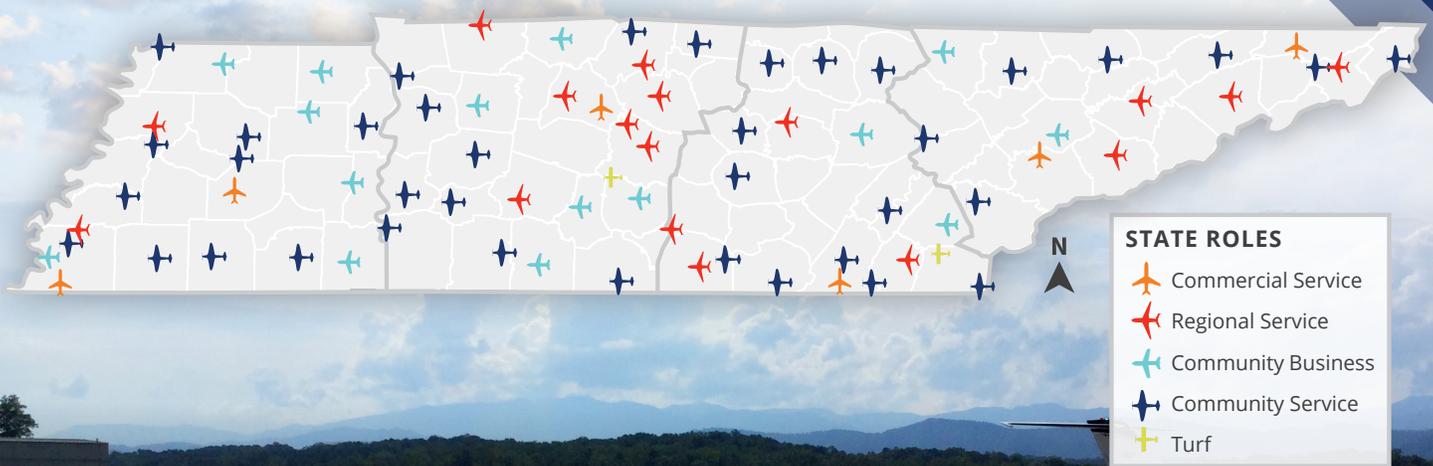


In Tennessee – Aviation Touches All Corners

Tennessee has 78 public-use commercial service and general aviation airports which contribute significantly to the state’s economy and enhance the livelihoods of all Tennesseans. Whether learning to fly, catching a flight, purchasing products shipped via air cargo, or benefitting from emergency response efforts launched from an airport, aviation impacts almost every aspect of life in Tennessee.

Recognizing the vital role that aviation plays in supporting the state, the Tennessee Department of Transportation (TDOT) Aeronautics Division initiated the development of the Tennessee Aviation System Plan (TASP) and Aviation Economic Impact Study. The TASP establishes a systemwide inventory of needs and provides context for the continued development of the state’s aviation system. The TASP is used by the TDOT Aeronautics Division to maintain a safe, efficient, and reliable aviation system as well as determine key investments that are needed to continue improving the system.

This primer provides an overview of the TASP and companion Aviation Economic Impact Study by providing select findings of these two studies that are of most interest to the general public, including an overview of the aviation system, the economic impact of the system, user accessibility, and case studies that illustrate how aviation touches the everyday life of Tennesseans





Home to one of the nation's newest large-hub airports (Nashville International Airport) and to the world's busiest air cargo airport (Memphis International Airport)

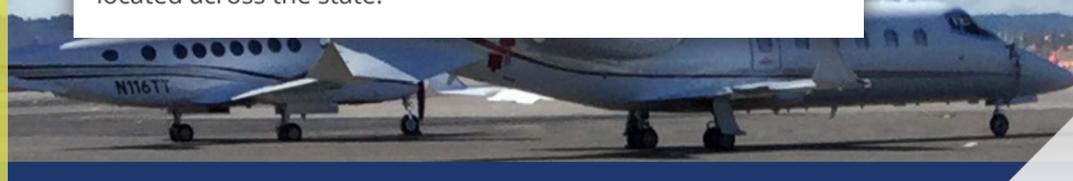
13.3M enplanements
2M operations
for all airports statewide

69 airports included in the National Plan of Integrated Airport Systems (NPIAS)

Aviation Moves Tennessee

Tennessee is home to 78 public-use airports. Six of these airports offer regularly-scheduled commercial service, spanning from Nashville International Airport (BNA), which supports the fastest-growing metropolitan area in the nation; to McKellar-Sipes Regional Airport (MKL), which provides Essential Air Service (EAS) in west Tennessee. Seventy-two of Tennessee's airports are general aviation (GA), supporting cargo and shipping, emergency response, law enforcement, disaster recovery, agricultural services, and a wide variety of other services that keep Tennessee running.

