

Aerospace Activity in Tennessee: Inventory and Economic Assessment

RES2013-13

Christopher Cherry and Mark Burton: University of Tennessee

Purpose of the Project: Aviation activities in Tennessee span nearly a century of involvement. The State of Tennessee has long supported and promoted aviation. Early on these activities came under the Bureau of Aviation, which is currently under the Tennessee Department of Transportation. Throughout this long history, which can be traced back to as early as the 1920's, this encouragement has fostered a significant impact on the growth and progress of the State. This research will identify and quantify airport and aviation impacts leading to the eventual determination of the overall economic impact and benefits of aviation activities in Tennessee. In addition, this research will document the contributions of the department's efforts in enhancing aviation safety, improving program efficiency and fostering aviation/transportation related economic development of Tennessee's system of airports.

A robust aviation system that provides citizens, businesses, and government entities access to the global economy is critical to the economic health and competitiveness of Tennessee. Aerospace activities in Tennessee are very diverse, from major passenger and freight commercial operations to general aviation, from the Civil Air Patrol and aviation education programs to aerospace manufacturing and consulting businesses. Many industries throughout the state support, or are supported by the aviation system. What is the contribution of state-wide aerospace activities to the Tennessee economy, and do these activities meet the current and future needs of the state? The ability to address this question is particularly important as aerospace faces new challenges in the next 25 years. These challenges include sustaining air service to small communities, identifying the value of air transportation and educating the public on this value, optimally directing airport investments, preventing airport closures, planning for future airport capacity needs statewide, and harmonizing aviation system development with other transportation and environmental goals. Most of these challenges require objective assessment of impacts of aviation to local, regional and statewide economies. To address these issues we need a comprehensive definition, or inventory, of all aerospace activities in the state. To serve as the foundation of research in these areas, particularly related to the economic impact of aerospace activities in Tennessee, an inventory built on a clear, repeatable methodology is necessary.

Scope and significance of the project: This research project investigates aerospace activities in Tennessee with the goal of creating an inventory of those activities at each airport facility and assessing the economic value of those activities for the airport and future economic impacts for each location. The research project is conducted in nine phases, through 19 identified tasks, by the research team at the University of Tennessee, Knoxville, (UTK) over a 24-month period. The research phases include: a detailed literature review and synthesizing of best practices from other similar studies, a process of defining aerospace input categories to inventory activities, data collection and

determination of aerospace input categories, investigation of economic impacts for different classifications of airports and associated businesses, and the dissemination of results through reports, web and print media, a video highlighting the findings of the study.

Expected outcomes: The outcome of this research will benefit TDOT as a stand-alone product and will serve as a basis for future research efforts in aviation by providing a deeper understanding of aerospace activities and aerospace needs in the state, as well as a clear and repeatable methodology to inventory aerospace activities in the state. Quantifying the impacts of aviation on the state, regional and local economies will assist in decision making and investment priority across the state. The project will dramatically increase the amount of information and analysis surrounding aviation and provide an important update to previous studies. The final report of the study, *Aerospace Activity in Tennessee: Inventory and Economic Assessment*, will include a discuss how the results of the inventory and economic assessment can be used to invest in aerospace activities in the state of Tennessee.

Time periods and status of the project: The project start date was October 1, 2013, with an expected duration of 24 months. The main products of project have been completed, including drafts of a final report, print media, and video media (<https://youtu.be/uQJuYPixWls>).

Contact Information:

Chris Cherry
Associate Professor-University of Tennessee
cherry@utk.edu