



The Economic Contribution of the Indianapolis International Airport

HIGHLIGHTS:

• Output:

- The total estimated value of goods, services, and expenditures (i.e., output) associated with IND is \$5.4 billion.
 - \$2.7 billion of output is generated directly by on-airport operations
 - \$955 million of the \$5.4 billion in output is generated through indirect and induced spinoff.
 - \$1.7 billion of the total output is generated by prominent users.
 - For every \$1.02 directly generated by IND operations, \$1 is generated in Marion County.

• Jobs:

- The estimated combined total number of jobs in Marion County associated with IND is 22,583.
 - An estimated 10,170 jobs are located at the Indianapolis International Airport (IND).
 - An additional 7,030 jobs are created in Marion County through indirect and induced relationships associated with on-airport operations and 5,348 as a result of prominent users.
 - For every full-time equivalent employee, 1.2 jobs are created in Marion County.

• Income:

- The estimated total contribution of IND to Marion County wages and benefits is \$2.04 billion.
 - Nearly \$1.17 billion in income is generated directly by IND
 - An additional \$390 million of spin off wages and benefits is produced by induced and indirect users, and over \$484 million is generated by prominent users
 - An additional \$1 of spin-off income is generated for every \$1.33 of direct IND employee income

• Role of IND in Marion County economy:

- The economic contribution of IND to the Marion County economy include, but are not limited to:
 - on-airport jobs and jobs in industries for which the IND is essential
 - income
 - flow of goods and services
 - professional talent attraction
 - convention industry support
 - the ability to leverage private capital investment
- In addition to economic and general quality of life benefits, Indianapolis businesses rely on the airport to link their Indiana operations to multiple domestic and international operations.

INTRODUCTION

The Indianapolis Airport Authority (IAA) was established as a municipal corporation by the General Assembly in 1962. The IAA owns, develops, and operates six airports in the Indianapolis metropolitan area. In addition to the Indianapolis International Airport (IND), the IAA corporation portfolio includes the: Downtown Heliport, Eagle Creek Airpark, Hendricks County Airport–Gordon Graham Field, Indianapolis Regional Airport, and Metropolitan Airport. The scope of this study is limited to the economic contribution of the Indianapolis International Airport (IND) on Marion County, Indiana.

The IND provides a wide range of economic contributions to Marion County, the central Indiana region, and the entire state of Indiana. Those contributions include, but are not limited to: on-airport jobs and jobs in industries for which the IND is essential; income; flow of goods and services; professional talent attraction; convention industry support; and the ability to leverage private capital investment. This analysis focuses primarily on estimating the quantifiable contributions of IND operations to the existing Marion County economy. Specifically, the Indiana University Public Policy Institute (PPI) has estimated the economic contribution of on-airport IND operations and prominent users through the total number of jobs, labor income, and output created and leveraged in Marion County, Indiana. Table 1 summarizes the total economic contribution of on-airport operations and prominent airport users.

Through IMPLAN input/output modeling software, PPI estimates that 17,200 jobs, \$1,557,921,634 in labor income, and total output of \$3,678,450,393 in Marion County may be attributed to current on-airport IND operations. Prominent IND users are associated with an additional 5,384 jobs, \$484,647,808 in labor income, and \$1,723,707,981 in total output in Marion County. The combined total economic contribution of on-airport operations and prominent airport users to Marion County is estimated at 22,583 jobs, \$2,042,569,442 in labor income, and \$5,402,158,373 of output.

METHODOLOGY

The economic contributions of a business, organization, or industry can be measured by the circulation of spending through a region as a result of direct investments. For this study, PPI examined the economic contribution of on-airport operations (i.e., all business located on the IND property) and prominent users (i.e., employees of firms who regularly rely on IND for business travel). Input/output modeling is the most common method for measuring economic contributions. Input/output modeling involves estimating the indirect and induced benefits of direct expenditures. Specifically, the modeling process provides estimates that illustrate indirect (i.e., supplier) impacts and induced (i.e., household) impacts of initial investments made by a business, organization, or industry.

