



North Central Texas Council of Governments – Air Transportation Advisory Committee Meeting:

Introduction of RS&H and Associated Aviation Capabilities

Steve Creamer – Senior Vice President
Johnny Jackson – Infrastructure Area Leader

December 9, 2022

About Us



Architecture/Engineering/Consulting

- » Multidisciplinary staff of architects, engineers, planners, environmental scientists and technical support
- » Employee-owned corporation



Client-centered
practices



1,400+
associates



No. 48 of Top 500
Design Firms (ENR)



Current Rankings

BD+C Rankings

39

*of Reconstruction Sector
Architecture Firms*

66

*of BIM
Architecture Firms*

06

*of Military Sector
Architecture Firms*

22

*of top 110
Top Giants 400 A/E Firms*

06

*of Top 95 Industrial Sector
Architecture + A/E Firms*

ENR Rankings

9

in Airports

05

in Aerospace

10

Highways

49

of Design Firms

36

of 'Pure' Designers

16

in Transportation

Associates & Locations

- 3 regions
 - 8 divisions
 - 72 offices
 - 1,400+ associates
 - 506 clients
-

One RS&H

Our geography allows us to grow market share in our current footprint, expand to new markets and accelerate cross-sector collaboration in support of comprehensive, strategic solutions.

Our geographic footprint is intentionally aligned with areas of significance and growing populations, as represented by the light blue areas of the map below – allowing us to serve our clients nationwide.

Locations



Society of Women Engineers (SWE) • American Public Works Association (APWA)

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRE) • Leadership in Energy & Environment

American Society of Interior Designers (ASID) • National Association of Industrial and Office Properties (NAIOP)

ral Precast Association (APA) • Society of American Military Engineers (SAME)

Industry **Organizations**

American Institute of Architects (AIA) • Institute of Transportation Engineers (ite) • National Collegiate Athletic Association (NCAA)

American Concrete Institute (ACI) • American Road & Transportation Builders

American Association of Airport Executives (AAAE) • Airports Council International (ACI) • American Society for Engineering Education (ASEE)

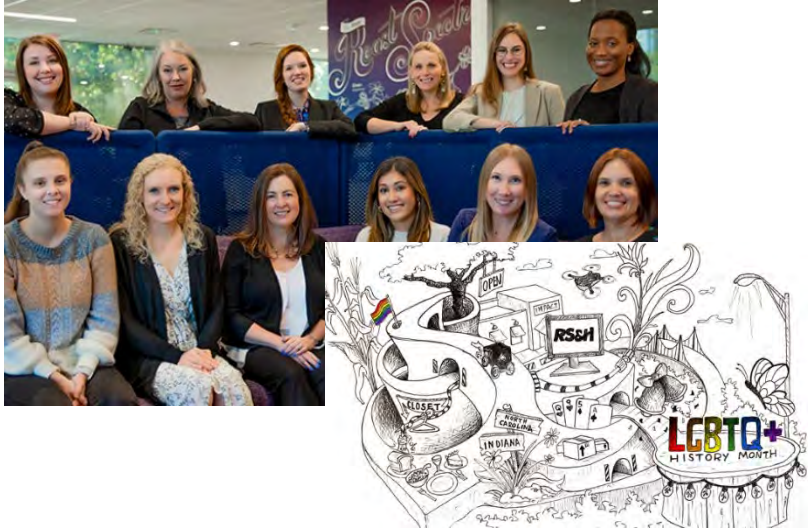
American Council of Engineering Companies (ACEC) • Design-Build Institute of America (DBIA)

Institute of Electrical and Electronics Engineers (IEEE) • American Society of Civil Engineers (ASCE)

Association of State Highway and Transportation Officials (AASHTD) • American Society of Landscape Architects (ASLA)

Corporate Responsibility





128%
Increase in
employee
participation

\$13K
Raised for
National Breast
Cancer
Foundation

\$8K
Raised with a company
match through the
Elevate fund for
the Trevor Project



Focus on supplier diversity
& strategic partnerships



\$55M in fees for our
120 MBE/SBE partners

Earmarked scholarship
awards of over
\$100K plus internships
and mentoring for the first
two years of the program

Charitable Giving



Highlights

The Elevate Fund is one of the integral elements to RS&H's Corporate Social Responsibility (CSR) Strategy that fosters deeper connections in communities across the U.S.

Since 2018, the Elevate Fund has contributed **\$400K** to **67** nonprofit organizations

Nonprofit organization by the numbers:



Sustainability



LEED Facts

for LEED O+M: Existing Buildings
(v2009)

Certification awarded Jan 2015

Silver 53

Sustainable sites 9/26

Water efficiency 9/14

Energy & atmosphere 19/35

Material & resources 2/10

Indoor environmental quality 6/15

Innovation 5/6

Regional priority credits 3/4

Corporate Sustainability Program & Sustainability Council



Over **2 million**
megawatt-hours
of electricity



1.4 billion
pounds of waste



Over **500 million**
gallons of water

Safety Initiative



Training & Equipment

OSHA 10 is now a required course for associates with professional classifications

272 course completions

97.14% course completion rate

Safety Highlights

1

Developed new safety data capture app

2

Created attentive driving policy for roadway safety

3

Implemented active shooter training

Our Markets





Aerospace



Aviation



Corporate



Federal



Health & Science



Transportation



Aerospace

Planning and design for commercial and federal space industry.

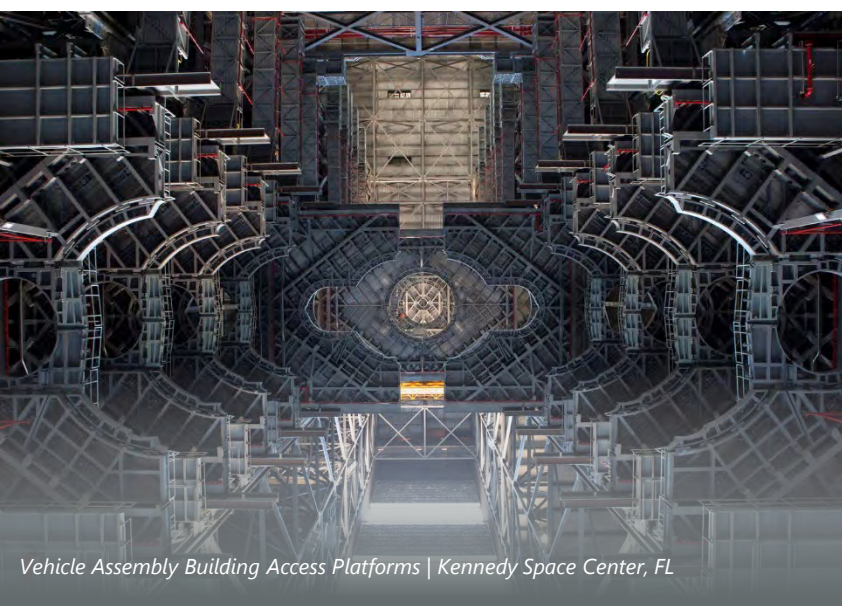
- » Spaceport planning
- » Space launch facilities
- » Ground support facilities
- » Manufacturing, process and assembly buildings



