COLORADO AEROTROPOLIS VISIONING STUDY

1. THE HISTORY
What is an aerotropolis? How did we get here? What is the study area? What are the study objectives?

2. THE STUDY
The study created a forum for jurisdictions, stakeholders, and to share ideas, information, and visions for realizing the opportunities presented by an aerotropolis.

3. THE FINDINGS
A proactively planned Aerotropolis has economic potential and has challenges to implement.

THE PARTICIPANTS
Core jurisdiction participants were Adams County, Aurora, Brighton, Commerce City, Denver, and Denver International Airport.

VISIONING
COLORADO AEROTROPOLIS FINDINGS GOVERNANCE INFRASTRUCTURE

The study examined water, wastewater, drainage, power, communications, and transportation infrastructure. It determined collaborative opportunities for catalytic and sustainable infrastructure investments based on projected development under near- and long-term Aerotropolis Scenarios.

The focus of the infrastructure investment would be to provide fast and efficient multimodal movement options for delivery of people, goods, and information between DIA and the surrounding development areas.

The study identified a near-term objective to establish a regional entity or governance structure for advancing infrastructure investments.

Upon further exploration of this concept, the study:

- Identified key decision points that will need to be negotiated.
- Recommended a process for further negotiations.
- Identified possible candidate mechanisms for structuring a regional entity.

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THE ANALYSIS TO QUANTIFY THE POTENTIAL OF A COLORADO AEROTROPOLIS FOUND:

Participants recognize need for infrastructure investments

- NEW JOBS:
  - 74,000 by 2040
  - An additional 18,500 on-airport and 55,500 off-airport jobs

- RESIDENTS:
  - 210,000 living in and near the Colorado Aerotropolis Area

Local revenues could range between $705 to $735 million and are roughly similar to the costs associated with additional infrastructure investment of $725 to $775 million.

BENEFITS FROM GROWTH GENERATED BY AN AEROTROPOLIS RESULTS IN ECONOMIC AND FISCAL NET GAINS FOR THE DENVER METROPOLITAN AREA

- NEW DEVELOPMENT:
  - 18 to 32 million square feet of additional commercial development

- INCREASED LABOR PRODUCTIVITY:
  - From “agglomeration” effect that attracts highly qualified talent pool to the Rocky Mountain region

- CONSTRUCTION:
  - Up to 9,500 direct and 3,200 indirect construction jobs over 25 years

- 75,000 NEW HOUSING UNITS CONSTRUCTED TO HOUSE AEROTROPOLIS WORKERS

- EMPLOYMENT NODES:
  - Where similar industries and businesses can cluster together

- LOCATION OF NEW HOUSING TO ACHIEVE BALANCED AND SUSTAINABLE GROWTH

DIA IS MIDWAY BETWEEN EUROPE, ASIA, AFRICA, AND SOUTH AMERICA

- Denver to Los Angeles: 4 HOURS
- Aurora to Buenos Aires: 6 HOURS
- Denver to Shanghai: 8 HOURS
- Denver to Cairo: 10 HOURS
- Denver to Abu Dhabi: 12 HOURS
- Denver to New York: 14 HOURS
- Denver to Johannesburg: 16 HOURS
- Denver to Tokyo: 18 HOURS
- Denver to Hong Kong: 20 HOURS
- Denver to Singapore: 22 HOURS
- Denver to Panama City: 24 HOURS
- Denver to Sydney: 26 HOURS
- Denver to Perth: 28 HOURS

DIA IS A REGIONAL ASSET WITH IMMENSE ECONOMIC DEVELOPMENT POTENTIAL

LOCATION OF NEW HOUSING TO ACHIEVE BALANCED AND SUSTAINABLE GROWTH

- New development
- Increased labor productivity
- Benefits from growth

REVENUE STREAM AVAILABILITY TO FINANCE INITIAL INVESTMENTS

- Local revenues could range between $705 to $735 million
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STRATEGY TO FOSTER COLLABORATIVE AND ROBUST ECONOMIC DEVELOPMENT

- Competition with other regional priorities for generated revenue
- Governance to provide an effective regional structure

- New development
- Employment nodes
- Location of new housing
- Benefits from growth

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Core jurisdiction participants were Adams County, Aurora, Brighton, Commerce City, Denver, and Denver International Airport.

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HISTORY

WHAT IS AN AEROTROPOLIS?
AN URBAN PLAN IN WHICH THE LAYOUT, INFRASTRUCTURE, AND ECONOMY ARE CENTERED AROUND AN AIRPORT.

