

FINAL REPORT

McKinney National Airport Economic Impact Study Analysis

Prepared for McKinney National Airport and Sky Synergy
Submitted by InterVISTAS Consulting Inc.

11 October 2022



Executive Summary

McKinney National Airport (TKI) engaged Inter VISTAS Consulting Inc. (Inter VISTAS) to conduct a study to analyze the potential economic impact of accommodating commercial service at TKI in the 2025/2026 time period.

The aviation sector is a major economic generator, and airports play a critical role within the industry by facilitating the movement of people, goods, and services globally. The industry facilitates employment and economic development in the broader economy through a number of key mechanisms including tourism, investment, trade of goods and services, and productivity.

Economic impact is a measure of the spending and employment associated with a sector of the economy, a specific project, or a change in government policy or regulation. In this case, economic impact refers to the economic contribution associated with the potential future operations of TKI as a commercial service airport. The three major components of economic impact are classified as direct, indirect, and induced impacts.¹ Together, they provide a snapshot of how the ongoing operations of the airport can impact the local and provincial economy.

Economic impact is also measured in four different dimensions, (i) employment (jobs or full-time equivalents), (ii) labor income, (iii) gross domestic product (GDP), and (iv) economic output. Each dimension is described in greater detail in **Figure 1-3**, page 6.

Study Methodology and Approach

This analysis estimates the potential economic impact of TKI's annual operations as a Part 139 Commercial Airport. The estimate of direct employment at TKI as a commercial airport was based upon the airport's passenger forecast that has been developed for TKI in its new role. The passenger forecast information was reviewed in concert with a sample of existing economic impact studies for similarly sized airports to assess average passenger traffic to employment ratios which were then used to develop direct employment estimates for TKI. The economic impact of TKI's future capital expenditure plan (estimated to be approximately \$349 million) was based on analysis conducted by other project components (See **Table 1.2**, page 4 for further details.).

Using the estimated direct impacts as inputs, the IMPLAN model was applied to estimate the other associated economic impacts. The IMPLAN model is an industry-recognized economic model, which is used to identify interrelationships in a regional economy and estimate the impacts of changes on that economy. The IMPLAN model is developed from hundreds of data sources, most notably the Bureau of Economic Analysis's (BEA) Benchmark I-O tables, the Bureau of Labor Statistics (BLS) Quarterly Census of Earnings and Wages, the Census Bureau, and the U.S. Department of Agriculture.

The IMPLAN model estimated the multiplier (indirect and induced) impacts, as well as certain direct economic impacts which were not explicitly measured by the project team such as GDP and economic output.

¹ Direct impacts account for the economic activity of the target sector itself. Indirect impacts are those that result because of the direct impacts, which involves employment in downstream industries that arise from the presence of TKI. Induced employment is generated from expenditures by individuals employed directly or indirectly by the airport.

The IMPLAN model also estimates the tax revenues associated with the economic impact analysis. This study reports the total federal, state, and local tax impacts as produced from the IMPLAN model and includes the following categories:

Federal Taxes

- **Personal Taxes.** This category contains the personal income tax impacts generated by households linked to the airport and payable at the federal level, as well as estate and gift taxes.
- **Other Taxes and Fees.** This category includes corporate profits taxes as well as taxes on production and imports, net of subsidies, paid by businesses at the federal level such as excise and customs taxes. In addition, this category includes employee and employer contributions to federal social insurance taxes.

State and Local Taxes

- **Property Taxes.** This category contains all property taxes paid by either households or businesses.
- **Sales Taxes.** This category contains all state and local sales taxes.
- **Other Personal Taxes.** Excluding property taxes (noted above), this category contains other taxes and fees paid by households at the state and local level including motor vehicle licensing fees, fishing and hunting licensing fees, and other applicable taxes.

The economic multipliers used in this study were based on the 2019 Input-Output (I-O) multipliers maintained by IMPLAN for the State of Texas, which are the most current and relevant I-O multipliers available at the time of the study. The economic ratios and multipliers have been updated to reflect 2022 price levels, but no structural changes have been assumed.

Potential Economic Impact of McKinney National Airport

TKI's impact in the State of Texas is assessed for two future time frames, 2025 and 2040. Passenger forecasts were developed for the airport and the medium scenario is used as the potential traffic levels for this analysis. In 2025, the airport is estimated to handle 533,000 enplanements. In 2040, the airport is estimated to handle 820,000 enplanements. The estimated economic impacts of the airport during those two time periods are presented in **Table ES-1** and **Table ES-2**.

For each time period, two economic impact scenarios are presented to illustrate the range of impacts that may result based on the mix of direct employment types that may occur at TKI. Scenario 1 presents the results if all employment is attributed to the Air Transportation industry only. Scenario 2 presents the result 50% of the employment is attributed to the Air Transportation industry and 50% of the employment is attributed to the Scenic and Sight Seeing Transportation and Support Activities for Transportation industries, as defined in the IMPLAN model.²

² The Air Transportation Industry is defined as activities that are carried out to provide scheduled, non-scheduled, air taxi, charter, freight, helicopter services. The Scenic and Sight Seeing Transportation and Support Activities for Transportation industries include a broad umbrella of activities that support all transportation industries (i.e., not just air) which include activities such as those carried out by Fixed Based Operators.

The one-time economic impact of capital expenditures associated with the conversion of TKI from a GA airport to a commercial service airport is provided in **Table ES-3**. The overall capital expenditure amount is estimated to be nearly \$350 million, of which over 80% of the spending (\$285 million) is anticipated to occur within the State of Texas.

Table ES-1:
Potential Economic Impact of McKinney National Airport Operations (533,000 enplanements), 2025

					
	Impact	Employment (Jobs)	Labor Income (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Scenario 1	Direct	1,040	\$130	\$243	\$433
	Indirect	1,060	\$75	\$115	\$231
	Induced	1,130	\$60	\$104	\$185
	Total	3,230	\$265	\$462	\$850
Scenario 2	Direct	1,040	\$102	\$162	\$298
	Indirect	850	\$58	\$86	\$171
	Induced	890	\$47	\$82	\$146
	Total	2,780	\$207	\$330	\$615

Note: Totals may not sum due to rounding. Monetary impacts are presented in 2022 dollars. The multiplier impacts (indirect and induced) and estimates of wages, GDP, and economic output are based on the ratios the State of Texas as derived from the IMPLAN model. Scenario 1 presents the results if all employment is attributed to the Air Transportation industry only. Scenario 2 presents the results if 50% of the employment is attributed to the Air Transportation industry and 50% of the employment is attributed to the Scenic and Sight Seeing Transportation and Support Activities for Transportation industry.

