



TEXAS AVIATION

Economic Impact Study

THE TEXAS AIRPORT SYSTEM

The Texas airport system with 289 airports is one of the largest airport systems in the country. It consists of 25 commercial service airports and 264 general aviation airports. These airports play an important role in the Texas economy by providing well-paying jobs, stimulating growth, and serving as critical components in a transportation network that permits the movement of people and goods across the state, throughout the country, and around the world. These airports are responsible for billions of dollars of economic activity, and support a wide assortment of businesses and activities. The state's commercial service airports serve as hubs for United Airlines, American Airlines, Southwest Airlines, FedEx and UPS Airlines. The general aviation airports are host to a variety of businesses. Aerial applicators, such as M&M Air Service, help crops thrive. Air ambulance services, like PHI

Air Medical and CareFlight, are based at general aviation airports throughout Texas in order to provide life-saving emergency flights where needed. Aircraft manufacturing takes place at Kerrville Municipal Airport in the Mooney factory. These airports support firefighting and disaster relief efforts. Aviation schools found on general aviation airports feature training for aircraft mechanics, fixed-wing pilots, helicopter pilots, skydivers, and even drone pilots. Military aircrews make use of many general aviation airports for training purposes. Finally, more than a dozen Texas general aviation airports host aviation museums and other nonprofit aerospace organizations that educate and promote the history of aviation.

Thanks to these businesses and organizations, and the millions of visitors that pass through Texas airports each year, the state's economy thrives and grows.



STUDY PROCESS

This study was undertaken by the Texas Department of Transportation's Aviation Division to improve their strategic planning and funding decisions. Knowledge of each airport's economic impacts helps the Aviation Division allocate its resources in its efforts to

develop and maintain the airport system as a world-class system capable of attracting businesses and visitors to Texas. This, in turn, aids the Aviation Division in supporting infrastructure development projects intended to promote economic growth around the state.

Through an extensive data gathering effort, information from each Texas system airport was compiled and validated. This data served as the input for a linear economic input-output model that expressed each airport's economic impacts in terms of employment, payroll, and output. Each airport was analyzed for its on-airport,

construction, and visitor-related impacts. Multiplier impacts were calculated to show how direct airport activity creates additional benefits. The process followed Federal Aviation Administration guidelines and has been used in previous Texas airport economic impact studies. Additionally, certain qualitative benefits were identified for the system airports.

STATEWIDE BENEFITS FROM AVIATION

The total impacts of Texas system airports amount to 778,955 jobs that received \$30.1 billion in wages and benefits. These workers generated \$94.3 billion in economic output. On top of this, the Texas airport system provides countless benefits that improve the health, safety, welfare, and quality of life for the people of Texas.

Furthermore, more than 17 million visitors passed through the state's commercial service airports, with another 1.5 million visitors making use of the Lone Star State's general aviation services.

