



# ADAMS COUNTY

**COLORADO**

BOARD OF COUNTY COMMISSIONERS

Eva J. Henry - District #1  
Charles "Chaz" Tedesco - District #2  
Erik Hansen - District #3  
Steve O'Doriso - District #4  
Jan Pawlowski - District #5

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**STUDY SESSION AGENDA  
TUESDAY  
April 5, 2016**

*ALL TIMES LISTED ON THIS AGENDA ARE SUBJECT TO CHANGE.*

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<b>11:30 A.M.</b>	<b>ATTENDEE(S):</b>	<b>Doug Edelstein / Todd Leopold</b>
	<b>ITEM:</b>	<b>Executive Session Pursuant to C.R.S. 24-6-402(4)(f) for the Purpose of Discussing Personnel Matters Related to County Manager</b>
<b>12:00 P.M.</b>	<b>ATTENDEE(S):</b>	<b>Jeanne Shreve / Kevin Doran</b>
	<b>ITEM:</b>	<b>Legislative Working Group</b>
<b>12:30 P.M.</b>	<b>ATTENDEE(S):</b>	<b>Todd Leopold</b>
	<b>ITEM:</b>	<b>Administrative Item Review / Commissioner Communications</b>
<b>1:00 P.M.</b>	<b>ATTENDEE(S):</b>	<b>CDOT</b>
	<b>ITEM:</b>	<b>CDOT Aerotropolis Visioning Study Presentation</b>
<b>2:00 P.M.</b>	<b>ATTENDEE(S):</b>	<b>Commissioner Tedesco / Raymond Gonzales / Chris Kline</b>
	<b>ITEM:</b>	<b>Foster Parent and Kinship Support Four Point Plan</b>
<b>3:00 P.M.</b>	<b>ATTENDEE(S):</b>	<b>Chris Kline</b>
	<b>ITEM:</b>	<b>Head Start Full Day Transition Plan</b>

(AND SUCH OTHER MATTERS OF PUBLIC BUSINESS WHICH MAY ARISE)

\*\*\*AGENDA IS SUBJECT TO CHANGE\*\*\*



## STUDY SESSION AGENDA ITEM

<b>DATE:</b> April 5, 2016
<b>SUBJECT:</b> Aerotropolis Study Session
<b>FROM:</b> Abel Montoya
<b>AGENCY/DEPARTMENT:</b> Office of Long Range Strategic Planning
<b>ATTENDEES:</b> Abel Montoya, Rachel Bacon, Jim Siedlecki, Norman Wright, Kristin Sullivan, Jeffery Maxwell, Christopher Primus, Mary Speck, HDR, members of consultant team
<b>PURPOSE OF ITEM:</b> Information/Update
<b>STAFF RECOMMENDATION:</b> Information

### **BACKGROUND:**

The Colorado Aerotropolis Visioning Study, funded by a Federal Highway Administration grant, along with additional funds from DIA, collaboratively engaged local jurisdictions to determine the land use and infrastructure requirements that could enhance economic development surrounding DIA. The Visioning Study was conducted independently from the political process that led to the voter approval of the IGA Amendment in 2015. The Colorado Department of Transportation (CDOT) administered the study as a neutral, objective party facilitating the identification of the benefits and impacts of a proactively planned Aerotropolis infrastructure surrounding the airport. An infrastructure framework for transportation, water, wastewater, power, and drainage is critical to fostering and supporting economic development surrounding DIA.

### **AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:**

Office of Long Range Strategic Planning; Community & Economic Development; Communications; Transportation

### **ATTACHED DOCUMENTS:**

Aerotropolis study briefing PPT, Draft Colorado Aerotropolis Executive Summary, Draft Aerotropolis Summary Report, Attach A Draft Colorado Aerotropolis Outreach, Attach B Draft Colorado Aerotropolis Peer Aerotropolis Memo, Attach C Draft Colorado Aerotropolis Infrastructure Development, Attach D Draft Colorado Aerotropolis Assessment of Growth Projections, Attach E Draft Colorado Aerotropolis Economic and Financial Analysis, Attach F Draft Colorado Aerotropolis Governance Options, Attach A App A Steering Agendas/Presentations, Attach A App B SRC Agendas/Notes/Presentations, Attach A App C Stakeholder Jurisdictions, Attach A App D Study Coordination



**FISCAL IMPACT:**

Either mark X  if there is no fiscal impact or provide the following information for the recommended action:

Fund(s):	
Cost center(s):	
Self-generated / dedicated revenues:	\$
Annual operating costs:	\$
Annual net operating (cost) / income:	\$
Capital costs:	\$
Expenditure included in approved operating budget:	\$
Expenditure included in approved capital budget:	\$
New FTEs requested:	

**APPROVAL SIGNATURES:**

**APPROVAL OF FISCAL IMPACT:**

  
\_\_\_\_\_  
Todd Leopold, County Manager

  
\_\_\_\_\_  
Nancy Buner  
Budget / Finance

  
\_\_\_\_\_  
Raymond H. Gonzales, Deputy County Manager

\_\_\_\_\_  
Ed Finger, Deputy County Manager

STUDY BRIEFING

# COLORADO AEROTROPOLIS

## VISIONING STUDY



Brighton™



Commerce  
CITY



DENVER  
THE MILE HIGH CITY





An aerial photograph of an airport terminal and surrounding urban development, rendered in a yellow and grey color scheme. The terminal is a large, circular structure with a prominent runway-like pattern on its roof. It is surrounded by various buildings, parking lots, and roads, illustrating an aerotropolis layout.

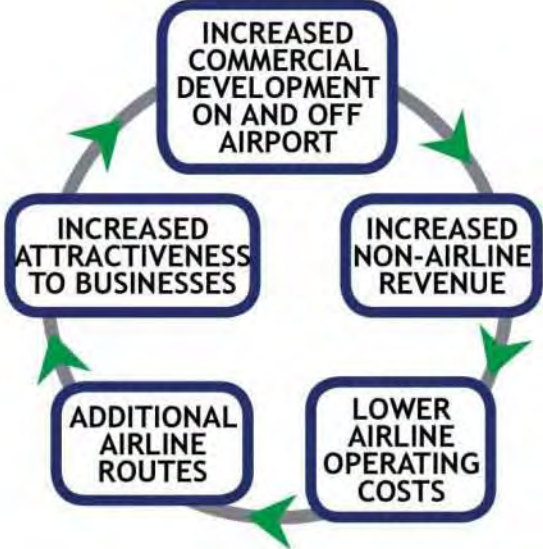
## WHAT IS AN AEROTROPOLIS?

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



# IMPORTANCE OF DEVELOPMENT

+ SUSTAINED ECONOMIC DEVELOPMENT CYCLE



+ COMPETITIVE WITH AEROTROPOLISES GLOBALLY





## ***FUTURE OPPORTUNITIES***

**>\$1 BILLION**

IN PLANNED ROADS NEAR DIA

**25,000 ACRES**

OF PLANNED DEVELOPMENTS NEAR DIA

POTENTIAL AT DIA TO BUILD

**6 MORE RUNWAYS**

**DEN IS 25 MILES**

FROM DOWNTOWN DENVER IN A  
NATURAL EXPANSION AREA

**COMMUTER RAIL**

LINE OPENS TO DOWNTOWN  
DENVER IN APRIL 2016

**1,500 ACRES**

OF NET LEASABLE DIA PROPERTY





# 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



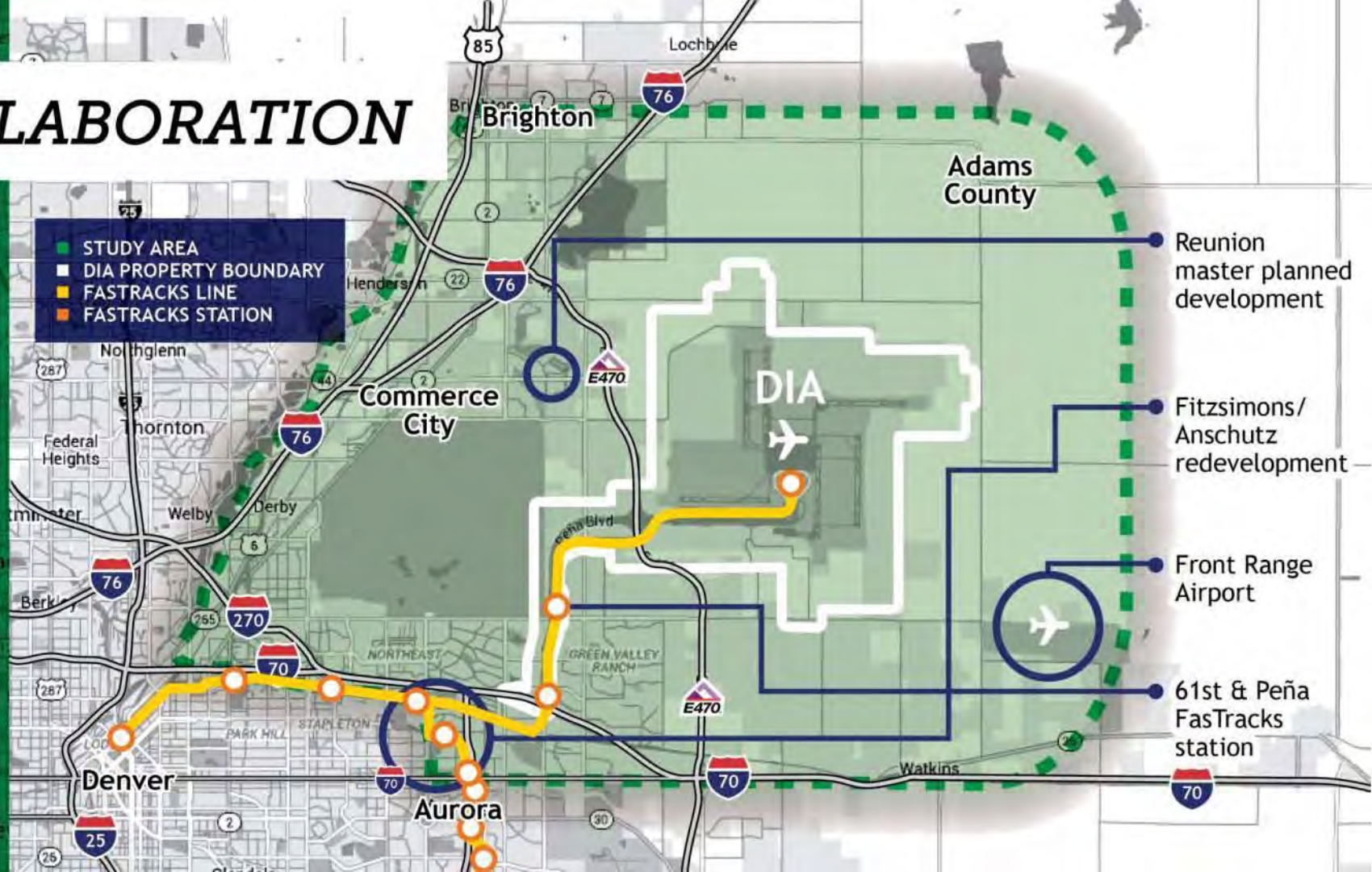
IDENTIFY A FRAMEWORK FOR COLLABORATION ON INFRASTRUCTURE INVESTMENTS



OUTLINE GOVERNANCE OPTIONS TO IMPLEMENT INVESTMENTS

# COLLABORATION

- STUDY AREA
- DIA PROPERTY BOUNDARY
- FASTRACKS LINE
- FASTRACKS STATION



Reunion master planned development

Fitzsimons/Anschutz redevelopment

Front Range Airport

61st & Peña FasTracks station



# VISION

"A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing."

— COLORADO AEROTROPOLIS VISIONING STUDY PARTICIPANTS

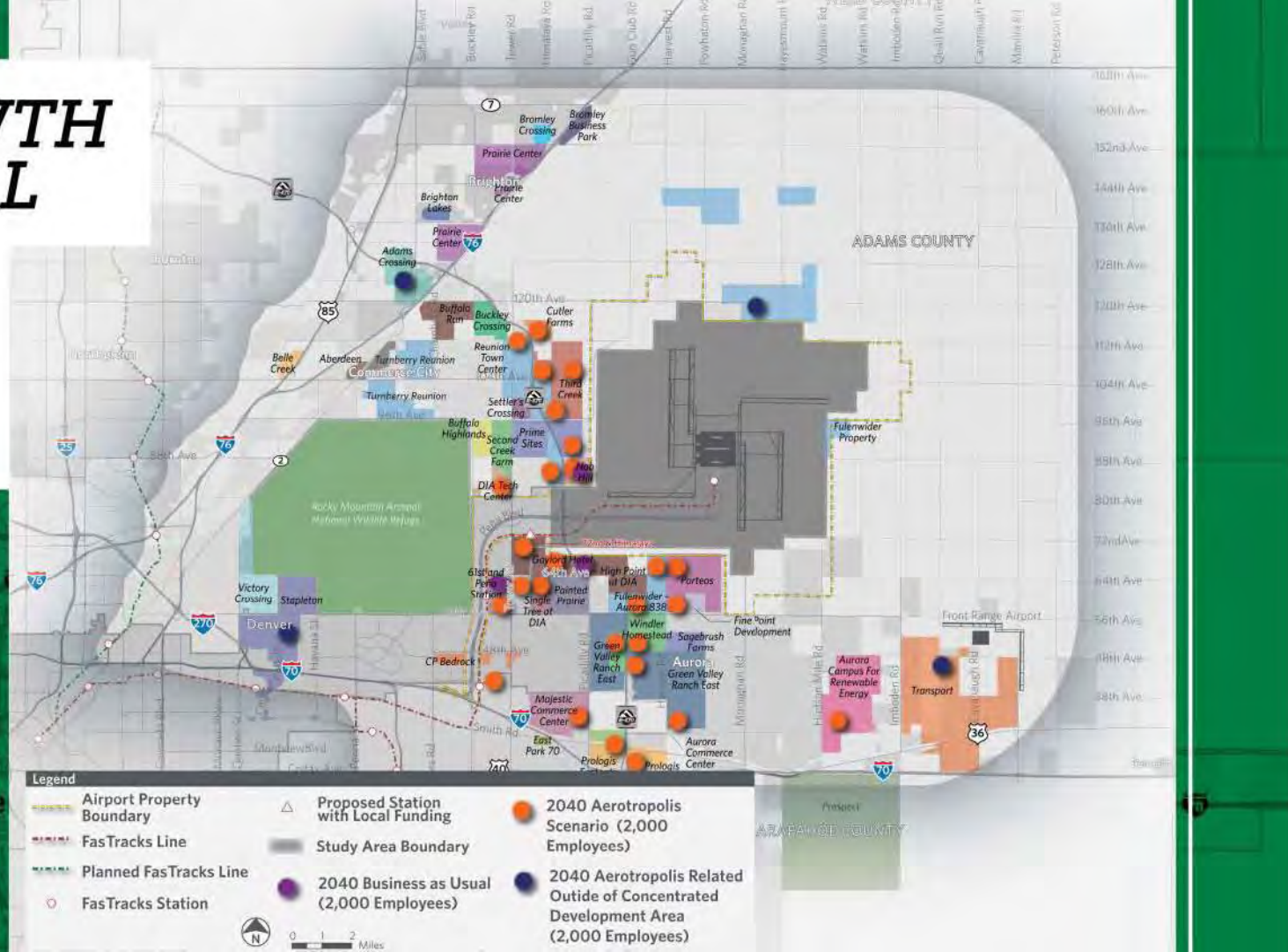




# JOB GROWTH POTENTIAL

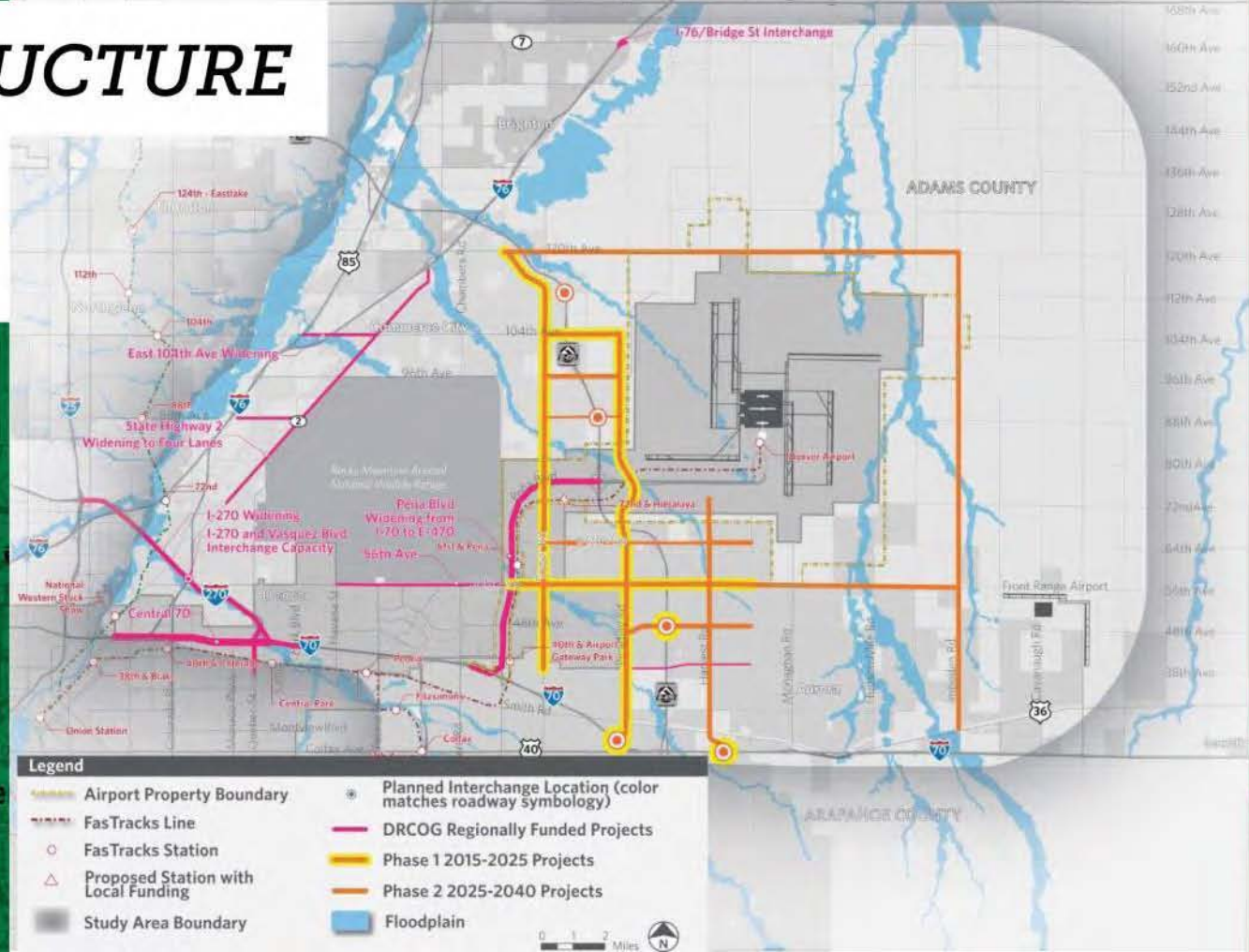
YEAR 2040

- + 74,000 AEROTROPOLIS-RELATED JOBS
- + 6,000 JOBS IF BUSINESS AS USUAL



# INFRASTRUCTURE

## NECESSARY TRANSPORTATION INFRASTRUCTURE IMPROVEMENTS





# ECONOMIC ANALYSIS THROUGH 2040

**74,000  
NEW JOBS**

BY 2040, A PROACTIVELY PLANNED AEROTROPOLIS COULD GENERATE AN ADDITIONAL 18,500 ON-AIRPORT AND 55,500 OFF-AIRPORT JOBS



**NEW DEVELOPMENT**  
18 TO 32 MILLION SQUARE FEET OF  
ADDITIONAL COMMERCIAL DEVELOPMENT



**ASSESSABLE PROPERTY VALUES  
INCREASED BY \$30 BILLION**



**ADDITIONAL TAX REVENUE  
TO \$600-\$630 MILLION**

**210,000  
RESIDENTS**

LIVING IN AND NEAR THE  
COLORADO AEROTROPOLIS AREA



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



**CONSTRUCTION**  
UP TO 9,500 DIRECT AND 3,200 INDIRECT  
CONSTRUCTION JOBS OVER 25 YEARS



**INCREASED LABOR PRODUCTIVITY  
"AGGLOMERATION" EFFECT**

# ***RECOMMENDED FRAMEWORK MOVING FORWARD***

## **NEAR-TERM ACTIONS**

- + ESTABLISH REGIONAL ENTITY
- + FURTHER STUDIES
  - + INFRASTRUCTURE SYSTEMS NEED
  - + ECONOMIC
- + GLOBAL BRANDING
- + MASTER PLAN

## **LONG-RANGE GOALS**

- + GLOBAL RECOGNITION
- + ON- AND OFF-AIRPORT DEVELOPMENT
- + DIA ECONOMIC SUCCESS
- + SUSTAINABLE DEVELOPMENT





DISCUSSION

# COLORADO AEROTROPOLIS

VISIONING STUDY



Brighton™



Commerce  
CITY



DENVER  
THE MILE HIGH CITY





# 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.





# HISTORY

## AEROTROPOLIS VISIONING STUDY OBJECTIVES

### WHAT IS AN AEROTROPOLIS?

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

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

## 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.

## 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

## VISIONING STUDY & IGA AMENDMENT

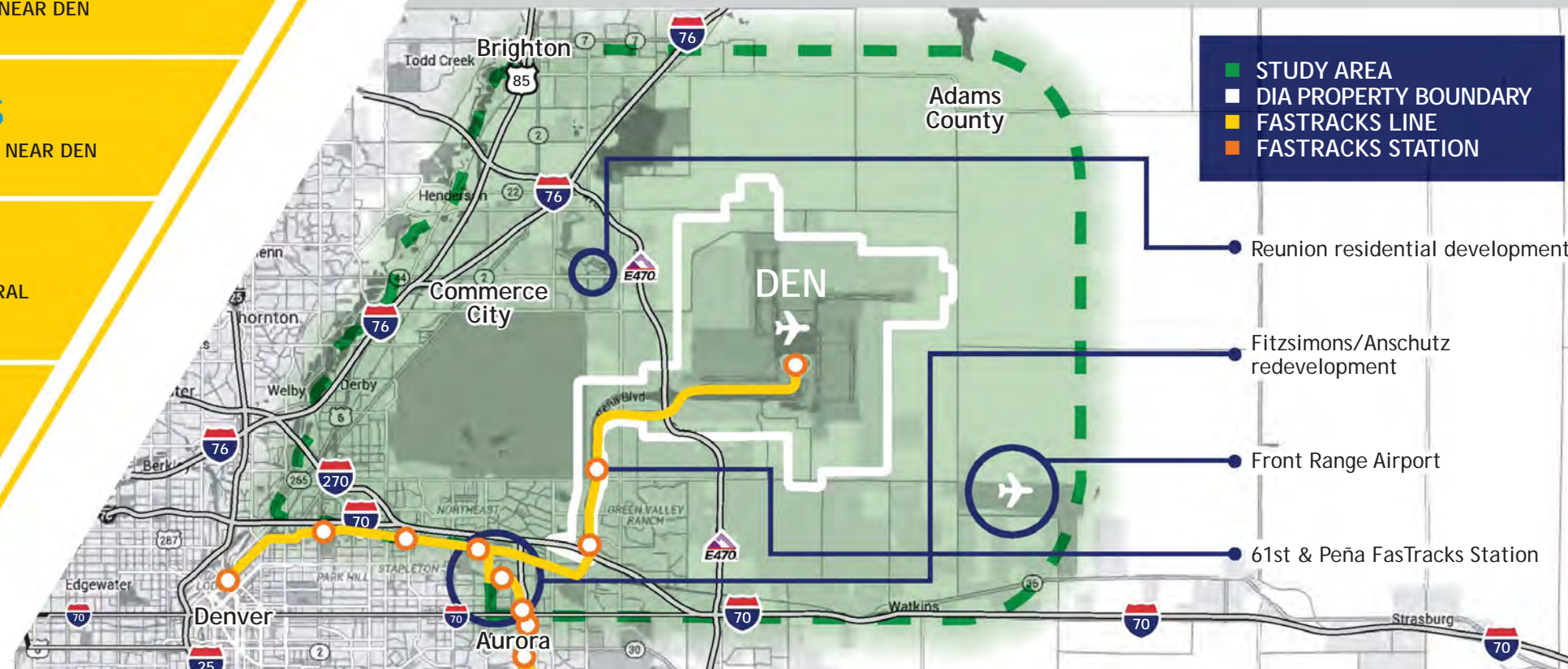
During the course of the Visioning Study, Denver and Adams County passed Ballot Measure 1A, an amendment to their original Intergovernmental Agreement regarding DEN. Both the study and the amendment were motivated by a collaborative vision for future development to spur growth and change on and around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



## 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.





# VISION

"A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing."

— COLORADO AEROTROPOLIS VISIONING STUDY PARTICIPANTS

## STUDY PARTICIPATION

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



124 INDIVIDUALS PARTICIPATED IN THE STUDY



STAKEHOLDERS FROM LOCAL AND REGIONAL PLANNING AND ECONOMIC DEVELOPMENT AGENCIES

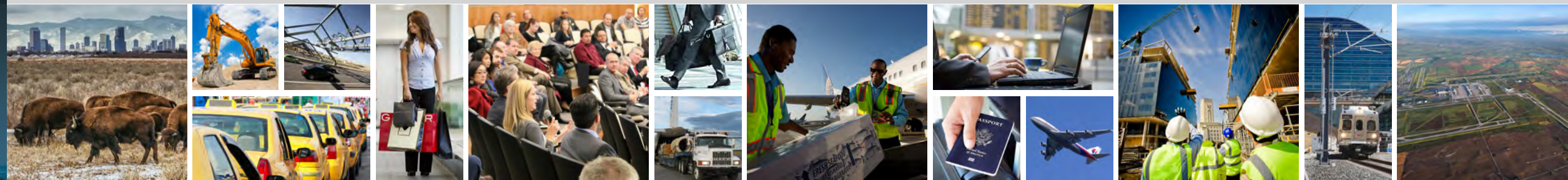


37 OPEN MEETINGS THAT GENERATED IDEAS THROUGH DISCUSSION AND EXERCISES



### THE CORE

- ▶ 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.



# VISIONING STUDY

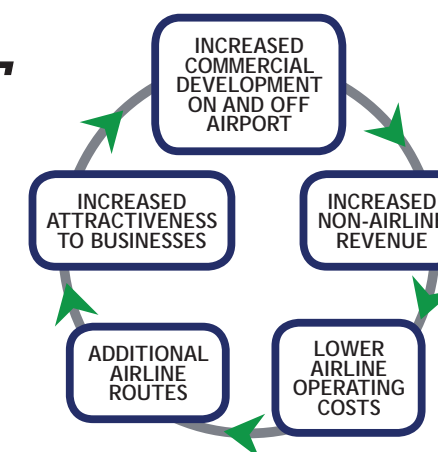
## RESEARCH

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

## CYCLE OF DEVELOPMENT

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.



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



# FINDINGS

Participants recognize need for infrastructure investments

The established local plans have many commonalities

Participants share enthusiasm for catalytic actions

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

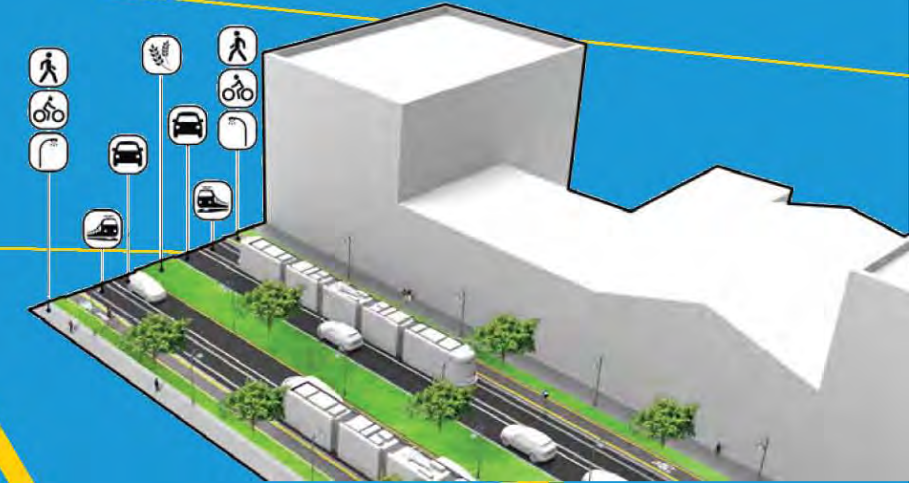
Local revenues could range between \$705 to \$735 million and are roughly similar to the costs associated with additional infrastructure investment of \$725 to \$775 million

## 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.

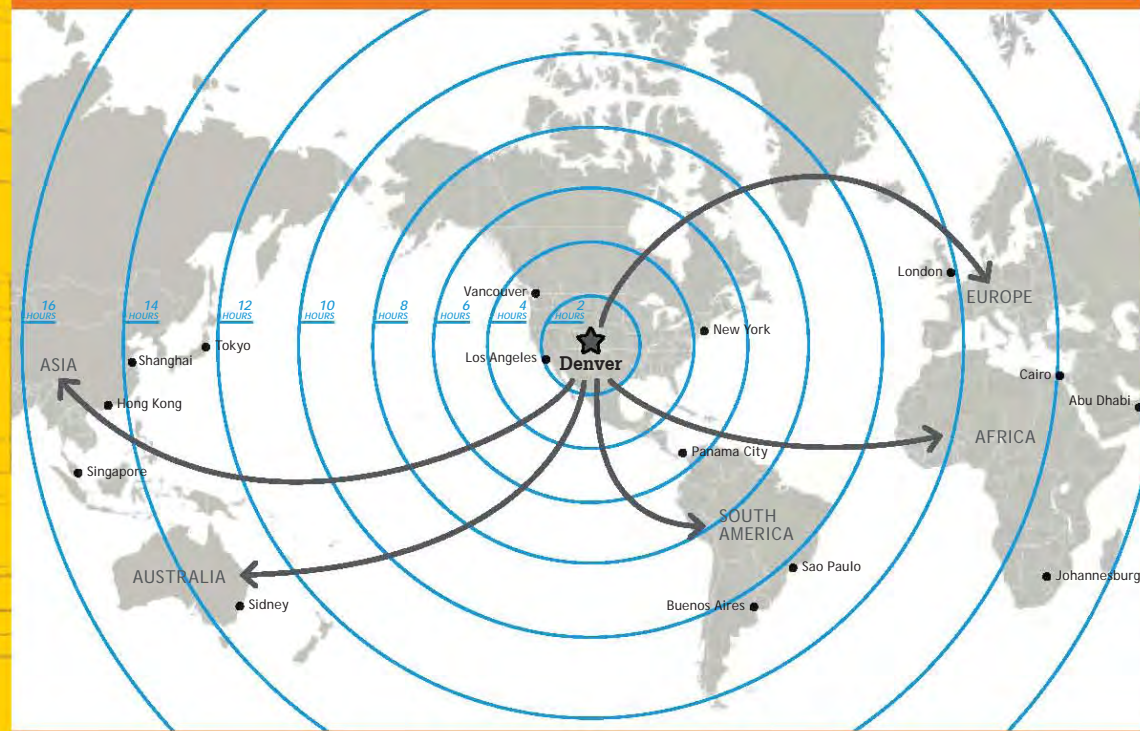
The focus of the infrastructure investment would be to provide fast and efficient multimodal movement options for delivery of people, goods, and information between DIA and the surrounding development areas.

REPRESENTATIVE MULTIMODAL CONCEPT FOR AEROTROPOLIS ARTERIAL



## QUANTIFYING AEROTROPOLIS ECONOMIC POTENTIAL

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



DIA IS A REGIONAL ASSET WITH IMMENSE ECONOMIC DEVELOPMENT POTENTIAL

74,000 NEW JOBS

BY 2040, A PROACTIVELY PLANNED AEROTROPOLIS COULD GENERATE AN ADDITIONAL 18,500 ON-AIRPORT AND 55,500 OFF-AIRPORT JOBS

210,000 RESIDENTS

LIVING IN AND NEAR THE COLORADO AEROTROPOLIS AREA



**NEW DEVELOPMENT**  
18 TO 32 MILLION SQUARE FEET OF ADDITIONAL COMMERCIAL DEVELOPMENT



**CONSTRUCTION**  
UP TO 9,500 DIRECT AND 3,200 INDIRECT CONSTRUCTION JOBS OVER 25 YEARS



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



**INCREASED LABOR PRODUCTIVITY**  
FROM "AGGLOMERATION" EFFECT THAT ATTRACTS HIGHLY QUALIFIED TALENT POOL TO THE ROCKY MOUNTAIN REGION



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



**EMPLOYMENT NODES**  
WHERE SIMILAR INDUSTRIES AND BUSINESSES CAN CLUSTER TOGETHER

## GOVERNANCE

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.

## 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





# Colorado Aerotropolis Visioning Study

## Colorado Aerotropolis Visioning Study

**Draft**  
Summary Report  
for the  
Colorado Aerotropolis Visioning Study

Prepared by  
HDR  
and  
Arland Land Use Economics

March 2016



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## **Appendix**

Amendment to 1988 Annexation and Intergovernmental Agreements on a New Airport - June 2015

### **Attachments**

Attachment A: Colorado Aerotropolis Visioning Study Outreach Working Paper

Attachment B: Examples of Aerotropolis Cities and Aerotropolises Worldwide Memo

Attachment C: Infrastructure Development for the Colorado Aerotropolis Study Area Working Paper

Attachment D: Assessment of Growth Projections for the Colorado Aerotropolis Study Area Working Paper

Attachment E: Colorado Aerotropolis Economic and Financial Analysis Working Paper

Attachment F: Governance Options for the Colorado Aerotropolis Working Paper

DRAFT



## 1.0 Definition of an Aerotropolis

An Aerotropolis is an urban plan in which the layout, infrastructure, and economy are centered on an airport.

## 2.0 Background

### 2.1 Denver International Airport Development

The City and County of Denver completed a New Airport Master Plan Study in 1986 that identified the need for a new airport. Because the new airport was to be located in Adams County, Denver and Adams County executed an Intergovernmental Agreement (IGA) and an Annexation Agreement in 1988. The purpose for the IGA was to agree that a new airport should replace Stapleton and economic benefits would be realized by Adams County and Denver, to set noise requirements, and to define land use in and around the airport property. The annexation agreement was for 53 square miles of Adams County land to Denver to build a world-class airport with expansion possibilities. Adams County voters approved the annexation.

The IGA allowed Denver to proceed with the planning and construction of Denver International Airport (DIA), which opened in 1995.

### 2.2 2015 IGA Amendment

Twenty years later, only a relatively small amount of development has arisen near the airport. Elected officials in both Denver and Adams County realize the need to spur development on and off airport. The original IGA allowed only aviation-related development on the airport property. This led to an amendment to the 1988 IGA, which was approved by Denver and Adams County voters in November 2015. Among other things, the amendment (included in the Appendix) allows Denver and Adams County to create a 1,500-net-leasable-acre on-airport pilot program with expanded commercial development possibilities. Adams County and the municipalities within and Denver will share (50-50) tax revenues generated from new commercial uses, while DIA will retain all lease revenue from new commercial businesses. Further, the amendment states Denver and Adams County communities will create a regional entity to jointly promote and market development opportunities, and assist in coordination of land use and infrastructure planning efforts.

### 2.3 Colorado Aerotropolis Visioning Study

The Colorado Aerotropolis Visioning Study, funded by a Federal Highway Administration grant, along with additional funds from DIA, collaboratively engaged local jurisdictions to determine the land use and infrastructure requirements that could enhance economic development surrounding DIA. The Visioning Study was conducted independently from the political process that led to the voter approval of the IGA Amendment in 2015. The Colorado Department of Transportation (CDOT) administered the study as a neutral, objective party facilitating the identification of the benefits and impacts of a proactively planned Aerotropolis infrastructure surrounding the airport. An infrastructure framework for transportation, water, wastewater, power, and drainage is critical to fostering and supporting economic development surrounding DIA.

### 2.3.1 Horizon Year

It is recognized that the full development of a Colorado Aerotropolis would take many decades, perhaps to 2075 or beyond. The year 2040 (25 years from now) was used for planning and analysis because of the availability of planning data, and it is anticipated that initial steps for the Colorado Aerotropolis development could take place in the next 10 to 15 years

### 2.3.2 Objectives

CDOT had the following objectives for the study:

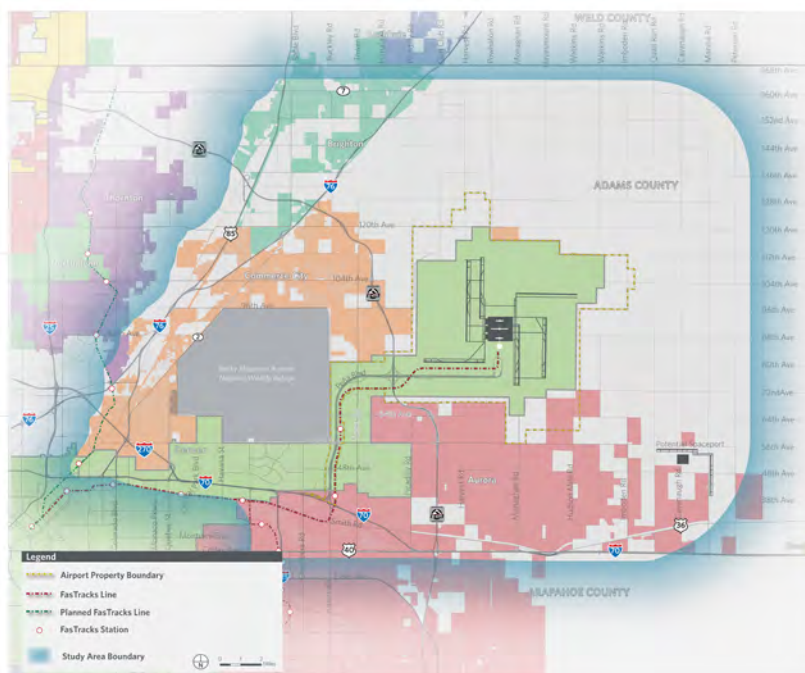
- Agree on a collaborative vision for a Colorado Aerotropolis.
- Learn about the aerotropolis concept.
- Identify commonalities of the local plans.
- Quantify the potential for economic growth—with or without a Colorado Aerotropolis.
- Identify a framework of possibilities for collaboration on infrastructure investments.
- Outline regional governance options to implement investments in transportation, water, wastewater, drainage, power, and communications systems.

This report documents how the study has met the objectives.

### 3.0 Study Area

The Colorado Aerotropolis study area boundaries shown in Figure 1 defined an area of influence that impacts or will be impacted by the current and future economic conditions both on and off airport.

Figure 1 Study Area for the Colorado Aerotropolis Visioning Study



Source: Aerotropolis Study Team.



### 3.1 Concentrated Development Area

For planning purposes, the study area was divided into Districts. These are illustrated in Figure 2. Given the disparity in the projected development among the study area Districts, the study team decided to focus the analysis on the South, Peña and West Districts to the south and west of DIA. This “Concentrated Development Area” is shown in Figure 3.

Figure 2 Study Area Planning Districts

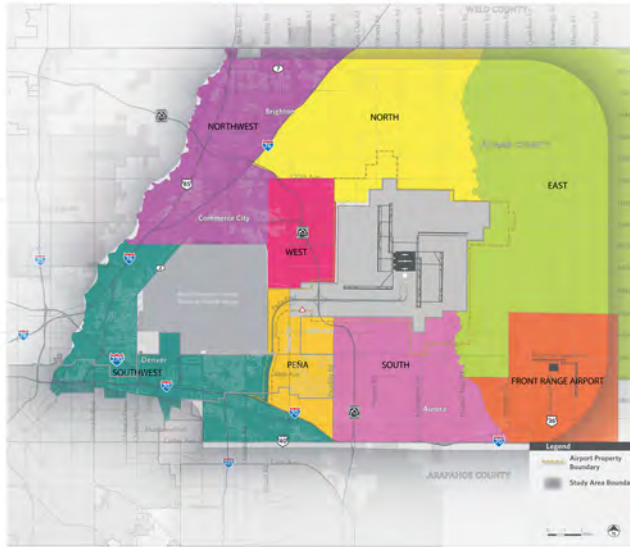
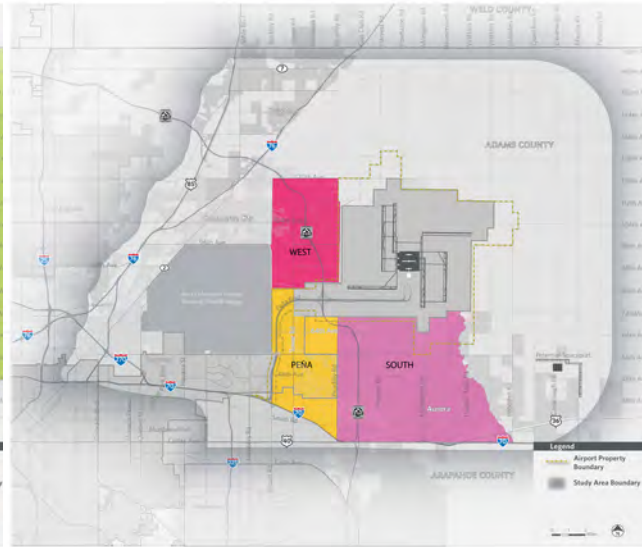


Figure 3 South and West Concentrated Development Area



Source: Aerotropolis Study Team.

### 4.0 Engagement/Collaboration

Recognizing the need to collaborate to create economic opportunities, CDOT brought key stakeholders together to create the vision and framework for implementing development in the area. CDOT created a forum for the primary stakeholder jurisdictions and other stakeholders to identify collaborative, catalytic actions to spur growth and change, and used this opportunity to be proactive in transportation network development in a targeted metropolitan Denver growth area.

Adams County, City of Aurora, City of Brighton, City of Commerce City, City and County of Denver, as well as DIA, were the primary stakeholders in the Visioning Study.

Any study success is due largely to the engagement process that CDOT conducted and the willingness of the jurisdictions to participate and collaborate. Several infrastructure, transportation, and economic development agencies were also engaged. This comprehensive



*Regular meetings were open to all interested parties and captured ideas through discussion and facilitated exercises.*



outreach created an atmosphere of cooperation and excitement about the potential of a Colorado Aerotropolis.

The *Colorado Aerotropolis Visioning Study Outreach* working paper (Attachment A) (Aerotropolis Study Team 2016) has the agendas, presentations, and meeting notes for the meetings held over the course of the study. The study team held 37 meetings and talked to more than 124 individuals about the Colorado Aerotropolis concept.

## 4.1 Committee Structure

### 4.1.1 Steering Committee

The Steering Committee was made up of senior-level staff from the area agencies. The Steering Committee membership list is included in Attachment A, *Colorado Aerotropolis Visioning Study Outreach* working paper.

The Steering Committee provided senior advisory input on the corridor vision, alternatives, and improvement phasing priorities at these key project milestones:

- Project Introduction and Concept Development
- Assessment of Initial Scenarios
- Review of Refined Scenarios and Screening
- Draft Framework Observations and Recommended Actions

### Colorado Aerotropolis Vision

At the onset of the study, the representatives from the primary stakeholders jointly developed a vision for a Colorado Aerotropolis:

***A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.***

### 4.1.2 Study Review Committee

The Study Review Committee members were technical staff from the primary stakeholders, study area local and state government agencies, and other regional partners. These included public works departments, planning departments, economic development departments and corporations, and other agencies. The membership list is included in Attachment A.

The Study Review Committee met approximately every four weeks to review study team progress and to provide technical input and feedback to the study team, a total of ten times. The members of the Study Review Committee served as the primary point of contact for their respective organizations and were responsible for keeping their constituent groups and elected officials on the Steering Committee updated on the study information and progress.

## 4.2 Coordination Meetings

### 4.2.1 Primary Stakeholders One-on-One Meetings

In addition to the Steering Committee and Study Review Committee meetings, the study team met individually with the primary stakeholders. All of the jurisdictions attended an initial coordination meeting. One-on-one meetings were held with each of them over the course of the study to discuss their specific plans and issues. Separate meetings were held to gain input

on governance options for a potential regional entity. In addition, a coordination meeting with the jurisdictions' Public Information Officers addressed how the agencies might work together to promote a Colorado Aerotropolis in the future. These jurisdictions were:

- Adams County
- City of Aurora
- City of Brighton
- City of Commerce City
- City and County of Denver
- Denver International Airport

#### 4.2.2 Other Agency Coordination Meetings

The study team met with additional infrastructure and economic development agencies to inform them about the study, gather input about their plans, and discuss their specific needs and issues. These included:

- Aurora Water
- CDOT Aeronautics
- Colorado Office of Economic Development and International Trade (OEDIT)
- Denver Regional Council of Governments (DRCOG)
- Denver Water
- E-470 Public Highway Authority
- Front Range Airport
- Central 70 Study Team
- Metro Denver Economic Development Corp. (Metro Denver EDC)
- Metro Wastewater Reclamation District
- Peña Boulevard Study Team
- Regional Transportation District (RTD)
- South Adams County Water and Sanitation District
- Urban Drainage and Flood Control District

### 5.0 Understanding the Concept

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

#### 5.1 Global Peer Aerotropolises

A Colorado Aerotropolis at DIA would have to compete with these existing and planned aerotropolises to attract businesses and development. However, the airport has numerous resources and advantages to support businesses that would locate near an Aerotropolis—current and future runway capacity, vast acreage of developable land on and off airport property, access to multiple highways and rail lines, and a central location within the North

American continent. These factors indicate Colorado has great potential for a vibrant aerotropolis.

The aerotropolises worldwide are in various stages of development with varying degrees of success. The brief overviews of some peer aerotropolises included below give insight into the possibilities and challenges associated with bringing the Colorado Aerotropolis concept to reality. Further information is available in the study memo, *Examples of Aerotropolis Cities and Aerotropolises Worldwide* (Attachment B) (Aerotropolis Study Team 2016).

**Amsterdam Schiphol Airport/Amsterdam District Zuidas, The Netherlands.** The airport developed around the international transport of flowers and is operated by the Schiphol Group—a public-private partnership. Development has occurred both on- and off airport property. The 670-acre aerotropolis city, Amsterdam District Zuidas, has office space, restaurants, residential units, a university, a medical center; and the Netherlands' largest convention center located just six minutes from the airport.



Amsterdam Schiphol Airport/Amsterdam District Zuidas, The Netherlands

**Chicago O'Hare International Airport, Illinois.** A new planned airport was stalled because of lack of collaboration and consensus on its location. Instead, the existing airport is being expanded, and opportunities for new development around the airport are limited.

**Dallas/Fort Worth Airport, Texas.** This is considered one of the most successful aerotropolises largely because of the vision and collaboration of public and private entities and their ability to attract a wide range of businesses. For instance, four Fortune 500 world headquarters (and eight of the Fortune 1,000 world headquarters) have located just east of the airport. Recent developments include a 15.3-acre lease for the world's largest Infiniti automobile dealership with rail connection to Dallas via DART; and the first phase of the airport's first mixed-use development, Southgate Plaza, which will include restaurants, a hotel, and the airport's new headquarters building.



Dallas/Fort Worth Airport, Texas

**Detroit International Airport, Michigan.** There are plans for an aerotropolis concept on 600,000 acres of land between Detroit and Ann Arbor. Lack of collaboration has delayed getting the idea off the ground.

**Incheon International Airport/Songdo International Business District, Seoul, Korea.** The airport was proactively planned and implemented to capitalize on the market in China and to compete with Hong Kong. The global business hub Songdo opened in 2009 as a Free Economic Zone, meaning tax benefits are provided by the Korean government for foreign firms and foreigners, as well as a simpler regulatory regime. It has office and convention space, hotels, residential and retail developments, schools, health care facilities, recreation spaces (100-acre Central Park and pocket parks and canal system), and high-tech industry tenants.



Incheon International Airport/Songdo International Business District, Seoul, Korea

**Memphis International Airport, Tennessee.**

Aerotropolis development occurred quickly after FedEx chose Memphis as its headquarters. Its cargo super-hub employs roughly 30,000 people in the Memphis area, and the airport generates approximately 166,000 jobs. Today, the city is taking a more proactive role in fostering a diversity of development. City leaders are encouraging biotech and biosciences distribution and climate-controlled distribution operations to spur additional growth.

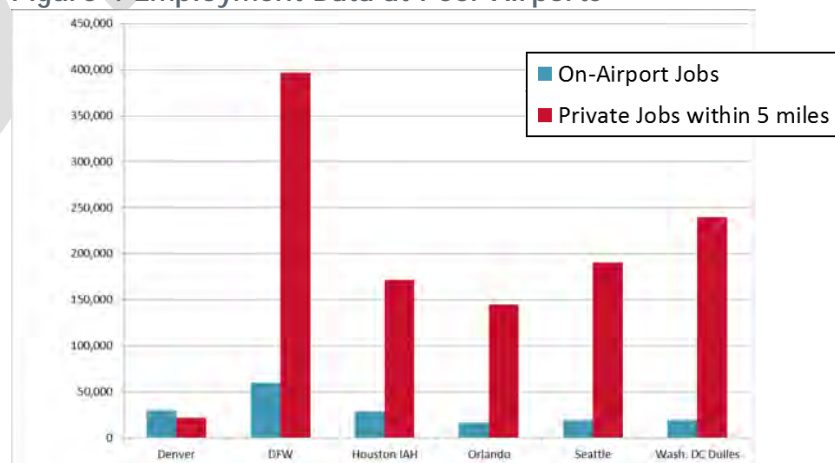
**Philadelphia International Airport, Pennsylvania.** Despite limited available land, city officials have recently developed aggressive plans for a concentrated development area around the airport that would include offices, restaurants, retail stores, and more.

**5.1.1 DIA Compared to Peer Airports (Employment Data)**

Several U.S. airports were examined to illustrate how an airport can attract commercial development and jobs and become the center of a strong economic ecosystem. In general, airports similar to DIA have attracted from 6 to 13 jobs off-airport property (within five miles) for every 1 job on airport property (including non-aviation related jobs located away from the terminal and all aviation jobs at and around the terminal) (Kasarda 2012).

Figure 4 compares on-airport and off-airport jobs at DIA to five airports that have similarities to DIA. These airports are not in close proximity to their respective central business districts and were built in areas with relative scarcity of development at the time of construction, just like DIA. The DIA area lags far behind these similar airports in proximate private job

Figure 4 Employment Data at Peer Airports



Source: Kasarda 2012.



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

## 5.2 Jeff Fegan and Dallas/Fort Worth Airport Aerotropolis

An aerotropolis is as varied as the conditions that shape it. The stories about how they are conceived and grow offered lessons learned for a Colorado Aerotropolis vision. CDOT invited former Dallas/Fort Worth (DFW) Airport CEO, Jeff Fegan, as an aerotropolis expert to share insights.



*Jeff Fegan, who was instrumental in setting the framework for the successful DFW aerotropolis, presented his experience to more than 80 individuals from agencies in the Denver metropolitan area.*

Highlights of Jeff's presentation included:

- DFW opened in 1972 and encompasses 30 square miles, is part of four cities, and is managed jointly by Dallas and Fort Worth.
- DFW's commercial development focuses on air-related warehouse and distribution activities but has flexibility to attract others, like medical devices and sports merchandise. DFW hosts three hotels, golf, corporate headquarters and four auto dealerships.
- A consolidated car rental operation began what turned out to be DFW's permanent revenue-sharing arrangement with the four host cities.
- A cooperative planning task force, led by DFW's vice president of commercial development, coordinates leads and prevents developers from playing one city off against another.
- Early DFW development was episodic until surrounding growth occurred. Jeff credited the North Central Texas Council of Governments for leading the development of the surrounding highway transportation infrastructure network that feeds the airport from all four directions.
- Today, DFW employs more than 55,000 on airport and has generated almost 400,000 other jobs within a 5-mile radius.

- Lessons learned:
  - Success takes a vision and long-term commitment.
  - Success requires communication and cooperation, which eventually leads to trust.
  - Must have a very strong understanding of the marketplace - existing and new opportunities.
  - Take risks, have patience, build trust.
  - Important to understand development needs. Infrastructure must be in place.

## 6.0 Scenario Analysis

### 6.1 Goal of Analysis

The goal of the high-level analysis was to compare two hypothetical scenarios to examine the conceptual economic and fiscal benefits of developing an aerotropolis compared to the allowing development to occur at the currently projected level. The two scenarios were identified as Business as Usual and Aerotropolis.

### 6.2 Scenario Definitions

#### 6.2.1 Business as Usual Scenario

This scenario represents a continuation of past trends reflecting development patterns near the airport. It is a hypothetical case to contrast with an IGA-enabled Aerotropolis Scenario. It is based on the following:

- Reflects the future socioeconomic forecast dataset in the *DRCOG 2040 Fiscally constrained Regional Transportation Plan* (DRCOG 2040 RTP) (DRCOG 2015). (DRCOG is a regional planning organization where local governments collaborate to set guidelines and allocate funding of transportation investments, as documented in the RTP.)
- Assumes the state and federally funded projects as identified in the *DRCOG 2040 RTP*.
- No amended Intergovernmental Agreement (IGA); therefore, no new on-airport nodes or accesses.

#### 6.2.2 Aerotropolis Scenario

The Aerotropolis Scenario represents a higher level of regional coordination and marketing relative to infrastructure and development surrounding DIA. It was largely compiled from information derived from master plans from each of the primary stakeholders, as described in detail in the *Infrastructure Development for the Colorado Aerotropolis Study Area* working paper (Attachment C) (Aerotropolis Study Team 2016), and data on peer airport developments across the globe. The Aerotropolis Scenario has the following assumptions:

- 2040 Horizon Year. Only 25 years into the future, 2040 was used because of availability of data for that horizon year. It is recognized that a Colorado Aerotropolis would develop over several decades - for another 50 years and beyond.
- An executed IGA Amendment - additional on-airport development, shared revenues, and new accesses onto the DIA property.

- New regional governance mechanism for the Aerotropolis.
- The Aerotropolis attracts additional development from the region, the state, North America, and the globe.
- Assumes the advancement of locally funded transportation projects, as identified in the *DRCOG 2040 RTP*, and some additional roadway improvements.

The analysis for the Aerotropolis Scenario explored different approaches for estimating a range of reasonable projections of employment activity under an Aerotropolis Scenario.

### 6.3 Growth Potential

The fundamental tenet is that, by opening up additional land for development and creating favorable market conditions through infrastructure investment, an Aerotropolis Scenario would induce additional growth above and beyond the trend portrayed by Business as Usual Scenario. Conceptual estimates of growth potential were prepared for each of the hypothetical scenarios, based on available information at the time of this study. More detail about the assumptions and process used to develop the estimates is included in the *Assessment of Growth Projections for the Colorado Aerotropolis Study Area* working paper (Attachment D) (Aerotropolis Study Team 2016). It is recognized that assumptions and numbers will change when more detailed studies are conducted.

#### 6.3.1 Business as Usual Scenario Growth Projection

In developing the assumptions and methodology for estimating benefits, the analysis used the DRCOG 2040 population and employment projections under the Business as Usual Scenario defined in Section 6.2.1. The Business as Usual Scenario assumes there is no coordinated investment in land use planning or additional infrastructure for an Aerotropolis Scenario. The Business as Usual Scenario would see incremental employment gains of about 6,000 jobs within the Concentrated Development Area, with correspondingly modest levels of real estate development that would be more dispersed.

DRCOG's population and employment projections for the entire Aerotropolis study area and the Concentrated Development Area within the study area are compared in Table 1.

**Table 1 DRCOG Population and Employment Projections - Study Area and Concentrated Development Area**

Area	Population 2015	Population 2040	Employment 2015	Employment 2040
Study Area (Total)	197,100	319,700	145,500	227,700
Concentrated Development Area (43,030 acres)	28,900	48,700	11,200	17,200
% of Region's Total			0.6%	0.7%

Source: DRCOG 2040 RTP.

#### 6.3.2 Aerotropolis Scenario Growth Projection

The study team used the process outlined in the following sections to determine the potential growth under an Aerotropolis Scenario. More detail about the assumptions and process used to develop the estimates is included in the *Assessment of Growth Projections for the Colorado Aerotropolis Study Area* working paper (Attachment D) (Aerotropolis Study Team 2016).

### 6.3.2.1 Amount of Employment Growth

To develop the conceptual amount of potential employment in 2040 under an Aerotropolis scenario, the study team used a series of conservative assumptions. Presuming typical commercial densities for a mix of uses, the 1,500 net leasable acres of on-airport property allowed as an initial development level in the IGA Amendment could have a maximum build-out number of approximately 37,000 employees.

If 50 percent of build-out is reached by 2040, the number of Aerotropolis-related on-airport employees in 2040 could be about 18,500. In general, under a proactively planned Aerotropolis, it is expected that more employment would occur off airport than on airport. Based on data from peer airports presented in Section 5.1.1, a conservative assumption of a 3:1 ratio results in approximately 55,500 new Aerotropolis-related off-airport employees in 2040. The total of new on and off airport jobs associated with the Aerotropolis Scenario is conceptualized at about 74,000.

Therefore, in the Concentrated Development Area, there would be approximately 80,000 jobs, comprised of 18,500 on-airport and 6,000 Business as Usual Scenario growth plus 55,500 new for a total of 61,500 off-airport jobs in 2040. Together with terminal on-airport jobs (air-operations-related), the number of future jobs in the vicinity of the airport could total 143,000 in 2040.

These numbers represent a higher level of employment activity than the current DRCOG 2040 projections. In fact, this is the central premise under investigation by the study: A proactively planned Colorado Aerotropolis is of economic benefit to the region, over and above the normal growth levels projected for the Denver metropolitan area under current trends. It is possible that some of the additional growth would be diverted from elsewhere in the region. However, much of the growth would represent a net gain in economic and fiscal benefits for the Denver metropolitan area because DIA offers the unique commercial opportunities for specialized industry sectors that locate near an airport.

Table 2 tabulates the employment growth projections for the Business as Usual and Aerotropolis Scenarios. The Aerotropolis Scenario employment projections reflect a conservative level of activity given available capacity, rather than a demand market analysis, to make a hypothetical comparison to the Business as Usual Scenario.

**Table 2 Aerotropolis Employment Projections**

Area	Category	2015 Existing	2040 Business as Usual Scenario		2040 Aerotropolis Scenario		
			Growth	Total	Growth from Aerotropolis	Total Growth (includes Business as Usual)	Total
On-Airport	Terminal Related	35,000	17,000	52,000	0	17,000	52,000
	Aerotropolis Related	0	0	0	18,500	18,500	18,500
	Subtotal	35,000	17,000	52,000	18,500	35,500	70,500



Table 2 Aerotropolis Employment Projections

Area	Category	2015 Existing	2040 Business as Usual Scenario		2040 Aerotropolis Scenario		
			Growth	Total	Growth from Aerotropolis	Total Growth (includes Business as Usual)	Total
Off-Airport (Concentrated Devt. Area)	Terminal Related	n/a	n/a	n/a	n/a	n/a	n/a
	Aerotropolis Related	11,000	6,000	17,000	55,500	61,500	72,500
	Subtotal	11,000	6,000	17,000	55,500	61,500	72,500
On- and Off-Airport	Aerotropolis Related Subtotal	11,000	6,000	17,000	74,000	80,000	91,000
	<b>Total</b>	<b>46,000</b>	<b>23,000</b>	<b>69,000</b>	<b>74,000</b>	<b>97,000</b>	<b>143,000</b>

Sources: Aerotropolis Study Team, DRCOG, DIA.

### 6.3.2.2 Allocation of Employment Growth Projections

Under an Aerotropolis Scenario, it is expected that Aerotropolis-related employment would occur mostly within the Concentrated Development Area adjacent to DIA over the 25 years (2015-2040). The development growth would occur in concentrated employment nodes where similar industries and businesses cluster together. The concentration of growth would create an “agglomeration” effect, whereby the proximity of similar industries and businesses to one another increases labor productivity and attracts a highly qualified talent pool.

For purposes of illustrating the potential in land development due to a proactively planned Aerotropolis, the study team performed an unofficial allocation of the employment growth of each of the scenarios. The following Guiding Principles were used to perform this allocation of off-airport jobs:

- Access to Super-Regional Multimodal Transportation Facilities
- Contiguous to Active Developments
- Gravitational Pull of Larger Development(s)
- Connectivity to DIA
- Consideration of Geographic Diversity
- Input from Stakeholders

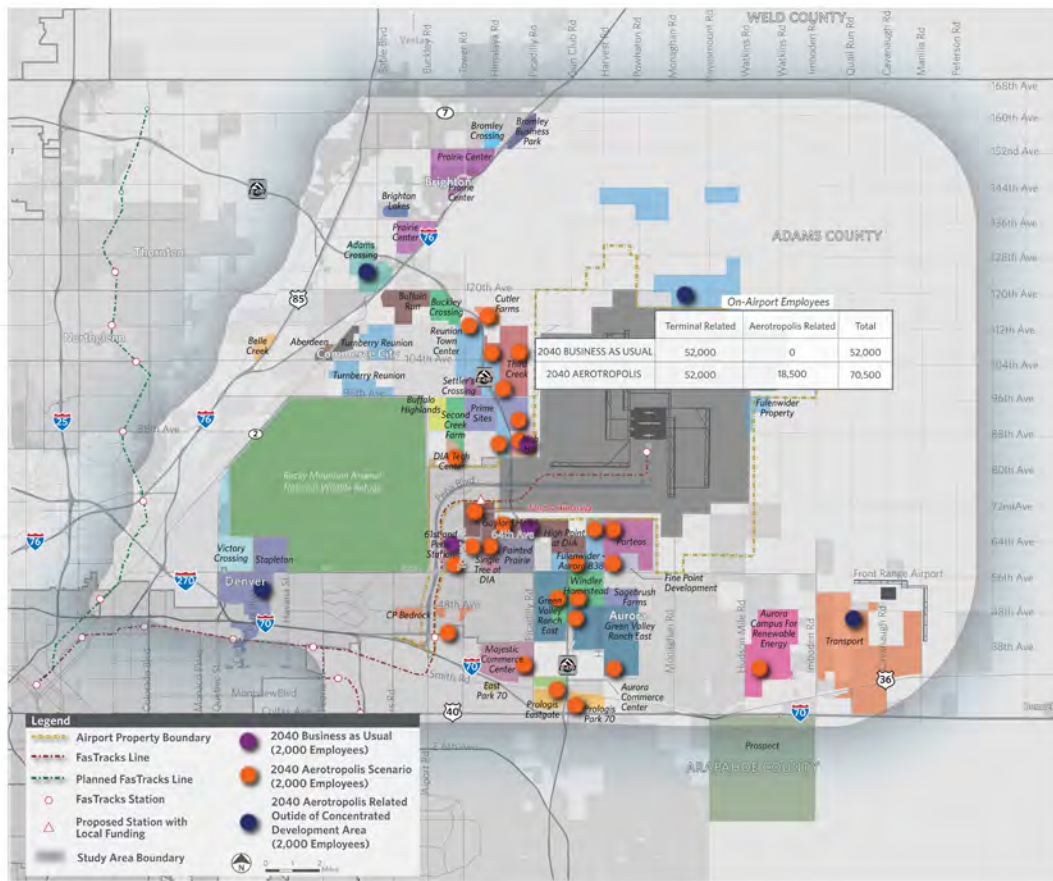
Figure 5 illustrates the current active developments within the Aerotropolis study area and the anticipated distribution of the off-airport jobs.

### 6.3.2.3 Square Footage of New Development

Collectively, over the 25-year period (2015-2040), the employment nodes in the Concentrated Development Area envisioned under an Aerotropolis Scenario are anticipated to attract jobs in a variety of industry sectors supporting (and supported by) operations at DIA. A “low” to “high” range of development square footage (SF) estimate was developed. Both assume the

same amount of jobs growth, but a different distribution of those jobs among various employment sectors and associated levels of demand for office, retail, and industrial space. The mix of jobs associated with the Low SF scenario closely resembles the density of existing Denver Technological Center (DTC), with a higher concentration of employment growth in sectors that demand office space. The High SF scenario closely resembles the mix of off-airport jobs inventoried around Los Angeles International Airport (LAX), which leverages the proximity to major trade corridors (interstate highways and the Ports of Los Angeles and Long Beach) and its high volume of international flights to attract a high percentage of space-intensive industrial and service jobs.

Figure 5 Allocation of Employment Growth - Aerotropolis Scenario



Source: Aerotropolis Study Team.

Based on the total number of employees and typical densities associated with the different business sectors, the Aerotropolis Scenario could result in 21 (Low) to 35 (High) million square feet of commercial development. The actual development potential of an Aerotropolis Scenario would likely fall somewhere between the Low SF and High SF scenarios.

A summary of the commercial square footage growth potential of an Aerotropolis Scenario compared to the Business as Usual Scenario is shown in Table 3. Further information about the square footage estimates is included in the *Colorado Aerotropolis Economic and Financial Analysis* working paper (Attachment E) (Aerotropolis Study Team 2016).

Table 3 Commercial Square Footage Projections

	Business as Usual	Aerotropolis (Includes BAU)	
		Low SF	High SF
<b>Commercial Development (sq ft)</b>	2,718,000	20,874,350	34,728,000
Industrial	<b>1,581,000</b>	<b>4,337,500</b>	<b>17,823,000</b>
Retail	<b>766,000</b>	<b>4,015,600</b>	<b>9,217,000</b>
Office	<b>371,000</b>	<b>12,521,250</b>	<b>7,688,000</b>

Source: Aerotropolis Study Team.

#### 6.3.2.4 Associated Housing Development

With new employment comes new housing. Although this study is primarily focused on the economic benefit of attracting new business to the area, housing needs would be associated with the employment growth. Based on the employment growth projections in Section 6.3.2.1, an estimated 210,000 additional residents and 75,000 housing units would be needed near the Aerotropolis study area. Further information about these estimates is included in the *Colorado Aerotropolis Economic and Financial Analysis* working paper (Attachment E) (Aerotropolis Study Team 2016).

### 6.4 Aerotropolis Scenario Infrastructure Needs

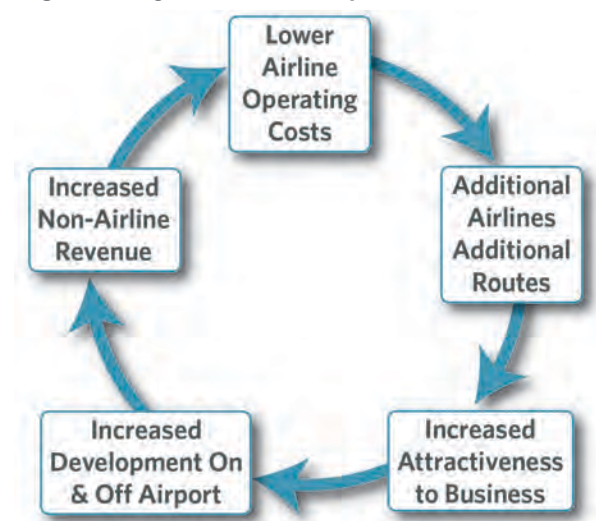
Efficient infrastructure surrounding an airport is key to fostering and supporting economic development. In addition to access to national and global markets via the airport, potential developers are attracted by ample “on the ground” supporting infrastructure. For purposes of this study, this means sufficient utilities (water, wastewater, drainage, power, communications systems) and transportation capacity. A complete description of the infrastructure elements described in this Section 6.4 is included in the *Infrastructure Development for the Colorado Aerotropolis Study Area* working paper (Attachment C) (Aerotropolis Study Team 2016).

#### 6.4.1 Self-Sustaining Cycle of Development

A significant finding of this study is the importance of on-airport commercial development to DIA’s ability to compete globally. A self-sustaining Cycle of Development is feasible, in which catalytic infrastructure actions can spur greater economic development and growth, as depicted in Figure 6. Maintaining and stimulating this Cycle of Development is extremely important.

When commercial developers invest in on-airport and off-airport property, the airport collects non-airline revenue. This allows

Figure 6 Cycle of Development



Source: Aerotropolis Study Team.

airports to lower operating costs for airlines, which in turn attracts additional airlines and additional airline routes. This increases the attractiveness of the airport for further commercial development, which adds to non-airline revenue for the airport and continues the cycle. Increased development also means further investments in infrastructure on and near the airport. Investment in infrastructure is, therefore, one of the catalysts that can be driven by the local municipalities surrounding an airport.

This Cycle of Development illustrates how an airport can grow to compete globally and contribute to the regional economy once initial investments in infrastructure are made.

## 6.4.2 Utilities

The joint use of the transportation rights-of-way with utilities would require that utilities be implemented at the time transportation improvements are made. While a transportation facility can be built in phases over time, wet and dry utilities are usually built to meet their ultimate requirements so that future disruption of the roadway is unnecessary to increase the size of the utility corridor.

### 6.4.2.1 Water Supply

Each of the major water providers in the study area have different primary sources of water supply.

- Aurora Water has a combination of surface water and a reuse system (Prairie Waters) that is sufficient to provide water to the area north of I-70.
- Denver Water has long-term water supplies from surface water storage and trans-mountain diversion based on more than 100 years of programs and agreements.
- South Adams County Water and Sanitation District (SACWSD) primarily serves the areas of Commerce City and Brighton west and north of DIA. SACWSD uses ground water for the bulk of the water distribution in the cities.

Although the water supply plans have been developed and would provide adequate water for the study area to support future development, there are several areas where more efficient development of the overall network could be achieved with a comprehensive partnership among the jurisdictions. Substantial savings could be realized by the jurisdictions as well as by the adjacent development projects.

The areas of efficiency could include:

- Balancing of supply to limit or eliminate pumping to any portion of the study area.
- Sharing of trunk and subtrunk facilities to limit or eliminate duplicative installations.
- Development of a comprehensive reuse plan to tie the area together. The water reuse could be grey water for irrigation purposes; or if tertiary treatment facilities are developed, the water could be mixed to add to the water supply.

To achieve these efficiencies, a comprehensive master plan with an integrated approach similar to Aurora's would be needed.

#### 6.4.2.2 Wastewater

The Denver metropolitan area is served by the Metro Wastewater Reclamation District (Metro). Metro is comprised of 52 entities, which include the Cities of Aurora, Brighton, Commerce City, and Denver. Unincorporated Adams County is not a part of the district. Any areas that want to link to the Metro system must be approved by the Metro members and provide a buy-in payment.

One of the major facilities under consideration in Metro's study is a possible large interceptor to run from the southeast to the northwest portion of the Aerotropolis study area. This interceptor would be large enough to collect flows from each of the jurisdictions and deliver the flows by gravity to the new Northern Treatment Plant.

One of the key outcomes from the Metro study will be a staging/phasing program based on an agreed-upon development pattern for the area. The Aerotropolis planning process can be used as one mechanism to start the discussions necessary to reach agreement on the pattern and pace of development, which would then support Metro and its Board in developing a master plan for service to the Aerotropolis study area.

#### 6.4.2.3 Power Utilities

Power utilities consist of electricity and natural gas. Electrical service providers in the Aerotropolis study area are Xcel Energy and United Power. Xcel Energy provides service to Denver, Aurora, parts of Commerce City, and parts of unincorporated Adams County in the southern portion of the study area. United Power serves Commerce City, Brighton, and the northern areas of unincorporated Adams County in the study area.

Power utilities are privately owned, and costs for installation are paid for by the utility owners. Coordination between the jurisdiction and the utilities at the time of roadway design and construction is required to integrate the lines.

#### 6.4.2.4 Communications Systems

Technology is constantly evolving, and an effective communications network is needed to serve development investments. Fast, reliable broadband, as well as traditional connectivity in the form of telephone, cable, and fiber optics, is needed. However, a collaborative regional effort would benefit each jurisdiction and the Aerotropolis study area as a whole. Some jurisdictions are planning substantial upgrades to various parts of their communications networks, but a coordinated plan is not yet in development.

While developers in the area would ultimately be responsible for the final connections to homes and businesses, the jurisdictions should consider laying the trunk groundwork to support an integrated communications system.

#### 6.4.2.5 Drainage Systems

The predominant ground elevation pattern in the study area is downward sloping to the Platte River from southeast to northwest. There are substantial barriers to that pattern, including the DIA property and the Rocky Mountain Arsenal National Wildlife Refuge. However, there are several natural watercourses that carry runoff to the Platte River.

The Urban Drainage and Flood Control District (UDFCD) is a regional agency with a mission to protect people and property. It coordinates improvements to the regional drainageways and



assists jurisdictions to implement the improvements. It has an established Northeast Quadrant subgroup that addresses drainage issues in the Aerotropolis study area. Each of the watersheds has been studied at various stages of detail, depending on the stage of development within the watershed. IGAs between jurisdictions are typically in place to establish flow levels across jurisdictional boundaries.

Proactive planning to preserve the floodplain, wetland, and riparian areas of drainageways would help sustain ecological resources. In contrast to channelization, floodplains store and convey floodwaters, thereby reducing flood damage and erosion. Floodplains enhance biodiversity, providing breeding and feeding grounds for fish and a wide variety of wildlife. The quality of life can be enhanced when drainageways are developed as multiuse recreational corridors. These features would add substantially to the overall attractiveness of the Aerotropolis area for future development. *The Emerald Strands, A Cooperative Park, Open Space, and Trail Plan for the Area Surrounding the new Denver International Airport for the area around DIA* (Adams County et. al. 1990) identifies these features for the area around DIA.

Regional detention facilities typically require proportionally less total land area and are more cost-effective to construct and maintain compared to facilities located on several sites. Because of the complexities associated with how they function within an entire watershed, regional detention facilities must be developed in the context of a formal master planning process.

The drainage infrastructure may be more complex than other areas of the metropolitan region. The watersheds traverse multiple jurisdictions through the study area. Preservation of floodplains and regional detention facilities would provide long-term benefits to the region. There is an opportunity for long-term efficiency, resiliency, and quality of life to be gained by regional collaboration regarding drainage needs.

### 6.4.3 Transportation Network

Transportation needs were projected for the Business as Usual Scenario and the Aerotropolis Scenario. It was assumed that the utilities described above would be constructed with the transportation improvements within the transportation rights-of-way.

#### 6.4.3.1 Local and Regional Plans

A review of local and regional plans indicate that the Aerotropolis study area warrants substantial investments in transportation infrastructure. Common themes in the transportation plans include:

##### Roadway

- Increase north-south capacity through the area between DIA and the Rocky Mountain Arsenal National Wildlife Refuge corridors, including:
  - Peña Boulevard
  - E-470
  - Tower Road
  - Picadilly Road
  - Plus at least one more arterial for additional capacity



- Provide additional connections into the airport properties. These would consist of connections for access through Jackson Gap, and connections of future on-airport land uses to adjacent sites in adjoining cities.
- East-west capacity improvements to:
  - 48<sup>th</sup> Avenue
  - 56<sup>th</sup> Avenue
  - 64<sup>th</sup> Avenue
  - 72<sup>nd</sup> Avenue
  - 88<sup>th</sup> Avenue
  - 96<sup>th</sup> Avenue
  - 104<sup>th</sup> Avenue
  - 120<sup>th</sup> Avenue
- Connection to the metropolitan region controlled-access highway system with interchange construction and improvements along both E-470 and I-70.

#### Transit

- Capitalize on the RTD commuter rail University of Colorado A Line.
- Consider additional transit capacity in the following forms:
  - Bus rapid transit or other regional bus service on major corridors.
  - Right-of-way preservation and eventual construction on the northeast area transit corridor.
  - Right-of-way preservation and eventual construction on the E-470 transit corridor - potential for high speed rail.

#### Pedestrian and Bicycle

- Build out a regional trail system.
- Build multimodal streets complete with high-quality sidewalks, bike lanes, cycle tracks and other treatments, as appropriate.
- Focus on providing high-quality access to transit.

#### 6.4.3.2 Business as Usual Scenario

The Business as Usual Scenario assumes that the municipalities would build their own projects as currently planned by 2040—in other words, only those transportation projects identified as federally or state-funded in the *DRCOG 2040 RTP*. In general, federal and state dollars have been identified and will be programmed for these regionally funded projects. Municipalities also will build projects with their own funds, such as a dedicated sales tax. In general, local funding of transportation projects in the *DRCOG 2040 RTP* is partially dependent on build-out of the area and associated revenue streams from developers.

The Business as Usual Scenario transportation network is assumed to be made up of the regionally funded projects (Figure 7). The infrastructure cost of this scenario would be approximately \$366 million (excluding the \$1.2 billion Central 70 project).



### 6.4.3.3 Aerotropolis Scenario

As part of the visioning study, a long-term Aerotropolis transportation system was conceptualized. For analysis purposes, a near-term 2040 network was also conceived for comparison to the Business as Usual Scenario.

#### Aerotropolis Long-term Vision Transportation Network (2075 or Beyond)

The long-term vision for a fully developed Aerotropolis may have a horizon timespan of several decades, perhaps to 2075 or beyond. The long-term future transportation network serving a fully developed Aerotropolis would be a full hierarchical grid system of facilities surrounding the 53-square-mile DIA property, as seen in other global aerotropolises. One of the higher-order facilities might be a multimodal loop that would encircle the airport within the Aerotropolis area. The need for this type of facility and its characteristics would need further definition and study. The future Aerotropolis transportation grid would likely include Vehicle to Infrastructure (V2I) communication-enabled technology, as well as other unknown future technologies.

#### Aerotropolis Near-term 2040 Transportation Network

Based on input from study participants, principles were established to identify priorities for near-term projects that would make up the Aerotropolis Near-term 2040 Transportation Network. The principles are listed without order of importance:

- Contiguous to Active Developments
- Reflect Current Local Plans
- Incremental to Previous Investments
- Achieve Early Attainable Projects
- Prioritization through Regional Collaboration
- Support the Long-term Vision

Following these guiding principles, with a focus on the priority issues for each jurisdiction, the study team developed a conceptual Aerotropolis Near-term 2040 Transportation Network. The network (shown in Figure 8) is largely made up of projects included in the local transportation plans and the *DRCOG 2040 RTP*.

The improvement projects are a combination of new roads and/or widening projects that would be built in two phases to complete the Aerotropolis Near-term Transportation 2040 Network —Phase 1 early-action projects (2015 to 2025) and Phase 2 projects (2025 to 2040).

It is recognized that the conceptual network recommendations may change over time as additional local transportation studies are conducted.





For the 25-year period leading to 2040, the total cost of the Aerotropolis Near-term 2040 Transportation Network is on the order of magnitude of \$725 to \$775 million. The Phase 1 (2015-2030) projects subtotal about \$350 million. Phase 2 (2030-2040) subtotal \$375 to \$425 million. Table 4 shows the cost by project.

Table 4 2040 Transportation Network Improvements

Roadway	Project Location	Improvement Type	Phase 1 and Phase 2 Conceptual Cost (\$M)	Phase 1 Conceptual Cost (\$M)
48th Ave.	Picadilly Rd. to Powhatan Rd.	New 6 Lanes	\$41	
56th Ave.	Peña Blvd. to Powhatan	Widen to 6 Lanes	\$74	\$74
64th Ave.	Tower Rd. to Powhatan	Construct/Widen to 4/6 Lanes	\$37	
88th Ave.	Tower Rd. to Picadilly Rd.	Widen to 6 Lanes	\$15	
96th Ave.	Tower Rd. to Picadilly Rd.	Widen to 6 Lanes	\$15	
104th Ave.	Tower Rd. to Picadilly Rd.	New 2 Lanes	\$12	\$12
120th Ave.	Tower Rd. to Imboden Rd.	Widen to 4 lanes	\$60	
Harvest Mile Rd.	I-70 to 72nd Ave.	Construct/Widen to 4 Lanes	\$79	
Imboden Rd.	US 36 to 120th Ave.	Widen to 4 lanes	\$72	
Picadilly Rd.	Smith Rd. to 96th Ave.	Construct/Widen to 6 Lanes	\$90	\$90
Tower Rd.	38th/40th Ave. to 120th Ave.	Construct/Widen to 6 Lanes	\$80	\$80
E-470	48th Ave.	Add New Interchange	\$27	\$27
E-470	88th Ave.	Add New Interchange	\$18	
I-70	Harvest Mile Rd.	Add New Interchange	\$40	\$40
I-70	Picadilly Rd.	Add New Interchange	\$28	\$28
		<b>Total</b>	<b>\$748</b>	<b>\$351</b>

Source: DRCOG 2040 RTP.

## 6.5 Economic Comparison

### 6.5.1 Economic Benefits

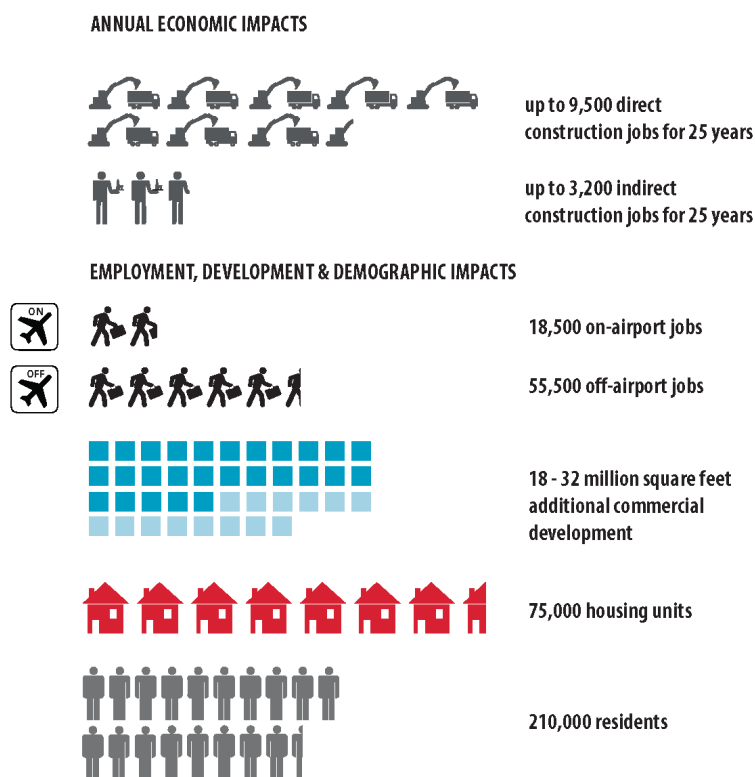
Without investment in the additional infrastructure needed to open up land adjacent to the airport for commercial development, the Business as Usual Scenario would not benefit from the economic potential of neighboring DIA.

Compared to the Business as Usual Scenario, an Aerotropolis Scenario is estimated to create an additional 74,000 jobs, drive demand for 18 to 32 million square feet of additional commercial development, and require the construction of just over 75,000 new housing units to achieve a balanced, sustainable pattern of regional growth.

The economic growth potential of an Aerotropolis Scenario is illustrated in Figure 9. It is recognized that numbers and assumptions will change as more detailed studies are conducted.

There are other significant qualitative economic benefits to be reaped from an Aerotropolis Scenario. The concentration of growth into dense employment nodes would create an “agglomeration” effect, whereby the proximity of similar industries and businesses to one another increases labor productivity and attracts a highly qualified talent pool. These benefits, while not quantified in this analysis, should be taken into consideration in understanding the growth potential and advantages of an Aerotropolis Scenario.

Figure 9. Summary of Aerotropolis Scenario Growth Potential Above Business as Usual



Source: Aerotropolis Study Team

### 6.5.2 Public Tax Revenue

The public tax revenue streams that would be generated under the Aerotropolis Scenario compared to the Business as Usual Scenario are summarized in Table 5. Increased residential and commercial property taxes associated with new Aerotropolis-related real estate development, increased sales taxes associated with additional household and business spending, and additional residential development impact fees are estimated to yield an additional \$600 to \$630 million over the 25-year period (2015-2040) compared to the Business as Usual Scenario.



More detail about the assumptions and process used to develop the estimates is included in the *Colorado Aerotropolis Economic and Financial Analysis* working paper (Attachment E) (Aerotropolis Study Team 2016). It is recognized that assumptions and numbers will change when more detailed studies and analysis are conducted.

Table 5 Business as Usual Scenario and Aerotropolis Scenario Revenue Streams (2015-2040)

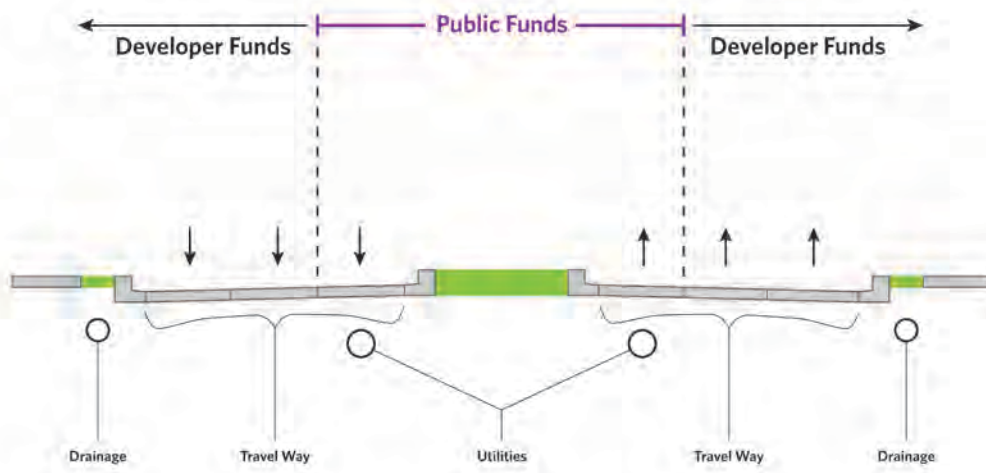
Revenue Stream	Business as Usual Scenario (\$M)	Aerotropolis Scenario (\$M)		Difference (\$M)
		Low SF	High SF	
Commercial Property Tax	\$19.0	\$130.4	\$158.6	
Residential Property Tax	\$37.2	\$295.1	\$295.1	
Development Impact Fees	\$30.3	\$193.9	\$193.9	
Sales Taxes	\$18.1	\$86.6	\$86.6	
<b>Total</b>	<b>\$104.6</b>	<b>\$706.0</b>	<b>\$734.1</b>	<b>\$601.4 - \$629.5</b>

Source: Aerotropolis Study Team.

### 6.5.2.1 Pay-as-you-Go Funding

Figure 10 shows a typical pay-as-you-go method for establishing a roadway cross-section in an undeveloped area. As revenue is generated by new development, jobs attracted to the study area would lead to increased revenues for infrastructure development. Typically, right-of-way would be identified and reserved for the full cross-section. Depending on funding capabilities, local jurisdictions could initially construct a portion of the road, including the utility infrastructure. Additional lanes would be added as demand increases and development occurs. Private developers would typically contribute to construction costs for these regional arterials, which would provide access to their land.

Figure 10 Pay-As-You-Go Roadway Funding



Source: Aerotropolis Study Team.

### 6.5.3 Fiscal Analysis of an Aerotropolis Scenario

For the 25-year period (2015-2040), the conceptual costs of the investment in an Aerotropolis Near-term 2040 Transportation Network are on the order of magnitude of \$725 to \$775 million. This represents about 71 linear miles of new roadways and/or multimodal transportation facilities that would be built in two phases, as shown in Table 4. The costs are all-inclusive costs for right-of-way, planning, construction, and utilities.

The public tax revenues that could be generated from commercial and residential property taxes, development impact fees, and sales taxes under an Aerotropolis Scenario could range between \$705 and \$735 million over the 25 years, as shown in Table 5. The revenue estimates reflect the types of revenue sources and assessment levels that can be expected for the types of development projected for the study area.

The fiscal analysis demonstrates that the potential revenues realized from an Aerotropolis Scenario are in line with the investment costs needed to support the development. The revenue estimates likely skew conservative because the study team used revenue sources controlled by local cities and agencies. The addition of commercial development impact fees, not assumed in this conceptual analysis, would raise additional revenue. Additional expected “downstream” revenue sources, such as passenger facility charges, were not included in the estimates because they wouldn’t necessarily be available for infrastructure investment. A new regional entity would address the revenue and investment streams for the Colorado Aerotropolis area, as described in Section 7.0.

Further information on the fiscal analysis is contained in the *Colorado Aerotropolis Economic and Financial Analysis* working paper (Attachment E) (Aerotropolis Study Team 2016).

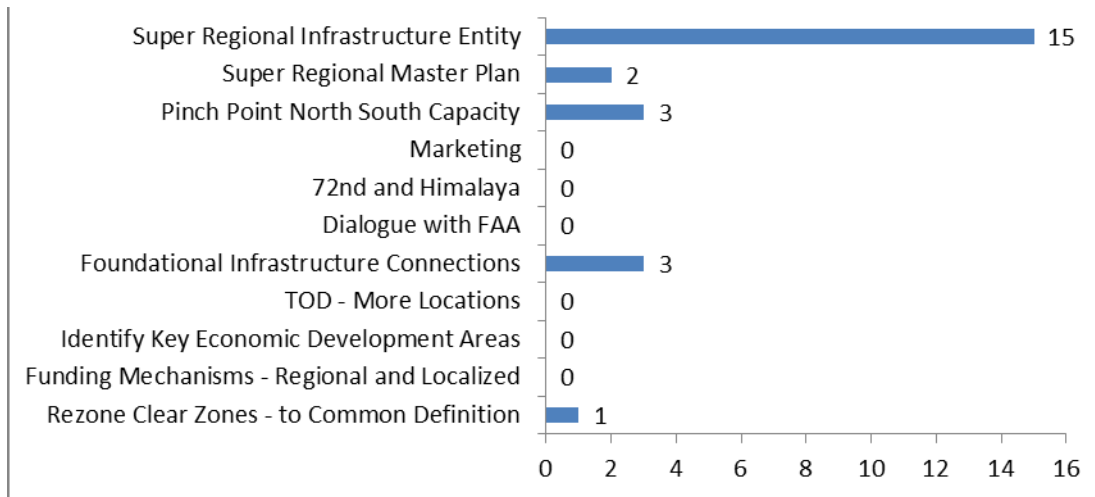
## 7.0 Establishment of a Governance Structure

### 7.1 Support for a Regional Governance Structure

One of the objectives of the Visioning Study was to explore, as a neutral party, outline regional governance options to implement investments in transportation, water, wastewater, drainage, power, and communications systems. The *Governance Options for the Colorado Aerotropolis* working paper (Attachment F) (Aerotropolis Study Team 2016) contains a complete record of the study team’s initial exploration regarding potential options.

The study’s Study Review Committee developed a critical interest in the potential establishment of a governance structure for infrastructure development in the Aerotropolis study area. Asked first to identify priority issues for development of an Aerotropolis, committee members, then informally voted and collectively indicated the importance of a practical and workable governance structure for the Aerotropolis (Figure 11). However, it is recognized that elected officials at each of the jurisdictions may have different visions and expectations.

Figure 11 Highest Priority Actions Based on Poll



Source: Study Review Committee poll at meeting on June 18, 2015.

## 7.2 Governance Panel

In response to the study participants' agreement that a regional governance structure should be one of the priorities, CDOT convened a panel of local leaders who had been involved in collaborative efforts in the Denver metropolitan area to develop infrastructure and market real estate development, and who were knowledgeable about the types of governance mechanisms available to strategically provide infrastructure. Their insight revealed that there are keys to success and obstacles to avoid in terms of governance and collaboration, as follows:

- Be all-inclusive with both public and private stakeholders - get everybody at the table.
- Do not overlook traditional funding sources.
- Create the grand vision, but start with project that are of a manageable size - small successes will be the proof of concept and will provide a foundation of trust.
- Recall the statement of Governor Hickenlooper - "Collaboration is the new Competition."



*Panelists were Peter Kinney, Metro Mayors Caucus; Tom Clark, Metro Denver EDC; Ed Icenogle, Partner at Icenogle, Seaver, Pogue Law Firm; and Don Hunt, Former Executive Director CDOT.*



### 7.3 Southeast Public Improvement Metropolitan District

Southeast Public Improvement Metropolitan District (SPIMD) offers a compelling case study for infrastructure development in the Denver Tech Center. SPIMD partners with local governments by contributing funding for transportation and economic development. Pat Mulhern, District Manager, provided an overview of the history of SPIMD and its success in supporting investments in infrastructure.

- The SPIMD organization is a Title 32 Special District for commercial development; it overlays 15 metro districts.
- SPIMD benefited from some large-scale developers that cross community boundaries. These developers originally saw the need to cooperate on building larger infrastructure.
- The keys to a vibrant business community are to develop and maintain safe and expedient transportation access and minimize congestion.
- The large scale of a potential aerotropolis development would require developers to partner with the local governments to promote regional transportation planning and development.



*Pat Mulhern, District Manager, provided an overview of the history of SPIMD.*

### 7.4 IGA Amendment Overview

This interest in a governance structure was further reinforced by the Denver and Adams County voters approving an IGA Amendment in November 2015 related to how the two jurisdictions will coordinate on DIA property. The ballot measure passed overwhelmingly in both counties, each by more than 70 percent in favor. The full IGA is included in the Appendix.

The IGA Amendment will create a 1,500-net-leasable-acre pilot program for commercial developments on airport property. The 1,500 net leasable acres are located “within the fence” at several nodes along Peña Boulevard and the DIA property boundary where there would be new access roads. The counties will evenly share (50-50) tax revenues generated from the new commercial uses.

Further, the IGA Amendment stipulates that Denver and Adams County will form a regional entity to jointly market opportunities. The Amendment’s description of the purposes of this new regional entity is, in total: “...to promote and market development opportunities on and around DIA and assist in coordinating land use and infrastructure planning efforts by the respective jurisdictions on and around DIA.” The IGA Amendment also denies the new regional entity any powers to regulate or otherwise control land use or development within any jurisdiction.

## 7.5 Governance Options

Against this background, the study team as a neutral third-party investigated potential options for a regional governance structure or entity. Individual meetings were held with representatives from the primary stakeholders participating in the Visioning Study—Adams County, the City of Aurora, the City of Brighton, the City of Commerce City, and the City and County of Denver. The purpose of the meetings was to solicit informal input regarding governance options, structures, and functions for a regional entity.

### 7.5.1 Anticipated Decision Points in Arriving at a New Entity

A review of the discussion responses yields a conclusion that the following terms and arrangements need to be negotiated and agreed upon after completion of the Visioning Study:

- Shall the entity be constrained to the functions listed in the 2015 Amendment, to wit: promotion and marketing of development opportunities and coordination assistance in land use and infrastructure planning? The 2015 Amendment can be narrowly or broadly construed, and the jurisdictions can by agreement expand the functions not listed, if desired.
- If the entity is to engage in funding, should it have direct taxes and/or fees, or should it rely upon primary stakeholder jurisdictions to remit taxes and/or fees over to the entity?
- Should the entity engage only in planning and coordination of infrastructure or also provide funding, design/construction, and/or operation?
- What area should the entity serve initially, mid-term, and ultimately?
- What infrastructure should the entity address: Transportation, water, sewer, drainage, other?
- Should the entity bond to accelerate projects and/or serve as a lending fund or revolving loan bank?
- Should the entity's decisional control be in its governing body or reside with the primary stakeholders' governing bodies? Should there be a mixed approach, depending on subject matter?
- Should the entity try to bring the private sector and other public entities into its decisional process or seek to involve them in advisory committee(s) and the like?
- Should marketing and branding be within the scope of the entity or accomplished through a separate entity or coalition with expertise? Should the entity help fund marketing and branding?
- Should the entity's governing body be elected officials or staff or others chosen for subject matter interest and expertise?

### 7.5.2 Recommended Process for Developing a New Entity

To advance the establishment of a new regional entity, the study team identified the following tasks:

- Discuss and negotiate, insofar as possible, areas of consensus and likely agreement.

- Consider use of a neutral facilitator and drafts person.
- Seek agreement on the major issues:
  - Scope of entity activity.
  - Whether a funding entity.
  - If a funding entity, direct or through primary stakeholders.
  - Consider wisdom of phasing and scaling activity of entity.
- Match major determinations to existing types of entities or collection of entities or consider customized entity through legislation or IGA.
- Work through refinement of lesser issues.

### 7.5.3 Likely Entity Candidates and Why or Why Not Likely of Use

Table 6 summarizes the likely entities that could be further considered for the regional governance type. More detailed descriptions of these options are included in the *Governance Options for the Colorado Aerotropolis* working paper (Attachment F) (Aerotropolis Study Team 2016).

**Table 6 Types of Entity Candidates and Likelihood of Use**

Candidate	Comment	Likelihood of Use
Regional Transportation Authority	Limited to transportation, requires organizational vote of people of member counties, municipalities	Unlikely
Title 32 Metropolitan District	Not well-suited to have governing body populated by counties, municipalities	Unlikely
Non-profit Corporation	May qualify for some federal grants, but not a public entity	Unlikely
Association of Existing and Future Metropolitan Districts	Developer and resident control; not stakeholder governments	Unlikely
Intergovernmental Agreement Entity	Can be imbued with powers common to local government stakeholders, although probably not some fundamental government powers, like taxes, exempt bonds, eminent domain; would include a regional transportation commission or a regional planning commission	Likely
Regional Planning Commission	If entity is to be limited to planning, established pursuant to Section 30-28-105, C.R.S.	Likely
New Legislative Entity	Can be customized, but requires action of General Assembly and Governor	Likely
Combination of Entities	Cobble together contribution and involvement of different types of public entities through a functional IGA, with or without creating a new entity	Likely
Other Potential Entities	Research required	n/a



## 8.0 Recommended Framework

A proactively planned Colorado Aerotropolis would bring a multitude of economic and financial benefits to the Denver metropolitan region by spurring robust employment growth and market demand for new development. However, enactment of a Colorado Aerotropolis faces many challenges. There are significant infrastructure needs in the area surrounding the DIA property that impede development activity. The five different government jurisdictions surrounding DIA each have local plans that have many commonalities for growth and development. A regional collaborative implementation framework could accelerate catalytic infrastructure projects that benefit the entire region.

The study team's recommended framework includes:

- Visions and objectives for a Colorado Aerotropolis.
- Near-term actions.
- Long-range goals for implementation.

### 8.1 Vision and Objectives

The Vision for the Colorado Aerotropolis was collaboratively developed by the study participants:

*A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

Based on the study findings, there are three primary objectives to achieve the vision:

- Establish and operate a sustainable regional entity to focus on area-wide economic development for the study area.
- Cooperatively develop the required infrastructure systems to enable the rational development of adjacent properties in a cost-balanced manner.
- Establish the Colorado Aerotropolis "global brand" and project that message on a consistent basis to all current and potential participants and targets of economic opportunity.

### 8.2 Near-term Actions (2016 - 2020)

The near-term actions to establish a Colorado Aerotropolis include the following.

- **Establish a Regional Entity.** Conduct a facilitated process to negotiate the decision points to define the initial organization structure for the regional entity. The process should include the following considerations:
  - Identify sustainable funding for the entity.
  - Incorporate actions to maintain and reinforce the principle that all jurisdictions should benefit from the economic activities in the Aerotropolis area.
  - Define a cooperative working role with Metro Denver EDC and the various economic development corporations within the Aerotropolis study area.

- Define a meaningful role for major land developers and property owners in the Aerotropolis area.
- **Conduct Further Collaborative Planning Studies.**
  - Detailed assessment of infrastructure requirements:
    - Actively engage with the responsible agencies to plan and program required infrastructure:
      - Transportation - CDOT, DRCOG, RTD, E-470
      - Water - Denver Water, Aurora Water, SACWSD
      - Wastewater - Metro, SACWSD
      - Drainage - UDFCD
      - Power Utilities - Xcel Energy, United Power
      - Communications Systems- Century Link, Comcast, Charter
    - Address phasing/timing relative to regional trunk and subtrunk infrastructure components in transportation, water, wastewater, power, communications, and drainage/open space.
    - Develop costs and funding/financing plans with input from agencies, developers, and land owners.
  - Detailed economic studies with actual land use plans, addressing these issues:
    - Understanding of and potential integration of each community's plans with adjacent plans.
    - Protection of existing agreements and regulations, such as noise contour definition, drainage requirements, open space coordination, and environmental restrictions (for example, migratory bird limitations around DIA).
- **Develop a Branding Program** to globally brand the Colorado Aerotropolis; and coordinate the branding program with the Metro Denver EDC.
- **Prepare a Long-range Master Plan** that describes the actions needed to achieve the Long-range Goals.

### 8.3 Long-range Goals (2020 - 2040)

Once the near-term actions have established the Colorado Aerotropolis as a known entity, these long-range goals, as part of a Long-range Master Plan, would solidify its role in the global marketplace.

- Become recognized around the world as one of the top 10 aerotropolis regions commensurate with the status of DIA as one of the busiest airports in the world.
- Achieve development levels of 74,000 employees and 210,000 new residents in the area around DIA by 2040.
- Reinforce the economic return to the airport to help lower the costs of airline operations at DIA.
- Incorporate sustainability into Aerotropolis developments.

- Implement the actions identified in the Long-range Master Plan to guide development and build out the Colorado Aerotropolis area by 2075.

## 9.0 References

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**Appendix:  
Amendment to 1988 Annexation and Intergovernmental Agreements  
on a New Airport - June 2015**

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# Colorado Aerotropolis Visioning Study

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**Attachment A:  
Colorado Aerotropolis Visioning Study Outreach  
Working Paper**

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**Attachment B:  
Examples of Aerotropolis Cities and Aerotropolises Worldwide  
Memo**

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# Colorado Aerotropolis Visioning Study

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**Attachment C:  
Infrastructure Development for the Colorado Aerotropolis Study Area  
Working Paper**

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**Attachment D:  
Assessment of Growth Projections for the Colorado Aerotropolis Study Area  
Working Paper**

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# Colorado Aerotropolis Visioning Study

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**Attachment E:  
Colorado Aerotropolis Economic and Financial Analysis  
Working Paper**

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# Colorado Aerotropolis Visioning Study

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**Attachment F:  
Governance Options for the Colorado Aerotropolis  
Working Paper**

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**AMENDMENT TO 1988 ANNEXATION AND INTERGOVERNMENTAL AGREEMENTS ON A  
NEW AIRPORT**

**Final Term Sheet**

June 3, 2015

**I. Approval process and timing**

- A. An Amendatory IGA reflecting the terms set forth herein will be approved by the governing bodies of Denver and Adams County, with the current municipal members of the Airport Coordinating Committee (the "ACC") also approving the Amendatory IGA as third-party beneficiaries, no later than *July 1, 2015*. The current municipal members of the ACC are: Aurora, Commerce City, Brighton, Thornton and Federal Heights. The Amendatory Agreement will, in one document, modify or supplement certain provisions of both the "Intergovernmental Agreement on Annexation" and the "Intergovernmental Agreement on a New Airport" dated April 21, 1988 (herein collectively referred to as the "1988 Agreements.")
- B. The Amendatory IGA will be referred to the voters of both Denver County and Adams County at the *November 3, 2015* state coordinated election. In the event the voters in either or both counties disapprove the agreement on that date, the Amendatory IGA may be re-submitted at the *November 8, 2016* state general election for voter approval in the county or counties where the measure was previously defeated.
- C. The ballot questions submitted to the voters in Adams County and Denver County will be compatible, with the voters in each county being asked to approve the Amendatory IGA. The ballot question in Denver County will additionally include language binding the city to a "multiple fiscal year financial obligation" to share tax revenue as described below.
- D. Upon approval by the voters in both Denver County and Adams County, the Amendatory IGA will become effective on the January 1 following the approval in both counties.

**II. Preservation of the existing 1988 Agreements**

Except as specifically set forth below, all the terms and conditions of the 1988 Agreements (including by way of example but not limitation, the noise provisions, restrictions on residential development, the hotel formula, restrictions on land use in relation to the Scenic Buffer, and provisions related to access roads) will remain in full force and effect. Denver will retain the authority to develop Accessory Uses and natural resources located anywhere on the New Airport Site to the extent allowed by the 1988 Agreements and all other rights it has those agreements.

**III. Amendments regarding land use restrictions**

The 1988 Agreements will be amended as follows:

- A. Fifteen-hundred acres located on the New Airport Site or in the Transportation Corridor north of 72<sup>nd</sup> Ave. will be released in perpetuity from the land use restrictions contained in the 1988 Agreement. Denver will exercise sole discretion to determine when and where to utilize the fifteen-hundred acres and create Development Parcels at DIA, subject only to the following restrictions: (1) residential development will be prohibited on this acreage; (2) businesses that would potentially compete with current and future business and institutional land uses at the Anschutz Medical Campus and the Fitzsimmons Life Science District in Aurora will be

prohibited on this acreage; (3) to the extent any hotels are located on this acreage, the limitation on number of hotel rooms in the 1988 IGA will continue to apply.

- B. Adams County on behalf of the ACC may negotiate and agree with Denver at any time to release additional acreage from the land use restrictions contained in the 1988 Agreements and allow for the creation of additional Development Parcels, either: (1) on a site-specific or project-specific basis; or (2) by releasing an additional amount of acreage.
- C. Restrictions on land use in the Clear Zones as set forth in the 1988 Agreements will be released entirely. Land use in the Clear Zones will remain subject to federal regulations on use and development. The parties will cooperate to modify zoning and other land use laws as necessary to allow development within the Clear Zones. Taxes derived from commercial development in the Clear Zones in Adams County will be retained entirely by the applicable governing Adams County jurisdiction(s).
- D. Denver will promptly notify the ACC jurisdictions of any proposed leasing and concessions activity at DIA (outside of the terminal complex area) when and to the extent such information has been made available to the general public. For example, Denver will provide notice when a request for proposals is published in regard to new leases and concessions, and when a specific lease or concession is submitted to the Denver City Council for approval.
- E. Adams County will sign the Amendatory IGA as a party. Aurora and Commerce City will remain third-party beneficiaries to the applicable provisions of the 1988 Agreements. Aurora and Commerce City will be third-party beneficiaries to the Amendatory IGA. The remaining ACC municipal members will be third party beneficiaries to the revenue sharing obligations. .
- F. Consistent with the 1988 Agreements, only those ACC municipalities with contiguity to the New Airport site (currently Aurora and Commerce City) will be treated as a third-party beneficiaries in regard to the land use provisions of the Amendatory IGA.

#### **IV. Financial terms in consideration for release of land use restrictions**

- A. Upon the effective date of the Amendatory IGA, Denver will transmit to Adams County a one-time cash payment of \$10 million, for distribution as determined by the ACC. No additional cash payment will be required for the discretionary release of additional acreage for Development Parcels as provided in III (B) of this Term Sheet.
- B. Beginning on the effective date and continuing in perpetuity, Denver will share with the ACC jurisdictions fifty percent (50%) of all Denver tax revenue derived from either the development or use of the Development Parcels, with the following exceptions: (1) revenue derived from any Denver tax or tax rate which, as of the effective date of the Amendatory Agreement, was obligated by voter-approval, bond covenant, or any other form of contract to be spent for a particular purpose, for as long as such revenues remain so obligated; (2) revenue derived from any voter-approved new, increased or extended Denver tax adopted after the effective date of the Amendatory Agreement and obligated for a particular purpose; or (3) revenue derived from Denver's debt service mill levies. If Denver ever allows a tax-exempt entity to develop or use any Development Parcel and negotiates a payment in lieu of taxes with such an entity, Denver will share with the ACC jurisdictions fifty percent (50%) of any such payment in lieu of taxes.
- C. The Amendatory IGA will contain procedures for documenting Denver's draws upon the 1500-acre "bank" for the establishment of Development Parcels; for documenting and remitting tax

revenue generation and sharing from the Development Parcels on no less than an annual basis; and for audit rights that may be exercised by the ACC jurisdictions in regard to the tax revenue sharing.

- D. Denver tax revenue shared with Adams County will be distributed as determined by the ACC. Any arrangement the ACC jurisdictions may negotiate among themselves for allocation of the Denver shared tax revenue will be reflected in a separate agreement between the ACC members and will not be a component of the Amendatory IGA. All current municipal members of the ACC will be treated as third-party beneficiaries in regard to the tax revenue sharing provisions of the Amendatory IGA.
- E. To the extent Denver offers tax incentives to commercial developers and tenants to induce businesses to locate or remain upon a Development Parcel, tax revenues that Denver is obligated to share with Adams County will *not* be utilized for such incentives, *unless* Adams County on behalf of the ACC agrees. Denver will not approve any form of tax increment financing resulting in a reduction in the amount of tax revenue from the Development Parcels that Denver is obligated to share with Adams County, unless Adams County on behalf of the ACC agrees.
- F. Denver will reserve the right to modify, decrease or eliminate Denver taxes that are subject to sharing under the Amendatory Agreement; however, Denver will not, without the consent of Adams County on behalf of the ACC, take or approve any action that would have the effect of reducing or eliminating any shared Denver tax or tax rate specifically imposed in or on the Development Parcels.

V. **Regional planning and marketing entity**

The Amendatory IGA will provide that, via a separate agreement to be negotiated between the parties, Denver and the ACC jurisdictions will form a new regional entity to promote and market development opportunities on and around DIA and assist in coordinating land use and infrastructure planning efforts by the respective jurisdictions on and around DIA. However, the entity will have no authority to regulate or otherwise control land use or development within any of the jurisdictions. The entity will be governed by a board consisting of equal representation by Denver appointees and ACC appointees.

VI. **Miscellaneous contract terms**

- A. The parties will agree to mutually defend the Amendatory IGA in the event of a challenge by any party who is not a third-party beneficiary to the Amendatory IGA.
- B. The parties' rights and remedies under the 1988 Agreements will remain in place outside of the Development Parcels for disputes that arise in the future about whether development falls within the range of land uses allowed upon the New Airport Site under the original 1988 Agreements. In the event of an alleged breach by Denver of the land use restrictions contained in the 1988 Agreements, as modified by the Amendatory IGA, the ACC party will provide written notice to Denver and the parties will attempt to resolve the dispute informally. Prior to either party filing suit over such a dispute, the parties will enter into formal non-binding mediation in an attempt to resolve the dispute. In the event the parties proceed to litigation and achieve a final judgment, the prevailing party will be awarded its attorney's fees and costs incurred in the litigation, and a prevailing ACC party will be awarded any withheld tax revenue sharing plus interest at the statutory rate. If Denver decides, prior to final judgment in any such litigation, to render the case

moot by locating the disputed land use in a Development Parcel, the ACC party will be awarded one-half of its attorney's fees and costs incurred to date in the case.

- C. The Amendatory IGA will also function as a settlement agreement in which Adams County, Aurora, Brighton, Commerce City, Federal Heights, and Thornton will waive any claims they may have against Denver regarding an alleged breach, or anticipatory breach, of the land use provisions in the 1988 Agreements based on the following: (1) any use or development of the New Airport Site, completed or in process (as demonstrated by the issuance of certificate of occupancy or building permit), that occurred prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people; or (2) Denver's land use planning or marketing activities for the New Airport Site that occurred prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people, but such planning or marketing efforts do not meet the requirements of waiver (1) unless a building permit or certificate of occupancy has been issued prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people. This waiver will not be construed as changing in any manner the land use provisions of the 1988 Agreements to the extent those provisions will continue to govern the use of the New Airport Site in the future, nor will the waiver prevent the parties from enforcing those provisions in regard to any use or development of the New Airport Site established after the date upon which Adams County referred the Amendatory IGA to a vote of the people or from enforcing the 1988 Agreements in the future.
  
- D. At any time under the Amendatory Agreement, Denver may decide to locate a land use which Denver considers to be an Accessory Use in a Development Parcel. No such decision on Denver's part will be considered a waiver or admission by Denver that the land use in question or any similar land use may not qualify as an Accessory Use in the future.

This Term Sheet shall not be considered a binding contract, but is intended solely to serve as the basis for drafting the Amendatory IGA. Each party and third-party beneficiary agrees to submit to their respective governing bodies the Amendatory Agreement for approval by the governing body as a whole (either as a primary party or a third-party beneficiary), subject to ultimate approval by the voters before the Amendatory IGA will be executed or go into effect.





# Colorado Aerotropolis Visioning Study

## Colorado Aerotropolis Visioning Study

**Draft**

## Colorado Aerotropolis Visioning Study Outreach

Prepared by  
HDR

March 2016



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## Colorado Aerotropolis Visioning Study Outreach

### Introduction and Overview

An Aerotropolis is an urban plan in which the layout, infrastructure, and economy are centered on an airport.

The Colorado Department of Transportation (CDOT) conducted a study regarding the land use and infrastructure requirements that could enhance economic development surrounding Denver International Airport (DIA). The Colorado Aerotropolis Visioning Study, funded by a Federal Highway Administration grant, along with additional funds from DIA, collaboratively engaged local jurisdictions to examine the benefits and impacts of a proactively planned Aerotropolis infrastructure surrounding DIA. An infrastructure framework for transportation, water, wastewater, power, communications, and drainage is critical to fostering and supporting economic development surrounding the airport.

CDOT engaged Adams County, City of Aurora, City of Brighton, City of Commerce City, City and County of Denver, as well as DIA, in the Visioning Study.

### Study Vision

At the onset, study participants jointly developed a vision for a Colorado Aerotropolis:

*A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

### Study Objectives

CDOT had the following objectives for the study:

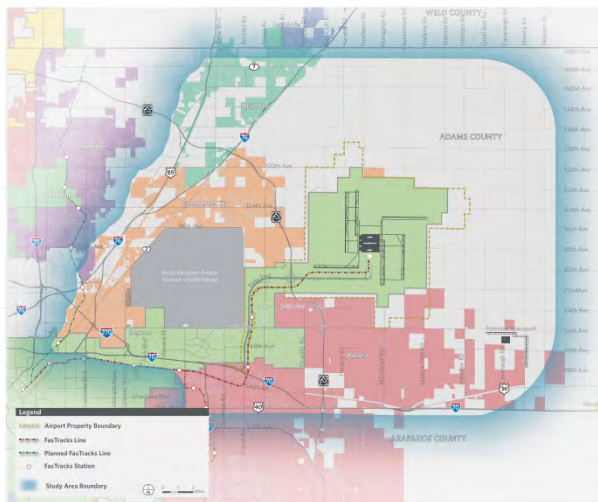
- Agree on a collaborative vision for a Colorado Aerotropolis.
- Learn about the aerotropolis concept.
- Identify commonalities among the local plans.
- Quantify the potential for economic growth—with or without a Colorado Aerotropolis.
- Identify a framework of possibilities for collaboration on infrastructure investments.
- Outline regional governance options to implement investments in transportation, water, wastewater, drainage, power, and communications systems.

## Study Area

Figure 1 displays the study area of the Colorado Aerotropolis Visioning Study. The study area boundaries defined an area of influence that impacts or would be impacted by the current and future economic conditions both on and off airport.

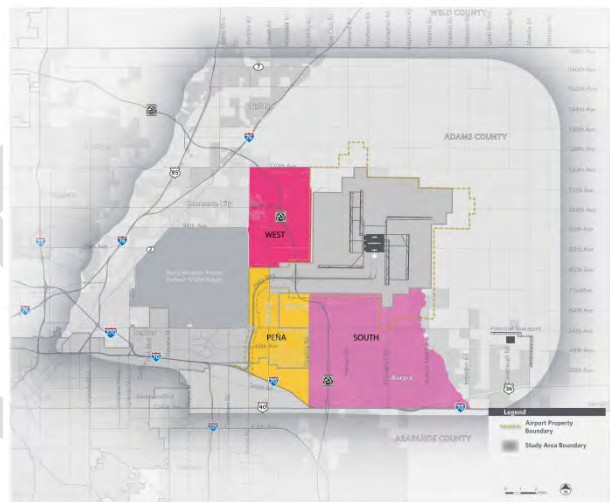
Given the low level of development within the large study area, the study team recognized that initial development near the airport will largely occur in the area to the south and west of DIA. This Concentrated Development Area is shown in Figure 2.

Figure 1 Study Area for the Colorado Aerotropolis Visioning Study



Source: Aerotropolis Study Team.

Figure 2 Concentrated Development Area



Source: Aerotropolis Study Team.

## Working Paper Organization

This working paper describes the need for engagement and collaboration, the process, and the participants who were engaged during the course of the study. The working paper is organized into the following sections:

- Need for Engagement/Collaboration
- Committees
- Coordination Meetings
- Appendices with Meeting Agendas, Notes, and Presentations



## Need for Engagement/Collaboration

Recognizing the need to collaborate to create economic opportunities, CDOT brought key stakeholders together to create the vision and framework for implementing development in the area. CDOT created a forum for the primary stakeholder jurisdictions and other stakeholders to identify collaborative, catalytic actions to spur growth and change, and used this opportunity to be proactive in transportation network development in a targeted metropolitan Denver growth area.

Adams County, the City of Aurora, the City of Brighton, the City of Commerce City, the City and County of Denver, as well as DIA, were the primary stakeholders in the Visioning Study.

Any study success is due largely to the engagement process that CDOT conducted and the willingness of the jurisdictions to participate and collaborate. Several infrastructure, transportation, and economic development agencies were also engaged. This comprehensive outreach created an atmosphere of cooperation and excitement about the potential of a Colorado Aerotropolis.

Over the course of the study, the study team held 37 meetings and talked to more than 124 individuals about the Colorado Aerotropolis concept. Engagement with major landowners will be conducted after conclusion of this study. Appendix A contains complete lists of meetings held with each of the following groups. The *Colorado Aerotropolis Visioning Study Outreach* working paper has the agendas, presentations, and meeting notes.

## Committee Structure

### Steering Committee

The Steering Committee was made up of senior-level staff from the area agencies. The Steering Committee membership list is included in Attachment A, *Colorado Aerotropolis Visioning Study Outreach* working paper.

The Steering Committee provided senior advisory input on the corridor vision, alternatives, and improvement phasing priorities at key project milestones, as listed below.

- Project Introduction and Concept Development
- Assessment of Initial Scenarios
- Review of Refined Scenarios and Screening
- Draft Framework Observations and Recommended Actions



*Regular meetings were open to all interested parties and captured ideas through discussion and facilitated exercises.*

## Study Review Committee

The Study Review Committee members were technical staff from the primary stakeholders; study area local and state government agencies; and other regional partners. These included public works departments, planning departments, economic development departments and corporations, and other agencies. The Study Review Committee membership list is included in Appendix A.

The Study Review Committee met approximately every four weeks to review study team progress and to provide technical input and feedback to the study team, a total of ten times. The members of the Study Review Committee served as the primary point of contact for their respective organizations and were responsible for keeping their constituent groups and elected officials on the Steering Committee updated on the study information and progress.

### Colorado Aerotropolis Vision

At the onset of the study, study participants jointly developed a vision for a Colorado Aerotropolis:

*A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

## Coordination Meetings

### Primary Stakeholders One-on-One Meetings

In addition to the Steering Committee and Study Review Committee meetings, the study team met individually with the primary stakeholders. All of the jurisdictions attended an initial coordination meeting. One-on-one meetings were held with each of them over the course of the study to discuss their specific plans and issues. Separate meetings were held to gain input on governance options for a potential regional entity. In addition, a coordination meeting with the jurisdictions' Public Information Officers addressed how the agencies might work together to promote a Colorado Aerotropolis in the future. These jurisdictions are:

- Adams County
- City of Aurora
- City of Brighton
- City of Commerce City
- City and County of Denver
- Denver International Airport

### Other Agency Coordination Meetings

The study team met with additional infrastructure and economic development agencies to inform them about the study, gather input about their plans, and discuss their specific needs and issues. These included:

- Aurora Water
- CDOT Aeronautics
- Colorado Office of Economic Development and International Trade
- Denver Regional Council of Governments
- Denver Water
- E-470 Public Highway Authority
- Front Range Airport
- I-70 East EIS Study Team
- Metro Denver Economic Development Corp.
- Metro Wastewater Reclamation District
- Peña Boulevard Study Team
- Regional Transportation District
- South Adams County Water and Sanitation District
- Urban Drainage and Flood Control District



**Appendix A  
Steering Committee Members and Meetings**

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## Steering Committee Membership

Adams County  
City of Aurora  
City of Brighton  
City of Commerce City  
City and County of Denver  
Denver International Airport

## Steering Committee Meetings

Date	Purpose
February 29, 2016	Steering #5
January 14, 2016	Steering #4
November 19, 2015	Steering #3 (Joint with Study Review Committee), Jeff Fegan
October 22, 2015	Steering #2
June 4, 2015	Steering #1



**Appendix B  
Study Review Committee Members and Meetings**

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## Study Review Committee Membership

Adams County  
City of Aurora  
City of Brighton  
Colorado Department of Transportation  
City of Commerce City  
City and County of Denver  
Denver International Airport  
Denver Regional Council of Governments  
Federal Aviation Administration  
Metro Denver Economic Development Corp  
Regional Transportation District  
City of Thornton  
The Stanton Solution  
Consultant Team (HDR, LXC2, Arland Land Use Economics)

## Study Review Committee Meetings

Date	Purpose
March 2, 2016	SRC #10: Final Recommendations
January 21, 2016	SRC #9: Recommendations
December 10, 2015	SRC #8: Economic Analysis
November 19, 2015	SRC #7: Joint with Steering Committee, Jeff Fegan
October 15, 2015	SRC #6: Governance and Study Analysis Update
September 17, 2015	SRC #5: Study Update
July 23, 2015	SRC #4: Panel and Aerotropolis Scenarios
June 18, 2015	SRC #3: Scenario Development
May 27, 2015	SRC #2: Agency Briefings
May 7, 2015	SRC #1: Vision





**Appendix C  
Primary Stakeholders One-on-One Coordination Meetings**

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## Primary Stakeholders One-on-one Meetings

Agency	Date	Meeting Materials
Public Information Officers	March 14, 2016	<ul style="list-style-type: none"> <li>• Conference Call</li> </ul>
Presentations to City Councils and County Commissions: <ul style="list-style-type: none"> <li>• Denver International Airport February 2, 2016</li> <li>• City and County of Denver March 1, 2016</li> <li>• Adams County March 22, 2016</li> <li>• City of Brighton March 22, 2016</li> <li>• City of Aurora Council Committee March 24, 2016</li> <li>• City of Commerce City April 11, 2016</li> <li>• City of Aurora Council Study Session April 18, 2016</li> <li>• Colorado Department of Transportation TBD</li> </ul>	<ul style="list-style-type: none"> <li>• Presentation</li> </ul>	
Governance Options: <ul style="list-style-type: none"> <li>• Adams County</li> <li>• City of Aurora</li> <li>• City of Brighton</li> <li>• City of Commerce City</li> <li>• City and County of Denver</li> </ul>	January 6, January 8, January 15, 2016	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Memo: Aerotropolis Stakeholder Governance Discussions, January 19, 2016, Icenogle Seaver Pogue</li> </ul>
Public Information Officers: <ul style="list-style-type: none"> <li>• Adams County</li> <li>• Adams County Economic Development</li> <li>• City of Aurora</li> <li>• City of Brighton</li> <li>• City and County of Denver</li> <li>• City of Commerce City</li> <li>• Colorado Department of Transportation</li> <li>• Denver International Airport</li> </ul>	December 14, 2015	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Meeting Notes</li> </ul>
City of Commerce City	October 13, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
City of Commerce City	September 30, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
Denver International Airport	September 28, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
City of Aurora	September 10, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
City and County of Denver	August 4, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
City and County of Denver	May 26, 2015	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Meeting Notes</li> </ul>
Denver International Airport	May 21, 2015	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Meeting Notes</li> </ul>

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Agency	Date	Meeting Materials
City and County of Denver	May 13, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li></ul>
City of Brighton	April 29, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li><li>• Meeting Notes</li></ul>
City and County of Denver	April 13, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li><li>• Meeting Notes</li></ul>
Denver International Airport	April 8, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li><li>• Meeting Notes</li></ul>
City of Commerce City	April 7, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li><li>• Meeting Notes</li></ul>
Adams County	April 6, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li><li>• Meeting Notes</li></ul>
City of Aurora	April 3, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li><li>• Meeting Notes</li></ul>
Initial Agency Coordination: <ul style="list-style-type: none"><li>• Adams County</li><li>• City of Aurora</li><li>• City of Commerce City</li><li>• City and County of Denver</li><li>• Denver International Airport</li></ul>	February 6, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li><li>• Meeting Notes</li></ul>



**Appendix D  
Other Agency Coordination Meetings**

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## Other Agency Coordination Meetings

Agency	Date	Meeting Materials
<ul style="list-style-type: none"> <li>• DRCOG TAC</li> <li>• E-470 PHA</li> <li>• Metro Denver Economic Development Corp Aviation Coalition</li> </ul>	April 25, 2016 April 28, 2016 June 8, 2016	<ul style="list-style-type: none"> <li>• Study Briefing</li> </ul>
Urban Drainage and Flood Control District	February 4, 2016	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
Aurora Water	October 15, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
E-470 PHA	October 14, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
DRCOG	September 28, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
Metro Wastewater Reclamation District	September 18, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
Denver Water	September 4, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
South Adams County Water and Sanitation District	August 27, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
OEDIT	June 1, 2015	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Meeting Notes</li> </ul>
Front Range Airport	May 5, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
CDOT Aeronautics	May 1, 2015	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Meeting Notes</li> </ul>
E-470 PHA	April 30, 2015	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Meeting Notes</li> </ul>
DRCOG	April 30, 2015	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Meeting Notes</li> </ul>
RTD	April 29, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>
Peña Boulevard Study Coordination	April 22, 2015	<ul style="list-style-type: none"> <li>• Meeting Agenda</li> <li>• Meeting Notes</li> </ul>
I-70 East EIS Coordination	April 20, 2015	<ul style="list-style-type: none"> <li>• Meeting Notes</li> </ul>

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Colorado Aerotropolis Visioning Study  
Colorado Aerotropolis Visioning Study Outreach

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Agency	Date	Meeting Materials
Metro Denver Economic Development Corp	April 17, 2015	<ul style="list-style-type: none"><li>• Meeting Agenda</li></ul>

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# Colorado Aerotropolis Visioning Study

Memo

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Project: Colorado Aerotropolis Visioning Study

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Subject: Examples of Aerotropolis Cities and Aerotropolises Worldwide

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Date: January 2016

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Distribution: File

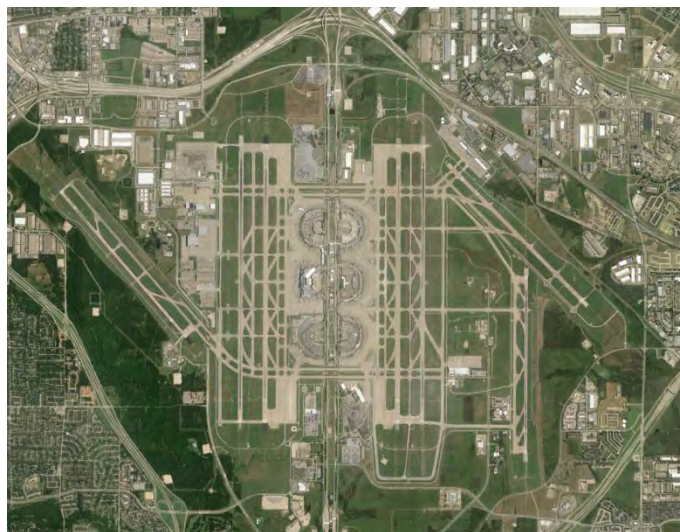
Many cities around the world have established their own version of an aerotropolis. In some cases these aerotropolises happened organically as the city and airport grew in conjunction with one another; in other cases the aerotropolis was planned and created with the vision of a global city in mind.

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

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

### *Dallas-Fort Worth International Airport*

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



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

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

### *Detroit Metropolitan Airport*

Despite recent economic hardships, Detroit may have a brighter future. With more industrial engineers and spending more money on research and development than other regions, Detroit has the potential to develop an aerotropolis of its own (Kasarda 2011). In fact, Detroit began touting the idea of an aerotropolis in 2003, but it wasn't until 2008 that Wayne County Executive Robert Ficano began to seriously push the aerotropolis concept. The proposed aerotropolis will encompass 60,000 acres of land around Detroit Metropolitan Airport and would combine Detroit Metropolitan and Willow Run Airports (Crain's Detroit Business 2013).



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

### *Edmonton International Airport (Alberta)*

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



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

### *Incheon International Airport (Seoul)*

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



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

### *Los Angeles International Airport*

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

### *Louisville International Airport*

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

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

### *Memphis International Airport*

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



### *O'Hare International Airport (Chicago)*

According to the Chicago Tribune, in a recent survey of passenger satisfaction, O'Hare International Airport ranked 96<sup>th</sup> among 100 world airports. In the 1970s, the Federal Aviation Administration noted that O'Hare would be outdated by the end of the 20th century and suggested building a much larger airport somewhere in the Midwest. Consequently, a tri-state commission was formed to study the best location for such an airport. However, due to a lack of collaboration and regional





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

### *Philadelphia International Airport, Pennsylvania.*

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

### *Schiphol International Airport (Amsterdam)*

The Netherlands is known today as a major grower and international exporter of flowers; however, the Dutch floral industry has been around for centuries. In 1593 a botanist arrived with an unusual wildflower - the tulip. Since then the production, sale, and export of tulips and other flowers has taken off. In 1928 KLM, the flag-carrier airline of The Netherlands, invented the perishables business, airlifting 7,500 hundred tons of flowers, fruits, and vegetables to London in that year alone. By 1973 nearly three quarters of all floral exports originated in The Netherlands. Consequently, Amsterdam Schiphol International Airport plays a very important role in the global economic market, and it is not by chance that the largest flower auction in The Netherlands is just 6 miles from the airport (Kasarda 2011).



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

### References

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# Colorado Aerotropolis Visioning Study

## Colorado Aerotropolis Visioning Study

**Draft**  
Infrastructure Development  
for the  
Colorado Aerotropolis Study Area

Prepared by  
HDR

March 2016



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## Infrastructure Development for the Colorado Aerotropolis Study Area

### Introduction and Overview

An Aerotropolis is an urban plan in which the layout, infrastructure, and economy are centered on an airport.

The Colorado Department of Transportation (CDOT) conducted a study regarding the land use and infrastructure requirements that could enhance economic development surrounding Denver International Airport (DIA). The Colorado Aerotropolis Visioning Study, funded by a Federal Highway Administration grant, along with additional funds from DIA, collaboratively engaged local jurisdictions to examine the benefits and impacts of a proactively planned Aerotropolis infrastructure surrounding DIA. An infrastructure framework for transportation, water, wastewater, power, communications, and drainage is critical to fostering and supporting economic development surrounding the airport.

CDOT engaged Adams County, City of Aurora, City of Brighton, City of Commerce City, City and County of Denver, as well as DIA, in the Visioning Study.

### Study Vision

At the onset, study participants jointly developed a vision for a Colorado Aerotropolis:

*A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

### Study Objectives

CDOT had the following objectives for the study:

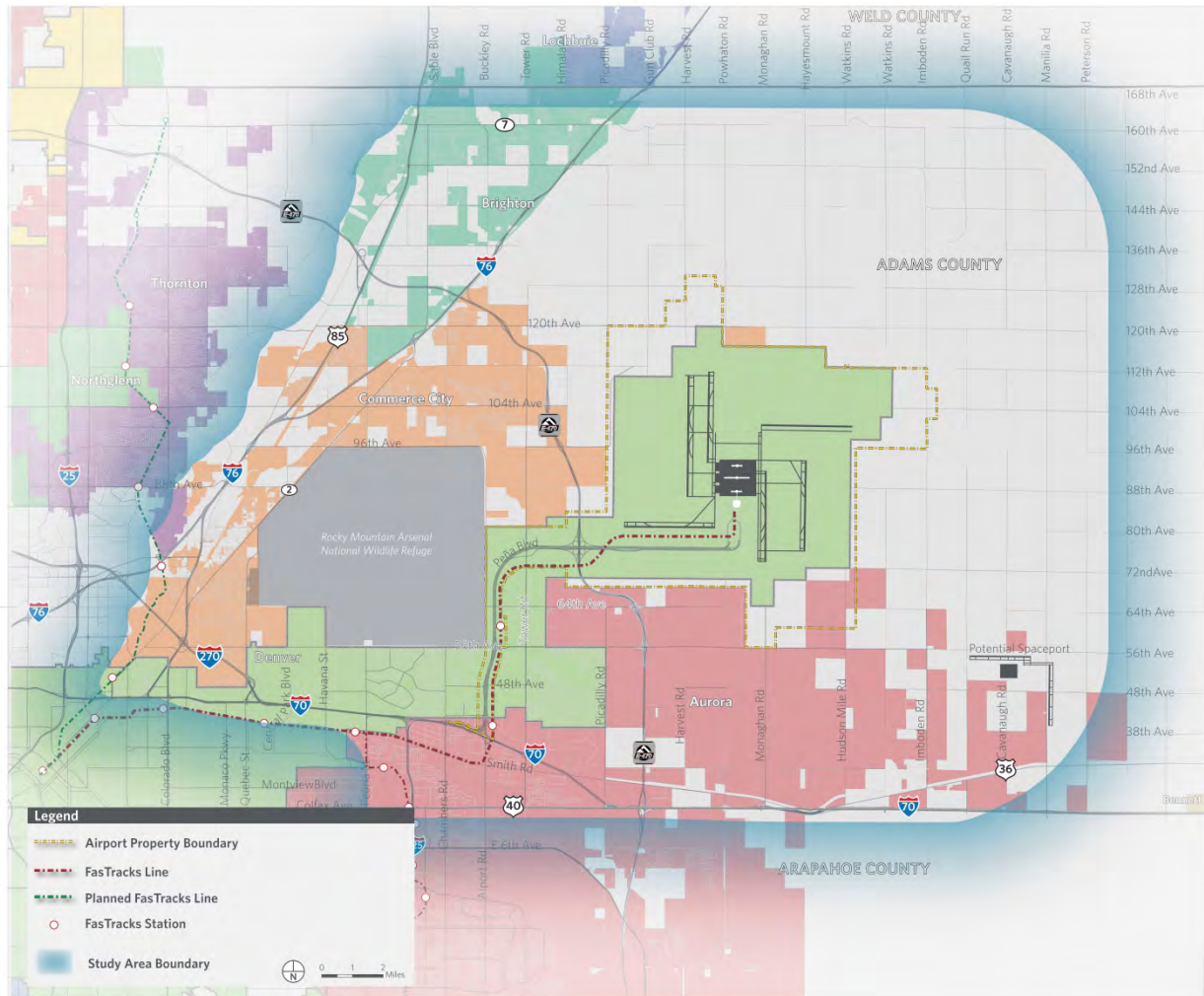
- Agree on a collaborative vision for a Colorado Aerotropolis.
- Learn about the aerotropolis concept.
- Identify commonalities among the local plans.
- Quantify the potential for economic growth—with or without a Colorado Aerotropolis.
- Identify a framework of possibilities for collaboration on infrastructure investments.
- Outline regional governance options to implement investments in transportation, water, wastewater, drainage, power, and communications systems.



## Study Area

Figure 1 displays the study area of the Colorado Aerotropolis Visioning Study. The study area boundaries defined an area of influence that impacts or would be impacted by the current and future economic conditions both on and off airport.

Figure 1 Study Area for the Colorado Aerotropolis Visioning Study



Source: Aerotropolis Study Team.

## Working Paper Organization

This working paper describes the existing and planned infrastructure systems, identifies opportunities for long-term infrastructure investments, and presents a concept of a phased collaborative infrastructure scenario for fostering the development of an Aerotropolis. The elements of infrastructure included in this paper are Transportation, Water, Wastewater, Power, Drainage, and Communication Systems.

The paper is organized into the following sections:

- Infrastructure Needs Assessment
  - Purpose for Aerotropolis Infrastructure
  - Support for Infrastructure Development
  - Utilities
  - Transportation Networks
- Scenario Comparison
  - Business as Usual Scenario
  - Aerotropolis Scenario

## Infrastructure Needs Assessment

### Purpose for Infrastructure Development

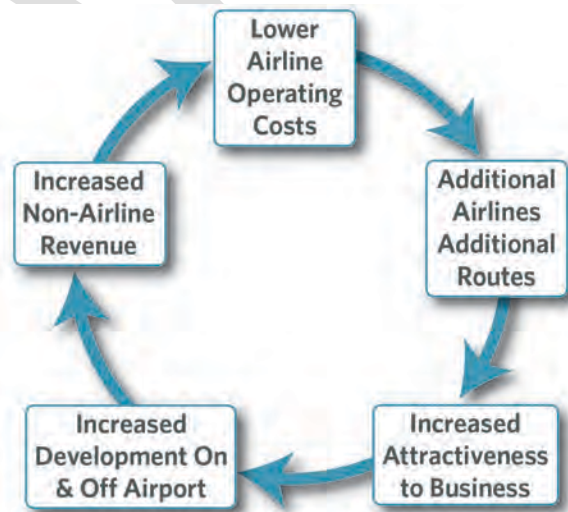
The construction of efficient infrastructure has long been a catalyst for fostering and supporting economic development. Developers, businesses, and residents are attracted by ample “on the ground” infrastructure. This means sufficient water, power, transportation, communications resources, and other supporting civil infrastructure.

A significant finding of this study is the importance of on-airport commercial development to DIA’s ability to compete globally. A self-sustaining Cycle of Development is feasible, in which catalytic actions can spur greater economic development and growth, as depicted in Figure 2. Maintaining and stimulating this Cycle of Development is extremely important.

When commercial developers invest in on-airport and off-airport property, the airport collects non-airline revenue. This allows airports to lower operating costs for airlines, which in turn attracts additional airlines and additional airline routes. This increases the attractiveness of the airport for further commercial development, which adds to non-airline revenue for the airport and continues the cycle. Increased development also means further investments in infrastructure on and near the airport. Investment in infrastructure is, therefore, one of the catalysts that can be driven by the local municipalities surrounding an airport.

This Cycle of Development illustrates how an airport can grow to compete globally and contribute to the regional economy once initial investments in infrastructure are made.

Figure 2 Cycle of Development



Source: Aerotropolis Study Team.

## Support for Infrastructure Development

Consistent with the Cycle of Development, the Study Review Committee for the Colorado Aerotropolis Visioning Study identified that rapid, collaborative infrastructure development is a key need. In an informal survey of the members regarding the most important near-term collaborative effort, infrastructure development was identified in at least 9 of 21 responses, as shown to the right.

When asked to expand on specific opportunities and constraints, participants zeroed in on the following:

- Opportunities:
  - RTD University of Colorado A Line connectivity.
  - Connection points from the south—Jackson Gap and Piccadilly.
- Constraints:
  - How are we working together and what can we do to make sure that some of the transportation corridor and projects are really linking and provide benefits?
  - Lack of dedicated funding; comes down to politics.
  - Major physical barriers (Rocky Mountain Arsenal National Wildlife Refuge and DIA) form a Pinch Point for north/south travel, where capacity may be constrained.
  - FAA restrictions regarding the amount of non-airport traffic that can be allowed to use Peña Boulevard.

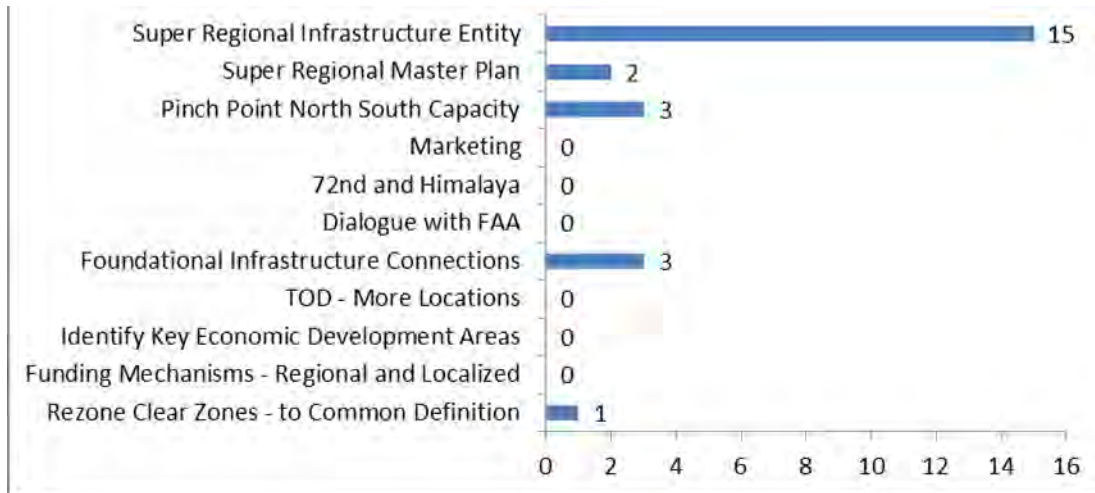
In further discussion of action priorities, the members overwhelmingly indicated that the top priority is to establish a regional entity responsible for guiding, planning, and *potentially* funding infrastructure investment. The results of the poll are shown in Figure 3. This visionary collective perspective recognizes that infrastructure investments for Aerotropolis development would support the Denver metropolitan area economy and provide world-class multimodal access and mobility around the airport.

### Informal Poll

What is the most important collaborative action in the near term?

- Multi-governmental regional committee structure beyond this plan
- Infrastructure
- Infrastructure
- Infrastructure
- Cross Jurisdictional Planning
- Governance/financing structure
- Funding
- Pass IGA Amendment this Fall
- Cost sharing
- Marketing and infrastructure
- Establish some form of governance/oversight
- Link west side of DIA via Piccadilly
- Cargo
- Peña Corridor solution
- Priority development areas
- Collaborative funding structure
- Roads
- Identify long-term funding stream
- Pass IGA Amendment vote
- Extend water supply to strategic areas outside DIA
- Understand specific regional water and wastewater needs, sources, timing, constraints, and funding operations

Figure 3 Highest Priority Actions Based on Poll



Source: Study Review Committee poll.

## Aerotropolis Scenario Infrastructure Needs

This study presents needs and opportunities for catalytic infrastructure investment, including utilities - water, wastewater, power, communications, and drainage - and transportation.

### Utilities

The joint use of the transportation rights-of-way with utilities would require that utilities be implemented at the time transportation improvements are made. While a transportation facility can be built in phases over time, wet and dry utilities are usually implemented to meet their ultimate requirements so that future disruption of the roadway is unnecessary to increase the size of the utility corridor.

Programs and plans for water utility networks were collected from the water supply and wastewater treatment systems service providers to the study area. A key finding is that certain "regional" elements would be required in the study area while the majority of the systems would take the form of typical installations within the transportation rights-of-way.

### Water Supply

The major water providers in the study area are Aurora Water, Denver Water, and the South Adams County Water and Sanitation District. These providers have different primary sources of water supply as summarized below.

#### Aurora Water

Aurora Water has a combination of surface water and a reuse system (Prairie Waters) that is sufficient to provide water to the area north of I-70.

- The system will be incrementally implemented using an "integrated water master plan" that considers all sources, uses, reuse, wastewater, and stormwater flows.
- Water to the area is delivered from treatment facilities south of I-70. Service pressures will be adequate for delivery to all parts of Aurora within the study area.



Trunk and smaller pipelines will need to be incorporated into roadway development projects and paid for primarily on a “pay-as-you-go” basis by adjacent development.

### Denver Water

Denver Water has long-term water supplies from surface water storage and trans-mountain diversion based on more than 100 years of programs and agreements.

- Part of the current agreement with multiple entities regarding trans-mountain diversion restricts the water use to the City and County of Denver only. A small portion (around 4,000 acre-feet) can be shared with adjacent communities. One current partner is SACWSD, which receives a portion of that allocation.
- Denver has sufficient water to serve expected development throughout the study area within Denver. Service levels will include development on airport as well as in the areas of Denver off airport.
- Water supply lines have been laid out in the Master Plan for the area. These include some locations where pumping to maintain service pressures will be required. These lines will be incorporated into roadway development and paid for primarily on a “pay-as-you-go” basis by adjacent development.

### South Adams County Water and Sanitation District (SACWSD)

SACWSD primarily serves the areas of Commerce City and Brighton west and north of DIA. SACWSD uses ground water for the bulk of the water distribution in the cities.

- A key issue for service to the east and south of E-470 within Commerce City is the elevation difference to some future development parcels. Pumping of potable water will be required if a different source cannot be found.
- Water supply lines have been laid out in the Master Plan for the area. These include some locations where pumping to maintain service pressures will be required. These lines will be incorporated into roadway development and paid for primarily on a “pay-as-you-go” basis by adjacent development.

### Observations

Although the water supply plans have been developed and would provide adequate water for the study area to support future development, there are several areas where more efficient development of the overall network could be achieved with a comprehensive partnership among the primary stakeholders. Substantial savings could be realized by the jurisdictions as well as by the adjacent development projects.

The areas of efficiency could include:

- Balancing of supply to limit or eliminate pumping to any portion of the study area.
- Sharing of trunk and sub-trunk facilities to limit or eliminate duplicative installations.
- Development of a comprehensive reuse plan to tie the area together. The water reuse could be grey water for irrigation purposes; or if tertiary treatment facilities are developed, the water could be mixed to add to the water supply.

To achieve these efficiencies, a comprehensive master plan with an integrated approach similar to Aurora's would be needed.

To provide the water supply infrastructure during initial construction of the Aerotropolis roadway system, the following assumptions were made regarding the size of the pipelines that would be required to serve the area:

- Minor Arterial - 16 inches
- Major Arterial - 24 inches
- Major Arterial with Trunk Water - 30 inches

### **Wastewater**

The Denver metropolitan area is served by the Metro Wastewater Reclamation District (Metro). Metro is comprised of 52 entities, which include the Cities of Aurora, Brighton, Commerce City, and Denver. Unincorporated Adams County is not a part of the district; therefore, any areas that want to link to the Metro system must be approved by the Metro members and provide a buy-in payment.

Since the 1970s, metropolitan wastewater has been collected and directed by gravity flow to the Hite Facility located at 64<sup>th</sup> Avenue and York Street. This major facility is capable of treating over 150 million gallons per day (MGD), which is currently sufficient for the members for the next several years. To prepare for the future, Metro has built and commissioned the Northern Treatment Plant, located on the Platte River just north of the downtown Brighton area.

In general, gravity flows from the Aerotropolis study area are possible, but each jurisdiction uses their own collection system to carry wastewater flows for treatment. As the collection pipes converge, larger interceptor pipelines controlled by Metro take flows to the Hite treatment plant. For portions of Aurora in the study area, wastewater needs to be pumped from the south, and then west to the Hite facility.

Metro is currently engaged in a comprehensive study of the northeast area of its district to determine the most efficient and effective approach to wastewater collection and treatment for future development, given the locations and capacities of the Hite Plant and the Northern Treatment Plant. The district is working with its member jurisdictions to define alternatives and evaluate options. Once the preferred solution is determined in mid-2016, funding and financing requirements and allocations will be proposed.

### **Observations**

To provide the wastewater collection infrastructure during initial construction of an Aerotropolis roadway system, the following assumptions were made regarding the size of the pipelines that would be required to serve the area:

- Minor Arterial - 24 inches
- Major Arterial - 36 inches
- Major Arterial with Trunk Wastewater - 48 inches

One of the major facilities under consideration in Metro's study is a possible large interceptor to run from the southeast to the northwest portion of the Aerotropolis study area. This interceptor would be large enough to collect flows from each of the jurisdictions and deliver the flows by gravity to the new Northern Treatment Plant. Locations and linkage points for the interceptor will be defined as part of the Metro study. A likely candidate for the alignment is along the Second Creek drainage right-of-way. The length of the interceptor would be about 15 miles and may cost in the range of about \$10 million per mile based on previous costs experience for similar interceptor projects.

One of the key outcomes from the Metro study will be a staging/phasing program based on an agreed-upon development pattern for the area. The Aerotropolis planning process can be used as one mechanism to start the discussions necessary to reach agreement on the pattern and pace of development, which will then support Metro and its Board in developing a master plan for service to the Aerotropolis study area.

### ***Power Utilities***

Power utilities consist of electricity and natural gas. Electrical service providers in the Aerotropolis study area are Xcel Energy and United Power. Xcel Energy provides service to Denver, Aurora, parts of Commerce City, and parts of unincorporated Adams County in the southern portion of the study area. United Power serves northern Commerce City, Brighton, and the northern areas of unincorporated Adams County in the study area.

Power-line corridors power substations are located throughout the study area. Xcel Energy recently installed a new substation just south of DIA that has stabilized much of the power network for the study area and for users east of DIA.

Natural gas lines for service leads are typically incorporated within the public right-of-way, while mainlines occasionally have their own right-of-way. When the lines are within the roadway right-of-way, specific locations are provided for gas lines and associated transmission stations.

Power utilities are privately owned, and costs for installation are paid for by the utility owners. Coordination between the jurisdiction and the utilities at the time of roadway design and construction is required to integrate the required lines.

### **Observations**

It is anticipated that there would be sufficient electrical and natural gas power available for build-out of the Aerotropolis study area.

### ***Communications Systems***

Technology is constantly evolving, and an effective communications network is needed to serve development investments. Fast, reliable broadband, as well as traditional connectivity in the form of telephone, cable, and fiber optics is needed. How this network is built out, and the roles the latest wireless technologies play, would be decided based on the newest technology at that point in time. However, a collaborative regional effort would benefit each jurisdiction and the Aerotropolis study area as a whole. Some jurisdictions are planning

substantial upgrades to various parts of their communications networks, but a coordinated plan is not yet in development.

### Observations

While developers in the area would ultimately be responsible for the final connections to homes and businesses, the jurisdictions should consider laying the trunk groundwork to support an integrated communications system.

### *Drainage Systems*

The predominant ground elevation pattern in the study area is downward sloping to the Platte River from southeast to northwest. There are substantial barriers to that pattern, including the DIA property and the Rocky Mountain Arsenal National Wildlife Refuge. However, there are several natural watercourses that carry runoff to the Platte River.

A series of creek-sized drainageways form a pattern across the study area to carry water from southeast to northwest. These are Sand Creek, Irondale Gulch, First Creek, Second Creek, Third Creek, and Box Elder Creek. Third Creek travels through the DIA property from south to north before exiting at the northwest corner of the property. North of the airport, Barr Lake has several smaller drainageways that are tributary to the lake. On the east side of the airport, Box Elder Creek runs almost due north to Boot Lake Reservoir.

There are some unique circumstances concerning drainage within the study area. One is that the Rocky Mountain Arsenal National Wildlife Refuge is in the center of the study area. The agency has stipulations on the amount of drainage water that can flow through its property. This necessitates the need for detention ponds upstream of the property. However, the FAA has restrictions on detention ponds near airports because of concerns about migratory waterfowl. The FAA allows detention ponds but they must be discharged within 48 hours after a flood event. There is also a concern about drainage of the airport property regarding deicing fluids. During normal weather conditions, the deicing fluid run-off is captured and contained. During flood events the flows may exceed capacity of these systems and deicing fluid may enter the drainage basins, which is a water quality concern.

The Urban Drainage and Flood Control District (UDFCD) is a regional agency with a mission to protect people and property. It coordinates improvements to the regional drainageways and assists jurisdictions to implement the improvements. It has an established Northeast Quadrant subgroup that addresses drainage issues in the Aerotropolis study area. Each of the watersheds has been studied at various stages of detail, depending on the stage of development within the watershed. IGAs between jurisdictions are typically in place to establish flow levels across jurisdictional boundaries. Each of the cities and Adams County have adopted drainage requirements for new development and for publicly owned right-of-way along transportation corridors.

### Observations

For the cited reasons, the drainage infrastructure may be more complex than other areas of the metropolitan region. The watersheds traverse multiple jurisdictions through the study area. The development of land needs to accommodate detention ponds, and agreements need



to be in place to manage the drainage systems. There is an opportunity for long term efficiency, resiliency, and quality of life to be gained by regional collaboration regarding drainage needs.

Proactive planning to preserve the floodplain, wetland, and riparian areas of drainageways would help sustain ecological resources. In contrast to channelization, floodplains store and convey floodwaters, thereby reducing flood damages and erosion. Floodplains enhance biodiversity, providing breeding and feeding grounds for fish and a wide variety of wildlife.

Regional detention facilities typically require proportionally less total land area and are more cost-effective to construct and maintain compared to on-site facilities. Well-designed regional facilities may also provide more favorable riparian habitat and offer greater opportunities for achieving multi-use objectives. Because of the complexities associated with how they function within an entire watershed, regional detention facilities must be developed in the context of a formal master planning process.

The quality of life can be enhanced when drainageways are developed as multiuse recreational corridors. These features add substantially to the overall attractiveness of the Aerotropolis area for future development. Adams County, Aurora, Brighton, Commerce City, and Denver prepared *The Emerald Strands, A Cooperative Park, Open Space, and Trail Plan for the Area Surrounding the new Denver International Airport* for the area around DIA (Adams County et. al. 1990). Figure 4 illustrates the conceptual open space, parks, pedestrian/bicycle trails, and major drainageways in the study area.

A regional and collaborative perspective on multipurpose drainageways produces positive outcomes:

- Lower capital and maintenance costs.
- Multiuse opportunities, including parks and recreation.
- Increased marketing potential.
- Community character and identification.
- Achievement of sustainability principles.

### Transportation

Transportation needs have been thoroughly identified and catalogued by the cities and counties in their various transportation plans.

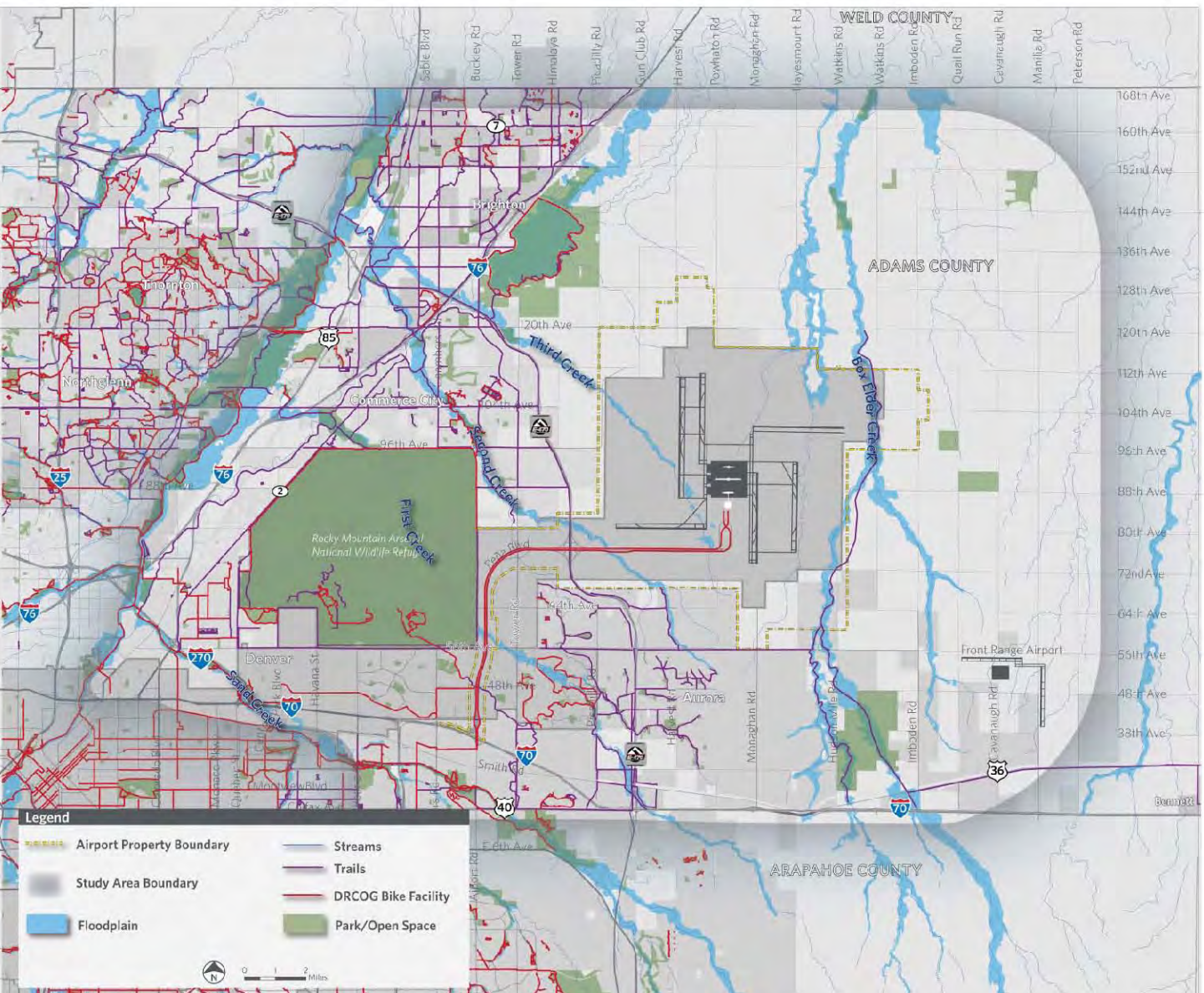
#### ***Local and Regional Transportation Plans***

Local and regional transportation plans provide the context for future infrastructure development around DIA.

Transportation plans or comprehensive plans have been developed by Adams County, Aurora, Brighton, Commerce City, and Denver and form the basis for the transportation infrastructure prioritization process. Transportation plans relevant to the study area are:

- Adams County *Imagine Adams County Comprehensive Plan, Transportation Plan Update, 2012*
- City of Aurora *Street Construction Priority Program for the Area South of DIA, 2014*

**Figure 4 Open Space, Parks, and Major Drainageways in the Study Area**



Source: Aerotropolis Study Team from Available Plans.

- City of Aurora *Northeast Area Transportation Study*, 2009
- City of Brighton *2020 Comprehensive Plan*, Amended 2009
- City of Commerce City *C3 Vision Transportation Plan*, 2010
- City and County of Denver *Strategic Transportation Plan*, 2008
- Denver Regional Council of Governments (DRCOG) *2040 Fiscally Constrained Regional Transportation Plan (DRCOG 2040 RTP)*, 2014

All of these plans identify priorities for infrastructure investment in the Aerotropolis study area and recognize the massive potential for growth in the area.

The Adams County *Transportation Plan Update* identifies significant capacity improvement for all modes in the area as strategic corridors (Figure 5).

#### Summary of Adams County *Transportation Plan Update*

Roadway	High-Order and Regional Facilities	Other Strategic Corridors
	<ul style="list-style-type: none"> <li>– I-70</li> <li>– I-76</li> <li>– E-470</li> <li>– US 85</li> <li>– Peña Boulevard</li> <li>– 56th Avenue</li> <li>– Imboden Road</li> <li>– 120th Avenue</li> </ul>	<ul style="list-style-type: none"> <li>– Tower Road</li> <li>– Picadilly Road</li> <li>– 64<sup>th</sup> Avenue</li> <li>– 48<sup>th</sup> Avenue</li> <li>– Harvest Mile</li> <li>– 104<sup>th</sup> Avenue</li> <li>– SH 2</li> <li>– 88<sup>th</sup> Avenue</li> </ul>
Transit	<ul style="list-style-type: none"> <li>– FasTracks University of Colorado A Line</li> <li>– FasTracks Northeast Area Transit Corridor (FasTracks Right-of-Way Preservation)</li> <li>– High Speed Rail Corridor(s) To Be Determined</li> </ul>	
Pedestrian/Bicycle	<ul style="list-style-type: none"> <li>– Colorado Front Range Trail</li> </ul>	

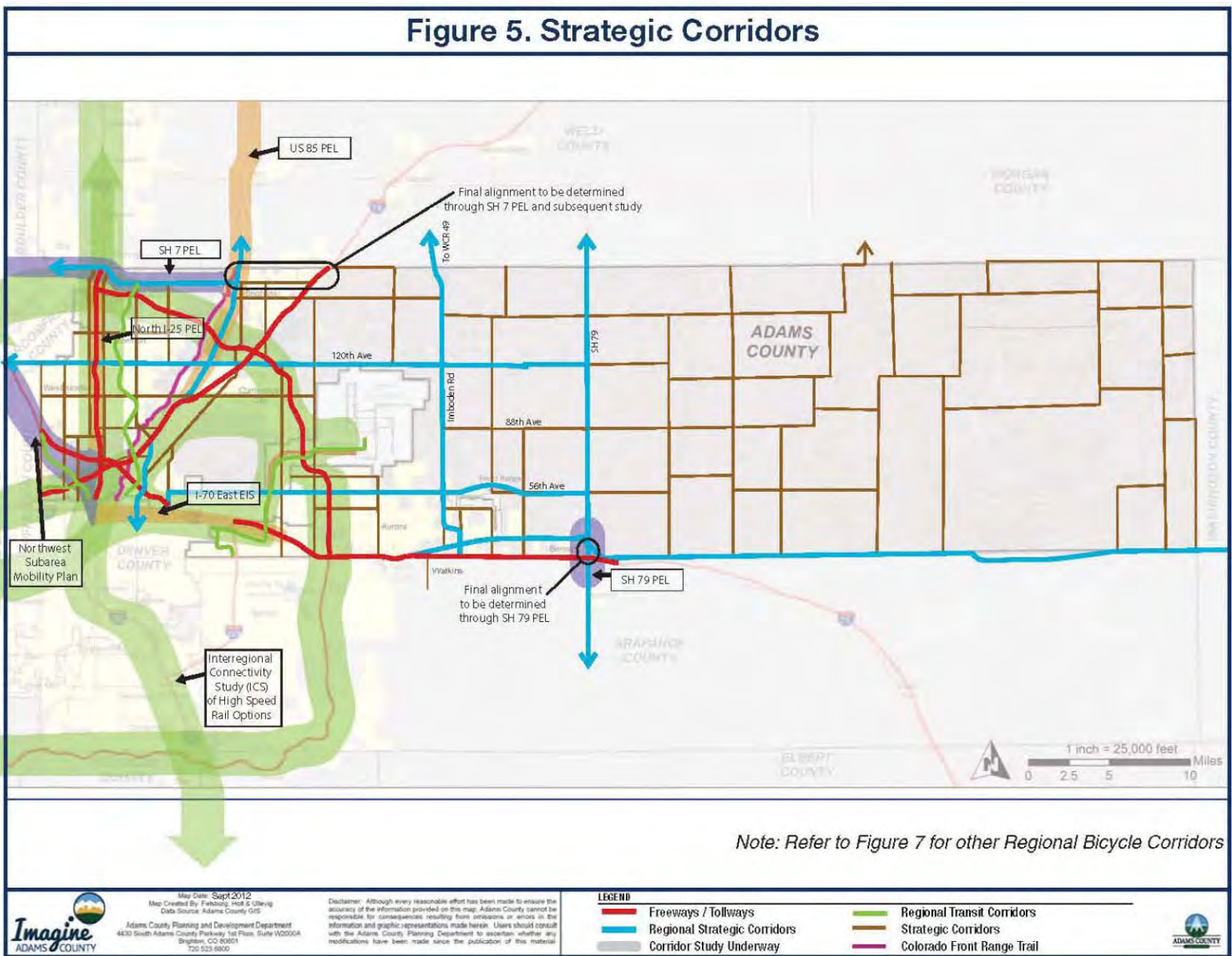
The City of Aurora *Northeast Area Transportation Study* and *Street Construction Priority Program for the Area South of DIA* also identified priorities for infrastructure investments in the study area. These are listed below and shown in Figure 6 and Figure 7.

#### Summary of City of Aurora *Northeast Area Transportation Study* and *Street Construction Priority Program for the Area South of DIA*

Roadway	Interchanges ( <b>Bold</b> = High Priority)	Corridors ( <b>Bold</b> = High Priority)
	<ul style="list-style-type: none"> <li>– <b>E-470/48<sup>th</sup> Avenue</b></li> <li>– E-470/64<sup>th</sup> Avenue</li> <li>– <b>I-70/Harvest Road</b></li> <li>– I-70/Manilla Road</li> <li>– <b>I-70/Picadilly Road</b></li> <li>– I-70/Quail Run Road</li> <li>– I-70/Watkins Road</li> </ul>	<ul style="list-style-type: none"> <li>– 26<sup>th</sup> Avenue</li> <li>– <b>48<sup>th</sup> Avenue</b></li> <li>– 56<sup>th</sup> Avenue</li> <li>– <b>64<sup>th</sup> Avenue</b></li> <li>– Harvest Road</li> <li>– <b>Picadilly Road</b></li> </ul>
Transit	<ul style="list-style-type: none"> <li>– E-470 corridor for future transit</li> <li>– UPRR/I-70</li> <li>– Jewell Avenue</li> </ul>	
Pedestrian/Bicycle	<ul style="list-style-type: none"> <li>– Several regional trail corridors (see Figure 7)</li> </ul>	



Figure 5 Adams County Transportation Plan Update Strategic Corridors

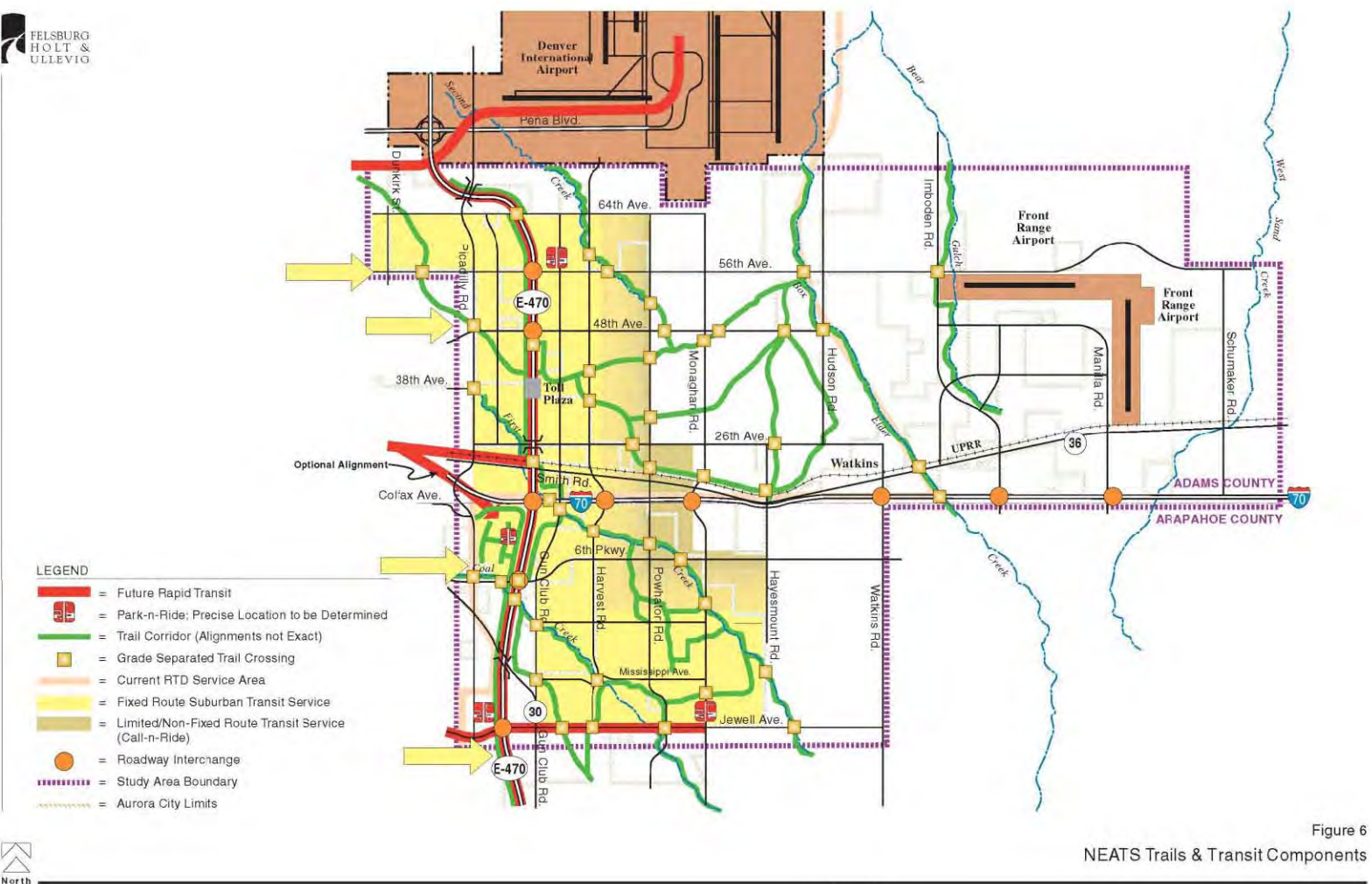


Source: Adams County Transportation Plan Update





### Figure 7 City of Aurora Bicycle & Pedestrian Plan from the Northeast Area Transportation Study



Source: City of Aurora Northeast Area Transportation Study



Draft

The City of Brighton is working on updates to its Transportation Master Plan and Comprehensive Plan. Prior plans identified 120<sup>th</sup> Avenue and SH 2 as major arterials in the Aerotropolis study area. Brighton is also focused on bringing better transit service to town as part of the FasTracks Northeast Area Transit Evaluation studies, which focus on right-of-way preservation for bus rapid transit (BRT) and/or rail to Brighton.

The City of Commerce City *C3 Vision Transportation Plan* identified the following priority corridors and projects. Figure 8 shows all strategic corridors identified by Commerce City.

Summary of City of Commerce City *C3 Vision Transportation Plan*

Roadway	High Priority <ul style="list-style-type: none"><li>– Tower Road</li><li>– US 85</li><li>– 96th Avenue</li><li>– 104th Avenue</li><li>– 120th Avenue</li><li>– High Plains Parkway</li><li>– I-76/88th Avenue Interchange</li><li>– US 85/120th Avenue</li><li>– US 85/104th Avenue</li></ul>
Transit	<ul style="list-style-type: none"><li>– FasTracks North Metro Commuter Rail</li><li>– FasTracks University of Colorado A-Line</li><li>– FasTracks Northeast Area Transit Corridor (FasTracks Right-of-Way Preservation)</li><li>– E-470 corridor for future transit</li></ul>
Pedestrian/Bicycle	<ul style="list-style-type: none"><li>– Several regional trail corridors (see Figure 9)</li></ul>

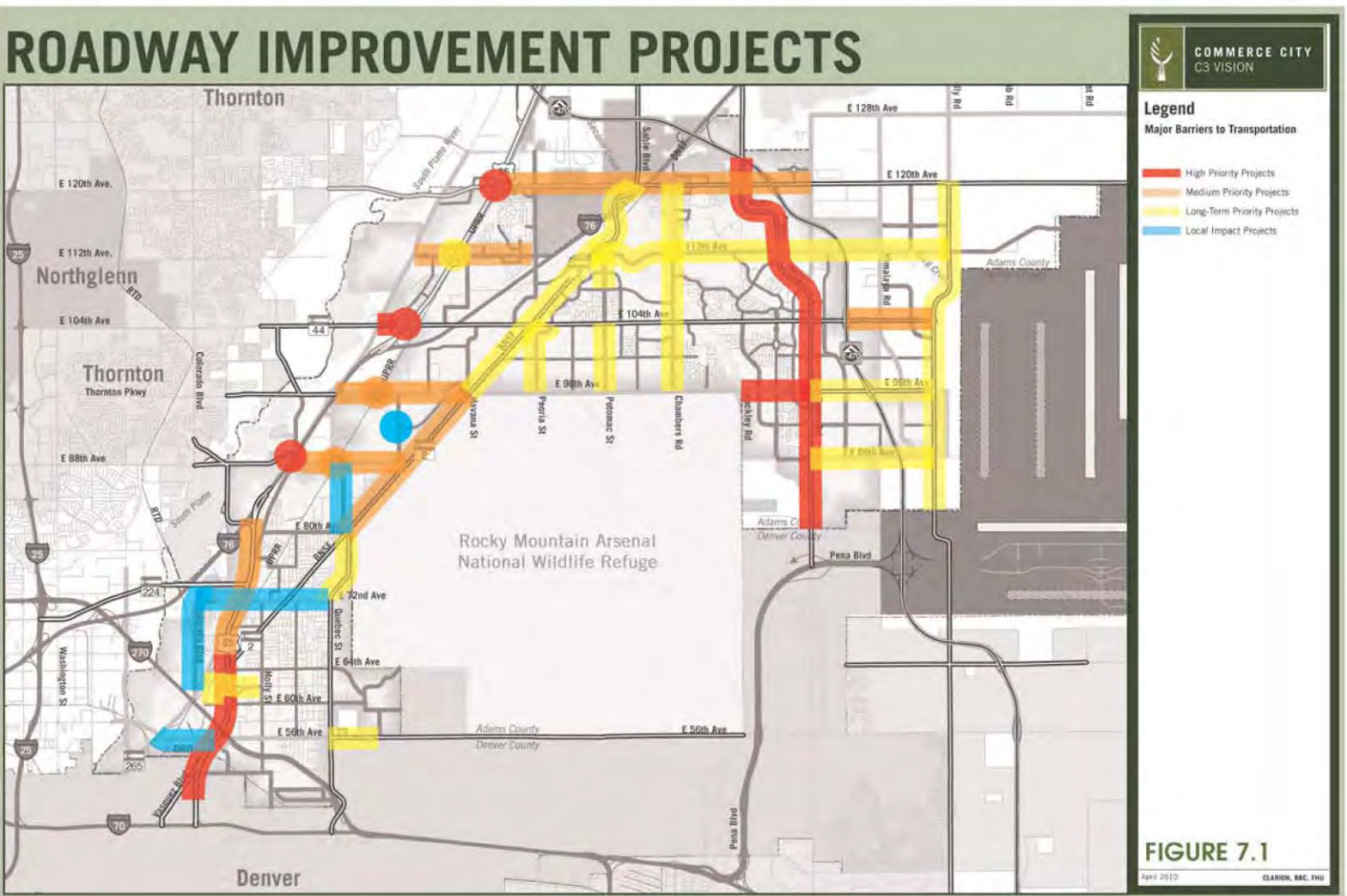
The City and County of Denver *Strategic Transportation Plan* developed recommendations for corridors and projects within the “Gateway” travel shed. These projects are shown below and displayed in Figure 10.