The total economic contribution of an operation to a given region is the sum of direct, indirect, and induced investments (represented in Table 1 as Airport Operations). Each contribution can be measured in terms of jobs, labor income, and output (defined in Table 2). Additionally, there are prominent users of airports for which the economic activity would be lost to other regions without the presence of IND. Prominent users include business-related travelers who likely are not part of the indirect IND supplier-chain or the induced IND household demand-chain estimated by the IMPLAN model.¹ To accommodate for the group prominent users, surveys results from a previous Indiana Department of Transportation survey were used.

Table 1: Total Economic Contribution of IND on Marion County, In

Contributors	Jobs	Income	Output
Airport Operations	17,200	\$1,557,921,634	\$3,678,450,393
Prominent Airport Users	5,384	\$484,647,808	\$1,723,707,981
Combined Operations and Prominent User	22,583	\$2,042,569,442	\$5,402,158,374

¹The IMPLAN model estimates airport-related economic multipliers based on generalizations about airport industry linkages. For the purpose of this study, contextual knowledge regarding prominent users is included to improve those generalized estimates provided by IMPLAN. This study uses a methodology that is similar to *Indianapolis Airports Economic Impact Study 2012*.



As shown in Table 2, direct impact is measured by the number of jobs, labor income, and output generated on the IND property. Jobs that are directly created by IND include employees of general management, airlines, Fixed Base Operators (FBO), air traffic control, aviation maintenance, air cargo, air charters, flight schools, rental car operators, hotels, retail stores, food services and drinking places. The operations of IND require goods and services from suppliers. The goods and services provided by outside firms necessary to operate on the IND property contribute to the local economy. For instance, firms located on the IND property require professional services and raw materials. Additional jobs are added to the economy as a result of those additional demands for goods and services by IND and represent indirect jobs. Finally, induced impacts occur as on-airport employees spend their wages to purchase goods and services (e.g., groceries, attend movies, and make home improvements). Their spending then generates additional economic activity at the stores and firms with which they do business. In turn, that economic activity results in additional jobs in the local economy. The impact of on-airport operations is the sum of direct, indirect, and induced jobs.

Total on-airport related income and total on-airport related output also can be estimated. Total on-airport income contribution is the sum of wages and benefits of direct jobs, estimated earnings associated with indirect jobs, and estimated earnings associated with induced jobs on the IND property. Total on-airport output is a broader measure of impact. It represents the change in total value of all goods and services produced by all industries within the study area (i.e., Marion County) as a result of direct activity at IND.

Prominent users of IND also contribute to the Marion County economy. Prominent users (jobs) of IND represent jobs that are reliant upon the proximity of the IND airport operations and are not expected to be included in the IMPLAN generalized multipliers. Specifically, IND provides an economic contribution to Marion County that is not fully realized through the supply- and demand-chain of multipliers in the IMPLAN model. The sum of prominent users and on-airport operations allows for the “combined” total jobs, income, and output contribution of IND to the Marion County economy.

Table 2: Measures of Economic Impact

Contribution	Jobs	Labor Income	Output
Direct	The number of jobs located on IND property.	The wages and benefits associated with jobs on the IND property.	The estimated total value of goods, services, and capital expenditures resulting from jobs on the IND property.
Indirect	Estimated total number of jobs created by purchases made by IND from outside vendors.	Estimated earnings of indirect jobs associated with IND outside vendor spending.	The estimated total value of goods, services, and capital expenditures resulting from indirect jobs associated with IND operations.
Induced	Estimated total number of jobs created by IND employee household spending.	Estimated earnings of induced jobs associated with IND employee household spending.	The estimated total value of goods, services, and capital expenditures resulting from induced jobs associated with IND employee households.
Total	Sum of direct, indirect, and induced jobs.	Sum of direct, indirect, and induced labor	Sum of direct, indirect, and induced output.
Prominent Users	Prominent users (jobs) of IND represent jobs that are reliant upon nearby airport operations and are not expected to be included in the IMPLAN generalized multipliers.	Estimated wages and benefits associated with prominent users of IND	The estimated total value of goods, services, and capital expenditures resulting from prominent users of IND.
Grand Total	Sum of estimated total job contribution attributable to on-airport operations and prominent airport users	Sum of estimated total labor income contribution attributable to on-airport operations and prominent airport users	Sum of estimated total output attributable to on-airport operations and prominent airport users