TOTAL JOBS:
778,955



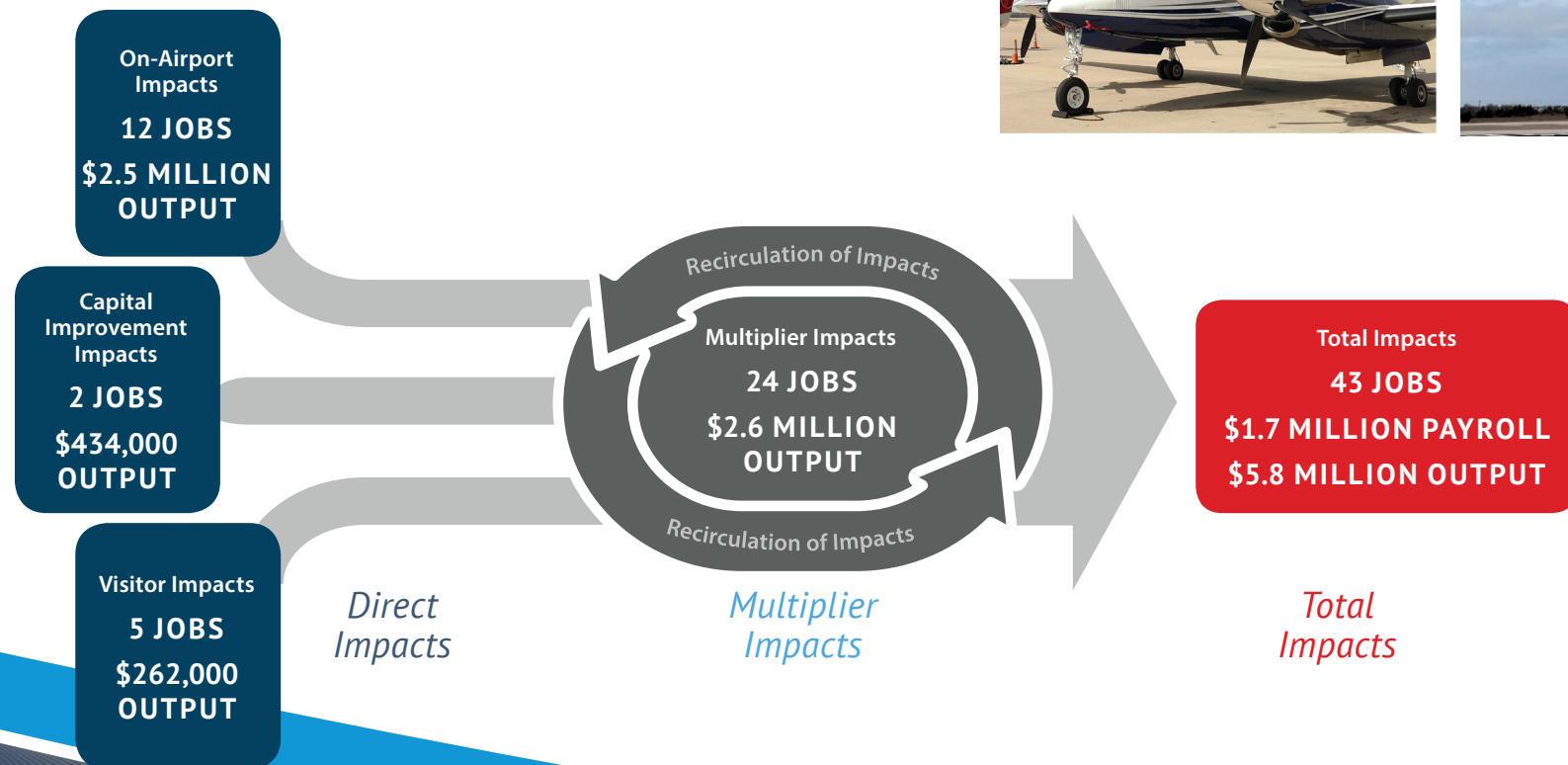
TOTAL PAYROLL:
\$30.1 BILLION



TOTAL OUTPUT:
\$94.3 BILLION



Economic Impact of BRENHAM MUNICIPAL AIRPORT (11R)



SYSTEM BENEFITS:

Each Texas airport contributes to the state's economy. On-airport businesses and government entities create a variety of jobs in their communities. Visitors travelling via aircraft use the Texas airport system for quick and easy access for business, recreation, and a multitude of other purposes. These visitor expenditures create additional benefits that ripple through the economy. In addition to jobs, payroll, and output, each airport also contributes to the health and welfare of the state by providing a variety of unique services that can range from emergency medical transport and disaster relief to flight training for the next generation of pilots.

IMPACT MEASURES

Employment measures the number of full-time equivalent (FTE) jobs related to airport activity including visitor-supported and on-airport construction jobs. A part-time employee counts as half of a full-time employee.

Payroll measures the total annual salary, wages, and benefits paid to all workers whose livelihoods are directly attributable to airport activity.

Output measures the value of goods and services related to airports in Texas. The output of on-airport businesses is typically assumed to be the sum of annual gross sales and average annual capital expenditures.