Summary of City and County of Denver *Strategic Transportation Plan*

Roadway	High Priority <ul style="list-style-type: none"><li>– 38th Avenue</li><li>– 48th Avenue</li><li>– 56th Avenue</li><li>– Tower Road</li><li>– Telluride Street</li><li>– Dunkirk Street</li><li>– Picadilly Road</li><li>– 64th Avenue</li><li>– 71st Avenue</li></ul>
Transit	<ul style="list-style-type: none"><li>– FastConnects hubs to connect to University of Colorado A Line</li><li>– Enhanced amenities at bus stops</li></ul>
Pedestrian/Bicycle	<ul style="list-style-type: none"><li>– Connections to University of Colorado A Line Stations</li><li>– Regional trail system</li></ul>



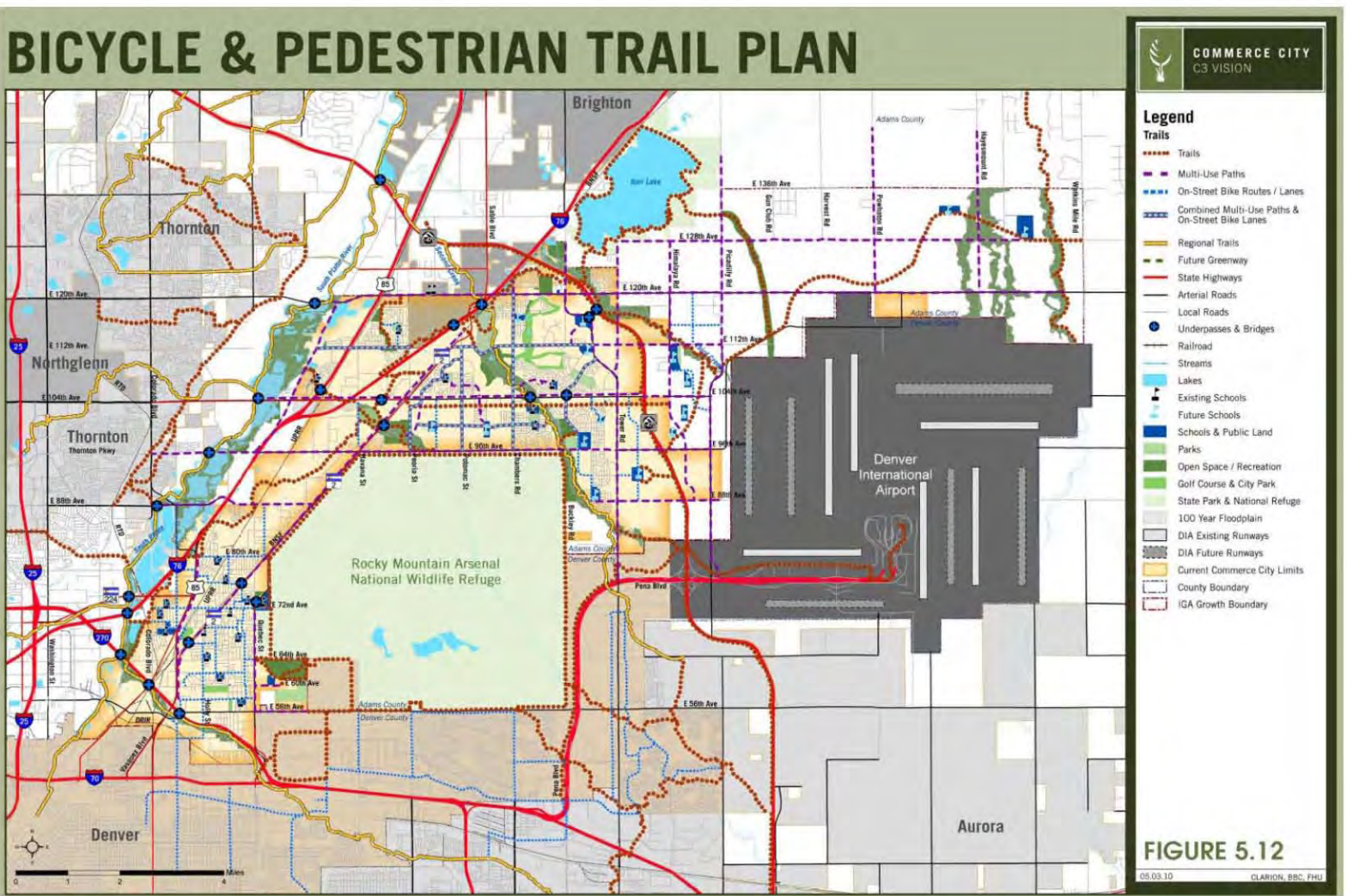
Figure 8 City of Commerce City Strategic Corridors from the C3 Vision Transportation Plan



Source: City of Commerce City C3 Vision Transportation Plan

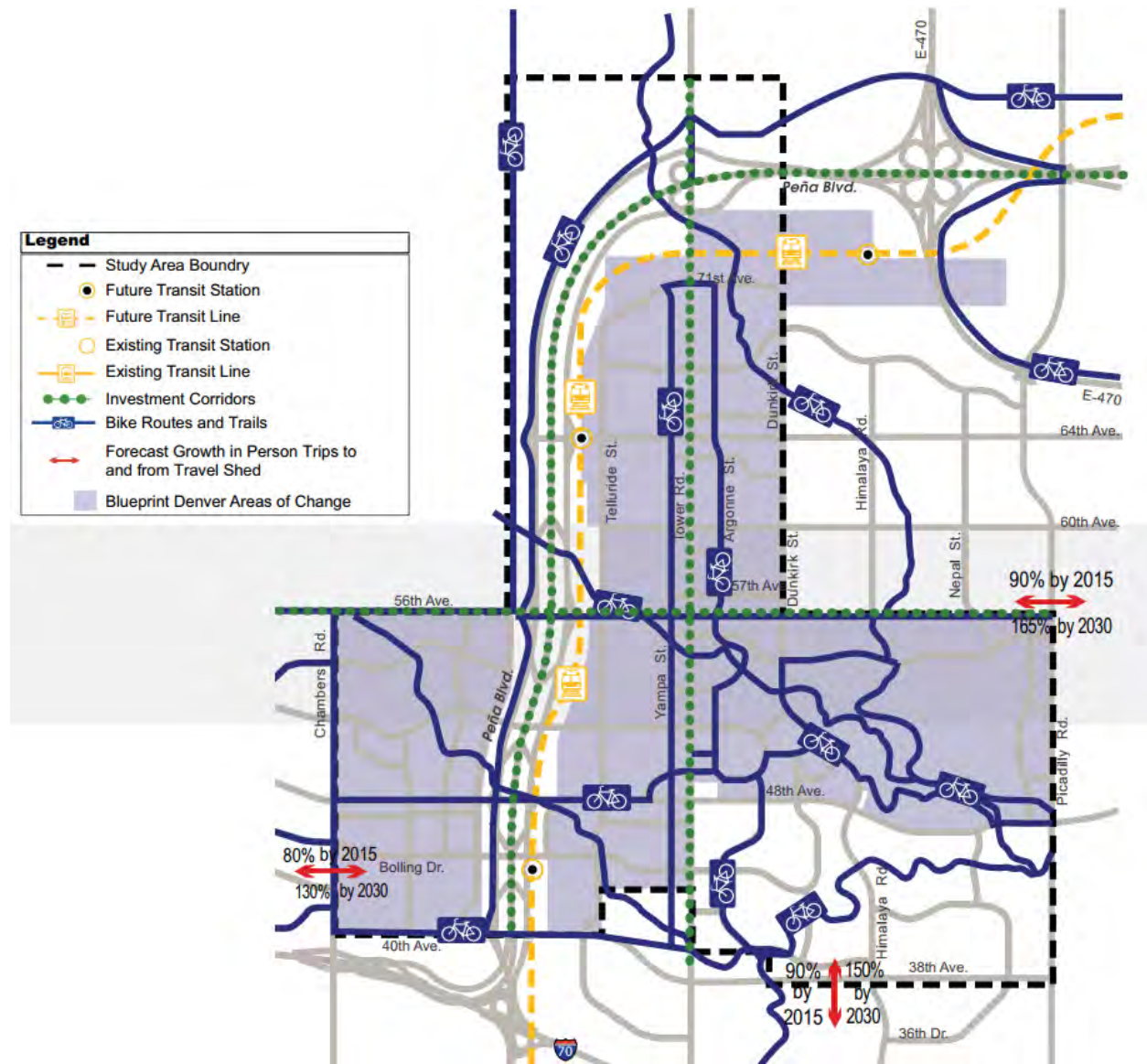


Figure 9 City of Commerce City Bicycle and Pedestrian Plan from the C3 Vision Transportation Plan



Source: City of Commerce City C3 Vision Transportation Plan

Figure 10 City and County of Denver Projects within the "Gateway" Travel Shed



Source: City and County of Denver

On the whole, the various local and regional plans indicate that the Aerotropolis study area warrants substantial investments in transportation infrastructure.

Common themes in the transportation plans include:

### Roadway

- Increase north-south capacity through the area between DIA and the Rocky Mountain Arsenal National Wildlife Refuge corridors, including:
  - Peña Boulevard
  - E-470
  - Imboden Road
  - Tower Road

- Picadilly Road
- Plus at least one more arterial for additional capacity
- Provide additional connections into the airport properties. These would consist of connections for access through Jackson Gap, and connections of future on-airport land uses to adjacent sites in adjoining cities.
- East-West capacity improvements to:
  - 48th Avenue
  - 56th Avenue
  - 64th Avenue
  - 72nd Avenue
  - 88th Avenue
  - 96th Avenue
  - 104th Avenue
  - 120<sup>th</sup> Avenue
- Connection to the metropolitan region controlled-access highway system with interchange construction and improvements along both E-470 and I-70.

#### Transit

- Capitalize on the RTD commuter rail University of Colorado A Line.
- Consider additional transit capacity in the following forms:
  - BRT or other regional bus service on major corridors.
  - Right-of-Way Preservation and eventual construction on the Northeast Area Transit Corridor.
  - Right-of-Way Preservation and eventual construction on the E-470 corridor for future transit - potential for high-speed rail.

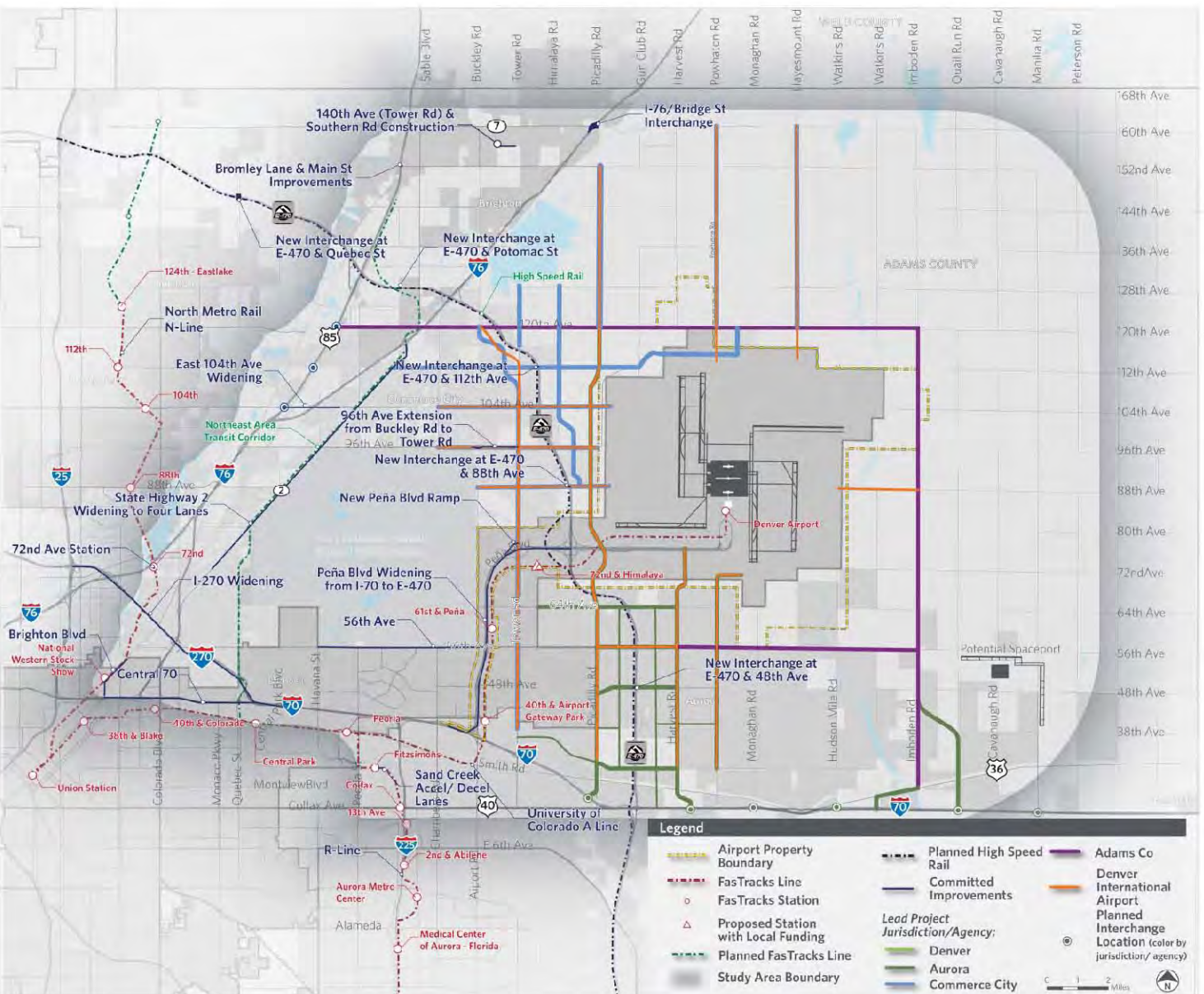
#### Pedestrian and Bicycle

- Build out a regional trail system.
- Build multimodal streets complete with high-quality sidewalks, bike lanes, cycle tracks and other treatments, as appropriate.
- Focus on providing high-quality access to transit.

Figure 11 illustrates a compilation of the roadway plans from the jurisdictions. Figure 12 illustrates a compilation of the pedestrian, bike, and transit plans from the primary stakeholders.



Figure 11 Compilation of Transportation Plans



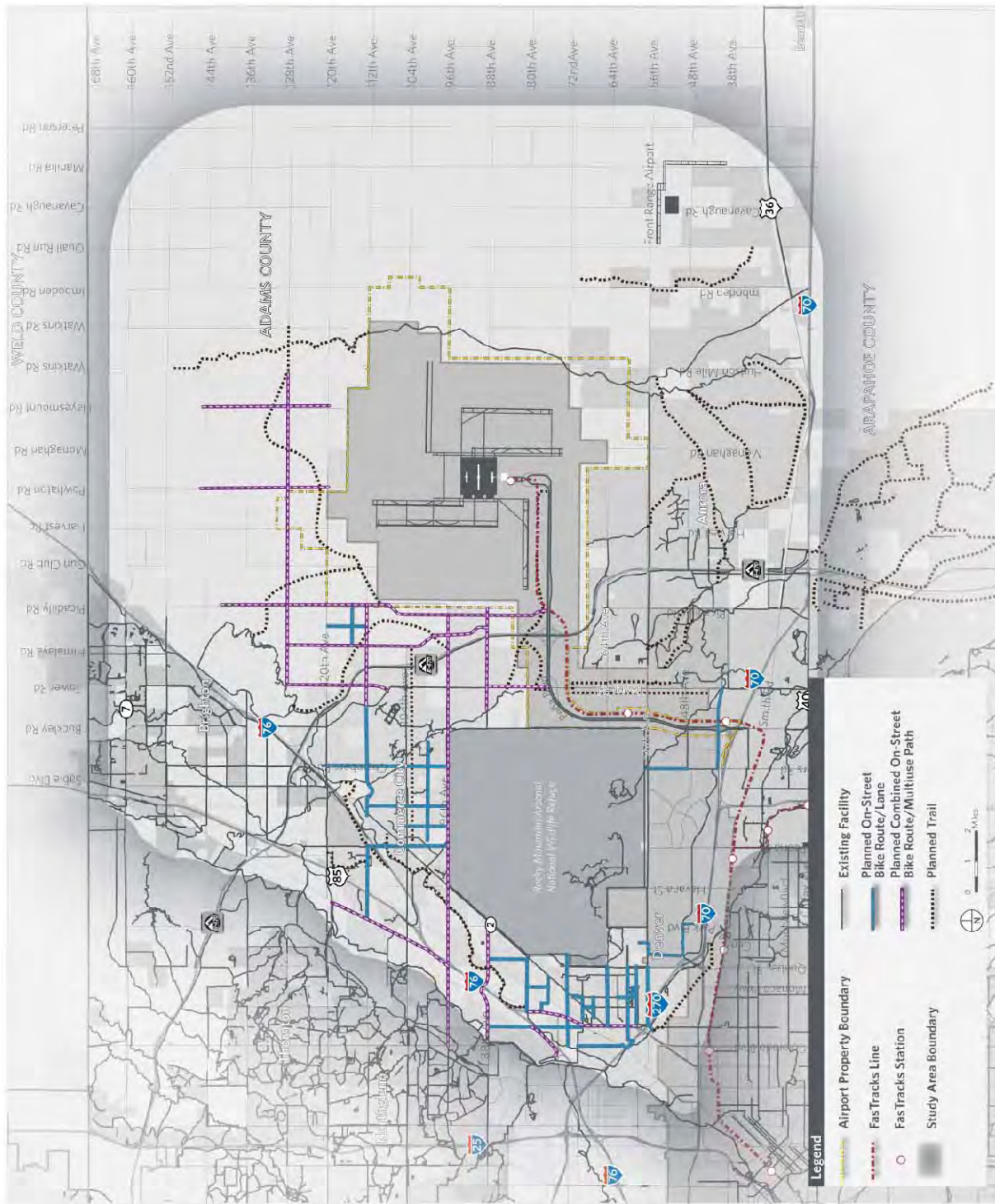
Source: Aerotropolis Study Team from Available Plans.



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Figure 12 Compilation of Transit, Pedestrian, and Bicycle Plans



Source: Aerotropolis Study Team from Available Plans.

### *Recent and Ongoing Studies*

In addition to the local plans and updates outlined above, other recently completed or ongoing studies are addressing transportation needs in the Aerotropolis study area. These are described below and shown on Figure 13:

- Peña Boulevard Corridor Transportation Study

A study of Peña Boulevard is underway to identify new funding options for Peña Boulevard maintenance and expansion. Peña Boulevard was built with Federal Aviation Administration funds. A key condition of federal law is that all revenue generated by DIA is used only for airport purposes. This rule applies to the maintenance and operation of Peña Boulevard.

Since the opening of DIA, commercial and residential development near the airport has resulted in an increasing number of motorists using Peña Boulevard for reasons other than to reach the airport. While traffic on Peña Boulevard between E-470 and the Terminal is 100 percent airport-related, a travel survey indicates 40 percent of the traffic on Peña Boulevard on the southern segment between I-70 and 40th is not airport-related. This non-airport related traffic currently results in DIA spending about \$1 million a year in additional maintenance funds on Peña Boulevard.

This issue, as well as future regional opportunities for the use of Peña Boulevard, must be addressed to remain in compliance with the covenants DIA has executed with the FAA.

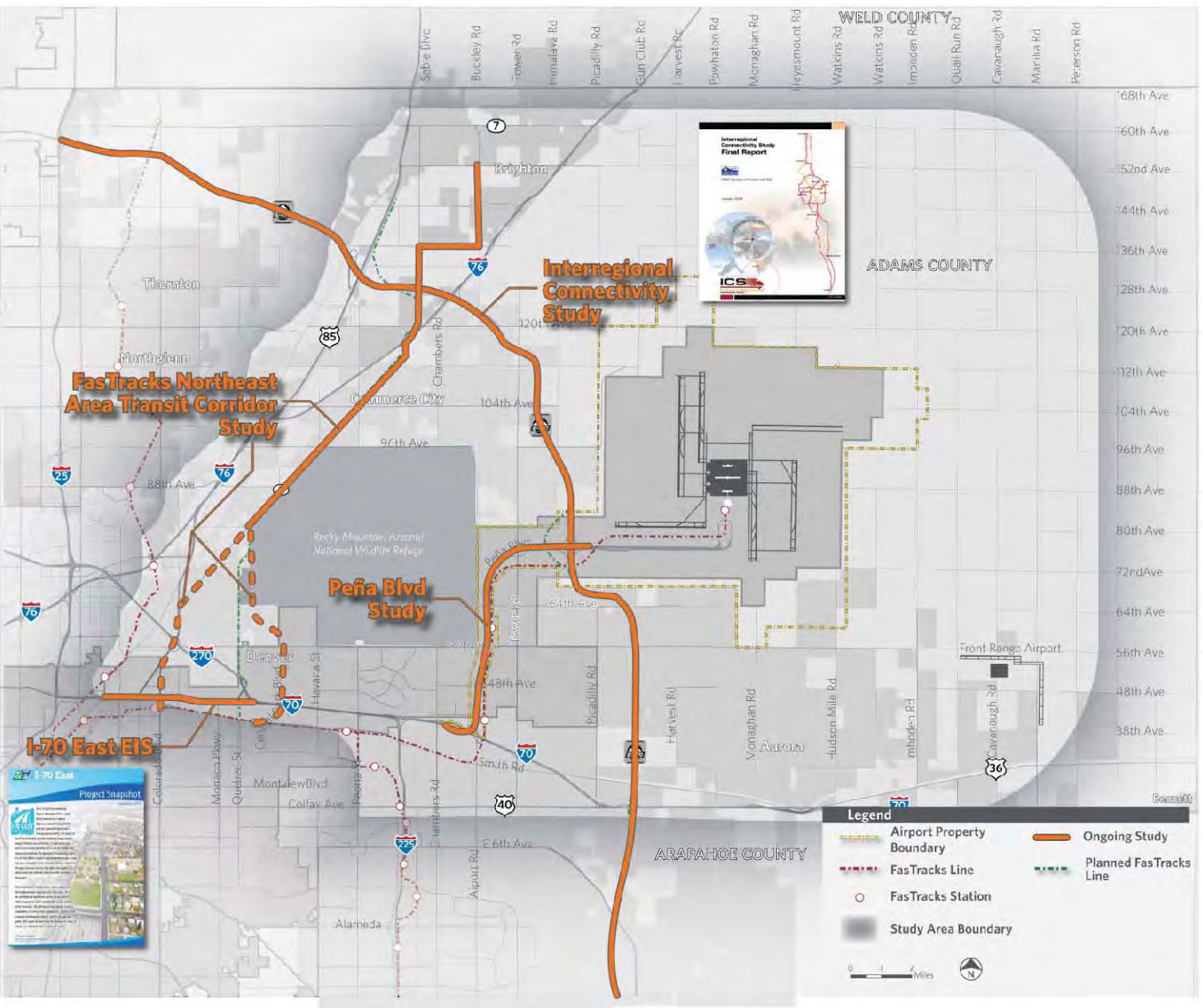
Therefore, the purpose of the Peña Boulevard Study is to:

- Identify short- and long-term transportation needs of the Peña Boulevard corridor.
  - Identify and analyze alternatives for improving and funding Peña Boulevard.
  - Work with neighboring jurisdictions and local, state, and federal partners to find solutions.
- FasTracks Northeast Area Transit Evaluation (NATE) II Study

RTD is conducting the FasTracks NATE II Study to evaluate transit options in the northeastern metropolitan area between downtown Denver and Brighton. This involves updating environmental, transportation, land use and municipal plan information from the NATE I study; performing high-level fatal flaw analysis of commuter rail and light rail alternatives; and developing BRT alternatives and evaluations.



Figure 13 Recent and Ongoing Studies



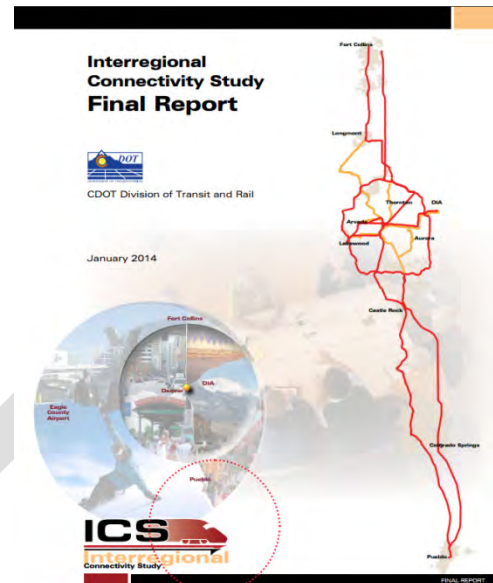
Source: Aerotropolis Study Team from Available Studies.

- Interregional Connectivity Study

CDOT's Interregional Connectivity Study, completed in 2014, evaluates the feasibility of high-speed transit (HST) options in Colorado.

The objectives of the study were to:

- Serve as a planning document and provide preliminary recommendations for HST segments, technologies, and station locations in the Denver metropolitan area that would maximize ridership for the existing and proposed RTD FasTracks transit system and future HST service.
- Identify potential future HST connections with the RTD FasTracks system.
- Determine optimal locations for a north-south (Front Range) corridor HST segment from Fort Collins to Pueblo and an east-west HST segment from the airport to the C-470/I-70 interchange in Jefferson County. The recommended alignment to serve DIA is along the median of E-470 to the north and to the south.



- I-70 East Environmental Impact Statement (EIS)

The I-70 East EIS is a joint effort between the Federal Highway Administration (FHWA), and CDOT. The intent of the EIS is to identify potential highway improvements along I-70 between I-25 and Tower Road and to assess their potential effects on the human and natural environment. After a decade of working closely with residents of the neighborhoods adjacent to the interstate, CDOT has preliminarily identified a preferred alternative, which proposes to lower and partially cover a portion of the interstate. This alternative has support from the community, as well as from regional civic, business, and economic development leaders.





### Typical Roadway Cross-Sections

The Aerotropolis area could benefit from a common set of typical roadway cross-sections, which would create a sense of place that provides cohesion across jurisdictional boundaries.

The study team reviewed existing design standards from the municipalities within the study area, as well as best practices for creating safe and efficient roadways. Many commonalities were identified through this review.

Representative conceptual cross-sections illustrating the types of roads that could comprise the roadway network are presented in this section (Figure 14, Figure 15, and Figure 16). These do not represent a full set of cross-sections needed to guide the Aerotropolis roadway network; it simply illustrates that the various municipalities already have commonalities regarding design standards, and collaboration on developing a common set of cross-sections is achievable.

#### Figure 14 Major Arterial Cross-Section

**Major Arterial:** The major arterial cross-sections are aimed primarily at moving a high volume of people. The facility would serve both general purpose and transit trips, and space in the cross-section could be allocated accordingly. Separated facilities are provided for pedestrians and bicyclists.

**Recommended Right-of-Way:**

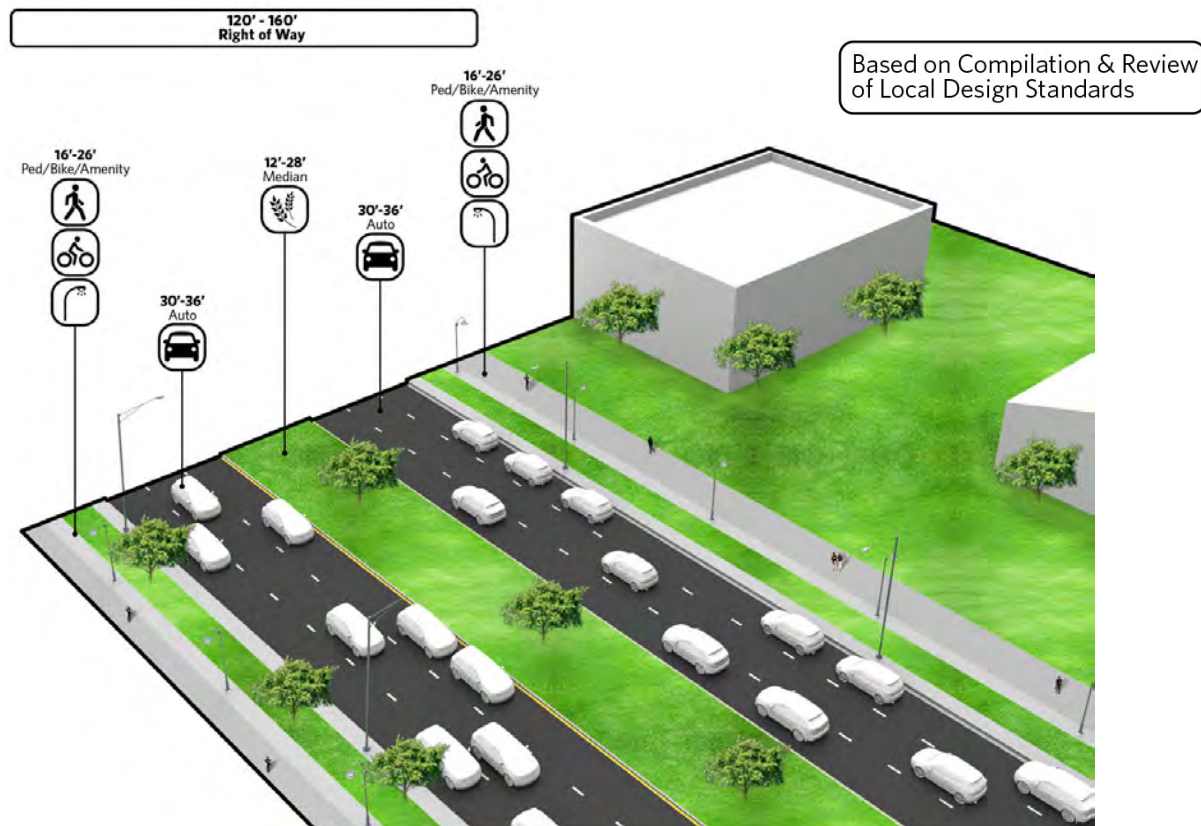
120' -160'

**Cross-section Elements (Each Side):**

16' -26' Pedestrian, Bike, and Amenity Zone

10' -12' Travel Lanes (3)

12' -28' Median



Note that the urban form/land use depiction is not intended to convey specific buildings or land use types.

Source: Aerotropolis Study Team.

### Figure 15 Minor Arterial Cross-Section

*Minor Arterial:* The character of minor arterials within the Aerotropolis area should reflect an ability to move about safely on foot while still prioritizing efficient mobility. The facility would serve both general purpose and transit trips, and space in the cross-section could be allocated accordingly.

*Recommended Right-of-Way:*

80' - 120'

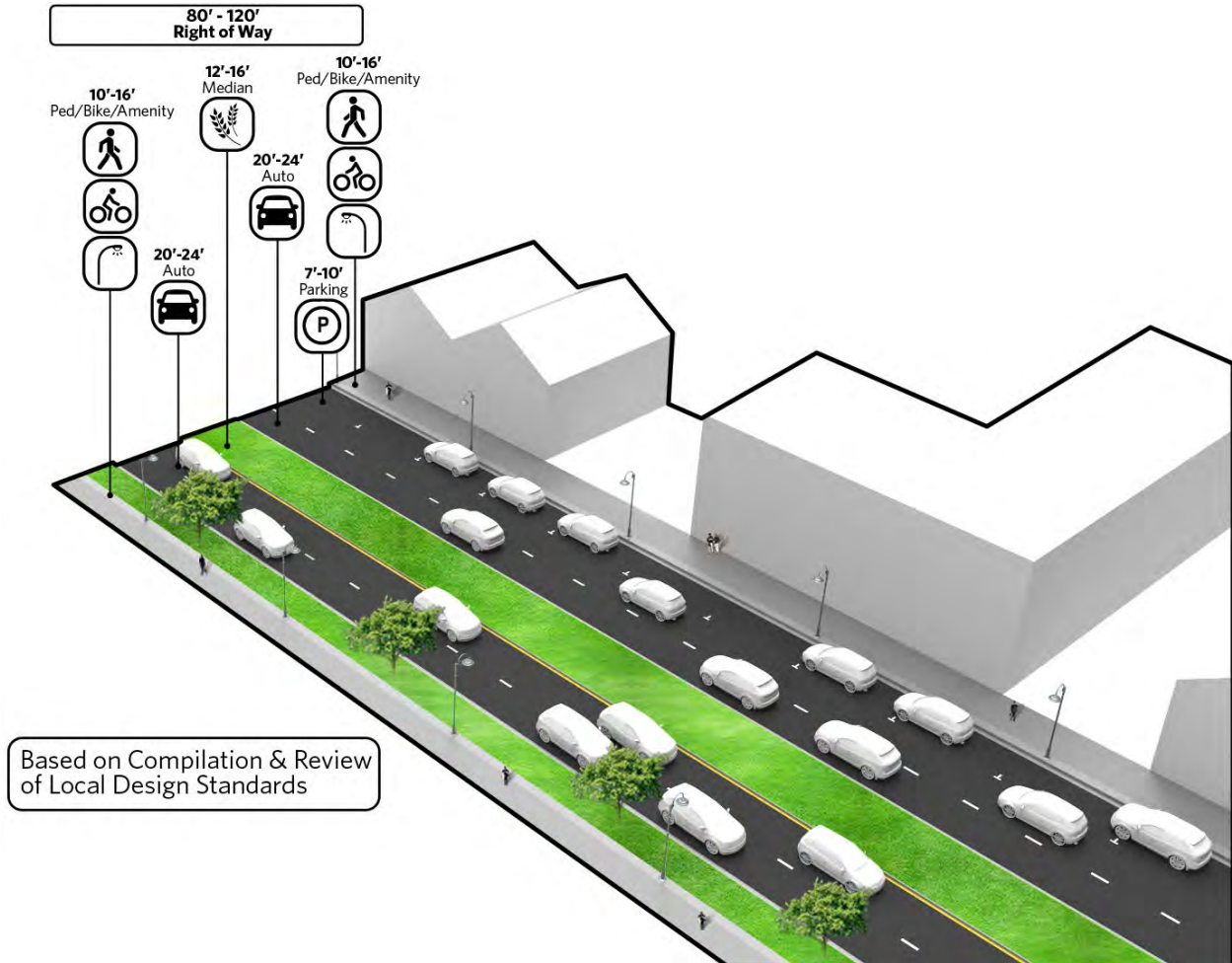
*Cross-section Elements (Each Side):*

10' - 16' Pedestrian, Bike, and Amenity Zone

8' Parking Lane

10' - 12' Travel Lanes (2)

16' Median



Note that the urban form/land use depiction is not intended to convey specific buildings or land use types.

Source: Aerotropolis Study Team.

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### Figure 16 Multimodal Boulevard Cross-Section

*Multimodal Boulevard:* The multimodal boulevard cross-section proposed for the Aerotropolis study area minimizes vehicular traffic while providing robust facilities for people walking, biking, and using transit.

*Recommended Right-of-Way:*

90' -130'

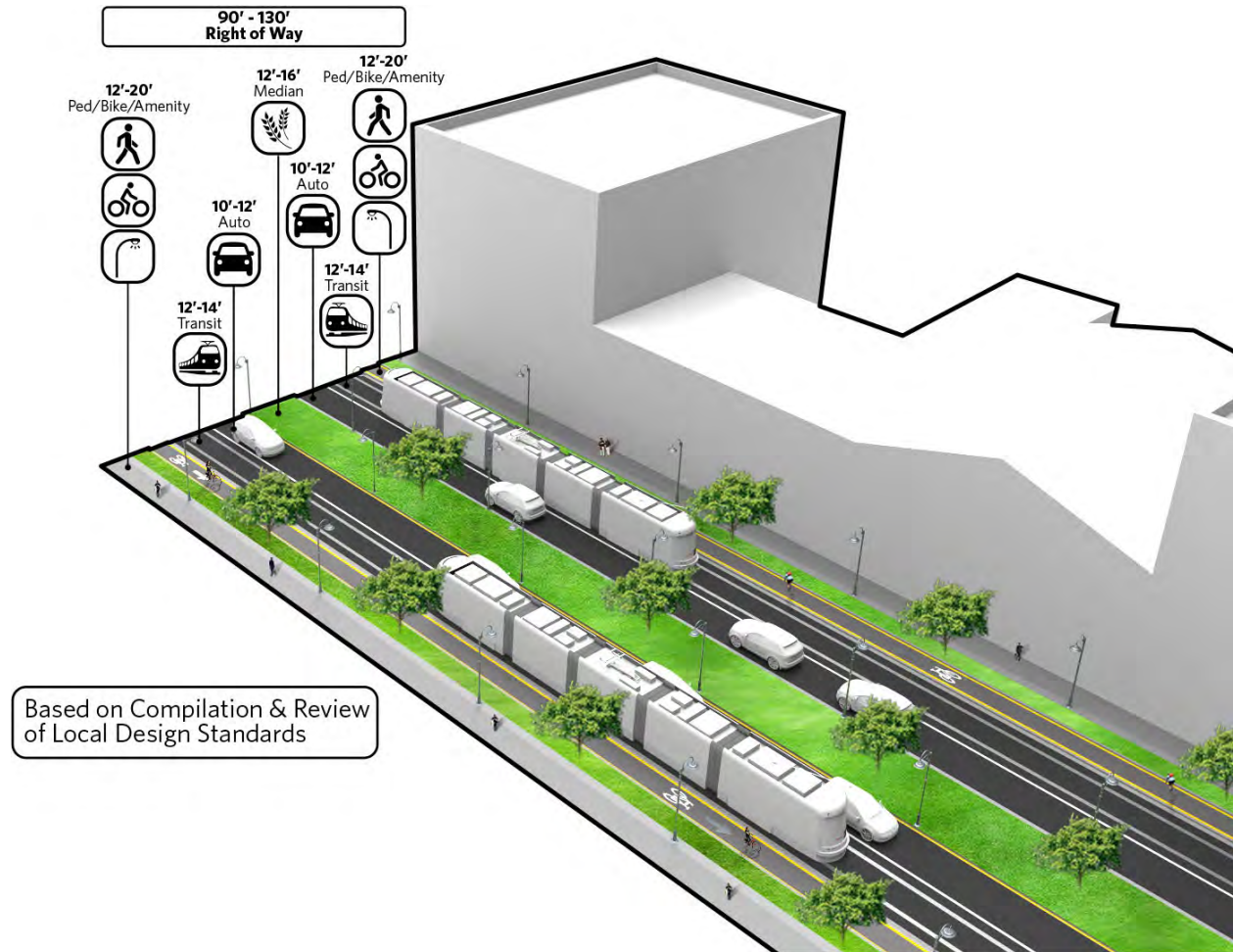
*Cross-section Elements (Each Side):*

12' -20' Pedestrian, Bike, and Amenity Zone

12' Streetcar/LRT/BRT

10' Travel Lane

14' Median



Note that the urban form/land use depiction is not intended to convey specific buildings or land use types.

Source: Aerotropolis Study Team.

## Scenarios Comparison

To demonstrate the benefits and challenges associated with the development of a Colorado Aerotropolis, the study team compared two scenarios:

- **Business as Usual Scenario.** This scenario represents a continuation of past trends reflecting development patterns near the airport. It is a hypothetical case to contrast with an IGA-enabled Aerotropolis Scenario.
- **Aerotropolis Scenario.** This scenario represents a higher level of regional coordination and marketing relative to infrastructure and development surrounding DIA leading to a collaborative Aerotropolis plan and more rapid, cohesive development in the study area.

### Business as Usual Scenario

The Business as Usual Scenario assumes that only those transportation projects identified as federally or state-funded in the *DRCOG 2040 RTP* would be constructed. Municipalities also will build projects with their own funds, such as a dedicated sales tax. In general, any local funding of transportation projects in the *DRCOG 2040 RTP* is partially dependent on build-out of the area and associated revenue streams from developers.

The Business as Usual Scenario transportation network is shown in Figure 17. The infrastructure cost of this scenario would be approximately \$366 million (excluding the \$1.2 billion Central 70 project). Table 1 shows the regionally funded projects and their conceptual cost estimates.

**Table 1 DRCOG Projects in Study Area to be Funded with Regional Sources**

Roadway	Project Location	Improvement Type	Length (Miles)	Air Quality Network Staging	Remaining Project Cost (\$M)	County
56th Ave.	Havana St. to Peña Blvd.	Widen from 2 to 6 Lanes	4.3	2015-2024	45.0	Denver
88th Ave.	I-76 NB Ramps to SH-2	Widen from 2 to 4 Lanes	1.7	2015-2024	21.5	Adams
Peña Blvd.	I-70 to E-470	Widen from 4 to 8 Lanes	6.4	2015-2024	55.0	Denver
Quebec St.	35th Ave. to Sand Creek Dr. S	Widen from 4 to 6 Lanes	1.2	2015-2024	11.0	Denver
I-70	Brighton Blvd. to I-270	Add 4 Managed Lanes	3.8	2015-2024	1175.7	Denver
I-270	I-25 to I-70	Widen from 4 to 6 Lanes	6.3	2035-2040	160.0	Adams
I-270	Vasquez Blvd.	Interchange Capacity	n/a	2015-2024	60.0	Adams
SH-2	72nd Ave. to I-76	Widen from 2 to 4 Lanes	7.5	2015-2024	13.6	Adams

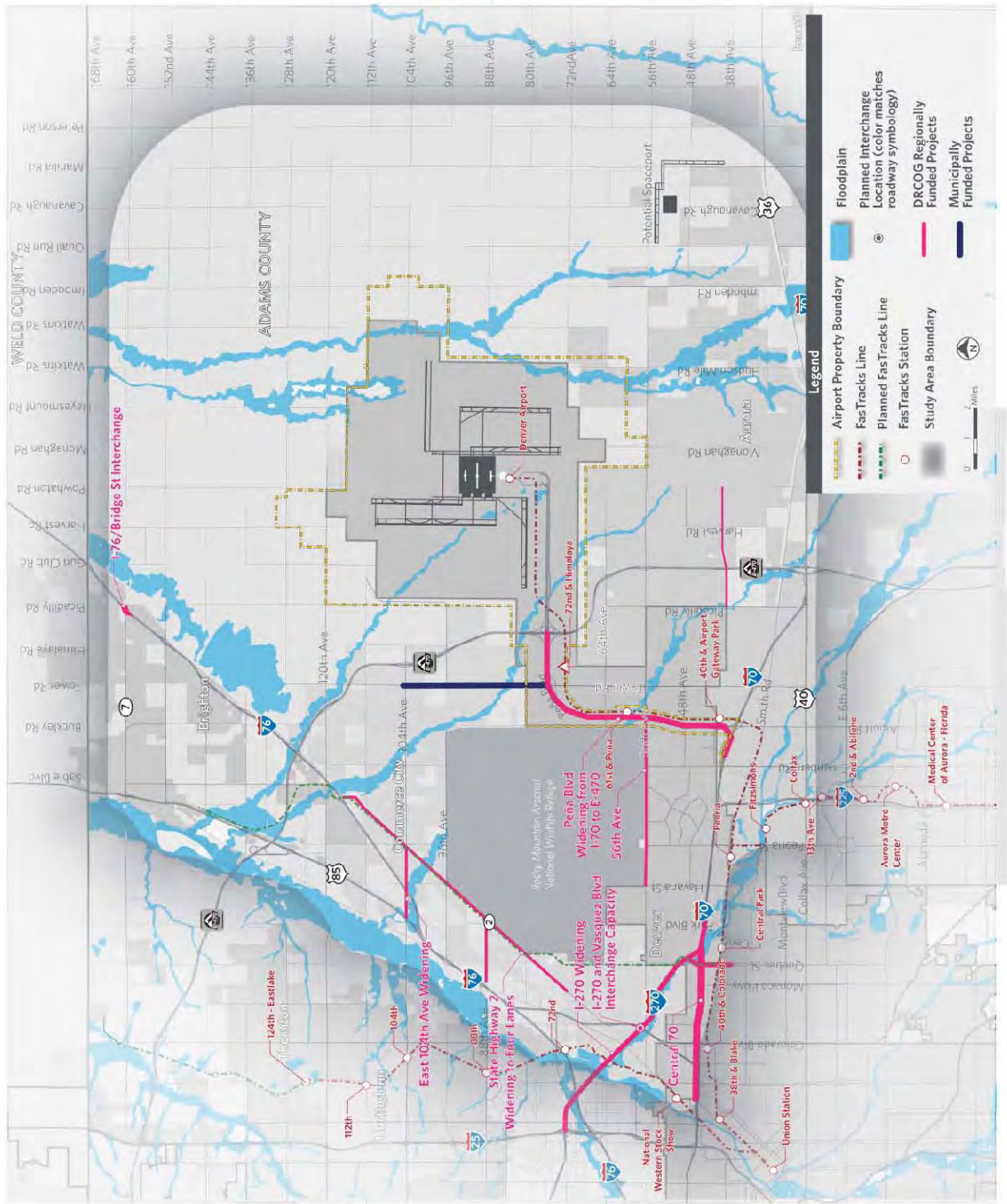
Source: DRCOG 2040 RTP.



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Figure 17 DRCOG 2040 RTP Regionally Funded Projects (Business as Usual Network)



Source: DRCOG 2040 RTP.

## Aerotropolis Scenario

An Aerotropolis Scenario assumes that greater collaboration, increased economic activity, and greater efficiencies can result in an earlier build-out of employment and residential land uses, which would mean earlier implementation of already-planned infrastructure.

### Conceptual Transportation Networks

Based on the local and regional plans, and projections for a transportation network to support an Aerotropolis development, conceptual transportation networks were developed for two planning horizons:

- A long-term vision illustrates the potential build-out condition of the Aerotropolis, which would be realized several decades into the future.
- A near-term vision uses 2040 as the planning horizon for regional planning.

### ***Aerotropolis Long-term Vision Transportation Network (2075 or Beyond)***

The long-term vision for a fully developed Aerotropolis may have a horizon timespan of several decades, perhaps to 2075 or beyond. The long-term future transportation network serving a fully developed Aerotropolis would be a full hierarchical grid system of facilities surrounding the DIA property. This would include high-order facilities designed for safe, fast, and efficient *movement* of people, goods, and information through and around the Aerotropolis area and local access facilities designed for efficient *delivery* of people, goods, and information within the Aerotropolis area. The future transportation grid would likely include Vehicle to Infrastructure (V2I) communication-enabled technology.

The core of this network exists today. High-order facilities include I-70, I-76, Peña Boulevard, E-470, and RTD's commuter rail University of Colorado A Line. Major arterials in the area include 56<sup>th</sup> Avenue, Tower Road, 104th Avenue, and 120th Avenue. There are local access roads within the master-planned developments in the study area. As development occurs over the next 50 years or more, this core network would serve as the foundation upon which economic activity is built. Preserving right-of-way for efficient, fast movement is of paramount importance. Dr. John Kasarda, who coined the term *Aerotropolis* and is largely credited for the increased focus on the concept, has said, "it's not the big eat the small. It's the fast eat the slow." In other words, Kasarda contends that ground transportation near an airport must be fast and efficient, and that the places with the fastest access to jobs and industry near airports would win a greater share of global economic activity driven by air travel.

*It's not the big eat the small.  
It's the fast eat the slow.*

—John Kasarda

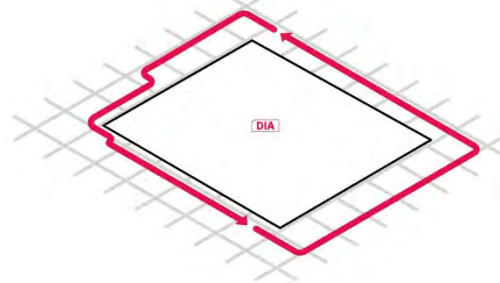
Because of the expanse of the potential Aerotropolis build-out area and the need for fast and efficient access around the development, one of the higher-order facilities might be a controlled-access multimodal loop that encircles the Aerotropolis area. This loop would be a high-speed facility serving travel modes of technologies potentially unknown today. It would potentially be placed off of the section lines to allow efficient access to development along

the arterials. The need for this type of facility and its characteristics will need further definition and study.

It is also recognized that several nodes of intense development would be geographically dispersed within the study area, and that these activity centers would each have their own distinct character. For the region to succeed, and to become a globally recognized hub for aviation and drive economic activity, such nodes must be well-connected to both the airport and the surrounding transportation network.

Figure 18 shows a concept of a Long-term Vision Transportation Network from a regional perspective, which could include a higher-order multimodal loop; it does not show the significant infrastructure investments that would be necessary at the local level to develop each node or corridor activity center. Future studies could determine the need for a multimodal loop and potentially identify a long-range phasing schedule for the post-2040 timeframe.

**Figure 18 Aerotropolis Long-term Vision Transportation Concept (2075 or Beyond)**



Source: Aerotropolis Study Team.

### ***Aerotropolis Near-term 2040 Transportation Network***

A conceptual near-term (2040) transportation network for the Aerotropolis was developed based on guiding principles and priority issues for each jurisdiction. The network is made up of near-term projects that would be the foundation for the Long-term Vision Transportation Network.

#### **Guiding Principles**

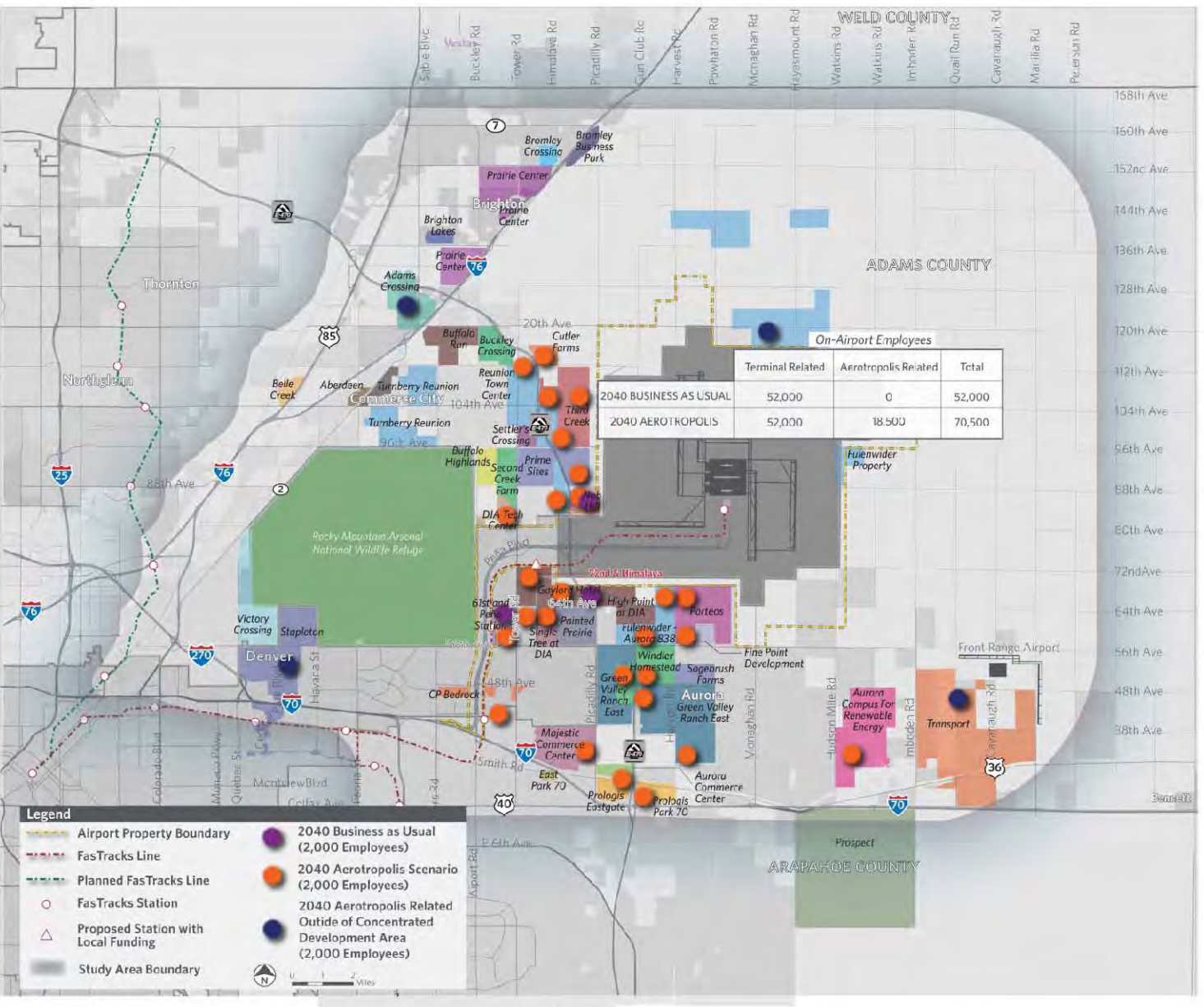
Based on input from study participants, principles were established to identify priorities for near-term projects to build the Near-term 2040 Transportation Network. The principles are listed without order of importance and are described in more detail below:

- Contiguous to Active Developments
- Reflect Current Local Plans
- Incremental to Previous Investments
- Achieve Early Attainable Projects
- Prioritization Through Regional Collaboration
- Support the Long-term Vision

**Contiguous to Active Developments.** Information from planning staff from the local jurisdictions helped to identify the active developments shown in Figure 19. The purple dots represent project growth areas under a Business as Usual Scenario. The orange dots represent growth projections under the Aerotropolis Scenario. These growth projections are described in detail in the *Assessment of Growth Projections for the Colorado Aerotropolis Study Area* working paper (Aerotropolis Study Team 2016).



Figure 19 Business as Usual Scenario and Aerotropolis Scenario Growth Areas



Source: Aerotropolis Study Team with input from Study Review Committee.

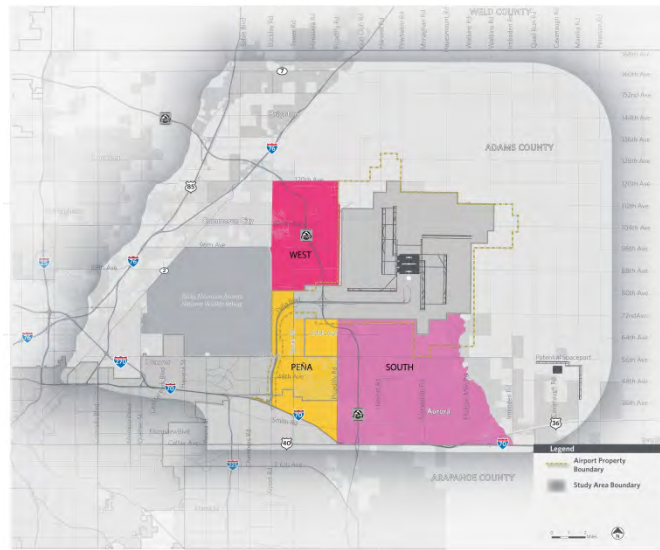


As illustrated, the near-term development is projected to occur primarily to the west and to the south of DIA. This subarea of the Aerotropolis study area is referred to as the Concentrated Development Area depicted in Figure 20.

#### Reflect Current Local Plans.

Current local transportation and comprehensive plans were reviewed and compiled. Each of the primary stakeholders of Adams County, Aurora, Brighton, Commerce City, and Denver has identified transportation needs and visions in the Aerotropolis area. The early-action needs are summarized below.

Figure 20 Concentrated Development Area



Source: Aerotropolis Study Team.

- Adams County
  - Arterial grid development
  - Access to Front Range Airport from:
    - DIA
    - I-70
- Aurora
  - Second connection to DIA from south
  - I-70 interchanges
  - E-470 interchanges
  - Arterial grid development and links to interchanges
- Brighton
  - Access to DIA north
- Commerce City
  - Resolve pinch-point capacity issues
  - Access to DIA west
  - Access to DIA north
  - E-470 interchanges
  - Arterial grid development and links to interchanges
- Denver
  - E-470 interchanges
  - Peña Boulevard capacity
  - Arterial grid development and links to interchanges

**Incremental to Previous Investments.** This principle steers project selection to incrementally build upon the current infrastructure. As shown in prior sections, there are several recent and upcoming infrastructure investments in the study area. These include the FasTracks

commuter rail University of Colorado A Line, the FasTracks light rail R Line through Aurora, and widening projects on Tower Road, 56<sup>th</sup> Avenue, SH 2, and potentially I-70 and I-270.

**Achieve Early Attainable Projects.** This principle was adopted in recognition of the scale of the study area and its needs. The magnitude of some needed infrastructure projects, even within the Concentrated Development Area, present a daunting challenge in terms of funding. This principle guides early project selection towards those improvement projects that are a realistic size, given the current conditions.

**Prioritization through Regional Collaboration.** Projects that cross jurisdictional lines and requiring regional collaboration would be good starter projects for demonstrating the needs and benefits of a jointly planned Aerotropolis Scenario.

**Support the Long-term Vision.** As investments are made to develop infrastructure in the Aerotropolis area, it is important that the projects cohesively build towards the longer-term Aerotropolis Scenario as envisioned by the regional partners.

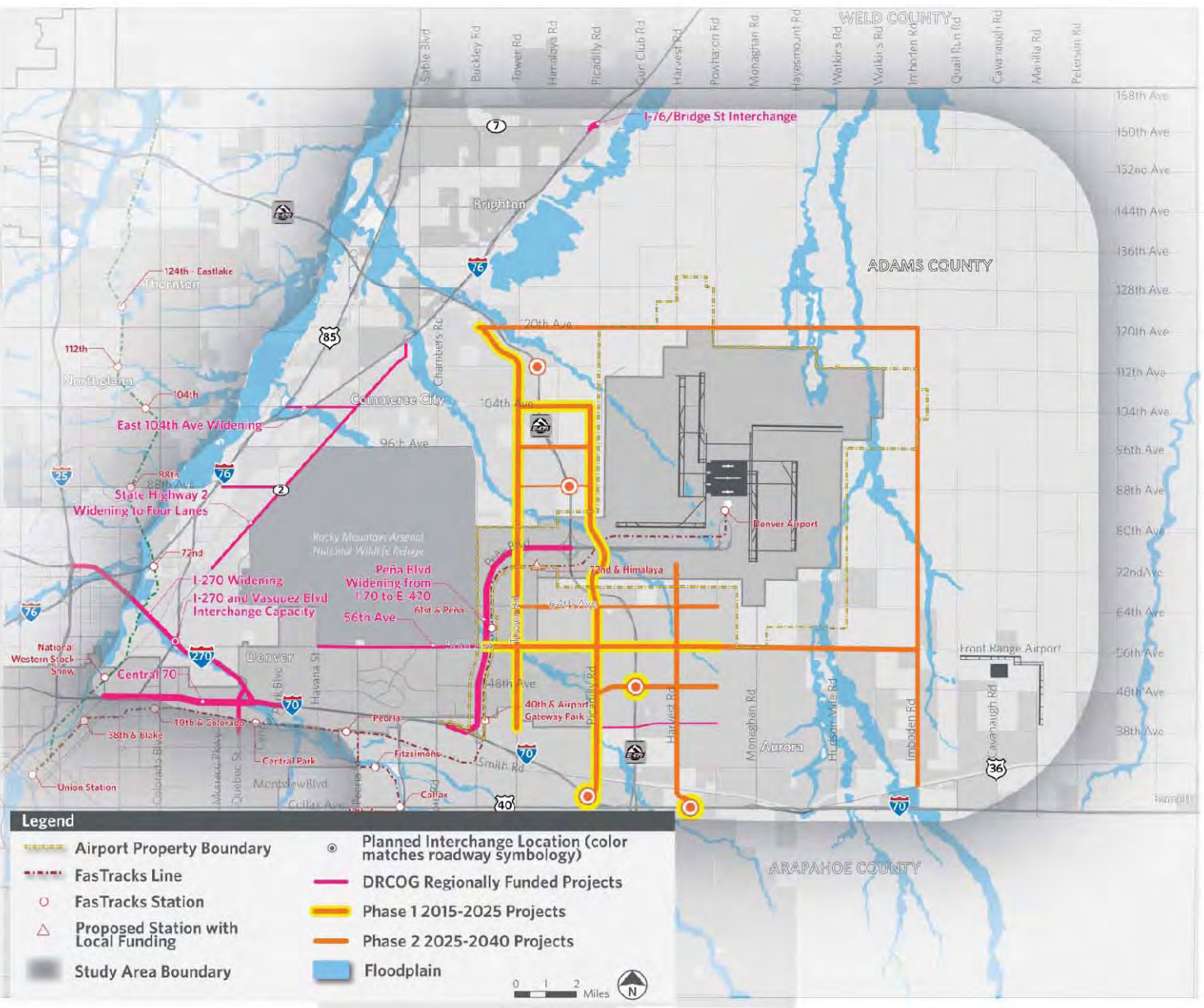
#### Projects for the Aerotropolis Near-term 2040 Transportation Network

Following these guiding principles, with a focus on the priority issues for each jurisdiction, a conceptual Aerotropolis Near-term 2040 Transportation Network was developed (shown in Figure 21). The projects are largely drawn from the *DRCOG 2040 RTP*, reflecting projects as submitted by the local jurisdictions, and local plans. The projects in the *DRCOG 2040 RTP* and local plans represent a robust set of projects that would provide improved connectivity and mobility. Note that this is in contrast to the *DRCOG 2040 RTP* socioeconomic growth projections in the study area. These projections reflect a low-growth state of affairs, which would be mismatched to the infrastructure investment proposed by local jurisdictions in the *DRCOG 2040 RTP*. Figure 21 also displays the floodplains where drainage and other infrastructure are located.

The improvement projects for the Aerotropolis Near-term 2040 Transportation Network are a combination of new roads and/or widening projects. The projects are shown in two phases—Phase 1 early-action projects (2015 to 2025) and Phase 2 projects (2025 to 2040) that would complete the conceptual Aerotropolis Near-term Transportation 2040 Network.

It is recognized that the conceptual network recommendations may change over time as additional detailed transportation studies are conducted.

Figure 21 Aerotropolis Near-term 2040 Transportation Network



Source: Aerotropolis Study Team.

### Aerotropolis Near-term 2040 Transportation Network Costs

The Aerotropolis 2040 Transportation Network represents a significant investment in infrastructure. The planning level cost estimates for the 2040 projects were obtained from the *DRCOG 2040 RTP*. These conceptual planning estimates are all-inclusive costs for implementing each project through completion, including costs of right-of-way, planning, construction, and utilities. For the 25-year period leading to 2040, the total cost of the 2040 Transportation Network is on the order of magnitude of \$725 to \$775 million. The Phase 1 (2015-2030) projects subtotal about \$350 million. Phase 2 (2030-2040) would total \$375 to \$425 million. Table 2 shows the cost by project.

Table 2 2040 Transportation Network Improvements

Roadway	Project Location	Improvement Type	Phase 1 and Phase 2 Conceptual Cost (\$M)	Phase 1 Conceptual Cost (\$M)
48th Ave.	Picadilly Rd. to Powhatan Rd.	New 6 Lanes	\$41	
56th Ave.	Peña Blvd. to Powhatan	Widen to 6 Lanes	\$74	\$74
56th Ave.	Powhatan to Imboden	Widen to 6 Lanes	\$60	
64th Ave.	Tower Rd. to Powhatan	Construct/Widen to 4/6 Lanes	\$37	
88th Ave.	Tower Rd. to Picadilly Rd.	Widen to 6 Lanes	\$15	
96th Ave.	Tower Rd. to Picadilly Rd.	Widen to 6 Lanes	\$15	
104th Ave.	Tower Rd. to Picadilly Rd.	New 2 Lanes	\$12	\$12
120th Ave.	Tower Rd. to Imboden Rd.	Widen to 4 lanes	\$60	
Harvest Mile Rd.	I-70 to 72nd Ave.	Construct/Widen to 4 Lanes	\$79	
Imboden Rd.	US 36 to 120th Ave.	Widen to 4 lanes	\$72	
Picadilly Rd.	Smith Rd. to 96th Ave.	Construct/Widen to 6 Lanes	\$90	\$90
Tower Rd.	38th/40th Ave. to 120th Ave.	Construct/Widen to 6 Lanes	\$80	\$80
E-470	48th Ave.	Add New Interchange	\$27	\$27
E-470	88th Ave.	Add New Interchange	\$18	
I-70	Harvest Mile Rd.	Add New Interchange	\$40	\$40
I-70	Picadilly Rd.	Add New Interchange	\$28	\$28
		<b>Total</b>	<b>\$748</b>	<b>\$351</b>

Source: DRCOG 2040 RTP.

### Aerotropolis Near-term 2040 Transportation Network Funding

Revenue to fund these improvements is assumed to be from taxes and fees on the new development attracted to the Colorado Aerotropolis. These would include increased residential and commercial property taxes associated with new Aerotropolis-related real estate development, increased sales taxes associated with additional household and business

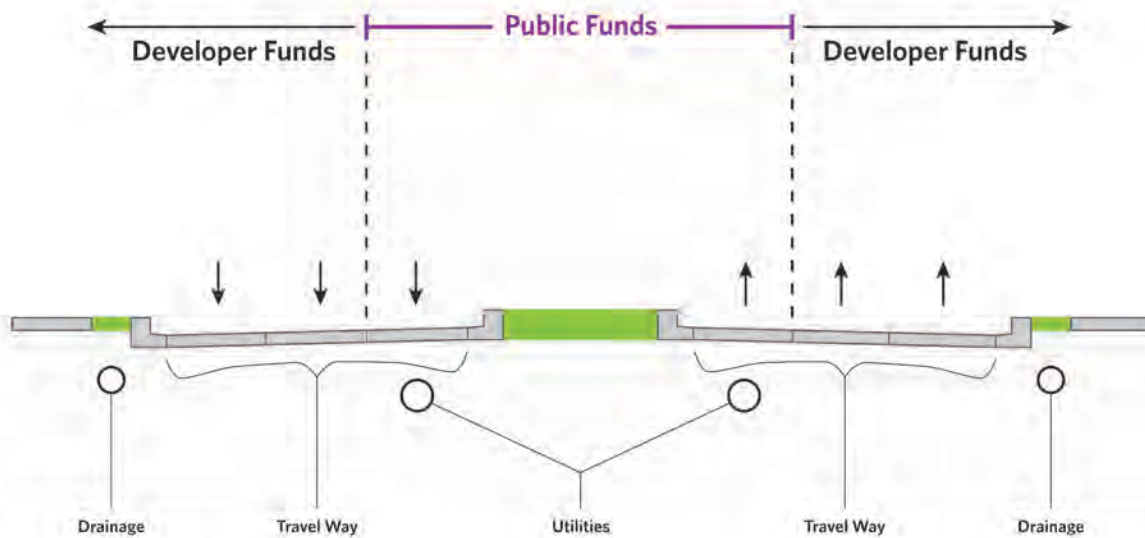


spending, and additional residential development impact fees. In the aggregate, these local revenues would range between \$705 and \$735 million and are roughly similar to the costs associated with additional infrastructure investment of \$725 to \$775 million (in 2015 dollars), indicating the potential for value capture revenues to provide a significant funding share over the 25-year analysis period. The addition of commercial development impact fees, not assumed in this conceptual analysis, would raise additional revenue. Additional funding from municipal, regional, and federal sources would also contribute to the investments but current plans show very little of those funds available for the area. Full documentation of the methodology for developing revenue estimates is detailed in the *Colorado Aerotropolis Economic and Financial Analysis* working paper (Aerotropolis Study Team 2016).

### *Pay-as-You Go Roadway Funding*

The initial costs of the proposed roadway improvements would be lower than the \$725 to \$775 million estimate because the roadway cross-section would be built in phases over time as demand increases. Figure 22 shows a typical pay-as-you-go method for establishing a roadway cross-section in an undeveloped area. Typically, right-of-way would be identified and reserved for the full cross-section. Depending on funding capabilities, local jurisdictions could initially construct a portion of the road, including the utility infrastructure. Additional lanes would be added as demand increases and development occurs. Private developers would typically contribute to construction costs for these regional arterials, which would provide access to their land.

Figure 22 Pay-As-You-Go Roadway Funding



Source: Aerotropolis Study Team.

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DRAFT



# Colorado Aerotropolis Visioning Study

## Colorado Aerotropolis Visioning Study

**Draft**

### Assessment of Growth Projections for the Colorado Aerotropolis Study Area

Prepared by  
HDR

March 2016



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## Assessment of Growth Projections for the Colorado Aerotropolis Study Area

### Introduction and Overview

An Aerotropolis is an urban plan in which the layout, infrastructure, and economy are centered on an airport.

The Colorado Department of Transportation (CDOT) conducted a study regarding the land use and infrastructure requirements that could enhance economic development surrounding Denver International Airport (DIA). The Colorado Aerotropolis Visioning Study, funded by a Federal Highway Administration grant, along with additional funds from DIA, collaboratively engaged local jurisdictions to examine the benefits and impacts of a proactively planned Aerotropolis infrastructure surrounding DIA. An infrastructure framework for transportation, water, wastewater, power, communications, and drainage is critical to fostering and supporting economic development surrounding the airport.

CDOT engaged Adams County, City of Aurora, City of Brighton, City of Commerce City, City and County of Denver, as well as DIA, in the Visioning Study.

### Study Vision

At the onset, study participants jointly developed a vision for a Colorado Aerotropolis:

*A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

### Study Objectives

CDOT had the following objectives for the study:

- Agree on a collaborative vision for a Colorado Aerotropolis.
- Learn about the aerotropolis concept.
- Identify commonalities among the local plans.
- Quantify the potential for economic growth—with or without a Colorado Aerotropolis.
- Identify a framework of possibilities for collaboration on infrastructure investments.
- Outline regional governance options to implement investments in transportation, water, wastewater, drainage, power, and communications systems.

## Working Paper Organization

This working paper is organized into the following sections:

- Purpose: Range of Potential Aerotropolis Growth Projections
- Definitions of Growth Scenarios
- DRCOG 2040 Socioeconomic Forecasts
- Colorado Aerotropolis Study Area
- Comparative Analysis and Observations
- Comprehensive Plans in the Study Area
- IGA Amendment Commercial Development Pilot Program
- Current Active Developments
- Conceptual Range of Development for Aerotropolis Scenario
- Geographic Allocation of Aerotropolis Employment
- Associated Housing Development

### **Purpose: Range of Potential Aerotropolis Growth Projections**

Employment and population growth forecasts are a key input to the Colorado Aerotropolis Visioning Study, as the level of projected growth is a direct indicator of the additional land use development and economic activity anticipated to occur within a given region. This paper presents the socioeconomic forecasts for the year 2040 as a Business as Usual Scenario, as prepared by the Denver Regional Council of Governments (DRCOG). Further, it explores different approaches for estimating a range of reasonable projections of employment activity under an Aerotropolis Scenario.

### **Definitions of Growth Scenarios**

This working paper describes the characteristics of two scenarios to assess growth projections for the study area.

#### **Business as Usual Scenario**

The Business as Usual Scenario represents a “current trend” environment relative to development surrounding DIA. It is based on the following assumptions:

- Reflects the future socioeconomic forecast dataset in the *DRCOG 2040 Fiscally constrained Regional Transportation Plan* (DRCOG 2040 RTP) (DRCOG 2015a).
- Assumes the state and federally funded projects as identified in the *DRCOG 2040 RTP*.
- No amended Intergovernmental Agreement (IGA); therefore, no new on-airport nodes or accesses.

## Aerotropolis Scenario

The Aerotropolis Scenario represents a higher level of regional coordination and marketing relative to infrastructure and development surrounding DIA. It was largely compiled from information derived from master plans from each of the jurisdictions, as described in detail in the *Infrastructure Development for the Colorado Aerotropolis Study Area* working paper. The Aerotropolis Scenario has the following assumptions:

- 2040 Horizon Year. Only 25 years into the future, 2040 was used because of availability of data for that horizon year. Note that DIA has now been operating for 20 years. It was recognized that a Colorado Aerotropolis would develop over several decades - for another 50 years and beyond. On the other hand, initial steps for the Colorado Aerotropolis development could take place in the next 10 to 15 years.
- An executed IGA Amendment - additional on-airport development; shared revenues; and new accesses onto the DIA property.
- New regional governance mechanism for the Colorado Aerotropolis.
- The Colorado Aerotropolis attracts additional development from the Region, the State, North America, and the globe.
- Assumes the advancement of locally funded transportation projects as identified in the *DRCOG 2040 RTP*, and some additional roadway improvements.

## DRCOG 2040 Socioeconomic Forecasts

As a Metropolitan Planning Organization, DRCOG leads regional planning for the Denver metropolitan area and is responsible for developing a transportation plan for the region.

### Metro Vision Objectives

DRCOG's *Metro Vision 2035 Plan* (DRCOG 2011) establishes how the future multimodal transportation system will serve the people and businesses of the Denver region. Supported by 14 specific policies, the Plan addresses mobility, land use, and development issues in an integrated manner.

The *Metro Vision Regional Transportation Plan* (MVRTP) implements the transportation elements of the *Metro Vision 2035 Plan*. The MVRTP contains an unconstrained vision plan, outlining the region's total transportation needs, as well as the *DRCOG 2040 RTP*, which includes those projects that can be implemented given reasonably expected revenues. DRCOG adopted the *DRCOG 2040 RTP* in February 2015, and is in the process of preparing a new Metro Vision Plan and MVRTP, with anticipated adoption in mid-2016.

The *DRCOG 2040 RTP* is based on the goals and policy direction of *Metro Vision 2035* along with input received to date from its member governments for the *Metro Vision 2040 Plan*. Specifically, the process for selecting regionally significant roadway capacity projects used criteria updated for the *Metro Vision 2040 Plan*, adopted by the DRCOG Board in April 2014.

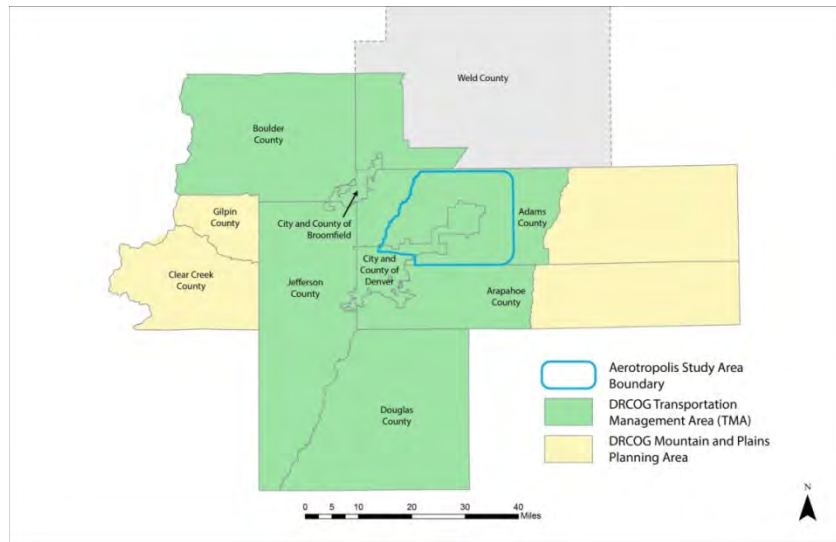
The study area for the Colorado Aerotropolis Visioning Study (study area) is fully located within the boundaries of the *Metro Vision 2040 Plan* and has been included in the studies, projections, and forecasts used to prepare the *DRCOG 2040 RTP*.



## DRCOG Region Population and Employment Projections for 2040

DRCOG’s 2040 RTP is prepared for the Transportation Management Area (TMA), which is made up of the counties of Boulder, Broomfield, Denver, Douglas, Jefferson, the western portions of Adams and Arapahoe, and the southeast portion of Weld. The TMA is shown in Figure 1.

Figure 1 DRCOG Transportation Management Area



DRCOG, in conjunction with the state demographer, establishes regional control totals for population and

Source: DRCOG.

employment forecasts for the region. With input from each of the local jurisdictions, DRCOG allocates the population and employment projections throughout the TMA using a land use simulation model. The TMA’s population projections will approach 4.3 million persons by 2040, compared to about 3.1 million in 2015. The DRCOG Region 2040 Employment projections are presented in Table 1. As reference, 2015 estimates are included in the table.

Table 1 DRCOG TMA 2040 Employment Projections

County	Acres	2015 Employment	2040 Employment	Annualized Employment Growth Rate 2015-2040
Adams (Within TMA)	363,302	229,115	347,308	1.68%
Arapahoe (Within TMA)	216,003	338,596	493,882	1.52%
Boulder	473,536	195,721	234,917	0.73%
Broomfield	22,439	52,592	111,812	3.06%
Denver	101,159	542,798	572,634	0.21%
Douglas	539,794	146,252	228,155	1.79%
Jefferson	494,763	287,418	337,528	0.64%
Southwestern Weld	128,892	20,898	19,905	-0.19%
<b>DRCOG TMA Total</b>	<b>2,339,889</b>	<b>1,813,390</b>	<b>2,346,141</b>	<b>1.04%</b>
<b>Study Area Total</b>	<b>236,054</b>	<b>145,532</b>	<b>227,700</b>	<b>1.81%</b>

Source: DRCOG 2040 RTP.

## Observations

The land area in the DRCOG TMA is 2.3 million acres, or about 3,600 square miles.

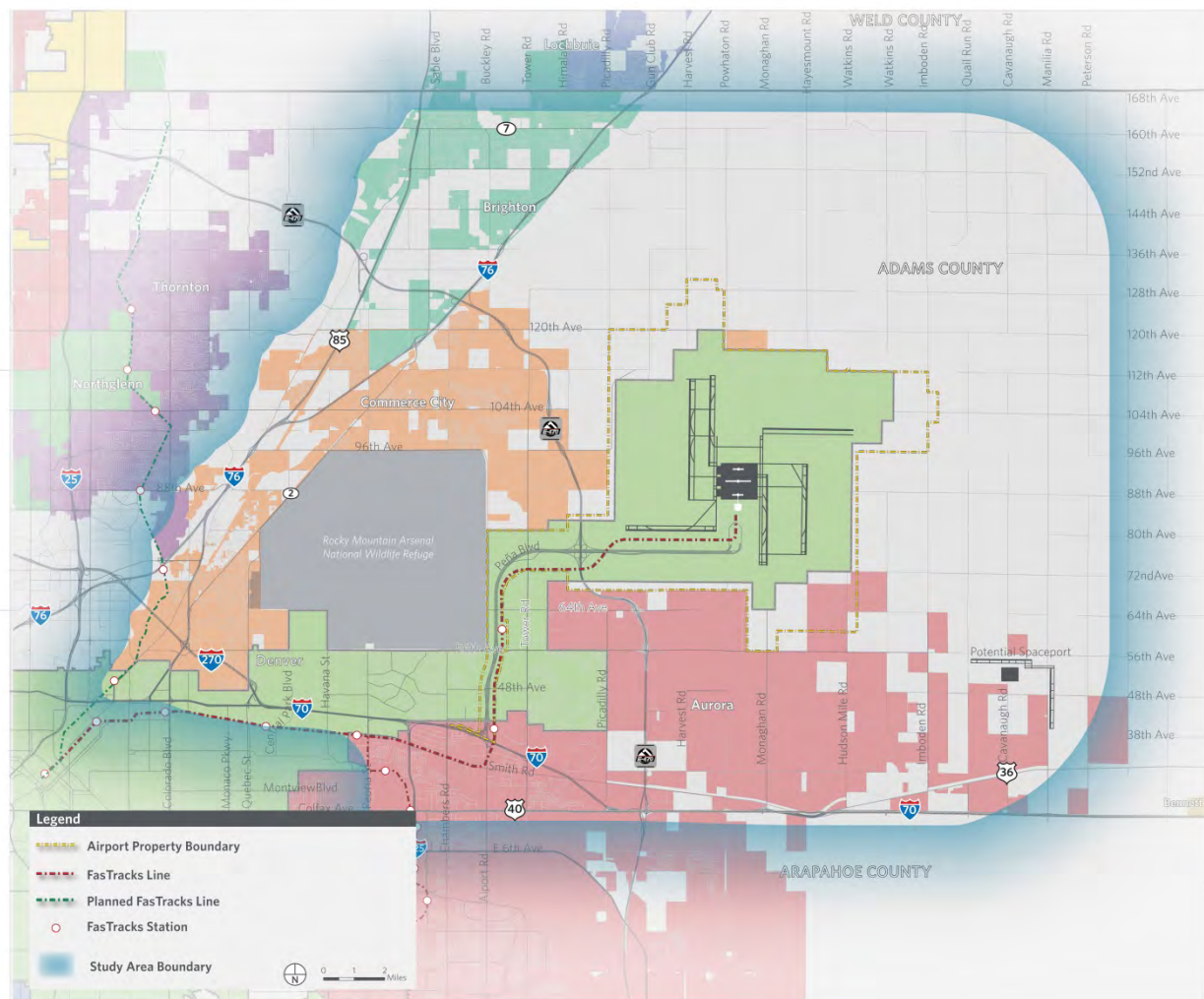
Employment in the TMA is projected to grow at just over at a 1.0% annual average growth rate, to a total of 2.3 million jobs. The highest employment growth rates within the TMA are projected for Adams and Broomfield Counties.

## Colorado Aerotropolis Study Area

The Colorado Aerotropolis study area is shown in Figure 1 and Figure 2. The study area boundaries defined an area of influence that impacts or will be impacted by the current and future economic conditions both on and off airport. It comprises a significant portion of the DRCOG TMA accounting for just over 10% of the total TMA land area.

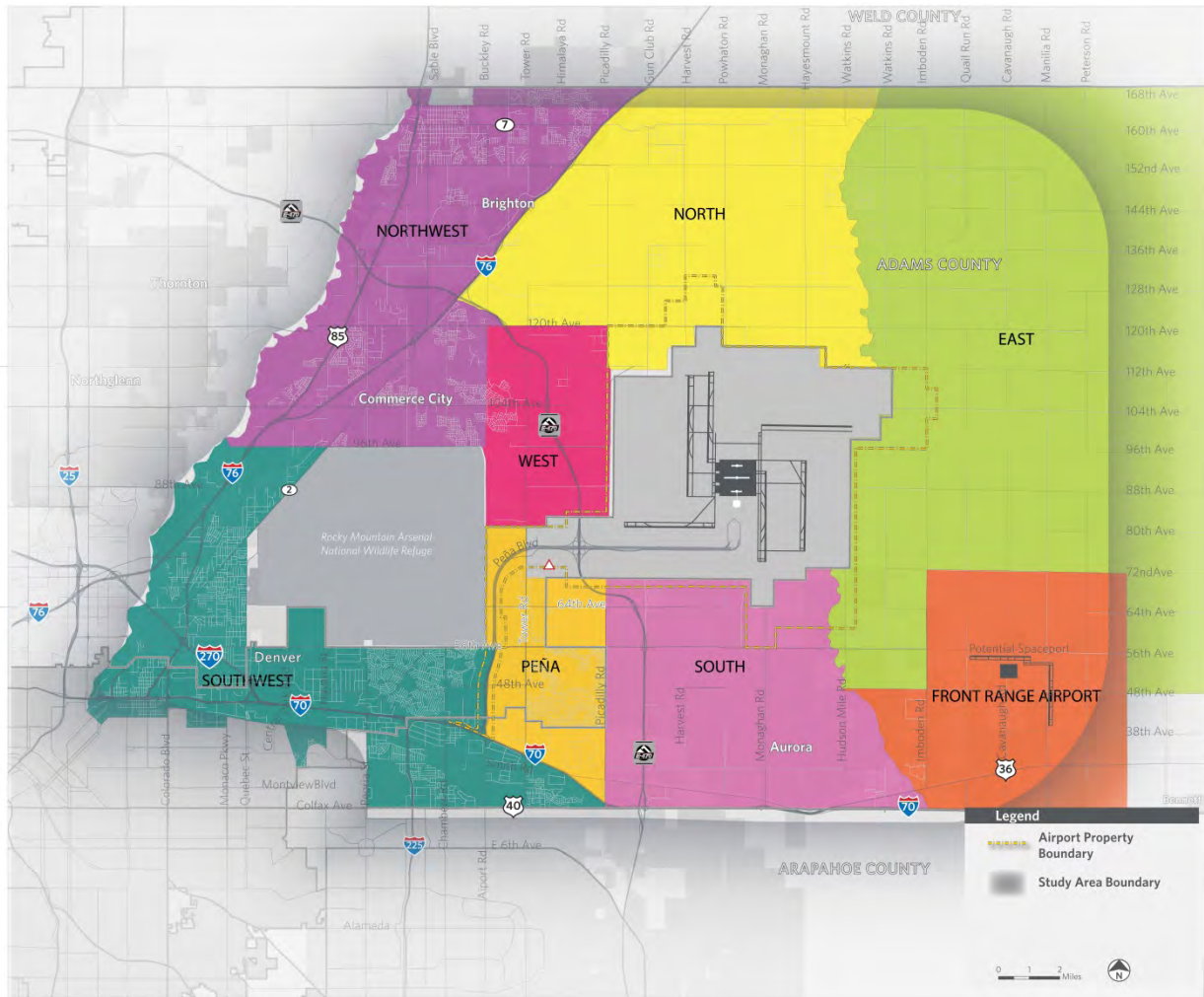
For planning purposes of this study, the study area is further divided into Districts. These are illustrated in Figure 3.

Figure 2 Study Area for the Colorado Aerotropolis Visioning Study



Source: Aerotropolis Study Team.

Figure 3 Study Area Planning Districts



Source: Aerotropolis Study Team.

## Summary of DRCOG Population and Employment Projections

The DRCOG population and employment projections for each of the Districts within the study area are summarized in Table 2.

Table 2 DRCOG 2040 Population and Employment Projections for Study Area Districts

Area	Population 2015	Population 2040	Employment 2015	Employment 2040
North	4,789	12,406	990	979
West	6,078	7,886	2,191	2,479
East	2,545	4,745	549	636
Front Range Airport	917	1,945	495	625
South	2,646	3,184	1,002	1,011
Peña	20,146	37,649	8,011	13,678
DIA (Non Terminal)	60	55	7,331	15,237
Terminal	16	16	13,406	29,019
Northwest	67,053	123,299	22,177	25,259
Southwest	92,882	128,484	89,380	138,777
<b>Study Area (Total)</b>	<b>197,132</b>	<b>319,669</b>	<b>145,532</b>	<b>227,700</b>

Source: DRCOG 2040 RTP.

### Observations

The Districts in the study area have a 2015 population of 197,100, which is projected to grow to 319,700 in 2040. Employment in the Districts in 2015 is approximately 145,500 jobs and is projected to increase to 227,700 in 2040.

**Northwest and Southwest Districts.** The vast portion of the study area population and employment projections is in these two Districts in the south and western portion of the study area.

**DIA Terminal District.** Employment numbers for the DIA Terminal District represent airline, cargo, rental car company, DIA, and other employees who directly support airport operations. DIA, in conjunction with the FAA, prepares airline passenger enplanement forecasts for planning purposes. These numbers are the basis for employment projections that DRCOG used for the 2040 data set in the Terminal District.

**DIA Non-Terminal District.** Employment forecasts in the DIA Non-Terminal District reflect other development activity on the airport property. These projections are based on preliminary information of DIA's regarding potential development activity on airport property.

**South District.** This district is mostly within the City of Aurora. There are only 1,000 employees in 2015, and the DRCOG 2040 dataset does not indicate any growth in employment in this area. Aurora and DRCOG are working together to review and update the 2040 forecasts in the Aurora area near DIA.



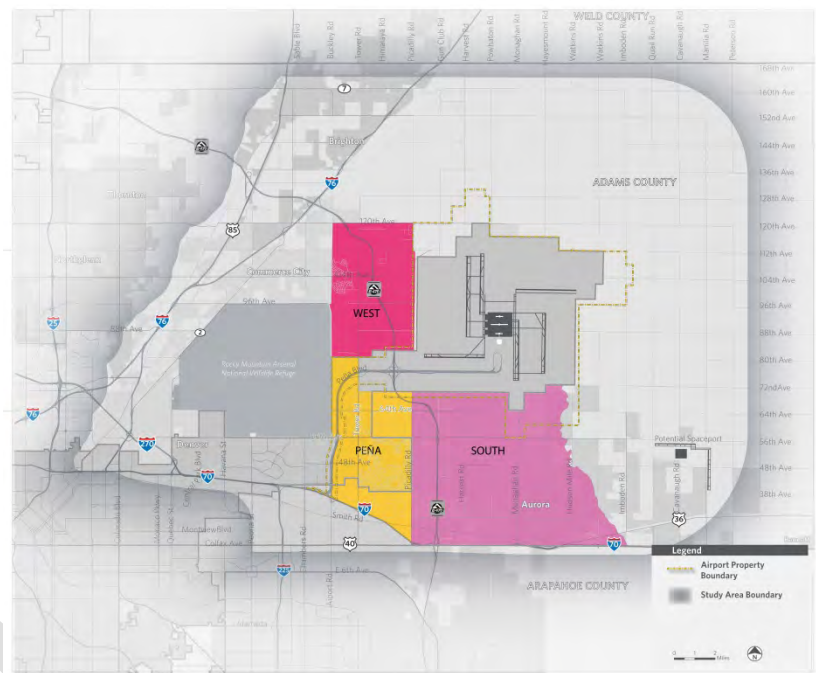
**West District.** This district is mostly within the City of Commerce City. There are 2,200 employees in 2015, and the DRCOG 2040 dataset indicates growth to only 2,500 employees in this area. Commerce City and DRCOG are working together to review and update the 2040 forecasts in this area near DIA.

**North and East Districts.**

The existing and projected numbers for population and employment in these Districts are non-consequential, reflecting the lack of existing and projected activity.

**Aerotropolis South and West Concentrated Development Area.** Given the disparity in the projected development among the study area Districts, the study team decided to focus the analysis on the South, Peña and West Districts to the south and west of DIA. This

**Figure 4 South and West Concentrated Development Area**



Source: Aerotropolis Study Team.

Concentrated Development Area is shown in Figure 4 and tabulated in Table 3.

**Table 3 South and West Concentrated Development Area - Population and Employment**

District	Acres	2015 Population	2015 Employment	2040 Population	2040 Employment
West	9,647	6,078	2,191	7,886	2,479
South	23,620	2,646	1,002	3,184	1,011
Peña	9,763	20,146	8,011	37,649	13,678
<b>Total</b>	<b>43,030</b>	<b>28,870</b>	<b>11,204</b>	<b>48,719</b>	<b>17,168</b>

Source: DRCOG 2040 RTP.

**Comparative Analysis and Observations**

The Concentrated Development Area has 43,030 total acres. According to DRCOG, population in this subarea in 2015 is estimated at 28,870 and projected to grow to 48,719 in 2040. The DRCOG employment forecast in this area in 2015 is 11,204 comprising 0.6% of the Region’s total. The employment in the Concentrated Development Area is projected to grow by about 6,000 employees to 17,168 in 2040, comprising 0.7% of the Region’s total. It is noted that this is a small amount of growth given current developments and the potential in this area. In

contrast, the *DRCOG 2040 RTP* has a robust set of roadway improvement projects in the vicinity of DIA. DRCOG is working with the communities to better align these projections in a future update of the 2040 dataset.

## Regional Employment Centers

The study team compared the population and employment numbers in the Concentrated Development Area with those of other recognized employment centers in the Denver metropolitan area (as defined by DRCOG). The employment centers are shown in Figure 5.

The projections for population and employment in these employment centers are compared to the projections for the study area in Table 4 and Table 5.

Table 4 Comparison of Population Projections

County	Acres	2015 Population	2040 Population	Annualized Population Growth Rate 2015-2040
<b>Study Area Total</b>	236,054	197,132	319,669	<b>1.95%</b>
<b>Concentrated Development Area</b>	43,030	28,870	48,719	<b>2.12%</b>
<b>Comparison Areas</b>				
<b>DTC</b>	6,838	23,172	37,552	<b>1.95%</b>
<b>CBD</b>	1,767	33,691	46,343	<b>1.28%</b>
<b>Fitzsimons</b>	1,028	7,449	9,071	<b>0.79%</b>
<b>Downtown Boulder</b>	556	9,746	13,060	<b>1.18%</b>
<b>Aurora City Center</b>	921	10,037	12,818	<b>0.98%</b>
<b>Cherry Creek</b>	674	10,166	10,780	<b>0.23%</b>
<b>Interlocken</b>	1,252	8,887	17,798	<b>2.82%</b>

Source: Aerotropolis Study Team.

Table 5 Comparison of Employment Projections

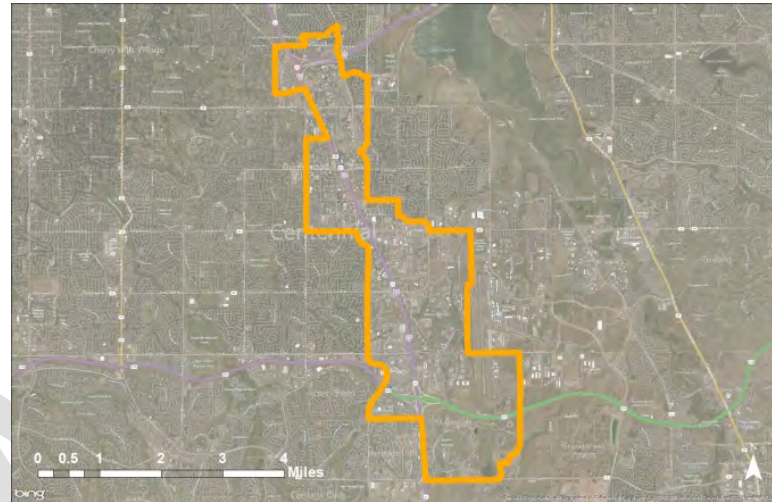
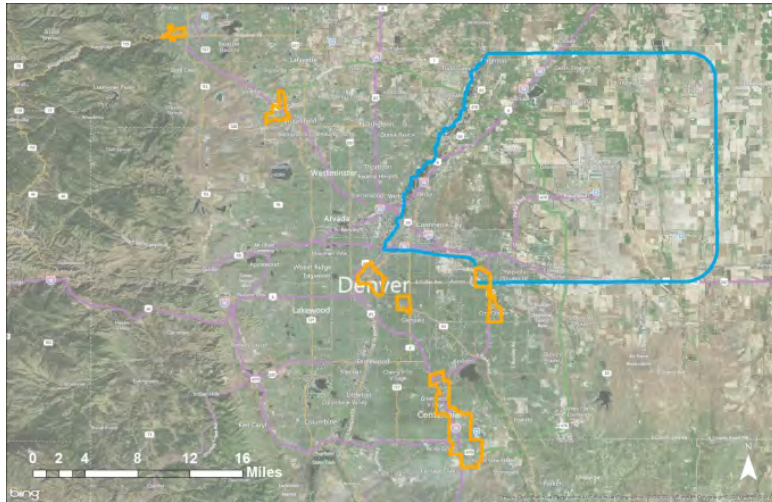
County	Acres	2015 Employment	2040 Employment	Annualized Employment Growth Rate 2015-2040
<b>Study Area Total</b>	236,054	145,532	227,700	<b>1.81%</b>
<b>Concentrated Development Area</b>	43,030	11,204	17,168	<b>1.72%</b>
<b>Comparison Areas</b>				
<b>DTC</b>	6,838	154,336	214,634	<b>1.33%</b>
<b>CBD</b>	1,767	150,458	152,279	<b>0.05%</b>
<b>Fitzsimons</b>	1,028	15,892	39,462	<b>3.71%</b>
<b>Downtown Boulder</b>	556	16,598	16,658	<b>0.01%</b>
<b>Aurora City Center</b>	921	9,867	9,430	<b>-0.18%</b>
<b>Cherry Creek</b>	674	19,756	19,238	<b>-0.11%</b>
<b>Interlocken</b>	1,252	13,308	18,652	<b>1.36%</b>

Source: Aerotropolis Study Team.



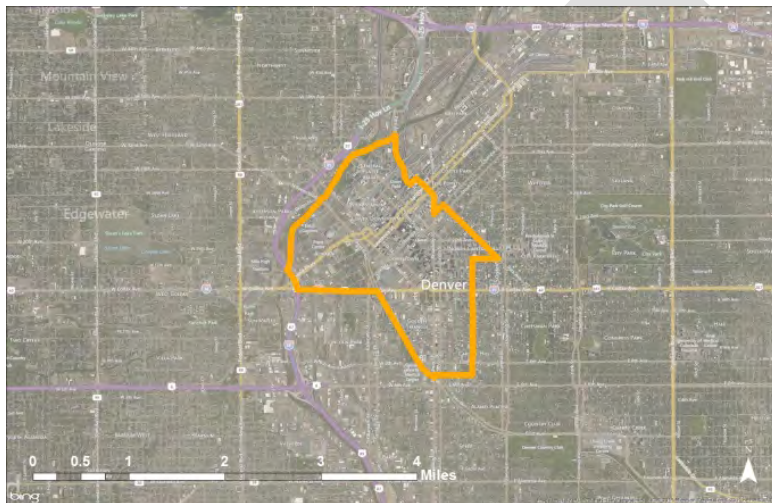
# Colorado Aerotropolis Visioning Study

Figure 5 Employment Centers in DRCOG's Greater Transportation Region



Aerotropolis Study Area and all Employment Centers

Denver Technological Center (DTC)



Denver Central Business District (CBD)

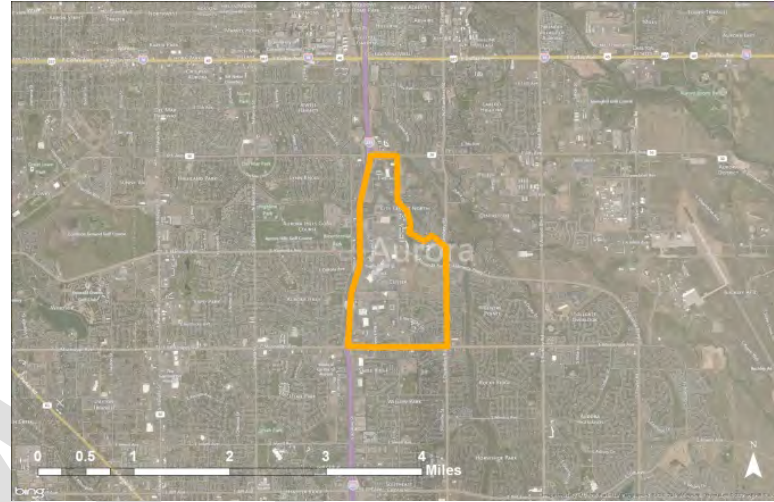
Fitzsimons



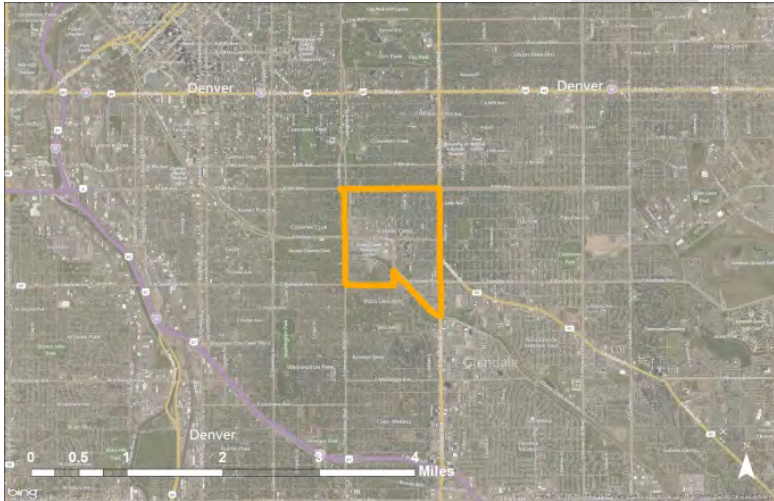
Figure 5 Employment Centers in DRCOG's Greater Transportation Region



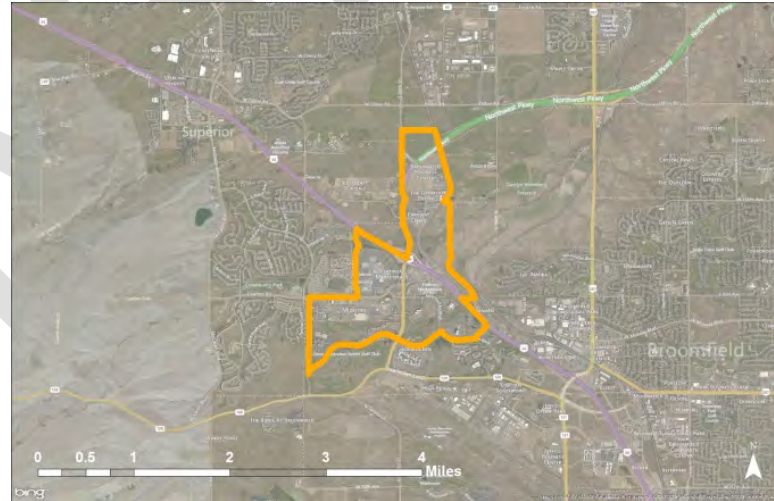
Downtown Boulder



Aurora City Center



Cherry Creek



Interlocken

Source: Aerotropolis Study Team.





## Observations

The acreage of the Concentrated Development Area is vastly larger than that of the other employment centers. However, projections for the employment centers can provide a frame of reference to predict the number of additional jobs to be located in the Concentrated Development Area.

The CBD and DTC areas have about 150,000 employees each, with modest growth projected for 2040. Other centers have employment levels in 2015 ranging from 10,000 to 20,000. Only Fitzsimons is expected to have significant growth to 2040.

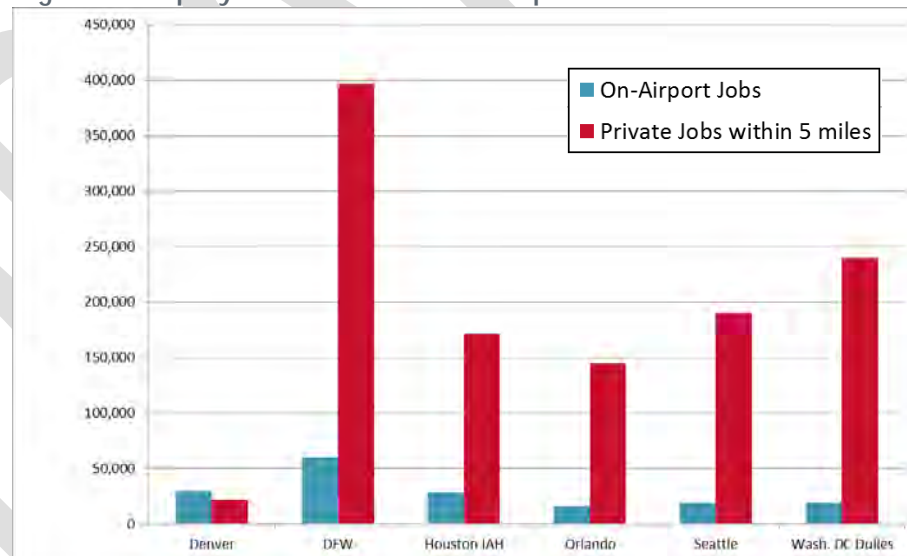
The density of jobs per acre in these employment centers is relatively high. Equivalent job densities in the Concentrated Development Area would only be realized at specific employment nodes or pods within the Concentrated Development Area.

## Peer Airports

Airports around the United States attract commercial development. Several airports serve as good comparative case studies, illustrating how an airport can attract jobs and serve as the center of a strong economic ecosystem. In general, airports similar to DIA have attracted from 6 to 13 jobs off-airport property (within five miles) for every job on airport property (including non-aviation related jobs located away from the terminal and all aviation jobs at and around the terminal) (Kasarda 2012).

Figure 6 shows compares on-airport and off-airport jobs at DIA to five airports that have similarities to DIA. These airports are not in close proximity to their respective central business districts and were built in areas with relative scarcity of development at the time of construction, just like DIA.

Figure 6 Employment Data at Peer Airports



Source: Kasarda 2012.

## Observations

As shown in Figure 6, the DIA area lags far behind peer airports in proximate private job growth.

## Comprehensive Plans

Each of the study jurisdictions has adopted a comprehensive plan that geographically identifies land use categories and their projected levels at build-out. The plans provide a theoretical representation of the build-out that could occur in the Aerotropolis study area, which is shown in Table 6. The number of potential employees was derived from conservative assumptions of the number of employees per acre by land use type, multiplied by the aggregate areas of future land uses within the Aerotropolis study area boundary. This number represents the cumulative number of employees for this area by land use at its maximum potential.

**Table 6 Potential Build-out in Aerotropolis Study Area Based on Comprehensive Plans**

Jurisdiction	Total Population (max)	Total Employment (max)
Denver	150,000	244,000
Commerce City	227,000	295,000
Aurora	363,000	480,000
Adams County	67,000	214,000
<b>Total Study Area</b>	<b>807,000</b>	<b>1,233,000</b>
<b>Concentrated Development Area</b>	<b>290,000</b>	<b>728,000</b>

Source: Aerotropolis Study Team based on available comprehensive plans.

## Observations

Should the build-out plans included in the comprehensive plans all come to fruition (in other words, the maximum amount of development activity that could occur by 2040), there would theoretically be 1.2 million employees in the Aerotropolis study area. That would be an amount equal to one-half of all employment in the Denver metropolitan area in 2040. Within the Concentrated Development Area, the theoretical employment level would be over 700,000.

These numbers reflect 1) the immense amount of land near DIA, and 2) the aggressive development visions of the local communities and their level of interest in developing land around DIA.

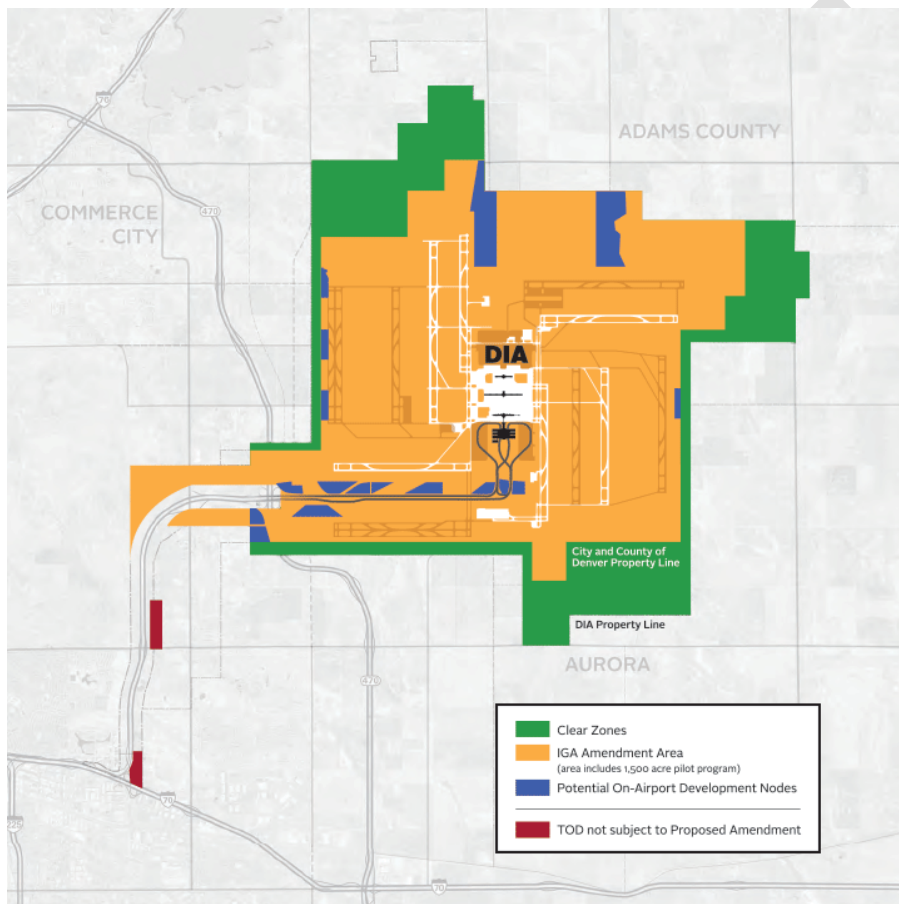
## IGA Amendment Commercial Development Pilot Program

Another frame of reference for employment activity is based on the amendment to the Intergovernmental Agreement (IGA) that was approved by Denver and Adams County in November 2015 (included in the Appendix). Among other things, this amendment creates a 1,500-net-leasable-acre pilot program for commercial developments on DIA property. The 1,500 acres are located “within the fence” at several nodes along the DIA property boundary where there would be new access roads. At each node, development would occur both on and off airport property. Figure 7 displays the potential development nodes. In addition to the 1,500 acres of net leasable acres, Adams County and Denver could agree at a later date to open more airport land to development. There would be restrictions on the type of land use within the airport, including:

- No residential.
- No businesses that would compete with businesses at Fitzsimons/Anschutz.
- Limited number of hotel rooms.

The restrictions on development within the Clear Zones would be lifted, and those areas annexed and rezoned to allow development. The Clear Zones are currently outside DIA property, and development within them would be under the purview and tax base of the municipalities, once annexed.

Figure 7 Potential Development Nodes Along the DIA Property Boundary



Source: Denver International Airport.

The study team developed a range of estimates for potential off-airport private employment that would result from development of on-airport commercial activity. The estimates provide a reasonable projection of economic activity and do not imply an accuracy level; they are provided for information only. As shown in Table 8, the 1,500 on-airport net leasable acres allowed as an initial commercial development level under the IGA Amendment can be estimated to accommodate approximately 37,000 jobs at full build-out, assuming the following mix of land use types: 20% transit oriented development, 60% industrial/distribution, 13% office, and 7% commercial; and further assuming a typical number of employees per acre by land use type. A reduction factor was also assumed to account for

buildable area, land needed for transportation, infrastructure and open space, and land use restrictions.

**Table 7 Potential Commercial Development in the IGA Pilot Program**

Land Use Type	Acres	60% Reduction	FAR	Total Square Feet	Employees (per Square Foot)	Employees
Transit Oriented Development	300	120	2	10,454,400	600	17,000
Industrial/Distribution	900	360	0.4	6,272,640	1000	6,000
Office	200	80	1	3,484,800	300	12,000
Commercial	100	40	0.6	1,045,440	500	2,000
<b>Build-out Total</b>						<b>37,000</b>
<b>2040 Total assuming 50% Build-out</b>						<b>18,500</b>

Source: Arland Land Use Economics.

## Observations

The 1,500 net leasable acres on DIA property could have a maximum build-out number of approximately 37,000 employees. If 50% of build-out is reached by 2040, the number of Aerotropolis-related on-airport employees in 2040 could be about 18,500.

## Current Active Developments

Several active developments within the local communities in the vicinity of DIA are in various stages of the planning and/or implementation process. These developments are in the early steps toward fulfillment of the comprehensive plans and constitute near-term activity near DIA. When combined, they represent the potential for identifying a collaborative infrastructure framework for the envisioned Colorado Aerotropolis. For comparison, the DRCOG projections show an increase of about 7,900 employees in the same time period.

Figure 8 displays the locations of these active developments. Table 8 summarizes the level of activity of each proposed development by jurisdiction.

**Table 8 Land Use Plans and Planned Developments**

Jurisdiction	Dwelling Units	Retail (sf)	Hotel (rooms)	Office (sf)	Industrial (sf)	Commercial Mixed Use (sf)
Commerce City	50,575 to 55,675 units			130,000 to 145,000 jobs		270 acres
Brighton		1,000,000				2,000,000
Aurora	21,425	7,854,816	6,942	30 million sf + 2,200 acres at Transport	25 million sf + 5,343 acres	
Denver	6.325 units + 640 acres of sf	2,636,912	1,085	9,545,392		2,775,368
Adams County				17.2 million sf of DIA Development		

Source: Arland Land Use Economics.

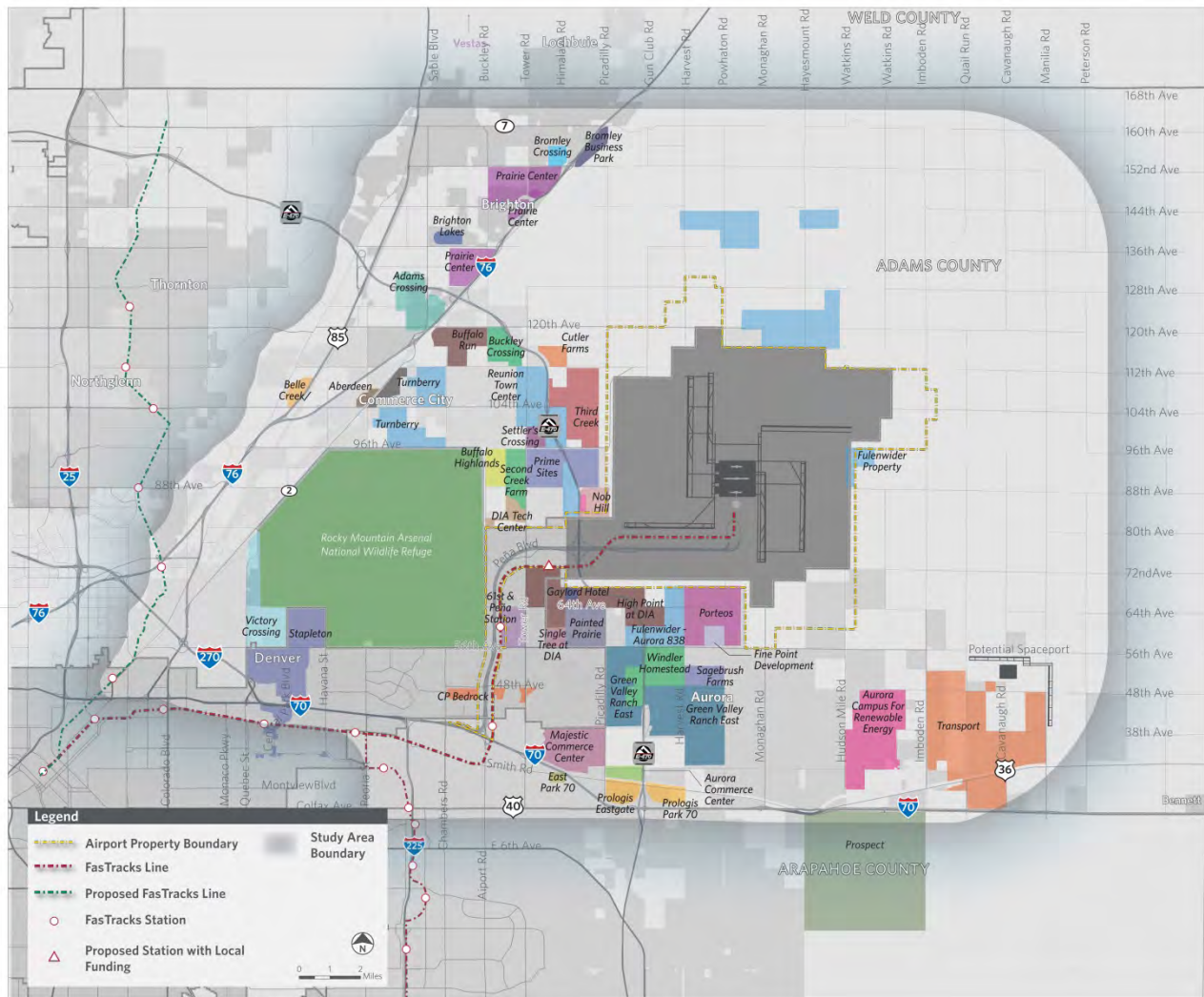
## Conceptual Range of Development for Aerotropolis Scenario

With an Aerotropolis Scenario, new employment would occur both on and off airport property. Table 9 indicates the level of employment potential given the 1,500 acres of commercial-use DIA leasable land. In general, under a proactively planned Aerotropolis, it is expected that more employment would occur off airport than on airport. This is primarily



because there are additional costs and security and regulatory requirements for firms operating within the airport. Land leases would be under the control of the FAA for on-airport development.

Figure 8 Active Developments in the Vicinity of the Aerotropolis Study Area



Source: Aerotropolis Study Team based on available comprehensive plans.

For some firms, it is worth being closer to airfield operations; however, most firms may instead prefer an off-airport location that is relatively close to the airport. Table 9 illustrates a range of potential employment levels for the Concentrated Development Area south and west of the airport given different various ratios of on- to off-airport employees.

Table 9 also shows the resulting share of total 2040 regional employment for the range of levels.

Table 9 Potential Levels of 2040 Employment Related to Aerotropolis Development

2040 Base Scenario Employment*	On-Airport Aerotropolis-Related Employment	Potential Range of Off-to On- Airport Employment	Off-Airport Aerotropolis Employment*	2040 Total Employment*	2040 Regional Employment	Share of Regional Employment
(see Table 3)	(see Table 7)				(see Table 1)	
17,000		Base Case		17,000	2,346,000	0.7%
17,000	18,500	1:1	18,500	35,500	2,346,000	1.5%
17,000	18,500	2:1	37,000	54,000	2,346,000	2.3%
17,000	18,500	3:1	55,500	72,500	2,346,000	3.1%

\* Within the Concentrated Development Area.

Source: Aerotropolis Study Team and DRCOG 2040 RTP.

## Observations

In 2015, there are about 11,000 employees in the Concentrated Development Area. DRCOG currently forecasts a growth to about 17,000 jobs in the Concentrated Development Area by 2040, comprising only 0.7% of the Denver region's total employment.

There is a wide range of potential population and employment levels under an Aerotropolis Scenario. For example, at the low end of the range, assuming only a 1:1 ratio of off-airport to on-airport employment, an Aerotropolis Scenario would have about 35,000 off-airport jobs in 2040. This would represent a tripling of current employment in the area, and represent just 1.5% of the Denver metropolitan area's total employment. The peer airports have a range of 1:6 to 1:13 on-airport to off-airport jobs. All of these range well under the theoretical 700,000 employment level envisioned by the comprehensive plans (see Table 6).

Any of these numbers represent a higher level of employment activity than the current DRCOG 2040 projections. However, the *DRCOG 2040 RTP* has a robust set of roadway improvement projects in the vicinity of DIA. DRCOG is working with the communities to better align these projections in a future update of the 2040 dataset.

As mentioned previously, the DRCOG forecasts abide regional control totals of employment and population, as established for the DRCOG area by the state demographer. Additional employment associated with the development of an Aerotropolis would require that either:

- 1) future growth in employment be reallocated from other locations of employment growth projected within the DRCOG Region, or
- 2) a higher level of regional employment occurs than is indicated by the regional control total.

The first case requires reconsideration of the allocation of employment growth within the Denver metropolitan area. DRCOG periodically updates its forecasts, and the new planning framework for an Aerotropolis might provide the input for such a reallocation. However, other communities of the Denver metropolitan area have plans and expectations for continued employment growth and might resist a major reallocation.

The second case would represent faster regional growth with the Aerotropolis attracting more employment from the national and global marketplace. This may be a more likely case because firms desiring to locate close to the airport may be a different set of firms than those who would relocate from elsewhere in the Denver metropolitan area. In fact, this is the central premise under investigation by the study: A proactively planned Aerotropolis is of economic benefit to the region, over and above the normal growth levels projected for the Denver metropolitan area under current trends.

For the purpose of this study, the study team selected a conservative ratio of 3 off-airport jobs to 1 on-airport Aerotropolis related job to conduct the sketch planning economic analysis. This ratio would result in approximately 80,000 Aerotropolis-related jobs in the Concentrated Development Area, comprised of 18,500 on-airport and 61,500 Business as Usual Scenario growth plus 55,500 new for a total of 61,500 off-airport jobs in 2040. Together with terminal (air-operations-related) on-airport jobs, the number of future jobs in the vicinity of the airport could total 143,000 in 2040.

Table 10 compares the level of employment on and around the airport under the Business as Usual and Aerotropolis Scenarios, assuming a 3:1 ratio of off-airport to on-airport jobs (new jobs in non-aviation businesses opened up by the IGA Amendment). The Aerotropolis Scenario employment projections reflect a conservative level of activity given available capacity, rather than a demand market analysis, to make a hypothetical comparison to the Business as Usual Scenario.

It is recognized that as more detailed studies are conducted, growth projections will be updated and revised accordingly.

**Table 10 Aerotropolis Employment Projections**

Area	Category	2015 Existing	2040 Business as Usual Scenario		2040 Aerotropolis Scenario		
			Growth	Total	Growth from Aerotropolis	Total Growth (includes Business as Usual)	Total
On-Airport	Terminal Related	35,000	17,000	52,000	0	17,000	52,000
	Aerotropolis Related	0	0	0	18,500	18,500	18,500
	Subtotal	35,000	17,000	52,000	18,500	35,500	70,500
Off-Airport (Concentrated Devt. Area)	Terminal Related	n/a	n/a	n/a	n/a	n/a	n/a
	Aerotropolis Related	11,000	6,000	17,000	55,500	61,500	72,500
	Subtotal	11,000	6,000	17,000	55,500	61,500	72,500
On- and Off-Airport	Aerotropolis Related Subtotal	11,000	6,000	17,000	74,000	80,000	91,000

Table 10 Aerotropolis Employment Projections

Area	Category	2015 Existing	2040 Business as Usual Scenario		2040 Aerotropolis Scenario		
			Growth	Total	Growth from Aerotropolis	Total Growth (includes Business as Usual)	Total
	<b>Total</b>	<b>46,000</b>	<b>23,000</b>	<b>69,000</b>	<b>74,000</b>	<b>97,000</b>	<b>143,000</b>

Sources: Aerotropolis Study Team, DRCOG 2040 RTP, DIA.

Note: terminal-related on-airport employment is based upon data from DIA, rather than the DRCOG data.

## Geographic Allocation

Within an Aerotropolis Scenario, where “collaboration is the new competition,” the various cities, counties, and private interests would achieve mutually beneficial economic growth. Under the scenario, employment centers could be located throughout the study area, and would cross jurisdictional boundaries and create an agglomeration economy benefiting landowners.

To set the stage for sketch planning, the study team allocated the 61,500 Aerotropolis off-airport jobs to various areas within the study area, using the guiding principles below. Note: a land use allocation model was not used to perform this step because this is simply a conceptual allocation to set a framework for sketch-level planning and analysis.

Guiding Principles:

- Access to Super-Regional Multimodal Transportation Facilities
- Contiguous to Active Developments
- Gravitational Pull of Larger Development(s)
- Connectivity to DIA
- Consideration of Geographic Diversity
- Input from Stakeholders

The study team performed the same allocation exercise for the Business as Usual Scenario, which would add 6,000 jobs within the Concentrated Development Area.

Figure 9 illustrates the results of these allocation exercises, which show potential Business as Usual Scenario employment centers as purple areas, and Aerotropolis Scenario centers as orange areas.

The range of acreage within the Concentrated Development Area required to accommodate these 61,500 jobs is based on typical employment densities at comparable locations, assumptions of employees per square foot of building space, and other principles. The range of land needed is 3,200 to 5,000 acres. Note that each orange circle represents an approximate area of 160 acres and 2,000 jobs. This equates to 12.5 jobs per acre, comparable to a typical suburban office park.



### Observations

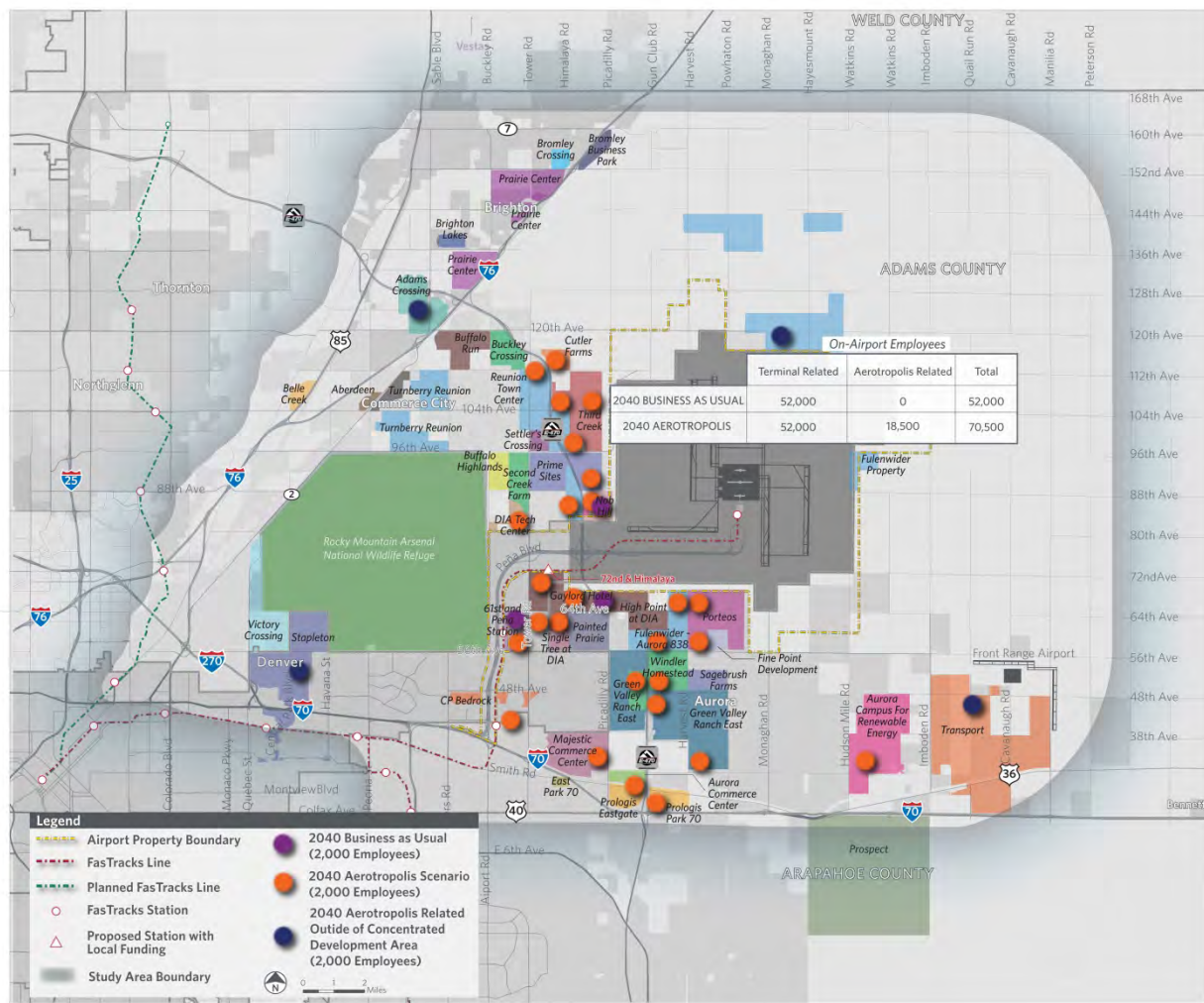
Additional land is opened up to development, and significant new employment centers could emerge. Of particular interest, employment could be centered on the E-470 corridor through Northeast Aurora, the 56<sup>th</sup>-64<sup>th</sup> corridor just south of DIA, and along Piccadilly in Commerce City west of DIA.

An even split of new employment centers between Denver, Aurora, and Commerce City may not naturally occur. However, through collaboration and sharing of resources, i.e., providing transportation improvements within and to each jurisdiction, it is possible to encourage an equitable development pattern where all benefit.

It is recognized that as more detailed studies are conducted, growth projections will be updated and revised accordingly.

As the Aerotropolis grows beyond the 2040 horizon, new employment centers would be expected to develop around the airport beyond those shown primarily in the Concentrated Development Area.

Figure 9 Allocation of Employment Growth - Aerotropolis Scenario



Source: Aerotropolis Study Team.

## Associated Housing Development

With new employment comes new housing. This study is primarily focused on the economic benefit of attracting new business to the area. However, housing needs would be associated with the employment growth.

The Aerotropolis study area is currently, and is planned to be in the future, an area of diverse housing types, including multifamily units located in TOD districts and single-family dwellings. Typical land area requirements for residential neighborhoods would typically include:

- Housing units.
- Public rights-of-way, including streets, alleys, sidewalks, trails, etc.
- Local parks and open space.
- Local neighborhood shops
- Schools.
- Community services.
- Some higher-order roads.

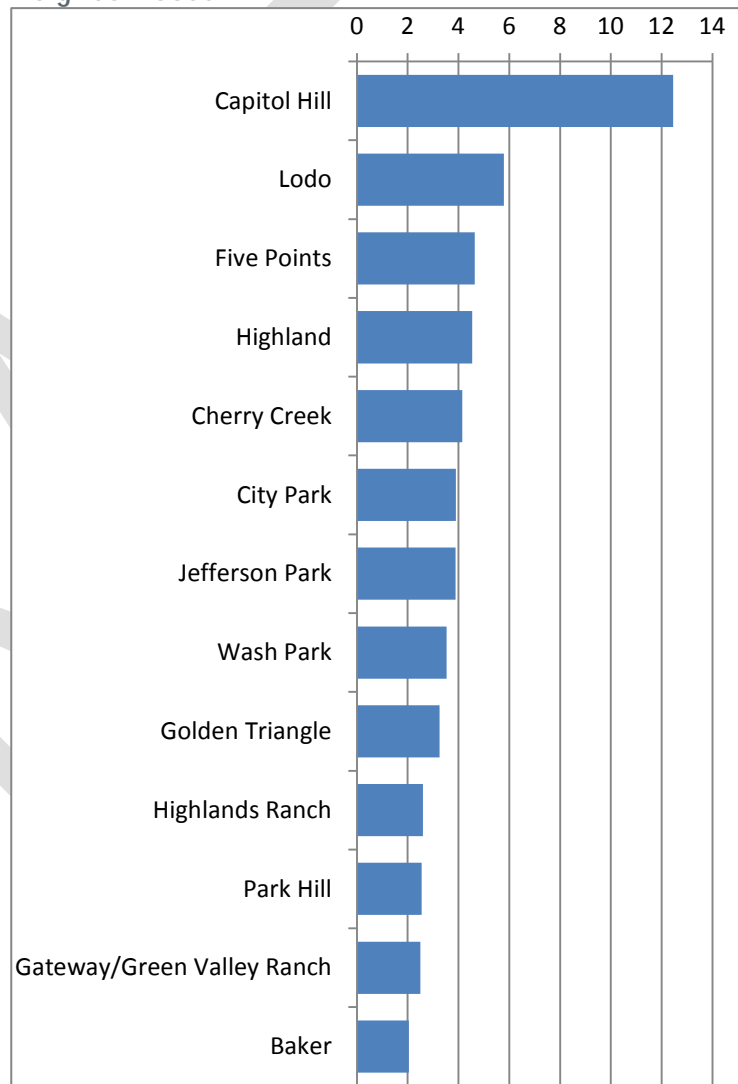
Based on research of typical Denver metropolitan area residential developments, a range of possible residential densities emerges, as shown in Figure 10.

While Capitol Hill stands out as extremely dense, its total district density is still just 12.5 units per acre, well below “site” densities for multifamily developments, which typically fall in the 15 to 30 units per acre range, and can be as high as 150 units per acre for very tall buildings.

Similarly, Green Valley Ranch, which is situated in the study area, typically sees site densities in the 4 to 12 units per acre range.

However, at the neighborhood or district level, the actual density is closer to 2 units per acre after accounting for open space, parks, streets, etc.

Figure 10 Dwelling Units per Acre in Denver Neighborhoods



Source: U.S. Census Bureau, 2010 Census.

It is important to note that the densities described herein do not represent target densities or indicate other preferences, but are simply provided as a reference for the sketch planning analysis.

## Observations

Given the parameters outlined above, a residential density in the 2 to 4 units per acre range is in line with expected development patterns in the study area. This recognizes that some of this development would occur in higher-density, more urban and/or transit-oriented nodes with high “site” densities, while some would naturally take a more suburban form.

The Concentrated Development Area has about 2.45 people per household and 2.84 people per job (DRCOG 2015b). At these ratios, an additional 75,000 housing units associated with Aerotropolis growth would be required. At 2 to 4 house units per acre, this new housing development would require approximately 23,000 acres of land to maintain a balanced housing-employment ratio in the area. The total area of the already-planned developments in the study area is 30,000 acres.

Further information on the residential development associated with the growth in Aerotropolis-related employment is contained in the *Colorado Aerotropolis Economic and Financial Analysis* working paper (Aerotropolis Study Team).

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**Appendix**

**Amendment to 1988 Annexation and Intergovernmental Agreements  
on a New Airport - June 2015**

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# AMENDMENT TO 1988 ANNEXATION AND INTERGOVERNMENTAL AGREEMENTS ON A NEW AIRPORT

## Final Term Sheet

June 3, 2015

### **I. Approval process and timing**

- A. An Amendatory IGA reflecting the terms set forth herein will be approved by the governing bodies of Denver and Adams County, with the current municipal members of the Airport Coordinating Committee (the "ACC") also approving the Amendatory IGA as third-party beneficiaries, no later than *July 1, 2015*. The current municipal members of the ACC are: Aurora, Commerce City, Brighton, Thornton and Federal Heights. The Amendatory Agreement will, in one document, modify or supplement certain provisions of both the "Intergovernmental Agreement on Annexation" and the "Intergovernmental Agreement on a New Airport" dated April 21, 1988 (herein collectively referred to as the "1988 Agreements.")
- B. The Amendatory IGA will be referred to the voters of both Denver County and Adams County at the *November 3, 2015* state coordinated election. In the event the voters in either or both counties disapprove the agreement on that date, the Amendatory IGA may be re-submitted at the *November 8, 2016* state general election for voter approval in the county or counties where the measure was previously defeated.
- C. The ballot questions submitted to the voters in Adams County and Denver County will be compatible, with the voters in each county being asked to approve the Amendatory IGA. The ballot question in Denver County will additionally include language binding the city to a "multiple fiscal year financial obligation" to share tax revenue as described below.
- D. Upon approval by the voters in both Denver County and Adams County, the Amendatory IGA will become effective on the January 1 following the approval in both counties.

### **II. Preservation of the existing 1988 Agreements**

Except as specifically set forth below, all the terms and conditions of the 1988 Agreements (including by way of example but not limitation, the noise provisions, restrictions on residential development, the hotel formula, restrictions on land use in relation to the Scenic Buffer, and provisions related to access roads) will remain in full force and effect. Denver will retain the authority to develop Accessory Uses and natural resources located anywhere on the New Airport Site to the extent allowed by the 1988 Agreements and all other rights it has those agreements.

### **III. Amendments regarding land use restrictions**

The 1988 Agreements will be amended as follows:

- A. Fifteen-hundred acres located on the New Airport Site or in the Transportation Corridor north of 72<sup>nd</sup> Ave. will be released in perpetuity from the land use restrictions contained in the 1988 Agreement. Denver will exercise sole discretion to determine when and where to utilize the fifteen-hundred acres and create Development Parcels at DIA, subject only to the following restrictions: (1) residential development will be prohibited on this acreage; (2) businesses that would potentially compete with current and future business and institutional land uses at the Anschutz Medical Campus and the Fitzsimmons Life Science District in Aurora will be

prohibited on this acreage; (3) to the extent any hotels are located on this acreage, the limitation on number of hotel rooms in the 1988 IGA will continue to apply.

- B. Adams County on behalf of the ACC may negotiate and agree with Denver at any time to release additional acreage from the land use restrictions contained in the 1988 Agreements and allow for the creation of additional Development Parcels, either: (1) on a site-specific or project-specific basis; or (2) by releasing an additional amount of acreage.
- C. Restrictions on land use in the Clear Zones as set forth in the 1988 Agreements will be released entirely. Land use in the Clear Zones will remain subject to federal regulations on use and development. The parties will cooperate to modify zoning and other land use laws as necessary to allow development within the Clear Zones. Taxes derived from commercial development in the Clear Zones in Adams County will be retained entirely by the applicable governing Adams County jurisdiction(s).
- D. Denver will promptly notify the ACC jurisdictions of any proposed leasing and concessions activity at DIA (outside of the terminal complex area) when and to the extent such information has been made available to the general public. For example, Denver will provide notice when a request for proposals is published in regard to new leases and concessions, and when a specific lease or concession is submitted to the Denver City Council for approval.
- E. Adams County will sign the Amendatory IGA as a party. Aurora and Commerce City will remain third-party beneficiaries to the applicable provisions of the 1988 Agreements. Aurora and Commerce City will be third-party beneficiaries to the Amendatory IGA. The remaining ACC municipal members will be third party beneficiaries to the revenue sharing obligations. .
- F. Consistent with the 1988 Agreements, only those ACC municipalities with contiguity to the New Airport site (currently Aurora and Commerce City) will be treated as a third-party beneficiaries in regard to the land use provisions of the Amendatory IGA.

**IV. Financial terms in consideration for release of land use restrictions**

- A. Upon the effective date of the Amendatory IGA, Denver will transmit to Adams County a one-time cash payment of \$10 million, for distribution as determined by the ACC. No additional cash payment will be required for the discretionary release of additional acreage for Development Parcels as provided in III (B) of this Term Sheet.
- B. Beginning on the effective date and continuing in perpetuity, Denver will share with the ACC jurisdictions fifty percent (50%) of all Denver tax revenue derived from either the development or use of the Development Parcels, with the following exceptions: (1) revenue derived from any Denver tax or tax rate which, as of the effective date of the Amendatory Agreement, was obligated by voter-approval, bond covenant, or any other form of contract to be spent for a particular purpose, for as long as such revenues remain so obligated; (2) revenue derived from any voter-approved new, increased or extended Denver tax adopted after the effective date of the Amendatory Agreement and obligated for a particular purpose; or (3) revenue derived from Denver's debt service mill levies. If Denver ever allows a tax-exempt entity to develop or use any Development Parcel and negotiates a payment in lieu of taxes with such an entity, Denver will share with the ACC jurisdictions fifty percent (50%) of any such payment in lieu of taxes.
- C. The Amendatory IGA will contain procedures for documenting Denver's draws upon the 1500-acre "bank" for the establishment of Development Parcels; for documenting and remitting tax

revenue generation and sharing from the Development Parcels on no less than an annual basis; and for audit rights that may be exercised by the ACC jurisdictions in regard to the tax revenue sharing.

- D. Denver tax revenue shared with Adams County will be distributed as determined by the ACC. Any arrangement the ACC jurisdictions may negotiate among themselves for allocation of the Denver shared tax revenue will be reflected in a separate agreement between the ACC members and will not be a component of the Amendatory IGA. All current municipal members of the ACC will be treated as third-party beneficiaries in regard to the tax revenue sharing provisions of the Amendatory IGA.
- E. To the extent Denver offers tax incentives to commercial developers and tenants to induce businesses to locate or remain upon a Development Parcel, tax revenues that Denver is obligated to share with Adams County will *not* be utilized for such incentives, *unless* Adams County on behalf of the ACC agrees. Denver will not approve any form of tax increment financing resulting in a reduction in the amount of tax revenue from the Development Parcels that Denver is obligated to share with Adams County, unless Adams County on behalf of the ACC agrees.
- F. Denver will reserve the right to modify, decrease or eliminate Denver taxes that are subject to sharing under the Amendatory Agreement; however, Denver will not, without the consent of Adams County on behalf of the ACC, take or approve any action that would have the effect of reducing or eliminating any shared Denver tax or tax rate specifically imposed in or on the Development Parcels.

V. **Regional planning and marketing entity**

The Amendatory IGA will provide that, via a separate agreement to be negotiated between the parties, Denver and the ACC jurisdictions will form a new regional entity to promote and market development opportunities on and around DIA and assist in coordinating land use and infrastructure planning efforts by the respective jurisdictions on and around DIA. However, the entity will have no authority to regulate or otherwise control land use or development within any of the jurisdictions. The entity will be governed by a board consisting of equal representation by Denver appointees and ACC appointees.

VI. **Miscellaneous contract terms**

- A. The parties will agree to mutually defend the Amendatory IGA in the event of a challenge by any party who is not a third-party beneficiary to the Amendatory IGA.
- B. The parties' rights and remedies under the 1988 Agreements will remain in place outside of the Development Parcels for disputes that arise in the future about whether development falls within the range of land uses allowed upon the New Airport Site under the original 1988 Agreements. In the event of an alleged breach by Denver of the land use restrictions contained in the 1988 Agreements, as modified by the Amendatory IGA, the ACC party will provide written notice to Denver and the parties will attempt to resolve the dispute informally. Prior to either party filing suit over such a dispute, the parties will enter into formal non-binding mediation in an attempt to resolve the dispute. In the event the parties proceed to litigation and achieve a final judgment, the prevailing party will be awarded its attorney's fees and costs incurred in the litigation, and a prevailing ACC party will be awarded any withheld tax revenue sharing plus interest at the statutory rate. If Denver decides, prior to final judgment in any such litigation, to render the case

moot by locating the disputed land use in a Development Parcel, the ACC party will be awarded one-half of its attorney's fees and costs incurred to date in the case.

- C. The Amendatory IGA will also function as a settlement agreement in which Adams County, Aurora, Brighton, Commerce City, Federal Heights, and Thornton will waive any claims they may have against Denver regarding an alleged breach, or anticipatory breach, of the land use provisions in the 1988 Agreements based on the following: (1) any use or development of the New Airport Site, completed or in process (as demonstrated by the issuance of certificate of occupancy or building permit), that occurred prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people; or (2) Denver's land use planning or marketing activities for the New Airport Site that occurred prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people, but such planning or marketing efforts do not meet the requirements of waiver (1) unless a building permit or certificate of occupancy has been issued prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people. This waiver will not be construed as changing in any manner the land use provisions of the 1988 Agreements to the extent those provisions will continue to govern the use of the New Airport Site in the future, nor will the waiver prevent the parties from enforcing those provisions in regard to any use or development of the New Airport Site established after the date upon which Adams County referred the Amendatory IGA to a vote of the people or from enforcing the 1988 Agreements in the future.
  
- D. At any time under the Amendatory Agreement, Denver may decide to locate a land use which Denver considers to be an Accessory Use in a Development Parcel. No such decision on Denver's part will be considered a waiver or admission by Denver that the land use in question or any similar land use may not qualify as an Accessory Use in the future.

This Term Sheet shall not be considered a binding contract, but is intended solely to serve as the basis for drafting the Amendatory IGA. Each party and third-party beneficiary agrees to submit to their respective governing bodies the Amendatory Agreement for approval by the governing body as a whole (either as a primary party or a third-party beneficiary), subject to ultimate approval by the voters before the Amendatory IGA will be executed or go into effect.





# Colorado Aerotropolis Visioning Study

## Colorado Aerotropolis Visioning Study

**Draft**

## Colorado Aerotropolis Economic and Financial Analysis

Prepared by  
HDR  
and  
Arland Land Use Economics

March 2016



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## Executive Summary

Bordering multiple jurisdictions and surrounded by several thousand acres of undeveloped land, Denver International Airport (DIA) is a regional asset with immense economic development potential. The ability to realize DIA's long-term economic potential by attracting additional airport-related uses is enhanced by coordinated regional land use planning and infrastructure investment. The Colorado Aerotropolis Visioning Study defines an Aerotropolis Scenario that achieves this vision of coordinated planning and investment through increased interagency and inter-jurisdictional collaboration between cities, counties, utilities, and the airport authority.

This economic and financial analysis examines some of the key quantitative economic and fiscal benefits to the Colorado region of implementing an Aerotropolis Scenario—increased employment, government revenues, real estate development, and commercial activity. In developing the assumptions and methodology for estimating benefits, this analysis used the Denver Regional Council of Governments (DRCOG) 2040 population and employment projections as a baseline scenario representing “business as usual.” The Business as Usual (BAU) Scenario assumes there is little coordinated land use planning or additional infrastructure investment associated with an Aerotropolis Scenario.

The fundamental tenet is that, by opening up additional land for development and creating favorable market conditions through infrastructure investment, an Aerotropolis Scenario would induce additional growth above and beyond what DRCOG currently projects for the Aerotropolis study area. It is possible that some of the additional growth could be diverted from elsewhere in the region. However, much of it would represent a net gain in economic and fiscal benefits for the Denver metropolitan area because of DIA's proximity to it and because DIA offers the unique commercial opportunities for specialized industry sectors that locate near an airport.

The key components of an Aerotropolis Scenario would include:

- A \$725 to \$775 million investment in transportation network enhancements surrounding DIA, consisting of about 71 linear miles of new roadways and/or multimodal transportation facilities.
- Approximately 12,000 acres of off-airport land adjacent to new/improved arterials directly available for commercial development (determined through a ¼-mile buffer calculation), complementing the 1,500 net leasable acres made available for on-airport commercial uses under the recently executed amendment to the Intergovernmental Agreement.
- Establishment of concentrated employment nodes, in which similar industries and businesses cluster together, within a Concentrated Development Area (CDA) adjacent to DIA as part of the overall study area.

Compared to the BAU Scenario, an Aerotropolis Scenario is estimated to create an additional 74,000 jobs, drive demand for 18 to 32 million square feet of additional commercial development (in addition to the baseline scenario of 3 million square feet for a total of 21 to

35 million square feet), and require the construction of just over 75,000 new housing units to achieve a balanced, sustainable pattern of regional growth.

The development projection ranges associated with the Aerotropolis Scenario assume the same number of additional jobs, but a different distribution of those jobs among various employment sectors, resulting in a “low” and “high” estimate of square feet (SF) of new development.

The mix of jobs associated with the Low SF scenario closely resembles the density of the existing Denver Technological Center (DTC), with a higher concentration of employment growth in sectors that demand office space. The High SF scenario closely resembles the mix of off-airport jobs inventoried around Los Angeles International Airport (LAX), which leverages the proximity to major trade corridors (interstate highways and the Ports of Los Angeles and Long Beach) and its high volume of international flights to attract a high percentage of space-intensive industrial and service jobs. The level of Aerotropolis development would likely fall somewhere between the Low SF and High SF ranges. A summary of the growth potential under an Aerotropolis Scenario is shown in Table 1.

Table 1 Growth Potential of an Aerotropolis Scenario

	BAU	Aerotropolis (Including BAU)		Difference
		Low SF	High SF	
<b>Increase in Employment</b>	<b>6,000</b>	<b>80,000</b>	<b>80,000</b>	<b>74,000</b>
Accommodation and food services	1,590	4,700	12,984	
Transportation and warehousing	1,028	748	7,866	
Manufacturing	(115)	819	2,362	
Wholesale trade	873	5,541	3,735	
Administrative and Waste Services	373	6,926	3,401	
Professional and Technical Services	333	13,893	3,033	
Health care and social assistance	298	3,323	2,714	
Retail trade	325	5,339	2,655	
Real estate and rental and leasing	467	1,930	2,655	
Educational services	291	1,396	2,647	
Other/Unclassified	263	1,588	2,393	
Management	162	5,726	1,478	
Finance and Insurance	143	15,885	1,305	
Information	(119)	10,534	517	
Public Administration	52	1,616	477	
<b>Commercial Development (sq ft)</b>	<b>2,718,000</b>	<b>20,874,350</b>	<b>34,728,000</b>	
Industrial	1,581,000	4,337,500	19,404,000	
Retail	766,000	4,015,600	9,983,000	
Office	371,000	12,521,250	5,340,000	
<b>Increase in Population</b>	<b>48,719</b>	<b>258,715</b>		<b>209,996</b>
<b>Additional Housing Units</b>	<b>14,139</b>	<b>89,223</b>		<b>75,084</b>
Single-Family Dwellings	12,725	71,355		
Multifamily TOD	1,414	17,869		

Source: Aerotropolis Study Team.

This analysis estimated the employment growth potential of an Aerotropolis Scenario by analyzing the ratio of on-airport to off-airport jobs in other successful Aerotropolis districts in the U.S. (between 6 and 13 to 1), and using a growth target with these ratios. With DIA poised to open up an additional 1,500 net leasable acres of airport land for commercial development as a result of the amended IGA, and assuming a conservative ratio of 3 off-airport jobs for every 1 on-airport job, the analysis estimates that the CDA would support an additional 18,500 on-airport and 55,500 off-airport jobs by 2040, for a total of 74,000 new jobs, above and beyond DRCOG long-term employment projections.

Collectively, over a 25-year period (2016-2040), the employment nodes in the CDA envisioned under an Aerotropolis Scenario are anticipated to attract jobs in a variety of industry sectors supporting (and supported by) operations at DIA. These Aerotropolis-related jobs would in turn draw an estimated 210,000 additional residents.

The net increase in assessable property value would be about \$30 billion under either scenario. The revenue streams that would be generated under the Aerotropolis Scenario compared to the BAU Scenario are summarized in Table 2. Increased residential and commercial property taxes associated with new Aerotropolis-related real estate development, increased sales taxes associated with additional household and business spending, and additional residential development impact fees are estimated to yield an additional \$600 to \$630 million over a 25-year period. The addition of commercial development impact fees would further raise revenue to better match the costs of infrastructure.

Table 2 BAU Scenario and Aerotropolis Scenario Revenue Streams (2015-2040)

Revenue Stream	BAU Scenario (\$M)	Aerotropolis Scenario (\$M)		Difference (\$M)
		Low SF	High SF	
Commercial Property Tax	\$19.0	\$130.4	\$158.6	
Residential Property Tax	\$37.2	\$295.1	\$295.1	
Development Impact Fees	\$30.3	\$193.9	\$193.9	
Sales Taxes	\$18.1	\$86.6	\$86.6	
<b>Total</b>	<b>\$104.6</b>	<b>\$706.0</b>	<b>\$734.1</b>	<b>\$601.4 - \$629.5</b>

Source: Aerotropolis Study Team.

With an estimated \$21 billion in construction value, an Aerotropolis Scenario would also generate a significant number of direct and indirect construction jobs. Real estate development is estimated to create approximately 9,500 direct Full Time Equivalent (FTE) construction jobs and 3,200 indirect FTE jobs annually during the 25-year analysis period. Initial infrastructure investment is estimated to create an additional 400 direct FTE construction jobs and 200 indirect FTE jobs annually over a 20-year build-out period.

The growth potential of an Aerotropolis Scenario is illustrated in Figure 1.

Figure 1 Summary of Aerotropolis Scenario Growth Potential Above Business as Usual

### ANNUAL ECONOMIC IMPACTS



up to 9,500 direct  
construction jobs for 25 years



up to 3,200 indirect  
construction jobs for 25 years

### EMPLOYMENT, DEVELOPMENT & DEMOGRAPHIC IMPACTS



18,500 on-airport jobs



55,500 off-airport jobs



18 - 32 million square feet  
additional commercial  
development



75,000 housing units



210,000 residents



### Conclusion

An Aerotropolis Scenario would bring a multitude of economic and financial benefits to the Denver region by spurring robust employment growth and market demand for new development. A key consideration in this analysis is the extent to which the infrastructure required to attract this new growth can be funded and/or financed by the additional incremental revenue streams that would accrue directly to local cities and agencies under an Aerotropolis Scenario. In the aggregate, these local revenues range between \$705 and \$735 million and are roughly similar to the costs associated with additional infrastructure investment in the range of \$725 to \$775 million (in 2015 dollars), indicating the potential for value capture revenues to provide a significant funding share over the 25-year analysis period.



This fiscal impact estimate may skew conservative because it is limited to revenue sources directly controlled by local cities and agencies, and it does not count other “downstream” revenue sources, such as passenger facility charges associated with additional enplanements at DIA, that would also be directly attributable to an Aerotropolis Scenario, but not necessarily available for infrastructure investment.

There are other significant, qualitative economic benefits to be reaped from increased regional land use coordination and infrastructure investment that strategically channel new growth into target areas under an Aerotropolis Scenario. The concentration of growth into dense employment nodes would create an “agglomeration” effect, whereby the proximity of similar industries and businesses to one another increases labor productivity and attracts a highly qualified talent pool. Airports have been shown to be a major driver of agglomeration economies by creating direct linkages (and decreasing travel times) to otherwise distant markets, increasing workforce mobility, and leveraging the significant economic impacts associated with commercial air travel. These benefits, while not quantified in this analysis, should be taken into consideration in understanding the growth potential and advantages of an Aerotropolis Scenario.

In contrast, the BAU Scenario will see incremental employment gains within the study area, with correspondingly modest levels of real estate development that is more dispersed. More importantly, by not investing in the additional infrastructure needed to open up land adjacent to the airport for commercial development, the BAU Scenario will not fully capitalize upon the economic potential of neighboring DIA.

It must be noted that implementation of an Aerotropolis Scenario raises numerous challenges. Many of the revenue streams identified in this analysis may be available to the area jurisdictions to invest in new infrastructure, but not available to finance it up front. Timing of costs versus revenues is one critical consideration.

In addition, while the analysis indicates that an Aerotropolis Scenario may generate revenues in excess of investments, the ability of local cities and agencies to capture these revenue streams would depend on an effective governance structure and a high level of regional coordination to establish uniform fee levels and special tax districts that earmark the revenue streams for Aerotropolis-related infrastructure investment. Transportation infrastructure would likely compete for these revenues against other regional priorities, including other forms of infrastructure, such as community facilities, hospitals, and schools.

Achieving the Aerotropolis Scenario employment growth targets would require the local jurisdictions to collaboratively develop a robust economic development strategy with land use regulations, transportation infrastructure, and other incentives. The Denver region would be competing on a national and potentially international level with other major airport hubs to attract a limited pool of jobs in airport-related industries, some of which are highly specialized and require a supportive already-established ecosystem of related industries in the area where they choose to locate.

It is recognized that as more detailed economic studies are conducted, assumptions and economic benefits will be updated and revised.

Table 3 summarizes some of the opportunities and challenges associated with implementation of an Aerotropolis Scenario.

**Table 3 Aerotropolis Scenario Opportunities and Challenges**

Issue	Opportunities	Challenges
<b>Funding</b>	Revenue streams generated by new development may be able to offset a portion of the additional infrastructure cost associated with an Aerotropolis Scenario.	An effective governance structure would be required to capture the revenue streams generated by new development and commercial activity, as other infrastructure needs would likely be competing for a portion of these same revenue streams.
<b>Financing</b>	Property taxes represent a significant share of estimated future Aerotropolis-related revenues and have historically been leveraged using tax-increment financing and other mechanisms to finance improvements.	Due to uncertainty over future development forecasts, the initial share of project construction costs financeable by value capture may be limited.
<b>Development Potential</b>	Abundant developable land adjacent to DIA creates the potential for significant growth at a competitive cost.	Land prices are likely to increase rapidly in response to new infrastructure investment and marketing, narrowing the price differential with metropolitan Denver and other market competitors over the long term.
<b>Balanced Regional Growth</b>	A significant number of new jobs would be added to the Denver region, increasing regional income and economic opportunity.	The creation of major new employment centers must be accompanied by a significant provision of additional housing in close proximity to those centers to avoid increasingly dispersed commuting patterns and diluting the agglomeration benefits of an Aerotropolis district.
<b>Land Consumption</b>	A compact development footprint, in which all land uses are located within ¼ mile of new transportation infrastructure, could reduce land consumption and minimize trip lengths.	Some but not all single-family housing demand can be accommodated within this compact footprint. Higher-density housing may reduce land consumption, but could also increase costs of development and may not be economically viable in the near term or align with market preferences.
<b>Infrastructure Costs</b>	The fiscal benefits of an Aerotropolis Scenario outweigh the costs in present value terms, indicating a potentially positive return on investment.	Additional investment in other forms of infrastructure (community facilities, institutional uses) would be needed to accommodate the totality of residential and commercial development needs created by the levels of anticipated Aerotropolis-related employment.

## Introduction and Overview

An Aerotropolis is an urban plan in which the layout, infrastructure, and economy are centered on an airport.

The Colorado Department of Transportation (CDOT) conducted a study regarding the land use and infrastructure requirements that could enhance economic development surrounding Denver International Airport (DIA). The Colorado Aerotropolis Visioning Study, funded by a Federal Highway Administration grant, along with additional funds from DIA, collaboratively engaged local jurisdictions to examine the benefits and impacts of a proactively planned Aerotropolis infrastructure surrounding DIA. An infrastructure framework for transportation, water, wastewater, power, communications, and drainage is critical to fostering and supporting economic development surrounding the airport.

CDOT engaged Adams County, City of Aurora, City of Brighton, City of Commerce City, City and County of Denver, as well as DIA, in the Visioning Study.

### Study Vision

At the onset, study participants jointly developed a vision for a Colorado Aerotropolis:

*A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

### Study Objectives

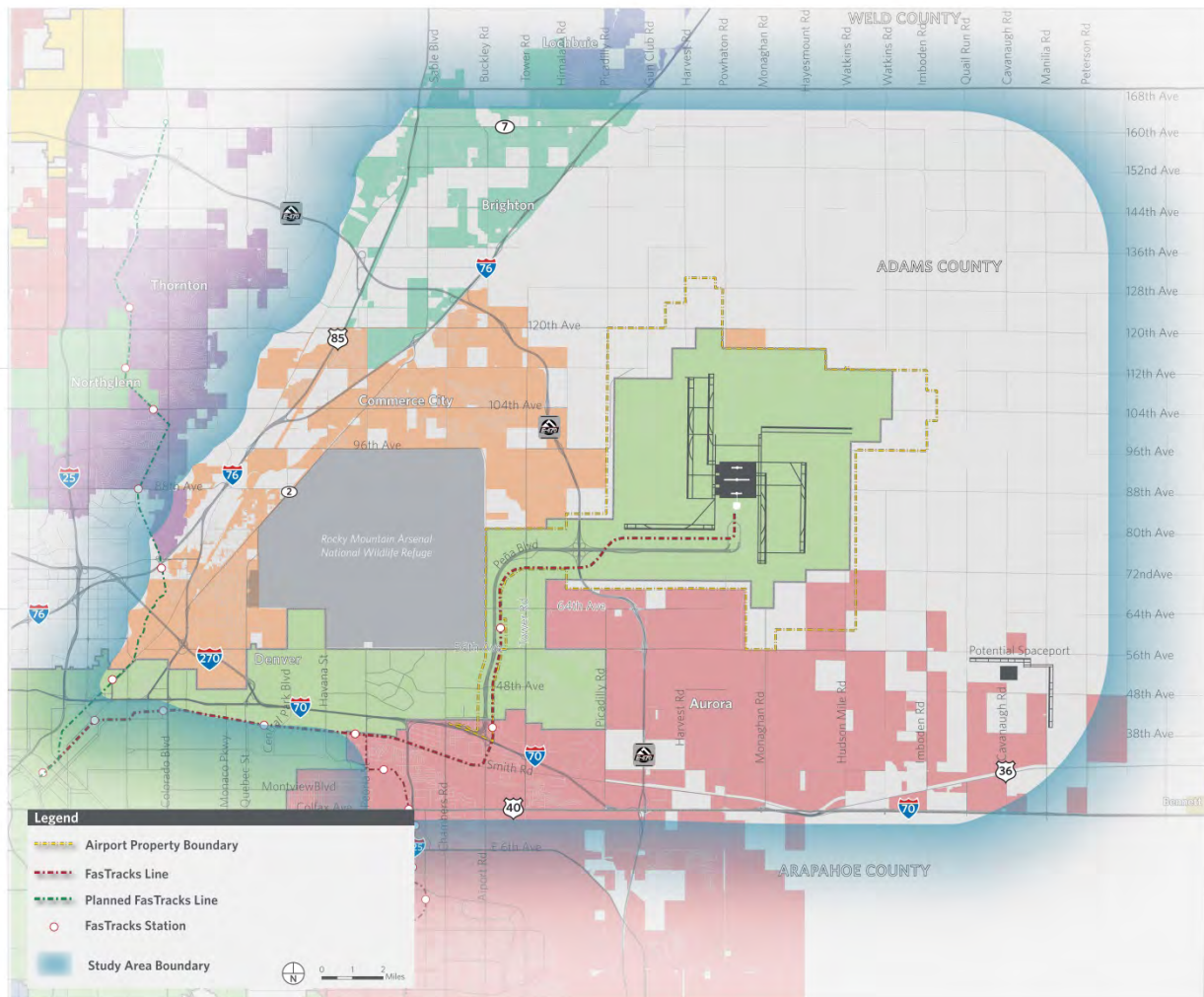
CDOT had the following objectives for the study:

- Agree on a collaborative vision for a Colorado Aerotropolis.
- Learn about the aerotropolis concept.
- Identify commonalities among the local plans.
- Quantify the potential for economic growth—with or without a Colorado Aerotropolis.
- Identify a framework of possibilities for collaboration on infrastructure investments.
- Outline regional governance options to implement investments in transportation, water, wastewater, drainage, power, and communications systems.

## Study Area

Figure 2 displays the study area of the Colorado Aerotropolis Visioning Study. The study area boundaries defined an area of influence that impacts or will be impacted by the current and future economic conditions both on and off airport.

Figure 2 Study Area for the Colorado Aerotropolis Visioning Study



Source: Aerotropolis Study Team.

## Areas of Focused Economic Development

The following two areas of development were the primary areas used for this economic and financial analysis.

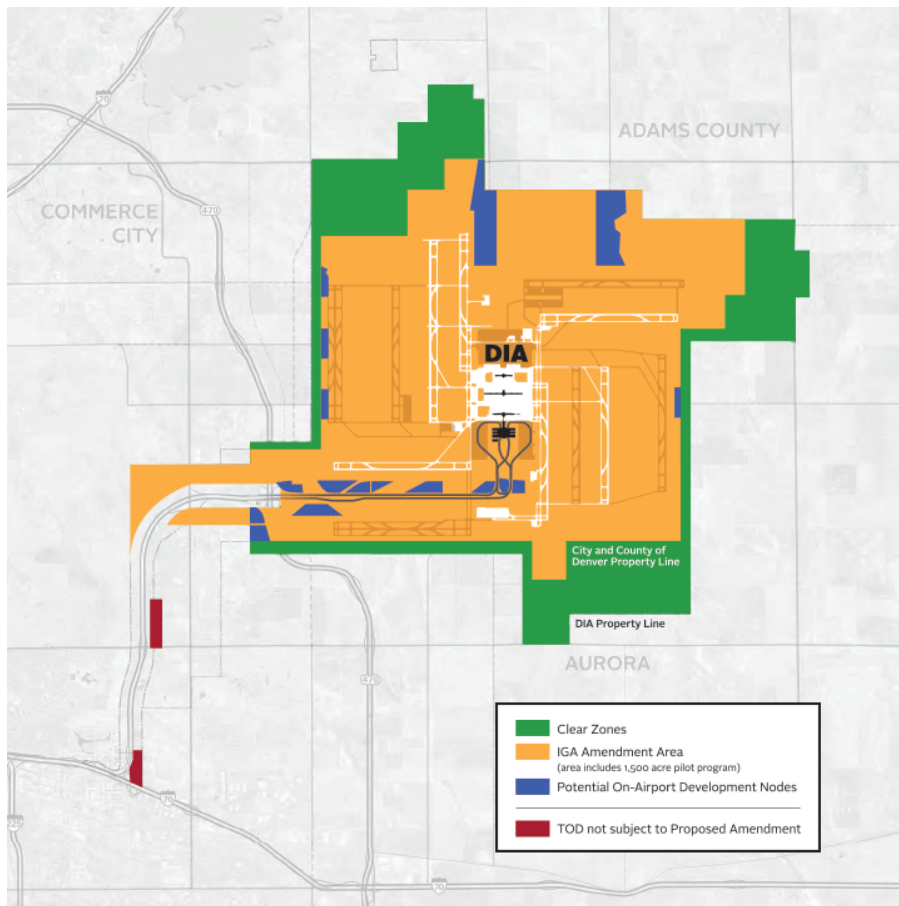
### IGA Amendment Pilot Program

One of the assumptions of the Aerotropolis Scenario is that the recently executed amendment to the Denver and Adams County Intergovernmental Agreement (IGA) Amendment would result in additional and/or accelerated investment in infrastructure improvements and additional on-airport development. The recently executed amendment will create a 1,500-



acre pilot program for commercial development leases on airport property. The 1,500 net leasable acres are located “within the fence,” at several nodes along Peña Boulevard and the DIA property boundary where there would be new access roads. At each node, development would occur both on and off airport property. Figure 3 displays the potential development nodes. In addition to the 1,500 net leasable acres, Adams County and Denver could agree at a later date to open more airport land to development.

**Figure 3 Potential Development Nodes Along the DIA Property Boundary**

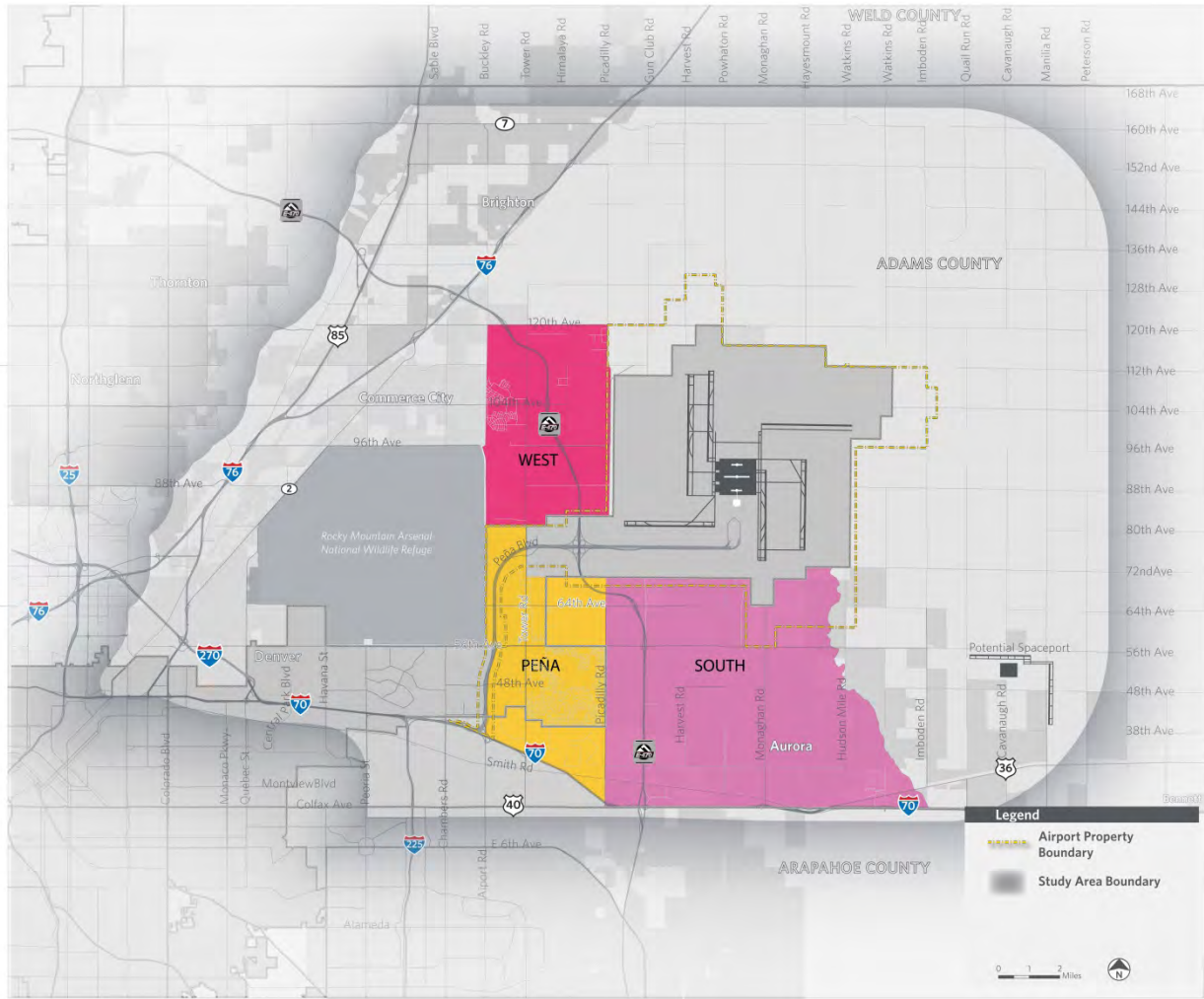


Source: Denver International Airport.

### Concentrated Development Area

Overall, the initial investments are anticipated to largely occur in a Concentrated Development Area (CDA) in the south and west portion of the larger Aerotropolis study area (shown in Figure 4). The 67-square-mile area is targeted for growth in several local and regional land use plans. This growth would attract additional off-airport employment above and beyond the DRCOG 2040 projections, which would increase commercial and residential development levels. The assumptions supporting off-airport employment are detailed in the *Assessment of Growth Projections for the Colorado Aerotropolis Study Area* working paper (Aerotropolis Study Team 2016).

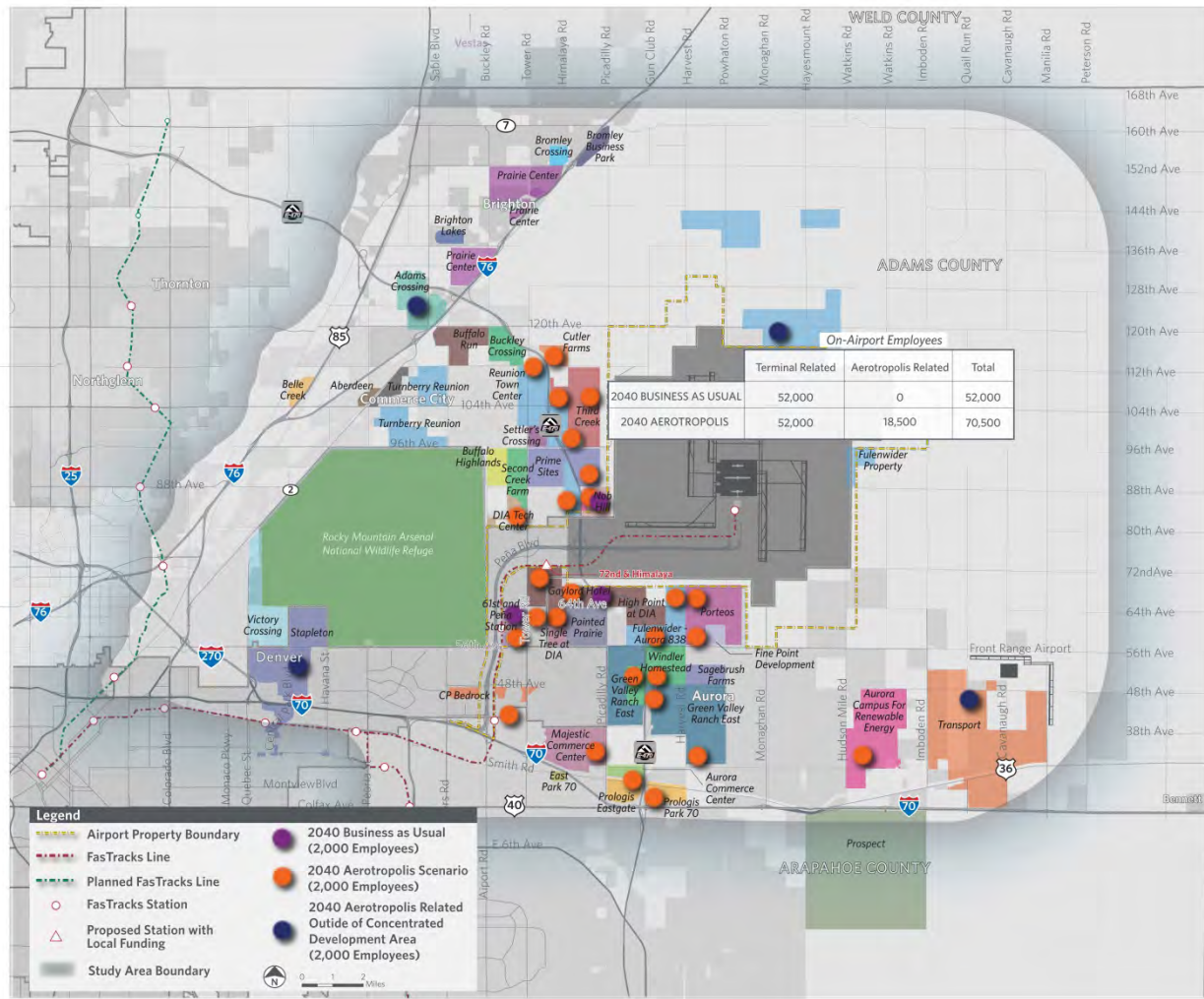
Figure 4 South and West Concentrated Development Area



Source: Aerotropolis Study Team.

Figure 5 shows a conceptual allocation of growth under an Aerotropolis Scenario in the CDA and other areas. Each of the orange circles represents an approximate area of 160 acres and 2,000 jobs.

Figure 5 Growth Allocation under Aerotropolis Scenario



Source: Aerotropolis Study Team.

### Economic and Financial Analysis

This analysis quantifies the economic impacts and revenue generation potential (revenue streams) and economic benefits (construction jobs) associated with the implementation of an Aerotropolis Scenario around DIA. It also identifies the level of infrastructure investment needed to support the Aerotropolis Scenario development.

### Employment Estimates

Under an Aerotropolis Scenario, employment was estimated for the 1,500 net leasable acres from the IGA Amendment (on-airport property) and the CDA (on- and off-airport property)—herein referred to as Aerotropolis-related employment. This Aerotropolis Scenario estimate

reflects a conservative level of activity given available capacity for the hypothetical comparison to the BAU Scenario, in contrast to a demand market analysis. Assuming a conservative 3:1 ratio of off-airport to on-airport employment, there are projected to be 18,500 on-airport and 55,500 off-airport jobs by 2040 above and beyond the BAU Scenario of approximately 6,000 additional jobs—for a total of almost 80,000 additional jobs by 2040. Table 4 compares the future employment estimates of the BAU Scenario to those calculated for the Aerotropolis Scenario. The basis for estimates of future employment is detailed in *Assessment of Growth Projections for the Colorado Aerotropolis Study Area* working paper (Aerotropolis Study Team 2016).