**Table ES-2:
Potential Economic Impact of McKinney National Airport Operations (820,000 enplanements), 2040**



	Impact	Employment (Jobs)	Labor Income (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Scenario 1	Direct	1,420	\$177	\$331	\$592
	Indirect	1,450	\$102	\$157	\$316
	Induced	1,540	\$82	\$142	\$253
	Total	4,410	\$362	\$631	\$1,161
Scenario 2	Direct	1,420	\$139	\$221	\$407
	Indirect	1,160	\$80	\$117	\$234
	Induced	1,200	\$64	\$112	\$199
	Total	3,800	\$283	\$450	\$840

Note: Totals may not sum due to rounding. Monetary impacts are presented in 2022 dollars. The multiplier impacts (indirect and induced) and estimates of wages, GDP, and economic output are based on the ratios the State of Texas as derived from the IMPLAN model. Scenario 1 presents the results if all employment is attributed to the Air Transportation industry only. Scenario 2 presents the results if 50% of the employment is attributed to the Air Transportation industry and 50% of the employment is attributed to the Scenic and Sight Seeing Transportation and Support Activities for Transportation industry.

**Table ES-3:
Potential Economic Impact of McKinney National Airport Capital Expenditures**



Impact	Employment (Jobs)	Wages (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Direct	1,700	\$121	\$134	\$285
Indirect	690	\$51	\$83	\$163
Induced	950	\$50	\$88	\$156
Total	3,340	\$222	\$304	\$604

Note: Totals may not sum due to rounding. Monetary impacts are presented in 2022 dollars.

Potential Tax Impact of McKinney National Airport

The IMPLAN model also estimates the tax revenues associated with the economic impact analysis, as described previously. This study reports the total federal, state, and local tax impacts as produced from the IMPLAN model. The tax impacts for the total economic impact of the 2025 and 2040 airport operations and the estimated airport capital expenditures are shown in **Table ES-4**.

**Table ES-4:
Potential Tax Impact of McKinney National Airport Operations (2025 and 2040) and Estimated Airport Capital Expenditures**

Impact	Local (\$millions)	State (\$millions)	Federal (\$millions)	Total (\$millions)	
Scenario 1	2025 Operations	\$29	\$27	\$58	\$115
	2040 Operations	\$40	\$37	\$79	\$157
	Capital Expenditures	\$8	\$7	\$45	\$60
Scenario 2	2025 Operations	\$17	\$16	\$44	\$77
	2040 Operations	\$24	\$22	\$60	\$106
	Capital Expenditures	\$8	\$7	\$45	\$60

Note: Totals may not sum due to rounding. Monetary impacts are presented in 2022 dollars. Scenario 1 presents the results if all employment is attributed to the Air Transportation industry only. Scenario 2 presents the results if 50% of the employment is attributed to the Air Transportation industry and 50% of the employment is attributed to the Scenic and Sight Seeing Transportation and Support Activities for Transportation industry.

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1 Introduction

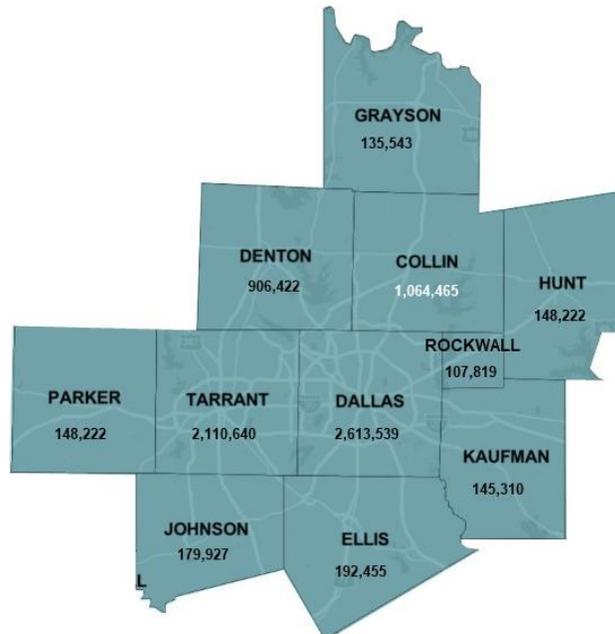
1.1 Overview of Dallas-Fort Worth (DFW) Metroplex Area and Collin County

One of the great metropolitan regions in the United States, Dallas, Fort Worth, and 19 neighboring counties, collectively known as The Metroplex, is renowned for its exceptional quality of life. The area boasts a vibrant culture, tremendous recreational opportunities, beautiful natural surroundings, and a thriving diverse economy.

Of these 19 counties, Collin County is the 6th largest county in Texas and the 3rd largest within the Dallas-Fort Worth Combined Statistical Area (CSA), a section of 13 counties within the Metroplex area. Of the counties within the Dallas-Fort Worth Metroplex, Collin County neighbors Dallas, Denton, Grayson, Fannin, Hunt, and Rockwall Counties. Collin County is projected to have the largest population growth in the Dallas-Fort Worth CSA through 2040, with an increase of 620,000 people or 2.3% per year. As of 2020, Collin County currently has a population of around 1.1 million people. According to the U.S. Bureau of Economic Analysis and Woods and Poole, the county’s economic growth is expected to outpace the Dallas-Fort Worth CSA and the U.S., with compound annual growth rates (CAGRs) of Gross Regional Product and total employment at 4.3% and 4.0%, respectively, over the 2020 to 2040 period.

The diverse and growing regional economy features a variety of industries including agriculture, food processing, computing, printing and publishing, large- and small-scale manufacturing, health care, arts and entertainment as well as medical instruments, education, and finance.

Figure 1-1: Dallas-Fort Worth (DFW) Metroplex Area and Collin County



1.2 McKinney National Airport and other airports within the DFW Metroplex Area

McKinney National Airport's (TKI's) airfield is approximately 780 acres in size and consists of one runway, Runway 18-36, at 7,000 feet long. TKI is a key airport in the region facilitating and supporting general and business aviation operations. The airport has many based aircraft that are owned by key corporations such as Toyota and Texas Instruments. The airport's FBO, McKinney Air Centre, provides its clients with full service lineup from fuelling to line service, flight crew amenities, and lease hangars. TKI also provides onsite U.S. Customs and Border Protection services, supporting international air operations. A flight school and flying club are regular users of TKI's runway facilities. With a transition into commercial air service, TKI's primary focus is to serve the needs of Collin County. However, beyond the local areas, TKI's primary and secondary catchment areas could attract up to 2 million enplanements that are currently flying through Dallas-Fort Worth International Airport and Dallas Love Field Airport.