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AUGUST 2018



PURPOSE AND NEED



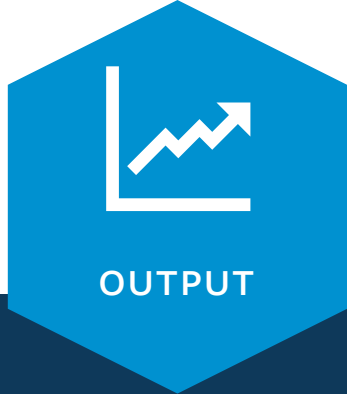
Purpose

- Tally the economic impacts of Texas system airports
- Key component of TxDOT's overall planning efforts
 - Airport system planning
 - Aviation Capital Improvement Program

Need

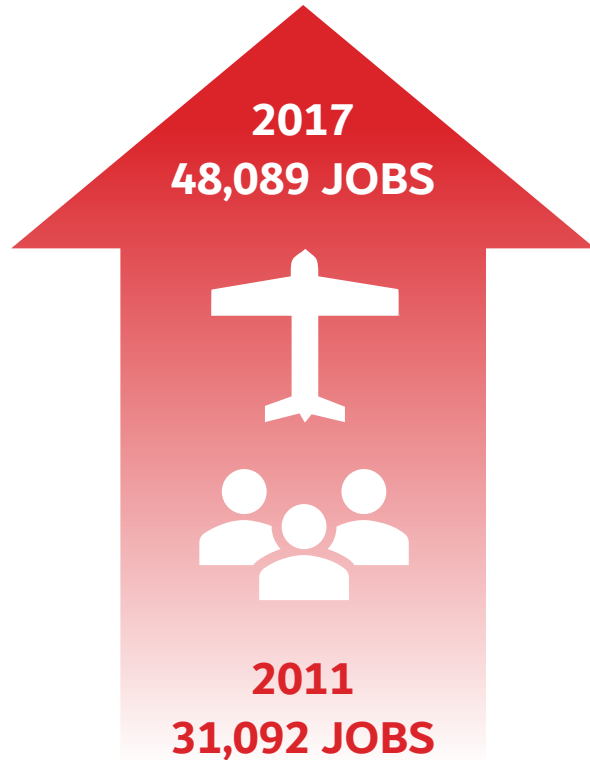
- Quantify airport economic impacts last done in 2011
- Demonstrate value of TxDOT's annual \$70 million investment in airports

AIRPORT SYSTEM ECONOMIC IMPACTS

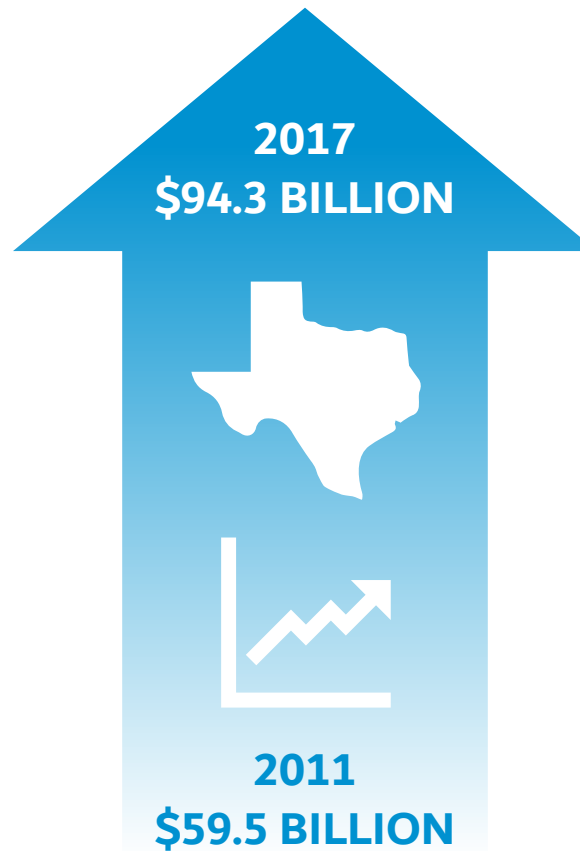
Impact Type	 EMPLOYMENT	 PAYROLL	 OUTPUT
Direct	490,404	\$17.5 billion	\$49.2 billion
Multiplier	288,551	\$12.6 billion	\$45.1 billion
Total	778,955	\$30.1 billion	\$94.3 billion