**Table 4 Aerotropolis Employment Projections**

Area	Category	2015 Existing	2040 BAU Scenario		2040 Aerotropolis Scenario		
			Growth	Total	Growth from Aerotropolis	Total Growth (includes BAU)	Total
On-Airport	Terminal Related	35,000	17,000	52,000	0	17,000	52,000
	Aerotropolis Related	0	0	0	18,500	18,500	18,500
	Subtotal	35,000	17,000	52,000	18,500	35,500	70,500
Off-Airport (Concentrated Development Area)	Terminal Related	n/a	n/a	n/a	n/a	n/a	n/a
	Aerotropolis Related	11,000	6,000	17,000	55,500	61,500	72,500
	Subtotal	11,000	6,000	17,000	55,500	61,500	72,500
On- and Off-Airport	Aerotropolis Related Subtotal	11,000	6,000	17,000	74,000	80,000	91,000
	<b>Total</b>	<b>46,000</b>	<b>23,000</b>	<b>69,000</b>	<b>74,000</b>	<b>97,000</b>	<b>143,000</b>

Sources: Aerotropolis Study Team, DRCOG 2040 RTP, DIA.

Two sets of employment growth projections were developed for the Aerotropolis Scenario. Both assume the same number of additional jobs, but a different mix of industry sectors and associated levels of demand for office, retail, and industrial space. This difference results in a low and high range estimate of the number of square feet of new commercial development.

The low square footage or Low SF scenario is characterized by a higher concentration of future employment in sectors that demand office space, including the fire, insurance, real estate (FIRE), information, and professional and technical services sectors. This mix of jobs closely resembles the density of the existing DTC. Because office uses are less space-intensive, the overall level of commercial development is lower (21 million square feet) compared to the high square footage or High SF scenario (35 million square feet), which is characterized by a greater emphasis on the accommodation and food services, transportation and warehousing, and manufacturing sectors. Growth in these sectors is correlated with



demand for industrial and retail space, with generally more square feet required per employee in these sectors than the FIRE sectors. The High SF scenario closely resembles the mix of off-airport jobs inventoried around LAX, which leverages the proximity to major trade corridors and its high volume of international flights to attract a high percentage of industrial and service jobs. Table 5 displays the commercial square footage of the two scenarios.

**Table 5 Future Commercial Square Footage Estimates**

	BAU	Aerotropolis (Includes BAU)		Difference
		Low SF	High SF	
<b>Increase in Employment</b>	<b>6,000</b>	<b>80,000</b>	<b>80,000</b>	<b>74,000</b>
Accommodation and food services	1,590	4,700	12,984	
Transportation and warehousing	1,028	748	7,866	
Manufacturing	(115)	819	2,362	
Wholesale trade	873	5,541	3,735	
Administrative and Waste Services	373	6,926	3,401	
Professional and Technical Services	333	13,893	3,033	
Health care and social assistance	298	3,323	2,714	
Retail trade	325	5,339	2,655	
Real estate and rental and leasing	467	1,930	2,655	
Educational services	291	1,396	2,647	
Other/Unclassified	263	1,588	2,393	
Management	162	5,726	1,478	
Finance and Insurance	143	15,885	1,305	
Information	(119)	10,534	517	
Public Administration	52	1,616	477	
<b>Commercial Development (sq ft)</b>	<b>2,718,000</b>	<b>20,874,350</b>	<b>34,728,000</b>	<b>18,000,000-32,000,000</b>
Industrial	1,581,000	4,337,500	17,823,000	
Retail	766,000	4,015,600	9,217,000	
Office	371,000	12,521,250	7,688,000	

Source: Aerotropolis Study Team.

These additional jobs would create demand for additional residential and commercial uses. To estimate the number of jobs across employment sectors and land use categories, the study team researched the distribution of on-airport and off-airport jobs at airport activity centers comparable to DIA. Table 6 and Table 7 summarize how the additional 80,000 jobs would likely be distributed across employment sectors and associated land use categories.

**Table 6 2040 Jobs Distributed Across Employment Sectors and Associated Land Uses—Low SF Scenario**

Employment Sector	2040 Jobs	Percent of Total Employment	Land Use Category	Office	Retail	Industrial
Accommodation and food services	19,132	5.9%	Retail	-	3,110	-
Transportation and warehousing	11,590	0.9%	Industrial	-	-	(280)
Manufacturing	3,481	1.0%	Industrial	-	-	934

Table 6 2040 Jobs Distributed Across Employment Sectors and Associated Land Uses—Low SF Scenario

Employment Sector	2040 Jobs	Percent of Total Employment	Land Use Category	Office	Retail	Industrial
Wholesale trade	5,503	6.9%	Office/Industrial	2,566	-	2,102
Administrative and waste management	5,012	8.7%	Office	6,553	-	-
Professional, scientific and technical services	4,469	17.4%	Office	13,560	-	-
Health care and social assistance	3,999	4.2%	Office	3,025	-	-
Retail trade	3,912	6.7%	Retail	-	5,014	-
Real estate and rental and leasing	3,912	2.4%	Office	1,463	-	-
Educational services	3,901	1.7%	Office	1,105	-	-
Other services	3,526	2.0%	Office	1,325	-	-
Management	2,178	7.2%	Office	5,564	-	-
Finance and insurance	1,923	19.9%	Office	15,742	-	-
Information	761	13.2%	Office	10,653	-	-
Public Administration	703	2.0%	Office	1,564	-	-
<b>Aerotropolis-related Employment</b>	<b>74,000</b>			<b>63,120</b>	<b>8,124</b>	<b>2,757</b>
<b>BAU Scenario Employment</b>	<b>6,000</b>			<b>2,468</b>	<b>1,915</b>	<b>1,581</b>
<b>2040 Total Employment</b>	<b>80,000</b>			<b>65,588</b>	<b>10,039</b>	<b>4,338</b>

Source: Aerotropolis Study Team.

Table 7 2040 Jobs Distributed Across Employment Sectors and Associated Land Uses—High SF Scenario

Employment Sector	2040 Jobs	Percent of Total Employment	Land Use Category	Office	Retail	Industrial
Accommodation and food services	19,132	25.9%	Retail	-	19,132	-
Transportation and warehousing	11,590	15.7%	Industrial	-	-	11,590
Manufacturing	3,481	4.7%	Industrial	-	-	3,481
Wholesale trade	5,503	7.4%	Office/Industrial	2,752	-	2,752
Administrative and waste management	5,012	6.8%	Office	5,012	-	-
Professional, scientific and technical services	4,469	6.0%	Office	4,469	-	-
Health care and social assistance	3,999	5.4%	Office	3,999	-	-
Retail trade	3,912	5.3%	Retail	-	3,912	-
Real estate and rental and leasing	3,912	5.3%	Office	3,912	-	-
Educational services	3,901	5.3%	Office	3,901	-	-
Other services	3,526	4.8%	Office	3,526	-	-
Management	2,178	2.9%	Office	2,178	-	-
Finance and insurance	1,923	2.6%	Office	1,923	-	-

Table 7 2040 Jobs Distributed Across Employment Sectors and Associated Land Uses—High SF Scenario

Employment Sector	2040 Jobs	Percent of Total Employment	Land Use Category	Office	Retail	Industrial
Information	761	1.0%		761	-	-
Public Administration	703	0.9%		703	-	-
<b>Aerotropolis-related Employment</b>	<b>74,000</b>			<b>33,134</b>	<b>23,043</b>	<b>17,823</b>
<b>BAU Scenario Employment</b>	<b>6,000</b>			<b>2,468</b>	<b>1,915</b>	<b>1,581</b>
<b>2040 Total Employment</b>	<b>80,000</b>			<b>35,602</b>	<b>24,958</b>	<b>19,404</b>

Source: Aerotropolis Study Team.

Next, employment levels were converted into land area and square feet of development, using prototypical densities for residential, office, retail, and industrial uses. Assumptions for the number of square feet per employee are based on Urban Land Institute planning metrics; assumptions for land use development intensities are based on comparable activity centers in the Denver metropolitan area.

Density for commercial uses is typically measured in terms of floor area ratio (FAR); density for residential uses is measured in dwelling units per acre (du/ac). A certain level of higher-density mixed-use, transit-oriented development (TOD) that has both residential and commercial uses is assumed to occur near two FasTracks stations located within the CDA. For TOD, the site FAR is assumed to be 2.0, split between multifamily housing (1.25 FAR) and office space (0.75 FAR), with some additional standalone (non-mixed use) multifamily housing constructed within TOD districts to satisfy residential demand for walkable, transit-accessible communities.

Table 8 and Table 9 show how the 2040 employment levels for the BAU Scenario, the Aerotropolis Scenario, and the combined total would translate to land area (acres) and square feet of commercial development for the Low SF and High SF scenarios respectively. Up to 20 percent of new commercial development (around 5.3 million square feet under the Low SF scenario) is assumed to be located in TOD districts adjacent to FasTracks stations.

Table 8 Potential 2040 Commercial Development—Low SF Scenario

Land Use	Acres	FAR	Total SF	BAU Scenario SF	Aerotropolis Scenario SF	SF/Emp	Total Emp	Aero Emp
Industrial	332	0.3	4,337,500	1,581,000	2,756,500	1,000	4,338	2,757
Retail	230	0.4	4,015,600	766,000	3,249,600	400	10,039	8,124
Office	329	0.5	7,155,000	314,670	6,840,330	150	47,700	45,602
TOD Mixed Use Commercial	164	0.75	5,366,250	111,060	5,255,190	150	17,888	17,517
<b>Total</b>	<b>1,055</b>		<b>20,874,350</b>	<b>2,717,200</b>	<b>18,157,150</b>		<b>79,964</b>	<b>74,000</b>

Source: Aerotropolis Study Team.

Table 9 Potential 2040 Commercial Development—High SF Scenario

Land Use	Acres	FAR	Total SF	BAU Scenario SF	Aerotropolis Scenario SF	SF/Emp	Total Emp	Aero Emp
Industrial	1,485	0.3	19,404,000	1,581,000	17,823,000	1,000	19,404	17,823
Retail	573	0.4	9,983,000	766,000	9,217,000	400	24,958	23,043
Office	178	0.5	3,884,000	315,000	3,569,000	150	25,892	23,794
TOD Mixed Use Commercial	89	0.75	1,456,000	56,000	1,401,000	150	9,710	9,339
<b>Total</b>	<b>2,281</b>		<b>34,727,000</b>	<b>2,718,000</b>	<b>32,010,000</b>		<b>79,964</b>	<b>74,000</b>

Source: Aerotropolis Study Team.

### Absorption Rates

To better understand the level of projected Aerotropolis-related development in the context of historical market demand within the metropolitan Denver area, annual net absorption rates for office, retail, and industrial uses were inventoried going back to 2009 to capture a rolling average. Net annual absorption can be roughly used as a proxy for the levels of annual new construction (or “deliveries”) that the metropolitan Denver market can support. Because real estate development is inherently cyclical, supply and demand may be mismatched in a given year but typically balance each other out in the long run. The rolling average for each land use was then compared to the annual build-out assumptions used for the Aerotropolis Low SF and High SF scenarios.

Table 10 Net Annual Absorption Rates

	Total	Office	Retail	Industrial
<b>Net Absorption Rates (2009-2015)</b>				
Minimum	(744,000)	(398,000)	(46,000)	(300,000)
Maximum	7,851,000	2,126,000	1,475,000	4,250,000
<b>Average</b>	<b>3,820,000</b>	<b>1,210,000</b>	<b>840,000</b>	<b>1,770,000</b>
Average Annual Deliveries—Low SF	908,000	544,000	175,000	189,000
Average Annual Deliveries—High SF	1,319,000	318,000	367,000	706,000
Percent of Average Net Annual Absorption	24 - 36%	26 - 45%	21 - 44%	11 - 40%

Source: CBRE, Colliers.

As shown in Table 10, annual projected levels of Aerotropolis-related commercial development would represent 24 to 36 percent of the Denver metropolitan area average over the past seven years. Because Aerotropolis-related development is assumed to be above and beyond the DRCOG long-term growth projections, it should be noted that this percentage does not represent a “capture rate” per se for the Northeast/Airport commercial real estate submarket in which the CDA is located, but rather a level of development that should be considered largely *additive to the regional total*. In other words, the fundamental premise of the Aerotropolis Scenario is that DIA is an underutilized asset that can catalyze additional employment (and population) growth in excess of the DRCOG long-term forecasts.

While the average annual deliveries (i.e., levels of new construction) associated with the Aerotropolis Scenario are significant, Aerotropolis-related growth would only modestly



increase the size of the Northeast/Airport commercial real estate submarket relative to the total inventory of the Denver metropolitan area over the 25-year build-out period. The current share of the Northeast/Airport submarket would increase from 17.5 percent to between 17.4 and 19.7 percent, as illustrated in Table 11.

**Table 11 Aerotropolis Growth as a Percentage of Total Existing and Projected Market Inventory**

	Total	Office	Retail	Industrial
Total Existing Market Inventory (sq ft)	492,990,000	142,640,000	121,380,000	228,970,000
Northeast/Airport Submarket	86,040,000	7,780,000	12,070,000	66,190,000
Percent of Existing Market Inventory	17.5%	5.5%	9.9%	28.9%
Total Projected 2040 Market Inventory	613,573,000	182,624,000	148,230,000	282,719,000
Northeast/Airport Submarket--Low SF	106,914,350	20,301,250	16,085,600	70,527,500
Northeast/Airport Submarket--High SF	120,768,000	15,468,000	21,287,000	84,013,000
Percent of Projected 2040 Market Inventory	17.4 - 19.7%	8.5 - 11.1%	10.9 - 14.4%	24.9 - 29.7%

Source: CBRE, Colliers, Aerotropolis Study Team.

The increase in the size of the Northeast/Airport commercial submarket under an Aerotropolis Scenario would vary considerably by land use. The office market size would undergo significant expansion, doubling to tripling its regional share of total inventory, while the industrial market size is projected at best to retain its regional share of total inventory by 2040. In fact, a potential decrease in industrial market share would occur under the Low SF scenario because the employment base surrounding DIA diversifies into sectors that have traditionally demanded office space (see Table 5).

### Residential Development

The additional employment would lead to additional housing needs. The housing need associated with the additional 74,000 Aerotropolis-induced on-airport and off-airport jobs was calculated using the regional person-to-jobs ratio of 2.84 (DRCOG 2015). This translates into a population increase of almost 210,000; however, not all of the Aerotropolis-related employees would live in or near the Aerotropolis. In the 2010 Census, 12.4 percent of all Denver County commuters had a trip to work in excess of 45 minutes. Applying this percentage to the Aerotropolis Scenario provides a reasonable estimate of the number of longer-distance commuters not needing housing in the CDA. An additional 184,000 residents may be expected to live within the CDA and the study area. Assuming 2.45 persons per household, this would result in an estimated need for just over 75,000 new housing units by 2040.

The calculations are shown in Table 12.

**Table 12 Calculation of Aerotropolis-related Housing Needs**

	Metric
Aerotropolis-Related Employment	74,000
Regional Persons:Jobs Ratio	2.84
Aerotropolis-Related Population	209,996
Less out-of-area commuters	(26,039)
Additional Residents	183,957
Persons per household/housing unit	2.45
<b>Net housing units required within CDA</b>	<b>75,084</b>
TOD-Multifamily	15,037
Single Family Dwellings (SFD)	60,047

Source: DRCOG, US Census, Aerotropolis Study Team.

Approximately 20 percent of new residential development is assumed to be multifamily units located in TOD districts and 80 percent in traditional single-family dwellings (SFD). The implied residential density of 1.25 FAR for TOD Mixed-use Residential is approximately 50 du/ac, or 4-story wrap configuration apartments. As summarized in Table 13, the Aerotropolis Scenario is likely to create demand for an additional 180 million square feet of residential development.

**Table 13 Aerotropolis-related Residential Development in the CDA (2040)**

Land Use	Acres	Average Density		Aerotropolis SF	SF/ DU	Total DU
TOD Mixed-use Residential <sup>[1]</sup>	112 - 187	1.25	FAR	15,037,000	1,000	15,037
Single-family Dwelling Residential	20,016	3	du/ac	126,099,000	2,100	60,047
<b>Total</b>	<b>20,128 - 20,203</b>			<b>178,116,000</b>	<b>0</b>	<b>75,084</b>

[1] The land area occupied by TOD Mixed-use Residential is partially accounted for in Table 8 and Table 9 under the land area occupied by TOD Mixed-Use Commercial.

Source: Aerotropolis Study Team.

## Employment Centers

The study team examined existing commercial development (industrial, retail, and office) at major peer employment centers in the Denver metropolitan area to compare an Aerotropolis Scenario to these centers. The employment centers are the Denver Central Business District (CBD), the DTC, Aurora City Center, Downtown Boulder, Cherry Creek, and Interlocken. For comparison purposes, the Aerotropolis study area is shown in Figure 6. The employment centers (as defined by DRCOG) are shown in Figure 7.

The centers vary in age and size. The two primary ones are the CBD and the DTC, both with approximately 50 million square feet of commercial space. The CBD has had a long history of being an employment and commerce center, while the DTC was established in the 1970s. The Aurora City Center includes Aurora's civic center, as well as a significant amount of retail and some office space. Downtown Boulder includes the Pearl Street Mall. Cherry Creek includes

the Cherry Creek Mall, Cherry Creek north boutique retail, and a significant amount of office space. Interlocken is a relatively newer employment and retail center along the US 36 Corridor in Broomfield, with significant room to grow.

Figure 6 Aerotropolis Study Area and all Employment Centers

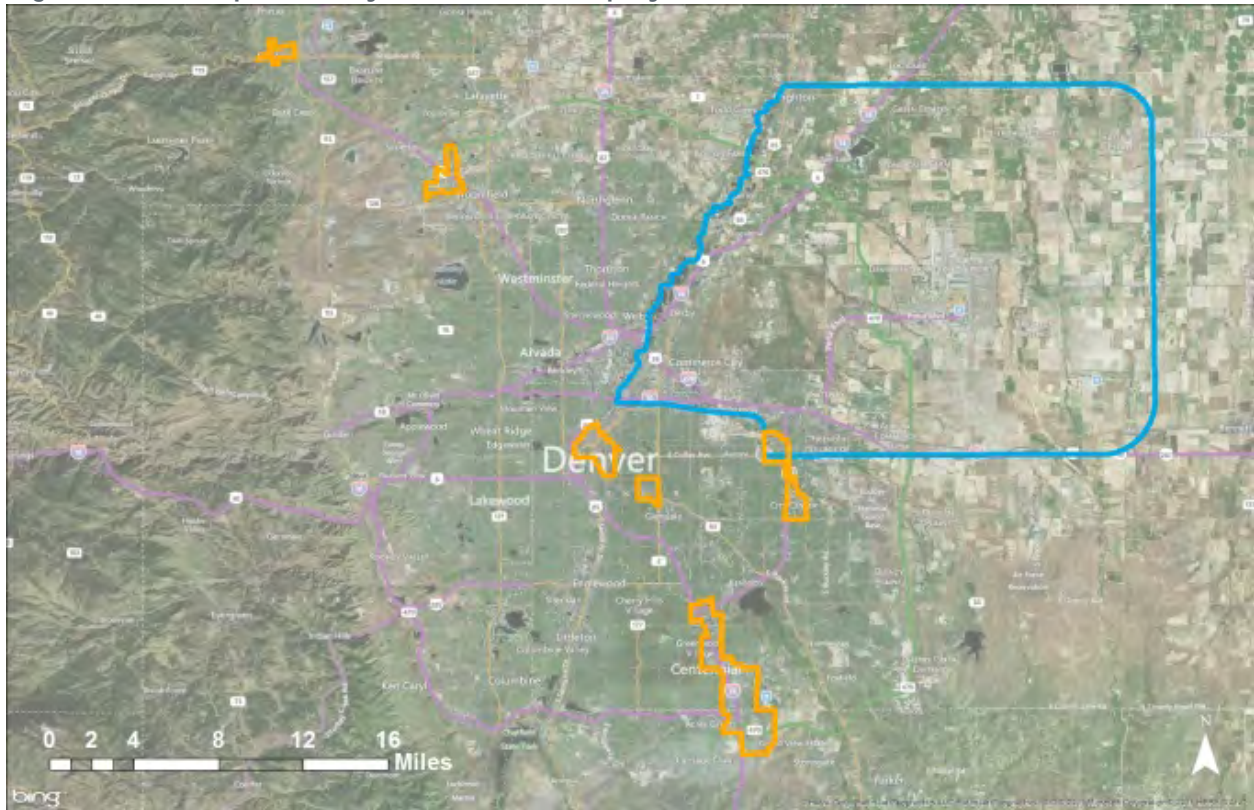
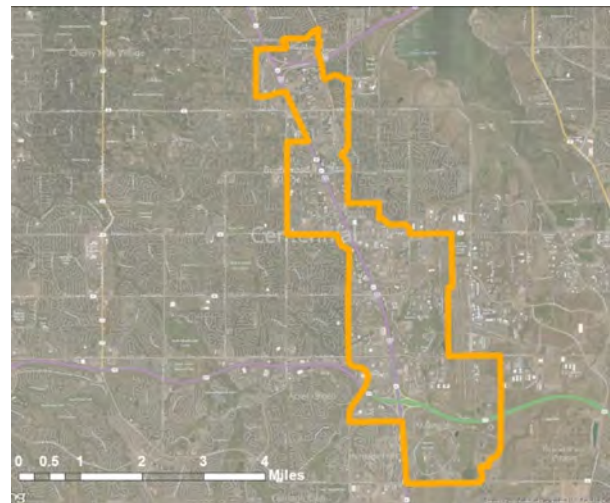


Figure 7 Employment Centers in DRCOG's Greater Transportation Region



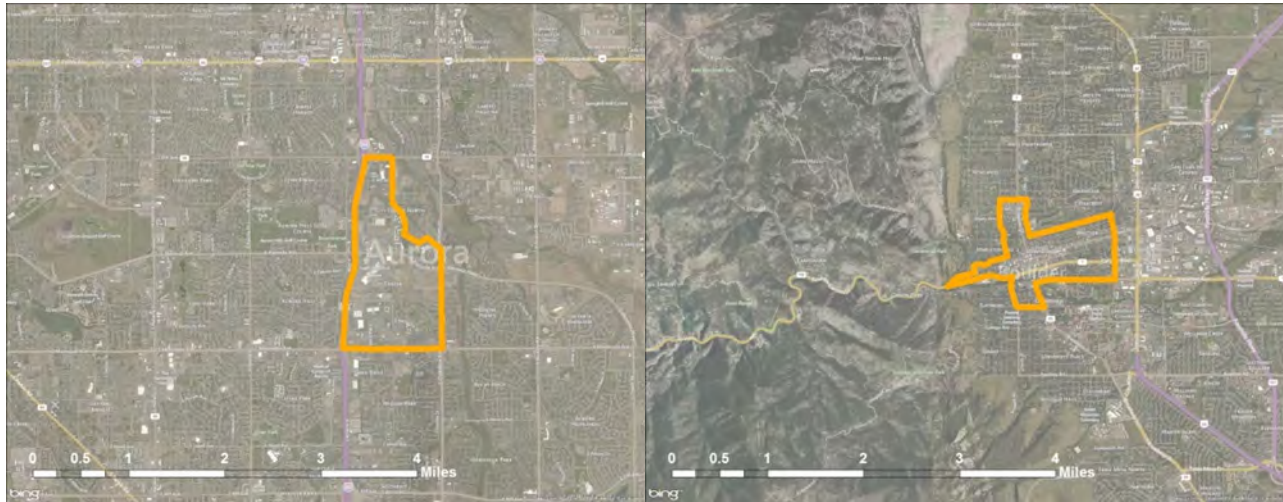
Denver Central Business District (CBD)



Denver Technological Center (DTC)



Figure 7 Employment Centers in DRCOG's Greater Transportation Region



Aurora City Center

Downtown Boulder



Cherry Creek

Interlocken



Table 14 shows the size of the commercial development in each of these centers. The CBD and the DTC are the largest at over 50 million square feet each and comprise mostly office development. The other centers are comparatively much smaller, ranging from 3.9 to 8.2 million square feet of commercial space.

**Table 14 Commercial Square Footage at Employment Centers**

	<b>CBD</b>	<b>DTC</b>	<b>Aurora City Center</b>	<b>Downtown Boulder</b>	<b>Cherry Creek</b>	<b>Interlocken</b>
Industrial	2,779,059	5,031,916	168,568	84,069	1,663	175,267
Retail	4,574,451	7,603,263	3,007,899	4,143,793	2,477,230	2,544,136
Office	43,272,864	38,120,405	771,372	3,968,346	3,616,750	2,332,005
<b>Total</b>	<b>50,626,374</b>	<b>50,755,584</b>	<b>3,947,839</b>	<b>8,196,208</b>	<b>6,095,643</b>	<b>5,051,408</b>

Source: CoStar, Aerotropolis Study Team

Table 15 shows the percentage breakdown by type of space. The highest percentage of commercial space in the CBD and the DTC is office, while the highest percentage of commercial space at the Aurora City Center is retail. Downtown Boulder, Cherry Creek, and Interlocken are more evenly balanced between office and retail space. Industrial space is a relatively small percentage of overall commercial space in all of these employment centers.

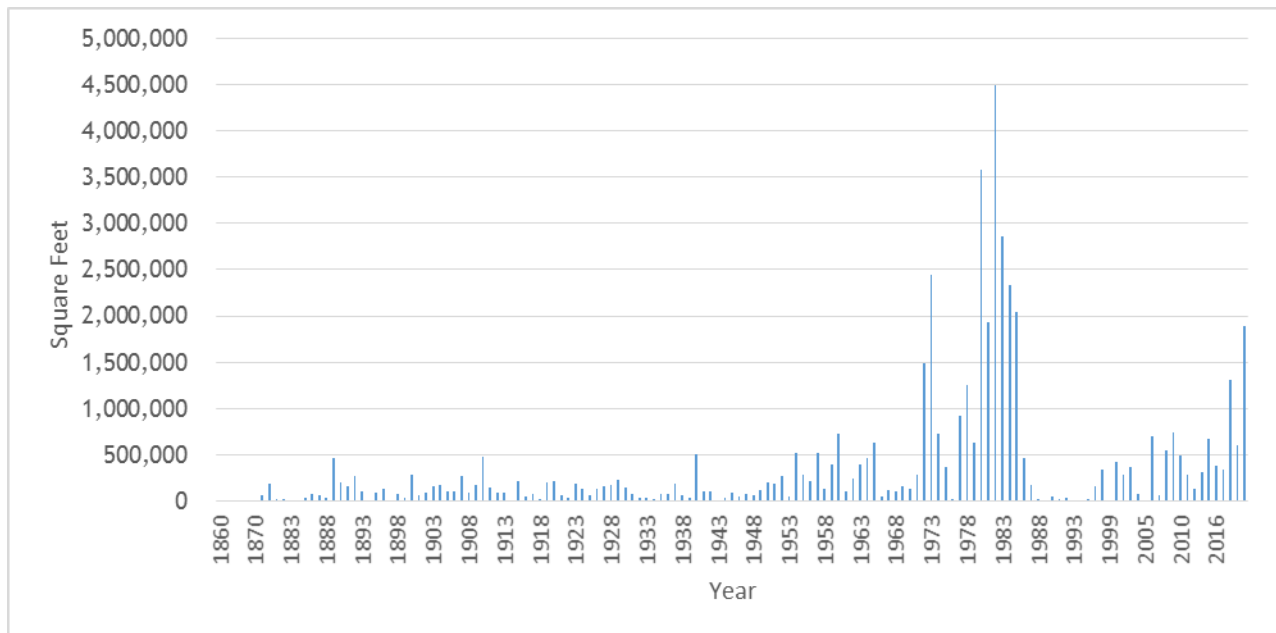
**Table 15 Distribution of Commercial Square Footages at Employment Centers**

	<b>CBD</b>	<b>DTC</b>	<b>Aurora City Center</b>	<b>Downtown Boulder</b>	<b>Cherry Creek</b>	<b>Interlocken</b>
Industrial	5.5%	9.9%	4.3%	1.0%	0.0%	3.5%
Retail	9.0%	15.0%	76.2%	50.6%	40.6%	50.4%
Office	85.5%	75.1%	19.5%	48.4%	59.3%	46.2%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: CoStar, Aerotropolis Study Team

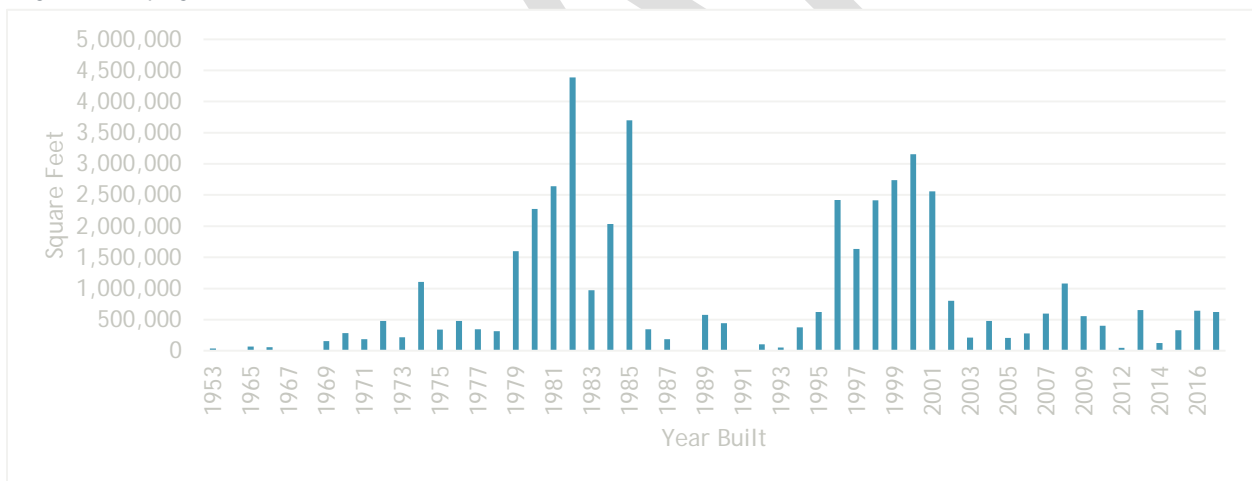
Figure 8 depicts the development of commercial space over time in each of these centers. The graphs show the year of construction and amount of square footage for the buildings in existence today. Buildings that were constructed and then subsequently demolished are not reflected. This may undercount some of the square footage that has been built historically particularly for the older CBD and Downtown Boulder, which have seen redevelopment over the years.

Figure 8 Annual Square Footage Growth of Employment Centers



Denver Central Business District (CBD)

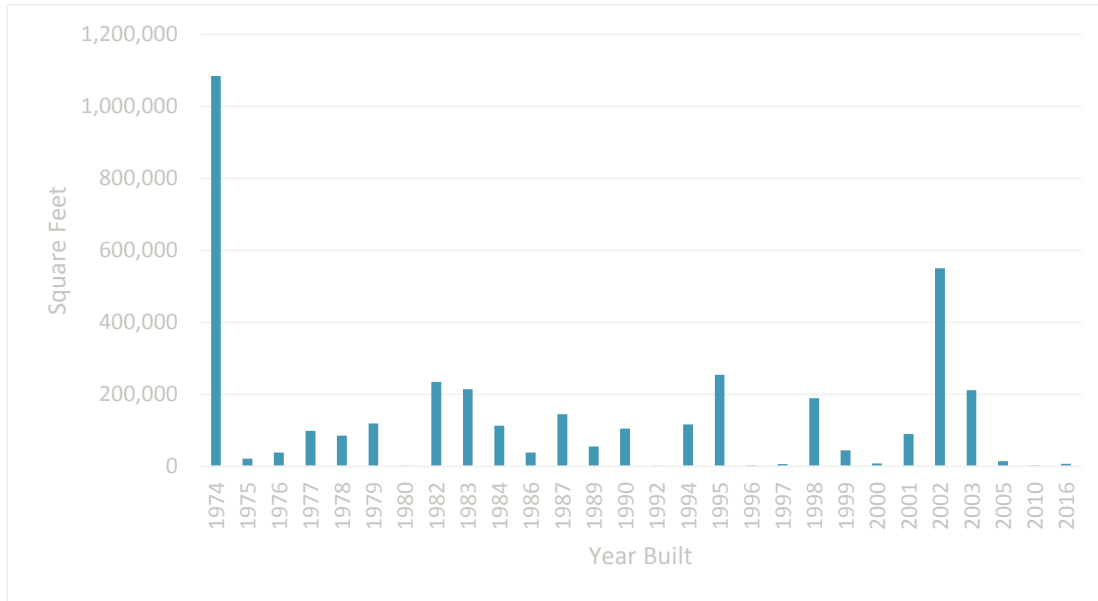
The CBD saw its greatest period of growth in the 1980s. It has a long history, with the construction of some of its current office spaces dating back to 1860. The CBD has enjoyed a recent resurgence with the development of major office projects near Denver Union Station.



DTC

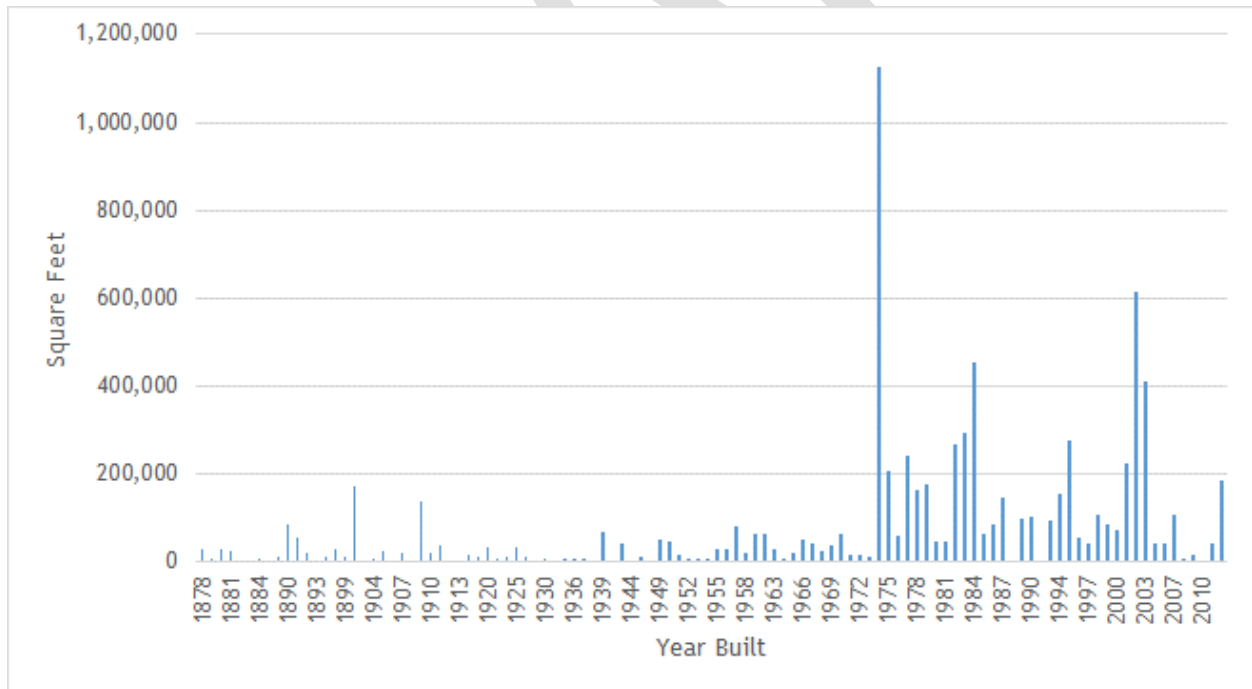
The DTC saw most of its major development in the 1980s, the late 1990s and early 2000s, although it still remains a very competitive office and retail center.

Figure 8 Annual Square Footage Growth of Employment Centers



**Aurora City Center**

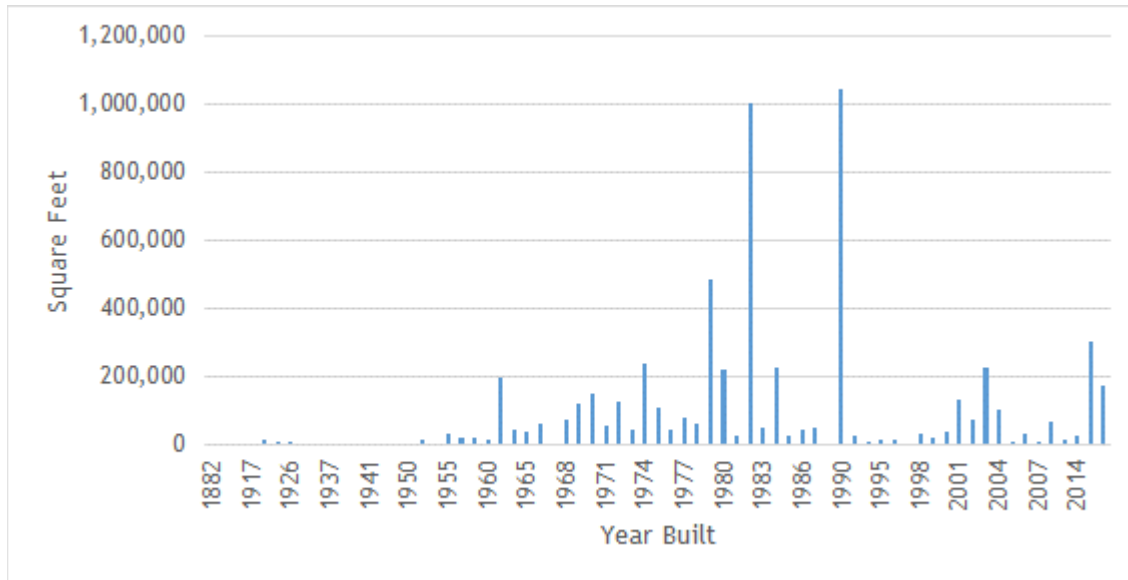
The commercial space at the Aurora City Center, which was developed in 1974, is primarily retail. However, there has been subsequent development of commercial space around the center, most recently centered primarily around the Fitzsimons Medical Campus.



**Downtown Boulder**

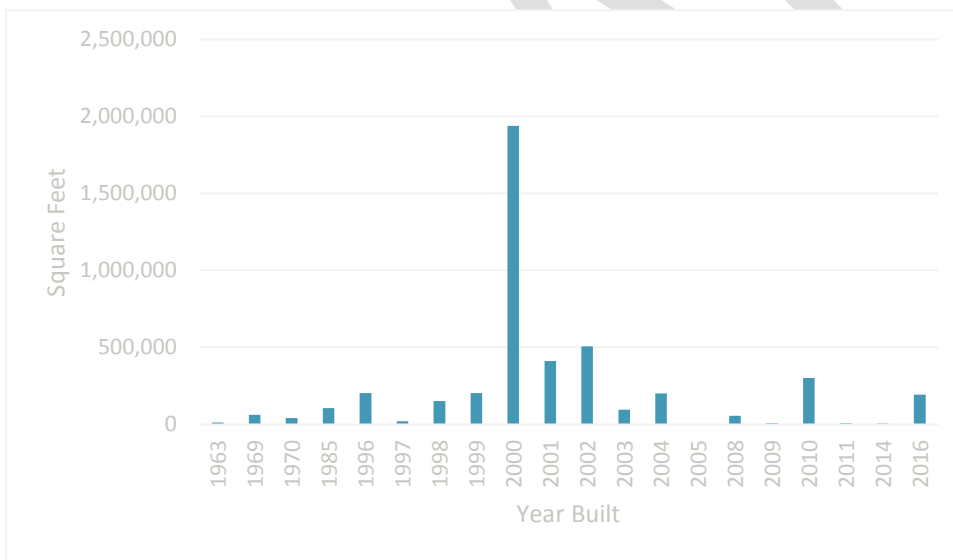
Downtown Boulder saw its greatest development in the early 1970s and early 2000s. Like the CBD, some of its existing commercial buildings date back to the late 1800s.

Figure 8 Annual Square Footage Growth of Employment Centers



**Cherry Creek**

Cherry Creek saw significant commercial development in the early 1980s and the Cherry Creek Mall opened in 1990. It also has some historical buildings. Cherry Creek has also recently seen a significant amount of residential condo and apartment development.



**Interlocken**

Interlocken along US 36 saw its initial commercial development in 1963 with a significant amount of development in 2000.

Source: CoStar, Aerotropolis Study Team.



Table 16 outlines the total growth of each of these centers between 1970 and 2016. During this time, there were both downturns and upticks in the local economy, reflected in the graphics in Figure 8.

The CBD saw fairly intense development between 1970 and 2016 at an annual average growth rate of 700,000 to 1 million square feet. During this time period, the DTC saw the vast majority of its development. Its average annual addition to inventory during this time period was 980,000 to 1.1 million square feet. The other centers were comparatively much smaller, but all saw a commensurate amount of growth.

**Table 16 Growth of Commercial Space at Area Employment Centers 1970-2016**

	Total Commercial Development (millions sq. ft.)	Average Annual Change (sq. ft.)	
		Minimum	Maximum
CBD	34.6 - 36.5	700,000	1,000,000
DTC	46.0 - 50.4	980,000	1,100,000
Aurora City Center	3.7	96,000	96,000
Downtown Boulder	6.3 - 6.5	140,000	144,000
Cherry Creek	5.5 - 5.7	122,000	126,000
Interlocken	4.4 - 4.9	97,000	108,000
<b>Total</b>		<b>2,135,000</b>	<b>2,574,000</b>

Source: CoStar, Aerotropolis Study Team.

Using these comparison centers to validate the assumptions underlying the Aerotropolis Scenario projections, it is estimated that, at full build-out, the aggregate level of development built under the Low SF and High SF scenarios would be roughly 40 to 70 percent of the overall size of the DTC, respectively, with average annual absorption rates for commercial space that are comparable to those experienced by the DTC over a 25-year period from the late 1970s to the early 2000s. The mix of industrial, retail, and office uses envisioned under the Low SF scenario is also substantially similar to that of the DTC, while the High SF scenario is more heavily oriented toward industrial and service uses that capitalize upon DIA's hub status and potential as a center for trade and international commerce.

### Public Tax Revenue Streams

The revenue generation potential of an Aerotropolis Scenario was considered over a 25-year period (2016-2040), consistent with the horizon year for DRCOG demographic projections. Because the revenues from residential and commercial development associated with an Aerotropolis Scenario are expected to be generated incrementally in the future, the analysis discounted those revenue streams to their present value (PV) 2015 dollars to compare revenues and costs. For the purposes of the cash flow analysis, the phasing of new growth is assumed to occur on a straight-line basis starting in 2018, with approximately 4 percent of total development coming on line each year through 2040. Assuming a discount rate of 4

percent, the PV of those future revenue streams could range between an additional \$600 to \$630 million in revenues above the baseline scenario of \$100 million.

The \$600 to \$630 million in revenue potential from commercial and residential property taxes, sales taxes, and residential development impact fees associated with the Aerotropolis-related commercial and residential development was quantified as described in the following sections.

### Increases in Property Taxes

The increase in property taxes collected by the counties is derived from the increase in assessed property values associated with new development. To quantify the increase attributable solely to an Aerotropolis Scenario, this analysis nets out the existing land value and the value of development that would have otherwise occurred under the BAU Scenario (Table 17 and Table 18).

**Table 17 Calculation of Net Increase in Property Values Associated with Aerotropolis Low SF Scenario**

Land Use	Acres	Aerotropolis SF	\$ PSF	Aerotropolis Property Value
<b>Commercial</b>				
Industrial	332	2,756,500	\$90	\$248,085,000
Retail	230	3,249,600	\$145	\$471,192,000
Office	329	6,840,330	\$180	\$1,231,200,000
TOD Mixed-use Commercial	164	5,255,190	\$217	\$1,140,376,000
<b>Residential</b>				
TOD Mixed-use Residential	112	12,610,000	\$233	\$2,938,130,000
SFD Residential	20,825	131,197,000	\$177	\$23,221,869,000
<b>Total</b>	<b>21,992</b>	<b>161,908,600</b>		<b>\$29,250,85200,000</b>
Agricultural Land Value Per Acre	\$1,740			
(Less Existing Agricultural Land Value)				(\$34,800,000)
<b>Net Increase in Assessable Property Value</b>				<b>\$29,216,052,000</b>

Source: Aerotropolis Study Team.

**Table 18 Calculation of Net Increase in Property Values Associated with Aerotropolis High SF Scenario**

Land Use	Acres	Aerotropolis SF	\$ PSF	Aerotropolis Property Value
<b>Commercial</b>				
Industrial	1,485	17,823,000	\$90	\$1,604,070,000
Retail	573	9,217,000	\$145	\$1,336,465,000
Office	178	3,569,000	\$180	\$642,420,000
TOD Mixed-use Commercial	45	1,401,000	\$217	\$304,017,000
<b>Residential</b>				
TOD Mixed-use Residential	187	12,610,000	\$233	\$2,938,130,000
SFD Residential	20,825	131,197,000	\$177	\$23,221,869,000
<b>Total</b>	<b>23,293</b>	<b>175,817,000</b>		<b>\$30,046,971,000</b>
Agricultural Land Value Per Acre	\$1,740			
(Less Existing Agricultural Land Value)				(\$40,530,000)
<b>Net Increase in Assessable Property Value</b>				<b>\$30,006,441,000</b>

Source: Aerotropolis Study Team.

This analysis assumes that the development of new residential and commercial uses in the CDA would involve the conversion of agricultural land, currently valued at a regional average of \$1,740 per acre. At full build-out in 2040, the Aerotropolis Scenario would add between \$29.2 and \$30.0 billion in net new property value to the assessor roll. The increase in property values associated with new development was calculated using the assessment ratio for residential and commercial properties in Denver and Adams Counties (7.96 percent and 29.00 percent, respectively). For purposes of this analysis, a uniform levy rate of 10 mills was applied to all jurisdictions throughout the CDA for both residential and commercial properties. This mill levy demonstrates a general level of revenue generation that would be necessary to support the infrastructure investments needed for the Aerotropolis Scenario. In reality, the means to raise revenue in support of Aerotropolis development has not yet been determined. The *Governance Options for the Colorado Aerotropolis* working paper (Aerotropolis Study Team 2016) discusses the possibilities for future funding after a regional entity is formed.

Because properties are subject to annual reassessment based on fair market value, this analysis used an escalation schedule to take into account the likely appreciation of real property over the 2016 to 2040 period. Over the past decade, property values in Denver and Adams Counties have increased at an average annual rate of 4.4 percent. This trend is assumed to continue through 2040 and was used to estimate the per-square-foot value of new development occurring in future years.

### Increases in Sales Taxes

The additional households and employees located within the CDA would pay retail sales taxes on taxable goods and services. Taxable spending is estimated at 35 to 40 percent of total household income—estimated at an average of \$35 per week per employee (in addition to taxes associated with household spending). However, until retail development reaches critical mass within the CDA when residents can shop locally for goods and services, the CDA is anticipated to experience a fair amount of sales leakage to other nearby commercial developments. For example, a significant retail center to the west is Northfield Stapleton (a large regional retail lifestyle center within the study area along I-70) and other retail centers. For this reason, the increase in sales taxes collected within the CDA is based on the expenditure of only 28 percent of household income. Sales taxes on business operations other than retail would increase revenue projections from sales taxes.

### Development Impact Fees

Cities and counties partner with developers and use impact fees to help defray the costs of additional facilities required to serve their new developments. For example, the Town of Castle Rock (Douglas County) currently imposes impact fees on new residential development only, set at \$1,990 per multifamily residential unit and \$2,173 per single-family dwelling. This analysis assumes that individual jurisdictions will coordinate to impose a uniform impact fee throughout the CDA at similar levels, with fees increasing annually in tandem with the average rate of property value appreciation (4.4 percent).

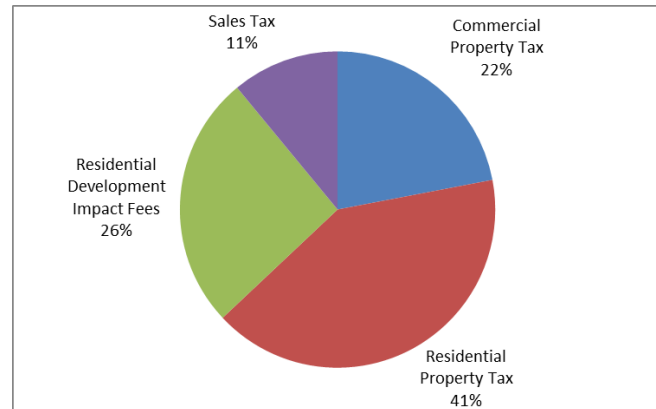
Commercial development impact fees are not assumed in this study. Imposition of impact fees on commercial development could also be considered, which could raise additional revenue.

Summary of Revenue Generation Potential

Table 19 summarizes the revenue potential from each of the revenue streams. Table 20 and Table 21 present the annual cash flows estimated for each of these revenue streams.

In total, revenues of about \$1.2 to \$1.3 billion (in YOE dollars) is expected over a 25-year period (2016-2040) under the Low SF and High SF scenarios. As shown in Figure 9, residential property taxes represent the largest share of revenues (41 percent), followed by residential development impact fees (26 percent), commercial property taxes (22 percent), and sales taxes (11 percent).

Figure 9 Composition of Aerotropolis Revenue Streams



Source: Aerotropolis Study Team.

The imposition of commercial development impact fees could also be considered; this would raise additional revenue greater than the estimates presented herein.

Table 19 Calculation of Net Increase in Property Values Associated with Aerotropolis High SF Scenario

Sources of New Revenue (2016-2040)	Low SF		High SF	
	Amount (in millions)		Amount (in millions)	
	YOE \$	2015 PV \$	YOE \$	2015 PV \$
Commercial Property Tax	\$238.0	\$111.4	\$298.2	\$139.6
Residential Property Tax	\$550.9	\$257.9	\$550.9	\$257.9
Development Impact Fees	\$306.8	\$163.6	\$306.8	\$163.6
Sales Taxes	\$142.1	\$68.4	\$142.1	\$68.4
<b>Total</b>	<b>\$1,237.8</b>	<b>\$601.3</b>	<b>\$1,298.0</b>	<b>\$629.5</b>

Source: Aerotropolis Study Team.



Table 20 Revenue Generation Potential Associated with Low SF Aerotropolis Scenario

Year		% Build-out	Escalation [1]	Commercial Property Tax	Residential Property Tax	Development Impact Fees	Escalation [2]	Sales Taxes
	<b>Totals</b>			<b>\$238,045,547</b>	<b>\$550,882,443</b>	<b>\$306,785,922</b>		<b>\$142,108,879</b>
	2015			\$0	\$0	\$0	101.9%	\$0
<b>1</b>	2016	0%	104.4%	\$0	\$0	\$0	101.9%	\$0
<b>2</b>	2017	0%	109.0%	\$0	\$0	\$0	103.8%	\$0
<b>3</b>	2018	4%	113.8%	\$445,370	\$1,030,671	\$7,961,432	105.7%	\$389,856
<b>4</b>	2019	9%	118.9%	\$930,072	\$2,152,364	\$8,312,983	107.7%	\$794,360
<b>5</b>	2020	13%	124.1%	\$1,456,712	\$3,371,107	\$8,680,057	109.8%	\$1,213,925
<b>6</b>	2021	17%	129.6%	\$2,028,047	\$4,693,285	\$9,063,339	111.8%	\$1,648,975
<b>7</b>	2022	22%	135.3%	\$2,646,999	\$6,125,657	\$9,463,546	113.9%	\$2,099,942
<b>8</b>	2023	26%	141.3%	\$3,316,658	\$7,675,374	\$9,881,425	116.1%	\$2,567,272
<b>9</b>	2024	30%	147.5%	\$4,040,296	\$9,350,009	\$10,317,756	118.2%	\$3,051,420
<b>10</b>	2025	35%	154.0%	\$4,821,374	\$11,157,571	\$10,773,353	120.5%	\$3,552,853
<b>11</b>	2026	39%	160.9%	\$5,663,553	\$13,106,533	\$11,249,069	122.7%	\$4,072,050
<b>12</b>	2027	43%	168.0%	\$6,570,707	\$15,205,860	\$11,745,790	125.0%	\$4,609,501
<b>13</b>	2028	48%	175.4%	\$7,546,933	\$17,465,031	\$12,264,446	127.4%	\$5,165,709
<b>14</b>	2029	52%	183.1%	\$8,596,560	\$19,894,068	\$12,806,003	129.8%	\$5,741,188
<b>15</b>	2030	57%	191.2%	\$9,724,169	\$22,503,567	\$13,371,473	132.2%	\$6,336,468
<b>16</b>	2031	61%	199.6%	\$10,934,599	\$25,304,731	\$13,961,913	134.7%	\$6,952,087
<b>17</b>	2032	65%	208.5%	\$12,232,965	\$28,309,397	\$14,578,425	137.2%	\$7,588,602
<b>18</b>	2033	70%	217.7%	\$13,624,675	\$31,530,075	\$15,222,160	139.8%	\$8,246,579
<b>19</b>	2034	74%	227.3%	\$15,115,438	\$34,979,985	\$15,894,320	142.4%	\$8,926,600
<b>20</b>	2035	78%	237.3%	\$16,711,291	\$38,673,090	\$16,596,160	145.1%	\$9,629,261
<b>21</b>	2036	83%	247.8%	\$18,418,606	\$42,624,141	\$17,328,991	147.8%	\$10,355,173
<b>22</b>	2037	87%	258.7%	\$20,244,117	\$46,848,717	\$18,094,182	150.6%	\$11,104,962
<b>23</b>	2038	91%	270.2%	\$22,194,931	\$51,363,271	\$18,893,161	153.4%	\$11,879,269
<b>24</b>	2039	96%	282.1%	\$24,278,556	\$56,185,174	\$19,727,420	156.3%	\$12,678,749
<b>25</b>	2040	100%	294.5%	\$26,502,917	\$61,332,766	\$20,598,518	159.3%	\$13,504,076

[1] applied to property tax assessments and impact fees; [2] applied to resident and household spending on taxable goods

Source: Aerotropolis Study Team. February 2016.

Table 21 Revenue Generation Potential Associated with High SF Aerotropolis Scenario

Year		% Build-out	Escalation [1]	Commercial Property Tax	Residential Property Tax	Development Impact Fees	Escalation [2]	Sales Taxes
	<b>Totals</b>			<b>\$298,206,806</b>	<b>\$550,882,443</b>	<b>\$306,785,922</b>		<b>\$142,108,879</b>
	2015			\$0	\$0	\$0	101.9%	\$0
<b>1</b>	2016	0%	104.4%	\$0	\$0	\$0	101.9%	\$0
<b>2</b>	2017	0%	109.0%	\$0	\$0	\$0	103.8%	\$0
<b>3</b>	2018	4%	113.8%	\$557,929	\$1,030,671	\$7,961,432	105.7%	\$389,856
<b>4</b>	2019	9%	118.9%	\$1,165,130	\$2,152,364	\$8,312,983	107.7%	\$794,360
<b>5</b>	2020	13%	124.1%	\$1,824,867	\$3,371,107	\$8,680,057	109.8%	\$1,213,925
<b>6</b>	2021	17%	129.6%	\$2,540,596	\$4,693,285	\$9,063,339	111.8%	\$1,648,975
<b>7</b>	2022	22%	135.3%	\$3,315,975	\$6,125,657	\$9,463,546	113.9%	\$2,099,942
<b>8</b>	2023	26%	141.3%	\$4,154,877	\$7,675,374	\$9,881,425	116.1%	\$2,567,272
<b>9</b>	2024	30%	147.5%	\$5,061,400	\$9,350,009	\$10,317,756	118.2%	\$3,051,420
<b>10</b>	2025	35%	154.0%	\$6,039,879	\$11,157,571	\$10,773,353	120.5%	\$3,552,853
<b>11</b>	2026	39%	160.9%	\$7,094,903	\$13,106,533	\$11,249,069	122.7%	\$4,072,050
<b>12</b>	2027	43%	168.0%	\$8,231,323	\$15,205,860	\$11,745,790	125.0%	\$4,609,501
<b>13</b>	2028	48%	175.4%	\$9,454,269	\$17,465,031	\$12,264,446	127.4%	\$5,165,709
<b>14</b>	2029	52%	183.1%	\$10,769,169	\$19,894,068	\$12,806,003	129.8%	\$5,741,188
<b>15</b>	2030	57%	191.2%	\$12,181,758	\$22,503,567	\$13,371,473	132.2%	\$6,336,468
<b>16</b>	2031	61%	199.6%	\$13,698,100	\$25,304,731	\$13,961,913	134.7%	\$6,952,087
<b>17</b>	2032	65%	208.5%	\$15,324,603	\$28,309,397	\$14,578,425	137.2%	\$7,588,602
<b>18</b>	2033	70%	217.7%	\$17,068,039	\$31,530,075	\$15,222,160	139.8%	\$8,246,579
<b>19</b>	2034	74%	227.3%	\$18,935,564	\$34,979,985	\$15,894,320	142.4%	\$8,926,600
<b>20</b>	2035	78%	237.3%	\$20,934,736	\$38,673,090	\$16,596,160	145.1%	\$9,629,261
<b>21</b>	2036	83%	247.8%	\$23,073,541	\$42,624,141	\$17,328,991	147.8%	\$10,355,173
<b>22</b>	2037	87%	258.7%	\$25,360,413	\$46,848,717	\$18,094,182	150.6%	\$11,104,962
<b>23</b>	2038	91%	270.2%	\$27,804,257	\$51,363,271	\$18,893,161	153.4%	\$11,879,269
<b>24</b>	2039	96%	282.1%	\$30,414,477	\$56,185,174	\$19,727,420	156.3%	\$12,678,749
<b>25</b>	2040	100%	294.5%	\$33,201,001	\$61,332,766	\$20,598,518	159.3%	\$13,504,076

[1] applied to property tax assessments and impact fees; [2] applied to resident and household spending on taxable goods

Source: Aerotropolis Study Team. February 2016.

Potential construction values were calculated to estimate the number of FTE construction jobs resulting from real estate development. Beginning with an assumption of property values and subtracting 10 percent for developer profit, 80 percent of the remaining value was assumed for construction, while 20 percent was assumed for land. Under the Low SF Scenario, this results in an estimate of overall construction costs of \$21 billion (Table 22). Under the High SF Scenario, the estimate of overall construction costs is \$21.6 billion (Table 23).

**Table 22 Value of Aerotropolis-related Real Estate Development Construction (Low SF Scenario)**

Land Use	Acres	Aerotropolis-related SF	\$PSF Property Value	\$ PSF Construction Value [1]	Aerotropolis Construction Value
<b>Commercial</b>					
Industrial	332	2,756,500	\$90	\$65	\$179,173,000
Retail	230	3,249,600	\$145	\$104	\$337,958,000
Office	329	6,840,300	\$180	\$130	\$889,239,000
TOD Mixed Use Commercial	164	5,255,200	\$217	\$156	\$819,811,000
<b>Residential</b>					
TOD Mixed Use Residential	112	12,610,000	\$233	\$168	\$2,118,480,000.
SFD Residential	20,825	131,197,000	\$177	\$127	\$16,662,019,000
<b>Total</b>	<b>21,992</b>	<b>161,908,600</b>			<b>\$21,006,680,000</b>

Source: Aerotropolis Study Team.

[1] Construction value assumes that 80% of a property's value is the construction value and 20% is the land value after 10% of the property value has been subtracted to account for developer profit.

**Table 23 Value of Aerotropolis-related Real Estate Development Construction (High SF Scenario)**

Land Use	Acres	Aerotropolis-related SF	\$PSF Property Value	\$ PSF Construction Value [1]	Aerotropolis Construction Value
<b>Commercial</b>					
Industrial	1,485	17,823,000	\$90	\$65	\$1,158,495,000
Retail	573	9,217,000	\$145	\$104	\$958,568,000
Office	178	3,569,000	\$180	\$130	\$463,970,000
TOD Mixed Use Commercial	45	1,401,000	\$217	\$156	\$218,556,000
<b>Residential</b>					
TOD Mixed Use Residential	187	12,610,000	\$233	\$168	\$2,118,480,000
SFD Residential	20,825	131,197,000	\$177	\$127	\$16,662,019,000
<b>Total</b>	<b>23,293</b>	<b>175,817,000</b>			<b>\$21,580,088,000</b>

Source: Aerotropolis Study Team.

[1] Construction value assumes that 80% of a property's value is the construction value and 20% is the land value after 10% of the property value has been subtracted to account for developer profit.

It was assumed that the value of labor (or jobs) was half of the estimated construction expenditures. According to the Bureau of Labor Statistics, the average annual wages for a worker in the construction and extraction field in the Denver-Aurora-Broomfield Metropolitan Statistical Area in 2014 was \$45,020. *Assuming a 25-year build-out, the annual labor value under the Low SF Scenario is \$420 million and equivalent to 9,300 direct construction jobs as a result of Aerotropolis real estate development. Under the High SF Scenario, assuming a 25-year build-out period, labor value is approximately \$432 million and equivalent to 9,600 direct jobs.*

The Bureau of Economic Analysis provides regional input-output multipliers to help economists analyze the potential impacts of economic activities on regional economies. According to the Bureau of Economic Analysis, direct construction jobs created have a multiplier impact of 1.34 jobs, where for every one job created as a result of construction, another 0.34 jobs is created in the regional economy. *Under the Low SF Scenario, the 9,300 construction jobs related to the Aerotropolis real estate development help create an additional 3,200 indirect jobs in the regional economy for a total of 12,500 jobs. Under the High SF Scenario, the 9,600 construction jobs related to the Aerotropolis real estate development help create an additional 3,300 jobs in the regional economy for a total of almost 12,800 jobs available annually over 25 years (Table 24).*

**Table 24 Aerotropolis-related Real Estate Development Direct and Indirect Construction Jobs**

	Low SF Scenario	High SF Scenario
Aerotropolis Construction Value	\$21,006,680,000	\$21,580,100,000
Value of Labor	\$10,503,340,000	\$10,790,000,000
Years to Build-out	25	25
Annual Labor Value	\$420,133,600	\$431,601,800
Annual Wage Rate	\$45,020	\$45,020
Annual FTE Jobs Created (25 years)	9,300	9,600
Multiplier Effect of Jobs Created	1.34	1.34
Total Direct FTE Jobs Created (Annually for 25 years)	12,510	12,800
Total Indirect FTE Jobs Created (Annually for 25 years)	3,200	3,300

Source: Aerotropolis Study Team, Bureau of Economic Analysis.

### Observations

Assuming a linear 25-year build-out, Aerotropolis-related real estate development is estimated to result in between 9,300 and 9,600 direct FTE construction jobs and between 3,200 and 3,300 indirect FTE jobs annually between 2015 and 2040. Because one construction worker may be employed on a number of different projects during the course of the build-out, the number of jobs created is not necessarily the same as the number of workers employed. Therefore, it is difficult to enumerate what percentage of these jobs would accrue to otherwise unemployed workers.

There were an estimated 60,000 construction workers in the Denver metropolitan area in 2014 according to the Bureau of Labor Statistics. The unemployment rate in the Denver



metropolitan area is 3.2 percent (October 2015). If construction were to begin today, given the number of potential workers needed, it is likely that many of the jobs would require that additional labor enter the Denver metropolitan economy, at least temporarily.

### Infrastructure Construction Jobs

Over a 20-year build-out, Aerotropolis-related infrastructure development is estimated to result in 400 direct FTE construction jobs and 200 indirect FTE jobs annually. Similar to the previous scenario, it is difficult to enumerate exactly what percentage of these jobs would be for otherwise unemployed workers. Given fluctuations in the strength of the employment market, there would be years when these jobs would pick up slack in the economy, and other years when there would be a labor shortage resulting in net new jobs to the Denver metropolitan area economy.

### Observations

The Aerotropolis-related infrastructure investment has been estimated between \$725 and \$775 million. The value of labor or jobs was assumed to be half of the overall estimated construction estimates with a 20-year build-out. The annual labor value of \$13.9 million supports 400 direct FTE annual infrastructure construction jobs. With the Bureau of Economic Analysis multiplier impact of 1.34 jobs, the 400 infrastructure construction jobs would help create an additional 200 jobs in the regional economy, for a total of 600 jobs resulting from the infrastructure investment annually over 20 years (Table 25).

**Table 25 Calculation of Direct and Indirect Jobs Created**

Aerotropolis Infrastructure Construction Value	\$750,000,000
Value of Labor	\$375,000,000
Years to Build-out	20
Annual Labor Value	\$18,750,000
Annual Wage Rate	\$45,020
Annual FTE Jobs Created	400
Multiplier Effect of FTE Jobs Created	1.34
Total FTE Jobs Created (Annually for 20 years)	600
Indirect FTE Jobs Created (Annually for 20 years)	200

Source: Aerotropolis Study Team, Bureau of Economic Analysis.

### Jobs Summary

The induced employment created by the Aerotropolis Scenario is estimated at 74,000 jobs across a variety of industries. The number of construction jobs resulting from Aerotropolis-related real estate development is estimated between 12,500 to 12,900 jobs annually over 25 years. The number of construction jobs related to infrastructure construction would result in 600 FTE jobs annually over 20 years.

### Infrastructure Investment

Investments in infrastructure are needed to support this new development. The transportation network shown illustrates a conceptual transportation network of 45 miles of major roadways and/or multimodal facilities in the CDA that would increase the accessibility



## Conclusions

The present value of future revenues from the BAU, together with Aerotropolis-related development of between \$705 and \$735 million is roughly similar to the total estimated construction cost for the supporting infrastructure of \$725 to \$775 million, indicating the potential for value capture revenues to provide a significant funding share over the 25-year analysis period (2016-2040). The addition of commercial development impact fees would further raise revenue to better balance the costs. The ability of project sponsors to access these various revenue streams to finance the upfront costs of Aerotropolis-related infrastructure improvements would depend on multiple factors, including the governance structure for the Aerotropolis district and the market acceptance of the development projections. Therefore, while these revenues may indeed materialize and be available in the future to offset the cost of new infrastructure, the initial share of project construction costs financeable by the revenue streams summarized in Table 19 is likely to be less than the aforementioned revenue range.

By adding a significant number of new jobs to the Denver metropolitan area economy, an Aerotropolis Scenario raises important planning issues with respect to the overall jobs/housing balance in the DRCOG region. The creation of major new employment centers, as this scenario anticipates, must be accompanied by a provision of additional housing units in close proximity to those centers to avoid increasingly dispersed commuting patterns. Dispersion would dilute one of the key economic benefits of an Aerotropolis Scenario—that of agglomeration. This occurs when firms and people locate near one another in cities and industrial clusters. The locational proximity of firms and people has been shown to facilitate the transfer of innovative ideas and knowledge, reduce the cost of moving goods and providing services, and enhance the ability of a region to attract and retain a qualified talent pool.

To achieve the benefits of an agglomeration economy, the Aerotropolis Scenario assumes relatively compact development patterns in which all land uses are located within one quarter mile of the proposed major infrastructure network shown in Figure 10, thereby minimizing trip lengths and the need for additional infrastructure (such as arterials and local streets required to access major roadways/multimodal facilities). Under this “compact” scenario, the land area opened up for development would be approximately 12,000 acres. By contrast, the total area of residential and commercial development created by the levels of anticipated Aerotropolis-related employment would range from 22,000 to just over 23,000 acres, largely attributable to the land consumption associated with over 75,000 units of new single-family dwellings. The mix of new development types currently envisioned would therefore require additional transportation infrastructure extending beyond this one-quarter-mile radius. The cost of this additional infrastructure is not accounted for in this analysis. Increasing average residential densities and/or accommodating a greater share of the housing need in TOD districts would help to ensure that a “compact” development scenario could be achieved and that the agglomeration benefits of an Aerotropolis Scenario would be fully realized.

It is recognized that conclusions observed in this report will change as more detailed economic analyses are conducted.

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# Colorado Aerotropolis Visioning Study

## Colorado Aerotropolis Visioning Study

**Draft**  
**Governance Options  
for the  
Colorado Aerotropolis**

Prepared by  
HDR  
and  
Icenogle Seaver Pogue, PC

March 2016



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Colorado Aerotropolis Visioning Study  
Governance Options for the Colorado Aerotropolis Study Area

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Appendix B: Aerotropolis Stakeholder Governance Discussions Memo, January 19, 2016

Appendix C: Supplement to Memorandum regarding Aerotropolis Stakeholder Governance Discussions, February 4, 2016

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## Governance Options for the Colorado Aerotropolis

### Introduction and Overview

An Aerotropolis is an urban plan in which the layout, infrastructure, and economy are centered on an airport.

The Colorado Department of Transportation (CDOT) conducted a study regarding the land use and infrastructure requirements that could enhance economic development surrounding Denver International Airport (DIA). The Colorado Aerotropolis Visioning Study, funded by a Federal Highway Administration grant, along with additional funds from DIA, collaboratively engaged local jurisdictions to examine the benefits and impacts of a proactively planned Aerotropolis infrastructure surrounding DIA. An infrastructure framework for transportation, water, wastewater, power, communications, and drainage is critical to fostering and supporting economic development surrounding the airport.

CDOT engaged Adams County, City of Aurora, City of Brighton, City of Commerce City, City and County of Denver, as well as DIA, in the Visioning Study.

### Study Vision

At the onset, study participants jointly developed a vision for a Colorado Aerotropolis:

*A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

### Study Objectives

CDOT had the following objectives for the study:

- Agree on a collaborative vision for a Colorado Aerotropolis.
- Learn about the aerotropolis concept.
- Identify commonalities among the local plans.
- Quantify the potential for economic growth—with or without a Colorado Aerotropolis.
- Identify a framework of possibilities for collaboration on infrastructure investments.
- Outline regional governance options to implement investments in transportation, water, wastewater, drainage, power, and communications systems.

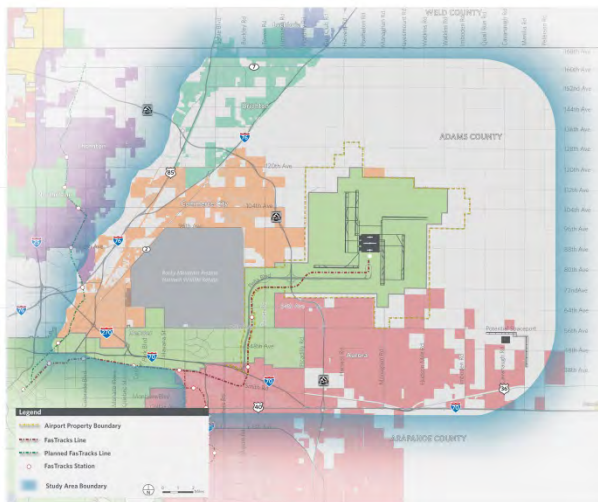


## Study Area

Figure 1 displays the study area of the Colorado Aerotropolis Visioning Study. The study area boundaries defined an area of influence that impacts or would be impacted by the current and future economic conditions both on and off airport.

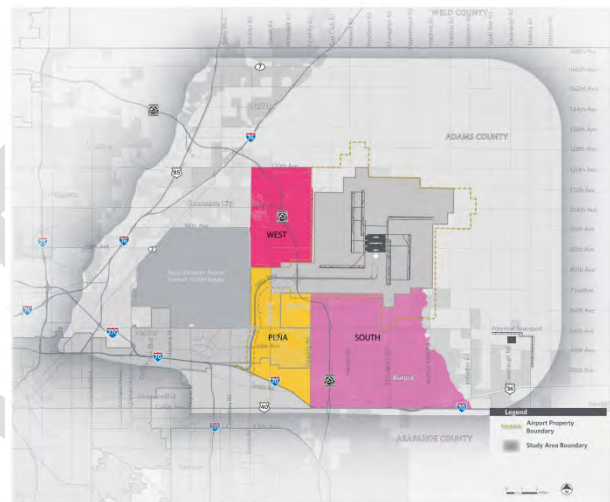
Given the low level of development within the large study area, the study team recognized that initial development near the airport will largely occur in the area to the south and west of DIA. This Concentrated Development Area is shown in Figure 2.

Figure 1 Study Area for the Colorado Aerotropolis Visioning Study



Source: Aerotropolis Study Team.

Figure 2 Concentrated Development Area



Source: Aerotropolis Study Team.

## Working Paper Organization

This working paper establishes the support for a regional governance entity, describes the existing jurisdictional governance entities in the study area, summarizes input from the primary stakeholder jurisdictions, provides a list of anticipated governance decision points, summarizes input from the primary stakeholder jurisdictions, identifies some potential types of regional entities, and suggests steps needed to determine and set up an Aerotropolis regional entity. The working paper is organized into the following sections:

- Support for a Regional Governance Structure
- Existing Governance Organizations
- Governance Structure Options

### Support for a Regional Governance Structure

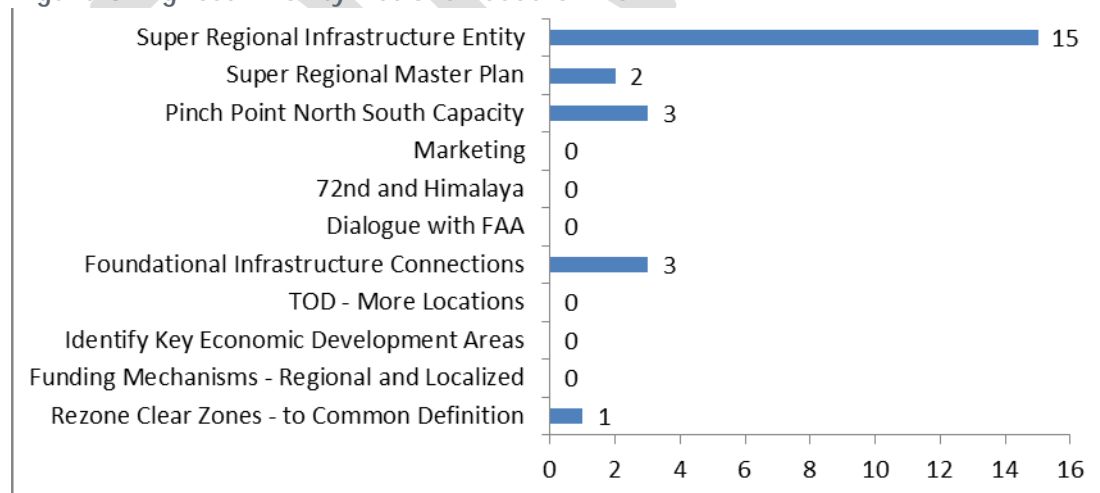
The Study Review Committee developed a critical interest in the establishment of a governance structure for infrastructure development in the Aerotropolis study area. Asked to identify priority issues for development of an Aerotropolis early in the study, committee members first identified governance in at least 11 of 21 responses, as shown.

Informal Survey	
What is the most important collaborative action in the near term?	
Red X denotes an issue related to governance.	
<ul style="list-style-type: none"> <li>Multi-governmental regional committee structure beyond this plan <b>X</b></li> <li>Infrastructure</li> <li>Infrastructure</li> <li>Infrastructure</li> <li>Cross Jurisdictional Planning <b>X</b></li> <li>Governance/financing structure <b>X</b></li> <li>Funding <b>X</b></li> <li>Pass IGA Amendment this Fall <b>X</b></li> <li>Cost sharing <b>X</b></li> <li>Funding for marketing and infrastructure <b>X</b></li> <li>Establish some form of governance/oversight <b>X</b></li> </ul>	<ul style="list-style-type: none"> <li>Link west side of DIA via Piccadilly Cargo</li> <li>Peña Corridor solution</li> <li>Priority development areas <b>X</b></li> <li>Collaborative funding structure <b>X</b></li> <li>Roads</li> <li>Identify long-term funding stream <b>X</b></li> <li>Pass IGA Amendment vote <b>X</b></li> <li>Extend water supply to strategic areas outside DIA</li> <li>Understand specific regional water and wastewater needs, sources, timing, constraints, and funding operations</li> </ul>

Source: Study Review Committee informal survey at meeting held June 18, 2015.

In an informal poll regarding these important near-term collaborative efforts, participants informally voted and zeroed in on the priority actions in Figure 3, collectively indicating the importance of a practical and workable governance structure as a way to work together for the Aerotropolis. However, it is recognized that elected officials at each of the jurisdictions may have different visions and expectations.

Figure 3 Highest Priority Actions Based on Poll



Source: Study Review Committee poll at meeting held June 18, 2015.

### IGA Amendment Pilot Program

The interest in a more formal way to work together was further reinforced by the Denver and Adams County voters approving an Intergovernmental Agreement (IGA) Amendment related to how the area jurisdictions will coordinate on DIA property. The ballot measure passed overwhelmingly in both counties, each with more than 70 percent in favor. The IGA Amendment is included in Appendix A.

The IGA Amendment will create a 1,500-net-leasable-acre pilot program for commercial developments on airport property. The 1,500 acres are located “within the fence” at several nodes along Peña Boulevard and the DIA property boundary where there would be new access roads to those areas. The counties will evenly share (50-50) tax revenues generated from the new commercial uses. Further, the IGA Amendment stipulates that Denver and Adams County will form a regional entity to jointly market opportunities.

The IGA Amendment, in Section V Regional Planning and Marketing Entity, provides direction to work together to implement a regional governance entity.

#### **IGA Amendment Section V. Regional Planning and Marketing Entity**

**The Amendatory IGA will provide that, via a separate agreement to be negotiated between the parties, Denver and the ACC jurisdictions will form a new regional entity to promote and market development opportunities on and around DIA and assist in coordinating land use and infrastructure planning efforts by the respective jurisdictions on and around DIA. However, the entity will have no authority to regulate or otherwise control land use or development within any of the jurisdictions. The entity will be governed by a board consisting of equal representation by Denver appointees and ACC appointees.**

Source: IGA Amendment, June 2015.

## **Current Governance and Organizations in the Study Area**

### County Governments

#### ***Adams***

The majority of the Aerotropolis study area is within Adams County. In fact, most of the DIA property is encircled by Adams County (Figure 1), which is a result of Denver’s annexation in 1988 of the area for DIA. Significant portions of the county are slated for development in the Aerotropolis study area.

Adams County has more than 480,000 residents. Five members serve on the Board of County Commissioners. The Board performs legislative, executive, and quasi-judicial functions; and serves as the legislative, policy-making and administrative body governing the unincorporated areas of Adams County. The county manager is appointed by the Board to carry out policy directions and to supervise and coordinate the work of the staff in the departments that fall under direct control of the Board.

Adams County leads the effort to work with the City and County of Denver regarding implementation of the IGA terms and conditions. The County heads the Airport Coordinating

Committee (ACC), which comprises the municipalities within Adams County: Aurora, Commerce City, Brighton, Thornton, and Federal Heights.

Adams County also is the chief operator of Front Range Airport in the southeast quadrant of the Aerotropolis study area. The airport currently provides air cargo and general aviation operations. Front Range Airport has applied for spaceport designation by the Federal Aviation Administration (FAA) Office of Commercial Space Transportation. Spaceport designation would potentially allow horizontal launch space operations. This would further foster technological development of suborbital flight and aerospace research and development in Colorado. The Aeronautics Division of CDOT is based at Front Range Airport.

The Adams County Community and Economic Development Department supports and encourages economic growth throughout the county as a strategic priority of the County. Regional economic development opportunities are coordinated in concert with the Metro Denver Economic Development Corporation (Metro Denver EDC), a regional economic development organization that works in partnership with every city, county, and economic development group in the metropolitan Denver and northern Colorado area.

### **Denver**

DIA lies within the limits of the City and County of Denver's jurisdiction. Significant development has taken place to date within Denver's boundaries, characterized by such substantial residential developments as Green Valley Ranch and by such employment areas as Gateway and the new Peña Station development on RTD's commuter rail line to DIA.

Denver is a City and County with more than 650,000 residents. It has a non-partisan city government with a strong mayor and a city council. Denver is managed by the mayor. The City Council has 13 members.

Denver's Department of Aviation is a separate entity that oversees DIA. The Department of Aviation is an enterprise, as defined by the Colorado Constitution. As an enterprise, DIA does not use any taxpayer dollars for its operation. Denver's mayor appoints the Chief Executive Officer (CEO), who then serves as a member of the mayor's cabinet and reports directly to the mayor. The Denver City Council, while having no authority over appointing the CEO, has oversight of contracts and purchasing as prescribed by City rules.

The Denver Office of Economic Development (OED) is dedicated to advancing economic prosperity for the City of Denver, its businesses, neighborhoods and residents. Regional economic development opportunities are coordinated in concert with the Metro Denver EDC.

*Denver International Airport (DIA) is the 15th-busiest airport in the world and the 5th-busiest airport in the United States.*

*With more than 53 million passengers traveling through the airport each year, Denver International Airport is one of the busiest airline hubs in the world's largest aviation market. The airport is the primary economic engine for the state of Colorado, generating more than \$26 billion for the region annually.*



There are several special government districts in Denver that assist with infrastructure development. Denver Water is one of the major districts serving the Aerotropolis study area. Denver Water has a Board that is independent of the mayor and Denver City Council. Denver Water is run by a five-member Board of Water Commissioners, which is charged with ensuring a continuous supply of water to the people of Denver and Denver Water's suburban customers. The mayor of Denver appoints Denver's five-member Board of Water Commissioners to staggered six-year terms. The Board designates a CEO/Manager to execute its policies and orders.

### ***Arapahoe***

The very southern edge of the study area along I-70 serves as the boundary between Adams County and Arapahoe County. The study area encompasses the 578-acre Fitzsimons campus located at the I-225 and Colfax Avenue interchange. Fitzsimons is made up of the Anschutz Medical Campus and the Fitzsimons Innovation Campus.

Arapahoe County has more than 615,000 residents. Arapahoe County is governed by the Board of County Commissioners. The Commissioners are elected by voters to represent five districts. The Board of County Commissioners oversees the County as the administrative and policy-making body.

### **City Governments**

In addition to Denver, there are three other cities in the Aerotropolis study area.

### ***Aurora***

The majority of the Aerotropolis study area directly south of the DIA property is within the jurisdiction of Aurora. Several active developments are within this area, including the Gaylord Rockies Resort and Convention Center at the northeast corner of 64th Avenue and Himalaya Street, which is expected to be complete in late 2018. The Anschutz Medical Campus and the Fitzsimons Innovation Campus located at the I-225 and Colfax Avenue interchange are also within Aurora's boundaries.

Aurora is the third largest city in Colorado, with more than 350,000 residents. The Aurora City Council is composed of a mayor and 10 council members. The City of Aurora is a full-service city governed by a council/manager form of government, which combines the political leadership of elected officials with the managerial expertise of an appointed local government manager.

The Aurora City Council serves as the board for Aurora Water. The City of Aurora operates, maintains and develops a complex, highly integrated water supply system that balances reservoir storage, municipal demands, and varying water supply conditions to meet the current and long-term water needs of its customers.

The Aurora City Council also oversees the Aurora Economic Development Council. This public/private partnership is helping build a regional economic powerhouse representing the state's most promising growth industries, including transportation, biosciences, aerospace and defense systems. Regional economic development opportunities are coordinated in concert with the Metro Denver EDC.

### ***Brighton***

Brighton lies in the northwest area of the Aerotropolis Study Area, further away from DIA than other municipalities within the study area. Direct development related to Aerotropolis is expected to occur in a later timeframe due to its relative proximity to DIA. There are several active developments in the City, including Adams Crossing located west of I-76 and E-470 and Prairie Center north of the same interchange.

Brighton, with almost 40,000 residents, is governed by a City Council made up of nine council members, including a mayor who is elected at-large. Brighton operates a City Manager form of government.

The City Council Brighton's Economic Development Corporation is a public/private partnership that promotes sustainable economic vitality in a competitive regional market, as well as new economic growth to meet the future needs of both residents and businesses. Regional economic development opportunities are coordinated in concert with the Metro Denver EDC, a regional economic development organization that works in partnership with every city, county, and economic development group in the Metro Denver and Northern Colorado area.

### ***Commerce City***

The jurisdictional boundary of Commerce City includes the area immediately west and north of DIA, including land adjacent to the E-470 corridor. This area includes Nob Hill and the DIA Tech Center properties, located north of Peña Boulevard east and west of Tower Road, respectively.

Over 50,000 persons reside in Commerce City. There are nine city council members, including a mayor. The nine members establish the vision for the city, set annual goals to achieve that vision and enact laws. City council appoints the city manager for the City Manager form of government.

The City operates an Economic Development Division. The Commerce City EDC promotes balanced growth through job creation, business assistance, housing options, neighborhood redevelopment and the growth of a skilled workforce. Regional economic development opportunities are coordinated in concert with the Metro Denver EDC, a regional economic development organization that works in partnership with every city, county, and economic development group in the Metro Denver and Northern Colorado area.

### **Regional Economic Entities**

#### ***Metro Denver EDC***

An affiliate of the Denver Metro Chamber of Commerce, the Metro Denver EDC is the nation's first regional economic development entity, bringing together more than 70 cities, counties, and economic development agencies in the nine-county metropolitan Denver and northern Colorado area. The Metro Denver EDC's mission is to enhance the regional economy through the retention and expansion of primary jobs and capital investment. The organization also leads four industry-focused affiliates: the Colorado Energy Coalition, the Colorado Investment Services Coalition, the Colorado Space Coalition, and the Metro Denver Aviation Coalition.

The Metro Denver EDC provides extensive services to help site selectors and companies with location, expansion, and market decisions.

### Special Districts

Municipalities like the City of Commerce City, the City of Brighton, and the City and County of Denver may organize (1) general improvement districts (GID) and (2) business improvement districts (BID). A GID is governed by a board of directors, which is often the city council serving ex officio. It has the authority to issue debt and to construct, operate, and maintain public improvements, so long as the forming municipality is authorized to perform the service or provide the improvement. The revenue sources for GIDs are ad valorem property taxes, assessments, charges, rates, and tolls.

BIDs may also construct, operate, and maintain public improvements and issue debt supported by revenues from ad valorem property taxes, assessments, charges, rates, and tolls. The governing body of a BID may be the city council serving ex officio, a board of BID electors appointed by the city council or mayor, a board of BID electors elected by the BID's electors, or the governing body of an urban renewal authority, downtown development authority, or general improvement district serving ex officio.

Counties like Adams County and the City and County of Denver, may organize (1) public improvement districts (PID) and (2) local improvement districts (LIDs). A PID, which is governed by the board of county commissioners serving ex officio, has the authority to construct, operate, and maintain public improvements, so long as the forming county is authorized to perform the service or provide the improvement. PIDs have the authority to issue debt and may raise revenues from assessments, charges, rates, and tolls, in addition to ad valorem property taxes. LIDs, which are administrative entities directly governed by the board of county commissioners, may construct any public improvement that the county forming the district is authorized to provide, with limited exceptions; however, LIDs do not provide ongoing operations and maintenance functions, nor do they have the authority to collect ad valorem property taxes or charges, rates, and tolls. LIDs may levy assessments and have limited authority to levy a sales tax. LIDs may issue revenue and special assessment bonds only.

Metropolitan districts may be organized within or across the boundaries of the cities and counties to provide two or more of certain services enumerated by statute. Metropolitan districts are governed by a board of directors directly elected by eligible electors of the district and have the authority to construct, operate, and maintain public improvements. They may also issue debt and levy ad valorem property taxes, assessments, charges, rates, and tolls.

### **Governance Structure Options**

In its role as a neutral third party, the study team investigated potential options for a regional governance structure or entity. The investigation process began with gaining an understanding of the needs and desires for an Aerotropolis regional entity.

### IGA Amendment

The IGA Amendment specifies that the regional entity will be required to have the following functions:

- Working organization among governmental jurisdictions.
- Coordinate planning.
- Coordinate infrastructure implementation.
- Coordinate marketing.

It is also recognized that the regional entity could be charged with additional elements. These are not precluded by the IGA Amendment and could include:

- Incorporate economic development functions.
- Working organization that also engages land owners and developers.
- Develop, implement and manage a funding source.
- Contribute to regional infrastructure investments.
- Interface and facilitate input from stakeholders including the general public.

### Meetings with Visioning Study Primary Stakeholders

Against this background, a series of individual meetings were held with representatives from the primary stakeholder governments participating in the Visioning Study: Adams County, the City of Aurora, the City of Brighton, the City of Commerce City, and the City and County of Denver. The purpose of the meetings was to solicit informal input regarding governance options, structures, and functions for a regional entity.

The interview team guided each of the primary stakeholder representatives to eight topics and invited additional comments. A compilation of the responses and comments are presented in this section. The full memo documenting the discussions is included in Appendix B.

#### ***A) Should the new governance entity be a funding mechanism and, if so, should it be a direct funding source or a collection point for revenues contributed by primary stakeholder governments and others?***

There was no consensus on whether the entity should participate in funding of Aerotropolis infrastructure and its promotion.

Some responses indicated a desire that the entity provide funding for regional projects. If that were the case, some representatives indicated a preference that the entity *not* be a direct taxing and funding entity, but rather be the recipient of revenues collected and contributed by the primary stakeholder governments. Pursuant to the Taxpayer's Bill of Rights or "TABOR," Section 20 of Article X of the Colorado Constitution, voter authorization would be required for a new entity to levy its own taxes directly. In contrast, if the entity were to serve as a recipient of funds from primary stakeholder governments, the entity would be free

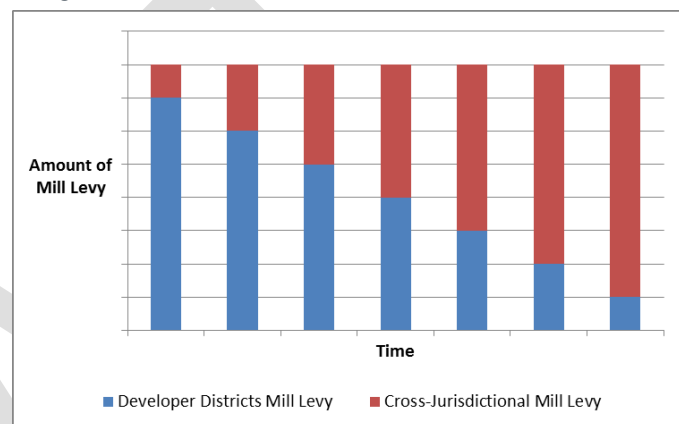


from voter TABOR authorization, although the contributed revenues would be at the expense of the primary stakeholder governments' budgets.

Along these lines, the study team was cautioned of likely opposition to an entity serving as an overlay property taxing district. At same time, we were cautioned that an arrangement by which revenues would flow from primary stakeholder governments to the entity would detract from the image and reality of a cohesive Aerotropolis governance and brand. However, if revenues were to flow from primary stakeholder governments to the entity, stakeholder sentiment favored a nexus between the primary stakeholder governments making contributions and the capital improvement projects undertaken with those contributions.

As an alternative to direct taxation or stakeholder flow-through of funds, the concept of a dedicated mill levy imposed through multiple special taxing/assessment districts was brought up. In the case of development districts, the example continued, a cross-jurisdictional mill levy for the Aerotropolis effort would increase as the developer districts' mill levies decreased with debt retirement and increased assessed value. (Figure 4)

**Figure 4 Potential for Relatively Constant Mill Levy Burden**



Source: Aerotropolis Study Team.

The concept of the entity establishing a revolving loan fund was also raised as a possible approach to either facilitate funding projects through the entity or as a stand-alone mechanism for Aerotropolis projects.

Additionally, there was some interest in "project-specific" revenue raising, which would seek funds for a particular project on a proportional basis, involving proximity, benefit, and other criteria.

With regard to revenue raising and spending, several representatives thought it likely that, regardless of the form of raising revenue, if the entity were to serve a funding function, the primary stakeholder governments would want revenues from their respective jurisdictions to be spent in their jurisdictions. Other representatives expressed the possibility that the revenue-raising and spending functions of the entity might be used to address "disparities" of tax and fee burdens from jurisdiction to jurisdiction.

Virtually all interviewed agreed that, whatever the revenue-raising and funding capabilities of the entity, but especially if revenues from the primary stakeholder governments were to be pooled, it would be important to establish a process that builds trust between and among primary stakeholder governments and that works to create a cohesive Aerotropolis.

Finally, other than funding for the entity's own operation, some stakeholders expressed a substantial preference that the entity *not* participate in infrastructure or promotional project funding at all, but rather serve a planning and coordination function. This is more fully discussed in Question B.

**B) *What services and/or infrastructure should the new regional entity deliver: Planning, funding, design/construction, and/or operation?***

Note that activity related to marketing and promotion (also referred to as branding), which appear expressly in the IGA Amendment, is deferred for separate treatment in Question H.

One vision for the entity, consistent with the language of the IGA Amendment, was that of a regional (sub-regional) planning council or body that would serve as a facilitator for the Aerotropolis participants. As possibly an IGA entity or a non-profit corporation, it would span jurisdictional boundaries and have the ability and responsibility to coordinate and plan infrastructure and to seek state and federal funding. The entity would serve as the initial organization in promoting Aerotropolis regional cooperation among the primary stakeholder governments and might evolve into a more traditional and empowered governance entity. Initially, the entity would act as a regional planning body that prioritizes and phases projects, leverages funding, makes recommendations, and distributes funding to several layers of governments. The example of the Denver Regional Council of Governments (DRCOG), a metropolitan planning organization, may illustrate the concept.

Of those stakeholder representatives who thought that, additionally, the entity *could* be responsible for funding infrastructure and marketing/branding, there was little support that the entity construct, own, or operate infrastructure. After construction, the jurisdiction where the infrastructure was built should own and maintain it.

Additionally, the entity might provide circulator transportation services or similar activities, which would cause the entity to have an ongoing governance role, and is in contrast with the more limited role of a planning entity or an entity that would not provide operations and maintenance functions.

**C) *What is the geographic scope of the governance mechanism and its activities?***

While the entirety of what is to become the Aerotropolis was expected to benefit from the entity, many expected near- and even mid-term activity to occur largely to the west and south of DIA, the Concentrated Development Area (see Figure 2), which was also believed to be the logical focal point for the initial phases of Aerotropolis development. Representatives felt that the entity should take a regional, long-term approach and acknowledged the cross-jurisdictional nature of many infrastructure projects that may be undertaken or coordinated by entity. Stakeholder representatives appeared to find some efficacy in the entity undertaking infrastructure projects and development on a limited scale initially and adding more land - or jurisdictions - to the entity's efforts as needed and over time.

**D) *For what types of infrastructure, in addition to transportation, if any, should the regional governance entity undertake?***

Representatives variously identified roads, transit, water, sewer, and drainage as infrastructure needs potentially to be advanced by the entity, although transportation was

the area of consensus. None appeared to favor relinquishing land use and entitlement authority within the boundaries of their jurisdictions, in the contexts of both the public infrastructure projects and the private property developed in the Aerotropolis area. Some representatives felt that infrastructure projects should be determined by the needs of each primary stakeholder government.

In addition to capital projects, some stakeholder representatives cited the value of shared or common services. Suggestions were made that the entity could potentially undertake traffic circulator services, as well as marketing and branding.

***E) Should the new regional governance entity's organizing "charter" specify infrastructure projects and/or sequence, or should it convene the primary stakeholders and only provide the process by which projects are selected and sequenced?***

Representatives agreed that the entity should retain flexibility to act and to have authority to develop agreement on and prioritize projects, especially in light of changing market conditions and other considerations. Therefore, representatives were generally opposed to specifying projects in an organizational document. Rather, they favored deciding upon projects as the need arises, possibly based on specific criteria. They cited DRCOG and regional and state transportation improvement plans as examples of project prioritization processes.

***F) The governance mechanism's powers, authority, and limitations will likely be defined by statute, intergovernmental agreement, or a combination of the two. Are the Aerotropolis infrastructure goals best served by placing decisional control in the primary stakeholders' governing bodies or in the governing body of the new regional governance entity?***

In response to this question, representatives voiced a range of concerns and possibilities.

Most representatives agreed that the entity's decision-making (and its governing body) should be contained within the public sector, some favoring staff participation and some elected officials' participation.

Some representatives argued that the entity must have the authority to act on its own and without the approval of the primary stakeholder government's governing body, while others felt strongly that decisions must be taken back to primary stakeholder governments for ratification. As a compromise, the entity could be given the authority to act on its own with regard to a list of previously determined decisions, with some decisions reserved for approval or ratification by the primary stakeholder governments.

***G) How can the governance mechanism best relate to public entity stakeholders (other than the primary stakeholders) and the private sector?***

Representatives approved of establishing advisory boards, committees, and commissions to participate in the entity. In general, they did not want citizens or landowners to be directly involved in the policy and the day-to-day governance of an Aerotropolis development.

As described in Question H, the collective marketing and branding of the Aerotropolis was seen as a direct way to relate to other public entity stakeholders and the private sector on state, national, and international scales. Additionally, the North Area Transportation Alliance

and DRCOG were given as examples of ways in which a governance entity can identify, develop, and advocate with a collective voice for infrastructure identified by the entity.

#### **H) *Marketing and branding***

Stakeholder representatives by and large indicated that marketing and branding should be left to those with subject-matter expertise (i.e., not the entity itself). As such, marketing and branding may be best handled by a separate organization, whether in existence now or to be formed, which would work closely with the new regional governance entity and perhaps receive partial or full funding from it. On more than one occasion, representatives alluded to the economic development councils currently serving various primary stakeholder governments in the metropolitan area. Stakeholder representatives thought these economic development councils represent a good example of existing organizations that could potentially collaborate, both among themselves and with the entity.

Representatives thought that marketing and branding would be most effective if tackled jointly, and some discussed the possibility of funding a joint economic development council to act in the collective interests of the primary stakeholder governments, the private sector, and the Aerotropolis.

However, some representatives thought that the primary stakeholder governments would want to also maintain their respective jurisdictional brands, while other stakeholder representatives hoped that branding and marketing of Aerotropolis could be used to improve and expand on a combined Aerotropolis brand.

#### **Anticipated Decision Points in Arriving at a New Entity**

A review of the discussion responses (summarized above) yields a conclusion that the primary stakeholder jurisdictions would need to negotiate and agree to the following terms and arrangements:

- Shall the entity be constrained to the functions listed in the IGA Amendment, to wit: promotion and marketing of development opportunities and coordination assistance in land use and infrastructure planning? The IGA Amendment can be narrowly or broadly construed, and the jurisdictions can by agreement expand the functions not listed, if desired.
- If the entity is to engage in funding, should it have direct taxes and/or fees, or should it rely upon stakeholder jurisdictions to remit taxes and/or fees over to the entity?
- Should the entity engage only in planning and coordination of infrastructure or also provide funding, design/construction, and/or operation?
- What area should the entity serve initially, mid-term, and ultimately?
- What infrastructure should the entity address: transportation, water, sewer, drainage, other?
- Should the entity bond to accelerate projects and/or serve as a lending fund or revolving loan bank?



- Should the entity's decisional control be in its governing body or reside with the stakeholders' governing bodies? Should there be a mixed approach, depending on subject matter?
- Should the entity try to bring the private sector and other public entities into its decisional process or seek to involve them in advisory committee(s) and the like?
- Should marketing and branding be within the scope of the entity or accomplished through a separate entity or coalition with expertise? Should the entity help fund marketing and branding?
- Should the entity's governing body be elected officials or staff or others chosen for subject matter interest and expertise?

### Recommended Process for Developing a Regional Entity

The study team recommends the primary stakeholder jurisdictions take the following steps in defining and setting up a regional entity:

- Discuss and negotiate, insofar as possible, areas of consensus and likely agreement. Some are identified in this memorandum.
- Consider use of a neutral facilitator and draftsman.
- Seek agreement on the major issues:
  - Scope of entity activity.
  - Whether a funding entity.
  - If a funding entity, direct or through stakeholders.
  - Consider wisdom of phasing and scaling activity of entity.
- Match major determinations to existing types of entities or collection of entities or consider customized entity through legislation or IGA.
- Work through refinement of lesser issues.

### Likely Types of Organizations for the Regional Entity

Based on the interviews, the table below summarizes the regional entity types that would fulfill the requirements of the IGA Amendment and their likelihood of being adopted by the primary stakeholder jurisdictions as an Aerotropolis regional entity.

**Table 1 Types of Entity Candidates and Likelihood of Use**

Candidate	Comment	Likelihood of Use
Regional Transportation Authority	Limited to transportation, requires organizational vote of people of member counties, municipalities	Unlikely
Title 32 Metropolitan District	Not well-suited to have governing body populated by counties, municipalities	Unlikely
Non-profit Corporation	May qualify for some federal grants, but not a public entity	Unlikely

Table 1 Types of Entity Candidates and Likelihood of Use

Candidate	Comment	Likelihood of Use
Association of existing and future Metropolitan Districts	Developer and resident control; not stakeholder governments	Unlikely
Intergovernmental Agreement Entity	Can be imbued with powers common to local government stakeholders, although probably not some fundamental government powers, like taxes, exempt bonds, eminent domain; would include a regional transportation commission or a regional planning commission	Likely
Regional Planning Commission	If entity is to be limited to planning, established pursuant to Section 30-28-105, C.R.S.	Likely
New Legislative Entity	Can be customized, but requires action of General Assembly and Governor	Likely
Combination of Types of Entities	Cobble together contribution and involvement of different types of public entities through a functional IGA, with or without creating a new entity	Likely
Other Potential Entities	Research required	n/a

### Responses to Initial Questions

Responses to initial questions from the Study Review Committee are below. These are also documented in a supplemental memo included in Appendix C.

#### ***How can a Regional Planning Commission be considered a “likely” governance candidate? The 2015 IGA Amendment expressly prohibits land use planning.***

The prohibition against vesting land use powers in the Aerotropolis regional governance entity is expressed in the IGA Amendment and in the Aerotropolis stakeholder governance discussions. Additionally, in our discussions with the five primary stakeholders, none favored attempting to vest any land use powers in the regional entity. However, a regional planning commission would not have land use powers; instead, it would be advisory in nature, would engage in studies and collaborative master planning with its powers expressly defined and limited by an IGA creating such a commission.

#### ***How can the regional entity take on funding? This wasn’t discussed in the IGA amendment process.***

The primary purpose of the discussions was to elicit from the primary stakeholders their aspirations for the regional entity and to objectively report on those aspirations. Funding was frequently mentioned and discussed, as documented in the previous sections, although not unanimously supported. In fact, one of the key obstacles that can be overcome by cooperative funding is infrastructure implementation across jurisdictional boundaries. As a matter of contract, the contemplated parties to the regional governance entity agreement may agree as they wish, so long as terms are in compliance with State law and not inconsistent with voter approvals.

***Why is a Title 32 metropolitan district not a likely governance candidate?***

Most discussions favored a form of governance directly controlled by the stakeholder counties and municipalities. Title 32 metropolitan districts are governed by independently elected boards of directors. Status as a mayor, councilmember, county commissioner, or public employee does not qualify a person to sit as one of the five or seven metro district directors. Metro districts are not, for the most part, well-suited to promoting and marketing development opportunities or to assisting and coordinating the land use and infrastructure planning of the Aerotropolis between and among the various municipalities and counties.

DRAFT



**Appendix A:  
Amendment to 1988 Annexation and Intergovernmental Agreements  
on a New Airport - June 2015**

DRAFT





**Appendix B:  
Aerotropolis Stakeholder Governance Discussions Memo,  
January 19, 2016**

**DRAFT**



# Colorado Aerotropolis Visioning Study

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**Appendix C:  
Supplement to Memorandum regarding  
Aerotropolis Stakeholder Governance Discussions, February 4, 2016**

DRAFT

# AMENDMENT TO 1988 ANNEXATION AND INTERGOVERNMENTAL AGREEMENTS ON A NEW AIRPORT

## Final Term Sheet

June 3, 2015

### **I. Approval process and timing**

- A. An Amendatory IGA reflecting the terms set forth herein will be approved by the governing bodies of Denver and Adams County, with the current municipal members of the Airport Coordinating Committee (the "ACC") also approving the Amendatory IGA as third-party beneficiaries, no later than *July 1, 2015*. The current municipal members of the ACC are: Aurora, Commerce City, Brighton, Thornton and Federal Heights. The Amendatory Agreement will, in one document, modify or supplement certain provisions of both the "Intergovernmental Agreement on Annexation" and the "Intergovernmental Agreement on a New Airport" dated April 21, 1988 (herein collectively referred to as the "1988 Agreements.")
- B. The Amendatory IGA will be referred to the voters of both Denver County and Adams County at the *November 3, 2015* state coordinated election. In the event the voters in either or both counties disapprove the agreement on that date, the Amendatory IGA may be re-submitted at the *November 8, 2016* state general election for voter approval in the county or counties where the measure was previously defeated.
- C. The ballot questions submitted to the voters in Adams County and Denver County will be compatible, with the voters in each county being asked to approve the Amendatory IGA. The ballot question in Denver County will additionally include language binding the city to a "multiple fiscal year financial obligation" to share tax revenue as described below.
- D. Upon approval by the voters in both Denver County and Adams County, the Amendatory IGA will become effective on the January 1 following the approval in both counties.

### **II. Preservation of the existing 1988 Agreements**

Except as specifically set forth below, all the terms and conditions of the 1988 Agreements (including by way of example but not limitation, the noise provisions, restrictions on residential development, the hotel formula, restrictions on land use in relation to the Scenic Buffer, and provisions related to access roads) will remain in full force and effect. Denver will retain the authority to develop Accessory Uses and natural resources located anywhere on the New Airport Site to the extent allowed by the 1988 Agreements and all other rights it has those agreements.

### **III. Amendments regarding land use restrictions**

The 1988 Agreements will be amended as follows:

- A. Fifteen-hundred acres located on the New Airport Site or in the Transportation Corridor north of 72<sup>nd</sup> Ave. will be released in perpetuity from the land use restrictions contained in the 1988 Agreement. Denver will exercise sole discretion to determine when and where to utilize the fifteen-hundred acres and create Development Parcels at DIA, subject only to the following restrictions: (1) residential development will be prohibited on this acreage; (2) businesses that would potentially compete with current and future business and institutional land uses at the Anschutz Medical Campus and the Fitzsimmons Life Science District in Aurora will be

prohibited on this acreage; (3) to the extent any hotels are located on this acreage, the limitation on number of hotel rooms in the 1988 IGA will continue to apply.

- B. Adams County on behalf of the ACC may negotiate and agree with Denver at any time to release additional acreage from the land use restrictions contained in the 1988 Agreements and allow for the creation of additional Development Parcels, either: (1) on a site-specific or project-specific basis; or (2) by releasing an additional amount of acreage.
- C. Restrictions on land use in the Clear Zones as set forth in the 1988 Agreements will be released entirely. Land use in the Clear Zones will remain subject to federal regulations on use and development. The parties will cooperate to modify zoning and other land use laws as necessary to allow development within the Clear Zones. Taxes derived from commercial development in the Clear Zones in Adams County will be retained entirely by the applicable governing Adams County jurisdiction(s).
- D. Denver will promptly notify the ACC jurisdictions of any proposed leasing and concessions activity at DIA (outside of the terminal complex area) when and to the extent such information has been made available to the general public. For example, Denver will provide notice when a request for proposals is published in regard to new leases and concessions, and when a specific lease or concession is submitted to the Denver City Council for approval.
- E. Adams County will sign the Amendatory IGA as a party. Aurora and Commerce City will remain third-party beneficiaries to the applicable provisions of the 1988 Agreements. Aurora and Commerce City will be third-party beneficiaries to the Amendatory IGA. The remaining ACC municipal members will be third party beneficiaries to the revenue sharing obligations. .
- F. Consistent with the 1988 Agreements, only those ACC municipalities with contiguity to the New Airport site (currently Aurora and Commerce City) will be treated as a third-party beneficiaries in regard to the land use provisions of the Amendatory IGA.

**IV. Financial terms in consideration for release of land use restrictions**

- A. Upon the effective date of the Amendatory IGA, Denver will transmit to Adams County a one-time cash payment of \$10 million, for distribution as determined by the ACC. No additional cash payment will be required for the discretionary release of additional acreage for Development Parcels as provided in III (B) of this Term Sheet.
- B. Beginning on the effective date and continuing in perpetuity, Denver will share with the ACC jurisdictions fifty percent (50%) of all Denver tax revenue derived from either the development or use of the Development Parcels, with the following exceptions: (1) revenue derived from any Denver tax or tax rate which, as of the effective date of the Amendatory Agreement, was obligated by voter-approval, bond covenant, or any other form of contract to be spent for a particular purpose, for as long as such revenues remain so obligated; (2) revenue derived from any voter-approved new, increased or extended Denver tax adopted after the effective date of the Amendatory Agreement and obligated for a particular purpose; or (3) revenue derived from Denver's debt service mill levies. If Denver ever allows a tax-exempt entity to develop or use any Development Parcel and negotiates a payment in lieu of taxes with such an entity, Denver will share with the ACC jurisdictions fifty percent (50%) of any such payment in lieu of taxes.
- C. The Amendatory IGA will contain procedures for documenting Denver's draws upon the 1500-acre "bank" for the establishment of Development Parcels; for documenting and remitting tax



revenue generation and sharing from the Development Parcels on no less than an annual basis; and for audit rights that may be exercised by the ACC jurisdictions in regard to the tax revenue sharing.

- D. Denver tax revenue shared with Adams County will be distributed as determined by the ACC. Any arrangement the ACC jurisdictions may negotiate among themselves for allocation of the Denver shared tax revenue will be reflected in a separate agreement between the ACC members and will not be a component of the Amendatory IGA. All current municipal members of the ACC will be treated as third-party beneficiaries in regard to the tax revenue sharing provisions of the Amendatory IGA.
- E. To the extent Denver offers tax incentives to commercial developers and tenants to induce businesses to locate or remain upon a Development Parcel, tax revenues that Denver is obligated to share with Adams County will *not* be utilized for such incentives, *unless* Adams County on behalf of the ACC agrees. Denver will not approve any form of tax increment financing resulting in a reduction in the amount of tax revenue from the Development Parcels that Denver is obligated to share with Adams County, unless Adams County on behalf of the ACC agrees.
- F. Denver will reserve the right to modify, decrease or eliminate Denver taxes that are subject to sharing under the Amendatory Agreement; however, Denver will not, without the consent of Adams County on behalf of the ACC, take or approve any action that would have the effect of reducing or eliminating any shared Denver tax or tax rate specifically imposed in or on the Development Parcels.

**V. Regional planning and marketing entity**

The Amendatory IGA will provide that, via a separate agreement to be negotiated between the parties, Denver and the ACC jurisdictions will form a new regional entity to promote and market development opportunities on and around DIA and assist in coordinating land use and infrastructure planning efforts by the respective jurisdictions on and around DIA. However, the entity will have no authority to regulate or otherwise control land use or development within any of the jurisdictions. The entity will be governed by a board consisting of equal representation by Denver appointees and ACC appointees.

**VI. Miscellaneous contract terms**

- A. The parties will agree to mutually defend the Amendatory IGA in the event of a challenge by any party who is not a third-party beneficiary to the Amendatory IGA.
- B. The parties' rights and remedies under the 1988 Agreements will remain in place outside of the Development Parcels for disputes that arise in the future about whether development falls within the range of land uses allowed upon the New Airport Site under the original 1988 Agreements. In the event of an alleged breach by Denver of the land use restrictions contained in the 1988 Agreements, as modified by the Amendatory IGA, the ACC party will provide written notice to Denver and the parties will attempt to resolve the dispute informally. Prior to either party filing suit over such a dispute, the parties will enter into formal non-binding mediation in an attempt to resolve the dispute. In the event the parties proceed to litigation and achieve a final judgment, the prevailing party will be awarded its attorney's fees and costs incurred in the litigation, and a prevailing ACC party will be awarded any withheld tax revenue sharing plus interest at the statutory rate. If Denver decides, prior to final judgment in any such litigation, to render the case

moot by locating the disputed land use in a Development Parcel, the ACC party will be awarded one-half of its attorney's fees and costs incurred to date in the case.

- C. The Amendatory IGA will also function as a settlement agreement in which Adams County, Aurora, Brighton, Commerce City, Federal Heights, and Thornton will waive any claims they may have against Denver regarding an alleged breach, or anticipatory breach, of the land use provisions in the 1988 Agreements based on the following: (1) any use or development of the New Airport Site, completed or in process (as demonstrated by the issuance of certificate of occupancy or building permit), that occurred prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people; or (2) Denver's land use planning or marketing activities for the New Airport Site that occurred prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people, but such planning or marketing efforts do not meet the requirements of waiver (1) unless a building permit or certificate of occupancy has been issued prior to the date upon which Adams County referred the Amendatory IGA to a vote of the people. This waiver will not be construed as changing in any manner the land use provisions of the 1988 Agreements to the extent those provisions will continue to govern the use of the New Airport Site in the future, nor will the waiver prevent the parties from enforcing those provisions in regard to any use or development of the New Airport Site established after the date upon which Adams County referred the Amendatory IGA to a vote of the people or from enforcing the 1988 Agreements in the future.
  
- D. At any time under the Amendatory Agreement, Denver may decide to locate a land use which Denver considers to be an Accessory Use in a Development Parcel. No such decision on Denver's part will be considered a waiver or admission by Denver that the land use in question or any similar land use may not qualify as an Accessory Use in the future.

This Term Sheet shall not be considered a binding contract, but is intended solely to serve as the basis for drafting the Amendatory IGA. Each party and third-party beneficiary agrees to submit to their respective governing bodies the Amendatory Agreement for approval by the governing body as a whole (either as a primary party or a third-party beneficiary), subject to ultimate approval by the voters before the Amendatory IGA will be executed or go into effect.



## ICENOGL SEAVR POGUE

### MEMORANDUM

TO: Chris Primus, HDR, Inc.

FROM: Ed Icenogle and Anna Wool

DATE: January 19, 2016

RE: Aerotropolis Stakeholder Governance Discussions

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### INTRODUCTION

Chris Primus of HDR, Inc. and Ed Icenogle and Anna Wool of Icenogle Seaver Pogue, P.C. held one-on-one meetings with senior staff (the “stakeholder representatives” or “stakeholders”) from the City and County of Denver and the City of Commerce City on January 6, 2016, the City of Aurora and Adams County on January 8, 2016, and the City of Brighton on January 15, 2016. The purpose of the meetings was to solicit from stakeholder representatives input regarding governance options and structures for the development of an “Aerotropolis” regional entity in the area of the Denver International Airport (“DIA”).

The 2015 Amendment to the 1988 Denver/Adams County agreements relating to the development of DIA specified, in Section V, that there will be negotiated an additional agreement between Denver and the Airport Coordinating Committee (“ACC”), by which a new regional entity will be formed for advancing the Aerotropolis concept. The ACC comprises Adams County, Aurora, Commerce City, Brighton, Thornton, and Federal Heights. The political subdivisions interviewed were selected as the “primary stakeholders” for the purpose of meetings to sample the sentiments of the Aerotropolis participants regarding this regional entity.

The 2015 Amendment’s description of the purposes of this new regional entity is, in total: “...to promote and market development opportunities on and around DIA and assist in coordinating land use and infrastructure planning efforts by the respective jurisdictions on and around DIA.” The 2015 Amendment also denies the new regional entity authority to regulate or otherwise control land use or development within any jurisdiction.

In pursuit of the new regional entity, the Study Review Committee polled Aerotropolis participants and identified a number of critical interests deemed most important for collaborative action in the near term. Among those critical interests, and of apparent especial relevance to the nature of the new regional entity, were: cross-jurisdictional planning, governance/financing structure, corroborative funding, marketing and infrastructure funding, form of governance/oversight, long-term roads funding stream, and regional water/wastewater.

Against this background, the one-on-one interview team guided the primary stakeholder representatives to eight topics and invited additional comments, as desired. This memorandum compiles the responses of the stakeholder representatives by topic and supplements with additional comments raised during the meetings.

This memorandum then concludes with a checklist of anticipated governance decision points, identification of some likely governance approaches, and recommended processes for determining the Aerotropolis new entity governance structure.

### **RESPONSE TO DISCUSSION ITEMS AND COMMENTS**

The eight discussion items (A through H) presented to representatives of the primary stakeholders (which are the City and County of Denver, the City of Commerce City, the City of Aurora, the City of Brighton, and Adams County), along with a summary of discussion comments, are presented in this section.

#### **A. Should the new governance entity be a funding mechanism and, if so, should it be a direct funding source or a collection point for revenues contributed by primary stakeholder governments and others?**

There was no consensus on whether the new entity should participate in funding of Aerotropolis infrastructure and promotion.

Some responses indicated a desire that the new entity provide funding for regional projects. If that is the case, some stakeholder representatives indicated a preference that the governance mechanism *not* be a direct taxing and funding entity, but rather serve as a recipient of revenues collected and contributed by the primary stakeholder governments. Pursuant to the Taxpayer's Bill of Rights or "TABOR," Section 20 of Article X of the Colorado Constitution, voter authorization would be required for a new entity to levy its own taxes directly. In contrast, if the governance entity were to serve as a recipient of funds from primary stakeholder governments, the new governance entity would be free from voter TABOR authorization, although the contributed revenues would be at the expense of the primary stakeholder governments' budgets.

Along these lines, we were cautioned of likely opposition to a new entity serving as an overlay property taxing district. At same time, we were cautioned that an arrangement by which revenues would flow from primary stakeholder governments to the new governance entity would detract from the image and reality of a cohesive Aerotropolis governance and brand. However, if revenues are to flow from primary stakeholder governments to a new governance entity, stakeholder sentiment favored a nexus between the primary stakeholder governments making contributions and the capital improvement projects undertaken with those contributions.

As an alternative to direct taxation or stakeholder flow-through of funds, the concept of a dedicated mill levy imposed through multiple special taxing/assessment districts was advanced for the new governance entity. In the case of development districts, the example continued, a



cross-jurisdictional mill levy for the Aerotropolis effort would increase as the developer districts' mill levies decreased with debt retirement and increased assessed value.

The concept of the entity establishing a revolving loan fund was also raised as a possible approach to either facilitate funding projects through the new entity or as a stand-alone mechanism for Aerotropolis projects.

Additionally, there was some interest in “project-specific” revenue raising, which would seek funds for a particular project on a proportional basis, involving proximity, benefit, and other criteria.

With regard to revenue raising and spending, several stakeholder representatives thought it likely that, regardless of the form of raising revenue, if the new governance entity is to serve a funding function, the primary stakeholder governments will want revenues from their respective jurisdictions to be spent in their respective jurisdictions. Other stakeholder representatives expressed the possibility that the revenue raising and spending functions of the governance entity might be used to address “disparities” of tax and fee burdens from jurisdiction to jurisdiction.

Virtually all interviewed agreed that, whatever the revenue raising and funding capabilities of the new governance entity, but especially if revenues from the primary stakeholder governments are to be pooled, it would be important to establish a process that builds trust between and among primary stakeholder governments and works to create a cohesive Aerotropolis.

Finally, other than funding for the new governance entity's own operation, some stakeholders expressed a substantial preference that the new governance entity *not* participate in infrastructure or promotional project funding at all, but rather serve a planning and coordination function. This is more fully discussed in Section B, below.

**B. What services and/or infrastructure should the new regional entity deliver: Planning, funding, design/construction, and/or operation?**

For this discussion, activity related to marketing and promotion (also referred to as branding), which appear expressly in the 2015 Amendment, is deferred for separate treatment in Section H, below.

One vision for the regional entity, consistent with the language of the 2015 Amendment, was that of a regional (sub-regional) planning council or authority, which would serve as a facilitator for the Aerotropolis participants. Possibly an IGA entity or a non-profit corporation, it would span jurisdictional boundaries and have the ability and responsibility to coordinate and plan infrastructure and to seek state and federal funding. The governance entity would serve as an initial step in Aerotropolis regional cooperation among the primary stakeholder governments and might evolve into a more traditional and empowered governance entity. Initially, the governance mechanism would act as a regional planning authority which prioritizes and phases projects, leverages funding, makes recommendations, and distributes funding to several layers of

governments. The example of DRCOG, a metropolitan planning organization, may illustrate the concept.

Of those stakeholder representatives who thought that, additionally, the governance mechanism *could* be responsible for funding infrastructure and marketing/branding, there was little support for new entity construction, ownership, or operation of infrastructure. Upon completion of infrastructure, the jurisdiction within which the infrastructure exists should own and maintain it.

A possible exception to avoiding an ongoing role for the new entity might be circulator transportation or similar activities.

**C. What is the geographic scope of the governance mechanism and its activities?**

While the entirety of what is to become Aerotropolis was expected to benefit from the new regional entity, many expect near- and even mid-term activity to occur largely to the west and south of DIA, those areas forming an “L” shape, which was believed to be the logical focal point for the initial phases of Aerotropolis development. Stakeholder representatives felt that the new governance mechanism should take a regional, long-term approach and acknowledged the cross-jurisdictional nature of many infrastructure projects that may be undertaken or coordinated by the new governance mechanism. Stakeholder representatives appeared to find some efficacy in the new entity undertaking infrastructure projects and development on a limited scale initially and adding more land – or jurisdictions – to the new governance mechanism’s efforts as needed and over time.

**D. For what types of infrastructure, in addition to transportation, if any, should the regional governance entity undertake?**

Stakeholder representatives variously identified roads, transit, water, sewer, and drainage as infrastructure needs potentially to be advanced by the new governance mechanism, although transportation was the area of consensus. None appeared to favor relinquishing land use and entitlement authority within the boundaries of their jurisdictions, in the contexts of both the public infrastructure projects and the private property developed in Aerotropolis. Some stakeholder representatives felt that infrastructure projects should be determined by the needs of each primary stakeholder government.

In addition to capital projects, some stakeholder representatives cited the value of shared or common services. Suggestions were made that the governance mechanism could potentially undertake traffic circulator services, as well as marketing and branding.

**E. Should the new regional governance entity’s organizing “charter” specify infrastructure projects and/or sequence, or should it convene the primary stakeholders and only provide the process by which projects are selected and sequenced?**

Stakeholder representatives agreed that the governance entity should retain flexibility to act, as well as the capability to develop agreement on and prioritization of projects, especially in light of changing market conditions and other considerations. Thus, stakeholder representatives were generally opposed to specifying projects in an organizational document. Rather, stakeholder representatives favored deciding upon projects as the need arises, possibly based on specific criteria. Stakeholder representatives cited DRCOG and regional and state transportation improvement plans as examples of project prioritization processes.

**F. The governance mechanism's powers, authority, and limitations will likely be defined by statute, intergovernmental agreement, or a combination of the two. Are the Aerotropolis infrastructure goals best served by placing decisional control in the primary stakeholders' governing bodies or in the governing body of the new regional governance entity?**

In response to this question, stakeholder representatives voiced a range of concerns and possibilities.

Most comments agreed that the new regional entity's decision-making (and its governing body) should be contained to the public sector, some favoring staff participation and some elected officials' participation.

Some stakeholder representatives argued that the entity must have the authority to act on its own and without the approval of the primary stakeholder government's governing body, while others felt strongly that decisions must be taken back to primary stakeholder governments for ratification. As a compromise, a new governance entity could be given the authority to act on its own with regard to a list of previously determined decisions, with some decisions reserved for approval or ratification by the primary stakeholder governments.

**G. How can the governance mechanism best relate to public entity stakeholders (other than the primary stakeholders) and the private sector?**

Primary stakeholder representatives approved of establishing advisory boards, committees, and commissions to participate in the governance mechanism. In general, stakeholder representatives did not want citizens or landowners to be directly involved in the policy and the day-to-day governance of Aerotropolis.

As described in Section H, below, the collective marketing and branding of the Aerotropolis was seen as a direct way to relate to other public entity stakeholders and the private sector on state, national, and international scales. Additionally, NATA and DRCOG were given as examples of ways in which a governance mechanism can identify, develop, and advocate with a collective voice for infrastructure identified by the new regional entity.

**H. Marketing and Branding.**

Stakeholder representatives by and large indicated that marketing and branding should be left to those with subject matter expertise (i.e., not the governance mechanism). As such,

marketing and branding may be best handled by a separate organization or entity, whether in existence now or to be formed, which would work closely with the new regional governance entity and perhaps receive partial or full funding from it. On more than one occasion, primary stakeholder representatives alluded to the economic development councils currently serving various primary stakeholder governments in the metropolitan area. Stakeholder representatives thought these economic development councils represent a good example of existing organizations that could potentially collaborate, both together and with the new regional entity.

Stakeholder representatives thought that marketing and branding would be most effective if tackled jointly, and some discussed the possibility of funding a joint economic development council to act in the collective interests of the primary stakeholder governments and Aerotropolis.

However, some stakeholder representatives thought that the primary stakeholder governments would want to also maintain their respective jurisdictional brands, while other stakeholder representatives hoped that branding and marketing of Aerotropolis could be used to improve and expand on a combined Aerotropolis brand.

#### **ANTICIPATED DECISION POINTS IN ARRIVING AT A NEW ENTITY**

A review of the discussion responses (summarized above) yields a conclusion that the following terms and arrangements need to be negotiated and agreed:

1. Shall the entity be constrained to the functions listed in the 2015 Amendment, to wit: promotion and marketing of development opportunities and coordination assistance in land use and infrastructure planning? The 2015 Amendment can be narrowly or broadly construed, and the jurisdictions can by agreement expand the functions not listed, if desired.
2. If the entity is to engage in funding, should it have direct taxes and/or fees, or should it rely upon stakeholder jurisdictions to remit taxes and/or fees over to the entity?
3. Should the entity engage only in planning and coordination of infrastructure or also provide funding, design/construction, and/or operation?
4. What area should the entity serve initially, mid-term, and ultimately?
5. What infrastructure should the entity address: Transportation, water, sewer, drainage, other?
6. Should the entity bond to accelerate projects and/or serve as a lending fund or revolving loan bank?
7. Should the entity's decisional control be in its governing body or reside with the stakeholders' governing bodies? Should there be a mixed approach, depending on subject matter?
8. Should the entity try to bring the private sector and other public entities into its decisional process or seek to involve them in advisory committee(s) and the like?
9. Should marketing and branding be within the ambit of the entity or accomplished through a separate entity or coalition with expertise? Should the entity help fund marketing and branding?



10. Should the entity's governing body be elected officials or staff or others chosen for subject matter interest and expertise?

### **RECOMMENDED PROCESS FOR DEVELOPING A NEW ENTITY**

- Discuss and negotiate, insofar as possible, areas of consensus and likely agreement. Some are identified in this memorandum
- Consider use of a neutral facilitator and draftsperson
- Seek agreement on the major issues
  - Scope of entity activity
  - Whether a funding entity
  - If a funding entity, direct or through stakeholders
  - Consider wisdom of phasing and scaling activity of entity
- Match major determinations to existing types of entities or collection of entities or consider customized entity through legislation or IGA
- Work through refinement of lesser issues

### **POSSIBLE ENTITY CANDIDATES AND WHY OR WHY NOT LIKELY OF USE**

- Regional Transportation Authority – Limited to transportation, requires organizational vote of people of member counties, municipalities – unlikely
- Title 32 Metropolitan District – Not well-suited to have governing body populated by counties, municipalities – unlikely
- Non-profit corporation – May qualify for some federal grants, but not a public entity – unlikely
- Association of existing and future Metropolitan Districts – Developer and resident control; not stakeholder governments – unlikely
- Intergovernmental Agreement entity – Can be imbued with powers common to local government stakeholders, although probably not some fundamental government powers, like taxes, exempt bonds, eminent domain; would include a regional transportation commission or a regional planning commission – likely candidate
- Regional planning commission (if entity is to be limited to planning), established pursuant to Section 30-28-105, C.R.S. – likely candidate
- New legislative entity – Can be customized, but requires action of General Assembly and Governor – likely candidate
- Combination of entities – Cobble together contribution and involvement of different types of public entities through a functional IGA, with or without creating a new entity – likely candidate
- Research other potential entities

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**MEMORANDUM**

TO: Chris Primus, HDR, Inc.

FROM: Ed Icenogle and Anna Wool

DATE: February 4, 2016

RE: Supplement to Memorandum regarding Aerotropolis Stakeholder Governance Discussions

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Subsequent to the release of the Memorandum of January 19, 2016 regarding Aerotropolis Stakeholder Governance Discussions, we have received a few comments and questions. The questions and our responses thereto are:

**(1) How can a Regional Planning Commission be considered a “likely” governance candidate? The 2015 IGA Amendment expressly prohibits land use planning.**

The prohibition against vesting *land use powers* in the Aerotropolis regional governance entity is express in the 2015 IGA Amendment and in the Aerotropolis Stakeholder Governance Discussions. Additionally, in our discussions with the five primary public stakeholders, none favored attempting to vest any land use powers in the regional governance entity. However, a regional planning commission would not have land use powers; instead, it would be advisory in nature and its powers would be expressly defined and limited by the intergovernmental agreement creating such a commission.

**(2) How can the regional entity take on funding? This wasn’t discussed in the IGA amendment process.**

The primary purpose of the discussions and the governance paper was to elicit from the stakeholders their aspirations for the regional governance entity and to objectively report on those aspirations. Funding was frequently mentioned and discussed (in the many forms reported in the paper), although not unanimously supported. As a matter of contract, the contemplated parties to the regional governance entity agreement may agree as they wish, so long as terms are in compliance with State law and not inconsistent with voter approvals.

**(3) Why is a Title 32 metropolitan district not a likely governance candidate?**

Most discussions favored a form of governance directly controlled by the stakeholder counties and municipalities. Title 32 metropolitan districts are governed by independently-elected boards of directors. Status as a mayor, councilmember, county commissioner, or public employee does not qualify a person to sit as one of the 5 or 7 metro district directors. Metro districts are not, for the most part, well suited to either promoting and marketing development opportunities or to assisting and coordinating the land use and infrastructure planning of the Aerotropolis municipalities and counties.





# Colorado Aerotropolis Visioning Study

## Meeting Agenda

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Project:	Colorado Aerotropolis Visioning Study
Subject:	Steering Committee Meeting #5
Date:	February 29, 2016, 2:30 p.m.
Location:	CDOT North Holly Offices, 4670 Holly St, Denver CO 80216

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1. Welcome and Introductions
2. Study Calendar - Final Presentations
3. Public Information Officers (PIO) February 26, 2016, Meeting Recap
4. Draft Executive Summary
5. Draft Study Summary Presentation
  - a. Standard Responses to Potential Questions
6. Study Recommendations Discussion
7. Outreach to Major Landowners
8. Roundtable
9. Action Items

### COLORADO AEROTROPOLIS | Visioning Study



A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

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# Colorado Aerotropolis Visioning Study Adams - Commerce City - Brighton - Denver - Aurora

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 February	2	3	4	5	6
7	8	9	10	11 Draft Reports Sent	12	13
14	15 Presidents' Day	16	17	18	19 Draft Presentation Sent	20
21	22	23	24	25	26 Report Comments Due PPT & Draft Reports to Denver PIO Meeting	27
28	29 Steering Committee Mtg #5	1 March SRC Meeting #10 Denver Mayor 11:30	2 Presentation Comments Due	3	4 Material to Adams Cty	5
6	7	8	9	10 Material to Aurora	11	12
13	14 Material to Brighton	15	16	17	18	19
20	21	22 Presentations to Adams County and Brighton 6 pm	23	24 Presentation to Aurora	25 Good Friday	26
27 Easter	28 Material to Commerce City	29 Presentation to Denver 1:30	30	31	1 April	2
3	4 Material to Aurora	5	6 Presentation Metro Denver Aviation Coalition	7	8	9
10	11 Presentation to Commerce City	12	13	14	15	16
17	18 Presentation to Aurora	19	20	21	22	23
24	25 Presentation DRCOG TAC	26	27	28	29 Final Report	30



# Colorado Aerotropolis Visioning Study

## Meeting Agenda

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Project:	Colorado Aerotropolis Visioning Study
Subject:	Steering Committee Meeting #4
Date:	January 14, 2016, 10:00 a.m.
Location:	Commerce City Offices, City Manager's Conference Room 7887 E. 60th Ave. , Commerce City, CO 80022

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1. Welcome and Introductions
2. Jeff Fegan Presentation Discussion
3. Public Information Officers (PIO) Meeting Recap
  - a. Presentations to City Councils
4. Governance Mechanisms
5. Economic Analysis Briefing
6. Study Recommendations
  - a. Framework
7. Post-Study Next Steps
8. Roundtable
9. Next Steering Committee Meeting
10. Action Items



A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.



Project:	Colorado Aerotropolis Visioning Study
Subject:	Steering Committee Meeting #4
Date:	January 14, 2016
Location:	City of Commerce City Offices
Attendees:	<b>Adams County:</b> Rachel Bacon <b>Aurora:</b> Bob Watkins <b>Brighton:</b> Marv Falconburg <b>Commerce City:</b> Jim Hayes <b>Denver:</b> Evan Dreyer <b>DEN Real Estate:</b> Mitch Traeger, John Potts <b>CDOT:</b> Jay Hendrickson <b>HDR:</b> Chris Primus, Mary Speck <b>LXC:</b> Kip Cheroutes <b>Arland Land Use Economics:</b> Arleen Taniwaki
Distribution:	File

### Summary of Discussion:

1. Welcome and Introductions
2. Jeff Fegan Presentation Takeaways
  - a. Chris Primus summarized saying that the event was well-received. More than 80 in attendance.
  - b. Kip Cheroutes stated that DFW is 20 years ahead of Denver in the development of an aerotropolis, but we are in possibly a better position than DFW was when it started. The regional economic development network is in good shape, the jurisdictions are talking to each other - so our relationship-building is better than when DFW started. Another take-away was that there were "brave" developers who figured out how to benefit from being able to only lease the land. Momentum was started with Trammel Crow, and DFW kept the ball running.
  - c. Jay Hendrickson talked about the Infiniti dealership—largest in the nation—that located at DFW. The Colorado Aerotropolis needs to get businesses like that to make the area attractive to others.
3. PIO Meeting, December 14, 2015
  - a. Attended by representatives from all of the jurisdictions. Goal was to coordinate between jurisdictions as the study finishes and progresses to the next phase. Also discussed ideas for future branding.
  - b. Agreement that the study and its results would be kept separate from the more political negotiations between the jurisdictions regarding implementation of the IGA Amendment and follow-on discussions about collaboration.
  - c. Bob Watkins suggested that the PIOs were best suited to coordinate media strategies and he and others on the Steering Committee are the ones to coordinate what is needed to get in front of the councils/commissions.



- d. Next meeting anticipated week of February 29.
  - i. Michelle Halstead will be out of the office March 1-4.
- 4. Contract Amendment Extension
  - a. CDOT and CCD worked hard to get an extension to September 30, 2016.
  - b. Work on the study will be essentially complete in March/April. The extension allows additional time to do any follow-up analysis with any remaining grant dollars.
  - c. Evan Dreyer asked if CDOT/HDR would be willing to facilitate discussions with the jurisdictions as they figure out next steps. The confidential mediation group of the jurisdictions hasn't met since June. A smaller group worked on the 1A campaign. ACC has met several times.
  - d. Also, after September 30, there could be a role for the study team.
- 5. Study Presentations
  - a. Jurisdiction Elected Officials
    - i. The idea came out of the PIO meeting. 10-minute presentation of what has occurred on the study and the findings, followed by 10-15 minutes of discussion.
    - ii. PIO group wanted to review the presentation and reports. Chris has built ample time into the schedule for this to occur and has started scheduling presentations for the end of March.
    - iii. Bob is concerned about the schedule for getting on Aurora Council agenda. Each jurisdiction has different requirements and deadlines related to materials for scheduled sessions.
      - Chris will coordinate individually to add interim deadlines to the calendar.
    - iv. Everyone agreed that it was important to inform the councils and commissions before any other interested groups.
  - b. State/Federal Representatives
    - i. Kip asked if there was a desire to give a briefing to state legislators or other officers?
      - Group agreed that Congressional representatives should have briefings. At the state level, possible state transportation committees.
    - ii. Kip will contact state and federal representatives to gauge interest.
    - iii. Jay will engage the Government Relations group - and have them coordinate with Kip to schedule meetings.
  - c. Additional Groups
    - i. Those who have been met with as part of this study—Denver Water, SAWSD, DRCOG, RTD, ACC, DIA, etc.
      - January 21 there is a joint meeting of the Aurora City Council and SAWSD.
    - ii. Property owners and developers.
      - There have been informal conversations with Cal Fulenwider, Caley Company.
      - Need to have a plan for how we inform them.

- Aurora and Denver have lists.
- Could hold one meeting - doesn't have to be by jurisdiction.

#### 6. Governance

- a. Ed Icenogle has been meeting one-on-one with jurisdictions and going over a list of questions designed to get input and ideas about governance options.
- b. Bob indicated that Vanessa Irwin has additional input after their meeting and will contact Ed with it.
- c. Kip asked if the discussions included timing about when the body or entity should "stand up."
  - i. Chris thought the plan was for this to happen in 2016, but this needs to be verified.
- d. Plan is to assemble comments and, as a neutral third party, identify what makes sense as the most promising options—three or four with pros and cons.
  - i. Preliminary conclusions will be presented at the SRC meeting on January 21.
- e. Rachel Bacon asked if Ed could lead governance discussions going forward. The group agreed this would be valuable.

#### 7. Economic Analysis

- a. Arleen presented a summary and updates to the economic analysis.
- b. Assumption: an additional 80,000 jobs beyond DRCOG's projection.
- c. Using an approximate 25-year time frame, rather than a hard 25-year time frame.
- d. To determine potential revenues, started with employment, then determined square footage.
- e. Square feet of commercial development - lower than previously presented.
  - i. Used a range: lower end of range- more like DTC with office space; higher end more like DTC with more cargo/industrial space (more land-intensive).
  - ii. To make sure estimates were reasonable:
    - Looked at other Denver area office centers square footage - most similar to DTC and Denver CBD.
    - Determined what percentage of metro area market the Aerotropolis would be.
    - Annual commercial absorption - DTC and CBD averaged 1.1 and 1 million sq ft per year, times 25 - result is at the low end of estimates for Aerotropolis.
- f. Property tax: assumed 10 mills. The governance discussion will determine how it will be implemented. Goal was to be realistic, but set a vision.
  - i. Used Castle Rock impact fees to come up with number—in the mid range for Denver metro area.
  - ii. Discussion: concern that 10 mills may be too much for jurisdictions in current economic climate. There has been pushback on new mill levies, mainly because of the total cumulative amount that communities are being asked to approve.
  - iii. Kip asked if Ed is asking about what bond issues the jurisdictions are planning over the next 2 to 3 years. Answer: not now.

- iv. Jim Hayes noted that the difference in the high and low end of the estimated potential revenue streams is not very much—maybe it is better to represent with one number. Arleen explained that the numbers are relatively close because the office space is more valuable per sq ft, but the industrial acreage is higher. She will footnote the information with this explanation.
  - g. Marv Falconburg asked if the information from the Economic paper could be available for the update to their Comp Plan.
    - i. Chris answered that the drafts will be sent out today or tomorrow to the SRC so we will send him a copy also.
8. Study Deliverables
- a. Chris outlined what the study team is planning to produce as far as deliverables.
    - i. 2-page Executive Summary
    - ii. 20-page Main Report
    - iii. Back-up reports or memos:
      - Growth Projections
      - Economic Analysis
      - Infrastructure - various infrastructure scenarios, information from local plans, sections on water, wastewater, drainage, communications, power. Identifies areas for future collaboration.
      - Governance - short paper - primarily a summary of what we heard and Ed's recommendations
      - Outreach & Engagement
      - Peer Aerotropolises
  - b. Review schedule
    - i. Chris will send the Growth Projections, Economic Analysis, and Infrastructure papers to the SRC for their review prior to January 21 meeting.
      - Discussion that the Governance paper would receive the most scrutiny.
    - ii. 2-page, Main Report, and all other reports will be sent for final review around February 5.
  - c. Suggestion for video was discussed at the PIO meeting. There was concern that a video would lend too much of an air of finality when a lot more work needs to happen. Their recommendation was to wait.
    - i. The Steering Committee agreed with this approach.
9. Preparation for Presentations
- a. Marv suggested that we prepare responses to anticipated questions or concerns.
    - i. This could be sent out with the draft of the presentation.
    - ii. Jay will reach out to the Steering Committee, PIOs, and Government Relations staff to compile the draft.

- iii. Marv suggested that after each presentation that the questions and our answers be shared with the group so message is available for the next meetings.

#### 10. General Public Information

- a. Rachel asked what the plan is for sharing with the general public. The information needs to be understandable.
  - Jay answered that the PIO discussed that the study wouldn't be made public right now. The regional entity would be more focused on communicating to the general public, branding, marketing, etc.
  - Message now is that the study has generated the data. Implementation strategies will follow.

#### 11. Additional Meetings

- a. Jay asked if this group thought there was a need for additional SRC or Steering Committee meetings.
  - i. After discussion, it was agreed to put the Steering Committee meeting on the calendar in case its needed - possible during the review period for the Presentation.
  - ii. Chris to check with the SRC about their desire to schedule an additional meeting.

### Follow-up Actions

1. Chris to continue scheduling presentations.
2. Kip to contact state and federal representatives to gauge interest in a study briefing.
3. Jay to engage the Government Relations group and coordinate with them to schedule meetings with state and federal representatives.
4. Jay to reach out to the Steering Committee, PIOs, and Government Relations staff to compile the draft of potential questions and answers to accompany the presentation.
5. Chris to schedule future Steering Committee meeting.
6. Chris to update calendar with interim deadlines for presentations to councils/commissions.
7. Chris to send draft of Economic paper to Marv Falconburg.





Name	Agency	Position/Title	Email	Phone
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# Welcome



## Colorado Aerotropolis Visioning Study





# Study Updates and Economic Analysis



# JEFF FEGAN PRESENTATION

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# PIO MEETING RECAP

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# GOVERNANCE MECHANISMS

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# Regional Governance Mechanism Options

- Infrastructure funding responsibility or recipient for revenues?
- Responsible for funding, design/construction, or operation of projects?
- Geographic scope ?
- Types of infrastructure?
- Specify infrastructure projects or provide the project selection process?
- Substantive decisions to be made by the governing body?
- Relation to (a) primary stakeholders and (b) other public entity stakeholders and the private sector?
- Handle branding and marketing?



# ECONOMIC ANALYSIS

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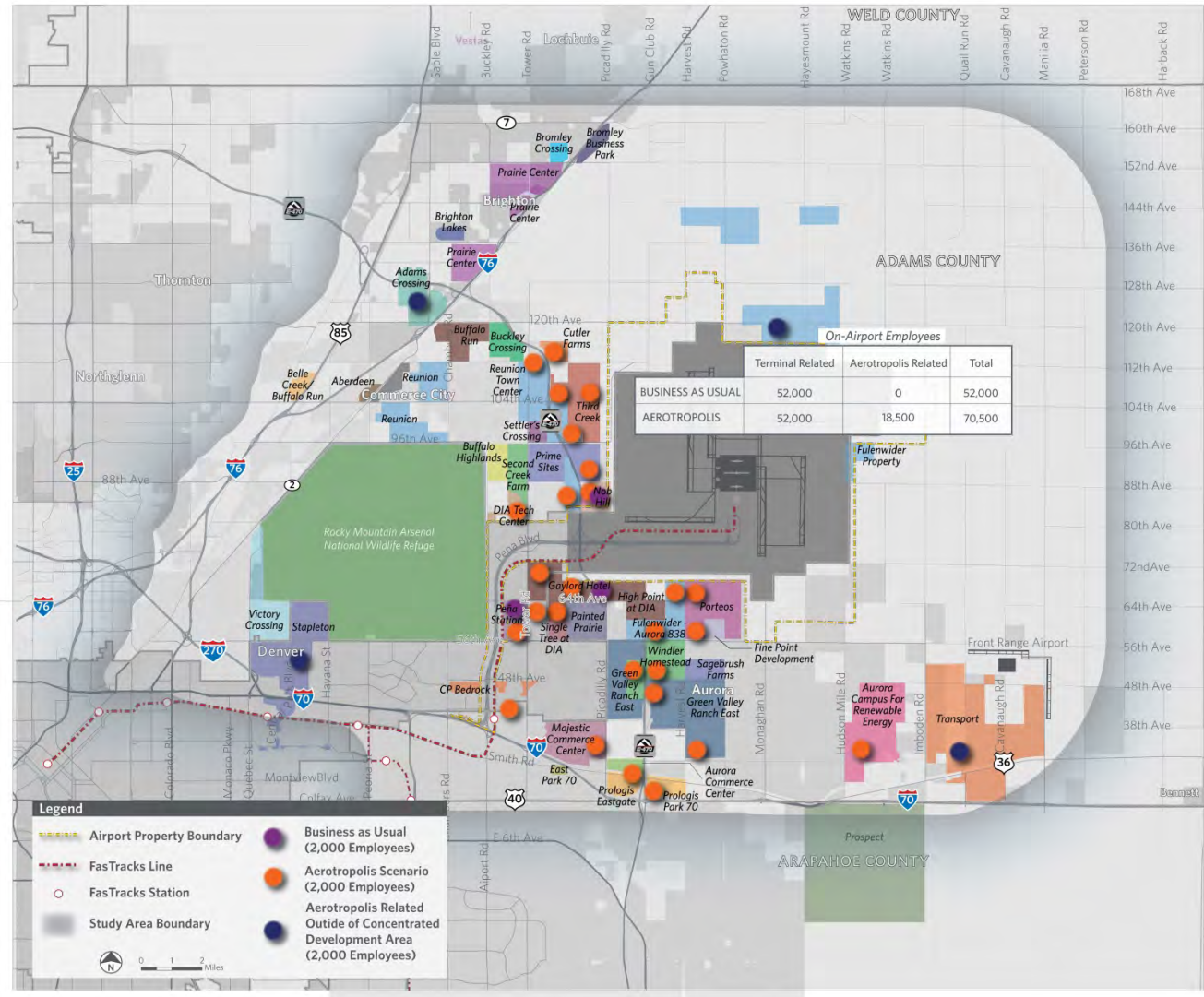
# Scenario Assumptions

- Aerotropolis induces additional growth of 74,000 jobs above and beyond DRCOG projections for the area (about 6,000 jobs) for a total of 80,000 jobs
- The growth represents a net gain in economic and fiscal benefits for the Denver metro area, rather than a diversion from the rest of the region.
- It drives demand for 25 to 37 million square feet of commercial development.
- The low end of the range (“Low SF” scenario) represents an office-oriented Aerotropolis (like DTC).
- The high end of the range (“High SF” scenario) represents a cargo and warehouse oriented Aerotropolis (like LAX).
- Commercial development also drives demand for over 75,000 TOD and single family detached residential dwelling units



# Base Employment Assumptions

- Allocation of 80,000 jobs.
- Each dot represents 2,000 jobs.





# Employment and Land Uses

## “Low SF” Scenario – 25 Million Square Feet

Top 5 Sectors	% of Total	Land Use
Finance and Insurance	19.9%	Office
Professional, Scientific, and Technical	17.4%	Office
Information	13.2%	Office
Administrative and Waste Management	8.7%	Office
Management	7.2%	Office

## “High SF” Scenario - 37 Million Square Feet

Top 5 Sectors	% of Total	Land Use
Accommodation and Food Services	25.9%	Retail
Transportation and Warehousing	15.7%	Industrial
Wholesale Trade	7.4%	Industrial/ Office
Administrative and Waste Management	6.8%	Office
Professional, Scientific and Technical Services	6.0%	Office

# “Low SF” Scenario Assumptions

- Square feet per employee
  - Office: 300
  - Retail: 400
  - Industrial: 1,000
  - TOD Mixed Use Commercial: 300
- Land use breakdown similar to the DTC and other metro area employment centers

Land Use	Acres	Millions of Square Feet	Percent of Total
Industrial	332	2.8	11.1%
Retail	230	3.3	13.0%
Office	657	13.7	55.0%
TOD Mixed Use Commercial (Office)	164	5.3	21.1%
Total	1,383	24.9	100.0%

# “Low SF” - Commercial Land Use Breakdowns at Comparative Employment Centers

	CBD	DTC	Aurora City Center	Down-town Boulder	Cherry Creek	Inter-locken
Industrial Sq. Ft.	5.5%	9.9%	4.3%	1.0%	0.0%	3.5%
Retail Sq. Ft.	9.0%	15.0%	76.2%	50.6%	40.6%	50.4%
Office Sq. Ft.	85.5%	75.1%	19.5%	48.4%	59.3%	46.2%
Total Sq. Ft.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Square Feet Total	50.6 Million	50.8 Million	3.9 Million	8.2 Million	6.1 Million	5.1 Million

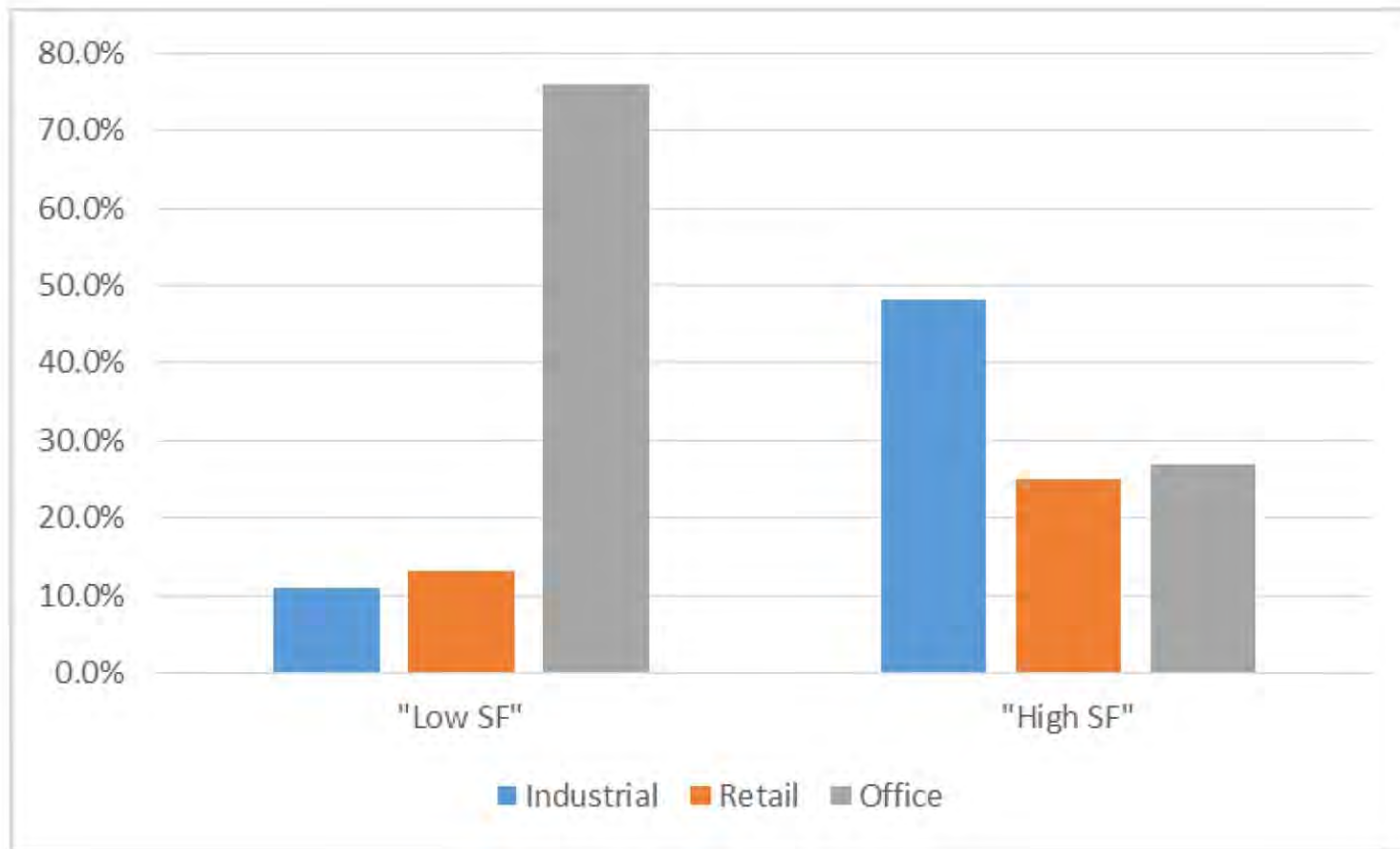
# “High SF” Scenario Assumptions

- Land use breakdown with a more heavily industrial orientation similar to LAX.
- Industrial tends to be land intensive at 1,000 square feet per employee.
- LAX is an international gateway, distribution and trade center.

Land Use	Acres	Millions of Square Feet	Percent of Total
Industrial	1,485	17.8	48.2%
Retail	573	9.2	24.9%
Office	357	7.1	19.3%
TOD Mixed Use Commercial (Office)	89	2.8	7.6
Total	2,504	37.0	100.0%



# Land Use Mix: “Low SF” vs. “High SF”



# Aerotropolis Scenarios % of Metro Market

**2015**

Metro Area Market = 493 Million Square Feet

Northeast Area Submarket = 86 Million Square Feet

Northeast % of Metro Area = 17.5%

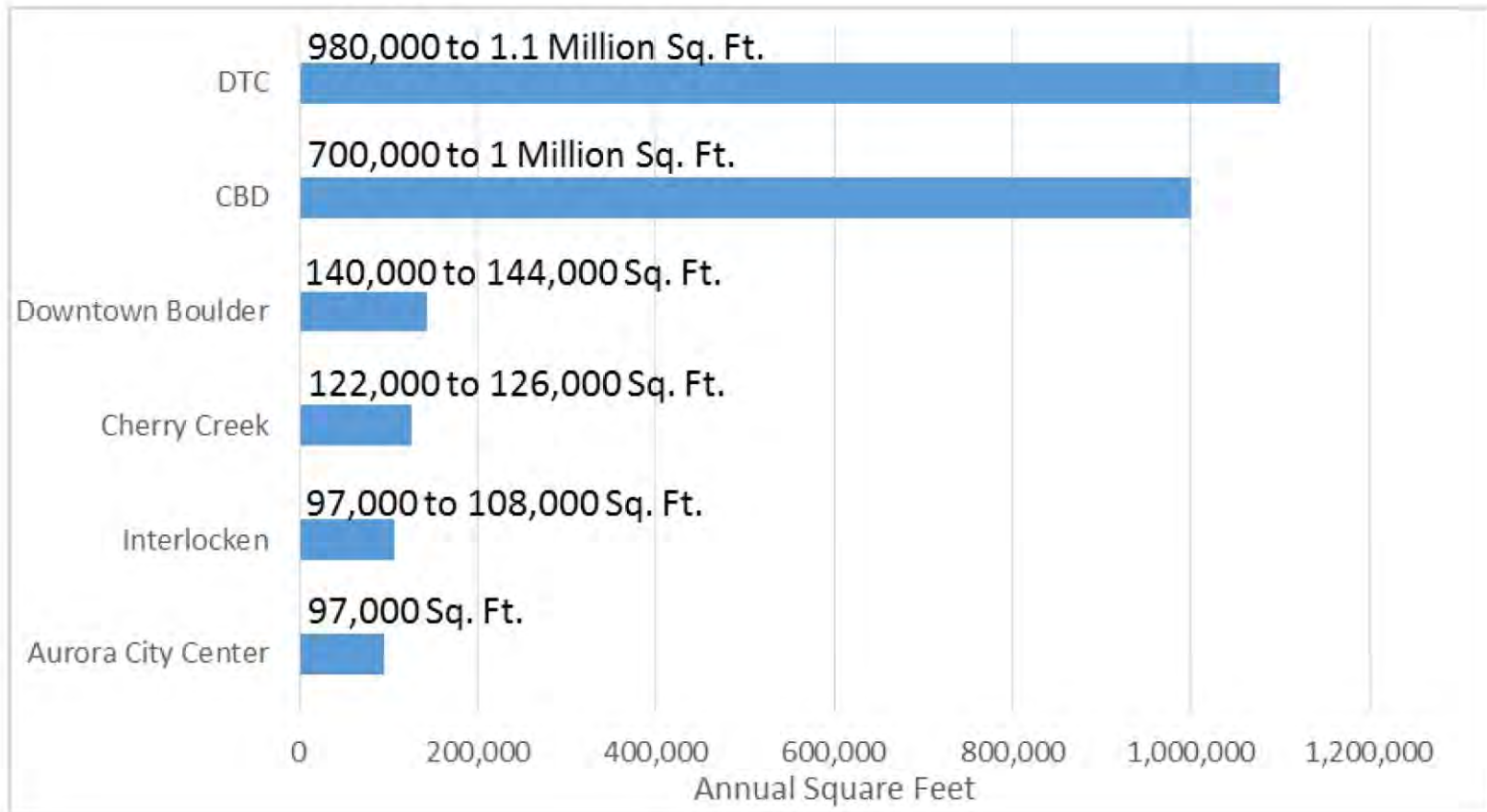
**2040**

Metro Area Market = 620 Million Square Feet

Northeast Area Submarket = 114 to 126 Million Square Feet

Northeast % of Metro Area = 18.4% to 20.4%

# Aerotropolis Scenarios: Annual Commercial Absorption / Change at Comparative Employment Centers between 1970 and 2016







# Summary Economic Impacts

## ANNUAL ECONOMIC IMPACTS



## EMPLOYMENT, DEVELOPMENT & DEMOGRAPHIC IMPACTS



- 18,500 on-airport jobs
- 55,500 off-airport jobs
- 25-37 million square feet of additional commercial development
- \$30 billion increase in assessable property values
- 9,600 to 9,800 FTE Direct Construction Jobs (25 years annually)
- 3,300 FTE Indirect Construction Jobs (25 years annually)
- 75,000 housing units
- 184,000 residents

# STUDY RECOMMENDATIONS

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# Final Deliverables

4-page Executive Summary

~ 20-page Main Report

Outreach &  
Engagement

Growth  
Projections

Infrastructure

Economic  
Analysis

Peer  
Aerotropolises

Governance

# POST STUDY/NEXT STEPS

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# THANK YOU

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Project:	<b>Colorado Aerotropolis Visioning Study</b>
Subject:	Steering Committee #3 Meeting – Working Luncheon with Jeff Fegan
Date:	November 19, 2015, 12:00 p.m.
Location:	Adams County Government Center
Attendees:	See attached sign-in sheet
Distribution:	Steering Committee Members, Attendees, File

## Discussion

1. Chris Primus welcomed everyone to the luncheon. The format of the working meeting is an informal question and answer session with Mr. Fegan, following his presentation to the wider audience this morning. Rick Pilgrim stated the issue of governance is important. The group needs to start coordination on this.
2. Jeff Fegan: This probably was the most important for DFW. There was a lot of resistance to begin with. But now everyone is happily working together. The communities eventually figured there really is nothing to lose by collaborating and working together.
  - a. Creating a monthly/quarterly feedback mechanism would be important to share the planning of this concept.
3. Question: What are lessons learned from the hurdles DFW faced earlier?
  - a. **Response:** During the 1980s, two airport directors before me talked at an event about building two runways and had not even talked to the surrounding communities, so I think that really poisoned the water. A lawsuit followed. A great relationship with the surrounding communities is very important.
  - b. The governance group for DFW is not formalized. It's not really an authority. We make sure whatever we did was compatible with the other side of the fence. It's really just an expectation, not a governance.
4. Question: Contrast between DFW and Denver. Growth improvements needed, infrastructure needed. This seems to be our biggest issue.
  - a. **Response:** There's not much more to build right now surrounding DFW as far as infrastructure goes. During the development of these roads, often the surrounding communities needed something from us and we gave it to them. We went kind of went overboard to help the surrounding cities with all the little things that they needed. But that worked out well.
  - b. On any given day, it doesn't always feel like it's going to happen. It takes years.
5. Question: Water and sewer infrastructure. Aurora Water, Denver Water, Metro Waster Water, we are all separate. How did you get all that figured out at DFW.
  - a. **Response:** During the business of hooking up sewer lines, there really weren't that many issues. We did have a big issue on de-icing. They were in the business of expanding, so they actually became advocates. The Airport installed all the infrastructure within the airport. That wasn't a problem either. As long as we paid for the water, we got the water.

- b. We created the possibility of serving an area by installing sewer/wastewater. A developer came and they built infrastructure from that. So that worked really well.
  - c. In Coppell, there was an exception. The two warehouses at DFW got their water sources from Coppell. It does get more and more expensive the farther you go out.
6. Question: Did you extend water lines from the airport?
- a. **Response:** Yes. Most of the infrastructure was built in the center of the airport and were expanded out over the years.
7. Question: Tolling. What are the roads around DFW that are tolled? What is the purpose of those roads? Who are the tolling authorities? What public outcry did you get?
- a. **Response:** There is SH-121 developed by the North Texas Turnpike Authority. A very expensive project—no way it would have gotten built waiting for state dollars. So there really wasn't much in terms of opposition to it. It was bid between the Authority and a private company. It runs right to the north entrance of the airport.
  - b. Another toll road that just finished is a managed toll road on LBJ. Now people are choosing to pay despite no traffic but the speed is 70 mph.
  - c. Another is a toll road that runs from DFW to Ft. Worth. Reasonably successful in terms of revenue. But people can choose and they drive 75 mph or stay in traffic with 50/55 mph speeds. Toll roads in Texas right now are starting to get a bad rap because there are so many of them.
8. Question: Do you have some perspective about other airports in the country and the world? Do you have any examples?
- a. **Response:** The fastest developing and successful ones are the Asian airports. Take, for example, Incheon Airport in South Korea. That is the best example of the airport and the government being perfectly aligned about what it is they want to do. A great example of getting it done very quickly in a very high-quality manner.
  - b. In the U.S., El Paso was an early adaptor.
  - c. The Aerotropolis concept really helps in how you can develop commercial property.
9. Question: Regarding population, how did that grow so fast?
- a. **Response:** Mostly because of large corporate relocations that have taken place. People figure out that it is a great place to work, and that's when migration happens. I don't believe our population is more prolific than others, but it's more about people moving in from different parts of the country.
  - b. Take Austin, Apple has 5,000 employees in Austin. It is a lifestyle that a lot of entrepreneurial and technology companies have embraced.
  - c. The only difference between Texas and Denver is that Denver has seasons. You have a great lifestyle here. It is really quite an extraordinary place.
10. Question: How about housing, how did that change in DFW?
- a. **Response:** We have a lot of areas dedicated to corporate housing and lots of golf courses, very high-end, including their own shopping malls. But yes, it took a lot of vision.

11. Question: Can you elaborate more on tax sharing?

- a. **Response:** For Grapevine, the mayor opted to not participate in tax sharing, so there is really nothing we can do about it. We just have to wait it out. He has been in office a long time. Right now, they get all the income-producing revenue from the airport. You buy a hamburger, Grapevine will get tax revenue from that.

12. Question: Can we talk about the developers? What is your experience on that?

- a. **Response:** It is something that you have to be very sensitive about. Don't play in other people's sandbox. We passed on things that we thought were better going off elsewhere. We would do it only if it makes sense for DFW.
- b. Maintain the flexibility to be ready to move if a developer calls on Denver.
- c. The infrastructure piece is the big issue. You don't necessarily need to have all the infrastructure in place, but you need to figure out a plan on how to implement that infrastructure when that time comes.
- d. Bringing tools to the landowners to make them understand how this would work is really important.

13. Question: The TOD plan inventory is a really nice asset to have.

- a. Chris Primus said the study team could look into that.





# Colorado Aerotropolis Visioning Study

## Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: Study Review Committee Meeting #7: Joint Meeting with Steering Review Committee

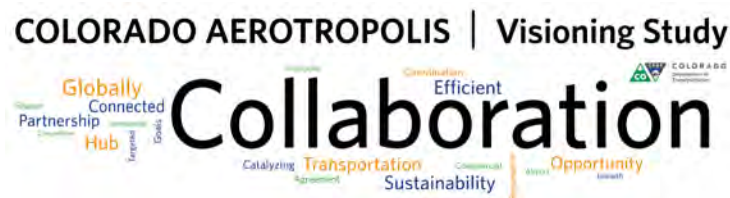
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Date: November 19, 2015 9:00 - 11:30 a.m.

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Location: Adams County Government Center

1. Welcome Jay Hendrickson, CDOT
2. Welcome from Adams County Charles "Chaz" Tedesco, Adams County Commissioner
3. Opening Remarks Erik Hansen, Adams County Commissioner  
  
Evan Dreyer, Deputy Chief of Staff, City and County of Denver
4. Study Overview
5. Presentation by Jeff Fegan
6. EDC Panel Discussion  
Moderator: Barry Gore, Adams County Economic Development  
Panelists:
  - Tricia Allen, Adams County Economic Development
  - Laura Brandt, Metro Denver Economic Development Corporation
  - Michelle Claymore, City of Commerce City
  - Yuriy Gorlov, Aurora Economic Development Council
  - Michael Martinez, Brighton Economic Development
  - Dan Poremba, DEN Real Estate
7. Adjourn



### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

## Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Joint Study Review Committee #7 and Steering Committee #3 Meeting
Date:	November 19, 2015, 9:00 a.m.
Location:	Adams County Government Center, Public Hearing Room
Attendees:	See attached sign-in sheet
Distribution:	SRC members, Steering Committee Members, File

Note: The entire meeting is recorded on video <https://www.youtube.com/watch?v=I5zj1GN53Ow>

### Welcome (Jay Hendrickson)

1. Jay Hendrickson welcomed everyone and announced the purpose of today's meeting. He mentioned the successful vote approving the amendment to the IGA. He thanked all the partners of the Aerotropolis study. The support and participation by the partners for this study have been incredible.
2. He introduced Jeff Fegan, today's guest speaker.

### Welcome from Adams County (Commissioner Jan Pawlowski)

3. Commissioner Pawlowski shared a piece of art that was about an Aerotropolis. When Aerotropolis came up a few years ago, she wasn't shocked to hear that word, but a lot of people were. She stressed the importance of everyone working together to achieve the vision. When the IGA amendment came up, it seemed like an insurmountable task. But because of Commissioner Erik Hansen's leadership, the amendment went through. She thanked everyone who supported the amendment and voted for it. The vote passed overwhelmingly.
4. One of the things that was constantly brought up is that Denver is in the center of the world. It only makes sense that we build an aerotropolis to go with that.

### Study Overview (Chris Primus)

1. Chris Primus gave a brief overview of the study area and presented the study area map.
2. He then introduced the Aerotropolis study vision statement, as well as the study objectives.
  - a. Vision: "A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing."
  - b. Study Objectives:
    - i. Setting a collaborative vision.
    - ii. Comparing future growth with or without an Aerotropolis.
    - iii. Identifying a framework of collaborative infrastructure possibilities.
    - iv. Outlining a governance framework and implementation steps.
3. He announced the brand new website for the Aerotropolis study on CDOT's website. <https://www.codot.gov/projects/aerotropolis>

4. Through the course of this study, the study team has been learning and educating themselves about aerotropolis. Toward this end, Jeff Fegan, an aerotropolis authority, has been invited to present his experiences with developing DFW Airport.
  - a. Jeff Fegan has over 35 years in the airport industry, including 29 years with the DFW Airport—19 years as the Chief Executive Officer.
  - b. Under his leadership, DFW was one of the first to embrace the Airport City/Aerotropolis concept, which has resulted in significant new commercial development and substantial new revenues for the airport from projects, such as major industrial parks, hotels, and foreign trade zone developments.
  - c. Jeff focused significant efforts on Air Service Development leading to DFW Airport's position as one of the top connecting hubs in the world. Jeff ensured that DFW could handle future demands resulting in a number of major Capital Improvement Programs totaling over \$5 billion in new infrastructure during his tenure. Also as a result of his transformational leadership, DFW Airport has developed one of the strongest brands in the industry.
  - d. Prior to joining DFW in 1984 as the Airport's Chief Planner, Jeff worked in the airport consulting business starting his career in 1978. He earned a Master's degree in City Planning from the Georgia Institute of Technology, a Bachelor of Science in Geography from Frostburg University, Maryland, and completed the Stanford Executive Program at Stanford University.

### **Land Development at DFW International Airport: A Collaborative Journey (Jeff Fegan)**

1. A big believer of the Aerotropolis concept long before the Aerotropolis word was coined.
2. When he first saw the big piece of land around DFW, he understood its potential.
3. Attended the first Aerotropolis conference in 2002. The last conference in Denver was attended by about 300 people.
4. Here to talk about commercial development around airports. What's going on in Denver right now presents a great opportunity for development.
5. There are a lot of similarities between DFW and DIA. There is a lot of land around DIA. Both airports are relatively young as far as airports go. Both are located in growing communities with strong economies. Both cities do not have navigable waters, so the air really is the only major means of transportation.
6. At DFW, the surrounding communities looked pretty much the same when the airport first opened and for the first 10 years. Now when you look at all the developments around DFW, the land is bounded by rooftops. We got a lot of resistance in the beginning. People didn't believe that the opportunity was there. Every time we get started to look at a piece of land for development, there was a lot of resistance to the development. People were more interested in development on airport than off-airport. Having commercial development around the airport has become a very sustainable source of income through taxes.
7. DFW is located right in the center of the Dallas/Ft. Worth metropolitan area. Much of the land around the airport was undeveloped. But everything has now grown around the airport. DFW Airport is owned by the City of Dallas and City of Ft. Worth with 11 board members, including the mayors of Dallas and Fort Worth.

8. The airport has grown quite a bit, and has 7 runways. It is one of the highest capacity airports in the world. There is an extensive transit system and it is now home to the American Airlines HQ and operations center—the largest hub for American Airlines by far. Had a huge economic impact with \$31 billion a year. Probably the biggest change in the last 10 years has been the growth of international travel. There are 57 new international destinations. Large cargo operation with 700,000 tons of cargo every day.
9. 12,000 acres to protect for aviation purposes; but 5,200 acres are appropriate for development. Created 13 distinct development districts within the airport—about 6 are active. Each district represents different markets with different development potential. 50 years or more of development around the airport.
10. Development was limited until the late 1990s. The 1999-2000 timeframe is when things really got started. Development around the airport created pressures to build more on the airport. In 1999, entered into a tax-sharing agreement with four surrounding cities—Euless, Irving, Coppell, and Grapevine. Started with a new rental car facility. A thousand acres around these areas are not yet developed. I suspect over time, these also will be developed.
11. Developers off airport began to realize the DFW Airport travel opportunity. It is different developing around airport. Trammel-Crowe was an early one. There are restrictions to consider.
12. Taxes total today of \$63 million have been generated from the surrounding commercial development and are expected to grow over time. And there are \$36 million of non-airline revenue to the airport every year.
13. Big driver was we had a very active regional council of government advocate—the North-Central Texas Council of Governments. It was a big advocate for roadway improvements to the airport. Now the airport is surrounded by highways and rail service. All these facilities are developing around the airport, that's where all these large commercial developments are. The proximity to the airport with transportation emanating from the airport really is a big draw for these developments.
14. A new hotel at DFW was constructed and is owned by DFW.
15. International Commerce Park—a development on airport started in 2000. Today it is completely built-out. It is a 422-acre site. DFW invested \$37 million in infrastructure for this site. It has done very well. The development community has invested \$247 million in all these buildings. Economic impact of this is huge. Airport gets \$6 million in revenue from these 422 acres of development.
16. Dallas Cowboys' main apparel headquarters is based on the airport. They import product from Central America. They distribute products in this building.
17. Southgate Plaza—another development that is in development today. The Hyatt Place is the third hotel we have on the airport. There will be post office in this complex and five other pad sites for other tenants.
18. Sikorsky—manufactures helicopters. What they do at DFW is repair/refurbish helicopter blades. They have a test facility at this location, then they ship the blades out.
19. An Infinity car dealership has located at DFW and it has become one of the best-selling dealership in the country.
20. We have two distribution facilities around the airport. One is the Logistics Center 1 with 23 acres of space. One distribution company distributes dialyses equipment. An example of some of the companies that see potential in locating in an airport.

21. Of course there were a lot of roadblocks during the development of the Aerotropolis around DFW, but with patience and persistence, it is possible. The surrounding communities will see the benefit of an Aerotropolis.
22. Denver really has a great opportunity. It has all the characteristics, in my opinion, to be successful and a big future ahead of you.
23. Lessons learned:
  - a. It takes a vision. It is a long-term commitment. Takes a lot of patience.
  - b. It requires communication, cooperation, and communication, which eventually leads to trust.
  - c. It created a new perspective on competition among the cities, as well as among airports.
  - d. We turned down a lot of big developments for a lot of different reasons. We were very selective.
  - e. Have to have a very strong understanding of the marketplace. There are a lot of opportunities out there that we have not thought of before.
  - f. Important to understand development needs. You have to have infrastructure in place. You have to be ready to go. If you are not ready for the developers, then you really are not going to be a player. You need to build infrastructure. Once we had everything in place, everybody just followed suit.

### Questions (Jeff Fegan):

1. You mentioned airlines. Talk about the dynamic DFW had to go through with the tax revenue generated by all of this. **Response:** DFW does not receive tax benefits at all associated with the development. The tax benefits go to the four cities and they distribute parts to the airport. \$36 million a year in revenue has been positive for the four cities. After the success we've had, there has been less resistance.
2. One of the tools is foreign trade zone program. Here in Colorado we don't use that much as a tool. Do you still see this as a viable tool that we should utilize as we try to draw companies in? **Response:** There were a lot of companies who asked to be within the trade zone. We have outside experts sat down with companies to make them see how they can benefit from it. Find a way to create scenarios wherein companies can benefit from it. The airport can take a bit of a role and help companies figure it out.
3. Can you describe off-airport developments that took place? **Response:** All land surrounding DFW has been developed. There aren't really any large tracts left that are not developed. It is completely built out.
4. Different situation in Denver right now - we have some development pressure southwest of DIA, but largely the airport is surrounded by empty land. Can you speak to that difference between DFW land use and Denver's? **Response:** You have a tremendous swath of real estate. DFW was really like Denver 20 years ago. It just took place over time. As people discovered this area as the place to live and work, more and more companies will locate here. You have massive highway system around DIA. It will just take a lot of time. You have a little more time to go before you get to where DFW is today.
5. Describe the relationship DFW had over time with FAA—as far as what was developable. **Response:** We had a very close relationship with FAA. They understood that DFW was committed to protecting the area around DFW. They didn't play a decision really whether something was on airport or off airport—only whether it was compatible for the airport and developing the plan. Commercial development



around the airport went pretty smoothly. We were able to fast track environmental assessments. They were approved pretty quickly. The FAA became a very good partner in the process.