BACKGROUND
Denver International Airport (DEN) opened in 1995 on the outskirts of the Denver metropolitan area. In the 20 years since it opened, it has become a powerful economic engine in Colorado with $26 billion in annual economic impact. The airport sits at the intersection of interstate highways, rail, and air freight connections, and will soon open a new commuter rail between DIA and downtown Denver. There are daily direct flights that connect to many major economic centers around the globe. DIA has ample room for growth and is positioned to be competitive in the global marketplace by attracting more commercial activity.

Today there are still thousands of acres of undeveloped land surrounding DIA that represent one of the most unrealized economic opportunities in the world.

VISIONING STUDY & IGA AMENDMENT
During the course of the Visioning Study, Denver and Adams County passed Ballot Measure 1A, an amendment to their original Intergovernmental Agreement regarding DEN. Both the study and the amendment were motivated by a collaborative vision for future development to spur growth and change on and around the airport.

The Visioning Study was conducted independently from the political process that led to the Intergovernmental Agreement (IGA) Amendment. The Colorado Department of Transportation (CDOT) administered the study as a neutral objective party.

UNREALIZED OPPORTUNITY
>$1 BILLION IN PLANNED ROADS NEAR DEN
25,000 ACRES OF PLANNED DEVELOPMENTS NEAR DEN
DIA IS 25 MILES FROM DOWNTOWN DENVER IN A NATURAL METROPOLITAN EXPANSION AREA
1,500 ACRES OF NET LEASABLE DIA PROPERTY

POTENTIAL AT DIA TO BUILD 6 MORE RUNWAYS

AEROTROPOLIS STUDY AREA
The Colorado study area boundaries define an area of influence that impacts or will be impacted by the current and future economic conditions both on and off airport.

AEROTROPOLIS VISIONING STUDY OBJECTIVES
LEARN ABOUT THE AEROTROPOLIS CONCEPT
COLLABORATE TO CREATE AN AEROTROPOLIS VISION
IDENTIFY COMMONALITIES AMONG LOCAL PLANS
QUANTIFY THE POTENTIAL FOR ECONOMIC GROWTH
IDENTIFY A FRAMEWORK FOR COLLABORATION ON INFRASTRUCTURE INVESTMENTS
OUTLINE GOVERNANCE OPTIONS TO IMPLEMENT INVESTMENTS

RESEARCH
After reviewing the aerotropolis case studies, study participants came to understand the importance of infrastructure as the first step in launching a healthy cycle of development. It was found that collaborative investments in transportation, public amenities, and economic development can be a catalyst for growth, and that investment in infrastructure have historically been the catalyst for a self-sustaining development cycle.

The Visioning Study was a collaborative planning exercise that allowed stakeholders to share ideas, information, and visions for realizing opportunities presented by an aerotropolis. Investment in infrastructure can be a trigger that leads to increased attractiveness to businesses that achieves the ultimate goal of benefiting both the airport and the economy.

Visioning Study Participation:
- Counties: Adams County, Aurora, Brighton, Commerce City, Denver, in coordination with DIA.
- Agencies: DIA, CDOT, FasTracks, DNTA.
- Economic Development Groups: Centennial, Commerce City, Denver, Aurora, and Chautauqua.
- Real Estate Firms: Edgemoor, Newmark, CBRE, and Denver Urbanism.
- Universities: Denver University, University of Denver, Colorado State University, and Colorado College.
- Local Government:
  - City of Denver: Ward 9, Ward 12
  - City of Aurora: Ward 6
  - City of Brighton: City Council
  - City of Commerce City: City Council
  - County Commission: Adams County
- Other:
  - AEA Auto
  - AECOM
  - Arthur Andersen
  - Bechtel
  - Black & Veatch
  - Booz Allen Hamilton
  - Brown & Brown
  - Burns & McDonnell
  - Cicero.

A forum was created as a platform for core jurisdictions and other infrastructure agencies. They were joined by representatives from interested economic development groups, transportation agencies, and other infrastructure agencies. Individuals from these groups collaborated to create an aerotropolis vision for future developments near the airport.

VISIONING STUDY PARTICIPANTS
- COLORADO AEROTROPOLIS
- CENTENNIAL
- COMMERCE CITY
- AURORA
- BRIGHTON
- COMMERCE CITY
- DENVER
- DIA
- ACT21
- CDOT
- DNTA
- CITY OF DENVER
- CITY OF AURORA
- CITY OF BRIGHTON
- CITY OF COMMERCE CITY
- COUNTY OF ADAMS
- COUNTY OF AURORA
- CHAUTAUQUA COUNTY
- REUNION RESIDENTIAL DEVELOPMENT
- FITZSIMONS/ANSCHUTZ REDEVELOPMENT
- FRONT RANGE AIRPORT
- 61ST & PENNA FASTRACKS STATION

This increases the attractiveness of the airport for further development and non-airline revenue allows airports to lower operating costs for airlines on airport property, the airport benefits from local and regional planning and exercises that generated ideas and perspective.

