

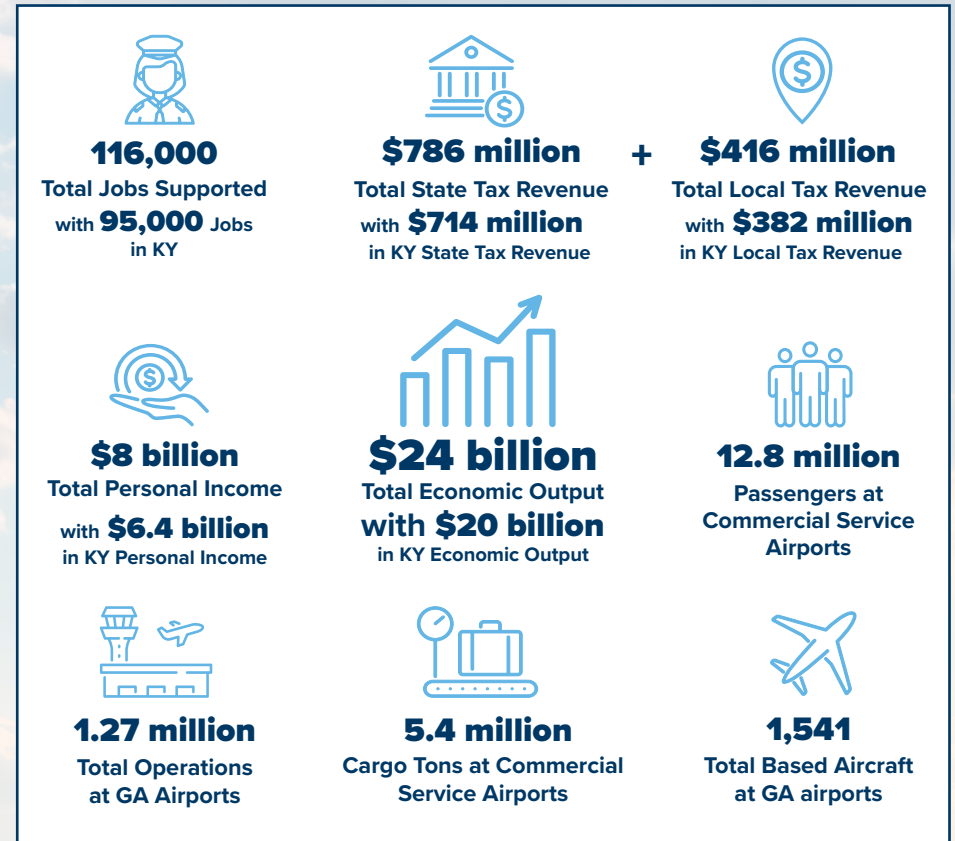
2022 ECONOMIC CONTRIBUTION OF KENTUCKY'S AIRPORTS: EXECUTIVE SUMMARY

INTRODUCTION

The economic footprint of an airport extends well beyond the physical property of its geographic location. Airports support commerce, tourism, and the provision of essential services across local, state, and regional economies. Kentucky's five commercial service airports and 53 general aviation (GA) airports confer immense economic benefits to the state.

Kentucky's system of public-use airports is critical for facilitating the transport of people and cargo. Airports bring new businesses and tourists into the state and bolster local and regional employment. Passenger airlines support business and leisure travel and connect Kentucky's businesses to opportunities worldwide. Kentucky's airports also support global business supply-chain activities as companies specializing in logistics and shipping air cargo link Kentucky exports to key domestic and international markets, while ensuring the state's businesses receive critical inputs in a timely manner. Two of the state's commercial airports, Louisville Muhammad Ali International Airport (SDF) and Cincinnati/Northern Kentucky International Airport (CVG), rank among the top cargo airports in the world. Beyond supporting business and facilitating air travel, airports provide physical space for based aircraft and serve as hubs for community services such as air ambulances, military training, and aviation education.

To understand the scope of these benefits, the Kentucky Transportation Cabinet's (KYTC) Department of Aviation (KDA) partnered with Kentucky Transportation Center (KTC) researchers to conduct this Airport Economic Impact Study (AEIS). The study quantified the contributions of Kentucky's 58 public-use airports to local, regional, and state economies in calendar year (CY) 2022.^{1,2} The most recent study to investigate the economic impacts of Kentucky's airports was published in 2017. While the study contains valuable insights, it is now dated and does not fully capture the role of airports in shaping the state's economy. Other studies assessing the economic impacts of aviation industries in Kentucky combined aviation and aerospace industry sectors and do not specifically address the economic contributions of the state's airports. This study provides a baseline against which future trends can be assessed with respect to the economic impacts of Kentucky's airports.