6. One of the things we were pushing with our messages was, we were able to talk about the region as a whole. What are pros and cons we can present? **Response:** We met with the Chambers of Commerce for the surrounding cities. They were our greatest advocate. All the employees working on airport do not live on airport. They actually live in the surrounding communities.
7. What about retail? **Response:** We have very little on the airport. Retail we do have is related to satisfying employees or passengers getting off airplanes.
8. Governance. The planning coordination committee - is that the only form of coordination among the jurisdictions? **Response:** The overall governance structure for DFW has the 11 board members. They don't vote, in the political level they are involved. For the staff level, that is where the discussion takes place about what's coming up, who's knocking at our door. We impose a policy on our place, that if someone wants to come into the airport, we ask that they sign an agreement that they have no intention of considering Dallas or Fort Worth, to keep that issue off the table. Developers sometimes want to play one community against the other. We don't offer any special deals for them to come to the airport.
9. Tax revenue is split 1/3, 1/3, 1/3--does that mean all three cities have 1/3 split with DFW? **Response:** Yes, for the car dealership. 1/3 goes to the host city, and the other 2/3 is split between Dallas in proportion 7/11 and Fort Worth 4/11, per their original agreement between the major cities.
10. In terms of where DFW is and where Denver is, what would you say would be your biggest piece of advice, something you could have gone back and done differently? **Response:** Whole communication, cooperation, coordination—that trust that is very important. Working collaboratively. The runways developments created some lawsuits with surrounding cities because of noise problems. We went through a really rough time between 1989 and 1995-1996 with a lot of adversarial relationships between the cities and the airport. We got over that and now the relationship is much better. We just wished we could have done it differently. The biggest thing really was the trust. Everyone likes to be part of the successful deal. Now all share our success.
11. How long is the longest land lease around the airport? Does the Aerotropolis have a boundary that everyone agreed on? **Response:** 40-year leases normally. We had some leases that went longer—99-year lease for one hotel. The influence of the Aerotropolis has gone 40 miles around the airport.
12. Was there a regional infrastructure agreement put in place around the DFW Aerotropolis? **Response:** Dallas was advocating funds for their infrastructure, same with Ft. Worth. No really specific agreement around the airport. Everything that happened around the airport, we extended our utilities to the development around the airport. But really no agreement among the cities.
13. Within the study area there is the Front Range Airport. From your perspective, what would be the best way in integrating that property around this plan? **Response:** Around the DFW area, I think there were 55 other airports, along with other airports serving different functions, I haven't studied that to give you any good advice and thoughts about Front Range Airport.

## Statistics (Chris Primus)

1. Chris Primus thanked Jeff Fegan.
2. Chris Primus shared some statistics that put DIA in perspective with other airports.
  - a. Total Jobs within 5 miles (2010 data; UNC):

- Of DIA: 21,000
  - DFW: 397,000
  - Houston: 171,000
  - Orlando: 145,000
  - Seattle: 190,000
  - Washington Dulles: 240,000
- b. These numbers illustrate the opportunities we have here. But, obviously, we have a lot of work to do.

## Round Table/EDC Panel Discussion

1. Moderator: Barry Gore, Adams County Economic Development
2. Panelists:
  - a. Laura Brandt, Metro Denver Economic Development Corporation
  - b. Yuriy Gorlov, Aurora Economic Development Council
  - c. Michelle Claymore, Commerce City Economic Development Director
  - d. Tricia Allen, Adams County Economic Development Senior Vice President
  - e. Michael Martinez, Brighton Economic Development
  - f. Dan Poremba, DEN Real Estate
3. Barry Gore introduced the panelists, and offered the panelists further specific questions for Jeff Fegan:
4. Tricia Allen: Spirit of cooperation and collaboration among the municipalities. How do you maintain that spirit of cooperation when you have changes in leadership? **Response:** It is very difficult. We dedicated resources from the airport to focus on surrounding communities. That was their job to stay connected and get out there to work with these communities. Dedicated resources were the key to our ongoing success.
5. Barry Gore: Is there a central point for the collaboration? **Response:** It was really hard for DFW because there are a lot of stakeholders involved. There wasn't really a central point. And we have a lot of tenants and developers.
6. Dan Poremba: Our study group has had strong consensus for infrastructure and financing. What advice can you give on that? How we might move that forward? **Response:** We were so fortunate to have that champion at the NCTCOG Michael Morris, who supported us. The Highway Department can only do so much. Tollways also made a difference.
7. Yuriy Gorlov: How many access points were added to the airport? **Response:** Probably 8 different connections leading to the international parkway.
8. Michelle Claymore: Any companies that required through-the-fence access? **Response:** We have never allowed through-the-fence access. I don't recommend that.
9. Barry posed a question to the panelists: What resonated with each of you the most about Jeff's presentation?
  - a. Laura Brandt: Most significant thing was the need for patience. The other was the fact that the airport is the reason that most companies are looking to come in to either Dallas or Ft. Worth.

- b. Poremba: The tale of four cities, and the early concern about competition amongst the cities. We'll be successful at economic development - if we can collaborate, we can make win-wins.
  - c. Michael Martinez: We are already ahead of the curve as it stands now with Metro Denver EDC - we market collectively to the world. We have good collaboration among our cities.
10. Barry Gore: What would be the challenges for businesses to locate near DIA?
- a. Michael Martinez: Infrastructure would be the biggest challenge and risk. But we are just starting so we can talk with the communities to address that risk.
  - b. Tricia Allen: Figure out how we identify the best tenant for that area. And also figuring out non-aviation-related business. In a survey, first was transportation and connectivity. The second most important factor to consider was amenities, such as retail, entertainment, and other aspects.
  - c. Yuriy Gorlov: The opportunity to attract international companies is huge. We need to figure out how to attract those companies.
  - d. Michelle Claymore: Would be fun to see how to attract niche companies where transportation is a big piece of their business.
  - e. Dan Poremba: We have a perfect storm occurring right now as far as opportunities. The FasTracks connection to the airport is huge. The improvements to I-70 are going to be a big plus. The 15,000 acres of land surrounding the Rocky Mountain Arsenal Wildlife Refuge cannot be discounted. Being able to contact Europe and Asia in the same business day—that platform is going to be important.
  - f. Barry Gore: It is our vision to build an aerospace technology park. The Front Range Airport is envisioned to be a spaceport, and build on aerospace sector that is already here in Denver. Gaylord is another one that will accelerate development. What I am hearing is the importance to get myself to my customers and our customers to us, we see that opportunity to fly to DIA and connect to the Front Range Airport, that door-to-door access would be important.
11. Barry Gore: What other business sectors do you think we should attract?
- a. Michelle Claymore: There are already interests for distribution centers around the airport.
  - b. Laura Brandt: We have heard that it is important for developers to be really close to the airport. Panasonic relocating on 61st and Peña Blvd is huge.
  - c. Michelle Claymore: We are widely known for our high-tech and highly educated workforce.
  - d. Michael Martinez: The Colorado Bioscience Organization could potentially help us.
  - e. Dan Poremba: Panasonic really is a game changer in the airport region. We need to establish a real estate paradigm that is not based on cargo. And Panasonic really has helped us start that.
  - f. Barry Gore: We have the rail connections and transportation facilities, but we don't have the population that DFW has. We are a destination airport for freight.
12. Barry Gore: Are there any recommendations for accelerating development around DIA?
- a. Michael Martinez: Formalize the collaboration from a governance standpoint is key.
  - b. Michelle Claymore: Solve infrastructure challenges. And communication, communication, communication.
  - c. Dan Poremba: A great case study was presented to this study - the Southeast Public Improvement Metro District. There is wealth of information that we can use from this and other studies that have been done that would allow us to collaborate, and collapse the timeline.

- d. Tricia Allen: Look at establishing a possible economic development acceleration zone. This may offer certain administrative or regulatory flexibility and incentive packages.
13. Barry Gore: Thank you to the panelists. Very exciting time for the area regarding aviation-related development. We are going to be around if anyone else has any questions.

## Next Steps and Adjourn

1. Chris Primus thanked everyone for coming and thanked Jeff Fegan for presenting today.
2. Today's presentation was recorded and will be posted on the Adams County YouTube channel for everyone to view - <https://www.youtube.com/watch?v=I5zj1GN53Ow>
3. The next SRC meeting is scheduled for December 10, 2015.
4. The next Steering Committee meeting is scheduled for January 14, 2016.
5. January 2016 will be spent working on our study framework, as well as the closeout of this study.



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# Welcome



## Colorado Aerotropolis Visioning Study

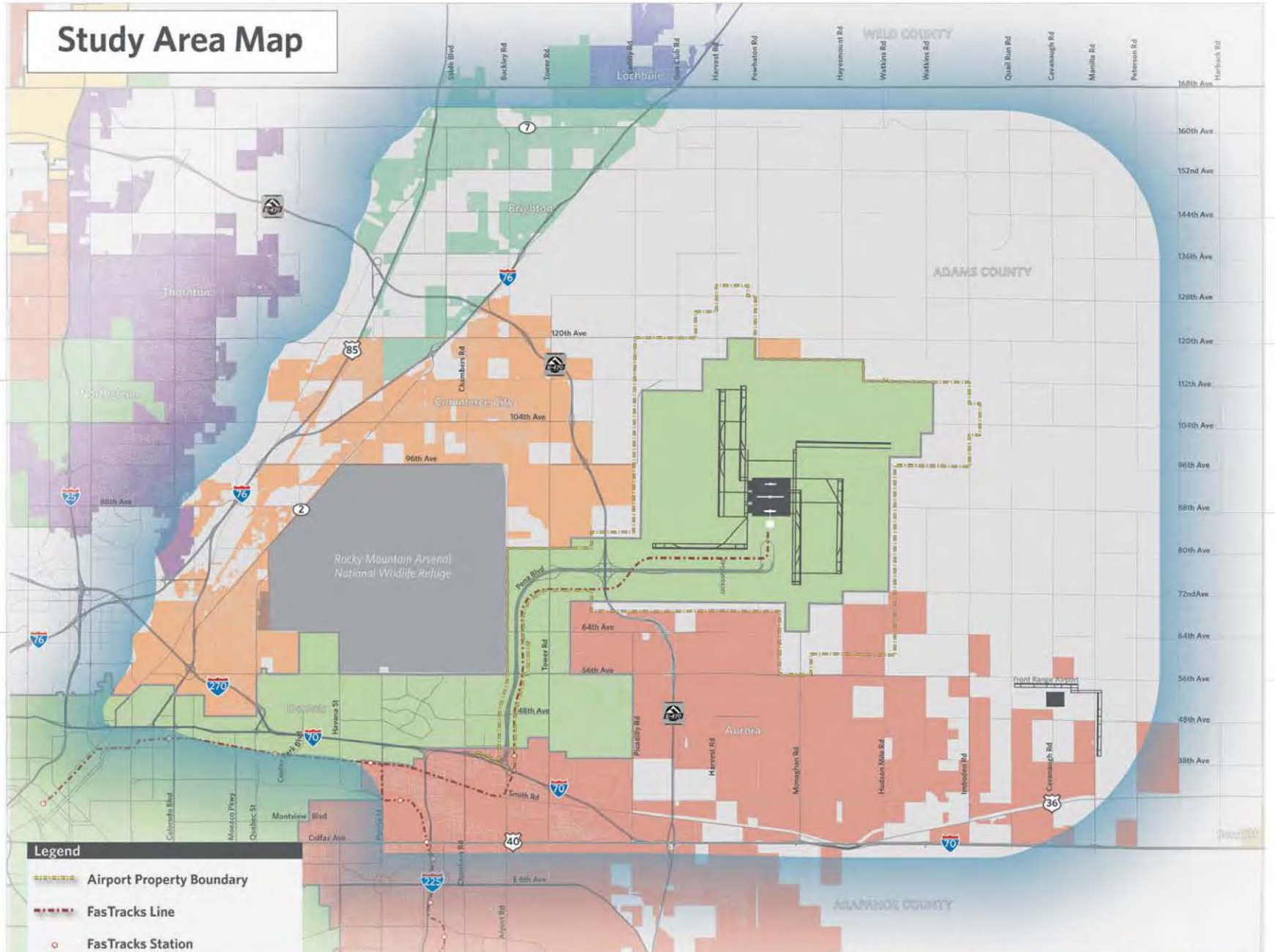


# Today's Agenda





- Study Overview
- Presentation by Jeff Fegan
- Panel Discussion



# Study Area Map



## Legend

-  Airport Property Boundary
-  FasTracks Line
-  FasTracks Station
-  Proposed Study Area Boundary



**Colorado Aerotropolis  
Visioning Study**



# Vision Statement

## COLORADO AEROTROPOLIS | Visioning Study



A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

# Study Objectives

- Setting a collaborative vision
- Comparing future growth with or without an Aerotropolis
- Identifying a framework of collaborative infrastructure possibilities
- Outlining a governance framework and implementation steps

# Study webpage

- <https://www.codot.gov/projects/aerotropolis>

The screenshot shows the Colorado Department of Transportation (CDOT) website page for the Colorado's Aerotropolis visioning study. At the top, there is a green navigation bar with the CDOT logo and the text "COLORADO Department of Transportation". Below this is a green header with a white "Projects" button. The main content area has a breadcrumb trail: "You are here: Home / Projects / Colorado's Aerotropolis". On the left, there is a "Quick Links" sidebar with three items: "Learn More", "Speaker Series", and "Visioning Study". The main content area features a section titled "Colorado's Aerotropolis" with a sub-heading "What is an Aerotropolis?". Below this, there is a "Visioning Study" section with three columns of text: "Overview", "Collaborative Investment", and "Stakeholders". At the bottom of the page, there are two statistics: "108 INDIVIDUALS PARTICIPATED" and "33 MEETINGS BY THE END OF 2015".

**CDOT COLORADO**  
Department of Transportation

## Projects

You are here: [Home](#) / [Projects](#) / Colorado's Aerotropolis

### Quick Links

- Learn More
- Speaker Series
- Visioning Study

## Colorado's Aerotropolis

One of the most compelling economic opportunities in the world is moving forward.

### What is an Aerotropolis?

An urban plan in which the layout, infrastructure, and economy is centered on and around an airport.

### Visioning Study

<b>Overview</b> The Federal Highway Administration funded a grant for a Colorado Aerotropolis Visioning Study to identify opportunities for the efficient infrastructure needed to foster and support economic development around Denver International Airport (DIA)EN. This study, administered by the Colorado Department of Transportation, comes at an opportune time to capitalize on the 1A ballot measure actions approved by Adams and Denver county voters. The visioning study will conclude in early 2016.	<b>Collaborative Investment</b> The planning framework will identify opportunities for collaborative investments in infrastructure (Transportation, Water, Wastewater, Power, and Drainage).	<b>Stakeholders</b> Jurisdictions adjacent to or near the airport are major stakeholders of the visioning study including Adams County, Aurora, Brighton, Commerce City and Denver. Economic development corporations, transportation agencies, and other infrastructure agencies are also involved in the study effort.
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**108 INDIVIDUALS PARTICIPATED**

**33 MEETINGS BY THE END OF 2015**

JEFF FEGAN

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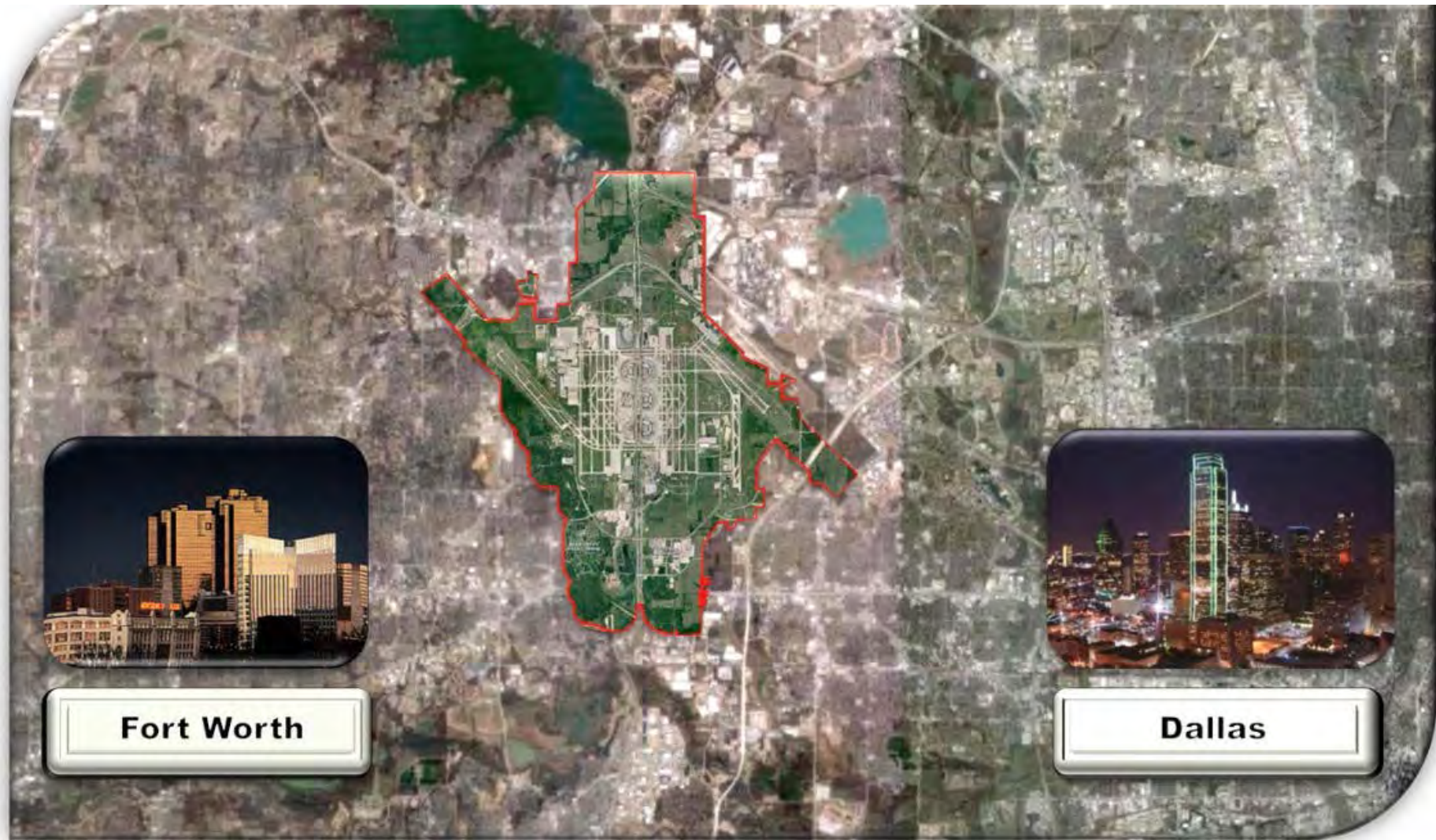


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# Land Development at DFW International Airport A Collaborative Journey

Jeffrey P. Fegan  
CEO, [JeffFegan.com](http://JeffFegan.com) LLC





**Fort Worth**



**Dallas**





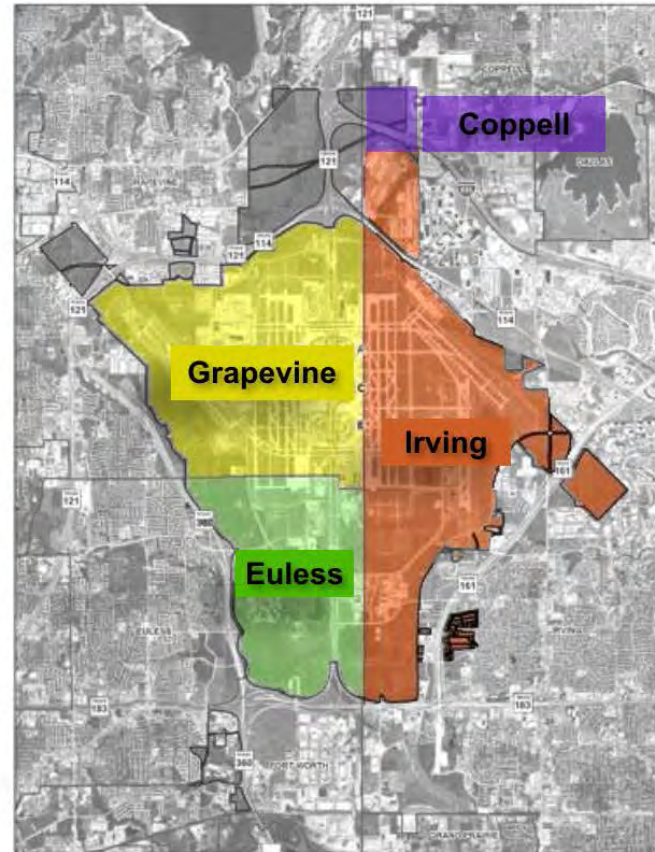


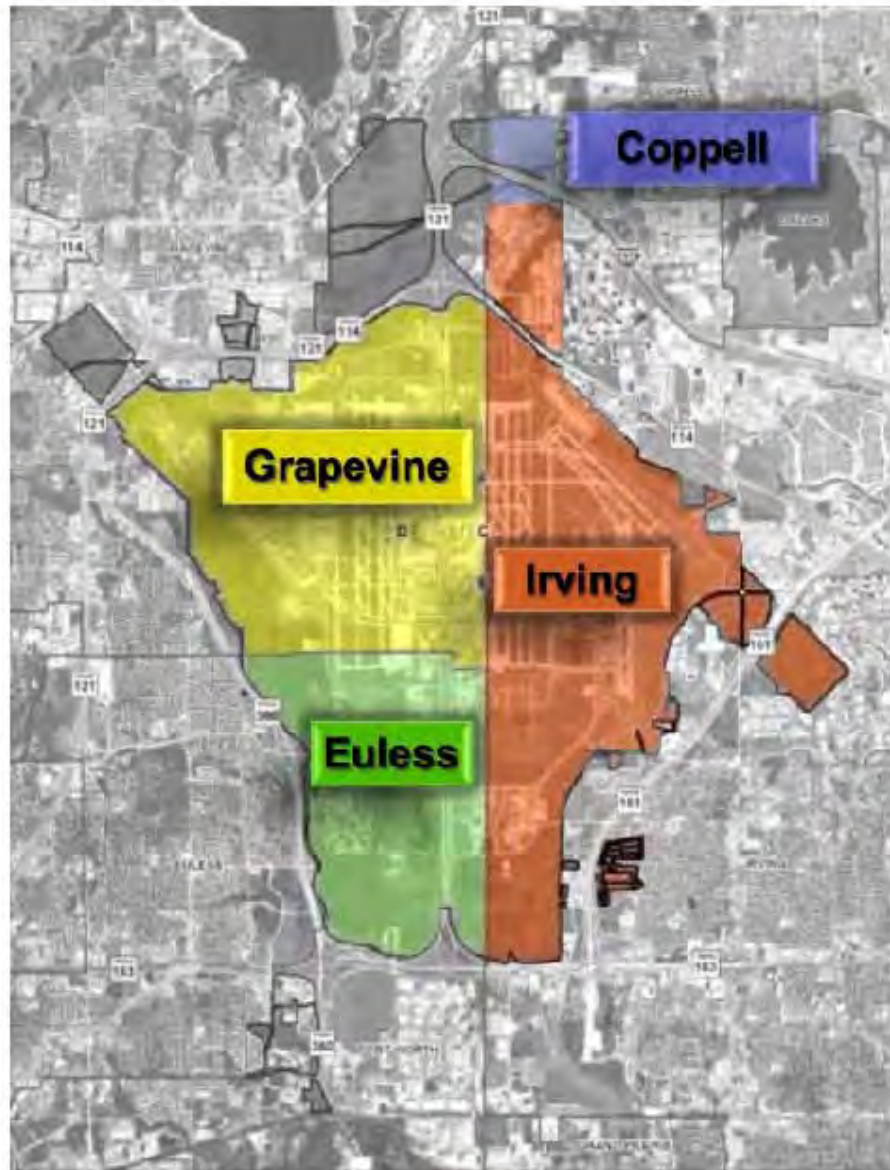






Photo of DFW and political jurisdictions

















# Hyatt Regency









## International Commerce Park











# Southgate Plaza





# Sikorsky



# Dallas Airmotive



Dallas Airmotive  
DFW International Airport  
September 21, 2015



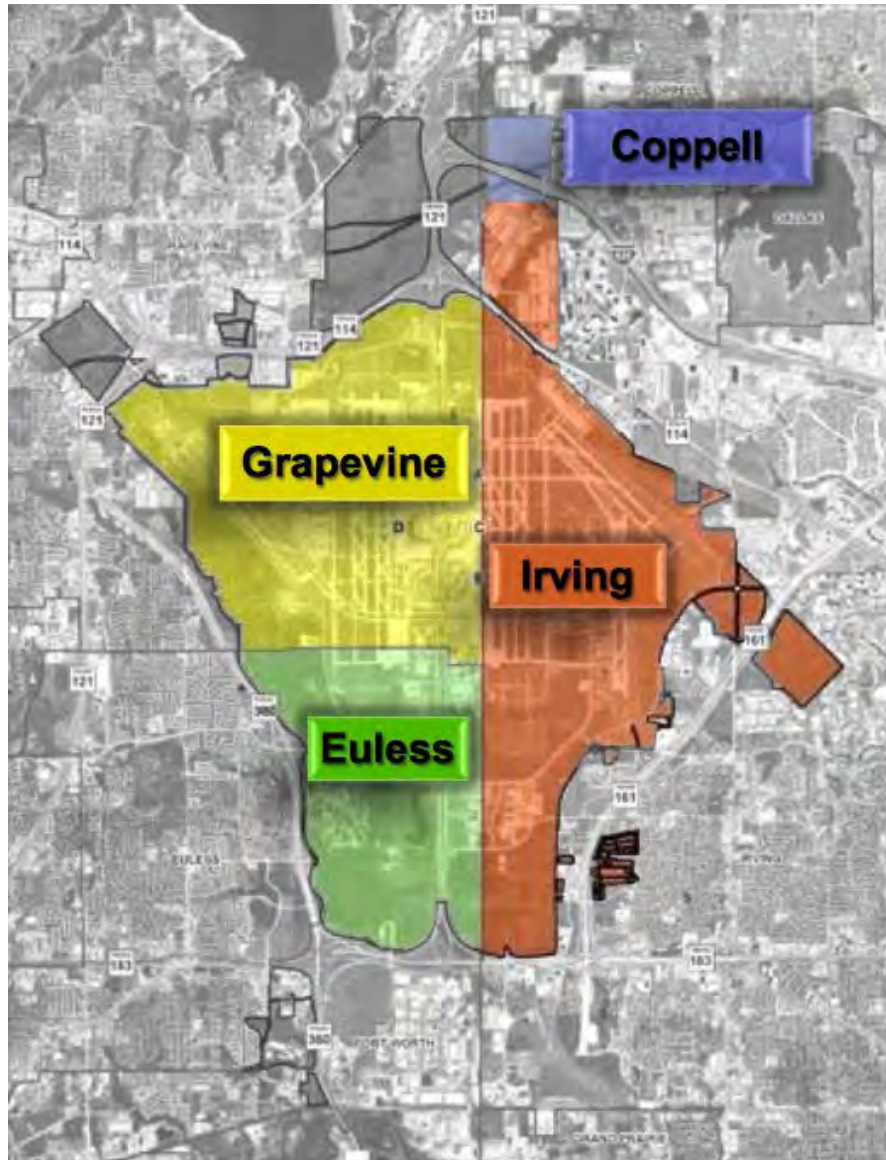


Logistics Center I  
December 22, 2014

# Logistics Center I











# PANEL DISCUSSION

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# Panel Participants

Moderator: Barry Gore, Adams County Economic Development

Panel Members:

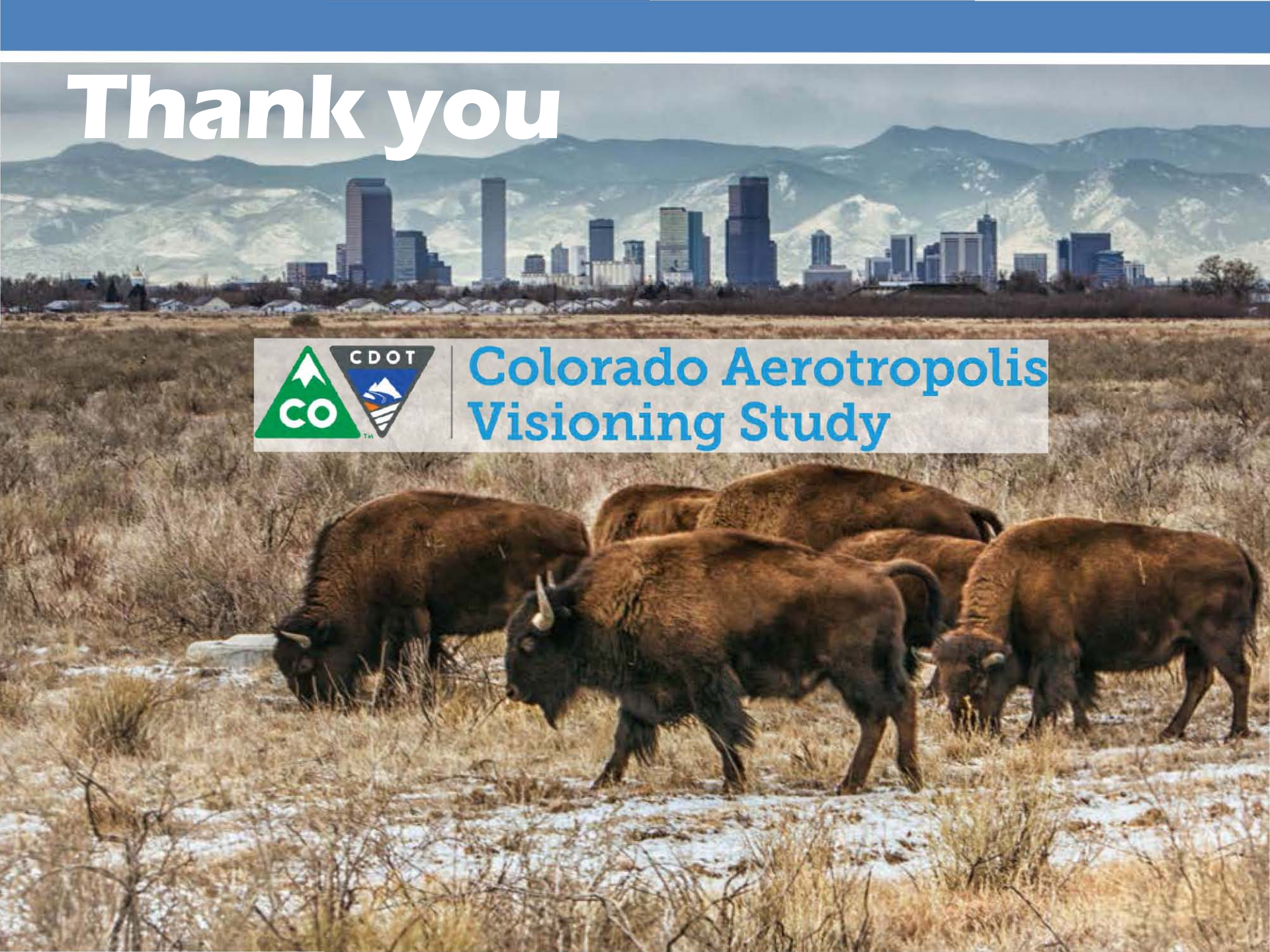
- Tricia Allen, Adams County Economic Development
- Laura Brandt, Metro Denver Economic Development Corporation
- Michelle Claymore, City of Commerce City
- Yuriy Gorlov, Aurora Economic Development Council
- Michael Martinez, Brighton Economic Development Corporation
- Dan Poremba, DEN Real Estate



# Thank you



Colorado Aerotropolis  
Visioning Study







# Colorado Aerotropolis Visioning Study

## Meeting Agenda

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Project:	Colorado Aerotropolis Visioning Study
Subject:	Steering Committee
Date:	October 22, 2015, 9:00 a.m.
Location:	Rocky Mountain Arsenal National Wildlife Refuge (same building and room as last time) Building 129 - Board Room

---

1. Welcome and Introductions
2. Study Update
  - a. IGA Amendment and Campaign
  - b. Study Schedule
  - c. Synopsis of Study Review Committee Workshops
3. Study Components
  - a. Scenario Analysis
    - i. Growth Projections
    - ii. Infrastructure
    - iii. Economic Analysis
  - b. Governance Considerations
4. Engagement Status
  - a. Water & Wastewater
  - b. Special Districts
  - c. Landowners
5. Speaker Jeff Fegan - November 19
6. Study Next Steps
  - a. Framework
  - b. Study Final Products
  - c. Presentations to Elected Officials
7. Roundtable
8. Next Steering Committee - January
9. Next Steps and Action Items

### COLORADO AEROTROPOLIS | Visioning Study



A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

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# Colorado Aerotropolis Visioning Study

## Meeting Agenda

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Subject:	Steering Committee
Date:	October 22, 2015, 9:00 a.m.
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### COLORADO AEROTROPOLIS | Visioning Study



A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

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Project: Colorado Aerotropolis Visioning Study

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Subject: Steering Committee Meeting #2

---

Date: October 22, 2015

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Location: Rocky Mountain Arsenal National Wildlife Refuge

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Attendees: **Commerce City:** Jim Hayes  
**Brighton:** Holly Prather  
**Aurora:** Bob Watkins  
**DEN Real Estate:** Dan Poremba  
**Adams County:** Abel Montoya  
**Denver:** Evan Dreyer  
**CDOT:** Jay Hendrickson  
**LXC:** Kip Cheroutes  
**HDR:** Chris Primus, Rick Pilgrim, Mary Speck

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Distribution: File

### Summary of Discussion:

1. Welcome and Introductions
2. IGA Amendment Update - Evan Dreyer
  - a. November 3 is Election Day for both counties.
  - b. 400-voter survey in Adams earlier this week - 60% in poll supported. Anticipate this or better in Denver.
  - c. Fundraising goal - almost hit budget of \$600k. Radio ads will start soon and go through Election Day. Five pieces are part of mail campaign. Have received endorsement from the Denver Post, and there have been presentations made to different groups. No apparent paid or organized opposition, except Denver County Republicans - but opposing all on ballot. Stock Show redevelopment - is also on the ballot - minimal controversy.
  - d. The region coming together has been helpful - elected officials, governor.
  - e. Kip Cheroutes asked question - where in Adams County was the poll conducted? Answer: Within areas that will be voting. Not just unincorporated Adams.
3. Study Schedule
  - a. Contract and grant currently have a December 31 deadline; CDOT and CCD are processing a time extension for the contract to wrap up the study in February.
  - b. FHWA has no objection to extension. They understand the start of study was delayed more than a year - transitioned administration of the study. Will likely be approved until end of federal FY - September 30, 2016.

#### 4. Synopsis of Study Review Committee Workshops

- a. In June 2015, each of the jurisdictions presented on the community's visions, etc., for Aerotropolis area.
  - i. One takeaway - lessons learned from DIA - importance of the economic development cycle and why an Aerotropolis makes sense for economic development. Lower cost for airlines, attracts airlines and routes; more businesses locate at Aerotropolis; this adds to development on and off-airport; on-airport development increases non-airline revenue, which leads to lower cost for airlines.
  - ii. Evan Dreyer mentioned that it was just announced that DEN will now have non-stop service from Denver to Munich 5x per week.
- b. Near-term and long-term initiatives.
  - i. A text polling exercise was done to see what the SRC thought was most important near term; result was a Super Regional Infrastructure Authority. The IGA Amendment has this element.
  - ii. Dan Poremba indicated that potentially post-IGA election, the focus of this Aerotropolis entity needs to be regional marketing. There has been a strong interest in regional marketing expressed in meetings.
  - iii. Chris Primus stated that as a result of this committee input, the study team has focused more attention to the question about how the jurisdictions would work together in the future - potential "governance" scenarios. Note the IGA Amendment Clause 5 includes a statement about establishing a regional and marketing entity.
- c. Scenario Development.
  - i. The Current Trends Scenario uses DRCOG date for 2040 - does not assume the IGA.
  - ii. Aero Scenario also is 2040, but assumes IGA in place and additional development occurs because of that
  - iii. Evaluation Criteria: what measures to use to compare scenarios. Team suggested some; SRC added others (in green):
    - Regional Compatibility
    - Community Acceptance
    - Environmental Sustainability
    - Infrastructure Efficiency
    - Economic Development
    - Regionalism and Cooperation
    - Global Recognition
    - Funding
  - iv. The SRC had a question about "Community Acceptance" - what is this community - is it the voters, elected officials, planning staff?
  - v. The SRC gave more details and suggestions for the Environmental Sustainability and Infrastructure Efficiency criteria.



vi. Discussion:

- Rick Pilgrim clarified that it's not so much an evaluation of each of the scenarios. It's really a comparison; if you continue, this is what would happen; if you come together, this is what would happen - benefits of working together. The results of this comparison will be good speaking points for elected officials and the IGA Amendment.
- There may be more nuance to it - the comparison should compare regional collaboration versus no regional collaboration, as opposed to IGA versus not-IGA.
- Sets the stage for recommendations. Want it relevant post-election.
- Kip Cheroutes suggested that a strategic theme resulting from the evaluation criteria be summarized- that the Aerotropolis will create jobs - thematically start to explain why all of this will create more jobs; how this looks.
- Guiding principle for Aerotropolis: Increase jobs and average incomes.

d. Employment Projections

i. Chris explained the methodology and growth allocation principles behind the Aerotropolis Employment Projections:

- For the Aerotropolis Scenario, the study team is assuming 75,000 additional off airport jobs over Current Trends Scenario through 2040. On airport - 18,000 additional jobs.
- Question: The increase that would result from what? It is an assumed ratio from on-airport jobs.
- Discussion:
  - Evan - The independent estimate of 12,000 jobs on the additional 1,500 acres doesn't account for associated increases in businesses allowed now, so 18,000 jobs is reasonable.
  - Abel Montoya mentioned that the State Demographer's office tracks job growth related to population growth. During the technology bubble was the only time jobs were equal to migration.
  - How do the 75k jobs look compared to the population growth projections? Answer: 75k about half employees in downtown Denver; half in greater DTC area - using DRCOG boundary definitions of these areas.
  - DRCOG numbers are not accurate. Over the last 10 years, dramatic influx to Colorado - 50,000 to 100,000 / year; has DRCOG foreseen this? Answer: in our study area, only 6k additional showing from DRCOG. DRCOG is working with jurisdictions now to update forecast numbers.
  - The team has used comparatives in region; and other aerotropolises across the globe to check these numbers for reasonableness
  - SRC determined these employment projections as a starting point - maybe conservatively.

- Evan Dreyer stated he wanted to understand growth and comparisons. Whatever data points are available help make the case for regional land use and transportation would be helpful. Chris will send a draft white paper on the growth projections.

ii. Employment Allocation Within Study Area

- Chris explained that the growth in employment was then allocated around the study area for purposes of the comparison exercise. The team developed the following allocation principles:
  - Access to Super-Regional Multimodal Transportation Facilities
  - Contiguous to Active Developments
  - Gravitational Pull of Larger Development(s)
  - Connectivity to DIA
  - Consideration of Geographic Diversity
- Chris said this was presented to the SRC last week.
  - As an exercise, the study team asked SRC to place employment growth around our study area using dots. Each dot represents 2,400 employees.
  - Compared to what the study team projected, there was no disagreement with the “L” south and west of the airport. The SRC identified additional outlying areas – Front Range Airport, Fitzsimons, Stapleton, Adams Crossing, in Brighton.
  - **Suggestion:** overlay the “on airport” employment projections on this map that current shows the off-airport employment.
- Chris then said that a draft infrastructure plan to support the growth in employment was developed for purposes of the comparison exercise. The team developed the following infrastructure development principles:
  - Access to Super-Regional Multimodal Transportation Facilities
  - Contiguous to Active Developments
  - Incremental to Previous Investments
  - Gravitational Pull of Larger Development(s)
  - Connectivity to DIA
  - Consideration of Geographic Diversity
- The study team identified the projects necessary to support the added development from local plans and DRCOG plan; focused on south and west side.
- Improvements include interchanges I-70, E-470, arterial capacity for pinch point, serving existing and future developments.
- Pinch point – Commerce City – currently widening Tower Road north of I-70.
- Question: Why are 56th or 120th Ave not highlighted? These will expand more in the future, probably post-2040. Perhaps they should be depicted with dashed lines.

– **Suggestions:**

- Also include the connection to Front Range Airport as dotted lines.
- Maybe a phasing of the roadway cross section? Consider add a phasing aspect to the map.
- Rick - shared that at a meeting with E-470 (that has been operating close to 30 years), staff indicated that the changes on south end include increasing use at 12-15% per year; their expectation is that over the next 30 years - similar changes.

– Housing Related to Employment

- Abel Montoya stated that when DIA was being built, Brighton had 136% increase in population. He suggested that with new development on and off airport, the south and east part might grow with housing - 56th; new roadway north cutting through. Those two places - are expected to have extreme increase in population growth.
- We know housing goes with employment - the study team hasn't discussed it much.
- Question: Does this take into account the supporting housing factor? Master planned communities in NE quadrant are providing a diversity of housing. There needs to be a broad range of housing types and values - lower-wage and executives.
- Question: Are the noise contours conducive to development? The answer is yes - they have not hindered Reunion, High Point Green Valley Ranch, Painted Prairie.
- Commerce City stated there are some challenges with the multifamily master-planned developments. Developers want to convert to single family because there is no transit or access. This is a chicken and egg situation with transit/multifamily housing.
- Rick - related to planned developments, Aurora is planning 5,000 housing units, which equates to 60,000 to 65,000 people.
- Evan Dreyer stated, if we do nothing, the projection for growth is that Adams County is the most populous county in the region. There will be housing and transportation impacts. This should be part of the narrative; good planning would achieve a good housing balance.
- **Suggestion** to overlay master planned residential communities, such as Brighton's entitled master planned communities on the map.

– Economic Analysis

- Using agglomeration effects - synergy when businesses locate next to each other. There are both quantitative and qualitative assumptions for comparing the two scenarios.

5. Governance

- a. Panel discussion was held for SRC #4 where panelists shared thoughts, experience, suggestions for SRC.
  - i. Ed Icenogle - Partner at Icenogle, Seaver, Pogue - governance structures.
  - ii. Don Hunt - Former Executive Director, CDOT - early work on southeast area of DTC.
  - iii. Tom Clark - Metro Denver EDC - history.

- iv. Peter Kinney - Metro Mayors Caucus.
  - b. Common theme was that collaboration is important.
  - c. Prior to panel discussion, the SRC had gone through a big ideas and big actions exercise; surprising - top recommendation from the group was governance - before deciding on big ideas and actions.
  - d. Ed Icenogle is being added to the team to further investigate governance structures; may ask to meet with staff and joint meetings. Better understanding of the districts in place now and community visions.
  - e. Patrick Mulhern from SPIMD presented at the last SRC meeting.
    - i. Concept of governance had been embraced, which created momentum.
    - ii. SPIMD - 4 developers (competitors) came together. 23 districts - 20 wrapped into district with a low mil level - transportation support, TMA, travel demand.
      - Champions have helped this group. George Wallace (Tech Center), John Madden (Greenwood), Walt Koelbel, Beardsley (Inverness).
    - iii. Joint SE Public improvement Assn. - collaborative, developer-led (no participation from municipalities).
    - iv. Too many metro districts - the answer was an overlay district: SPIMD. SPIMD partners with the jurisdictions, including CDOT.
    - v. SPIMD was focused on transportation - should have included water and wastewater; water issues are fractioned within the area.
    - vi. Discussion:
      - Question: How was mil levy set so low? There are mechanisms to net out the mil - ways to reduce those out at the metro district level; don't want to duplicate mils - that are for the same infrastructure improvements.
      - It was noted that with all of the experiences of these organizations, the current Aerotropolis effort has the potential to compress a 40-year learning curve to get to valuable implementation strategies much quicker.
6. Talking with Landowners
- a. There have been suggestions to bring in - larger landowners in the area to help them understand what the study has been looking at.
  - b. What does this group think about this - when and how? Ed wants to meet one-on-one with maybe six of them. Be careful about who to invite - so no one is left out. Must be tactful. It was decided not to wait for study findings.
  - c. **Suggestion** to invite landowners to Nov 19 event with Jeff Fegan, who was at the Aerotropolis convention last December.
  - d. Property owners may need to be briefed up front - don't want them to feel threatened and let them know that the study's future steps will involve them.
  - e. The City of Aurora is holding regular meetings with developers in Aurora.



- f. **Concurrence** was to invite landowners to come to event via email as a kick-off, customizing emails going to landowners. Then, follow up by Ed Icenogle to meet one-on-one, followed up by meetings.
  - g. Part of the event presentation needs to be a summary of where we've been, where we're headed to give an overview for those who haven't been involved prior to this.
7. November 19 Event with Jeff Fegan
- a. How to get the word out:
    - i. Critical to promote the event for a good turnout and recharge SRC people to attend.
    - ii. Reach out to:
      - Senior staff and all staffs.
      - Elected officials. Give them a heads-up (city councils and commissions). Develop an agenda for the event that can be communicated in a regular report.
      - Landowners and special districts.
    - iii. It was decided that the specific jurisdictions would send emails to their contact lists. The Airport has a lot of lists - concessionaires, vendors, doing business at airport - and those who want to do business
  - b. Event logistics:
    - i. Would we record this? Yes, will be videotaped.
    - ii. Abel Montoya indicated the Government Center has the capability to broadcast on YouTube, but meeting has to be in public hearing room.
      - Two Hundred, Abel - work through logistics
    - iii. CDOT's PIO office needs to be involved.
8. Study Next Steps
- a. Three deliverables:
    - i. Framework of recommendations - based on findings.
    - ii. Final report - documentation of activities, analyses.
    - iii. Executive Summary - short brochure type of form.
  - b. Video produced?
    - i. Could be placed on the web - ongoing for months to document what the concept is and study findings.
    - ii. Consider something that can be produced in multiple languages.
    - iii. Interim video out from this group - to the jurisdictions involved - to identify next steps after the elections. Elected officials - can this group's findings help them post election?
  - c. Two objectives of the video and Executive Summary:
    - i. Outputs/next steps here.
    - ii. Implementation of IGA amendment.

d. Executive Summary

- i. If there is an interim ES, needs to come out early in November. It would detail the process and interim results. Tweak it a week after election results.
- ii. Want to make the point that this group is the best well-positioned group to assist elected officials to implement the IGA amendment and describe what this group could do to help implement the IGA amendment going forward.
- iii. How to help with regional marketing and infrastructure evaluation, which parallel with the IGA Amendment.
  - **Follow-up:** Send growth projections - and today's Powerpoint to Evan.

e. City Councils/Commissions

- i. Meet with the ACC shortly after election, early November - what is next?
- ii. Aurora - there will be a transition in Council and some new members. Sequence for presenting study findings to Aurora elected officials: City Manager - then go to a Council Committee - meeting week of Nov 16. Committees may not meet in December; Full council study session full presentation - January or February. Council presentation is essential.

9. Other

a. What is the status of the Peña Study?

- i. Outreach - is that part of a post-election discussion, or is it separate?
  - Should be coordinated with outreach for IGA Amendment; when and how?
  - The study is beginning of outreach to individual jurisdictions to talk about technical analysis - shortly after election.
  - DIA is under pressure by FAA to get an answer about Peña problem. Gave more time for the IGA election; but must have a solution by next spring.
- ii. Between November and March/April - everything converges. There is a technical path and a policy path.
- iii. **Suggestion:** Could the Pena group present to the SRC?

## Steering Committee Decisions

1. Agreement that the jurisdictions would invite landowners to the November 19 event with Jeff Fegan via email as a kick-off, customizing emails going to landowners. Then, follow up by Ed Icenogle to meet one-on-one, followed up by meetings.
2. Agreement to move forward with an Executive Summary and an interim and final video.
3. Consider January 14 for the next meeting

## Follow-up Actions

1. Send November 19 invites to Steering Committee and SRC members for distribution to their agencies and contact lists.
2. Send calendar appointments for next Steering Committee on January 14.
3. Send today's presentation and growth projections to Evan Dreyer.



Name	Agency	Position/Title	Email	Phone
Chris Plinius	HDR	PM	christoplw.plinius@hdrinc.com	3 323 98 38
JAMES HAYES	COMM CITY	DEPUTY CM	JHAYES@CO.GOV.COM	3-289-3619
Holly Prather	Brighton	Comm. Dev. Director	hprather@brightonco.gov	3-655-2022
JAY HEWDRICK	CDOT	PROGRAM MGR	JAY.HEWDRICK@CDOT.CO.GOV	3/612-5501
EVAN DRAYAN	DRAPER			
Abel Montoya	ADAMS	Dir. Long Range Strategic Planning	amontoya@adco.gov.org	720 523-6800
Dan Perumba	DIA	SVP Dir. REAL ESTATE	dan.perumba@Hydenvar.com	3.621.5524
KIP CHEROUTES	LXC		LXC2@AOL.COM	3.204.0479
Bob Watkins	Aurora	Dir. of Planning + Dev Services	rwatkins@aurora.gov	3-734-754
Rick Pugin	HDR		rick.pugin@hdrinc.com	3-3186324
MARY SPECK	HDR		mary.speck@hdrinc.com	3-764-1566



# Welcome



## Colorado Aerotropolis Visioning Study

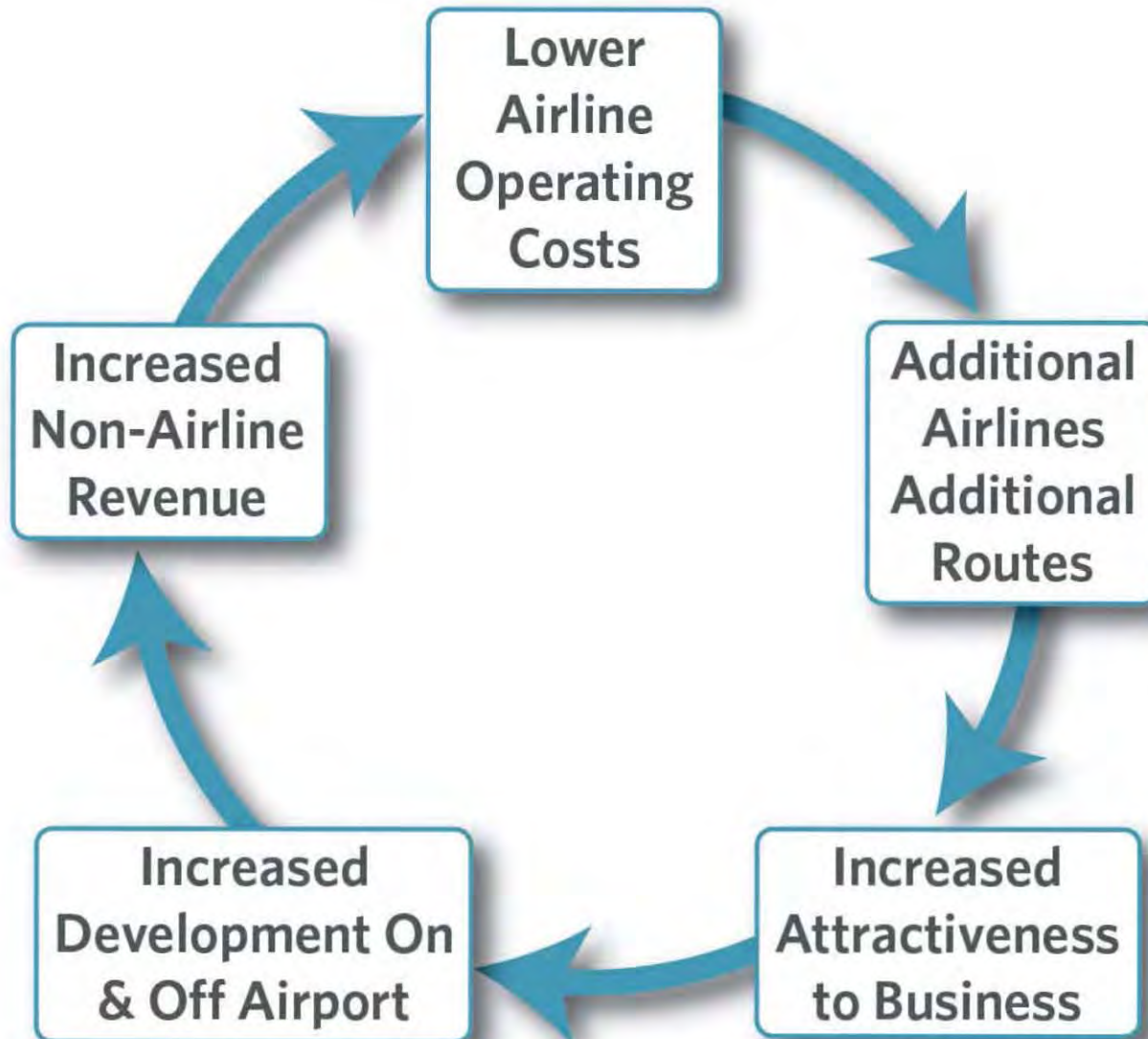




# Community and Agency Briefings



# Economic Development Cycle





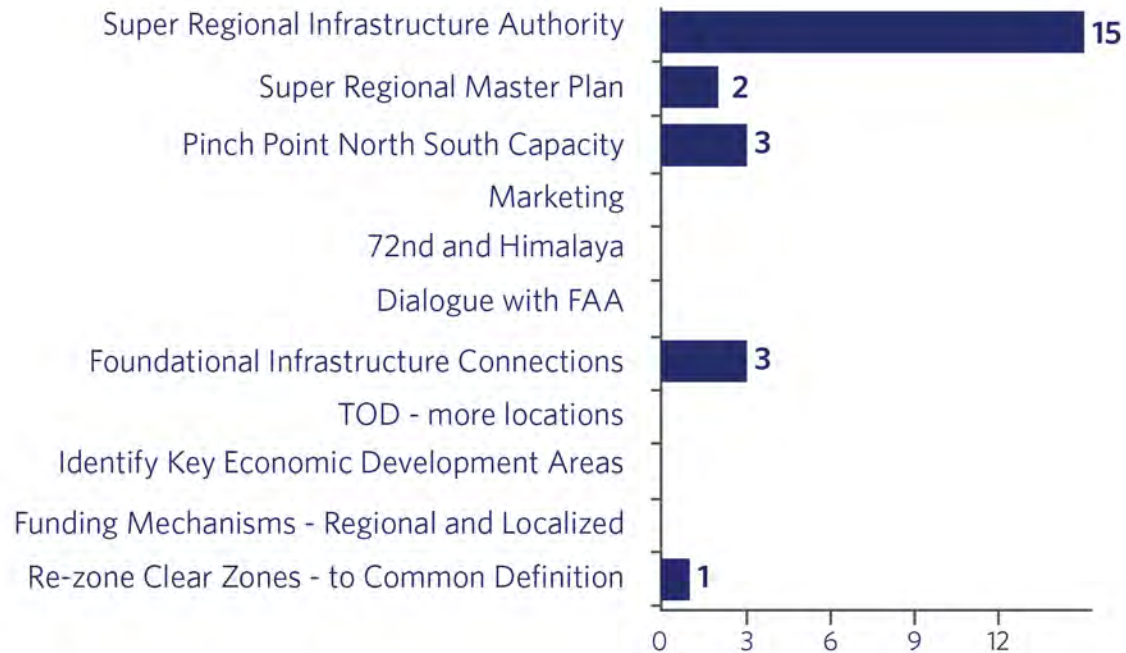
# Near-Term and Long-Term Initiatives





# Priority Issues of Jurisdictions

- Identified Near-term Initiatives for Study

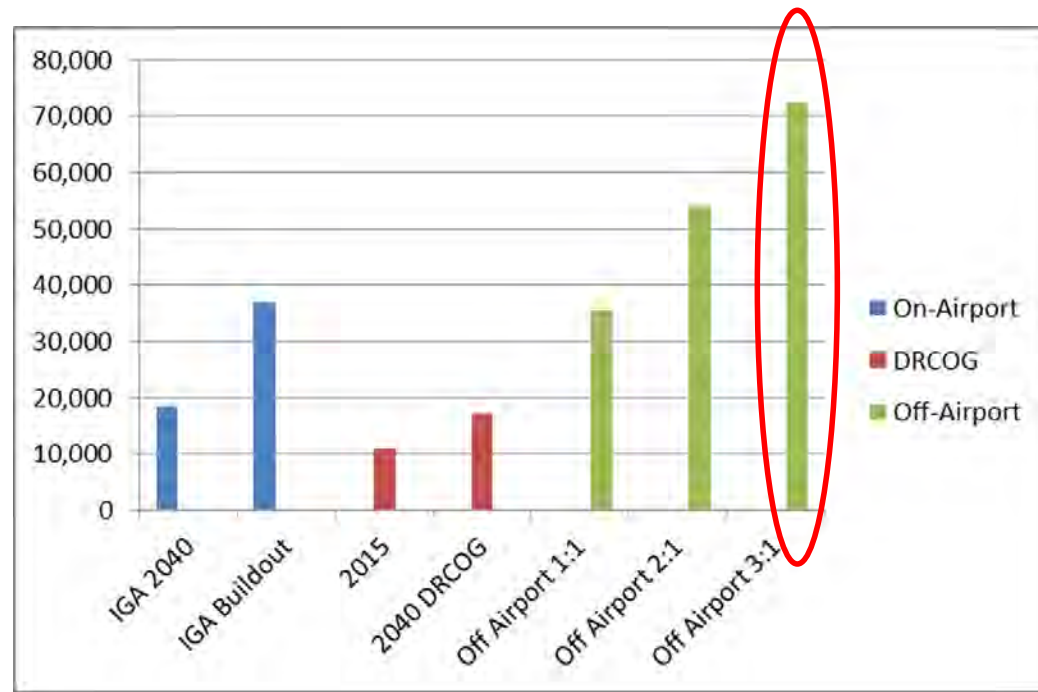


# Scenario Analysis

- Current Trends Scenario
- Aerotropolis Scenario
- Evaluation Criteria
  - Regional Compatibility
  - Community Acceptance
  - Environmental Sustainability
  - Infrastructure Efficiency
  - Economic Development
  - Regionalism and Cooperation
  - Global Recognition
  - Funding

# Aerotropolis Employment Projections

- Higher than DRCOG 2040 Projection
- Two Possibilities:
  - Reallocation among DRCOG Region
  - Exceed 2040 Regional Control Total

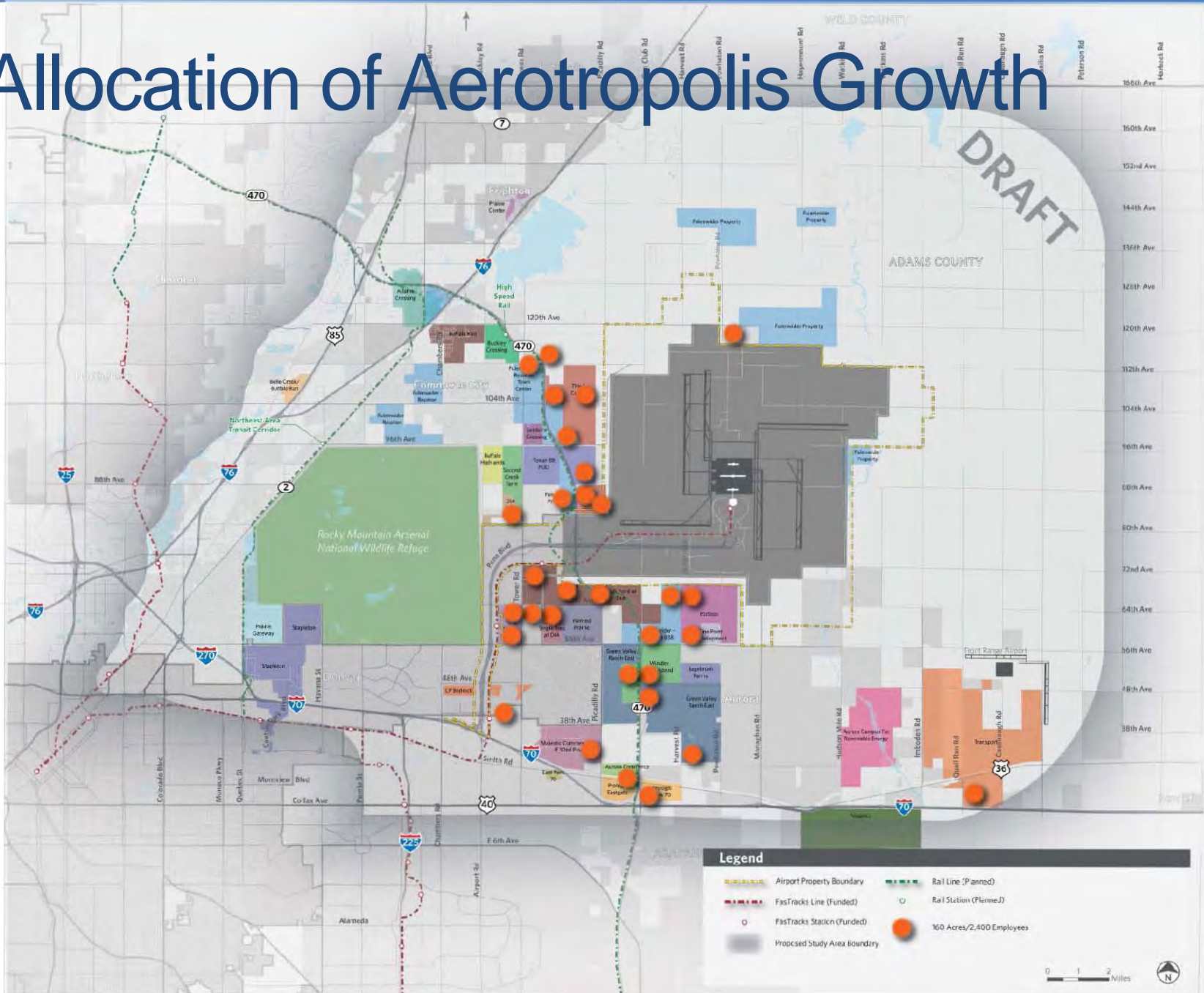


# Growth Allocation Principles

- Access to Super-Regional Multimodal Transportation Facilities
- Contiguous to Active Developments
- Gravitational Pull of Larger Development(s)
- Connectivity to DIA
- Consideration of Geographic Diversity



# Allocation of Aerotropolis Growth

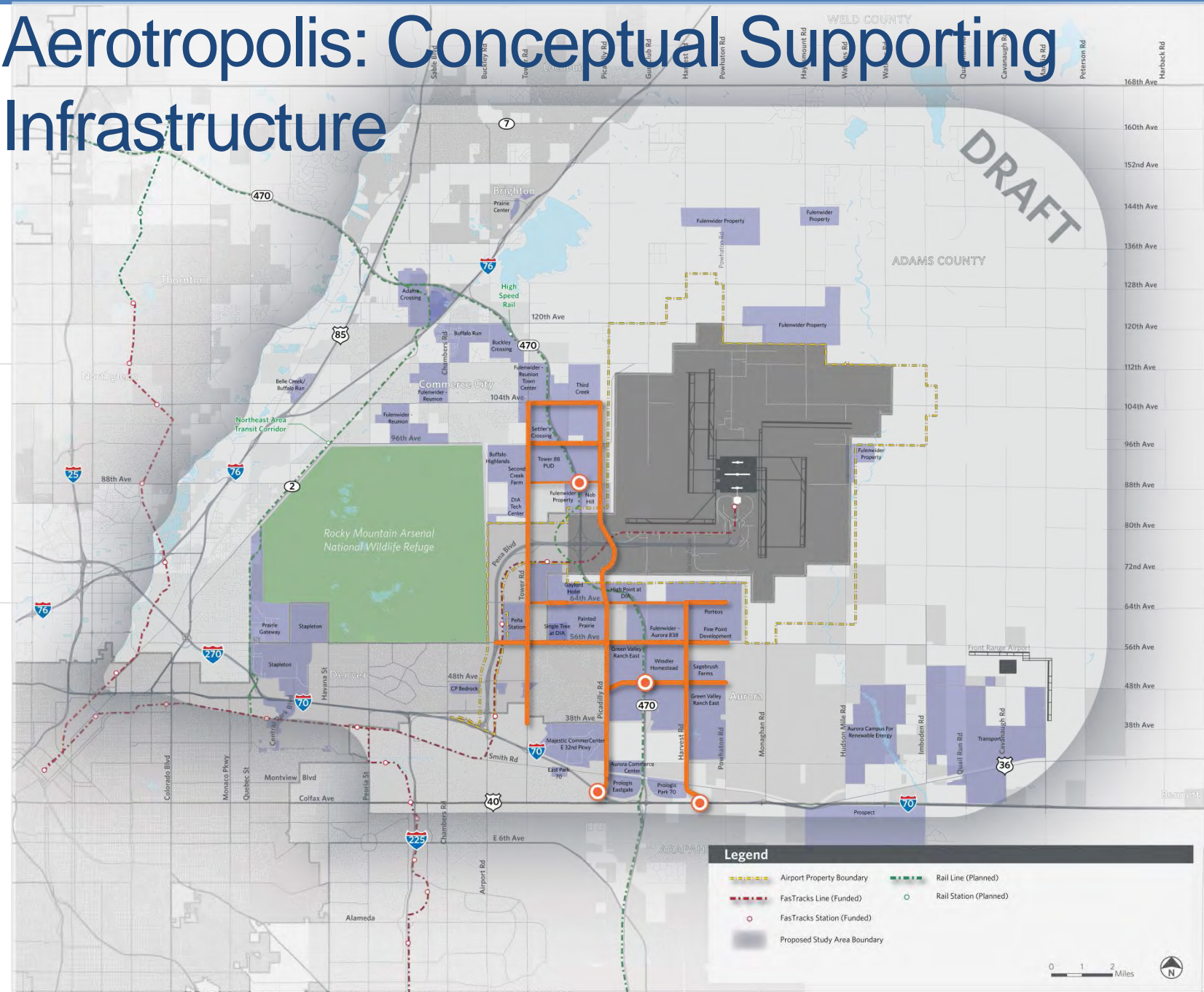


# Transportation Development Principles

- Access to Super-Regional Multimodal Transportation Facilities
- Contiguous to Active Developments
- Incremental to Previous Investments
- Gravitational Pull of Larger Development(s)
- Connectivity to DIA
- Consideration of Geographic Diversity



# Aerotropolis: Conceptual Supporting Infrastructure



# Economic Analysis

- Objective: Assess Agglomeration Economy Effects
- Quantitative
  - Capital Cost Savings
  - Real Estate Values
  - Property and Sales Taxes
  - Direct/Indirect & Permanent Jobs
- Qualitative
  - Wage Growth
  - Productivity
  - Quality of Life



# Governance Panel

- Don Hunt – Former Executive Director, CDOT
- Ed Icenogle – Partner at Icenogle, Seaver, Pogue
- Tom Clark – Metro Denver EDC
- Peter Kinney – Metro Mayors Caucus



# Southeast Public Improvement Metropolitan District

- Patrick Mulhern – SPIMD



# THANK YOU

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# Colorado Aerotropolis Visioning Study

## Meeting Agenda

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Project:	Colorado Aerotropolis Visioning Study
Subject:	Steering Committee
Date:	8:30 June 4, 2015
Location:	Rocky Mountain Arsenal National Wildlife Refuge

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1. Welcome and Introductions
2. Study Review Committee Workshops Discussion
3. Study Decisions
  - a. Study Name
  - b. Study Vision Statement
  - c. Study Area
  - d. Proposed Study Outcomes
    - i. Existing Conditions and Plan Compilation
    - ii. Scenario Development/Growth Analysis
    - iii. Post-Study Framework
4. Roundtable - Perspectives on Study
5. Committee Structure
  - a. Steering Committee
  - b. Study Review Committee
6. Communications Protocol
  - a. Study FAQ Sheet
7. Other
8. Next Steering Committee - TBD
  - a. Meeting location
9. Next SRC meeting June 18 - Scenarios
10. Next Steps and Action Items

### COLORADO AEROTROPOLIS | Visioning Study



Create a sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning.





## Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Steering Committee Meeting
Date:	June 4, 2015
Location:	Rocky Mountain Arsenal National Wildlife Refuge
Attendees:	<b>Commerce City:</b> James (Jim) Hayes (JAH) <b>Brighton:</b> Marv Falconburg (MF) <b>Aurora:</b> Bob Watkins (BW) <b>DEN Real Estate:</b> Dan Poremba (DP) <b>Adams County:</b> NA <b>Denver:</b> NA <b>CDOT:</b> Jay Hendrickson (JH) <b>LXC:</b> Kip Cheroutes (KC) <b>HDR:</b> Chris Primus (CP), Rick Pilgrim (RP), Kaia Nesbitt (KN)
Distribution:	File

### SUMMARY OF DISCUSSION:

1. Welcome and Introductions (Rick Pilgrim)
2. Study Overview and Schedule
  - a. This study will develop a framework for moving forward; it has a tight timeframe to complete by end of 2015.
  - b. Scenarios will be developed for later this month.
  - c. Questions:
    - (DP) Refer to DEN's 'Quilt Plan'—highlighting collective interests of Land Use. Follow-up—Reach out to DEN for their combined plan. Possible Tryba/CH plan for land uses and infrastructure.
    - (BW) De-emphasis land use in Aurora—Their uses near DIA are flexible. Infrastructure (especially transportation) is hot issue.
    - (JAH) Commerce City—Flexible about land use, but infrastructure is key. Nob Hill is closest development opportunity to airport, but as a high geographic point it's expensive to serve with infrastructure.
    - (KC) Should we have the key developers/property owners included? (BW) Some of them have good financing plans. (Fulenwider, Oakwood Homes, Porteos...)
    - (JH) Maybe we can use the new Partnership Agreement (mediation) to help fund/prioritize major infrastructure moves.
3. Stakeholder Committee—Representation
  - a. (BW) Depends on the purpose of the committee—if it's about having the involved parties, then it makes sense for DEN to be involved. If decisions are not made by voting, then yes, absolutely they

should be involved. If we are having discussions and working toward consensus, then DEN should have a seat.

- b. (JAH) It wouldn't be a robust planning exercise without DEN at the table.
- c. (MF) Agree with JH. Shared marketing is important.
- d. (DP) You'll find DEN and Denver don't always have the same point of view. If there's an unfair advantage in voicing preferences because of DEN and Denver, we're willing to adjust.
- e. (JH) Note, DEN impacted by FAA regulations that Denver is not.
- f. (MV) If this is about voting on priorities, we might have a different opinion.
- g. **OUTCOME: Substantial agreement to have DEN on Steering committee.**

#### 4. Study Decisions

- a. (DP) There's opportunity for this committee to make recommendations for post-study framework, including entity inclusions. For example, collaborative marketing, development along Piccadilly. This is about regional economic benefit and jobs. Most of the development will be off-airport because of FAA headaches.
- b. (KC) Invite the campaign to our study committee to make sure we're aligned (the contact person is Mike Melanson).
- c. (JH) November elections anything related or conflicting with the IGA issue? (JAH) council elections and mayor, school district bond issues. (MF) Nothing major. (KC) Denver will have a vote for the stock show bonding.
- d. (JH) general overview comments about the positive momentum and collaborative success so far on this study. (DP) "Just keep going! I feel like this project is moving at lightning speed compared to some of the others."
- e. (JH) Noted meeting with representative from Colorado's office of Economic Development and International Trade.
- f. (JH) Project name—All agree it's ok as "Colorado Aerotropolis Visioning Study."
- g. (JH) Project vision—revised to include 'Colorado' and '..planning, development and financing'. All agreed.
- h. (CP) Project boundary—Revised to capture south side activity near I-70 interchanges. Boundary will be moved to ½ mile south of I-70. All agreed.
- i. (JH) This may lead us to coordinating with Arapahoe County. After discussion, the study team will consider further.
- j. (JH) Revision to FAQ—The FAQ will be updated to reflect new language for the Proposed IGA amendment. Also, the Question concerning Peña Boulevard will be deleted as it confuses the issue.
- k. (BW) Overall, what does this study team need from us? (JH) We need to know when you disagree, we need continuous participation through the process, we will need your input one-on-one, we need your continuity of meeting participation, your coordination with elected officials.

5. Interaction with Elected Officials (CP)
  - a. Steering committee members to help the team ensure communication with elected officials. This will be accomplished by informal via briefings throughout the study, and a final summary to Council/Commissions at the end. (BW)
  - b. Issue of Peña Blvd study coordination/conflict. Their alternatives should inform our study (JAH). We need to make sure the two are not seen as colluding (JH).
6. How will this study help you? What does post-study framework look like?
  - a. Aurora—It's about transportation, interchanges along I-70, arterial connections, sewer. Looking at a taxing approach for funding. Example—Porteos asking for connection to I-70. Post study framework—not sure yet. Financing ideas are coming from the property owners (BW).
  - b. DEN—focus on infrastructure over land use. Connectivity of roadways is really important. Districts are important for figuring out financing. Could catalog the districts that exist within the boundaries. Can help figure out what the regional overlay might look like. Do we need an infrastructure financing consultant? (DP)
    - Aurora currently using someone (BW).
    - Infrastructure financing is within HDR scope, but at conceptual level. Evaluate options (benefits/issues with each) such as P3 (CP).
    - Ed Icenogle has developed 12 ways for infrastructure financing, including requirements and elements. He has advised the mayors caucus (RP).
  - c. Brighton—Completely on board. It's our job to go back to councils and manage that until the end. We have infrastructure to our land area and decent transportation but we need better connections. Commerce City and light rail are interested in light rail in the future. Also interested in joint marketing. Vestas has brought 1500 jobs—great story and example (MV).
  - d. Commerce City—We will reach out to our developers. Cowley Companies, Fulenwider, Prime Sites, [Shea](#), Need to involve South Adams County Water and Sanitation (Abel Moreno) because we don't provide utilities at all. FAQ is great for city council (JAH).

#### STEERING COMMITTEE DECISIONS

1. DEN will have seat on Steering Committee for this project going forward.
2. Agreement to move forward with study name as "Colorado Aerotropolis Visioning Study."
3. Agreement to move forward with the revised Vision Statement.
4. Agreement to move forward with the project boundary, revised to include interchanges along I-70.

#### FOLLOW-UP ACTIONS

1. Make sure Planning staff from each jurisdiction attends the Scenarios meeting.
2. Consider inviting Mike Melanson (campaign manager for IGA initiative).
3. Team Action—How to involve Arapahoe County (JH).

4. Revisions to Vision, study boundary, FAQ (as noted during meeting).
5. Set meetings as far in advance as possible. Set August meeting now.
6. Follow up with Steering committee members regarding their opinions about interaction with elected officials.
7. Team to map our plan for end-of-study council presentations.
8. Give Brighton 5 minutes to 10 minutes min to tell their story at the June 18 SRC meeting (Holly Prather).
9. Consider distributing FAQ sheet and study area map to city councils.
10. FAQ updates—will be received by Friday. Suggestions: add vision statement; correct the word 'visioning'; remove the Peña Boulevard study reference.







# Colorado Aerotropolis Visioning Study

## Agenda

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Project:	Colorado Aerotropolis Visioning Study
Subject:	Study Review Committee Meeting #10
Date:	March 1, 2016 8:30 - 10:30 a.m.
Location:	<b>CDOT Headquarters - Auditorium</b> <b>4201 E Arkansas, Denver, CO 80222</b>

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1. Welcome and Introductions
2. Presentation - Urban Drainage and Flood Control District
3. Study Calendar - Councils and Commission Presentations
4. Study Summary Presentation
  - a. Study Recommendations
  - b. Standard Responses to Potential Questions
5. Study Reports
  - a. Executive Summary
  - b. Comments Received - Summary
6. Plan for Outreach to Major Landowners
7. Reflections and Study Impressions
  - a. What surprised you?
  - b. What expectations do you have moving forward?
8. Adjourn

### COLORADO AEROTROPOLIS | Visioning Study



#### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

# Colorado Aerotropolis Visioning Study Adams - Commerce City - Brighton - Denver - Aurora

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 February	2	3	4	5	6
7	8	9	10	11 Draft Reports Sent	12	13
14	15 Presidents' Day	16	17	18	19 Draft Presentation Sent	20
21	22	23	24	25	26 Report Comments Due PPT & Draft Reports to Denver PIO Meeting	27
28	29 Steering Committee Mtg #5	1 March SRC Meeting #10 Denver Mayor 11:30	2 Presentation Comments Due	3	4 Material to Adams Cty	5
6	7	8	9	10 Material to Aurora	11	12
13	14 Material to Brighton	15	16	17	18	19
20	21	22 Presentations to Adams County and Brighton 6 pm	23	24 Presentation to Aurora	25 Good Friday	26
27 Easter	28 Material to Commerce City	29 Presentation to Denver 1:30	30	31	1 April	2
3	4 Material to Aurora	5	6 Presentation Metro Denver Aviation Coalition	7	8	9
10	11 Presentation to Commerce City	12	13	14	15	16
17	18 Presentation to Aurora	19	20	21	22	23
24	25 Presentation DRCOG TAC	26	27	28	29 Final Report	30



# Colorado Aerotropolis Visioning Study

## Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: Study Review Committee Meeting #9

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Date: January 21, 2016 9:00 - 11:30 a.m.

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Location: City of Commerce City Recreation Center  
6060 E. Parkway Drive  
Commerce City, CO 80022

1. Welcome and Introductions
2. Governance Options
3. Multimodal Loop Discussion
4. Economic Analysis
5. Final Report
6. Study Recommendations
7. Study Schedule
8. Next Meeting
9. Adjourn

## COLORADO AEROTROPOLIS | Visioning Study



### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.



## Colorado Aerotropolis Visioning Study

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
17	18 ML King Day	19	20	21 SRC Meeting #9	22	23
24	25	26	27	28	29	30
31	1 February	2	3	4	5 Send Draft Reports	6
7	8	9	10	11	12	13
14	15 Presidents' Day	16	17	18	19 Send Draft Presentation	20
21	22	23	24	25	26 Report Comments Due	27
28	29 PIO Meeting Wk of 29th	1 March	2	3	4	5
6	7	8	9	10	11 Presentation Comments Due	12
13	14 Finalize Presentation this week	15	16	17	18	19
20	21	22 Presentations to Adams County and Brighton	23	24	25 Good Friday	26
27 Easter	28 Presentation to Commerce City	29 Presentation to Denver	30	31	1 April	2
3	4	5	6	7	8 Final Report	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

Project:	Colorado Aerotropolis Visioning Study
Subject:	Study Review Committee #9
Date:	January 21, 2016 9:00 a.m.
Location:	Commerce City Recreation Center
Attendees:	See attached sign-in sheet
Distribution:	SRC members, File

### Welcome and Introductions

1. Stephanie White opened the meeting and called the meeting to order. Self-introductions followed. Jay Hendrickson was not able to attend this meeting due to other commitment. Jason Wallis is attending on behalf of Jay.
2. Chris Primus provided a summary of the topics discussed by this group so far. He then introduced Ed Icenogle (of Icenogle Seaver Pogue) who will be presenting a summary of stakeholder governance discussions for the Aerotropolis study. Today's meeting will primarily focus on the governance options and final study products.

### Governance Options (Ed Icenogle)

1. At the study outset, the Study Review Committee polled Aerotropolis participants and identified a number of critical interests deemed most important for collaborative action in the near term. Among those critical interests, and of apparent especial relevance to the nature of the new regional entity, were cross-jurisdictional planning, governance/financing structure, corroborative funding, marketing and infrastructure funding, form of governance/oversight, long-term roads funding stream, and regional water/wastewater.
2. Ed Icenogle and his colleague Anna Wool were brought on to the study team to further explore options for potential governance structures.
3. The Icenogle team held one-on-one meetings with stakeholder representatives from Denver and Commerce City on January 6, 2016, Aurora and Adams County on January 8, 2016, and Brighton on January 15, 2016. The purpose of the meetings was to solicit input regarding governance options and structures for the development of an Aerotropolis.
4. Ed Icenogle introduced the draft memorandum his firm prepared with regards to the governance discussion. Copies of this memorandum were distributed to the group.
5. Ed directed the group to the third paragraph on the memorandum:

*The 2015 Amendment's description of the purposes of this new regional entity is, in total, "...to promote and market development opportunities on and around DIA and assist in coordinating land use and infrastructure planning efforts by the respective jurisdictions on and around DIA." The 2015 Amendment also denies the new regional entity authority to regulate or otherwise control land use or development within any jurisdiction.*
6. Ed summarized the discussion results with the jurisdictions. Eight questions were formulated for the stakeholders to answer to give structure to the conversations and to maintain some consistency in the responses. The identities of the responders were not recorded.

7. **Responses to Discussion Items and Comments.** The eight discussion items presented to representatives of the primary stakeholders (Denver, Commerce City, Aurora, Brighton, Adams County), along with a summary of discussion comments, include:
- A. **Should the new governance entity be a funding mechanism? If so, should it be a direct funding source or a collection point for revenues contributed by primary stakeholder governments and others?**
- i. The sentiment was largely that it probably is not. There is some argument about why it should be. If it's going to have some funding aspect to it, should it be a direct funding source—like property tax? Should it be the kind of entity that collects money, becomes a focal point of money, and coordinate the expenditure and accomplishments of that?
  - ii. There was no consensus on whether the new entity should participate in funding of Aerotropolis infrastructure and promotion.
  - iii. Some responses indicated a desire that the entity provide funding for regional projects. If that were the case, some representatives indicated a preference that the entity not be a direct taxing and funding entity, but rather be the recipient of revenues collected and contributed by the primary stakeholder governments. Pursuant to the Taxpayer's Bill of Rights or "TABOR," Section 20 of Article X of the Colorado Constitution, voter authorization would be required for a new entity to levy its own taxes directly. In contrast, if the entity were to serve as a recipient of funds from primary stakeholder governments, the entity would be free from voter TABOR authorization, although the contributed revenues would be at the expense of the primary stakeholder governments' budgets.
  - iv. Along these lines, we were cautioned of likely opposition to a entity serving as an overlay property taxing district. At same time, we were cautioned that an arrangement by which revenues would flow from primary stakeholder governments to the entity would detract from the image and reality of a cohesive Aerotropolis governance and brand. However, if revenues were to flow from primary stakeholder governments to the entity, stakeholder sentiment favored a nexus between the primary stakeholder governments making contributions and the capital improvement projects undertaken with those contributions.
  - v. As an alternative to direct taxation or stakeholder flow-through of funds, the concept of a dedicated mill levy imposed through multiple special taxing/assessment districts was brought up. In the case of development districts, the example continued, a cross-jurisdictional mill levy for the Aerotropolis effort would increase as the developer districts' mill levies decreased with debt retirement and increased assessed value.
  - vi. The concept of the entity establishing a revolving loan fund was also raised as a possible approach to either facilitate funding projects through the entity or as a stand-alone mechanism for Aerotropolis projects.
  - vii. Additionally, there was some interest in "project-specific" revenue raising, which would seek funds for a particular project on a proportional basis, involving proximity, benefit, and other criteria.
  - viii. With regard to revenue raising and spending, several representatives thought it likely that, regardless of the form of raising revenue, if the entity were to serve a funding function, the primary stakeholder governments would want revenues from their respective jurisdictions to be spent in their jurisdictions. Other representatives expressed the possibility that the revenue-

- raising and spending functions of the entity might be used to address “disparities” of tax and fee burdens from jurisdiction to jurisdiction.
- ix. Virtually all interviewed agreed that, whatever the revenue-raising and funding capabilities of the entity, but especially if revenues from the primary stakeholder governments were to be pooled, it would be important to establish a process that builds trust between and among primary stakeholder governments and that works to create a cohesive Aerotropolis.
  - x. Finally, other than funding for the entity’s own operation, some stakeholders expressed a substantial preference that the entity not participate in infrastructure or promotional project funding at all, but rather serve a planning and coordination function. This is more fully discussed in Question B.
- B. What services and/or infrastructure should the new regional entity deliver: Planning, funding, design/construction, and/or operation?**
- i. One vision for the entity, consistent with the language of the IGA Amendment, was that of a regional (sub-regional) planning council or authority that would serve as a facilitator for the Aerotropolis participants. As possibly an IGA entity or a non-profit corporation, it would span jurisdictional boundaries and have the ability and responsibility to coordinate and plan infrastructure and to seek state and federal funding. The entity would serve as the initial organization in promoting Aerotropolis regional cooperation among the primary stakeholder governments and might evolve into a more traditional and empowered governance entity. Initially, the entity would act as a regional planning authority that prioritizes and phases projects, leverages funding, makes recommendations, and distributes funding to several layers of governments. The example of DRCOG, a metropolitan planning organization, may illustrate the concept.
  - ii. Of those stakeholder representatives who thought that, additionally, the entity could be responsible for funding infrastructure and marketing/branding, there was little support that the entity construct, own, or operate infrastructure. After construction, the jurisdiction where the infrastructure was built should own and maintain it.
  - iii. A possible exception to avoiding an ongoing role for the new entity might be circulator transportation or similar activities.
- C. What is the geographic scope of the governance mechanism and its activities?**
- i. While the entirety of what is to become the Aerotropolis was expected to benefit from the entity, many expected near- and even mid-term activity to occur largely to the west and south of DIA, the Concentrated Development Area (see Figure 2), which was also believed to be the logical focal point for the initial phases of Aerotropolis development. Representatives felt that the entity should take a regional, long-term approach and acknowledged the cross-jurisdictional nature of many infrastructure projects that may be undertaken or coordinated by entity. Stakeholder representatives appeared to find some efficacy in the entity undertaking infrastructure projects and development on a limited scale initially and adding more land - or jurisdictions - to the entity’s efforts as needed and over time.
- D. For what types of infrastructure, in addition to transportation, if any, should the regional governance entity undertake?**
- i. Representatives variously identified roads, transit, water, sewer, and drainage as infrastructure needs potentially to be advanced by the entity, although transportation was the area of consensus. None appeared to favor relinquishing land use and entitlement authority



- within the boundaries of their jurisdictions, in the contexts of both the public infrastructure projects and the private property developed in the Aerotropolis area. Some representatives felt that infrastructure projects should be determined by the needs of each primary stakeholder government.
- ii. In addition to capital projects, some stakeholder representatives cited the value of shared or common services. Suggestions were made that the entity could potentially undertake traffic circulator services, as well as marketing and branding.
- E. Should the new regional governance entity's organizing "charter" specify infrastructure projects and/or sequence, or should it convene the primary stakeholders and only provide the process by which projects are selected and sequenced?**
- i. Representatives agreed that the entity should retain flexibility to act and to have authority to develop agreement on and prioritize projects, especially in light of changing market conditions and other considerations. Therefore, representatives were generally opposed to specifying projects in an organizational document. Rather, they favored deciding upon projects as the need arises, possibly based on specific criteria. They cited DRCOG and regional and state transportation improvement plans as examples of project prioritization processes.
- F. The governance mechanism's powers, authority, and limitations will likely be defined by statute, intergovernmental agreement, or a combination of the two. Are the Aerotropolis infrastructure goals best served by placing decisional control in the primary stakeholders' governing bodies or in the governing body of the new regional governance entity?**
- i. In response to this question, representatives voiced a range of concerns and possibilities.
  - ii. Most representatives agreed that the entity's decision-making (and its governing body) should be contained to the public sector, some favoring staff participation and some elected officials' participation.
  - iii. Some representatives argued that the entity must have the authority to act on its own and without the approval of the primary stakeholder government's governing body, while others felt strongly that decisions must be taken back to primary stakeholder governments for ratification. As a compromise, the entity could be given the authority to act on its own with regard to a list of previously determined decisions, with some decisions reserved for approval or ratification by the primary stakeholder governments.
- G. How can the governance mechanism best relate to public entity stakeholders (other than the primary stakeholders) and the private sector?**
- i. Representatives approved of establishing advisory boards, committees, and commissions to participate in the entity. In general, they did not want citizens or landowners to be directly involved in the policy and the day-to-day governance of an Aerotropolis development.
  - ii. As described in Question H, the collective marketing and branding of the Aerotropolis was seen as a direct way to relate to other public entity stakeholders and the private sector on state, national, and international scales. Additionally, NATA and DRCOG were given as examples of ways in which a governance entity can identify, develop, and advocate with a collective voice for infrastructure identified by the entity.
- H. Marketing and Branding**
- i. Stakeholder representatives by and large indicated that marketing and branding should be left to those with subject-matter expertise (i.e., not the entity itself). As such, marketing and

- branding may be best handled by a separate organization, whether in existence now or to be formed, which would work closely with the new regional governance entity and perhaps receive partial or full funding from it. On more than one occasion, representatives alluded to the economic development councils currently serving various primary stakeholder governments in the metropolitan area. Stakeholder representatives thought these economic development councils represent a good example of existing organizations that could potentially collaborate, both among themselves and with the entity.
- ii. Representatives thought that marketing and branding would be most effective if tackled jointly, and some discussed the possibility of funding a joint economic development council to act in the collective interests of the primary stakeholder governments and the Aerotropolis.
  - iii. However, some representatives thought that the primary stakeholder governments would want to also maintain their respective jurisdictional brands, while other stakeholder representatives hoped that branding and marketing of Aerotropolis could be used to improve and expand on a combined Aerotropolis brand.
8. Stephanie White asked the group for any comments or questions with regard to the work on governance options the Icenogle team had conducted.
- a. Great work on this; although, this raises more questions than answers.
  - b. This was really helpful. We would like to share this with our team members and would like to get this memorandum in an e-mail so we can share. **Yes, the HDR team will send this memorandum out to this group.**
  - c. This is a good start to move forward and figure out what we would like to do. The notion of having a taxing entity that somehow collects revenues locally and distribute them would raise so many issues and so problematic. That in itself might not be a non-starter. In our discussion we talked more about planning and coordination, but this could still be a powerful tool. An example is the Peoria interchange. In the end it was all voluntary, but it was good to get funding because you go in as a group. You could have a planning entity because it could be powerful.
  - d. If there is some sort of funding entity, we do need planning and coordination first. We need to get an idea first as to what the different entities want out of this.

### Multimodal Loop Options (Stephanie White)

2. Chris started the discussion on the multimodal loop idea. A multimodal loop would lend efficiency. A fast ground transportation network can foster an Aerotropolis. There are challenges to planning a road like this. Local plans would need to change, we need to acquire right-of-way, and there is obviously cost. It's a visioning aspect that we could include in our Aerotropolis study.
3. Stephanie White distributed a handout summarizing the pros and cons of a multimodal loop around the Aerotropolis in the distant future. She asked that each person mark on the handout one thing that was the most important consideration. Chris noted that the pros and cons on the handout were taken verbatim from the information gathered at the last SRC meeting.
4. Clarification question: What you're saying is that E-470 could be a first leg in which a ring road can be built upon. *Response/Chris Primus:* Yes, many of the aerotropolis examples we have showed this group have some sort of ring road that connects to their airports.

5. Elements of a multimodal loop road that the group deemed important include:
  - a. Connectivity
  - b. Mobility
  - c. Aurora (Mac Callison): Sequencing (Land Use). Transportation vs. land use/development.
  - d. Aurora (Bob Watkins): Sequencing/Land Use. Even if 50 years in the future, it's still out there. Once you draw this on a map, you are going into a big buzz saw.
  - e. Economic Development—too early to start.
  - f. Travel Speed: Long-term planning—should be considered in the background as a very fuzzy line.
  - g. Connectivity. As we looked at those other airports, we see they have all those roads that eventually connect. We began to throw the concept out there so people start thinking about it. Maintaining the ability to provide speed.
  - h. Connectivity: More localized and look at infrastructure that is already there.
  - i. Connectivity, but multimodal connectivity. It's all got to be part of a broader system.
  - j. Commerce City: We have done our part of the ring road. Agree that it may be outright a long-term solution. Could put it forward for a study, but there are other ways to provide mobility and access, other than just a ring road. Need to have other conversations to justify it. Need to do a systemwide evaluation. That may be a ring road, that may not be a ring road.
  - k. Aurora: Do a system study for the whole area to get to the conclusion. The local network is what's lacking. If you go into those ring roads, it's a dead stop during peak hour. That is where the whole system is falling down.
  - l. Mac Callison: Very familiar with Dulles; there really isn't a ring road. You have all these highways and roads, but really don't have a concentric beltway.
  - m. Commerce City: We looked at logistic companies and how they move goods. Not sure if a loop road is the right answer, but we need to figure out connectivity first.
  - n. DRCOG (Steve Cook): Sequencing is the key thing.
  - o. Brighton: Development/connectivity. Access roads to employment to airport, that's probably the most important for us.
  - p. DIA: Long term, we probably need connectivity or greater speed to the airport. Thinking about it is important. I don't see why it would hurt to put it in a future plan and consider it as an option.
  - q. Development/Connectivity: Long-range vision, at some point in time, a multimodal loop around the airport would be important, but I agree with others that we need more study. Need to focus on 56th Avenue and Aurora in the short time. Need to work with Commerce City and Adams County on 120th. But a loop road would make sense someday, just don't know when.
  - r. Connectivity is very important. It may be 45 to 50 years now, in terms of long-term connectivity. Arterials are also very important.
  - s. It is all about connectivity. Connectivity is a work in progress and constantly changing. Need to remain mindful that we are not creating new developments that will prohibit future possibilities of a ring road or a good connectivity within existing arterials.
  - t. Rapid advances in technology might make the concept moot.

- u. Brighton: Connectivity/right-of-way. If we all go back to tribalism and we only look at our own jurisdiction, we are not going to come up with good collaboration.
- v. Some type of connectivity all around, whether it is a ring road or not.
- w. Stephanie White summarized that everyone would agree that “connectivity” is very important. However there is also a big concern about picking the solution before we identify the problem. Stephanie suggested that this study, as indicated by the graphic on the bottom of the agenda, should continue to highlight the importance of collaboration.

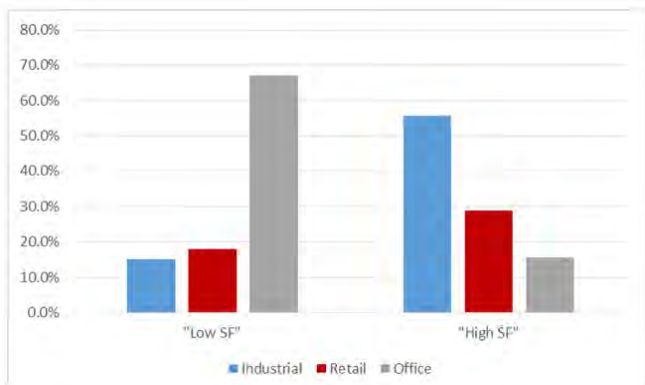
## Economic Analysis (Arleen Taniwaki)

6. Arleen Taniwaki provided an update of the information that was presented at the last SRC meeting. We’ve received comments and feedback from this group.
7. The scenario assumptions that we came up with include:
  - a. Aerotropolis induces additional growth of 74,000 jobs above and beyond DRCOG projections for the area (about 6,000 jobs) for a total of 80,000 jobs.
  - b. The growth represents a net gain in economic and fiscal benefits for the Denver metro area, rather than a diversion from the rest of the region.
  - c. The “Business as Usual” Scenario drives demand for 3 million square feet of commercial development.
  - d. The Aerotropolis scenario drives demand for 21 to 35 million square feet of commercial development.
  - e. The low end of the Aerotropolis scenario (Low Square-Foot [SF] scenario) represents an office-oriented Aerotropolis (like DTC).
  - f. The high end (High Square-Foot [SF] scenario) represents a cargo- and warehouse-oriented Aerotropolis (like LAX).
  - g. Commercial development helps drive demand for over 75,000 TOD and single-family detached residential dwelling units.
8. Establishing the conceptual 2040 network would mean \$550 to \$560 million investment of 45 linear miles of new and improved roadways for the Aerotropolis scenario.
9. Base employment assumptions include allocation of 80,000 jobs (each dot on the map Arlene projected on the screen represented 2,000 jobs).
10. Arleen discussed the additions to employment and land uses for the different scenarios and presented tables of comparison among the top 5 sectors.



"BAU" Scenario – 3 Million Square Feet			"Low SF" Scenario – 21 Million Square Feet			"High SF" Scenario - 35 Million Square Feet		
Top 5 Sectors	% of Total	Land Use	Top 5 Sectors	% of Total	Land Use	Top 5 Sectors	% of Total	Land Use
Accommodation and Food Services	26.7%	Retail	Finance and Insurance	19.9%	Office	Accommodation and Food Services	25.9%	Retail
Transportation and Warehousing	17.2%	Industrial	Professional, Scientific, and Technical	17.4%	Office	Transportation and Warehousing	15.7%	Industrial
Wholesale Trade	14.6%	Industrial Office	Information	13.2%	Office	Wholesale Trade	7.4%	Industrial/Office
Administrative and Waste Management	6.3%	Office	Administrative and Waste Management	8.7%	Office	Administrative and Waste Management	6.8%	Office
Professional, Scientific and Technical Services	5.6%	Office	Management	7.2%	Office	Professional, Scientific and Technical Services	6.0%	Office

- The Low SF Scenario assumes land use breakdown similar to metro area employment centers.
- The High SF Scenario assumes land use breakdown with a more heavily industrial orientation similar to LAX. Industrial tends to be land intensive at 1,000 square feet per employee. LAX is an international gateway, distribution, and trade center.
- Arleen next discussed the Aerotropolis land use mix and projected a graph on the screen depicting a comparison of the Low SF vs. the High SF scenarios land use mix.
- Arleen presented an Aerotropolis Scenario of annual commercial absorption/change at comparative employment centers between 1970 and 2016.
- The study team looked at potential revenue streams between 2016 and 2040. If we assume 10 mills, the following revenue would be realized. This is a conceptual idea of what could be generated to pay for the entire infrastructure needed for an Aerotropolis.



	Business As Usual	Low SF	High SF
Commercial Property Tax	\$19.0 Million	\$130.4 Million	\$158.6 Million
Residential Property Tax	\$37.2 Million	\$295.1 Million	\$295.1 Million
Sales Taxes	\$18.1 Million	\$86.6 Million	\$86.6 Million
Residential Development Impact Fees	\$30.3 Million	\$193.9 Million	\$193.9 Million
<b>TOTAL</b>	<b>\$104.6 Million</b>	<b>\$706.0 Million</b>	<b>\$734.1 Million</b>
= \$550-\$560 Million			

16. Arleen presented a summary of economic impacts of an aerotropolis.
  - a. 18,500 on-airport jobs
  - b. 55,500 off-airport jobs
  - c. 21-35 million square feet of commercial development
  - d. \$30 billion increase in assessable property values
  - e. 9,400 FTE Direct Construction Jobs (25 years annually)
  - f. 3,200 FTE Indirect Construction Jobs (25 years annually)
  - g. 75,000 housing units
  - h. 184,000 residents
  
17. Arleen asked the group for any comments or questions about the economic analysis topic. Chris reminded everyone that the \$550 to \$560 million for conceptual cost was taken directly from the DRCOG cost. That's the cost to build those roads as listed in the DRCOG RTP.
  - a. Steve Cook: Assuming that's what you did, it is current year dollars, too.
  - b. This is assumed building as we go. The initial cost necessarily would not be that high. Developers may be contributing to cover those costs.
  - c. Steve Cook: Is it just the L area on the map or does the employment include the airport? *Response:* We tried to straighten this out over the last weeks. The 74,000 is all Aerotropolis-related employees. The 18,000 on-airport jobs would be on the 1,500 acres in the IGA amendment. The L shape to the west and south of the airport would have 55,000.
  - d. The Icenogle report is suggesting that we don't use metro districts to generate funding, but the economic analysis says something different. How do we reconcile that? *Response/Chris:* We do need to reconcile that because we conducted the economic analysis before the Icenogle study.
  - e. Aurora: It's a good study and helpful to identify the revenue source.
  - f. Would like to have a copy of the presentation as a reference. **Yes, we will send it out to the group.**

## Final Report (Chris Primus)

1. Chris introduced the different papers that will be prepared for the study that will be distributed to this group in a couple of weeks.
  - a. A 4-page Executive Summary in 11 x 17 format would be a high-level summary of what we learned about Aerotropolis.
  - b. A 20-page main report will be ready the first week in February. Chris asked the group to put the focus on this paper and submit input. We will be preparing a survey to help channel comments and send out to the group to get comments.
  - c. Supporting Papers would contain the detailed study work in each of these topic areas:
    - Growth Projections
    - Infrastructure
    - Economic Analysis
    - Peer Aerotropolises
    - Governance

- Outreach and Engagement

### Recommendations Framework (Chris Primus)

1. We've talked about infrastructure opportunities in:
  - a. Water
  - b. Wastewater
  - c. Drainage. Good opportunities to collaborate because of the need for retention ponds.
  - d. Transportation. Five-year horizon to identify which projects should be built first.
2. Other recommendations for the framework will include governance options.

### Review Schedule (Chris Primus)

1. Chris directed the group to the schedule printed on the back of the agenda that was handed out to everyone. It lays out the general schedule. Initially, we identified end of March time frame to present to the different jurisdictions, but that would depend on each jurisdiction. Chris will work with each jurisdiction to determine when would be a good time.
2. The schedule for the presentation to the city councils is not finalized in the current schedule. It would depend on when the presentation to the jurisdictions will happen.

### Next Meetings

1. Next meeting is not scheduled. Would like to get input from this group whether a meeting in February is necessary. Communications at this point can happen via e-mail.
2. Consensus is that a meeting in February would be beneficial. If the Arsenal is available, we will have the February meeting there.

### Adjourn (Chris Primus)

1. Chris thanked everyone for attending today's meeting and for all the input.















# Welcome



## Colorado Aerotropolis Visioning Study





# Today's Purpose

- Governance Options and Final Products



# GOVERNANCE OPTIONS

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# Colorado Aerotropolis Visioning Study

## Aerotropolis Stakeholder Governance Discussions

Ed Icenogle



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# Response to Discussion Items and Comments

- Should the new governance entity be a funding mechanism?
  - If so, should it be a direct funding source or a collection point for revenues contributed by primary stakeholder governments and others?

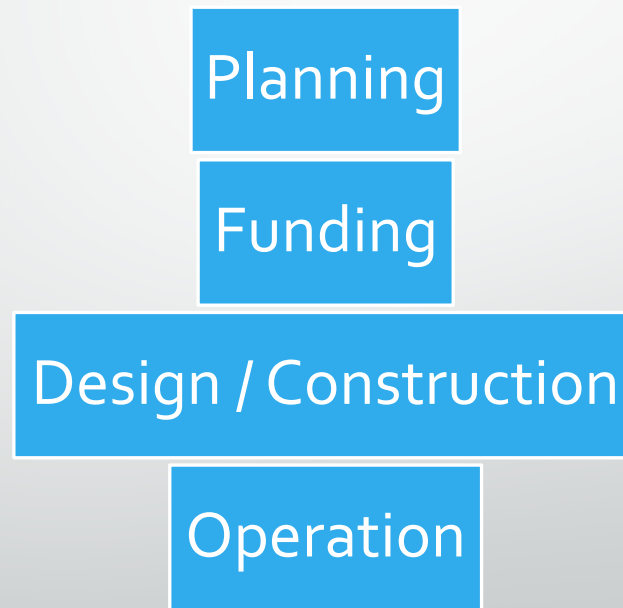


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- What services and/or infrastructure should the new regional entity deliver:



- What is the geographic scope of the governance mechanism and its activities?



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- For what types of infrastructure, in addition to transportation, if any, should the regional governance entity undertake?



- Should the new regional governance entity's organizing "charter" specify infrastructure projects and/or sequence

OR

- Should it convene the primary stakeholders and only provide the process by which projects are selected and sequenced?



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The governance mechanism's powers, authority, and limitations will likely be defined by statute, intergovernmental agreement, or a combination of the two.

- Are the Aerotropolis infrastructure goals best served by placing decisional control in the primary stakeholders' governing bodies


OR

- In the governing body of the new regional governance entity



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- 
- How can the governance mechanism best relate to public entity stakeholders (other than the primary stakeholders) and the private sector?



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Marketing



Branding



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# Anticipated Decision Points in Arriving at a New Entity



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# Recommended Process for Developing a New Entity



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Possible Entity Candidates  
And  
Why or Why Not Likely of Use



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# Colorado Aerotropolis Visioning Study

## Aerotropolis Stakeholder Governance Discussions

Ed Icenogle



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# MULTIMODAL LOOP

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# ECONOMIC ANALYSIS

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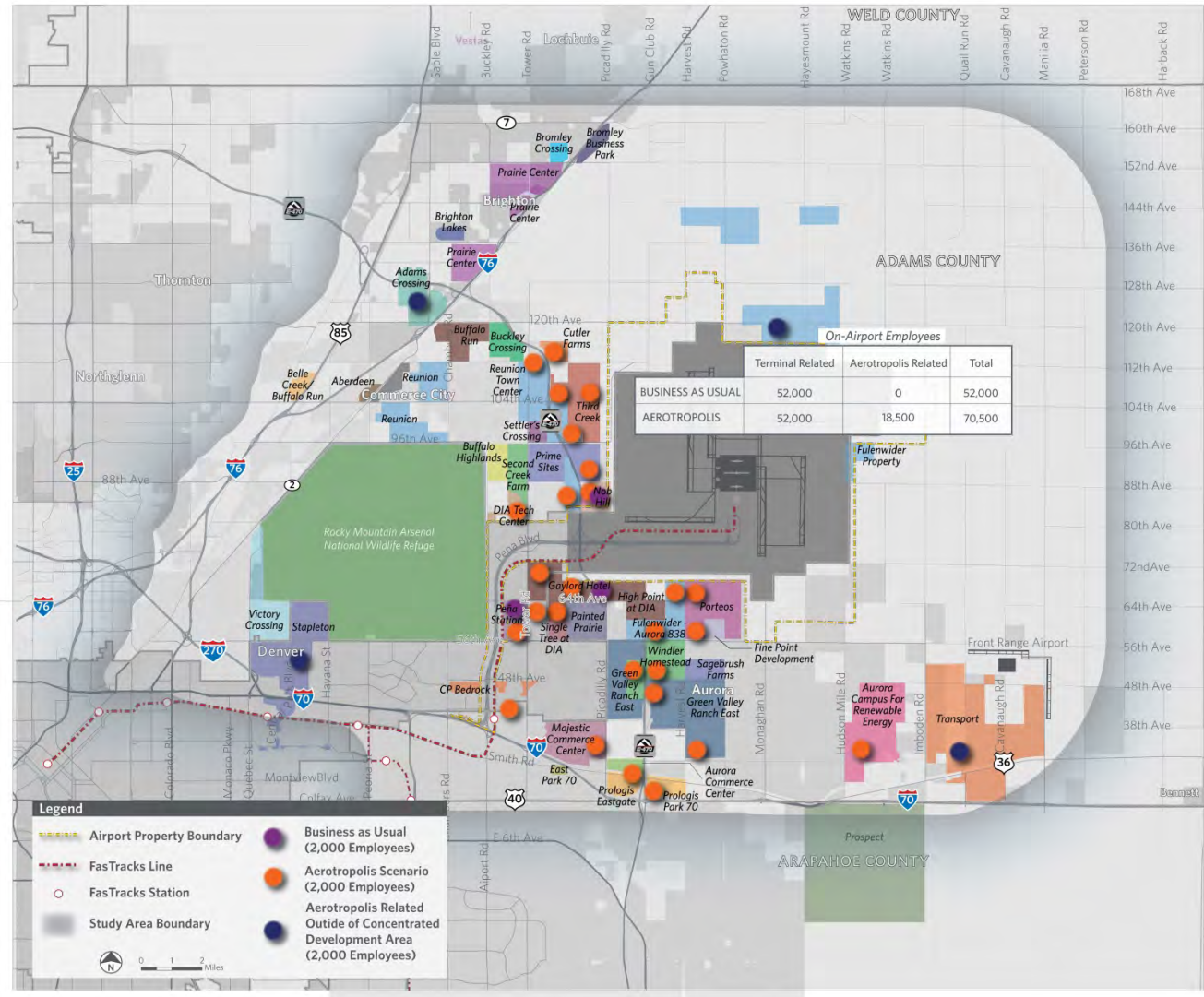
# Scenario Assumptions

- Aerotropolis induces additional growth of 74,000 jobs above and beyond DRCOG projections for the area (about 6,000 jobs) for a total of 80,000 jobs.
- The growth represents a net gain in economic and fiscal benefits for the Denver metro area, rather than a diversion from the rest of the region.
- The “Business as Usual” Scenario drives demand for 3 million square feet of commercial development.
- The Aerotropolis scenario drives demand for 21 to 35 million square feet of commercial development.
- The low end of the Aerotropolis scenario (“Low SF” scenario) represents an office-oriented Aerotropolis (like DTC).
- The high end (“High SF” scenario) represents a cargo and warehouse oriented Aerotropolis (like LAX).
- Commercial development helps drive demand for over 75,000 TOD and single family detached residential dwelling units



# Base Employment Assumptions

- Allocation of 80,000 jobs
- Each dot represents 2,000 jobs





# Additions to Employment and Land Uses

## “BAU” Scenario – 3 Million Square Feet

Top 5 Sectors	% of Total	Land Use
Accommodation and Food Services	26.7%	Retail
Transportation and Warehousing	17.2%	Industrial
Wholesale Trade	14.6%	Industrial Office
Administrative and Waste Management	6.3%	Office
Professional, Scientific and Technical Services	5.6%	Office



# Additions to Employment and Land Uses

## “Low SF” Scenario – 21 Million Square Feet

Top 5 Sectors	% of Total	Land Use
Finance and Insurance	19.9%	Office
Professional, Scientific, and Technical	17.4%	Office
Information	13.2%	Office
Administrative and Waste Management	8.7%	Office
Management	7.2%	Office

## “High SF” Scenario - 35 Million Square Feet

Top 5 Sectors	% of Total	Land Use
Accommodation and Food Services	25.9%	Retail
Transportation and Warehousing	15.7%	Industrial
Wholesale Trade	7.4%	Industrial/Office
Administrative and Waste Management	6.8%	Office
Professional, Scientific and Technical Services	6.0%	Office

# “Low SF” Scenario Assumptions

- Square feet per employee
  - Office: 150
  - Retail: 400
  - Industrial: 1,000
  - TOD Mixed Use Commercial: 150
- Land use breakdown similar to metro area employment centers

Land Use	Acres	Millions of Square Feet	Percent of Total
Industrial	332	2.8	15.2%
Retail	230	3.3	17.9%
Office	329	6.8	37.7%
TOD Mixed Use Commercial (Office)	164	5.3	29.2%
Total	1,055	18.2	100.0%

# “Low SF” - Commercial Land Use Breakdowns at Comparative Employment Centers

	CBD	DTC	Aurora City Center	Down-town Boulder	Cherry Creek	Inter-locken
Indus-trial Sq. Ft.	5.5%	9.9%	4.3%	1.0%	0.0%	3.5%
Retail Sq. Ft.	9.0%	15.0%	76.2%	50.6%	40.6%	50.4%
Office Sq. Ft.	85.5%	75.1%	19.5%	48.4%	59.3%	46.2%
Total Sq. Ft.	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Square Feet Total	50.6 Million	50.8 Million	3.9 Million	8.2 Million	6.1 Million	5.1 Million

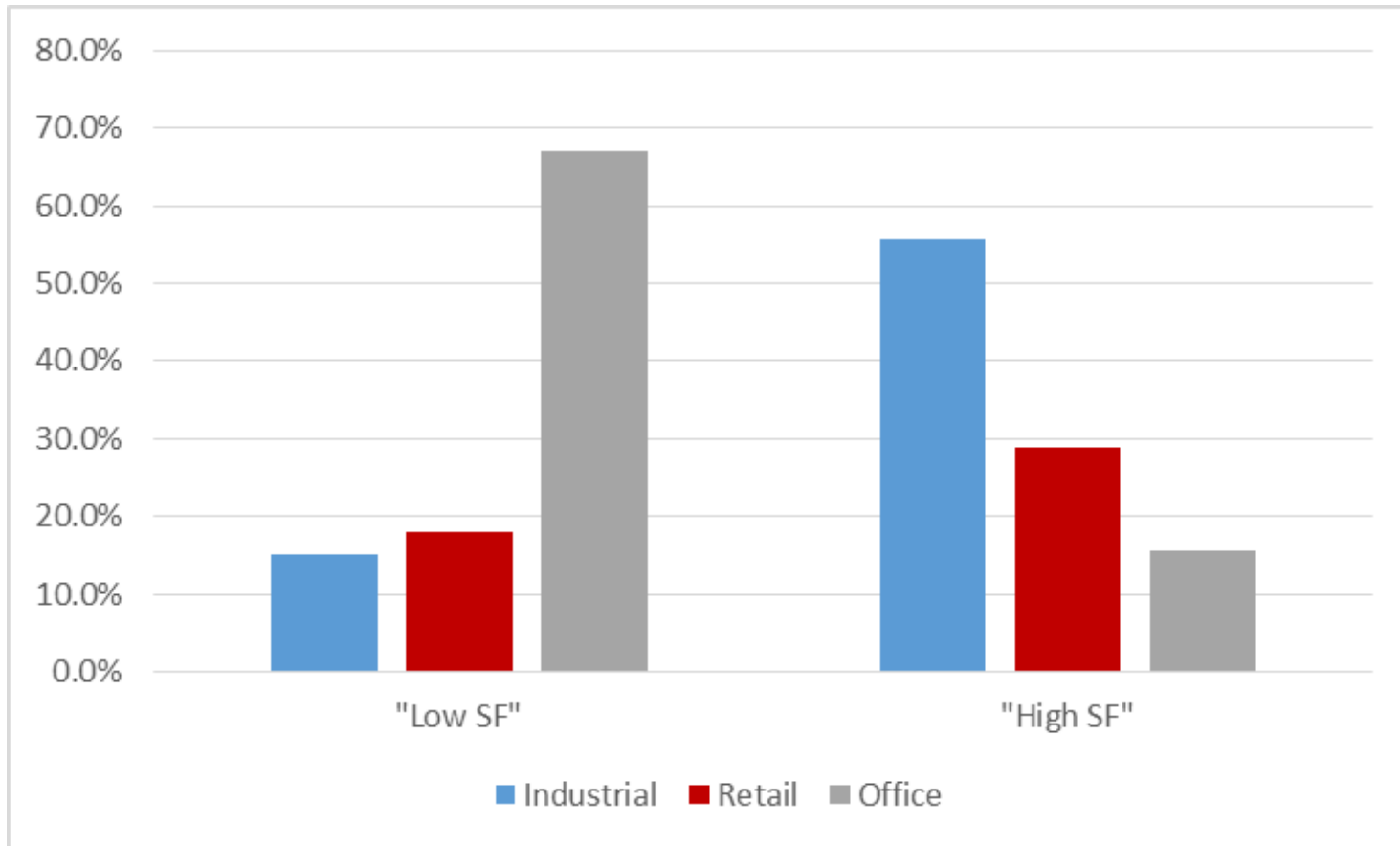


# “High SF” Scenario Assumptions

- Land use breakdown with a more heavily industrial orientation similar to LAX.
- Industrial tends to be land intensive at 1,000 square feet per employee.
- LAX is an international gateway, distribution and trade center.

Land Use	Acres	Millions of Square Feet	Percent of Total
Industrial	1,485	17.8	55.7%
Retail	573	9.2	28.8%
Office	178	3.6	11.2%
TOD Mixed Use Commercial (Office)	45	1.4	4.4%
Total	2,280	32.0	100.0%

# Aerotropolis Land Use Mix: “Low SF” vs. “High SF”



# Aerotropolis Scenarios % of Metro Market

**2015**

Metro Area Market = 493 Million Square Feet

Northeast Area Submarket = 86 Million Square Feet

Northeast % of Metro Area = 17.5%

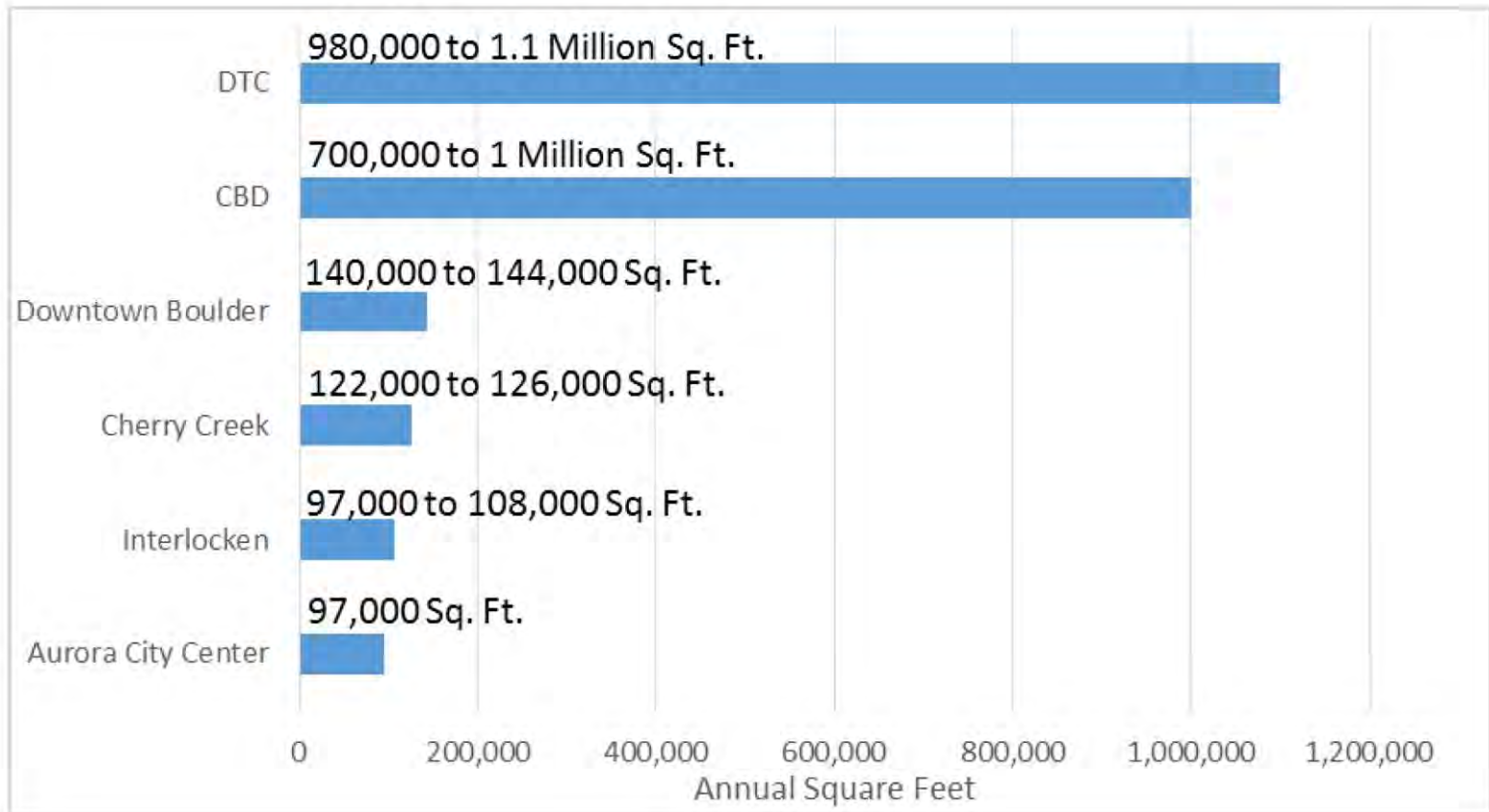
**2040**

Metro Area Market = 620 Million Square Feet

Northeast Area Submarket = 107 to 121 Million Square Feet

Northeast % of Metro Area = 17.2% to 19.3%

# Aerotropolis Scenarios: Annual Commercial Absorption / Change at Comparative Employment Centers between 1970 and 2016







# Summary Economic Impacts

## ANNUAL ECONOMIC IMPACTS



## EMPLOYMENT, DEVELOPMENT & DEMOGRAPHIC IMPACTS



- 18,500 on-airport jobs
- 55,500 off-airport jobs
- 21-35 million square feet of commercial development
- \$30 billion increase in assessable property values
- 9,400 FTE Direct Construction Jobs (25 years annually)
- 3,200 FTE Indirect Construction Jobs (25 years annually)
- 75,000 housing units
- 184,000 residents

# FINAL REPORT

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# Final Products

4-page Executive Summary

~ 20-page Main Report

Outreach &  
Engagement

Growth  
Projections

Infrastructure

Economic  
Analysis

Peer  
Aerotropolises

Governance



# Recommendations Framework

- Infrastructure
  - Water
  - Wastewater
  - Drainage
  - Transportation
- Governance
  - Options

# REVIEW SCHEDULE

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NEXT MEETING

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# Next Meetings

## Steering Committee

- Date: **TBD**
- Location: **TBD**

## Study Review Committee

- Date: **TBD**
- Location: **TBD**

# ROUNDTABLE DISCUSSION

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# THANK YOU

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# Study Web Page



## Projects

You are here: [Home](#) / [Projects](#) / Colorado's Aerotropolis

### Quick Links

[Learn More](#)

[Speaker Series](#)

[Visioning Study](#)

## Colorado's Aerotropolis

One of the most compelling economic opportunities in the world is moving forward.

### What is an Aerotropolis?

An urban plan in which the layout, infrastructure, and economy is centered on and around an airport.

### Visioning Study

#### Overview

The Federal Highway Administration funded a grant for a Colorado Aerotropolis Visioning Study to identify opportunities for the efficient infrastructure needed to foster and support economic development around Denver International Airport (DIA)EN. This study, administered by the Colorado Department of Transportation, comes at an opportune time to capitalize on the 1A ballot measure actions approved by Adams and Denver county voters. The visioning study will conclude in early 2016.

#### Collaborative Investment

The planning framework will identify opportunities for collaborative investments in infrastructure (Transportation, Water, Wastewater, Power, and Drainage).

#### Stakeholders

Jurisdictions adjacent to or near the airport are major stakeholders of the visioning study including Adams County, Aurora, Brighton, Commerce City and Denver. Economic development corporations, transportation agencies, and other infrastructure agencies are also involved in the study effort.



**108 INDIVIDUALS PARTICIPATED**



**33 MEETINGS BY THE END OF 2015**



# Colorado Aerotropolis Visioning Study

## Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: Study Review Committee Meeting #8

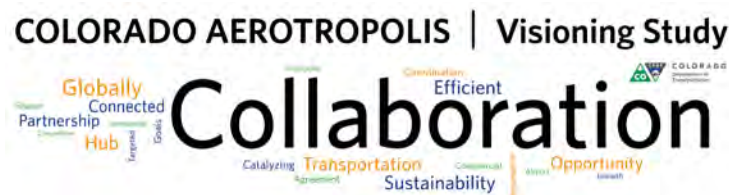
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Date: December 10, 2015 9:00 - 11:30 a.m.

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Location: CDOT North Program Office 4670 North Holly Street

1. Welcome and Introductions
2. Jeff Fegan Presentation Takeaways [www.youtube.com/watch?v=I5zj1GN53Ow](http://www.youtube.com/watch?v=I5zj1GN53Ow)
3. Infrastructure Development for the Colorado Aerotropolis
  - a. Multimodal Loop
4. Economic Analysis
5. IGA Amendment
6. PIO Meeting
7. Peña Boulevard Study Update
8. Study Activities
  - a. Governance
  - b. Report/Interim Executive Summary
  - c. Web page <https://www.codot.gov/projects/aerotropolis>
  - d. Video
9. Next Meetings
  - a. Steering Committee: January 14, 10:00, Location TBD
  - b. SRC: January 21, 9:00, Location TBD
10. Adjourn



### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

Project:	Colorado Aerotropolis Visioning Study
Subject:	Study Review Committee #8
Date:	December 10, 2015, 9:00 a.m.
Location:	CDOT North Program Office, 4670 North Holly Street
Attendees:	See attached sign-in sheet
Distribution:	SRC members, File

### Welcome (Chris Primus)

1. Chris welcomed everyone. Introductions followed.
1. Today's meeting is primarily focused on economic analysis

### Jeff Fegan and Panel Discussion Recap/Summary (Kip Cheroutes)

1. Kip gave a brief overview and summary of the presentation by Jeff Fegan that was held on November 19. The presentation was attended by about 80 representatives from public agencies, transportation organizations, elected officials, and the aviation industry.
2. Key takeaways from Jeff's presentation include:
  - a. Understanding of developer needs.
  - b. Relationship with and among the four host cities.
  - c. Cooperative planning task force to coordinate leads.
  - d. Close relationship with FAA to speed environmental view processes and airport layout change approvals.
  - e. Commercial development flexibility.
  - f. Cooperation, communication, risk-taking, patience, building trust.
3. Chris asked for others' perception of the Jeff Fegan presentation:
  - a. Laura Brandt: Texas is one of the areas we compete against more than anywhere else. Totally agree with Kip. We at MDEDC can start sending prospects that are appropriate.
  - b. Dan Poremba: The big question is how the (yet to be formed) Aerotropolis entity is going to interface with MDEDC with regional marketing. That is something that needs to be figured out.
  - c. Laura Brandt: DEN should be one of our partners. No need to do additional separate marketing. So we are not marketing against one another—like Denver is better than Aurora. Companies thinking about coming to the region think about Denver as a metropolitan region. And in the world's vision, Denver is comparable to Chicago or London, and no one thinks of the individual municipalities.
  - d. Rick Pilgrim: Would the MDEDC then be the doorway or entry point for companies looking to establish a business in Colorado? *Response:* The EDCs can be the clearinghouse, and we can engage the different entities and they figure out how to close the deal.
  - e. Tricia Allen: The individual firm would contact Laura Brandt. Laura sends it out to all the partners and the partners are responsible for identifying properties that best fit that need. Laura packages

it and sends it out. She is there to answer questions and make sure the site selector has all the information they need. Our job is to continue to market the region. We don't market against each other, but we have the opportunity to market our different assets.

- f. Laura Brandt: Going out to companies who might be looking for something doesn't work anymore. You don't get companies that way. You talk to them, they sound excited, and you never hear from them again once you walk out the door.
  - g. Kip: Big question mark about it is the district. How does that start as a district?
4. Jay Hendrickson and Rick Pilgrim once again extended their appreciation to Adams County for hosting the November 19 session and especially for recording the entire presentation and making it available on YouTube.

## Infrastructure (Chris Primus and Keith Borsheim)

1. For the Aerotropolis study, we would like to get an understanding of the layout of all of the infrastructure elements. We want to summarize a concept-level understanding of long-range plans and identify opportunities to collaborate for each of the infrastructure elements.
2. Water
  - a. We met with the different districts: Aurora Water, Denver Water, and South Adams County Water and Sanitation District. Aurora and Denver Water both have ample supply. The South Adams County W&S District does not have as ample a supply. In the long term, there is opportunity for collaboration among the water districts.
  - b. Bob Watkins: Regional cooperation is already heading in the right direction—to share resources. Aurora Water is really kind of in the national forefront in a lot of ways in doing conservation measures. The call for reduction in water use over time is something that regionally we need to evaluate. There needs to be concern about what is being set at the state level regarding water, per the recently adopted *Colorado State Water Plan*.
  - c. Question: Do you get the sense that the districts have enough supply? Generally Aurora projects that they can serve their respective area within current boundaries. For Denver there is enough supply. But if the state is asking a reduction in water use, that is something we need to consider.
  - d. Rick Pilgrim: Aurora Water has been aggressive in developing an integrated master plan. There was an example from a couple of years ago from a major manufacturer looking to relocate out near the DIA area required ample water. Overall, coordination and planning would be helpful and perhaps if there were coordination in place, that project might have gone through. But the site selector couldn't wait and had to move on.
  - e. Laura Brandt: Water Use Plan—Looking at the conditions here, we are not an area with lots of water. So this influences the types of industries and firms that might locate here. Long-term, high water use is not sustainable.
3. Wastewater
  - a. Met with the Metro Wastewater Reclamation District (MWRD) and the South Adams County Water and Sanitation District. MWRD serves multiple jurisdictions within the metro area, but unincorporated Adams County is not one of them. MWRD operates the Hite plant near 64<sup>th</sup> and York. It has available capacity, but some areas of the region require lift stations.
  - b. MWRD recently built the Northern Treatment Plant north of Brighton. It will open soon.



- c. It would be a long-term investment of installing a new interceptor to the Northern Treatment Plant. That would be an opportunity for collaboration. There is a Second Creek Intercept Study going on right now.
- d. The group requested the contact information for who is doing the study for the Second Creek Intercept Study. **ACTION: The study team will obtain this information and share with the group.** [Jim Mallore, of Metro Wastewater Reclamation District, [jmallore@mwrdd.com](mailto:jmallore@mwrdd.com)]

#### 4. Drainage

- a. Several watersheds are contained within the Aerotropolis study area. Each have drainage plans, but may have various stages of detail depending on the stage of development within the watershed. IGAs are typically in place establishing flow levels across jurisdictional boundaries.
- b. The Urban Drainage and Flood Control District, representing most of the jurisdictions in the metro area, is the organization that provides drainage planning, coordination, and infrastructure. It has long had a Northeast Quadrant subgroup that addresses drainage issues in the Aerotropolis study area.
- c. There are some unique circumstances concerning drainage with in our area. One is that the RMANW is in the center of our study area. The arsenal has stipulations on how much flow can go through its property. There are pretty strict agreements about the amount of water that can flow through its property. There would be a need for retention ponds in our study area, upstream of the arsenal. However, the FAA has restrictions on retention ponds near airports because of concerns about migratory waterfowl. They have stipulation that you can have retention ponds but they have to be emptied within 48 hours after a flood event. There is also a concern about drainage in airports regarding de-icing fluids during flood events, which is a water quality concern.
- d. For these reasons, the drainage infrastructure is more complex than other areas of the metro region. There is an opportunity for regional collaboration necessitated by these circumstances.
- e. The drainage basins also provide an opportunity for a trail system along our Aerotropolis study area.
- f. Kip Cheroutes: Recently, Denver Parks and Rec gave a really good briefing on trail development and construction going on around Denver in our area. There will be a Denver park trailhead. There is even connection to the Peña station.
- g. Dan Poremba: The trail is an open space agreement that we worked on with Denver Parks and Rec. It's a DIA open space, which allows that trail to connect to TOD on the other side of Peña Boulevard. What would be helpful is to address what you see is a critical path to the Aerotropolis development. For example, the pipeline and impacts to the timing.

Regarding drainage, it would be good to know what the impact of the retention ponds means regarding Aerotropolis development—like the Porteos development, for example.

- h. We are going to continue to work with UDFCD and summarize their issues and opportunity for collaboration.

#### 5. Gas and Electric and Communications

- a. Xcel Energy and United Power supply gas and electric in the study area. There are established power corridors, and substations, including a new one south of DIA. As the Aerotropolis grid network gets developed, continued coordination with these private power utility firms will be necessary.

- b. The Aerotropolis area will also need up-to-date communications fiber and cable.
6. Transportation (Keith Borsheim)
    - a. Keith provided a recap and summary of what has been discussed regarding transportation.
    - b. Reasons to invest in transportation infrastructure include:
      - Transportation infrastructure is the backbone of economic activity.
      - The best infrastructure provides the best access to the most opportunities.
      - Provide catalytic projects to spur economic activity.
    - c. Process would include compiling existing plans, identifying commonalities of those plans, and establishing stepping stones to achieve everybody's visions collectively.
    - d. *Compile existing plans.* Keith presented a map showing existing plans in the corridor. The study team looked at plans for the strategic corridors in the study area.
      - DRCOG 2040 regionally funded projects = \$366 million plus \$1.2 billion for I-70 East
      - DRCOG 2040 locally funded projects = \$1.05 billion
      - And other planned projects
    - e. *Identify commonalities*
      - North-south pinch point capacity
        - Widen Peña and E-470
        - Tower Road and Piccadilly Road
      - Additional access to high order facilities
        - Interchanges along E-470 and I-70 and more access to the Airport
      - East-west capacity
        - 48th, 56th, 64th, 88th, 96th, 104th, 120th
      - Create a place with transportation choices
        - Capitalize on the East Corridor A-Line Commuter Rail
        - Provide BRT or other rapid transit solutions
        - Preserve ROW for transit - High-Speed-Rail or Commuter Rail
        - Build a regional trail system
      - Is there a focus on regional trail system? *Response:* Part of the study team's task is to compile cross sections from each jurisdiction. We recognize that each jurisdiction desires to provide complete streets, with strong pedestrian and bicycle facilities.
    - f. *Establish conceptual 2040 network.* Create catalytic projects and build toward separate visions collaboratively. The study team has used some guiding principles to establish this network:
      - Contiguous to active developments
      - Reflect current local plans
      - Incremental to previous investments
      - Prioritization through regional collaboration
      - Achieve early attainable projects

- Support a long-term vision
- g. Keith presented a map of the conceptual 2040 network and discussed the improvements shown on the map. The projects highlighted in magenta on the map are projects that would be constructed as part of the Aerotropolis scenario.
- h. Chris Cramer: One thing that should be added is connecting Tower Road to 120th. It is critical because 120th goes all the way over to the west side of town. Whatever regional backbone network we come up with, it would be an advantage for an Aerotropolis if it connects to 120th.
- i. How do we address Peña Boulevard? There is a big study going on right now. An agenda item today is a status update from the study team.

### Multimodal Loop (Chris Primus)

1. We stepped back as a team and thought about the concept of the multimodal loop, also termed a ring road.
2. One of the things that struck us is the vast size our study area. For functionality, the arterials are slow, even the fast ones. At-grade crossings create friction and impede flow. Grade separation is the key to fast movement for any mode.
3. Circumference around DIA is 20 miles. To traverse two sides. You could either go 60 mph and traverse it in 15 minutes or 25 mph and traverse it in 36 minutes.
4. We also looked at loop examples from different airports.
  - a. Orlando where there is a pretty robust system of freeway facilities encircling their airport.
  - b. DFW. Encircling DFW there is complex system of higher speed facilities, including tollways. Schiphol in Amsterdam has a system of highways that encircle the airport, as does Houston.
5. Bob Watkins suggested Dulles International Airport as an example worth learning from. Keith projected on the screen a Google map of Dulles.
6. DIA has E-470 as a high-speed facility on the west, but nothing planned for the north, south, or the east.
7. Chris pointed the attendees to a worksheet and asked each attendee to provide some ideas about a multimodal loop concept. This is part A of this exercise. The study team will summarize the input to discuss as a group at the next meeting on January 21 as part B of the exercise.
8. Chris asked the attendees if they have other airport examples that they would like explored, to let him know and we will present at next month's meeting.

### Economic Analysis (Arleen Taniwaki)

1. Chris mentioned the current trends have been moving so fast over the past several months regarding the Aerotropolis. We are thinking about changing our nomenclature from "Current Trends" to "Business as Usual" scenario. This scenario will be compared to the Aerotropolis scenario regarding the economic benefit. We have talked about growth projections of employment for the Aerotropolis scenario. We have talked about infrastructure and the costs associated with that. We have tried to size the infrastructure so that it serves that amount of employment and vice versa. We are trying to make sure we are in the ballpark of growth, infrastructure, costs, and benefits that comes with an Aerotropolis scenario.

2. Arleen Taniwaki provided a summary of the draft economic analysis. She mentioned the team looked at several things. We have a conceptual 2040 network—supporting all the new development—\$535 million investment of 45 linear miles of new and improved roadways.
3. Arleen presented base assumptions on a map. An additional 75,000 jobs in the Aerotropolis scenario is assumed, and this was developed partially by reviewing data from other airports. Each dot on the map represents 2,400 jobs.
4. The Aerotropolis scenario assumptions include:
  - a. Induces additional growth, above and beyond DRCOG projections for the area.
  - b. Opens up additional land for development.
  - c. Creates favorable market conditions through infrastructure investment.
  - d. Much of the growth represents a net gain in economic and fiscal benefits for the Denver metro area, rather than a diversion from the rest of the region.
  - e. Future land uses initially made up of industrial (1,650 acres), retail (660 acres), office (202 acres), and TOD mixed-use commercial (275 acres).
  - f. New employees drive demand for residential (75,000 houses).
5. Arleen summarized a comparison of the “Business as Usual” and Aerotropolis scenario. Jay Hendrickson asked how we define metro area. Arleen responded the study team used Bureau of Labor Statistics, as noted on the table.

	“Business as Usual” Increase*	Aerotropolis Scenario Increase*	Current Metro Area Estimates	“Business as Usual” % of Metro Area	Aerotropolis % of Metro Area
Jobs	6,000	80,000	1,325,000	0%	6%
Population	49,000	259,000	3,015,000	2%	9%
Commercial Development	3.6 Million Square Feet	46 Million Square Feet	467 Million Square Feet	1%	10%

\*Concentrated Development Area



Source: BLS, 2014 for Denver, Aurora, Broomfield, 2014 US Census estimates for Adams, Arapahoe, Boulder, Broomfield, Douglas, Jefferson, and Denver Counties. Costar 2015 estimates

6. The team looked at potential revenue streams for infrastructure investment. This is our first cut. We will be refining this as we move along. We looked at property taxes (assumed a 10-mill rate) and sales taxes. We assume we would have a 1/2 percent allocation from sales tax for the Aerotropolis scenario.
7. Arleen presented a table of revenue streams scenario.
8. The present value of future revenues from Aerotropolis-related development exceeds the total estimated project costs.
9. An effective governance structure and a high level of regional coordination would be necessary to:

### Potential Revenue Streams (\$2015) 2016-2040

	“Business as Usual”	Aerotropolis
Commercial Property Tax	\$19.0 Million	\$236.9 Million
Residential Property Tax	\$37.2 Million	\$236.3 Million
Sales Taxes	\$18.1 Million	\$90.0 Million
Residential Development Impact Fees	\$17.3 Million	\$110.3 Million
<b>TOTAL</b>	<b>\$91.6 Million</b>	<b>\$673.5 Million</b>

- a. Realize the Aerotropolis vision.
  - b. Finance the costs of aerotropolis-related infrastructure improvements.
  - c. Build a cohesive and regional economic development strategy.
10. Question: Did you use the assumption for increased in mills? *Response:* Yes, we did. It was 10 mills, which we know is a large amount. As we work with the governance person on our study team, we will need to adjust that. We don't want it to get so high that we are not competitive.
11. Question: Is this additional funds—in addition to today? *Response:* Yes, but it is very conceptual.
12. Question: The difference between status quo vs. Aerotropolis scenario, am I reading it right to be 46 million square feet? *Response:* Yes. Talking about a differential of 42 million square feet roughly.
- a. That number seems high. How do we test that number? The tech center is about 45 million square feet of office alone, with 65 million square feet of total commercial development. Downtown is about 35 million square feet of office.
  - b. Jay Hendrickson: All this is a good thing. We have vast increases in the metrics and the revenues outpace the cost. We want to highlight the goodness of that conclusion and draw the readers to that.
  - c. Jay Hendrickson: All this is a good thing. We have vast increases in the metrics and the revenues outpace the cost. We want to highlight the goodness of that conclusion and draw the readers to that.
  - d. Dan Poremba: This has to be dialed back, because if you think of Tech Center, it was developed over a long period of time. If we are going to be close to the idea of revenue being able to support cost, we really need to get support for that.
  - e. Comment: The limited amount of infrastructure we have to support 46 million square feet—that's a ton of development.
  - f. Comment: The footprint of the Tech Center and Downtown vs. the Aerotropolis area, I think is not sustainable for the Aerotropolis scenario. You would need a lot of infrastructure for this amount of area.
  - g. Note, Peña Boulevard is built, E-470 is built, and we have a leg up here relative to other areas.
13. Jay Hendrickson: I would encourage all of the EDC staff to be looking at this information and chime in on all of these issues so we can make this as robust as possible.
- a. Chris Primus: We really appreciate this group's input, so don't hold back with your comments.
  - b. Arleen Taniwaki: These are a first cut and we are expecting to refine these estimates.
  - c. Rick Pilgrim: I know it's hard for the team to come attend this meeting and understand everything exactly. We will definitely share all materials with this group. You've all asked for a number of very relevant comparisons and we will build those in and prepare an executive summary.
  - d. Jay commented that it is really important for people to speak up and ask questions to the study team so that we can find answers and really address all our concerns.

## IGA Amendment (Dan Poremba)

1. Dan Poremba gave an update about the IGA. There is talk behind the scenes on how to implement the IGA. Trying to figure out the protocols and how to put those in place. The political staff of both Denver



and Adams County and other jurisdictions are talking about a smaller working group to discuss the implementation of the IGA.

2. Once we get past December, there would be more intense meetings on the structure and operations of that smaller working group.

### PIO Meeting Proposed Agenda (Chris Primus)

1. We are looking at wrapping up this study in February. We have been in coordination with Amy Ford, the Communications Director with CDOT. There is a meeting with her and the main Public Information Officers from each of your jurisdictions on Monday (12/14) to talk about how to be in coordination regarding the communications for this study, and protocol for post-study communications.
2. Chris presented the proposed agenda for the meeting with Amy Ford for everyone's input. No comments were noted.
3. We will give an update at the January 21 SRC meeting about the communications meeting.

### Peña Boulevard Update (Tom Reed)

1. Tom Reed presented an update of the Peña Boulevard Study. He gave a brief overview of the history of Peña Boulevard. Peña Boulevard is owned, operated, and maintained by DIA, which operates under Federal Aviation Administration rules. Peña Boulevard was constructed by the City and County of Denver to provide roadway access to DIA.
2. Since the opening of DIA, commercial and residential development near the airport has grown, resulting in an increasing number of motorists using Peña Boulevard to reach destinations other than the airport.
3. The percentage of non-airport traffic has increased, outweighing the percentage of airport traffic (E-470 to Terminal is 100% Airport; I-70 to 40th is 40% non-Airport). This non-airport related traffic currently results in DIA spending about \$1 million a year in additional maintenance funds on Peña Boulevard. This issue, as well as future regional opportunities for the use of Peña Boulevard, must be addressed to remain in compliance with the covenants Denver has executed with the FAA.
4. DIA receives significant funding from the FAA to maintain runways and taxiways. Federal law requires that all revenue generated by DIA is used only for airport purposes. This rule applies to the maintenance and operation of Peña Boulevard.
5. The problem is that airport funds cannot be used to pay for the additional maintenance and future expansion needed as a result of non-airport traffic on Peña Boulevard. DIA must find an alternative source of funds to pay for non-airport use or eliminate non-airport use of Peña Boulevard. Otherwise, DIA and Denver could lose future federal funding, and the airport could be required to pay back federal funds previously received.
6. DIA hired URS/AECOM to conduct a corridor study on Peña Boulevard. The purpose of this study is to look at the long term transportation needs of the airport region. The goals of the Peña Boulevard Corridor Study include:
  - a. Identifying short- and long-term transportation needs of the Peña Boulevard Corridor.
  - b. Identifying and analyzing alternatives for improving and funding Peña Boulevard.

- c. Working with the City and County of Denver, our neighboring jurisdictions, DRCOG, CDOT, FAA, and other local, state, and federal partners to identify solutions that will continue to serve the community while meeting federal law.
7. Tom presented a map of the Peña Boulevard study area. The boundaries lie along I-70 on the south and 120th on the north; Hudson Road on the east and Chambers Road on the west. Peña Boulevard is just one piece of a regional transportation network. This study must look not only at Peña Boulevard but at the local and regional transportation needs of the surrounding communities.
8. Key study tasks and products of the corridor study include establishing baseline traffic conditions; modeling and analyzing future traffic conditions; developing and analyzing a full range of short-, medium-, and long-term physical, financial, and policy solutions; reviewing alternatives with stakeholder groups; selecting a set of preferred solutions; and producing a fully implementable plan for the Peña Boulevard Transportation Corridor moving forward that will be in compliance with the FAA's Revenue Use Policy.
  - a. The study will look at a whole range of potential infrastructure, financial, and institutional solutions.
  - b. Based on current land use plans for the airport and the surrounding areas, the study team will use traffic analysis to determine the amount of airport and non-airport traffic anticipated along Peña Boulevard from I-70 to E-470 over the next 20 years.
  - c. Transportation solutions that serve both airport and non-airport traffic will be developed and evaluated.
  - d. Mechanisms for funding operation and maintenance transportation improvements will also be identified.
  - e. Stakeholder input is important to this process and the team will conduct extensive outreach to get input from citizens and stakeholders.
9. Because of some additional non-airport funding we received from Denver, we got an extension from the FAA to the end of 2016.
10. Tom presented a summary of 2011-2015 traffic counts on Peña Boulevard. There has been a tremendous increase in traffic volumes between 2011 and 2015. We have 115,000 vehicles per day now—traffic coming to and leaving the airport. We need to do something with Peña Boulevard based on those traffic counts. We have a level of service C right now on Peña Boulevard; really congested. We will need to widen Peña Boulevard in the next 5 years. Part of the issue is, how do we fund the expansion of Peña Boulevard? That is one of the issues we hope to address in the study. We hope to secure \$55 million of federal funds. These would be FHWA funds, not FAA funds.
11. Tom gave a summary of traffic distribution: 40% on the south of Peña Boulevard is non-airport traffic (going to and coming from places other than the airport). Once you get up to Peña Boulevard, that's 100% airport traffic. The growth around the airport will increase demand on Peña Boulevard.
12. The next steps on the Peña Boulevard Study include outreach to agencies and local government jurisdictions in the first quarter of 2016, public outreach in the first quarter of 2016, selection of a preferred alternative in the third quarter of 2016, and completion of the project by end of 2016. Outreach with stakeholders and the public will occur throughout the process, including public meetings.
13. More information about the study will be posted on DIA's Web site soon (<http://www.flydenver.com>).

14. Comment: Peña Boulevard is a regional facility, no doubt about it. The question to the aerotropolis study is, how do we go about funding it?
  - a. Jay asked if Deb Perkins-Smith would have any thoughts on the issue. Deb replied that because of limited funding, CDOT has a policy to look at managed lanes. That's where CDOT is at this point.
  - b. Tom said that DIA has met with Don Hunt, and Don confirmed that CDOT does not have funding at the moment. We are looking at maybe some cost-sharing mechanisms, funds from metro district.
  - c. Jay suggested to include these funding mechanisms in the Aerotropolis study and explore them further. Chris said that we certainly could do that.
15. Question: Does this study anticipate looking at the same areas that we are looking at for the Aerotropolis study? Tom: Yes, it certainly does.
  - a. The study is trying to identify who uses Peña Boulevard, exactly for what reason—whether going to the airport, or going to a hotel for a conference. We have three studies going on at the same time – this Peña one, the Aerotropolis study, and the IGA coordination. Within the next month, when we reconvene, there might be some detailed information that would occur. There would have to be some convergence among all these studies.

## Governance Next Steps

1. Chris announced that next steps for governance will involve Ed Icenogle meeting with the representatives from the study jurisdictions to talk about governance options.
2. Chris will contact the jurisdictions for contact persons for interviews. This will happen in the next month.

## Study Final Products

1. Report/interim executive summary.
2. Video. We plan to create a video to summarize the study.
3. Web. The study is now on the web; hosted on the CDOT site. The site will be eventually migrated from CDOT's website to a website hosted elsewhere.

## Roundtable Discussion

Chris Primus asked the group for thoughts about today's meeting. Some of the comments were:

1. This has been a fantastic process and I am really excited about where this is going.
2. It was really interesting to hear update about the Peña Boulevard Study.
3. It has been really helpful to hear everyone's input to help us plan for the big picture.
4. Rick Pilgrim: The infrastructure working paper and the governance working paper will be glued together into the final report. We appreciate everyone's feedback so far.
5. Jay Hendrickson: This has just been a fantastic journey. This meeting today is probably the best meeting we've had, and we've had some good meetings. I would like to lean on Peter Baertlein on getting the contract amendment to extend the study deadline from December 31. Any strings you can pull would really be appreciated.

6. Tricia: In terms of marketing, we have not talked about the Office of Economic Development and International Trade (OEDIT). They market the entire state and they go to a lot of trade shows, so they would be a good resource. *Response/Jay*: We have engaged Sandi Moilanen at OEDIT. *Response/Tricia*: Sandi handles international business; we need to engage the person handling local business. **Tricia will provide Chris with the proper contact at OEDIT**, and we will re-engage OEDIT since it has been a while since we met with them.
7. Deb Perkins-Smith: It's been really exciting to see this gel together. CDOT is developing a database of potential projects/needs. Even if CDOT is not funding all of them, they like to see studies like this added to the database.
8. Tom Reed: Great job. Really appreciate the input so far. With the expansion of Peña Boulevard in the future, we will be doing a NEPA process, so we would appreciate everyone's support.
9. Chris Cramer: The takeaway from today is hearing about all the ongoing plans and studies. It would be interesting to see if that convergence would happen magically over the next month.
10. Bob Watkins: Two key things that we have to focus on—one is governance; the second is developing ongoing and continuing relationships with stakeholders. You cannot get too far into physical details and new infrastructure ideas until you accomplish the governance and relationships, because you could have one thing getting in the way of the other.

## Next Meetings

1. Steering Committee Meeting #4: January 14 at 10:00 AM; location to be determined
2. Study Review Committee Meeting #9: January 21, 9:00 AM, location to be determined

## Adjourn (Chris Primus)

1. Chris thanked everyone for attending today's meeting and for all the input.





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# Welcome



## Colorado Aerotropolis Visioning Study





# Today's Purpose

- Economic Analysis





NOVEMBER 19  
JEFF FEGAN

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# Jeff Fegan and Panel Discussion

- Around 80 attendees
  - Public agencies, transportation organizations, elected officials, aviation industry representatives



# Takeaways

- Understanding of developer needs
- Relationship with and among the four host cities
- Cooperative planning task force to coordinate leads
- Close relationship with FAA to speed environmental view processes and airport layout change approvals
- Commercial development flexibility
- Cooperation, communication, risk-taking, patience, building trust

Presentation on Adams County YouTube site:  
[www.youtube.com/watch?v=l5zj1GN53Ow](http://www.youtube.com/watch?v=l5zj1GN53Ow)

# INFRASTRUCTURE

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# Infrastructure



Transportation



Electric & Gas



Communications



Water



Drainage



Wastewater

- Concept-level Understanding of Long-range Plans
- Identification of Opportunities to Collaborate



# Water

- Aurora Water
- Denver Water
- South Adams County Water and Sanitation District

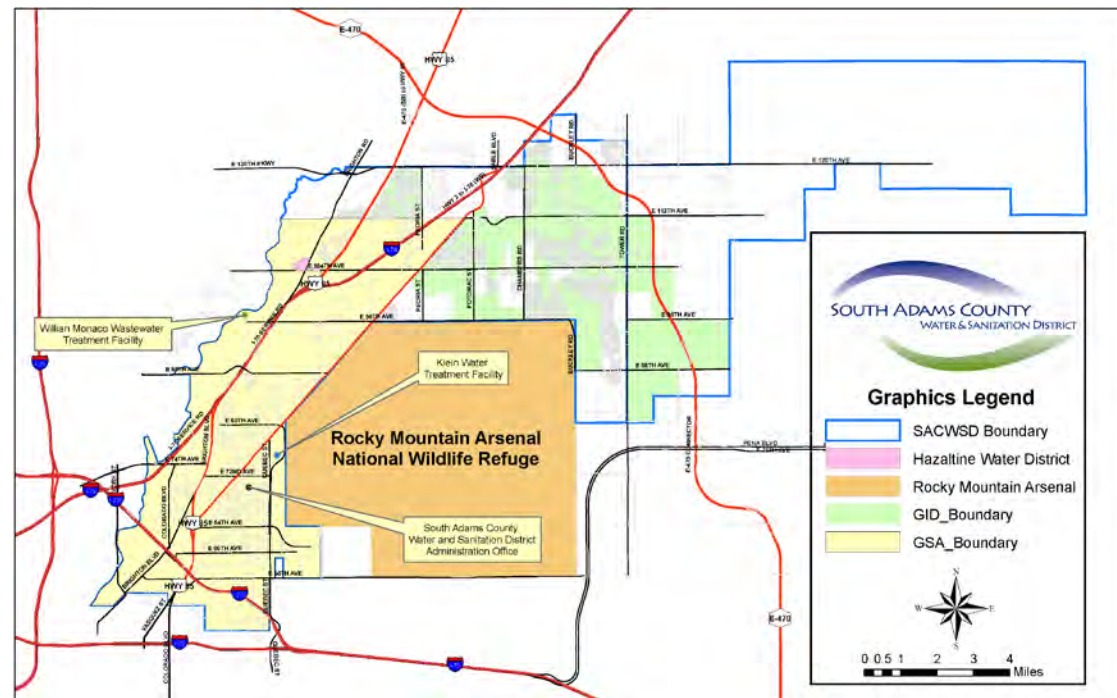


# Wastewater

- Metro Wastewater Reclamation District
- South Adams County Water and Sanitation District



*MWRD Northern Treatment Plant*

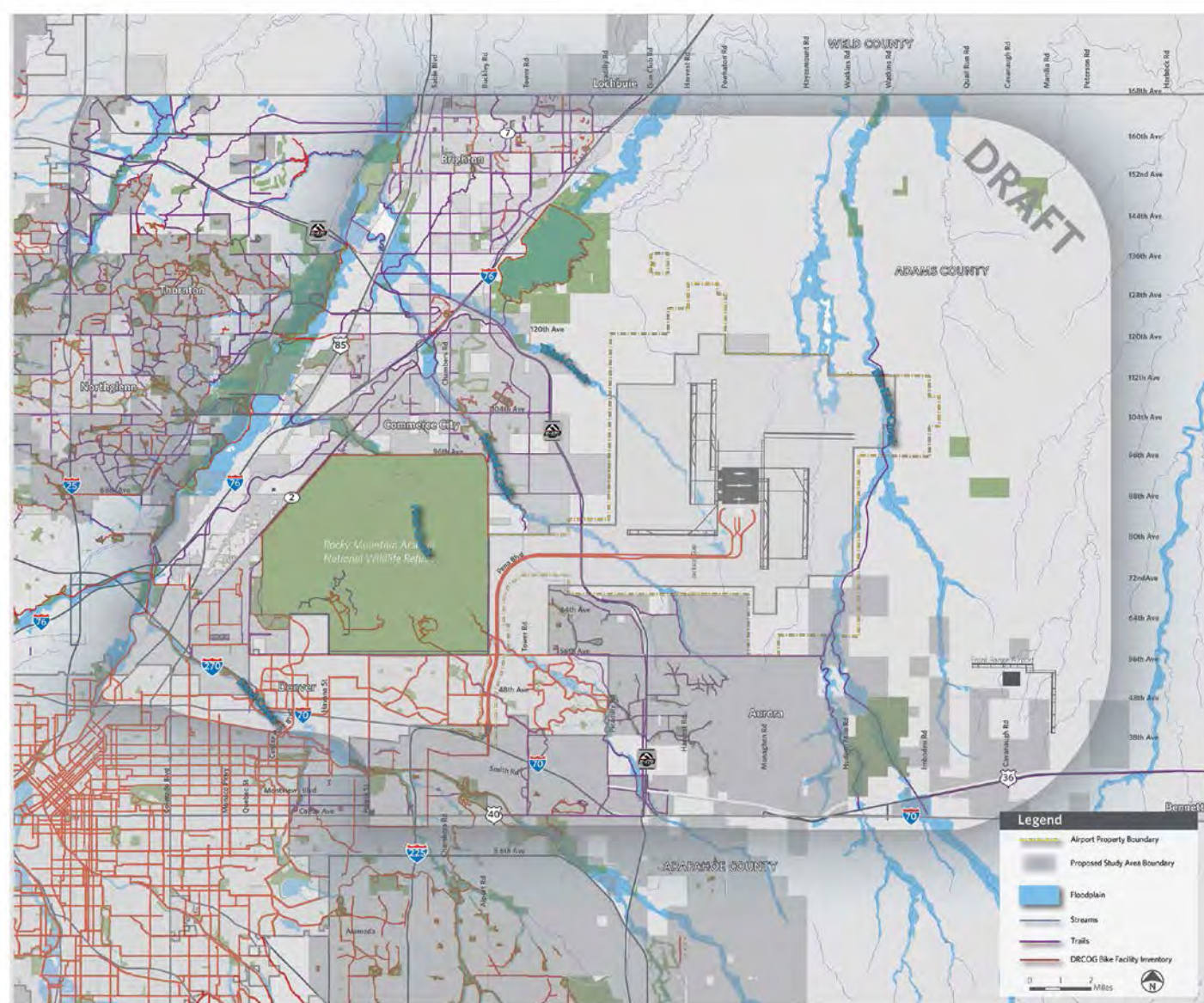


*South Adams County Water and Sanitation District Boundaries*



# Drainage

- Watersheds
- IGAs
- UDFCD
- Unique Circumstances
- Trail System Opportunity



# Gas & Electric and Communications

- Xcel Energy
- United Power



# Transportation

- Reason to invest in transportation infrastructure
  - Transportation infrastructure is the backbone of economic activity
  - The best infrastructure provides the best access to the most opportunities
  - Provide catalytic projects to spur economic activity

*“It’s not the big that eat the small,  
it’s the fast that eat the slow.”*

- John Kasarda



# Transportation

- Process

- Compile existing plans
- Identify commonalities
- Establish stepping stones to achieve everybody's visions collectively

*“It’s not the big that eat the small,  
it’s the fast that eat the slow.”*

- John Kasarda

# Compilation of Existing Plans

Figure 5. Strategic Corridors



Note: Refer to Figure 7 for other Regional Bicycle Corridors


 May 2016 / 5/23/2016  
 No Confidentiality, Planning and Strategy  
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 Adams County Planning and Development Department  
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 Denver, CO 80011  
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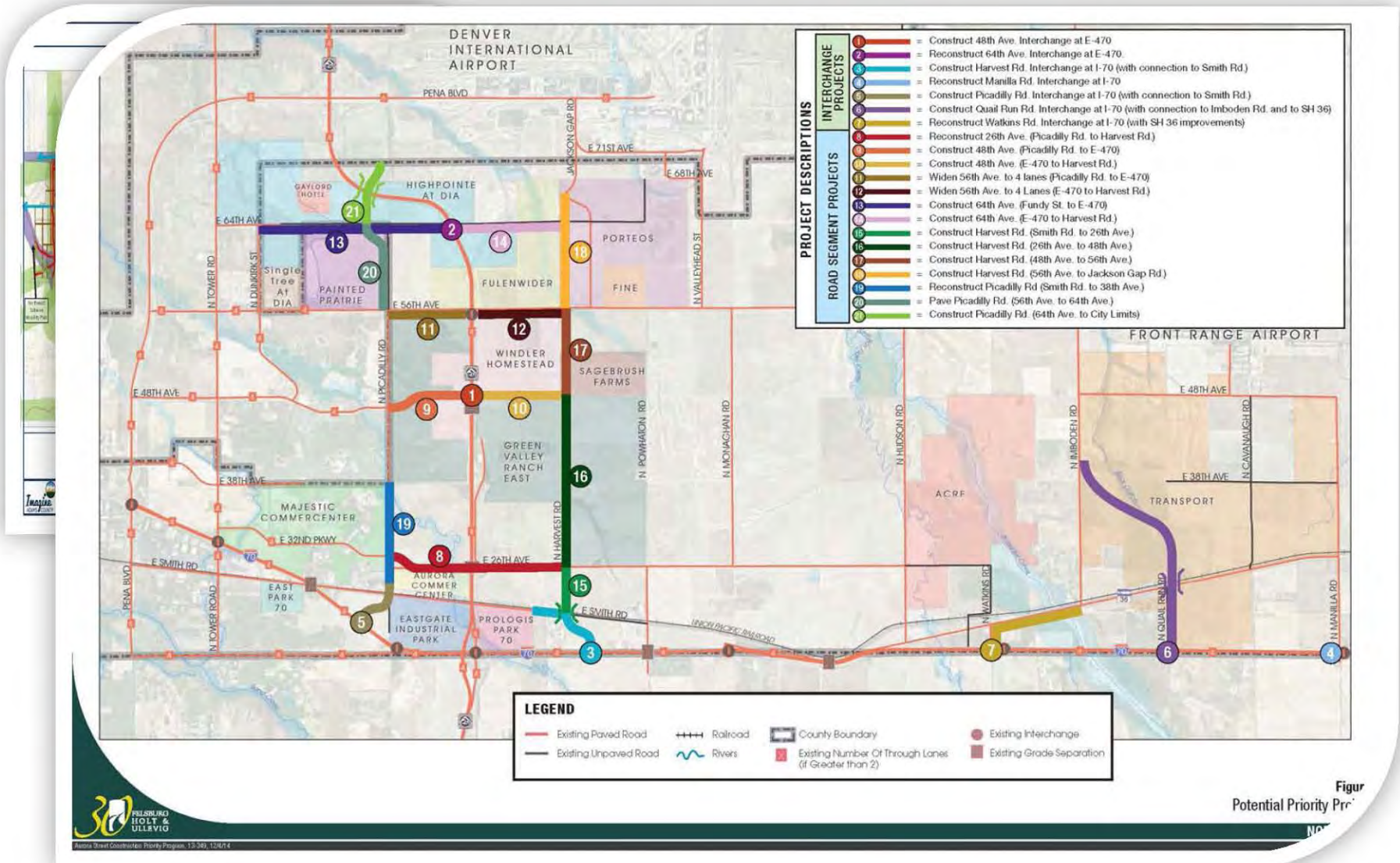
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**LEGEND**  
— Freeways / Tollways  
— Regional Strategic Corridors  
— Strategic Corridors  
— Colorado Front Range Trail  
— Corridor Study Modernway  
— Regional Transit Corridors

# Compilation of Existing Plans



# Compilation of Existing Plans

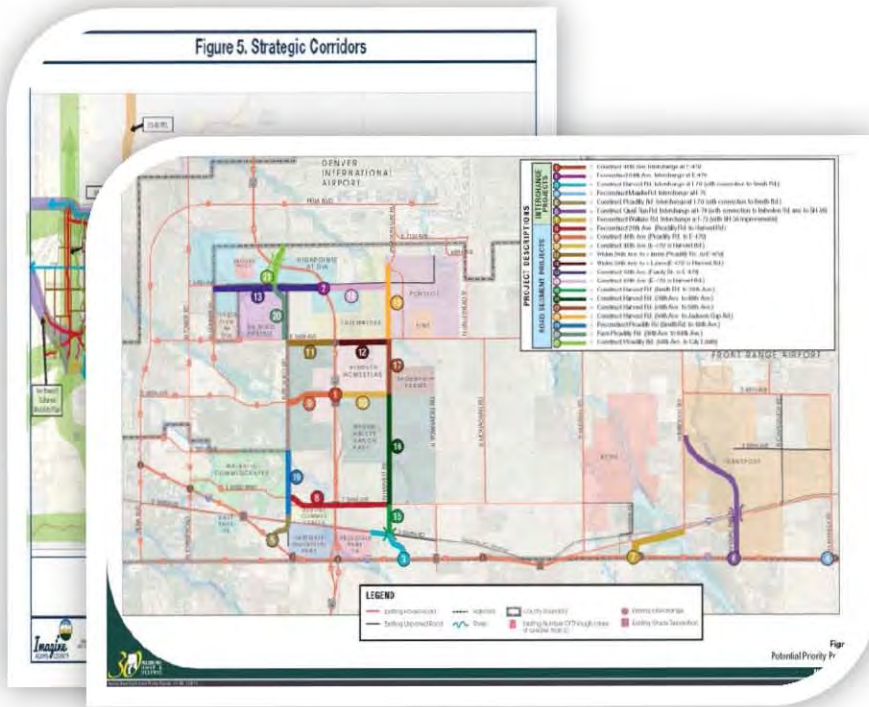


Figur  
Potential Priority Pr...



