and St. Clair counties in Illinois. Six citizens from the region and the chair of metro also sit on the board. The

East-West Gateway has been designated as the metro planning organization for the region and as such, is responsible for identifying road, bridge, and transit projects to receive federal funds. The agency also tries to promote a business-friendly tax environment, enhance quality of life, and public investment. The East-West Gateway is supported by financial grants, private foundations, and fees for service, as well as the federal, state and local governments.³⁰³

In cooperation with the FAA, the Missouri Department of Transportation, and the Illinois Department of Transportation, the Gateway is managing a study of the St. Louis metropolitan area's regional aviation system that will eventually result in the St. Louis Metropolitan Aviation System Plan. The study's main objective is to examine the region's aviation assets and propose a regional approach for building on these strengths.³⁰⁴

Funding

STL is a self-sustaining operation and funded primarily by landing fees, parking fees, and tenant rents. In 2009, average landing fees were \$7.96 per \$1,000 pounds and the passenger facility charge was \$4.50 per enplaned passenger. By city charter, the operation and maintenance costs are covered by airport tenants. All revenues generated by the airport go into a city of St. Louis enterprise fund. If revenues are higher than costs, the city reimburses airport tenants.

The airport's \$1 billion expansion project – which created the newest runway – was funded by Airport Development Funds, Federal Highway Administration grants, and Airport Improvement Program grants, as well as from general airport revenue bonds and passenger facility charges. Land acquisition accounted for nearly half the project's cost. Construction accounted for 40 percent of the total cost and the remainder of the money was spent on management and consulting.³⁰⁶ In 2008, STL committed \$70 million for a new modernization and renovation project called "Airport Experience." The St. Louis Regional Business Council contributed \$200,000 for roadway improvements, such as signs, streetlights, guardrails, and fencing.³⁰⁷

Incentives

A number of incentives are relevant to economic development at and around STL. For example, Panattoni Development Co. benefitted from \$5 million in state Brownfield tax credits to remove soil and water contamination and asbestos-containing materials from the site of the former Ford plant—now the Aviator Business Park.³⁰⁸ In addition, STL lies within the 8,666-acre North County Enhanced Enterprise Zone.³⁰⁹ Enterprise zone tax incentives are geographically targeted and include credits and exemptions from state corporate tax for job creation in certain industries, such as manufacturers, poultry and egg producers, railroad, motor freights and barge terminals, wholesale distributors, and retailers. Qualifying businesses are eligible for at least a \$400-per-employee tax credit for each new hire, or if an employer moved to the zone from out of state. If the

new hire was previously unemployed, the benefit doubles. It triples if the new hire was previously unemployed and is a resident of the zone. The credit can last for up to a decade. A company can receive enterprise zone investment tax credits and a 50 percent exemption on the state corporate income tax if 30 percent of new hires are residents of the enterprise zone and/or previously unemployed. The investment tax credit lasts for 10 years and will cover 10 percent of the first \$10,000 in capital investment made by a company. The credit will then provide five percent of the next \$90,000 and two percent for investments of more than \$100,000. Pollution control tools and equipment used to upgrade products of eligible companies within the zone are assessed at 25 percent of their value – rather than 33 percent – for personal property taxes.³¹⁰

Tax increment financing (TIF) is another development tool used in the St. Louis area. For example, TIF is offered to companies that locate to NorthPark.³¹¹ TIF helps finance eligible improvements to a property in designated areas by using the incremental tax revenues generated by the project upon completion. Under the program, property taxes within the area are frozen for up to 23 years. Property owners then make payment in lieu of taxes (PILOTS) to an allocation fund. In addition, half of any new local economic activity taxes (EATS), such as sales taxes or utility taxes generated by the project, go into the district's fund. The fund's proceeds reimburse the developer for any of the approved project costs. The proceeds can also be used to pay back any debt incurred as a result of the project. Eligible project costs include the costs of studies, surveys, and plans; costs of construction of public works; financing costs; and others. Additionally, projects in an enterprise zone, federal empowerment zone, or the central business district may also use 50 percent of the project's "new state revenues." New state revenues are defined as increases in state sales taxes that result from the project or state income taxes withheld on behalf of the new employees in the district.³¹²

Additionally, the St. Louis Development Corporation received a \$45 million New Markets Tax Credit (NMTC) allocation from the federal government. NMTCs are meant to stimulate economic and community development in low-income communities by attracting private sector investment.³¹³

Two Foreign Trade Zones (FTZs) and seven subzones are located in the Greater St. Louis region. FTZ 31 is operated by the Tri-City Regional Port District in Granite City, IL. Within FTZ 31 are six general-purpose sites, including River's Edge Industrial Park and MidAmerica Airport. FTZ 31 also has three special purpose subzone sites: DaimlerChrysler, WRB Refining, and Premcor Refining Group. FTZ 102 is at STL. The 76 acres leased by the airport to AeroTerm, LLC, is located in the trade zone. The 484,020-square-foot zone includes special use subzones for Ford, GM, and Florsheim Shoe Co.³¹⁴ Last year, the FTZ expanded to include NorthPark and Hazelwood Commerce Center.³¹⁵

Louisville International Airport, Louisville, KY (SDF)

Characteristics/Description

Until 1937, the Louisville International Airport (SDF) was a large field in the middle of farmland. Today, SDF's campus has grown to 1,200 acres. The airport, which is owned and operated by the Louisville Regional Airport Authority, is located 10 minutes from downtown Louisville at the intersection of interstates 264 and 65.³¹⁶ SDF is just eight miles from the Ohio River.³¹⁷ SDF compares its airfares with Cincinnati/Northern Kentucky International Airport (CVG), Indianapolis International Airport (IND), and Blue Grass Airport, Lexington (LEX). SDF also benchmarks for seats, destinations, and passenger statistics against Evansville (EVV) and occasionally Columbus (CMH), Dayton (DAY), and Nashville (BNA).³¹⁸

According to the Louisville-Jefferson County map, SDF is located within a large tract of land zoned primarily for commercial use. To SDF's south and west are large tracts of land zoned for industrial use.³¹⁹

SDF has two parallel runways and one crosswind runway. Runway lengths are 7,250 feet, 8,580 feet, and 11,890 feet. In addition, the airport has more than 62,000 linear feet of taxiways.³²⁰ In 2009, take offs and landings at SDF totaled 146,492–or about 401 a day.³²¹ The airport is capable of handling a maximum of 109 arrivals and departures per hour.³²²

In 2008, SDF ranked 66th for passenger traffic with more than 1.8 million enplanements.³²³ Nine commercial passenger airlines will serve SDF by April 19, 2010: American Airlines/American Eagle, Continental Express, Delta Air Lines/Delta Connection, Northwest, Frontier, Midwest, Southwest, United Express, and US Airways Express.³²⁴ There are more than 360,000 square feet of passenger terminal space and 23 boarding gates.³²⁵

Cargo

Primarily because the airport is home to the United Parcel Service's (UPS) sorting hub (Worldport), SDF ranks third in North America and ninth in the world with regard to pounds of cargo landed. In 2008, this totaled 10.5 billion pounds.³²⁶

UPS Air began its air operations in 1981 with its primary hub at SDF. The operation started with 135 employees and a 35-acre apron for parking additional aircraft. Since then, UPS has grown to be one of the region's largest employers. In 2002, UPS opened Worldport, its five-million square foot facility located between the two parallel runways. Today, 20,000 people work at Worldport, which sorts 2,000 packages every 24 seconds. In 2006, UPS announced a \$1 billion expansion to Worldport that will increase the facility's size by 1.2 million square feet. This facility will increase sorting capacity by 37 percent (to 416,000 packages per hour) by May 2010.³²⁷ UPS also plans to add

three aircraft load/unload wings, a high-speed conveyor, and new computer control systems to Worldport. The first two phases of the expansion plan opened in July 2009. When complete, Worldport will total 5.2 million square feet.³²⁸ After closing the Dayton, Ohio hub it purchased from Menlo Worldwide Forwarding, UPS chose to locate its \$82.5 million, 653,000 square-foot heavy airfreight hub at SDF.³²⁹

In addition to UPS, American/American Eagle, Continental/ExpressJet, Delta/Delta Connection, Federal Express, Excel MSAS North American Logistics, Southwest, Tyme-it Transportation, Inc., United/United Express, US Postal Service, and US Airways Express run cargo operations at SDF.³³⁰

Tenants

SDF is home to a variety of vendors: eight national rental car companies including Hertz, Avis and Enterprise; nine food and drink establishments including Starbucks and Burger King; and eight retail outlets, including *New York Times* Books Store, and a PGA Tour Shop.³³¹ The airport also embraces Louisville's tourist attractions with stores dedicated to the Louisville Slugger and Churchill Downs. SDF also houses the Kentucky Air National Guard's 123rd Airlift Wing.³³² There is also some potential for new development. There are about 20 acres of developable land without direct airfield access on airport grounds.