¹ Barkley Regional Airport (PAH) results are based on PAH's own 2019 economic impact study.

² Tradewater Airport (8M7) was excluded from analysis.



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ECONOMIC IMPACT METRICS

Researchers quantified the economic impact of every airport in Kentucky by looking at their direct impacts, indirect impacts, and induced impacts. They collected operational statistics and employment data for commercial service airports and surveyed airport management, tenants, and major users of GA airports. GA airport managers supplied data on the number of annual operations, while major users offered insights into how often their employees use each airport as well as the level of employment they support. Researchers also reviewed operational and capital budgets along with state and federal funding sources. These data were used to construct an operational profile of each facility. Researchers used the IMPLAN® econometric software package to build a model that estimates the individual and collective contributions of Kentucky's airports to the state's economy.

To quantify the overall economic impact of Kentucky airports, the impact of individual airports was first standardized by a metric or unit of analysis. Researchers used the number of employed individuals and flow of traffic in and out of an airport to discern the overall economic impact of individual airports on Kentucky's economy. Total impacts are based on four measures: employment, personal income (or payroll), output, and tax revenue.



Employment:

The total number of full-time and part-time employees in jobs supported by the airport. Part-time employees are scaled to their full-time equivalency (e.g., a person who works 20 hours in a week is 0.5 full-time equivalent). This is the definition used by the Bureau of Labor Statistics (BLS) and Bureau of Economic Analysis (BEA).



Payroll or personal income:

The sum of compensation (including wages and benefits) received by individuals working jobs supported by an airport.



Tax Revenue:

All taxes generated in association with an airport (for both local and state governments), such as income (personal and corporate), sales, and property taxes.



Economic Output:

Gross revenue of goods and services produced by an airport (i.e., business revenue earned minus operating costs).

ECONOMIC IMPACT COMPONENTS

Airports facilitate the sale of goods and services through activity that originates either on or off their premises. Researchers measured the economic impacts of Kentucky airports using the following components:



ON-AIRPORT IMPACTS

- General Aviation Visitor Spending
- Commercial Visitor Spending



OFF-AIRPORT VISITOR AND BUSINESS TRAVELER IMPACTS

- Airport Management
- Business Tenants
- Capital Investment



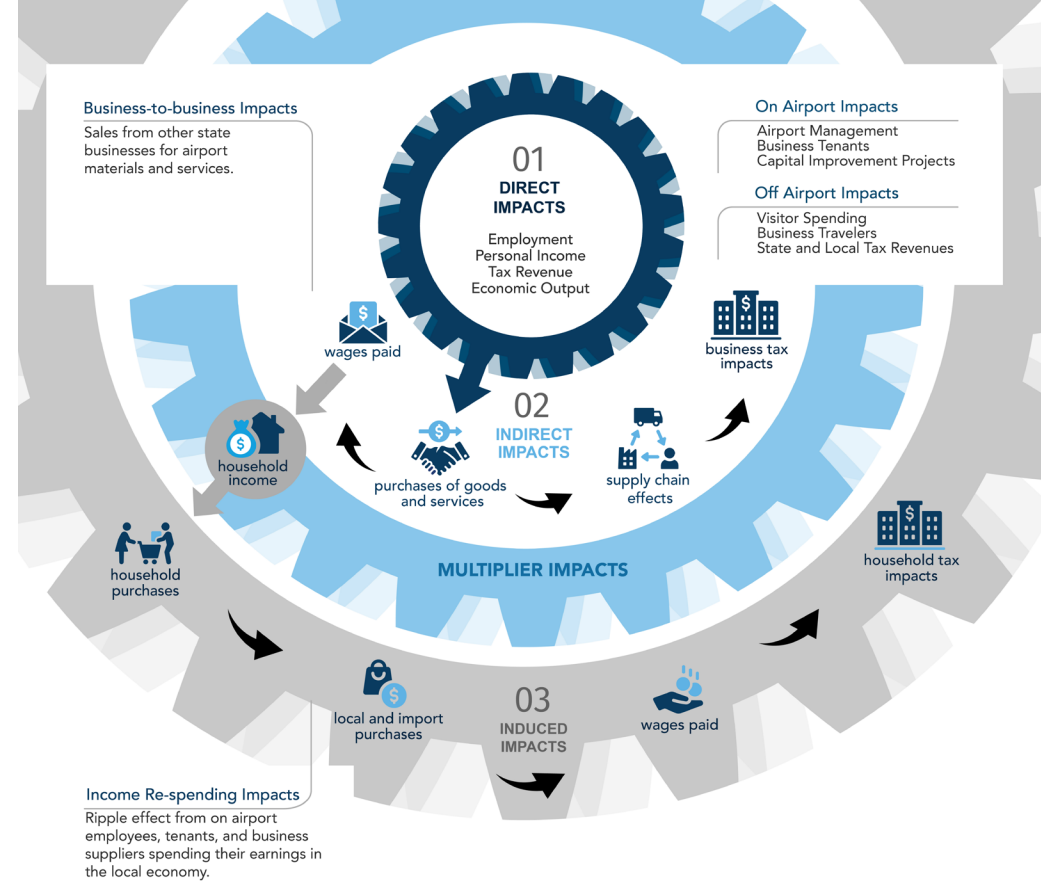
ECONOMIC IMPACT PROCESS

Airport economic impact assessments measure and estimate the flow of dollars through all economic sectors. The total economic contribution of each airport is the sum of direct, indirect, and induced impacts.