DATA AND MODEL

The data included in this analysis were collected directly from most of the firms on the IND property between February and March, 2016. Other data were estimated from the most recent data collected by the Indiana Department of Transportation (DOT) in 2011 and 2012. Each firm provided full-time and part-time job counts. All counts were translated into Full-Time Equivalents (FTE).

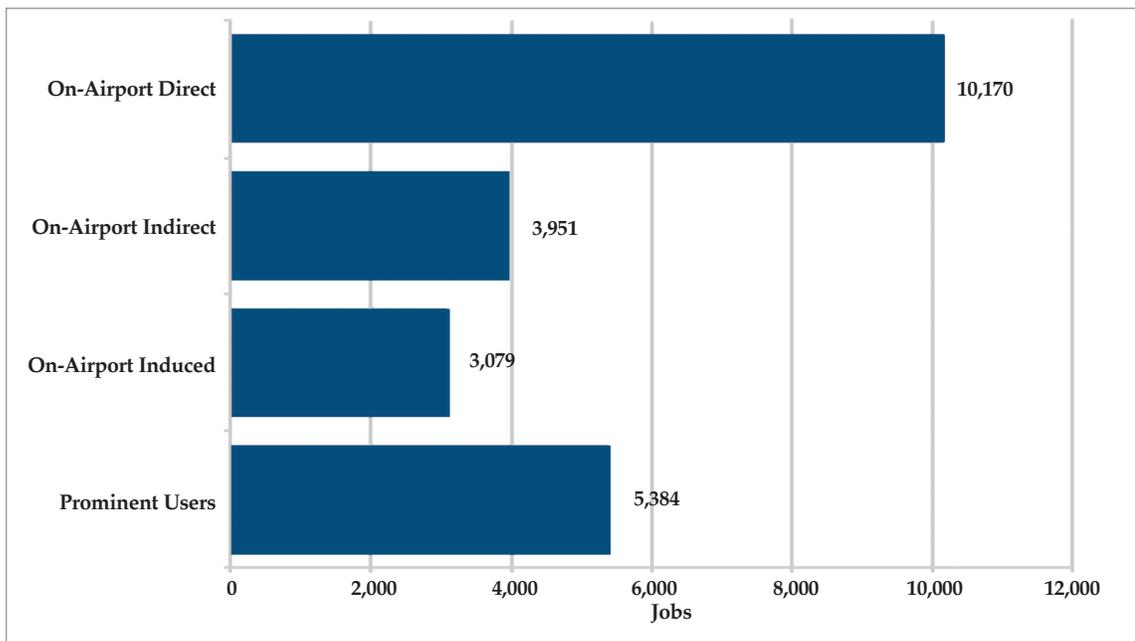
This analysis was completed with the IMPLAN economic impact model. IMPLAN maintains a national database of employment and economic data that allows for location and industry specific analyses. The software program also efficiently generates multipliers and output based on user specifications. IMPLAN is one of the two most commonly used input/output models for economic impact and the best suited model for this analysis.

ECONOMIC CONTRIBUTION OF INDIANAPOLIS INTERNATIONAL AIRPORT

There are over 10,000 jobs located on the IND property. Figure 1 shows that indirect (3,951 jobs) and induced (3,079 jobs) effects support an additional 7,030 jobs in Marion County. In sum, an estimated 17,200 jobs in Marion County are attributable to and supported by operations on the IND property. Nearly 5,400 jobs in Marion County are estimated to be prominent users of IND. A total combined contribution of direct IND operations and prominent IND users supports an estimated 22,584 jobs in Marion County. An additional job has been supported in Marion County (i.e., Indirect-, Induced-, and Prominent User-related jobs), for each 0.82 full-time equivalent jobs at IND.