In order to operate as a 24 hour-a-day, seven day-a-week airport, SDF needed to expand. As a result, SDF embarked on an extensive relocation program in 1991. The initial program included the relocation of nearly 1,600 families to accommodate airport expansion. The second phase began in 1994 as a Part 150 noise abatement /voluntary residential relocation program.³³³ The U.S. Postal Service has already located at the Highland Park site, which has 70 acres of developable land. SDF's plans for this site include additional parking. SDF also hopes to see cargo-related business locate there.³³⁴

The real estate market surrounding SDF is dominated by companies that rely heavily on Worldport. The area around the airport contains a mix of online retailers and third-party groups servicing online retailers. Many of these businesses have located distribution centers in Louisville to take advantage of UPS's late cut-off times for overnight shipping.³³⁵ Such businesses have created more than 13,300 jobs and invested more than \$1.2 billion in the regional economy.³³⁶ Examples of companies drawn to the area by UPS include Amgen, Ann Taylor, the Geek Squad, Johnson & Johnson, Zappos, Nike.com, Drug Emporium.com, and Guess.³³⁷

Many of these logistics and distribution centers are located in industrial parks near SDF. The Airport Industrial Center (AIC) in South Louisville is an important nexus for SDF dependent businesses. The AIC was built on the site of former Naval Ordnance Station Louisville, an operational Navy base until 1996. Titan Research and Development leases the property from the Louisville-Jefferson County Redevelopment Authority. AIC

tenants include defense contractors BAE Systems and Raytheon Corporation, as well as American Recycling & Shredding and Mercury Logistics, Inc.³³⁸ All General Electric's (GE) distribution functions are based in Louisville. GE has had an important presence in Louisville since 1953 when it established the company's 900-acre Appliance Park.³³⁹ In addition, Duane Realty Inc. owns a 126,000-square-foot distribution center immediately west of Appliance Park.³⁴⁰ Global Port is also near both the airport and Appliance Park. The industrial complex is home to FedEx's Louisville operations, medical supply distributor Owens & Minor, Ohio Logistics, and a variety of other companies.³⁴¹ Best Buy Warehousing Logistics Inc. also has a facility in nearby Shepherdsville's Cedar Grove Business Park, which is located in Bullitt County, just south of Jefferson County.³⁴²

Governance/Structure/Operations

SDF is owned and operated by the Louisville Regional Airport Authority. The independent public agency also runs a second airport, Bowman Field (LOU). The authority is overseen by a board, which consists of 11 members: the mayor of Louisville, seven mayoral appointees, and three appointees made by the governor of Kentucky. Board members serve four-year rotating terms without compensation. The authority board is responsible for hiring an executive director, who oversees day-to-day operations for both airports.³⁴³

In his research, Kasarda reported that a major distribution network emerged in Louisville because of UPS and Worldport.³⁴⁴ However, no formal aerotropolis initiative has formed around SDF. Nevertheless, the airport is a major economic engine for the region. The metro chamber of commerce, Greater Louisville Inc., plays in important role marketing SDF.³⁴⁵ That organization, along with Louisville-Jefferson County and Bullitt County's economic development departments, has taken the lead in cultivating airport-related development projects.³⁴⁶

Even without an aerotropolis plan, a great deal of economic activity is airport centered. The market for logistics and distribution space has stretched to Bullitt County, about 15 miles south of SDF.³⁴⁷ SDF draws travelers from within a 200-mile radius of Louisville, including parts of Southern Indiana.³⁴⁸ Furthermore, the Bullitt County Economic Development Authority oversees projects within its borders such as the Cedar Grove and Shepherdsville Business Parks.³⁴⁹ In 2003, Louisville and Jefferson County merged to form one government. The Louisville-Jefferson County Redevelopment Authority Board supervises development projects that occur within county lines, such as the Airport Industrial Center and GE's Appliance Park.

Funding

Louisville Regional Airport Authority (LRAA) is an autonomous municipal corporation established by the commonwealth of Kentucky via statute. LRAA is responsible for owning, operating, and developing Louisville International Airport (SDF) and Bowman Field (LOU). The self-funded authority derives its operating revenue from user fees such as landing fees, tenant rents, and passenger facility charges (PFC). ³⁵⁰ It does not receive any local or state funding for routine operations. ³⁵¹

In 2009, SDF's landing fees for signatory airlines were \$1.48 per 1,000 lbs of landed weight and passenger facility charges were \$3.00 per enplaned passenger.^{352, 353} Total airport revenue in 2008 was \$63.3 million. SDF has utilized Airport Improvement Project (AIP) funds from the FAA to construct new taxiways and make runway improvements.³⁵⁴

Many developments at and around the airport are private sector ventures. For example, UPS invested \$1 billion in its Worldport expansion.³⁵⁵ Industrial parks such as Cedar Grove, Shepherdsville, and Airport Industrial Park are managed by real estate development corporations. Many of these parks and their tenants receive assistance through incentive packages from state and local governments.

Incentives

Louisville and Kentucky utilize a variety of incentives to spur economic development in the region. UPS was the recipient of the state's largest incentive package. The company received \$51.6 million in subsidies to expand its Worldport operations. Most of the package, \$31.6 million, was financed through the Kentucky Jobs Development Act (KJDA), which was created to promote white-collar technology and service-related expansions. A KJDA grant is good for 10 years. It provides recipients with corporate income tax credits. In addition, recipients are exempt from paying state and local income taxes on the new full-time jobs created by the expansion.³⁵⁶ UPS is also receiving up to \$20 million through Kentucky Enterprise Initiative Act (KEIA) grants. Under KEIA, approved firms that invest \$500,000 or more in Kentucky recover state sales and use tax on the costs of construction materials, building fixtures, and research and development equipment. Another important part of the UPS incentive package was the Metro College initiative. Students who work part-time for UPS receive free tuition at the University of Louisville or Jefferson Community and Technical College. This project is cooperatively funded by UPS, the state of Kentucky and Louisville-Jefferson County.³⁵⁷

The Minors Lane area was once home to one of the communities affected by SDF's relocation program. Today, the residents have moved and the area is within a 3,000-acre Renaissance Zone. The zone was created by the state of Kentucky in 2003 to spur economic development around the airport.³⁵⁸ Within the zone, 80 percent of the tax revenues from new development will be used to pay for roads, sewers and other public improvement projects.³⁵⁹ Although the Renaissance Zone Corp (LRZC) and the Airport Authority are separate organizations, its board composition is the same. Some of the land purchased by the airport authority has been purchased by the LRZC.³⁶⁰ The corporation then uses money raised by Tax Increment Financing (TIF) to make the property developable.³⁶¹

In nearby Edgewood, the state sold 174 acres of land to UPS. The state also spent \$6.3 million to build a bridge over I-65, which provides UPS with a direct connection between the airports and its operations in nearby Edgewood.³⁶²

Kentucky and its local governments routinely offer smaller incentive packages to other companies. For example, Print Fulfillment Services Inc. was the beneficiary of a \$380,000-KJDA grant when it invested more than \$2.1 million to expand its facility. The Louisville-based company ships its products to thousands of locations around the world.³⁶³ Additionally, Bio Pharma Logistics, LLC received preliminary approval for \$150,000 in sales tax rebates and \$350,000 in state tax incentives to build a cold storage facility in Louisville.³⁶⁴ RecoverCare, a distributor of wound care and bariatric equipment, is relocating from Philadelphia to Louisville. The company was drawn in part by \$2.3 million in tax incentives offered by the commonwealth of Kentucky. Moreover, the company plans to create 57 new jobs in Louisville.³⁶⁵

Louisville-Jefferson County's economic development department has a robust incentives program. For example, manufacturing companies that locate to the metro area could receive a five-year moratorium on property taxes. Additionally, the county's brownfields loan program provides financing for companies that acquire or renovate property in older industrial areas. Louisville-Jefferson County also offers special loans for small businesses and minority and female-owned businesses.³⁶⁶