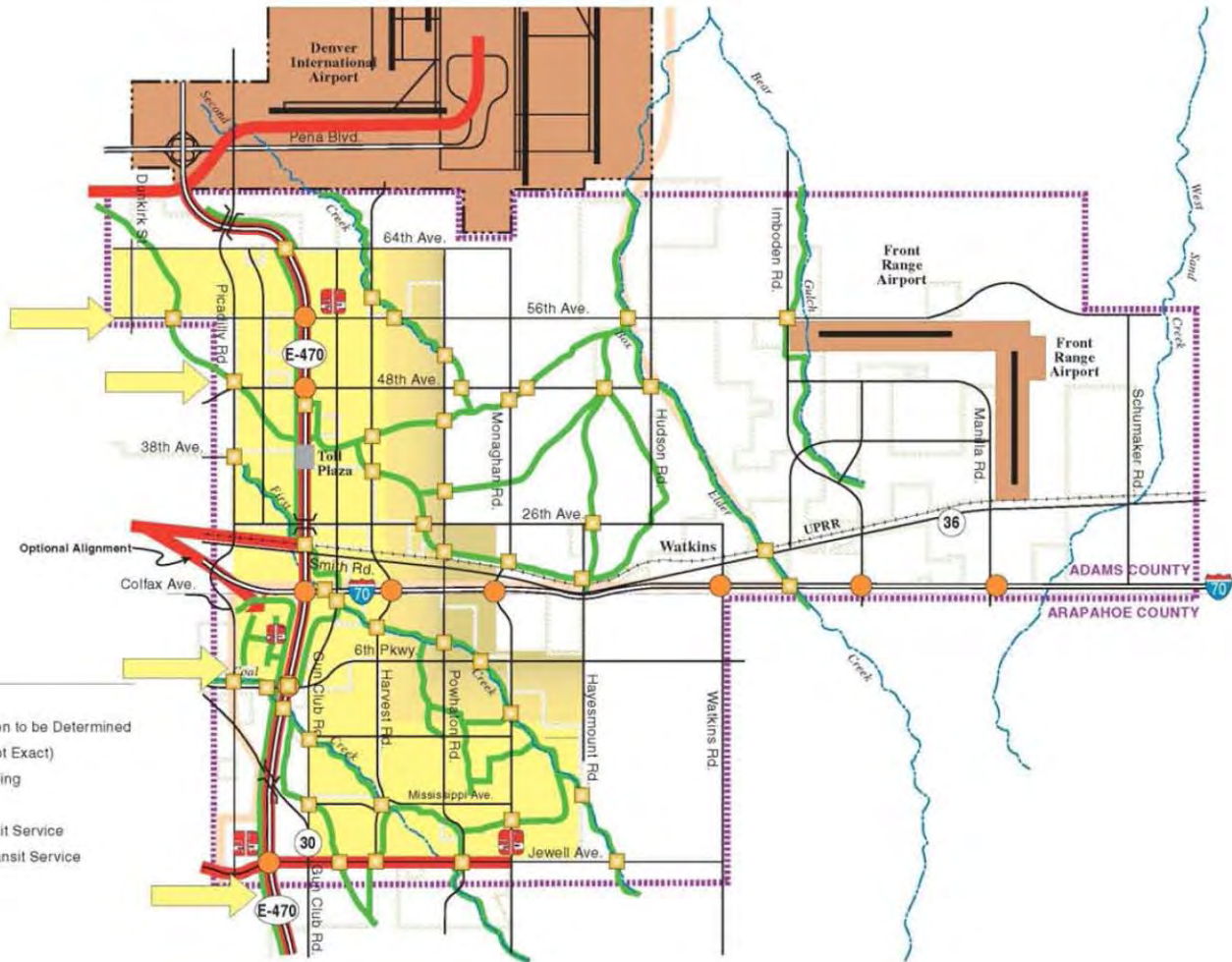
# Compilation of Existing Plans

Figure 5. Strategic Corridors



# Compilation of Existing Plans

BOURG  
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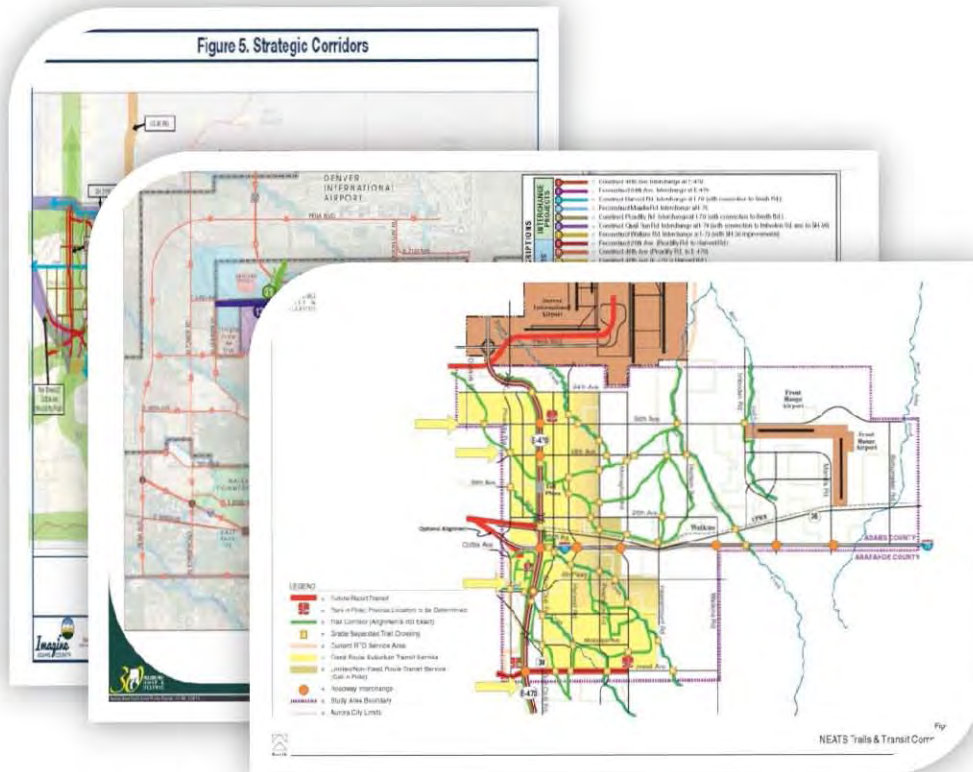
## LEGEND

- = Future Rapid Transit
- = Park-n-Ride; Precise Location to be Determined
- = Trail Corridor (Alignments not Exact)
- = Grade Separated Trail Crossing
- = Current RTD Service Area
- = Fixed Route Suburban Transit Service
- = Limited/Non-Fixed Route Transit Service (Call-n-Ride)
- = Roadway Interchange
- = Study Area Boundary
- = Aurora City Limits



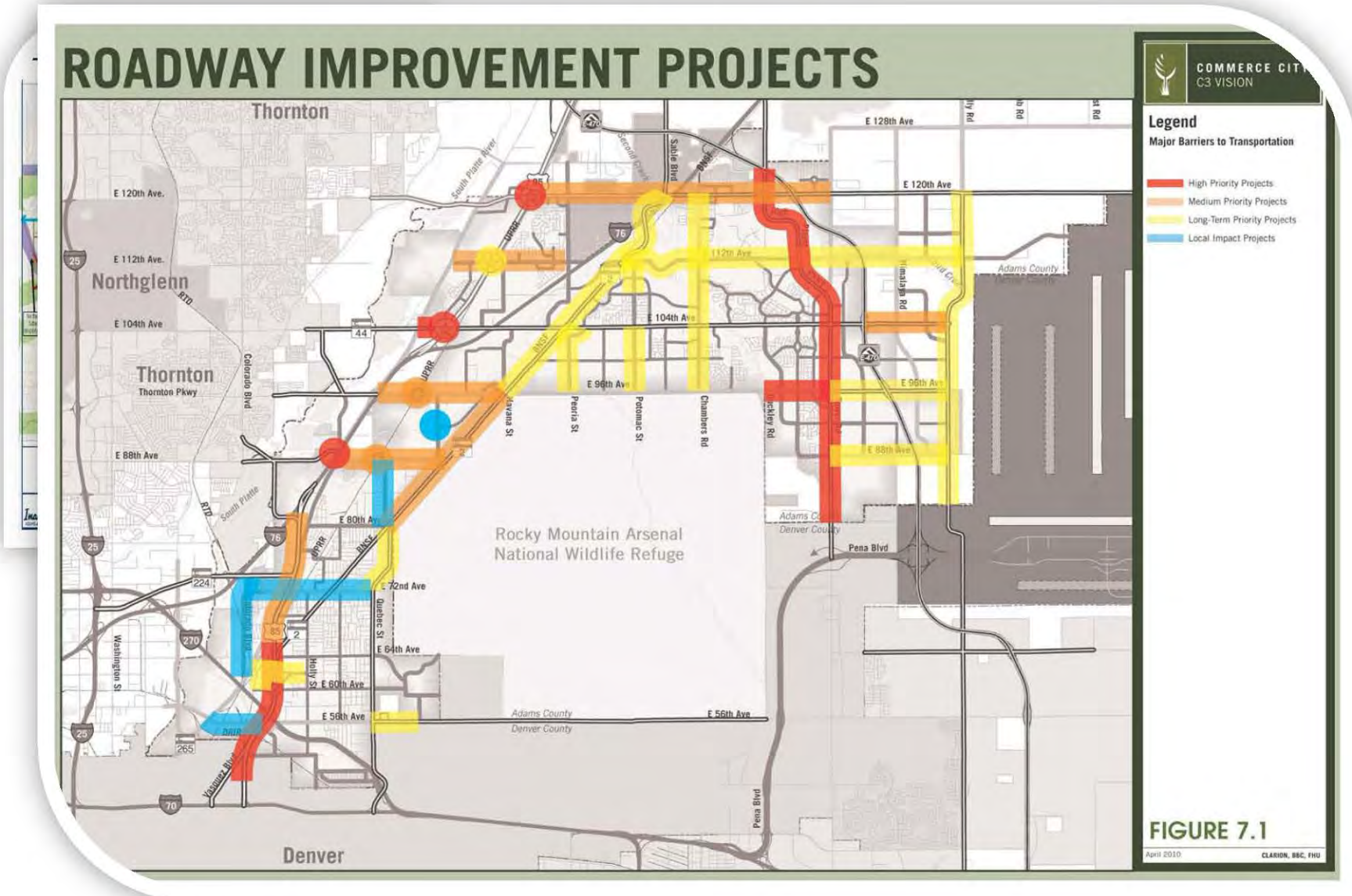
Fig. 1  
NEATS Trails & Transit Corridor

# Compilation of Existing Plans



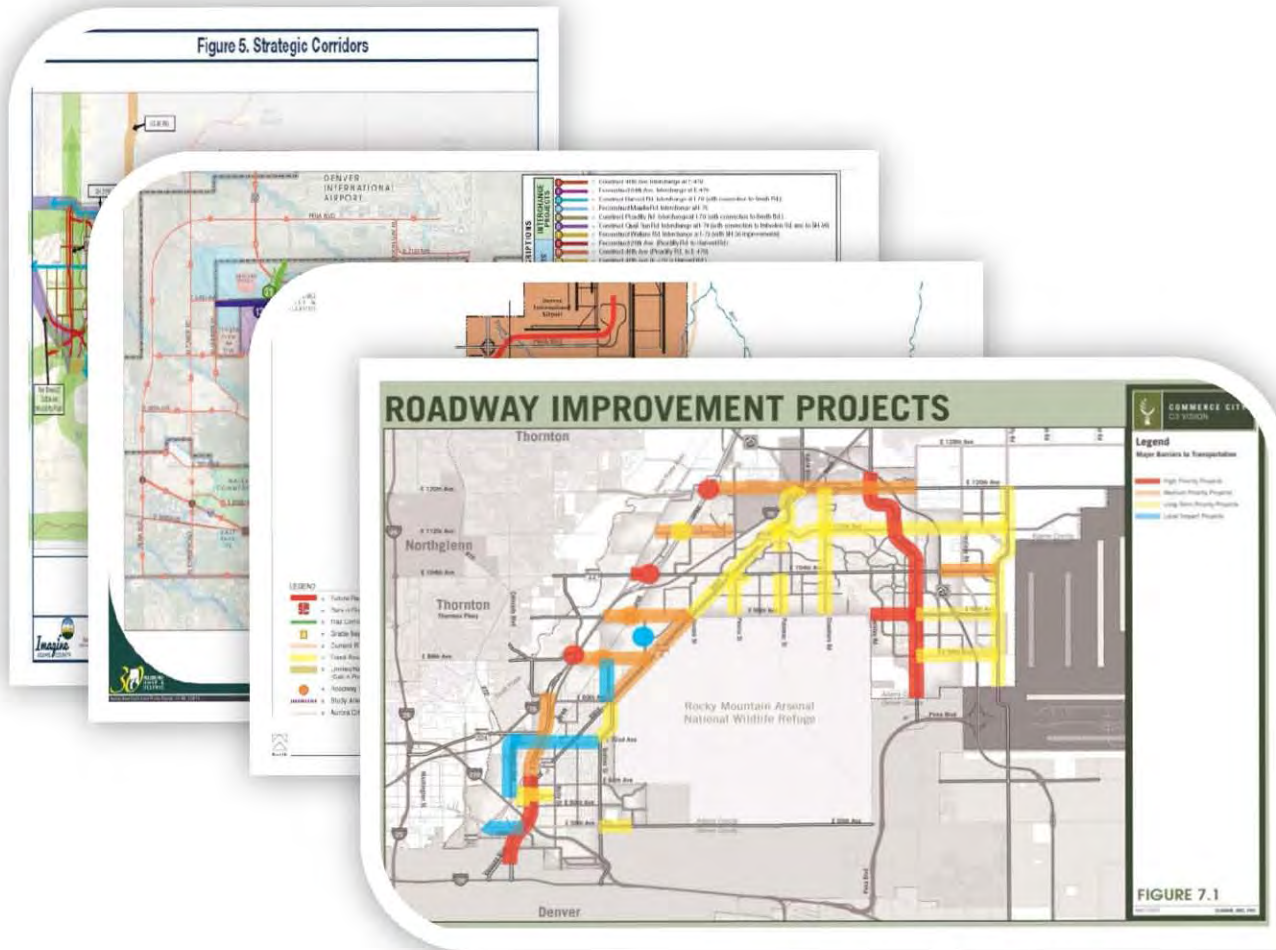


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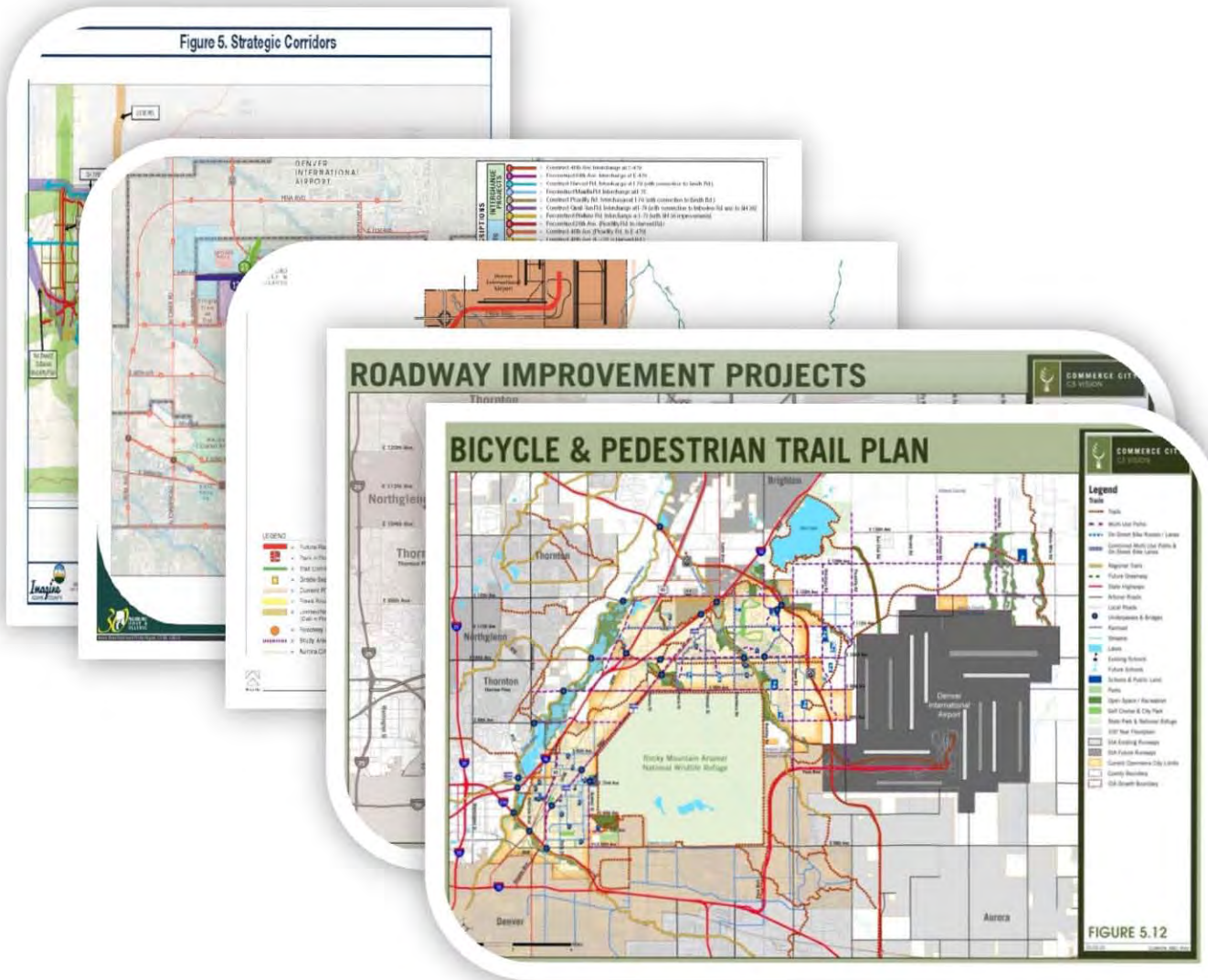
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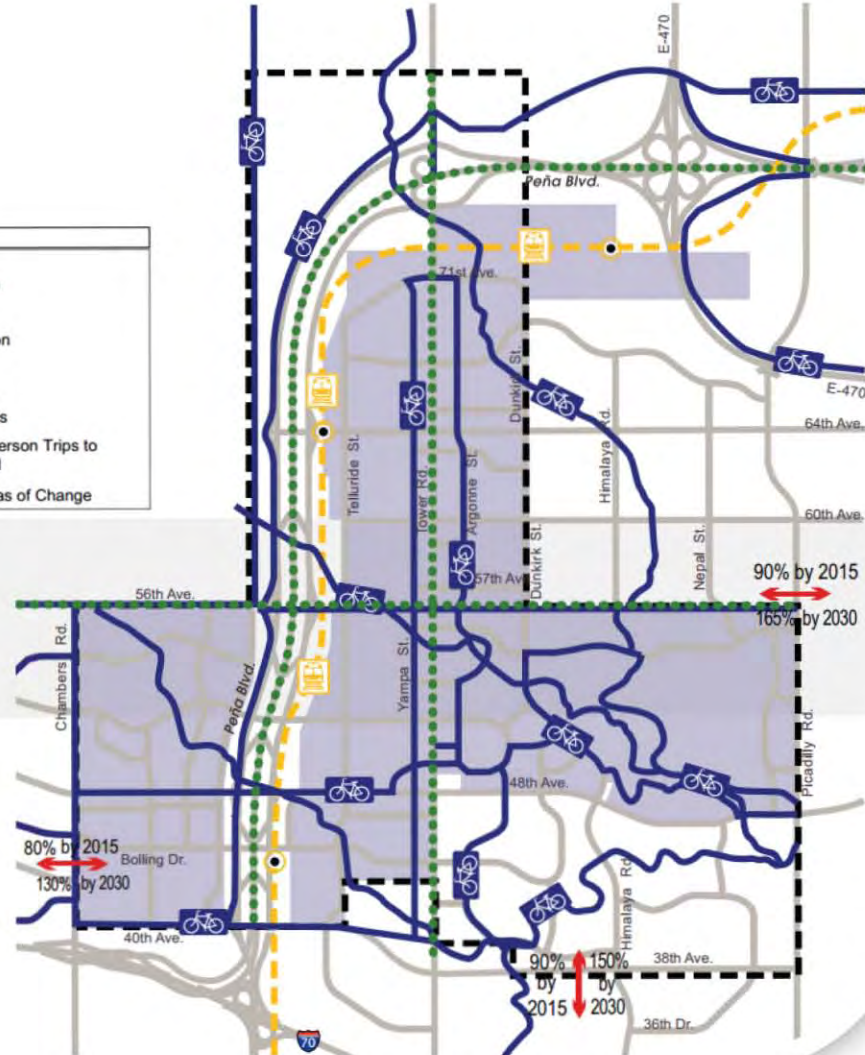
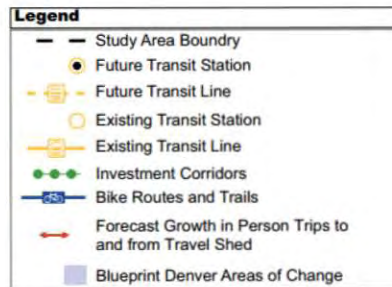


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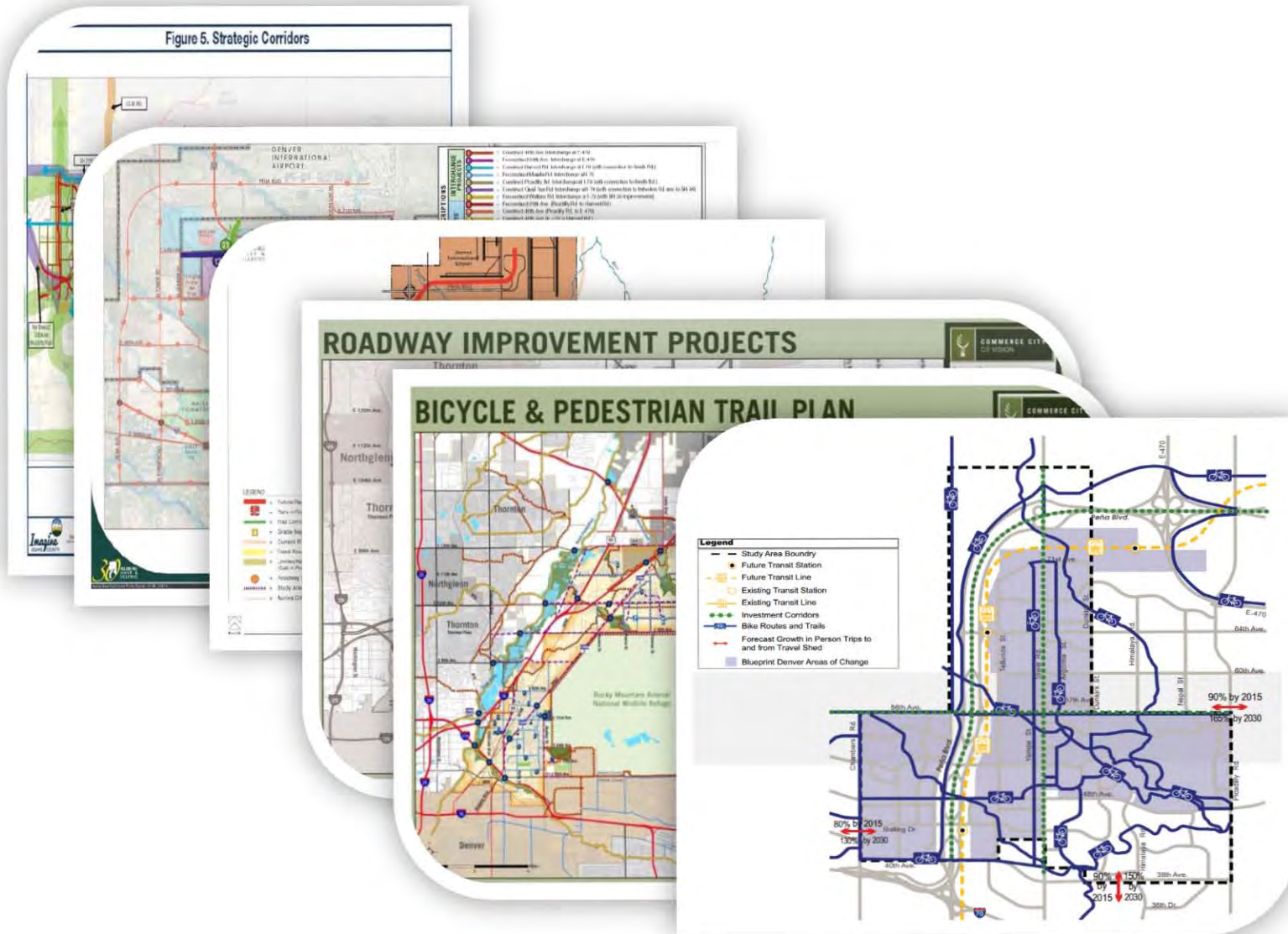
# Compilation of Existing Plans

Figure 5. Strategic Corridors



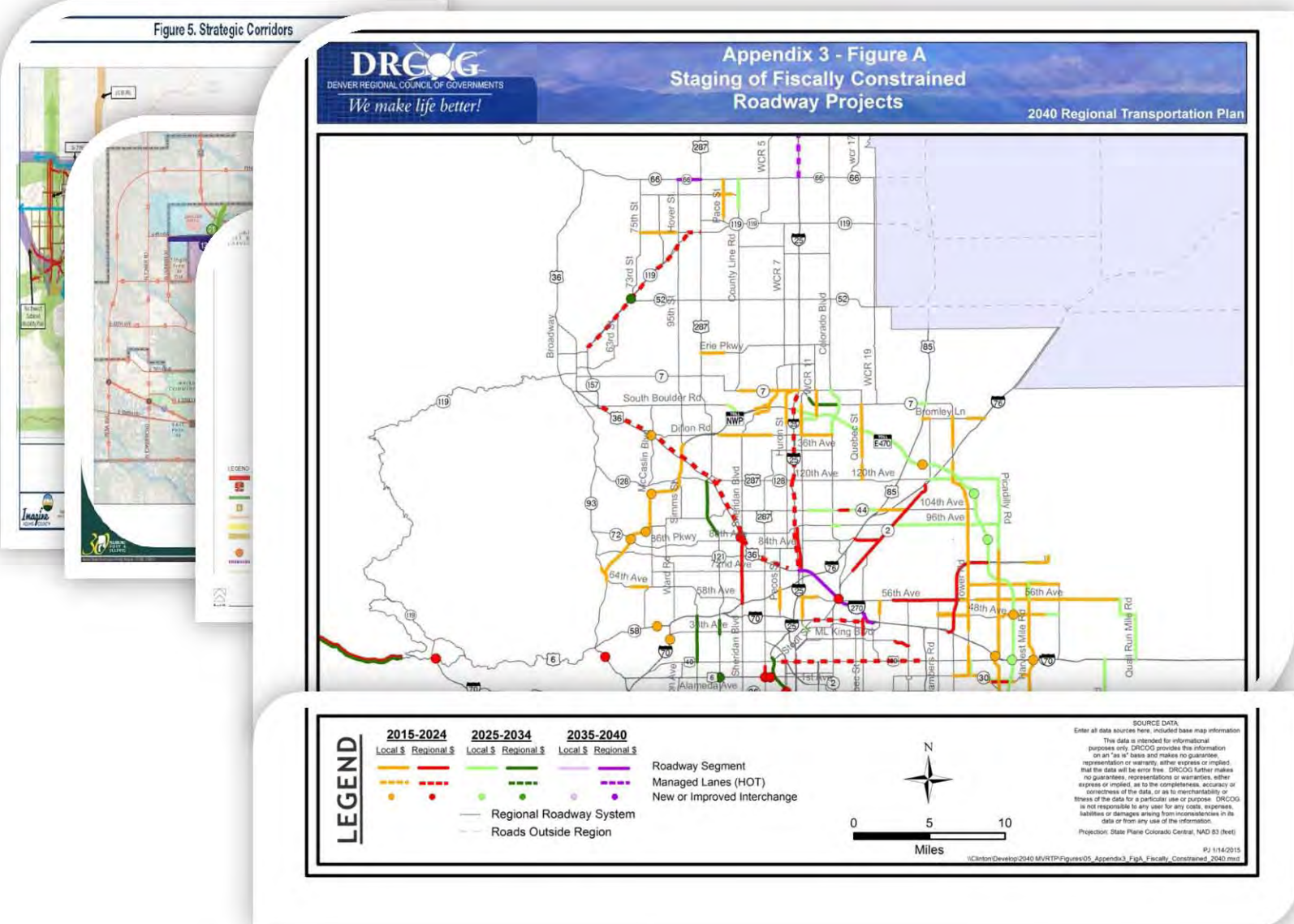


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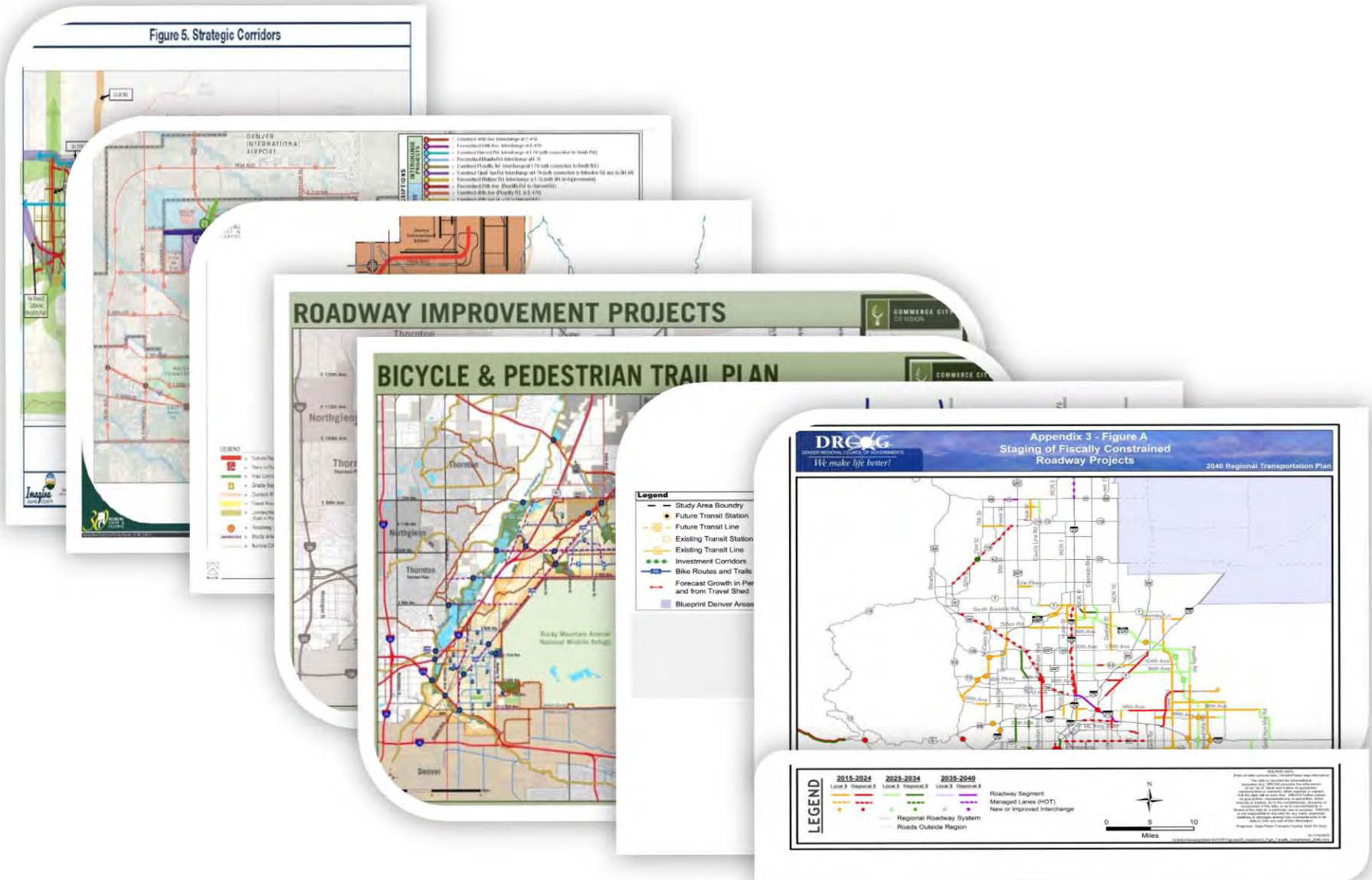
# Compilation of Existing Plans

Figure 5. Strategic Corridors





# Compilation of Existing Plans

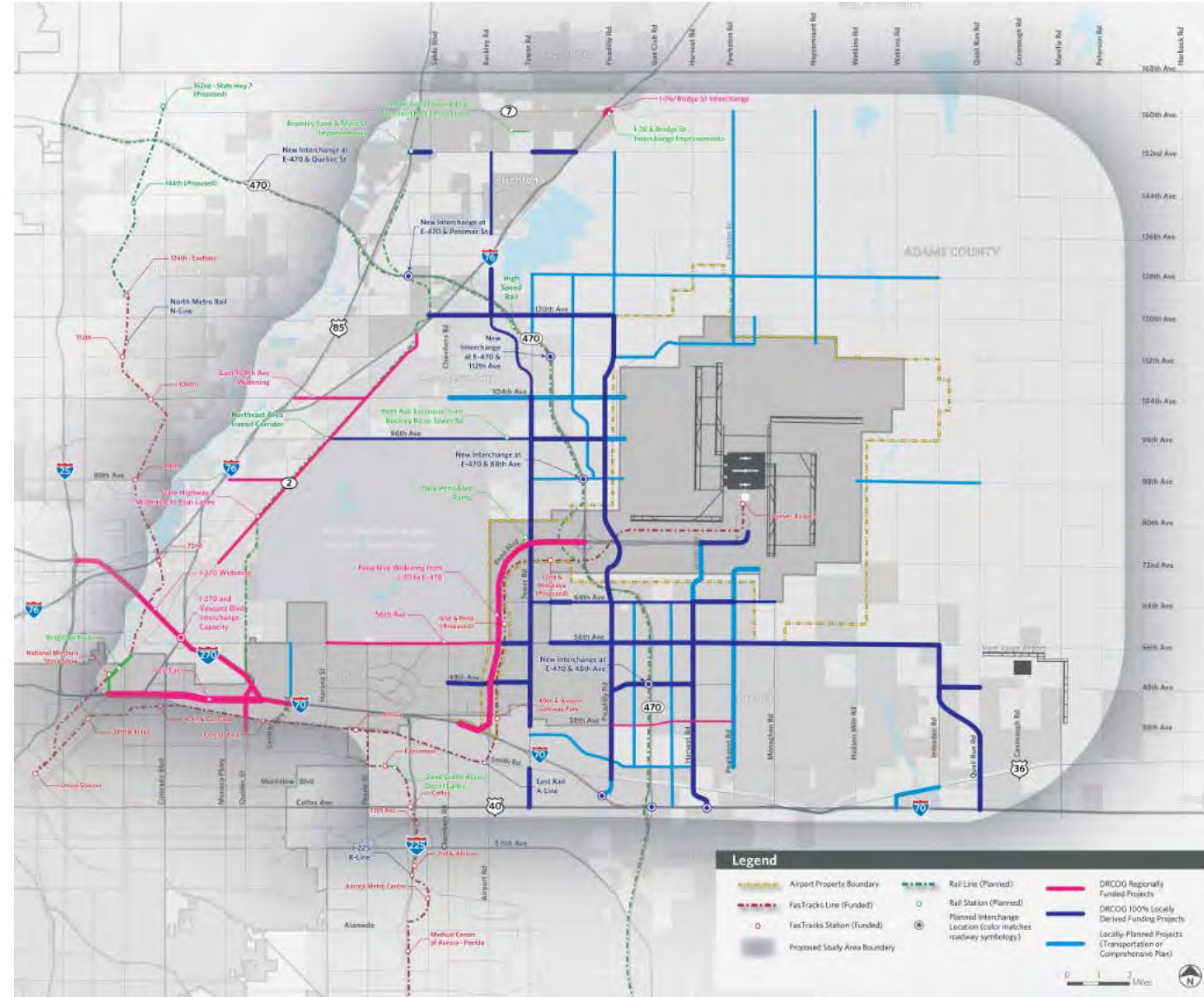


# Compilation of Existing Plans

DRCOG 2040  
REGIONALLY  
FUNDED  
PROJECTS  
**\$366 MILLION**  
**+ \$1.2 BILLION FOR  
I-70 EAST**

DRCOG 2040  
LOCALLY FUNDED  
PROJECTS  
**\$1.05 BILLION**

OTHER PLANNED  
PROJECTS





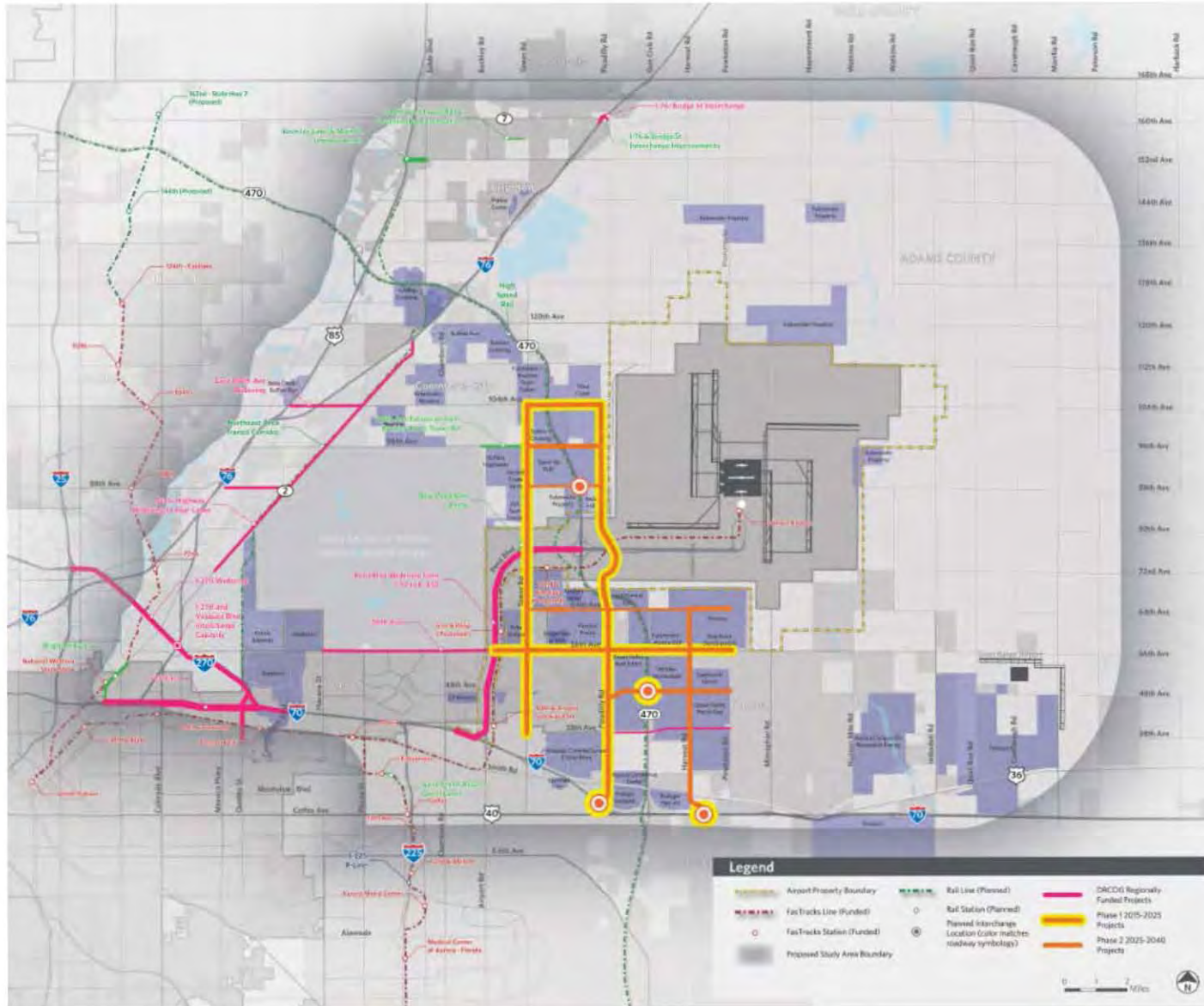
# Identify Commonalities

- North-South Pinch Point Capacity
  - Widen Pena and E-470
  - Tower Road and Picadilly Road
- Additional Access to High Order Facilities
  - Interchanges along E-470 and I-70 and more access to the Airport
- East-West Capacity
  - 48<sup>th</sup>, 56<sup>th</sup>, 64<sup>th</sup>, 88<sup>th</sup>, 96<sup>th</sup>, 104<sup>th</sup>, 120<sup>th</sup>
- Create a Place with Transportation CHOICES
  - Capitalize on the East Corridor A-Line Commuter Rail
  - Provide BRT or other rapid transit solutions
  - Preserve ROW for transit – High-Speed-Rail or Commuter Rail
  - Build a regional trail system

# Establish the Conceptual 2040 Network

- Create Catalytic Projects
  - Build toward your separate visions collaboratively
- Guiding Principles
  - Contiguous to active developments
  - Reflect current local plans
  - Incremental to previous investments
  - Prioritization through regional collaboration
  - Achieve early attainable projects
  - Support a long-term vision

# Establish the Conceptual 2040 Network



# MULTIMODAL LOOP

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# Benefits of Speed

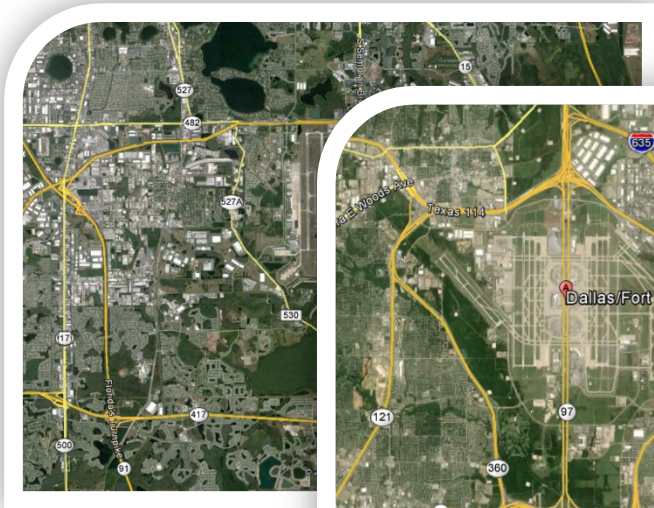
- Functionality
  - Arterials are slow – even the fast ones
    - At-grade crossings create friction and impede flow
  - Grade separation is the key to fast movement – for ANY MODE
- Circumference around DIA is 30 miles. To traverse 2 sides:
  - Avg. 60 mph = 15 minutes    Avg. 25 mph = 36 minutes

*“It’s not the big that eat the small,  
it’s the fast that eat the slow.”*

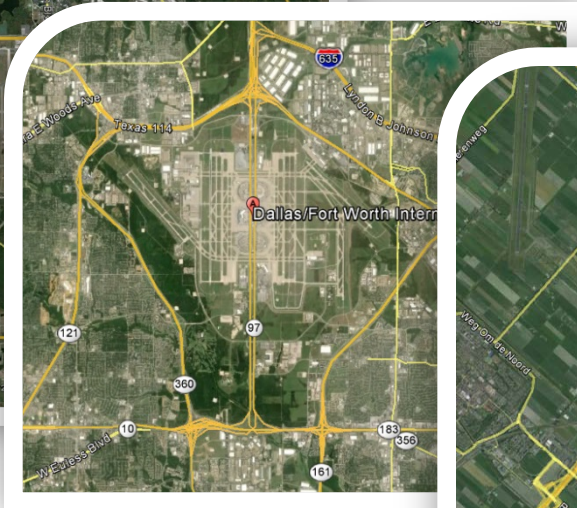
- John Kasarda

# Loop Examples

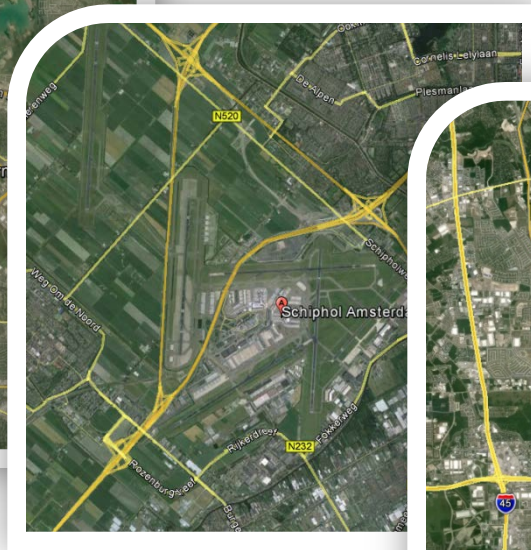
ORLANDO



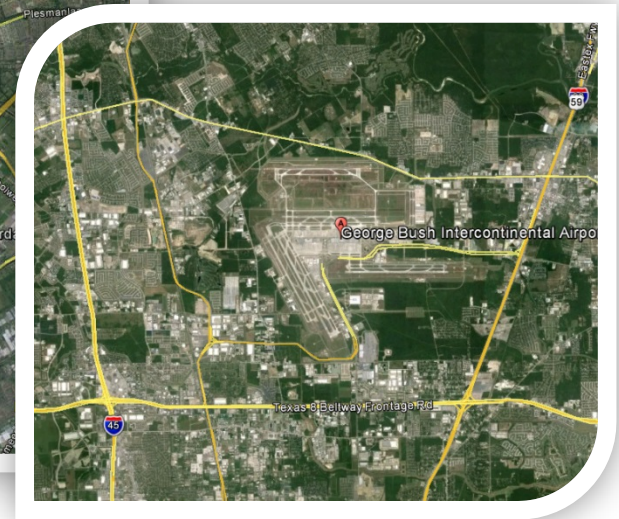
DFW



SCHIPOL



HOUSTON



*“It’s not the big that eat the small,  
it’s the fast that eat the slow.”*

- John Kasarda

# Loop Exercise

- Part A: Gather input today
- Part B: Report back January 21 at next SRC meeting

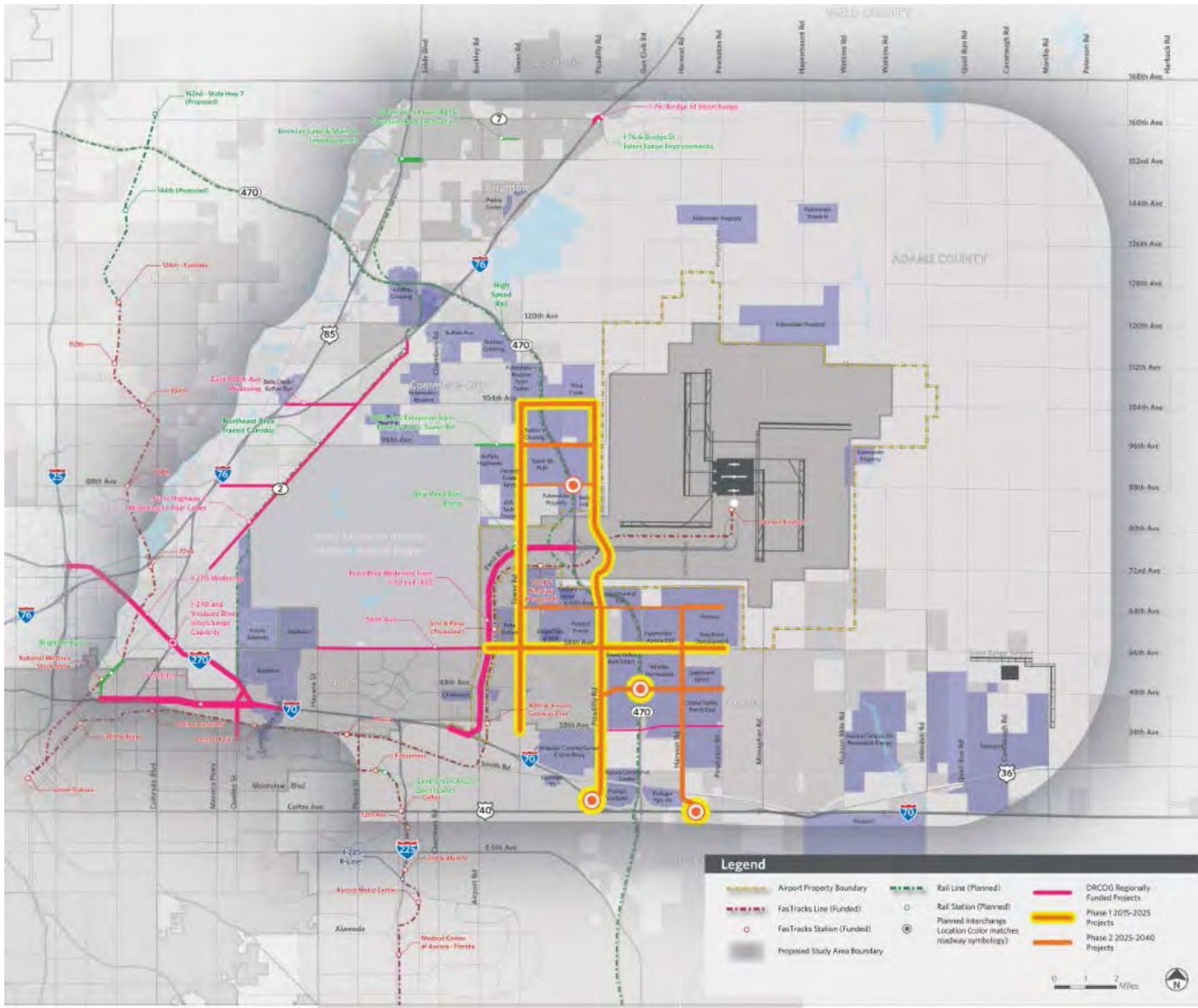
# ECONOMIC ANALYSIS

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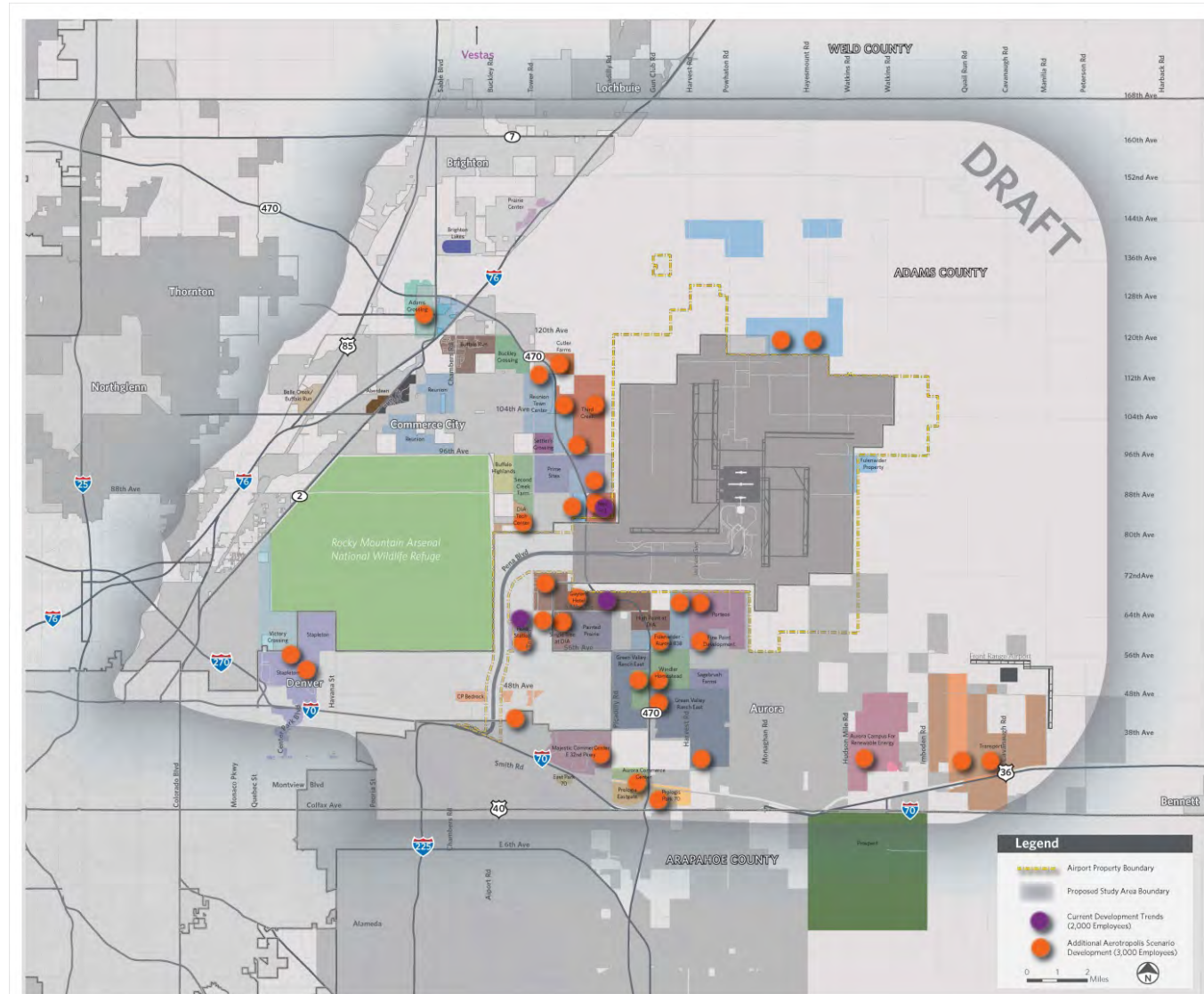
# Establish the Conceptual 2040 Network

- \$535 million investment of 45 linear miles of new & improved roadways.



# Base Assumptions

- Allocation of 75,000 jobs
- Each dot represents 2,400 jobs.



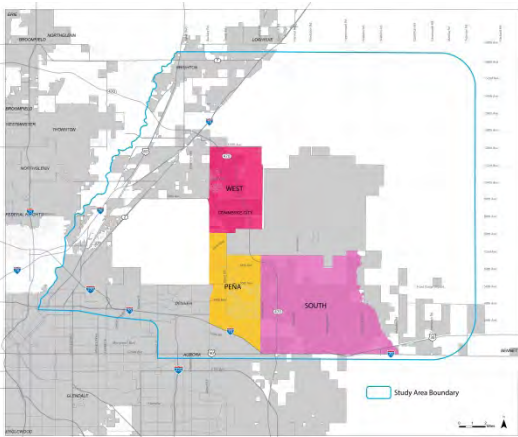
# Aerotropolis Scenario Assumptions

- Induces additional growth, above and beyond DRCOG projections for the area.
- Opens up additional land for development.
- Creates favorable market conditions through infrastructure investment.
- Much of the growth represents a net gain in economic and fiscal benefits for the Denver metro area, rather than a diversion from the rest of the region.
- Future land uses initially made up of industrial (1,650 acres), retail (660 acres), office (202 acres), and TOD mixed-use commercial (275 acres).
- New employees drive demand for residential (75,000 houses).

# “Business as Usual” vs. Aerotropolis

	“Business as Usual” Increase*	Aerotropolis Scenario Increase*	Current Metro Area Estimates	“Business as Usual” % of Metro Area	Aerotropolis % of Metro Area
Jobs	6,000	80,000	1,325,000	0%	6%
Population	49,000	259,000	3,015,000	2%	9%
Commercial Development	3.6 Million Square Feet	46 Million Square Feet	467 Million Square Feet	1%	10%

## \*Concentrated Development Area



Source: BLS, 2014 for Denver, Aurora, Broomfield. 2014 US Census estimates for Adams, Arapahoe, Boulder, Broomfield, Douglas, Jefferson, and Denver Counties. Costar 2015 estimates



# Potential Revenue Streams (\$2015)

## 2016-2040

Draft

	“Business as Usual”	Aerotropolis
Commercial Property Tax	\$19.0 Million	\$236.9 Million
Residential Property Tax	\$37.2 Million	\$236.3 Million
Sales Taxes	\$18.1 Million	\$90.0 Million
Residential Development Impact Fees	\$17.3 Million	\$110.3 Million
TOTAL	\$91.6 Million	\$673.5 Million

# Conclusions

- The present value of future revenues from Aerotropolis-related development exceeds the total estimated project costs.
- An effective governance structure and a high level of regional coordination would be necessary to:
  - Realize the Aerotropolis vision
  - Finance the costs of Aerotropolis-related infrastructure improvements
  - Build a cohesive and regional economic development strategy

# IGA AMENDMENT

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# PIO MEETING

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# PIO Meeting Proposed Agenda

- I. Aerotropolis Overview
  - a. Current study
  - b. How it relates to 1A
  - c. Next steps (post-study)
- II. Communications Goals and Objectives
  - a. Current Owner – CDOT
  - b. Future Owner – TBD
- III. Interim Communications Plan (immediate post-study)
  - a. What are the minimal elements?

# PEÑA BOULEVARD STUDY UPDATE

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# STUDY ACTIVITIES

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# Study Final Products

- Report/Interim Executive Summary
- Video
- Web



You are here: [Home](#) / [Projects](#) / Colorado's Aerotropolis

## Quick Links

[Learn More](#)

[Speaker Series](#)

[Visioning Study](#)

## Colorado's Aerotropolis

One of the most compelling economic opportunities in the world is moving forward.

### What is an Aerotropolis?

An urban plan in which the layout, infrastructure, and economy is centered on and around an airport.

### Visioning Study

#### Overview

The Federal Highway Administration funded a grant for a Colorado Aerotropolis Visioning Study to identify opportunities for the efficient infrastructure needed to foster and support economic development around Denver International Airport (DIA)EN. This study, administered by the Colorado Department of Transportation, comes at an opportune time to capitalize on the 1A ballot measure actions approved by Adams and Denver county voters. The visioning study will conclude in early 2016.

#### Collaborative Investment

The planning framework will identify opportunities for collaborative investments in infrastructure (Transportation, Water, Wastewater, Power, and Drainage).

#### Stakeholders

Jurisdictions adjacent to or near the airport are major stakeholders of the visioning study including Adams County, Aurora, Brighton, Commerce City and Denver. Economic development corporations, transportation agencies, and other infrastructure agencies are also involved in the study effort.



**108 INDIVIDUALS PARTICIPATED**



**33 MEETINGS BY THE END OF 2015**

<https://www.codot.gov/projects/aerotropolis/>

# Next Meetings

## Steering Committee

- Meeting #4: January 14, 10:00  
Location: **TBD**

## Study Review Committee

- Meeting #9: January 21, 9:00  
Location: **TBD**

# ROUNDTABLE DISCUSSION

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# THANK YOU

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# Colorado Aerotropolis Visioning Study

## Agenda

Project: Colorado Aerotropolis Visioning Study

Subject: Study Review Committee Meeting #7: Joint Meeting with Steering Review Committee

Date: November 19, 2015 9:00 - 11:30 a.m.

Location: Adams County Government Center

1. Welcome Jay Hendrickson, CDOT
2. Welcome from Adams County Charles "Chaz" Tedesco, Adams County Commissioner
3. Opening Remarks Erik Hansen, Adams County Commissioner  
Evan Dreyer, Deputy Chief of Staff, City and County of Denver
4. Study Overview
5. Presentation by Jeff Fegan
6. EDC Panel Discussion  
Moderator: Barry Gore, Adams County Economic Development  
Panelists:
  - Tricia Allen, Adams County Economic Development
  - Laura Brandt, Metro Denver Economic Development Corporation
  - Michelle Claymore, City of Commerce City
  - Yuriy Gorlov, Aurora Economic Development Council
  - Michael Martinez, Brighton Economic Development
  - Dan Poremba, DEN Real Estate
7. Adjourn

### COLORADO AEROTROPOLIS | Visioning Study



#### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

## Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Joint Study Review Committee #7 and Steering Committee #3 Meeting
Date:	November 19, 2015, 9:00 a.m.
Location:	Adams County Government Center, Public Hearing Room
Attendees:	See attached sign-in sheet
Distribution:	SRC members, Steering Committee Members, File

Note: The entire meeting is recorded on video <https://www.youtube.com/watch?v=I5zj1GN53Ow>

### Welcome (Jay Hendrickson)

1. Jay Hendrickson welcomed everyone and announced the purpose of today's meeting. He mentioned the successful vote approving the amendment to the IGA. He thanked all the partners of the Aerotropolis study. The support and participation by the partners for this study have been incredible.
2. He introduced Jeff Fegan, today's guest speaker.

### Welcome from Adams County (Commissioner Jan Pawlowski)

3. Commissioner Pawlowski shared a piece of art that was about an Aerotropolis. When Aerotropolis came up a few years ago, she wasn't shocked to hear that word, but a lot of people were. She stressed the importance of everyone working together to achieve the vision. When the IGA amendment came up, it seemed like an insurmountable task. But because of Commissioner Erik Hansen's leadership, the amendment went through. She thanked everyone who supported the amendment and voted for it. The vote passed overwhelmingly.
4. One of the things that was constantly brought up is that Denver is in the center of the world. It only makes sense that we build an aerotropolis to go with that.

### Study Overview (Chris Primus)

1. Chris Primus gave a brief overview of the study area and presented the study area map.
2. He then introduced the Aerotropolis study vision statement, as well as the study objectives.
  - a. Vision: "A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing."
  - b. Study Objectives:
    - i. Setting a collaborative vision.
    - ii. Comparing future growth with or without an Aerotropolis.
    - iii. Identifying a framework of collaborative infrastructure possibilities.
    - iv. Outlining a governance framework and implementation steps.
3. He announced the brand new website for the Aerotropolis study on CDOT's website. <https://www.codot.gov/projects/aerotropolis>

4. Through the course of this study, the study team has been learning and educating themselves about aerotropolis. Toward this end, Jeff Fegan, an aerotropolis authority, has been invited to present his experiences with developing DFW Airport.
  - a. Jeff Fegan has over 35 years in the airport industry, including 29 years with the DFW Airport—19 years as the Chief Executive Officer.
  - b. Under his leadership, DFW was one of the first to embrace the Airport City/Aerotropolis concept, which has resulted in significant new commercial development and substantial new revenues for the airport from projects, such as major industrial parks, hotels, and foreign trade zone developments.
  - c. Jeff focused significant efforts on Air Service Development leading to DFW Airport's position as one of the top connecting hubs in the world. Jeff ensured that DFW could handle future demands resulting in a number of major Capital Improvement Programs totaling over \$5 billion in new infrastructure during his tenure. Also as a result of his transformational leadership, DFW Airport has developed one of the strongest brands in the industry.
  - d. Prior to joining DFW in 1984 as the Airport's Chief Planner, Jeff worked in the airport consulting business starting his career in 1978. He earned a Master's degree in City Planning from the Georgia Institute of Technology, a Bachelor of Science in Geography from Frostburg University, Maryland, and completed the Stanford Executive Program at Stanford University.

### **Land Development at DFW International Airport: A Collaborative Journey (Jeff Fegan)**

1. A big believer of the Aerotropolis concept long before the Aerotropolis word was coined.
2. When he first saw the big piece of land around DFW, he understood its potential.
3. Attended the first Aerotropolis conference in 2002. The last conference in Denver was attended by about 300 people.
4. Here to talk about commercial development around airports. What's going on in Denver right now presents a great opportunity for development.
5. There are a lot of similarities between DFW and DIA. There is a lot of land around DIA. Both airports are relatively young as far as airports go. Both are located in growing communities with strong economies. Both cities do not have navigable waters, so the air really is the only major means of transportation.
6. At DFW, the surrounding communities looked pretty much the same when the airport first opened and for the first 10 years. Now when you look at all the developments around DFW, the land is bounded by rooftops. We got a lot of resistance in the beginning. People didn't believe that the opportunity was there. Every time we get started to look at a piece of land for development, there was a lot of resistance to the development. People were more interested in development on airport than off-airport. Having commercial development around the airport has become a very sustainable source of income through taxes.
7. DFW is located right in the center of the Dallas/Ft. Worth metropolitan area. Much of the land around the airport was undeveloped. But everything has now grown around the airport. DFW Airport is owned by the City of Dallas and City of Ft. Worth with 11 board members, including the mayors of Dallas and Fort Worth.

8. The airport has grown quite a bit, and has 7 runways. It is one of the highest capacity airports in the world. There is an extensive transit system and it is now home to the American Airlines HQ and operations center—the largest hub for American Airlines by far. Had a huge economic impact with \$31 billion a year. Probably the biggest change in the last 10 years has been the growth of international travel. There are 57 new international destinations. Large cargo operation with 700,000 tons of cargo every day.
9. 12,000 acres to protect for aviation purposes; but 5,200 acres are appropriate for development. Created 13 distinct development districts within the airport—about 6 are active. Each district represents different markets with different development potential. 50 years or more of development around the airport.
10. Development was limited until the late 1990s. The 1999-2000 timeframe is when things really got started. Development around the airport created pressures to build more on the airport. In 1999, entered into a tax-sharing agreement with four surrounding cities—Euleess, Irving, Coppell, and Grapevine. Started with a new rental car facility. A thousand acres around these areas are not yet developed. I suspect over time, these also will be developed.
11. Developers off airport began to realize the DFW Airport travel opportunity. It is different developing around airport. Trammel-Crowe was an early one. There are restrictions to consider.
12. Taxes total today of \$63 million have been generated from the surrounding commercial development and are expected to grow over time. And there are \$36 million of non-airline revenue to the airport every year.
13. Big driver was we had a very active regional council of government advocate—the North-Central Texas Council of Governments. It was a big advocate for roadway improvements to the airport. Now the airport is surrounded by highways and rail service. All these facilities are developing around the airport, that's where all these large commercial developments are. The proximity to the airport with transportation emanating from the airport really is a big draw for these developments.
14. A new hotel at DFW was constructed and is owned by DFW.
15. International Commerce Park—a development on airport started in 2000. Today it is completely built-out. It is a 422-acre site. DFW invested \$37 million in infrastructure for this site. It has done very well. The development community has invested \$247 million in all these buildings. Economic impact of this is huge. Airport gets \$6 million in revenue from these 422 acres of development.
16. Dallas Cowboys' main apparel headquarters is based on the airport. They import product from Central America. They distribute products in this building.
17. Southgate Plaza—another development that is in development today. The Hyatt Place is the third hotel we have on the airport. There will be post office in this complex and five other pad sites for other tenants.
18. Sikorsky—manufactures helicopters. What they do at DFW is repair/refurbish helicopter blades. They have a test facility at this location, then they ship the blades out.
19. An Infinity car dealership has located at DFW and it has become one of the best-selling dealership in the country.
20. We have two distribution facilities around the airport. One is the Logistics Center 1 with 23 acres of space. One distribution company distributes dialyses equipment. An example of some of the companies that see potential in locating in an airport.

21. Of course there were a lot of roadblocks during the development of the Aerotropolis around DFW, but with patience and persistence, it is possible. The surrounding communities will see the benefit of an Aerotropolis.
22. Denver really has a great opportunity. It has all the characteristics, in my opinion, to be successful and a big future ahead of you.
23. Lessons learned:
  - a. It takes a vision. It is a long-term commitment. Takes a lot of patience.
  - b. It requires communication, cooperation, and communication, which eventually leads to trust.
  - c. It created a new perspective on competition among the cities, as well as among airports.
  - d. We turned down a lot of big developments for a lot of different reasons. We were very selective.
  - e. Have to have a very strong understanding of the marketplace. There are a lot of opportunities out there that we have not thought of before.
  - f. Important to understand development needs. You have to have infrastructure in place. You have to be ready to go. If you are not ready for the developers, then you really are not going to be a player. You need to build infrastructure. Once we had everything in place, everybody just followed suit.

### Questions (Jeff Fegan):

1. You mentioned airlines. Talk about the dynamic DFW had to go through with the tax revenue generated by all of this. **Response:** DFW does not receive tax benefits at all associated with the development. The tax benefits go to the four cities and they distribute parts to the airport. \$36 million a year in revenue has been positive for the four cities. After the success we've had, there has been less resistance.
2. One of the tools is foreign trade zone program. Here in Colorado we don't use that much as a tool. Do you still see this as a viable tool that we should utilize as we try to draw companies in? **Response:** There were a lot of companies who asked to be within the trade zone. We have outside experts sat down with companies to make them see how they can benefit from it. Find a way to create scenarios wherein companies can benefit from it. The airport can take a bit of a role and help companies figure it out.
3. Can you describe off-airport developments that took place? **Response:** All land surrounding DFW has been developed. There aren't really any large tracts left that are not developed. It is completely built out.
4. Different situation in Denver right now - we have some development pressure southwest of DIA, but largely the airport is surrounded by empty land. Can you speak to that difference between DFW land use and Denver's? **Response:** You have a tremendous swath of real estate. DFW was really like Denver 20 years ago. It just took place over time. As people discovered this area as the place to live and work, more and more companies will locate here. You have massive highway system around DIA. It will just take a lot of time. You have a little more time to go before you get to where DFW is today.
5. Describe the relationship DFW had over time with FAA—as far as what was developable. **Response:** We had a very close relationship with FAA. They understood that DFW was committed to protecting the area around DFW. They didn't play a decision really whether something was on airport or off airport—only whether it was compatible for the airport and developing the plan. Commercial development



around the airport went pretty smoothly. We were able to fast track environmental assessments. They were approved pretty quickly. The FAA became a very good partner in the process.

6. One of the things we were pushing with our messages was, we were able to talk about the region as a whole. What are pros and cons we can present? **Response:** We met with the Chambers of Commerce for the surrounding cities. They were our greatest advocate. All the employees working on airport do not live on airport. They actually live in the surrounding communities.
7. What about retail? **Response:** We have very little on the airport. Retail we do have is related to satisfying employees or passengers getting off airplanes.
8. Governance. The planning coordination committee - is that the only form of coordination among the jurisdictions? **Response:** The overall governance structure for DFW has the 11 board members. They don't vote, in the political level they are involved. For the staff level, that is where the discussion takes place about what's coming up, who's knocking at our door. We impose a policy on our place, that if someone wants to come into the airport, we ask that they sign an agreement that they have no intention of considering Dallas or Fort Worth, to keep that issue off the table. Developers sometimes want to play one community against the other. We don't offer any special deals for them to come to the airport.
9. Tax revenue is split 1/3, 1/3, 1/3--does that mean all three cities have 1/3 split with DFW? **Response:** Yes, for the car dealership. 1/3 goes to the host city, and the other 2/3 is split between Dallas in proportion 7/11 and Fort Worth 4/11, per their original agreement between the major cities.
10. In terms of where DFW is and where Denver is, what would you say would be your biggest piece of advice, something you could have gone back and done differently? **Response:** Whole communication, cooperation, coordination—that trust that is very important. Working collaboratively. The runways developments created some lawsuits with surrounding cities because of noise problems. We went through a really rough time between 1989 and 1995-1996 with a lot of adversarial relationships between the cities and the airport. We got over that and now the relationship is much better. We just wished we could have done it differently. The biggest thing really was the trust. Everyone likes to be part of the successful deal. Now all share our success.
11. How long is the longest land lease around the airport? Does the Aerotropolis have a boundary that everyone agreed on? **Response:** 40-year leases normally. We had some leases that went longer—99-year lease for one hotel. The influence of the Aerotropolis has gone 40 miles around the airport.
12. Was there a regional infrastructure agreement put in place around the DFW Aerotropolis? **Response:** Dallas was advocating funds for their infrastructure, same with Ft. Worth. No really specific agreement around the airport. Everything that happened around the airport, we extended our utilities to the development around the airport. But really no agreement among the cities.
13. Within the study area there is the Front Range Airport. From your perspective, what would be the best way in integrating that property around this plan? **Response:** Around the DFW area, I think there were 55 other airports, along with other airports serving different functions, I haven't studied that to give you any good advice and thoughts about Front Range Airport.

## Statistics (Chris Primus)

1. Chris Primus thanked Jeff Fegan.
2. Chris Primus shared some statistics that put DIA in perspective with other airports.
  - a. Total Jobs within 5 miles (2010 data; UNC):

- Of DIA: 21,000
  - DFW: 397,000
  - Houston: 171,000
  - Orlando: 145,000
  - Seattle: 190,000
  - Washington Dulles: 240,000
- b. These numbers illustrate the opportunities we have here. But, obviously, we have a lot of work to do.

## Round Table/EDC Panel Discussion

1. Moderator: Barry Gore, Adams County Economic Development
2. Panelists:
  - a. Laura Brandt, Metro Denver Economic Development Corporation
  - b. Yuriy Gorlov, Aurora Economic Development Council
  - c. Michelle Claymore, Commerce City Economic Development Director
  - d. Tricia Allen, Adams County Economic Development Senior Vice President
  - e. Michael Martinez, Brighton Economic Development
  - f. Dan Poremba, DEN Real Estate
3. Barry Gore introduced the panelists, and offered the panelists further specific questions for Jeff Fegan:
4. Tricia Allen: Spirit of cooperation and collaboration among the municipalities. How do you maintain that spirit of cooperation when you have changes in leadership? **Response:** It is very difficult. We dedicated resources from the airport to focus on surrounding communities. That was their job to stay connected and get out there to work with these communities. Dedicated resources were the key to our ongoing success.
5. Barry Gore: Is there a central point for the collaboration? **Response:** It was really hard for DFW because there are a lot of stakeholders involved. There wasn't really a central point. And we have a lot of tenants and developers.
6. Dan Poremba: Our study group has had strong consensus for infrastructure and financing. What advice can you give on that? How we might move that forward? **Response:** We were so fortunate to have that champion at the NCTCOG Michael Morris, who supported us. The Highway Department can only do so much. Tollways also made a difference.
7. Yuriy Gorlov: How many access points were added to the airport? **Response:** Probably 8 different connections leading to the international parkway.
8. Michelle Claymore: Any companies that required through-the-fence access? **Response:** We have never allowed through-the-fence access. I don't recommend that.
9. Barry posed a question to the panelists: What resonated with each of you the most about Jeff's presentation?
  - a. Laura Brandt: Most significant thing was the need for patience. The other was the fact that the airport is the reason that most companies are looking to come in to either Dallas or Ft. Worth.

- b. Poremba: The tale of four cities, and the early concern about competition amongst the cities. We'll be successful at economic development - if we can collaborate, we can make win-wins.
  - c. Michael Martinez: We are already ahead of the curve as it stands now with Metro Denver EDC - we market collectively to the world. We have good collaboration among our cities.
10. Barry Gore: What would be the challenges for businesses to locate near DIA?
- a. Michael Martinez: Infrastructure would be the biggest challenge and risk. But we are just starting so we can talk with the communities to address that risk.
  - b. Tricia Allen: Figure out how we identify the best tenant for that area. And also figuring out non-aviation-related business. In a survey, first was transportation and connectivity. The second most important factor to consider was amenities, such as retail, entertainment, and other aspects.
  - c. Yuriy Gorlov: The opportunity to attract international companies is huge. We need to figure out how to attract those companies.
  - d. Michelle Claymore: Would be fun to see how to attract niche companies where transportation is a big piece of their business.
  - e. Dan Poremba: We have a perfect storm occurring right now as far as opportunities. The FasTracks connection to the airport is huge. The improvements to I-70 are going to be a big plus. The 15,000 acres of land surrounding the Rocky Mountain Arsenal Wildlife Refuge cannot be discounted. Being able to contact Europe and Asia in the same business day—that platform is going to be important.
  - f. Barry Gore: It is our vision to build an aerospace technology park. The Front Range Airport is envisioned to be a spaceport, and build on aerospace sector that is already here in Denver. Gaylord is another one that will accelerate development. What I am hearing is the importance to get myself to my customers and our customers to us, we see that opportunity to fly to DIA and connect to the Front Range Airport, that door-to-door access would be important.
11. Barry Gore: What other business sectors do you think we should attract?
- a. Michelle Claymore: There are already interests for distribution centers around the airport.
  - b. Laura Brandt: We have heard that it is important for developers to be really close to the airport. Panasonic relocating on 61st and Peña Blvd is huge.
  - c. Michelle Claymore: We are widely known for our high-tech and highly educated workforce.
  - d. Michael Martinez: The Colorado Bioscience Organization could potentially help us.
  - e. Dan Poremba: Panasonic really is a game changer in the airport region. We need to establish a real estate paradigm that is not based on cargo. And Panasonic really has helped us start that.
  - f. Barry Gore: We have the rail connections and transportation facilities, but we don't have the population that DFW has. We are a destination airport for freight.
12. Barry Gore: Are there any recommendations for accelerating development around DIA?
- a. Michael Martinez: Formalize the collaboration from a governance standpoint is key.
  - b. Michelle Claymore: Solve infrastructure challenges. And communication, communication, communication.
  - c. Dan Poremba: A great case study was presented to this study - the Southeast Public Improvement Metro District. There is wealth of information that we can use from this and other studies that have been done that would allow us to collaborate, and collapse the timeline.

- d. Tricia Allen: Look at establishing a possible economic development acceleration zone. This may offer certain administrative or regulatory flexibility and incentive packages.
13. Barry Gore: Thank you to the panelists. Very exciting time for the area regarding aviation-related development. We are going to be around if anyone else has any questions.

## Next Steps and Adjourn

1. Chris Primus thanked everyone for coming and thanked Jeff Fegan for presenting today.
2. Today's presentation was recorded and will be posted on the Adams County YouTube channel for everyone to view - <https://www.youtube.com/watch?v=I5zj1GN53Ow>
3. The next SRC meeting is scheduled for December 10, 2015.
4. The next Steering Committee meeting is scheduled for January 14, 2016.
5. January 2016 will be spent working on our study framework, as well as the closeout of this study.



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Rory Blakemore	Cowley Companies	Rory@cowleyco.com	602 385-4213



# Welcome



## Colorado Aerotropolis Visioning Study

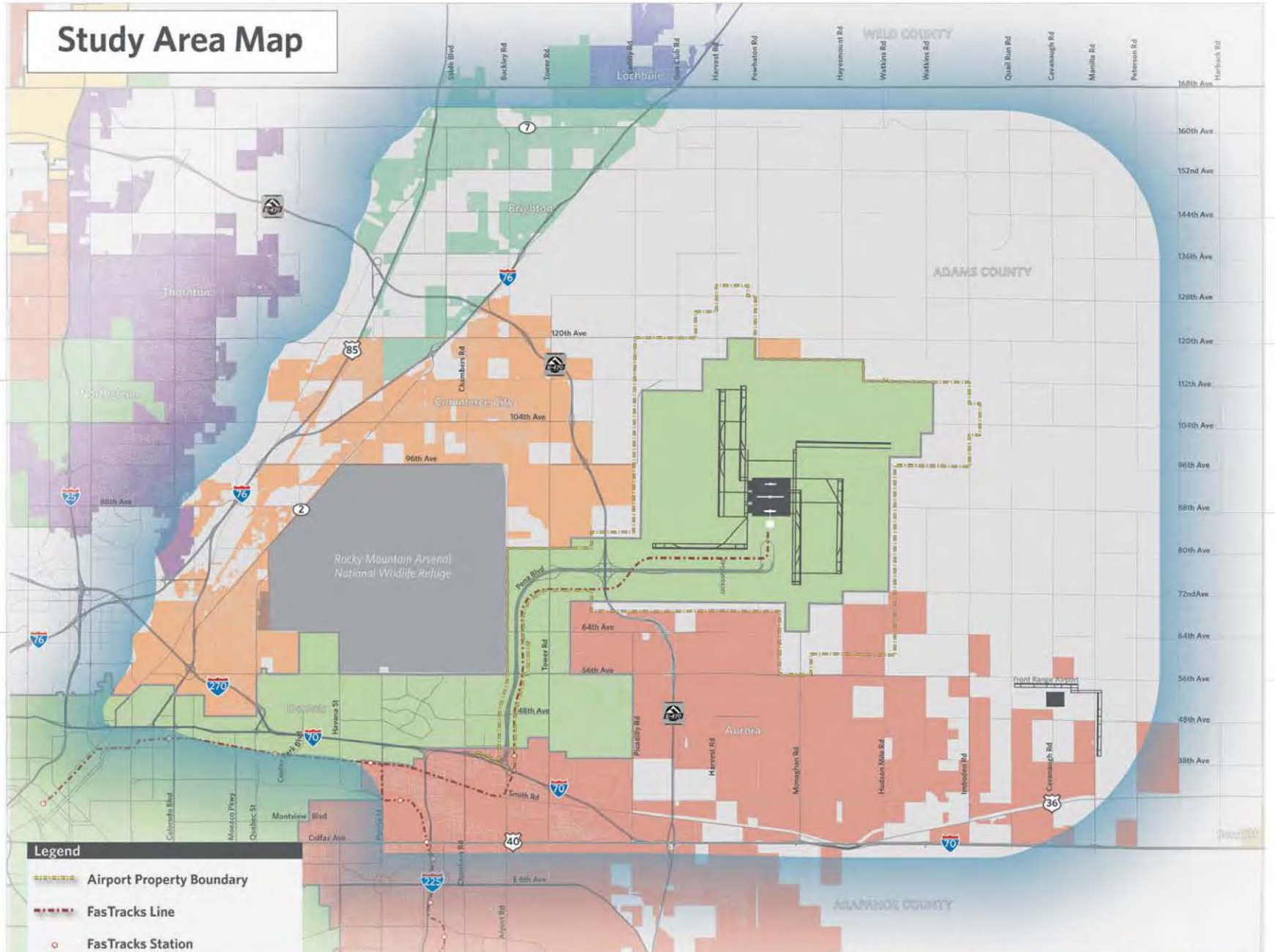


# Today's Agenda





- Study Overview
- Presentation by Jeff Fegan
- Panel Discussion



# Study Area Map



## Legend

-  Airport Property Boundary
-  FasTracks Line
-  FasTracks Station
-  Proposed Study Area Boundary



**Colorado Aerotropolis  
Visioning Study**



# Vision Statement

## COLORADO AEROTROPOLIS | Visioning Study



A sustainable, efficient, well-connected, and globally recognized Colorado Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

# Study Objectives

- Setting a collaborative vision
- Comparing future growth with or without an Aerotropolis
- Identifying a framework of collaborative infrastructure possibilities
- Outlining a governance framework and implementation steps

# Study webpage

- <https://www.codot.gov/projects/aerotropolis>

The screenshot shows the Colorado Department of Transportation (CDOT) website page for the Colorado's Aerotropolis visioning study. At the top, there is a green navigation bar with the CDOT logo and the text "COLORADO Department of Transportation". Below this is a green header with a white "Projects" button. The main content area has a breadcrumb trail: "You are here: Home / Projects / Colorado's Aerotropolis". On the left, there is a "Quick Links" sidebar with three items: "Learn More", "Speaker Series", and "Visioning Study". The main content area features a green section titled "Colorado's Aerotropolis" with a sub-header "What is an Aerotropolis?". Below this, there is a "Visioning Study" section with three columns of text: "Overview", "Collaborative Investment", and "Stakeholders". At the bottom of the "Visioning Study" section, there are two statistics: "108 INDIVIDUALS PARTICIPATED" and "33 MEETINGS BY THE END OF 2015".

**CDOT COLORADO**  
Department of Transportation

## Projects

You are here: [Home](#) / [Projects](#) / Colorado's Aerotropolis

### Quick Links

- [Learn More](#)
- [Speaker Series](#)
- [Visioning Study](#)

## Colorado's Aerotropolis

One of the most compelling economic opportunities in the world is moving forward.

### What is an Aerotropolis?

An urban plan in which the layout, infrastructure, and economy is centered on and around an airport.

### Visioning Study

<b>Overview</b> <p>The Federal Highway Administration funded a grant for a Colorado Aerotropolis Visioning Study to identify opportunities for the efficient infrastructure needed to foster and support economic development around Denver International Airport (DIA)EN. This study, administered by the Colorado Department of Transportation, comes at an opportune time to capitalize on the 1A ballot measure actions approved by Adams and Denver county voters. The visioning study will conclude in early 2016.</p>	<b>Collaborative Investment</b> <p>The planning framework will identify opportunities for collaborative investments in infrastructure (Transportation, Water, Wastewater, Power, and Drainage).</p>	<b>Stakeholders</b> <p>Jurisdictions adjacent to or near the airport are major stakeholders of the visioning study including Adams County, Aurora, Brighton, Commerce City and Denver. Economic development corporations, transportation agencies, and other infrastructure agencies are also involved in the study effort.</p>
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**108 INDIVIDUALS PARTICIPATED**

**33 MEETINGS BY THE END OF 2015**

JEFF FEGAN

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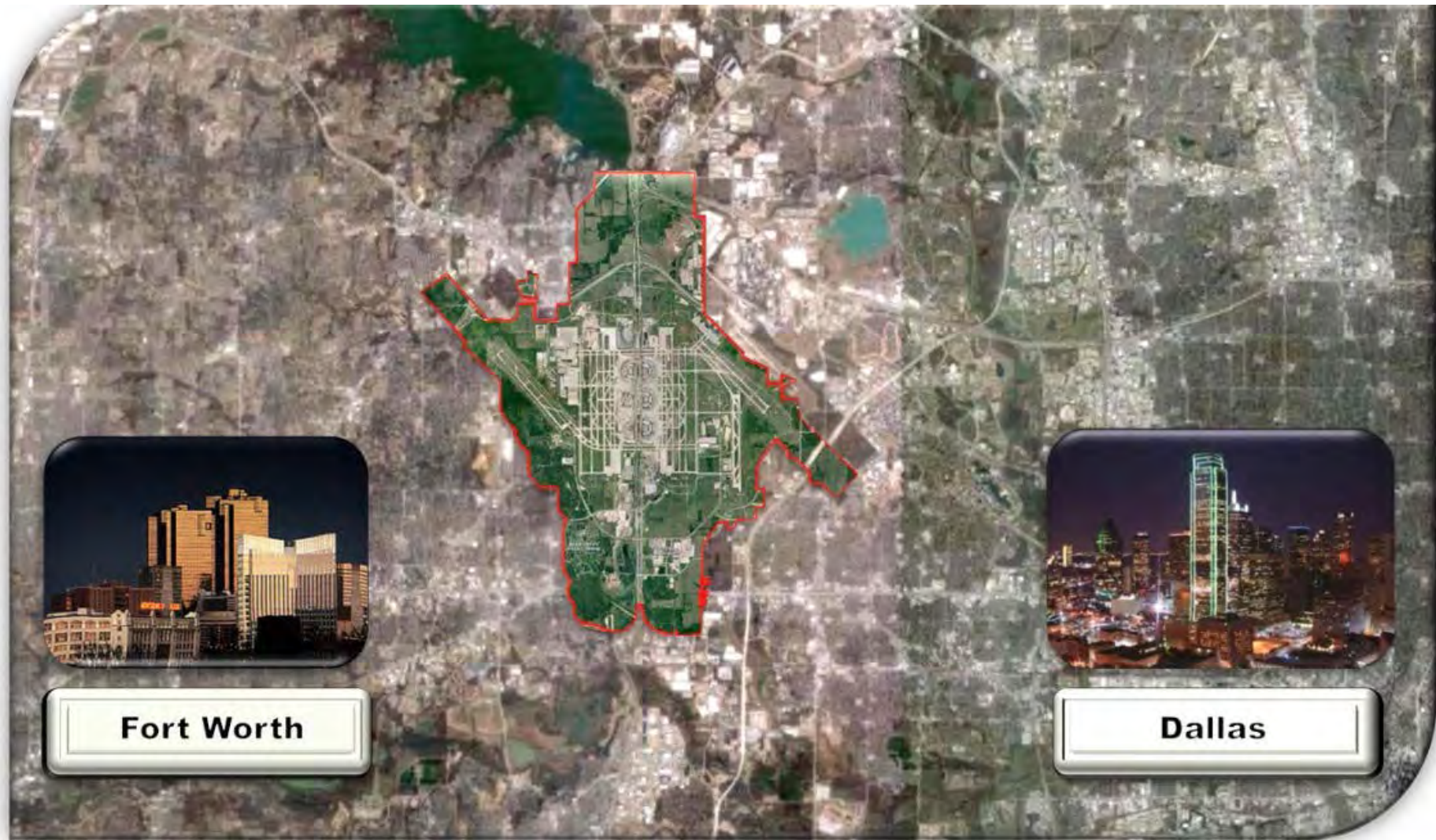


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# Land Development at DFW International Airport A Collaborative Journey

Jeffrey P. Fegan  
CEO, [JeffFegan.com](http://JeffFegan.com) LLC





**Fort Worth**



**Dallas**





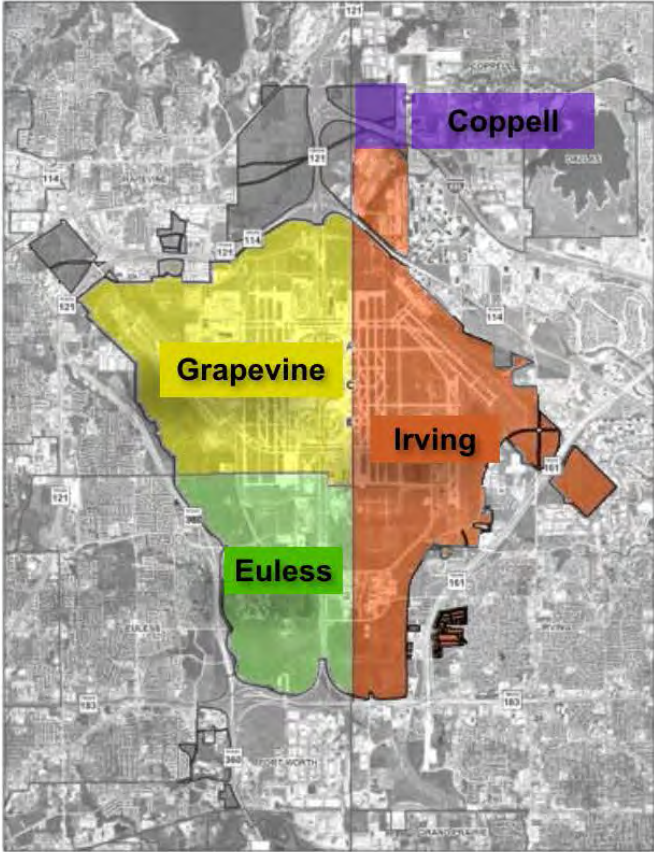


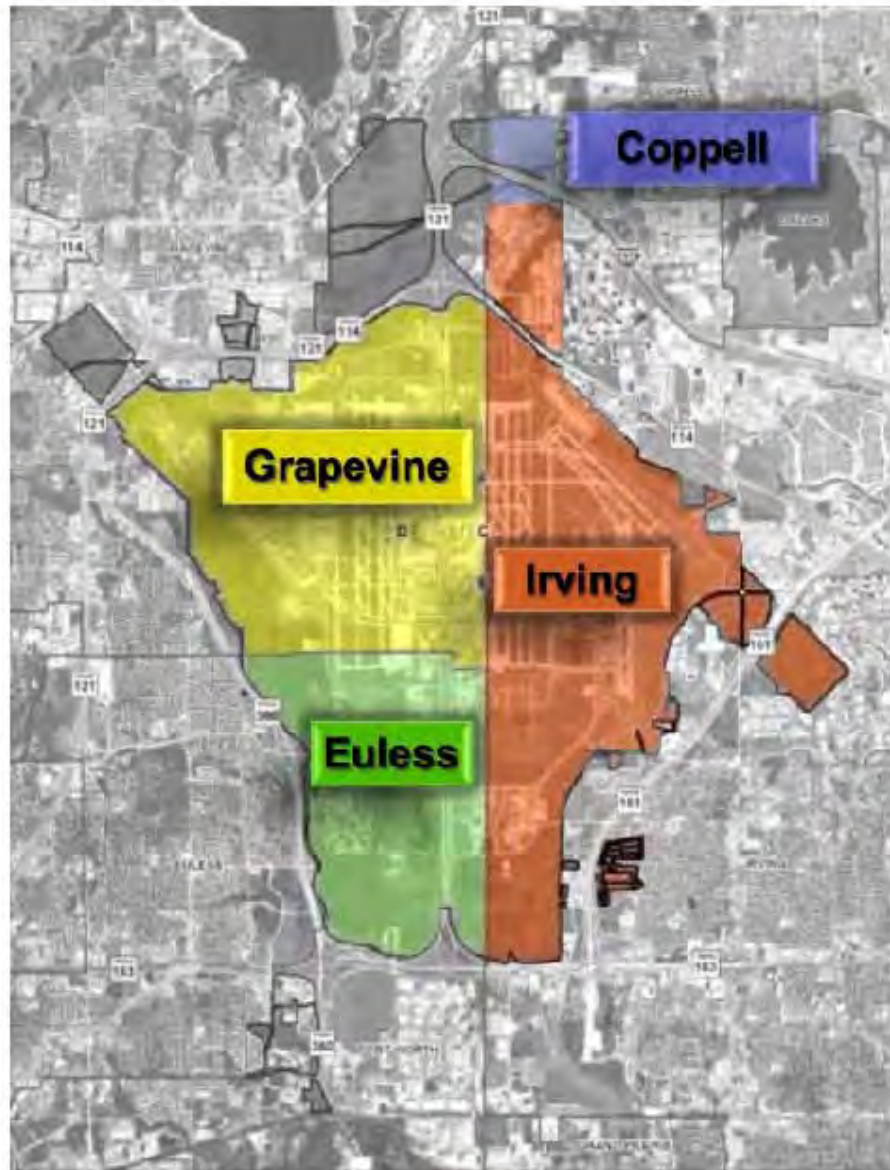






Photo of DFW and political jurisdictions

















# Hyatt Regency









## International Commerce Park











# Southgate Plaza





# Sikorsky



# Dallas Airmotive



Dallas Airmotive  
DFW International Airport  
September 21, 2015

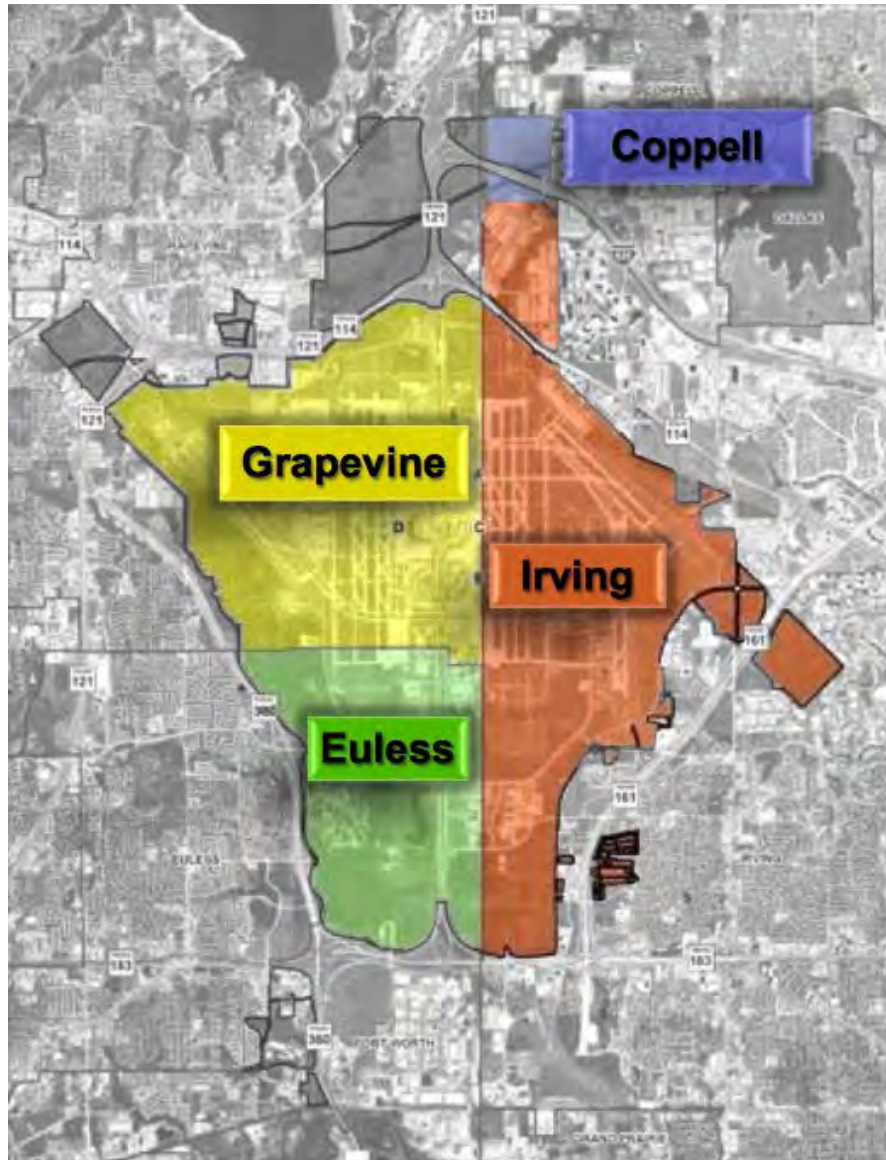




## Logistics Center I











# PANEL DISCUSSION

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# Panel Participants

Moderator: Barry Gore, Adams County Economic Development

Panel Members:

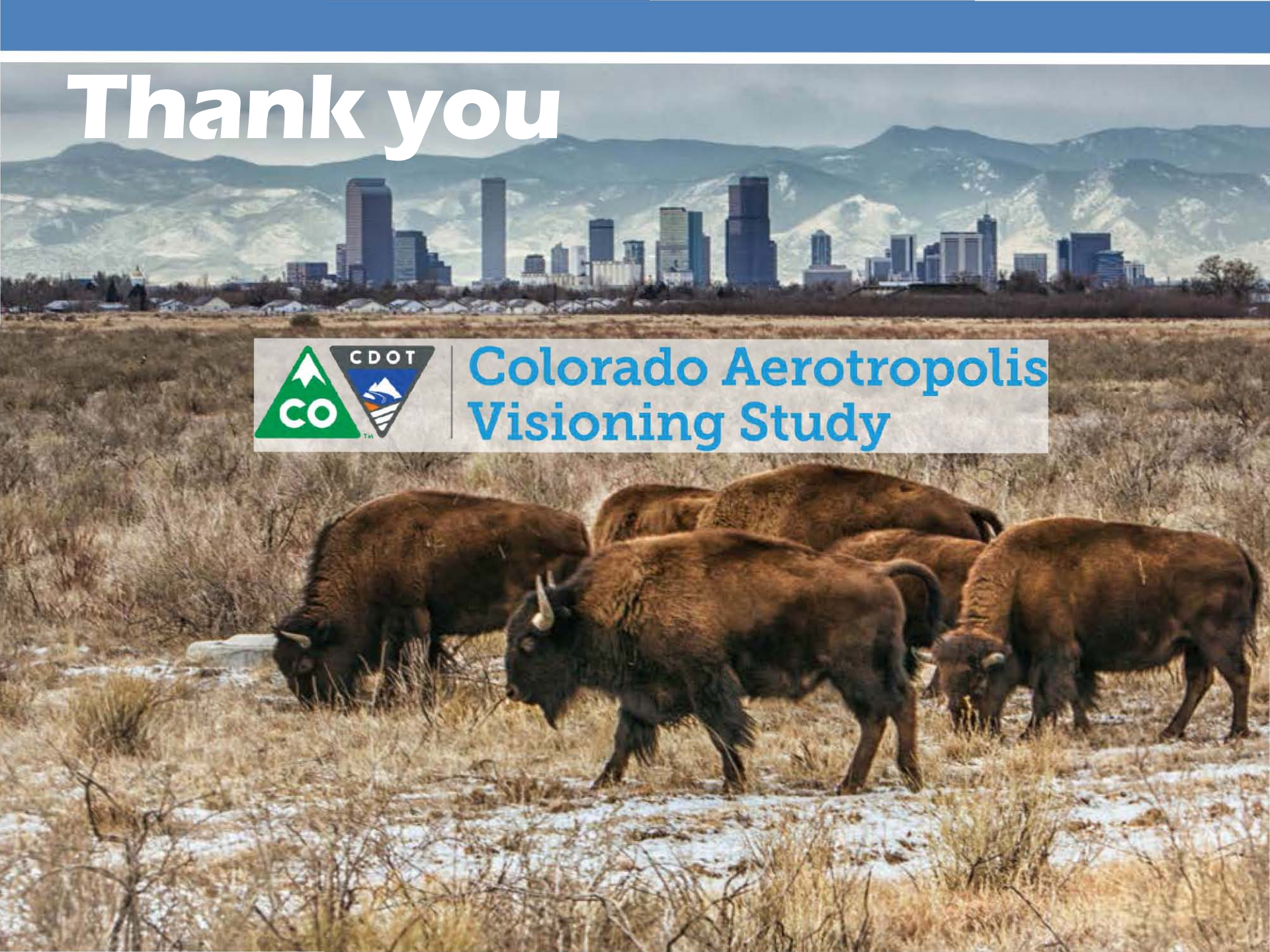
- Tricia Allen, Adams County Economic Development
- Laura Brandt, Metro Denver Economic Development Corporation
- Michelle Claymore, City of Commerce City
- Yuriy Gorlov, Aurora Economic Development Council
- Michael Martinez, Brighton Economic Development Corporation
- Dan Poremba, DEN Real Estate



# Thank you



Colorado Aerotropolis  
Visioning Study







# Colorado Aerotropolis Visioning Study

## Agenda

Project: Colorado Aerotropolis Visioning Study

Subject: Study Review Committee Workshop #6

Date: October 15, 2015 9:00 - 11:30

Location: Commerce City Recreation Center, 6060 E. Parkway Drive

1. Welcome & Introductions
2. Campaign Update
3. Governance
  - a. Presentation - Patrick Mulhern, Southeast Public Improvement Metropolitan District
4. Scenario Comparative Analysis
  - a. Growth Projections
    - i. Magnitude and Allocation Process
    - ii. Comments on Growth Projections
  - b. Infrastructure
5. Aerotropolis Vision Components
  - a. Group Discussion
6. Study Final Products
7. Roundtable Discussion
  - a. Messages to Steering Committee (meeting October 22)
8. Next Meetings
  - a. Combined SRC/Steering November 19, 9:00 to 11:30 **Guest Speaker - Jeff Fegan**  
**Adams County Government Center**  
**Conference Center - Platte River B & C**  
**4430 South Adams County Parkway**  
**Brighton, CO 80601-8214**
  - b. Steering Committee: October 22, 9:00 - 10:30 RMANWR **in Building 130 Lab**  
**Conference Room (east of our usual Building 129)**
9. Next Steps and Action Items
10. Adjourn



### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

Project:	Colorado Aerotropolis Visioning Study
Subject:	Study Review Committee Meeting #6
Date:	October 15, 2015, 9:00 a.m.
Location:	Commerce City Recreation Center
Attendees:	See attached sign-in sheet
Distribution:	SRC members, File

## Welcome and Introductions

1. Stephanie White welcomed everyone and directed the participants to the materials distributed in each table. She also noted the announcement cards on each table for the next meeting on November 11 where Jeff Fegan, an authority in Aerotropolis development, will be speaking. This will be a joint Steering Committee and Study Review Committee meeting.

## Campaign Update (Rick Pilgrim)

1. Rick announced that the campaign has started distributing public information. Ballots are out in the mail. Also starting to distribute printed materials on Measure 1A to the public. Measure IA appears to be doing well with early polling. Rick passed around the Measure IA campaign announcement for everyone to see.

## Southeast Public Improvement Metropolitan District (Pat Mulhern, Manager)

### SPIMD

1. District for transportation and economic development along the Southeast Corridor.
2. Southeast Corridor today has 31 million square feet of commercial development, office/retail development, and about 110,000 jobs.
3. The key corridor developers are:
  - a. George Wallace, who founded the DTC.
  - b. John Madden, who developed Greenwood Metro.
  - c. Walt Koelbel, who has been involved in the SPIMD since its development.
  - d. George Beardsley, who developed the Inverness in the 1970s.

These four key developers were astute business people and tough competitors. They saw the need to come together to cooperate on larger infrastructure.

Rick Pilgrim shared an experience he had with George Wallace when he was at RTD.

4. Developer Vision:
  - a. The key to a vibrant business community is to develop and maintain safe and expedient transportation access, and minimize congestion.
  - b. Utilize Metropolitan Improvement Districts to plan and develop local infrastructure.

- c. Partner with local governments to promote regional transportation planning and development. The scale of this type of development is much larger than a developer might have. It is up to the developers to partner with the local government to promote regional transportation planning and development.
5. The original group that was put together for transportation was called the Joint Southeast Public Improvement Association (JSPIA). This group was a club of the districts; no organization that tied them together other than this club. They met monthly to collaborate. The goal of JSPIA was to “Promote improved accessibility to and within the Southeast I-25 Corridor by working with state and local governments in public/private partnerships focused on transportation issues.”
6. The SPIMD organization (which was established in 2005) is a Title 32 Special District and it overlays 15 metro districts in the Southeast Corridor.
  - a. 7 elected board members ( 7 director districts)
  - b. Commercial and retail property (no residential)
  - c. Initial assessed value = \$1.7 billion
  - d. Up to 2 mills of property tax authority
7. The SPIMD district is formed over commercial areas only, not residential. As SPIMD raises money through taxes for transportation, it goes to the residential community to tell them they are not paying for these types of improvements. Their connection to the improvements is through their local community.
8. Went to the legislature originally for the ability to do this, because of two things only: transportation and economic development. Economic development was not in the metro district powers, so they went to the legislature and got them to add economic development. Although, this can only be done if there is over \$1 million in assessed value.
9. The SPIMD service plan includes:
  - a. Partnering with local governments of the Southeast Corridor.
  - b. Supporting economic development.
  - c. Supporting transportation improvements throughout the corridor.
10. The 15 districts throughout the corridor are:
  - a. Goldsmith (DTC)
  - b. Greenwood Metro
  - c. Greenwood South
  - d. Inverness
  - e. Orchard Valley
  - f. Highland Park
  - g. Panorama
  - h. Rampart Range (Ridgegate)
  - i. Centennial 25
  - j. Madre
  - k. Interstate South
  - l. Meridian
  - m. OmniPark
  - n. Park Meadows
  - o. Southgate at Centennial

11. Pat Mulhern presented a map of the boundary of SPIMD. Jay Hendrickson asked whether the yellow boundary on the map indicates municipalities. Pat responded the yellow boundary is for the 15 districts, which have no relation to the local government. There are six local governments in this local area that SPIMD partners with. The boundaries originally were developer boundaries.



12. Rick Pilgrim commented that (from) I-70 to 20th is about 11 miles. On

the west side of the airport, if you follow E-470 (about) to the airport, the Aerotropolis study area is a little longer with a lot more area.

13. There are two counties and four cities that are participants in the SPIMD.
14. The SPIMD annual financial plan includes:
  - a. \$4 million annual income (increases with development)
  - b. \$2 million to Transportation (\$4 million in match with local government)
  - c. \$1.7 million to Economic Development (Denver South)
  - d. \$0.3 million to admin, debt, contingency
15. SPIMD's 2025 vision plan lays out a logical scheme for what we are going to do with our funds down the corridor. Having funds available is very critical to SPIMD.
  - a. Provide 50/50 matching funds for I-25 corridor projects.
  - b. \$35 million available through 2025.
  - c. \$3.5 million in each zone (interchange) for regional projects--interchange or arterial projects.
  - d. \$0.5 million in each zone (interchange) for local projects--for sidewalk access and other access to the light rail.
  - e. \$7 million bonus pool (corridor-wide benefits). One project with CDOT is the widening of I-25 from County Line Road down to Peña Boulevard.
  - f. The \$4 million is matched by local government it is really \$8 million.
16. SPIMD's Transportation Funding Partnership is comprised of the following steps:
  - a. Local governments identify regional and corridor projects.
  - b. The local government then file funding application with its local TMA (the TMA operates the transportation arm of this).
  - c. The TMA then makes funding recommendations to the district board.
  - d. SPIMD appropriates funds through funding agreements.

### **Funding Contributions and Projects Participation**

17. JSPIA has made the following regional contributions:
  - a. Funded 2.3 million in I-25 corridor infrastructure from 1998 to 2005.
  - b. Advocated for T-REX improvements (funded \$7.5 million in local match with governments)
  - c. Advocated for T-REX pedestrian overpasses.
  - d. Worked with local governments to form the Transportation Management Agency.
  - e. Provided landscape and landscape maintenance with local governments.
18. JSPIA projects (worth \$30.5 million) that were done in its first 20 years include:
  - a. Belleview Interchange Improvements
  - b. Orchard Interchange Improvements
  - c. Arapahoe Interchange Improvements
  - d. Yosemite Street Overpass
  - e. Dry Creek interchange
  - f. County Line Interchange Improvements
  - g. Interchange landscape Improvements

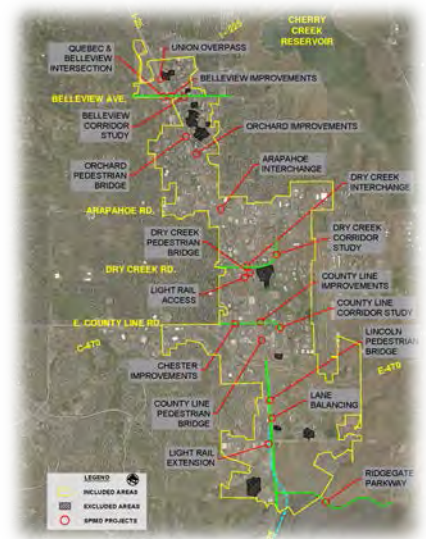
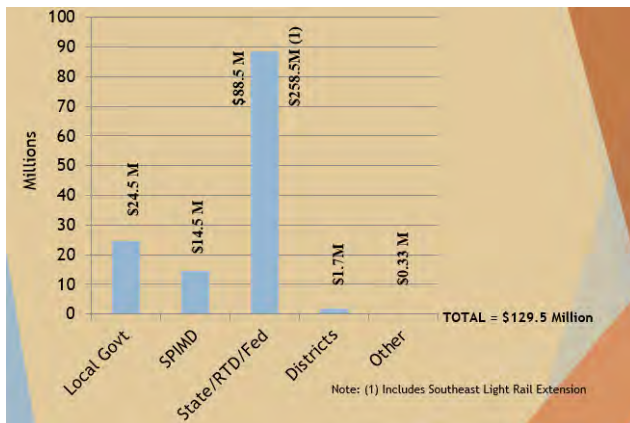


- h. TREX/pedestrian bridges (with local government match)
- 19. TMA major projects contribution ( with SPIMD match) includes:
  - a. Union Overpass = \$700,000 (additional lanes)
  - b. Arapaho Interchange = \$4,428,000 (design/construction)
  - c. Ridgeway Parkway = \$2,500,000 (by Cabela's)
  - d. I-25 Lane Balancing = 2,000,000
  - e. Light Rail Extension = 3,000,000 (extension down through the Ridgeway development down to Castle Rock)
- 20. TMA local projects (with \$1.6 million total SPIMD match) include:
  - a. Belleview Corridor Study
  - b. Quebec/Belleview Intersection
  - c. Light Rail Sidewalk Access (Belleview and I-25 handrail, Greenwood Plaza Boulevard sidewalk, Yosemite, Dry Creek connectivity, Inverness North, Inverness South)
  - d. Chester Improvements
  - e. County Line Corridor Study
  - f. Dry Creek Corridor Study
  - g. Lone Tree Shuttle

21. Pat presented a map showing SPIMD's project participation funding.

- a. Red line tag indicates transportation projects
- b. Green line indicates the local improvements SPIMD has done.
- c. Money is coming throughout the corridor, SPIMD is spending it throughout the corridor.

22. Pat discussed the Southeast Corridor Transportation's funding contributions for 2010-2015.

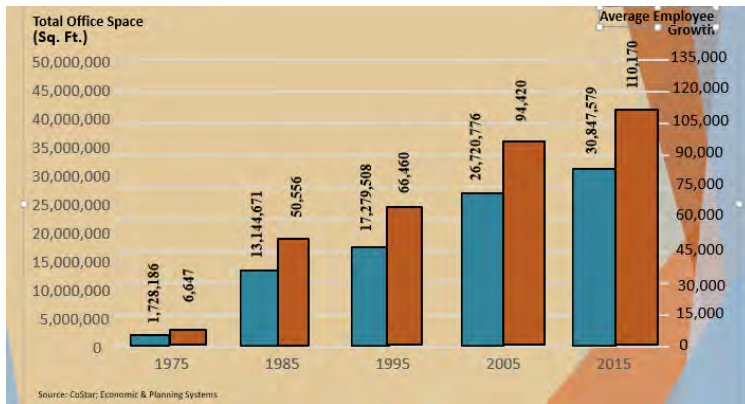


23. If you can go out to the state or RTD and you got your checkbook with you, it's going to help you draw them in. They are interested in getting their dollars as far as they can as well.

24. Kip Cheroutes asked how much federal share is attributed to the bailout program. Pat replied he couldn't be sure exactly, but he didn't think it was a great part of it.

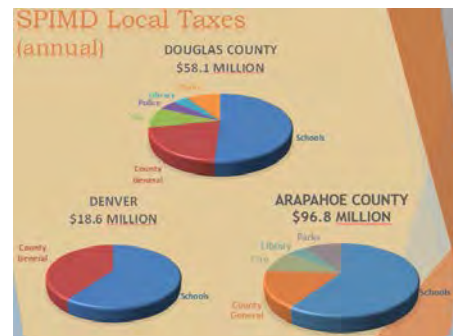
## Economic Development

25. The local governments fund 25% of it and SPIMD funds the other 75%. Most of the economic development agencies operate off dues from businesses.
26. Everything the Denver South EDP is doing is about job creation. Its goals and strategy include retention, innovation and entrepreneurship (continuous improvement), expansion, and relocation and recruitment. All of these are centered toward job creation, payroll, capital investment, and tax base.
27. Denver South EDP's focus areas include branding and promotion, business services, public policy advocacy, and transportation. Innovation and entrepreneurship; bringing in new startups with new ideas and retaining and expanding those businesses by giving them tools for expansion.
28. Pat gave a summary of office space and employee growth from 1975 to 2015. The graph he presented showed a steady growth. This is the growth that makes the community healthy.



## SPIMD Local Taxes (Annual)

29. Pat presented a graph of SPIMD's taxpayers' contribution in dollars—only property tax, not including sales tax or money that is paid out by businesses in the community that contributes to the development of the whole area.



## SPIMD Summary

30. SPIMD partners with local governments by contributing funding for transportation and economic development.
31. Good transportation is key factor in attracting/maintaining companies.

32. Business development and business retention is key to maintaining a vibrant local economy.

### Questions and Comments on the SPIMD Presentation

1. Can you elaborate on the ongoing plan for landscaping? *Response*: For example, interchange landscaping, focus on land along the highway, always allocate money for landscaping the area after it has been disturbed. For example, we have half a million dollars set aside for landscaping along I-25. Ask local government to fund the maintenance of the landscaping and SPIMD funds the other half. The TMA contracts out the maintenance.
2. Jay Hendrickson: How would you apply SPIMD to what this study is trying to do? *Response*: The biggest challenge by far is all local governments coming together. It's hard for any one community (except for Denver and Aurora) to get this big view of the world. Having consistent meetings makes everyone very aware of what's going on in each respective areas and you see the synergy starts to build, but it takes a while. We started the TMA in 1999, but it has gotten good traction after a while.
3. Jay Hendrickson: When CDOT first applied for the TIGER grant, it was declined because there wasn't collaboration among the local governments, so we tried again and got together with the local governments.
4. SPIMD benefited from some large-scale developers that cross community boundaries. But if there are small developers, the local governments have to take the lead and form at least a club of those developers. The trick was always getting more and more people to see the vision. It would happen slowly.
5. With regard to mill levy, with the metro districts' relatively high knowledge going into that, in hindsight, what would you do differently in overall SPIMD? *Response*: Mill levies are generally in the 15-25 range. Putting some of their money to regional transportation. It just came off local metro district.
6. Kip Cheroutes: We have a unique circumstance. The IGA amendment includes the creation of a potential Aerotropolis organization. We need to get some people to communicate across the jurisdictions, just like SPIMD did. Do we need to start thinking about individuals like that, who have that experience, to start pushing the Aerotropolis vision? *Response*: Yes, you need all those people in there to make it work, a champion like Ray Bullock. That is key.
7. Rick Pilgrim: What is your experience with water and water infrastructure, in addition to transportation? *Response*: That is tough. When you come down and you are providing water and sewage service through the district, getting them to play into that vision is very tough. People involved with our districts were working with the districts to make sure that wasn't dropped. We weren't as organized as we were in transportation.
8. SPIMD's big advantage down this corridor is that there was very little residential. That was a huge advantage. The residential moved in over time. We are doing big urban corridor study in the area right now to look at the next 20 years through 2035. One of the big things we are looking at now is how much multifamily residential we can get on this corridor to reduce the commute.
9. Pat: I do think that the model here is the JSPIA piece. You are going to need infrastructure districts, and then you create an association of those districts. And have the association be in partnership with local entities, and that's how you get started. Once you get going, it creates seed money for continuing growth around. Wallace and Beardsley and Madden in particular, they created their districts and built them up. We needed the Dry Creek interchange; all the three developed districts lent the money to the undeveloped districts on a 20-year pay back and all got paid back through the assessed value.

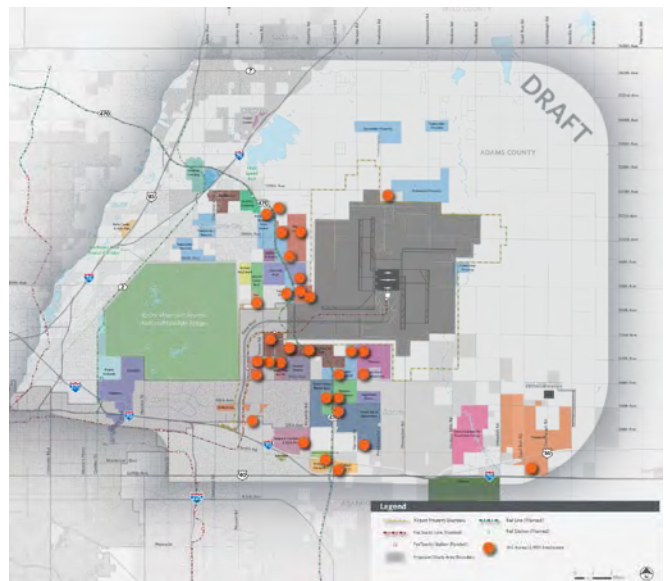




6. Keith further compared the magnitude of Aerotropolis jobs to the amount of employment in peer employment centers of Denver CBD, DTC, and Interlocken.
7. Beyond the magnitude of growth, the next step is the allocation of that growth. The growth allocation principles proposed for this Aerotropolis study include:
  - a. Access to super-regional multimodal transportation facilities
  - b. Contiguous to active developments
  - c. Gravitational pull of larger development(s)
  - d. Connectivity to DIA
  - e. Consideration of geographic diversity
8. Kip mentioned that the general projection from Adams County and Denver is that the 1500 acres in the IGA would generate 12,000 new jobs. Can we use the 12,000 new jobs? Should we not consider going into that ratio rather than the other ratios we had looked at? It may not be drastically different but may be more consistent with the other data we are looking at. We are generally looking at a 25-year time frame. Chris responded the method we have right now is very conservative. We would be willing to provide a range.
9. On-airport would include private jobs on DIA property.
10. Do the job numbers change the infrastructure? If we use a range, would the answer still be the same?  
*Response:* We would certainly look at that.

### Allocation Exercise (Stephanie White)

1. The breakout session focused on the allocation of Aerotropolis growth. Stephanie gave instructions on how the breakout session would work. Orange sticky dots were provided in each table to place on the study area map to indicate allocation of Aerotropolis growth. Each dot equals 5000 jobs.
2. The study area map with growth allocation marked was projected on the screen and the participants compared their worksheet to the map. **Action: E-mail copy of the map to the whole group.**
3. Chris then discussed how the study team came up with the growth allocation. A map depicting conceptual supporting infrastructure for the employment growth was projected on the screen and Chris provided a summary of the data shown on the map.
4. Chris presented an illustration of public and developer infrastructure collaboration to the group.
5. We are not close to detail modeling for this study yet. We are letting the Peña Boulevard study play out.



6. Tom Reed: On behalf of DIA, Peña Boulevard will be expanded and have additional capacity added to it. And the airport can pay for the capacity requirement for airport access. The expansion is anticipated to be one to two more lanes in each direction in the next 20 years.
7. How much north-south capacity do we need? We got a little more parallel capability though E-470. There are some limitations to Peña Boulevard that you don't have with E-470.
8. Curious about other jurisdictions and drainage impact fees. *Aurora*: In the spirit of having incrementally complete facilities, there are costs involved. How we look at it is, what are some marginal, less than whole cross sections that allow development, and allow the frontage adjacency as well as upstream and downstream, so to speak, to make those work.

## Group Discussion

Stephanie White asked the group to vote on a series of questions using the colored cards provided on the tables. Red = No; Yellow = Needs more discussion; Green = Yes. The following questions were asked:

1. Do you want to continue rectangular arterial grid structure, or master plan a curvilinear structure? A mix of red, green, and yellow cards was displayed.
  - a. We have an opportunity to do something different so we can have both.
  - b. For a grid, I am fine with that.
  - c. Should not be constrained by the grid.
  - d. Can we do a hybrid?
2. Are you willing to preserve right-of-way for multimodal treatment? Mostly green cards were displayed.
  - a. We need to be cautious about this, seeing some new toll roads along US 36. Would like to see how this plays out.
  - b. Preserving right-of-way, yes; but don't think we are there yet to spend that kind of money to build. But yes on preserving right of way.
3. Are you willing to preserve right-of-way for a high-capacity Ring Road? A mix of cards was displayed, with many Yellow.
  - a. Important to look at access management principle.
  - b. Need more info--location, etc.
  - c. More study.
  - d. Timing sequence.
  - e. There's not much to north and east, why would we need a road for it?
  - f. Benchmark airports have ring road, so generally try to move in that direction.
  - g. Just the sheer volume of infrastructure to create a ring road is mind-boggling.
  - h. Jay Hendrickson: Just to clarify, this is not going to happen tomorrow. This is going to happen incrementally through the years. Being able to get around once you are at the airport, without some kind of facility, I think it's incrementally important.
  - i. Along that ring road will be developments and destinations. We are thinking about what it is right now, but in the long term, there will be developments along that ring road.

4. Are you willing to collaboratively define a common aesthetic? A mix of cards was displayed, with the vast majority red or yellow.
  - a. Agree.
  - b. Not committing; maybe think about very discrete elements, something limited in nature but universal, like wayfinding elements. Maybe identify unifying elements as opposed to a common standard.
  - c. Preserving individuality.
  - d. If you think about it regionally, it's a mind-blowing idea. Not bad to have diversity.
  - e. It is difficult at best.
  - f. Maintain individual identities.
  - g. Maybe some core branding elements that could be useful globally.
  - h. Jay Hendrickson: diversity will be the draw to this.

## Moving Forward

1. Chris suggested to the group that the final products of this study would include a report, an executive summary, a video, and a Web presence.
2. Two Hundred has been contracted to help the project develop Web presence.

## Communication (Marjorie Alexander, Two Hundred)

1. Marjorie Alexander presented a concept of a website and video for this study. A sample video was showed on the projection screen.
2. Why a website and video?
  - a. Sustain the study.
  - b. Communicating technical issues to non-technical audience to give people a sense of what could be for this project.
  - c. Intention was to collect the content that has been developed for the study and give it a home so interested parties can access the information easily online.
3. Chris asked whether the group support the idea of having a website.
4. Dan Poremba: I think it's a perfect opportunity. If the IGA goes through, the jurisdictions are going to be looking at this study. If there is some way to bring together the information we have collected so far for the elected officials, I think it would be beneficial.
5. Wasn't there a subgroup or committee about communications comprised of jurisdictions? *Response (Dan)*: That actually did not happen, but I think that at this point, it would probably be beneficial.
6. Stephanie reminded the group that the question today was about the format of our final deliverable. Kip: I think that both printed material and a video. Make the video as multilingual as possible to make it an international video. It would communicate across boundaries.
7. The group liked the idea of a video.

## Next Steps and Action Items

1. Steering Committee Meeting #2: Oct 22, 10:30  
Location: RMANWR - Bldg 130, Lab Conference Room
2. Joint Steering/Study Review Committee, November 19  
Guest Speaker: Jeff Fegan  
Location: Adams County Government Center
3. **Action: E-mail copy of the growth allocation map to the group.**

## Adjourn

Jay Hendrickson announced the next Steering Committee meeting (Thursday 10/22) and if anyone has any topic suggestion, to let Chris Primus know. He also encouraged everyone in attendance to take some meeting announcement cards for the 11/19 combined Steering and Study Review Committee speaker event to distribute to peers and spread the word.











# Welcome



## Colorado Aerotropolis Visioning Study





# Today's Purpose

- Governance and Study Analysis Update



# CAMPAIGN UPDATE

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# GOVERNANCE

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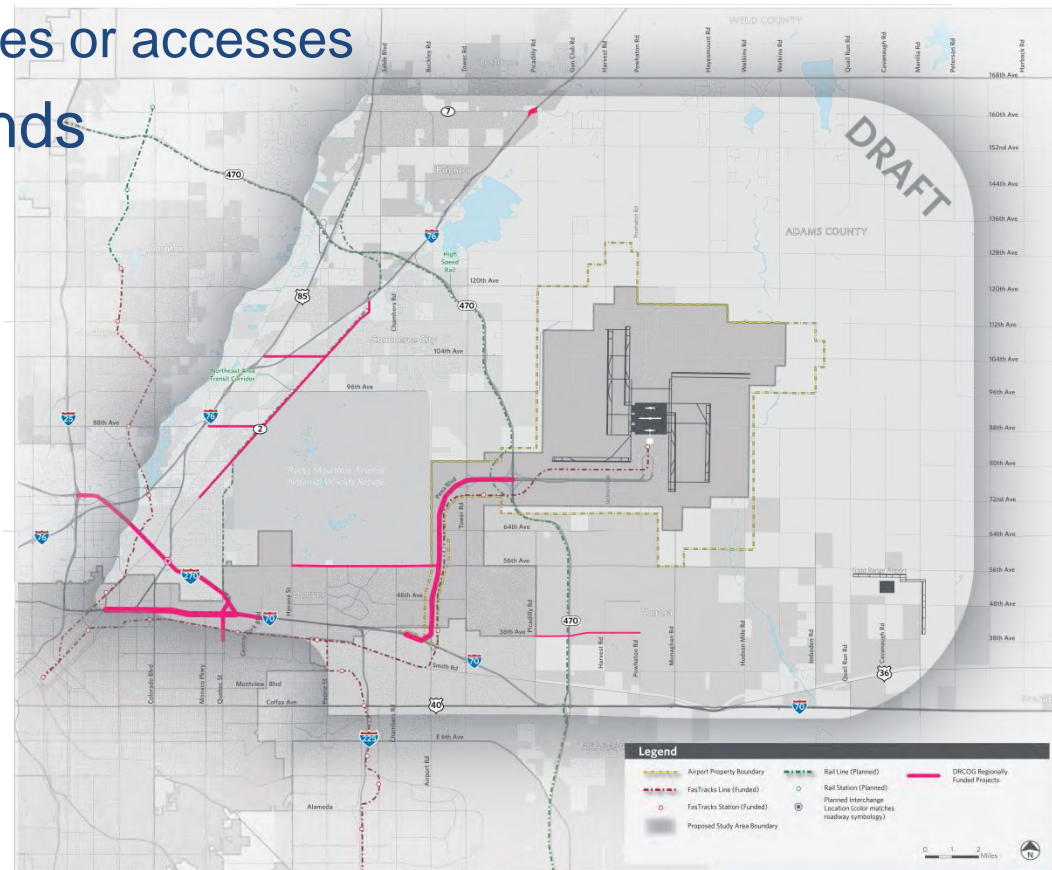
# SCENARIO COMPARATIVE ANALYSIS

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# Current Trends Scenario

- 2040 DRCOG RTP (federally funded projects)
- No New IGA Agreement
  - No new on-airport nodes or accesses
- Limited Additional Funds



# Aerotropolis Scenario

- 2040 Horizon Year
- IGA Amendment
- New Regional Governance Mechanism
- Attracts Additional Development
- Advance Planned Roadway Improvements

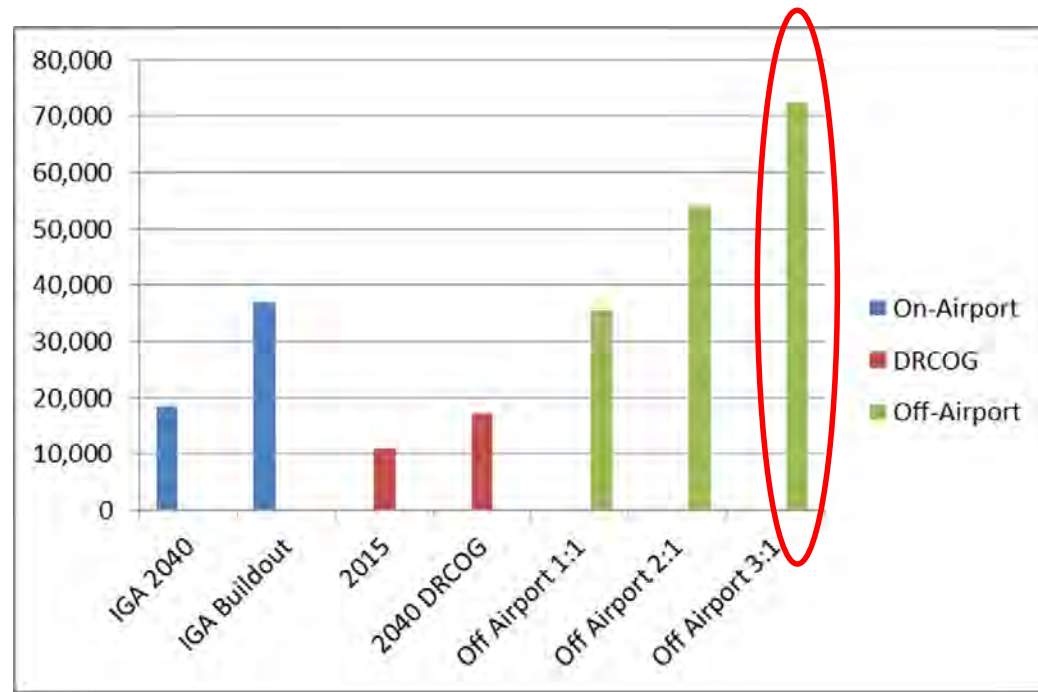


# Growth Projections

- Magnitude
- Allocation

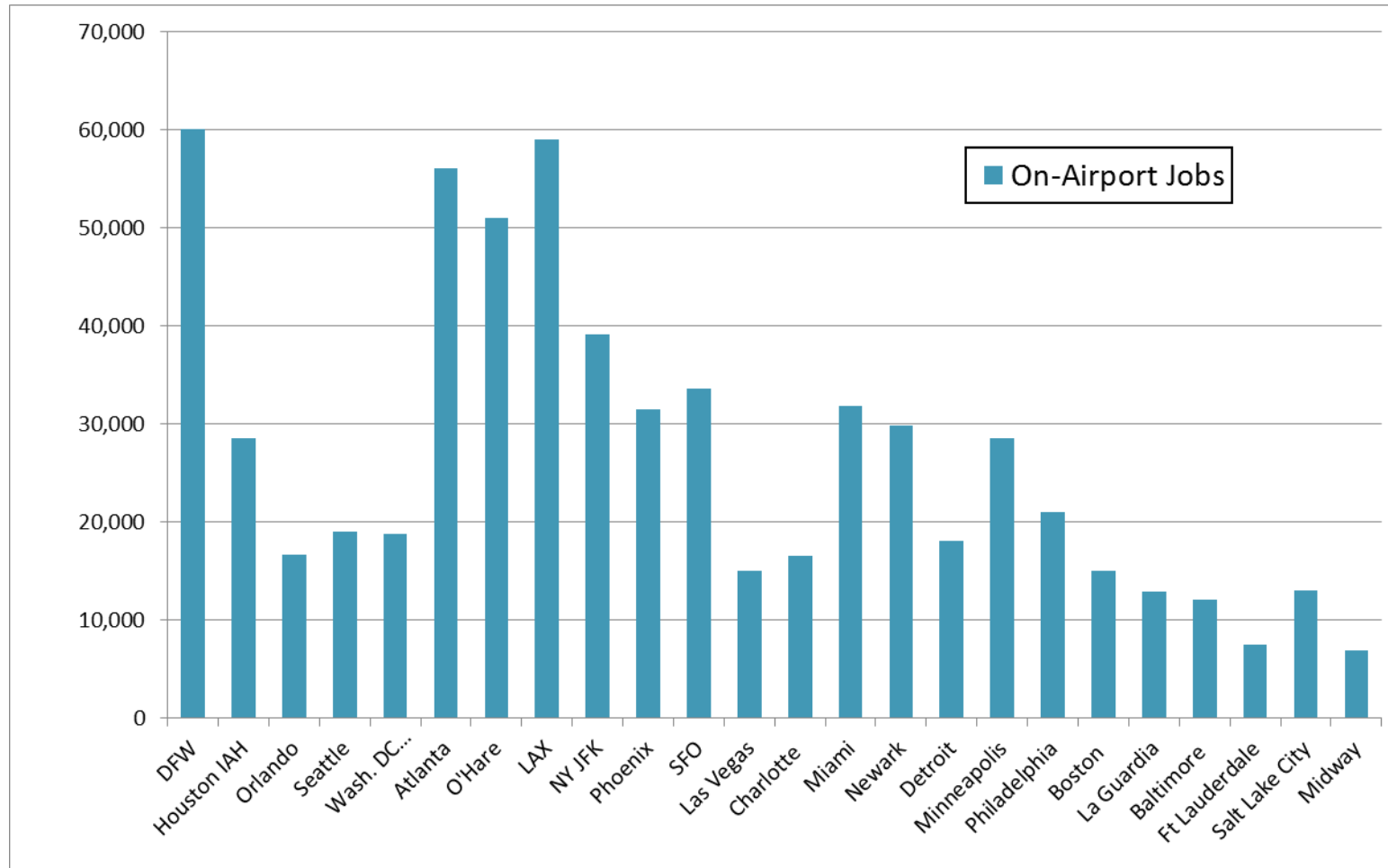
# Aerotropolis Employment Projections

- Higher than DRCOG 2040 Projection
- Two Possibilities:
  - Reallocation among DRCOG Region
  - Exceed 2040 Regional Control Total

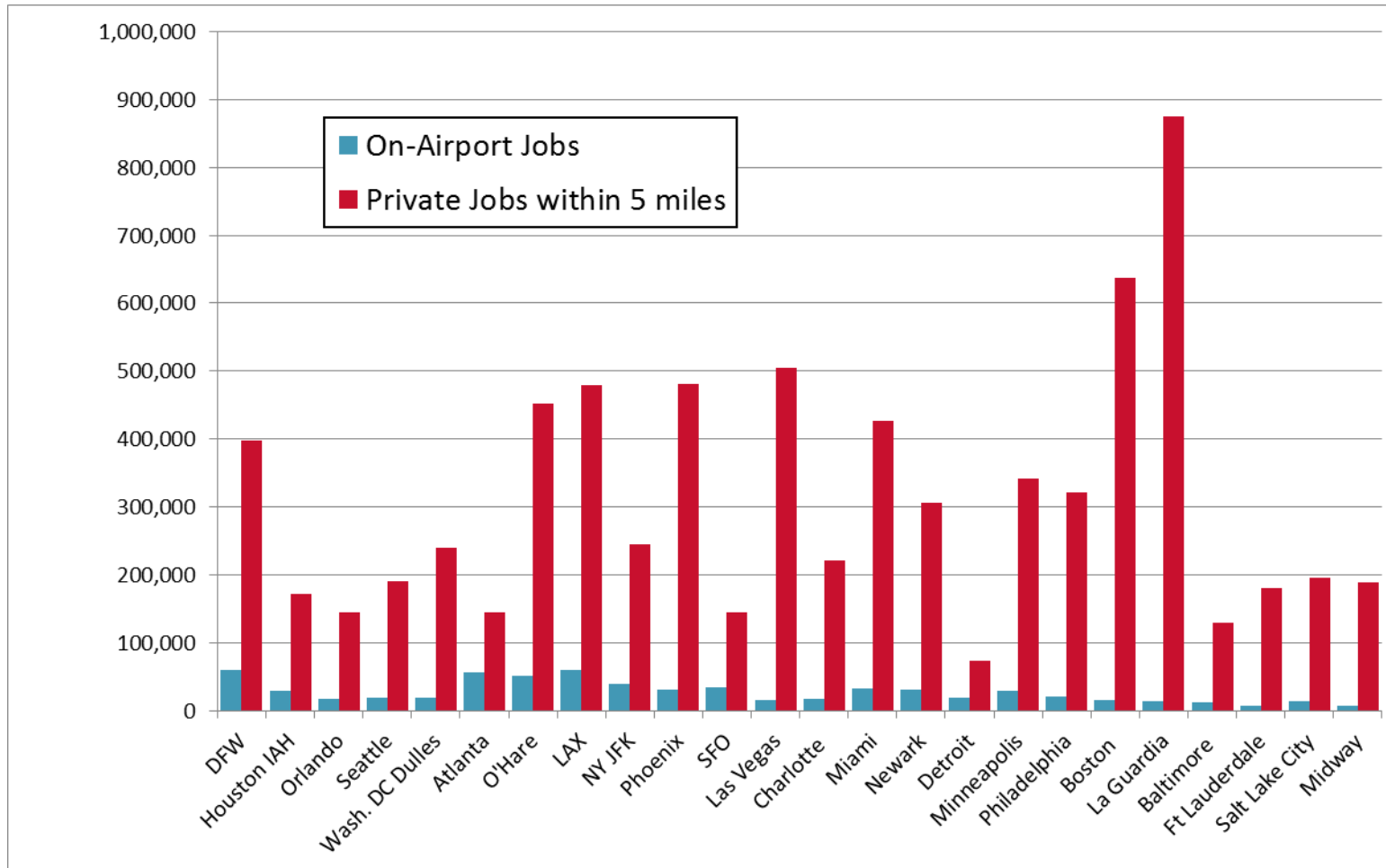




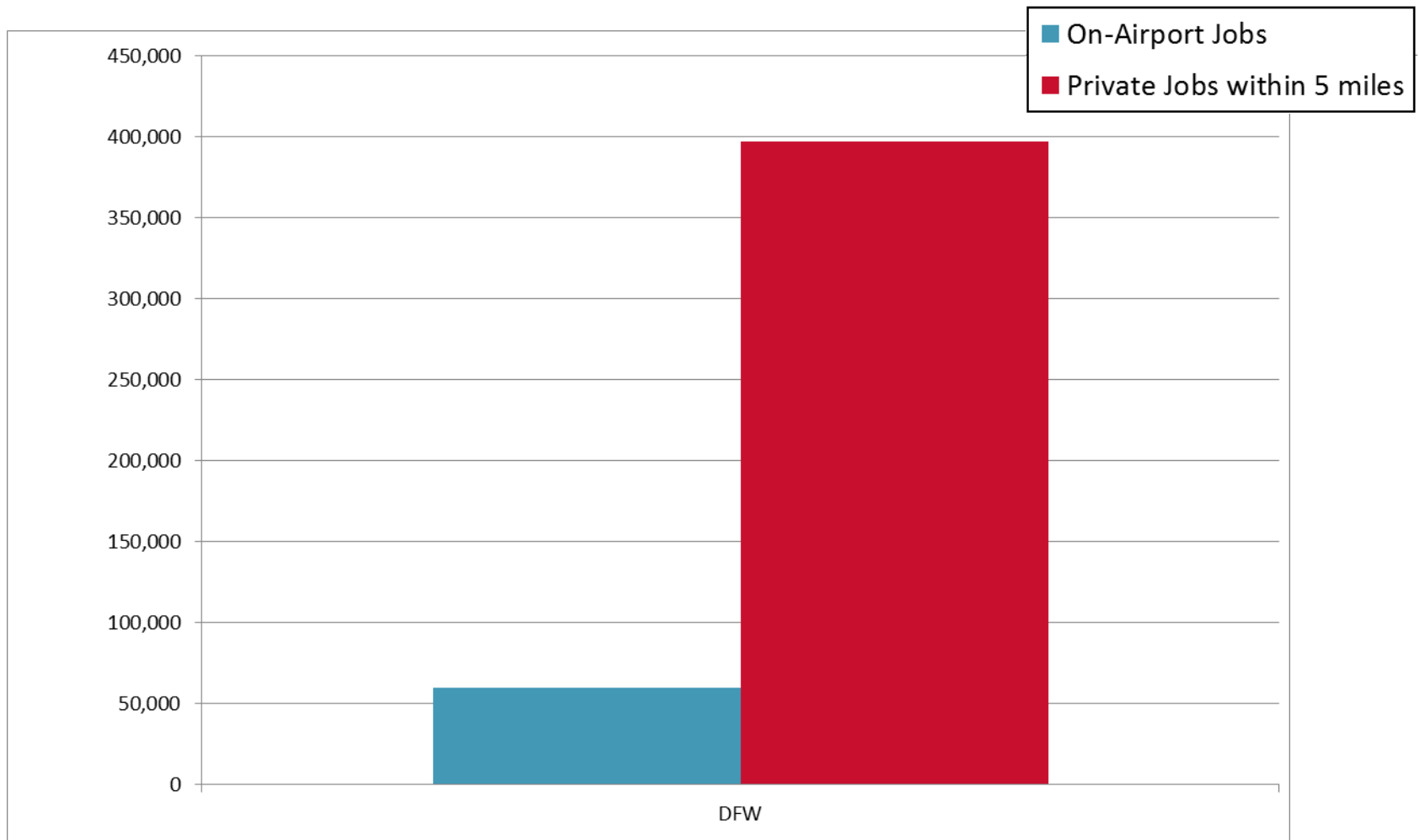
# Peer Airports – On-Airport Jobs



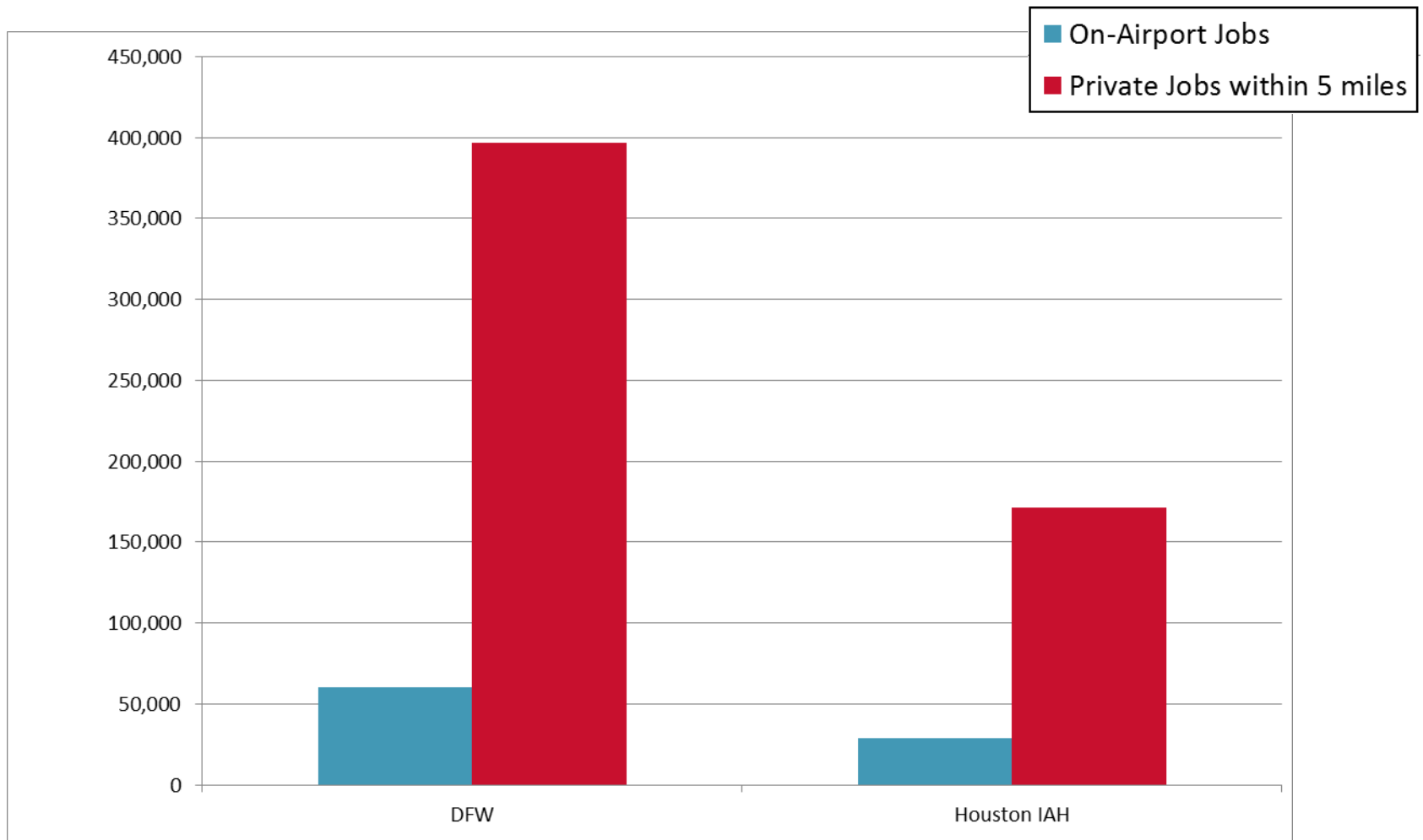
# Peer Airports – Jobs within 5 Miles



# Peer Airports – Jobs within 5 Miles

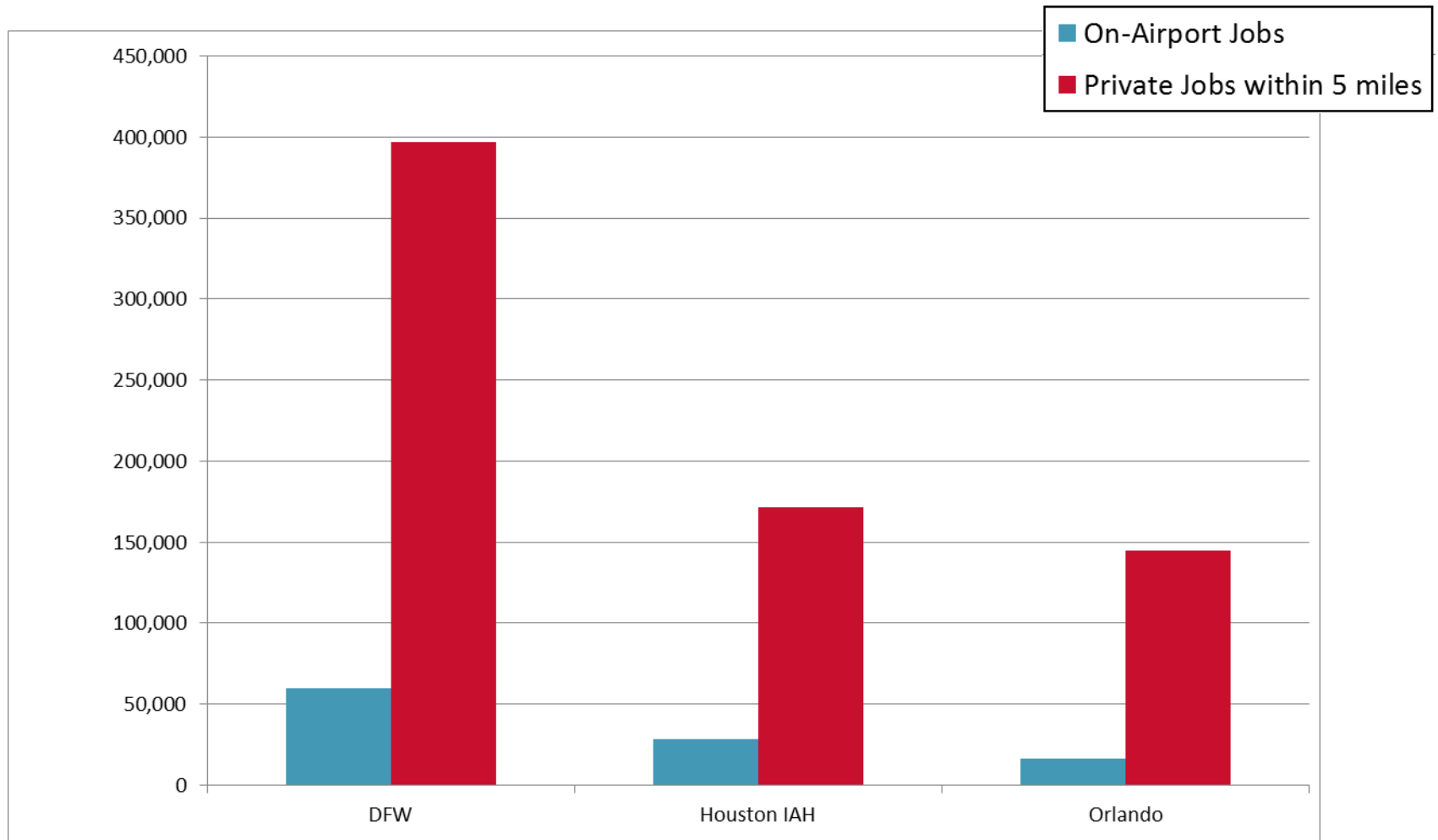


# Peer Airports – Jobs within 5 Miles

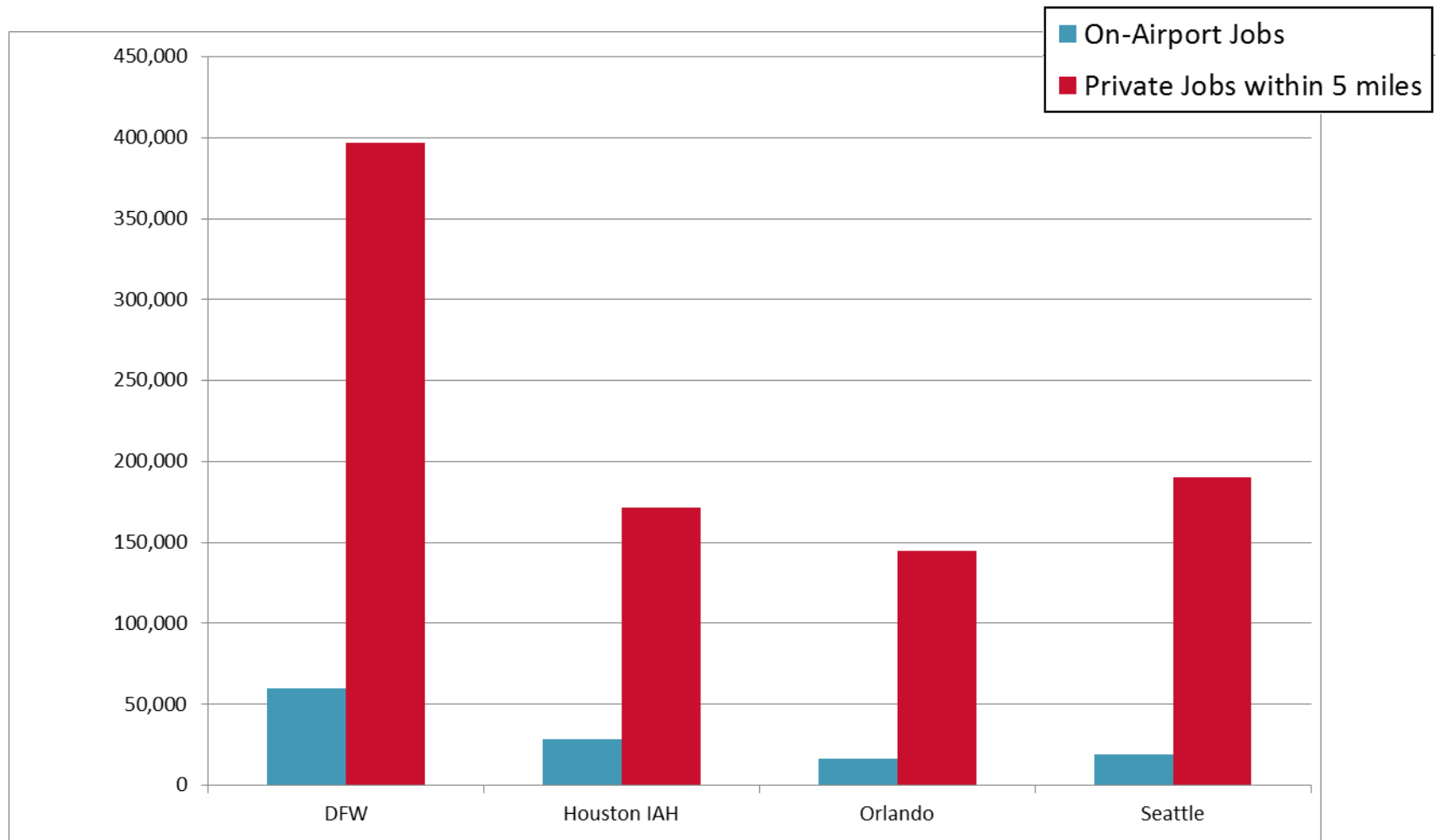




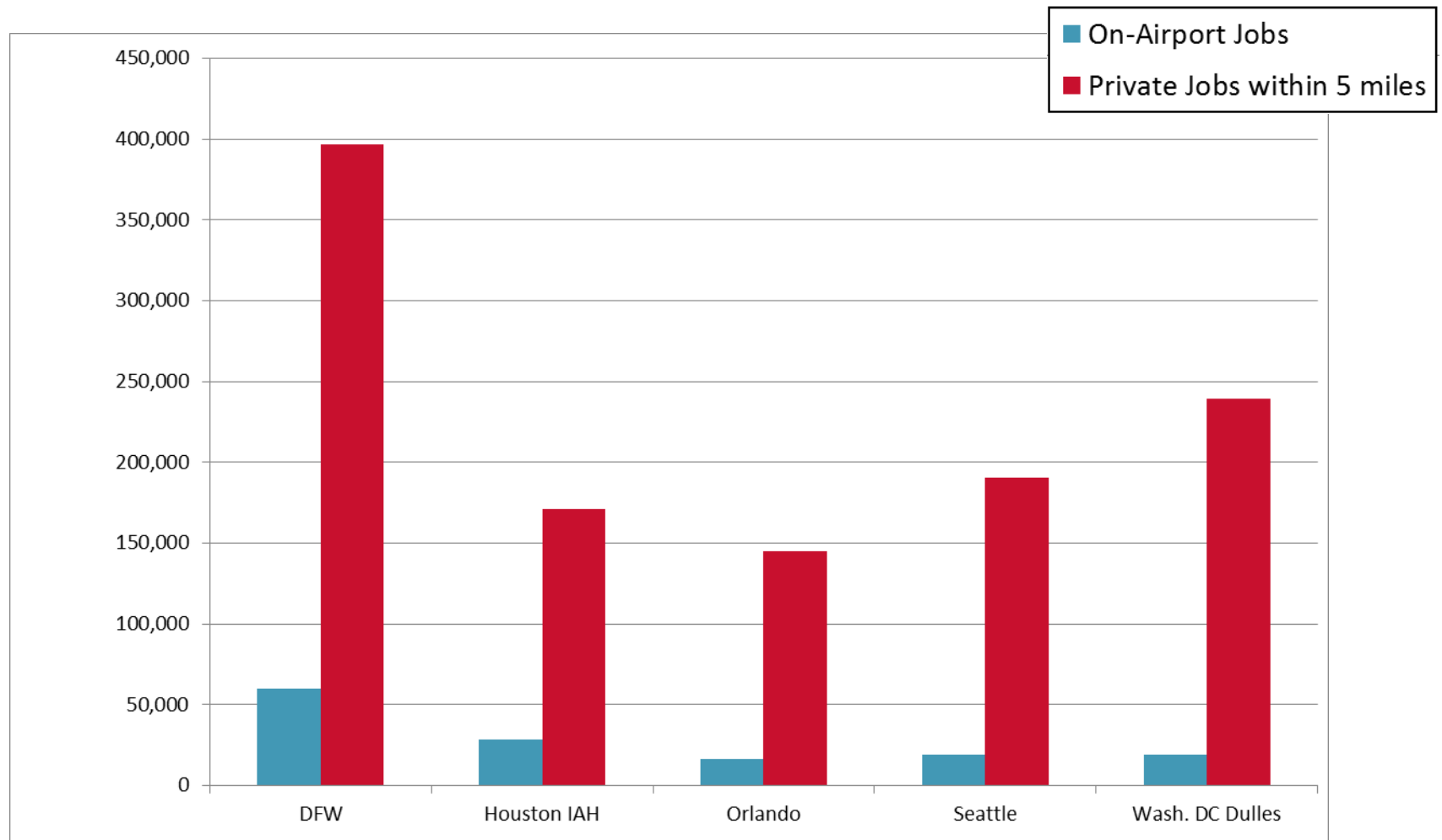
# Peer Airports – Jobs within 5 Miles



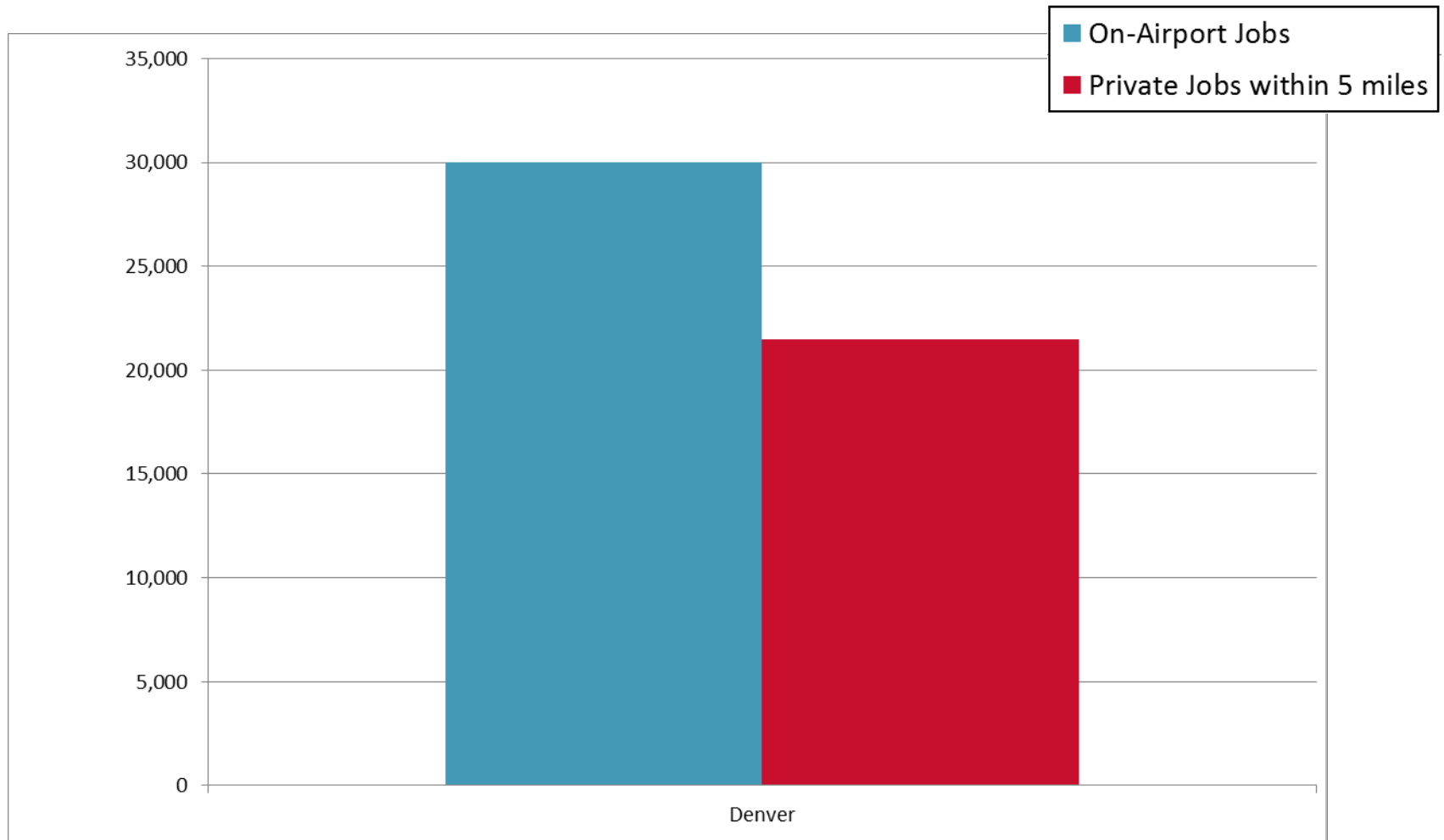
# Peer Airports – Jobs within 5 Miles



# Peer Airports – Jobs within 5 Miles

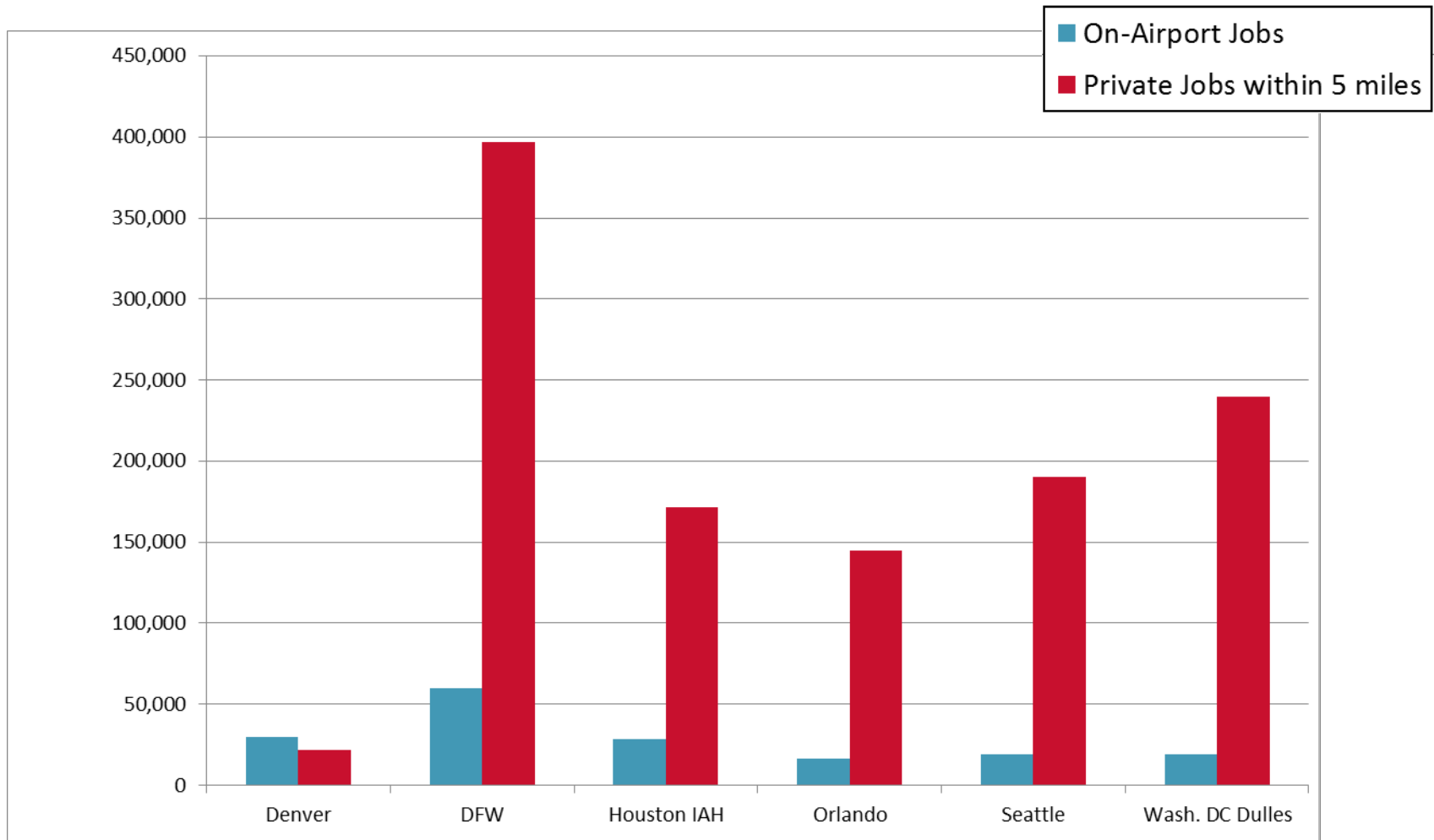


# Denver – Jobs within 5 Miles

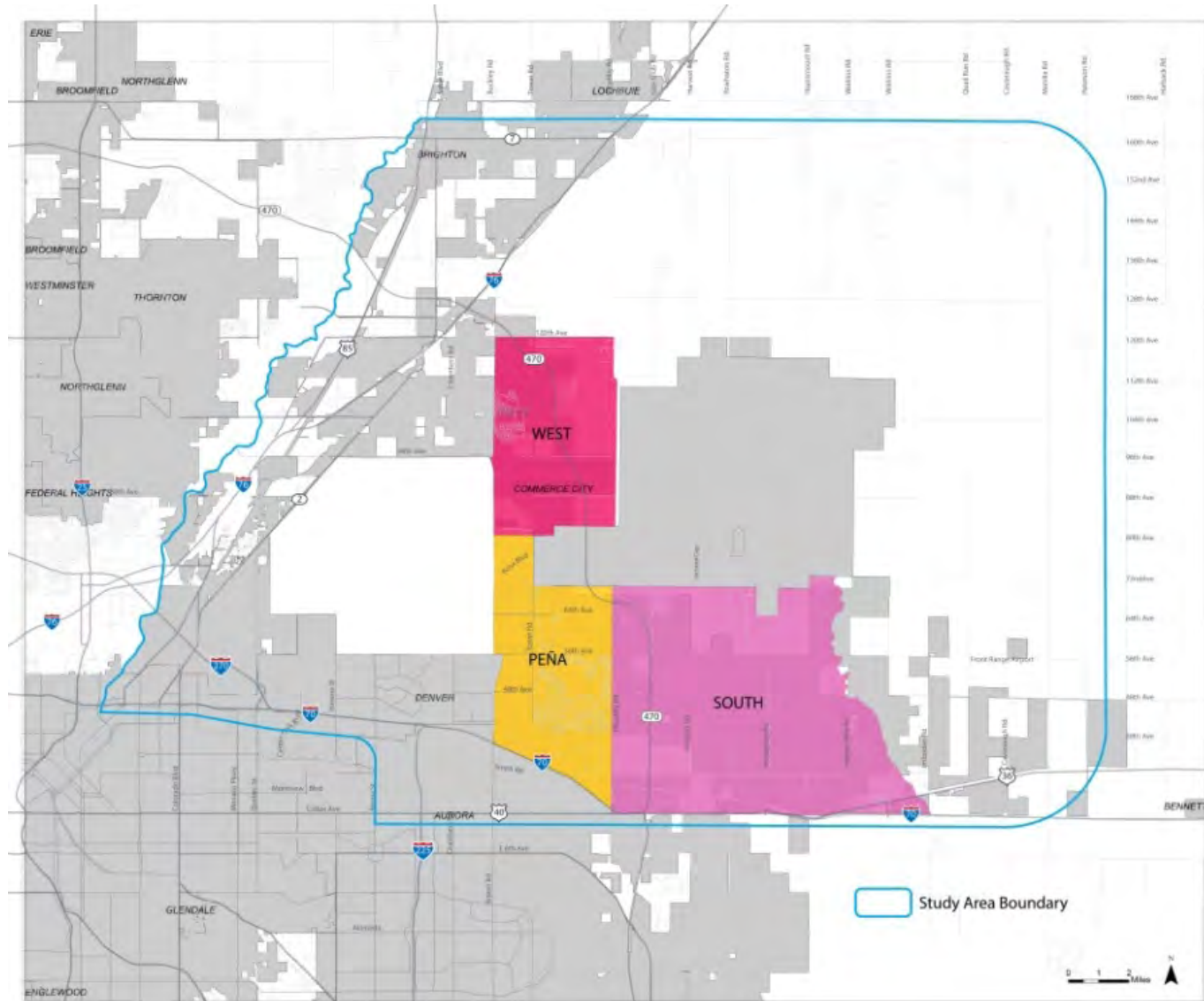




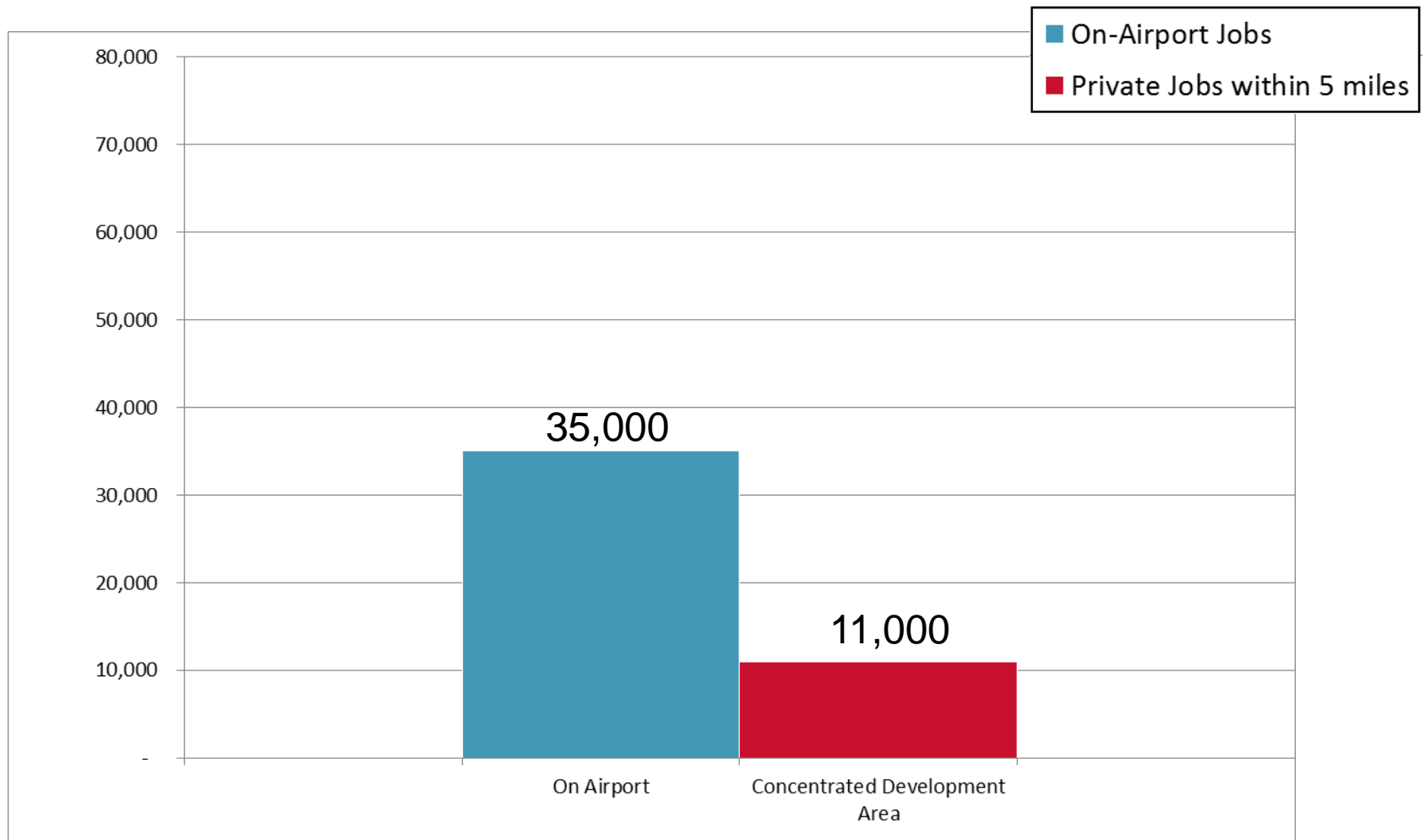
# Denver & Peers – Jobs within 5 Miles



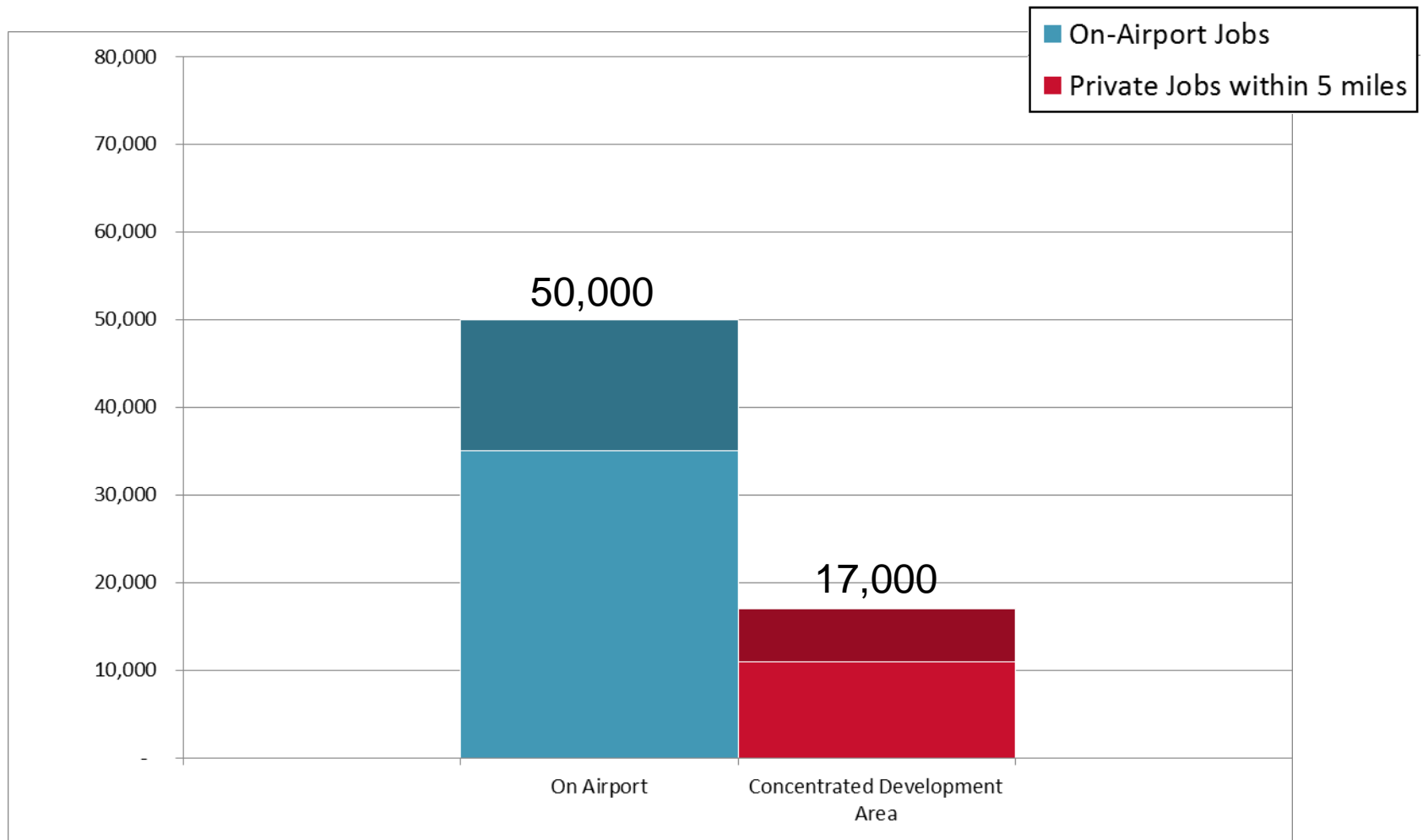
# South, West, and Peña Districts: Concentrated Development Area