Tennessee's airports are as diverse as the state itself. From From McGhee Tyson Airport (TYS), a commercial service airport that also supports a joint military base, to a variety of smaller general aviation airports that serve the specific needs of their communities, chances are aviation touches your life every day. Aviation helps connect Tennessee with the rest of the country and with the world. In 2019, aircraft conducted almost two million operations in the state and supported over 13 million enplanements, with both operations and enplanements expected to grow over the next 20 years. Tennessee also supports a robust air cargo industry. Memphis International Airport (MEM) is the busiest cargo airport in the world. Much of this activity being driven by the FedEx "Superhub" located at the airport, which employs 10,000 people, operates almost 400 flights a day and contributes billions to the state's economy. In addition to the employment benefits generated through on-airport operations, Tennessee's airports also contribute \$19 billion to the state's economy through the import and export of intermediate and final goods for thousands of businesses located across the state.



Freight/Cargo

Tennessee airports are critical to local, statewide, national, and international commodity flows, enabling communities across Tennessee to directly do business across the globe and allowing Tennesseans to have access to a variety of commodities. Across the state, airports enable businesses to transport commodities and finished goods both from suppliers and to customers located in long-distance domestic and international markets. Without the support provided by freight/cargo services, markets available to Tennessee companies would be severely limited, impacting businesses' ability to operate efficiently and profitably.

Also responsible for **82,357** employed Most domestic air commodities benefit by having access to aviation services. Tennessee's top five domestic air commodities by value are shown in the chart to the right.

Accessibility

Access to Tennessee's airports for commercial flights, chartered flights, emergency services, education, and other aviation services is important to the everyday lives of Tennesseans. Determining access to system airports was an important component of developing the TASP.

The TASP analyzed the percent of Tennessee's population that lives within a certain driving distance of Tennessee's commercial service and general aviation airports. For the average user, a commercial service airport is the most familiar type of airport facility. Tennessee's commercial service airports connect passengers with long-distance travel. Commercial service airports also serve as important hubs for industry. **Sixty-five percent of Tennessee's population lives within a 45-minute drive time of a commercial service airport.**

General aviation airports serve an important role in Tennessee's economy and in the lives of many Tennesseans. Each airport offers unique facilities and services that contribute to the overall strength and accessibility of Tennessee's aviation system. The individual functions of general aviation airports impact how well the system can serve community, regional, and state needs. **Eighty-seven percent of Tennessee's population lives within a 30-minute drive time of a general aviation airport.**

TOP 5 DOMESTIC AIR COMMODITIES BY VALUE

Outbound Value | Inbound Value

Commodity	Outbound Value	Inbound Value
Pharmaceutical Products	\$818 Million	\$8.2 Billion
Transportation Equipment (not incl. Motorized Vehicles)	\$649 Million	\$833 Million
Precision Instruments and Apparatus	\$531 Million	\$619 Million
Electronics and Other Electrical Equipment and Components	\$261 Million	\$454 Million
Textiles and Leather	\$103 Million	\$197 Million
Other*	\$119 Million	\$296 Million

*Other outbound air commodities include 12 categories of commodities ranging from chemical products to paper articles. Other inbound air commodities include 20 categories of commodities ranging from plastics/rubber to base metals.

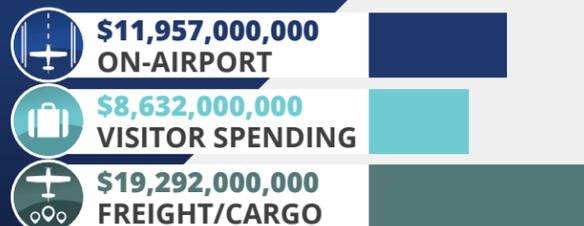
All Commodities
\$2.5 Billion | **\$10.6 Billion**