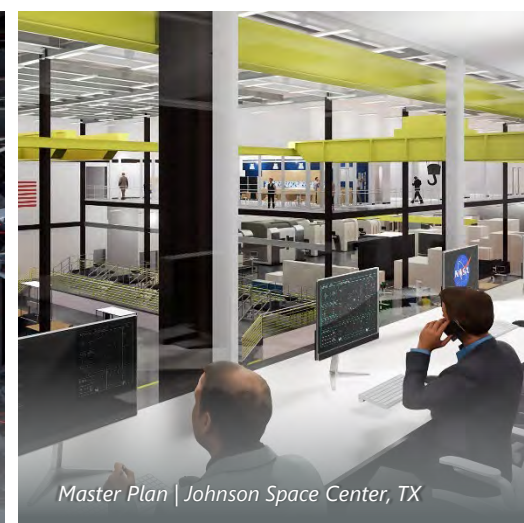
Mid-Atlantic Regional Spaceport – NASA's Wallops Flight Facility | Wallops Island, VA



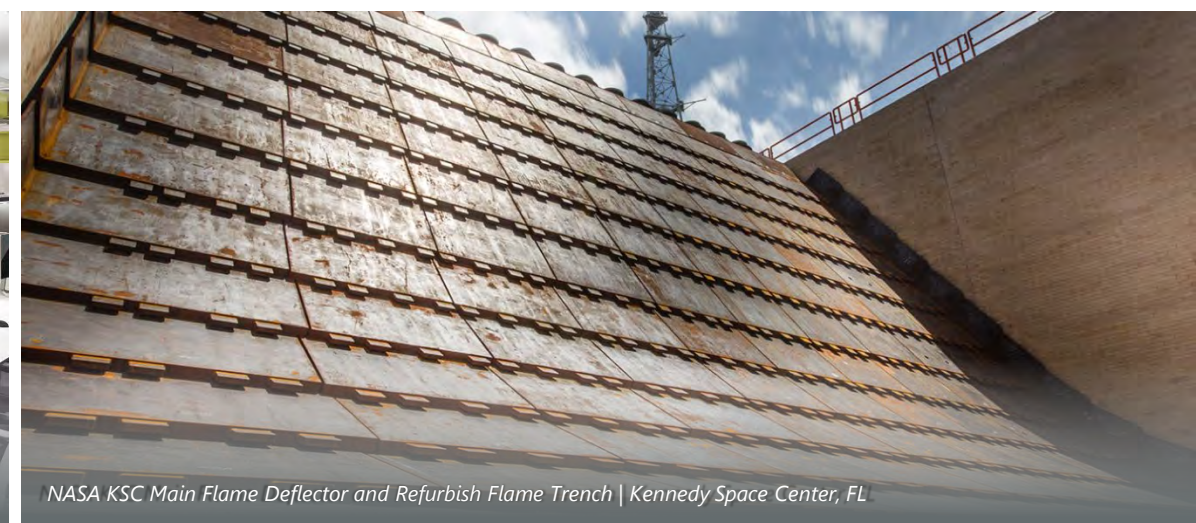
Aerospace



Vehicle Assembly Building Access Platforms | Kennedy Space Center, FL



Master Plan | Johnson Space Center, TX



NASA KSC Main Flame Deflector and Refurbish Flame Trench | Kennedy Space Center, FL



Atlas V Space Launch Complex 41 | Cape Canaveral, FL



Design Lightning Protection for Crew Launch Vehicle at Launch Complex 39B | Kennedy Space Center, Florida



Aviation

Serves the public and private aviation industry worldwide.

» Services:

- Airfield
- Buildings
- Environmental Stewardship & Resiliency services
- Planning
- Environmental Planning



Alpena County Regional Airport | Alpena, MI



Aviation



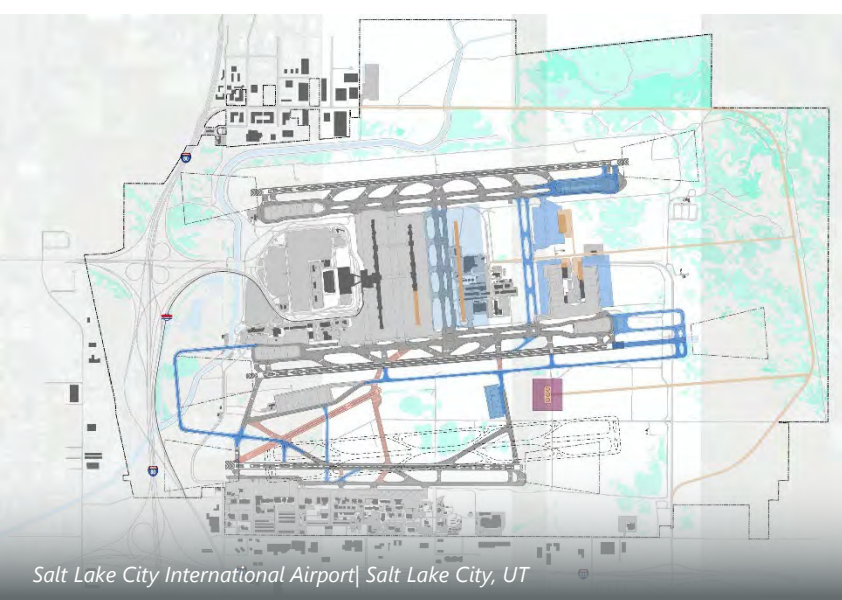
Duluth International Airport | Duluth, MI



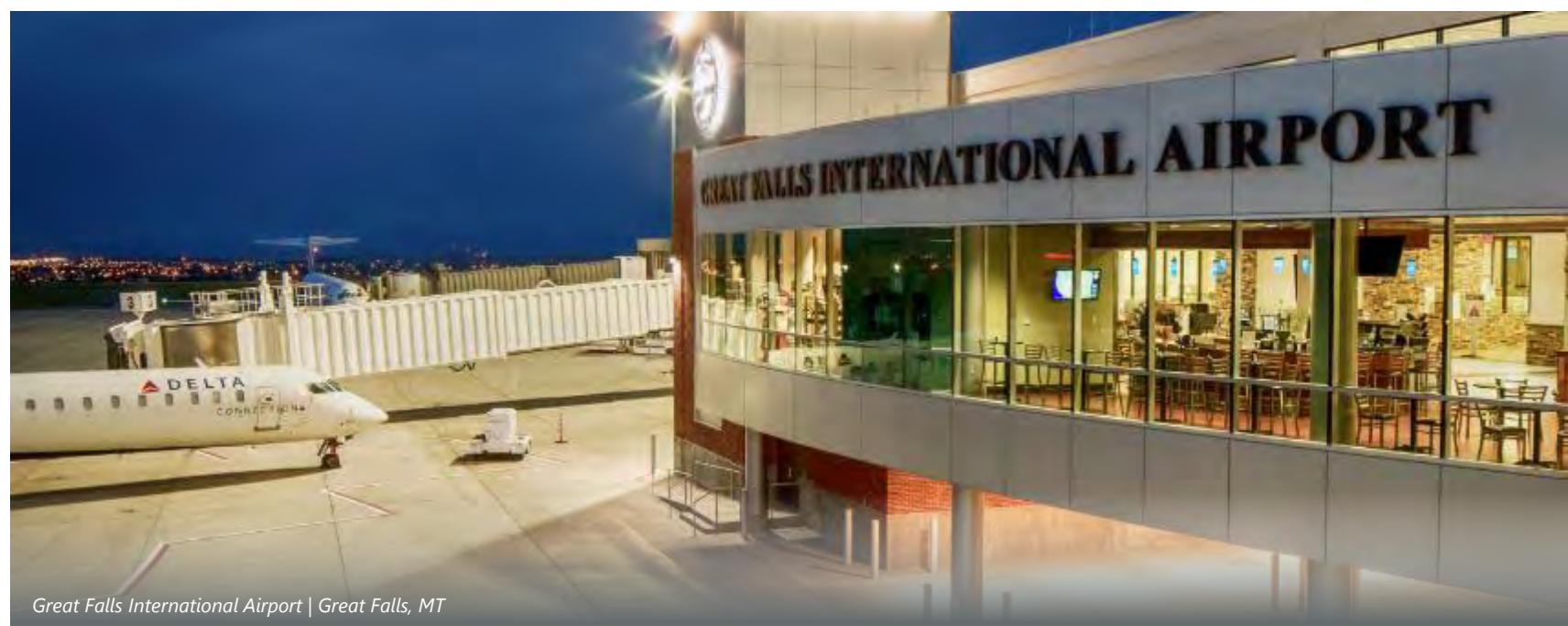
Ft. Lauderdale-Hollywood International Airport, FL