The Commonwealth of Kentucky appears to be the main provider of incentive packages. In 2009, the state created the Kentucky Business Investment (KBI) program. The program is available to businesses engaged in manufacturing or agribusiness, or companies planning to establish regional or national headquarters in Kentucky. A company must meet several criteria to participate in the program. There are several stipulations: (1) the business must create and maintain at least 10 new jobs for Kentuckians, (2) the business must incur at least \$100,000 in costs and (3) the business must provide benefits for full-time employees such as health insurance and 401(k)s. Businesses that meet the qualifications could receive a credit for up to 100 percent of corporate income taxes or limited-liability entity taxes stemming from the project. Companies may also receive wage assessment incentives of up to five percent of gross wages for each employee. The state also targets disadvantaged counties as "enhanced incentive counties." Companies in these counties receive incentives that are more generous. Neither Jefferson nor Bullitt County, however, qualifies for this designation.³⁶⁷

Another tool used for economic development in the Louisville area is the Kentucky Reinvestment Act (KRA). In order to qualify, companies must be engaged in manufacturing or related functions and pledge to remain in Kentucky on "a permanent basis for a reasonable period of time." In addition, companies must spend at least \$2.5 million in qualified equipment related to the reinvestment project. Companies must also agree to maintain a workforce of least 85 percent full capacity. Kentucky will pay up to 50 percent of the cost of eligible equipment and up to 100 percent of the cost of training employees. The company could also receive a corporate income or limited-liability entity tax credit for up to 100 percent of the project cost. The incentive would remain in place for up to 10 years.³⁶⁸

In addition to state and local incentives, the U.S. Department of Commerce established Foreign Trade Zone (FTZ) 29 in Louisville. The FTZ is operated by Louisville-Jefferson County Riverport Authority and has eight subzones.³⁶⁹

Minneapolis St. Paul International Airport (Minneapolis, MN)

Characteristics/Description:

Minneapolis St. Paul International Airport (MSP) sits on a 3,400 acre (5.31 square miles) plot of land. The majority of the airport's property is located in an unincorporated section of Hennepin County, MN, while a small portion of the property falls within the city limits of Minneapolis.³⁷⁰ Although not within the boundaries of these cities, the airport is surrounded by Minneapolis, St. Paul, Bloomington, Eagan, Mendota Heights, and Richfield.³⁷¹ MSP is surrounded by freeways and state park in all directions. The airport property is bordered by Route 62 to the north, Route 77 to the west, Route 5 to the south and east, and Fort Snelling State Park and Pine Island State Park to the east and northeast.³⁷²

The airport operates four runways (11,006 feet, 10,000 feet, 8,200 feet, and 8,000 feet) and two terminal buildings–Lindbergh Terminal and Humphrey Terminal.³⁷³ Each terminal houses its own parking facilities. There is no pedestrian access between the two terminals; the only access is through light rail service. The 2.9 million square foot Lindbergh Terminal houses 17 gates, while the smaller, 398,000 square foot, Humphrey Terminal is and houses 10 gates. These two terminals process about 432,604 operations (air carrier, air taxi, general aviation, and military landings and takeoffs) per year, about 1,185 per day in 2009.³⁷⁴ Its passenger operations rank as the 16th largest in the U.S. and 30th in the world, with about 16.4 million passengers enplaned in 2008 on 15 airlines, including Air Canada, Air Tran, Alaska Airlines, American Airlines, Northwest Airlines, Delta Airlines, Frontier Airlines, Icelandair, Midwest Airlines, Northwest Airlines, Southwest Airlines, Sun County Airlines, Unites Airlines, and US Airways.³⁷⁵ In addition to passenger traffic, the Air Carrier Activity Information System (ACAIS) ranks MSP as the 23rd largest cargo airport in the U.S., processing about 1.1 billion pounds per year.³⁷⁶

Within the terminal, MSP leases more than 125,000 square feet of retail space to more than 100 shops and dining establishments. Retail and restaurant leases include a provision that provides MSP with a percentage of each establishment's annual sales. In 2005, consumers spent almost \$130 million at the airport's restaurants and shops. The airport's portion was nearly \$20 million; accounting for 10 percent of its annual operating revenue. Additionally, the airport requires that retail and restaurant tenants provide "street pricing," meaning that airport merchants must sell their products at prices equal

to what they sell their products for outside of the airport or on the street. Airports officials have also pressured retailers to increase customer service at their airport locations, including a mandate that Caribou Coffee purchase additional espresso machines to decrease waiting time. The airport has also made efforts to expand the selection of shops and restaurants from newsstands and coffee shops to specialty stores such as Lands' End and Select Comfort, as well as incorporating a Minnesota presence by including Minnesota-based companies such as Creative Kidstuff, The Red Balloon Bookshop, Dunn Bros., and the French Meadow Bakery. Some companies, such as The Red Balloon Bookshop, simply lend their businesses name and expertise in their business to a firm that operates the airport store.³⁷⁷

Surrounding the airport is a heavy concentration of housing, office space, and retail. Along the north and west borders of the airport are predominately-residential neighborhoods, and the Minneapolis Veterans Administration Medical Center. The heavy concentration of office space and retail businesses exists to the south of the airport. Situated in this area is the typical variety of national and international hotels and chain restaurants. These accommodations and eateries are between two major retail outlets: The Mall of America (a major Minnesota tourist attraction) and Ikea. Among these retail establishments are a large number of office buildings, including, but not limited to, the headquarters for HealthPartners (a non-profit HMO), Askar Corporation, Boyum & Barenscheer CPAs, Barbosa Law Offices, Superior Freight Services, Investment Rarities Inc., St. Croix Promotions, Interstate Bearing Systems, Harvey Winchell Company (food & snack distributor), Award Staffing, Ceridian Corporation (staffing), and Travel One Inc. Additional places of interest include the Fred Wells Tennis and Education facility, National American University, and the Minnesota Valley National Wildlife Refuge.³⁷⁸ Zoning around the airport is predominately residential, with minimal commercial zoned land to the south.³⁷⁹

Cargo

In 2001, as a result of air cargo challenges that came about due to fragmented operational processes, MSP began considering plans for the development of an "all-cargo airport twin" for MSP to be located within its own enterprise zone.³⁸⁰ Though not labeled as an aerotropolis, the vision for the project draws similarities to airports in Hong Kong and Memphis, TN, where the focus is to entice quality investment and employment opportunities that make up a new distribution infrastructure that ties into global markets. The plan, in its preliminary stages, suggests moving traditional air cargo handling services off the already congested airport property and creating an all-cargo twin to MSP. The plan also seeks public/private partnerships to utilize the geography between the "all-cargo twin" and existing MSP site as "the next generation Midwest Gateway Regional Distribution Center."³⁸¹

In 1996, implementation of MSP's 2010 comprehensive plan (*MSP 2010: Building a Better Airport*) began. The \$3.2 billion upgrade included the relocation of freight and airline facilities, while new FedEx and UPS facilities were recently completed within the

boundaries of the airport.³⁸² The Metropolitan Airport Commission (MAC) served as its own developer in collaborating with FedEx and UPS to construct a new cargo facility separate from MSP, called the MAC Air Freight Facility, for use by all other cargo companies. As a result of this development, and in conjunction with the recent decline in the real estate market, many small freight forwarding companies moved across the river to take advantage of lower rents outside of the airport's immediate radius while maintaining a one-minute drive time to the airport.³⁸³

Airport access has also been addressed. The 2010 master plan included upgraded airport access routes, as well as a more efficient terminal return route. In preparing plans for airport access, MAC worked with the state of Minnesota's department of transportation, as well as soliciting feedback from local communities and airport patrons. The airport has also been on the cutting edge regarding sound issues in residential neighborhoods surrounding the airport. MAC worked closely with these communities to address noise complaints and even established a sound proofing program that provides material to residents for soundproofing. Since working with communities and establishing the sound proofing program, complaints have dropped drastically.³⁸⁴

General development around the airport has not been substantial and there is very little vacant, developable land. The airport cites one of its biggest weaknesses as its difficulty to expand. The airport is landlocked, and a great deal of the land surrounding the airport is developed as residential. The airport is not engaged in plans to develop an aerotropolis, but there has been some attempt by neighboring cities to address airport-related development, but this has been independent of MSP. The city of Bloomington, for example, has looked at what type of industry or development is best suited for airport land use planning.³⁸⁵

Governance and Funding

Minneapolis St. Paul International Airport is governed by the MAC. This 15-member commission, appointed by the Minnesota governor and the mayors of Minneapolis and St. Paul, sets policies for implementation by the MAC's executive director and staff. Its mission is to "provide and promote safe, convenient, environmentally sound and cost-competitive aviation services for [their] customers."