IMPROVEMENTS SINCE 2011

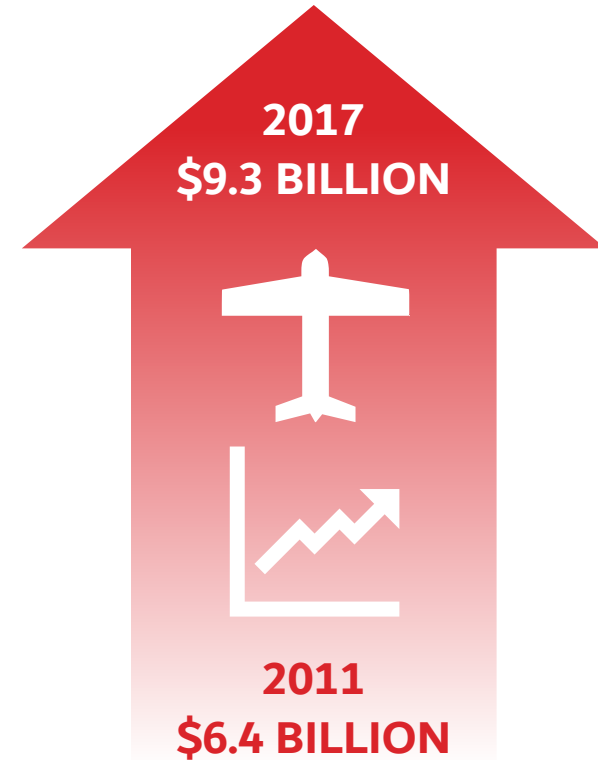
54%
GENERAL AVIATION
EMPLOYMENT GROWTH



58%
TEXAS SYSTEM TOTAL
OUTPUT GROWTH

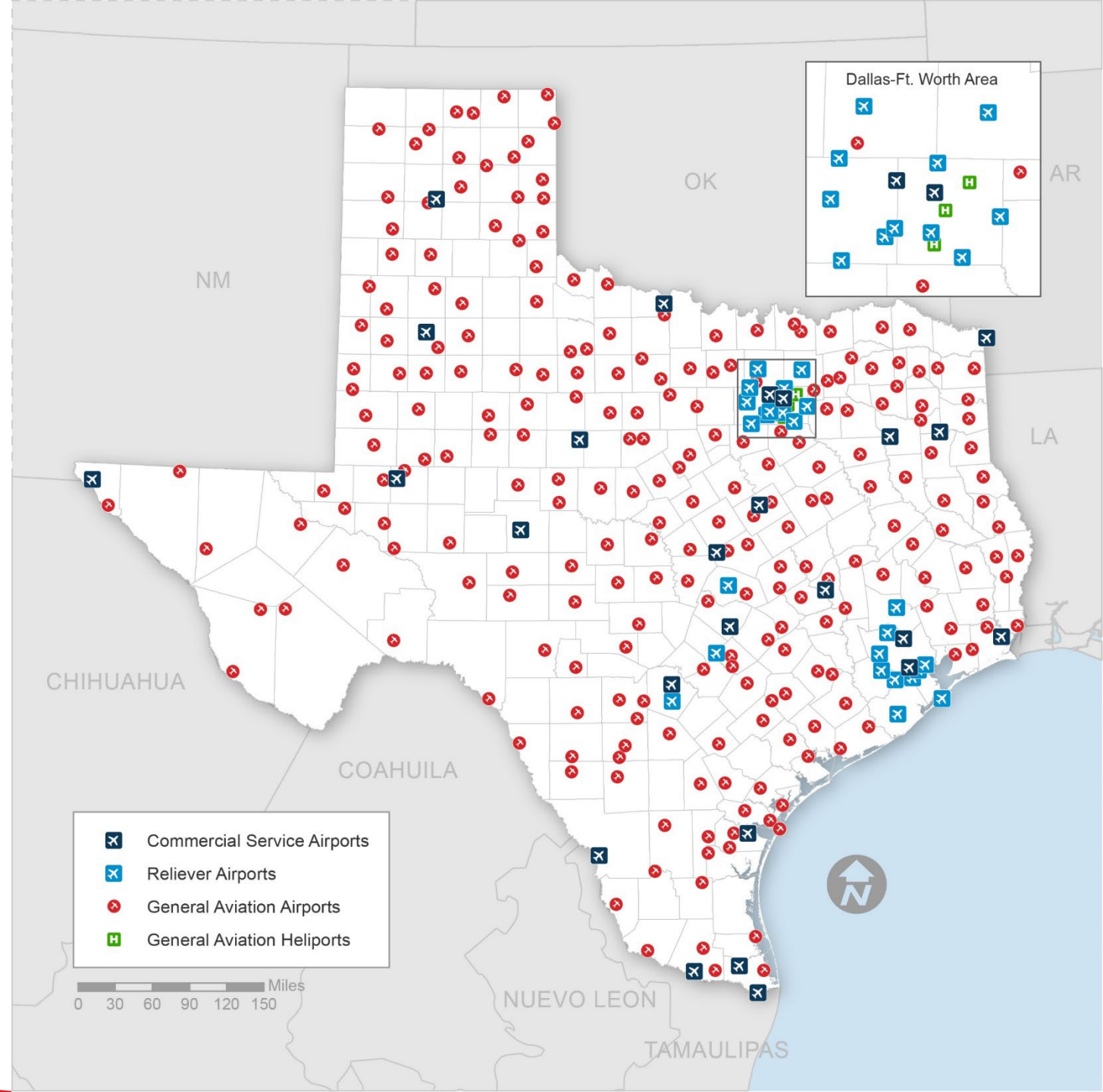


47%
GENERAL AVIATION
OUTPUT GROWTH

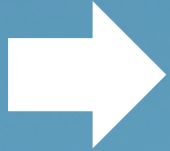


TEXAS AIRPORT SYSTEM

- 289 airports
- 25 commercial service airports