TOTAL ECONOMIC IMPACT **\$40 BILLION**

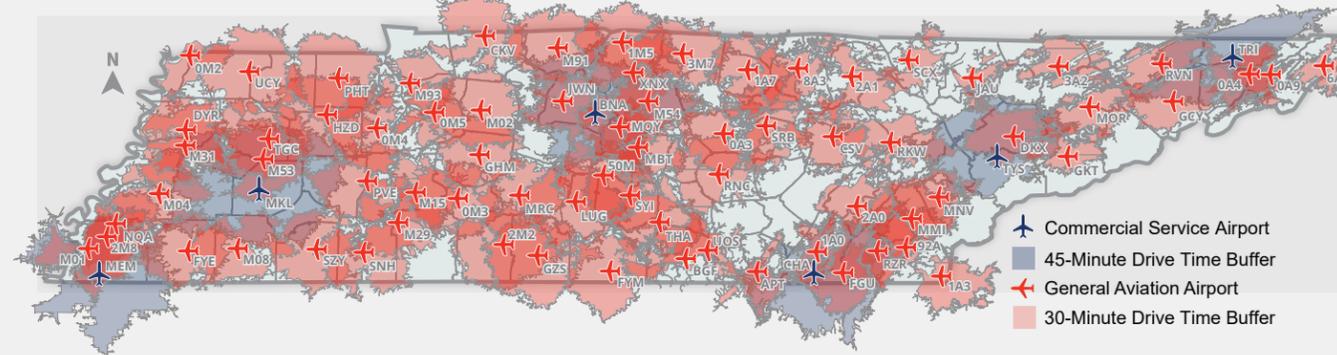
AVIATION CONTRIBUTES **11%** OF TENNESSEE'S GROSS DOMESTIC PRODUCT (GDP)

To understand how Tennessee's 78 system airports support the economy, the TDOT Aeronautics Division undertook the Aviation Economic Impact Study. Data for this study were collected for calendar year 2019 and represent a snapshot in time for that year.

In total, Tennessee's airports contribute \$40 billion to the state's economy, which represents approximately 11 percent of Tennessee's gross domestic product (GDP). This includes almost \$12 billion in on-airport impacts, almost \$9 billion in visitor spending impacts, and over \$19 billion in freight/cargo impacts. What's more, Tennessee's aviation system supports almost 221,000 jobs and \$13 billion in payroll, exemplifying the impact that aviation has on the day-to-day life of Tennesseans.



Commercial Service and General Aviation Drive Time Maps



Ultra-Low-Cost Carriers (ULCC) – An Affordable Option Throughout Tennessee

As a relatively new commercial service business model, the ULCC model offers affordable, a la carte options for air travel and promotes new passenger demand at lesser-known destinations. Popular ULCCs in the United States include Allegiant Air, Frontier Airlines, Spirit Airlines, and Sun Country Airlines, which each have unique service offerings. Combined, these ULCCs serve over 200 destinations across North America, including destinations in Tennessee. ULCCs in Tennessee offer nonstop service to over 30 destinations, including one international destination (Cancun, Mexico). Almost 30 percent of the nonstop destinations flown from Nashville International Airport (BNA) are provided by ULCCs. Allegiant is Tennessee's most predominate ULCC, offering service from five of the state's six commercial service airports, including Memphis International Airport (MEM), Nashville International Airport, Lovell Field (CHA), McGhee Tyson Airport (TYS), and Tri-Cities Airport (TRI). Between Memphis International Airport and McGhee Tyson Airport, Allegiant also employs over 100 people.



Memphis International Airport – The Busiest Cargo Airport in the World

Memphis International Airport (MEM) is the busiest cargo airport in the world. The airport handles almost five-million tons of cargo every year and more than \$2.8 billion in exports. More than 43 percent of all goods being exported from Tennessee by air are shipped through Memphis International Airport. The airport also handles around 14 percent of all air cargo imports into Tennessee, about \$2.9 billion worth of goods. Cargo and shipping businesses at Memphis International Airport contributed \$2.5 billion to Tennessee's economy in 2019. Cargo shippers primarily use the airport as a port of entry for international and domestic goods, but the presence of cargo shipping operations alone significantly contributes to Tennessee's economy. FedEx's "SuperHub" at the airport is the primary contributor to cargo movement through the airport and generates a large economic impact in Tennessee. FedEx operates almost 400 flights per day and handles more than 180,000 packages and 245,000 documents per hour. Cargo and shipping industries at the airport, including ground transportation and other postal services connected to FedEx's operations, generated 13,000 jobs in Tennessee and \$1.3 billion in labor income. The FedEx facility at Memphis International Airport contributes over \$1.7 billion in economic impact to Tennessee's economy.

The United Parcel Service (UPS) is Memphis International Airport's second-largest cargo and shipping-related tenant. UPS employs 2,000 people at the airport and contributes \$350 million to Tennessee's economy. UPS's presence at Memphis International Airport is expected to almost double as part of an amendment to the company's current lease agreement with the airport. The amended lease will allow UPS to expand by 1.1 million square feet as part of a \$216-million-dollar-investment project to grow operations at the airport and in the region.



Photo: Wiki Commons