In 2008, the airport's operating expenses were approximately \$126.7 million.³⁸⁶ The MAC receives no operating funds from state, federal, or local income, sales or property taxes. Instead, MAC is supported solely by concession revenues, lease agreements, and airline fees. Passenger airlines paid a \$4.50 passenger facilities charge³⁸⁷ for each enplaned passenger and signatory airlines paid \$2.24 per 1,000 pounds of landed weight in 2009.³⁸⁸ Improvements and upgrades to airport facilities are funded from passenger facility charges, federal grants, bond sales, and revenue from airport operations. About 40 percent of all revenue is generated from non-airline operations; including land and non-terminal facilities fees, retail terminal leases, parking fees, and rental-car company leases. About one-third of all revenue comes from non-operating

revenue, while about one-quarter is generated through airline operations. The following tables break down MSP's 2008 revenues.³⁸⁹

Aeronautical Operating Revenue	Total Dollars	Percent of Total
Landing Fees	\$48,874,778	13.20%
Terminal Charges	\$44,550,770	12.03%
Apron charges/tiedowns	\$7,458,293	2.01%
FBO Revenue: contract/sponsor-operated	\$1,886,069	0.51%
Cargo and hangar rentals	\$1,785,144	0.48%
Fuel sales	\$328,510	0.09%
Misc.	\$1,641,948	0.44%
Other	\$7,981,608	2.16%
Subtotal	\$98,543,904	26.61%
Non-Aeronautical Operating Revenue		
Land and non-terminal facilities	\$8,224,445	2.22%
Terminal - food and beverages	\$12,807,212	3.46%
Terminal - retail stores	\$8,688,616	2.35%
Terminal - other	\$6,457,918	1.74%
Rental cars	\$26,667,624	7.20%
Parking	\$62,747,945	16.94%
Misc.	\$5,986,031	1.62%
Other	\$11,430,425	3.09%
Subtotal	\$143,010,216	38.61%
Non-Operating Revenue		
Interest Income	\$49,938,260	13.48%
Grants	\$18,927,062	5.11%
Passenger facility charges	\$54,681,407	14.76%
Other	\$5,271,224	1.42%
Subtotal	\$128,817,953	34.78%
Total	\$370,372,073	100.00%

Table 2: Revenue, 2008

Source: City-data.com. Retrieved from http://www.city-data.com/airports/

Incentives

Since the airport services two major metropolitan areas (Minneapolis and St. Paul), businesses relocating to either city are eligible for financial incentives. The city of Minneapolis, Minnesota offers a variety of incentives such as 501(c)(3) revenue bonds, alternative financing programs, bank-qualified bank-direct loans, business development fund loans, capital acquisition loans, common-bond revenue bonds, emerging-entrepreneur capital acquisition loans, Great Streets gap financing,³⁹⁰ the Two-Percent loan program,³⁹¹ the Two-Percent commercial corridor/commercial node loan

program,³⁹² working capital programs,³⁹³ and tax increment financing. Additional resources include grants for brownfield remediation, grants for transit-oriented development, and a variety of financial benefits from the U.S. Small Business Administration.³⁹⁴

The city of St. Paul offers its own set of incentives to businesses. Such incentives include business loans through the Capital City Business Development Program,³⁹⁵ financial assistance for Main Street development, small business loan guarantees, and sales tax revitalization³⁹⁶ to help pay for capital expenses, remodeling, and expansion.³⁹⁷

Additionally, the Twin City region is located within a Foreign Trade Zone, offering additional financial incentives to business located within and relating to the area.³⁹⁸

Pittsburgh International Airport (Findlay Township, PA.)

Characteristics/Description

Pittsburgh International Airport (PIT) is 16 miles west of downtown Pittsburgh. Most of the airport's 8,840-acre campus is in Findlay Township; however, PIT's northern portion extends into Moon Township.³⁹⁹ PIT sits between the split of Business Route 60 and newly designated Interstate 376. It is also easily accessible from interstate routes 76, 79, and 279. PIT is just two hours southeast of CLE. The airport's catchment areas overlap. Therefore, PIT sees CLE as one of its major competitors.⁴⁰⁰

When PIT was constructed in 1992, it was built to the specifications of US Airways. As a result, PIT has four runways measuring 11,500 by 200 feet wide, 10,502 by 150 feet, 9,708 by 150 feet, and 8,101 by 150 feet.⁴⁰¹ The airport eventually plans to build a fourth parallel runway.⁴⁰² On average, 168 cargo and passenger flights depart from PIT per day.⁴⁰³ According to the FAA's 2004 Airport Capacity Benchmark Report, in optimal weather conditions, PIT can handle 152 to160 flights per hour.⁴⁰⁴

Unlike some airports that may be constrained by residential developments, PIT is surrounded by large tracts of undeveloped land. The land immediately surrounding PIT in Findlay Township is primarily zoned for heavy industrial use, but there is also some zoning for business parks, mixed use, and light industrial use.⁴⁰⁵ In Moon Township, the land surrounding the airport is zoned for business parks.⁴⁰⁶

US Airways maintained hub operations at PIT 2004. Its departure has lead to a substantial drop in PIT's passenger traffic. Passenger flights per day have declined from a peak of 500 to around 170.⁴⁰⁷ In 2008, 8.7 million passengers used the airport. In 1998, the airport recorded 20.6 million passengers.⁴⁰⁸ Year-to-date passenger traffic is down 8.1 percent, and for the month of November 2009, it was down 1.6 percent. Aircraft operations dropped 3.5 percent for the month and 12.5 percent year-to-date.⁴⁰⁹

Recovering from the loss of the hub has been the airport's biggest challenge.⁴¹⁰ Still, more than 12 passenger carriers service PIT. ⁴¹¹ In 2008, the airport ranked 43rd in the nation for enplanements with 4.3 million ⁴¹² Delta recently began offering a nonstop flight from PIT to Paris; however, London and Frankfurt are PIT's first and second largest markets for international travel, respectively. Domestically, New York City, followed by Philadelphia, is PIT's largest markets for passenger travel. The loss of the US Airways hub has caused PIT to lose nonstop service to many West Coast Destinations such as Seattle. However, nonstop destinations account for 70 to 80 percent of business destinations.

Cargo

PIT has made expanding its cargo facilities a top priority. In 2007, Allegheny County, the airport authority, and the Allegheny Conference on Community Development signed a letter of intent with Xi'an Xianyang International Airport in China for joint development of an "Air Silk Road." The aim is to increase cargo airfreight and trade between the two airports. The county and airport authority developed a task force to concentrate on air cargo opportunities with China.⁴¹³ However, PIT already enjoys a significant cargo presence. Twenty-one freight forwarders and integrators serve the airport, including UPS and FedEx. In 2008, PIT was ranked 46th in the country for cargo with more than 491 million pounds landed.⁴¹⁴ The airport authority wants to use PIT's abundance of land to further increase cargo capacity and is eventually planning to use approximately 2,000 acres exclusively for cargo.⁴¹⁵ PIT's northern campus has three cargo buildings with 53,000, 60,000, and 71,000 square feet of cargo, handling space and 196,000, 187,000, and 336,000 square feet of aircraft apron, respectively. Its eastern campus has one 40,000 square-foot cargo building.⁴¹⁶ Much like passenger traffic, cargo volume has also decreased at PIT— down 3.7 percent for November 2009 and 15 percent yearto-date.417

Tenants

There are a variety of retail operations and restaurants at PIT. BAA USA founded the first AIRMALL at the airport in 1992. PIT's AIRMALL was designed to offer mall-caliber brands and prices. BAA manages 100,000 square feet of retail space at PIT. Passengers may choose from 25 bars and restaurants and nearly 35 brand-name retail stores. More money per passenger is spent at PIT than at any other airport in the country.⁴¹⁸ AIRMALL tenants include Clinique, Brookstone, Victoria's Secret, T.G.I. Friday's, and Ben & Jerry's.⁴¹⁹ PIT is also home to a Hyatt Regency hotel.

The airport is also home to local corporations such as H.J. Heinz and U.S. Steel's corporate jet operations. Fixed-base operator Atlantic Aviation opened a business center in 2001 to serve both corporate and general aviation needs. The four cargo buildings at PIT are operated by Aviation Facilities Company (AFCO).⁴²⁰ The airport is also home to three military bases: the Pennsylvania Air National Guard's 171st Air Refueling Wing (ARW), United States Air Force's 911th Airlift Wing, and the 316 Army

Reserve.⁴²¹ Republic Airlines uses two hangars at PIT for its aircraft repair and maintenance base.