Direct impacts encompass the economic output and employment associated with activities that initiate on airport property (e.g., airport operations, onsite employment, tenant businesses), as well as output and wages associated with money spent by arriving business and leisure travelers. Visitor spending is an income source for off-airport businesses and jobs that might not exist without the airport's presence. Airports also generate direct impacts when business travelers secure returns on investment by accessing new markets, gains in human capital, and enhancements in factors of production stemming from airport market access. Economic output (the value of goods and services produced), employment, and employee earnings of (i.e., wages, salaries, and benefits) fall under the heading of direct impacts as well. Examples of onsite employment include airport administration, business tenants, and maintenance workers. Commercial service airports directly support jobs at airlines; airport security; car rental companies; food, hospitality, and retail stores; and cleaning services. GA airports directly support tenant jobs at FBOs, flight instruction businesses, and air ambulance services. Industries directly supported by visitors include lodging, food and dining, tourism, and other hospitality businesses.

Indirect impacts, or business-to-business impacts, result from secondary enterprises whose inputs support businesses that create direct impacts. Indirect impacts typically result from materials and services businesses procure to complete their work (e.g., asphalt, construction equipment and surveying to repave a runway, raw ingredients for restaurants). In terms of assessing an existing sector, the indirect impact primarily includes supplies and tools needed to maintain a business's site or operations. Engineering and Information Technology (IT) industries create indirect impacts in a local economy, as businesses that provide support to goods and services primarily provided by the airport thus creating secondary or indirect impacts in the local economy.

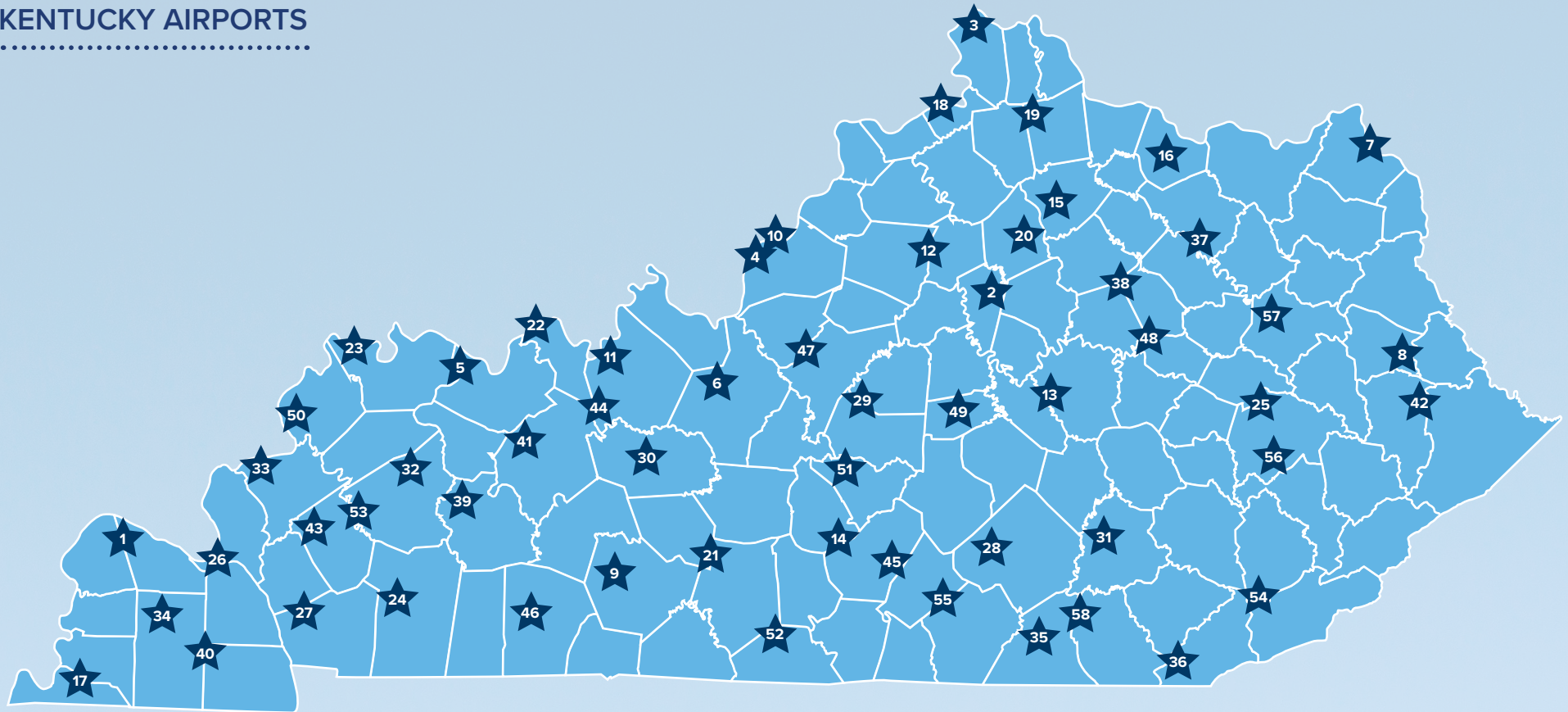
Induced impacts, or tertiary impacts, occur due to spending from employees or visitors incur within the local economy. The purchase of these goods and services creates a ripple effect in the local market, as individuals spend their earnings on items such as groceries, housing, and utilities.