The largest airport in the region, Dallas-Fort Worth International Airport (DFW), is located in neighboring Dallas County, spanning approximately 17,000 acres with seven runways. With 5 terminals, DFW will offer 173 gates across 5 terminals by 2026. Passenger enplanements are expected to reach a maximum of 54.3 million passengers by 2038, due to physical constraints given the number of gates. In August 2022, DFW has indicated a restart of planning around a Terminal F, after two years of pausing the project due to the pandemic. The project will provide DFW with greater capacity. However, given the economic development and growth of the area, there is consideration for TKI to become a Part 139 commercial service airport in the 2025/2026 time period. As such, there is interest to undertake an economic impact analysis of converting TKI from a GA airport to a commercial service airport.

Also located in neighboring Dallas County, Dallas Love Field Airport (DAL) is approximately 1,300 acres in size and consists of two parallel runways, Runway 13R-31L and Runway 13L-31R. A third runway, Runway 18-36 is present, but is not active as of July 2022. With 20 gates, DAL is projected to handle 10.3 million passengers by 2040, with a level of enplanements and average daily departures expected to stagnate according to the FAA.

1.2.1 TKI Passenger Enplanement Forecasts and TKI Capital Expenditures

Detailed market analysis was conducted for TKI to assess the potential passenger volumes that may be handled at TKI in 2025 and 2040. The economic impact analysis was based upon the *medium scenario* for both years, which is aligned with the other financial analyses that are being undertaken for this project. The forecasted passenger enplanements are 533,000 in 2025 and 820,000 in 2040. **Table 1-1** summarizes the passenger enplanement forecasts for both time periods for all scenarios.

Detailed capital expenditure estimates have also been prepared for the potential conversion of TKI from a GA focused airport to a commercial air service provider. **Table 1-2** provides a summary of the expenditures with an estimated share of spend that is expected to occur specifically within the State of Texas.

Table 1-1: TKI Passenger Enplanement Estimates, 2025 and 2040

TKI Enplanements & Capacity Baseline Demand Forecast 2025	Very Low	Low	Medium	High	Very High
TKI Primary Catchment Capture %	10%	20%	30%	40%	50%
TKI Secondary Catchment Capture %	5%	10%	15%	20%	25%
Local Domestic Enplanements	178K	355K	533K	710K	888K
Seats per Departure	150	150	150	150	150
Load Factor*	80%	80%	80%	80%	80%
Average Daily Departures	4	8	12	16	20
Departures per Gate	6	6	6	6	6
Gates Needed	1	2	3	3	4

Source: CMT, Crawford, Murphy and Tilley.

TKI Enplanements & Capacity Baseline Demand Forecast 2040	Very Low	Low	Medium	High	Very High
TKI Primary Catchment Capture %	5%	10%	15%	20%	25%
TKI Secondary Catchment Capture %	273K	547K	820K	1.1M	1.4M
Local Domestic Enplanements	150	150	150	150	150
Seats per Departure	80%	80%	80%	80%	80%
Load Factor*	6	13	19	25	31
Average Daily Departures	6	6	6	6	6
Departures per Gate	2	3	4	5	6
Gates Needed	5%	10%	15%	20%	25%

Source: CMT, Crawford, Murphy and Tilley.

Table 1-2: TKI Capital Expenditure Estimates

Project	Preliminary Cost Estimate	% Local (Collin County)	% State of Texas	% Outside of Texas Within USA
Terminal Building (4 Gate facility)	\$173,500,000	25%	75%	25%
East side infrastructure development (e.g., electrical, water, sewer)	\$3,700,000	60%	90%	10%
Terminal apron pavement (e.g., 4 gates and surrounding areas)	\$19,200,000	40%	90%	10%
Parallel Taxiway C (Phase 1) – Partial Taxiway to Runway 36 End	\$12,500,000	40%	90%	10%
Terminal Entrance and Loop roadway	\$35,700,000	40%	90%	10%
Passenger Vehicle Parking (Surface lots)	\$46,700,000	40%	90%	10%
Vehicle Service Road serving East Side of the airport	\$7,500,000	40%	90%	10%
New ARFF Equipment	\$1,000,000	0%	0%	100%
Total (FY 2024)	\$299,800,000			
New ARFF Station	\$8,500,000	40%	90%	10%
New West Side 30,000 gallon JetA Fuel Tank	\$700,000	10%	30%	70%
Total (FY 2025)	\$9,200,000			
Parallel Taxiway C (Phase 2) – Full Extension to Runway 18 End	\$35,600,000	40%	90%	10%
East side fuel farm (JetA - 30,000 gallons)	\$4,500,000	20%	50%	50%
Total (FY 2027)	\$40,100,000			
Project Total	\$349,100,000			

Source: Garver.

Project	Preliminary Cost Estimate	\$ Local (Collin County)	\$ Total State of Texas (incl. Collin County)	\$ Outside of Texas Within USA
Terminal Building (4 Gate facility)	\$173,500,000	\$43,375,000	\$130,125,000	\$43,375,000
East side infrastructure development (e.g., electrical, water, sewer)	\$3,700,000	\$2,220,000	\$3,330,000	\$370,000
Terminal apron pavement (e.g., 4 gates and surrounding areas)	\$19,200,000	\$7,680,000	\$17,280,000	\$1,920,000
Parallel Taxiway C (Phase 1) – Partial Taxiway to Runway 36 End	\$12,500,000	\$5,000,000	\$11,250,000	\$1,250,000
Terminal Entrance and Loop roadway	\$35,700,000	\$14,280,000	\$32,130,000	\$3,570,000
Passenger Vehicle Parking (Surface lots)	\$46,700,000	\$18,680,000	\$42,030,000	\$4,670,000
Vehicle Service Road serving East Side of the airport	\$7,500,000	\$3,000,000	\$6,750,000	\$750,000
New ARFF Equipment	\$1,000,000	\$-	\$-	\$1,000,000
Total (FY 2024)	\$299,800,000	\$94,235,000	\$242,895,000	\$56,905,000
New ARFF Station	\$8,500,000	\$3,400,000	\$7,650,000	\$850,000
New West Side 30,000 gallon JetA Fuel Tank	\$700,000	\$70,000	\$210,000	\$490,000
Total (FY 2025)	\$9,200,000	\$3,470,000	\$7,860,000	\$1,340,000
Parallel Taxiway C (Phase 2) – Full Extension to Runway 18 End	\$35,600,000	\$14,240,000	\$32,040,000	\$3,560,000
East side fuel farm (JetA - 30,000 gallons)	\$4,500,000	\$900,000	\$2,250,000	\$2,250,000
Total (FY 2027)	\$40,100,000	\$15,140,000	\$34,290,000	\$5,810,000
Project Total	\$349,100,000	\$112,845,000	\$285,045,000	\$64,055,000

Source: InterVISTAS Consulting analysis of Garver Capital Expenditure Estimates.