The airport authority has been actively seeking large corporate (non-aviation) tenants as it seeks to develop 3,000 acres of land.⁴²² Last year, more than 1.1 million square feet of commercial space was built on authority-owned land, including the 440-acre North Field site. Construction of Dick's Sporting Goods' 670,000-square-foot global headquarters was completed in January 2010. The North Field site will be the eventual location of the 160-acre PIT International Logistics Centre. In addition, appliance dealers Cooperative and Okonite are in the middle of development projects at Findlay Industrial Park at Westport near the airport.⁴²³ Another example of development on airport grounds is Clinton Commerce Park, which located in Findlay Township. The German company Flabeg has located its parabolic mirror production facility at Clinton Commerce Park along with Knepper Press, American Tire Distributors and FedEx Ground.⁴²⁴ There are about 10 business and industrial parks open for tenants or under construction within the airport campus boundaries or near PIT.

Structure/Operations

Although PIT lacks a formal aerotropolis initiative as defined by Kasarda, there is a coordinated regional economic development strategy around the airport. The Allegheny County Chief Executive, the Allegheny County Airport Authority, and the Allegheny Conference on Community Development formed the ad hoc Airport Market Area Task Force in 2002. Leaders from academia and the public and private sectors serve on the task force as volunteers.⁴²⁵ The task force's main accomplishment was contracting the Urban Land Institute (ULI) to analyze development opportunities in the three-county area around PIT.⁴²⁶ In order to maximize the airport's potential, ULI called for better regional cooperation, improvements to the transportation infrastructure around PIT, and the formulation of a regional water and sewer infrastructure plan. The institute also claimed that a dearth of "ready-to-go" business sites in the airport vicinity stymied regional economic development.⁴²⁷ ULI's recommendations became the basis of the economic development strategy around PIT.⁴²⁸ After the study was completed, the task force dissipated but gave rise to the Tri-County Airport Partnership (T-CAP) of Allegheny, Beaver, and Washington Counties, which formed in 2003.⁴²⁹ As members of T-CAP, each county agreed to support development around the airport, regardless of location.⁴³⁰ The organization's main goal was to achieve interstate status for PA Route 60, which occurred in 2009 when the highway became I-376.431 T-CAP acts as a facilitator, helping the three counties coordinate and implement policies, and as a forum to leverage both public and private sector power.432

Governance

Since 1999, PIT and Allegheny County Airport have both been owned and operated by the Allegheny County Airport Authority. The authority is governed by a board of nine community leaders who are appointed by the Allegheny County chief executive officer

(CEO). The board hires the airport authority's CEO. The airport authority's mission is "to provide exceptional customer service in a safe, secure, and cost competitive airport environment through the commitment, innovation and expertise of our employees."⁴³³

Although Allegheny County seems to play a key role in cultivating airport-related economic development projects, the existence of T-CAP ensures that both Washington and Beaver counties are deeply involved in development around the airport. All three counties signed an agreement to form the regional partnership. T-CAP is comprised of the Allegheny County Chief Executive, The Beaver County Commissioner Chairman, the Washington County Commission Chairman and a representative from the airport authority, as well additional members as agreed upon by the group. Leaders from the three counties serve as T-CAP chairperson on a rotating basis. T-CAP relies on the Pittsburgh Regional Alliance to market the airport area.⁴³⁴

Many airport-area marketing duties are assumed by county economic development departments and the Pittsburgh Airport Area Chamber of Commerce (PAACC), which represents 1,000 businesses in the region.⁴³⁵ PAACC encompasses 31 communities within the three counties. The chamber is run by a 25-member, volunteer board of directors who are elected to three-year terms. The board elects an executive committee, lead by the chairperson of the board, to serve for one year. The chamber's vision is to be "a unified voice for business." It describes its mission as "advancing economic vitality by providing advocacy, information, and services to our members and communities."

Funding

PIT is a self-sustaining operation and generates revenues from landing fees and tenant leases. PIT's operating revenues and expenses in 2008 were \$131.9 million and 85.0 million, respectively. In 2009, PIT charged \$2.83 in landing fees for signatory airlines and had passenger facility charges of \$4.50 per enplaned passenger.⁴³⁷ The loss of the US Airways hub had serious financial implications for PIT. In the 1980s, US Airways asked PIT to construct a new terminal to allow the airline's hub operations to grow. To finance the terminal's \$1 billion construction costs, the airport authority borrowed money through the sale of bonds. The airport committed to pay back the bonds with fees based on each carrier's volume relative to airport's total traffic. Being the largest carrier at PIT, US Airways agreed to contribute the largest portion of dollars to the construction.⁴³⁸ The county also loaned the airport \$42.5 million for the project.⁴³⁹ The airport authority also sold airport construction bonds.

The departure of the US Airways hub has made it more difficult for PIT to pay for the cost of its construction, because the US Air is no longer assuming the bulk of the debt burden.⁴⁴⁰ The airport authority still faces a \$500 million debt.⁴⁴¹ County and state officials have used gaming legislation to help reduce the debt from \$800 million. They used \$150 million to be generated by future casino gambling.⁴⁴² Earlier this year, PIT

received a \$10 million grant from the stimulus package to make improvements to a crosswind runway.⁴⁴³

Development around PIT is funded by a mix of public and private dollars. T-CAP's project management and administration activities are funded through the Allegheny Conference, but in many cases, either county planning agencies or property owners provide funding for actual projects.⁴⁴⁴ Many developers lease the land near or on airport grounds from either the airport authority or Allegheny County. For example, Trammell Crow Co. is investing \$88 million to construct five industrial buildings on the North Field Site.⁴⁴⁵ Flabeg is expected to invest \$30 million in its new facilities at Clinton Commerce Park.⁴⁴⁶

Incentives

Because airport area development is considered a special Allegheny County Economic Development (ACED) project, it receives "financial assistance for projects through grants, loans, state funding, and tax incentive programs."⁴⁴⁷ For example, improvements to the North Field site are financed through a \$5 million tax increment finance (TIF) bond, a \$7 million grant from the governor's Redevelopment Assistance Capital Program, \$2 million from the airport authority, and a \$700,000-federal grant.⁴⁴⁸ Site preparation for the new Flabeg facility at Clinton Commerce was partially financed by a \$7.5 million Pennsylvania Community and Economic Development grant.⁴⁴⁹ A "Business in Our Sites" Ioan from the state covered \$6 million of the \$14 million cost of the Cherrington Parkway Extension. The project will open more land along Route 60 for development. The Airport Authority provided \$3.5 million and the Moon Transportation Authority contributed \$2.5 million for the extension. The property was developed by DiCiccio Development Inc.⁴⁵⁰The Redevelopment Authority also administered a State Redevelopment Assistance Capital Grant for the Airside Business Park at PIT.⁴⁵¹

Many of the developments around PIT were aided by Pennsylvania's Business in Our Sites program, which finances infrastructure for business or industrial site development.⁴⁵² Administered by the Commonwealth Financing Authority, Business in Our Sites is a \$300 million grant and loan pool created by the issuance of bonds.⁴⁵³ The money is used for shovel-ready projects that seek to grow the regional economy and accommodate business. In the airport area's case, construction financing and planning grants were used to improve water and sewer infrastructure.⁴⁵⁴

Allegheny County is known for its hilly topography. Much of the land on and around the airport had formerly been deep mined for coal. Thus, preparing the ground for development was one of the main ways state, county and local government provided incentives for businesses to locate there.⁴⁵⁵ Once areas were made "ready to go" for business, some tenants further benefitted from state and county incentive programs.⁴⁵⁶ Allegheny County offers a number of incentive programs to aid development in the airport area. The Allegheny County Industrial Development Authority (ACIDA) issues tax-exempt obligations to small manufacturing companies for capital projects such as construction of new facilities or land acquisition. The county's Economic Development

Fund (EDF) provides companies with low-interest loans. In addition to administering state grants, RAAC helps businesses with property acquisition and infrastructure improvements. Tax Increment Financing (TIF) is another tool frequently used by the county. Part of the new assessed value of the property generates new tax revenues that then go toward the debt incurred due to the improvements.⁴⁵⁷

Local governments also provided some tax incentives for some businesses to locate on or around the airport. For example, Dick's Sporting Goods received a 50 percent break on property taxes over the next decade from Allegheny County, Findlay Township and the West Allegheny School District. Allegheny County also gave the company a \$1 million grant.⁴⁵⁸

In addition to incentives provided by state, county and local governments, businesses in and around PIT can take advantage of FTZ 33. More than 5,000 acres of the airport campus are designated as an FTZ including the fuel arm, which allows cargo shippers to save considerable money on fuel.⁴⁵⁹

Seattle-Tacoma International Airport (SeaTac, WA)