- 80 million enplanements
- 1.9 million commercial operations
- 264 general aviation airports
- 5.7 million general aviation operations



ECONOMIC IMPACT STUDY BACKGROUND



STUDY BEGAN
AUGUST 2017



SNAPSHOT OF
TEXAS AIRPORT
IMPACTS IN 2017



FOLLOWED FAA
GUIDELINES



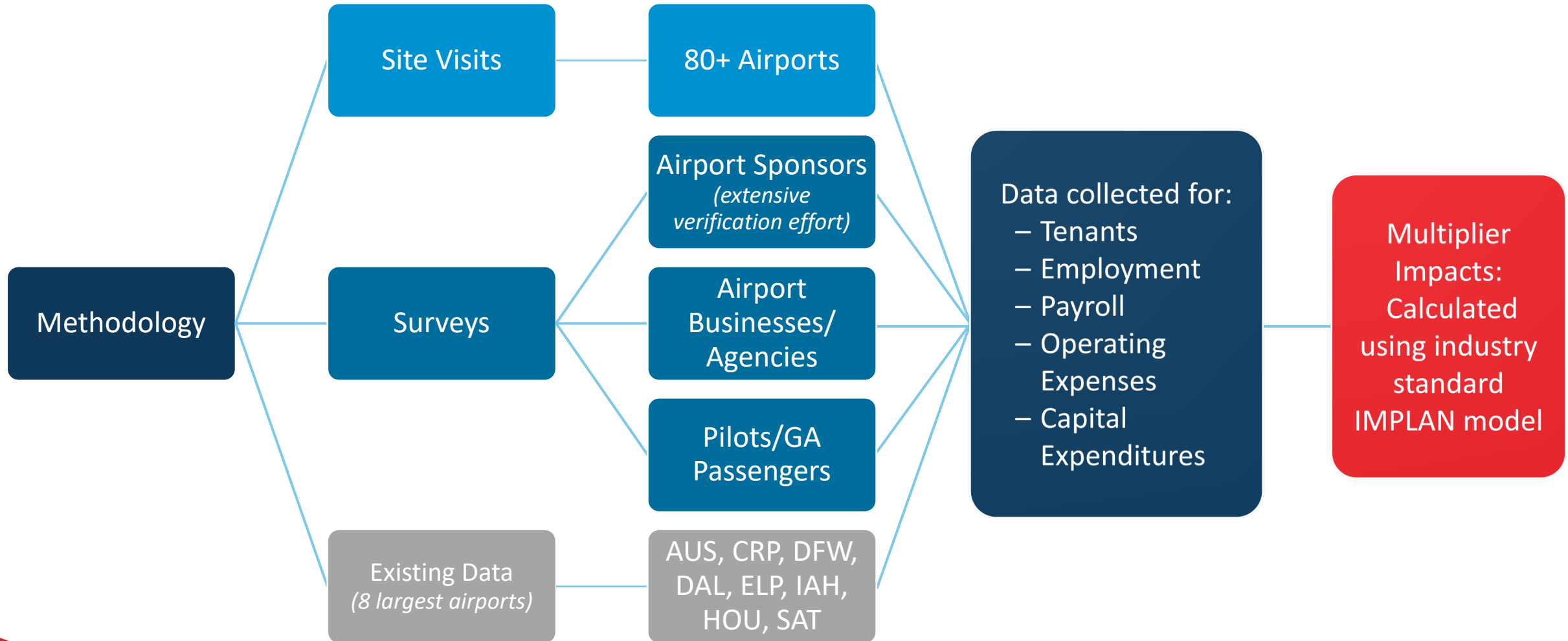
QUANTIFIED
IMPACTS BY
AIRPORT AND FOR
STATE