1.3 Potential Economic Impact of Future TKI Operations

McKinney National Airport has the opportunity to offer commercial air services for the local region. As such, the potential future operations of TKI will contribute directly to employment in Collin County and the surrounding area, as well contributing more broadly to state and national gross domestic product (GDP) through its commercial activities and operations. Additionally, TKI acts as an economic catalyst, facilitating the growth of regional businesses and industrial sectors. The economic contribution of the airport to the community is termed the *Economic Impact* of TKI.

1.3.1 What is Economic Impact?

Economic impact is a measure of the spending and employment associated with a sector of the economy, a specific project (such as the construction of a new facility), or a change in government policy or regulation. Economic impact can be measured in various ways. Two of the most popular ways to assess economic impact are in terms of the dollar value of industrial output produced, or in terms of jobs or FTEs generated.³ Other measures are gross domestic product (GDP) and value of capital used and/or created. All of these are used to express the gross level of economic activity or expenditure from a sector of the economy, a specific project, or a change in policy or regulation. These measures can be useful in developing an appreciation of projects, investments, and economic sectors.⁴ The different measurements of economic impact, including employment, wages, gross domestic product (GDP), and economic output, are explained in **Figure 1-3**.

This study examines the potential economic impact of TKI as a commercial services airport on the state economy. The potential economic impact is presented for passenger forecast scenarios in 2025 and 2040. One of the most important components of the TKI economic impact is given particular attention here: *Employment Impact*. Other economic impact measures such as wages, GDP, and economic output are also considered and presented.

³ A full-time equivalent (FTE) of employment accounts for part-time and seasonal employment.

⁴ Economic impact is different from a cost-benefit analysis that weighs benefits against costs.

Figure 1-3: Measurements of Economic Impact

<p>Employment (Jobs or Full-time Equivalents)</p>	<ul style="list-style-type: none"> • The number of full-time equivalents (FTEs) or person years generated by a particular source. Because certain jobs may only be part-time or seasonal, the number of jobs is generally greater than the number of FTEs.
<p>Labor Income</p>	<ul style="list-style-type: none"> • The wages, salaries, bonuses, benefits, and other remuneration earned by the associated workforce.
<p>Gross Domestic Product (GDP)</p>	<ul style="list-style-type: none"> • A measure of the value added by labor and capital services used to produce final goods and services, as a result of economic activity in the nation. This measure is net of the value of intermediate goods and services used up to produce the final goods and services.
<p>Economic Output</p>	<ul style="list-style-type: none"> • The dollar value of industrial output produced. Sometimes referred to as “economic activity,” it reflects the spending (i.e., capital improvement plus revenue) by firms, organizations, and individuals.

1.3.2 Categories of Economic Impact

The three major components of economic impact are *direct, indirect, and induced impacts*, as described in **Figure 1-4**. These distinctions are used as a base for the estimation of the total economic impact of TKI. Each of these three components requires different tools of analysis. Employment impact analysis determines the economic impact in terms of jobs created and salaries and labor income paid out. In the case of the airport, the direct, indirect, induced, and total numbers of jobs created at the airport are examined to produce a snapshot in time of potential airport operations in 2025 and 2040.

Direct Impact

Direct impacts account for the economic activity of the target sector itself. For instance, all employment that is directly related to the operation and management of TKI, including businesses located onsite at the airport as well as airport-dependent businesses located offsite, would be considered direct employment. Thus, the direct employment base includes airline employees, fixed base operators, aircraft maintenance, ground handling, customer service, etc.

Indirect Impact

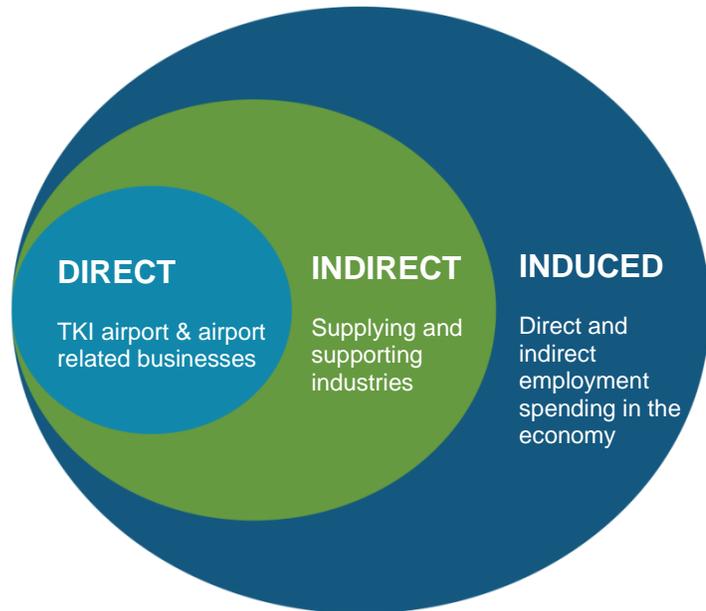
Indirect impacts are those that result because of the direct impacts. This involves employment in downstream industries that arise from the presence of TKI. For instance, indirect employment includes the portion of employment in supplier industries which are dependent on sales to the air transport sector, e.g., food wholesalers that supply food for catering on flights.

Induced Impact

Induced employment is generated from expenditures by individuals employed directly or indirectly by the airport. For instance, if an airline employee at TKI decides to renovate her home, this would result in induced employment hours in the general economy as the renovation would support hours of employment in the construction industry, the construction materials industry, etc. Induced impact is often called the “household-spending effect”.

Total impacts are the sum of direct, indirect, and induced effects. These three categories of impacts are summarised in **Figure 1-4**.

Figure 1-4:
Categories of Economic Impact Generated and Facilitated by TKI Operations



CASE STUDY

Raytheon Technologies: Expanding its Footprint in McKinney

Raytheon is one of the largest defense and aerospace companies in the US, with 4 subsidiaries across 46 countries. With a strong presence in the DFW area since the 1940s, Raytheon continues to develop its manufacturing and supply chain presence in the region. For instance, Raytheon invested \$100 million to build an intelligent manufacturing center in Collin County, employing 500 skilled employees starting in late 2021. Following this effort to modernize its manufacturing processes, Raytheon announced plans to develop an additional 400,000 square foot factory, lab, and office space at their McKinney campus by 2025, creating an additional 700 jobs. Raytheon has a significant economic footprint in the McKinney area, employing 3,000 people. As well, there may be opportunities for Raytheon to conduct product testing at TKI, should the airport further develop its infrastructure (e.g., runway extension) to further support its current business aviation services, that is not currently possible. The potential for additional commercial air services is anticipated to support the continued future growth of company by providing more travel options for professional staff which saves time. In addition, improved transportation options at McKinney will support the recruitment of professional staff, due to greater proximity to more affordable housing.