Characteristics/Description

Seattle-Tacoma International Airport (SEA) is located on 2,500 acres (3.905 square miles) in SeaTac, Washington, 16 miles south of downtown Seattle, Washington and 20 miles north of Tacoma, Washington.⁴⁶⁰ The airport's three runways vary in size, the largest of which is 11,500 feet long. The others are 9,425 feet and 8,500 feet.⁴⁶¹

In 2009, SEA's operations included 317,873 air carrier, air taxi, general aviation, and military flights. During that same period, it serviced more than 32 million passengers (domestic and international).⁴⁶² The FAA ranked SEA 17th in the U.S. in 2009 with 15.8 million enplaned passengers. More than 60 carriers operate at SEA; however, 10 carriers account for the majority of activity (Alaska Airlines, Horizon Airlines, Southwest Airlines, United Airlines, Northwest Airlines, Delta Airlines, American Airlines, Continental Airlines, United Express/Skywest, and U.S. Airways).⁴⁶³ The market for business-related travel is constant. The Port of Seattle serves as a major entry point for Pacific Rim travelers. The local region is considered an origination and destination location, indicating that most travelers stay in the area, due, in part, to the Seattle Seaport, which attracts foreign and domestic business to the area.⁴⁶⁴

According to the FAA, the airport's air cargo operations are the 18th busiest in the country with a total landed weight of nearly 1.5 billion pounds.⁴⁶⁵ The airport's cargo operations have direct international cargo flights to Seoul, Beijing, Taipei, Tokyo, London, Paris, Frankfurt, Amsterdam, and Luxemburg. Cargo operations are housed within 900,000 square feet (85,000 square meters) of warehouse, airmail, and office space. Additionally, the airport offers 1.5 million square feet of aircraft parking, which includes multiple positions for wide-body and nose-loading 747-F.⁴⁶⁶ The size and

continued growth of the airport's cargo operations is due to the market in which the airport is located, serving as a major export venue for high value produce (cherries), sophisticated electronics, and medical and pharmaceutical products. Import demand is also high, concentrated in the areas of consumer products (clothes, I-Pods) and the globalization of manufacturing (outsourcing by manufacturers such as Boeing). With growing demand for both passenger and freight, SEA has an internal department solely dedicated to increasing freight and passenger services.⁴⁶⁷ Although SEA continues to grow to accommodate increased demand, they are not engaged in plans to form an aerotropolis.

Zoning around the airport is eclectic, including three levels of low-density urban residential, three levels of medium-density urban residential, and three levels of high-density urban residential. In addition, this area is zoned for mobile homes, neighborhood business, office/commercial/mixed use, community business, aviation business, business park, commercial aviation, aviation operations, industrial, and parks.⁴⁶⁸

The airport has 76 tenants within the terminal catering to the shopping, dining, and personal service needs of flyers.⁴⁶⁹ Outside the airport's borders is a heavy concentration of hotels and accommodations, along with a small scattering of businesses including restaurants, pubs, law firms, a casino, a performing arts center, several local government buildings, and a senior living facility.⁴⁷⁰ Despite these local businesses, studies conducted by the port indicate the predominant industry around the airport is airport related, specifically freight forwarding business and related services.⁴⁷¹

Only recently has the port engaged in real estate development efforts around the airport focusing on cooperative agreements with neighboring cities, including an 87-acre industrial park and a 50-acre site currently under review. Additionally, the port has identified roughly 200 acres of developable land surrounding the airport, all of which it owns. Despite developable land and cooperative agreements, the port's greatest challenge is capacity. As demand for the airport continues to increase, the port anticipates difficulty meeting the growing demand because of land constraints and infrastructure. It considers land constraints and infrastructure to be its biggest weakness.⁴⁷²

Structure/Operations and Governance

SEA is owned and operated by the Port of Seattle, which overseas four operating divisions, including an Aviation Division, a Capital Development Division, a Real Estate Division, and a Seaport Division. The Port of Seattle is governed by a five-person commission elected at-large by the voters of King County, Washington. The Aviation Division, responsible for operating SEA International Airport, is lead by a managing director, who reports to the five-member board. The port's vision is to be the cleanest, greenest, and most energy-efficient port in the nation.⁴⁷³ The entire Port of Seattle

organization is funded by a property tax levy, which in 2008, consisted of a tax rate of \$.0224 per \$1,000 assessed value.⁴⁷⁴

The Port of Seattle is focused on increasing travel and developing a state-of-the art cargo handling facility that coordinates the air cargo with Seattle's busy seaport.⁴⁷⁵ In 2008, airport operating expenses were \$195.2 million, including compensation, communications, supplies, repairs, and insurance.⁴⁷⁶ Airport operations are paid for using a variety of revenue streams, the largest of which are terminal charges, accounting for almost one quarter of the airport's annual revenue. Other major sources of revenue include landing fees (\$2.96 per 1,000 lbs in 2009⁴⁷⁷), parking charges, passenger facility charges (\$4.50 per enplaned passenger in 2009⁴⁷⁸), and grants. Table 3 displays the airport's revenue sources for 2008.⁴⁷⁹

Aeronautical Operating Revenue	Total Dollars	Percent of Total
Landing Fees	\$65,770,471	12.50%
Terminal Charges	\$125,767,877	23.89%
Apron charges/tiedowns	\$3,931,563	0.75%
Cargo and hangar rentals	\$6,050,014	1.15%
Fuel sales	\$100,232	0.02%
Security Reimbursement	\$1,086,790	0.21%
Misc.	\$1,654,496	0.31%
Subtotal	\$204,361,443	38.83%
Non-Aeronautical Operating Revenue		
Land and non-terminal facilities	\$6,013,151	1.14%
Terminal - food and beverages	\$11,389,733	2.16%
Terminal - retail stores	\$11,039,029	2.10%
Terminal - other	\$10,752,267	2.04%
Rental cars	\$35,592,311	6.76%
Parking	\$64,551,861	12.26%
Misc.	\$11,189,536	2.13%
Other	\$3,439,625	0.65%
Subtotal	\$153,967,513	29.25%
Non-Operating Revenue		
Interest Income	\$26,116,836	4.96%
Grants	\$49,460,685	9.40%
Passenger facility charges	\$60,707,659	11.53%
Other	\$31,732,337	6.03%
Subtotal	\$168,017,517	31.92%
Total	\$526,346,473	100.00%

Table 3: Revenue, 2008

Source: City-data.com. Retrieved from http://www.city-data.com/airports/

In 2008, a third runway was completed at an estimated cost of more than \$1 billion. Financing for this expansion came from several sources, including landing fees, passenger facility charges, bonds issued by the Port of Seattle, and federal grants. Additionally, the FAA contributed a total of \$278 million, including more than \$60 million

for costs associated with mitigating the runway's environmental impact. It is suggested that construction delays resulting from the objections of nearby residents, design changes, and environmental concerns tacked on an additional \$25 million.⁴⁸⁰

Incentives

The airport's freedom to offer incentives and amenities to encourage businesses to locate near the airport is limited by FAA regulations and state law. However, it cooperates with the state of Washington when the state drafts tax incentives for attracting businesses.⁴⁸¹ Being situated in the city of SeaTac, Washington, between Seattle and Tacoma, exposes neighboring businesses to development incentives from three different cities. The city of Seattle's office of economic development offers financing options for new businesses, which include small business loans, small to medium-size business loans for capital, funding for energy efficient improvements for local grocery stores, New Market Tax Credits, and Recovery Zone Facility Bonds (RZBFs).⁴⁸² Additional support for the city of Seattle's long-term economic development plans to promote job growth and attract businesses includes tax incentives for a wide variety of industries.