IMPLAN® econometric modelling software leverages national employment and population datasets to show how economic activity in one industry produces ripple effects in other industries (as shown in the figure above). Multiplier effects emerge when economic contributions that originate from on-airport expenditures are re-spent in other industries. IMPLAN® generates indirect and induced multipliers based on industry inputs. The final model output — the total effect — is the sum of direct, indirect, and induced effects for all industry inputs.



KENTUCKY AIRPORTS



Commercial Airports

1. Barkley Regional Airport (PAH)
2. Blue Grass Airport (LEX)
3. Cincinnati/Northern Kentucky International Airport (CVG)
4. Louisville Muhammad Ali International Airport (SDF)
5. Owensboro–Davies County Regional Airport (OWB)

General Aviation Airports

6. Addington Field Airport (EKX)
7. Ashland Regional Airport (DWU)
8. Big Sandy Regional Airport (SJS)
9. Bowling Green–Warren County Regional Airport (BWG)
10. Bowman Field (LOU)
11. Breckinridge County Airport (I93)
12. Capital City Airport (FFT)

13. Central Kentucky Regional Airport (RGA)
14. Columbia-Adair County Airport (I96)
15. Cynthiana-Harrison County Airport (O18)
16. Fleming-Mason Airport (FGX)
17. Fulton Airport (1M7)
18. Gallatin County Regional Airport (8GK)
19. Gene Snyder Airport (K62)
20. Georgetown-Scott County Regional Airport (27K)
21. Glasgow Municipal Airport (GLW)
22. Hancock County Airport (KY8)
23. Henderson City-County Airport (EHR)
24. Hopkinsville-Christian County Airport (HVC)
25. Julian Carroll Airport (JKL)
26. Kentucky Dam State Park Airport (M34)
27. Lake Barkley State Park Airport (1M9)
28. Lake Cumberland Regional Airport (SME)
29. Lebanon Springfield-George Hoerter Field Airport (6I2)

30. Leitchfield-Grayson County Airport (M20)
31. London-Corbin Airport-Magee Field Airport (LOZ)
32. Madisonville Regional Airport (2I0)
33. Marion-Crittenden County Airport (5M9)
34. Mayfield Graves County Airport (M25)
35. McCreary County Airport (18I)
36. Middlesboro-Bell County Airport (1A6)
37. Morehead-Rowan County Clyde A. Thomas Regional Airport (SYM)
38. Mount Sterling-Montgomery County Airport (IOB)
39. Muhlenberg County Airport (M21)
40. Murray-Calloway County Airport (CEY)
41. Ohio County Airport (JQD)
42. Pike County Airport-Hatcher Field (PBX)
43. Princeton-Caldwell County Airport (2M0)
44. Rough River State Park Airport (2I3)
45. Russell County Airport (K24)

46. Russellville-Logan County Airport (4M7)
47. Samuels Field Airport (BRY)
48. Stanton Airport (I50)
49. Stuart Powell Field Airport (DVK)
50. Sturgis Municipal Airport (TWT)
51. Taylor County Airport (AAS)
52. Tompkinsville-Monroe County Airport (TZV)
53. Tradewater Airport (8M7)
54. Tucker-Guthrie Memorial Airport (I35)
55. Wayne County Airport (EKQ)
56. Wendell H. Ford Airport (CPF)
57. West Liberty Airport (9I3)
58. Williamsburg-Whitley County Airport (BYL)