CASE STUDIES
In 2013, the Visioning Study participants learned from other aerotropolis case studies that connected, and outlined keys that came to success and avoided obstacles to growth. Non-airline revenue allows airports to increase the attractiveness of the airport for further development and non-airline revenue allows airports to lower operating costs for airlines on airport property, the airport benefits from local and regional planning and exercises that generated ideas and perspective.

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Visioning Study Participants learned of other aerotropolis case studies that outlined keys to success and obstacles to avoid.

After reviewing the aerotropolis case studies, study participants came to understand the importance of infrastructure as the first step in launching a healthy cycle of development. It was found that collaborative investments in transportation, water, power, communications resources, and other supporting civil infrastructure have historically been the catalyst for a self-sustaining aerotropolis. Investment in infrastructure can be a trigger that leads to increased attractiveness to businesses that achieves the ultimate goal of benefiting both the airport and the economy.

Infrastructure can be a catalyst starting a cycle of development. When commercial development occurs on airport property, the airport benefits from non-airline revenue. Non-airline revenue allows airports to lower operating costs for airlines. This increases the attractiveness of the airport for further development. Increased development leads to further investments in infrastructure.

The core participants in the study were the jurisdictions adjacent to or near the airport — Adams County, Aurora, Brighton, Commerce City, and Denver, in coordination with DIA.

They were joined by representatives from interested economic development groups, transportation agencies, and other infrastructure agencies.

A forum was created as a platform for core jurisdictions and other stakeholders to share ideas, information, and visions for realizing the opportunities presented by an aerotropolis.

The Visioning Study was conducted independently from the political process and change on and around the airport. The Visioning Study & IGA Amendment were motivated by a collaborative Agreement regarding DEN. Both the study and the amendment to their original Intergovernment Agreement (IGA) Amendment.

Today there are still thousands of acres of undeveloped potential at DIA to build on and around the airport. Denver International Airport (DEN) opened in 1995 on the outskirts of the Denver metropolitan area. In the 20 years since it opened, it has become a many major economic centers around the globe. DIA has ample room for air freight connections, and will soon open a new commuter rail between DIA and downtown Denver. There are daily direct flights that connect to Europa.

The Colorado Department of Transportation (CDOT) administered the study as a neutral.
**FINDINGS**

**STUDY THE HISTORY**

- What is an aerotropolis?
- How did we get here?
- What is the study area?
- What are the study objectives?

**VISIONING**

**COLORADO AEROTROPOLIS**

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- The study identified a near-term objective to establish a regional entity or a governance structure for advancing infrastructure investments.

Upon further exploration of this concept, the study:

- **Identified** key decision points that will need to be negotiated.
- **Recommended** a process for further negotiations.
- **Identified** possible candidate mechanisms for structuring a regional entity.

**QUANTIFYING AEROTROPOLIS ECONOMIC POTENTIAL**

- **DIA IS MIDWAY BETWEEN EUROPE, ASIA, AFRICA, AND SOUTH AMERICA**

  - Denver
  - Los Angeles
  - Buenos Aires
  - Shanghai
  - Vancouver
  - London
  - Cairo
  - Abu Dhabi
  - New York
  - Sao Paulo
  - Johannesburg
  - Tokyo
  - Hong Kong
  - Singapore
  - Sydney
  - Panama City
  - 2 hours
  - 4 hours
  - 6 hours
  - 8 hours
  - 10 hours
  - 12 hours
  - 14 hours
  - 16 hours

**QUANTIFYING AEROTROPOLIS ECONOMIC POTENTIAL**

- **By 2040**, a proactively planned Aerotropolis could generate an additional 18,500 on-airport and 55,500 off-airport jobs.

- **74,000 NEW JOBS**

- **210,000 RESIDENTS** living in and near the Colorado Aerotropolis area.

**CONSTRUCTION**

- **Up to 9,500 direct and 3,200 indirect construction jobs** over 25 years.

- **75,000 new housing units** constructed to house Aerotropolis workers.

**INFRASTRUCTURE**

- **Representative multimodal concept for Aerotropolis arterial**

**CHALLENGES TO REALIZING AEROTROPOLIS ECONOMIC POTENTIAL**

- **Competition** with other major airport hubs for airport-related industries.
- **Revenue stream availability** to finance initial investments.
- **Governance** to provide an effective regional structure.
- **Strategy** to foster collaborative and robust economic development.
- **Competition** with other regional priorities for generated revenue.
- **Location** of new housing to achieve balanced and sustainable growth.

**THE PARTICIPANTS**

- Core jurisdiction participants were Adams County, Aurora, Brighton, Commerce City, Denver, and Denver International Airport.