San Luis Obispo International Airport | San Luis Obispo, CA



Salt Lake City International Airport | Salt Lake City, UT



Great Falls International Airport | Great Falls, MT

ATAC Focus Areas:

Compatible Land Use

Stakeholder Collaboration

Funding and Capital Improvement Program Development

Federal/State Legislative Support

System Capacity and Growth

- Aviation Education
- Innovative Technologies
- Unmanned Aircraft System (UAS) Integration and Safety



AVIATION EDUCATION



TUSKEGEE NEXT

Tuskegee NEXT is a 501(c)(3), that seeks to transform the lives of underrepresented youth through **aviation education**, **life skills training**, and **career path** opportunities, so they can transform their communities. Our **Summer Flight Program** targets young people ages 18 - 20 years old, showing them the value of aviation. Participants in the program are part of a summer residential program where they earn their **private pilot and drone licenses**. Opportunities like these are life-changing and are free of charge to those who are admitted to the program.

FLIGHT
TRAINING

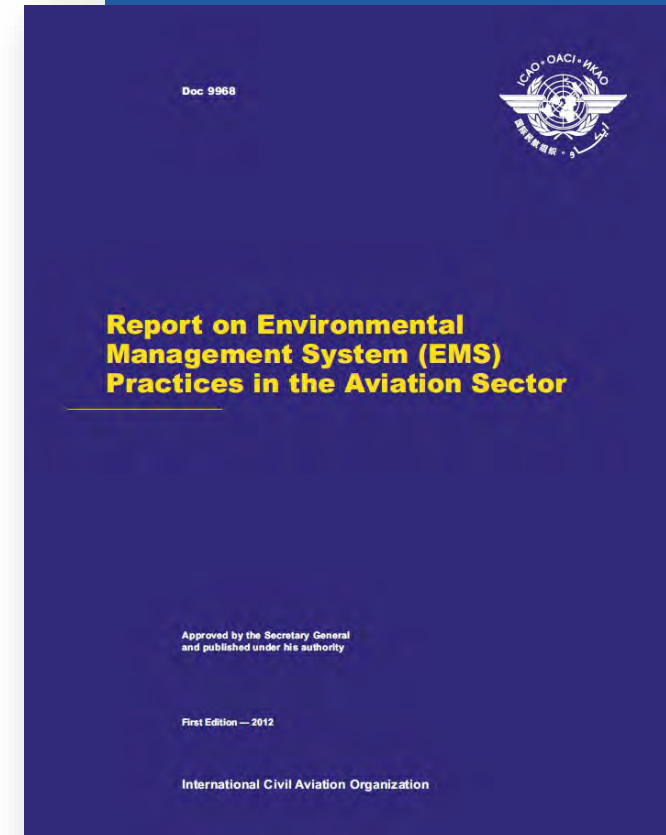
LIFE SKILLS
PROGRAMING

CAREER PATH
ASSISTANCE



Environmental Stewardship and Resiliency Services

- Water Resources
- Air Quality and Greenhouse Gases
- Waste Management
- Environmental Program Development
- Resiliency and **Sustainability**



Environmental Stewardship and Resiliency Services

– Sustainability

- Airport Carbon Accreditation (ACA) Program
- Sustainability Management/Master Planning
- **ENVISION** rating systems review



Envision is:

- A holistic approach to evaluating and recognizing projects
- As much a planning tool as it is a certification program
- A rating system that embraces the social aspect
- A rating system that can incorporate aspects of other rating systems



Graduate School of Design, Harvard University
George Gund Hall, 48 Quincy Street
Cambridge, MA 02138
June 1, 2013 – REV. 0
September 9, 2013 – REV. 1

EXPANSION, PHASE II: JUAN SANTA MARIA INTERNATIONAL AIRPORT COSTA RICA



Juan Santamaría International Airport / Photograph provided by AERIS.

Cristina Contreras and Juan Cristaldo prepared this case study under the supervision of Dr. Andreas Georgoulas, as part of the Harvard-Zofnass / IDB collaboration program. Richa Shukla and Anthony Kane provided comments and edits. The authors would like to thank Ana-Maria Vidaurre-continuous support in developing this case.

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Overview of Envision Categories



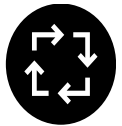
Quality of Life

Wellbeing, Mobility, Community



Leadership

Collaboration, Planning, Economy



Resource Allocation

Materials, Energy, Water



Natural World

Siting, Conservation, Ecology



Climate & Resilience

Emissions, Resilience

EXPANSION, PHASE II: JUAN SANTA MARIA INTERNATIONAL AIRPORT COSTA RICA

Zofnass Program for Sustainable Infrastructure, Harvard Design School

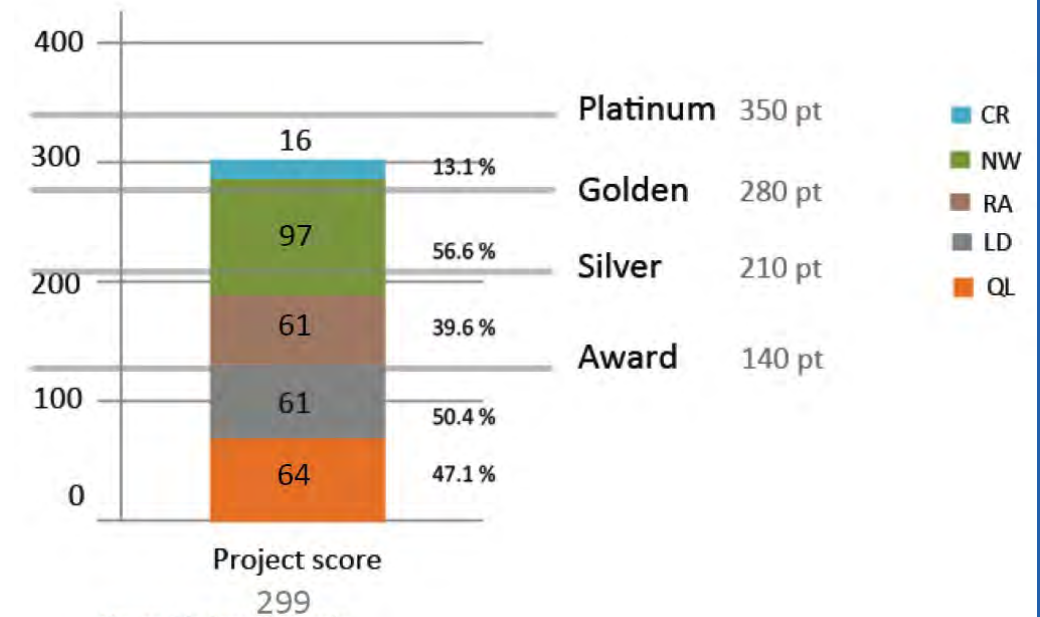


Figure 64: Awards levels

Service Capabilities:

- AAM Infrastructures Planning and Design (vertiport, utilities...) on and off airports
- Airspace Analysis and Review
- Activity Forecast
- Capital Improvement Plan (CIP)
- Airport Layout Plan (ALP) Update



Location: Fort Hood, TX

Client: USACE Fort Worth

RS&H Role: Architectural and Engineering Services

Size: 130,000 SF

Design Fee: \$2.3M

Construction Cost: \$40M

UNMANNED AERIAL SYSTEM HANGAR

Designer-of-record for the new facility to support the beddown of new UAS platforms. The facility includes a Flight Operations Center for unmanned aircraft, as well as state-of-the-art control and operations spaces, including a Ground-Based Sense and Avoid (GBSAA) system to control the drones and to interface with the FAA civilian system on the joint-use runways of the Killeen Airport. A ground control station is included in this project.