# Existing Denver – 2015

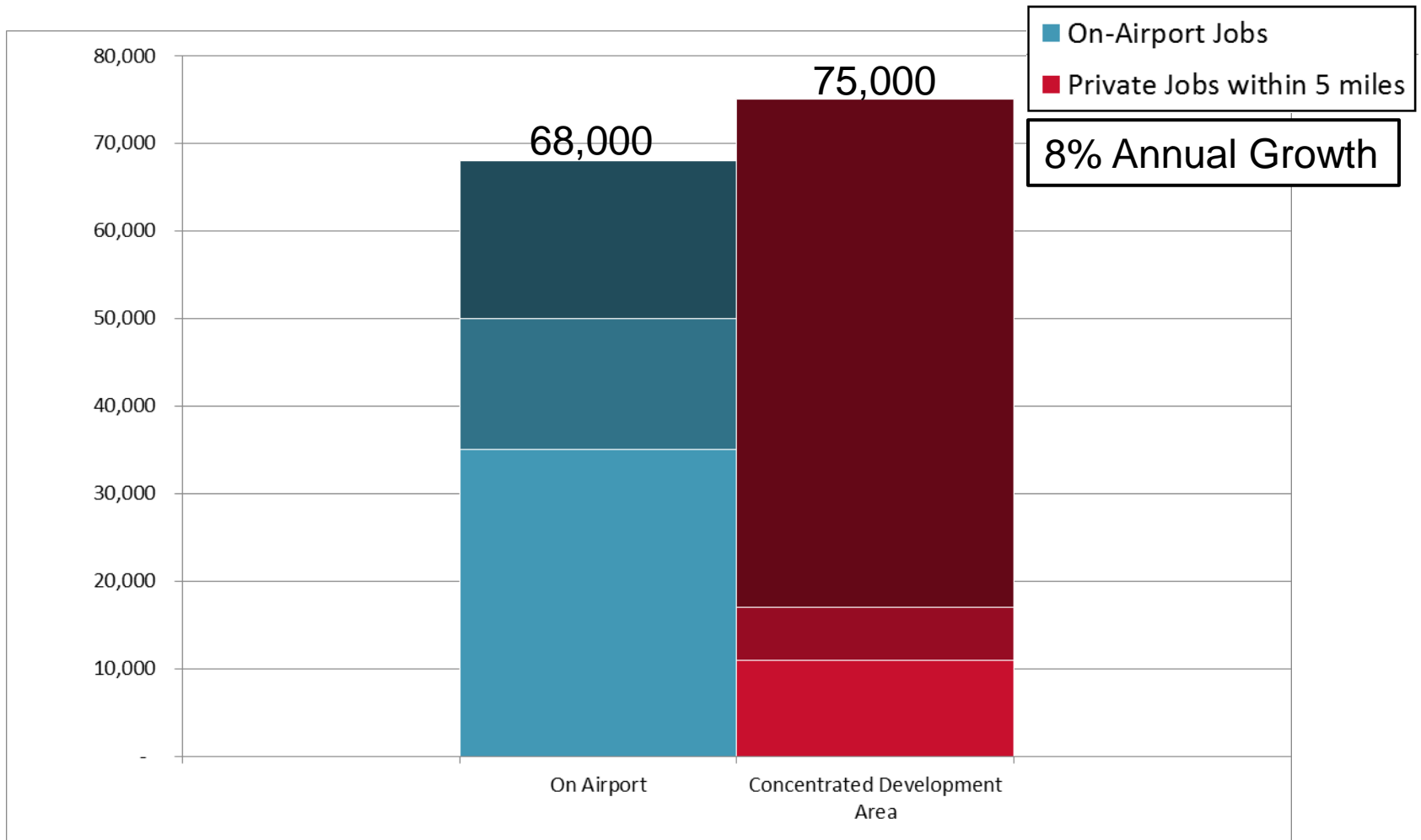


# Current Trends – 2040 DRCOG

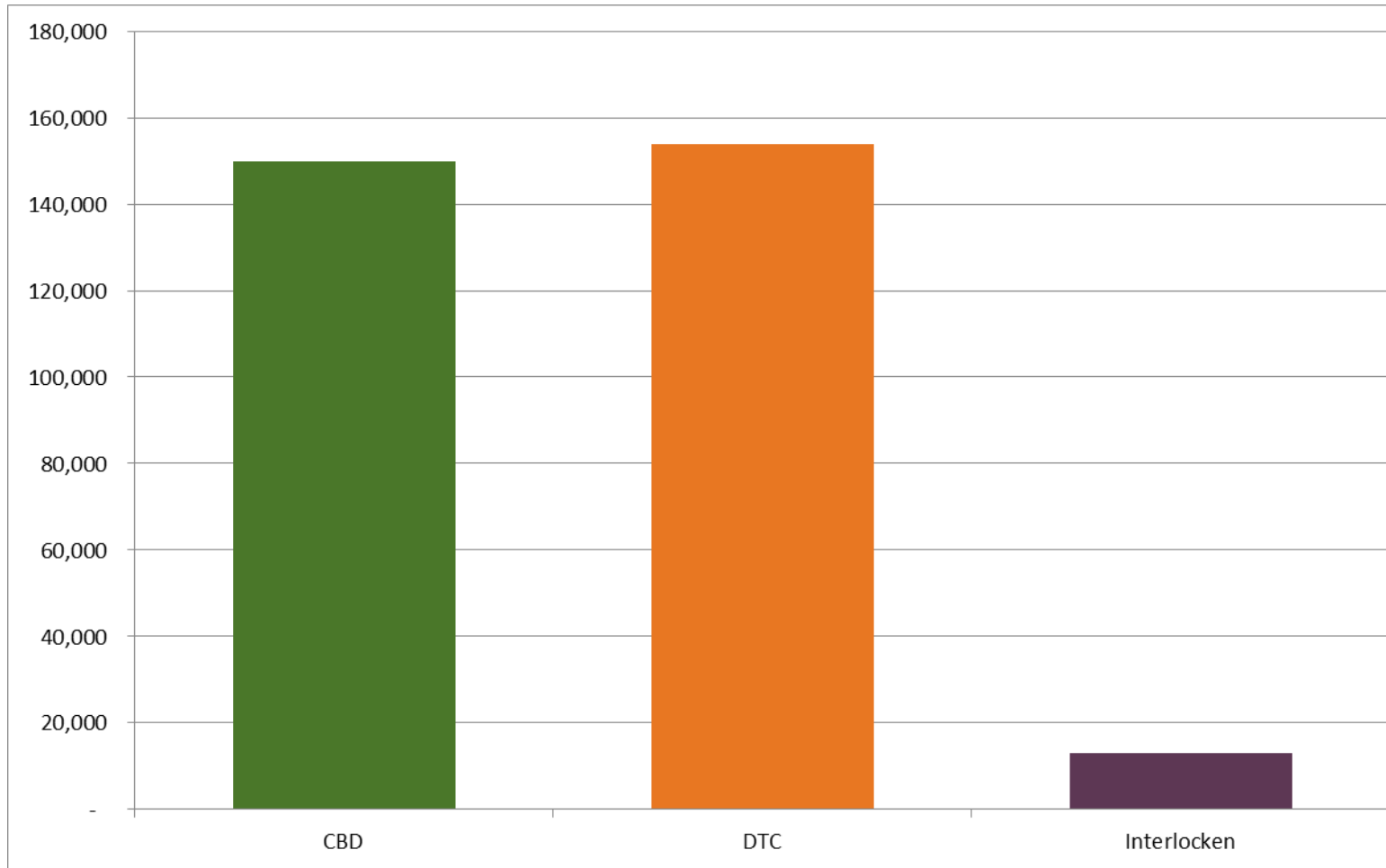




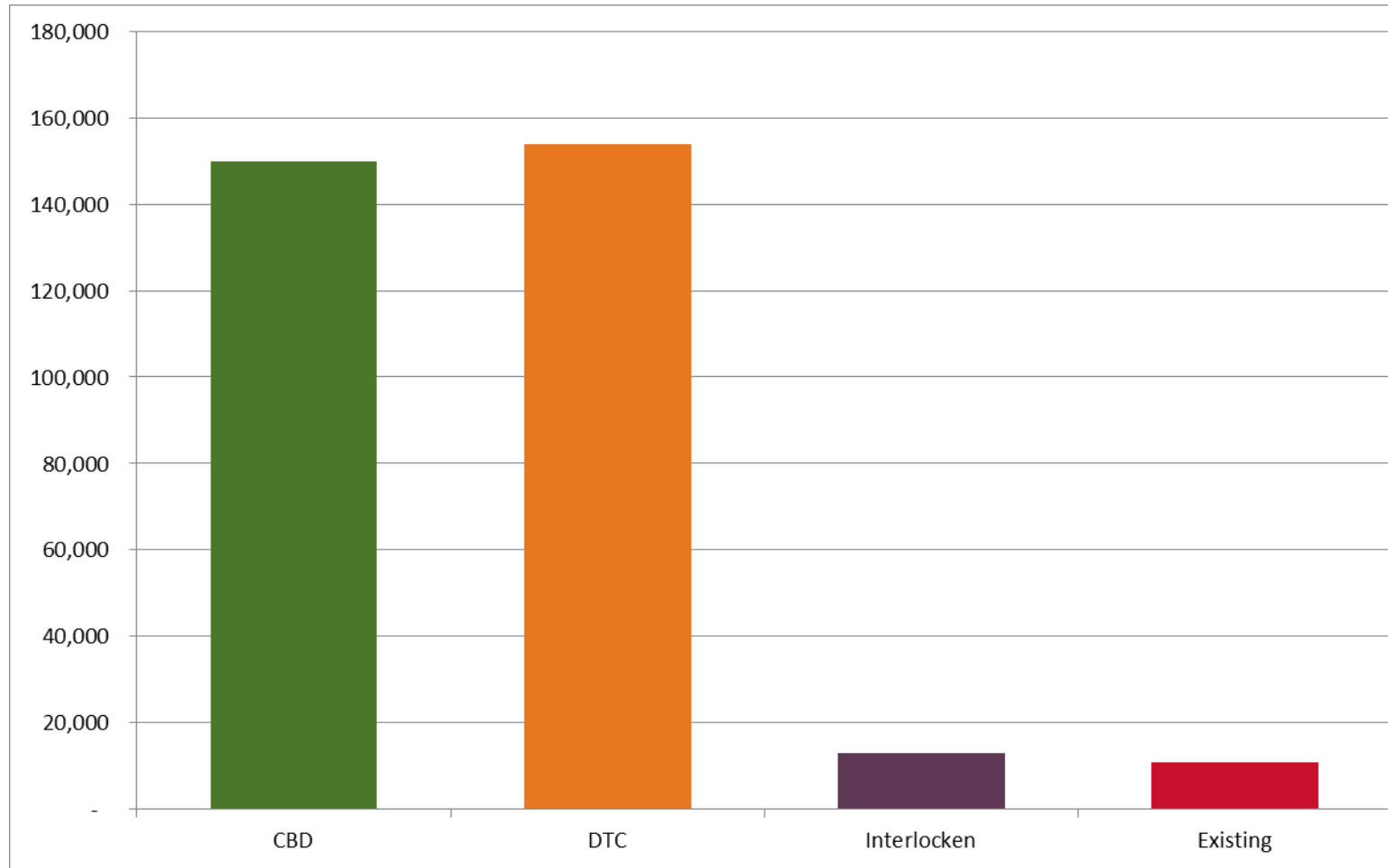
# Aerotropolis Scenario



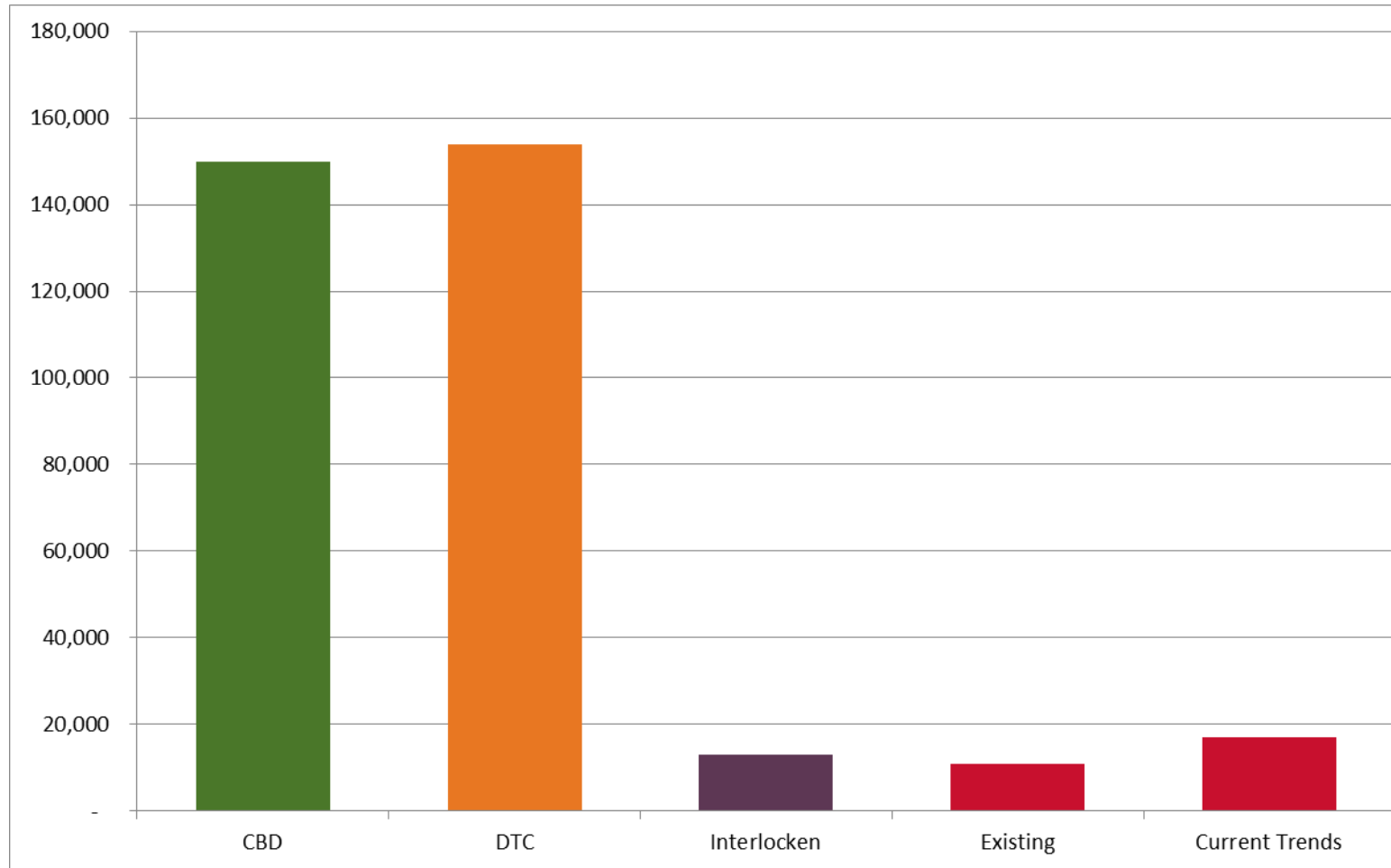
# Regional Comparison



# Regional Comparison

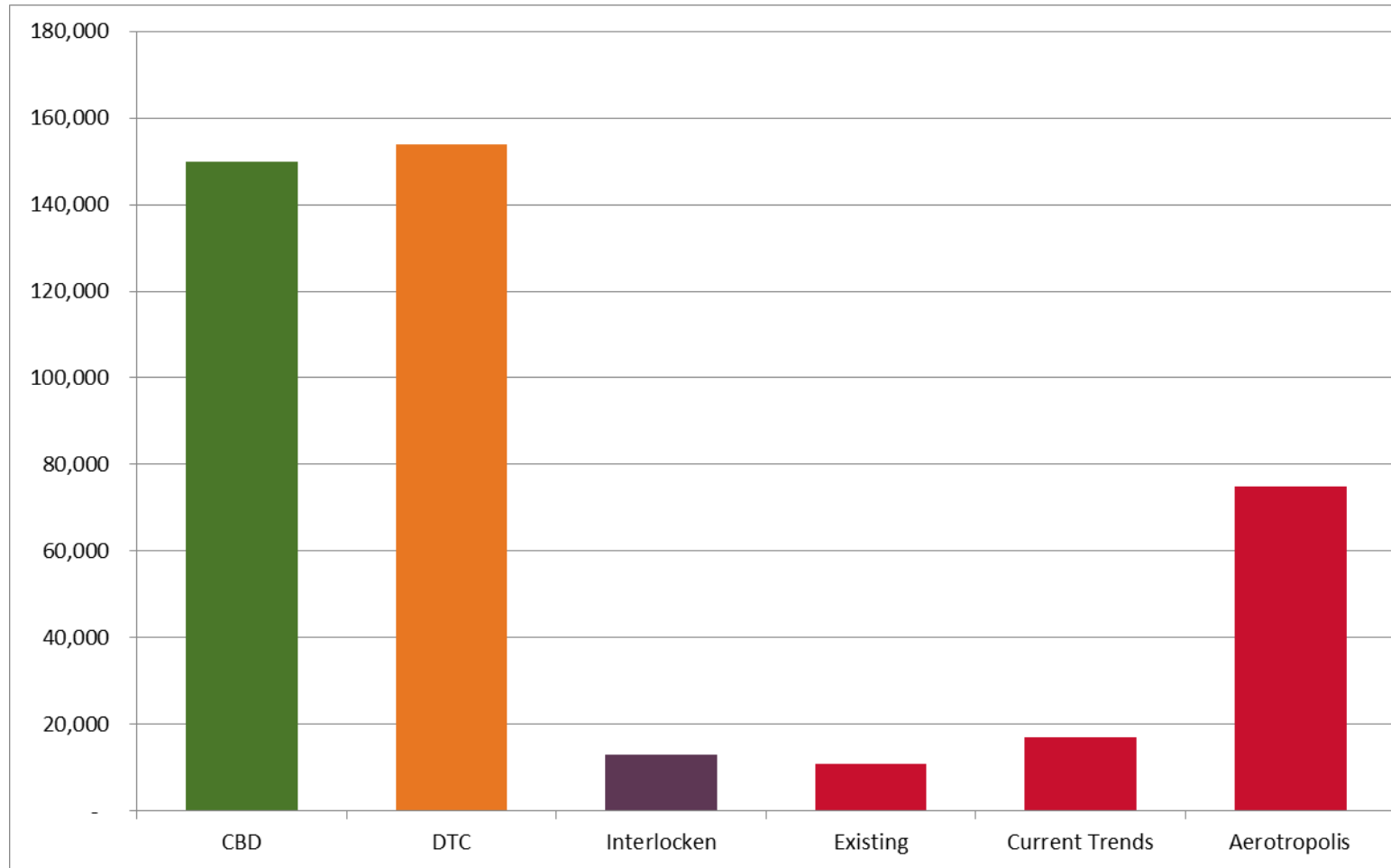


# Regional Comparison

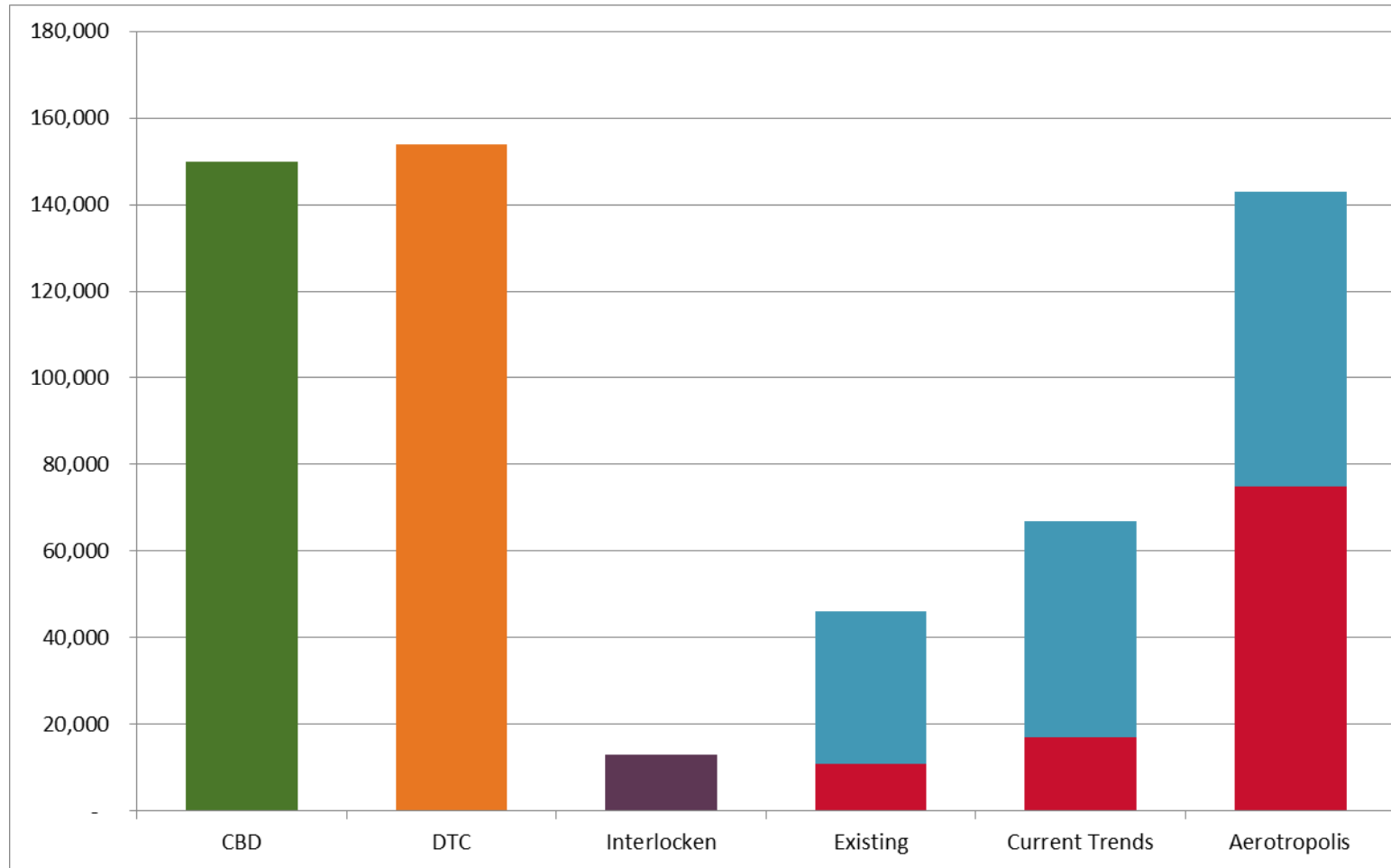




# Regional Comparison



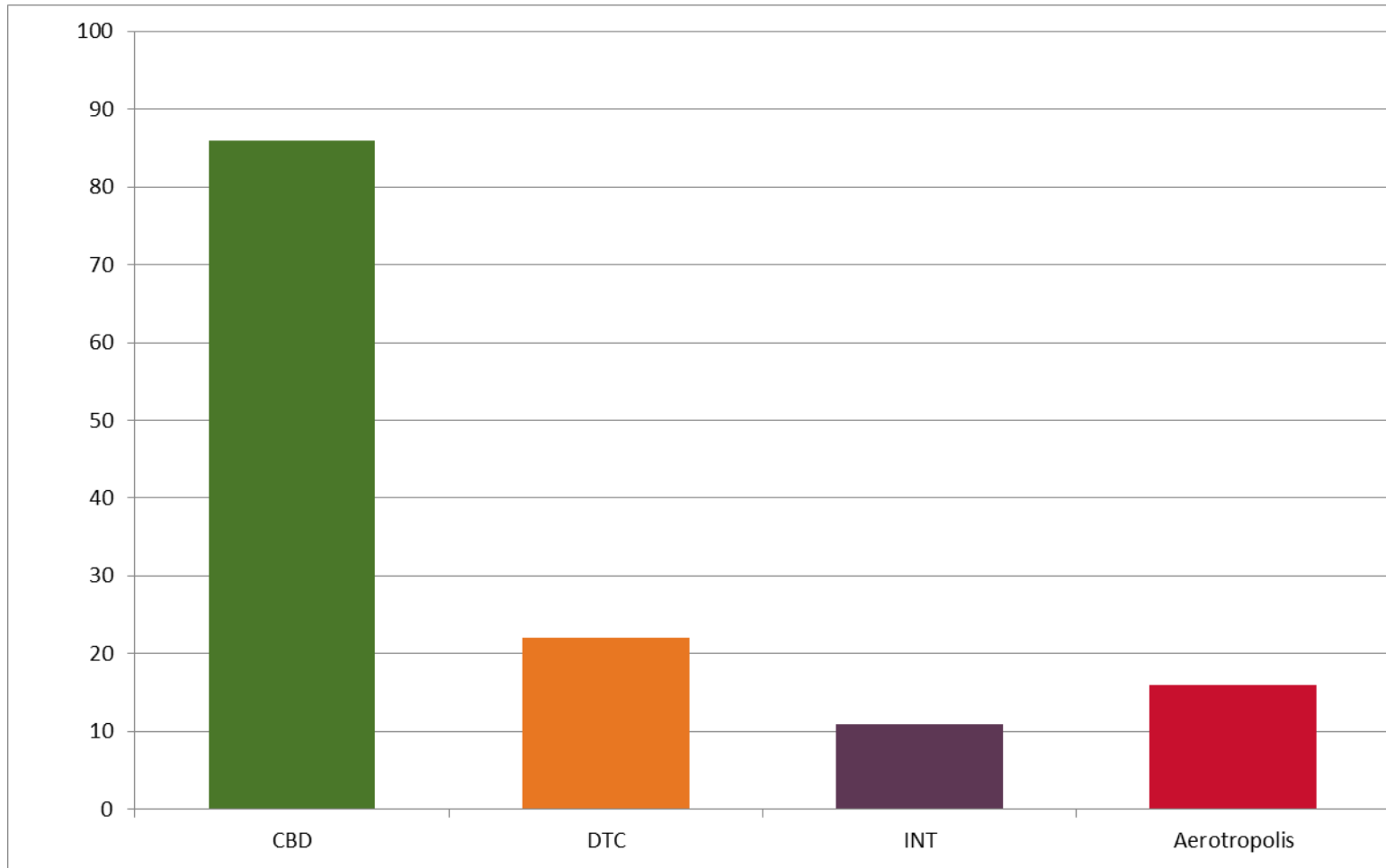
# Regional Comparison



# Growth Allocation Principles

- Access to Super-Regional Multimodal Transportation Facilities
- Contiguous to Active Developments
- Gravitational Pull of Larger Development(s)
- Connectivity to DIA
- Consideration of Geographic Diversity

# Regional Comparison – Jobs per Acre

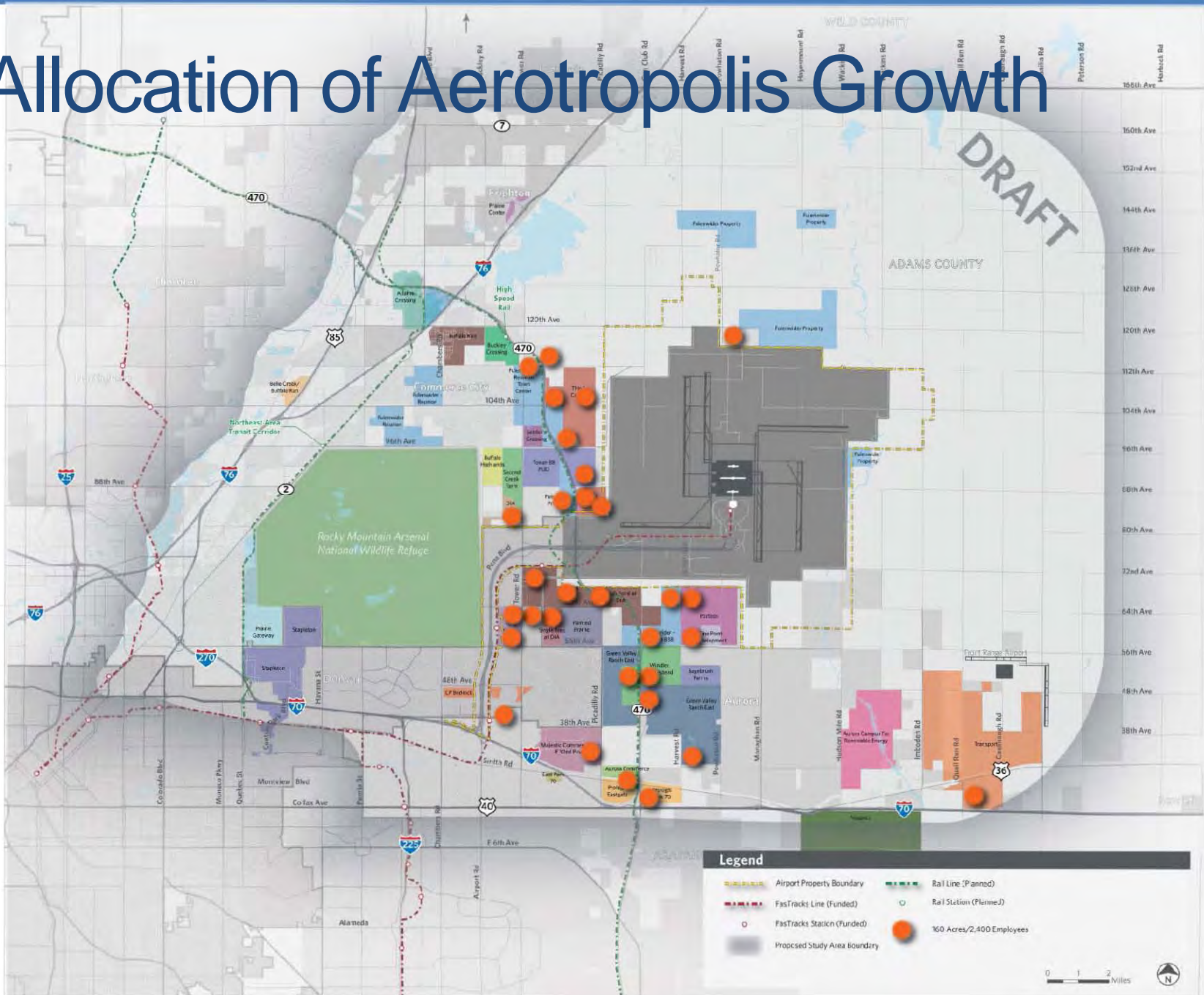




# ALLOCATION EXERCISE

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# Allocation of Aerotropolis Growth

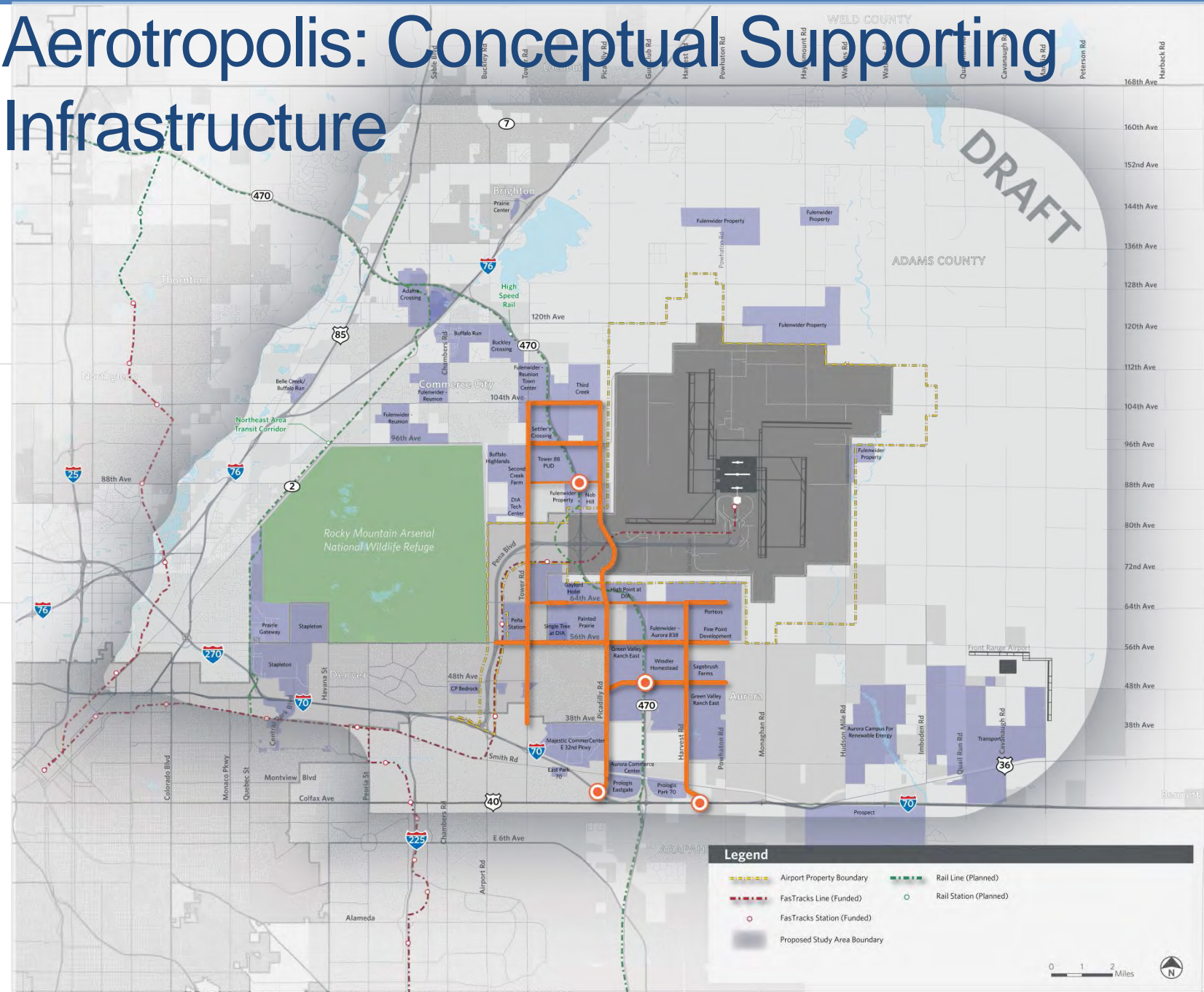


# Transportation Development Principles

- Access to Super-Regional Multimodal Transportation Facilities
- Contiguous to Active Developments
- Incremental to Previous Investments
- Gravitational Pull of Larger Development(s)
- Connectivity to DIA
- Consideration of Geographic Diversity



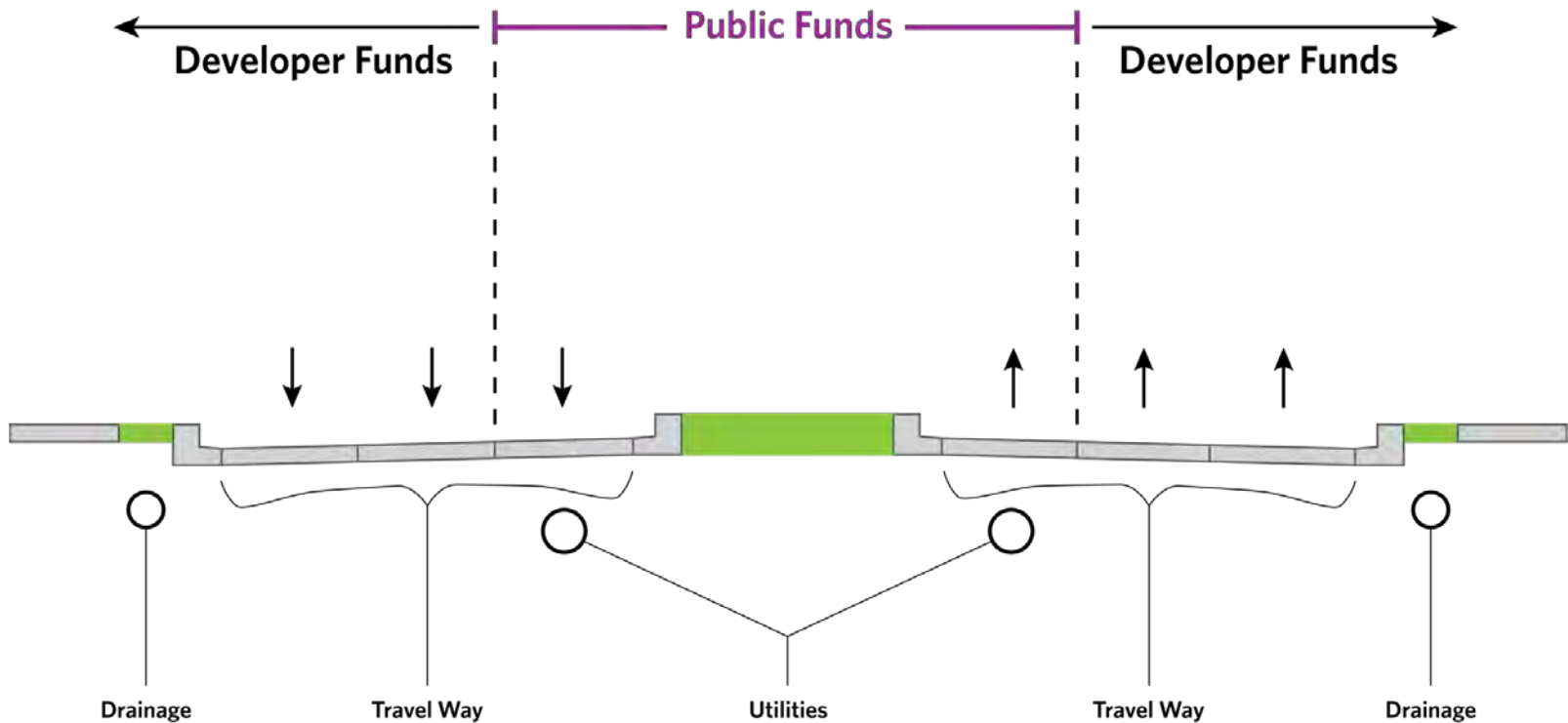
# Aerotropolis: Conceptual Supporting Infrastructure





# Public and Developer Infrastructure Collaboration

## Roadway Section



# AEROTROPOLIS VISION COMPONENTS

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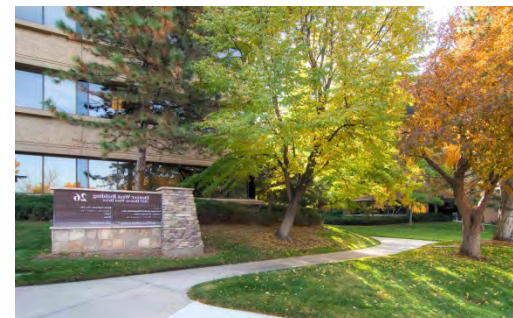
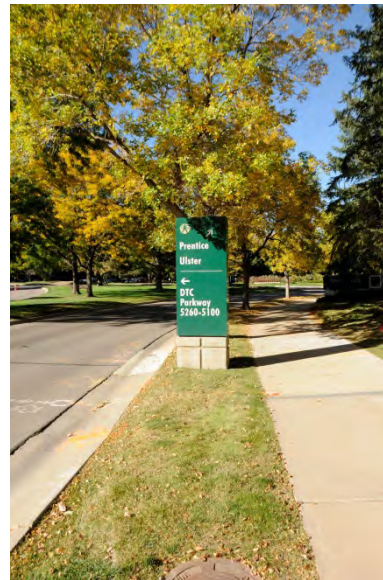
# Regional Collaboration

- Joint Governance for Infrastructure Funding
  - Transportation
  - Utilities
- Common Aesthetic

Denver West Office Park



Denver Tech Center



# GROUP DISCUSSION

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Do you want to continue rectangular arterial grid structure, or master plan a curvilinear structure?

Are you willing to preserve right-of-way  
for multimodal treatments?

Should we identify post-FasTracks  
high-capacity transit connections?

Are you willing to preserve right-of-way  
for a high-capacity Ring Road?



Are you willing to collaboratively define a common aesthetic?

MOVING FORWARD

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# Study Final Products

- Report
- Executive Summary
- Video
- Web Presence

# Next Meetings

## Steering Committee

- Meeting #2: Oct 22, 10:30

Location: RMANWR – **Bldg 130, Lab Conference Room**

## Joint Steering/Study Review Committee

- Guest Speaker: Jeff Fegan
- Nov 19, 9:00
- Adams County Government Center



# ROUNDTABLE DISCUSSION

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# THANK YOU

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# Colorado Aerotropolis Visioning Study

## Agenda

Project: Colorado Aerotropolis Visioning Study

Subject: Study Review Committee Workshop #5

Date: September 17, 2015 9:00 - 11:30

Location: Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)

1. Welcome & Introductions
2. Campaign Update
3. Study Components
4. Panel Recap
5. Comparative Analysis
  - a. Evaluation Criteria Breakout Groups
6. Growth Projections
7. Approach to Infrastructure Development
  - a. Transportation
  - b. Water
  - c. Wastewater
  - d. Special Districts
  - e. Landowners
8. Roundtable Discussion
9. Next Meetings
  - a. Study Review Committee: October 15, 9:00 - 11:30  
**Commerce City Recreation Center  
Community Room  
6060 E. Parkway Drive  
Commerce City, CO 80022**
  - b. Steering Committee: October 22, 9:00 - 10:30 RMANWR **in Building 130 Lab  
Conference Room (east of Building 129 where we are now)**
  - c. Combined SRC/Steering November 19, 9:00 to 11:30 RMANWR **Guest Speaker**
10. Next Steps and Action Items
11. Adjourn

## COLORADO AEROTROPOLIS | Visioning Study



### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

Project:	Colorado Aerotropolis Visioning Study
Subject:	Study Review Committee Meeting #5
Date:	September 17, 2015, 9:00 a.m.
Location:	Rocky Mountain Arsenal National Wildlife Refuge
Attendees:	See attached sign-in sheet
Distribution:	SRC members, File

### Welcome and Introductions

1. Stephanie White welcomed everyone and announced the purpose of today's meeting. Two handouts were previously distributed via e-mail to the committee to review prior to the meeting. These documents (in draft form) were the *Assessment of Growth Projections* and *Comparative Evaluation Process* for Colorado Aerotropolis.
2. Stephanie then distributed a few copies of the previously distributed documents to the group noting that today's meeting will focus on study methodologies.

### Campaign Update (Evan Dreyer)

1. Evan Dreyer provided a brief update on the campaign to get the Adams County and Denver unified. Amended the IGA to allow for non-airport commercial businesses to be developed at the airport. We are asking voters in Denver and Adams County to open the door to other commercial businesses.
2. He mentioned a survey result: Do you think the airport has been doing well? Response: 95 percent yes in Denver, 80 percent yes in Adams County. People really do get the economic benefits that the airport brings to the whole metro Denver.
3. Got the ballot number to be the same in Denver and Adams County—"1A" series. Being able to use the 1A for DIA for both Denver and Adams County is a good thing.
4. Conducting a unified campaign—consultant helping us get the mailing out. Ballots start arriving in mailboxes in less than a month. Campaign kickoff a little over a week ago. A budget of \$900K, probably closer to \$800K to produce mail pieces and communicate to the voters.
5. There hasn't been a lot of opposition, but maybe some environmental issues we need to address in Adams County.
6. Doing a lot of outreach with aggressive schedule to meet with the public.
7. If we raise enough money, we will be on radio and TV as well.
8. Jay Hendrickson: What is the plan to raise awareness? Is there anything that this group can do to help?  
*Response:* The more you start talking about issues that are more complicated, the worse it gets. I think pushing people to the website (*1AforDIA.com*) is really helpful. That would be the place to go to see exactly what's happening. If you know of opportunities to speak where it will be helpful for the campaign, that would be something this group can do.
9. Jay Hendrickson: The Society of Industrial and Office Realtors has reached out to CDOT. They are very interested in Aerotropolis. They were on board with the whole thing. *Response:* Need to get contact info from you about this group.

10. Question: The Denver ordinance, are you okay if this study team distributes the wording of that ordinance (the whereas clauses)? *Response:* Yes, that would be fine. But this study group cannot distribute campaign materials.
11. Rebranding of DIA: Official unveiling was yesterday (9/16) of the logo and new brand. DEN is now the official logo.

### Study Components (Rick Pilgrim)

1. Rick Pilgrim introduced today's topics. One is the forecast of development growth in the study area. We have growth comparison and projections that we want the group to look at.
2. A comparative evaluation of the scenarios is another topic we will be discussing today. We want to use the evaluation criteria as the framework from which to compare scenarios. We are working on a working paper format, so these are draft.
3. From a larger perspective, Rick gave an overview of the major components of the Aerotropolis study:
  - a. Collaborative Vision. Developed from input of this group.
  - b. Growth Projections. These are fundamental to an economic analysis.
  - c. Infrastructure. Framework of collaborative infrastructure implementation possibilities.
  - d. Governance. A framework of next steps for a regional district or other structure.
  - e. Framework and Next Steps

### Panel Recap: Governance Panel, July 23 (Keith Borsheim)

1. Keith Borsheim provided a brief review of the Governance Panel at the last SRC meeting. The panel was composed of:
  - a. Peter Kinney—Metro Mayors Caucus
  - b. Tom Clark—Metro Denver EDC
  - c. Ed Icenogle—Partner at Icenogle, Seaver, Pogue
  - d. Don Hunt—Former Executive Director, CDOT
2. The panel provided insight into the following:
  - a. Past examples of collaborative efforts in the Denver metro area to develop infrastructure and market real estate development.
  - b. Examples of the types of governance mechanisms available to strategically provide infrastructure.
  - c. Stressed the need to be all-inclusive—both public and private stakeholders. Get everybody at the table.
  - d. Do not overlook traditional funding sources.
  - e. Create the grand vision but do not attempt to bite off more than you can chew as you start. Small successes will be the proof of concept and will provide a foundation of trust.
  - f. Governor Hickenlooper—“Collaboration is the new Competition.”



3. Comment (Dan Poremba): There was some talk about this study having Ed or somebody like him to help us survey the finance mechanisms and identify the most likely range of finance mechanisms. I think that was a pretty practical Idea.

### Comparative Analysis (Chris Primus)

1. Current Trends Scenario
  - a. Baseline assumption is we are using the 2040 DRCOG RTP.
  - b. No new IGA Agreement (no new on-airport nodes or accesses).
  - c. There are limited additional funds.
2. Aerotropolis Scenario
  - a. 2040 horizon year
  - b. Assuming the IGA amendment
  - c. New regional governance mechanism
  - d. Attracts additional development
  - e. Advanced planned roadway improvements
  - f. Allows additional improvements
3. Dan Poremba: From the IGA, 1,500 acres was identified as the maximum. There will be future phases of development that will spin from that. The 1,500 acres really is expected to be the net land leased. Probably 2,000 + gross acres. IGA does not specifically allow for new access funded with shared tax revenues. It will be up to the jurisdictions how to prioritize such accesses.
  - a. Chris: We do use the 1,500 acres in our analysis; and we will incorporate this good information.

### Evaluation Criteria Breakout Groups (Chris Primus)

1. We have categories and topics for evaluating each scenario. This is the SRC's chance to provide input on how to evaluate each scenario.

Evaluation Category	Criteria
<b>Regional Compatibility</b>	Effect on region growth
	Consistency with Metro Vision's Guiding principles: <ol style="list-style-type: none"> <li>1. To protect and enhance the region's quality of life</li> <li>2. To be aspirational and long-range in focus</li> <li>3. Offer direction for local implementation</li> <li>4. Respect local plans</li> <li>5. Encourage communities to work together</li> <li>6. Plan is dynamic and flexible</li> </ol>
<b>Community Acceptance</b>	Effect on adjacent development
	Consistency with adopted plans

Evaluation Category	Criteria
<b>Environmental Sustainability</b>	Effect on region air quality
	Effect on region water quality
	Resiliency to environmental changes
<b>Infrastructure Efficiency</b>	Transportation System
	Utility system/network continuity
	Cost-efficient infrastructure development
<b>Economic Development</b>	Quantitative benefits: 1. Reduction in the capital and operating cost of sewer and water conveyance systems 2. Increases in real estate values 3. Increases in property and sales taxes 4. Direct and indirect jobs associated with construction 5. Increases in State income taxes from new permanent jobs
	Qualitative Benefits 1. Increases in rate of wage growth 2. Increases in productivity 3. Decreases in household and business transportation costs
	Costs
	Qualitative Features

2. Stephanie pointed each group/table to the worksheet for the groups to use. Each group was given 5-10 minutes to discuss and each group then reported back.
3. Table 1 (Rick Pilgrim)
  - a. Regional Compatibility: seemed okay.
  - b. Transportation Efficiency: maybe more specific and get to reduction and average ADT.
  - c. Economic Development: the quantitative benefits. What about just income in general? How about positively impact average income? Maybe visit the Community survey to get more background. Calculate the number of more permanent jobs. Maybe a little bit more explicit.
  - d. Qualitative Benefits. What do you mean by increase in productivity? What does that mean? does it mean together we can be more productive?
  - e. Maybe there should be a criterion for contribute to a unified brand.
4. Table 2 (Kristin Sullivan)
  - a. Economic Development: add words to the criterion of cost—cost benefit, not just cost itself; smart strategic investment.

- b. Sustained regional cooperation: A good effect on our cooperation as a region and would it be sustained for a long time?
  - c. Global competitiveness of Aerotropolis.
5. Table 3 (Jacob Riger, DRCOG)
- a. Regional Compatibility: long process to update our plan to 2040, so the thematic content probably won't change. In making these scenarios, we need to be thoughtful about that.
  - b. Plans can be amended, so it is not always just about the plan.
  - c. Infrastructure Efficiency: Local transportation connectivity, mobility, transit impacts. Need to clarify.
6. Table 3 (Tom Reed)
- a. Regional Compatibility: To DRCOG, we need to be thoughtful about how to apply the metro vision plan to the area.
  - b. Community Acceptance: reconcile differences in each jurisdiction's plans.
  - c. Infrastructure Efficiency: no major recommendations.
  - d. Economic Development: make sure there is growth in all sorts of areas.
7. Table 4 (Kip Cheroutes)
- a. General comment: maybe there should be a process that could be done to give some weights to these criteria.
  - b. Community Acceptance: What is the community? Voters? Planning people? Elected officials? Beyond an IGA vote, whatever creation we come up with, is that going to need a vote? Either by specific jurisdiction or statewide?

## Economic Analysis (Arleen Taniwaki)

1. Comparing baseline growth. Not assuming Aerotropolis but rather DRCOG and applying that to an Aerotropolis scenario.
2. Agglomeration economic benefits:
  - a. Benefits that come when firms and people locate near one another.
  - b. Networks that facilitate the transfer of innovative ideas and knowledge.
  - c. Reduces household and business transportation costs.
  - d. Increases in productivity, wage rates.
  - e. Enhances the ability of a region to attract and retain a qualified talent pool.
3. Economic Analysis Methodology ("Business as Usual" and Aerotropolis Scenarios)
  - a. Quantitative benefits
    - Increases in real estate values
      - Land use assumptions
      - Aerotropolis premiums
      - Additional 1,500 acres in the IGA

- Direct and indirect jobs associated with construction and permanent jobs
  - Increases in property and sales tax revenues
  - Increases in State income taxes from new permanent jobs
  - Reduction in the capital and operating cost of sewer and water conveyance systems
4. Jay reminded the group that if anyone has any comments or thoughts about the methodology, this is where we want to discuss it. We need to get buy-in on our methodology so we can go forward. We need our methodology to be robust.

### Growth Projections (Chris Primus)

1. Chris announced to the group that growth projections are part of the study's methodology and that they are fundamental to this study. Projected growth is a direct indicator of economic activity.
2. Chris then summarized the 16-page paper that was sent to the SRC previously so everyone would have an understanding of the assumptions that will be used for the analysis.
3. The study will look at different approaches and references to get a handle on the amount of employment that could develop with an Aerotropolis scenario. There are several ways to forecast growth for the Aerotropolis study, including the IGA Amendment, DRCOG forecasts, comprehensive plans, and peer employment centers.
4. A known reference is based on the new IGA amendment identification of 1,500 acres of airport property for commercial development—node-focused and with new accesses.

For potential on-airport employment, our study team has used this data to create assumptions about usable lands and take into account open space and transportation needs. We came up with 37,000 employees at full build-out of the 1,500 acres. To be conservative, we took half of that and assumed 1,800 by 2040 for on-airport employment.

We have broken down the study area into districts and looked at potential off-airport employment. We need to first realize that our study area is very large. Realistically, the Aerotropolis development will occur first to the west and south. We looked at employment projections and current employment data.

For planning purposes, we are going to focus on the south, west, and Peña Districts (concentrated development areas), not including the airport and not including the 1,500 acres from the IGA.

5. 2015 values from DRCOG show there are currently 11,000 employees; this is expected to grow to 17,000 by 2040, which is a modest amount of growth. The 17,000 would be the baseline for the Aerotropolis scenario.

There are several ways to come up with an estimate of employment off airport under the Aerotropolis scenario. We had different levels of assumptions. On the low end, we assumed one-on-one: for every on-airport job of that 17,000 jobs, we assume there would be one off-airport job, and that is pretty conservative. But the ratio could easily be higher: For every on-airport job of the 17,000 jobs, there may be two or three off-airport jobs. Those ratios are still actually conservative.

6. The Aerotropolis employment projections are higher than the DRCOG 2040 projections, which leads to one two possibilities: the reallocation of employment among DRCOG region or the employment exceeds the DRCOG 2040 regional control total.
7. If DRCOG reallocates the future growth in employment from elsewhere within its region to the Aerotropolis area—from elsewhere in Adams, Denver, Commerce City, Aurora, as well as from

Jefferson, Broomfield, Arapahoe Counties, and others. But as we all know, this could become contentious among some of these partners. Each is on a growth trajectory, and expect growth to continue in their communities. One question would be, would aerotropolis-oriented firms necessarily compete with growth in these other areas?

8. The second possibility could be that the Aerotropolis development could instead attract development that otherwise would have occurred in other cities across the nation, and across the globe. DRCOG would then be exceeding the regional control totals. (These are established in consultation with the state demographer.) This is in fact the key premise of the study—that the development of a collaborative Aerotropolis will advance the regional economy faster than otherwise expected.
9. Comment (Bob Watkins): When you get into distribution, there are no magic projections. It's what you want to happen. It is not a question of what's predetermined; the question is what we want. With employment, are we taking away from other employment centers from the region, or are we growing because of what we're doing?
10. Jay reminded the group that the paper the study team prepared has more details about all this.

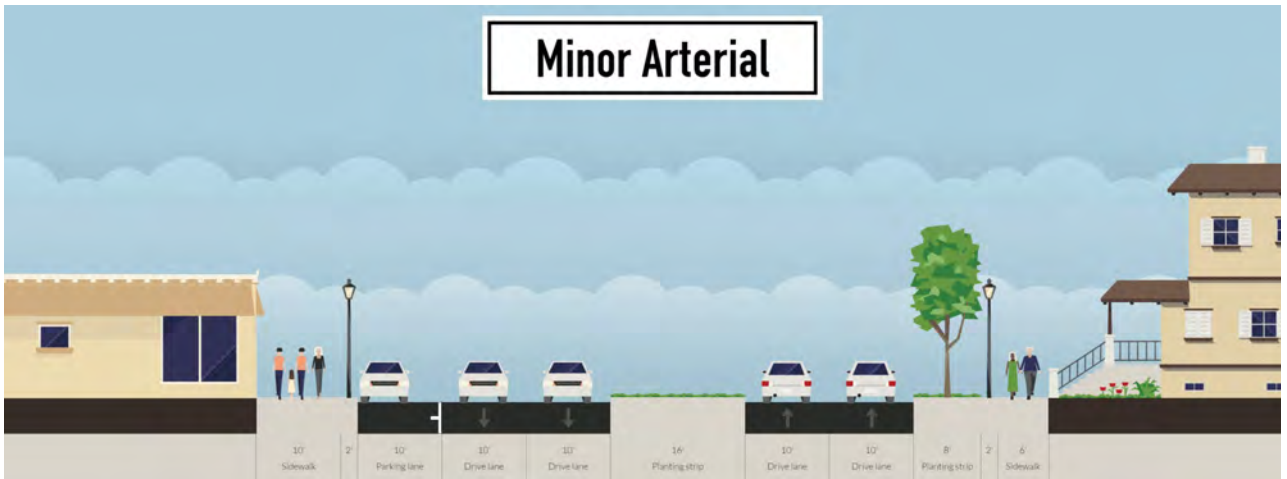
## Infrastructure (Rick Pilgrim)

1. Rick repeated the priority issues the jurisdictions have identified in previous meetings. All comments have been related to infrastructure.
2. Some near-term initiatives identified for the study include:
  - a. Super Regional Infrastructure Authority
  - b. Super Regional Master Plan
  - c. Pinch point north-south capacity
  - d. Marketing
  - e. 72nd and Himalaya
  - f. Dialogue with FAA
  - g. Foundational infrastructure connections
  - h. TOD (more locations)
  - i. Identify key economic development areas
  - j. Funding mechanisms (regional and localized)
  - k. Rezone clear zones (to common definition)
3. Transportation Network—Near Term
  - a. Define base network
  - b. Logical infrastructure development
  - c. Address priority issues
  - d. Incorporate local and regional plans
  - e. Link nodes of development
4. Transportation Network—Future
  - a. Evolve to future network
    - Urban design context
    - Functional classifications to reserve right-of-way
      - Super-regional
      - Regional (Peña, Tower)
      - Local area
      - Fastway Loop (ring road)

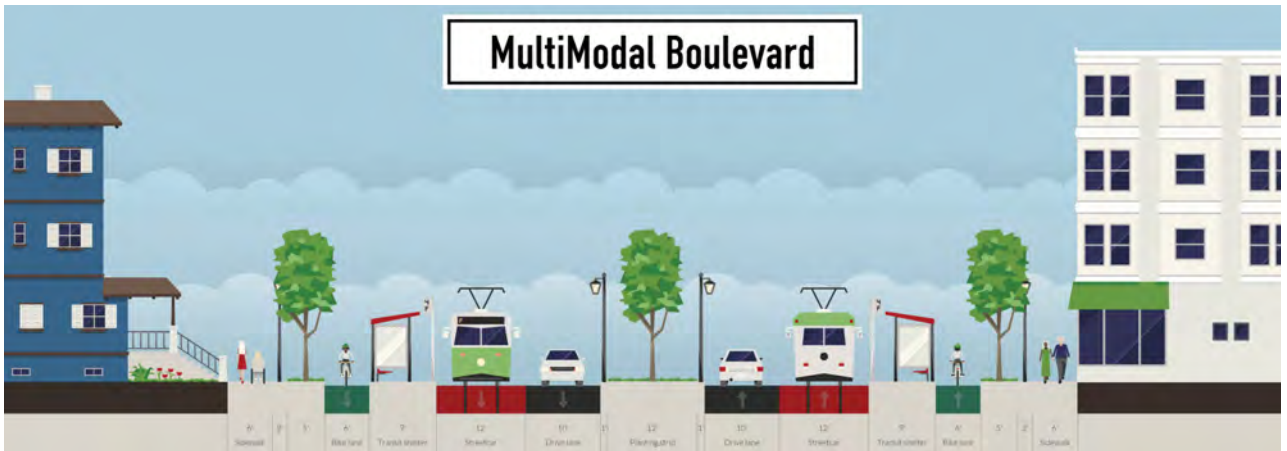


- a. Comment (Bob): Concerned about the Fastway Loop concept. The idea that we would spend money on a new facility when we have such extreme needs for improvements to our existing highways and arterial connections is a big concern. And could be disruptive.
  - b. Response (Rick): That is a fair concern. In setting a framework, it is good to not exclude possible options. We definitely need to look into it further.
- b. Rick presented to the group some cross-section concepts (below). We will consider what it will take to build the needed cross section and what it will take to install utilities. We'll be looking at what that phasing might be so we don't overload the land use.

**90'-110' ROW**



**100'-120' ROW**



### 140'-160' ROW



### 200'-300' ROW



### 200'-220' ROW



## 5. Utility Network

- We met with Denver Water and will be meeting with the other water districts. We will connect with utilities and with the Urban Drainage and Flood Control District.
- Basic utilities using transportation right-of-way are wastewater, power, and drainage.
- Major components are regional, trunk, sub-trunk.
- Dan Poremba asked whether (for the methodology) the study team would be looking at several regional projects and use those to drive cost and look at the potential for financing possibilities. Rick responded that is exactly the methodology that the study team is using.

Do we know what those prioritized infrastructure projects might be? Yes. We are meeting with Jim Mallory with Metro Wastewater Reclamation District tomorrow.

## Roundtable

Stephanie White asked each meeting attendee to provide one thought that each person came away with from today's meeting.

1. Want to make sure the projections and estimates are on point.
2. Would like to continue the discussion about projections.
3. Good hearing the feedback about what needs to be included in the economic analysis.
4. Surprising how things have gone.
5. On the side of data and criteria we use, normalizing as much as we can. Per capita or whatever it may be to help with understanding if it's new or transfer from other regions.
6. DRCOG doesn't prepare forecast for the Aerotropolis area, we want to be clear about that. Plans and work is regional level, but we are here as a resource for this group and want to help out.
7. Interesting to hear what the potential might be for something like the Aerotropolis.
8. Understand why the on-airport employment was taken out of the Aerotropolis projections. If you do one-on-one projections, that would be a lot more people working at the airport.
9. Most interested in the projections and the ratios, specifically learning more about other Aerotropolis in other areas. That might be some different type of marketing that might help with our projections.
10. When we talked about the distribution around the Aerotropolis area, we have to think about what we want. On the transportation side, we want to emphasize once again we have a well-defined plan in Aurora. One challenge has always been around the border. We look at cross-sections and making them multimodal. We have very well-defined network that we are working on and implementing, so we caution you to not radically change our plans in that area. I am not saying you can't change anything, but I caution you to not recreate the transportation plan. What we really need is money.
11. Economic development: thinking about the marketing side of all of this.
12. Like where everything is going. Think about accelerating these meetings as we go into fall and making an effort to get the attendance back up. Need to get matching dollars out by the end of the year. Look at what the recommendations are looking like.
13. Need to be flexible with the upcoming election. What will this study say if the election fails, or pass on one side and fail on the other? How does all that analysis change, or would it, depending on the outcome of the election?
14. How we present ourselves to the world. This is so much better than us going this alone.
15. Focus is the next five years. Interested to hear DFW's business case. What kind of businesses do they attract?
16. Interested in the multimodal concept.
17. Maintain flexibility in terms of growth projections. We are dealing with a global and national perspective in terms of Aerotropolis. It will be Denver competing with DFW or Lisbon. Really a global

effort. But long term, 50 years to 80 years from now, maybe there is a need for a beltway. Should take a careful look.

18. Like to see how we can leverage infrastructure development.

## Next Meetings

1. **Study Review Committee Meeting #6:** October 15, 9:00-11:30 (**Commerce City Recreation Center, Community Room, 6060 E. Parkway Drive, Commerce City, CO 80022**)
2. **Steering Committee Meeting #2:** October 22, 9:00-10:30 (**RMANWR Bldg 130 Lab Conference Room**). Encourage the Steering Committee to attend. This will be the second meeting only for the Steering Committee, so it would be good to have good attendance.
3. **Joint Steering Committee/Study Review Committee Meeting:** November 19, 9:00-10:30 (**RMANWR**). Will have a guest speaker from DFW at this meeting.

## Adjourn

Jay thanked everyone for their efforts so far and encouraged everyone to be the cheerleader as people go back to their respective groups. He noted to Bob that it is not CDOT's intent to modify Aurora's plans by any means. CDOT will respect Aurora's plans.



















# Welcome



## Colorado Aerotropolis Visioning Study





# Today's Purpose

- Study Methodologies



# CAMPAIGN UPDATE

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# STUDY COMPONENTS

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# Study Components

- Collaborative Vision
- Growth Projections
- Infrastructure
- Governance
- Key Issues
- Framework & Next Steps

## COLORADO AEROTROPOLIS | Visioning Study





# PANEL RECAP

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# Governance Panel, July 23

- Peter Kinney – Metro Mayors Caucus
- Tom Clark – Metro Denver EDC
- Ed Icenogle – Partner at Icenogle, Seaver, Pogue
- Don Hunt – Former Executive Director, CDOT

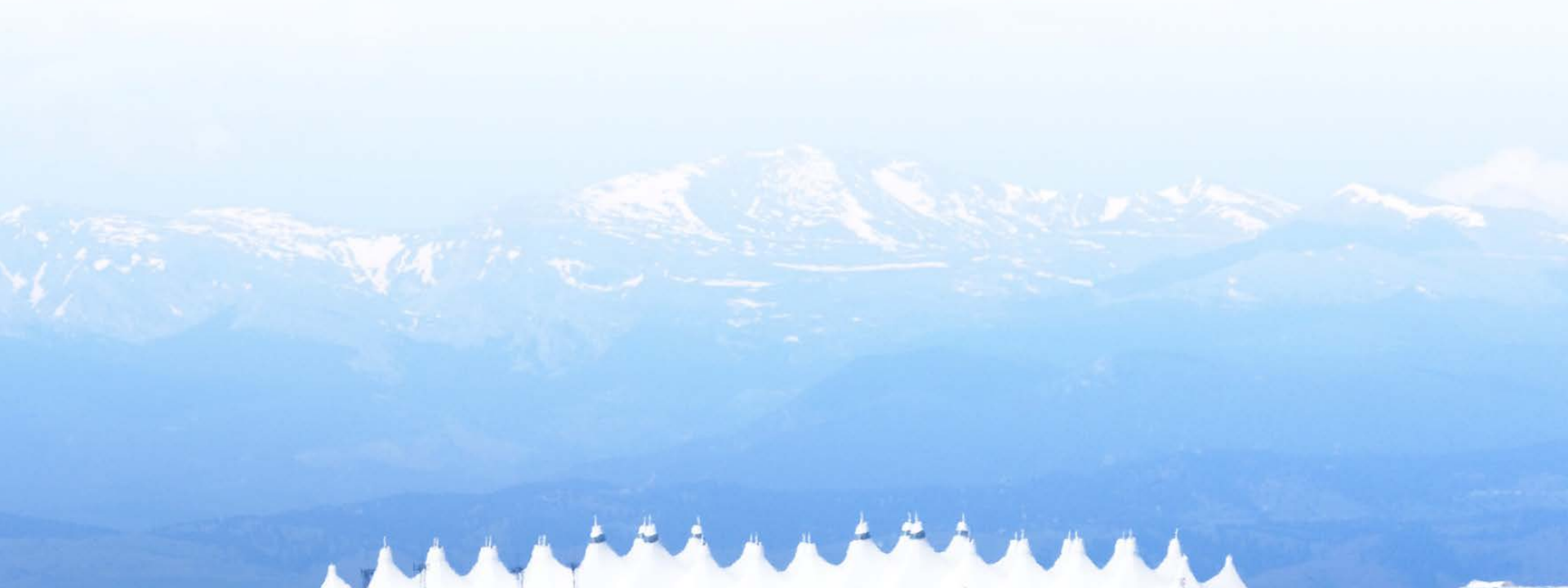


# COMPARATIVE ANALYSIS

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# Current Trends Scenario

- 2040 DRCOG RTP
- No New IGA Agreement
  - No new on-airport nodes or accesses
- Limited Additional Funds



# Aerotropolis Scenario

- 2040 Horizon Year
- IGA Amendment
- New Regional Governance Mechanism
- Attracts Additional Development
- Advance Planned Roadway Improvements
- Allows Additional Improvements





# EVALUATION CRITERIA BREAK-OUT GROUPS

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# Economic Analysis Methodology

## “Business as Usual” & Aerotropolis Scenarios

### Quantitative Benefits

- Increases in real estate values
  - Land Use Assumptions
  - Aerotropolis Premiums
  - Additional 1,500 Acres in the IGA
- Direct and indirect jobs associated with construction and permanent jobs
- Increases in property and sales tax revenues
- Increases in State income taxes from new permanent jobs
- Reduction in the capital and operating cost of sewer and water conveyance systems



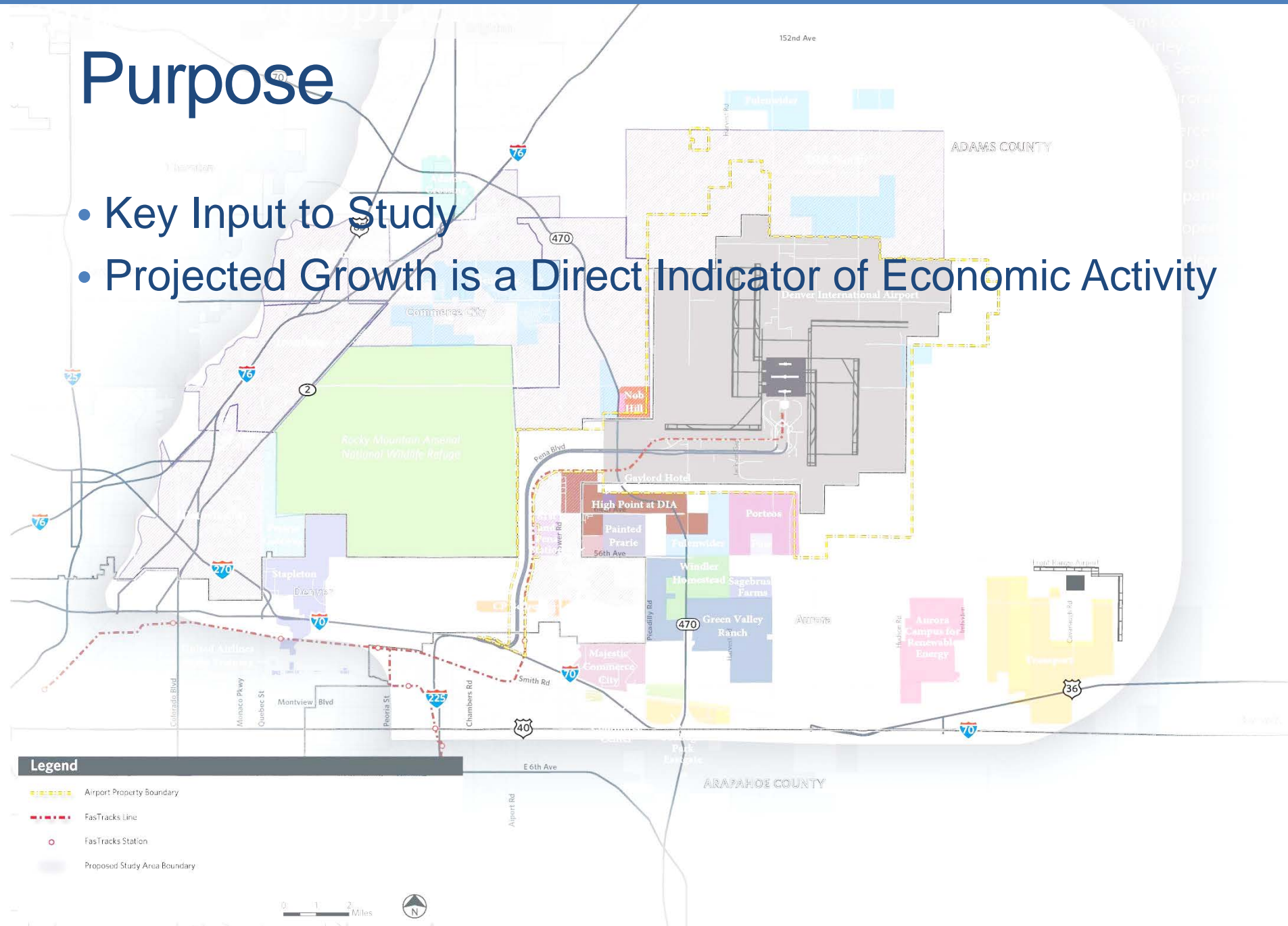
# GROWTH PROJECTIONS

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# Purpose

- Key Input to Study
- Projected Growth is a Direct Indicator of Economic Activity

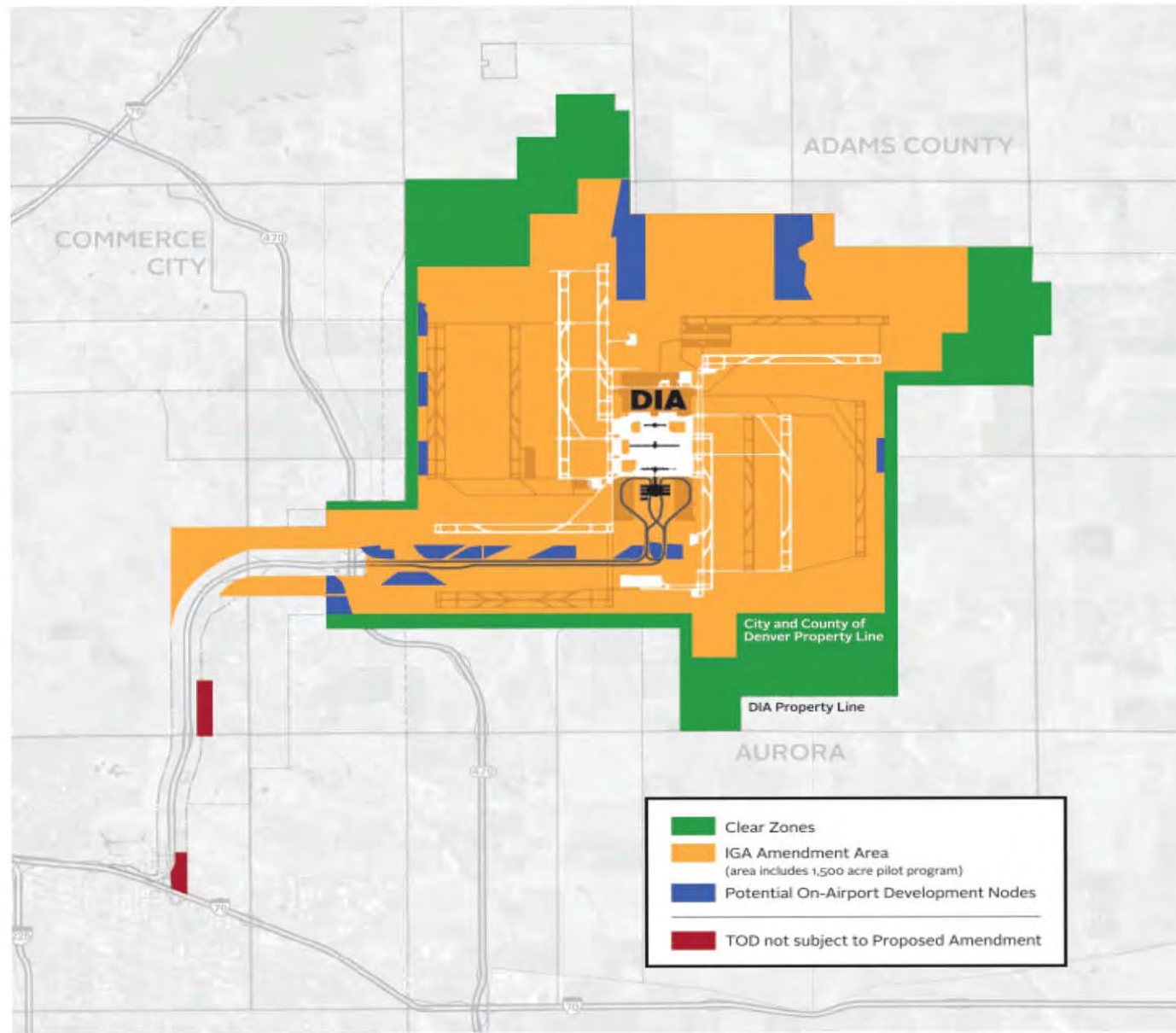




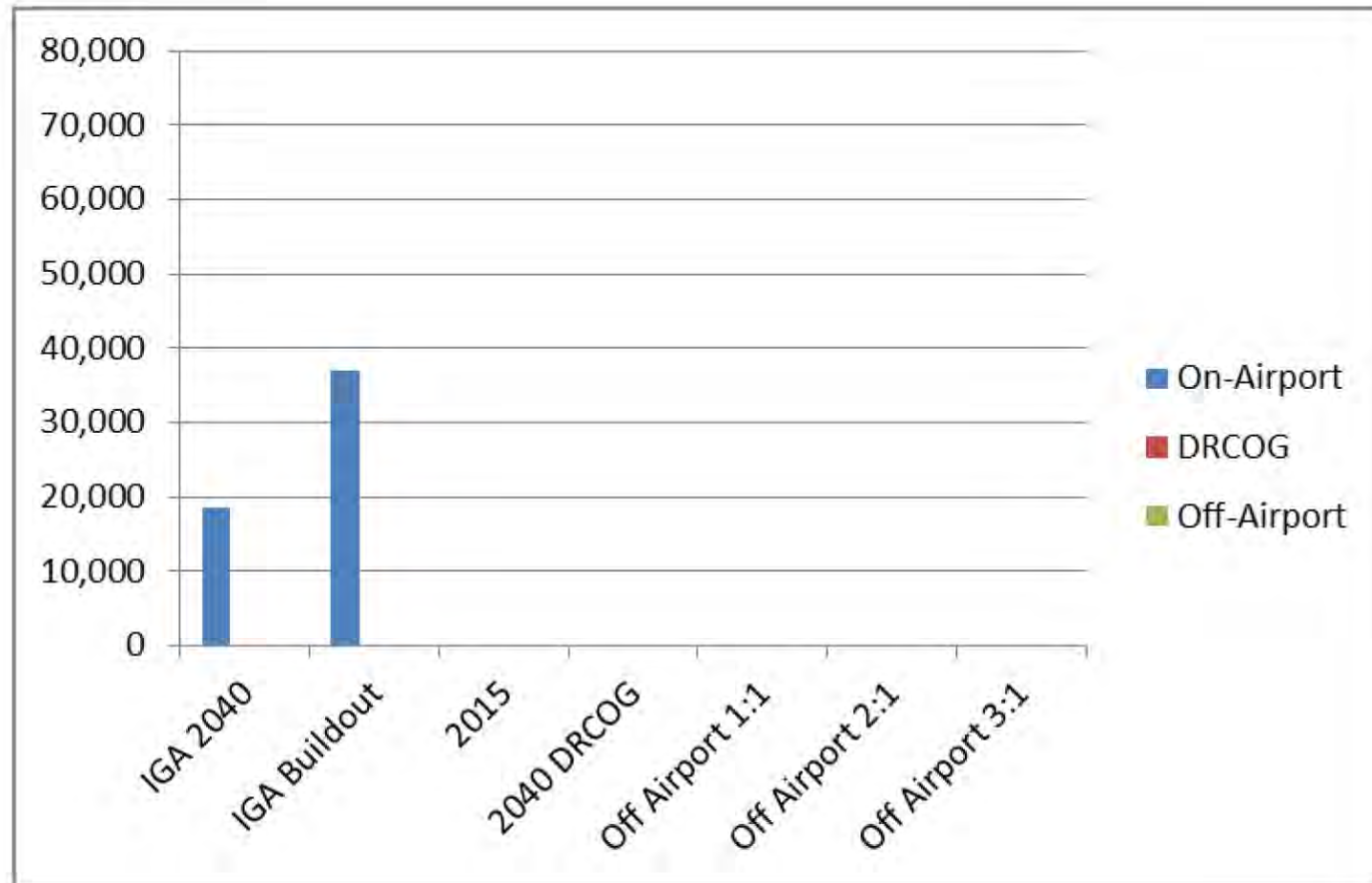
# Range of Ways to Forecast

- IGA Amendment
- DRCOG Forecasts
- Comprehensive Plans
- Peer Employment Centers

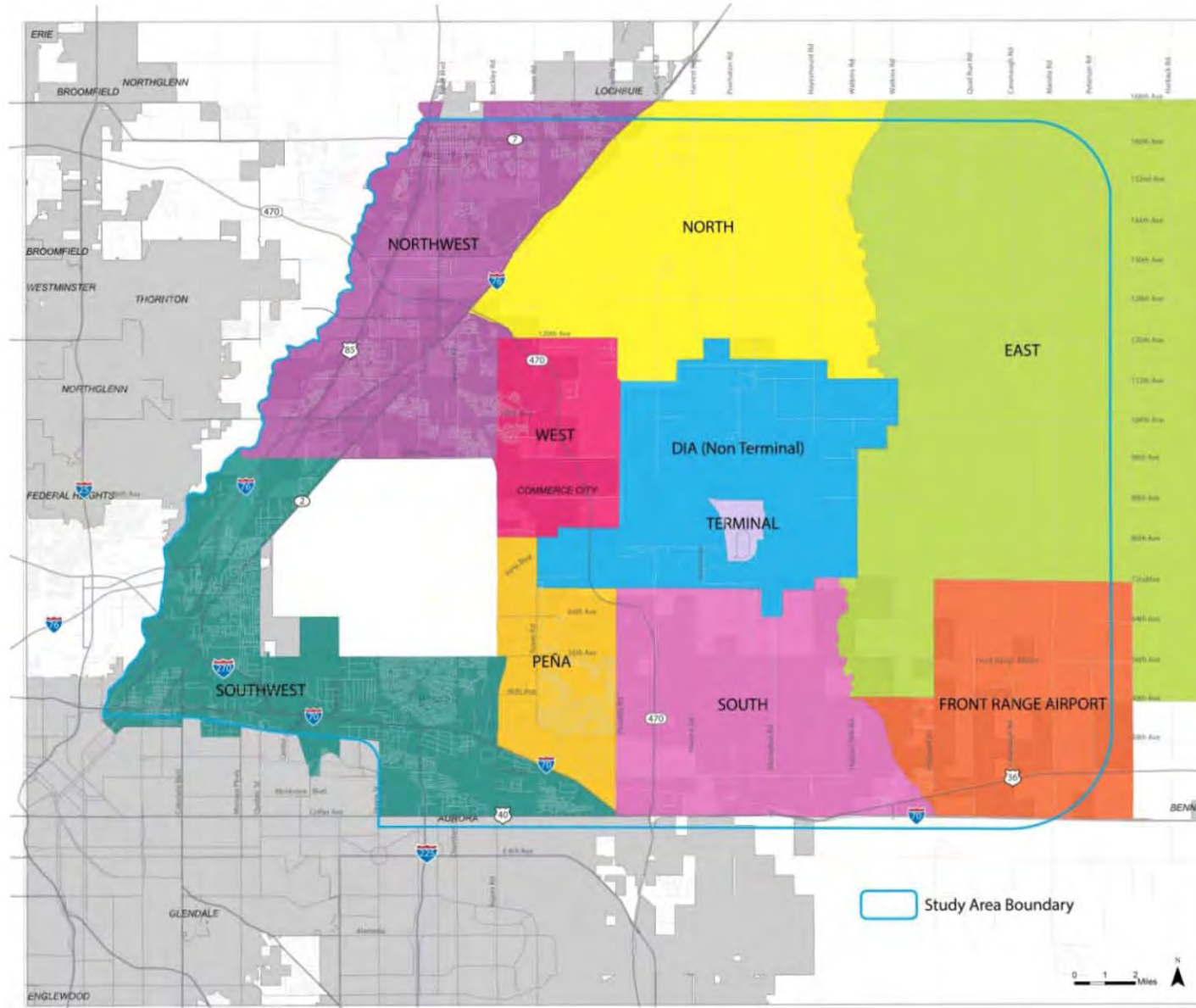
# IGA Amendment



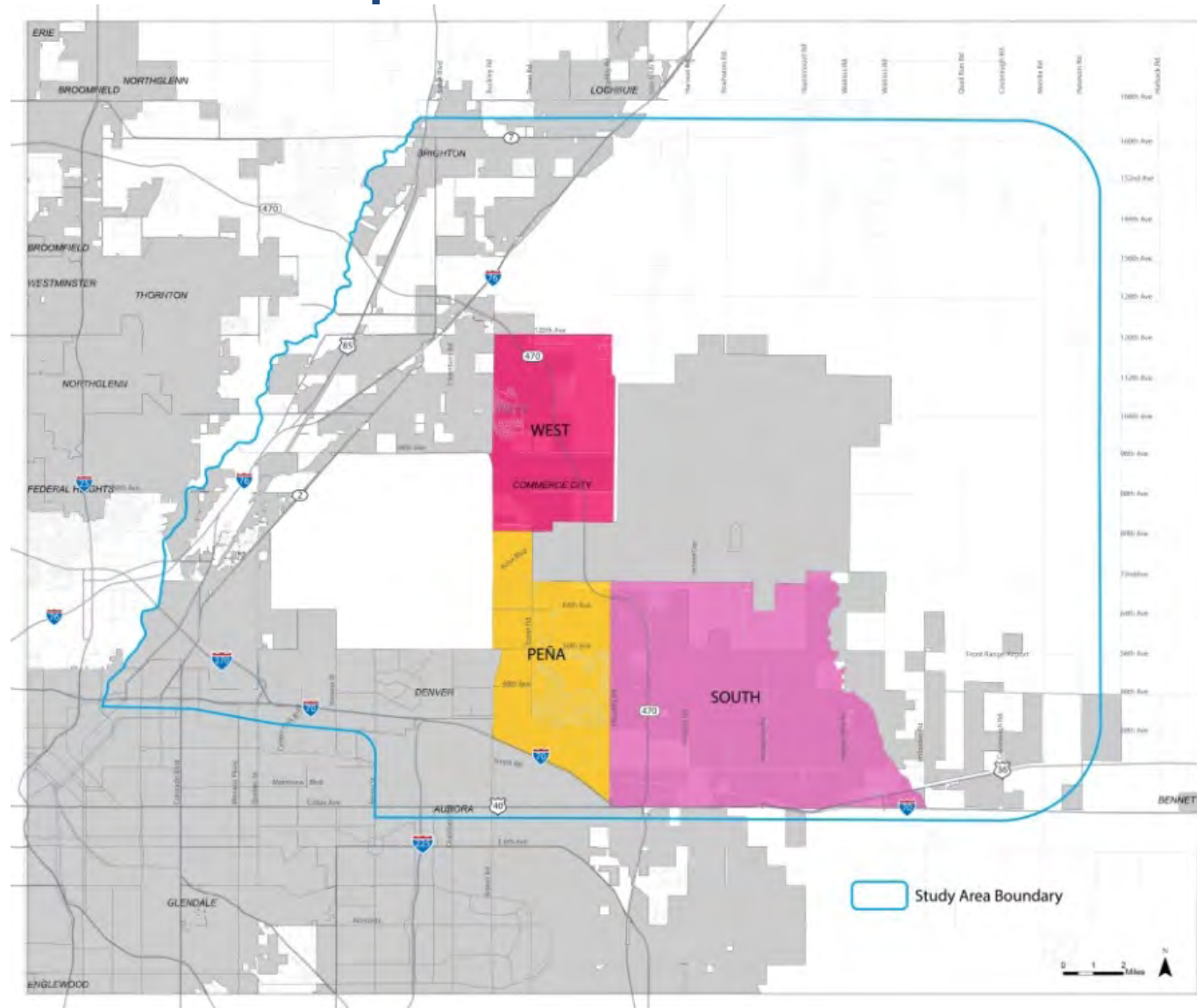
# Potential On-Airport Employment



# Study Area Districts

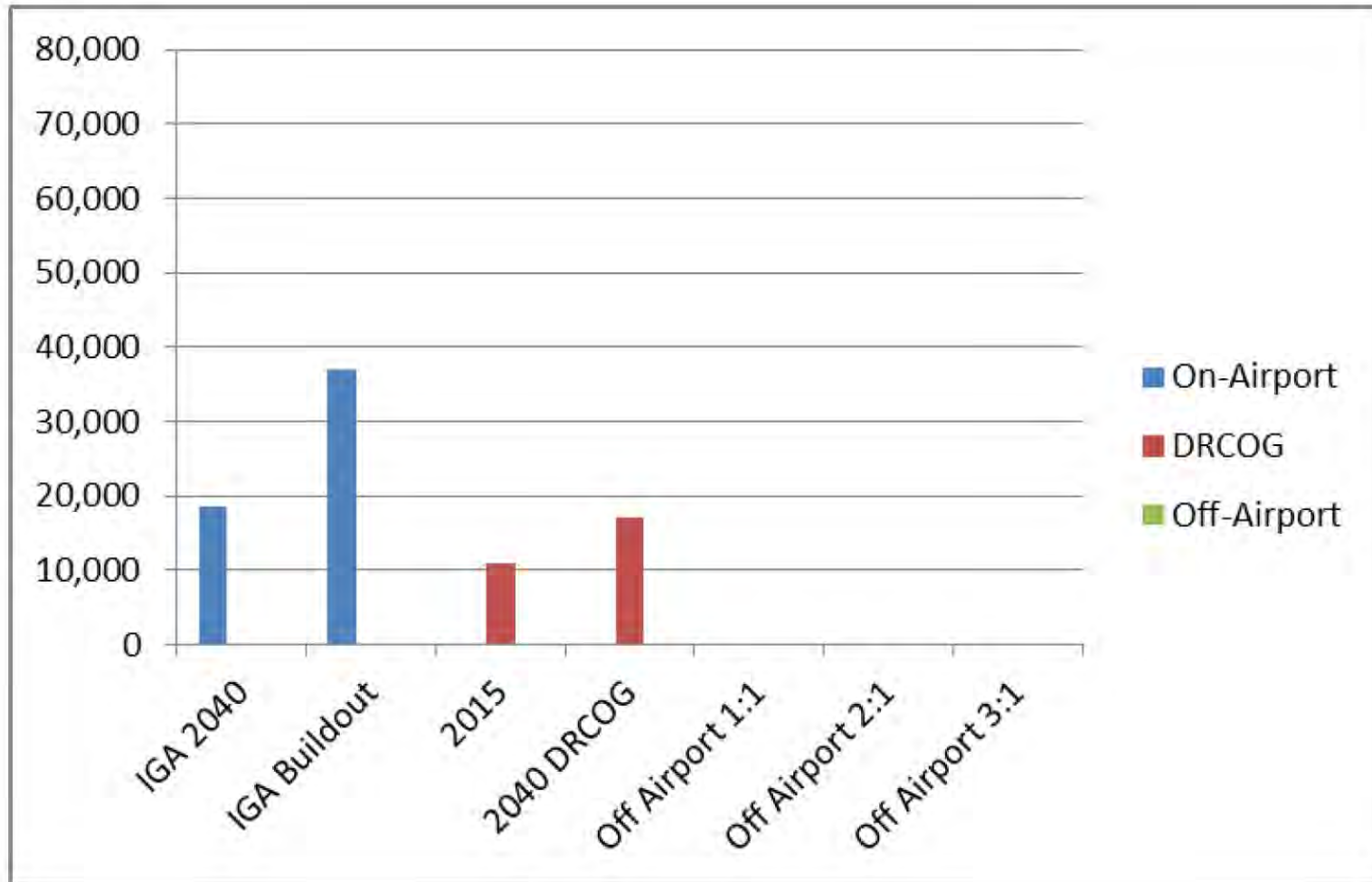


# South, West, and Peña Districts: Concentrated Development Area

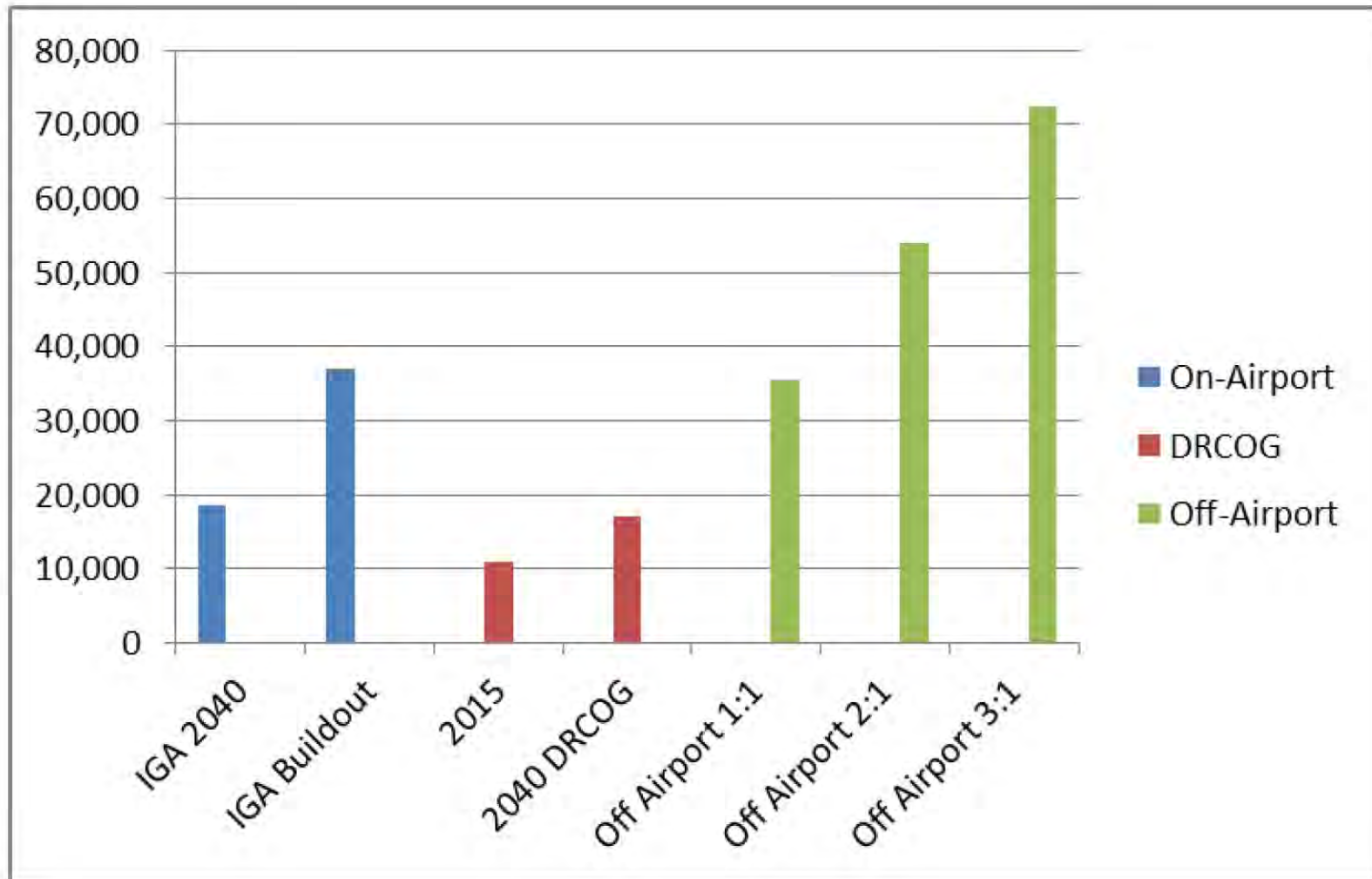




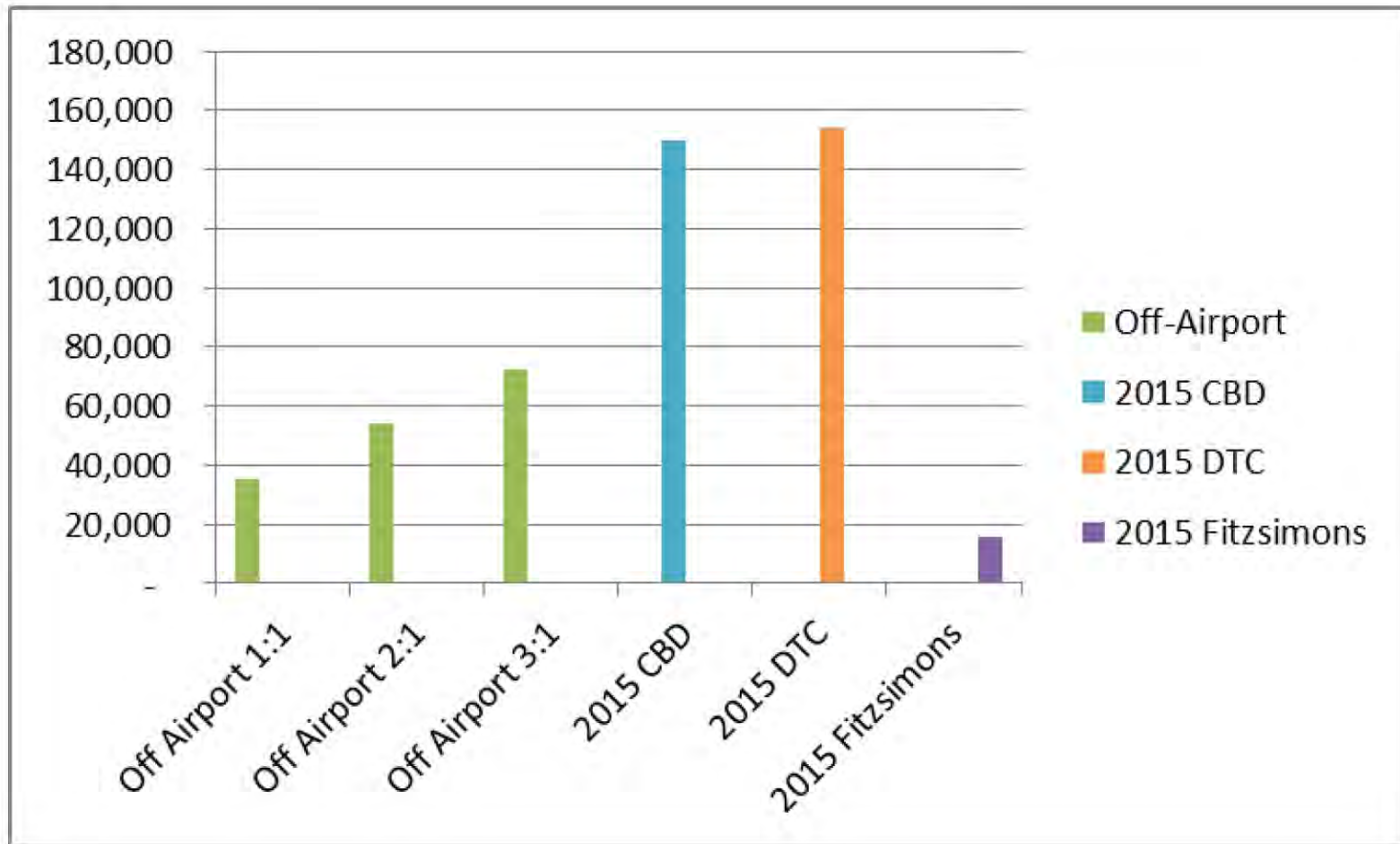
# DRCOG Employment Projections



# Potential Off-Airport Employment

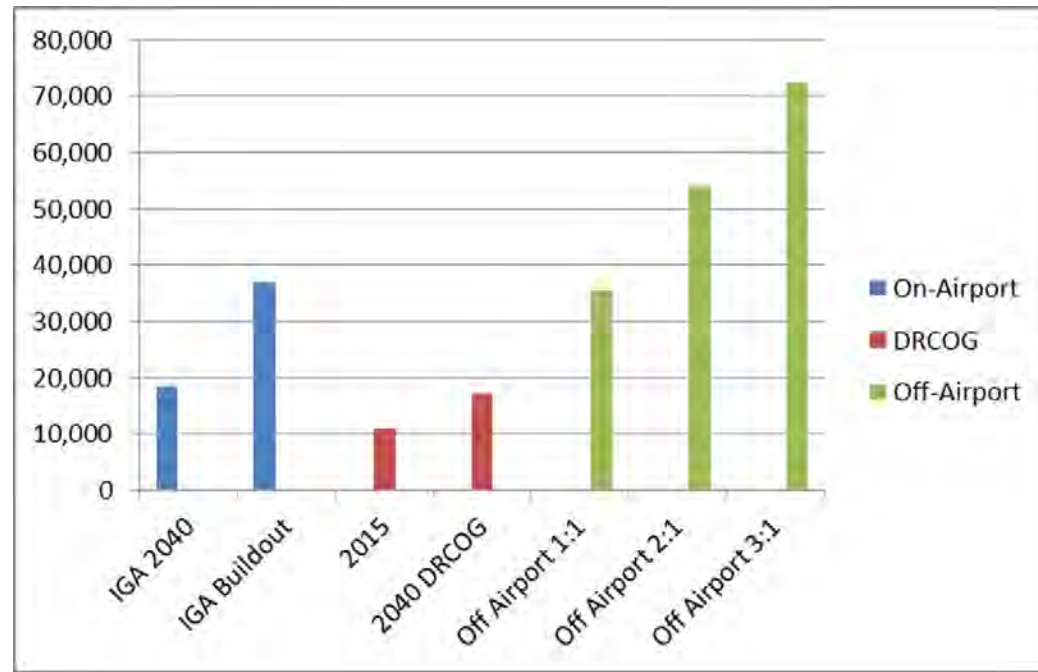


# Comparison Employment Centers



# Aerotropolis Employment Projections

- Higher than DRCOG 2040 Projection
- Two Possibilities:
  - Reallocation among DRCOG Region
  - Exceed 2040 Regional Control Total



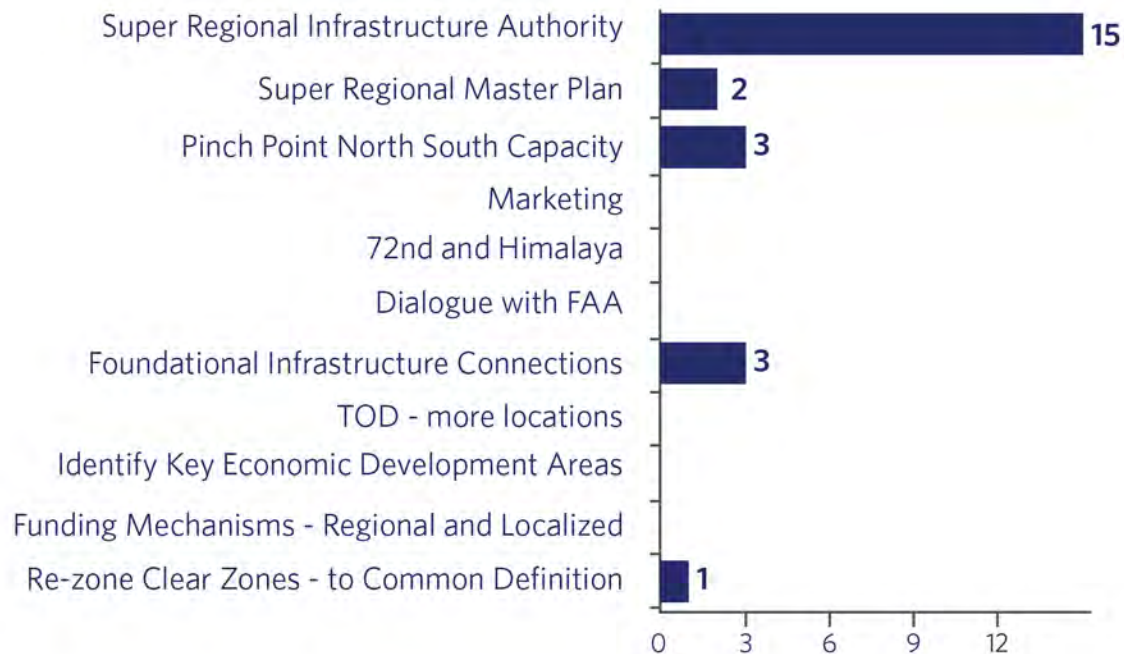
# INFRASTRUCTURE

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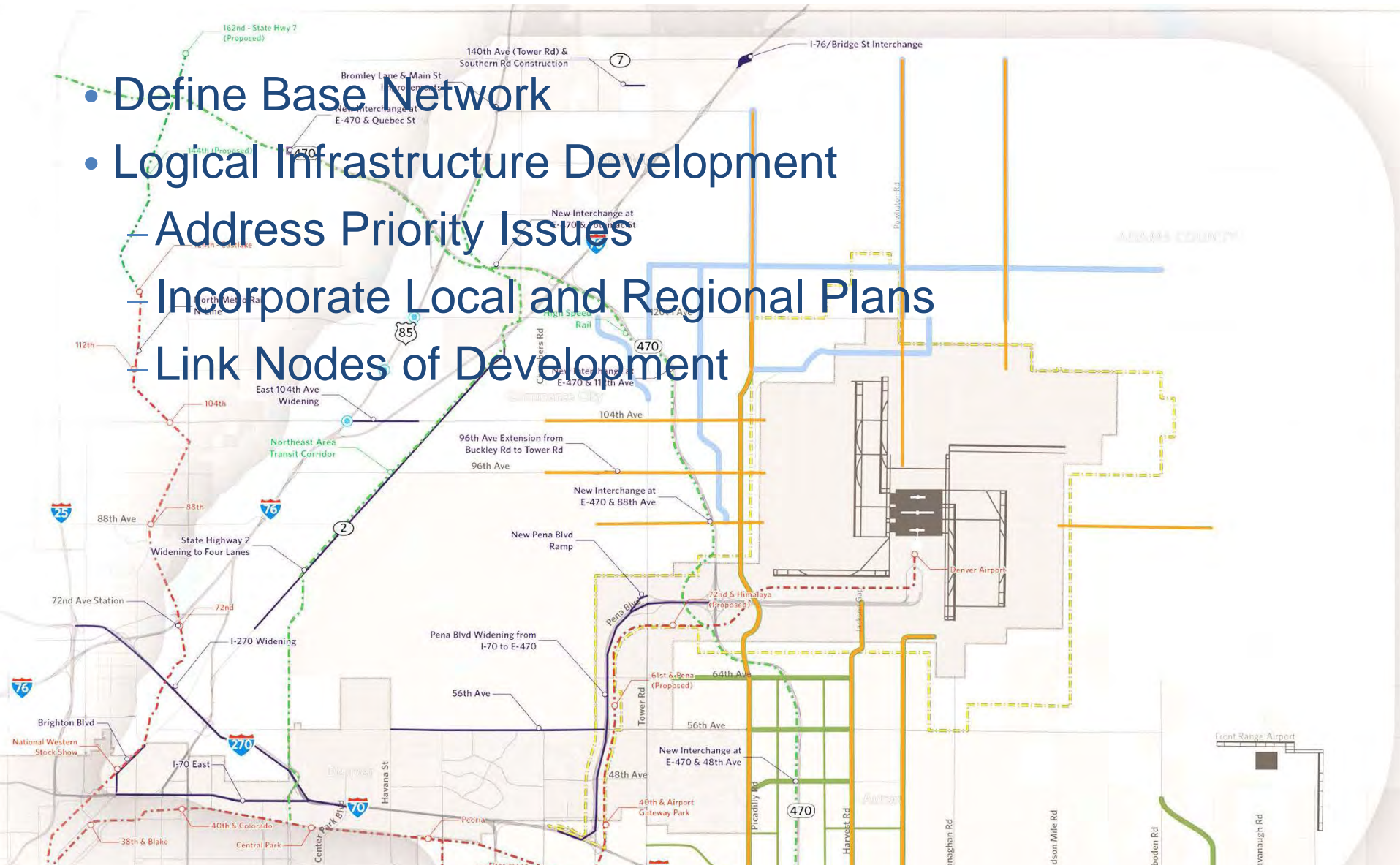
# Infrastructure

- Priority Issues of Jurisdictions
  - All comments have been related to infrastructure
- Identified Near-term Initiatives for Study



# Transportation Networks – Near Term

- Define Base Network
- Logical Infrastructure Development
  - Address Priority Issues
  - Incorporate Local and Regional Plans
  - Link Nodes of Development

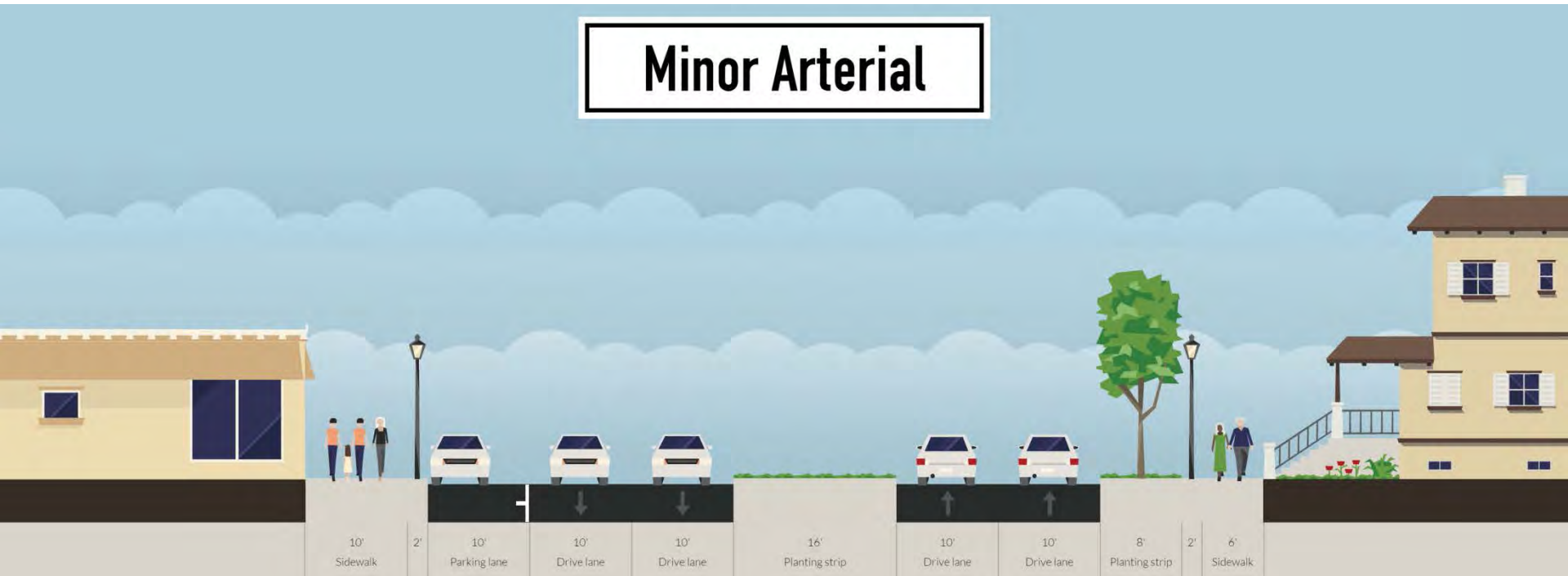


# Transportation Networks - Future

- Evolve to Future Network
  - Urban Design Context
  - Functional Classifications to Reserve Right-of-Way
    - Super-Regional
    - Regional
    - Local Area
    - Fastway Loop

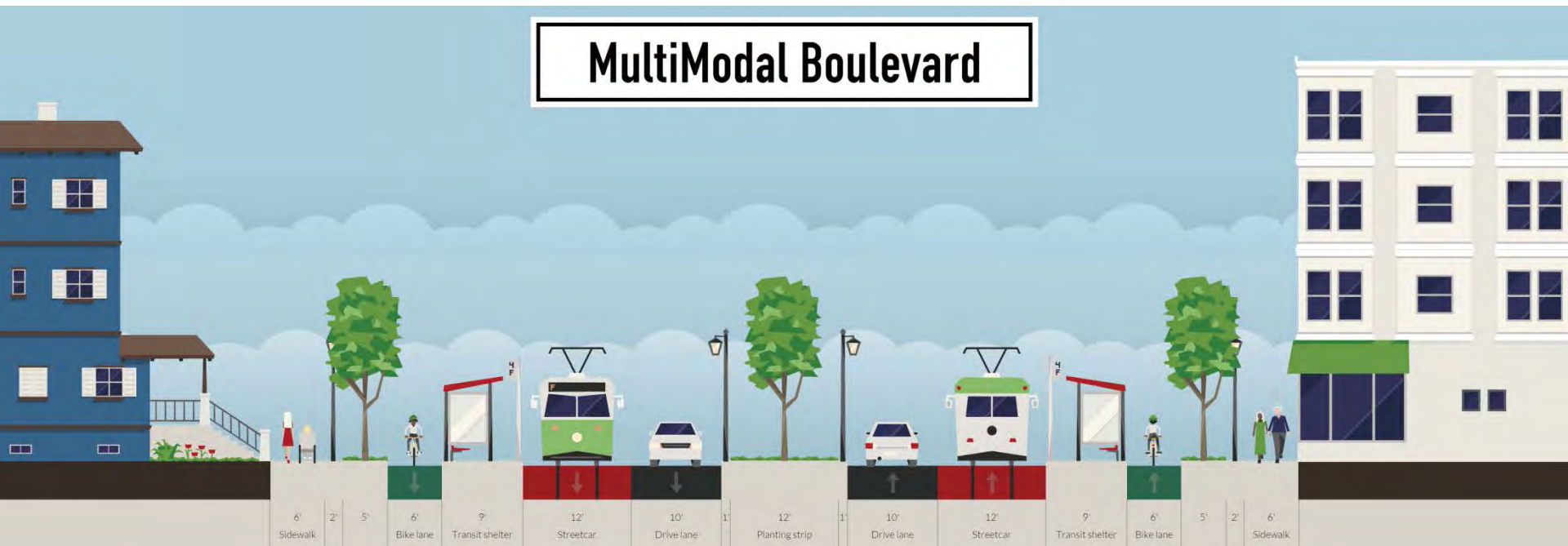
# 90'-110' ROW

## Minor Arterial



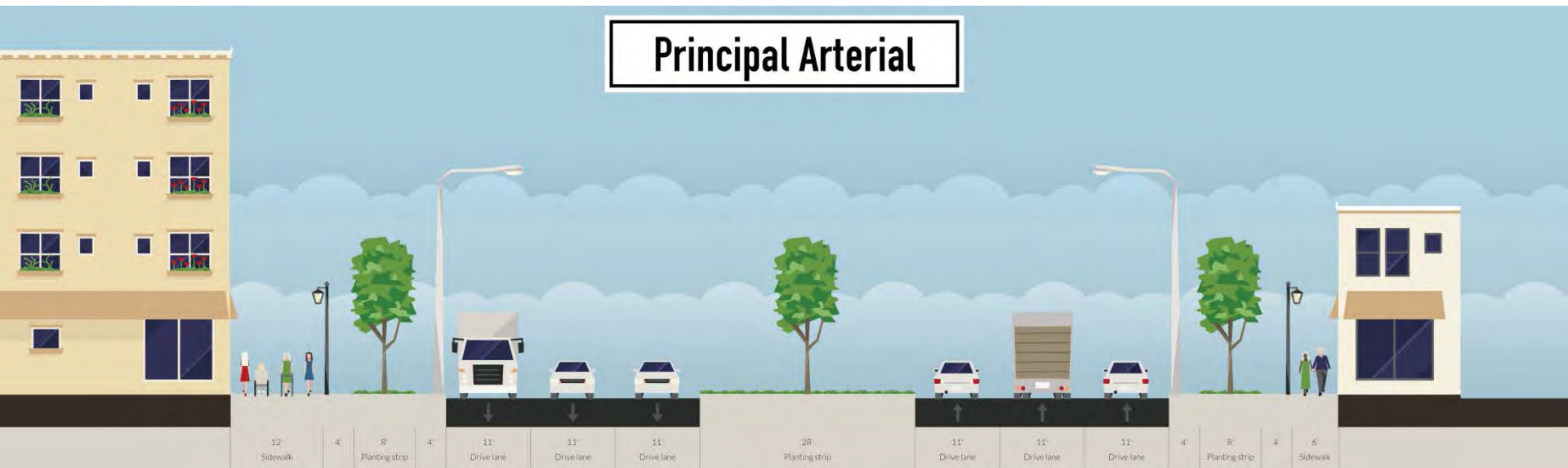
# 100'-120' ROW

## MultiModal Boulevard





# 140'-160' ROW



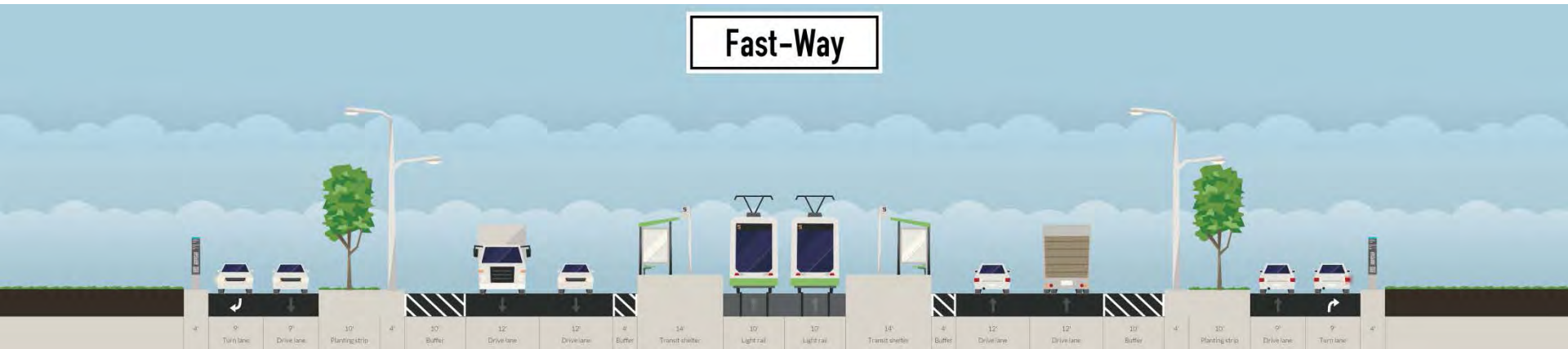
# 200'-300' ROW

Freeway



# 200'-220' ROW

## Fast-Way



# Utility Networks

- Basic Utilities Using Transportation Right-of-Way
  - Wastewater
  - Power
  - Drainage
- Identify Major Components
  - Regional
  - Trunk
  - Sub-trunk

# ROUNDTABLE

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MOVING FORWARD

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# Next Meetings

## Steering Committee

Meeting #2: Oct 22, 9:00  
Location: RMANWR, Bldg  
130, Lab Conference Room

## Study Review Committee

Meeting #6: Oct 15, 9:00  
**Location:**  
Commerce City Recreation Center  
Community Room  
6060 E. Parkway Drive  
Commerce City, CO 80022

## Joint Steering/Study Review Committee

Guest Speaker: Nov 19, 9:00  
Location: RMANWR

# THANK YOU

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## Agenda

Project: Colorado Aerotropolis Visioning Study

Subject: Study Review Committee Workshop #4

Date: July 23, 2015 9:00 - 11:30

Location: Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)

1. Welcome & Introductions
2. Panel Discussion - Governance
  - a. Tom Clark - Metro Denver Economic Development Corporation
  - b. Don Hunt - The Antero Company
  - c. Ed Icenogle - Icenogle Seaver Pogue, P.C.
  - d. Peter Kenney - Civic Results, Metro Mayors Caucus
3. Aerotropolis Scenarios
4. Roundtable Discussion of Scenario Concepts
5. Study Check-in
6. Next SRC Meeting
  - a. August xx 9:00 - 11:30 Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
  - b. Topic: Scenario Analysis Results and Campaign Briefing
7. Next Steering Committee Meeting
  - a. August 27, 9:00 - 10:30 Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
8. Next Steps and Action Items
9. Adjourn



### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

## Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Study Review Committee Meeting #4
Date:	July 23, 2015, 9:00 a.m.
Location:	Rocky Mountain Arsenal National Wildlife Refuge
Attendees:	See attached sign-in sheet
Distribution:	SRC members, File

### Welcome and Introductions

1. Stephanie White called the meeting to order and introduced herself and directed the group to sign in.
2. Jay Hendrickson thanked everyone for coming and thanked the panel participants for being part of the day's agenda.

### Recap of Last Meeting and Update on IGA

1. Stephanie reviewed the results of the survey taken at the end of the last meeting. The group had overwhelmingly responded that the most important near-term initiative is the "superregional infrastructure authority." Based on the subject of a new governance moved up in the priority level and influenced the course of the study.
2. Evan Dreyer (City and County of Denver) updated the group on the upcoming campaign for the IGA amendment.
  - a. The terms of the amendment will only take effect if both Adams County and Denver approve it by vote. There will be a unified campaign with a public affairs team and another team working the grass roots angle. It will be focused on education and awareness. The Adams County EDC has provided seed money for the campaign, but there will be additional fund-raising efforts for the campaign.
  - b. Evan noted that the IGA establishes the regional governance entity that will have a joint marketing function initially. It will eventually plan and develop infrastructure, which is important to the SRC.
  - c. Jay affirmed this and offered that any of the work on this study that could help would be available to the campaign.

### Panel Discussion on New Governance

1. Rick Pilgrim (HDR) introduced the panel discussion on new governance. The panelists were:
  - Peter Kinney - Metro Mayors Caucus
  - Tom Clark - Metro Denver EDC
  - Ed Icenogle - Partner at Icenogle, Seaver, Pogue Law Firm
  - Don Hunt - Former Executive Director, CDOT
2. The panelists provided insight into past examples of how collaborative initiatives in the Denver Metro Area led to the development of infrastructure.
  - E-470 Public Highway Authority



- C-470
  - I-25 South and Denver Tech Center
  - Pikes Peak Area Council of Governments
3. Lessons learned noted from these and other collaborative initiatives in Colorado:
- a. Collaboration is key to aggregating the power and financial capability of districts with shared interests—to create a system that functions, rather than individual projects.
  - b. Governor Hickenlooper - “Collaboration is the new Competition.”
  - c. Leadership is needed to see the larger opportunities.
  - d. Identifying the stakeholders or functions needed to develop the organization is important—those who have access to financing mechanisms and the private sector, in addition to the public sector entities.
  - e. Identify all possible stakeholders from the beginning, even reluctant ones, and reach consensus on needs and goals early.
  - f. The entity needs two groups—a policy body and a technocracy body (advisory that tackles technical issues).
  - g. A strong communication system makes sure that information is shared, confidentiality is maintained, and no one is caught off guard.
  - h. Facilitating relationship-building between elected officials builds trust and a willingness to support each other.
  - i. Identify what needs to be financed, identify stakeholders, and then think about the governance structure to accomplish the goals. Ed shared a chart with numerous mechanisms and processes in Colorado law that can be used to expand infrastructure.
  - j. Consider traditional funding sources first, then decide if there is a need for an entity to generate funding; if so, choose the mechanism based on the need and what will be needed to accomplish both short- and long-term goals.
  - k. Important to start with a project that can be an early success. This sets the foundation of trust for larger, more long-term efforts.
4. The panelists offered the following observations on what challenges the group may face:
- a. Number one issue is roads—jointly planning for and creating a system of connectivity
  - b. Next is water and how to coordinate multiple jurisdictions under current agreements
  - c. Continuity of leadership is jeopardized because of term limits.
  - d. Identifying and accomplishing incremental successes.

## Aerotropolis Scenarios

1. Chris Primus (HDR) presented three Aerotropolis scenarios of employment and transportation network and the proposed methodology for comparing them for an economic analysis. The comparative analysis is underway.
2. Chris reminded the group of the size of the study area—370 square miles.

### Current Trends Scenario

- Assumptions:
  - 2040 DRCOG RTP (2015-2040) employment projections
  - No New IGA Agreement
    - No new on-airport nodes or accesses
  - Limited Additional Funds
- Most of the projected employment from DRCOG is in the south and west of the Visioning Study area. The project team is proposing to focus on that part of the area for the analysis.
- In 2040, jobs in the “L” area represent 0.7% of regional jobs.

### Hypothetical Aerotropolis Scenario

- Assumptions:
  - 2040 Horizon Year
  - IGA Amendment in Place with a New Regional Governance Mechanism
  - Attracts Additional Development
  - Advance Planned Roadway Improvements
  - Additional Funds Generated by the Governance Mechanism for Improvements Beyond Those in the DRCOG 2040 RTP
- Differs from the Current Trends Scenario:
  - New access points south and west, using nodes
  - Jobs are attracted to the nodes; more jobs off-airport at each node than on-airport
  - Additional transportation network connections
  - Addition of a surface transit connection between Pena Station and DIA

### Hypothetical Future Aerotropolis

- Assumptions:
  - +/- 2075
  - Build Out
  - Visionary
- Differs from 2040 Aerotropolis Scenario:
  - Addition of a ring road - “fastway” - that reaches to Front Range Airport
  - Additional transit access on the east side - 72nd Avenue Station
  - Efficient, supporting grid of major arterials
  - Pods of development with internal connections (pedestrian, transit, etc.) at high-concentration points throughout the study area

### 3. Discussion/Suggestions

- a. There will be additional development off-airport that would create additional nodes - need to identify/recognize.
- b. Project team will distribute dots on future versions of maps where they can be predicted to occur, rather than randomly scattering in the TAZs.

- c. Add land use to the maps.
- d. Ring or “fastway” needs to show ties to future transit to the north and to the west. Reference the High Speed Rail Study and incorporate transit on E-470 corridor.
- e. Extend the “L” focus area east to include Front Range Airport.
- f. Incorporate information from the long-range plans prepared by the various jurisdictions.
- g. An idea was suggested to work with the various metro districts to include a mechanism for mill levies that could build over time and be used when needed to support bonding of a regional governance body.
- h. Create the vision first—then cooperate to build the smaller projects to support the vision.

## Comparative Evaluation Process

1. Rick Pilgrim (HDR) presented the proposed methodology to compare the 2040 Current Trends and 2040 Aerotropolis scenarios. The scenarios will be evaluated in the following categories:
  - Costs and Affordability
  - Economic and Financial Effects
  - Infrastructure Systems Compatibility
  - Ease of Implementation
2. Through the process, the Project Team will use the following methodology to assess the Agglomeration (of Aerotropolis) Economy Effects:
  - Quantitative
    - Capital/Operating Cost Savings
    - Real Estate Values
    - Property and Sales Taxes
    - Direct/Indirect Jobs
    - Permanent Jobs
  - Qualitative
    - Wage Growth
    - Productivity
    - Transportation Savings
    - Quality of Life
3. The team will prepare a working paper that will describe the draft evaluation process for review of the Steering Committee and the SRC.

## Study Check In

1. Jay Hendrickson wanted to check in with the SRC to make sure that the direction of the study was according to their expectations. We’ve completed the initial steps of visioning, and now the analyses are starting. If there are concerns about the direction or the prioritization of the work efforts, Jay encouraged the participants to contact him directly.
2. Jay also asked if there were stakeholders that need to be included in the SRC. Some suggestions from the group:

- a. Additional private sector representatives—reach out to landowners and potentially hold a panel discussion about their perspectives.
- b. Additional districts—water, for example.
- c. DRCOG.
- d. There was a question if the Project Team is concerned about conflicting with the campaign for the IGA amendment. Jay responded that this study will support with information exchange and not be part of the campaign as an advocate.
- e. Suggestion to have a panel with representatives who have been part of developing an Aerotropolis.

## Next SRC Meeting

1. Stephanie announced the next SRC meeting:
  - September 3, 2015, at 9:00 a.m., Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
  - Topic: Scenario Analysis

## Next Steps/Meetings

The following topics will be discussed at future SRC meetings:

1. Special districts/landowners
2. Scenario analysis results
3. Speaker
4. Updated scenario analysis results
5. Funding and finance
6. Framework recommendations

Future SRC Meetings:

- Meeting #5: Sep 3, 9:00
- Meeting #6: Sep 17, 9:00
- Meeting #7: Oct 15, 9:00
- Meeting #8: Nov 12, 9:00

Future Steering Committee Meetings:

- Meeting #2: Aug 27, 9:00
- Meeting #3: Oct 22, 9:00
- Meeting #4: Nov 19, 9:00

## Adjourn

1. Chris reminded everyone that the meeting notes and other study information is on the project SharePoint site. Representatives from all of the SRC groups have access; if additional individuals need access, please contact Chris.
2. Jay thanked everyone for coming and for their continued support.













# Welcome



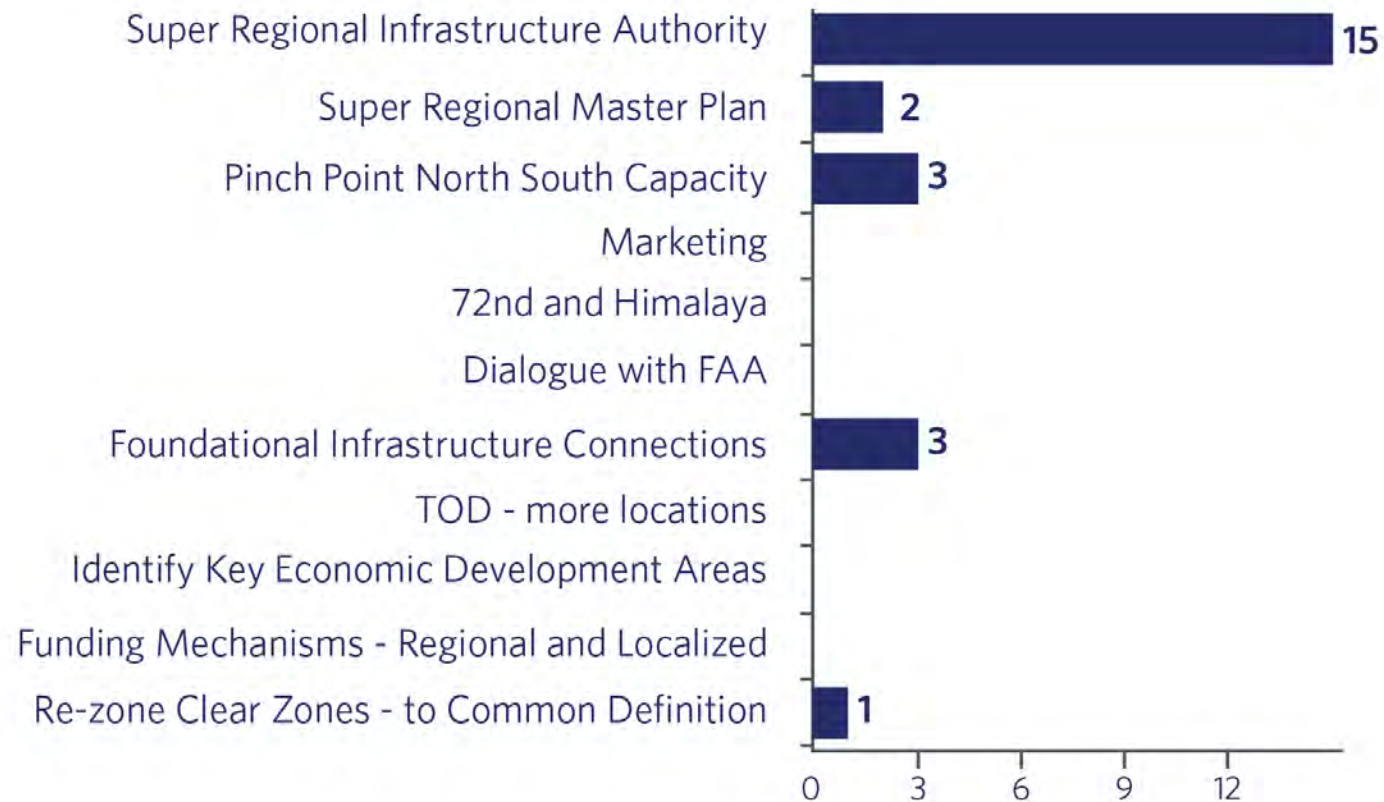
## Colorado Aerotropolis Visioning Study





# Today's Purpose

- Panel Discussion on New Governance
- Aerotropolis Scenarios





# PANEL DISCUSSION

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# Panelists' Perspectives

- Importance of a collaborative organization to address shared interests of the area jurisdictions
- Type of “collaborative efforts” for the Aerotropolis concept
- How shared interests get to a governance format
- Lessons learned on forming a “new governance” format
- Roles of the private sector and the public sector
- Biggest obstacles to forming a “new governance” and how they can they be overcome
- First steps (action items) for moving forward

# AEROTROPOLIS SCENARIOS

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# CURRENT TRENDS SCENARIO

- 2040 DRCOG RTP
- No New IGA Agreement
  - No new on-airport nodes or accesses
- Limited Additional Funds



2015 | 2020 | 2025 | 2030 | 2035 | 2040

employment



**DRCOG**



**Each Dot = 50 Jobs**







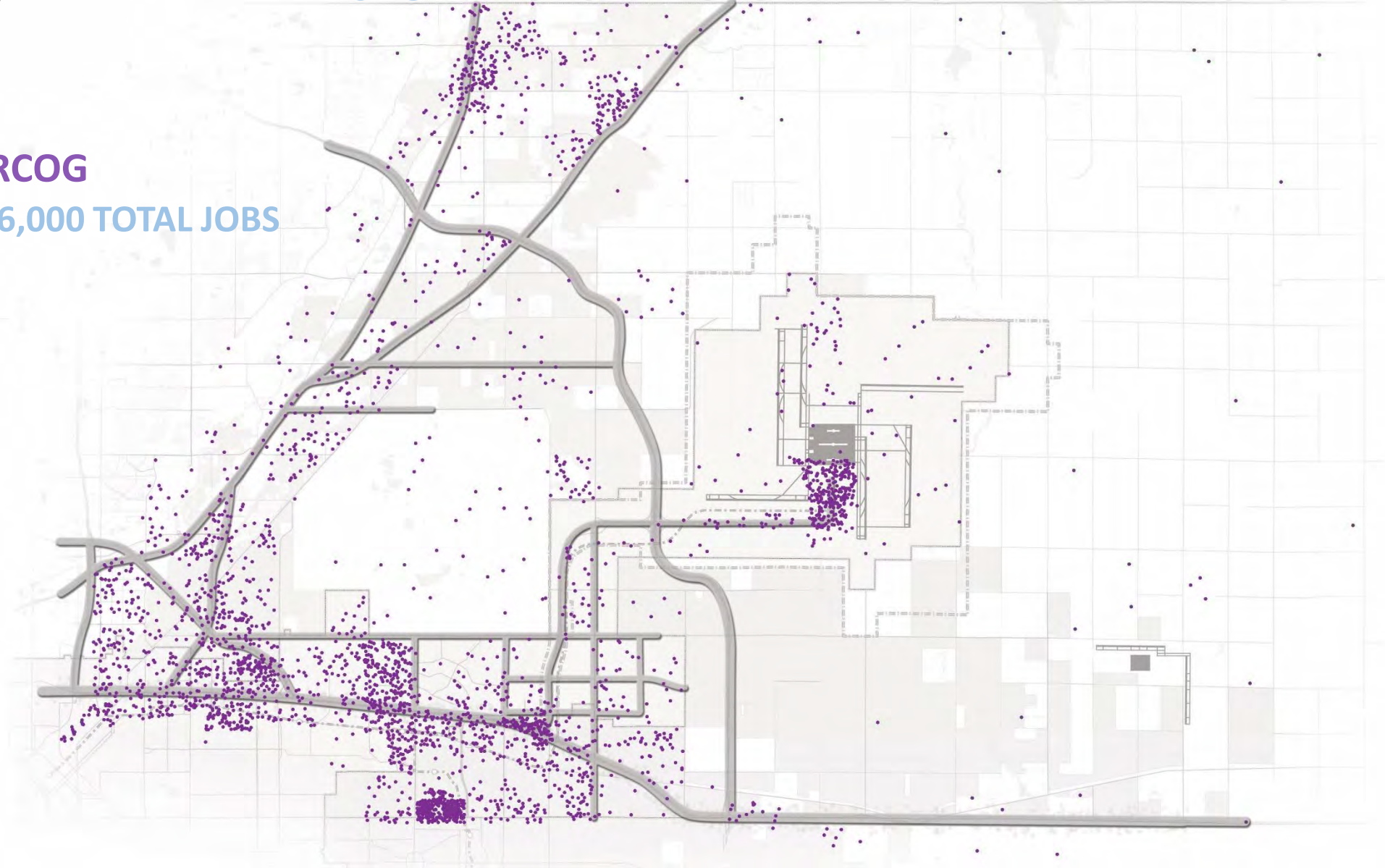
2015 | 2020 | 2025 | 2030 | 2035 | 2040

employment



**DRCOG**

**146,000 TOTAL JOBS**





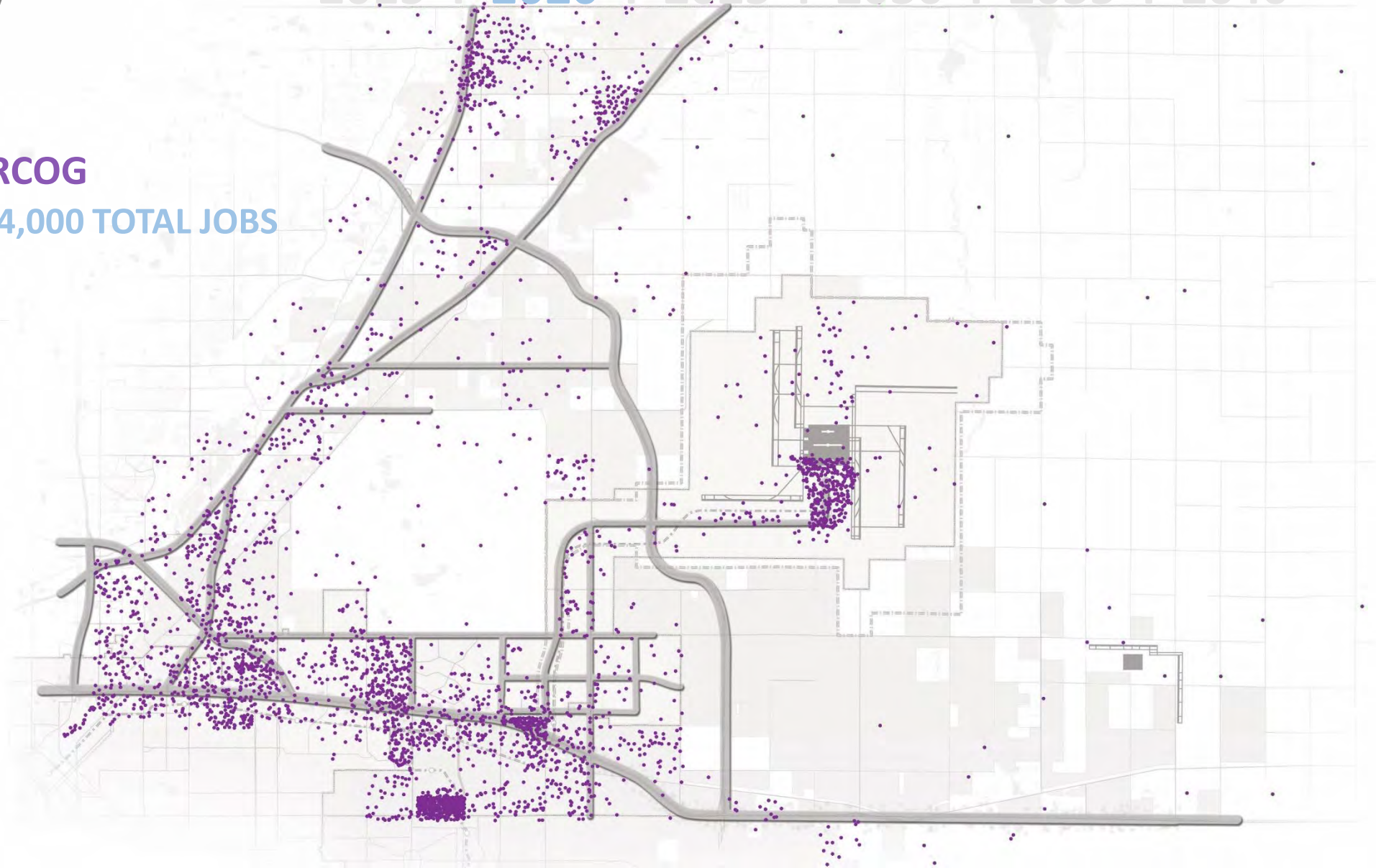
2015 | 2020 | 2025 | 2030 | 2035 | 2040

employment



**DRCOG**

**164,000 TOTAL JOBS**







2015 | 2020 | **2025** | 2030 | 2035 | 2040

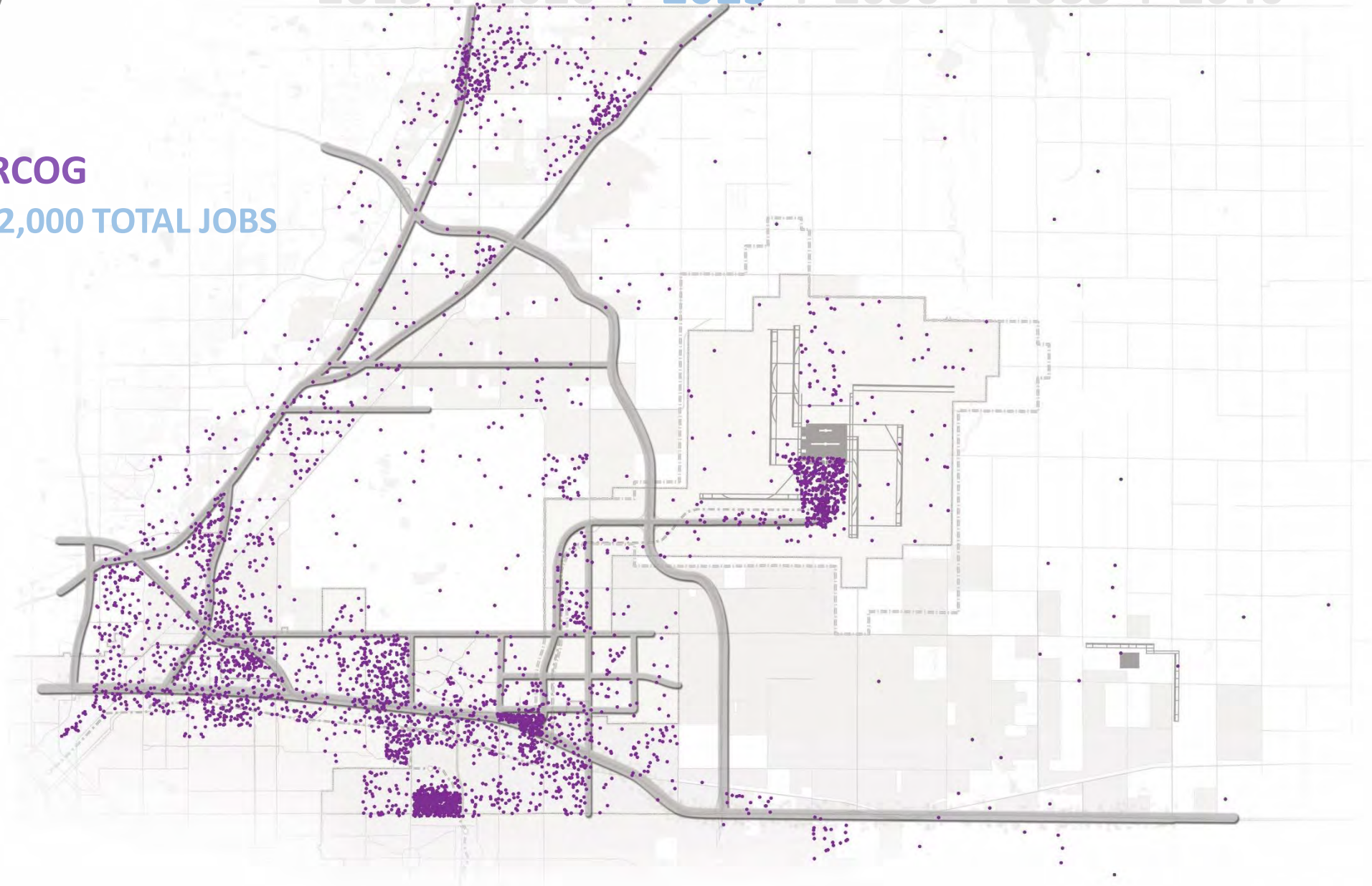
employment



50

**DRCOG**

**182,000 TOTAL JOBS**





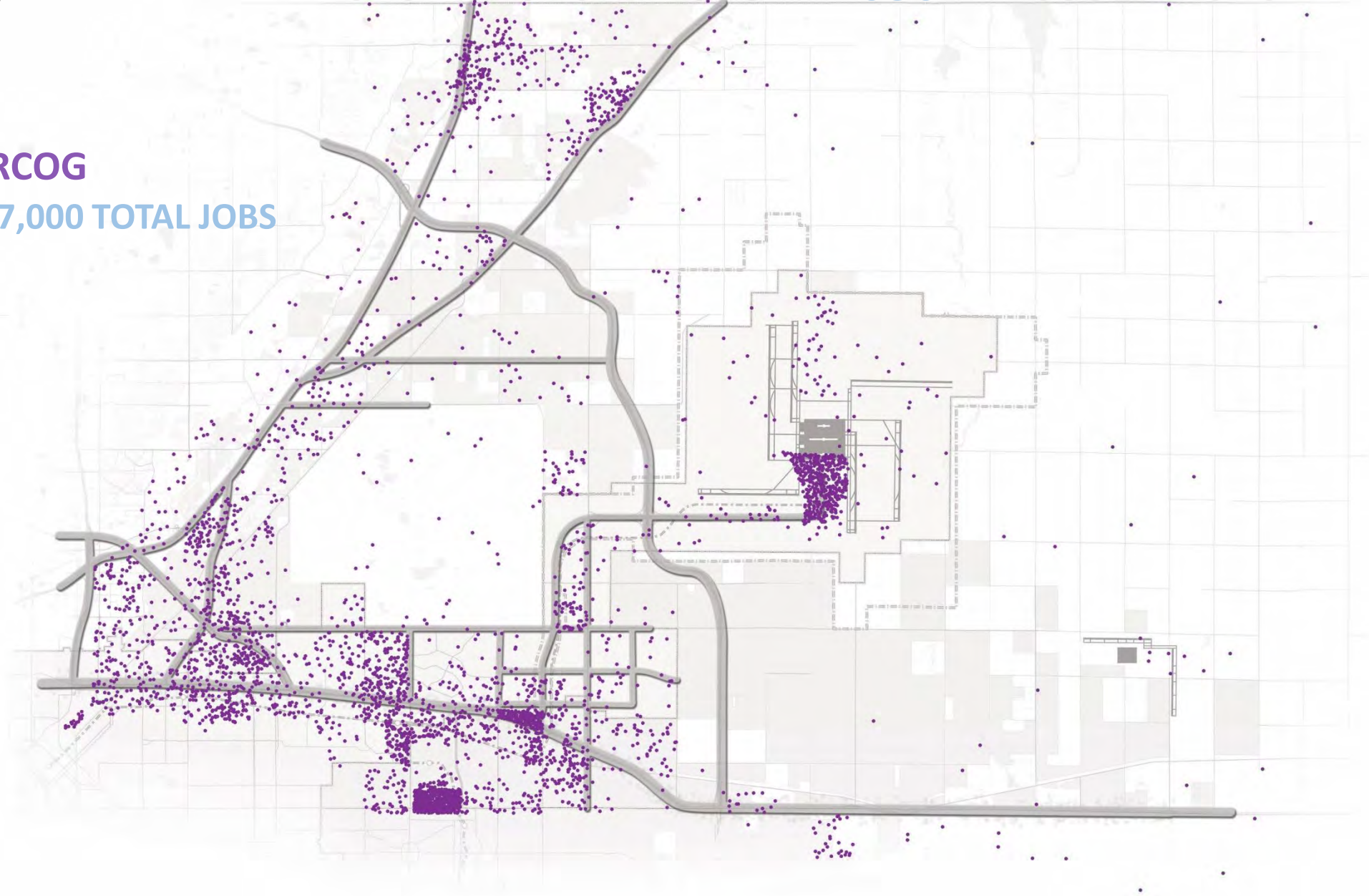
2015 | 2020 | 2025 | **2030** | 2035 | 2040

employment



**DRCOG**

**197,000 TOTAL JOBS**







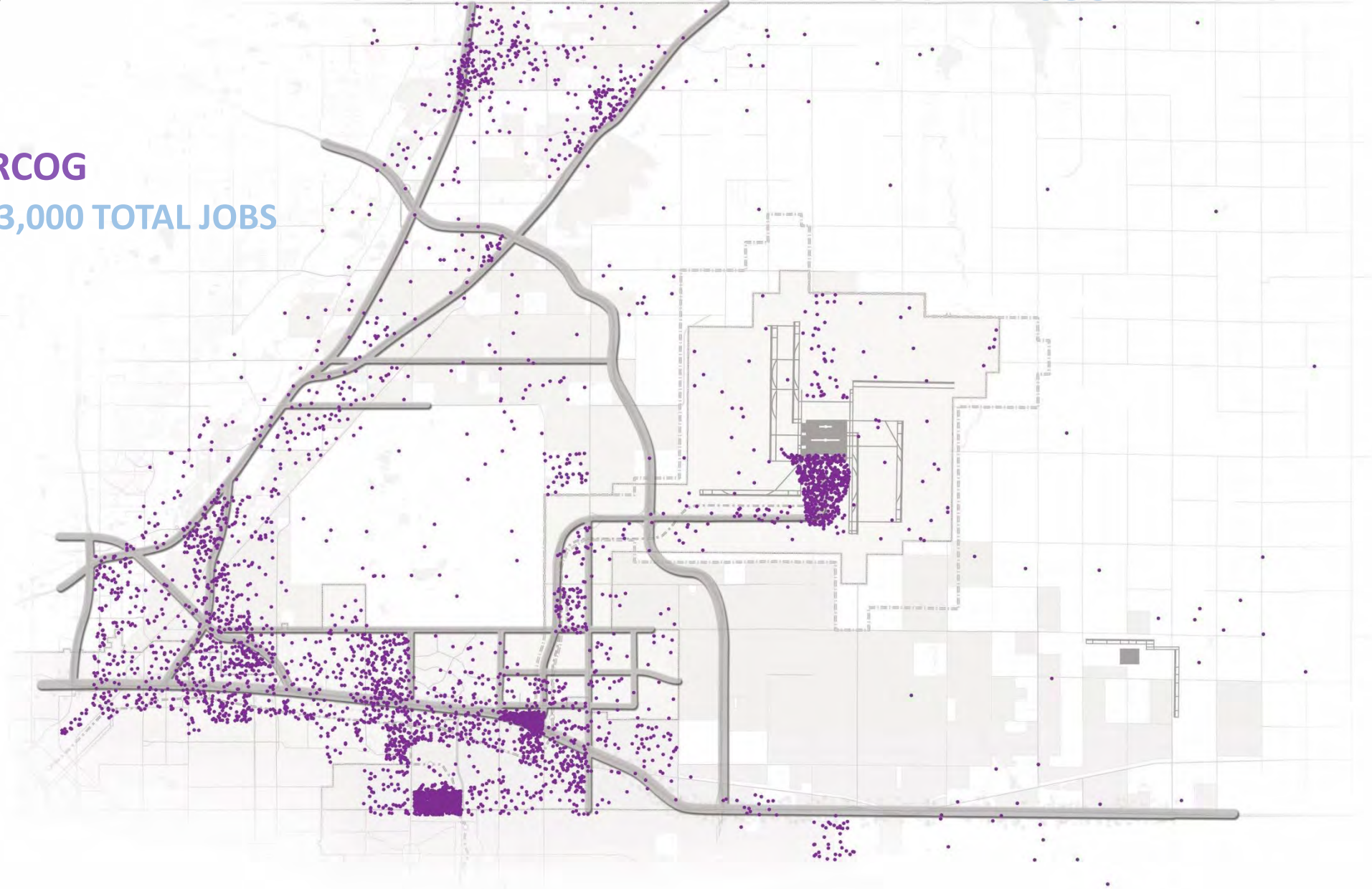
2015 | 2020 | 2025 | 2030 | **2035** | 2040

employment



**DRCOG**

**213,000 TOTAL JOBS**





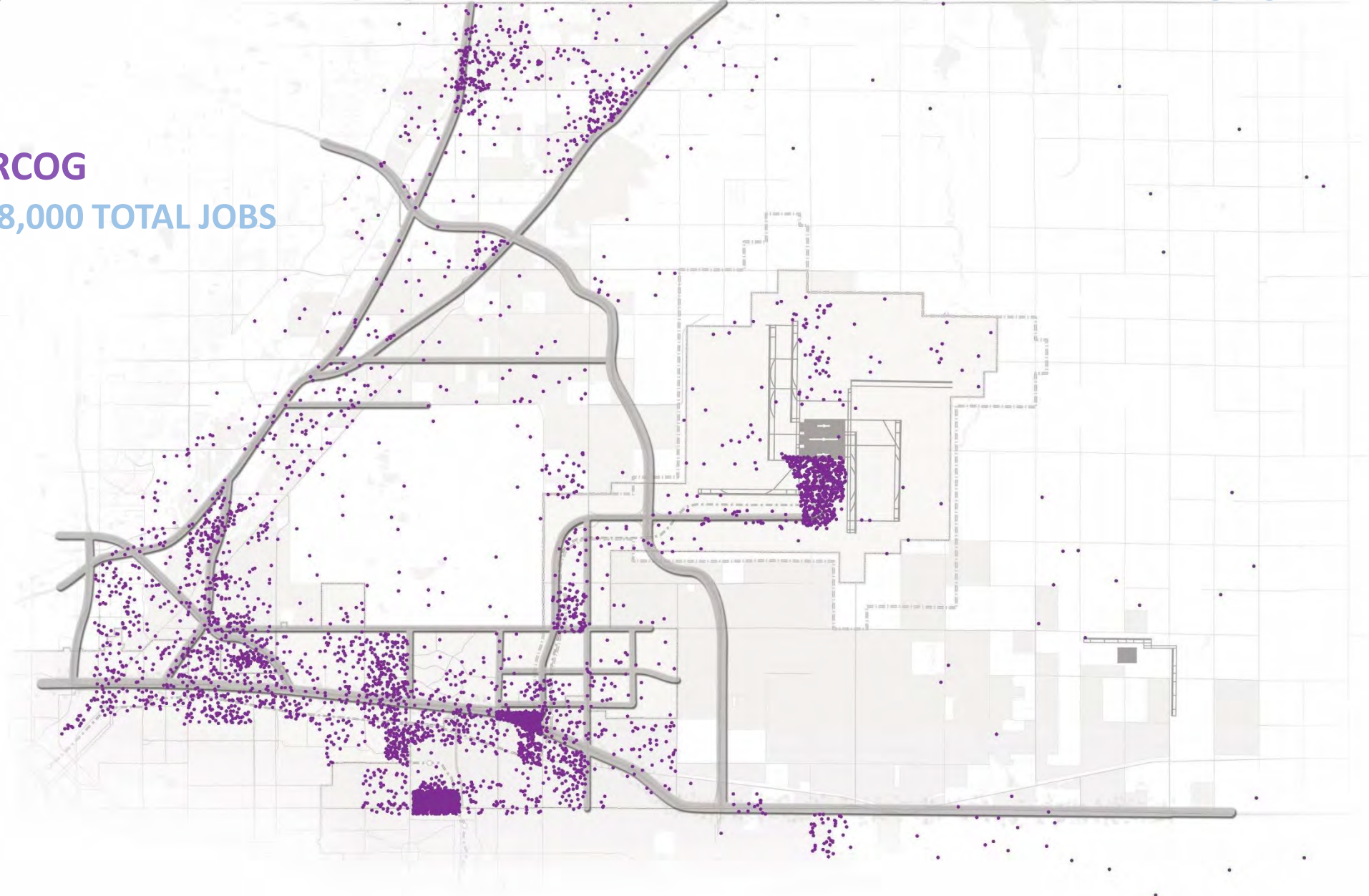


employment



**DRCOG**

**228,000 TOTAL JOBS**

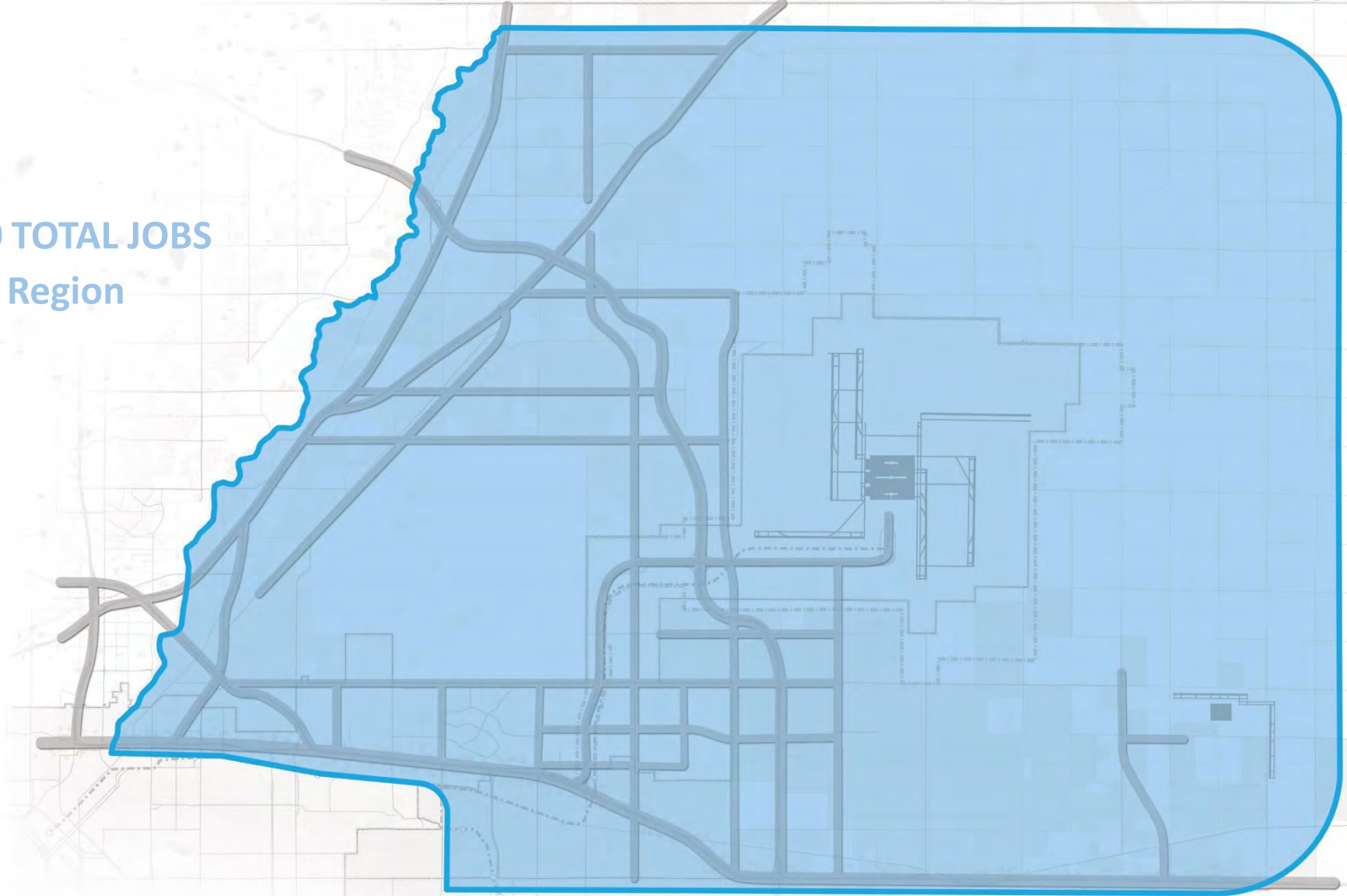




2015 | 2020 | 2025 | 2030 | 2035 | 2040

employment

**228,000 TOTAL JOBS**  
**9.7% of Region**



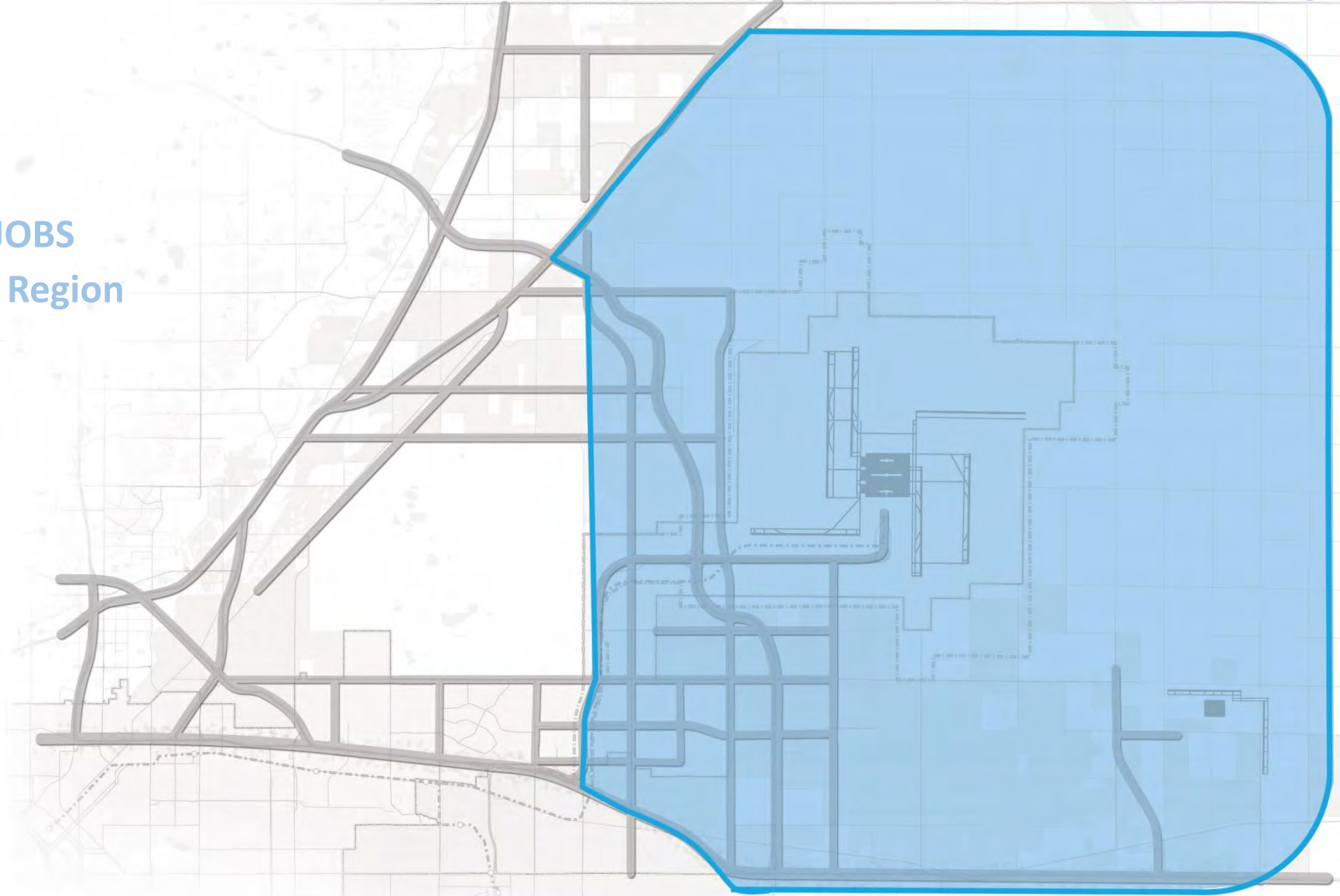




2015 | 2020 | 2025 | 2030 | 2035 | 2040

# employment

**64,000 JOBS**  
**2.7% of Region**

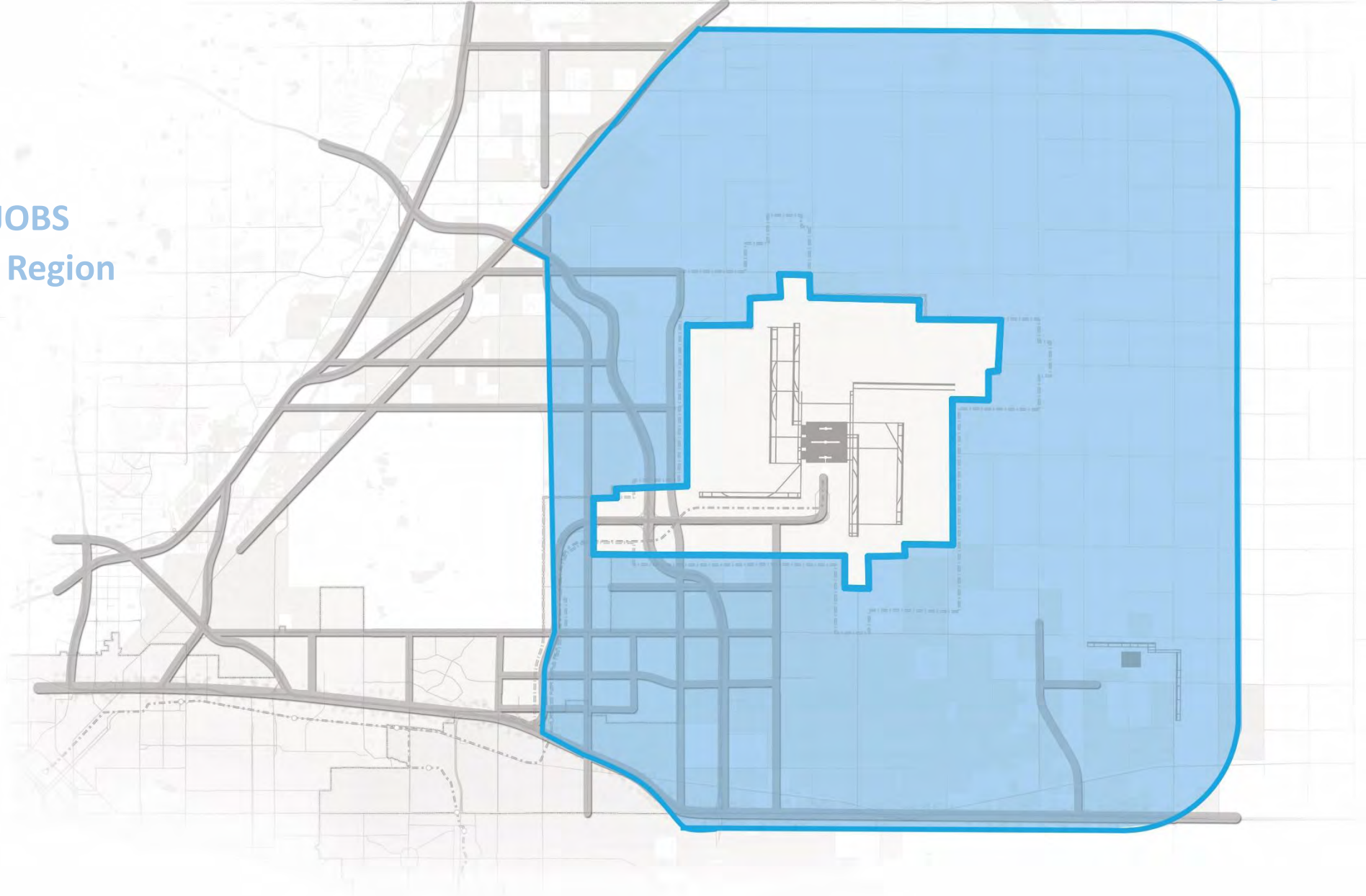




2015 | 2020 | 2025 | 2030 | 2035 | 2040

employment

23,000 JOBS  
1.0% of Region

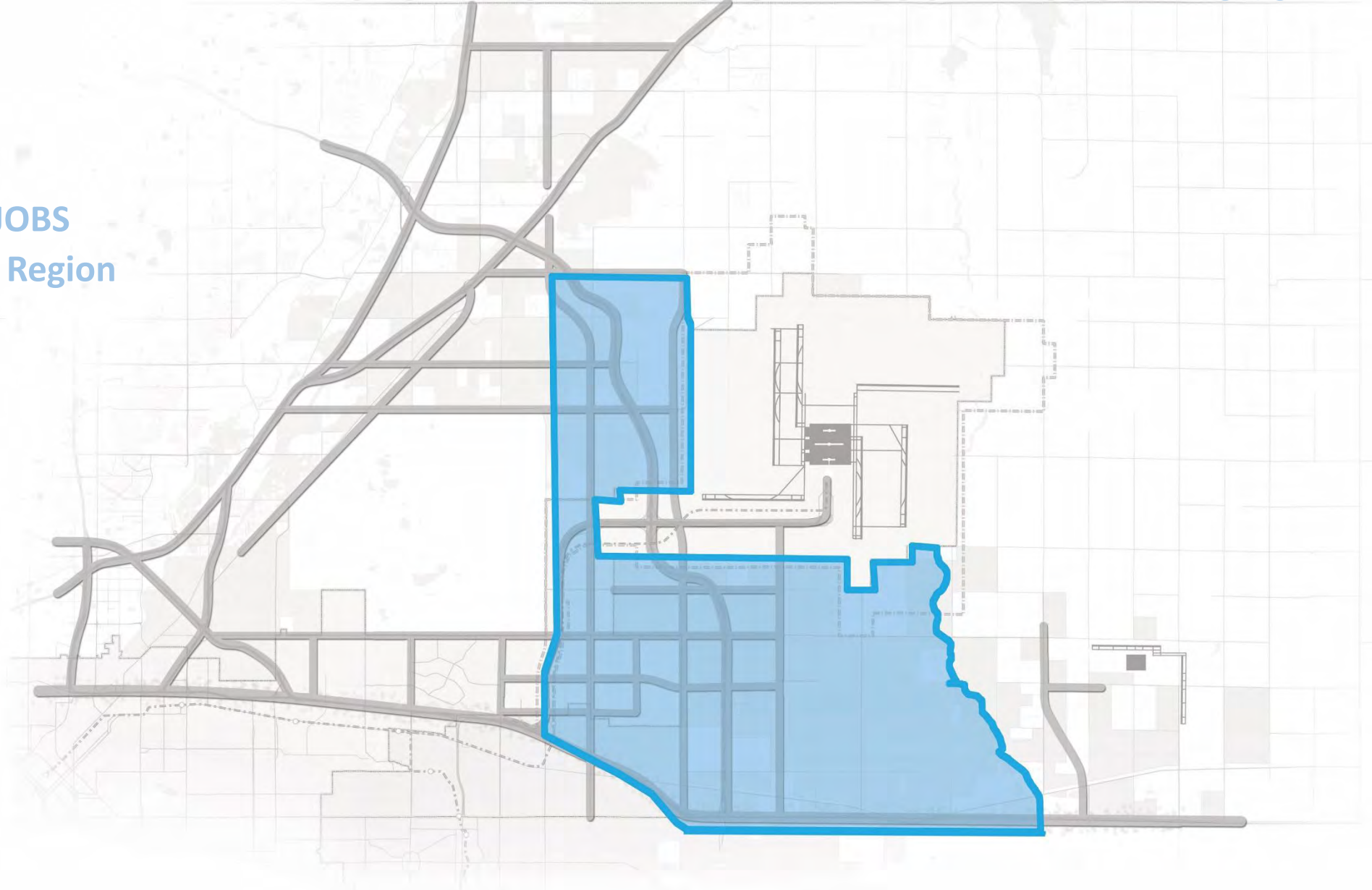




2015 | 2020 | 2025 | 2030 | 2035 | 2040

employment

17,000 JOBS  
0.7% of Region





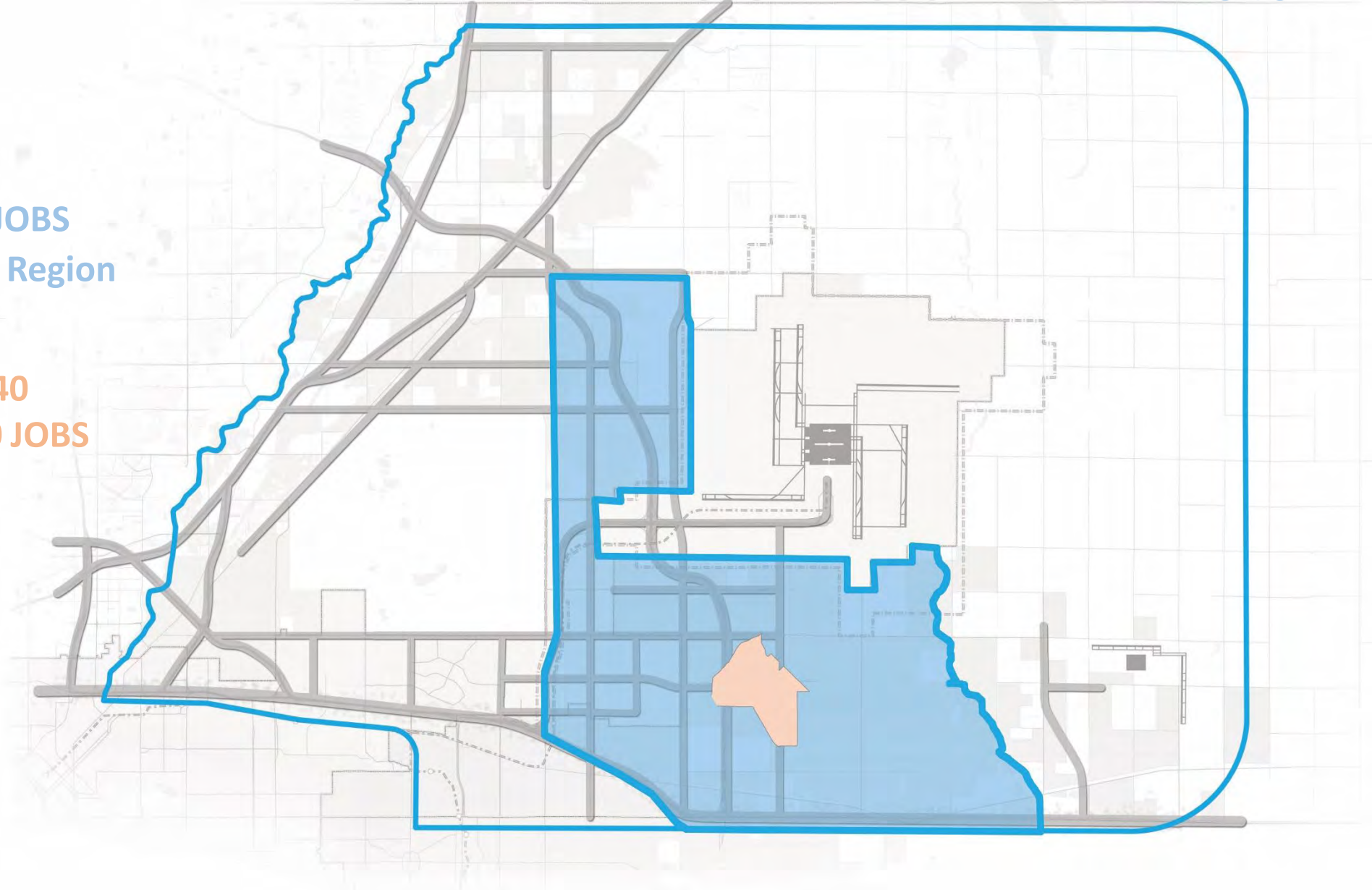


2015 | 2020 | 2025 | 2030 | 2035 | 2040

employment

17,000 JOBS  
0.7% of Region

CBD 2040  
152,000 JOBS



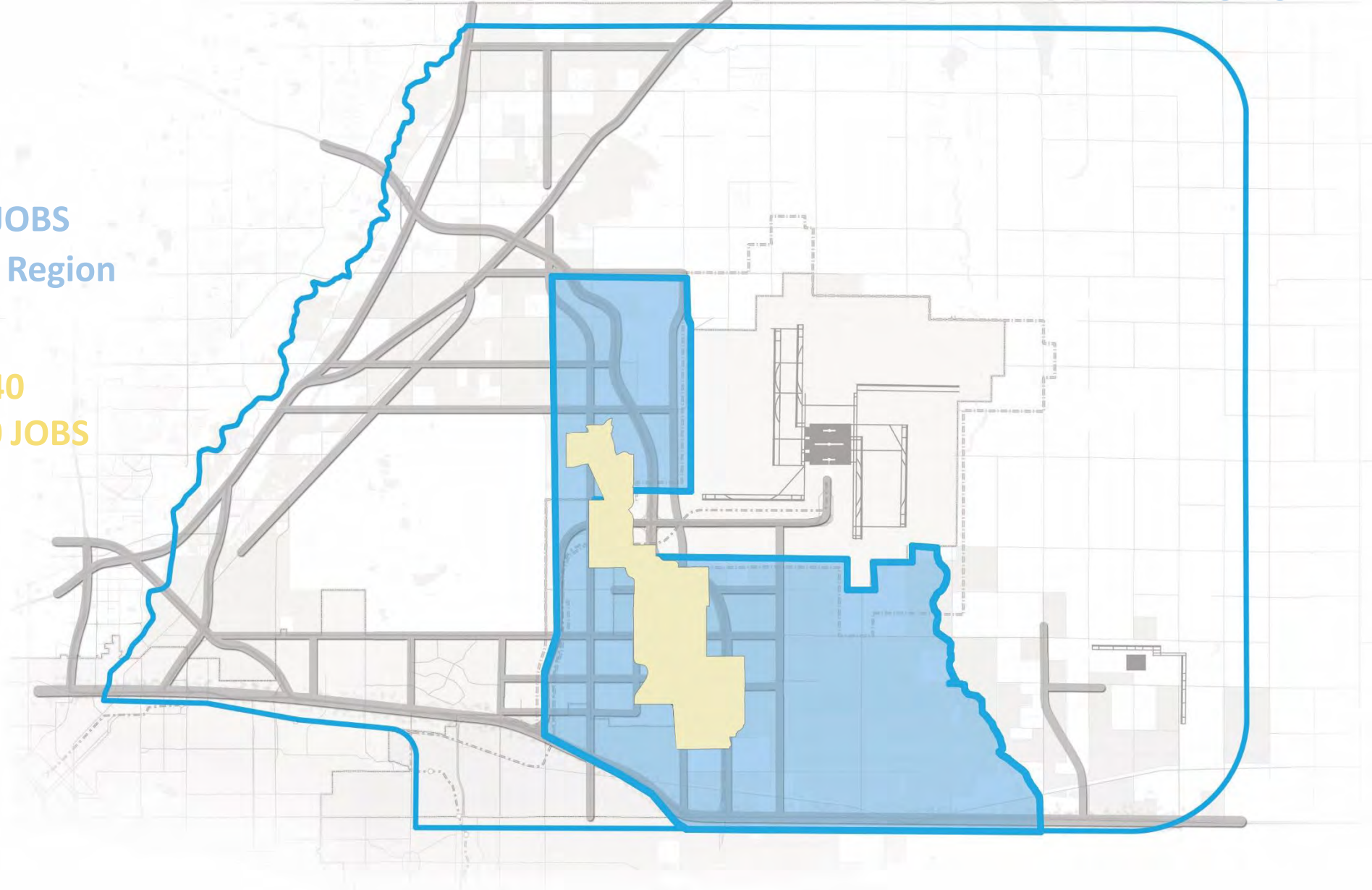


2015 | 2020 | 2025 | 2030 | 2035 | 2040

employment

17,000 JOBS  
0.7% of Region

DTC 2040  
214,000 JOBS





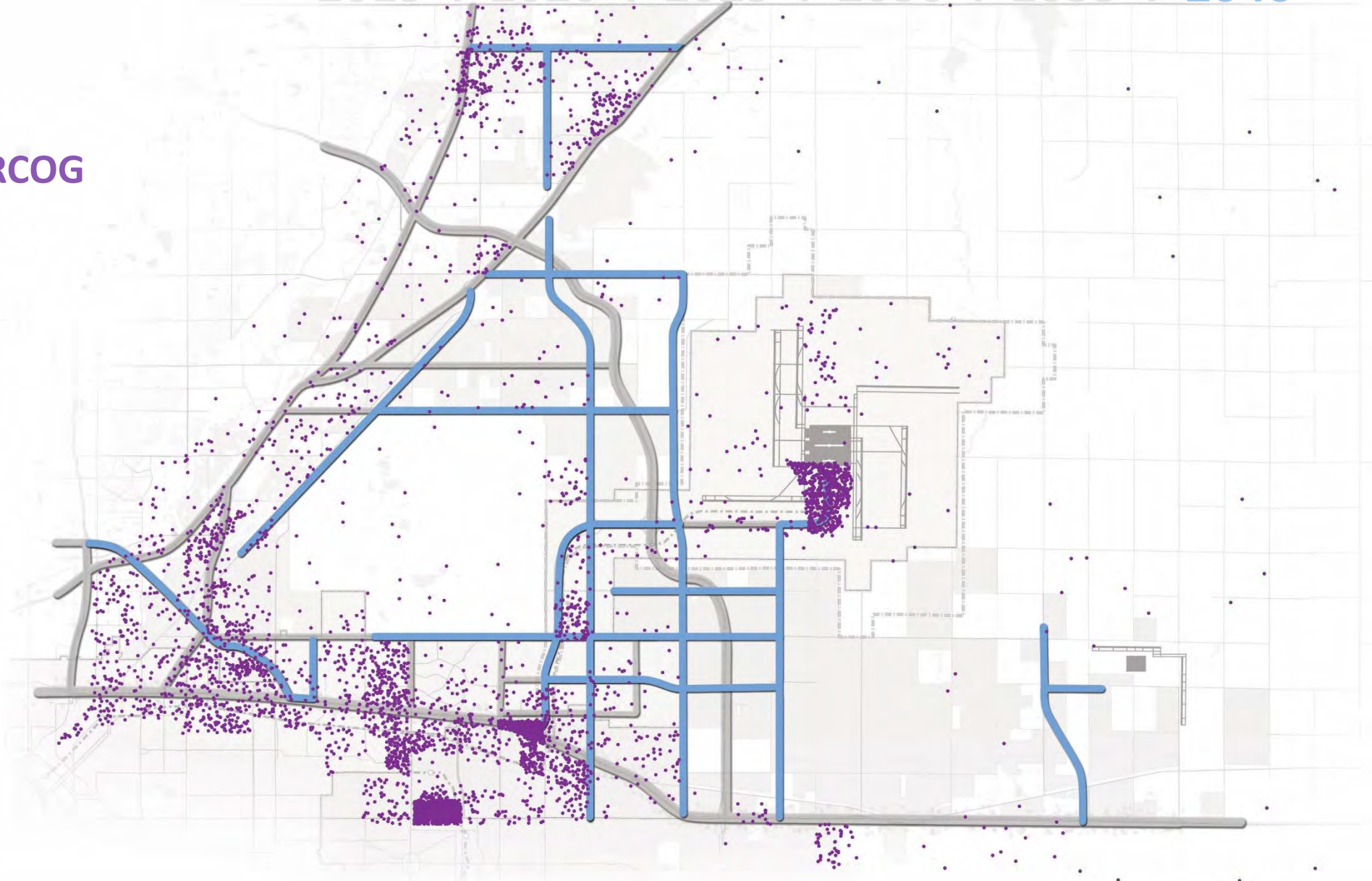


2015 | 2020 | 2025 | 2030 | 2035 | 2040

2040 RTP



DRCOG





# AEROTROPOLIS SCENARIO

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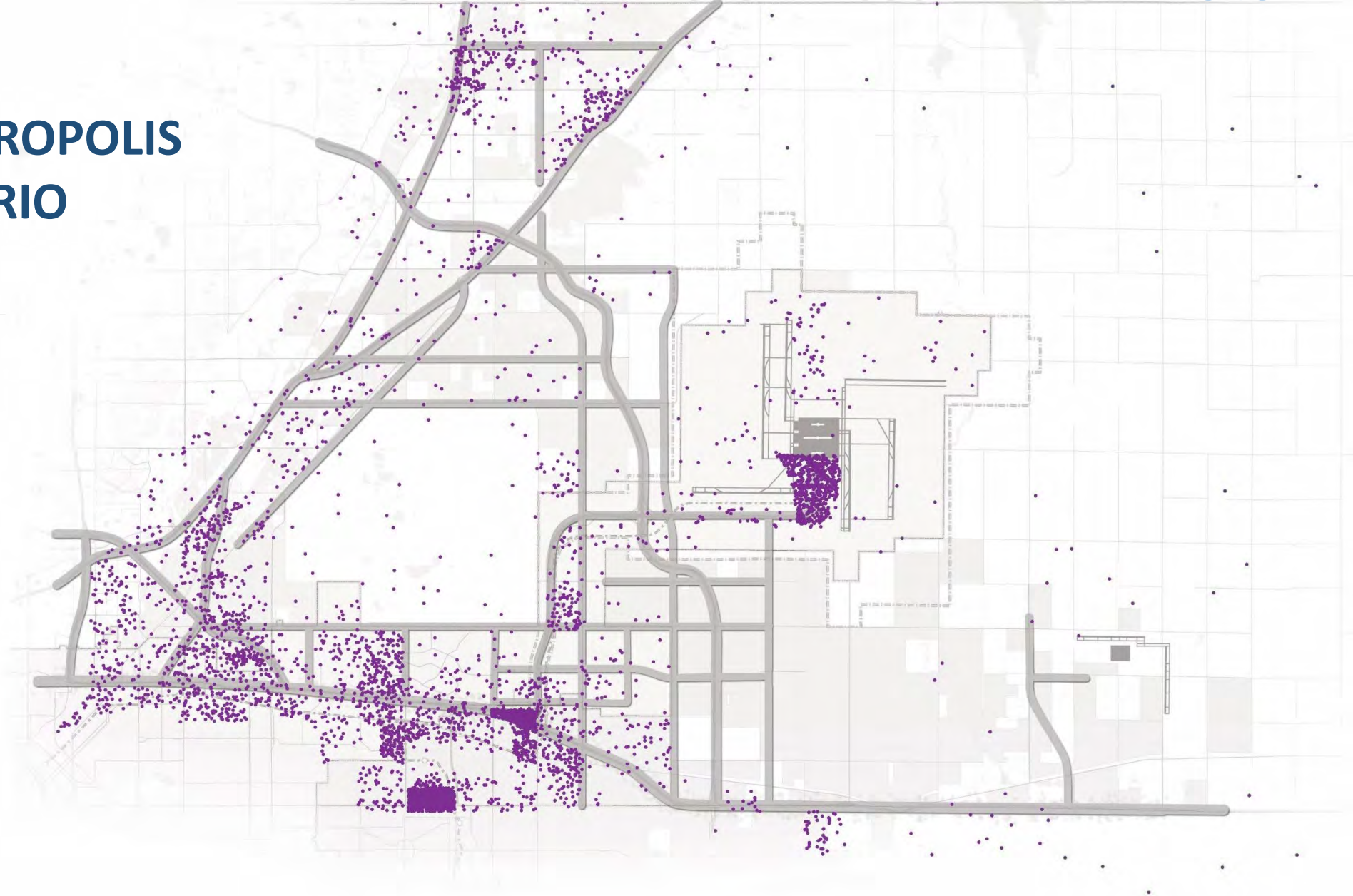
- 2040 Horizon Year
- IGA Amendment
- New Regional Governance Mechanism
- Attracts Additional Development
- Advance Planned Roadway Improvements
- Allows Additional Improvements