The city of Tacoma, Washington provides tax incentives for designated geographic areas within the city and job-credit tax incentives.⁴⁸³ Additional incentives are available to office, retail, and industrial businesses. Office and retail businesses are eligible for incentives from the Washington State Job Skills Program, city business loans, city of Tacoma business and occupation tax credits for job creation,⁴⁸⁴ and Neighborhood Business District Program.⁴⁸⁵ Industrial businesses are eligible for industrial revenue bonds,⁴⁸⁶ Washington State sales and use tax exemption on machinery and equipment,⁴⁸⁷ Washington State Job Skills Program, and additional city of Tacoma business loan programs.⁴⁸⁸

The city of SeaTac, Washington also provides financial incentives to businesses located in and relocating to the city. Such programs include up-front capital funding, tax exemptions, community renewal funding, funding for public-private partnerships and projects with a public use and purpose application.⁴⁸⁹

Additionally, foreign trade zones, providing additional financial incentives to businesses relocating to the area, exist in Tacoma and Seattle.⁴⁹⁰

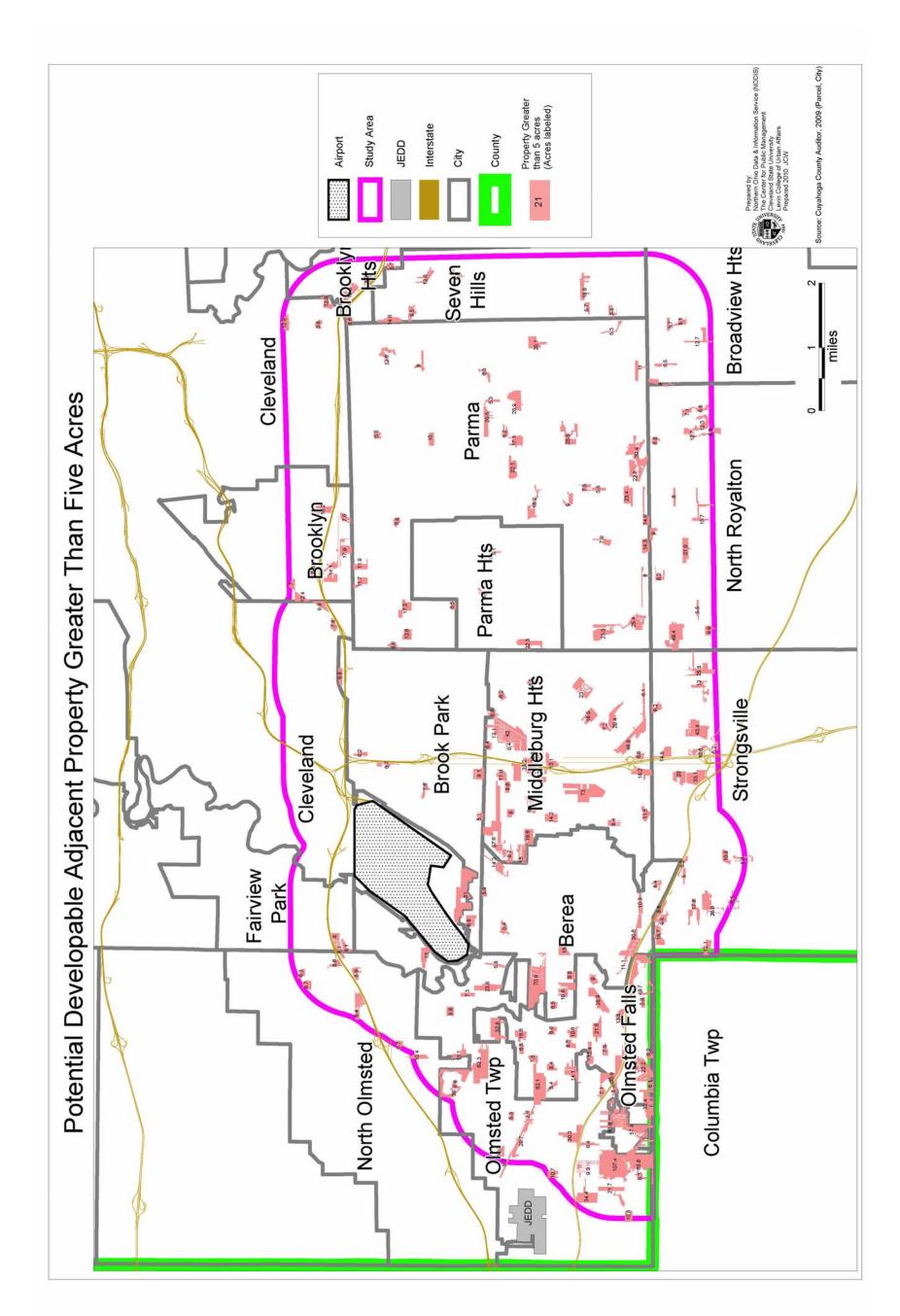


Figure 1: Potentially developable properties greater than or equal to 5 acres

Feasibility of an Aerotropolis: Appendices

APPENDIX O: Proposed Next Michigan Development Act

SENATE BILL No. 1083

SENATE BILL No. 1083

January 21, 2010, Introduced by Senators BASHAM, ALLEN, HUNTER, JANSEN, HARDIMAN and CLARK-COLEMAN and referred to the Committee on Commerce and Tourism.

A bill to encourage the creation of next Michigan development corporations by interlocal agreement and to prescribe their powers and duties; to foster economic opportunities in this state and prevent conditions of unemployment and underemployment and to promote economic growth; to provide for the designation of next Michigan development districts and next Michigan development businesses; and to prescribe the powers and duties of certain state and local departments, entities, and officials. THE PEOPLE OF THE STATE OF MICHIGAN ENACT: 1 Sec. 1. This act shall be known and may be cited as the "next Michigan development act".

Sec. 2. The legislature of this state finds and declares that

SENATE BILL No. 1083

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1
    there exists in this state the continuing need for programs to
    encourage economic development and investment, job creation and job
 2
    retention, and ancillary economic growth in this state. To achieve
 3
    these purposes, it is necessary to assist and encourage the
 4
    creation and implementation of intergovernmental development
 5
 6
    corporations and to enable those corporations to foster economic
 7
    opportunities in this state, prevent conditions of unemployment and
 8
    underemployment, and promote economic growth.
 9
         Sec. 3. As used in this act:
10
          (a) "Eligible act 7 entity" means a separate legal and
    administrative entity formed by interlocal agreement under the
11
    urban cooperation act of 1967, 1967 (Ex Sess) PA 7, MCL 124.501 to
12
13
    124.512, among 2 or more local governmental units, at least 1 of
    which shall be a county, and at least 1 of which shall be a
14
15
    qualified local government unit as defined in section 2 of the
    obsolete property rehabilitation act, 2000 PA 146, MCL 125.2782,
16
    for the purpose of jointly exercising economic development powers
17
    and attracting business.
18
          (b) "Eligible next Michigan business" means that term as
19
    defined in section 3 of the Michigan economic growth authority act,
20
    1995 PA 24, MCL 207.803.
21
          (c) "Eligible urban entity" means a city with a population of
22
    100,000 or more and is the largest city within a metropolitan
23
    statistical area as defined by the United States office of
24
    management and budget.
25
          (d) "Local governmental unit" means a county, city, village,
26
    township, or charter township.
27
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(e) "Michigan strategic fund" means the Michigan strategic 1 2 fund as described in the Michigan strategic fund act, 1984 PA 270, MCL 125.2001 to 125.2094. 3 (f) "Next Michigan development corporation" means an eligible 4 act 7 entity or eligible urban entity that meets the requirements 5 of section 4 and has been so designated by the board of the 6 7 Michigan strategic fund. (g) "Next Michigan development district" or "district" means 8 9 the territory of a next Michigan development corporation. 10 Sec. 4. (1) An eligible act 7 entity may apply to the board of 11 the Michigan strategic fund for designation as a next Michigan 12 development corporation under this act. An eligible urban entity may apply to the board of the Michigan strategic fund for 13 14 designation as a next Michigan development corporation under this act. An eligible urban entity may expressly designate an 15 16 instrumentality of an eligible urban entity or a nonprofit corporation to file the application and act as the next Michigan 17 18 development corporation on behalf of the eligible urban entity. 19 (2) The territory of a next Michigan development corporation 20 shall be composed of the area within the boundaries of the cities, 21 villages, and townships which are parties to the interlocal 22 agreement as the same may be amended to add or remove parties from time to time or the area of the eligible urban entity. The 23 24 interlocal agreement may include a division of rights, responsibilities, and duties between and among the local government 25 26 unit parties as may be determined appropriate by the local 27 government unit parties to implement the purposes of this act and

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1 otherwise shall conform to law.

2 (3) Except for an application from or on behalf of an eligible
3 urban entity, the application for next Michigan development
4 corporation status under this act shall be accompanied by a copy of
5 the interlocal agreement creating the eligible act 7 entity and the
6 approval of the governor of the interlocal agreement pursuant to
7 section 10 of the urban cooperation act of 1967, 1967 (Ex Sess) PA
8 7, MCL 124.510.