A high-angle, wide shot of a modern office space with a blue color overlay. The office features several cubicles with glass partitions and white desks. In the foreground, a woman with long dark hair is seated at a desk, working on a computer. To her left, a man is seated at another desk, also working. In the background, another man is standing near a desk, and a woman is seated. The office has large windows on the right side, providing a view of a suburban neighborhood with houses and trees. There are small potted plants on the desks and a white cylindrical trash can with a green top. A sign on one of the cubicle walls reads "Welcome to RS&H".

Thank You

RS&H



DRAFT V4b

McKinney National Airport is taking off

Maximizing the commercial value of McKinney National Airport (TKI) has long been a priority of the City of McKinney and its City Council





TKI

McKinney National Airport at 30,000 feet

A self-sustaining local asset

- National General Aviation (GA) airport
- Home to Fortune 500 corporate fleets and privately-owned aircraft
- Revenues from fuel sales, hangar and office rents, ground leases, and other aeronautical services fully fund the maintenance and operation of the airfield and associated facilities
- Ad valorem tax revenue funds education, public safety, and streets, etc.



\$12M

**SELF-SUSTAINING
ANNUAL
OPERATING
BUDGET**



\$212.7M

**ANNUAL
ECONOMIC
IMPACT**



\$3.5M

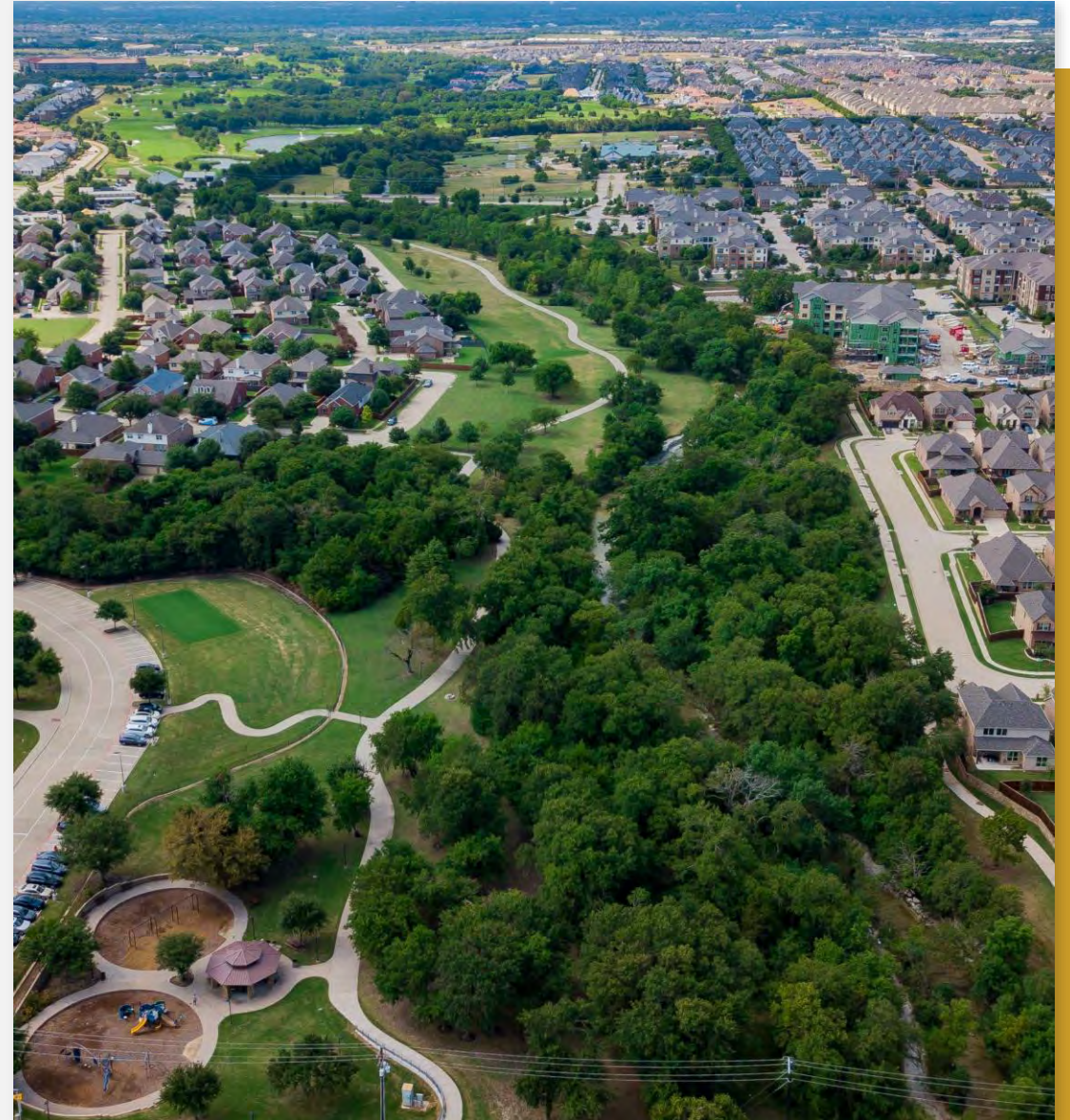
**FY 2022-23
AD VALOREM
TAX REVENUE**



Check-in

The tremendous growth in the North Texas region plus expressed carrier interest in McKinney fuels the timing of this planned expansion. Research demonstrates that the metroplex can support more than two commercial service airports.

McKinney is uniquely positioned to reach a desirable customer base, offering convenience to the region and competition in the market that will ultimately benefit residents of McKinney, Collin County, and North Texas.





TKI



First-class facilities

Sustainable commercial air service terminal offers a convenient alternative to the large and medium hub airports within the Dallas/Fort Worth area.

State-of-the-art technology and amenities will offer an **enhanced passenger experience**.