With Raytheon's current 12,000 employees in the DFW area and another 1,200 positions to be created in the McKinney area by 2025, Raytheon's need for commercial air service will grow. As of 2022, 9,000 employees are devoted to engineering and supply chain operations around the Plano region. These engineers and supply chain operators often travel out of state for business, opting for commercial air service to move between sites. Currently, Dallas Love Field and Dallas-Fort Worth Airports serve this business flight demand, connecting Raytheon staff to California, Mississippi, Florida, Colorado and Washington, D.C. Given McKinney's proximity to Plano and other Raytheon facilities, many of these business flights could be routed through McKinney Airport.



2 Methodology

2.1 Overview of Approach

This analysis estimates the potential economic impact of TKI's annual operations as a Part 139 Commercial Airport. The estimate of direct employment at TKI as a commercial airport was based upon the airport's passenger forecast that has been developed for TKI in its new role. The passenger forecast information was reviewed in concert with a sample of existing economic impact studies for similarly sized airports to assess average passenger traffic to employment ratios which were then used to develop direct employment estimates for TKI. The economic impact of TKI's future capital expenditure plan was based on work conducted by other project components. A total of 13 U.S. airports were included in the analysis of the on-airport job per enplanement ratio computation.⁵ **Table 2-1** provides an overview of the sample airports reviewed.

Table 2-1: Direct Jobs per Enplanement Analysis for Sampled Airports

#	Airport Code	City	Airport Name	State	Year of Study	Enplanements during Study Year	Direct - On Airport Jobs	Direct Jobs per Enplanement
1	RAP	Rapid City	Rapid City Regional	SD	2019	342,794	618	0.0018028
2	BEL	Bellingham	Bellingham International	WA	2018	362,868	814	0.0022432
3	PSC	Pasco	Tri-Cities	WA	2018	395,348	659	0.0016669
4	FAR	Fargo	Hector International	ND	2015	437,188	1,072	0.0024520
5	LBB	Lubbock	Lubbock Preston Smith International	TX	2019	520,181	552	0.0010612
6	CHA	Chattanooga	Lovell Field	TN	2019	553,142	1,366	0.0024695
7	BTV	Burlington	Burlington International	VT	2018	658,879	1,406	0.0021339
8	MAF	Midland	Midland International Air And Space Port	TX	2019	672,382	766	0.0011392
9	IWA	Mesa	Phoenix-Mesa Gateway	AZ	2013	725,048	2,042	0.0028164
10	ISP	Islip Long Island MacArthur	Long Island	NY	2009	929,902	1,194	0.0012840
11	HPN	Westchester County	Westchester County	NY	2009	964,927	1,313	0.0013607
12	GSP	Greer	Greenville Spartanburg	SC	2018	1,133,012	2,340	0.0020653
13	ALB	Albany	Albany International	NY	2009	1,302,814	1,709	0.0013118

Source: Economic Impact Studies published for airports, Enplanements from FAA.

Airports 1 through 6 were used to derive the average jobs per enplanement for TKI's forecasted passenger enplanement for 2025. Airports 7 through 13 were used to derive the average jobs per enplanement for 2040. **Table 2-2** shows the average jobs per enplanement computation and estimated TKI direct on-airport jobs for each respective time period.

⁵ The airports included in the analysis were selected based upon the availability of an existing economic impact analysis that included specific reporting on the number of on-airport jobs at the airport. It is worth noting that standardization of economic impact reports does not exist. The granularity of data varies across different reports. For example, some studies may report only total jobs (i.e., direct, indirect and induced) or direct jobs may include a summation of on-airport, visitor spending, and military employment categories.

Table 2-2: Estimated Direct On-Airport Jobs at TKI

Time Period	Forecasted Passenger Enplanements	Average On-Airport Jobs per Enplanement	Standard Deviation of the Mean	Estimated Direct On-Airport Jobs at TKI
2025	533,000	0.001949282	0.00054768	1,039
2040	820,000	0.001730189	0.000621149	1,419

Source: InterVISTAS Consulting Analysis.

Using the estimated direct impacts as inputs, as shown in **Table 2-2**, the IMPLAN model was applied to estimate the other associated economic impacts. The IMPLAN model is an industry-recognized economic model, which is used to identify interrelationships in a regional economy and estimate the impacts of changes on that economy. The IMPLAN model is developed from hundreds of data sources, most notably the Bureau of Economic Analysis’s (BEA) Benchmark I-O tables, the Bureau of Labor Statistics (BLS) Quarterly Census of Earnings and Wages, the Census Bureau, and the U.S. Department of Agriculture.

The IMPLAN model estimated the multiplier (indirect and induced) impacts, as well as certain direct economic impacts which were not explicitly measured by the project team such as GDP and economic output.

The IMPLAN model also estimates the tax revenues associated with the economic impact analysis. This study reports the total federal, state, and local tax impacts as produced from the IMPLAN model and includes the following categories:

Federal Taxes

- **Personal Taxes.** This category contains the personal income tax impacts generated by households linked to the airport and payable at the federal level, as well as estate and gift taxes.
- **Other Taxes and Fees.** This category includes corporate profits taxes as well as taxes on production and imports, net of subsidies, paid by businesses at the federal level such as excise and customs taxes. In addition, this category includes employee and employer contributions to federal social insurance taxes.

State and Local Taxes

- **Property Taxes.** This category contains all property taxes paid by either households or businesses.
- **Sales Taxes.** This category contains all state and local sales taxes.
- **Other Personal Taxes.** Excluding property taxes (noted above), this category contains other taxes and fees paid by households at the state and local level including motor vehicle licensing fees, fishing and hunting licensing fees, and other applicable taxes.

The economic multipliers used in this study were based on the 2019 Input-Output (I-O) multipliers maintained by IMPLAN for the State of Texas, which are the most current and relevant I-O multipliers available at the time of the study. The economic ratios and multipliers have been updated to reflect 2022 price levels, but no structural changes have been assumed.

CASE STUDY

HISUN Motors: Travel time savings

HISUN Motors USA is headquartered in McKinney, Texas. The powersports vehicle manufacturer has a major presence in McKinney with its 300,000 sq. ft. facility that supports final assembly, technical support, and parts distribution. Its quality products and excellent customer service has made HISUN Motors as one of the fastest growing companies in the industry with local staffing levels well in excess of 100 employees.