9 Sec. 5. (1) The board of the Michigan strategic fund, upon the 10 filing of an application under section 4, may designate the 11 applicant as a next Michigan development corporation. No more than 12 5 next Michigan development corporations may be designated in this state. The president of the Michigan strategic fund shall develop 13 14 the form of application for designation as a next Michigan development corporation within 49 days of the effective date of 15 16 this act provided that an application from an eligible act 7 entity or an eligible urban entity which otherwise meets the requirements 17 18 of this act may be filed with the board of the Michigan strategic 19 fund at any time following the effective date of this act, and any 20 such application shall be considered by the board of the Michigan 21 strategic fund under subsections (2) and (3). The Michigan 22 strategic fund shall use its best efforts to develop the application process jointly with eligible act 7 entities and 23 24 eligible urban entities. (2) The board of the Michigan strategic fund shall apply the 25 26 following criteria in determining to designate a next Michigan

27 development corporation:

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1	(a) The nominal level of unemployed workers within the county
2	or counties which are parties to the interlocal agreement creating
3	the applicant eligible act 7 entity, if the applicant is an
4	eligible act 7 entity, or within the applicant eligible urban
5	entity, if the applicant is an eligible urban entity, in each case
6	as publicly reported by the state department of energy, labor, and
7	economic growth as of the month preceding the filing of the
8	application on an adjusted or unadjusted basis, whichever is
9	greater.
10	(b) The number of local governmental unit parties to the
11	applicant's interlocal agreement if the applicant is an eligible
12	act 7 entity.
13	(c) Whether the application demonstrates evidence of
14	significant job creation potential of a regional or state asset or
15	combinations of enterprises, facilities, or obsolete facilities
16	within the territory of the applicant, as documented by a
17	comprehensive business plan and a third-party study or studies
18	quantifying the job creation potential, and the degree of the job
19	creation potential.
20	(d) Whether the application is supported by public and private
21	commitment and the degree of the commitment.
22	(e) The extent to which the interlocal agreement or the
23	eligible urban entity creates the possibility of streamlined
24	permitting.
25	(3) The board of the Michigan strategic fund shall grant or
26	deny designation to an applicant within 42 days of receipt of the
27	application. If the board of the Michigan strategic fund does not

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grant or deny the designation within 42 days of receipt of the 1 application, the application shall be considered approved. If the 2 application is denied, the board shall provide the applicant with 3 the specific reasons for the denial by reference to the criteria 4 set forth in subsection (2). An applicant may amend the application 5 to take into account the reasons for the denial and thereafter may 6 7 resubmit the application to the board of the Michigan strategic 8 fund. 9 Sec. 6. (1) A next Michigan development corporation shall seek 10 to attract eligible next Michigan businesses to its next Michigan 11 development district and may exercise all of the powers, privileges, and responsibilities granted to it under state law, 12 including, but not limited to, the powers, privileges, and 13 14 responsibilities granted in the Michigan renaissance zone act, 1996 PA 376, MCL 125.2681 to 125.2696, the local development financing 15 16 act, 1986 PA 281, MCL 125.2151 to 125.2174, section 9f of the general property tax act, 1893 PA 206, MCL 211.9f, 1974 PA 198, MCL 17 18 207.551 to 207.572, and other relevant law. 19 (2) The Michigan economic development corporation shall market 20 the next Michigan development corporations. 21 Sec. 7. (1) The business of a next Michigan development 22 corporation shall be conducted at public meetings held in compliance with the open meetings act, 1976 PA 267, MCL 15.261 to 23 24 15.275. Public notice of the time, date, and place of a meeting shall be given as provided by the open meetings act, 1976 PA 267, 25 26 MCL 15.261 to 15.275. 27 (2) Except as expressly provided otherwise in this section, a

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1 writing prepared, owned, used, in the possession of, or retained by 2 the next Michigan development corporation in the performance of an official function shall be a public record and shall be made 3 available to the public in compliance with the freedom of 4 information act, 1976 PA 442, MCL 15.231 to 15.246. A record or 5 portion of a record, material, or other data received, prepared, 6 7 used, or retained by the next Michigan development corporation in connection with an application by an eligible business for 8 9 renaissance zone status or other tax or development incentive that 10 relates to financial or proprietary information or site selection 11 where more than 1 site is under consideration submitted by the 12 eligible business applicant that is considered by the applicant and acknowledged by the next Michigan development corporation as 13 14 confidential shall not be subject to the disclosure requirements of the freedom of information act, 1976 PA 442, MCL 15.231 to 15.246. 15 16 A designee of the next Michigan development corporation shall make the determination as to whether the next Michigan development 17 18 corporation acknowledges as confidential any financial or 19 proprietary information submitted by the eligible business 20 applicant and considered by the applicant as confidential. Unless 21 considered proprietary information, the next Michigan development 22 corporation shall not acknowledge routine financial information as 23 confidential. If the designee of the next Michigan development 24 corporation determines that information submitted to the next 25 Michigan development corporation is financial or proprietary 26 information and is confidential, the designee of the next Michigan 27 development corporation shall prepare a written statement, subject

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1 to disclosure under the freedom of information act, 1976 PA 442, MCL 15.231 to 15.246, which states all of the following: 2 3 (a) That the information submitted was determined by the designee of the next Michigan development corporation to be 4 confidential as financial or proprietary information or site 5 selection information. 6 7 (b) A broad nonspecific overview of the financial or proprietary information determined to be confidential. 8 9 (3) The next Michigan development corporation shall not 10 disclose financial or proprietary information or site selection information not subject to disclosure pursuant to subsection (2) 11 without the consent of the eligible business applicant submitting 12 the information. However, nothing in this subsection shall preclude 13 14 the president of the Michigan strategic fund, members of the board of the Michigan strategic fund, or their designees from reviewing 15 16 information otherwise exempt from disclosure under this section. 17 (4) As used in this section, "financial or proprietary 18 information" means information that has not been publicly 19 disseminated or is unavailable from other sources, the release of 20 which might cause the eligible business applicant, in the 21 applicant's judgment, material competitive harm. Financial or 22 proprietary information does not include a written agreement under the Michigan renaissance zone act, 1996 PA 376, MCL 125.2681 to 23 24 125.2696. 25 Sec. 8. In the event that a next Michigan development 26 corporation dissolves or is terminated, all incentives previously 27 granted by the next Michigan development corporation shall be

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1 unaffected by the dissolution and shall remain valid and in full 2 force and effect in accordance with their respective terms. Incentives previously granted by the next Michigan development 3 corporation shall be administered by the city, village, township, 4 or charter township in which the eligible business to which the 5 incentives were granted is located unless otherwise provided in the 6 7 interlocal agreement. 8 Sec. 9. (1) Upon application to and approval by the next 9 Michigan development corporation, an eligible next Michigan 10 business which has been awarded a tax credit by or upon the recommendation of a next Michigan development corporation may sell 11 or assign, in whole or in part, the tax credit granted to the 12 eligible next Michigan business. This subsection does not apply to 13 14 tax exemptions from ad valorem taxes or specific taxes. The 15 application must be on the form required by the next Michigan 16 development corporation and must include or demonstrate all of the following: 17 18 (a) The applicant's name and address. 19 (b) A copy of the tax credit certificate or documentation 20 establishing the tax credit previously issued to the applicant. 21 (c) A statement as to whether any part of the tax credit has 22 been applied to tax liability of the applicant and the amount so applied. 23 24 (d) Any other information required by the next Michigan 25 development corporation. 26 (2) The next Michigan development corporation shall review the 27 application and, upon being satisfied that all requirements have

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been met, may approve the application and shall notify the tax 1 2 collecting units to which the tax credit applies. 3 (3) The purchaser or assignee of all or a portion of a tax credit under this section shall claim the credit in the taxable 4 year in which the purchase or assignment is made. The purchaser or 5 assignee of a tax credit may use the tax credit against any tax 6 7 liability of the purchaser or assignee under law in respect of the tax to which the tax credit applies. The amount of the tax credit 8 9 so used may not exceed 80% of the purchaser's or assignee's tax in 10 respect of the tax to which the tax credit applies for the taxable year. The purchaser or assignee may not carry over, carry back, 11 obtain a refund of, or assign the tax credit. Except as provided in 12 subsection (4), the purchaser or assignee shall satisfy the 13 14 documentary procedures established by the State Treasurer as conditions of applying the tax credit against the purchaser's or 15 16 assignee's tax liability. (4) A next Michigan development corporation from time to time 17 18 may purchase and thereafter may sell or assign, in whole or in 19 part, tax credits granted to eligible next Michigan businesses from 20 its revenues, assessments or other funds lawfully available for 21 such purpose. 22 Sec. 10. This act shall be construed liberally to effectuate the legislative intent and purposes of this act as found and stated 23 24 in section 2. This act constitutes complete and independent authority for the performance of each and every act and thing 25 26 authorized by this act, and all powers granted by this act shall be 27 broadly interpreted to include any power reasonable and convenient

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- 1 to effectuate the intent and purposes of this act, and the language
- 2 used in this act shall be read as grants of authority and not as
- 3 limitations of powers to those expressed or necessarily implied.

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