TKI

144,000 sq. ft.
terminal



Ticketing & check-in
area





TKI

State-of-the-art
facility



Conceptual rendering



Four
Gates



Conceptual rendering



TKI



Spacious waiting areas
with multiple seating
options



Conceptual rendering



TKI



Dining & Retail



Arrivals		Arrivals	
Flight	Time	Flight	Time
AA100	10:00	AA100	10:00
AA101	10:15	AA101	10:15
AA102	10:30	AA102	10:30
AA103	10:45	AA103	10:45
AA104	11:00	AA104	11:00
AA105	11:15	AA105	11:15
AA106	11:30	AA106	11:30
AA107	11:45	AA107	11:45
AA108	12:00	AA108	12:00
AA109	12:15	AA109	12:15
AA110	12:30	AA110	12:30
AA111	12:45	AA111	12:45
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AA125	16:15	AA125	16:15
AA126	16:30	AA126	16:30
AA127	16:45	AA127	16:45
AA128	17:00	AA128	17:00
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AA155	23:45	AA155	23:45
AA156	00:00	AA156	00:00
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AA158	00:30	AA158	00:30
AA159	00:45	AA159	00:45
AA160	01:00	AA160	01:00
AA161	01:15	AA161	01:15
AA162	01:30	AA162	01:30
AA163	01:45	AA163	01:45
AA164	02:00	AA164	02:00
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AA166	02:30	AA166	02:30
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AA173	04:15	AA173	04:15
AA174	04:30	AA174	04:30
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AA178	05:30	AA178	05:30
AA179	05:45	AA179	05:45
AA180	06:00	AA180	06:00
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AA186	07:30	AA186	07:30
AA187	07:45	AA187	07:45
AA188	08:00	AA188	08:00
AA189	08:15	AA189	08:15
AA190	08:30	AA190	08:30
AA191	08:45	AA191	08:45
AA192	09:00	AA192	09:00
AA193	09:15	AA193	09:15
AA194	09:30	AA194	09:30
AA195	09:45	AA195	09:45
AA196	10:00	AA196	10:00
AA197	10:15	AA197	10:15
AA198	10:30	AA198	10:30
AA199	10:45	AA199	10:45
AA200	11:00	AA200	11:00



TKI



TKI



2,000 parking spaces,
including covered
parking and valet

Conceptual rendering



Preliminary site plan for new commercial service terminal & Spur 399

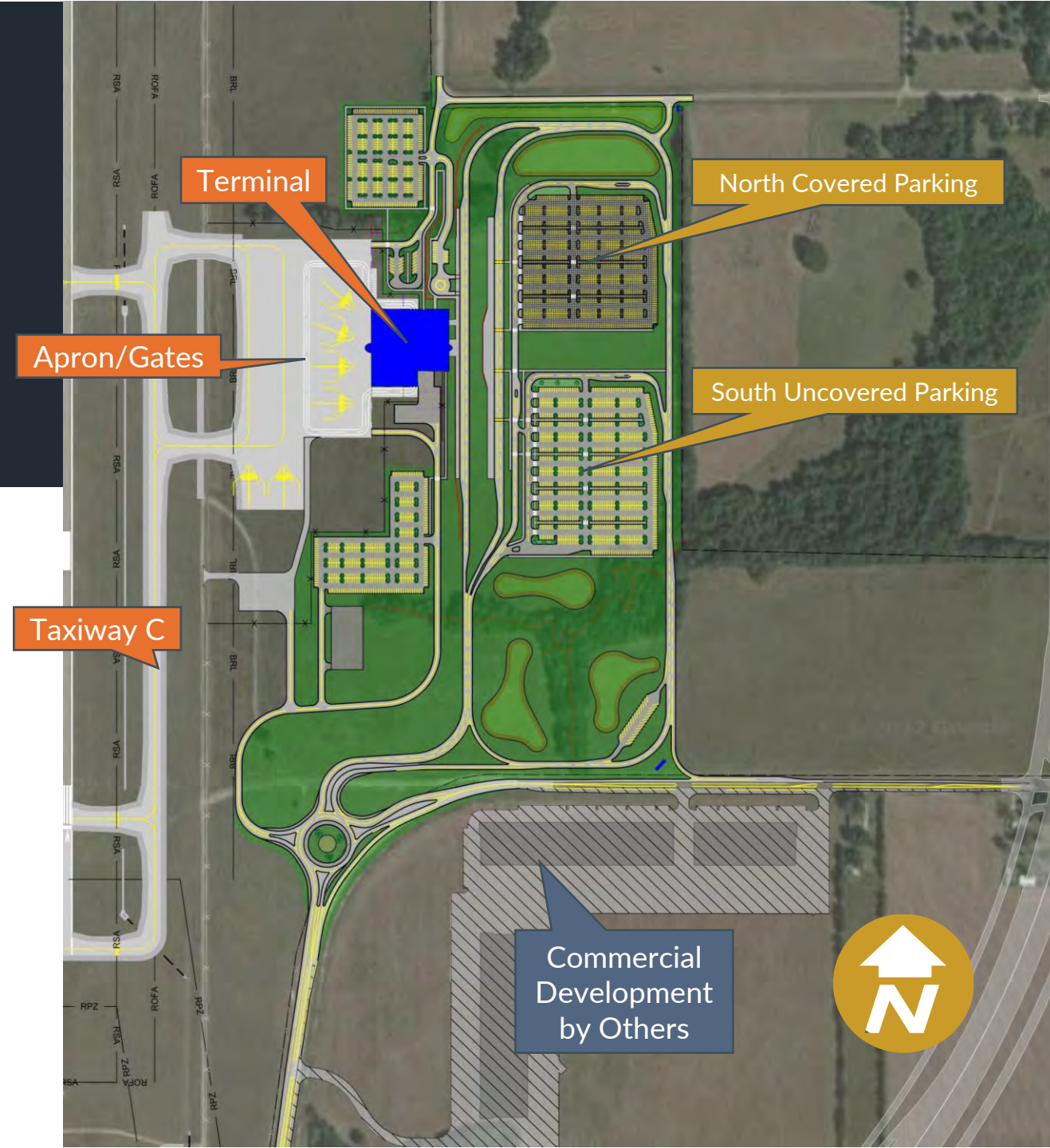
- Development will be on the east side of the airport
- TxDOT has selected the alignment east of the airport as its preferred option for the Spur 399 extension
- Six to eight-lane freeway with frontage roads
- Improved connectivity between the eastern portion of Collin County and destinations south of McKinney



Preliminary site plan for new commercial service terminal

FACILITY HIGHLIGHTS

- 144,000 square foot terminal
- Four gates
- 15-acre aircraft apron
- 2,000 parking spaces
- Taxiway C (Phase 1)





Airlines and passengers are interested

- Initial airline discussions began in late 2019, which resulted in tangible carrier interest
- McKinney National Airport can expect 12 daily departures in the initial year and 18 daily departures by 2040
- Consumer research indicates 75% of surrounding leisure and business travelers would consider McKinney National Airport, regardless of the carrier, if competitive direct flights are offered