HISUN currently utilizes DFW primarily for its travel needs for executive corporate travel to the neighboring states of California and Texas, along with international travel to Mexico, China, and Vietnam. HISUN also offers mobile technical support based elsewhere in the U.S. The firm's outside sales representatives also meet in McKinney twice a year originating from Indiana, Florida, and California.

The opportunity for HISUN should TKI offering commercial air services would be in the form of travel time savings to get to/from DFW for their travel needs. Savings of two hours return drive time could afford employees with more personal time.



3 Potential Economic Impact of TKI

3.1 Potential Economic Impact of McKinney National Airport

The aviation sector is a major economic generator, and airports play a critical role within the industry by facilitating the movement of people, goods, and services globally. The industry supports employment and economic development in the broader economy through a number of key mechanisms including tourism, investment, trade of goods and services, and productivity. See **Figure 3-1**.

Figure 3-1: Air Connectivity Supports Economic Development



TKI's impact with the addition of commercial air services along with ongoing general and business aviation operations in the State of Texas is assessed for two future time frames, 2025 and 2040. Passenger forecasts were developed for the airport and the medium scenario is used as the potential traffic levels for this analysis. In 2025, the airport is estimated to handle 533,000 enplanements. In 2040, the airport is estimated to handle 820,000 enplanements. The estimated economic impacts of the airport during those two time periods are presented in **Table 3-1** and **Table 3-2**.

For each time period, two economic impact scenarios are presented to illustrate the range of impacts that may result based on the mix of direct employment types that may occur at TKI. Scenario 1 presents the results if all employment is attributed to the Air Transportation industry only. Scenario 2 presents the result 50% of the employment is attributed to the Air Transportation industry and 50% of the employment is attributed to the Scenic and Sight Seeing Transportation and Support Activities for Transportation industries, as defined in the IMPLAN model.⁶

The one-time economic impact of capital expenditures associated with the conversion of TKI from a GA airport to a commercial service airport is provided in **Table 3-3**. The overall capital expenditure amount is

⁶ The Air Transportation Industry is defined as activities that are carried out to provide scheduled, non-scheduled, air taxi, charter, freight, helicopter services. The Scenic and Sight Seeing Transportation and Support Activities for Transportation industries include a broad umbrella of activities that support all transportation industries (i.e., not just air) which include activities such as those carried out by Fixed Based Operators.

estimated to be nearly \$350 million, of which over 80% of the spending (\$285 million) is anticipated to occur within the State of Texas.

Table 3-1:
Potential Economic Impact of McKinney National Airport Operations (533,000 enplanements), 2025

					
	Impact	Employment (Jobs)	Labor Income (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Scenario 1	Direct	1,040	\$130	\$243	\$433
	Indirect	1,060	\$75	\$115	\$231
	Induced	1,130	\$60	\$104	\$185
	Total	3,230	\$265	\$462	\$850
Scenario 2	Direct	1,040	\$102	\$162	\$298
	Indirect	850	\$58	\$86	\$171
	Induced	890	\$47	\$82	\$146
	Total	2,780	\$207	\$330	\$615

Note: Totals may not sum due to rounding. Monetary impacts are presented in 2022 dollars. The multiplier impacts (indirect and induced) and estimates of wages, GDP, and economic output are based on the ratios the State of Texas as derived from the IMPLAN model. Scenario 1 presents the results if all employment is attributed to the Air Transportation industry only. Scenario 2 presents the results if 50% of the employment is attributed to the Air Transportation industry and 50% of the employment is attributed to the Scenic and Sight Seeing Transportation and Support Activities for Transportation industry.

Table 3-2:
Potential Economic Impact of McKinney National Airport Operations (820,000 enplanements), 2040

					
	Impact	Employment (Jobs)	Labor Income (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
Scenario 1	Direct	1,420	\$177	\$331	\$592
	Indirect	1,450	\$102	\$157	\$316
	Induced	1,540	\$82	\$142	\$253
	Total	4,410	\$362	\$631	\$1,161
Scenario 2	Direct	1,420	\$139	\$221	\$407
	Indirect	1,160	\$80	\$117	\$234
	Induced	1,200	\$64	\$112	\$199
	Total	3,800	\$283	\$450	\$840

Note: Totals may not sum due to rounding. Monetary impacts are presented in 2022 dollars. The multiplier impacts (indirect and induced) and estimates of wages, GDP, and economic output are based on the ratios the State of Texas as derived from the IMPLAN model. Scenario 1 presents the results if all employment is attributed to the Air Transportation industry only. Scenario 2 presents the results if 50% of the employment is attributed to the Air Transportation industry and 50% of the employment is attributed to the Scenic and Sight Seeing Transportation and Support Activities for Transportation industry.

Table 3-3: Potential Economic Impact of McKinney National Airport Capital Expenditures

					
	Impact	Employment (Jobs)	Labor Income (\$ Millions)	GDP (\$ Millions)	Output (\$ Millions)
	Direct	1,700	\$121	\$134	\$285
	Indirect	690	\$51	\$83	\$163
	Induced	950	\$50	\$88	\$156
	Total	3,340	\$222	\$304	\$604

Note: Totals may not sum due to rounding. Monetary impacts are presented in 2022 dollars.

3.2 Potential Tax Impact of McKinney National Airport

The IMPLAN model also estimates the tax revenues associated with the economic impact analysis, as described previously. This study reports the total federal, state, and local tax impacts as produced from the IMPLAN model. The tax impacts for the total economic impact of the 2025 and 2040 airport operations and the estimated airport capital expenditures are shown in **Table 3-4**.

Table 3-4:
Potential Tax Impact of McKinney National Airport Operations (2025 and 2040) and Estimated Airport Capital Expenditures

	Impact	Local (\$millions)	State (\$millions)	Federal (\$millions)	Total (\$millions)
Scenario 1	2025 Operations	\$29	\$27	\$58	\$115
	2040 Operations	\$40	\$37	\$79	\$157
	Capital Expenditures	\$8	\$7	\$45	\$60
Scenario 2	2025 Operations	\$17	\$16	\$44	\$77
	2040 Operations	\$24	\$22	\$60	\$106
	Capital Expenditures	\$8	\$7	\$45	\$60

Note: Totals may not sum due to rounding. Monetary impacts are presented in 2022 dollars. Scenario 1 presents the results if all employment is attributed to the Air Transportation industry only. Scenario 2 presents the results if 50% of the employment is attributed to the Air Transportation industry and 50% of the employment is attributed to the Scenic and Sight Seeing Transportation and Support Activities for Transportation industry.