SHOWED
IMPROVEMENTS
COMPARED TO
2011 STUDY



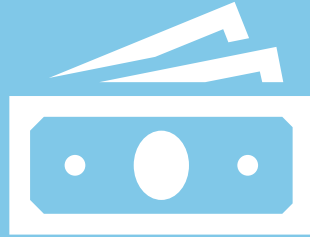
METHODOLOGY



ECONOMIC IMPACT MEASURES



EMPLOYMENT



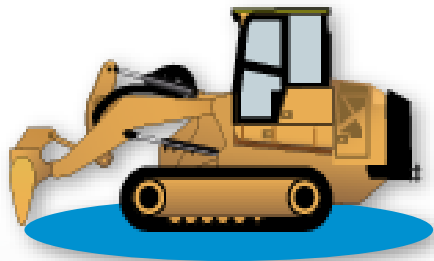
PAYROLL



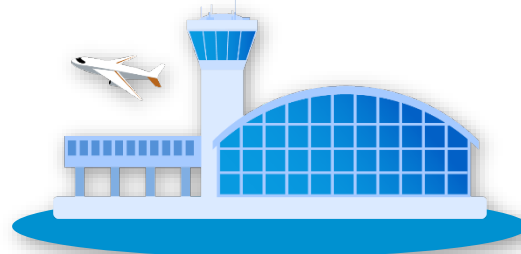
OUTPUT



ECONOMIC IMPACT CATEGORIES



Capital Improvement



On-Airport



Visitor Expenditures



ECONOMIC IMPACT MODEL

● + ● = Total Impacts

Multiplier Impacts

Direct Impacts

Capital Improvements

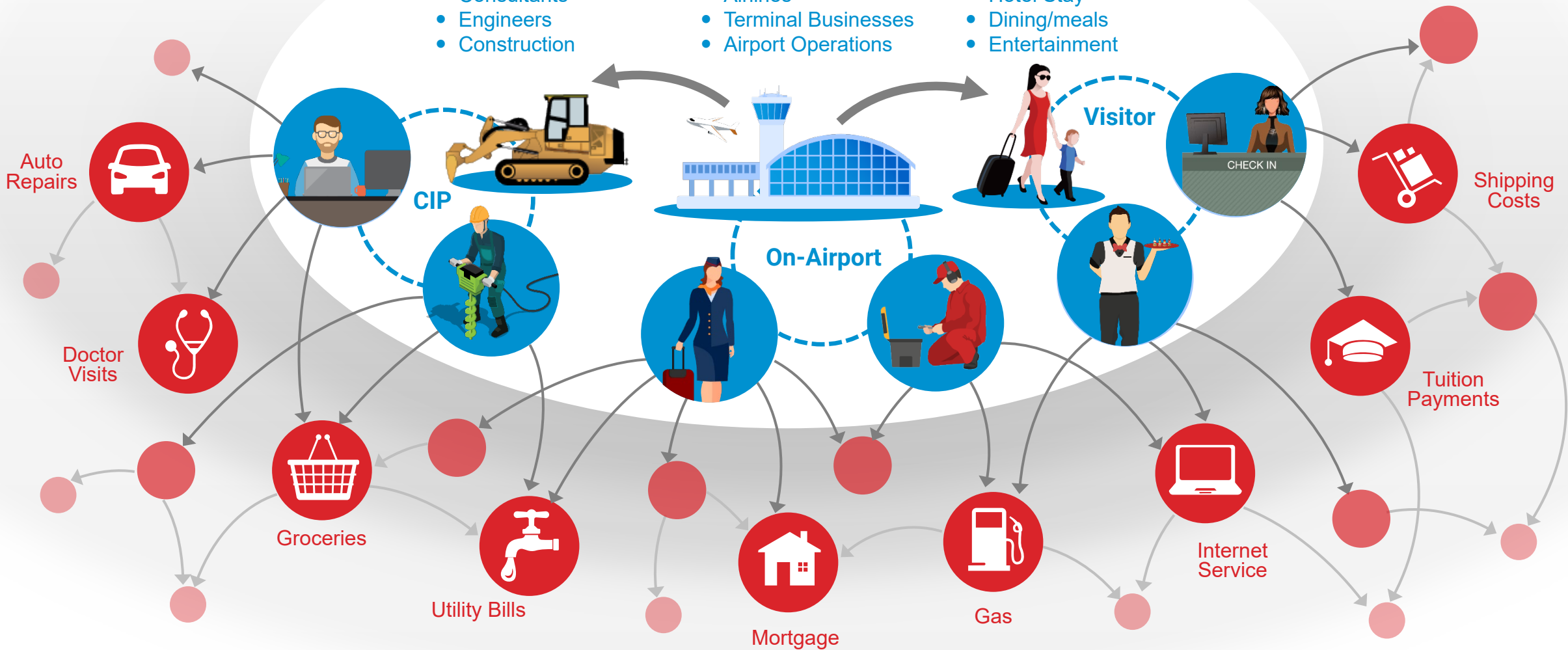
- Consultants
- Engineers
- Construction