DRCOG - RTP

## AEROTROPOLIS SCENARIO







2015 | 2020 | 2025 | 2030 | 2035 | 2040

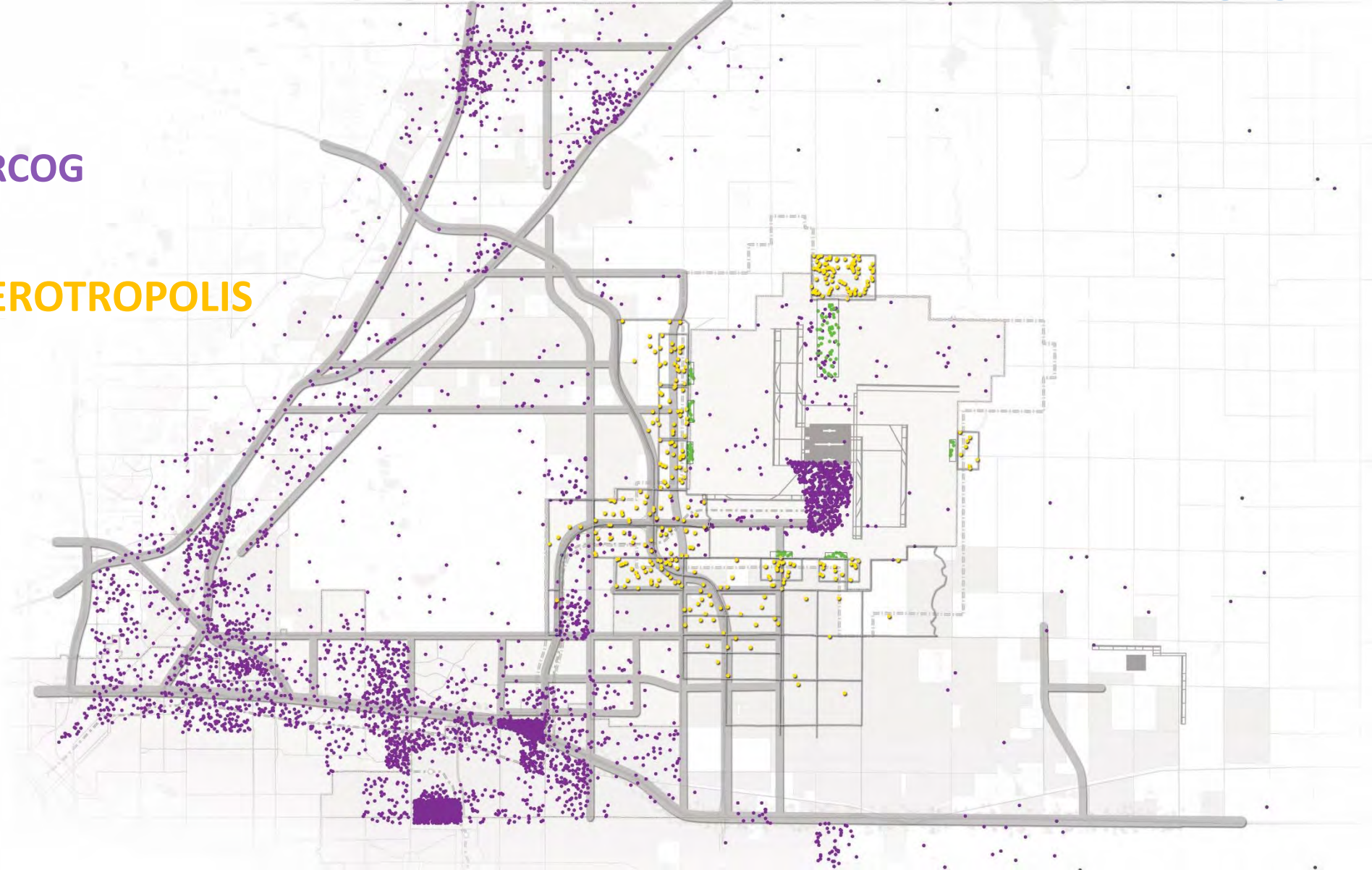
employment



DRCOG



AEROTROPOLIS



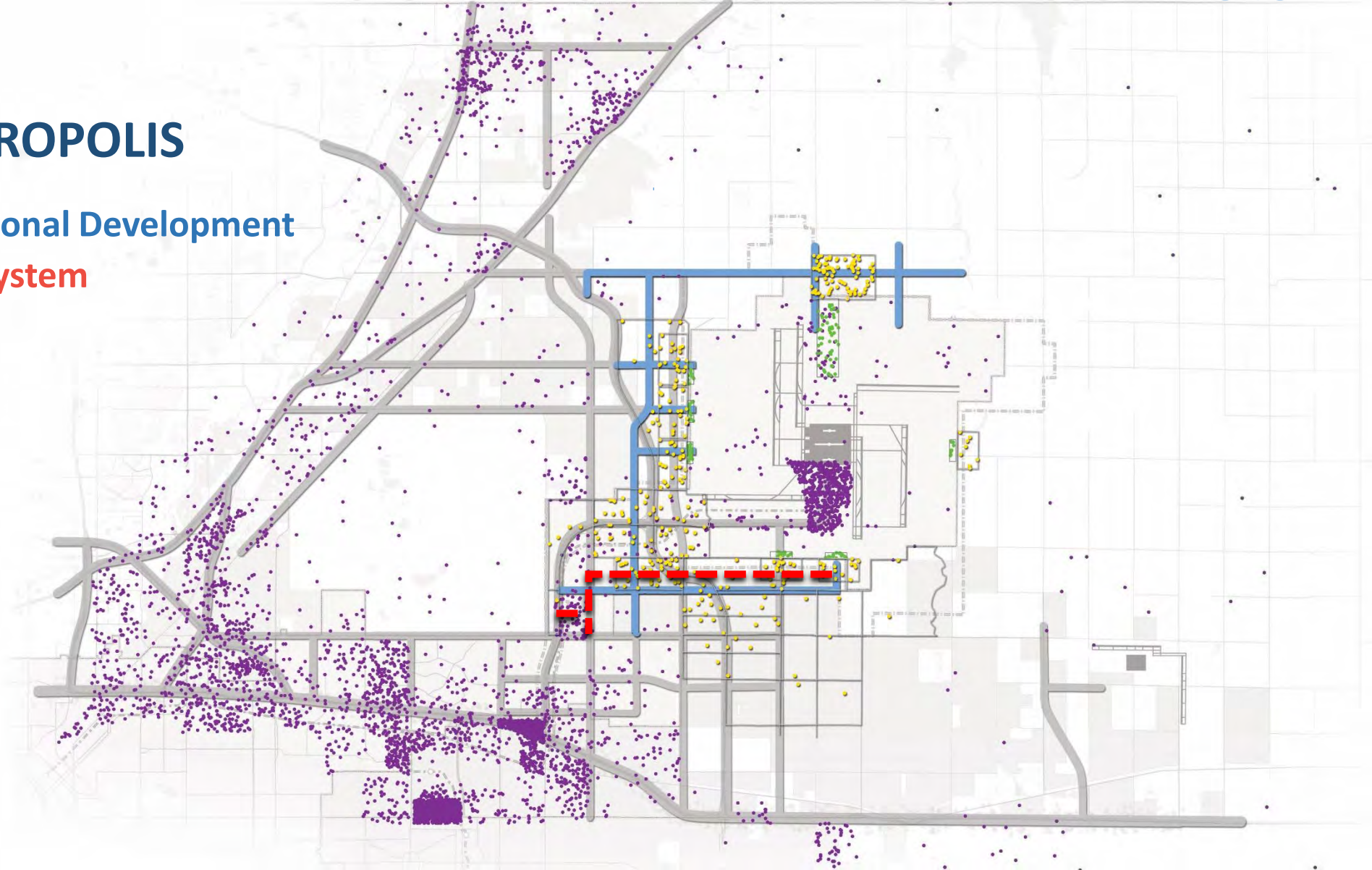


2015 | 2020 | 2025 | 2030 | 2035 | 2040

AERO 2040

## AEROTROPOLIS

- Additional Development
- - - BRT System



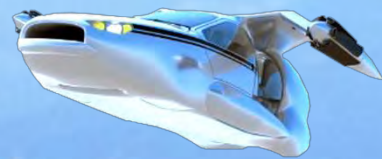




# FUTURE AEROTROPOLIS

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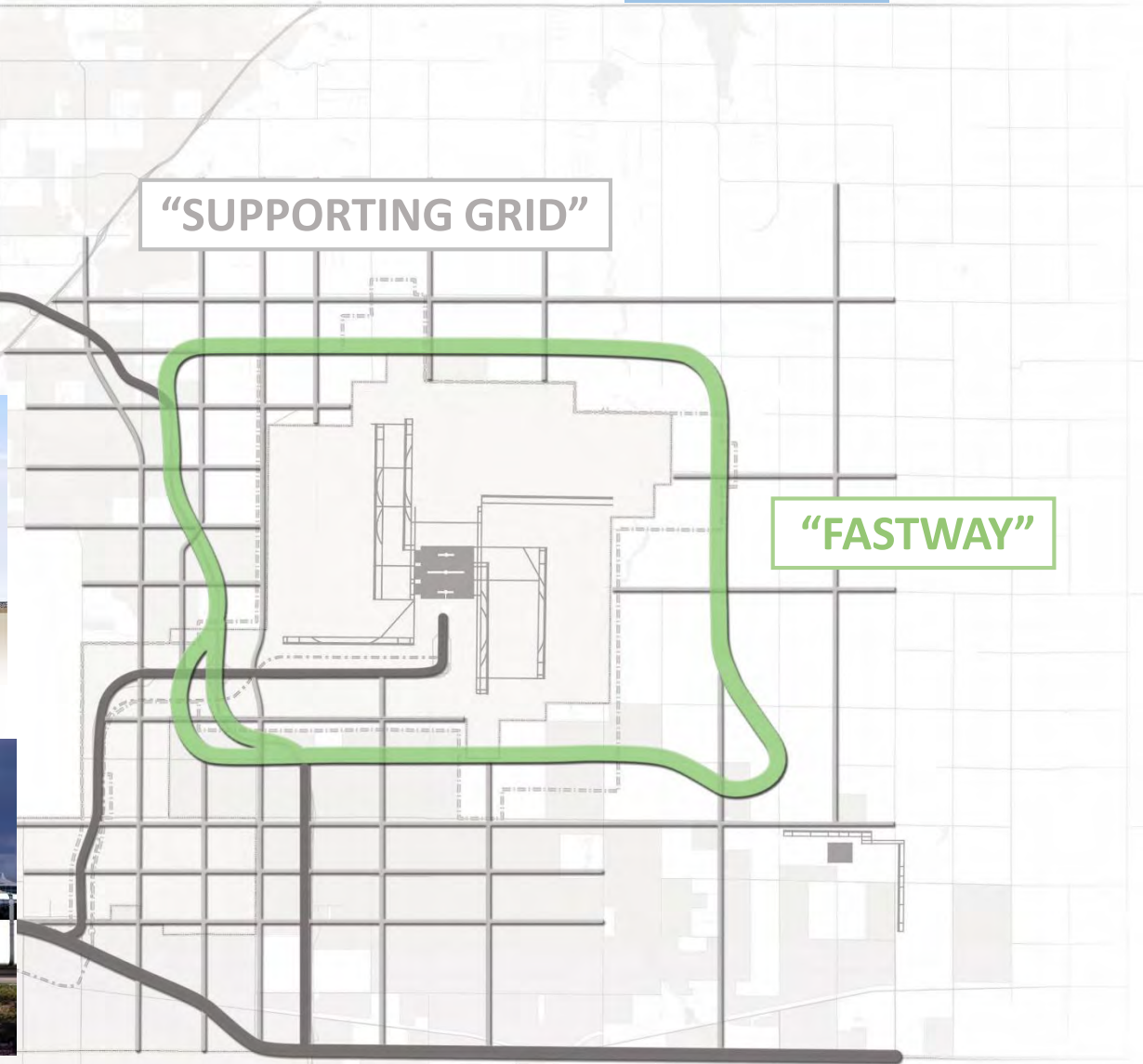
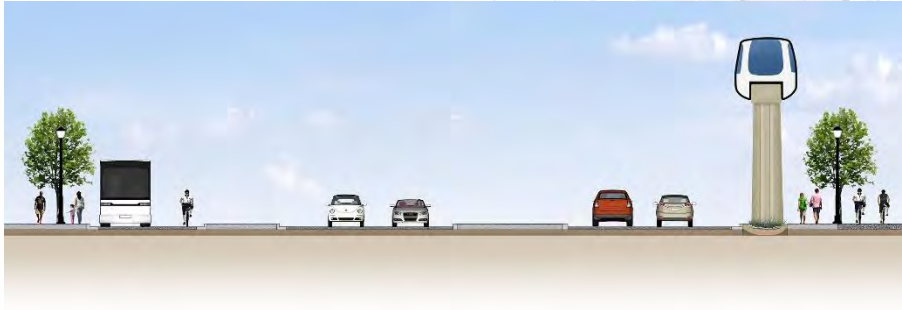
- + - 2075
- Build Out
- Visionary





FUTURE

# AEROTROPOLIS

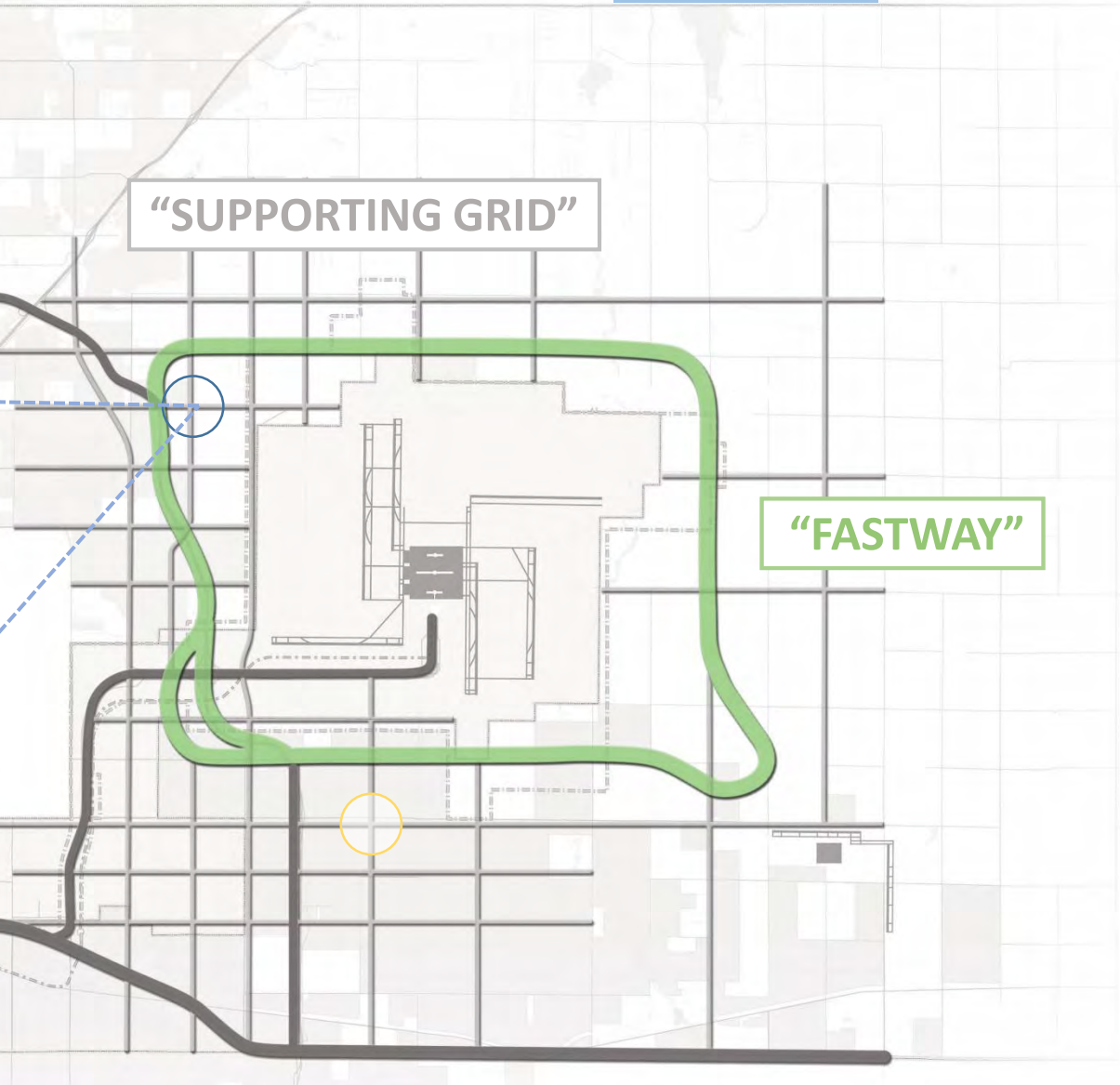
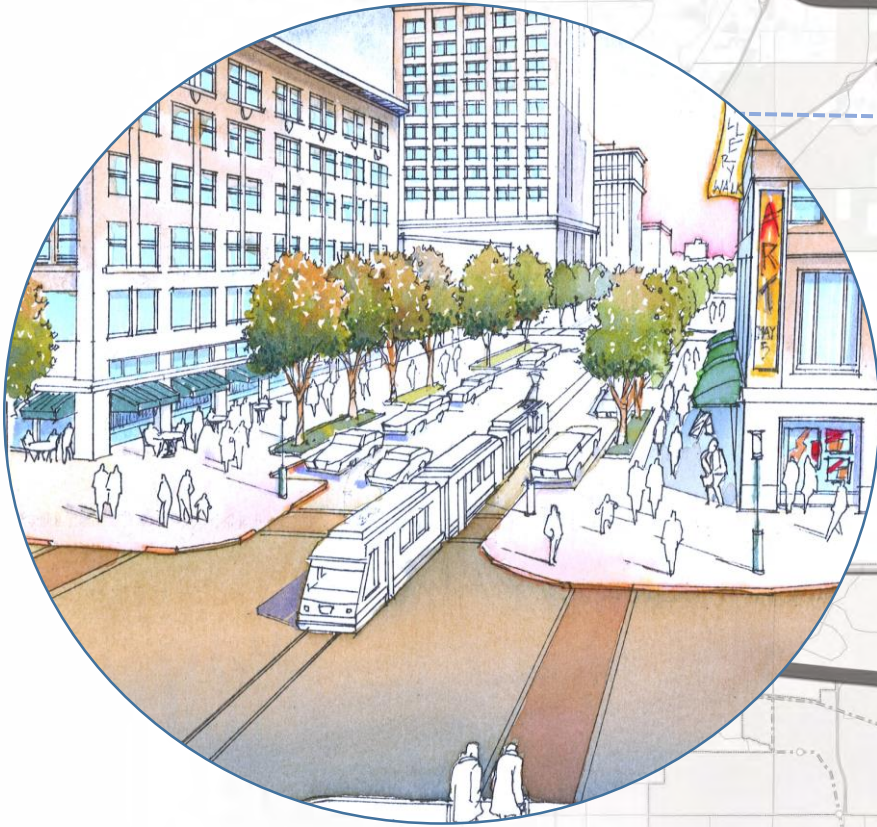






FUTURE

# AEROTROPOLIS







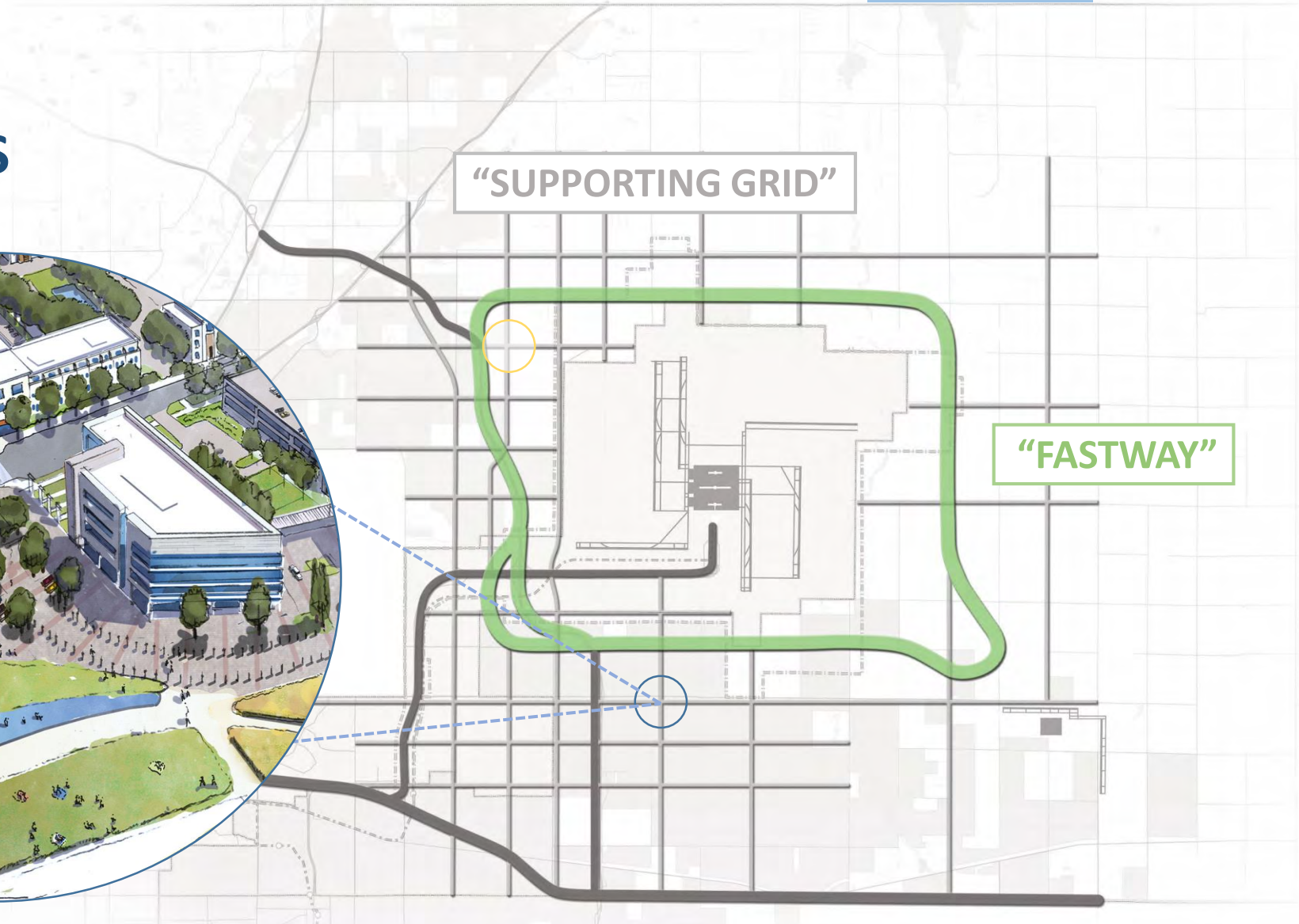
FUTURE

# AEROTROPOLIS



“SUPPORTING GRID”

“FASTWAY”





*“It’s not the big that eat the small,  
it’s the fast that eat the slow”*

- John Kasarda





# **COMPARATIVE EVALUATION PROCESS**

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## **Objective: Compare Scenarios**

### **Criteria Categories**

- Costs and Affordability
- Economic and Financial Effects
- Infrastructure Systems Compatibility
- Ease of Implementation



# Economic and Financial Effects

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## Methods

Objective: Assess Agglomeration  
Economy Effects

- **Quantitative**

- Capital/Operating Cost Savings
- Real Estate Values
- Property and Sales Taxes
- Direct/Indirect Jobs
- Permanent Jobs

- **Qualitative**

- Wage Growth
- Productivity
- Transportation Savings
- Quality of Life



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CHECK IN

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MOVING FORWARD

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# Next Meetings

## Steering Committee

- Meeting #2: Aug 27, 9:00
- Meeting #3: Oct 22, 9:00
- Meeting #4: Nov 19, 9:00



## Study Review Committee

- Meeting #5: Aug xx, 9:00
- Meeting #6: Sep 17, 9:00
- Meeting #7: Oct 15, 9:00
- Meeting #8: Nov 12, 9:00

# THANK YOU

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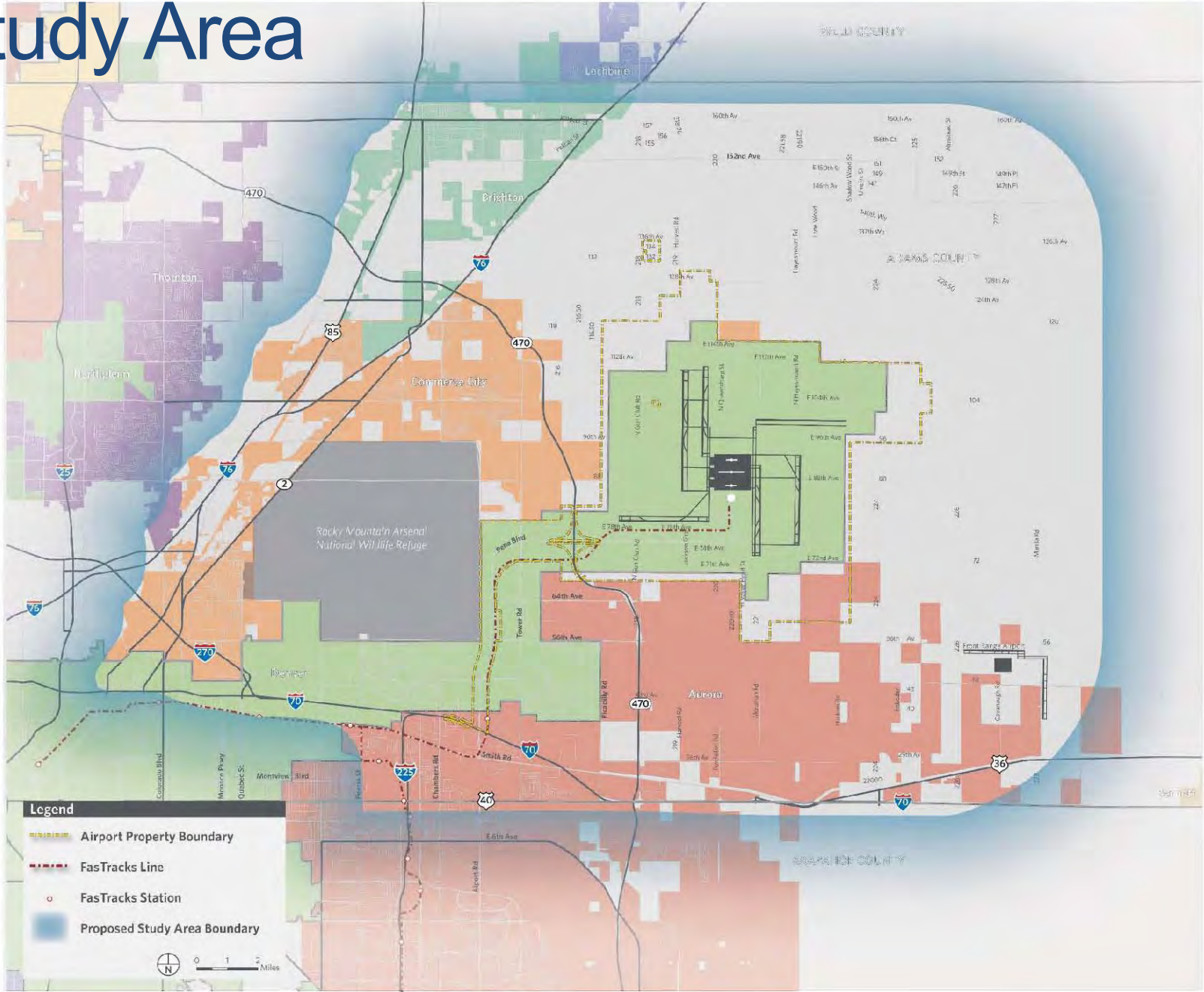




# ADDITIONAL INFORMATION

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# Study Area





## Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: Study Review Committee Workshop #3

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Date: June 18, 2015 9:00 - 11:30

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Location: Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)

1. Welcome & Introductions
2. Purpose of Meeting
3. News Update
4. Briefing Summary
5. Overview of Other Aerotropolises
6. Work Session - Scenario Development
7. Roundtable
8. Next SRC Meeting
  - a. July 23 9:00 - 11:30 Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
  - b. Topic: Compiled Scenarios, Special Districts/Landowners
9. Next Steps and Action Items
10. Adjourn



Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

Project:	Colorado Aerotropolis Visioning Study
Subject:	Study Review Committee Meeting #3
Date:	June 18, 2015
Location:	Rocky Mountain Arsenal National Wildlife Refuge
Attendees:	See attached sign-in sheet
Distribution:	SRC members, File

### Welcome and Introductions

1. Stephanie White called the meeting to order and introduced herself and directed the group to sign in. Self-introductions followed.

### Purpose of Today's Meeting

2. Jay Hendrickson welcomed everyone. He provided an update on the successes of the IGA. He noted the momentum this group has achieved and encourage the group to build on the momentum. We hope to start rolling up our sleeves at today's meeting and talk about land use and scenarios. Aerotropoli in other states are developing - this is not something that Denver is doing alone.
3. Stephanie asked everyone to take out their cell phones to test text polling and directed everyone to text HDR to 2233. She then asked the group to answer the question: *Where did your last flight from DIA take you?* The participants then started texting their replies, which showed on the projection screen. This text polling was used later in the meeting to answer some questions about the study.

**Poll:** Where did your last flight from DIA take you?

**Responses:** DCA, San Diego (x2), NYC, California, Memphis, Philadelphia, Orlando, Las Vegas, PHL, Edinburg, Toronto, Seattle (x2), Madison, Wisconsin, Burbank, Connecticut, Baltimore

### News Update

1. **Study Name.** Chris Primus updated the participants regarding the Steering Committee meeting held on June 4, 2015 (Adams County, Aurora, Adams County, Brighton, and DIA). Some of the ideas the SRC team has brought forward were presented to the Steering Committee. The Steering Committee has agreed on the study name the SRC has selected.
2. **Study Vision.** The Steering Committee has made a small revision to the Vision Statement previously agreed by the SRC to emphasize the action that was intended.

#### Revised Vision Statement

*A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

#### Original Vision Statement

*Create A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.*

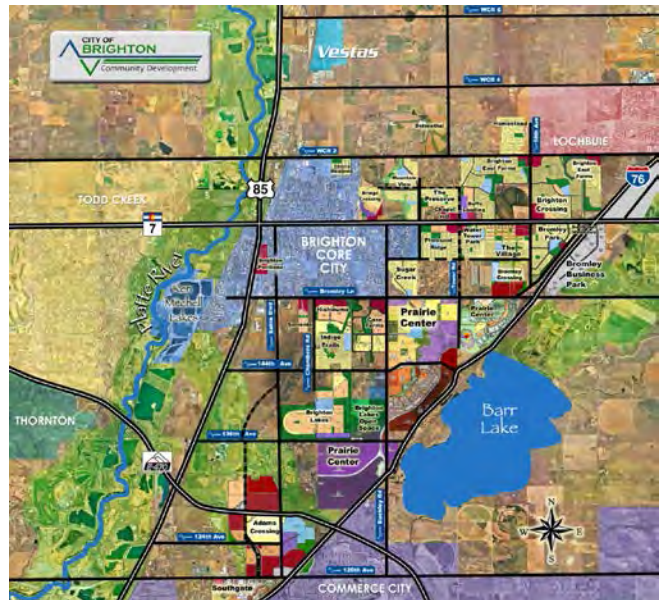


3. **Study Area.** The Steering Committee recognized that the study area moved down about a half mile south of I-70, to capture the interchanges and associated developments.
4. **Proposed IGA Amendment**
  - a. Kristin Sullivan gave an update on the IGA Amendment. There was a 1988 IGA that allowed the annexation of the Adams County land on which DIA has been built. That IGA only allowed for development of aviation uses. Recently, after two years of mediation, the airport community committee and Denver have come to an agreement on a proposed IGA amendment, which would go on a vote in November. The highlights of the proposed amendment are:
    - The pilot program identifies 1,500 acres on-airport that can be developed in 20 to 35 years.
    - These are largely driven by this concept of nodes of development around the airport. A dozen nodes of development that have been targeted.
    - Free up some land use changes in the neighboring communities.
    - 500 to 800 acres that are high-value commercial developments.
      - Clear zones identified along the Porteos property.
    - Three nodes along the western side along Commerce City.
    - Financing of the deal—basically the tax revenues from that freed-up development will be shared between Adams County and the jurisdictions in perpetuity. Denver will make an initial \$10M payment to Adams County in January 2016, pending the vote outcome.
  - b. Kristin noted that this group's meeting is really well-timed with the IGA solutions. With the start of this grant, as well as reaching an agreement on the IGA, we can all start to talk now. This group would become a very valuable support group—not only supporting the election coming up to get the amendment to pass, but also with the regional aerotropolis committee, which makes the work of this group even more valuable in that context.
  - c. There was some discussion about how this announcement affects the work we are doing with the aerotropolis study. There will be a lot of work to be done to educate voters between now and November.
  - d. Kaia Nesbitt asked whether there is a plan currently on how the \$10M will be used. Kristin responded there is a plan on how the \$10M will be shared using a specific formula to split the money (the same formula that will be used to share the upcoming tax revenues) but no description on how the jurisdictions would use that.
  - e. Both sides are still working on the detail language of the amendment. Denver is trying to get it submitted as final by end of this week for city council action.
  - f. Rick Pilgrim asked whether it would be a good idea for the aerotropolis study to be represented at the Denver City Council during the IGA hearing. Should someone from this project speak about the planning process we have going on? We provide a lot of commentary internally about how well this is going and how important this is. But that is a good point whether CDOT/HDR should be there. We should probably talk to Evan Dreyer and give it more thought.
  - g. Jay noted that there is obviously a lot of work yet to be done to get it to pass to vote. He asked Kristin if there are any opportunities for this group to help that effort. Kristin thinks it's a little early to know, but there is definitely an opportunity for this team to help out.

## Briefing Summary

### 1. Briefing Addendum—City of Brighton (Holly Prather on behalf of Marv Falconburg)

- a. Very brief overview of where Brighton is today and where we hope to be in the future. Generally, we are bounded by major transportation corridors. Over 11,000 households; 40% of population is Hispanic. Principal employers include Adams County, 1,900 employees. Next larger employer is School District 27 employing about 1,600. The City itself employs about 500.
- b. Historically, our growth was centered in the core of the city since the mid-80s.
- c. Focus on the Prairie Center development with 4,500 units and 2 million square feet of commercial. There has been some growth along 120th Avenue. There is a new Adams Crossing development.
- d. Growth projections for the future: 90 permits for this year right now. If things went well, we would have enough residential development in Brighton that would take us out into the next 40 years. Kicking around the idea of a local food production plan. Last update of our comprehensive plan is outdated. Need to do an amendment.
- e. Kip asked about the railroad lines shown on the map. Holly replied they are the UPRR and Burlington Northern Railroad.
- f. What is the plan for the area in brown on the map? That land is farmland, with little parts that are in development, but it is all part of the agricultural plan.



### 2. Briefing Overview. Kaia Nesbitt presented a brief overview of the briefings made by each agency at the last SRC meeting. Her observations were categorized by Land Use and Development, Transportation, and Utilities.

#### a. Land Use

- Development coming from the west and south coming across. Future development for land use is really on the east side.
- How this could potentially become the next tech center. Being more relative to some of the markets that have been defined.
- Spaceport was also highlighted as a unique opportunity in this area.
- Also the idea of price point.
- Respect for the noise contour especially for the residential development.
- Idea of global connectivity.
- Constraint: over 350 square miles. Hard to know where to start; what would make the biggest impact first.

- Constraint: decrease in cargo activity. For other aerotropoli across the globe, cargo has been a huge part of their success. This is definitely a constraint for DIA.

b. Transportation

- The east line and having that connectivity.
- Connection points from the south—Jackson Gap and Piccadilly.
- Constraint: How are they working together and what can we do to make sure that some of the transportation corridor and projects are really linking and provide benefits?
- Constraint: Funding mechanism; some maybe project-related, some maybe politics.
- Constraint: pinch point: Rocky Mountain Arsenal and DIA land.
- Constraint: Pena Boulevard; FAA restrictions

a. Utilities

- This study is an opportunity to think regionally—use of water/wastewater and supply and location are some of the things that should be considered.
- New wastewater facility in Adams County in the Brighton area.
- Constraint: lack of water.
- Constraint: connection to new wastewater plant.
- Constraint: Drainage facility needs.

- b. Chris reported that another take-away from the last SRC meeting was the cycle of development on an airport.



Cycle of Development on an Airport

## Overview of Other Aerotropoli (Chris Primus)

1. **Amsterdam Schiphol Airport.** Schiphol's cargo is center around the transport of flowers. Operated by the Schiphol Group—a public-private partnership.
2. **Narita International Airport, Japan.** Seafood market, so they fly fish around the world. They have a very successful shopping mall. People go to the airport just to shop.
3. **Memphis International Airport.** This was not created as an aerotropolis per se, but it just kind of morphed into that way when FedEx chose to use this airport for its operations.
4. **Louisville International Airport.** The same with this airport, when UPS decided to use this airport for its operations. Louisville has really embraced the need for an aerotropolis concept; has moved homes, neighborhoods, and commercial areas for airport expansion needs; and is quite successful.
5. **Chicago O'Hare International Airport.** Spent billions of dollars improving the airport. More than 40 years ago, the FAA noted that O'Hare would be outdated by the end of the 20th Century and suggested building a much larger airport somewhere in the Midwest. A tri-state commission was formed to study the best location for such an airport and selected a site near Peotone. Then the planned airport

vanished off the FAA's radar. The plan for the airport lacked a regional consensus. No collaboration and lack of consensus on location; therefore, not moving forward.

6. **Berlin-Brandenburg Airport, Europe.** Europe's largest airport construction project—planned for 27 million passengers. Should have opened in October 2011 but now opening likely before 2017/2018. Former director is facing corruption charges; accused of accepting 680,000 euros in bribes being investigated for price fixing.
7. **Detroit International Airport.** About 10 years ago, they heard about this concept and embraced the idea for an aerotropolis. The aerotropolis idea is to develop the land in between Detroit and Ann Arbor. It has been delayed. Have not collaborated very well to get the aerotropolis off the ground. They have the land but not enough collaboration.
8. **Incheon/Songdo International Business District, Seoul.** They built Incheon to capitalize on the market in China and to compete with Hong Kong. They built Songdo to serve the airport. It has done pretty well. Very green city, lots of activities, lot of people living there, but the commercial aspect of Songdo has not really taken off like they hoped.
9. **Edmonton, Alberta.** Land is much smaller but they have good collaboration. They are doing a series of studies, including the Land Use Compatibility Plan, Aero Hub Study (an academic type study), Aero Visibility Study, and Collaborative Land Use Plan.
10. **LAX.** They really took off during the Second World War. The rest of California really grew up in the 50s and 60s. Really constrained, very hard to expand.

Jay noted the reason we included LAX in this overview of other aerotropolisi is because it is a perfect example of what we don't want to do—an airport that is avoided, congested, not attractive, which is what we don't want for Denver.

11. **Dallas/Fort Worth.** DFW has really embraced attracting businesses. Kind of a company town. Lot of tax incentives, very friendly to businesses, lots of high-end clientele. The aerotropolis area surrounding the airport is kind of running out of land.

## Work Session—Scenario Development

### Small Group Task Description (Rick Pilgrim)

1. Need help in putting together some scenarios. We are suggesting two different time frames: near-term (10 to 15 years) and long range.

**Objective:** Develop collaborative actions to advance development.

**Near Term:** Develop three catalytic actions that are *foundational*, *transformative*, and *collaborative*.

**Long Range:** Describe a path to realize the Vision: *Distinguishing features of Colorado Aerotropolis and achieve self-sustaining momentum*.

2. Rick Pilgrim presented a proposed land use map on the projection screen. A smaller printout of this same map was on each group's table to refer to when developing scenarios.
3. Another map of major development that showed connection points to the airport proper itself was projected on the screen to help with development of the scenarios..
4. A third map of existing and committed transportation plans was presented.



5. Stephanie started the second text poll with the question: *What is the most important collaborative action in the near-term?* Replies from the participants starting rolling into the projection screen.

**Poll:** What is the most important collaborative action in the near-term?

**Responses:**

- Multi-governmental regional committee structure beyond this plan
- Infrastructure (x3)
- Cross Jurisdictional Planning
- Governance/financing structure
- Funding
- Pass IGA Amendment this Fall
- Cost sharing
- \$
- Marketing and infrastructure
- Establish some form of governance/oversight
- Link west side of DIA via Piccadilly
- Cargo
- Peña Corridor solution
- Priority development areas
- Collaborative funding structure
- Roads
- Identify long-term funding stream
- Pass IGA Amendment vote
- Extend water supply to strategic areas outside DIA
- Understand specific regional water and wastewater needs, sources, timing, constraints, and funding operations

### Exercise: Catalytic Actions

The participants broke off into 6 groups and brainstormed for 25 minutes to develop scenarios using 3 catalytic actions that are *foundational*, *transformative*, and *collaborative*.

### Report Back

#### Yuri Gorlov

1. Super regional infrastructure authority and Infrastructure governance. How does that look? Can we hire someone to help us?
2. Super regional master plan—to incorporate all the land use that all the jurisdictions have.
3. Focus on pinch points with E-470 and Pena Boulevard and how to avoid the pinch point.

#### Kip Cheroutes

1. 72nd And Himalaya—TOD area. Starwood coming. Is there a way we could draw Denver Water into the conversation to supply water in that area?
2. Continue dialogue with FAA. Where will FAA allow us to do this accessory development over time?

#### Deb Perkins-Smith

1. Foundational Infrastructure governance.
2. TOD—on Pena Station for example.
3. Marketing—where do you really focus your effort?

#### Bob Watkins

1. Economic development area—spaceport maybe a mid-term.
2. Key infrastructure areas.
3. Funding mechanism—local vs. regional.

#### Kristin Sullivan

1. Piccadilly Road—if it were built from 120th Avenue all the way to I-70.
2. Super regional governance structure—committees, political group, marketing, financing.
3. Clear zones to become a common zone district—adopt the same regulations.
4. Comment: Piccadilly was good but harvest Road should also be considered.

## Exercise: World Map

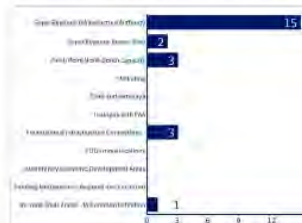
Rick Pilgrim announced the next idea to brainstorm: *How do you put us on the world map?* Responses from the participants included:

1. Regional cooperation, gateway to the plains and the west, and transportation hub.
2. Strength of the aerospace and commercial space potential in the Denver area, as well as medical and other high-tech type work (aerospace and high tech).
3. Existing authorities—you know who to go to, have a defined space. One-stop shopping. Export of intellectual capital.
4. Spaceport. Not limiting it to just aerospace but capitalizing on the cluster studies that have been done. Developing marketing strategy.
5. Idea of being regenerative. Maybe sustainable is just not good enough. Net Zero as an opportunity; solar farms. Expand to something that is bigger, maybe state level, or regional level.

## Text Poll: *What is the Most Important Near-Term Initiative?*

1. All the near-term ideas the groups have presented were turned into a poll and Stephanie asked the participants to vote once via text.
2. Super regional infrastructure authority has the most votes = 15.

### What is the most important near-term initiative?



#### Answers

Super Regional Infrastructure Authority	15	63%
Super Regional Master Plan	2	8%
Pinch Point North South Capacity	3	13%
Marketing	0	0%
72nd and Himalaya	0	0%
Dialogue with FAA	0	0%
Foundational Infrastructure Connections -	3	13%
TOD - more locations	0	0%
Identify Key Economic Development Areas	0	0%
Funding Mechanisms - Regional and Localized	0	0%
Re-zone Clear Zones - to Common Definition	1	4%

#### Responses Percentage

Responses	Percentage
15	63%
2	8%
3	13%
0	0%
0	0%
0	0%
3	13%
0	0%
0	0%
0	0%
1	4%



## Roundtable

Before ending the meeting, Stephanie asked the participants to provide one characteristic of this study so far that each participant is most excited about. Responses included:

- Opportunity (3)
- Potential
- Openness
- Momentum
- Political
- Possibilities
- Catalytic
- Agreement
- Optimism

- Real (2)
- Collaborative (4)
- Unknown
- Transformative
- Connected
- Global
- Surprise
- Practical
- Energizing
- Positive

## Next SRC Meeting

Chris announced the next SRC meeting and announced to the group that there is a SharePoint site for the study that is available for anyone who would like to have access.

1. July 23, 2015, at 9:00 a.m., Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
2. Topic: Special Districts/Landowners

## Next Steps/Meetings

The following topics will be discussed at future SRC meetings:

1. Special districts/landowners
2. Scenario analysis results
3. Speaker
4. Updated scenario analysis results
5. Funding and finance
6. Framework recommendations

Future SRC Meetings:

- Meeting #4: Jul 23, 9:00
- Meeting #5: Aug 20, 9:00
- Meeting #6: Sep 17, 9:00
- Meeting #7: Oct 15, 9:00
- Meeting #8: Nov 12, 9:00

Future Steering Committee Meetings:

- Meeting #2: Aug 27, 9:00
- Meeting #3: Oct 22, 9:00
- Meeting #4: Nov 19, 9:00

## Adjourn

1. Rick thanked everyone for the big ideas/catalytic actions. A one-on-one follow-up with this group might be a good thing as we progress. This group's input has been invaluable. The roadmap that has us going through November presented on the screen is really nice.
2. Jay added how the group's progress has been phenomenal, and he really appreciated the effort that this group has put in.





















# Welcome



## Colorado Aerotropolis Visioning Study





# Today's Purpose

- Scenario Development Work Session



# NEWS UPDATE

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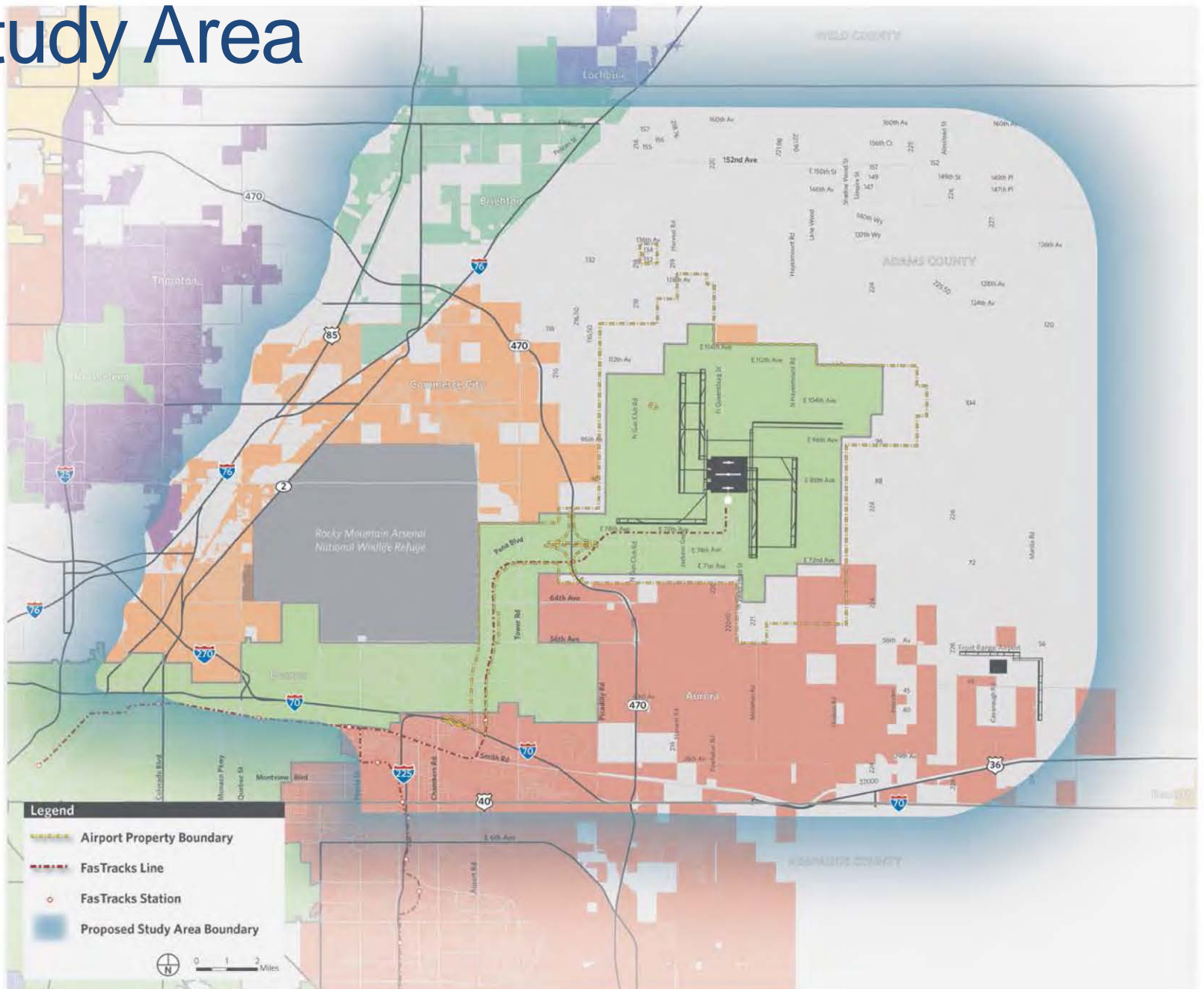
# Vision Statement

## COLORADO AEROTROPOLIS | Visioning Study



A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.

# Study Area



# Proposed IGA Amendment

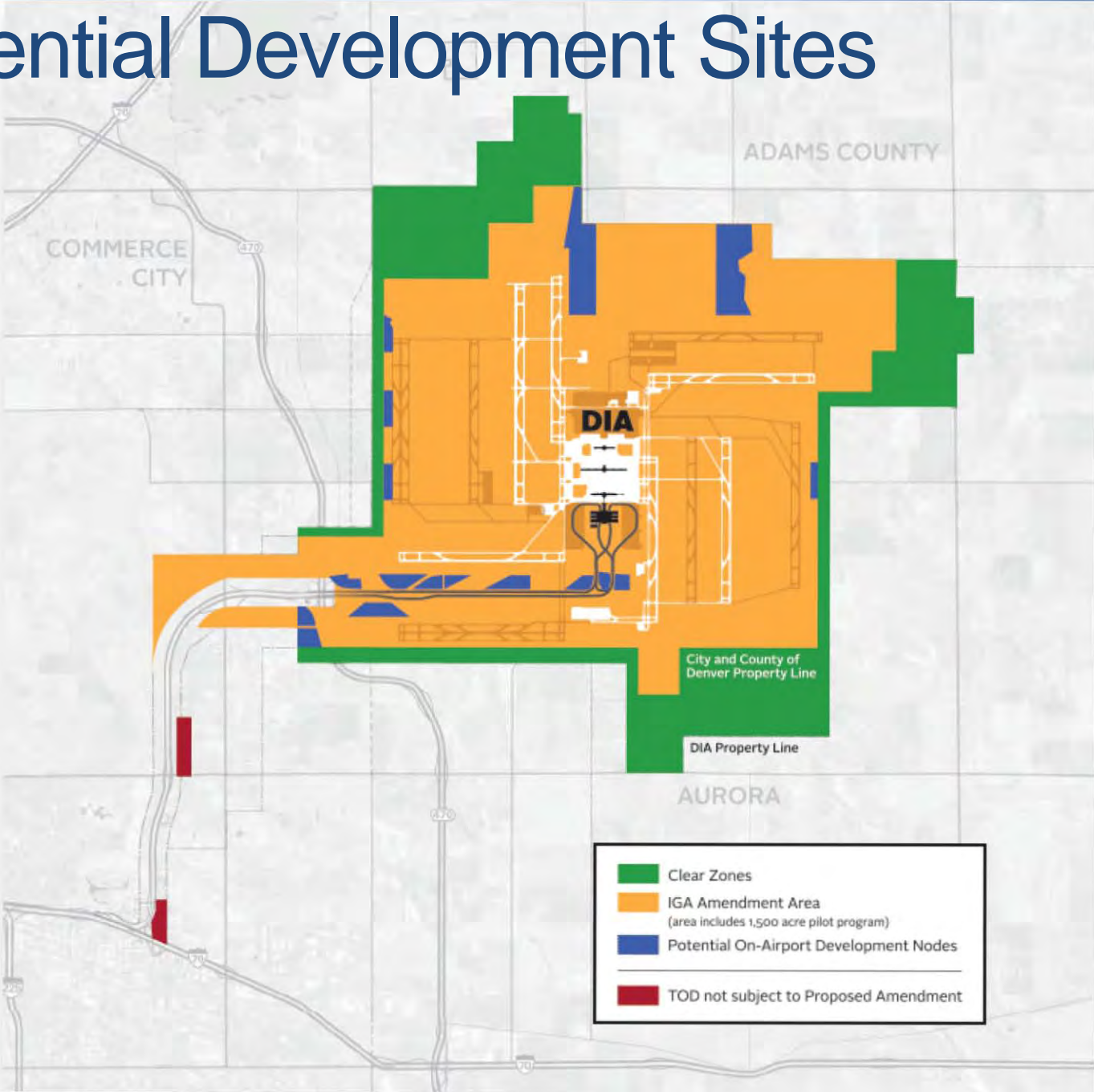


New Regional Agreement on DIA Development

Metro Denver Economic Development Corp.



# Potential Development Sites





# BRIEFING ADDENDUM

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Integrity + Vision + Stewardship = Progressive Community

# BRIEFING SUMMARY

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# LAND USE & EC. DEV

\* DEN identified catalytic dev. points - 1 Good for air scenarios.

**DEN Real Estate:**  
 9,000 acres available for non-airline revenue  
 - Phase 1 - hotel + transit ✓  
 2 - TOD - Park station  
 - East line connectivity  
 3 - on-airport commercial dev  
 60-90 yr build out  
 - nodal strategy that takes advantage of transp + access.

**GLOBAL CONNECTIVITY**  
 3rd strongest domestic hub growing international (3.7M → 9.5M in 5yrs)

**DRCOB**  
 + 1.3M ppl by 2040 in region

**BTD**  
 1st Final Mile

- Dev has been slow around DIA  
 - Shrinkage of bus + business focus on mixed use, intellectual capital  
 70% of commercial dev will land off airport. Regional

- High Growth County "Land of Opportunity"

- 21% 2000-2010 - growth
- 65% growth young 32-4 yr old median
- 1,111 miles<sup>2</sup> - total land area
- Agriculture
- Mfg - transp of goods > jobs
- Ag + oil + gas (processing)
- Warehousing
- Revision = "New Tech Center" by 2015
- Pop. 400k current - 67% growth expected

CE growth up  
 200 growth plan

Commerce City  
 - Fastest growing 1990s in Adams county - 51,000 pop  
 - became increasing  
 - Youngest city in Adams County  
 - Dev challenge: What do you start? So much land!

100,000 jobs projected  
 CSU teaching up  
 53 sq mi  
 53 m. Per 2014

Repair of 7 other die to navigation off-airports needed 2010-2030

Intellectual capital  
 Intel vs  
 Intel vs  
 Intel vs

Aurora  
 - 3rd largest city (340k) population  
 - Tax - declining in some districts  
 - 20% pop is foreign born

- Employment up:  
 all new slight rail + commuter rail stations  
 - Possible City + County  
 Prosper influence

staple built at  
 - Pop. 60,000 (+ 10,000 increase since 2006)  
 Intellectual growth  
 - Increasing housing prices  
 - Housing stock limited  
 - 5-10 yrs will be built out  
 - Metro districts + impact fees funding

Slow movement of pop growth in future

200-2010 most of Aurora pop growth is south

Legend	
	Airport Property Boundary
	FasTracks Line
	FasTracks Station
	Proposed Study Area Bound





# WELD COUNTY TRANSPORTATION

## DELOG

- MPO • creates long range transp plan
- creates Visionary & 5 yearly conservative plan
- TIP • 3-5yr plans fed fund
- 2014 airport growth projected & experienced +14% in 2014

## RTD

1st Final Mile (not just bus doors)

New Quebec st. interchange

Widening plan Peña to I-25 by 2035

- robust transp network
- P-Tower, 56', Peña
- CIP - 2035 will shift focus from West to East (east of airport)
- Multi-modal hub by 2075

Commerce City 2040 roadway classification plan

- Bike Red Plans
- limited arterials

Shaw Festack's NorthAero?

Rocky Mountain Arsenal National Wildlife Refuge

barrier to transp connection regionally

Good roadway dev. Infrastructure funded by federal & state districts

- Regional not work challenges

Corridor of Opportunity

470 east of multi-center airport

Pinch point will create multiple barriers at 4th street

possible 47 runways 2020-2030

heavy rail & I-70 access

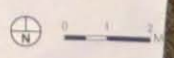
Aurora

- need to rethink street-financing
- wants multiple interchanges on I-70
- light rail commuter rail stations. Mixed use zoning
- Station area planning
- Protecting airspace - DIA, Buckley & access

2016 - Peña Tower TAMP

- E 470 paying for study
- Commerce City will contribute to maintenance funding

Legend	
	Airport Property Boundary
	FasTracks Line
	FasTracks Station
	Proposed Study Area Boundary



# UTILITIES

24 mill gallons  
new Metro Wastewater  
- needs connection to Aurora

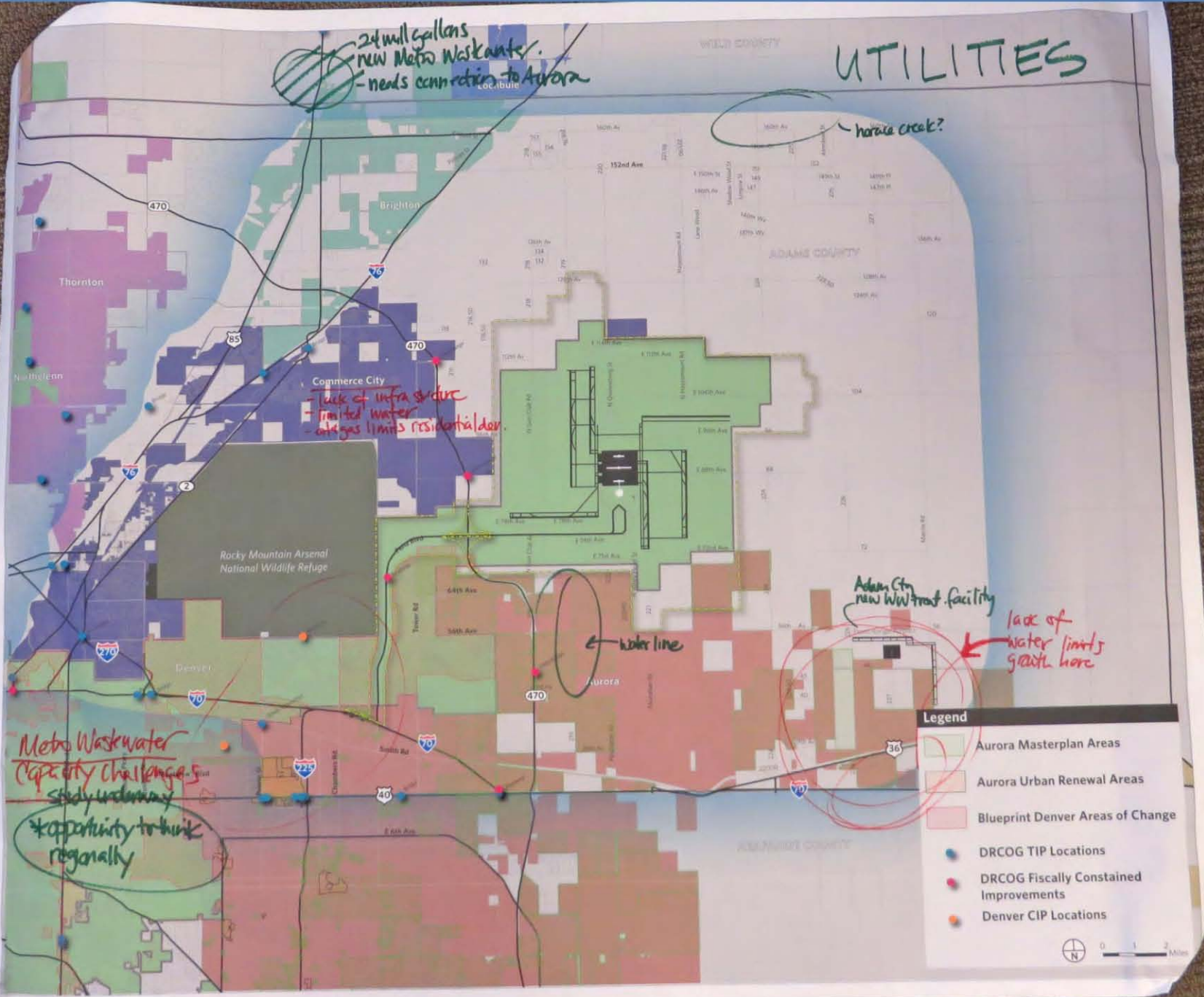
horace creek?

Commerce City  
- lack of infra strc  
- limited water  
- oil gas limits residential dev.

Aurora City new WW treatment facility  
lack of water limits growth here

water line

Metro Wastewater  
Capacity Challenge  
study underway  
\*opportunity to think  
regionally



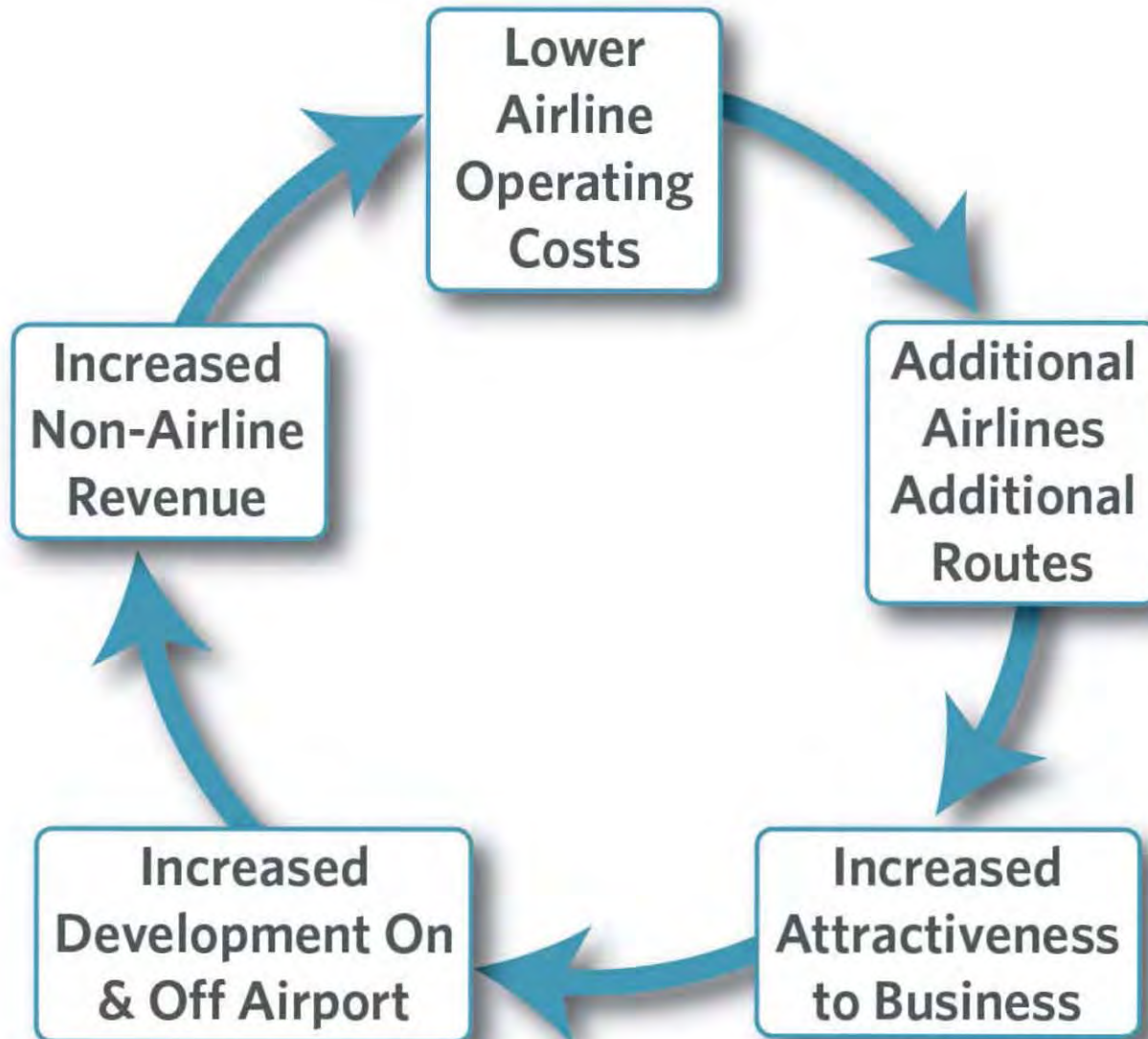
**Legend**

- Aurora Masterplan Areas
- Aurora Urban Renewal Areas
- Blueprint Denver Areas of Change
- DRCOG TIP Locations
- DRCOG Fiscally Constrained Improvements
- Denver CIP Locations





# Economic Development Cycle



# OVERVIEW OF OTHER AEROTROPOLISES

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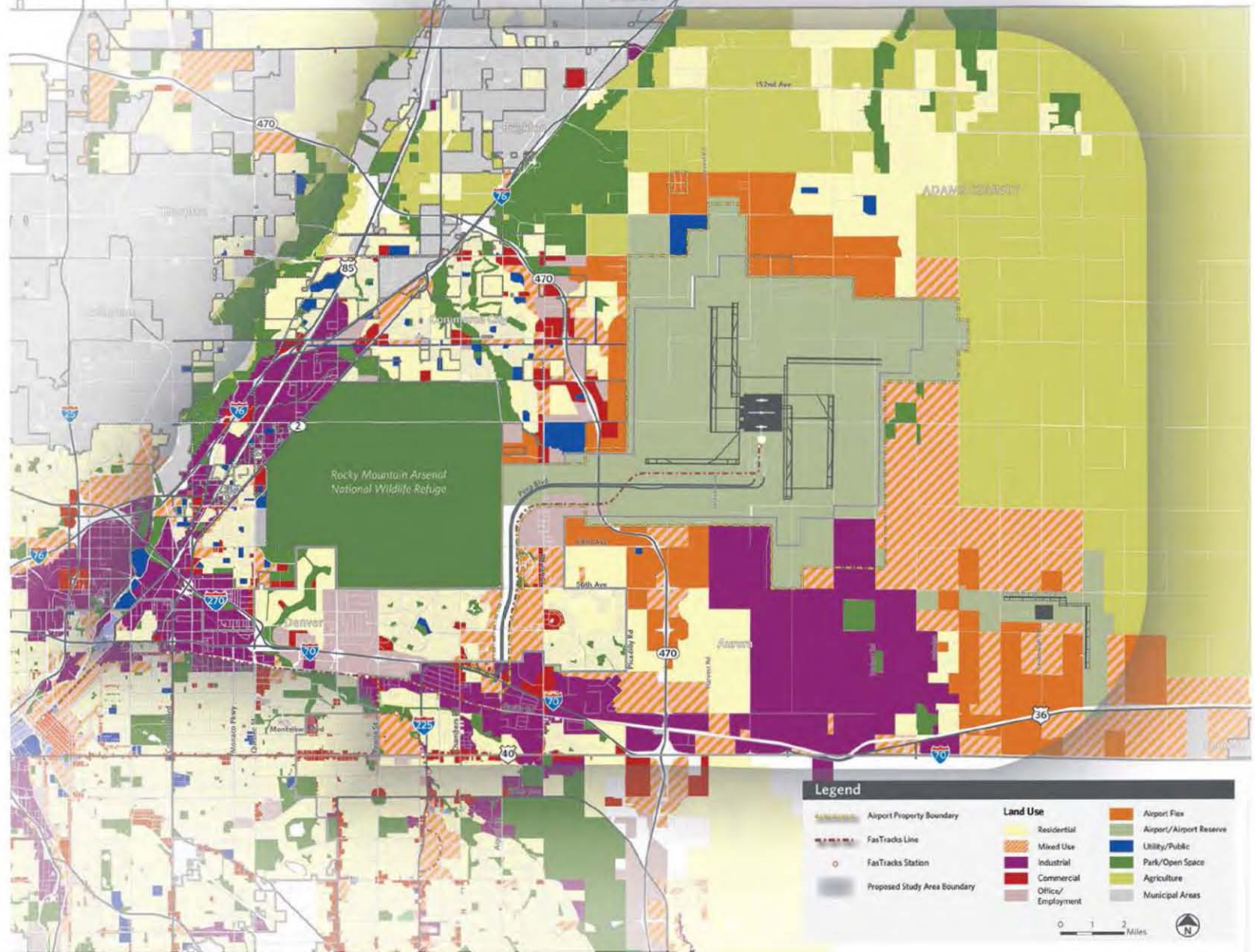


# WORK SESSION

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# Land Use - Proposed

WELD COUNTY

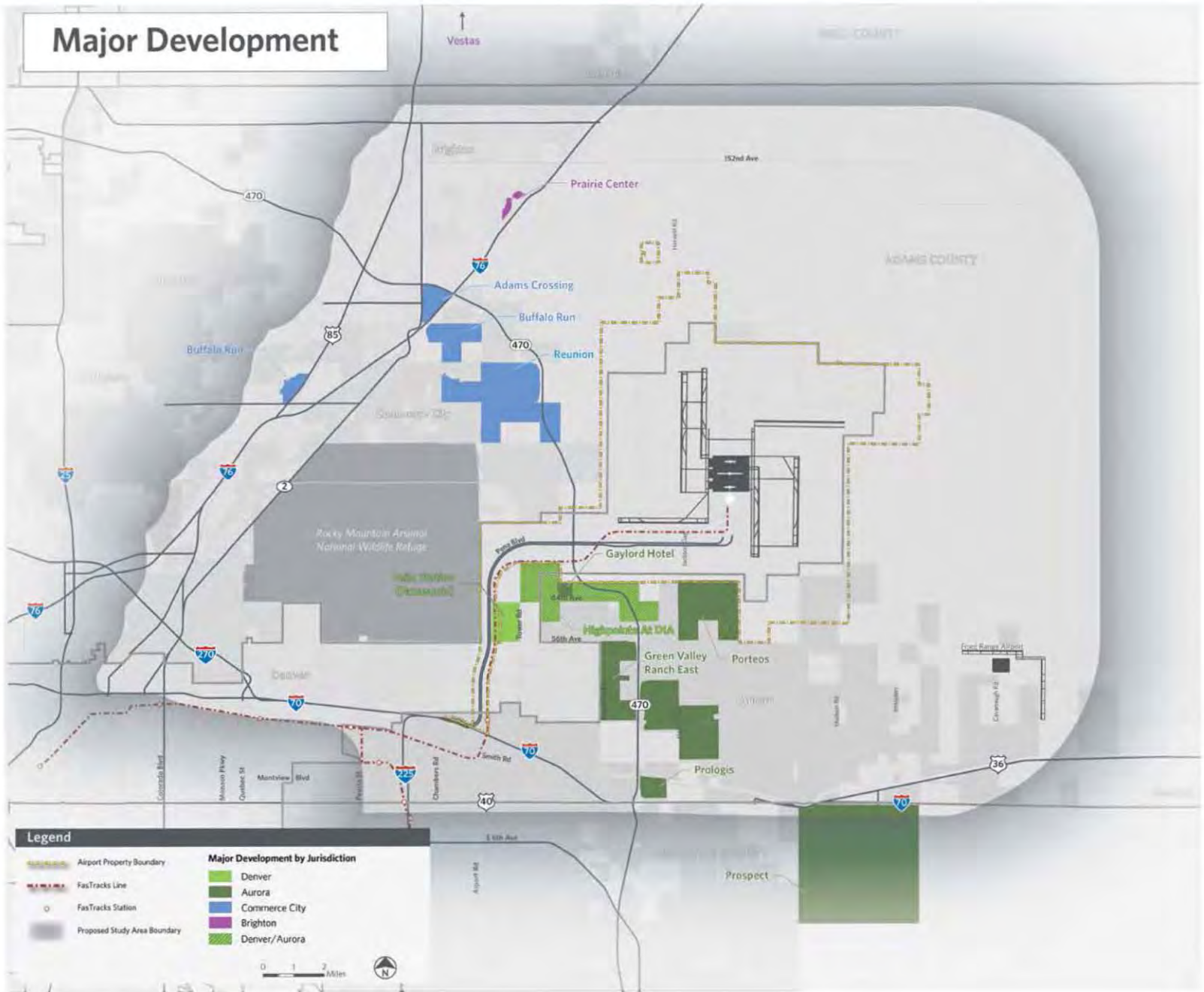


## Legend

- |                              |                   |                         |
|------------------------------|-------------------|-------------------------|
| Airport Property Boundary    | <b>Land Use</b>   | Airport Flux            |
| FasTracks Line               | Residential       | Airport/Airport Reserve |
| FasTracks Station            | Mixed Use         | Utility/Public          |
| Proposed Study Area Boundary | Industrial        | Park/Open Space         |
|                              | Commercial        | Agriculture             |
|                              | Office/Employment | Municipal Areas         |

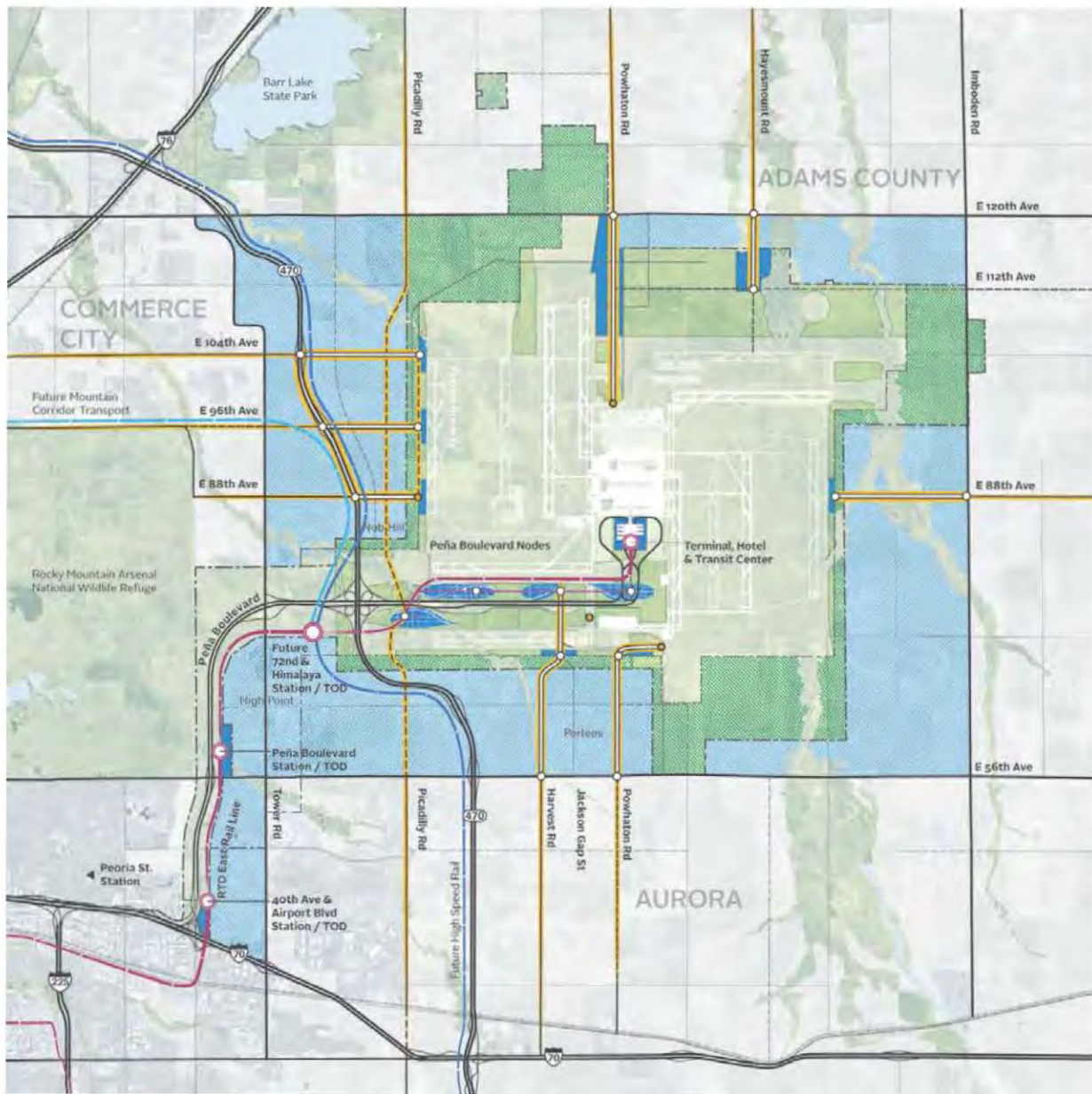


# Major Development





# DIA Development Opportunities

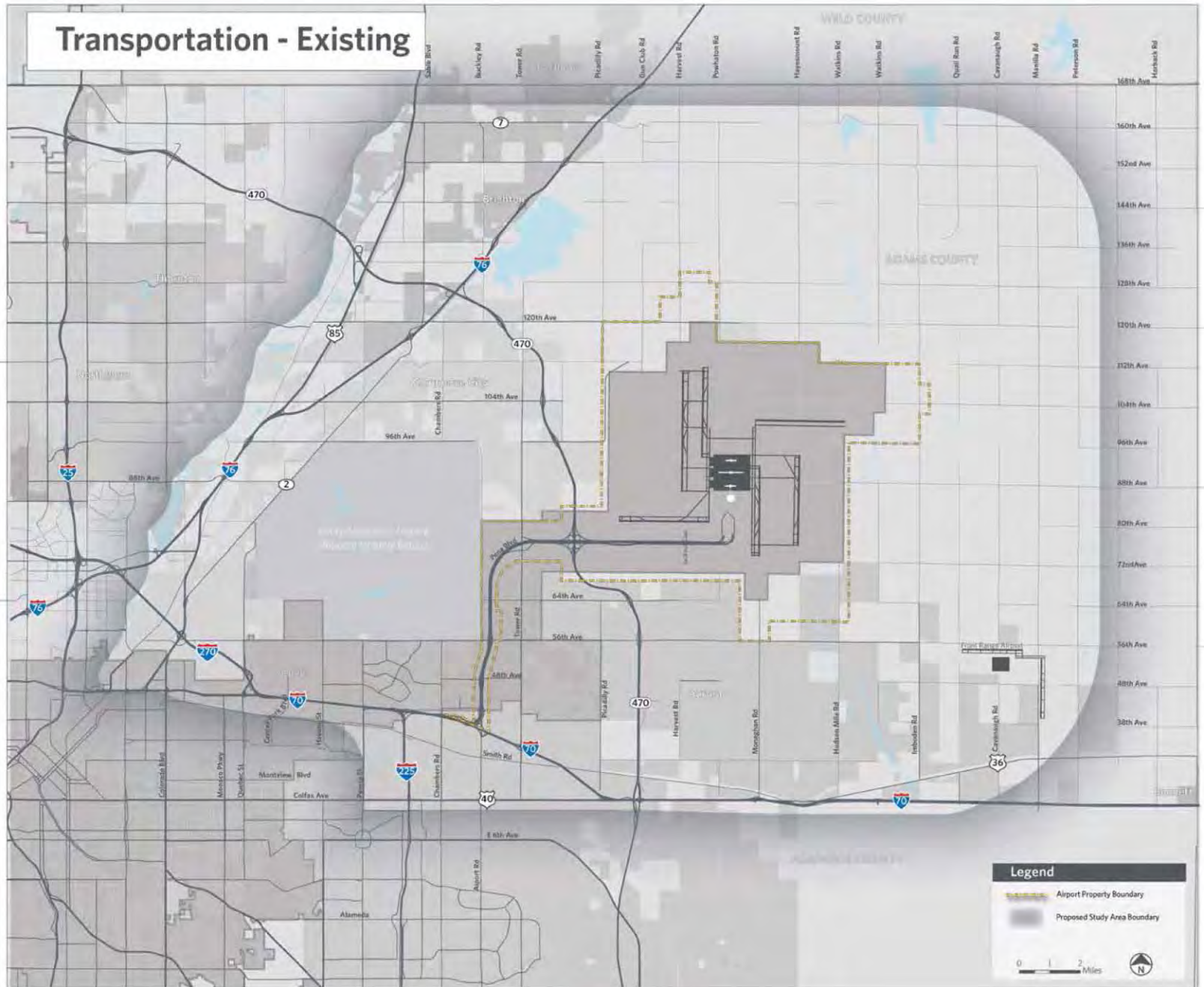


- On-Airport Development Opportunity
- Neighboring Development Opportunity
- Adams County Clear Zone
- Airport Open Space
- Major Surface Connector
- Highway
- Arterial
- RTD East Commuter Rail
- Future High Speed Rail
- Future Mountain Corridor Train
- Bus Rapid Transit
- Secure Gate
- Access Point
- RTD Station and Transit Oriented Development

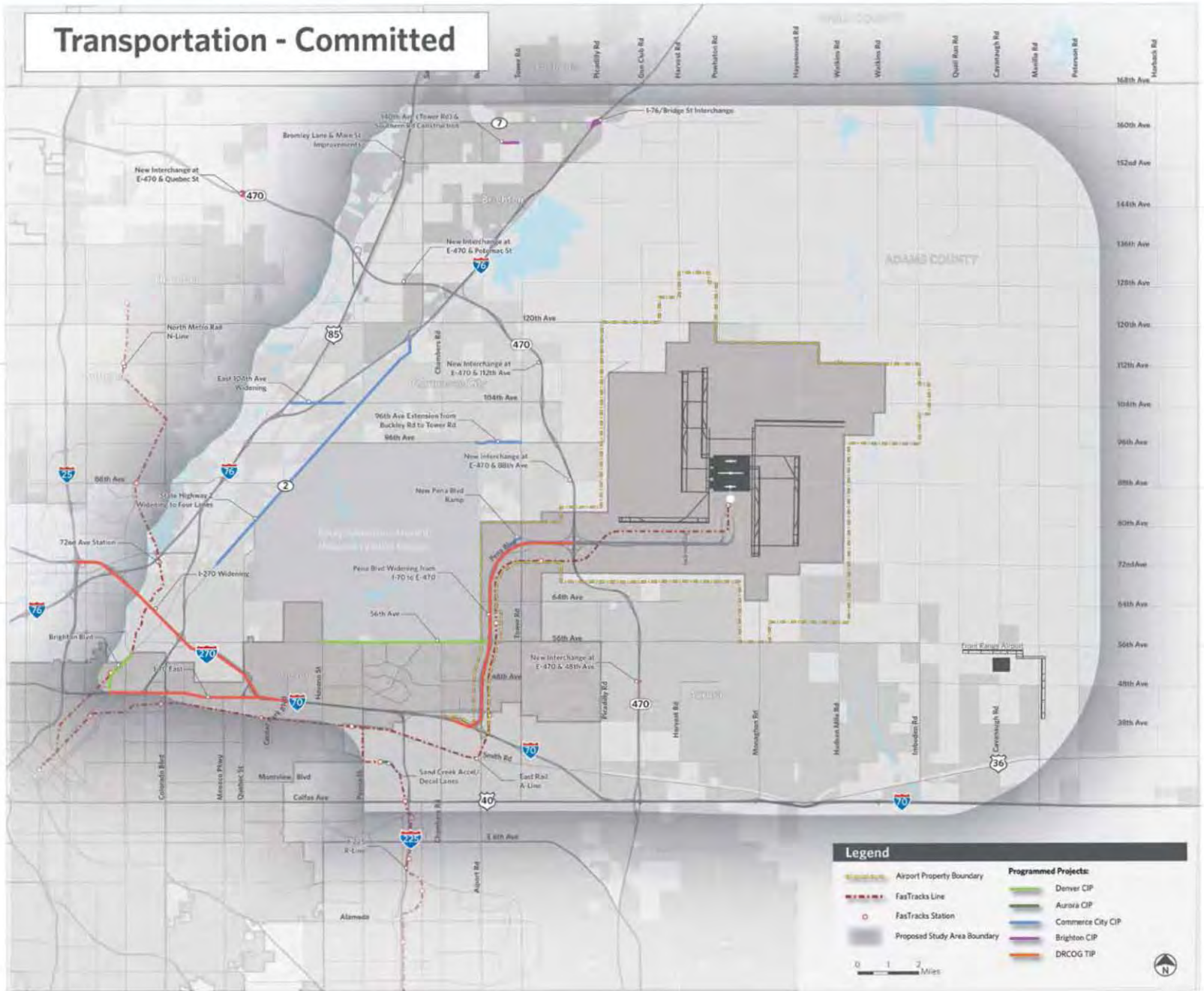
\*Drawing features full 12 runway buildout



# Transportation - Existing

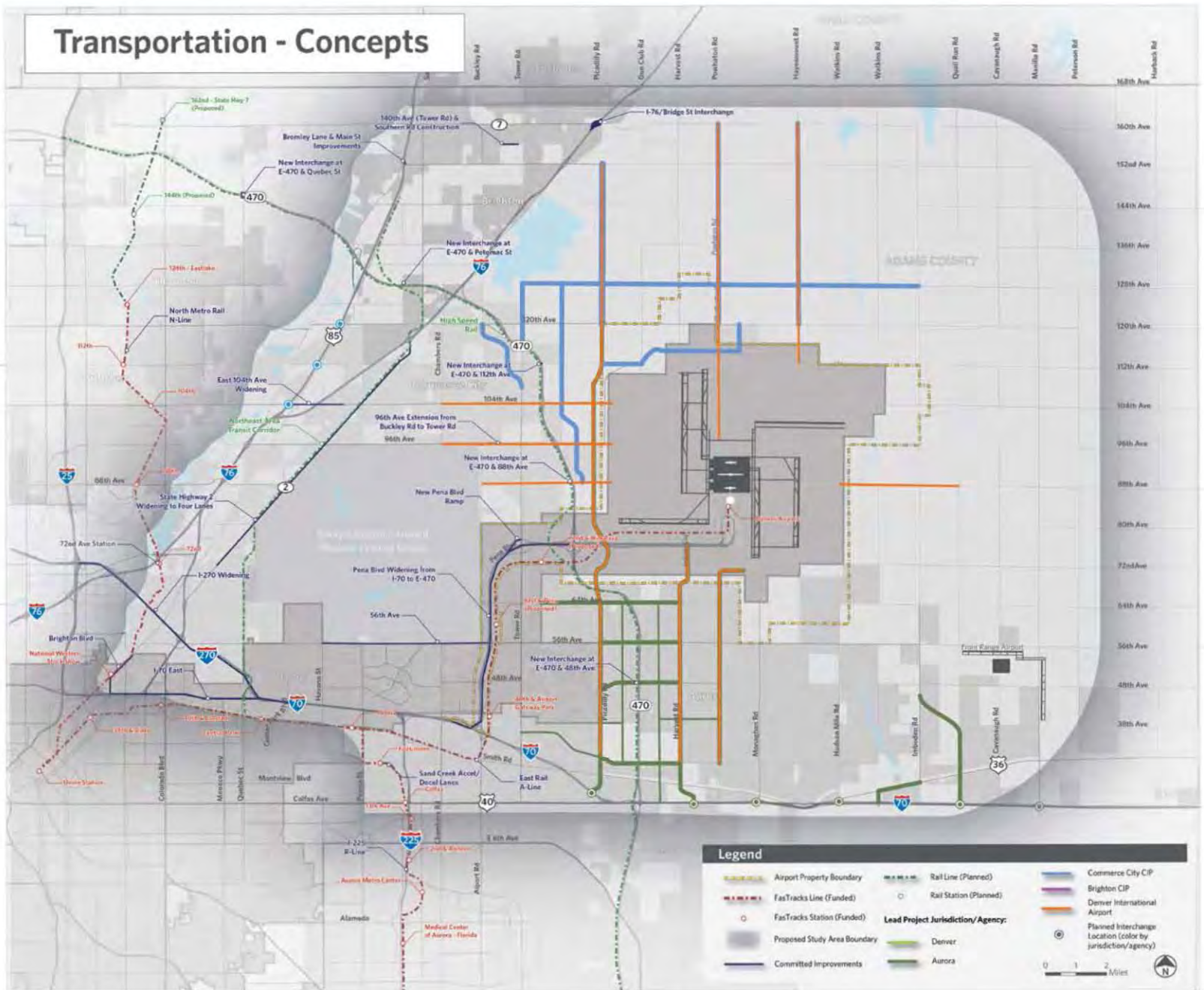


# Transportation - Committed





# Transportation - Concepts



# Scenario Development





# Input to Scenarios

- Objective
  - Develop collaborative actions to advance development
- Near Term
  - Develop 3 catalytic actions that are:
    - Foundational
    - Transformative
    - Collaborative
- Long Range
  - Describe a path to realize the Vision:
    - Distinguishing features of Colorado Aerotropolis
    - Achieve self-sustaining momentum

MOVING FORWARD

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# Next Meetings

## Steering Committee

- Meeting #2: Aug 27, 9:00
- Meeting #3: Oct 22, 9:00
- Meeting #4: Nov 19, 9:00



## Study Review Committee

- Meeting #4: Jul 23, 9:00
- Meeting #5: Aug 20, 9:00
- Meeting #6: Sep 17, 9:00
- Meeting #7: Oct 15, 9:00
- Meeting #8: Nov 12, 9:00

# THANK YOU

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1. Welcome & Introductions
2. Purpose of Meeting
3. Decision Points From SRC #1
  - a. Study Name
  - b. Study Vision
  - c. Study Area
  - d. Media Protocol
4. Roundtable Briefings
  - a. Major Stakeholders
    - i. Adams County
    - ii. Aurora
    - iii. Brighton
    - iv. Commerce City
    - v. Denver
  - b. Airports
    - i. DIA Master Plan
      1. DEN Real Estate
    - ii. Front Range Airport
  - c. On-going Studies
    - i. I-70 East
    - ii. Pena Boulevard
  - d. Transportation Agencies
    - i. CDOT Aeronautics
    - ii. DRCOG
    - iii. E-470 Authority
    - iv. HPTE
    - v. RTD
5. Work Session
6. First Steering Committee Meeting
  - a. June 4, 2015 8:30 Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
7. Next SRC Meeting
  - a. June 18 9:00 - 11:30 Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
  - b. Topic: Scenarios
8. Next Steps and Action Items
9. Adjourn

## Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Study Review Committee Meeting #2 - Briefings
Date:	May 27, 2015
Location:	Rocky Mountain Arsenal National Wildlife Refuge
Attendees:	See attached sign-in sheet
Distribution:	SRC members, File

### Welcome and Introductions

1. Jay Hendrickson welcomed and thanked everyone for coming. Today's meeting is a briefing workshop to get information from different jurisdictions—information that could be useful for this study. Each jurisdiction will be doing a 5-minute presentation.
2. The project team has compiled the feedback and input from the first SRC visioning workshop (held on May 7, 2015) and is in the process of reviewing and compiling each jurisdiction's plans.
3. In June, the Steering Committee will be convened for the first time in a workshop to discuss the outcome of the first two SRC meetings.

### Purpose of Today's Meeting

1. Stephanie White introduced the participants to the handouts distributed at each table—agenda and worksheet. The worksheet is for participants to jot down any opportunities and obstacles that they feel the study might encounter.
2. Three maps posted on the wall will serve as notepads for opportunities and obstacles relating to transportation, land use, and utilities.

### Decision Points from SRC Meeting #1

1. **Study Name.** Chris announced the results of the votes from the last SRC meeting for a favored name. The vote was for the name "Colorado Aerotropolis Visioning Study." At this point, the project will be called that.
2. **Study Vision.** During the last meeting, the participants were asked for words that they felt are important to them. The project team incorporated the suggested words and revised the Vision Statement for the project:  
*Create a sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning.*
3. **Study Area.** Another discussion at the last meeting was the proposed study area. The project team has incorporated the suggestions from the group. Chris presented the revised study area and noted the soft boundary added to the map based on suggestions from the last meeting—that this aerotropolis vision extends way beyond DIA.
4. **Media Protocol.** Emily Wilfong (CDOT Region 3 communications manager) discussed how the team should handle communications. She will be working with Amy Ford (CDOT), HDR, and the study team to identify what message we should be disseminating internally. They have identified seven questions for a Question & Answer (FAQ) sheet and asked the group to review these questions today and make edits

or suggestions. CDOT would be mainly handling communications for the public but would also like to get a representative from this group. Emily will send out a draft of the FAQ to get feedback on it.

## Roundtable Briefings

These conversations are meant to be 8 minutes to 10 minutes. The worksheet can be used to jot down questions because we might not have enough time for Q&A.

### 1. MAJOR STAKEHOLDERS

#### a. Adams County (Kristin Sullivan)

- Adams County population in 2014 is 480,000. One of the prevailing characteristics of Adams County is it's a fast-growing county. Population is expected to double by 2040.
- A fairly young county: lots of younger families living in Adams County.
- A fairly diverse county; continues to grow Hispanic population.
- A large county as it relates to land area with 1,184 square miles of land, of which 68% is used for agriculture. This gives you a sense of how much land there is in Adams County for growth.
- A powerhouse for jobs. During the recession, had a net positive job growth while all other counties in the metro area lost jobs during the recession.
- All major highways in the state go through Adams County. A lot of jobs relate to manufacturing and transportation of goods.
- We see trends in commercial and industrial development.
- With the oil and gas activity on the eastern side of DIA, we see a lot of transportation-related activity serving the oil and gas industry.
- There is a 5,000-acre master planned community along the I-70 corridor.
- Limited by lack of water supply; no public water in the general area of the I-70 corridor.
- An economic development project is the spaceport in the Front Range airport and general aviation business around Front Range airport.
- Working on some paving project along the Imboden corridor, eastern edge of DIA. We are collaborating with Aurora in the upgrade.
- Water treatment plant in the Front Range Airport.
- Between now and 2025, dramatic shift from the western portion of the county—the new focus in our CIP.
- County will participate in stormwater improvements.
- 2075 vision—a full build out; multi-modal transportation. The vision is for Adams County to be the new tech center for the metro Denver area.

#### Stephanie asked the meeting attendees for the biggest takeaways on Adams County

- Wastewater plant at the Front Range Airport
- East and west Adams County—what defines the two? Response: It's a dividing line between the more urban Adams County and the eastern side of DIA. Generally, on the eastern side of DIA. Totally different character.
- Regarding water, is generally available within the City of Aurora boundaries (where the water supply has currently been developed); no other infrastructure in the ground. Adams County has three wells that provide water service but not long-term, sustainable water supply.



- Are there any opportunities for surface water storage? Response: Not aware of any entity pursuing such a plan.
- Regarding population for the planning window, what is the population growth projection for Adams County? Response: 67% growth is expected in the next 30-year period.
- Total land area

b. **Aurora** (Jim Sayre)

- A diverse city.
- Median family income is a critical trend; Aurora is getting poorer over time compared to some other suburbs.
- Aurora has 7.3% of the population graduate with a professional degree compared to 15% to 20% in other cities.
- Third largest city in Colorado; relatively young population; 20% of population is foreign-born
- Need to create primary jobs.
- Current activities include the Jackson Gap-Porteos Gaylord development. Have water rights that Aurora essentially managed.
- Has a huge recycling system.
- Growth Trends relative to DIA: primarily residential growth. Aurora is committed to the noise contour boundaries. Master planned community in the Cherry Creek school district, by the Centennial airport. Issued 1600 new residential permits in 2003; starting to blossom. Issued 20,000 single-family home permits 2003-2013.
- Beginning to slide into the recession in 2007. Down south, a lot of permits being issued. Beginning to fill up in 2010. Can no longer annex into Douglas County. Filling up by 2013 and it's going to spill northward. That will be very slow. The I-70 corridor will remain industrial.
- Near-term transportation planning and infrastructure projects—street construction priority program for the area south of DIA.
- Funding mechanisms for streets south of DIA—need to completely revamp the way we fund streets because the taxpayers won't do it, and neither would federal funds.
- Looking to make Aurora as a county by 2075. Interested in creating a city and county of Aurora. There is a long-term focus on transit and a focus to become a county.
- Committed to protecting airspace at DIA.
- Transit Station as mixed-use places—Dayton, Nine Mile, Iliff, Florida, Centrepoint at the Aurora City Center, Abilene at 2nd Avenue, 13th Avenue, Fitzsimmons/Colfax, Montview, Peoria-Smith, Gateway Park East, High Point.

**Stephanie asked the meeting attendees for the biggest takeaways on Aurora**

- Aurora's desire to be a city and county.
- Aurora protecting airspace at DIA.

c. **Commerce City** (Steve Timms)

- City is moving out toward the airport.
- Fourth fastest growing city in Colorado (144% population increase since 2000).
- Commerce City has the majority of recent growth in Adams County.
- Highest income increase in the Denver metro area (rose by 2/3 in the last 10 years).

- Population is 51,762.
- Historic area in southern part of the city. Majority of growth is in the northern edge of the city. Western boundary and northern boundary, lots of residential. 175,000 people for future residential.
- Future non-residential growth: about 12,000 acres of developable land.
- Several target industries—advanced manufacturing, logistics and distribution, business and professional services, retail/hospitality/leisure.
- As a transportation corridor, Commerce City is adjacent to DIA. Can reach either coast in one day and be home for dinner the same night.
- Roadway classification plan done in 2010 that relates to the airport area. Tower road is in the process of being developed into 6 lanes into the future.
- Highway accessibility includes I-70, I-270, I-76, Highway 85, Highway 2, E-470, and Peña Boulevard.
- Has rail access to two major rail lines—BNSF and Union Pacific.
- Public Transportation
  - Multi-modal transportation, including FasTracks. RTD operates four local routes, one express, one skyRide, and two regional routes connecting to downtown Denver, Boulder, Brighton, DIA, Stapleton, and the existing light rail station at Colorado Boulevard and I-25. There will be a future FasTracks location at 72nd Avenue and Colorado Boulevard and a future mass transit along Highway 2 and along E-470.
  - Bike/pedestrian trail plan: Future connections to open space involved regional connection through Denver, through DIA, around the arsenal, around south Platte.
  - Significant projects include Reunion (Shea Homes' master-planned development), Belle Creek (Gorgeous new-urbanist community), and Buffalo Run Golf Course (one of the state's top facilities).
  - Other city projects include Victory Crossing, Mile High Greyhound Park, Derby Downtown District, and North Metro Line Station Area.
  - Challenges near the airport include:
    - Lack of infrastructure, consisting of roadways, utilities, and regional drainage facilities.
    - Barriers to regional arterial network.
    - Water! Commerce City has a separate water district and there is a limited supply of water available for development.
    - Various utility, oil and gas interests, and pipeline easements.
    - Residential/non-residential balance; there is so much land; where to start?
- General improvement districts for future improvements.
  - Regarding DIA North development, how would that align with the preliminary aerotropolis notion that we have? Response: A lot of the planning for that type of development still needs to occur.
  - What is involved not only on the highway for the Commerce City section? Response: The Master Transportation Plan includes a listing of major interchanges; the most intense and dense area of the city up to the I-76 interchange.

**Stephanie asked the meeting attendees for the biggest takeaways on Commerce City**

- South Adams County Water and Sanitation District.

d. **Denver** (Tykus Holloway; Peter Baertlein)

- Denver population shows 663,000 from the Census; due to statistical questions, debating whether this may be higher.
- Heavy growth in the downtown area; lot of debate of overgrowth--residential and traffic.
- 23,000 millennials come to Denver and don't see any end in sight to this cohort growth.
- I-70 East Line Corridor—one of areas of opportunity corridor. Traffic, housing, jobs have seen a tremendous amount of growth.
- TODs—quite a few across the city; some closer to the airport, a lot is planned for what's going to be developed around those TODs.
- Growth trends around Green Valley Ranch. Green Valley is filling up at this point. In 5 years to 10 years, we could be pretty much built out with the space we have right now.
- First Creek Bike trail is going to be finished this year as a part of the First Creek Restoration Project.
- Denver finances improvements in this area through the Gateway Impact Fees. The City is slowly building out the arterial roads such as 56th Avenue and Piccadilly. What we don't have is the big picture. Roadway network is getting complete but still have a long way to go with it.
- Denver did an planning environmental linkage study for 56th Avenue but Denver does not have enough funding to complete the project.
- Tower is a big item on Denver's agenda at the City's North and South City Limits
- 
- Metro Waste Water District is opening a new plant at 168<sup>th</sup> and Hwy 85; and the Second Creek Sanitary Sewer Study will line look at the possibility of constructing a new trunk line as far South as Aurora. The 18-month study will determine the best way to provide service to this portion of the metro area
- Denver Water is installing a water reuse line—part of the program to treat and recycle water.

**2. AIRPORTS**

a. **DIA Master Plan** (Tom Reed)

- General overview of airport master plan for DIA.
  - 2006 hired a consultant to conduct a master plan update.
  - DIA appreciates the working relationships that have been established with some of the participants in this group.
  - Brought a board of the airport layout plan as approved by FAA, it's the major planning document for DIA.
  - Brought copies of master plan update executive summary that everyone can take.
- DEN ranks as second-largest airport in the world with 53 square miles (34,000 acres/137 square kilometers/13,700 hectares). Currently operates 6 nonintersecting runways; can expand to 12.
- DEN is ranked 15th in the world and 5th in the U.S. for passenger traffic. DEN airlines served more than 53 million passengers in 2014.

- With 15 passenger airlines, DEN provides 1,500 daily flights to more than 170 destinations worldwide.
- DEN is a primary economic engine for metro Denver and Colorado. It generates over \$26 billion in annual economic impact with 35,000 total employees (city, FAA, airlines, concessions, etc.).
- 580,000 take offs and landings—third busiest airport in the county; 126,000 annual operations in 2014.
- Very strong domestic hub operations (United, Southwest, Frontier). Ranked 3rd strongest domestic hub in the county.
- Busy trying to increase international service from DIA; increase by 40% in the next 5 years.
- Master Plan Preferred Concept for New Concourses (after build-out of A, B, and C—likely after 2025)
  - Alternative concourse layout with north/south configuration.
  - Advantages of preferred concept include increased operational efficiencies, expandability to meet future needs, reduction of burden on AGTS infrastructure, and minimal passenger travel/transfer time.
  - 105 mainline gates; up to 140 gates, if not more, for the full build out. Looking at what is more efficient for the airport.
- Master Plan Airfield needs: 6 existing runways; future runways; capability to expand from 6 to 12 runways.
- Moving to more of satellite-based transportation network under the NextGen technology.
- Later in 2020, will make decision on where to build the 7th runway. Or we may not need the 7th runway until 2030. At this time, looking at the 7th runway in 2030.
- DEN Real Estate (Dan Poremba)
  - Brought brochures from the Aerotropolis Conference in Denver.
  - To become more competitive globally, we initiated a real estate development program several years ago with a concentrated planning effort.
  - Our goal is to leverage the 9,000+ gross acres that are available after the full build-out of the airport to 12 runways.
  - The financial objective is to generate non-airline revenues to offset airport operating and capital expenses to make the airport a more sustainable airport going forward. This will allow us to keep airline rates and charges as low as possible, which in turn will allow us to attract more airlines, more routes, and more passengers.
  - As an integrated transportation and real estate hub, we can generate more passenger and cargo traffic and become a bigger, better international hub airport.
  - Three phases of DEN Real Estate:
    - ◆ *Phase One:* Hotel and Transit Center—under construction: 519-room Westin Hotel opening in late 2015; Transit Center opening in early 2016. Transit Center will anchor the new East Commuter Line (a new commuter line connecting DIA to downtown and the entire Denver region via the RTD FasTracks system, opening in 2016).
    - ◆ *Phase Two:* Transit Oriented Development—To leverage the FasTracks system, the airport is blessed with three East Line Stations and transit-oriented development (TOD) opportunities located on more than 200 acres of DIA land. The first two of these stations are currently under construction: the Pena Boulevard Station and 40th and Airport



Boulevard Station. The first TOD project is called Peña Station, which is a 400-acre mixed-use TOD community that involves 60 acres of DIA land at the station.

When the East Line opens it will connect DIA to the entire FasTracks system. For DIA, the FasTracks connectivity is a game changer for our passengers and employees, and also for the global appeal of our airport real estate.

- ◆ *Phase 3: Mixed-use Development On-Airport*

- DEN Real Estate Nodes

- ◆ Nodal development strategy seeks to leverage current and future utilities and access. More than a dozen specific development areas will be focused on for the first 25 years. This focused approach seeks to leverage current and future utilities and access and to limit infrastructure costs.
- ◆ Planning effort includes a regional perspective.
- ◆ Focus on three TODs along the north/south leg of Peña Boulevard and probably 4 or 5 nodes of development along the east/west leg of Peña Boulevard.
- ◆ Northern side of the airport—agricultural research opportunities in tandem with CSU.
- ◆ First TOD development—working closely with the three adjacent landowners and the City of Denver on a 400-acre TOD development project known as “Peña Station.”
- ◆ Anchor tenant: Panasonic—Development has been slow around DIA, but I think this shows that with increasing connectivity, all of a sudden we have a new story to tell the world, and there are companies out there that are very reactive to that.
- ◆ Most airport city/development around the U.S. has really been driven by cargo. We have a shrinking cargo business, so we have to come up with a new paradigm.

#### Biggest takeaway from DEN Real Estate

- The need to generate non-airline revenues to keep airline rates as low as possible, which in turn will allow DIA to attract more airlines & routes, and therefore more on- and off- airport development
- Interest in nodal map. Looks like something that would be helpful for the aerotropolis project.

#### b. **Front Range Airport** (Dave Ruppel)

- Front Range Airport is a general aviation airport focusing on business and aviation uses with two 8,000-foot runways, three precision approaches, fixed-base operator, hangars, based businesses, easy access to Denver and DIA, easy corporate access, room to grow, room to operate.
- Candidate airport designated by the state for Spaceport Colorado
  - Environmental assessment prepared
  - Launch Site Operator License
  - Horizontal Launch/Recovery
- Current and future plans around DIA includes:
  - Aerospace and Commercial Space Center of Excellence
  - Aviation Business Center
  - Corporate front door to DIA and Denver metro area
  - Multi-Modal Business and Transportation Center

- Horizontal space launch facility for point-to-point travel, space tourism, small satellite delivery, and more.

### 3. ONGOING STUDIES

#### a. Peña Boulevard (Tom Reed, DIA)

- The airport reached a major milestone in the last few months—20 years ago in February 1995, DIA opened. It accommodated about 30,000 passengers during that year.
- 72,000 total passengers by year 2030 (15 years).
- Peña Boulevard opened in 1993; primary roadway access for DIA; DIA funded the construction of Peña Boulevard; DIA owns, operates, and maintains the roadway.
- Traffic and Development Trends
  - Significant residential and commercial development near DIA since opening.
  - Non-airport traffic increasing in total numbers as percentage of total traffic.
  - E-470 traffic coming into the airport represents about 25% volume of traffic.
- Federal Funding for DIA and Pena Boulevard
  - DIA receives significant funding from the FAA to maintain runways and taxiways
  - Federal law requires all revenue generated by DIA to be used for airport purposes only.
- Problem
  - Airport funds cannot be used to pay for the additional maintenance and future expansion needs as a result of non-airport traffic.
  - DIA must find a solution to pay for added costs on Peña Boulevard. Could be a funding solution, political solution.
- Purpose of Pena Boulevard Study
  - Identify short- and long-term transportation needs of the Peña Boulevard corridor.
  - Identify and analyze alternatives for improving and funding Peña Boulevard.
  - Work with neighboring jurisdictions and local, state, and federal partners to find solution.
- Pena Boulevard Study Area. Peña Boulevard is just one piece of a regional transportation network. This study must look not only at Peña Boulevard but at the local and regional transportation needs of the surrounding communities.
- Key Study Tasks and Products
  - Establish baseline traffic conditions around DIA.
  - Model and analyze traffic conditions.
  - Develop and analyze a full range of short, medium- and long-term physical, financial, and policy solutions.
  - Review alternatives with stakeholder groups.
  - Select a set of preferred solutions.
  - Produce a fully implementable plan for the Pena Boulevard Corridor moving forward that will be in compliance with the FAA's Revenue Use Policy.
- Next Steps
  - Outreach to agencies and jurisdictions in summer 2015

- Public outreach in fall 2015
- Select a preferred alternative in December 2015
- How to stay involved
  - More information about the study will be posted on [www.flydenver.com](http://www.flydenver.com)
- Question: What is the status of Tower Road ramp? Getting agreement in place, meeting next week to talk about the NEPA process. Goal is to start design and NEPA process this year with the goal to start construction sometime next year.
- Question: Is traffic generated by parking lot there considered airport traffic? Response: Yes.

#### 4. TRANSPORTATION AGENCIES

##### a. **CDOT Aeronautics** (T.K. Gwin)

- Worked only in airports, kind of obscure in the transportation department. Commissioned to maintain viable 73 airports in Colorado.
- Use tax to provide grant program for the airports.
- Works with FAA to make sure everyone is coordinated.
- Grant program is for a runway-type of a program; safety issues at airport. Cover some primary areas in airports to relieve some of their funding for more creative use.
- For this project, we can take a look at from a standpoint of aviation and how to fix the overall program in the state and just give advice to the team.
- CDOT Aeronautics is located at Front Range Airport with state patrol.

##### **Biggest takeaway from CDOT Aeronautics**

- Did not know CDOT handled airports.

##### b. **DRCOG** (Steve Cook)

- The only agency that doesn't own land or administer land. DRCOG is a planning organization where local governments collaborate to establish guidelines, set policy, and allocate funding in the areas of transportation and personal mobility, growth and development, and aging and disability resources.
- 3 million people today living in the region.
- Coordinating entity within the jurisdictions in the area.
- Transportation aspect: federally required metropolitan planning organization; creating a long-range transportation plan; fiscally constrained plan with reasonable expectation that funds will be there for a particular project; constantly amending plan based on funding availability.
- Short range aspect: TIP, short-term is 3 years to 4 years; any project using federal dollar has to be in the TIP.
- Roadway projects are long-term for fiscally constrained elements: identify 10-year horizon windows.
- Transit side: identify fiscally constrained transit system; identify stations; will have plan amendments from RTD come in so DRCOG's plan has to be nimble and can be amended twice a year.

##### c. **E-70 Public Highway Authority** (Jason Meyers)

- First 5 miles of E-470 (a 47-mile centerline on the eastern perimeter of the Denver metro area) opened in 1991; one of the first toll roads to implement open road tolling (ExpressToll). Final section opened in 2003, completing the 47-mile semi-circle.
  - A political subdivision of the state of Colorado; user-financed, with \$1.6 billion in debt and a maturity date of 2041.
  - Discontinued cash collection in the lanes in 2009 and introduced License Plate Toll (LPT).
  - In 2014/2015 became the back office and customer service for US 36, I-25 North Expansion, and I-70 Peak Period Shoulder Lanes.
  - Member jurisdictions include road owners and eight voting members (Adams County, Arapahoe County, Douglas County, Aurora, Brighton, Commerce City, Parker, and Thornton), as well as non-voting members (Arvada, Broomfield, Greeley, Lone Tree, Weld County, CDOT, DRCOG, and RTD).
  - ExpressToll Service Center operated by E-470 Public Highway Authority provides services in account management and maintenance, transponder issuance and replacement, transaction and payment processing, collections, and violation and adjudication processing. It serves E-470, NW Parkway (ExpressToll customers only), I-25 Central/US 36 Managed Lanes (Plenary—HPTE Concessionaire), and the Colorado High Performance Transportation Enterprise (HPTE)—for future facilities.
  - The Authority's interoperable transponders can be used on all toll facilities in Colorado. One transponder means one ExpressToll billing statement.
  - Recent projects include the Quebec Street Interchange, which opened in November 2014.
  - An \$89.1 million widening project in the southern segment is scheduled for 2016-2017—to include three lanes in each direction, with bridges for ultimate build out to four lanes. Based on results of CDM Smith Traffic and Revenue Study for LOS. Anticipated completion is end of 2017.
  - The 2014 Traffic and Revenue Study done by CDM Smith is available on the E-470 Web site under investor relations. This is an investment grade Traffic and Revenue Study that includes widening in the area for 2035. Future interchanges include the Potomac Street and 48th Street Avenue, which is a part of I-76 interchange (2025), and the 88th Avenue and 112th Avenue to complete the I-76 and I-70 interchanges (2035).
- d. **HPTE** (Mike Cheroutes)
- A unit lodged within CDOT created by the Faster Act of 2009.
  - Operates with its own board of directors.
  - Created as an enterprise—exempt from the limitations of constitutional amendment.
  - Created to address the accelerating and mobility problem in the state, primarily in the metro region, but also the I-70 intermountain corridor.
  - Has innovative ways to get some mobility and congestion relief and has powers that CDOT doesn't have in the state level.
  - CDOT decides on what to do and goes to the HPTE to figure out how to do it.
  - Tolling is new to Colorado and sometimes controversial. We learned that cooperation does not only mean collaboration with agencies but with the public itself. Transparency has become very important.
  - Why are we here? I-70 has a major impact on this visioning study and vice versa. In the middle of a procurement of a \$200 million project that would not only replace the viaduct but add additional express lanes on I-70.



- Been involved with the airport for years and years and would like to be part of this project. Consider HPTE as a facilitator.

e. **RTD** (Mike Turner)

- East Rail Line is anticipated to have great influence on travel patterns and development.
- With East Line, there are a lot of questions about how long it will take for people to connect to/from the East Line to the airport.
- Lots of anticipation between downtown and the airport.
- Looking at potential bus rapid transit in Commerce City.
- The last and final mile concept is important. Focus more on how people get there by either multi-modal means; any kind of future possibilities aside from driving.

### Work Session

At the meeting's end, Stephanie asked each person to summarize their main takeaway from the prior discussions:

1. Impression of the overwhelming importance of integrated needs—collaboration as a goal but also collaboration as a necessity.
2. Specific nodes of development. Something that we can hang the aerotropolis study on.
3. Leverage what we have. Lots of big ideas out there.
4. Growth is coming to the region; water and lack of water really needs to be addressed.
5. Time for the long-range vision. Do we have time? How soon is that growth coming?
6. There are more opportunities than obstacles.
7. The study area map, even though that's something we generated at last meeting. It contains what will evolve.
8. Consider the millennials moving into the area and the infrastructure and water needed for increased population.
9. Optimism and lots of tremendous growth; this group will open up so many opportunities.
10. Regional cooperation is a huge obstacle and opportunity. Our region is in a sweet spot; great opportunity to take advantage of that.
11. Collaboration is a necessity and the nodal concept within the real estate world.
12. We have an amazing opportunity on a global scale to do something that has global implications. Collaboration is needed, as well as leadership to make it happen, to help define the tradeoffs with the communities.
13. Scale—the magnitude is so much bigger, so collaboration is really important.
14. Specific cooperation—the scale makes you think how to work together.
15. Links, accesses, demographics, change are all important consideration.
16. Shared marketing at the region, not necessarily at individual jurisdiction. Hopefully we can continue these discussions, not just isolated coordination effort but more of a holistic effort.
17. Need to think about the future. What we're planning for now is really going to be the future. Foresight to think ahead because we have a clean slate ahead of this. West side of DAI is really constrained physically, so that needs to be really taken into account.

18. Think about the transportation infrastructure for this whole concept—not only Peña Boulevard, I-70, I-70 development, rail lines. The whole transportation infrastructure would be the lifeline of this development.
19. Millennials, growth—consider how that impacts transportation in this area.
20. Expectations for growth for all of the communities in the area and the impact on infrastructure and water.
21. Power of working together on this could really transform the region—identifying the geographic area as one place rather than individual jurisdiction.
22. Metro Waste Water; financing creativity.
23. Amount of planned development—how do we get started; about Panasonic and their interest.
24. Collaboration and need for sure messaging; opportunity for messaging.
25. Remove jurisdiction aspect and look at them clearly, we might see this in a different way. Collaboration can reveal new connections.

### Upcoming Events

1. **Adams County Forum**. Adams County is hosting a forum on aerotropolis development sponsored by HDR on June 4 from 11:00-1:00. It is free for everyone to attend.
2. **First Steering Committee Meeting** is scheduled for June 4 at 8:30 a.m., Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
1. **Next SRC Meeting** is on June 18 at 9:00 a.m., Rocky Mountain Arsenal National Wildlife Refuge (RMANWR). Topic for this meeting: Scenarios

### Adjourn

Jay thanked everyone for attending and for the refuge for allowing the team to use this facility. Biggest takeaway: sensing a developing synergy; group coming together; seeing the opportunities.

Colorado Aerotropolis Visioning Study



Colorado Aerotropolis Visioning Study  
 Study Review Committee  
 Date: Wednesday, May 27, 2015

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Colorado Aerotropolis Visioning Study



Colorado Aerotropolis Visioning Study  
 Study Review Committee  
 Date: Wednesday, May 27, 2015

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Colorado Aerotropolis Visioning Study



**COLORADO**  
Department of  
Transportation

Colorado Aerotropolis Visioning Study  
Study Review Committee  
Date: Wednesday, May 27, 2015

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# Welcome

## Rocky Mountain Arsenal Wildlife Refuge



# Today's Purpose

- Review SRC #1 Decision Points
- Agency Briefings

# SRC #1 DECISION POINTS

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# Study Name

## SRC MEMBER VOTES

<b>22</b>	Colorado Aerotropolis Visioning Study
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<b>3</b>	Aerotropolis Land Use and Transportation Study
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<b>2</b>	Colorado Front Range Aerotropolis Study
----------	---

<b>1</b>	Rocky Mountain Region Aerotropolis Study
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<b>0</b>	Aerotropolis Infrastructure Study
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<b>0</b>	Northeast Area Aerotropolis and Visioning Study
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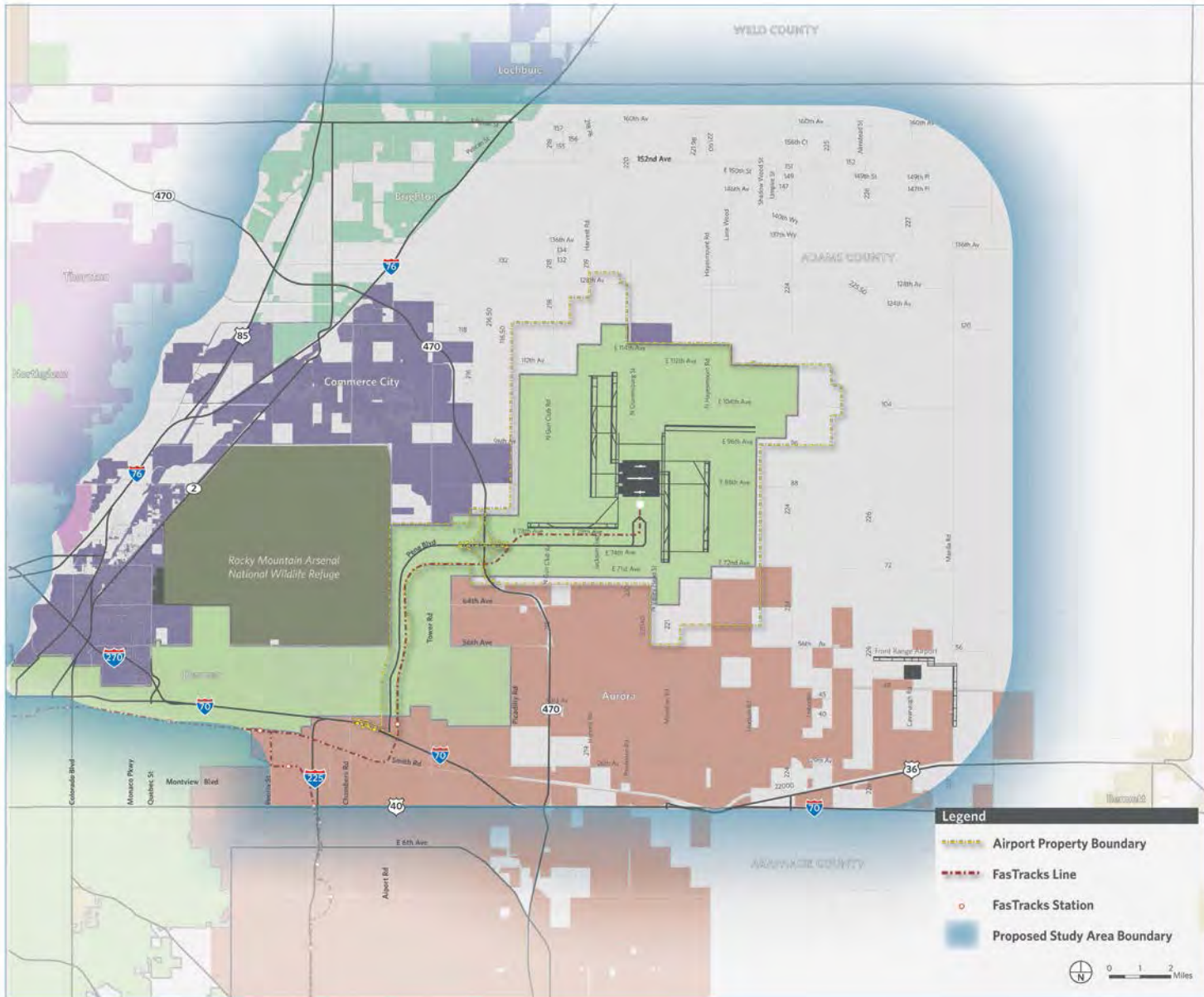
# Vision Statement

## COLORADO AEROTROPOLIS | Visioning Study



Create a sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning.

# Study Area

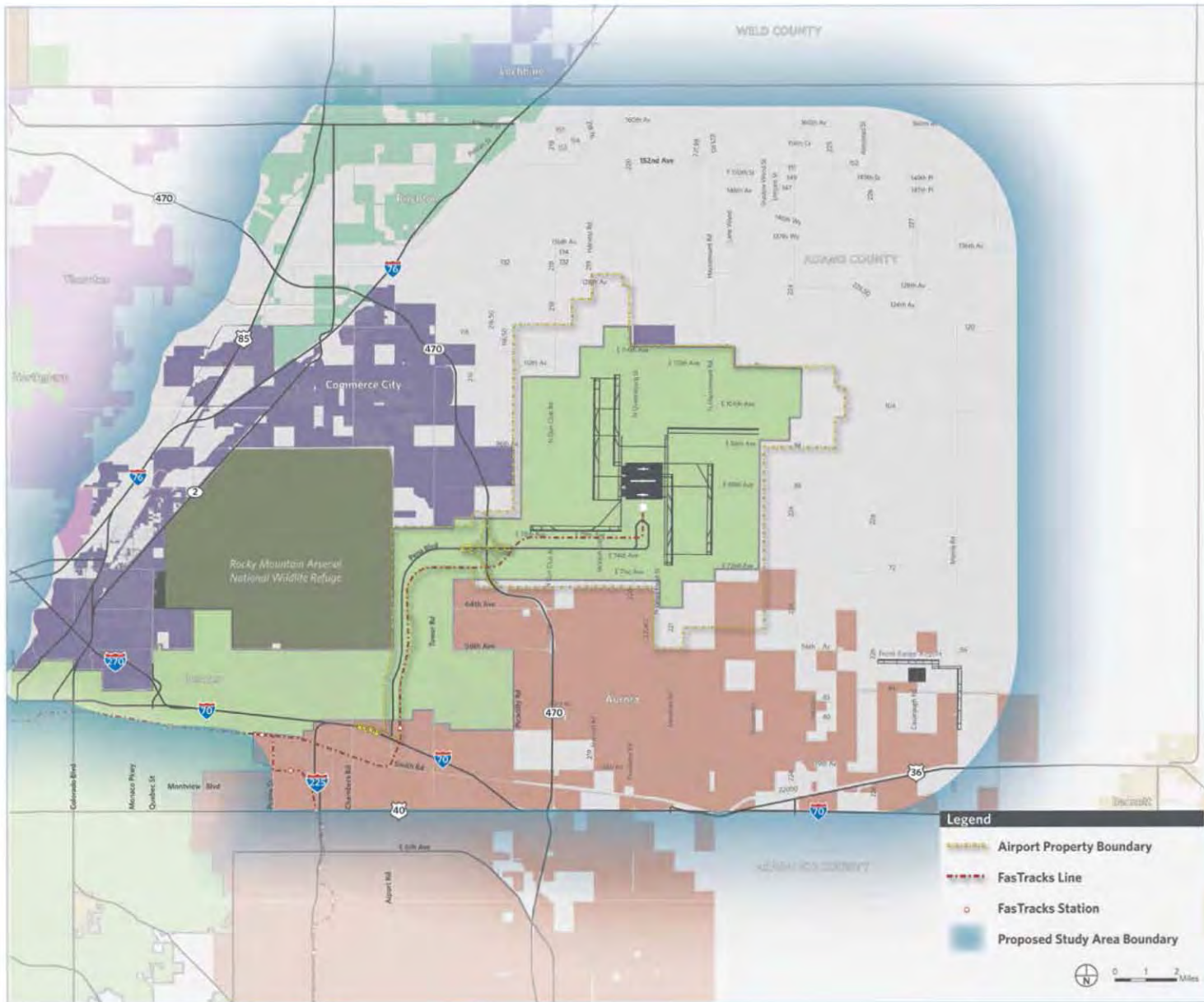


# Media Protocol Discussion



# AGENCY BRIEFINGS

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# WORK SESSION

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MOVING FORWARD

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# Next Steps

## Steering Committee

- Meeting #1 June 4, 8:30

## Study Review Committee

- Meeting #3 June 18, 9:00

# THANK YOU

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# Study Review Committee Visioning Workshop

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May 7, 2015

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## WORKING VISION STATEMENT

*A globally recognized hub of commercial, industrial, and academic activity surrounding the Denver International Airport, underpinned by efficient transportation, utility, and jurisdictional systems due to agency coordination and collaboration.*

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## Agenda

1:30	<b>Welcome</b> <ul style="list-style-type: none"><li>– CDOT Welcome</li><li>– Refuge Welcome</li><li>– Quick Project Overview</li></ul>
1:45	<b>Working Vision Session</b>
2:15	<b>Aerotropolis Fundamentals</b> <ul style="list-style-type: none"><li>– Glossary of Terms</li><li>– 2014 Conference Lessons</li><li>– DFW</li></ul>
2:30	<b>Colorado's Opportunity</b> <ul style="list-style-type: none"><li>– Study Methodology</li></ul>
2:40	<b>BREAK</b>
2:50	<ul style="list-style-type: none"><li>– Breakout 1: Visionary</li><li>– Breakout 2: Restraints to Growth</li></ul>
3:40	<b>Study Parameters</b> <ul style="list-style-type: none"><li>– Objectives</li><li>– Area</li><li>– Name</li></ul>
4:25	<b>Moving Forward</b> <ul style="list-style-type: none"><li>– Media Protocol Discussion</li><li>– Next Steps</li></ul>

## Meeting Notes

Project: **Northeast Quadrant Visioning Aerotropolis Study**

Subject: Study Review Committee Meeting #1—Visioning Workshop

Date: May 7, 2015

Location: Rocky Mountain Arsenal Wildlife Refuge (RMAWR)

Attendees: See attached sign-in sheet

### WELCOME

1. Jay Hendrickson (CDOT Region 1 Central Program Engineer) opened the meeting and welcomed everyone. This is an informal kickoff and collaborative meeting. He thanked the RMAWR for letting the study team use the room for this meeting. Dave Lucas of the RMAWR provided a short introduction about the refuge and arsenal cleanup, as well as the number of visitation to the refuge. The trail is a big component to the refuge.
2. Brief overview of today's workshop:
  - a. Concept has always been to develop around the airport. Over the years some developments happened but perhaps not as much as anticipated. There have been some challenges.
  - b. Denver received a grant to conduct a study and development of an aerotropolis. The grant has a funding expiration date of December 31, 2015. We have lot to do and a not a lot of time to do it. We need coordination efforts to happen quickly.
  - c. Denver requested CDOT to be a neutral third-party administrator. Ideally what we want to accomplish today as a group is come up with a formal name for the project, as well as come up with study objectives. To date we have conducted several one-on-one meetings to understand the needs of local agencies and coordinating organizations.
  - d. Four decision plans that we want to get consensus on:
    - Vision for the aerotropolis
    - Objectives of the study
    - Study area
    - Study name
3. We want to foster a collaborative environment among the jurisdictions.
4. Stephanie White provided an introduction about today's workshop and directed the group to the study area map that was provided for the participants at each table, as well as other materials, including the agenda.

### INTRODUCTIONS AND VISION STATEMENT

*A globally recognized hub of commercial, industrial, and academic activity surrounding the Denver International Airport, underpinned by efficient transportation, utility, and jurisdictional systems due to agency coordination and collaboration.*

1. The study team has come up with a draft Working Aerotropolis Vision Statement. Stephanie White asked each workshop participant to come up with one word that each feels is the most important or



missing from the vision statement and state that word following self-introduction. The study team will take these words and fold them into the vision statement. Words suggested included:

- **Airport** (Steve Timms, Commerce City)
- **Globally** (Michelle Claymore, Commerce City)
- **Opportunity** (James Hayes, Commerce City)
- **Growth** (Chris Cramer)
- **Surrounding** (Bob Watkins, Aurora)
- **Collaboration** (Maria D'Andrea, Commerce City)
- **Collaboration** (Robert Smith, Brighton)
- **Efficient** (Chontel Trujillo, Brighton)
- **(missed word)** (Marv Falconburg, Brighton)
- **Regionalism**(Dan Poremba, DIA)
- **Hub** (Debra Perkins-Smith, CDOT)
- **(missed word)** (Yuriy Gorlov, AEDC)
- **Hub** (Tom Reed, DIA)
- **Collaboration** (Suzanne Culin, DIA)
- **Globally** (Bill Poole, DIA)
- **Transportation** (Stan Koniz, E-470)
- **Finance** (Tom Blickensderfer, DIA)
- **Efficient** (Jason Meyers, E-470)
- **City/polis** (Steve Cook, DRCOG)
- **Efficient** (Crissy Fanganello, Denver)
- **Opportunity** (T.K. Gwin, CDOT Aeronautics)
- **Goals** (Jim Sayre, Aurora)
- **Connected** (Evan Dreyer, Denver Mayor's Office)
- **(missed word)** (Raymond Gonzales, Adams County)
- **Collaboration** (Kristin Sullivan, Adams County)
- **Partnership** (Abel Montoya, Adams County)
- **Transportation** (Nick Farber, HPTE)
- **Collaboration** (Paul Jesaitis, CDOT R1)
- **(missed word)** (René Valdez, Adams County)
- **Commercial** (Dave Ruppel, Front Range Airport)
- **Collaboration** (Roger Tinklenberg, Commerce City)
- **Agreement** (Ron Papsdorf, CDOT)
- **Collaboration** (Kaia Nesbitt, HDR)
- **Sustainability** (Tykus Holloway, Denver)
- **Catalyzing** (Arleen Taniwaki, Arland/HDR Team)
- **Collaboration** (Bill Siros, RTD)
- **Partnership** (Jose Cornejo, Denver)
- **Connected** (Peter Baertlein, Denver)

- **Targeted** (Aurora)
- **Collaboration** (Commerce City)
- **Competitive** (Jay Hendrickson, CDOT)
- **Globally** (Chris Primus, HDR)
- **Agency Coordination** (Kip Cheroutes, HDR Team)
- **Sustainability** (Ali Kranz, HDR)
- **Collaboration** (Michael Sobol, HDR)
- **Collaboration** (Lorena Jones, HDR)

## AEROTROPOLIS FUNDAMENTALS

### Glossary of Terms

1. Rick Pilgrim discussed the glossary of terms. This glossary will grow as we progress in our study. Some of the terms covered in our glossary to date includes:
  - a. **Aerotropolis.** An urban plan in which the layout, infrastructure, and economy is centered on and around an airport.
  - b. **Airport City.** Development within the airport boundary.
    - Comment from Denver: Remember that we've moved away from the "airport city" term. Denver is not using that anymore for our real estate. We want to think more regionally in terms of what we're doing.
  - c. **Planning Horizon.** Short-term (2015 to 2025); long-term (2025 to 2075)
  - d. **Steering Committee.** Advisory committee comprised of one representative from each major stakeholder.
  - e. **Study Review Committee (SRC).** The technical advisory committee for the study.

### 2014 Aerotropolis Americas Conference

1. Rick gave a summary of the December 2014 Aerotropolis Americas Conference:
  - a. "It's no longer the big eat the small. It's the fast eat the slow."
  - b. The fastest, best connected places will win in the 21st century.
  - c. Keys to developing an Aerotropolis:
    - Collaboration, visioning, strategic planning
    - Global positioning
    - Economic growth and development
2. A key point that came out from the conference is *collaboration*.

## Planned and Operational Aerotropoli Around the World

1. Jay Hendrickson noted that air travel is key for high-value people and high-value goods and products. There are several aerotropolis developments around the world that are competing for this high-value people and goods. And that is what the competition is for. It's not the big or small but the fastest—how fast people can get from point A to point B. That is the basis that DIA is going to be competing on against all of these facilities that already have a head start.
2. Rick Pilgrim stated it is important for us to understand the necessary requirements for a successful airport, and aerotropolis. This is especially important as DIA must compete on global basis. The 50+ square miles of land that is available within DIA is a consideration.
3. Rick described DFW Airport as an example. DFW came online in the '70s and DIA followed about 20 years later. DIA is now 20 years old and the range of opportunities are still very open. Characteristics that benefit DFW include:
  - Joint ownership
  - 4 municipalities
  - Surrounding area has grown from 2.5 to 6.7 million
  - 200/54 destinations
  - Economic growth engine for north Texas. There are over 400,000 jobs within a 5-mile radius of DFW.
  - Key requirements for success
4. Given urban planning and infrastructure, we can open up the world.

## COLORADO'S OPPORTUNITY

### Study Methodology (How are we going to do this project?)

1. **Existing Conditions and Plan Compilation.** A lot of good planning has been conducted and we will overlay it and analyze.
2. **Scenario Development Growth Analysis.** We need to identify and then propose ways to address all the things that are holding us back. Developing those scenarios and restraints can help us. Utility corridors are going to be equally important. This team will help us identify those restraints and we will then test those scenarios. We will also take into consideration input from all the communities.
3. **Post-Study Framework.** This part is going to be pretty important. Once we start working together, the key point to address is how will the participants continue to make these decisions on a collaborative basis? The term governance came up at one time. There are examples around the country about how we could work together, and we will examine those together.

-15-Minute Break-

## ONE-ON-ONE AGENCY MEETINGS

1. Rick Pilgrim gave a summary of one-on-one meetings that have been held to date. Meetings were held with:
  - Adams County
  - Aurora
  - Brighton
  - Commerce City
  - Denver
  - CDOT Aeronautics Division
  - DIA
  - DRCOG
  - E-470 Authority
  - Front Range Airport
  - I-70 East EIS
  - MDEDC
  - Pena Boulevard Study
  - RTD
2. The study team has covered a lot of ground in the last months. We would like to come back to the individual agencies again in approximately August.
3. There were a lot of positive thoughts and ideas that came out from the one-on-one meetings, including:
  - a. How else can we open up the airport to compatible uses?
  - b. Additional interchanges along I-70 (access-oriented); start with small closed-in sites and start to link.
  - c. Consider options along Peña Boulevard. We got together with the Peña Boulevard study team.
  - d. Spaceport and the role of Front Range Airport are very important.
  - e. Connection with the Eagle P3 project.
  - f. What next? What should RTD be doing in this part of town?
  - g. Some good ideas about how to work together and move forward as a group.

## WORKING BREAKOUT SESSIONS

Each participant was assigned a number that corresponded to a designated table for the breakout sessions. Each group (a total of 7 tables/groups) was assigned a facilitator and was given 15 minutes to brainstorm on the different agency input and report back to the larger group.

At the one-on-one agency meetings, several visionary ideas were mentioned. These included: *System; global; regional; governance; marketing; relationships; planning; joint; structure; competitive; transportation; rail; inter-jurisdictional; authority; connected; cooperation; collaborative; utility; spaceport; productive*

**Breakout Session 1: Visionary** (What are things that this group suggests should be part of the visioning itself?)

1. *What does a Colorado Aerotropolis look like?*
2. *How will it integrate with the community?*

Table 1: Chris Primus (Facilitator)

- Overarching goal is make the DIA region the biggest economic driver
- Globally focused competitively
- More corporate headquarters
- Serve people who need to move rapidly and serve high-dollar cargo



- Sustainable green infrastructure that has a complete multimodal system, including high technology infrastructure
- Additional rail lines for passenger rail, better regional connectivity with higher capacity that it is today-- integrate with financing

Table 2: Kaia Nesbitt (Facilitator)

- Global player
- Global lifestyle hub—global competitiveness
- Sustainable development—coordinated and comprehensive for the region
- Potential for having regionally attractive communities and uniqueness--housing and diversity
- Quickness/fastness—making sure equitable, building a robust transportation system that has a lot of choices, increasing a variety of mobility

Table 3: Ally Kranz (Facilitator)

- Plan carefully for primary employment to add jobs
- Utilities and water/sewer being a big challenge in the area
- Not building another Stapleton— don't box in airport and restrict future growth; more commercial and tech closer to the airport and residential away from the airport (avoid noise impacts)
- Each community has its own identity.
- Hard to provide water/sewer to Nob Hill - high point in the area but “100% corner”.
- Balance where people live and where people work.
- Front Range and Spaceport are important to define the role and the relationships to DIA and other uses
- Access linkages are needed - to Pena, to I-70, to E-470

Table 4: Keith Borsheim (Facilitator)

- Maintain identity
- Active
- Casual lifestyle
- Nimble, outdoor activities
- We can create an aerotropolis with all these things in mind
- Invisible boundaries

Table 5: Michael Sobol (Facilitator)

- Community--potential of being a catalyst for brining jurisdictions together
- Go beyond provincial boundaries.
- Competitiveness
- Connectivity
- Commercial oriented, employment center, international development. Commercially vital with short term returns
- Substantial infrastructure improvements to be done as a group to enable economic development.

Table 6: Jay Hendrickson (Facilitator)

- Interconnected—involvement of multiple partners
- Range of activities and providing well-connected multi-modal transportation within those hubs
- Sustainability—beyond just the textbook version or definition of sustainability. How does the aerotropolis 30 years down the road still be vibrant?

- Drainage/MS4
- What does the rural area surrounding the aerotropolis want?
- Make it easy—we don't want congestion; something that drives people away
- Secondary attractions—how do we highlight that? How can you get there in 5 minutes in a shuttle, for example?
- Beyond the boundaries—the counties further to the east, what happens there?
- Are there some existing infrastructure that are serving as a barrier?

#### Table 7: Kip Cheroutes (Facilitator)

- What it looks like and when it looks like? What do you do this year, 10 years, in a 100 years? What do you do north of DIA and east of DIA?
- As aerotropolis happens on the west side of DIA, it will push interest on the east side of DIA
- Industry sectors that can be marketed
- Connectivity—the existing roads/interchanges. How long does it take to get from point A to point B?
- Northern Area Transit Alliance; transit

At the one-on-one agency meetings, several constraints were mentioned. These included: *upfront collaboration; equal playing field; comprehensive and transportation plans already in place; establish framework for DIA to work with its neighbors; cost and revenue sharing; infrastructure funding; regional understanding and cooperation for transportation corridors; utility needs*

### Breakout Session 2: Restraints to Growth

1. *What are the infrastructure constraints?*
2. *How do we foster multi-jurisdictional effort?*

#### Table 7: Kip Cheroutes (Facilitator)

- Lack of agreed-upon priorities of projects. Everyone is doing his thing. Jurisdictions might have different priorities.
- Water. Water in the big picture. Is there enough water in this part of metro area to serve in the 100-year time span?
- Foster multi-jurisdictional efforts
- Funding mechanism
- Number one constraint: Water and lack of agreed-upon projects to work on

#### Table 4: Keith Borsheim (Facilitator)

- Politics and the goal that politics play in preventing collaboration and pooling our resources together. How do we get past those politics?
- Money talks. Can we prove that doing it together is better than doing it alone/separately?
- How do we make it better together?

#### Table 5: Michael Sobol (Facilitator)

- Connectivity; regional issues surrounding transportation; rules and regulation of the FAA
- Why is it important for all parties involved, particularly in the near-term? This needs to be expressed for the “whole” municipality or county participant - for example to be able to show the Aurora resident that lives miles away from the airport why it is important to jointly plan and implement improvements that will generate economic development for all entities. Shared cost benefits; equal vote for everyone in the table.
- Demonstrate the benefits to all parties

- Number one constraint: connectivity

#### Table 6: Jay Hendrickson (Facilitator)

- Constraints: the east/west connectivity to the airport and what is viewed as an opportunity; access/congestion (E-470 running through there)
- Railroad: huge multi-track lines
- Politics/individual prioritization as oppose to group prioritization
- Hard to plan for 2075 when 10 years ago no one has an iPhone
- Many jurisdictions involved
- Finding a common ground; finding comfortable framework—authority with the board, the mayor, etc.; having that framework be comfortable.
- Everyone believing we can all win; that this is going to be successful
- Identifying mutual benefits of the collaborative effort
- Logical sequential development of that prioritization
- Recognizing the benefits of this project
- Taking small steps and celebrating success along the way
- Number one constraint: connectivity/lack of cooperation

#### Table 2: Kaia Nesbitt (Facilitator)

- Connectivity; water/sewer; street; politics
- How to foster the multi jurisdictional effort—really creating shared vision and defining those priorities
- Thinking big but also thinking small and try to get a few good wins in the first 5 years
- Example of a regional win that is located in Brighton
- Tell the story of the evolution of aerotropolis and starting with what has already begun and building toward the future
- Building an adaptable plan; need to be flexible and adaptable

#### Table 1: Chris Primus (Facilitator)

- The full range of infrastructure, and water itself, and the cost to implement this infrastructure
- First development will have a huge start-up cost because of the large area and distances.
- Multi- jurisdictional financing strategy.
- Initially work on utility corridor, perhaps Piccadilly, that is maybe more attainable in the short term  
This could eventually lead to an airport authority in long term
- Number one constraint: need for trust

#### Table 3: Ally Kranz (Facilitator)

- Access to the airport as an aerotropolis, southern access, FAA regulations; who funds it
- Noise for residential development
- Environmental/wildlife/view sheds
- Oil and gas developments could restrict land use surrounding the airport
- Security
- Reducing competitive dynamics
- Regional authority - keep original IGA

## STUDY DETAILS

### Decision Point 1: Study Objectives

1. Jay Hendrickson stated the study team is going to put forward recommendations, but they would be recommendations under three broad categories:
2. The three broad categories for the study objectives include:
  - a. **Existing Conditions and Plan Compilation**
  - b. **Scenario Development/Growth Analysis**
  - c. **Post-Study Framework**
3. Discussion:
  - What is going to govern the collaborative effort after this study is complete? We don't know what that looks like but we hope that after this session, we would be able to come up with something.
  - We are not looking for an outcome of a plan with this study, but we want to identify what happens next? Next step is what the post-study framework is going to identify.
  - Might it be better going forward to call this "recommendation"? That was the concept we arrived at—develop a host of recommendation for the next step.
  - For better or worse, we are divided into jurisdictions. We have to think about benefits and impacts to each jurisdiction. Add this to the study objective.
  - Does it include competitiveness analysis with other aerotropolis? Yes, we will do that.
  - Include the working vision.
4. After the above discussion, there was concurrence and agreement that the study objectives should be:
  - a. **Existing Conditions and Plan Compilation**
  - b. **Scenario Development/Growth Analysis**
  - c. **Benefits and Impacts to Each Jurisdiction**
  - d. **Post-Study Recommendations**

### Decision Point 2: Study Area

1. Stephanie White asked each table to briefly review and mark-up the proposed study area on the plot. Each table then briefly reported on their suggested study area modifications:
  - Because it includes most of Commerce City it might be better to include west to the Platte River to include all of Commerce City.
  - Add Fitzsimmons.
  - Extend further to the east.



- Include the major intersection on 270 and 276, tweak at the southwest.
  - Go all the way to the Stock Show; expansive funnel view starting at this “Corridor of Opportunity”.
  - Incorporate the town of Bennett, maybe using 72nd as the northern boundary.
2. These marked up maps will be compiled and the study area will be revised accordingly.

### Decision Point 3: Study Name

1. After input at the one-on-ones, a suggested name for this study is *Colorado Aerotropolis Visioning Study*.
2. The group was asked for any other suggestions or comments on the suggested name. Some points that were raised included:
  - a. Comment: The name *Colorado Aerotropolis Visioning Study* doesn't acknowledge the centrality of Denver.
  - b. Jay Hendrickson: Globally the brand is Colorado and that was his reasoning for the name. We are competing against Tokyo and others; they are not going to know Denver. But the point is valid.
  - c. Comment: I think it depends on your customer because if I am from Colorado Springs, I would expect to be included in this.
  - d. Crissy Fanganello: It is important not only for the jurisdictions, but important for the state, for the regions—it is important for the bigger area.
  - e. Jay Hendrickson: This is a name for the study and this is an effort to be respectful for all the jurisdictions involved. Just keep in mind that it is not the brand. It does attempt to be inclusive and respectful.
  - f. How about Northeast Metro Area Aerotropolis Visioning Study?
  - g. Jay Hendrickson: Northeast has some connotation—about Denver’s plans for their area northeast of downtown. But it was definitely on our list.
  - h. Comment: The language in the original grant application and all the subsequent communication is really about the land use and transportation plan. Can we make it sound a little more real—Aerotropolis Land Use and Transportation Study?
  - i. How about Colorado Front Range Aerotropolis Visioning Study?
  - j. How about Aerotropolis Infrastructure Study?
  - k. Not just about Colorado, but more about Rocky Mountain Region. How about Rocky Mountain Region Aerotropolis Study?
3. Jay Hendrickson noted that it is definitely a challenge to come up with a name. If we can’t come up with a name today, at some point we need to come to a consensus on this.
4. Stephanie wrote each of the suggestions, and asked meeting participants to mark their favored selection as they leave the meeting.

## **MEDIA PROTOCOL**

1. Jay Hendrickson announced that all media requests should go through CDOT. We don't envision much press release but there has been a fair amount of media about this.
2. The CDOT Public Information Office will be the central repository so we have consistency on what goes out to the public. Amy Ford is the public information officer at Headquarters.
3. How about social media? We will come to the next meeting with a declarative statement, after discussion with the CDOT Public Information staff. Crissy Fanganello suggested putting in writing not to post on social media at this point.

## **NEXT STEPS**

1. **SRC Meeting #2** is May 27 at 9:00 a.m., at RMAWR. This will be a briefing meeting for the surrounding jurisdictions.
2. **SRC Meeting #3** will be June 18, with location still to be determined.
3. The study team needs designated committee contacts from each jurisdiction.
4. The date of **Steering Committee Meeting #1** still needs to be determined.

## **CLOSING**

1. Jay thanked everyone for coming to today's visioning workshop.





















Name	Agency	Position/Title	Email
Chris Pinner	HDR	✓	✓
Joy Hendrickson	CDOT		
Stephanie Wite	<del>CDOT</del> HDR		
Keith Burstein	HDR		
Aly Kranz	HDR		
Michael Sobel	HDR		
Lorena Jones	HDR		

# Welcome

## Rocky Mountain Arsenal Wildlife Refuge



# Today's Purpose

- Launch Jurisdictional Collaboration
- Establish a Vision Statement
- Finalize Study Parameters:
  - Name
  - Objectives
  - Geographic Boundary



# Quick Study Overview

## Background

- Grant
- Purpose
- Schedule

## Objectives

- Existing Conditions and Plan Compilation
- Scenario Development / Growth Analysis
- Post-Study Framework



# VISION STATEMENT

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# Working Aerotropolis Vision

A globally recognized hub of commercial, industrial, and academic activity surrounding the Denver International Airport, underpinned by efficient transportation, utility, and jurisdictional systems due to agency coordination and collaboration.

# AEROTROPOLIS FUNDAMENTALS

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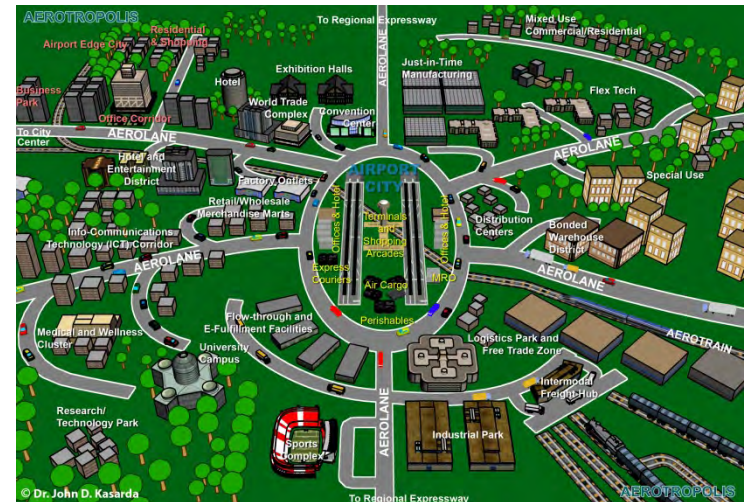
# Glossary of Terms

Aerotropolis	An urban plan in which the layout, infrastructure, and economy is centered on and around an airport
Airport City	Development within the airport boundary
Planning Horizon	Short-term – 2015 to 2025 Long-term – 2025 to 2075
Steering Committee	Advisory committee comprised of 1 representative from each major stakeholder
Study Review Committee (SRC)	Technical advisory committee



# 2014 Aerotropolis Americas Conference

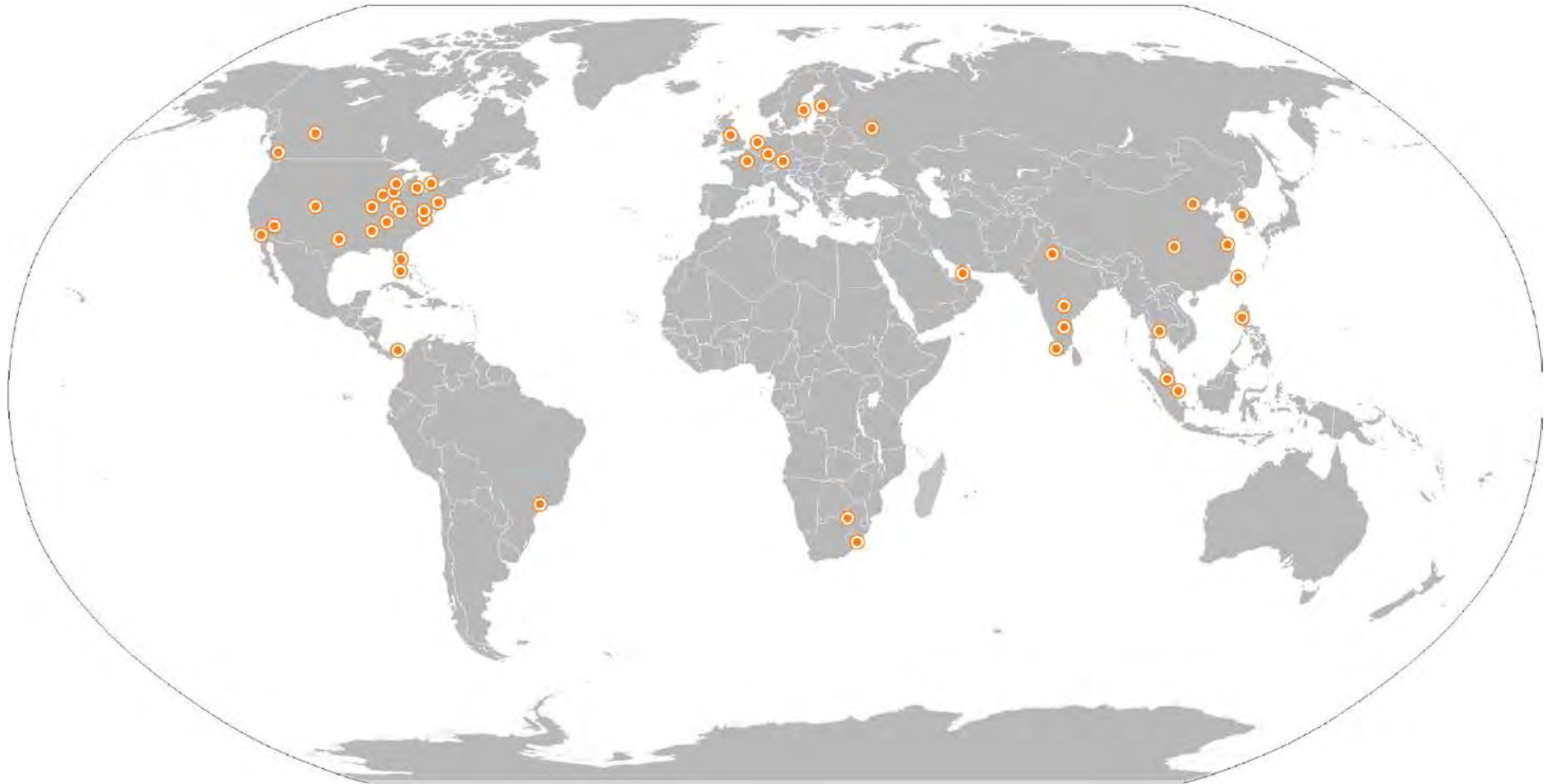
- “It’s no longer the big eat the small. It’s the fast eat the slow”
- The fastest, best connected places will win in the 21st century
- Keys to developing an Aerotropolis:
  - Collaboration, visioning, strategic planning
  - Global positioning
  - Economic growth and development



A word cloud featuring various city names in different orientations and sizes. The names are arranged in a roughly circular pattern, with some appearing more prominently than others. The colors are primarily black and grey, with a blue header at the top.

Diego  
Incheon  
Toronto  
San  
Memphis  
Brown  
Manchester  
Worth  
Louisville  
Frankfurt  
Paris  
Detroit  
Johannesburg  
Dallas-fort  
Amsterdam  
Municipal  
Shanghai  
Munich  
Edmonton  
Milwaukee  
Songdo  
Vancouver  
Campinas  
Beijing  
Seoul  
Philadelphia  
Zuidas  
Dubai  
Field  
Chengdu  
Brazil  
China  
Ekurhuleni  
Leduc  
Luisville

# Planned and Operational Aerotropoli Around the World



# What Can We Learn from DFW?



- Joint ownership
- 4 municipalities
- Surrounding area has grown from 2.5 to 6.7 million
- 200/54 destinations
- Economic growth engine for north Texas
- Key requirements for success





# COLORADO'S OPPORTUNITY

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Working Breakout Sessions

# Study Methodology

- Existing Conditions and Plan Compilation
- Scenario Development / Growth Analysis
- Post-Study Framework

BREAK

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# One-on-One Agency Meetings

- Adams County
- Aurora
- Brighton
- Commerce City
- Denver
- CDOT Aeronautics Division
- DIA
- DRCOG
- E-470 Authority
- Front Range Airport
- I-70 East EIS
- MDEDC
- Pena Boulevard Study
- RTD

# Agency Input: Visionary

A word cloud of visionary agency input terms. The words are arranged in a roughly triangular shape, with the largest words at the top and smaller words at the bottom. The words are: system, global, regional, governance, marketing, relationships, planning, joint, structure, competitive, transportation, rail, Inter-jurisdictional, connected, authority, cooperation, collaborative, utility, spaceport, and productive.

system  
global  
regional  
governance  
marketing  
relationships  
planning  
joint  
structure  
competitive  
transportation  
rail  
Inter-jurisdictional  
connected  
authority  
cooperation  
collaborative  
utility  
spaceport  
productive

# Breakout Session 1: Visionary

- What does a Colorado Aerotropolis look like?
- How will it integrate with the community?

# Agency Input: Restraints to Growth

- Upfront collaboration
- Equal playing field
- Comprehensive & Transportation plans already in place
- Establish framework for DIA to work with its neighbors
- Cost and revenue sharing
- Infrastructure funding
- Regional understanding and cooperation for transportation corridors
- Utility needs



# Breakout Session 2: Restraints to Growth

- What are the infrastructure constraints?
- How do we foster multi-jurisdictional effort?

# STUDY DETAILS

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# Today's Purpose

- Launch Jurisdictional Collaboration
- Establish a Vision Statement
- Finalize Study Parameters:
  - Name
  - Objectives
  - Geographic Boundary

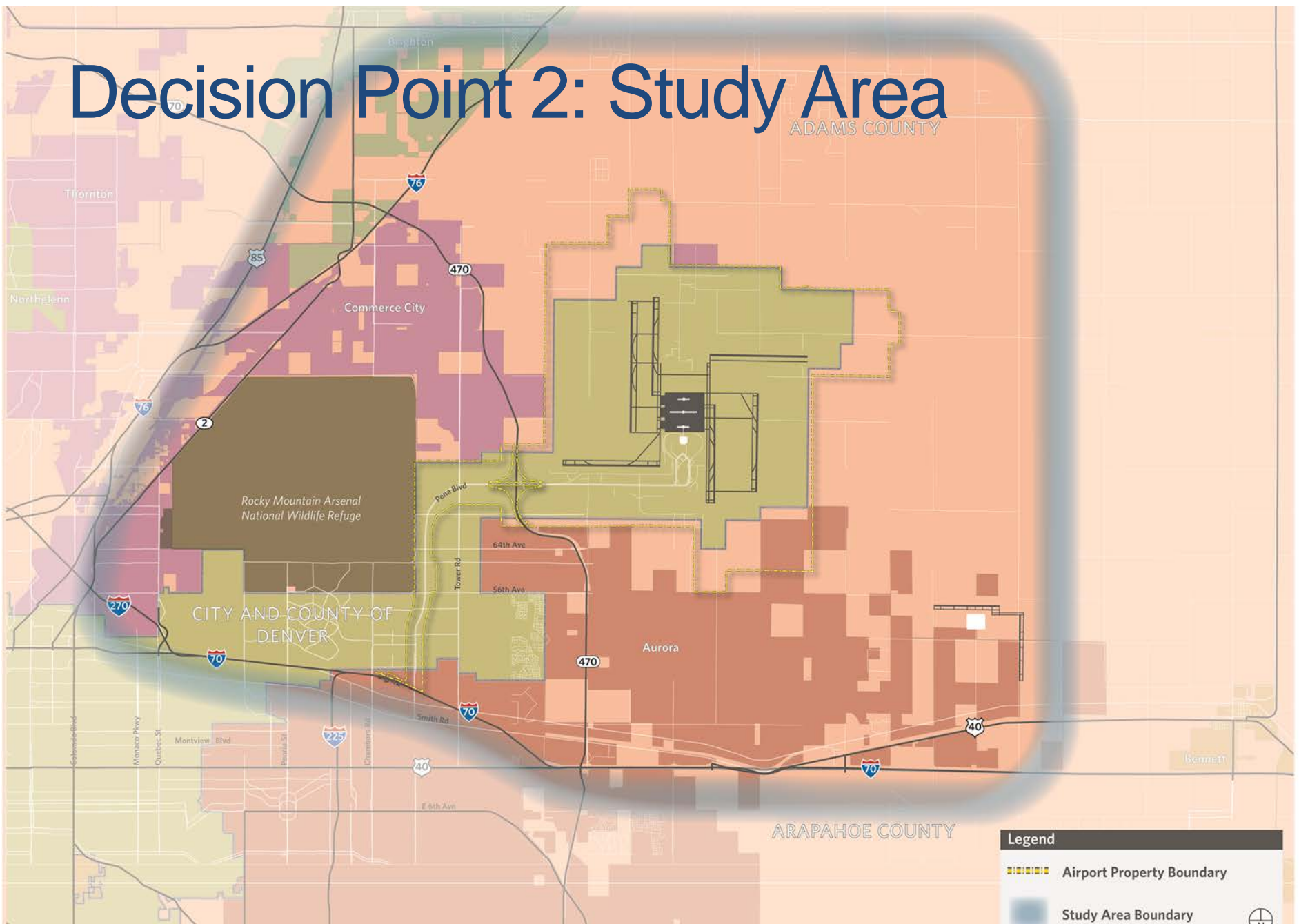
# Decision Point 1: Study Objectives

- Existing Conditions and Plan Compilation
- Scenario Development / Growth Analysis
- Post-Study Framework



# Decision Point 2: Study Area

ADAMS COUNTY



Rocky Mountain Arsenal  
National Wildlife Refuge


CITY AND COUNTY OF  
DENVER

Aurora

ARAPAHOE COUNTY

## Legend

 Airport Property Boundary

 Study Area Boundary



# Decision Point 3: Study Name

- Proposal for discussion today...
  - Colorado Aerotropolis Visioning Study
  - Others?

MOVING FORWARD

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# Media Protocol Discussion

# Next Steps

## Study Review Committee

- Meeting #2 May 27, 9:00
- Meeting #3 June 18, TBD

## General

- Need Designated Committee Contacts
- TBD - Steering Committee Meeting #1



# THANK YOU

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## Governance Meeting Agenda

Project: Colorado Aerotropolis Visioning Study

Subject: Coordination Meeting

Date: January 6, 2016 - City of Commerce City, City and County of Denver; January 8, 2016 - City of Aurora, Adams County; January 15, 2016 - City of Brighton

Location:

1. Introductions
2. Study Overview
3. Purpose of Meeting
4. Current Districts
5. Staff Discussion of Regional Governance Mechanism Options
6. Action Items

### Public Sector Regional Governance Mechanism Options

- a. Should the governance mechanism be responsible for funding of infrastructure (and to what degree), or should it be the recipient for revenues accumulated from primary stakeholder governments and others?
- b. For which aspects of infrastructure delivery should the governance mechanism have responsibility: Funding, design/construction or operation?
- c. What is the geographic scope of the governance mechanism and its infrastructure activities?
- d. For what types of infrastructure, in addition to transportation, should the governance mechanism undertake?
- e. Should the governance mechanism's authorizing and organizing "charter" specify infrastructure projects and/or sequence, or should it convene the primary stakeholders and provide the process by which projects are selected and sequenced?
- f. The governance mechanism's powers, authority, and limitations will be defined by statute, intergovernmental agreement, or a combination of the two. Are the Aerotropolis infrastructure goals best served by placing control (i) in the establishing documentation with substantive decisions to be made by the primary stakeholders' governing bodies or (ii) in the governing body of the governance mechanism?
- g. How can the governance mechanism best relate to (a) primary stakeholders and (b) other public entity stakeholders and the private sector?















## ICENOGL SEAVR POGUE

### MEMORANDUM

TO: Chris Primus, HDR, Inc.

FROM: Ed Icenogle and Anna Wool

DATE: January 19, 2016

RE: Aerotropolis Stakeholder Governance Discussions

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### INTRODUCTION

Chris Primus of HDR, Inc. and Ed Icenogle and Anna Wool of Icenogle Seaver Pogue, P.C. held one-on-one meetings with senior staff (the “stakeholder representatives” or “stakeholders”) from the City and County of Denver and the City of Commerce City on January 6, 2016, the City of Aurora and Adams County on January 8, 2016, and the City of Brighton on January 15, 2016. The purpose of the meetings was to solicit from stakeholder representatives input regarding governance options and structures for the development of an “Aerotropolis” regional entity in the area of the Denver International Airport (“DIA”).

The 2015 Amendment to the 1988 Denver/Adams County agreements relating to the development of DIA specified, in Section V, that there will be negotiated an additional agreement between Denver and the Airport Coordinating Committee (“ACC”), by which a new regional entity will be formed for advancing the Aerotropolis concept. The ACC comprises Adams County, Aurora, Commerce City, Brighton, Thornton, and Federal Heights. The political subdivisions interviewed were selected as the “primary stakeholders” for the purpose of meetings to sample the sentiments of the Aerotropolis participants regarding this regional entity.

The 2015 Amendment’s description of the purposes of this new regional entity is, in total: “...to promote and market development opportunities on and around DIA and assist in coordinating land use and infrastructure planning efforts by the respective jurisdictions on and around DIA.” The 2015 Amendment also denies the new regional entity authority to regulate or otherwise control land use or development within any jurisdiction.

In pursuit of the new regional entity, the Study Review Committee polled Aerotropolis participants and identified a number of critical interests deemed most important for collaborative action in the near term. Among those critical interests, and of apparent especial relevance to the nature of the new regional entity, were: cross-jurisdictional planning, governance/financing structure, corroborative funding, marketing and infrastructure funding, form of governance/oversight, long-term roads funding stream, and regional water/wastewater.

Against this background, the one-on-one interview team guided the primary stakeholder representatives to eight topics and invited additional comments, as desired. This memorandum compiles the responses of the stakeholder representatives by topic and supplements with additional comments raised during the meetings.

This memorandum then concludes with a checklist of anticipated governance decision points, identification of some likely governance approaches, and recommended processes for determining the Aerotropolis new entity governance structure.

### **RESPONSE TO DISCUSSION ITEMS AND COMMENTS**

The eight discussion items (A through H) presented to representatives of the primary stakeholders (which are the City and County of Denver, the City of Commerce City, the City of Aurora, the City of Brighton, and Adams County), along with a summary of discussion comments, are presented in this section.

#### **A. Should the new governance entity be a funding mechanism and, if so, should it be a direct funding source or a collection point for revenues contributed by primary stakeholder governments and others?**

There was no consensus on whether the new entity should participate in funding of Aerotropolis infrastructure and promotion.

Some responses indicated a desire that the new entity provide funding for regional projects. If that is the case, some stakeholder representatives indicated a preference that the governance mechanism *not* be a direct taxing and funding entity, but rather serve as a recipient of revenues collected and contributed by the primary stakeholder governments. Pursuant to the Taxpayer's Bill of Rights or "TABOR," Section 20 of Article X of the Colorado Constitution, voter authorization would be required for a new entity to levy its own taxes directly. In contrast, if the governance entity were to serve as a recipient of funds from primary stakeholder governments, the new governance entity would be free from voter TABOR authorization, although the contributed revenues would be at the expense of the primary stakeholder governments' budgets.

Along these lines, we were cautioned of likely opposition to a new entity serving as an overlay property taxing district. At same time, we were cautioned that an arrangement by which revenues would flow from primary stakeholder governments to the new governance entity would detract from the image and reality of a cohesive Aerotropolis governance and brand. However, if revenues are to flow from primary stakeholder governments to a new governance entity, stakeholder sentiment favored a nexus between the primary stakeholder governments making contributions and the capital improvement projects undertaken with those contributions.

As an alternative to direct taxation or stakeholder flow-through of funds, the concept of a dedicated mill levy imposed through multiple special taxing/assessment districts was advanced for the new governance entity. In the case of development districts, the example continued, a

cross-jurisdictional mill levy for the Aerotropolis effort would increase as the developer districts' mill levies decreased with debt retirement and increased assessed value.

The concept of the entity establishing a revolving loan fund was also raised as a possible approach to either facilitate funding projects through the new entity or as a stand-alone mechanism for Aerotropolis projects.

Additionally, there was some interest in “project-specific” revenue raising, which would seek funds for a particular project on a proportional basis, involving proximity, benefit, and other criteria.

With regard to revenue raising and spending, several stakeholder representatives thought it likely that, regardless of the form of raising revenue, if the new governance entity is to serve a funding function, the primary stakeholder governments will want revenues from their respective jurisdictions to be spent in their respective jurisdictions. Other stakeholder representatives expressed the possibility that the revenue raising and spending functions of the governance entity might be used to address “disparities” of tax and fee burdens from jurisdiction to jurisdiction.