CASE STUDY

Baylor Scott & White Health: Supporting Health Care for Texas Residents

Baylor Scott & White Health (BSW) is the largest not-for-profit dedicated healthcare system in the State of Texas. BSW currently includes 52 hospitals, more than 800 patient care sites, more than 7,300 active physicians, over 49,000 employees in the state and is a significant economic generator for the state supporting the well-being of its residents.

BSW McKinney provides one hospital with 192-beds that offers its clients advanced medical services for a wide variety of health care concerns. Future growth of the McKinney hospital is anticipated to grow to over 400 beds and with increased intensive care unit beds.

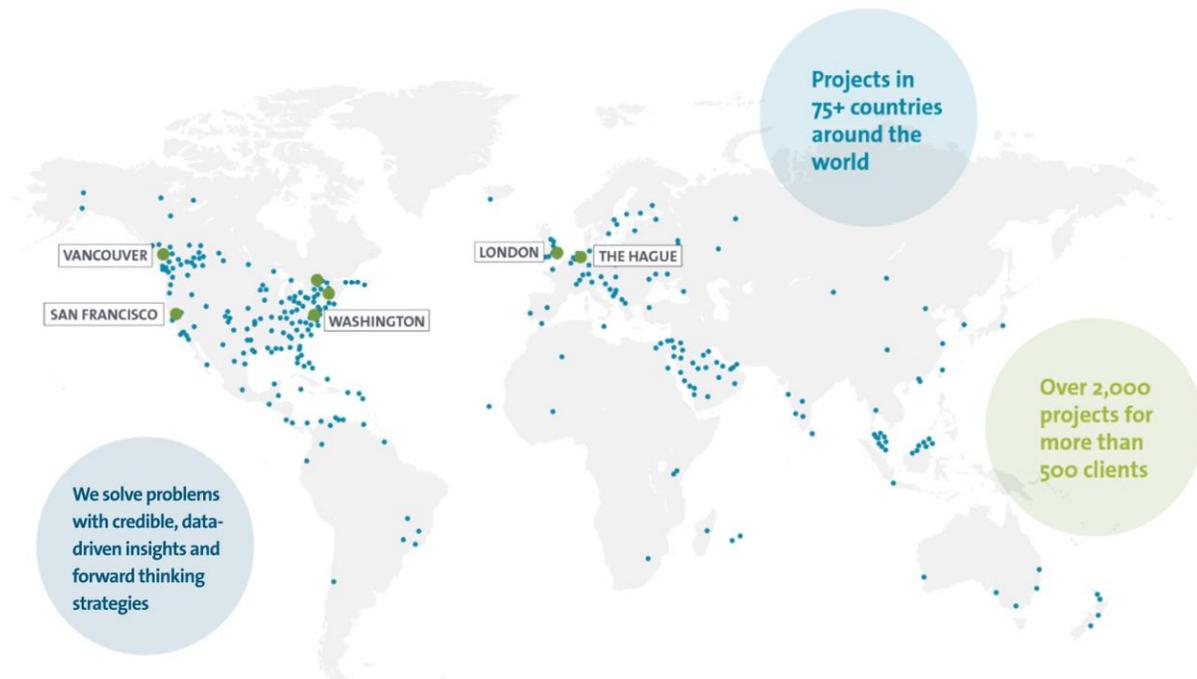
The potential expansion of TKI into a commercial air services airport may positively support BSW's operations in the future. Improved airport infrastructure and service levels provides more travel options and potential time savings for business travel and also supporting patient care.



Appendix: About InterVISTAS Consulting

InterVISTAS Consulting Inc. is based in Vancouver, Canada, with global offices in Washington D.C., San Francisco, London (U.K.), The Hague (Netherlands), and secondary offices in Asia, Australia, and South Africa through our parent company, Royal HaskoningDHV. Since our inception in 1997, we have delivered over 2,000 projects for more than 500 clients across 75 countries.

InterVISTAS provides strategic advice to airports, airlines, governments, regulators, ferry operators, rail carriers, transit operators, ports, and tourism organizations. Our consultants and subject-matter experts have direct experience assisting clients in a wide array of areas: economic impact studies, policy and regulatory/economic analysis, commercial and financial advisory, competitive and market studies, air service development, airline network planning, airline strategies, forecasting, market research, strategic planning, cargo and logistics, transportation management, business development, tourism, public private partnerships, airport commercial development and retail, expert witness, policy analysis and advocacy, security borders and facilitation, and sustainability/climate change.



The company offers several distinct yet interrelated business services:

ECONOMIC AND REGULATORY STUDIES AND SERVICES

InterVISTAS provides its clients with a comprehensive range of economic and regulatory services – services that assist governments, port authorities, airports, airlines and others with forecasting, planning studies, and litigation – including:

- Demand / Traffic Forecasting
- Economic Impact Studies
- Policy Development

- Regulatory Services and Testimony
- Expert Witness Services

BUSINESS AND STRATEGIC PLANNING PLANS AND FACILITATION

InterVISTAS helps clients establish a clear vision of the future and develop effective strategies to achieve their goals. Our strategic planning services provide concrete actions to overcome challenges affecting our clients' business – be it regulatory, process, community relations or competitive threats.

- Tourism Development Strategies
- Benchmarking and Competitive Analysis
- Strategic Plans
- Business Plans
- Financial Analysis
- Meeting Facilitation and Community Consultation
- Policy Development & Strategic Advocacy
- Governance and Performance Reviews

MARKET RESEARCH ANALYSIS AND PLANNING

InterVISTAS uses market research as a powerful tool to support and guide a wide range of commercial initiatives – from tourism/destination marketing to air service development and customer service enhancements at airports. Expertly conducted, scientifically targeted research provides airport decision-makers with the crucial information they need to identify key market opportunities, improve operational efficiencies, and maximize revenues. Our research and analysis services include:

- Air Travel Market Research & Travel Industry Surveys
- IATA Air Ticket Sales Data
- Customer Satisfaction Surveys
- Retail Surveys - Revenue Impacts & Brand/Product Development

AIR SERVICE DEVELOPMENT PASSENGER & CARGO

InterVISTAS' airport clients can realize significant increases in both traffic and revenues by implementing carefully researched and planned market development programs. We analyse situations and develop detailed reports with recommendations or proposals for presentation to airlines on behalf of airports. Our services and products include:

- Air Access Studies
- Air Service Deficiency Studies
- Air Service Proposals
- Airfare Analysis
- Cargo Development Plans

- Foreign Trade Zone Development
- Strategies
- Cargo Marketing
- Marketing Plans
- Tourism/Destination Marketing
- Marketing Communications
- Marketing Commercial Opportunities