Conceptual rendering

12

Daily departures
in the initial year

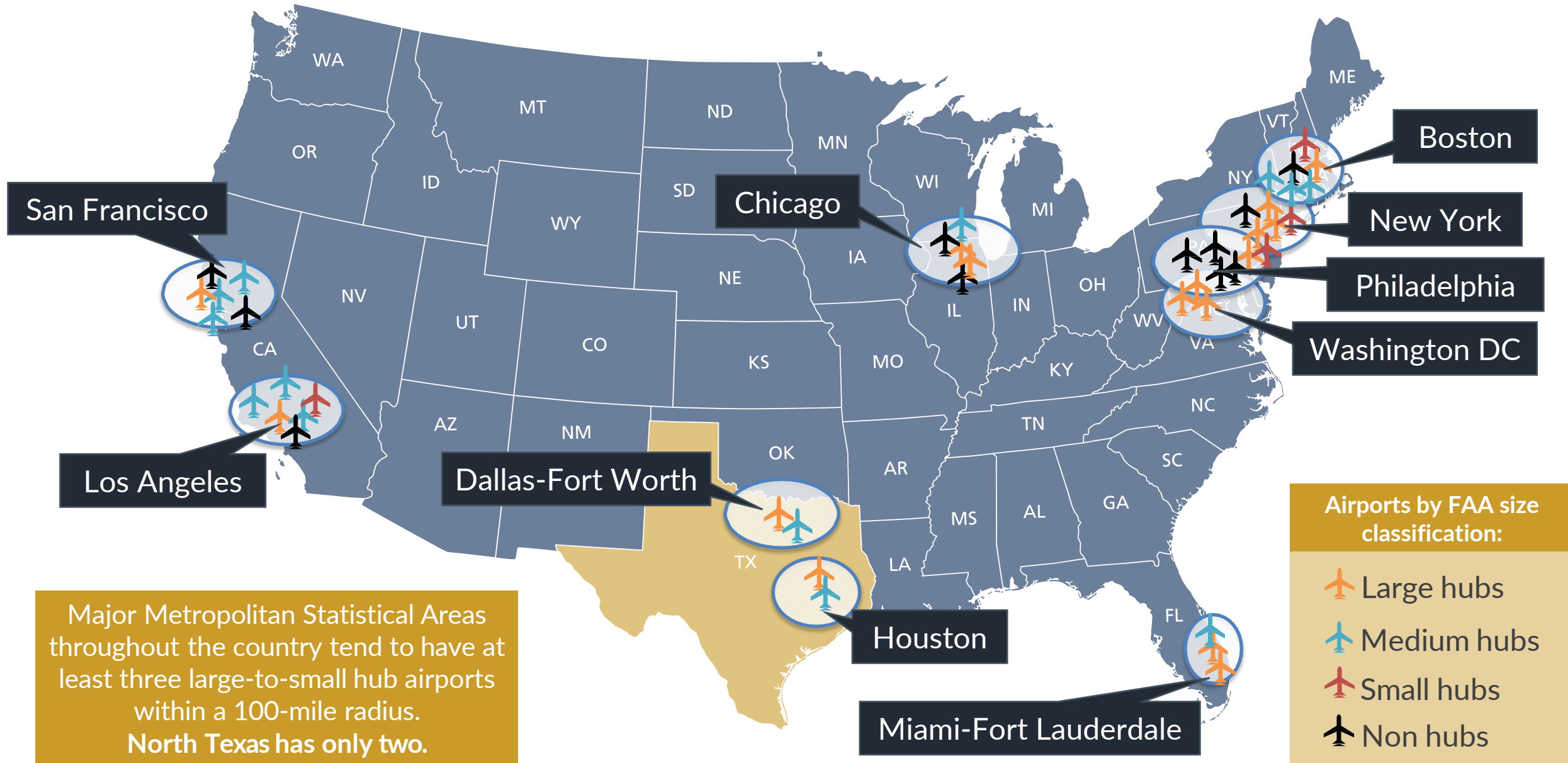
18

Daily departures
by 2040

75%

Surrounding
travelers would
consider TKI

Large metropolitan areas with multiple commercial airports





TKI

McKinney National Airport's target market

The region served by an airport considers:



Geography



Accessibility



Proximity of alternative airports

Drive time analysis from zip codes in the Dallas-Fort Worth combined statistical area to TKI versus DAL and DFW



Source: Google Maps search results for drive time on Tuesday, January 25, 2022, at 5 p.m.

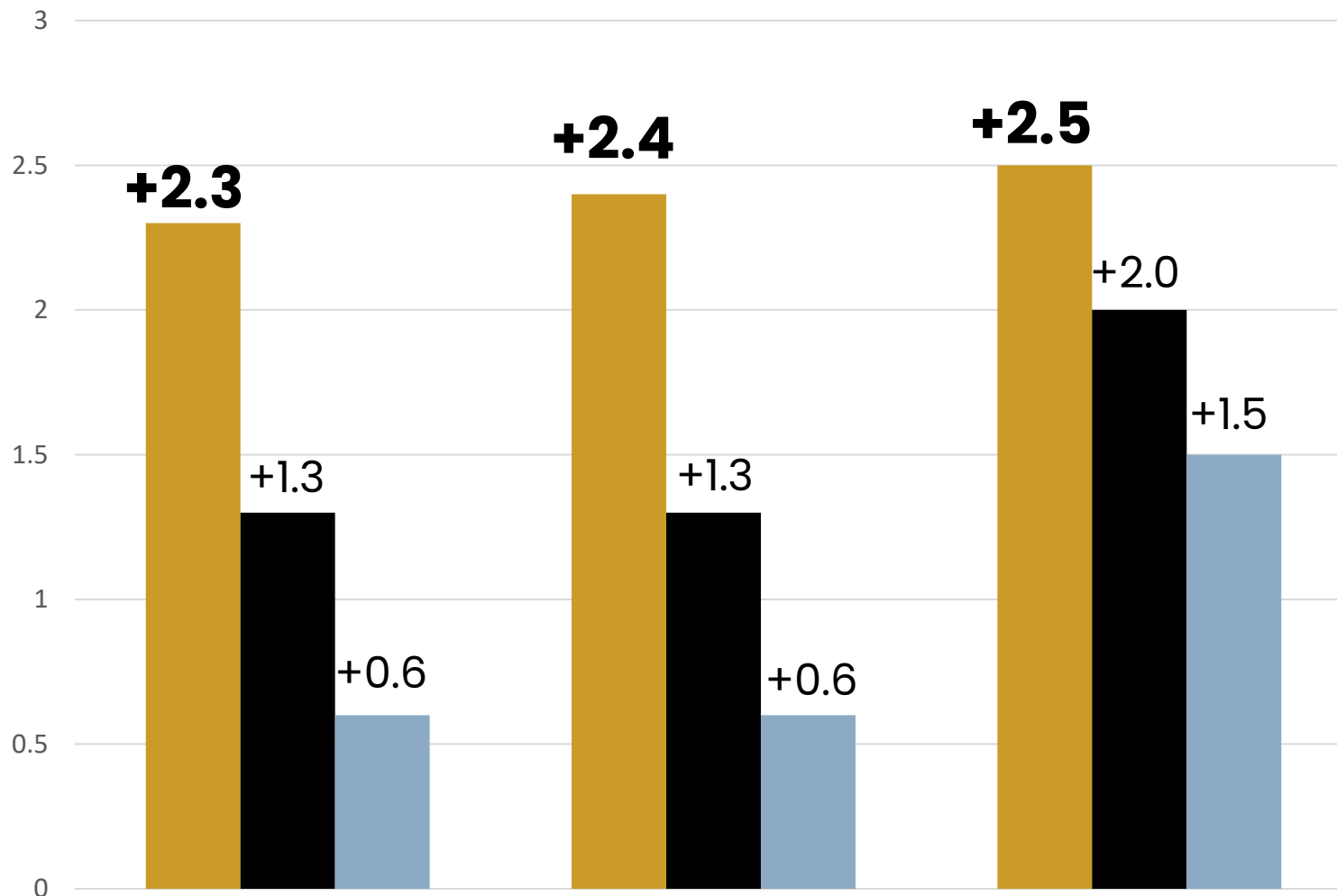


Strong regional growth

Population, economic, and socio-economic statistics in Collin County indicate strong growth through 2040, making McKinney a prime location for a third commercial airport