On-Airport Impacts

- Airlines
- Terminal Businesses
- Airport Operations

Visitor Impacts

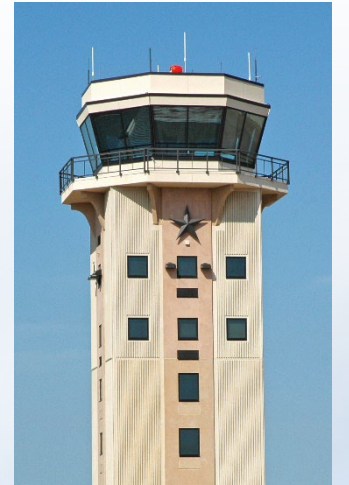
- Hotel Stay
- Dining/meals
- Entertainment



ON-AIRPORT IMPACTS

Includes:

- Businesses (e.g., FBOs, flight schools, repair shops, terminal concessionaires, rental car agencies, and airlines)
- Government agencies (e.g., airport sponsors, FAA, and TSA)
- Multiplier impacts



Total Employment	263,733
Total Payroll	\$14.7 BILLION
Total Output	\$53.4 BILLION



VISITOR EXPENDITURE IMPACTS

Includes:

- Commercial service visitors
- General aviation visitors
- Multiplier impacts



Total Employment	497,516
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Total Payroll	\$14.8 BILLION
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Total Output	\$38.0 BILLION
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CAPITAL IMPROVEMENT IMPACTS

Includes:

- Airfield projects
- Terminal renovation and construction
- Tenant improvements
- Multiplier impacts



Total Employment	17,706
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Total Payroll	\$591.1 MILLION
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Total Output	\$2.9 BILLION
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OTHER BENEFITS



Life saving air
ambulance flights



Agriculture
enhancement



More efficient
pipeline inspections



Improved wildfire
protection and
suppression



Better community
security through
law enforcement
flights



Greater medical
coverage by
physicians using
aircraft

XYZ AIRPORT OVERVIEW

- Airport background
- Airport facilities
- Airport services
- Unique aspects of airport

Airport Photos



XYZ AIRPORT



Impact Type

Direct	XX	\$XX million	\$XX million
Multiplier	XX	\$XX million	\$XX million
Total	XX	\$XX million	\$XX million

A photograph of the Marshall, Texas airport terminal at dusk. The building features a prominent control tower with a glass-enclosed top and a brick base. The main terminal has a large glass facade reflecting the interior lights. A sign above the entrance reads "MARSHALL, TEXAS".

THANK YOU

**CDM
Smith**