Figure 2 shows the percentage of estimated total jobs in Marion County attributable to on-airport IND operations by industry. Of the estimated

Figure 1: Jobs Attributable to IND Operations and Prominent IND Users





17,200 total jobs in Marion County attributable to direct IND operations, 42 percent are associated with the transport by truck industry. Transport by air is responsible for over one-quarter of Marion County jobs directly attributable to the IND.

Figure 3 shows that the economic contribution of IND includes over \$2.04 billion in wages and benefits for Marion County. The nearly \$1.17

billion in direct income generates an additional \$221 million in indirect income, \$168 million in induced income, and over \$484 million in prominent user related income; a total of nearly \$874 million in spin-off wages and benefits. An additional \$1 of spin-off income is generated for every \$1.33 of direct IND employee income. Figure 4 shows the percentage of estimated income in Marion County attributable to IND by industry. Over one-third (36 percent) of the total income is related to government

Figure 2: Percentage of Marion County Total Employment Attributable to IND Operations, by Industry

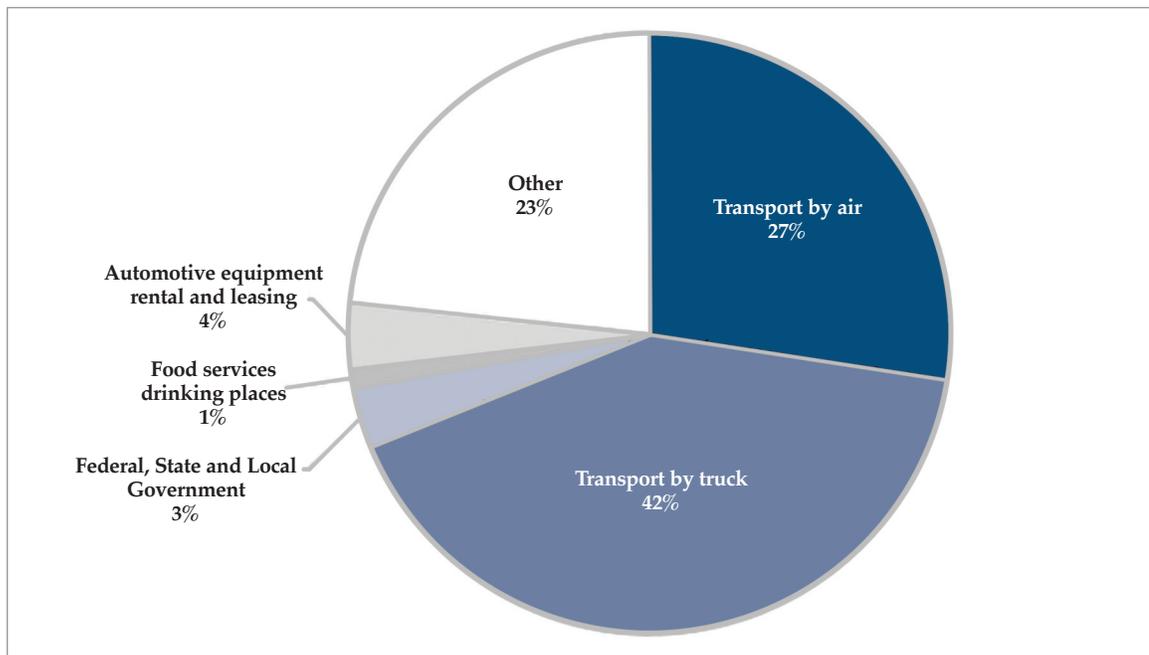
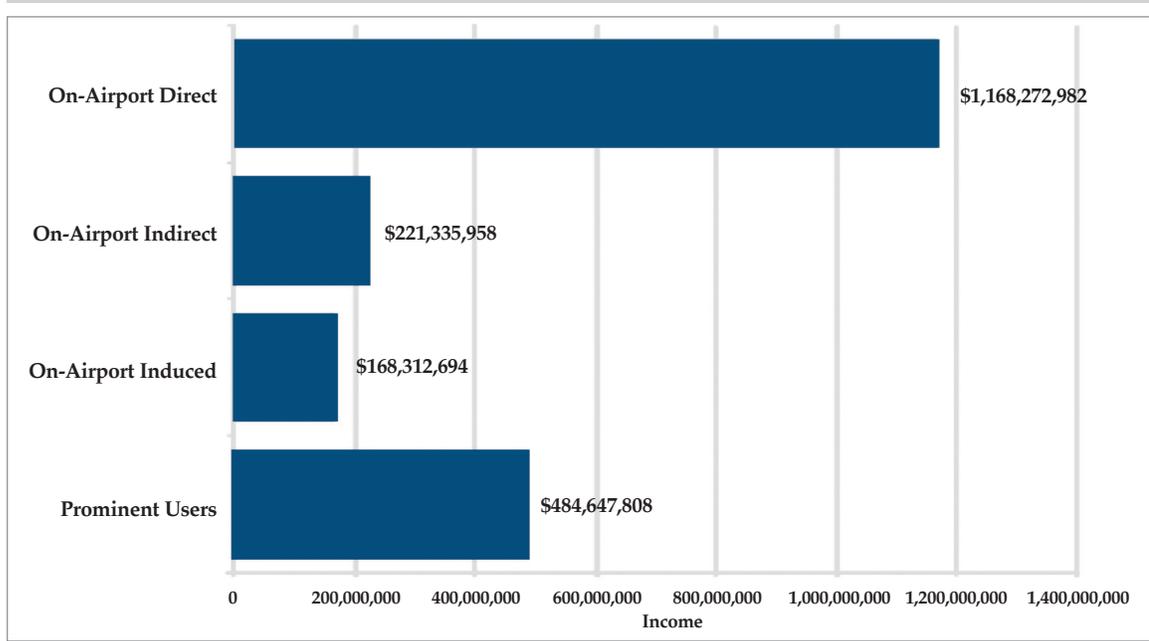