SUSTAINABILITY

InterVISTAS is a forward thinking, strategic and tactical solutions provider made up of senior professionals with a diverse range of backgrounds and experience. We help our clients satisfy consumer, regulatory, community and governing board demands by developing comprehensive environmental solutions that enhance market position and brand strength through improved environmental performance. By identifying environmental risks and developing practical environmental management solutions, we help our clients meet and exceed their objectives and targets. Our environmental services include:

- Sustainability Strategy and Planning
- Environmental Strategic Plans
- Environmental Audits
- Greenhouse Gas Accounting and Management
- Carbon Offsetting Programs
- Indicator Development and Reporting
- Policy Analysis

SECURITY & STRATEGIC FACILITATION PLANS & ADVOCACY

InterVISTAS assists clients with services to manage goods and passenger flows within a new security environment. An integrated approach using technology, process re-engineering and regulatory changes provides clients with the means to effectively manage risk and enhance customer service. Services include:

- Explosive Detection Systems
- Implementation Studies
- Security Research & Best Practices
- Security Intelligence & Issues Monitoring
- Pre-Clearance Issues Resolution
- Perimeter Clearance Advocacy & Pilot Project Development
- Strategic Facilitation Advocacy
- Security & Border Agencies Representation
- Process Re-Engineering

AIR CARGO CAPABILITIES

InterVISTAS Consulting is highly experienced in the air cargo sector and the firm's professionals are regularly engaged in client work for air cargo market studies, cargo market leakage analyses and air cargo forecast development. InterVISTAS' consultants have led cargo air service development efforts for numerous airports worldwide which included work with stakeholders such as airlines, shippers, freight forwarders, facilities operators and governmental entities. Additionally, InterVISTAS' consultants have advised leading integrated express carriers and all-cargo airlines on strategic and regulatory matters. InterVISTAS offers a full range of services related to air cargo including:

- Air Cargo Studies
- Air Cargo Market Forecasts
- International Commodity Flow Analysis
- Cargo Airline Route Planning
- Airline and Airport Strategic Analysis
- Cargo Air Service Development
- Air Cargo Community Cooperative Programs
- Economic Impact Studies
- Regulatory Support

Our Economic Impact Qualifications

InterVISTAS Consulting has completed over 120 economic impact studies for airports, airlines, tourism destinations, marine ports, and other industries. Our project team collectively has over 100 years of experience working in socio-economic impact studies. We have a full team of economists and business analysts (several with Masters Level degrees in Economics and related disciplines) with extensive experience in conducting economics based studies for a variety of clients.

Recent U.S. Based Studies

Below are project summaries with online links to the final reports for our selected U.S. based studies completed in recent years. In Appendix B, we also highlight the work that we have completed internationally in Canada, Asia and Europe.

Virginia Airports System Economic Impact Study, 2018. For the Virginia Department of Aviation, InterVISTAS analysed the impacts of the operations of the 66 public use airports in the Commonwealth of Virginia, including 9 commercial service airports that range in size from EAS-supported Shenandoah Valley Regional Airport to the two large hubs serving Washington, DC: Reagan Washington National and Washington Dulles International airports. The study also included analyses of the impacts of 59 general aviation airports (including several reliever facilities that manage far more operations than many FAA-defined non-hub airports). The scope of work included data collection and conducting surveys of operations for all airports, onsite visitor intercept surveys for the commercial airports, economic and tax impact modelling, and a comparative analysis of the results to a prior statewide study. The project also described the catalytic impacts of aviation and the relationship between commercial aviation and other

industry sectors in Virginia (e.g., financial services). The study results are publicly available here: <https://doav.virginia.gov/resources/forms-and-reports/studies-guides-and-reports/virginia-airport-system-economic-impact-study--2018/>

Statewide Economic Impact of Aviation in Idaho, 2018. InterVISTAS completed an economic impact study for the state of Idaho as part of its broader aviation system plan update. InterVISTAS was a sub-contractor to Kimley-Horn and was responsible for the economic impact assessment of all commercial and public use general aviation airports in the state. The project covered seven commercial service and 68 general aviation (GA) airports, including the backcountry airports based on calendar year 2018 operations. The scope of work encompassed survey data analysis and detailed economic and tax impact modelling for each airport. The project also explained the changes in economic impact since the prior (2010) study. The full technical report on the economic impact study is publicly available here: <https://www.idaho-airport-system-plan.com/wp-content/uploads/2020/09/ITD-AEIA-Final-Technical-Report-DIGITAL.pdf>

Statewide Economic Impact of Aviation in South Dakota, 2018. InterVISTAS completed an economic impact study for the state of South Dakota as part of its broader aviation system plan update. InterVISTAS was a sub-contractor to Kimley-Horn and was responsible for conducting major economic analyses examining the state-level economic impact of all six commercial service and 65 public general aviation airports in the state's system for calendar year 2018. In addition, the study included analyses of major events in the state that are associated with aviation (including, for example, aerial spraying operations and the aviation-driven impacts of its pheasant hunting industry and the Sturgis Motorcycle Rally). The aviation system plan, which includes the economic impact study, is publicly available here: https://dot.sd.gov/transportation/aviation/aviation-systems-plan#listItemLink_1605

Economic impact of Minneapolis/St. Paul Airport, 2016. InterVISTAS conducted economic impact studies of ongoing operations, capital developments, and air visitor spending related to the Minneapolis-St. Paul International Airport (MSP) as well as the six general aviation airports in the greater Minneapolis-St. Paul area that serve as relievers to MSP. The project team also conducted economic impact "microstudies" estimating the potential economic impact of prospective international long-haul routes at MSP. The scope of work included an employment survey of all employers associated with economic activity at MSP (e.g., airlines, government agencies, and ground handling firms), including identifying the county of residence for employees at MSP, as well as an in-terminal survey of non-resident passengers at MSP. The project team performed all technical analysis and modelling to estimate all economic multiplier impacts and tax impacts. The report for one of these studies (the economic impact of MSP airport) is publicly available here: <https://www.mspairport.com/sites/default/files/2017-09/MSP%20Economic%20Impact%20Study%202016%20FINAL%20DRAFT%20REPORT%20%2814Sep2017%29.pdf>

ACRP 03-58: Measuring and Understanding the Relationship between Air Service and Regional Economic Development, 2022. This study explores the interconnected nature of air services and regional economic development in a community. The technical report is available here: <https://crp.trb.org/acrpwebresource12/wp-content/uploads/sites/25/2022/05/Contractors-Technical-Report-1.pdf> and web resources is available here: <https://crp.trb.org/acrpwebresource12/>



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