Virtually all interviewed agreed that, whatever the revenue raising and funding capabilities of the new governance entity, but especially if revenues from the primary stakeholder governments are to be pooled, it would be important to establish a process that builds trust between and among primary stakeholder governments and works to create a cohesive Aerotropolis.

Finally, other than funding for the new governance entity's own operation, some stakeholders expressed a substantial preference that the new governance entity *not* participate in infrastructure or promotional project funding at all, but rather serve a planning and coordination function. This is more fully discussed in Section B, below.

**B. What services and/or infrastructure should the new regional entity deliver: Planning, funding, design/construction, and/or operation?**

For this discussion, activity related to marketing and promotion (also referred to as branding), which appear expressly in the 2015 Amendment, is deferred for separate treatment in Section H, below.

One vision for the regional entity, consistent with the language of the 2015 Amendment, was that of a regional (sub-regional) planning council or authority, which would serve as a facilitator for the Aerotropolis participants. Possibly an IGA entity or a non-profit corporation, it would span jurisdictional boundaries and have the ability and responsibility to coordinate and plan infrastructure and to seek state and federal funding. The governance entity would serve as an initial step in Aerotropolis regional cooperation among the primary stakeholder governments and might evolve into a more traditional and empowered governance entity. Initially, the governance mechanism would act as a regional planning authority which prioritizes and phases projects, leverages funding, makes recommendations, and distributes funding to several layers of



governments. The example of DRCOG, a metropolitan planning organization, may illustrate the concept.

Of those stakeholder representatives who thought that, additionally, the governance mechanism *could* be responsible for funding infrastructure and marketing/branding, there was little support for new entity construction, ownership, or operation of infrastructure. Upon completion of infrastructure, the jurisdiction within which the infrastructure exists should own and maintain it.

A possible exception to avoiding an ongoing role for the new entity might be circulator transportation or similar activities.

**C. What is the geographic scope of the governance mechanism and its activities?**

While the entirety of what is to become Aerotropolis was expected to benefit from the new regional entity, many expect near- and even mid-term activity to occur largely to the west and south of DIA, those areas forming an “L” shape, which was believed to be the logical focal point for the initial phases of Aerotropolis development. Stakeholder representatives felt that the new governance mechanism should take a regional, long-term approach and acknowledged the cross-jurisdictional nature of many infrastructure projects that may be undertaken or coordinated by the new governance mechanism. Stakeholder representatives appeared to find some efficacy in the new entity undertaking infrastructure projects and development on a limited scale initially and adding more land – or jurisdictions – to the new governance mechanism’s efforts as needed and over time.

**D. For what types of infrastructure, in addition to transportation, if any, should the regional governance entity undertake?**

Stakeholder representatives variously identified roads, transit, water, sewer, and drainage as infrastructure needs potentially to be advanced by the new governance mechanism, although transportation was the area of consensus. None appeared to favor relinquishing land use and entitlement authority within the boundaries of their jurisdictions, in the contexts of both the public infrastructure projects and the private property developed in Aerotropolis. Some stakeholder representatives felt that infrastructure projects should be determined by the needs of each primary stakeholder government.

In addition to capital projects, some stakeholder representatives cited the value of shared or common services. Suggestions were made that the governance mechanism could potentially undertake traffic circulator services, as well as marketing and branding.

**E. Should the new regional governance entity’s organizing “charter” specify infrastructure projects and/or sequence, or should it convene the primary stakeholders and only provide the process by which projects are selected and sequenced?**

Stakeholder representatives agreed that the governance entity should retain flexibility to act, as well as the capability to develop agreement on and prioritization of projects, especially in light of changing market conditions and other considerations. Thus, stakeholder representatives were generally opposed to specifying projects in an organizational document. Rather, stakeholder representatives favored deciding upon projects as the need arises, possibly based on specific criteria. Stakeholder representatives cited DRCOG and regional and state transportation improvement plans as examples of project prioritization processes.

**F. The governance mechanism's powers, authority, and limitations will likely be defined by statute, intergovernmental agreement, or a combination of the two. Are the Aerotropolis infrastructure goals best served by placing decisional control in the primary stakeholders' governing bodies or in the governing body of the new regional governance entity?**

In response to this question, stakeholder representatives voiced a range of concerns and possibilities.

Most comments agreed that the new regional entity's decision-making (and its governing body) should be contained to the public sector, some favoring staff participation and some elected officials' participation.

Some stakeholder representatives argued that the entity must have the authority to act on its own and without the approval of the primary stakeholder government's governing body, while others felt strongly that decisions must be taken back to primary stakeholder governments for ratification. As a compromise, a new governance entity could be given the authority to act on its own with regard to a list of previously determined decisions, with some decisions reserved for approval or ratification by the primary stakeholder governments.

**G. How can the governance mechanism best relate to public entity stakeholders (other than the primary stakeholders) and the private sector?**

Primary stakeholder representatives approved of establishing advisory boards, committees, and commissions to participate in the governance mechanism. In general, stakeholder representatives did not want citizens or landowners to be directly involved in the policy and the day-to-day governance of Aerotropolis.

As described in Section H, below, the collective marketing and branding of the Aerotropolis was seen as a direct way to relate to other public entity stakeholders and the private sector on state, national, and international scales. Additionally, NATA and DRCOG were given as examples of ways in which a governance mechanism can identify, develop, and advocate with a collective voice for infrastructure identified by the new regional entity.

**H. Marketing and Branding.**

Stakeholder representatives by and large indicated that marketing and branding should be left to those with subject matter expertise (i.e., not the governance mechanism). As such,

marketing and branding may be best handled by a separate organization or entity, whether in existence now or to be formed, which would work closely with the new regional governance entity and perhaps receive partial or full funding from it. On more than one occasion, primary stakeholder representatives alluded to the economic development councils currently serving various primary stakeholder governments in the metropolitan area. Stakeholder representatives thought these economic development councils represent a good example of existing organizations that could potentially collaborate, both together and with the new regional entity.

Stakeholder representatives thought that marketing and branding would be most effective if tackled jointly, and some discussed the possibility of funding a joint economic development council to act in the collective interests of the primary stakeholder governments and Aerotropolis.

However, some stakeholder representatives thought that the primary stakeholder governments would want to also maintain their respective jurisdictional brands, while other stakeholder representatives hoped that branding and marketing of Aerotropolis could be used to improve and expand on a combined Aerotropolis brand.

#### **ANTICIPATED DECISION POINTS IN ARRIVING AT A NEW ENTITY**

A review of the discussion responses (summarized above) yields a conclusion that the following terms and arrangements need to be negotiated and agreed:

1. Shall the entity be constrained to the functions listed in the 2015 Amendment, to wit: promotion and marketing of development opportunities and coordination assistance in land use and infrastructure planning? The 2015 Amendment can be narrowly or broadly construed, and the jurisdictions can by agreement expand the functions not listed, if desired.
2. If the entity is to engage in funding, should it have direct taxes and/or fees, or should it rely upon stakeholder jurisdictions to remit taxes and/or fees over to the entity?
3. Should the entity engage only in planning and coordination of infrastructure or also provide funding, design/construction, and/or operation?
4. What area should the entity serve initially, mid-term, and ultimately?
5. What infrastructure should the entity address: Transportation, water, sewer, drainage, other?
6. Should the entity bond to accelerate projects and/or serve as a lending fund or revolving loan bank?
7. Should the entity's decisional control be in its governing body or reside with the stakeholders' governing bodies? Should there be a mixed approach, depending on subject matter?
8. Should the entity try to bring the private sector and other public entities into its decisional process or seek to involve them in advisory committee(s) and the like?
9. Should marketing and branding be within the ambit of the entity or accomplished through a separate entity or coalition with expertise? Should the entity help fund marketing and branding?

10. Should the entity's governing body be elected officials or staff or others chosen for subject matter interest and expertise?

### **RECOMMENDED PROCESS FOR DEVELOPING A NEW ENTITY**

- Discuss and negotiate, insofar as possible, areas of consensus and likely agreement. Some are identified in this memorandum
- Consider use of a neutral facilitator and draftsperson
- Seek agreement on the major issues
  - Scope of entity activity
  - Whether a funding entity
  - If a funding entity, direct or through stakeholders
  - Consider wisdom of phasing and scaling activity of entity
- Match major determinations to existing types of entities or collection of entities or consider customized entity through legislation or IGA
- Work through refinement of lesser issues

### **POSSIBLE ENTITY CANDIDATES AND WHY OR WHY NOT LIKELY OF USE**

- Regional Transportation Authority – Limited to transportation, requires organizational vote of people of member counties, municipalities – unlikely
- Title 32 Metropolitan District – Not well-suited to have governing body populated by counties, municipalities – unlikely
- Non-profit corporation – May qualify for some federal grants, but not a public entity – unlikely
- Association of existing and future Metropolitan Districts – Developer and resident control; not stakeholder governments – unlikely
- Intergovernmental Agreement entity – Can be imbued with powers common to local government stakeholders, although probably not some fundamental government powers, like taxes, exempt bonds, eminent domain; would include a regional transportation commission or a regional planning commission – likely candidate
- Regional planning commission (if entity is to be limited to planning), established pursuant to Section 30-28-105, C.R.S. – likely candidate
- New legislative entity – Can be customized, but requires action of General Assembly and Governor – likely candidate
- Combination of entities – Cobble together contribution and involvement of different types of public entities through a functional IGA, with or without creating a new entity – likely candidate
- Research other potential entities



# Colorado Aerotropolis Visioning Study

## Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: PIO Meeting

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Date: December 14, 2015 12:00 - 1:30 p.m.

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Location: CDOT Headquarters

1. Welcome and Introductions
2. Aerotropolis Overview
  - a. Current study
    - i. Study final deliverables
  - b. How it relates to 1A
  - c. Next steps (post-study)
3. Communications Goals and Objectives
  - a. Current Owner - CDOT
  - b. Future Owner - TBD
4. Interim Communications Plan (Immediate Post-study)
  - a. What are the minimal elements?

## COLORADO AEROTROPOLIS | Visioning Study



### Vision Statement:

A sustainable, efficient, well-connected, and globally recognized Aerotropolis that capitalizes on the economic opportunity surrounding the Denver International Airport through collaborative planning, development, and marketing.



## Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Primary Stakeholders' Public Information Officers Meeting
Date:	December 14, 2015, 12:00 p.m.
Location:	CDOT Headquarters
Attendees:	See attached sign-in sheet
Distribution:	Attendees, File

### Meeting Summary

1. This is a meeting with CDOT's Communications Office and the public information officer from each of the project jurisdictions (Adams County, Aurora, Brighton, Commerce City, and Denver and DIA). The purpose of the meeting is to coordinate on how the study and the study conclusions get communicated as the study finishes and what are the next steps. After the study, CDOT will eventually disengage.
2. The study has garnered momentum. What happens after the study should try to leverage the forum amongst the jurisdictions that the study has provided.
3. The 1A Ballot Initiative has been a separate and successful event through the course of the study. They are moving on to define the regional entity as described in the IGA Amendment. They have until 2016 to negotiate among the jurisdictions to set something set up.
4. The group suggested that the Aerotropolis Visioning study remains separate and pure from the 1A Initiative activity of the Adams County Airport Coordinating Committee (ACC) and the negotiations with Denver to set up the regional entity.
5. The PIO suggested that the final study reports and products be thoroughly vetted. The draft report will be prepared by mid- to late-January 2016 and distributed to this group, as well as the study committees, by the first of February 2016.
6. The primary stakeholders of the study were identified to be all the study participants and the staff and elected officials, as well as planning agencies, such as RTD and DRCOG, among others. The general public is not a primary stakeholder; it was noted the study has a page on the CDOT website.
7. It was suggested that the "ownership" eventually needs to shift to the ACC. It was recognized that a neutral third party to be a coordinating body would be helpful in the interim period.
8. A video has been suggested as part of the final study product. After some discussion, it was agreed that a video product would sound too polished and lend too much of an air of finality. In contrast, there is actually quite a bit of work to do through 2016 among the jurisdictions to set up a regional entity. So this study can continue to provide a forum into early 2016 and provide an independent voice and perspective on the merits of an aerotropolis.
9. It was agreed that the study recommendations and description should be presented to city councils. After some discussion, it was identified that the March time frame is the best time to do this. Jay Hendrickson confirmed that the contract language has been extended through September 2016, so there is no problem in continuing the study through March.
10. The March time frame for presenting the study to the city councils will allow time for thorough review and vetting of the presentation and study final products.

11. The audience is largely confined to the staff and elected officials at jurisdictions. There will be no public release, so there is no need for public announcements or press reports announcing the completion of the study.
12. It was suggested that Jay Hendrickson and Rick Pilgrim should be the main presenters for the presentation to the city councils. The same presentation will be presented to each of the jurisdictions.
13. The public information officers should reconvene and discuss the final presentation and study recommendations, as well as review the final study products.
14. Each of the attendees agreed to identify dates for presentation to their respective city council.
15. Presentations to other interested groups, such as DRCOG and the Metro Denver Economic Development Corporation, will be held after the city council presentations.



Initial	Name	Organization	Title
✓	Beckstein, Erin	Adams County Economic Development	Director, Marketing and Communications
KC	Chernosky, Kristen	City of Brighton	Director of Public Information & Community Resources
MC	Crane, Mindy	DIA	Director of Communications
P.D.	Dreyer, Evan	Denver Office of the Mayor	Deputy Chief of Staff
✓	Ford, Amy	CDOT	Director, Office of Communications
✓	Gault, Kaitlin	City of Brighton	Communications Specialist
✓	Halstead, Michelle	City of Commerce City	Director of Communications
✓	Hendrickson, Jay	CDOT	Program Engineer/ Project Manager
AM	Miller, Amber	Denver Office of the Mayor	Director of Communications
	Montoya, Abel	Adams County	Planning & Development Director
✓	Morales, Abraham	City of Aurora	Sr. Public Information Officer
✓	Primus, Chris	HDR	Consultant Project Manager
✓	Siedlecki, Jim	Adams County	Director, Public Information Office
✓	White, Stephanie	HDR	Public Involvement Director

Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—Commerce City
Date:	October 13, 2015
Location:	Commerce City
Attendees:	Commerce City: Chris Cramer, Michelle Claymore, Steve Timms, and Jim Hayes HDR: Chris Primus Arland: Arlene Taniwaki
Distribution:	File

### Summary of Discussion

1. Jim Hayes gave a brief overview of the special districts in the area. They have two districts—one is commercial and one is residential. The commercial district raises about 30 mill; the residential raises about 27 mill. The districts don't have formal boundaries; however, there is a general area where in if a development occurs, then it will be tagged as either a commercial district or residential district.
2. Reunion has a GID. Total mill levy is about 120 mills. The schools in the city add up to about 90, and the 27 mill for residential special district bring the Reunion mill levy to about 120. On top of that a Title 32 District would add again to serve developer's own infrastructure needs. When they set this up, they set a very high limit of around \$2 billion with an 85-year absorption schedule.
3. Jim Hayes mentioned that there is a presentation from a landowner meeting they had in July that he would share with the Aerotropolis Study, that would further illustrate this situation with the districts.
4. Tower Road is a widening project that is proceeding over the next couple of years through construction with 100 percent funding from Commerce City municipal funds.
5. Some landowners who are prospective developers in the Commerce City area are complaining that the City's system for funding developments is unfair compared to Aurora and other cities around the metropolitan area. One of these landowners has recently commissioned a study to compare Commerce City system to the peers of Aurora, Denver, and others. They have not heard yet from this. They are to meet to get a preliminary view of the results of the study in a week or two.
6. Chris Primus mentioned that he had met briefly with the Crawley Development Group earlier in the summer and have received copies of their land holdings. **Chris will send PDFs of this information to Commerce City.**
7. Arlene and Chris described the need to get a good understanding of the developments that are imminent, as well as longer term prospects, that Commerce City knows about. The map that was provided to Commerce City was discussed. Arlene suggested Commerce City looked at the map, mark it up, and send back to Arlene. Chris will provide a zoomed-in PDF of this map to Commerce City that the City will use to mark up and send back.



Project:	Computed:	Date:
Subject:	Checked:	Date:
Task:	Page:	of:
Job #:	No:	

Sign-In  
Aerotropolis Coordination Meeting  
Commerce City October 13, 2015

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Chris Primus HDR

CHRIS CRAMER Commerce City

Michelle Claymore Commerce City

Steve Thomas CCC

JAMES HAYES COMM. CITY

Aileen Tamwahi Arland Land Use Economics





Project:	Computed:	Date:
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Job #:	No:	

Sign-In  
Aerotropolis Coordination Meeting  
Commerce City October 13, 2015

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Chris Primus HDR

CHRIS CRAMER Commerce City

Michelle Claymore Commerce City

Steve Thomas CCC

JAMES HAYES COMM. CITY

Aileen Tamwahi Arland Land Use Economics

Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—Commerce City
Date:	September 30, 2015
Location:	Commerce City
Attendees:	Steve Timms, Michelle Claymore, Chris Cramer, Maria D’Andrea (Commerce City); Arlene Taniwaki (Arland); Chris Primus (HDR)
Distribution:	File

### Summary of Discussion

1. Chris Primus provided a brief review of the alternative scenarios that the Aerotropolis Study would be analyzing. The projections of growth for each one would be the baseline using the 2040 DRCOG forecasts. The Aerotropolis scenario would have additional employment over and above the 2040 projections.
2. There was some discussion of the IGA amendment and the fact that it opens up acres in the clear zones. There was a question about what and where this meant. Chris will follow-up with Dan Poremba to get more information.
3. Michelle Claymore mentioned that the scenario analysis was very similar to an analysis that was conducted for the completion of the beltway by the Northwest Parkway team. An economist had been hired and did a similar scenario analysis looking at the employment that would be attracted when the beltway is completed. The Jefferson County EDC might have a copy of this study.
4. Chris Cramer voiced a concern about the use of the data after the Aerotropolis Study concludes. The allocation of Aerotropolis employment is quite contentious among the jurisdictions. If there is data in this report, it could be used to contend for infrastructure investments—in one jurisdiction vs. another.
5. Maria D’Andrea described the planned improvements on Tower Road. For the most part this will be completed within about 2 years. They are currently at 90% plans. In general, they are widening from two to four lanes from 104th down south to their border. They are adding the missing ramp from Tower Road to southbound Pena Boulevard. They are widening Tower Road through the Pena Boulevard interchange to the eastbound ramps. She noted this is actually City and County of Denver territory, but it was part of the agreement they worked out with CCD.
6. The DRCOG projections for Commerce City were discussed. The information that the study team pulled together for the area in Commerce City directly west of DIA showed very little growth from 2015 through 2040. Commerce City confirmed that this was not a reasonable growth projection, and that there must have been a miscommunication with DRCOG when DRCOG was seeking input from local governments during development of the 2040 data set.
7. It was noted that Piccadilly, Tower Road, and E-470 are all planned to be six lanes each in the future. This was a result of an earlier plan. Commerce City plans to update the transportation plan next year and would consider having a focus area for a subarea of this area to the west of DIA.
8. Chris Primus asked about special districts within the city. All of Commerce City’s developers have at least one or more metro districts. Some of the developers have not yet formed a metro district yet. There are two or three GIDs in the corridor. Commerce City suggested that the study team speak with the director of the South Adams Water and Sanitation District, Jim Jones. DOLA has a list of all metro districts.

9. Commerce City has several planned developments at various stages. It was agreed that a subsequent meeting is needed to go through those developments so the study team can get a good understanding of the developments that Commerce City knows about and the stages of each.



Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—DIA
Date:	September 28, 2015
Location:	
Attendees:	Dan Poremba (DIA); Arlene Taniwaki (Arland); Rick Pilgrim, Chris Primus (HDR)
Distribution:	File

### Summary of Discussion

1. Dan Poremba mentioned that the developments that are closest to occurring include Porteos. It is very well positioned. It does need infrastructure. Another one is Nob Hill. He also mentioned the two TOD projects—one at 61st and Pena Station, the other one at 40th and Airport Boulevard.
2. In discussing the ratio of off-airport Aerotropolis employees to on-airport Aerotropolis employees, Dan reiterated that particularly in the early years, there would be much more off-airport Aerotropolis activity than on-airport. Only as the land fills up will there be a need or much cause for companies to locate on airport property because of additional costs and bureaucratic hurdles.
3. Regarding the estimate of 12,000 employees as a result of a successful IGA amendment, Dan said that he would look for the process that was used to estimate the number of employees.
4. Regarding the IGA and clear zones, Dan mentioned that the 1,500 acres are really the net leasable number of acres. The IGA also allows use of the clear zone acreage which amount to about 8,500 acres. This is owned by Denver but located in Adams County.
5. Dan suggested (and the study team agreed) that the pilot lexicon should be used when referring to the 1,500 acres of commercial development per the IGA amendment.
6. Regarding the ratio of off-airport employees to on-airport employees in association with an Aerotropolis, John Kasarda might have some information. Dan will contact Dan Kasarda. Another resource who would be useful could be Chris Letournier (sp?) with MXD, who has had a contract in the past with DIA.
7. Dan mentioned his support for having Ed Icenogle on our study team to contribute toward identifying reasonable governance structures that are options to move forward on.
8. The value of involving EDCs in this study was discussed. The study team has met with Tom Clark. Vicky Leah is the appointed representative from EDC to attend study team meetings. It was agreed that perhaps a panel of EDC speakers could inform this study at a future Study Review Committee meeting.



## FINAL Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—City of Aurora
Date:	September 10, 2015
Location:	City of Aurora
Attendees:	Bob Watkins (Aurora), Mac Callison (Aurora), Vinessa Irvin (Aurora), Rick Pilgrim, (HDR) Chris Primus (HDR)
Distribution:	File

### Summary of Discussion

1. Introductions were made.
2. Regarding the development opportunities out in the DIA area, they have been working with property owners and developers who have identified infrastructure needs. Financing is the real issue. The developers have stated their interest in shared possibilities for the financing. Vinessa mentioned that they have a variety of tools for partnership, one of which is the Titled 32 Metro District. They have lots of those throughout the city of Aurora. Another one of these tools is ARI (Aurora Regional Infrastructure) Mill Levy). It is primarily for the built-out areas. The first 10 years is a 1 mill levy, the second 10 years is 5 mill levy, up to about 20 years and it steps up further. As the built-out area's debts get paid off, the ARI Mill Levy ramps up to provide money for new capital improvements. However, without the existing infrastructure, this tool is probably not the best for the area in north Aurora south of DIA. GIDs would be better initially.
3. Vinessa stated two authorities have been formed out of a conglomeration of special metro districts. The structure of these authorities is very similar to SPIMD (Southeast Public Improvement Metropolitan District), which is in the southeast area.
4. Vinessa also mentioned that for the built environment, the bulk of the funding for infill or redevelopment opportunities comes through the adjacency procedure—that is, if the property is adjacent to the roadways, the property owner is responsible for improvements in that area. This structure does not work for undeveloped areas (such as that south of DIA), because the improvement needed may not necessarily be for the area adjacent to the property. Instead there may be a need for improvements in the vicinity of the property, such as addressing gaps in roadways or other roadway improvements to access the property from some distance away.
5. For the northern area, GIDs would be a better structure at this point. The metro districts are developer-controlled. Rick Pilgrim suggested potential use of the funds would be the provision of a ring road. Aurora's position is that a good arterial network is superior to building more freeways. If the ring road is to be a freeway, they would disagree with that concept in favor of a good structure of arterials. This could be controlled access with limited signals.
6. Rick inquired about the population and employment estimates as tabulated in the recent FHU study for northern Aurora south of DIA.
7. There was some discussion about Aurora's urban growth area. There is 3.2 miles of urban area designated in the south of DIA area. There is also about 5 square miles that is unspecified location-wise but is a part of their allotment for urban growth in the Aurora area. As needed,

they can mix and match their urban growth allotment as long as they don't go over their total of about 21 square miles.

8. Urban centers are an important part of the metro vision process, in that approximately 75 percent of future growth within the metropolitan area is to take place within designated urban centers. Aurora has several urban centers already designated, including one at 64th and E-470, 56th and E-470, and others.
9. It was mentioned that in the HDR's review of the 2040 socioeconomic data, the Aurora area immediately south of DIA seemed to have very low projections of employment through 2040. Bob Watkins said that they have recently met with DRCOG to provide them further information. DRCOG is still processing the 2040 data. A new 2040 data set will be produced next year.
10. Mac mentioned that the City of Aurora has its own land use allocation model that uses a Delphi technique based on a variety of input that takes into account capacity constraints for their own scenario planning assumptions.
11. It was agreed that the DRCOG estimates for the south of DIA area represent a low end at this point. The FHU numbers represent a higher end. And the real development pattern probably is somewhere in between for the year 2040 level of development.
12. The City Council asked for the FHU study to be completed for the area south of DIA to jump start and spur infrastructure that would attract development. The Council would prefer to see this development happen much sooner than the study's horizon year of 2035.
13. The study team needs to have a meeting with Aurora Water. Sarah Young might be a good contact for this need.
14. Aurora regularly has contacts with developers. The study team would like to contact the major landowners. The following contacts were provided by the City to the study team:
  - a. Bruce Row (Oakwood)
  - b. Bill Wichterman (Porteos; 602-595-6121)
  - c. Ed Sabrowski (HighPoint)
15. Other developers to consider contacting include:
  - a. Starwood
  - b. Painted Prairie
  - c. Front Range
  - d. Transport



## FINAL Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—Peter Bartlein, City and County of Denver
Date:	August 4, 2015
Location:	Denver Offices
Attendees:	Peter Bartlein (Denver), Rick Pilgrim, (HDR) Chris Primus (HDR)
Distribution:	File

### Summary of Discussion

1. The purpose of this meeting is to discuss the special districts that are established in the City and County of Denver near DIA.
2. Peter Bartlein mentioned that SPIMD (Southeast Public Improvement Metropolitan District) is a good model to consider for the Aerotropolis area to develop.
3. He said that the special districts in the DIA area (within Denver) were established in 1990 for the Gateway Area Development to pay its own way. This involved impact fees to pay for the entire development needs, including parks, trail, drainage, fire, etc. After some point in time (approximately in the year 2000), Fulenwider needed the 56th and Tower area developed for the hotels that are currently there now. This led to the establishment of a Gateway Regional Metro District (GRMD). This provided a different fee structure to provide for regional infrastructure. It was a hierarchical fee structure that varied depending on the distance from Tower or 56th per square foot of development. The Gateway Regional Metro District provides revenue to the City and County of Denver (CCD) for the initial development. CCD acted as a bank which now gets paid back as time goes on.
4. In 2006 High Point wanted out of the GRMD and formed its own. This is set up as a local but collected for regional projects.
5. More recently the GRMD has been updated and put forth an obligation for Peña Boulevard and 64th Interchange which would serve the region. This would provide their share for those improvements.
6. The GRMD was established pre the Tabor amendment to the constitution. They have established a 20-year voter obligation, and in the year 2017 it goes back to a vote.
7. The improvements funded by the GRMD fund the initial establishment of a road. And the outlying lanes are provided by private developers as demand increases in the future.
8. Peter also mentioned that Metro Waste Water has developed a northern treatment plant which is opening in 2016. The intention is to relieve the Hite Plant, which is approximately at I-270 and 72nd. This has identified an opportunity to haul wastewater from Aurora and send north to the Northern Treatment Plant instead of the Hite Plant. But it is at local government's discretion and this diversion from Aurora is not confirmed yet. Metro Wastewater has hired a consultant to work on the technical merits of such a diversion.
9. The wastewater follows the trunk model; such as on the transportation side, there are main regional facilities and interchanges.



## Meeting Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting—Denver

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Date: May 26, 2015

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Location: Denver City and County Building

1. Purpose of Meeting
2. Study Review Committee
  - a. Visioning Workshop
    - i. Name, Vision, Area
  - b. Next SRC meeting May 27 - Briefings
3. Steering Committee
  - a. Representatives
  - b. 8:30 - 10:30 June 4, 2015 RMANWR
4. Other
5. Next Steps and Action Items



## FINAL Meeting Notes

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Project: Colorado Aerotropolis Visioning Study

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Subject: Study Coordination Meeting—City and County of Denver

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Date: May 26, 2015

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Location: CCD Offices

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Attendees: Evan Dreyer (CCD), Chris Primus (HDR), Rick Pilgrim (HDR), Jay Hendrickson (CDOT)

1. Evan Dreyer attended the visioning workshop on May 7 and thought it went very well and was positive in his perception of the response from the attendees. He thought that everyone had good contributions and were excited for the study to move forward.
2. He inquired about the second Study Review Committee (SRC) meeting scheduled for May 27. This will be a briefing session for the different agencies to introduce themselves and present their plans for the future near DIA.
3. Chris inquired who was going to speak for Denver. It was mentioned that 2 or 3 people will be speaking for DIA. Evan was not sure would be speaking for Denver. He was not sure if a presentation has been prepared. He suggested we contact Leslie Thomas, Jose Cornejos, and Crissy Fanganello since Peter Baertlein is on vacation.
4. Jay described the media protocol that is planned by CDOT. Evan thought that it was a good plan and agreed that social media needs to be allowed as people desire. He suggested that if there are elements of discord that the agencies involved work out and communicate this prior to engaging the media.
5. Chris said he drafted a study fact sheet for the support of the Public Information Office of CDOT. Evan confirmed he could review the draft statement that was prepared for the fact sheet regarding how the Aerotropolis study interacts with the Peña Boulevard study, and also the relationship of the Aerotropolis study with the confidential mediation underway. **Chris will send the draft fact sheet to Evan for his review.**
6. Jay inquired about the history of the grant, as it has not been known by the study team. Evan responded while Mayor Hancock was campaigning about 4 years ago, the Aerotropolis was an initiative that he campaigned upon and educated himself with the concept with John Kasarda's book and other materials.
7. Upon Mayor Hancock's election, the aerotropolis concept became one of the priorities of his administration. Someone in the Public Works department heard about or knew of an opportunity for a grant to study this concept through FHWA.
8. In 2011 the City sought the grant with support from DIA contributing \$125,000. In 2012 the Global Airport Cities Conference was held in Denver and the MXD Study, which had been underway for 2 or 3 years, was announced by the mayor at the conference. This airport city concept proved politically controversial. And those within the City and DIA realized they cannot successfully administer the FHWA grant.

9. Kim Day's idea of turning to a third party to administer the grant led to the identification of CDOT as the third-party. The grant was transferred to CDOT and CDOT hired HDR to facilitate the study.
10. There was discussion about the representation at the Steering Committee. The first committee meeting is June 4, and the major stakeholders have an interest in having equitable representation. Jay suggested that since DIA and Denver both wanted representation, that DIA make the case to the other stakeholders why they should have a seat at the table. It was clarified that a seat at the table does not translate into a vote, because committee recommendations would not be made by voting.
11. Evans said that either CDOT or DIA could make the case at the first meeting. Jay suggested that it might be best for DIA/Dan Poremba to make the case. This was fine with Evan and he could support Dan on this topic.
12. Evan mentioned that the IGA originally signed by the major stakeholders in 1988, in advance of the annexation of the land for DIA into Denver, makes the prospect of an aerotropolis unique. That is a structure and an agreement between neighboring jurisdictions around an airport unlike any other prospective aerotropolis development.
13. There was discussion about stakeholders that should be involved in the study. One mentioned was the Metro Denver Economic Development Corporation run by Tom Clark. Evan suggested Pam Reichert would be a good representative from this group because she has worked on DIA in the past.
14. Evan agreed it would not be appropriate to include the FAA as a stakeholder.
15. Evan suggested large private landowners should also be engaged. Rick and Jay confirmed the intention is to engage large private landowners once the study has made some progress and we can frame out the plan to these private landowners. Evan has a list that could be useful in identifying the major private landowners.



## Meeting Agenda

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Project: Aerotropolis Visioning Study

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Subject: Coordination Meeting—DIA

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Date: May 21, 2015

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Location: DIA

1. Purpose of Meeting
  2. DIA Perspectives
    - a. Global Marketplace
    - b. FAA Regulations and Restrictions
    - c. Non-Airline Revenue
  3. Access
  4. Area-wide Benefits
  5. DIA Master Plan
    - a. DEN Real Estate
  6. Economic Profile
  7. Other
  8. Next SRC meeting May 27 - Briefings
  9. Next Steps and Action Items
-

Draft Schedule

Tasks	2015									
	A	M	J	J	A	S	O	N	D	
Project Management										
Steering Committee										
Study Review Committee										
Concept Development and Visioning										
Initial Scenarios Economic Analysis										
Refined Scenarios Economic Analysis										
Findings & Next Steps										
Final Document										

## FINAL Meeting Notes

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Project: Colorado Aerotropolis Visioning Study

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Subject: Study Coordination Meeting—City and County of Denver

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Date: May 21, 2015

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Location: DIA Offices

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Attendees: Tom Reed (DIA), Brandon Howes (DIA), Bill Poole (DIA), Chris Primus (HDR), Rick Pilgrim (HDR), Jay Hendrickson (CDOT)

1. The DIA planners are part of the Infrastructure Group within the DIA organization. They are tasked with maintaining and updating the DIA Master Plan, as well as other duties. The Master Plan is closely coordinated with the DEN Real Estate Group within the DIA organization.
2. The planning and needs of an airport focus more and more on sources of non-airline revenue. They see that the potential aerotropolis helps them achieve the goal of increasing non-airline revenue. They see the airport as a catalyst to drive this economic engine.
3. The DIA planners are currently working with the DEN Real Estate Group to produce a mini update of the Master Plan. This mini update will incorporate the DEN Real Estate Airport City Plan. The airport has 34,000 acres in total; the DEN Real Estate Group has identified that 9,000 of this is potential for development for non-airline revenue endeavors. Less than 10 percent of the 9,000 acres is currently used.
4. The DIA planners confirmed that the airport master plan focuses on airport property. It does not go beyond the airport borders. They are looking toward this aerotropolis study to help inform their planning for additional accesses, for example. The plan now identifies Piccadilly as a new corridor through the airport property. Piccadilly is currently a partial road within Aurora. This improvement would build the corridor through DIA and improve it into Commerce City and farther in Aurora.
5. A good example of the planning process leading to a new access into the airport is the Jackson Gap extension. It will be open in June. It has taken 4 to 5 years working with the developer to get to this point where a new access will be open. There are numerous bureaucratic steps that need to be followed when an access opens into an airport property.
6. DIA has an IGA with the developer to help pay for maintenance of the roadway. Aurora will pay for the roadway and its maintenance needs south of airport property within Aurora. The airport will provide snowplow services, but the IGA with the developer stipulates that the developer will pay for maintenance funds, including future potential capacity additions on airport property.
7. The developer is owned by A.N.C Properties, the same developer for the Porteos Development located immediately south of DIA along Jackson Gap.
8. The steps necessary for developing new roads onto airport property are largely controlled by the requirements that the FAA places on airport operators. There are a variety of airport compliance regulations that they must follow and follow grant assurances that define how use



of funds that are generated on an airport can be used. The grant assurances stipulate that revenues generated on airport property are used for aviation purposes.

9. The process for Jackson Gap was a lengthy one but it was also the first one for a brand new access onto DIA (besides Peña Boulevard). Future new accesses might be a quicker process now that Jackson Gap has set the precedent.
10. At a future SRC meeting, it would be worthwhile to present and discuss the process for gaining access to airport property.
11. A new initiative at DIA is to place DIA on the world map. One goal is to increase the share of international passengers. Currently, about 3.7% of passengers have international destinations. DIA's goal is to increase it by 5% to 6% in 5 years. They work closely with the International Trade Group of the Governor's office for development purposes. Panasonic, for example, is a development that has occurred through collaboration between DIA and the Governor's Economic Development Group Office.
12. There is a need for an airport to increase its share of non-airline revenue. To be competitive globally it is important that the costs to run an airport are paid not only by airlines but non-airline sources as well. Increasing non-airline revenue reduces the amount an airport needs to charge an airline for operating. With reduced costs to operate an airport airlines are more likely to locate in an airport and increase the number of flights that they operate. In turn, this increases connectivity to the nations in the world and increases the attractiveness of airport to corporations and companies and they are more likely to locate in and near the airport with increased connectivity. The presence of more companies as to the development around the airport, there is a balance between the amount of on-airport development and off-airport development.
13. There is a need to be sure development opportunities are off airport, as well as opportunities on airport. This provides a good mix of price points for companies to locate near the airport.
14. The cities need to have a share of development, not residential so much as that costs the cities, but also commercial development. Otherwise, the surrounding cities are impacted without benefits.
15. The DIA's opportunities for on- and off-airport development are very great. DIA currently has six runways and this provides them plenty of capacity. The ultimate buildout for the airport can accommodate 12 runways. Current forecast suggests that the 7th runway will not be needed until 2030. This is partially because of the increased technology that NextGen provides, which is a GPS-based airplane tracking as opposed to radar-based airplane tracking for air traffic control.
16. Laura Jackson is the person who could make a presentation about DIA marketing. She has good material about DIA and its statistics and how it ranks against domestic airports, as well as international airport. It was suggested she could be a potential presenter at an SRC meeting.

17. There was discussion about the upcoming SRC meeting scheduled for May 27. It was agreed that there is not enough time for Laura Jackson to present at that time. The airport city concept will be presented in principle for what is driving the need, but it is recognized that no detail would be discussed. And that it needs to be developed in balance with off-airport development opportunities.
18. There was also discussion about DEN vs. DIA. The airport is attempting to rebrand itself as DEN, because that is the recognition that people have internationally for the Denver airport. It is also recognized that the airport will always be known as DIA to the locals. The DIA planners are comfortable with using both terms interchangeably for the aerotropolis study.



## Meeting Agenda

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Project: **Aerotropolis Visioning Study**

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Subject: **Coordination Meeting—Evan Dreyer**

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Date: **May 13, 2015**

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Location: **City and County of Denver**

1. **Introductions**
2. **Visioning Workshop Observations**
  - a. **Study Name**
  - b. **Continuing Participation**
3. **Study Committee Structure**
  - a. **Steering Committee**
  - b. **Study Review Committee (SRC)**
4. **Study Course and Outcomes**
5. **Background of Grant**
6. **Next Steps and Action Items**

Draft Schedule

Tasks	2015									
	A	M	J	J	A	S	O	N	D	
Project Management										
Steering Committee										
Study Review Committee										
Concept Development and Visioning										
Initial Scenarios Economic Analysis										
Refined Scenarios Economic Analysis										
Findings & Next Steps										
Final Document										



## Meeting Agenda

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Project: Northeast Quadrant Visioning Aerotropolis Study

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Subject: One-on-One Agency Coordination Meeting—City of Brighton

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Date: 4:00 April 29, 2015

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Location: City of Brighton  
Brighton, CO 80603  
City Hall - 6th Floor Meadowlark Conference Room

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1. Introductions
  2. Study Background / Grant
    - a. Collaboratively develop an overall vision for the infrastructure and development surrounding DIA to generate long-term economic growth
  3. Purpose of Meeting
    - a. On an individual agency basis, the study team desires to listen and understand your agency perspectives and needs before the kick-off of the study
  4. Study Schedule
  5. Proposed Committee Structure
    - a. Main stakeholders: Adams County, Aurora, Brighton, Commerce City, Denver
    - b. Small Steering committee composed of one representative each, either appointed or elected, from the main stakeholders
    - c. Larger Study Review Committee composed of main stakeholders and coordinating organizations
  6. Suggested Coordinating Organizations
    - a. Economic Development Corporations
    - b. RTD
    - c. DRCOG
    - d. Major landowners
    - e. DIA
    - f. Others?
-



7. Consideration of:
  - a. Study Name Study Area
  - b. Study Vision Statement
  - c. Study Goals
  - d. Charter Agreement
8. Perspectives and Visions
  - a. What are your top three priorities regarding the northeast quadrant?
9. Draft Agenda Kick-off Visioning Workshop
  - a. Date:
10. Confirmation of Local Plans and Studies
11. Available GIS and other data
12. Roundtable
13. Next Steps and Action Items
  - a. Scenario Development Collaboration



## FINAL Meeting Notes

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Project:	Northeast Quadrant Visioning Aerotropolis Study
Subject:	One-on-One Agency Coordination Meeting—Brighton
Date:	April 29, 2015
Location:	City of Brighton Offices
Attendees:	Marv Falconburg (Brighton), Chontel Trujillo (Brighton), Jay Hendrickson (CDOT), Chris Primus (HDR)

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1. Introductions were made.
2. Jay Hendrickson described the background of the upcoming study and CDOT's role to lead the study as a neutral party. He said the purpose of today's meeting was to listen to the perspectives and visions of the City regarding this upcoming study. He further mentioned that due to terms of the grant, the study needs to be concluded by end of the calendar year.
3. It was agreed the proposed committee structure of a Steering Committee and a larger Study Review Committee (SRC) was appropriate.
4. Brighton is interested in productive talks for the planning of the Aerotropolis Area. Brighton noted that they are geographically not as close to DIA as some of the other local partners. But they support improved access and joint marketing of the Aerotropolis area for the benefit of all. Brighton views that there is a lot to gain for regional cooperation and will be a willing partner in the Aerotropolis Study.
5. It is realized that more connections via roads into the DIA area would be beneficial.
6. It was questioned if revenue sharing will be an outcome of the study. In discussions with other local partners at the One-on-One sessions, it has been mentioned that the study could be a first step towards some kind of inter-jurisdictional structure for revenue sharing.
7. Marv confirmed that he has invitations for the Study Review Committee Envisioning Workshop on May 7<sup>th</sup> as well as the 2<sup>nd</sup> workshop on May 27<sup>th</sup>. Chris will make sure Chontel is also invited. The attendees at the committee meetings might differ among agencies. Brighton would appreciate knowing the number and type of staff being sent by local partners so that they can make sure they send the appropriate staff at these committee meetings.
8. Brighton is looking forward to productive discussions among staff for moving forward with regional collaboration. They have seen political gamesmanship between some of these other partners regarding airport redevelopment in the past and do not wish to participate in those battles.
9. Brighton looks forward to the possibilities of joint marketing efforts for economic development and believe the model set by the MDEDC is productive in which they attract developments from elsewhere in the nation and world and then give the local

partners a chance to compete for those developments. A positive example of this which was a success story for Brighton was the Vestas Wind Turbine Facility in Brighton. This came about by working with the MDEDC and eventually resulted in the location of this plant in Brighton.

10. Another example of the strength of aviation related development and the proximity to an airport is shown by a new hospital complex in the Prairie Center development area. The hospital has some state of the art medical machinery. The proximity to the airport is favorable. People from Japan have been flown in to see the equipment in operation.
11. After consideration of the area appropriate for the Aerotropolis study, Brighton suggests that the northern boundary be the county line. On the west, the 76 and 85 corridors would be appropriate for the Aerotropolis study.
12. Regarding potential study names, the term Aerotropolis is appropriate from their perspective. Regarding their visions and priorities for the area surrounding DIA, Marv and Chontel will brainstorm with colleagues regarding Brighton's visions and priorities. It was confirmed that not just future roads but transit and utilities such as water, sewer, should also be considered when they are envisioning future possibilities. They will send bullets or a marked up map back by Tuesday, May 5, 2015.
13. Brighton has some GIS mapping that will be useful. One of these is the IGA and Growth Areas Map. Other city plan documents will also be provided.





## Meeting Agenda

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Project: Northeast Quadrant Visioning Aerotropolis Study

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Subject: One-on-One Agency Coordination Meeting—City and County of Denver

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Date: 8:30 Monday, April 13, 2015

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Location: City and County of Denver  
Webb Bldg  
201 W Colfax Ave, 6th Floor  
Conf Rm 6.H.17

1. Introductions
  2. Study Background / Grant
    - a. Collaboratively develop an overall vision for the infrastructure and development surrounding DIA to generate long-term economic growth
  3. Purpose of Meeting
    - a. On an individual agency basis, the study team desires to listen and understand your agency perspectives and needs before the kick-off of the study
  4. Study Schedule
  5. Proposed Committee Structure
    - a. Main stakeholders: Adams County, Aurora, Brighton, Commerce City, Denver
    - b. Small Steering committee composed of one representative each, either appointed or elected, from the main stakeholders
    - c. Larger Study Review Committee composed of main stakeholders and coordinating organizations
  6. Suggested Coordinating Organizations
    - a. Economic Development Corporations
    - b. RTD
    - c. DRCOG
    - d. Major landowners
    - e. DIA
    - f. Others?
-



7. Consideration of:
  - a. Study Name Study Area
  - b. Study Vision Statement
  - c. Study Goals
  - d. Charter Agreement
8. Perspectives and Visions
  - a. What are your top three priorities regarding the northeast quadrant?
9. Draft Agenda Kick-off Visioning Workshop
  - a. Date:
10. Confirmation of Local Plans and Studies
11. Available GIS and other data
12. Roundtable
13. Next Steps and Action Items
  - a. Scenario Development Collaboration



## FINAL Meeting Notes

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Project: Northeast Quadrant Visioning Aerotropolis Study

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Subject: One-on-One Agency Coordination Meeting—City and County of Denver

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Date: 8:30 Monday, April 13, 2015

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Location: City and County of Denver  
Webb Building  
201 W Colfax Ave, 6th Floor  
Conf Rm 6.H.17

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Attendees: Jose Cornejo (CCD); Lesley Thomas (CCD/PW); Peter Baertlein (CCD/PW); Crissy Fanganello (CCD/PW); Brian Pinkerton (CCD/PW); Tykus Holloway (CCD/PW); George Delaney (CCD/PW); Jay Hendrickson (CDOT); Chris Primus (HDR); Rick Pilgrim (HDR); and Kip Cheroutes (LXC)

1. Introductions were made.
2. Jay Hendrickson described the background of the upcoming study and CDOT's role to lead the study as a neutral party. He said the purpose of today's meeting was to listen to the perspectives and visions of the County regarding this upcoming study. He further mentioned that due to terms of the grant, the study needs to be concluded by end of the calendar year.
3. CCD recognizes that this is a great opportunity for the region and for the state. They are excited about the study and the visionary opportunities that it brings.
4. It was agreed the proposed committee structure of a Steering Committee and a larger Study Review Committee (SRC) was appropriate.
  - a. A suggestion was to include the State of Colorado Economic Development Office.
  - b. DIA can be a separate coordinating organization for the study. It was noted that DIA is different than some of the other coordinating organization because DIA functions as an enterprise economic development corporation, a landowner, and airport operations functions.
  - c. Would CDOT would be a participant as a sitting member of the study? Besides Jay Hendrickson, CDOT will be represented by HPTE for long term planning and connectivity possibilities.
  - d. It was recognized that key agencies are utility organizations, such as Denver Water, Metro Districts, etc. After some discussion, as the study progresses, special districts will be contacted and coordinated with at a later date.
  - e. It was noted that the major landowners typically have districts that represent them. CCD has a map or a list of the districts, there are many in the area. Peter

- Baertlein will provide the list. There are multiple ones but there are two or three ones that may be sufficient in representing this study.
- f. Should Arapahoe County be an cooperative agency? After discussion, it was determined it was too far south, and in turn if you go further south, you need to go further north and engage communities such as Ft. Lupton, Thornton, Weld County and that would be too many players at this point in time.
  - g. DRCOG's role on the study. We are looking forward to keeping them informed and including coordinating with the sustainability initiatives.
  - h. RTD. Aerotropolis needs to keep transit as part of the infrastructure surrounding and serving the airport. At the beginning stages it might look like circulators, and could evolve into BRT and other services.
  - i. This Aerotropolis effort among the neighboring jurisdictions could be akin with the US-36 Coalition. This is a partnership among agencies along the US-36 corridor that promotes transportation and infrastructure in investments.
5. The study should have a perspective of developing from the concept of Aerotropolis. In contrast, the various needs of the northeast area would be developed in an individual sense.
  6. No agency has a proper perspective or full understanding of the regional economic potential of DIA. Hopefully this study will provide some of that perspective.
  7. Denver as well as its neighboring partners have had development and infrastructure plans for the area going multiple years back. But this study takes a different look at the Aerotropolis concept; the idea is to grow beyond and outside of individual such plans. Also, to be more thoughtful and provide the type of infrastructure that is needed by various aviation oriented industries that Aerotropolis concept can support. For example, there may be certain infrastructure needs of transportation, power, etc. that are tailored to an agriculture / aviation area of development. All individual plans will be challenged to amend and revise to correspond to the larger Aerotropolis concept.
  8. It was questioned if there was a level of agreement among the local partners of what an Aerotropolis study would accomplish. Does the grant chart a specific course of action? It was agreed that this study will provide an opportunity to get us to an Aerotropolis in a collaborative manner with neighboring jurisdictions. In fact, this study in its entirety will function as a chartering process amongst the jurisdictions.
  9. Regarding the name Aerotropolis, the term's concept is established and has academic basis based on Dr. John Kasarda and his contributions. Use of this term is important for branding purposes. The term Aerotropolis, for this area, will be important to define the airports role in the region and economic potential. The 'aerotropolis' term will convey to the world that this area is coordinated and therefore will be attractive for development.
  10. Amongst peer airports that have gone through an Aerotropolis type of development, DIA's development as an Airport was perhaps not typical. Are there peers that have had the issue of multiple competing government jurisdictions in the process of developing an Aerotropolis? DFW and Chicago are a couple of examples that might be

good examples. When there are multiple jurisdictions involved, how do differing view points get handled?

11. At the staff level, there are good relations with other neighboring jurisdictions. People are eager to talk and work on this issue. As the study proceeds there will be some things that will be found to be in alignment; and others that collaboratively that can be tackled and worked on amongst the partners.
12. The biggest challenge of this study effort will be to demonstrate the economic benefits and determining the costs of an Aerotropolis type development. How will costs be shared? There will need to be a willingness amongst the partners to share the costs and therefore the shared economic benefits can be realized in the long term. The current development plans need to be re-considered by each jurisdiction, including the City and County of Denver, in light of the potential greater economic benefit under a collaborative plan. The costs are both direct and indirect. As infrastructure is provided and activities at the airport grow due to early Aerotropolis developments, there will be more impacts on the surrounding roadway networks for example and impacting the other jurisdictions.
13. It was suggested that there may be the need to establish a governance to move forward after the study. The study will have to answer why we want to move forward but some sort of government structure might be appropriate amongst the jurisdictions to proceed with Aerotropolis plans.
14. The geographic area for the study was suggested to be a hard one to pin down. DIA serves metro area as a whole, serves Colorado and even beyond the state borders. The other extreme is that Aerotropolis geographic area could be defined as a mile or two on either side of Pena Blvd corridor.
15. A governing structure will eventually need a defined area for the district for costs and revenues. It was suggested that the absorption rates of economic development and their horizon years will naturally lead to a description a geographic area for part of the Aerotropolis area and study.
16. It was recognized that the cost of infrastructure is going to be quite large because of the area and the expansive land to cover with new infrastructure. It might be better to group together and define a closer in area to start with. This is reasonable because the Aerotropolis will take decades, 50-60-100 years to fully develop. Better to start close in where the costs are surmountable. For this reason, it might be best to identify some early small areas off airport property that might be available as practice opportunities with our jurisdictional partners.
17. It was asked on what is the best way to engage DIA to make new connections into the airport. It was mentioned that airport revenues cannot be used to build these roads. Denver's policy is that development pays its own way, but in contrast, many of the jurisdictions offer incentives for financial developments. This difference between Denver and the neighboring jurisdictions is another part of the puzzle that needs to be worked out.
18. The study could help with prioritizing early developments, identifying those, and potentially a government structure for the early opportunities.

19. Funding as always is critical. It was noted that DIA actually has money but has limitations on what it can be used for. It has revenue for parking and revenues for oil and gas. It therefore has revenues to build infrastructure on airport property. This is often resented by surrounding jurisdictions that don't have funding streams. It was noted in contrast that Pena Blvd. was initially constructed with airport revenue. If that's the case, with that model, can the airport build more Pena's so to speak, connecting to the surrounding areas? If not, at least these roads could be built within airport boundaries and other revenues will need to be identified to continue the roads around the airport property. The financial aspects will be important to address.
20. The overall concept is to attract global investments and the whole study will actually act as a charter amongst the partnering jurisdictions. One of the important aspects of the study is to address funding and revenue sharing.





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Jose Gomez	CCI		
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George Delaney	CCD / PW	george.delaney@denvergov.org	720-913-1776

## Meeting Agenda

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Project: Northeast Quadrant Visioning Aerotropolis Study

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Subject: One-on-One Agency Coordination Meeting—DEN

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Date: 9:00 Wednesday, April 8, 2015

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Location: Denver City and County Building, Conference Room #353

1. Introductions
  2. Study Background / Grant
    - a. Collaboratively develop an overall vision for the infrastructure and development surrounding DIA to generate long-term economic growth
  3. Purpose of Meeting
    - a. On an individual agency basis, the study team desires to listen and understand your agency perspectives and needs before the kick-off of the study
  4. Study Schedule
  5. Proposed Committee Structure
    - a. Main stakeholders: Adams County, Aurora, Brighton, Commerce City, Denver
    - b. Small Steering committee composed of one representative each, either appointed or elected, from the main stakeholders
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    - a. Economic Development Corporations
    - b. RTD
    - c. DRCOG
    - d. Major landowners
    - e. DIA
    - f. Others?
-

7. Consideration of:
  - a. Study Name and Study Area
  - b. Study Vision Statement
  - c. Study Goals
  - d. Charter Agreement
8. Perspectives and Visions
  - a. What are your top three priorities regarding the northeast quadrant?
9. Draft Agenda Kick-off Visioning Workshop
  - a. Date:
10. Confirmation of Local Plans and Studies
11. Available GIS and other data
12. Roundtable
13. Next Steps and Action Items
  - a. Scenario Development Collaboration



## FINAL Meeting Notes

Project:	Northeast Quadrant Visioning Aerotropolis Study
Subject:	One-on-One Agency Coordination Meeting—DEN
Date:	9:00 Wednesday, April 8, 2015
Location:	Denver City and County Building, Conference Room #353
Attendees:	Dan Poremba (DEN); Bill Poole (DEN); Mark Schaefer (AECOM); Jay Hendrickson (CDOT); Chris Primus (HDR); Rick Pilgrim (HDR); and Kip Cheroutes (LXC).

1. Introductions were made. The other active people on their staff that will potentially contribute to the study are Tom Reed and Kenneth Howell.
2. Jay Hendrickson described CDOT's role to lead the study as a neutral party. He said the purpose of today's meeting was to listen to the perspectives and visions of DIA regarding this upcoming study.
3. It was agreed the proposed committee structure of a Steering Committee and a larger Study Review Committee (SRC) was appropriate. After some discussion, they recognize that it is appropriate that DIA be a stakeholder or a participant in the study. Denver staff would sit on the small steering group and represent Denver and DIA. DIA has requirements of running an airport and these may need to be discussed and understood by the study participants. The bottom line is that the airport is a large 26 billion dollar enterprise and benefits the entire region. The goal for the study is to better determine how to leverage DIA and its benefits with the Aerotropolis concept for the surrounding area.
4. The Denver Finance Department should participate in the study. That would be Kerry Kennedy and her staff.
5. DIA feels the study will be a means to educate others about activities at DIA regarding the level of planning and how the Airport City planning can integrate with other plans surrounding the airport.
6. Regarding the Airport City versus Aerotropolis, it was confirmed the Airport City by definition ends at the boundary of DIA. Dan Poremba mentioned that they have a new brochure for Real Estate on DIA property and he would provide the study team that brochure. Another aspect is the clear zones. There are 8,000 acres of clear zones and these are owned by the city but are in other jurisdictions.
7. Of ten (10) companies that are involved in development activity at DIA, nine (9) are outside the boundary. An example is the collaboration with an edge project is Nob Hill and Porteos.
8. They recognize that there are important transportation needs. It is needed to connect DIA better to the region with transportation infrastructure. The status of Pena Boulevard needs to be defined and worked out on a regional basis. For transportation

connections on the west Commerce City's cooperation is needed: nothing can happen without coordination. On the north, CSU has been in discussion about developing an agricultural hub. This would be on the North side of DIA. And on the south of DIA, the transportation needs are focused on new roads.

9. Mark Schaeffer said the Pena study has a focus on both the 2,000 foot wide Pena corridor as well as some broader alternatives for capacity improvements. The study has not really started developing alternatives yet, but it will be doing so soon. They will also be examining funding opportunities.
10. As a broader discussion for the Aerotropolis study would be a recognition that there a lot of activities and studies going on that will need to be understood and summarized. After some discussion, it was suggested that a workshop of the study review committee be focused on a series of briefings by these other endeavors. This would include the Den Real Estate "Airport City Activities", Pena Boulevard Study, The CSU Agricultural work, The Panasonic Development, The Wildlife Refuge, The Aurora Street Study, and others.
11. There are a variety of metro districts that are active in the area surrounding DIA. Landowners should be reached out to after some progress is made on the study.
12. It was confirmed that the outcome of the study would not be a plan but recommendations or a frame work or framework for potential recommendations. This study has limited funding and time but are looking forward to it being a forum for regional conversation and hopefully it would lead to a series of recommendations for future cooperation.
13. Regarding potential names for the study, they suggested that one of the alternatives for the Airport Envisioning Study was not good. They asked about the Colorado Aerotropolis study. They mentioned it had been used in the past. They are not opposed to that and recognize it would be good for global marketing purposes. In the past, Colorado had been used by Tom Clark for an earlier DIA effort.
14. Regarding the boundary for the study, they suggested something on the order 10-25 miles away from the DIA boundary. A square or rectangle shape is appropriate. I-70 makes sense on the south. I-76 and US-85 makes sense on the west, etc. They did quite a bit of prior work for a variety of reasons regarding the area of influence around the airport, which of course leads to infrastructure concerns and needs. Bill Pool will send a summary of this area of influence.
15. The Front Range Airport is an area of opportunity. In the long term, it is good for real estate opportunities. Regarding space port, they have concerns that the operational impacts to DIA could be significant. However, the specific technology used for space operations might offer an ability to offer a space port there that does not impact DIA operations.
16. Dan said that he can request from John Kasarda permission to use a video for purposes of launching this Aerotropolis visioning workshop. He also suggested that Chris LeTourneur from MXD could also be a speaker and is very inspiring. But after some discussion, it might make sense to bring him in later on as the study progresses. Another person that came up as a potential speaker is Jeff Fagan from DFW. It was agreed that he would be a very good speaker.



17. DIA recognizes they are at the end of a “cul-de-sac” and this needs to change. They are looking forward to the east line. They see that as a game changer for passengers as well as real estate developments.
18. They also noted that there is a need to discuss and educate others about the change in operations of an airport regarding airline-based revenue. In the last few decades, there has been a move towards increasing non-airline revenue for competitive operation of an airport.
19. It was asked why Denver sought the grant and Dan Poremba didn't know but speculated it was to foster regional collaboration and to improve the development infrastructure around DIA.
20. DIA has needs for infrastructure including water and sewer is very important. They notice DIA is 20 years old and is needed to spend more and more money as this infrastructure ages, so that is a new aspect for DIA.
21. They are looking forward to the envisioning workshop, which will occur in early first week of May. It was recognized that there is a need to increase connectivity in the surrounding areas with this type of infrastructure. They recognize some projects will be catalysts and will help everyone work together to get these infrastructure needs met.



## Meeting Agenda

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Project:	Northeast Quadrant Visioning Aerotropolis Study
Subject:	One-on-One Agency Coordination Meeting—City of Commerce City
Date:	1:30 Tuesday, April 7, 2015
Location:	Commerce City Civic Center

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1. Introductions
  2. Study Background / Grant
    - a. Collaboratively develop an overall vision for the infrastructure and development surrounding DIA to generate long-term economic growth
  3. Purpose of Meeting
    - a. On an individual agency basis, the study team desires to listen and understand your agency perspectives and needs before the kick-off of the study
  4. Study Schedule
  5. Proposed Committee Structure
    - a. Main stakeholders: Adams County, Aurora, Brighton, Commerce City, Denver
    - b. Small Steering committee composed of one representative each, either appointed or elected, from the main stakeholders
    - c. Larger Study Review Committee composed of main stakeholders and coordinating organizations
  6. Suggested Coordinating Organizations
    - a. Economic Development Corporations
    - b. RTD
    - c. DRCOG
    - d. Major landowners
    - e. DIA
    - f. Others?
-

7. Consideration of:
  - a. Study Name and Study Area
  - b. Study Vision Statement
  - c. Study Goals
  - d. Charter Agreement
8. Perspectives and Visions
  - a. What are your top three priorities regarding the northeast quadrant?
9. Draft Agenda Kick-off Visioning Workshop
  - a. Date:
10. Confirmation of Local Plans and Studies
11. Available GIS and other data
12. Roundtable
13. Next Steps and Action Items
  - a. Scenario Development Collaboration



## FINAL Meeting Notes

Project:	Northeast Quadrant Visioning Aerotropolis Study
Subject:	One-on-One Agency Coordination Meeting—City of Commerce City
Date:	1:30 Tuesday, April 7, 2015
Location:	Commerce City Civic Center
Attendees:	Maria D’Andrea (CC); James Hayes (CC); Chris Cramer (CC); Steve Timms (CC); and Jay Hendrickson (CDOT); Chris Primus (HDR); Rick Pilgrim (HDR); Kip Cheroutes (LXC).

1. Introductions were made.
2. Jay Hendrickson described the background of the upcoming study and CDOT’s role to lead the study as a neutral party. He said the purpose of today’s meeting was to listen to the perspectives and visions of the County regarding this upcoming study. He further mentioned that due to terms of the grant, the study needs to be concluded by end of the calendar year.
3. It was agreed the proposed committee structure of a Steering Committee and a larger Study Review Committee (SRC) was appropriate.
  - a. Will the representatives on the Steering Committee be elected officials or senior staff? They could be either; it was suggested senior staff would allow the study to proceed efficiently.
  - b. Considering the list of major stakeholders, how will Denver and DIA be treated? At this point, it is expected they will be considered as separate entities, with Denver providing the representative to the Steering Committee.
4. It was agreed that the main stakeholders as identified on the agenda are appropriate. There was discussion of Bennett and how it relates with its growth boundary but was suggested agreed to be too far away. Watkins is unincorporated. It was agreed that the main stakeholders are appropriate.
5. CCC suggested that the small steering group should be composed of senior staff officials, as opposed to elected officials in the interest of time to move forward given the schedule. They suggested we reach out to each of the main stakeholders to suggest the staff level of representation (as opposed to elected official) and to ask each agency to identify their delegate.
6. Cooperating organizations:
  - a. The EDC is important and Chris Cramer will reach out to Commerce City’s Economic Development Corporation.
  - b. E-470 Authority
  - c. Fish & Wildlife Organizations.
  - d. Commerce City water and sanitation district. They mentioned that there is a meeting upcoming on April 22<sup>nd</sup> where this study could be mentioned.



- e. Denver Water.
  - f. Railroads either BN or UP but after some discussion, it was suggested that those are too far away.
7. Boundaries
- a. On the west: the refuge on the south and SH-2 for the western border further north.
  - b. Barr Lake and 136<sup>th</sup> as a northern boundary.
8. Name of study
- a. CCC embraces the term Aerotropolis
  - b. Recognize that Airport City is on-airport and this term is not favored.
  - c. Suggested that 'Northeast' as too closely aligned with the stock show and activities of northeast Denver itself, not the northeast metro area.
  - d. Corridor of Opportunity
9. CCC is looking forward to the economic analysis aspect of the study to demonstrate the benefits of further cooperation between communities to improve connections to the airport to improve the grid and further infrastructure improvements.
10. CCC suggested that we need to consider managed lanes. For example managed lanes are a potential on I-270 coming from US-36 down to I-70 and also E-470 itself. They suggested that the potential managed lane system be considered as part of the study.
- a. Has tolling hindered economic development? E-470 as an example, it's not clear whether that has fostered or hindered development because of the toll aspect of that highway. They suggested that would be a question for the study to investigate the impact of tolls on development.
11. A key transportation element is the Peña study that is being conducted by URS. That study needs to dovetail very closely with this study.
12. CDOT, as leader of this study, can help review the larger regional benefit of Peña. They suggested that the study help coordinate and summarize all ongoing studies.
13. DFW sets an example, but the study can start everyone thinking to aspire to be better than DFW and to accomplish more in the long run.
14. A recommendation from the study might include a regional authority perhaps with a funding ability. If there is a regional authority with funding ability, an area would need to be defined at that point in time.
15. Commerce City has a land use plan with various distributions of development types. The facts of an economic analysis of a cooperative development plan that demonstrates the absorption rates will be beneficial. Land use plans can be changed as necessary.
16. They have a concern that Commerce City will be stuck with "back of house" uses. CCC already has many parking lots, distribution warehouses, storage tanks, etc as opposed to a healthier mix of some of the higher end development such as hotels and convention centers. They noted that the Airport City development pods closest to

Commerce City were more warehouse uses as opposed to some of the higher end development.

17. Commerce City has a desire to help shape its image and this includes airport related development as a key way for them to help craft a new image for themselves as higher end developments occur in Commerce City. They realize that from a planning perspective, like-uses develop near each other, so Commerce City would like input on where these pods are placed.
18. It was noted that there is open space to the north of the airport that is owned by DIA and in Adams County. It is a corridor 3 miles long but because of its open space needs, there is no normal way for development along there to help pay for extending the infrastructure of roads and water and sewer and power. That is a natural inhibition to the development north of DIA.
19. As far as corridors go, Piccadilly Roadway and its water and sewer is a very important corridor. They identified that as important for regional collaboration. They know Aurora has also tagged Piccadilly as an important corridor. They have needs up at 75<sup>th</sup>. Another important corridor is 120<sup>th</sup> east and west.
20. CCC is looking forward to the study supporting collaboration. They noted that CCC does not have as much water and sewer as Denver or Aurora. CCC does not want to be a bedroom community but they would like a full mix of use types. They have Reunion which is primarily residential but now they need a mix of more jobs. As part of an overall Aerotropolis development, they would like a reasonable jobs and housing balance.
21. Commerce City will have the planning districts for water and sewer send data.



## Meeting Agenda

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Project: Northeast Quadrant Visioning Aerotropolis Study

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Subject: One-on-One Agency Coordination Meeting—Adams County

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Date: 9:00 Monday, April 6, 2015

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Location: Adams County  
4430 S Adams County Parkway  
Brighton, CO 80603  
5th Floor Study Session Conference Room

1. Introductions
  2. Study Background / Grant
    - a. Collaboratively develop an overall vision for the infrastructure and development surrounding DIA to generate long-term economic growth
  3. Purpose of Meeting
    - a. On an individual agency basis, the study team desires to listen and understand your agency perspectives and needs before the kick-off of the study
  4. Study Schedule
  5. Proposed Committee Structure
    - a. Main stakeholders: Adams County, Aurora, Brighton, Commerce City, Denver
    - b. Small Steering committee composed of one representative each, either appointed or elected, from the main stakeholders
    - c. Larger Study Review Committee composed of main stakeholders and coordinating organizations
  6. Suggested Coordinating Organizations
    - a. Economic Development Corporations
    - b. RTD
    - c. DRCOG
    - d. Major landowners
    - e. DIA
    - f. Others?
-

7. Consideration of:
  - a. Study Name Study Area
  - b. Study Vision Statement
  - c. Study Goals
  - d. Charter Agreement
8. Perspectives and Visions
  - a. What are your top three priorities regarding the northeast quadrant?
9. Draft Agenda Kick-off Visioning Workshop
  - a. Date:
10. Confirmation of Local Plans and Studies
11. Available GIS and other data
12. Roundtable
13. Next Steps and Action Items
  - a. Scenario Development Collaboration





## FINAL Meeting Notes

Project: Northeast Quadrant Visioning Aerotropolis Study

Subject: One-on-One Agency Coordination Meeting—Adams County

Date: 9:00 Monday, April 6, 2015

Location: Adams County  
4430 S Adams County Parkway  
Brighton, CO 80603  
5th Floor Study Session Conference Room

Attendees: Kristin Sullivan (Adams Cnty); Jeff Maxwell (Adams Cnty); Todd Leopold (Adams Cnty); Ray Gonzales (Adams Cnty); Chris Primus (HDR); Rick Pilgrim (HDR); Jay Hendrickson (CDOT); Kip Cheroutes (LXC2).

1. Introductions were made.
2. Jay Hendrickson described the background of the upcoming study and CDOT's role to lead the study as a neutral party. He said the purpose of today's meeting was to listen to the perspectives and visions of the County regarding this upcoming study. He further mentioned that due to terms of the grant, the study needs to be concluded by end of the calendar year.
3. It was agreed the proposed committee structure of a Steering Committee and a larger Study Review Committee (SRC) was appropriate.
  - a. Will the representatives on the Steering Committee be elected officials or senior staff? They could be either; it was suggested senior staff would allow the study to proceed efficiently.
  - b. Considering the list of major stakeholders, how will Denver and DIA be treated? At this point, it is expected they will be considered as separate entities, with Denver providing the representative to the Steering Committee.
4. For the study review committee, other participants should include:
  - a. The Front Range Airport (FRA). Dave Ruppel is the contact. FRA is an enterprise authority as part of the county.
  - b. ACED Adams County Economic Development led by Barry Gore.
5. Regarding the title of the study, it should convey that its focus is beyond the airport borders somehow. Colorado would be acceptable as part of the title name. The title could include 'Northeast Corridor', as a suggestion. Chris Primus asked for them to give further thought and respond with comments if they have any more.
6. Regarding the geographic scope of the study, first thoughts were that I-76 on the west; east of the Front Range Airport; and I-70 on the south. It was suggested that Bennett was too far away so the study area should not go that far.

7. Kristin Sullivan said that there were many studies that have occurred regarding DIA since the 1980's. The most prominent one was the Airport Environs. She will send an Adams County presentation that summarized and listed many of these studies. This presentation was developed in 2013. Adams County has several of these past studies, but not all. They will send the ones that they have to the study team.
8. Their perspective of the Front Range Airport is that it is not a competing facility but a complementary facility to DIA. They noted that it has its own wastewater treatment plant that has additional capacity and that might be an advantage for the infrastructure needs until the long term growth of the municipal utilities takes place.
9. Adams County, looking back at the past studies, has been concerned that DIA was myopic regarding its impacts to the surrounding area. Adams County is looking forward to the more regional approach of this study. The study should be multimodal including future rail consideration.
10. Kristin is really interested in the economic analysis aspect of the scope of our study. She inquired about our specific plans; we will be developing a variety of broad scale scenarios to compare and contrast. An economic model would be developed to demonstrate the coverage and absorption rates and to see if it would be reasonable to attract more development than the current DRCOG regional control totals.
11. There was a question about the planning horizon and it was suggested that 5-10 years to plan for capital improvement projects would be appropriate. They realized that the development on the south will occur first, then areas near Commerce City, and then development east of DIA will occur later.
12. The spaceport concept should be assumed as a potential development in the future. They are continuing their spaceport application process with the federal government. They don't expect to have a license by the calendar year end, but they do expect some milestones to be achieved regarding their submittal to the FAA. Adams County sees it as revenue diversification and an important complementary facility to the support the continued growth of the robust aerospace industry throughout Colorado: the metro area has all kinds of aerospace activity as it is and this would further the aerospace opportunities. They suggested the area near the Front Range Airport could eventually become a new DTC or Interlocken type high end development with a focus on research, development, testing, and training.
13. The Front Range Airport is underutilized which is one reason that the County pursued a spaceport license. Spaceport is a real long term 50-60 years out visioning investment. There are potential space technologies that could use the Front Range Airport facility and not interfere with plane operations at DIA. If indeed this space technology is successful, then a city such as Tokyo could be 2.5 hours away from the Colorado Front Range. The County has multiple studies regarding spaceport: business plan, environmental assessment, conceptual layout and they will share those studies with the study team.
14. It was asked if the study would address development and infrastructure within DIA; the answer was yes but the focus was on outside the boundary of DIA. It was asked if any additional entrances to DIA would be considered and studied in this process. The Adams County staff suggested that several cities might want new accesses, realizing that that will drive economic development. The Jackson Gap entrance into the

Porteos development on the south of DIA is already underway. Additional entrances on north and east side of DIA might be considered.

15. Among issues and concerns, the ongoing concern has been that agreements have not been honored in the past by all the parties. The economic activity surrounding DIA has not yet been realized to its full potential. However, they are interested in focusing on good planning to prepare for the growth that will come to this part of the region.
16. When DIA was developed, it was purposely developed with a lot of land, as an extreme case opposite than Stapleton, to remove any noise conflicts with residential areas. As time has gone on DIA has realized that there is so much property on the airport itself that is available for development. This has caused a significant disconnect from the original IGA with Adams County when the DIA land was annexed by Denver. However, they also realize that the economics of the airline industry has changed and that sources of non-airline revenue are extremely important now for airport operations.
17. Adams County and its residents remain concerned about planes and the noise impacts approaching DIA. They realized that there is a long history including litigation related to noise impacts. They feel that there is more awareness now and that plans and development can move on with noise treated properly.
18. Reunion, Highpoint, and Green Valley have long term potential for commercial, industrial and office activity. They have had concerns in the past where Denver moves to capture new opportunities. The original IGA is very specific regarding its language on hotel development. There is a specified ratio of hotel rooms. The County has expected more hotels surrounding the airport but it hasn't happened yet.
19. The infrastructure is an important part. Water and sewer infrastructure takes a long time to develop. It is coming to the south, but both north and south need additional infrastructure.
20. Peña Boulevard has aviation and non-aviation uses. There have been lots of discussions and studies on this issue. Denver has taken a position that other surrounding cities should pay portion of maintenance and capital costs for Peña in order for DIA to stay in compliance with the FAA. However, there is aviation traffic on Adams County, Aurora, and Commerce City roads surrounding the airport and no similar model for compensation.
21. The morning of May 6<sup>th</sup> would be a good date for the Visioning Workshop but this is pending discussion with other stakeholders. They said they had a lot of GIS data including noise, comp plans, transportation plans, spaceport plans, and potentially including some of the municipal data and that their GIS staff should directly communicate with our team's GIS staff.
22. The IGA mediation talks have been going on about 2 years. Despite this, they have good relations with staff at other agencies. They see this study as a great opportunity to do something jointly. A collaborative process will be a positive visioning approach. Adams County has grown 60% since the 1980's and are projected to continue to grow. They support the regional economic development approach of Tom Clark at the MDEDC where we market the metro region first and share opportunities that come to the front range as a whole.





## Meeting Agenda

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Project: Northeast Quadrant Visioning Aerotropolis Study

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Subject: One-on-One Agency Coordination Meeting—City of Aurora

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Date: Friday, April 3, 2015

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Location: Mt. Bierstadt Conference Room, City Manager's Office (5th floor):  
City of Aurora  
15151 E. Alameda Parkway  
Aurora, CO 80012

1. Introductions
2. Study Background / Grant
  - a. Collaboratively develop an overall vision for the infrastructure and development surrounding DIA to generate long-term economic growth
3. Purpose of Meeting
  - a. On an individual agency basis, the study team desires to listen and understand your agency perspectives and needs before the kick-off of the study
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  - a. Main stakeholders: Adams County, Aurora, Brighton, Commerce City, Denver
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6. Suggested Coordinating Organizations
  - a. Economic Development Corporations
  - b. RTD
  - c. DRCOG
  - d. Major landowners
  - e. DIA
7. Others?
8. Consideration of:
  - a. Study Name Study Area
  - b. Study Vision Statement
  - c. Study Goals



- d. Charter Agreement
- 9. Perspectives and Visions
  - a. What are your top three priorities regarding the northeast quadrant?
- 10. Draft Agenda Kick-off Visioning Workshop
  - a. Date:
- 11. Confirmation of Local Plans and Studies
- 12. Available GIS and other data
- 13. Roundtable
- 14. Next Steps and Action Items
  - a. Scenario Development Collaboration



## FINAL Meeting Notes

Project: Northeast Quadrant Visioning Aerotropolis Study

Subject: One-on-One Agency Coordination Meeting—City of Aurora

Date: Friday, April 3, 2015

Location: Mt. Bierstadt Conference Room, City Manager's Office (5th floor):  
City of Aurora  
15151 E. Alameda Parkway  
Aurora, CO 80012

Attendees: Skip Noe (Aurora); Bob Watkins (Aurora); Jim Sayre (Aurora); Jay Hendrickson (CDOT); Chris Primus (HDR); Rick Pilgrim (HDR); and Kip Cheroutes (LXC)

1. Introductions were made.
2. Jay Hendrickson described the background of the upcoming study and CDOT's role to lead the study as a neutral party. He said the purpose of today's meeting was to listen to the perspectives and visions of the County regarding this upcoming study. He further mentioned that due to terms of the grant, the study needs to be concluded by end of the calendar year.
3. It was agreed the proposed committee structure of a Steering Committee and a larger Study Review Committee (SRC) was appropriate.
  - a. For the steering committee, they requested that a staff person be an option instead of necessarily an elected official.
  - b. For the SRC,
    - i. The E-470 Authority should be a coordinating agency
    - ii. EDCs are important participants and noted that EDCs focus on the primary industries.
    - iii. North Metro Chamber would be an appropriate participating agency as well.
    - iv. Homebuilders Association is also a possibility
    - v. Aurora Economic Development Corporation
    - vi. In addition, Aurora suggested that we talk to the FAA.
4. Regarding the title of the study, the "airport development study" is too innocuous. The term "Aerotropolis" has been identified too much with Mayor Hancock of the City and County of Denver. "Airport Area" would be a good term. The "Northeast Area" would be ok. The term "Development" in the title would be appropriate.
5. Aurora has made a tremendous amount of effort in planning and serving the airport, but it has been a challenge. Development around the airport in practical terms has not

occurred. The Airport City initiative represented a step backward. There are people that have strong memories of when the Adams County land was annexed into Denver. Aurora is ready and willing to move on but people must be cognizant of these past memories.

6. There was no regional collaboration that identified a need for a new study. This Aerotropolis study came to them out of the blue.
7. Aurora has just recently conducted a study that has identified priorities. Among those are Harvest, Piccadilly, 48<sup>th</sup>, and 64<sup>th</sup>. The cost of interchanges is a big challenge but they are a necessary link to DIA and are a high priority for Aurora. If this study could help identify progress for additional interchanges in I-70 that would be very helpful.
8. Aurora doesn't have a way to pay for interchanges at this point in time. Fees or GIDs are needed but development is south of I-70 but the needs are focused on the north side of I-70. Also, oil & gas can potentially help with revenue. The study had BBC (the financial firm) and identified funding options. Those are largely tried and true methods. But these and other funding issues need to be addressed.
9. A really important need is a second route into DIA. This would be through the Harvest Road / Jackson Gap Road. They noted though that this corridor needs an I-70 interchange.
10. Utilities are a big issue. Aurora City Water should have input to this study. Well and septic flows will eventually be converted to sewer systems. Now it is pumped south. Water and well plans will need to be developed and this would be a good basis for cooperation. Cliff Stevens is the contact at the Aurora Department of Water. They also suggested that Xcel be contacted. The power needs are challenging because of the distance that needs to be traversed.
11. How Front Range Airport gets connected is an important topic for the study to address. Aurora City boundaries will eventually surround the Front Range Airport.
12. Aurora and none of the other neighboring jurisdictions will give up their land use authority, but recognize that this study will have a larger umbrella than specific land use plans. Coordinating for infrastructure improvements is sensible and hope that this study can further that.
13. The study could define a better structure for how DIA works with its neighbors. DIA has more of a focus on development and infrastructure within its borders in contrast to a focus on outside of the DIA boundary.
14. There are potential gateways on the south. The Porteras developer has tried to obtain an airport gateway. But the process for gaining permissions to access the airport takes years. There is always a new hurdle or hoop to jump through including the FAA, DIA, the TSA, and others. This results in a very unclear process and developers need to have expectations upfront. It would be very helpful if DIA could chart out a clear path on how a gateway is established. This would be an inter-jurisdictional process. To conclude, DIA should promote this process and it will foster development and cooperation.
15. They noted there is a large development occurring south of Watkins that has been approved recently by Arapahoe County. It is called Prospect. They noted that the City

of Aurora opposed this development but Arapahoe County Commissioners have approved it.

16. It was recognized that we can learn lessons from DFW and other airports and development around them. However, DFW was jointly owned between the two major cities and is governed by a board, unlike DIA.
17. Aurora is glad to help and will provide any data that they have that is relevant for our study. They will facilitate coordination with their water department and of course participate in and attend all meetings. If this study could further the ability to advance funding capabilities for infrastructure improvements, then participation in this study is worth Aurora's time. This study might produce a new ethos of cooperation for getting some of these infrastructure improvements accomplished.
18. Aurora is a city of 350,000 population. Most people in the region don't appreciate its size. It would be a really positive outcome of the study to articulate the benefits of cooperation.
19. Jim will send the final update for 2016 to the Comprehensive Plan. The Infrastructure Phasing Plan is available. Land Use planning is done and that is available. Aurora will provide a contact for their GIS group. They will be very involved with providing any readily available data as needed.







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**Subject:** Northeast Quadrant Aerotropolis Meeting  
Initial Agency Coordination

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**Meeting Date:** February 6, 2015  
1:30 PM

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**Meeting Location:** CDOT Metro Conference Room  
2000 S. Holly Street  
Conference Call-in Number: 1-877-820-7831  
Passcode: 406221#  
POC Breena Alderete 720.865.9015

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1. Introductions
2. Purpose of Meeting
3. Intention of Grant
4. CDOT's Role
  - a. HDR Introduction
5. Multi-jurisdictional Steering Committee with Equal Representation
  - a. Role of Agencies in the study
6. Public Discussion of Study Given Confidential IGA Negotiations
7. Land Use Planning Outside of Denver's Boundaries
8. Roundtable Discussion - possible discussion questions:
  - a. What is the purpose of the grant?
  - b. How will the grant be discussed publicly, if at all, particularly while confidential IGA negotiations are underway?
  - c. Is this just an effort by Denver to engage in land-use planning outside of its boundaries?
  - d. Could we establish a multi-jurisdictional steering committee to provide direction to CDOT and the consultant?
9. Schedule
10. Input on HDR's Scope
11. Next Steps



# FINAL Meeting Notes

Project: **CCD Aerotropolis Study**

Subject: Initial Agency Coordination Meeting

Date: February 6, 2015

Location:

Attendees:

Distribution Attendees, File

## SUMMARY OF DISCUSSION:

### 1. Introductions.

- Self-introductions were made.
- Jay Hendrickson welcomed everyone and introduced Evan Dreyer from the City and County of Denver (CCD).

### 2. Purpose of Meeting

- Evan Dreyer stated that this meeting was a follow-up to phone conversations that he has held with elected officials from each of the jurisdictions invited to this meeting today. He stated that this meeting was a preliminary conversation about the upcoming FHWA grant study. CCD received the grant for an aerotropolis study a couple of years ago, and its funds need to be expended soon. For a variety of reasons, the initiation of the study has been delayed, but now is a good time for launching the study. CCD recognized that it would be appropriate if a third neutral party would run the grant study, and CDOT has agreed to that role.
- Jay reiterated that CDOT is looking forward to move forward with the study, and will be reaching out to all the jurisdictions in an equitable manner through the course of the study. The grant has been amended to have CDOT as its executor.

### 3. Intention of Grant

- Dan Poremba from DIA briefly described the intention of the grant. The object is to perform a comprehensive land use and transportation aerotropolis study, as a regional effort engaging all the jurisdictions around DIA. This grant is intended to build a jurisdictional collaboration process to understand the range of advantages and requirements for developing the area around DIA to everyone's benefit. DIA has no pre-conceived notions on the dialogue regarding the forthcoming planning effort.

### 4. CDOT's Role

- Tony DeVito stated the timing of this comes at an exciting period. After conclusion of the recent 4-P planning process with the jurisdictional partners, it is clear that this is a quadrant of the metro area that is poised for high growth potential. CDOT is excited to be proactive in work with all the jurisdictions to define the transportation infrastructure in this area. CDOT is here to listen and collaborate with all of the local jurisdictions.

- Mike Cheroutes said that HPTE is focused on the key concept of a regional managed lane network. This provides improved reliability for the system as a whole. I-70 East is planned now to have a managed lane to I-225; and its expansion to the east could be part of the regional managed lane network. For this study, he welcomes the opportunity to consider potential projects and priorities.
- Jay stated that CDOT's role was to administer the grant in a fair, impartial, and transparent manner as a neutral third party. He is looking to receive input from all parties and return the best value for the grant and to develop a regional vision beneficial to all.
- Jay introduced Rick Pilgrim and Chris Primus of HDR, the consultant that CDOT will be retaining to conduct the study.

#### 5. Multi-Jurisdictional Steering Committee

- Evan said that during his conversations with the jurisdictions, it was suggested that a stakeholder steering committee be established that is structured so that all parties have an equal voice.
  - Steve Hogan suggested that a smaller committee is better than a larger committee. Tony agreed, given past experience on other corridors, streamlining the committee size is better. Sometimes having members and associate members can make the committee large and cumbersome.
  - Jose Cornejo asked how technical information would be efficiently provided to the committee for decision-making. It was suggested that at periodic milestones, relevant technical information would be conveyed to the steering committee.
  - Dan asked if each jurisdiction would have two, or three people assigned. This will be determined after others provide input on the committee structure.
  - It was suggested that an alternate representative be designated and empowered to enable the study to progress on a reasonable schedule.
  - Jim Hayes asked if the steering committee would be composed of elected or technical representatives.
  - Steve Hogan replied that his understanding of this grant study would not result in a specific plan that needed elected officials to provide decisions, but rather a process that would identify what is needed in the area, with potential timeframes of improvements under a recommended set of planning assumptions. So the committee needed to be technical staff representatives as opposed to decision-making elected officials.
  - It was noted that the surrounding jurisdictions already have prepared plans for their respective areas (the area within CCD might be the sole exception to this), and have done so in coordination with Adams County and so as a result major conflicts are already minimized. There is no desire of these local jurisdictions to change their plans. If CCD has thoughts on major impacts to these existing plans, this should be settled under some other process – not this study. Jay said that this study will focus on

major concepts, and will identify on what might be needed. Outreach will be a key part to understand the jurisdictional visions, and move forward accordingly.

- Dan Poremba submitted that the reality for this effort is the need to identify where infrastructure and community plans work together, and where they don't work together. This actually should be a key focus of this study: to gather and analyze background-planning information from all of the jurisdictions; knit these together, and develop findings and recommendations. This type of effort is pragmatic, given the time and resources available.
- For these reasons, it was suggested the steering committee be technical rather than composed of elected officials. It was suggested that perhaps a two-tiered structure might be appropriate, with a periodic meetings to inform elected officials of project milestones; and more regular meetings of technical staff. The elected officials could provide parameters and guidance for the study at the outset of the meeting.

#### 6. Public Discussion of Study Given IGA Negotiations

- Jay noted that there is an important mediation effort underway among many of the jurisdictions regarding the IGA. Evan said that from his perspective, the mediation is relevant but can be disconnected from the study. The area will continue to develop and grow, the infrastructure needs will not go away. This study will be beneficial for the jurisdictions regardless of the specific outcomes of the mediation. Steve Hogan agreed.
- Regarding public discussion of this study, Evan suggested that all media conversations be directed through CDOT; that individual jurisdictions not engage the media on this study as a topic. Steve Hogan agreed. Steve also suggested that at the initial kick-off meeting of this study, that all the jurisdictional PR persons be invited, so that they can understand the nuances of the sensitivity of this topic.

#### 7. Schedule

- Chris Primus stated that the grant funds need to be expended by the end of the calendar year, with a possible two-month extension.

#### 8. Input to HDR's Scope

- Jay asked for input to the HDR scope, by end of next week February 13, 2015.
  - Chris Primus reminded the group that the scope is a draft, pending input from this group. As mentioned earlier, the scope envisions extensive coordination and collaboration with the jurisdictions; the technical work will be conceptual at the '30,000'-foot level. The draft scope has identified potential stakeholders that should be reviewed by the participants today. The draft scope also outlines a potential committee structure, that after today's discussion and further input will need to be modified.
  - Dan Poremba suggested that per earlier discussion today, the scope be repositioned from resulting in an end product of 'plan', to more a summary of the collaborative findings and recommendations with an identification of next steps.
  - Tony suggested that step 15 of the scope could be the logical end-point of the study.

- Leslie said the focus should be more on the needed transportation infrastructure, rather than the land use planning. The development will follow naturally as these infrastructure investments are made.
- Jim Hayes supported the importance of the study including an identification of potential implementation funding strategies.
- Dan Poremba suggested a prioritization of regional infrastructure needs could be a beneficial and useful outcome of the study.

## 9. Roundtable Discussion

- Leslie Thomas asked about the ongoing Pena Boulevard Study. Dan Poremba stated that it is in the stage of identifying alternatives, and no detailed comparative analysis has begun yet. He suggested that the Pena study be well coordinated with this study, as this study will be more regional in nature than the corridor study, and it would be good to add the regional perspective to the Pena Boulevard study.
- Jose emphasized the importance of the analysis of existing jurisdictional plans and the coordination challenges and opportunities, rather than only a compilation of studies. Steve Hogan agreed that the evaluation needs to assemble and assess the multi-jurisdictional plans, and recommend strategic planning accordingly. It was agreed that the scope language needs to be strengthened to clarify the task.

## 10. Next Steps

- Jay said the focus is to finalize the HDR scope to get a task order processed for HDR.
  - He asked for input on the HDR scope by February 13, 2015 – one week from today's meeting.
  - Lesley Thomas recognized that the steering committee structure is an important and early decision, and would this group get back together? Steve Hogan suggested that the group respond to a proposal, rather than an open-ended discussion. CDOT and HDR will prepare a proposal for the steering committee structure, after input and careful consideration. Jay suggested this group might be reconvened via conference call to discuss and finalize the committee proposal structure.
  - Leslie asked if a high level conceptual schedule was available, to indicate the projected flow of the study associated with the draft scope. Chris Primus affirmed that a draft schedule has been prepared, and Jay stated that he would send it to the meeting participants.
  - Steve Hogan identified the need to determine the appropriate set of jurisdictions that will form the steering committee.
  - Jay also asked each jurisdiction to identify the appropriate technical people who should be appointed to participate in this study.
  - Tony recommended that this group and the elected officials meet collectively with the new CDOT executive director, to apprise him of the direction and intent of the study. All participants supported this proposal.



Sigh in

NE Quadrant Aerotropolis Meeting

February 6, 2015

Name	Agency	Phone	Email
Jay H... DUANE HENDRICKSON	CDOT	3/512-5991	DUANE.HENDRICKSON@STATE.CO.US
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JAMES HAYES	CITY OF COMM CITY	303-289-3619	JHAYES@C3GOV.COM
Tom Blikenaderfer	DIA	(303)342-2402	Tom.Blikenaderfer@flydenver.com

Name	Agency	Phone	Email
Tony DeVito	CDOT RI	303-757-9459	anthony.devito@state.co.us
EVAN DREYER	Denver Mayor's office	720-350-8370	EVAN.DREYER@denvergov.org
Chris Pilatus	HDR	303 323 9838	christopher.pilatus@hdrinc.com
Dan Poremba	DIA	303.621.5524	dan.poremba@flydenver.com
BILL POOLE	DIA	303.942.4518	bill.poole@flydenver.com

On Phone:

Steve Hagan	A-rora
Mike Cherantes	HPTE
Rick Pilgrim	HDR
Kim Day	DIA
Tykus Hallaway	CCD
Todd Leopold	Adams Co



Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—Urban Drainage and Flood Control District (UDFCD) NE Quadrant
Date:	February 16, 2016
Location:	UDFCD
Attendees:	David Mallory (UDFCD); Teresa Patterson (UDFCD); Tom Reed (DIA); representatives from Denver, Commerce City, and Fulenwider Development Properties; Chris Primus (HDR), Jay Hendrickson (CDOT)
Distribution:	File

### Summary of Discussion

1. Jay Hendrickson and Chris Primus attended this meeting of the NE Quadrant Group of the UDFCD as guests to present and introduce the Aerotropolis study to the group. This group meets once a month to coordinate on drainage and flood control issues. There is no set agenda; the group typically operates a roundtable to coordinate a variety of issues.
2. Chris and Jay provided an overview of the aerotropolis visioning study, its major tasks and objectives, as well as the current status of the study.
3. Chris and Jay had an informal meeting with Shay Thomas a couple of weeks ago which led to an invitation to this meeting. Shay provided Chris and Jay a description of the UDFCD and its vision and goals for the area. Chris used this information to prepare a brief summary for inclusion in the Aerotropolis final report. Chris will send the draft summary to Teresa Patterson for her review.
4. Chris and Jay notified the group of the next Study Review Committee meeting on March 1. UDFCD will be attending this meeting to give a brief presentation about the District and its mission, goals, and plans for the area. **Chris will send Teresa an Outlook invitation to the March 1 meeting.**
5. Many times coordination of regional detention facilities is challenging. It is one thing to identify them in a master plan, but sometimes difficult to implement as development occurs. This is because the land may not already be in the jurisdictions ownership, or the land is not available, or the land is valuable for other purposes, and many other reasons.
6. David Mallory noted that there is a restoration project under way at Frist Creek near Tower and Pena, in the 56th Avenue area under the FasTracks line. He also noted that the Rocky Mountain Arsenal has recently updated its Conversation Plan Master Plan. This plans for future expansion of its facilities to expand the growing visitor trends at the arsenal. For example, a trail in the First Creek floodplain will eventually be connected onto a trail on the Refuge property.
7. David also strongly encouraged that initial review for Section 404 permitting purposes be done at this visioning stage of the Aerotropolis study. An aerotropolis development could potentially not be allowed to occur because of Section 404 issues. This is another reason to make sure preservation of floodplains is part of the overall development plan in the Aerotropolis area. He suggested the Aerotropolis team get an ecologist with Section 404 expertise on board to review the general plan and provide some input. In support of this, he noted that the first word of the visioning statement is “sustainable.”
8. David mentioned that the District is first and foremost focused on protecting people and property from natural hazards, particularly floods. Floodplain preservation is a key recommendation that the District encourages.

9. There are several drainages that traverse the Aerotropolis study area, including Irondale Gulch, First Creek, Second Creek, Third Creek, as well as Box Elder Creek on the far east of DIA. It was noted that Sand Creek also traverses the lower southwest corner of the study area.
10. In general, each drainageway has a master plan. These master plans are in various stages of completion with different levels of detail for each of the drainageways.
11. There are also typically IGAs in place for each of these drainages. There is an IGA for First Creek and for Second Creek. There is an IGA drafted for Third Creek but has not been completed yet. There are two IGAs in place for Irondale Gulch—one among Aurora, Denver, and UDFCD; the second IGA is among Denver, UDFCD, and the Rocky Mountain Arsenal.
12. These IGAs generally stipulate cost-sharing for facility implementation. In general, the master plans are formed and the IGAs implement the agreements of the master plans.
13. Many of the drainages traverse multiple miles well beyond upstream of the Aerotropolis study area. Many of them have two separate master plans. Some of them are divided by upstream of the Arsenal and downstream of the Arsenal, or upstream of DIA and downstream of DIA.
14. DIA has been updating its drainage plan through RESPEC, the consulting firm who is completing the update for DIA. It was noted that closer to the South Platte, adhering to the master plans is more important. There is typically a general lack of demands for water closer to the South Platte. The infrastructure needs to accommodate flood waters per the master plan are identified but certainly not all of that infrastructure is in place. This infrastructure is more important closer to the South Platte River than farther upstream in its drainageway.
15. UDFCD does not have a permitting process to make sure that development is in compliance with the master plans. UDFCD technically serves as an extension of the local governments regarding these issues. Each respective local government is responsible for implementing its portion of the plan. In general, implementation of the plan occurs in tandem with development. However, UDFCD has a program to assist the communities with maintenance of the facilities after they have been implemented.
16. Regional trails are often a part of the drainageway plan within the floodplains. One master plan of a regional scale is called the Emerald Strands Trail Plan. It was developed many years ago as a joint effort of several jurisdictions. It identified trails of Second Creek, First Creek, the Highline Canal, and multiple other areas.
17. In general, the jurisdictions are quite cooperative in developing trail systems, and proof of that is in the regional trail system along the Platte River and other drainages throughout the metropolitan area.



# Colorado Aerotropolis Visioning Study

## Meeting Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting

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Date: October 15, 2015

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Location: Aurora Water Offices

1. Introductions
2. Study Overview and Schedule
3. Study Methodology and Outcome
4. Coordination Opportunities
5. Other
6. Action Items

Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—Aurora Water
Date:	October 15, 2015
Location:	City of Aurora
Attendees:	Aurora Water: Sarah Young HDR: Kevin Bergschneider, Rick Pilgrim and Chris Primus
Distribution:	File

### Summary of Discussion

1. Introductions were made. Chris Primus gave a brief overview of the Aerotropolis Study.
2. Sarah Young handles long-range planning for Aurora Water. They have recently been working on their long-range plan, as well as wastewater master plan.
3. **Action item: Send Sarah a draft of the write-up of utility opportunities and constraints.**
4. Sara mentioned that the integrated water master plan has used an in-house land use allocation model called LUAM. This produced forecasts of population and employment through the year 2070 in 5-year increments. Sara will provide this as a reference for the Aerotropolis Study.
5. Sarah asked if we would be looking at detailed utilities plans. The Aerotropolis Study is at a higher level than detailed plans. Instead we are trying to understand the landscape of challenges and opportunities concerning the major utilities of water, wastewater, power, and drainage.
6. Concerning wastewater, Sarah mentioned that serving the northern part of the city has been a challenge as it has grown rapidly. Developments are happening now and she needs to plan and build utilities accordingly since they are needed now. This will involve building lift stations.
7. In contrast, the wastewater could be gravity fed to Second Creek interceptor to the Northern Treatment Plant. However, that line will not be available for another 10 years. The needs for wastewater infrastructure are occurring now. Aurora cannot wait and must build the lift stations, and the life cycle of these lift stations will not be realized for sometime. At one point eventually, Aurora could consider sending wastewater to the Northern Treatment Plant through the Second Creek interceptor.
8. Regarding water, it was mentioned that Denver Water currently has end-of-line issues to serve DIA, and some water is wasted at the end of the line to clear it for water quality issues. Sarah agreed that area is a natural area where regional collaboration would be sensible. But there are very many complexities involved regarding that potential collaboration. These complexities include detailed water quality issues among the two water districts.
9. Sarah mentioned that the City and County of Denver and Aurora Water together have joint project for 56th Avenue Interceptor. This agreement will need to be renegotiated in 2018. Because it is a temporary contract with Denver Water, it is not something she can count on consistently and cannot put that water definitively into her long-range plans, because of the need for continual renegotiations as contract periods expire. For this reason, agreements amongst water districts make the logistics difficult, even though there may be long-term cost savings.
10. Aurora Water does not have water quality issues at the end of the line. Water redundancy is provided among the smaller pipes serving the areas.



11. Aurora's needs for water and wastewater are a difficult challenge. It will be achievable to serve Aurora and its needs through the year 2070 within its current boundaries. However there is discussion of a potential eastern annexation north of Quincy in the old Lowry Range. A potential eastern annexation would go beyond Aurora's current capabilities to serve that area with water and wastewater.
12. Sarah asked about if the Aerotropolis Study is interested in stormwater needs. Aurora has intergovernmental agreements with DIA that stipulate that if a flow exceeds a certain cubic feet per second, that there would be the requirement to build stormwater ponds. This is relative to specific points on tributaries, and they are used for stormwater drainage.
13. The Urban Flood Control Drainage District is currently updating its long-range plan for Third Creek. Matrix is the consultant performing this work.





# Colorado Aerotropolis Visioning Study

## Meeting Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting

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Date: October 14, 2015

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Location: E-470 Offices

1. Introductions
2. Study Overview and Schedule
3. Study Methodology and Outcome
4. Improvement Plans
5. Coordination Opportunities
6. Other
7. Action Items

Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—E-470 Public Highway Authority
Date:	October 14, 2015
Location:	E-470 Public Highway Authority
Attendees:	E-470 Public Highway Authority: Chrissy Palestine, Jason Myers, John McCuskey, Neil Thomson, and Stan Koniz  HDR: Rick Pilgrim and Chris Primus
Distribution:	File

### Summary of Discussion

1. John McCuskey asked why CDOT is running this study. Chris Primus gave a brief overview of the history of the study, the intentions, and planned outcomes of the study.
2. It was asked if a regional authority indeed might be formed after the study concludes. It was suggested that some sort of authority probably would be formed.
3. There is an investment grade traffic and revenue study available on E-470's Web site. FHU looked at level of service and EPS did the economic analysis. This was conducted in spring of 2014. The Aerotropolis Study may want that as a reference.
4. There is also an interchange expansion plan available on E-470's Web site under the Finance Relations page. CDM-Smith conducted the study. The following interchange expansions were identified (listed according to priorities):
  - a. Quebec, which has recently been constructed and is now open.
  - b. Sable, which is now Potomac, in 2025
  - c. 112th in 2035
  - d. 88th in 2035
  - e. 48th in 2035

Also identified in that study was completing and improving the interchanges with I-76 and I-70 with E-470. However, it is a later time frame for these interchanges.

5. The E-470 Authority also has an accelerated interchange policy. This is for developers who want an interchange built in the near term. They recently finished two under this policy—Gartrell and Jamaica on the southern side of E-470. This policy entails that the developer pays up front under an agreement of record with the jurisdictions, then E-470 Authority builds the interchange. And as time goes on, E-470 Authority pays back the developer over a period of several years for the cost of the interchange.
6. The E-470 Authority will be developing some of the toll plazas that have been discontinued. One of these is north of I-70 and another one is north of Peña. This would have convenience stores and gas stations and other sorts of commercial development serving motorists.
7. E-470 will be six lanes down south in the next couple of years. After that, Quincy at I-70 will be widened eventually. In the long term, all of E-470 will be widened to at least six lanes.
8. Chris Primus distributed a map of the conceptual ring road around the DIA property. He pointed out the conception of it, the need for it based on experience of other Aerotropolises around the world, as well as the fact that as conceived now, it uses the E-470 alignment.

9. There was discussion about the ring road concept. In the end the E-470 Authority board would decide if that would be the best use of its right-of-way. In general, the board has been open to selling their right-of-way. They have done so for a variety of water and gas lines. Because in the end, E-470 Authority is a business recouping its cost to pay back the bonds.
10. In general, the concept of a ring road was supported among the E-470 Authority staff that it makes to reserve right-of-way.
11. E-470 Authority's plans include a freeway needing 300 feet of right-of-way, plus 75-foot easements on each side, for a total of 450 feet.
12. E-470 Authority suggested we use their official logo for depicting E-470 symbol on our maps.





## FINAL Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	Coordination Meeting—DRCOG
Date:	September 28, 2015
Location:	DRCOG
Attendees:	Daniel Jerrett (DRCOG), Adam Christian (DRCOG), Arleen Taniwaki (Arland), Keith Borsheim, (HDR) Chris Primus (HDR)
Distribution:	File

### Summary of Discussion

1. DRCOG is currently updating the 2040 data set to produce cycle 2 of 2015 for their 2040 forecast. They are close to finishing this within the next couple of months. It has additional information from local governments. However, Aurora has not provided its information yet, so DRCOG will incorporate Aurora's information in the 2016 round of updating the 2040 data set.
2. Daniel Jerrett provided a brief overview of Urban SIM's land use allocation model. DRCOG works with the state demographer to establish the regional control total. The state demographer updates this about once a year. It is a back and forth procedure to determine the number for the DRCOG area. DRCOG further divides this control totals to the county level, which is then one of the input to the land use Urban SIM model. The model employs a location choice model that uses econometric regressions.
3. Previously, DRCOG used a utility-driven model. Zones were ranked based on attractiveness/proximity to existing urban centers. Employment control total was then distributed among the zones. Smooth curve and predictable. UrbanSIM now employed - dataset has 3 components: 1) parcels (GIS); 2) building data set and attributes (zoning, square footage); 3) inventory of number of employees by establishment, shows physical location of job clusters. Using these inputs, the UrbanSIM synthesizer swells sample population data up to regional control total; then distributes residential population by income level consistent with Census tract data. There is typically not enough planned or available housing to place all of the additional residents. For the excess household demand, UrbanSIM will scan for parcels with available development capacity, then prioritize where development occurs based on location choice model (income and housing affordability are primary drivers, not access to transit, amenities). Model is dynamic such that UrbanSIM will allocate growth to outlying, less expensive areas once the price of land increases in highly desirable areas in response to household demand. DRCOG relies heavily on input and feedback from local jurisdictions with respect to current and future plans.
4. The DRCOG area is forecast to become a less employment-rich region, with the number of jobs per person decreasing to 0.54 by 2040, compared to 0.59 currently in 2015. What accounts for this shift (aging population, more children per household)? Any insights into how this shift may translate into different development patterns (ie. more multifamily or multigenerational housing)? Primarily aging population - 1 in 4 residents will be over age 60 in 2040. Model does not assume dramatic expansion of urbanized area. New housing is located around employment centers. Average trip distances have decreased as a result. Some fixed inputs to the inputs are based on master plans—for example, a 13,000-unit development is proposed elsewhere within the region. Many local TOD plans around station areas anticipate 1,000s of new housing units.
5. Can DRCOG provide a breakdown of the 2040 employment forecasts by industry sector? If unavailable, is any additional information available on the assumptions/methodology DRCOG uses to build up to its regional totals? Industry sectors remain constant for 2040 employment projections—forecasting by industry sector is in the works. REMI is being pilot-tested. Population forecasts come from Region 3—

DRCOG. Likely aging population drives growth in health care, but this is just a hypothesis. Urban SIM uses 22 codes rolled into 6 sectors. DRCOG is able to share these codes with HDR.

6. In a study of off-airport jobs surrounding LAX, the majority of jobs were in the accommodations/food services (23.4%), transportation/warehousing (18.9%), manufacturing (7.1%), and wholesale trade (6.7%), and administrative/waste management (6.1%) sectors. Do you foresee a similar mix surrounding DIA? Are there other industry clusters that you think DIA is uniquely poised to attract? Denver and DFW. Lots of shipping/freighting. Will be difficult to attract talented labor to DIA. Contrary to the guiding assumption of the Aerotropolis scenario, Prologis moved from DIA to downtown Denver where amenities are concentrated and millennials want to locate.
7. Chris inquired about the potential of an Aerotropolis scenario attracting more employment that leads to one of two options—either a reallocation from other areas of the region or exceeding the regional control total of 2040. Daniel reminded that population would need to be increased as well in this scenario. He said that the migration of people to the area would need to be examined, because this would affect the potential for employment to exceed the current regional control total.
8. Daniel said that DRCOG cannot exceed the regional control total for their planning purposes, but a study like this has much more flexibility. He said that DRCOG would not be able to endorse or in any way convey that it was a DRCOG planning assumptions to exceed their regional control total. He understood that for academic purposes, a study like this could exceed that number without a problem.
9. Arleen mentioned Commerce City requested a meeting with the study team to discuss the DRCOG projection. This has been scheduled for Wednesday, 10/7. Arleen suggested it might make sense for Daniel to attend this meeting. Daniel will check his schedule and will try to accommodate this meeting. Arleen will notify Commerce City that Daniel has been invited.
10. Chris asked about the possibility of having DRCOG use the Urban SIMs model to produce a land use data set for Aerotropolis. Daniel said that currently the area out there is not attractive to employment in the Urban SIMs modeling parameters. The zones out there could be made to be very attractive. To manually force employment to reallocate there as opposed to other areas in the region. This might take trial and error and this would include adjusting the zoning and other inputs. The zoning is a very important parameter to allow developments to take place that the model uses. He mentioned that many times areas like these are not zoned properly, and the model therefore doesn't allocate growth. Oftentimes, municipalities address the zoning pending development occurring, instead of setting up a long-range plan.
11. Adam asked again about the locational aspect of the Urban SIMs model. He asked if there is a visual that would demonstrate the locational desirability throughout the study area compared to the rest of the region. Daniel mentioned that DRCOG has a beta of a Web application that is under development. They might be able to share the app with the study team at this stage. This app will allow the community to look at the desirability of zones across the region.
12. Chris discussed the importance of the Economic Development Corporations (EDC). EDC representatives from the jurisdictions typically attend study team meetings. Meetings have also been held with Tom Clark with Metro Denver EDC. Chris mentioned that it's possible that a panel of EDC representatives will be convened, or a special meeting with EDC representatives will be held. If this happens, Daniel will be invited to this meeting.







# Colorado Aerotropolis Visioning Study

## FINAL Meeting Notes

Project:	Colorado Aerotropolis Visioning Study
Subject:	One-on-One Agency Coordination Meeting—Metro Wastewater Reclamation District
Date:	10:30 Friday, September 18, 2015
Location:	Metro Wastewater Reclamation District 6450 York Street, Denver 80229
Attendees:	Jim Malloreay (MWRD); John Rehring (Carollo Engineers); Rick Pilgrim (HDR); Mary Speck (HDR)

1. Introductions were made.
2. Rick Pilgrim described the background of the study and CDOT's role to lead the study as a neutral party. He said the purpose of today's meeting was to listen to the perspectives and visions of the Metro Wastewater Reclamation District (MWRD) regarding the study. He further mentioned that due to terms of the grant, the study needs to be concluded by end of the calendar year.
3. Rick explained that the study will develop a framework for development of an Aerotropolis, based on cooperation between jurisdictions engaged in the study—Adams County, City of Aurora, City of Brighton, City and County of Denver, Commerce City, and DIA. An amendment to the IGA about DIA will allow 1,500 acres to be developed on airport property, and the participating jurisdictions will share the revenue generated by development. The framework will address both transportation and utility infrastructure.
4. Jim Malloreay explained that the members of the MWRD are Denver, Aurora, Brighton, and South Adams County Water and Sanitation District (not Adams County). Essentially, the entire metropolitan area is served by MWRD, with the exception of the Littleton/Englewood plant.
5. Unincorporated areas are also served by MWRD, either under the members or as "special connectors." A member is a municipal jurisdiction and is a Board member; special connectors represent a defined geographical area and they are not Board members.
6. Carollo is conducting a study for MWRD that taking a regional approach to wastewater management. The study will determine what flows north of I-70 and east of the South Platte would best be contributors to the new Northern Treatment Plant. They are considering a new interceptor along Second Creek that would connect to the South Platte Interceptor. The study will compare the long-term costs of MWRD treating the flows with the costs of constructing the new interceptor. The first step is to determine the approach; apportioning of costs and how this would be funded will be a later step.
7. John Rehring suggested that MWRD consider adding an evaluation criterion to their list about the scenario's ability to contribute to regional infrastructure related to a future Aerotropolis development.
8. Rick explained that the study team had used growth projections from DRCOG and comprehensive plans from jurisdictions to develop employment and population projections based on an Aerotropolis scenario. He indicated that the latest DRCOG projections may



not incorporate the latest data from the jurisdictions. The Aerotropolis projections are actually higher than the DRCOG control data.

9. John would like to have the data the study team has developed for their study to use with the DRCOG TAZ data. The DRCOG TAZs do not align with the tributary boundaries for their study. Rick offered to send the study team's GIS data, the FHU report, and the draft growth memo and data for their use.
10. Rick indicated that there are several ways to fund regional facilities. The study team is assembling order of magnitude costs for the anticipated infrastructure needs.
11. Tom and John stated that the 7-mile South Plate Interceptor total project cost was approximately \$70 million - or \$10 million/mile. The new Second Creek Interceptor would be about 14-15 miles.
12. John stated that Aurora is conducting a water demand study.
13. John asked about how the Aerotropolis development will be funded. Rick stated that part of the study will be to recommend a way for the jurisdictions to work together to fund ongoing studies and eventually projects. A regional governance structure is one of many options.
14. Rick reiterated that the study team will keep MRWD informed about what they will be including in their recommendations.



## Final Meeting Notes

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting—Denver Water

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Date: Friday, September 4, 2015

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Location: Denver Water

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Attendees: Martin Garcia (Denver Water); Vince Garter (Denver Water); Julie Anderson (Denver Water); Lyndsay Schulz (Denver Water); Arnold Strasser (Denver Water); Chris Primus (HDR); Rick Pilgrim (HDR)

1. Introductions were made.
  2. The water infrastructure supporting DIA is sized to meet fire flow demands as well as regular use. There is some capacity available, but this would need to be confirmed.
  3. If users other than DIA were to be provided water on DIA property, these private developments would need to pay for that additional infrastructure. In general, the pump systems and the reservoir systems would need to be expanded to at least a limited extent depending on the total demand requirements. It was noted that in general, Denver Water cannot provide water outside of their service district of the City and County of Denver.
  4. Regarding infrastructure on DIA, the piping constraints change at 48<sup>th</sup> Avenue and east of Piccadilly. The sizing requirements change and the material requirements change. The pipe must be steel beyond this point. Denver Water owns land for a pump station. This location is south of E-470 and west of E-470, or east of Picadilly and south of 64<sup>th</sup>. It is a small square plot in Adams County with the land owned by Denver Water, completely surrounded by City of Aurora. In general, they probably have enough capacity to serve developments along Pena with this current infrastructure in place.
  5. They noted that under construction there is a 6 mile long pipe from DIA over to Prairie Waters. This should be complete in a year. They have an agreement to provide water to Prairie Waters through the year 2030. The primary need driving this is Prairie Waters needs potable water to balance the chemical flow of the water that is produced by the Prairie Waters Plant. They also deliver recycled water to the Rocky Mountain Arsenal and they are building towards using recycled water in purple pipes to the rental car area of DIA.
  6. Denver Water has a Demand Planning Section headed by Greg Fisher. They thought that the DRCOG forecast provides a reference point but that this group of Denver Water also prepares forecasts for their demand planning needs.
  7. They inquired if we are meeting with the developers such as Panasonic. We answered that we are planning on meeting with the major landowners towards the end of our study to inform them and get their input on the framework that will be proposed by the Aerotropolis Study.
  8. Denver Water has a fixed limit contract with the South Adams County Water and Sewer District to provide water. This particular contract provides Adams County water
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in perpetuity. They provided a lump sum for infrastructure improvements and then they pay standard meter rates for outside of Denver Water District users.

9. The Denver Water staff noted that there is a Colorado River Cooperative Agreement regarding water use within Colorado. It caps Denver Water to providing no more than 4,000 acre feet to other metropolitan area users of water that is from the Western Slope. They have a handful of contracts with other users that were in place prior to this cooperative agreement and those agreements are grandfathered in and do not count towards the 4,000 acre-foot total. The 4,000 acre foot cap affects all new use of Denver Water that comes from the Western Slope.

They explained that the Colorado River Cooperative Agreement said that the basis of this was a Denver Water Board decision during the Two Forks process that the board adopted a redline service area boundary to clarify the use of trans-mountain water during that political process.

They were uncertain of the amount of water that South Adams County Water and Sewer District already uses as part of the 4,000 acre foot agreement from the Trans-mountain sources.

10. Rick Pilgrim explained the Proposed IGA Amendments and showed them the potential nodes of new development on airport property with the associated new accesses to airport property. They noted that new infrastructure on the property would need to be provided to serve those on-airport property nodes, but they also noted that if it was cost effective then they might work out an easement agreement through Adams County to pipe the water to some of these nodes depending on the geographic circumstances.

Rick noted that it is a very large study area but in the immediate future over the next 15–20–25 years the Aerotropolis development would take place to the west of DIA and to the south of DIA. To the north and to the east would take place perhaps in the 50-60 or more year timeframe.

They noted that if development was to occur to the north of DIA, then that would help the water quality on DIA property for Denver Water. DIA is a dead end of the Denver Water system and the ability to move that on through to users up to the north would be a benefit for water quality. In this case, South Adams County Water and Sewer District would purchase this water in a regional cooperative agreement.

In case the node is developed up north needing water, it would probably be more cost effective to extend the piping to the north through the DIA property as opposed to running pipe across the northern boundary of DIA through the clear zone area with no development.

11. Regarding regional cooperation for some future needs, they agreed that over a long time frame of 30 years that there could be some changes. In the closer time frame, there are a lot of constraints to providing water and not a lot of immediate opportunities or needs to work with the other water providers. They acknowledged that over a long time frame that there might be some opportunities to cooperate on some big changes as far as providing water in this area.
12. They strongly recommended that instead of diverting water from their mountain sources, that reusable water would be a very promising option. They recommended looking at the state water plan which is in draft form which has an initiative termed One Water. The One Water initiative emphasizes the need to maximize reuse of

water. California is already doing this and this is the most sustainable plan forward for the Denver Metropolitan Area.

This would be much more sustainable and a recommended path forward to providing water to an Aerotropolis district.

13. Towards the end of the study, they agreed and thought it would be useful if we came back to them and checked our assumptions regarding conceptual costs and other infrastructure assumptions and also to keep them informed on the progress of the Aerotropolis Study.

14. Action Item: Meet again with Denver Water to check our cost assumptions and apprise them of study progress.





## Final Meeting Notes

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting—South Adams County Water and Sanitation District

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Date: Thursday, August 27, 2015

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Location: South Adams County Water and Sanitation District

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Attendees: Blair Corning (SACWSD); Rick Pilgrim (HDR); Chris Primus (HDR)

### 1. Introductions were made

### 2. Wastewater

- a. Blair Corning said that a new wastewater treatment plant known as the North Treatment Plant will be coming online very soon. It is in the final construction stages and should be open by the end of the year approximately.
- b. There was new effort among some of the wastewater service providers to coordinate on how the Northern Treatment Plant can be best used. Currently, Aurora has lift stations to pump the wastewater to the Metro Wastewater Hite Plant at 64<sup>th</sup> and York. The opening of the Northern Treatment Plant will allow the potential to just use gravity to get the wastewater from the northern Aurora area down the second creek basin to the Northern Treatment Plant. The collaboration effort has begun is lead by Metro Wastewater and involves Brighton, Aurora, Denver and DIA with Carrollo Engineering assisting the effort. He thinks they have had one meeting so far but this group is investigating how to potentially run a line to the Northern Treatment Plant from the northern Aurora area. He suggested that we contact Jim Mallory of Metro Wastewater to become informed on their collaboration efforts.
- c. Blair also mentioned that DIA's wastewater contains deicer fluid that they may look to get to the Northern Treatment Plant. The deicer fluid would provide a good source of carbon needed for the treatment plant operation. The collaborative group is investigating a joint project to connect to the Northern Treatment Plant.

### 3. Water

- a. Blair mentioned that Aurora, through the new Prairie Waters Plant, has water. Denver, from long established sources, has available water. Adams County does not have sources of water. They serve their needs in this area with well for water and wastewater with septic systems. The South Adams County Water and Sanitation District largely ONLY has groundwater available as a source.
- b. SACWSD have a water treatment plant at 74<sup>th</sup> and Quebec. The district does not have water available in the north area of DIA. Currently, any needs are met with groundwater.

- c. On the SACWSD website, they have their service boundary under development. The GID boundary is shown as well as the general service area boundary. Future areas would probably need future GIDs established to get water service.
- d. He mentioned that somewhat recently, SACWSD has established a connection from DIA and they lease water to serve part of their district immediately to the west of DIA. They have done this on a temporary basis so that DIA, being at the end of a line, does not need to dump water.
- e. The area of east of Commerce City is served with a dual irrigation system. The water in the purple pipes is available for lawns and other secondary uses. Blair showed us a map of the district lines. The water trunk lines range from 16 to 18 to 24 inches depending on demand needs. In general, water supply is adequate through the year 2040 within the Commerce City boundaries.
- f. Blair mentioned that the Prairie Waters line pumps water to Aurora through the pinch point between the arsenal and DIA. Similarly, the East Cherry Creek Valley (ECCV) also pumps water from north to south through the pinch point area, and so does Castle Rock.



# Colorado Aerotropolis Visioning Study

## Meeting Agenda

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting

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Date: June 1, 2015

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Location: OEDIT Offices 1625 Broadway Suite 2700

1. Introductions
2. Purpose of Meeting
3. Study Overview
4. Study Schedule
5. Study Methodology and Outcome
6. Coordination Opportunities
7. Study Review Committee
8. Other
9. Next Steps and Action Items



Project:	Colorado Aerotropolis Visioning Study
Subject:	One-on-One Agency Coordination Meeting—Office of Economic Development and International Trade (OEDIT)
Date:	June 1, 2015
Location:	OEDIT Offices
Attendees:	Sandi Moilanen (OEDIT), Jay Hendrickson (CDOT), Chris Primus (HDR)
Distribution:	Jay Hendrickson, Chris Primus, File

#### SUMMARY OF DISCUSSION:

1. This is a one-on-one meeting with OEDIT, which is part of the Colorado state government. Jay gave an overview of the study and schedule and its intended outcomes.
2. Sandi is aware and knowledgeable about the aerotropolis concept. Her office has helped and worked closely with DIA staff and has helped attract some of the new international routes that serve DIA. She and her staff also work closely with MDEDC (Metro Denver Economic Development Corporation).
3. Sandi described the dual role that her office serves. Their first role is to help firms in Colorado expand their market penetration both domestically and internationally. The second role is to market to international firms to locate here in Colorado. The second role is one that is relevant to this aerotropolis study.
4. She suggested the project team meet with the City of Denver's Economic Development Office if we have not done so already. Paul Washington is the director working alongside Jeff Romine. Jay and Chris will plan to meet with this office.
5. Jay described the committee structure for this aerotropolis study, and invited the OEDIT office to provide a representative at the Study Review Committee meetings. Sandi will check with her senior executive director to make sure that being a participant in this study make sense for her office.
6. Jay noted that the upcoming June 18 meeting, which will focus on scenario development, would be a particularly relevant meeting for OEDIT to participate in.
7. Sandi mentioned that her office was involved in attracting Panasonic to locate near DIA. Her colleagues on the domestic side of her office were directly involved because it was a US subsidiary of Panasonic that decided to locate some of its facilities here in Denver.
8. Chris and Jay inquired if she perceives any competition from other aerotropolises around the world when it comes to attracting companies to locate their facilities in Denver. Sandi replied she hasn't heard of competition domestically in this regard, but she is aware of the attractiveness of airports around the world, including Munich, Amsterdam, and Seoul.
9. In general, Sandi perceives that Colorado/DIA competes quite a bit and quite often with DFW. Both of these airports are located centrally and offer good service, so DFW often comes up as a competitor.
10. Jay described the two Study Review Committee workshops that have been held to date. After some discussion, Sandi suggested that "Colorado" has a stronger brand name of worldwide than "Denver."



11. Sandi described the exports that Colorado focuses on—which are in services and products. Her office has more information on the product and commodity line—approximately \$8.4 billion a year of exports, including electronics, bioscience, and agricultural products—but not enough data on the export of services. The export of services is approximately double the amount of the product and commodity line and includes education and professional services among others.
12. Sandi will share the global opportunities identified by her office.
13. Sandi noted that most international prospects that come to Colorado are a result of mergers and acquisitions. A smaller portion are firms that locate here without prior presence.
14. Sandi mentioned that foreign trade zone is a concept that this aerotropolis study should investigate and discuss. She said that the City of Denver maintains a foreign trade zone approximately along the I-70 corridor, including the airport. Different licenses established under that zone include world port and license to the Aspen Distribution Center which is along I-70. Specific licenses within a foreign trade zone can be issued to private companies.  

The federal government issues the foreign trade zones. There can be adjacent trade zones but no overlaps are allowed. Generally, a 60-mile radius is suggested for a foreign trade zone. The one that is in play now is maintained and administered by the City and County of Denver. Other entities, such as other local governments, could have specific licenses within that. It was noted that this is another aspect that is available to the community surrounding DIA, but one again that is maintained and administered by the City and County of Denver.
15. Sandi will send to Chris and Jay the summary of categories of local opportunities that her office focuses on. She will also investigate the possible participation of her office in the Study Review Committee.
16. Chris will send to Sandi the meeting notes from the May 7 SRC visioning workshop.

**ACTION ITEMS:**

<input type="checkbox"/>	1. Sandi to send to Jay and Chris a summary of global opportunities identified by her office.
<input type="checkbox"/>	2. Sandi to send to Chris and Jay a summary of local opportunities identified by her office.
<input type="checkbox"/>	3. Sandi to investigate the possible participation of her office in the Study Review Committee.
<input type="checkbox"/>	4. Chris to send to Sandi the meeting notes from the May 7 SRC visioning workshop.



## FINAL Meeting Notes

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting—Front Range Airport

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Date: May 5, 2015

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Location: Conference Call

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Attendees: Dave Ruppel (Front Range Airport); Chris Primus (HDR)

1. Chris described the background of the Aerotropolis study. He described CDOT's role in running the grant as a neutral party, and he described the purpose and general outcome of the Aerotropolis study.
2. Chris described the study's proposed committee structure consisting of a Steering Committee and a larger Study Review Committee. The Steering Committee will consist of a representative from each of the five major stakeholders: Adams County, Aurora, Brighton, Commerce City, and Denver. DIA will also be a central player and have involvement and input on both committees.
3. Dave Ruppel has been invited to the May 7 Study Review Committee Visioning Workshop and he plans on attending. He suggested the Aerotropolis concept be defined so that the participants at the Study Review Committee meeting are on the same page regarding the concept.
4. Dave mentioned that he has recently discussed with DIA their aerotropolis plans; that DIA has done a lot of planning and evaluation regarding an aerotropolis. He has been encouraged how much they appreciate Front Range Airport's role in an aerotropolis development around DIA. He noted that while they have spent a lot of energy and effort in considering an aerotropolis development, they have not taken into account very well the local plans of other agencies. He suggested that the study team could pull together and understand the local plans in regards to an aerotropolis development.
5. Chris also described the second Study Review Committee briefing meeting on May 27, 2015. Dave agreed that Front Range Airport could provide a 5- to 10-minute briefing on their plans and visions and current activities at this meeting.



## Meeting Agenda

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Project: **Aerotropolis Visioning Study**

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Subject: **Coordination Meeting—CDOT Aeronautics**

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Date: **May 1, 2015**

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Location: **CDOT Aeronautics  
Watkins**

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1. **Introductions**
2. **Study Background / Grant**
3. **Study Schedule**
4. **Study Methodology and Outcome**
5. **Coordination Opportunities**
6. **Study Committee Structure**
  - a. **Steering Committee**
  - b. **Study Review Committee (SRC)**
7. **SRC**
  - a. **Kick-off Visioning Workshop May 7 1:30**
  - b. **Briefing Meeting May 27 9:00**
8. **Available GIS and other data**
9. **Next Steps and Action Items**

Draft Schedule

Tasks	2015									
	A	M	J	J	A	S	O	N	D	
Project Management										
Steering Committee										
Study Review Committee										
Concept Development and Visioning										
Initial Scenarios Economic Analysis										
Refined Scenarios Economic Analysis										
Findings & Next Steps										
Final Document										



## FINAL Meeting Notes

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Project:	Northeast Quadrant Visioning Aerotropolis Study
Subject:	Coordination Meeting—CDOT Aeronautics
Date:	May 1, 2015
Location:	CDOT Aeronautics
Attendees:	T.K. Gwin (Aeronautics); Todd Green (Aeronautics); Scott Storie (Aeronautics); Shahn Sederberg (Aeronautics); Jay Hendrickson (CDOT); Chris Primus (HDR);

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1. Introductions were made.
2. Jay Hendrickson described the study background and purpose. He confirmed it was an FHWA grant that funds this study.
3. The CDOT Aeronautics Division works with FAA and CDOT Grants for region airport activities. They thought that FHWA might be open to deadline extension given the short time frame to conduct the study, and that FHWA would like to be sure that the study product is not rushed.
4. The CDOT Aeronautics staff has a good understanding of DIA and Front Range airports and their needs and plans. They also have a good understanding of the FAA and its perspectives. They confirmed that they would be willing to support the study as a neutral party. They could help review the study and its recommendations regarding aviation issues. CDOT Aeronautics has a conference room that can accommodate 35 people that they could make available for committee meetings.
5. Shahn Sederberg handles communications for CDOT Aeronautics and confirmed that he is in close coordination with the communications group at CDOT Headquarters under Amy Ford.
6. CDOT Aeronautics confirmed that they can participate in the Study Review Committee meeting during the visioning workshop on May 7, 2015. They will also participate in the second Study Review Committee meeting on May 27, 2015, which will focus on briefings on activities and plans of agencies in the area around DIA.
7. CDOT Aeronautics has a good understanding of the development requirements around airports so that new developments do not interfere with airport operations.
8. CDOT Aeronautics recently conducted studies regarding the economic impact of airports. The studies identified that the impact of airports vary significantly by region and by county. The final report was never prepared but Aeronautics will send HDR the summary.
9. CDOT Aeronautics has good relationship with the FAA in Colorado and nationally. The relevant division in Colorado for this study is the Denver Airport District Office of the FAA. John Bauer is the main contact. The FAA focuses on airspace and airport accesses and their role is to make sure these are protected for the aviation industry. CDOT



Aeronautics recommended that the Denver Airport District Office of the FAA be invited to participate in the Aerotropolis study.

10. The FAA will make final determination on airport access and developments around airports. If they have an early understanding of how plans are developed, then it is easier for them to have a perspective to understand the needs and plans and better able to work with Washington, DC, to get the approval process completed.
11. Peña Boulevard has recently been under scrutiny for its non-aviation use. The CDOT Aeronautics Division issued a \$3 million grant to fund maintenance and operations of Peña Boulevard during an interim period, while negotiations with neighboring jurisdictions were made for future maintenance and operations funding needs.
12. The FAA has been clarifying its rules regarding various guidances. A new guidance was just issued regarding the rule concerning non-aviation uses of airport accesses. CDOT Aeronautics will send a Web link of this new guidance to HDR.
13. As a point of clarification, any revenue raised on an airport (for example, tax on aviation fuel and, many times, tax on airport retail sales) is considered airport revenue and must be used for airport purposes. The FAA makes determinations on a case-by-case basis on new airport access and use of airport funds.
14. The FAA may want to participate in the May 27, 2015, briefing workshop for the Study Review Committee. They will send the contact information and Chris Primus will invite them to a conference call next week (week of 5/4) apprising them of the study and invite them to the visioning workshop and the briefing workshop.
15. Regarding the study area for the Aerotropolis study, FAA did not have any immediate suggestions, but thought that the study team's economist may have perspectives on the appropriate area. They also suggested that we should be aware of the area each of the five major stakeholders has within our final study area, in case this becomes a point of contention.





## Meeting Agenda

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Project: **Aerotropolis Visioning Study**

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Subject: **Coordination Meeting—E-470 Authority**

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Date: **April 30, 2015**

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Location: **Conference Call 866-994-6437 Code 8971215**

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1. Introductions
2. Study Background / Grant
3. Study Schedule
4. Study Methodology and Outcome
5. Coordination Opportunities
6. Study Committee Structure
  - a. Steering Committee
  - b. Study Review Committee (SRC)
7. SRC
  - a. Kick-off Visioning Workshop May 7 1:30
  - b. Briefing Meeting May 27 9:00
8. Available GIS and other data
9. Next Steps and Action Items

Draft Schedule

Tasks	2015									
	A	M	J	J	A	S	O	N	D	
Project Management										
Steering Committee										
Study Review Committee										
Concept Development and Visioning										
Initial Scenarios Economic Analysis										
Refined Scenarios Economic Analysis										
Findings & Next Steps										
Final Document										



## FINAL Meeting Notes

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Project: E-470 Authority

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Subject: Coordination Meeting—E-470 Authority

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Date: April 30, 2015

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Location: Conference Call

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Attendees: Stan Koniz (E-470); Jason Myers (E-470); Jaime Heitman (E-470); Jay Hendrickson (CDOT); Chris Primus (HDR)

1. Introductions were made.
2. Jay Hendrickson provided an overview of the study, background, and grant.
3. It was clarified that the planned outcome of the study is to investigate the infrastructure that is needed to support the development in the area around DIA and that the study will articulate the economic benefits of a collaborative approach.
4. It was questioned how this study relates to the current study of Pena Boulevard and it was confirmed that the two studies will be in close coordination. The Pena Boulevard study will recommend alternatives by the end of the year. Those will help inform the infrastructure needs for the Aerotropolis Study.
5. The area for the Aerotropolis Study will be I-70 on the south, US-85 and I-76 on the West, Adams County Line on the north and the eastern boundary will be to the east of Front Range Airport. It was noted that E-470 is central to this area.
6. E-470 has recently completed a Traffic and Revenue Study in late 2014. It is on the website under the Investor Relations Tab. It identifies the need for widening in the southeast part of their corridor between Parker and Quincy in the relative near term. Further out, in the 2025 /2035 timeframe, it identifies more widening to the north of Quincy. However, no widening in the twenty year time frame is anticipated at this point near Pena Boulevard. Of course, plans are re-visited as development occurs and if additional development occurs near Pena Boulevard in a closer timeframe, E-470 will adjust plans accordingly.
7. Regarding interchanges, Quebec opened last year in the northern segment of the E-470 corridor. Another interchange of note is the 6<sup>th</sup> Avenue alignment. It is close to the southern boundary for this Aerotropolis Study area. The interchange today is a dead end, but Aurora is proceeding with a 6<sup>th</sup> Avenue Parkway Extension to that interchange in the next three to five years. A new interchange at 88<sup>th</sup> Avenue has been identified for the 2025 / 2035 Horizon Year Time Span. E-470 Authority completed an Interchange Study in 2012 that was conducted by CDM Smith. That has information about interchanges and the tolling and revenue impacts as these new interchanges come online. Their studies involve land use projections that are updated by discussions with the local jurisdictions and developers in the areas surrounding the E-470 Corridor.



8. Chris further described the Study Review committee and the steering committee. The E-470 authority would be a welcome participant at the study review committee. The first study review committee will be a Visioning Workshop on May 7<sup>th</sup> and the second study review committee will be a briefing meeting on May 27<sup>th</sup>. Jason and Stan confirmed that they can attend the two meetings as well as subsequent study review committees.
9. The Steering Committee, which is composed of major stakeholders of Adams, City of Aurora, City of Brighton, Commerce City, and the City and County of Denver, will be in an Advisory Committee with one seat at the table per jurisdiction. It was noted four out of the five members of the Steering Committee are on the E-470 board. The only one not on the board is The City and County of Denver.
10. Beyond the information on the web, GIS information is available regarding E-470 and their plans. Jason will determine the GIS contact for this study.



## Meeting Agenda

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Project: Aerotropolis Visioning Study

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Subject: Coordination Meeting—DRCOG

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Date: April 30, 2015

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Location: DRCOG

1. Introductions
  2. Study Background / Grant
  3. Study Schedule
  4. Study Methodology and Outcome
  5. Coordination Opportunities
  6. Study Committee Structure
    - a. Steering Committee
    - b. Study Review Committee (SRC)
  7. SRC
    - a. Kick-off Visioning Workshop May 7 1:30
    - b. Briefing Meeting May 27 9:00
  8. Available GIS and other data
  9. Next Steps and Action Items
-

Draft Schedule

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Findings & Next Steps										
Final Document										



## FINAL Meeting Notes

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting—CDOT Aeronautics

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Date: April 30, 2015

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Location: DRCOG

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Attendees: Doug Rex (DRCOG); Daniel Jerrett (DRCOG); Steve Cook (DRCOG); Jay Hendrickson (CDOT); Chris Primus (HDR); Keith Borsheim (DRCOG)

1. Introductions were made.
2. Jay Hendrickson described the background and purpose of the study.
3. Steve Cook mentioned that this grant has been in the TIP for a couple of years under the TCSP Program funds. DRCOG has not heard any activity on it recently.
4. Steve also mentioned that the Aerotropolis term is in the MAP-21 legislation under the Freight section, Section 11.15, National Freight Policy, under establishing a national freight network, including intermodal connectors and aerotropolis transportation systems.
5. DRCOG asked if the Peña Boulevard study is separate from the Aerotropolis study. It is separate but integral. The Aerotropolis study team will be in close coordination with the Peña Boulevard project team as alternatives are developed for Peña Boulevard. The Peña Boulevard study is in the same time frame to complete and identify alternatives by the end of 2015.
6. Chris Primus provided a description of the Aerotropolis study committee structure and listed the major stakeholders of Adams County, Aurora, Brighton, Commerce City, and Denver.
7. Jay described the first Study Review Committee meeting on May 7, 2015, which is a visioning workshop. The second Study Review Committee meeting on May 27, 2015, will be a briefing meeting. DRCOG is welcome to participate in and send representatives to the Study Review Committee meetings. At the briefing meeting on May 27, DRCOG is welcome to describe their plans and visions and support for the Aerotropolis Study.
8. Chris described the planned outcome of the study, which will not be a plan, per se, of determining future land use patterns and future roadway network, but rather it will be an economic analysis of the benefit of developing an aerotropolis compared to a current trends development scenario.
9. Chris further said that the economic analysis may reallocate employment and some residential to the aerotropolis area compared to the standard 2040 allocation data set of DRCOG. He suggested that the study team might use the DRCOG travel demand model to do this. The HDR team is accustomed to operating the COMPASS model. He asked Daniel Jerrett how land use could be redistributed to reflect aerotropolis-types of development patterns as a scenario exercise.

10. After some discussion and description of Urban Sims and its capabilities, Urban Sims probably is not the right tool. Instead Daniel recommended IMPLAN or REMI. He noted the main input to Urban Sims—the regional control totals at the county level, as well as the zoning—is a critical input. The IMPLAN and REMI tools produce number of jobs created and cost. He also suggested that the zones in the aerotropolis area might need to be split.
11. DRCOG also suggested that if we, for a scenario analysis, look at an aerotropolis that attracts more employment than the current regional control total for 2040, then the Aerotropolis study team should coordinate with the state demographer and DRCOG to be sure the new total is in line and within reason of migration levels.
12. Chris asked DRCOG about its sustainability initiative. There was a specific grant, the SCI Sustainability Grant that is in its final stages that has looked at sustainability measures particularly near new station areas. The 61st and Peña station may have been one of those stations.
13. The other aspect of sustainability at DRCOG is the Council of Governments general policy for sustainability. The current DRCOG Board varies in its support for sustainability as a regional policy.
14. Daniel said he could have a conference call with the HDR team economist to further explore the technical aspect of the economic analysis. He noted that he and the travel modeling staff at DRCOG are completely booked for several months into the fall. The ability for DRCOG staff to run scenarios is limited and probably not possible in the time frame of the Aerotropolis study.
15. Chris will send invitation to the Study Review Committee meetings to DRCOG staff.





Name	Agency / Dept	Email	Phone
Chris Plums	HDR	christopher.plums@hdrinc.com	33239838
KEITH BORSHEIM	HDR	KEITH.BORSHEIM@HDRINC.COM	303.323.9843
Daniel Jerrett	DRCOG	djerrett@drco.org	303-480-5644
Doug Rex	DRCOG	drex@drco.org	3-480-6747
Steve Cook	DRCOG	scook@drco.org	3-480-6749
Jay Hendrickson	CDOT		



## Meeting Agenda

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Project: **Aerotropolis Visioning Study**

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Subject: **Coordination Meeting—DRCOG**

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Date: **April 30, 2015**

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Location: **DRCOG**

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## FINAL Meeting Notes

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Project: Colorado Aerotropolis Visioning Study

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Subject: Coordination Meeting—DRCOG

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Date: April 30, 2015

---

Location: DRCOG

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Attendees: Doug Rex (DRCOG); Daniel Jerrett (DRCOG); Steve Cook (DRCOG); Jay Hendrickson (CDOT); Chris Primus (HDR); Keith Borsheim (DRCOG)

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Daniel Terrett	DRCOG	dterrett@drco.org	303-480-5644
Doug Rex	DRCOG	drex@drco.org	3-480-6747
Steve Cook	DRCOG	scook@drco.org	3-480-6749
Jay Hendrickson	CDOT		

## FINAL Meeting Notes

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Project: Aerotropolis Visioning Study

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Subject: Coordination Meeting—RTD

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Date: April 29, 2015

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Attendees: Bill Van Meter (RTD) ); Jay Hendrickson (CDOT); Chris Primus (HDR)

1. Introductions were made.
2. Jay Hendrickson provided an overview of the study, background, and grant.
3. Bill Van Meter provided a background to the development of the East Corridor stations. The Airport and 40<sup>th</sup> station has always been identified as a station on the FasTracks plan. As planning for the FasTracks corridors progressed, Denver along with DIA wanted two more stations along the East Corridor line. RTD due to funding constraints said that any additional stations would need to be funded by Denver. RTD's analysis demonstrated that one additional station would not require additional fleet, but two additional stations would require additional fleet. The agreement with Denver was that they would contribute accordingly if two stations were added.
4. Denver has proceeded with having a station built at 61<sup>st</sup> and Pena as one of the first additional stations. The other additional station is located on the east-west portion of the east corridor line near E-470. Aurora has been somewhat supportive of these additional stations. Actually, Aurora's preference was the other station in contrast to 61<sup>st</sup> and Pena, since it provides better access for Aurora developments.
5. RTD's analysis showed that there is a need for 800 parking spaces at the 61<sup>st</sup> & Pena Station and that is in the agreement with Denver that the parking be provided. It was mentioned that parking is potential revenue generator. A parking facility can charge airport travelers for parking and help generate revenue for the development.
6. Regarding long term visions, RTD has been active in the recent past as a joint sponsor for the Inter-Connectivity Study, which studied High Speed Rail Lines through the state and how they are connected in the RTD Region. The ICS Study as one of its alternatives envisioned a High Speed Rail Line North-South along the Front Range, with a suburban station on both the north and south of the suburban areas and routing east around the metropolitan with a station at DIA.
7. Another study which is looking at the long term (post-FasTracks) is the NATE2 Study, the Northeast Area Transportation Evaluation study. It is primarily looking at the corridor between the Downtown area and the City of Brighton. The corridors under review are the US-85 Corridor, the SH-2 Corridor, and the I-76 corridor. Brighton has been interested in a rail line on one of these corridors. As the FasTracks plans has progressed and rail corridors have been planned and designed, there is a better awareness of the cost of rail lines. For that reason, the Nat2Study has focused on BRT as the mode of choice for the corridor up to Brighton. The study has identified that BRT arterial corridors through the study area include the SH-7 Corridor and the 120<sup>th</sup>

Avenue corridor serve the east-west area near DIA in the Commerce City / Brighton areas.

8. RTD will be happy to be a coordinating agency and attend the study review committee meetings. Bill suggested that two groups might have good input to be representatives of RTD. One would be the service planning group and the other would be Bill's long range planning group. Depending on availability, Bill would ask staff from these two groups of RTD to attend the study review committees.
9. Bill will also provide GIS files for the East Corridor and the NATE 2 Study. He suggested a better source for the ICS alignments is David Krutsinger, at CDOT's Division of Transit and Rail.
10. Bill mentioned that they have current staff skills and capacity for planning, designing, and delivering rail lines. He was unsure what RTD would plan for post-FasTracks with that in conjunction with CDOT DTR. There may be some Rail opportunities statewide where his staff participates in those planning and design meetings.



## Meeting Agenda

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Project: **Aerotropolis Visioning Study**

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Subject: **Coordination Meeting—Pena Boulevard Study**

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Date: **Wednesday, April 22, 2015**

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Location: **WorldPort**

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1. Introductions
  2. Study Background / Grant
  3. Study Schedule
  4. Study Methodology and Outcome
  5. Coordination Opportunities
  6. Study Committee Structure
    - a. Steering Committee
    - b. Study Review Committee (SRC)
  7. SRC
    - a. Kick-off Visioning Workshop May 7
    - b. Briefing Meeting May 22 or 27
  8. Available GIS and other data
  9. Next Steps and Action Items
-

Draft Schedule

Tasks	2015									
	A	M	J	J	A	S	O	N	D	
Project Management										
Steering Committee										
Study Review Committee										
Concept Development and Visioning										
Initial Scenarios Economic Analysis										
Refined Scenarios Economic Analysis										
Findings & Next Steps										
Final Document										





## FINAL Meeting Notes

Project: Northeast Quadrant Visioning Aerotropolis Study

Subject: Coordination Meeting— Pena Boulevard Study

Date: 8:30, April 22, 2015

Location: WorldPort

Attendees: Bill Poole (DIA); Suzanne Culin (DIA); Dave LaPorte (DIA/AIM); Dan Poremba (DIA); Mark Schaefer (AECOM); Tom Reed (DIA); Brandon Howes (DIA) Amy Raaz (DIA); Kendall Peterson (URS); Rick Pilgrim (HDR); Evan Dryer (Mayor's Office) Jay Hendrickson (CDOT); Kip Cheroutes (LXC Strategies); Chris Primus (HDR); Rick Pilgrim (HDR).

1. Introductions were made.
2. Jay Hendrickson provided the background to the study.
3. The Pena Boulevard effort is a paramount issue for planning the infrastructure around the DIA facility and it is important that the two studies are synchronous with each other in terms of outreach and messaging. However, the Aerotropolis Study has a neutral party CDOT as its lead, and there can be some distance between the two studies.
4. The Aerotropolis Study has a planned committee structure of a steering committee and study review committee. The steering committee will be a guidance committee or an advisory committee with each of the major stakeholders having one seat at the table for equitable representation. The five major stakeholders are Adams County, City of Aurora, City of Brighton, Commerce City and Denver. It was questioned if DIA would have a seat at the table as well, and at the one-on-ones, it has been suggested that Denver represent DIA. However, if DIA would like to make their case at the visioning workshop for a seat at the table, that may be accepted by the major stakeholders.
5. The Aerotropolis Study has scheduled a kick-off visioning workshop on May 7<sup>th</sup>. Chris Primus said that the second meeting of the Aerotropolis Study Review Committee would be a briefing session to where various activities and studies, that are active around the DIA area, would each provide an overview of their study. The overviews would briefly describe the schedule and potential outcome to the larger study review committee stakeholders. This workshop is to be scheduled in late May, will be a good forum for Pena Boulevard Study team to describe their plans and activities for the study.
6. Tom Reed provided the background to the Pena Boulevard Study. As development and growth has occurred, an increasing amount of traffic on Pena Boulevard is not destined to/from the airport. This violates the funding agreements that the airport maintains with the FAA, which assures airport revenue is not diverted from airport uses.

7. The FAA's position is that as non-airport traffic begins to use the start of Pena Boulevard that other jurisdictions contribute towards the costs for operating and maintaining the facility and future capacity improvements. This issue of non-compliance is a very serious one. Potentially the FAA could halt all federal funds that are used by DIA. In 2013, the CDOT division of Aeronautics received a three million dollar grant to operating maintenance costs of Pena Boulevard. This is an interim funding. This grant runs out at the end of 2015. At the end of 2015, more interim funding will need to be identified for operations and maintenance of Pena Boulevard.
8. As this became an issue, the airport hired FHU to study the traffic on Pena Boulevard. The study collected traffic counts and used the DRCOG model as well as Bluetooth data on traffic patterns to come up with estimated traffic on Pena that was airport destined versus non-airport use. The study determined that approximately 38% was non-airport use on the southern section of Pena between 56<sup>th</sup> Avenue and I-70. During the study period, a task force was formed with the surrounding jurisdictions to understand the issues that regarding the non-airport use of Pena Boulevard. The task force met three or four times during the course of the study. After the FHU study, which ended in 2012, URS was hired to further study the traffic patterns to further define the problems and this time develop alternatives.
9. The URS study must identify a solution that is acceptable to DIA, Denver, and the FAA. The solutions could be short or long term. It may specify how the jurisdictions contribute to the solutions. In the meantime, the development and growth surrounding DIA has increased. And as a result, the traffic on Pena has continued to increase as well. It was noted that due to the increasing traffic, there is rising concerns about Pena Boulevard. The FAA requires the level service C on airport access road. And traffic conditions are verging toward level of service "D" conditions.
10. At the end of 2015, DIA, Denver, and FAA must have identified alternatives that are satisfactory. But preliminary thoughts on possible alternatives not yet internally vetted include: Physical alternatives could include additional lanes or additional/widened arterials. The physical alternatives could also include Collector-Distributor (CD) roads. Actually, CD roads were identified as part of the original design plan for DIA back in the early 1990's. The CD road as envisioned would serve local traffic along the Pena corridor, and Pena Boulevard would serve as an expressway into DIA. Current cost estimates for a CD road infrastructure would range from sixty million to one-hundred million dollars. Another category of alternatives would be operational alternatives. This would include tolls or peak hour restrictions or other options. The tolling options could take form of various permutations but would serve to both raise revenue and also meter traffic. The third category of alternatives would be financial or institutional alternatives.
11. It was questioned if the original airport plans had called for CD roads, they would have been paid with the same airport bond revenue as the rest of the airport infrastructure. And if that was the case, could the same revenue structure pay for the CD roads today? It was so many years ago, it was not known the logic of how the CD roads were paid for. It could have been expected to be paid for by City and County general funds. Or perhaps, they did not understand the consequences and the restrictions on that revenue.

12. It was suggested that this question may arise again from the participants of the Pena Boulevard study or the Aerotropolis study. There may be a need to reconstruct the funding plan for the CD roads back in 1992.
13. The URS study has not met with the task force yet. The Pena Boulevard team will develop the range of alternatives and present them to the stakeholders. This is not scheduled yet. The Pena study team will begin the outreach effort soon. They are refining the messaging and after further internal review, they will start to engage the stakeholders.
14. The outreach plan of the Pena Boulevard study team is to engage the neighboring jurisdictions. It will be largely the same group as the Aerotropolis study has engaged in one-on-one sessions over the last two or three weeks. After the Pena Boulevard team engages the technical staff, then the outreach plan will broaden to reach elected officials, the public, and the media.
15. In summary Jay Hendrickson asked for their perspectives on the ideal outcome of the Aerotropolis Study. It was suggested that the Aerotropolis study identify an overall plan for the roadway network; this would be beneficial to help offload traffic from Pena Boulevard. It was also suggested that the public relations be in coordination and a meeting should be set with the DIA PR team, CDOT and the study team's PR individuals.



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AMY HENNINGSON	CDOT	AMY.HENNINGSON@STATE.CO.US	31 512-5991
Dave Lupatere	DIA AIM	dave.lupatere@flydenver.com	303-342-2269
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Kendall Peterson	URS team/CIA	Kendall@CIA-pr.com	31 956-4860
Rick Pilgrim	HDR	rick.pilgrim@hdrinc.com	720-309-9446
Evan Dyer	Power Manager office	on phone	





## FINAL Meeting Notes

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Project: Northeast Quadrant Visioning Aerotropolis Study

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Subject: Coordination Meeting—I-70 East Project

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Date: 2:00 Monday, April 20, 2015

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Location: Atkins

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Attendees: Peter Kozinski (CDOT); Vanessa Henderson (CDOT); Carrie Wallis (Atkins); Jay Hendrickson (CDOT); Chris Primus (HDR); Rick Pilgrim (HDR)

1. Introductions were made.
2. Jay Hendrickson provided the background to the study.
3. Carrie Wallis provided a brief overview of the status of the I-70 East study. The terminus on the east side is Tower Road. The project plans two managed lanes in each direction, between I-25 and Tower. Phase I would have one tolled lane in each direction between I-25 and I-225. In Phase II, the lanes are extended further east. Direct connects between the managed lanes and Pena Blvd are not planned at this time. Their designs do not preclude a direct connect, but it is not being directly designed at this point in time. Under the Phase II two managed lanes, it is possible one of the lanes connects to/from a direct connection to Pena Blvd and the other lane merges to/from the mainline.
4. The Supplemental Draft EIS is online and has the description of the eastern end that is relevant to the Aerotropolis Study.
5. Regarding interchanges, their Phase I has ramp modifications only, in the vicinity of Quebec and Tower. They did note that Phase II has reconstructions of the interchanges including Havana. The others are re-constructed with as diamond interchanges. The Tower Road interchange does not have a major reconstruction in Phase II.
6. The I-70 East study is using 2035 as a horizon year partially because the 2040 modeling is not available for project use from DRCOG.
7. Chris Primus briefly described the Aerotropolis study's committee structure. He said a Kick-off Visioning Workshop of the Study Review Committee (SRC) will be held on May 7. The next meeting of the SRC, in mid- to late May, will be a "Briefing" meeting where various entities and studies active in the DIA area will each provide brief



overviews of their efforts. Peter Kozinski agreed that the I-70 East project team could provide a brief overview at the “Briefing” SRC meeting.





## Meeting Agenda

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Project: **Aerotropolis Visioning Study**

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Subject: **Coordination Meeting—MDEDC**

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Date: **Friday, April 17, 2015**

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Location: **Denver Metro Chamber of Commerce**

1. **Introductions**
  2. **Study Background / Grant**
  3. **Study Schedule**
  4. **Study Methodology and Outcome**
  5. **Coordination Opportunities**
  6. **Study Committee Structure**
    - a. **Steering Committee**
    - b. **Study Review Committee (SRC)**
  7. **SRC**
    - a. **Kick-off Visioning Workshop May 7**
    - b. **Briefing Meeting May 21 or 22**
  8. **Available GIS and other data**
  9. **Next Steps and Action Items**
-

Draft Schedule

Tasks	2015									
	A	M	J	J	A	S	O	N	D	
Project Management										
Steering Committee										
Study Review Committee										
Concept Development and Visioning										
Initial Scenarios Economic Analysis										
Refined Scenarios Economic Analysis										
Findings & Next Steps										
Final Document										



## STUDY SESSION AGENDA ITEM

<b>DATE:</b> April 5, 2016
<b>SUBJECT:</b> Foster Parent and Kinship Support Plan
<b>FROM:</b> Chris Kline, Director of Human Services
<b>AGENCY/DEPARTMENT:</b> Human Services Department
<b>ATTENDEES:</b> Jan James – Children and Family Services Division Director Brian Kenna – Human Services Department Deputy Director Chris Kline – Human Services Department Director
<b>PURPOSE OF ITEM:</b> Present Foster Parent and Kinship Support Four Point Plan
<b>STAFFING RECOMMENDATIONS:</b> That the Board of County Commissioners approves.

### **BACKGROUND:**

To discuss and receive approval for the proposed plan to improve support for foster and kinship providers for Adams County children in temporary out-of-home care. The plan is comprised of four primary strategies funded through the use of the Child Welfare IV-E reserve. Currently, the IV-E reserve is currently at \$3,901,032 that can be spent within the Children and Family Services division. The balance was accumulated over several years and has been stagnant for over five years. Within the defined purposes of these funds, Human Services intends to deliver enhanced services to families in order to utilize the resources instead of continuing to store them through the following strategies:

#### **1. Flexible Pool of Funds to Support Kinship and Foster Care Families**

We are currently involved in a state-funded IV-E Waiver project. Colorado has received a federal waiver to implement programming designed to keep children in their homes and/or to return them home more rapidly should they require temporary out-of-home care. To work toward this goal, we have been authorized to expend funds to keep children in the community that were previously used exclusively to pay for foster care. In the first 3 years of this 5-year project, we have received a pool of funds that are exclusively to be used to pay for hard goods and services (i.e., beds, diapers, clothes, transportation support, recreation center passes, etc.) for children placed temporarily with kinship providers. In SFY 2015-16, the funding was increased to \$87,500 to help us better meet the needs of our kinship providers. We have grown our population of children placed with kin from 39% the first year of the project (2013), to 46% at this writing. In this state fiscal year, we have served 131 families in the first 7 months, and have spent \$53,628 of the awarded funds (an average expenditure of \$410.00 per family).



The IV-E Reserves would provide an invaluable resource to help us continue this work in the next 10 years. As these funds originated from Federal foster care monies, it seems appropriate and fitting to “repurpose” these dollars to now keep children safely in kinship homes.

*Amount requested from the IV-E reserve - \$80,000 per year/\$800,000 over ten years*

## **2. Increased Staffing Support**

- a) Supervisor: to provide direct oversight of our Kinship Support Unit to help grow and develop this resource to allow for quickly finding appropriate, safe Kinship foster parents to temporarily care for children to assure our Homes for Hope remains a short-term supportive option without increasing out-of-home care costs
- b) Training Coordinator (SCW IV): to work directly with new and established foster parents to provide direct coaching, support and training to help support retention and stable placement of children in our County foster homes (we need to recruit and train 15 new foster families to achieve our goal of 100 Adams County certified homes)
- c) Kinship Caseworker (SCW III): 46% of children in out of home are now with kin; we currently have 3 FTE who outreach to the approximately 145 kinship placement families to provide needed resources and supports to ensure placement stability for children while they are unable to live with their parents.
  - Kinship families receive no payments for providing foster care for these kinship placements
  - Our 3 FTE, currently provide support to 48-50 active families at any given time
  - As the families are non-paid, our staff work with them initially to secure background checks, link them with benefit navigators who help them secure child-only TANF and Medicaid for the child(ren), and provide hard goods and services (beds, diapers, etc.) to help them house children up to a year while their parents are involved with services
  - Caseloads are far too high per FTE to offer any support beyond the initial outreach, and we have subsequently been unable to impact our placement stability outcomes to a significant degree as a result
  - By adding 1 additional FTE Kinship Caseworker we can reduce this caseload to 35-36 families per worker which will allow for more consistent outreach and support to help improve placement stability (a federal outcome we are responsible to meet) and reduce disruption of kinship placements to provide better continuity for children

*Amount requested from the IV-E Reserve - \$202,410 per year/\$1,074,622 over five years*

## **3. Homes for Hope:**

To provide in-county emergency and short-term placements for children. We initially reached out to several partner agencies, but found little interest as their core mission is different than that of fostering children. We have refined our search and received an excitingly positive amount of interest to work with us on this project from Certified Placement Agencies. These agencies certify their own homes, provide case management and supportive services to their foster families, are typically non-profits (501(c)(3)), and therefore would be responsible for the hiring,

training and oversight of their own foster families. In such a model, we would partner with a CPA that would be responsible for staffing, hiring and assure that the foster families were providing appropriate services, and we would have exclusive access to these in-county foster homes on an emergency or short-term basis. And in the instance that a foster parent is faced with an allegation of abuse or neglect, we would independently investigate the allegation and provide a finding – our responsibilities as the Child Protection agency within the county. The CPA would be accountable to the Foundation to uphold the terms of the rental agreement for the properties, including assurance that the foster families are in good standing and maintain a positive licensing status.

**4. Increase Monthly Reimbursement for Adams County Certified Foster/Kinship Homes**  
 (to bring to parity with other Metro Counties reimbursement levels – please note this increase will be covered by our existing block allocation and existing budget authority):

<b>Current Monthly</b>	<b>Proposed</b>	<b>Cnty Cost per home/per month</b>	<b>Per Year (100)</b>
\$461	\$719	\$258	\$309,600

The increased access to county foster homes (assumes 15 additional county homes) would reduce our need for Certified Placement Agency (CPA) placements for children/youth for whom we cannot locate appropriate kin placements. The costs for CPA homes are about 55% higher than the proposed rate for our County Homes. By reducing our reliance on these more costly placements and reinvesting in County-certified homes we will achieve a cost-savings of about \$24,000 per annum for the County’s portion once we are at capacity. This will help offset some of the costs and sustainability, and will also free up resources to help children and youth stepdown from congregate care settings.

**Total request from the IV-E Reserve - \$1,874,622 (over 10 years)**

**AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:**

- Finace Department
- Human Resources Department
- Adams County Foundation
- Colorado Department of Human Services

**ATTACHED DOCUMENTS:**

- Study session powerpoint presentation

**FISCAL IMPACT:**

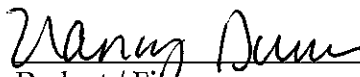
Either mark X  if there is no fiscal impact or provide the following information for the recommended action:

Fund(s):	15
Cost center(s):	201032001210
Self-generated / dedicated revenues: (15.4271; IV-E Reserve)	\$282,410
Annual operating costs:	\$282,410
Annual net operating (cost) / income:	\$- 0 -
Capital costs:	\$
Expenditure included in approved operating budget:	\$
Expenditure included in approved capital budget:	\$
New FTEs requested:	3

**APPROVAL SIGNATURES:**

**APPROVAL OF FISCAL IMPACT:**

  
\_\_\_\_\_  
Todd Leopold, County Manager

  
\_\_\_\_\_  
Budget / Finance

  
\_\_\_\_\_  
Raymond H. Gonzales, Deputy County Manager

\_\_\_\_\_  
Ed Finger, Deputy County Manager



# Adams County Human Services Foster Parents and Kinship Care Strategy Plan



# Introduction

- Eight month process and practice evaluation
- Team meetings conducted monthly
  - Commissioner Tedesco, Ray, Jan, Ellen, Chris
- Research best practice models
- Site visits conducted
  - Preston Ministries Ranch





# Need

- Practice model that provides greater staff support and resources to foster parents and kin providers
- Recruit more and successfully maintain existing foster homes
  - Currently maintain around 80-85 and desired number is 100
- Ongoing strategies to reduce congregate care



# Solution

- Flexible Pool of Funds to Support Kinship and Foster Care Families
- Increased Staffing Support
- Homes for Hope
- Increase Monthly Reimbursement for Adams County Certified Foster/Kinship Homes



## IV-E Reserve

- \$3,900,000 specifically designated to serve the needs of child welfare activities
- Requires no county match
- Has not been utilized in 20 years (1996)



# Recommendation #1

- Flexible Pool of Funds to Support Kinship and Foster Care Families
  - Funds that are exclusively to be used to pay for hard goods and services (i.e., beds, diapers, clothes, transportation support, recreation center passes, etc.) for children placed temporarily with kinship providers
  - Amount requested from the IV-E reserve - \$80,000 per year/\$800,000 over ten years



## Recommendation #2

- Increased Staffing Support (3 FTE's)
  - Caseloads are far too high per FTE to offer any support beyond the initial outreach, and we have subsequently been unable to impact our placement stability outcomes to a significant degree as a result
  - Amount requested from the IV-E Reserve - \$202,410 per year/\$1,074,622 over five years (contingent on workload study FTE allocation)





# Recommendation #3

- Homes for Hope
  - Utilization of existing county owned property and homes
  - To provide in-county emergency and short-term placements for children
  - We would partner with a Certified Placement Agency
  - The CPA would be accountable to the Adams County Foundation to uphold the terms of the rental agreement for the properties, including assurance that the foster families are in good standing and maintain a positive licensing status



# Recommendation #4

- Increase Monthly Reimbursement for Adams County Certified Foster/Kinship Homes
  - To bring to parity with other metro counties reimbursement levels
  - Amount requested - \$309,600 per year (*please note this increase will be covered by our existing block allocation*)
  - **Current Monthly Proposed Cost per home/per month Per Year (100)**

\$461	\$719	\$258	\$309,600
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# Summary

- Four strategies to improve services for foster parent and kinship care providers
- Total request from the IV-E Reserve - \$1,874,622 (over 10 years)
- Total request from the block - \$309,600 per year (currently budgeted)



ADAMS COUNTY  
COLORADO

- Questions?



## STUDY SESSION AGENDA ITEM

<b>DATE:</b> April 5, 2016
<b>SUBJECT:</b> Adams County Head Start (ACHS) Program Implementation Plan
<b>FROM:</b> Chris Kline, Director of Human Services Department
<b>AGENCY/DEPARTMENT:</b> Human Services Department
<b>ATTENDEES:</b> Isebel Arellano – Head Start Administrator Brian Kenna – Human Services Department Deputy Director Herb Covey – Human Services Department Deputy Director Chris Kline – Human Services Department Director Susana Ramirez – Quality Assurance Manager John Reed – Fiscal Grants Analysis
<b>PURPOSE OF ITEM:</b> Present Adams County Head Start Program Options
<b>STAFF RECOMMENDATION:</b> That the Board of County Commissioners approve.

### **BACKGROUND:**

Adams County Head Start (ACHS) is requesting approval to implement program option changes and reduce the number of program slots. The proposed changes are prompted by new Head Start Performance Standards projected to be in place by the summer of 2016. In addition, a shift in community needs stressed by Head Start eligible families needing more full day sessions rather than part day sessions.

ACHS currently has a total of 498 Head Start slots with 417 in the double session program option, 33 in home base and 48 in the full day session option. Head Start children are served in seven centers within Adams County. The facilities housing classrooms include one county owned facility in Commerce City with three (3) classrooms at the Honnen Building; four leased facilities, one in Brighton with three (3) classrooms, one in Westminster with 3 classrooms, another in southern Westminster with 3 classrooms, one in Thornton with 2 classrooms; and a classroom in two School District 50 elementaries.

### **Needs of Eligible Families**

Adams County Head Start identified a shift in the needs of Head Start eligible families during the past four years. This prompted a re-evaluation of program services and identified necessary changes to meet their needs while ensuring long term program sustainability. After an analysis of data collected through several sources including parent input, community needs assessments, aggregated program data, and community input, the need to request approval for a program



change became evident. Data collected from a recent parent survey conducted by the Early Childhood Council in Adams County reflects the need for full day services. Community partners' input concluded that families are seeking full day center based slots more frequently than home based (ECPAC-CS, 2014). ACHS program data mirrors the need for full day services and the decreased interest in the home based option. During the enrollment process families are requesting full day services more often than before and home based is not being requested as frequently. ACHS administered a parent survey during February of 2016 to determine the program option needs of families. Three hundred forty-six (346) families completed the survey. The results of the survey reflect 83% of these families are in need of a full day option.

### **New Head Start Performance Standards**

Regulations in the new Head Start Performance Standards (NHSPS) will have a major impact on our program, including the elimination of all double sessions and home based slots and extending the school year to 180 days. The cost to fund all full day classrooms for 498 children and extend the school year from 128 days to 180 days is beyond our funding ability. The final rule is anticipated to occur in the summer of 2016 according to a presentation at the Colorado Head Start Association on January 21, 2016 by a Region VIII Program Specialist. Head Start programs will have one year to comply with the new regulations once the final rule is implemented.

### **Cost Analysis**

ACHS lacks the necessary funding to support the conversion of all current double session and home based slots to full day sessions, the cost for the extension to a 180 day school year and the ability to fiscally sustain the change long term. To add a full day classroom with sixteen children a Teacher, Assistant Teacher, and a Classroom Aide must be hired; along with the cost of setting up a classroom; providing resources to sustain the classroom in addition to providing ongoing services each year; and the cost of leasing and maintaining the classroom(s). If the program adds more full day classrooms, an additional Education Supervisor will be needed to supervise and support the additional staff, and additional Substitute Assistant Teacher positions will also need to be created to cover the classrooms when staff is absent. Additionally, there is a potential need to hire more maintenance workers to support with the up keeping of the additional facilities.

An analysis completed by our Fiscal Grants Analyst outlines the cost for three possible options to provide Head Start services for 32, 64 and 128 slots. According to the analysis, the approximate cost for every thirty-two slots is \$500,000 annually and approximately \$100,000 to fund start up costs for two classrooms. ACHS is anticipating an approximate \$50,000 funding reduction due to loss of revenue allocated to the home based option. ACHS cannot sustain the cost of additional full day sessions, therefore, double session slots will need to be eliminated to compensate for the additional full day classrooms and to extend school days from 128 to 180. ACHS's only possibility of serving more children is with additional funding from Adams County or other reliable sources and if facilities are secured to house more classrooms.

The outcomes of the program's cost analysis prompted the following proposals. ACHS identified three potential options to comply with the new regulations.

1. Eliminate 242 slots once the final rule occurs, leaving 256 full day slots
2. Maintain the current classrooms and transition 242 slots into full day sessions with funding provided by Adams County and additional facilities are secured to house additional classrooms. No slots would be eliminated.

3. 256 slots are served in full day classrooms and additional slots can be provided contingent upon Adams County funding or other reliable funding sources.

### **Proposed Plan**

Due to the cost to transition to full day sessions; operate classrooms for 180 days per school year, and the ongoing challenges ACHS has endured for numerous years to secure facilities for classrooms, ACHS is proposing to implement a phase-in process to move toward meeting NHSPS regulations and the need of the community.

#### *Year One, 2016 – 2017 Program Year*

ACHS will eliminate the current thirty-three (33) home based slots and sixteen (16) double session slots. This proposal eliminates the home based options which ACHS has experienced several challenges with over the years. For example, ACHS struggled to fully enroll home based slots by the beginning of the 2014 – 2015 and 2015 – 2016 school years and it continues to be a challenge to fill slots that are vacated as the school year progresses. Head Start eligible parents continuously showed lack of interest in the home based options. Another factor to consider is our program's home based waitlist. ACHS's monthly waitlist data for the previous years indicates that the home based option's waitlist numbers were consistently low. The average waitlist number from August 2013 to May 2015 was 49, indicating a decrease in interest for this option. This program year from August 2015 through March 2016 the average monthly waitlist number dropped even further to 14 for income eligible and 16 for over income. It is a consistent challenge to keep the home based fully enrolled. Eliminating 16 slots from a double session classroom will help us transition one more classroom to a full day session to begin the alignment with the proposed regulations and the need of the community.

#### *Year Two, 2017 – 2018 Program Year*

With the anticipated final rule taking place the summer of 2016, it is projected that all classrooms for the 2017 – 2018 school year would be required to be full day. ACHS lacks the funds to transition the double session slots to full day slots and the facilities to house the additional classrooms. Consequently, 193 double session slots will need to be eliminated leaving 256 slots in full day sessions.

Until the required full day option is required, ACHS is proposing to continue to implement a phase-in process by conducting an annual analysis using program and community data to determine the area(s) in highest need of a full day session and the number of double session slots that need to be eliminated to meet the need and/or regulation. Without additional funding from Adams County or another reliable source, double session slots will need to be eliminated as the program transitions into full day classrooms.

The data utilized to develop ACHS's community needs assessment along with other program and community data prompted the re-evaluation of program services. The cost analysis to implement additional full day sessions clearly reflects the need to reduce Head Start slots to ensure program sustainability. ACHS is commitment to meeting the needs of the most vulnerable children and families in the community. After an analysis of the significant changes in the community and the obstacles families are struggling with and the program changes needed to meet federal regulations, ACHS is diligently attempting to provide the services that will best support Head Start eligible families.

**AGENCIES, DEPARTMENTS OR OTHER OFFICES INVOLVED:**

Administration for Children and Families Office of Head Start

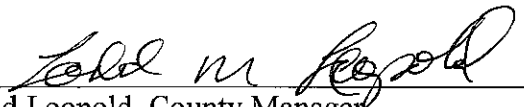
**FISCAL IMPACT:**

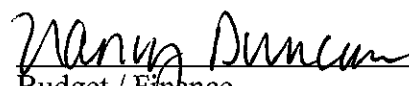
Either mark X  if there is no fiscal impact or provide the following information for the recommended action:

Fund(s):	
Cost center(s):	
Self-generated / dedicated revenues:	\$0.00
Annual operating costs:	\$0.00
Annual net operating (cost) / income:	\$0.00
Capital costs:	\$0.00
Expenditure included in approved operating budget:	\$0.00
Expenditure included in approved capital budget:	\$0.00
New FTEs requested:	

**APPROVAL SIGNATURES:**

**APPROVAL OF FISCAL IMPACT:**

  
\_\_\_\_\_  
Todd Leopold, County Manager

  
\_\_\_\_\_  
Nancy Duncan  
Budget / Finance

  
\_\_\_\_\_  
Raymond H. Gonzales, Deputy County Manager

\_\_\_\_\_  
Ed Finger, Deputy County Manager



# Adams County Human Services Head Start Full Day Transition Proposal



# New Performance Standards

- Changes impacting ACHS
  - Eliminate all double session classrooms
  - Eliminate the Home Based Option
  - Implement- only full day session classrooms
  - 180 classroom days per program year





# Eligible Families Needs

- Adams County Head Start (ACHS) Annual Community Needs Assessment
- Program Data
  - Parent Survey (ACHS)
  - Enrollment Data
- Community Partners' Data



# Research Data

- Duration matters
- Greater benefits in more intensive, earliest starting, and longest lasting programs
- Positive effect on children's language, academic learning, and physical health
- Increased parental satisfaction
- Growth in reading, writing, and math domains



## Research Data Cont.

- Enhanced skills in vocabulary and literacy
- Higher rates of mastery in school readiness
- Growth is significant enough to close the achievement gap
- Mixed outcomes in socio-emotional development
- Program quality matters



# Current Enrollment

- 498 Current Slots:
  - 417 in Double Session Classrooms
  - 48 in Full Day Session Classrooms
  - 33 in Home Based Option
- ACHS Sites located in:
  - Brighton
  - Commerce City
  - Westminster
  - Thornton



# Proposed Phase-in Process

- Year One: 2016 – 2017 Program Year
  - Transition One Double Session Classroom to a Full Day Session
    - Eliminates 16 Double Session slots
  - Eliminate all (33) Home Based slots





# Proposed Plan – Year One

## Current Slots (2015 – 2016 Program Year)

- **Total Slots – 498**
- Double Session Slots – 417
- Full Day Session Slots – 48
- Home Based Slots - 33

## Year One: 2016 – 2017 Program Year

- **Total Slots – 449**
- Double Session Slots – 385
- Full Day Session Slots – 64
- Home Based Slots – 0



# Proposed Phase-in Process

- Year Two: 2017 – 2018 Program Year
  - Full Implementation after Final Rule or
  - Continue the phase-in process – Annually assess community needs by using program and community data to determine the area(s) in highest need of a full day session and the number of double session slots that need to be eliminated to meet the need and/or regulation



# Proposed Plan - Year Two

## Year One: 2016 – 2017 Program Year

- **Total Slots – 449**
- Double Session Slots – 385
- Full Day Session Slots – 64
- Home Based Slots – 0

## Full Implementation of NHSPS 2017-18

- **Total Slots- 256**
- Full day Session Slots – 256
- Eliminates 242 Slots



# Adding Classrooms

- 32 Full Day Slots Cost
  - Would need 2 Additional Classrooms
    - Approximately \$100,000 for start up costs to furnish the classrooms, purchase materials and equipment, make the necessary updates to meet state and federal regulations
    - Approximately \$500,000 annually to sustain the two classrooms



# Recommendation

- Approve proposed two year transition plan maintaining 449 slots during the 2016-17 school year and 256 slots through the 2017-18 school year allowing for a successful transition and evaluation of the new federally required changes before determining the need for additional classrooms.





Questions?