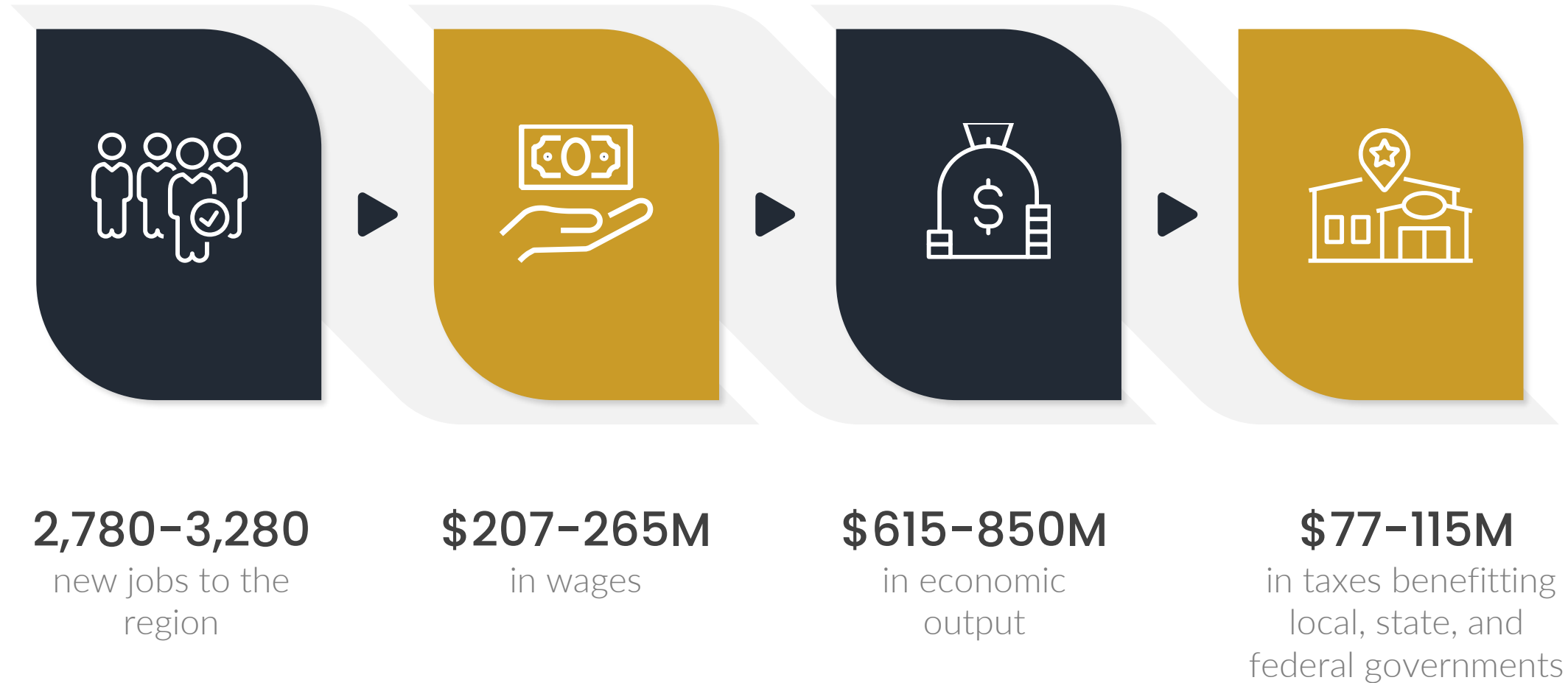
Source: Woods & Poole and U.S. Census American Community Survey, S1901 Report for 2020 5-Year Estimate

COMPOUND ANNUAL GROWTH RATE 2020-2040



	Total Population	Number of Households	Mean Household Income
Collin County	1.1M	381K	\$173K
Dallas-Fort Worth CSA	8.2M	3.0M	\$147K
United States	329.9M	129.4M	\$131K

Potential annual economic impact in the initial year



Monetary impacts are presented in 2022 dollars

Source: InterVISTAS Consulting, Inc. Economic Impact Study Analysis. October 2022

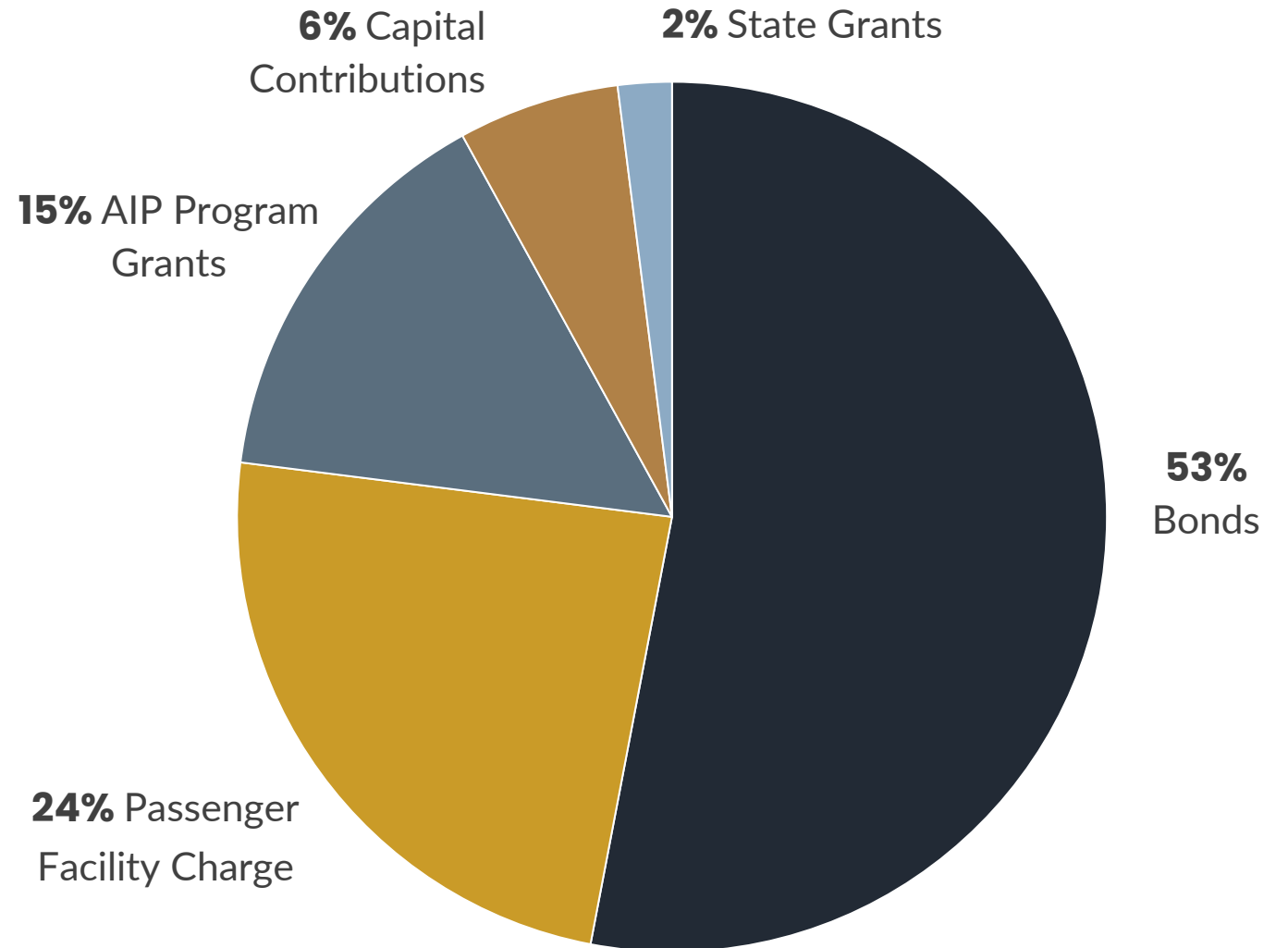
Funding proposal

Funding for the project is proposed to come from several sources, including:

- General Obligation bonds
- Federal grants
- Low-interest federal transportation infrastructure loans



TYPICAL AIRPORT INDUSTRY FUNDING SOURCES (NOT INDICATIVE OF TKI)



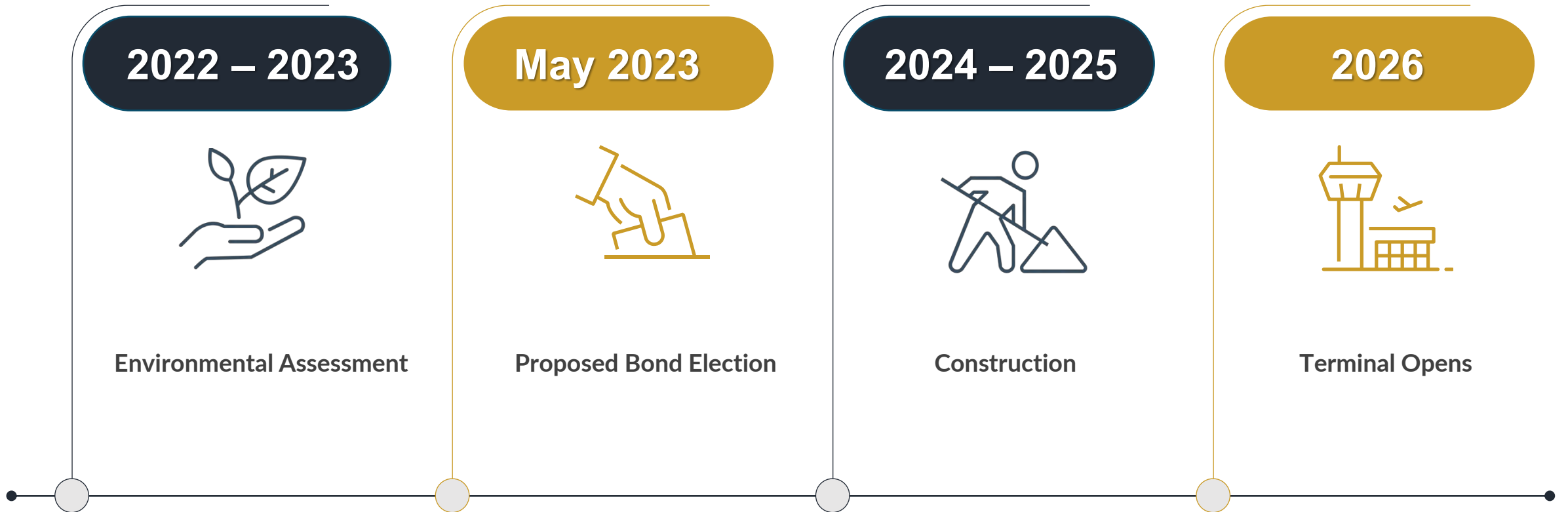
**TKI**

Environmental assessment



- An environmental assessment, started in 2022, will analyze the potential environmental impacts to resources such as water, wildlife and habitat, culture, air quality, noise, surface transportation, residences, and community populations.
- Public Hearings for the draft environmental assessment will occur in early 2023, with additional opportunities for public feedback to follow.

Boarding time

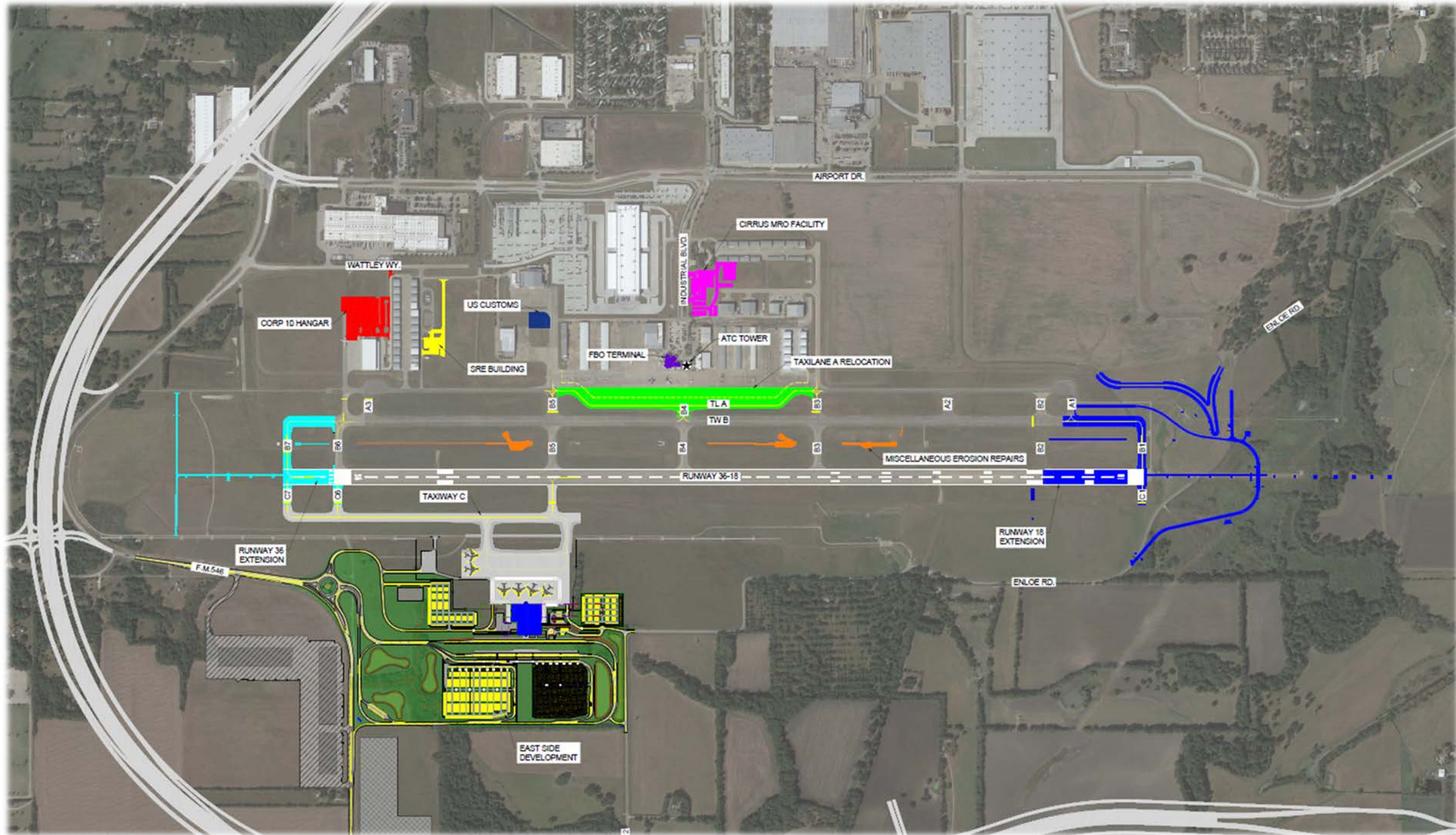


Add-on benefits to McKinney and the region



Commercial service will not only offer convenience and connectivity to travelers but also increase the desirability of McKinney and Collin County for business growth and enhance the city's ability to attract leisure and hospitality industries, benefitting even those who don't travel by air.







Questions

BEFORE DEPARTURE