Figure 3: Income Attributable to IND Operations



employment. Transport by air and transport by truck are associated with 18 percent and 28 percent of generated income in Marion County through the IND, respectively.

\$5.4 billion. Figure 5 shows that \$2.72 billion of output is generated directly by IND. An additional \$955 million in output is generated through indirect (\$516 million) and induced (\$439 million) spinoff and \$1.7 billion is generated by prominent users. An additional \$1 of additional spin-off output is generated for every \$1.02 of direct output by IND.

Thirty percent of all estimated IND direct contribution in output to

On-airport operations at IND generate a total economic output of nearly

Figure 4: Percentage of Marion County Total Income Attributable to IND Operations, by Industry

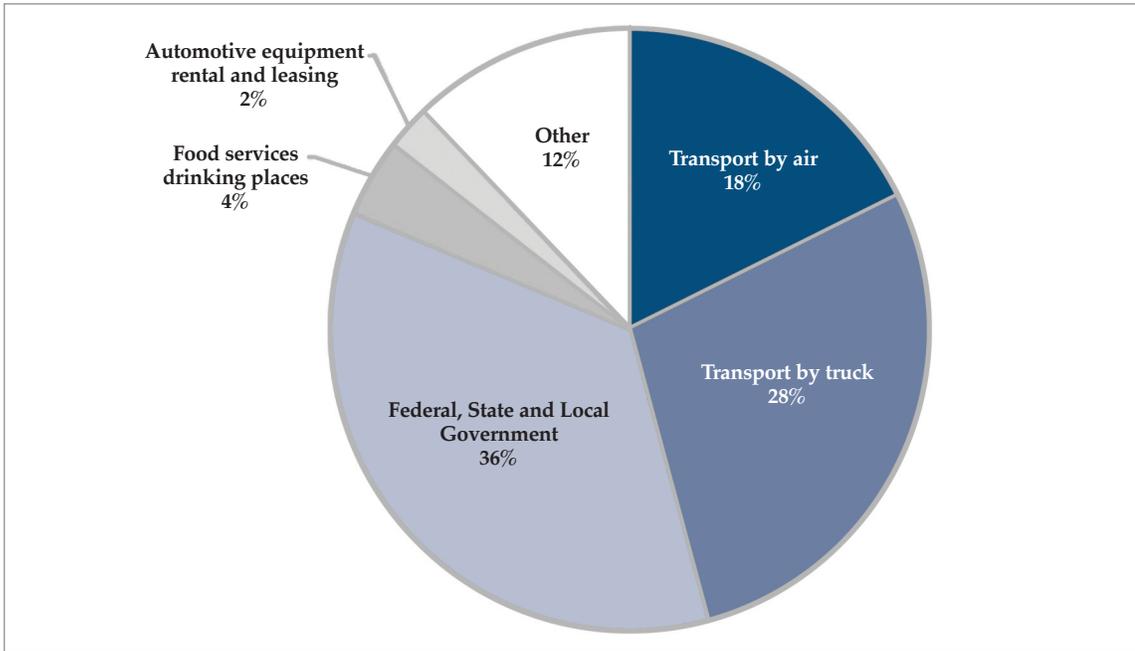
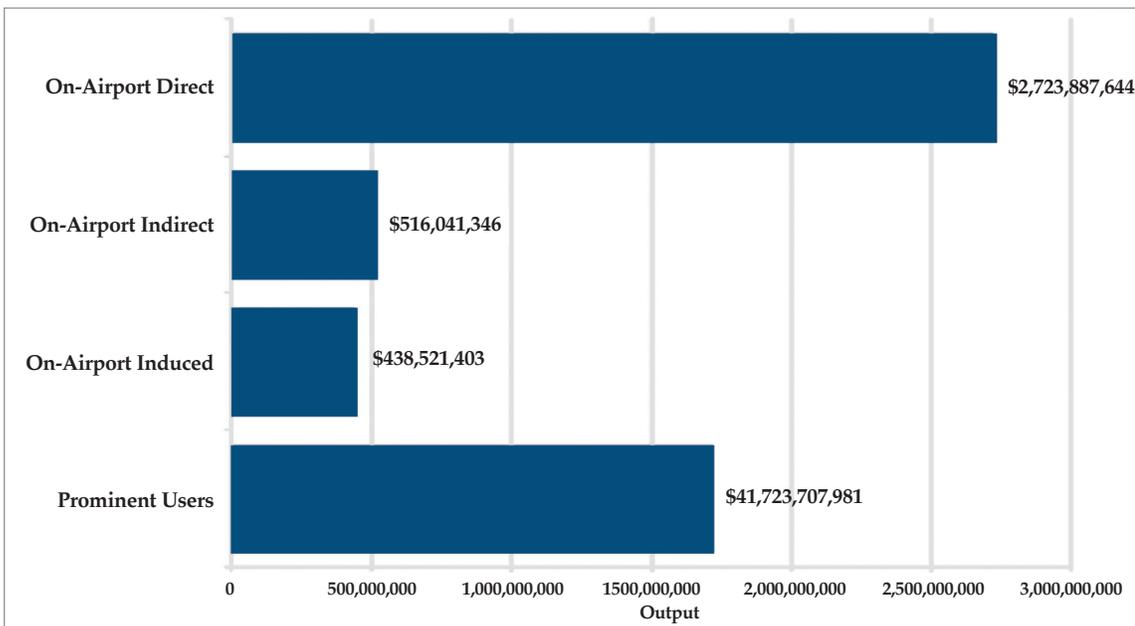


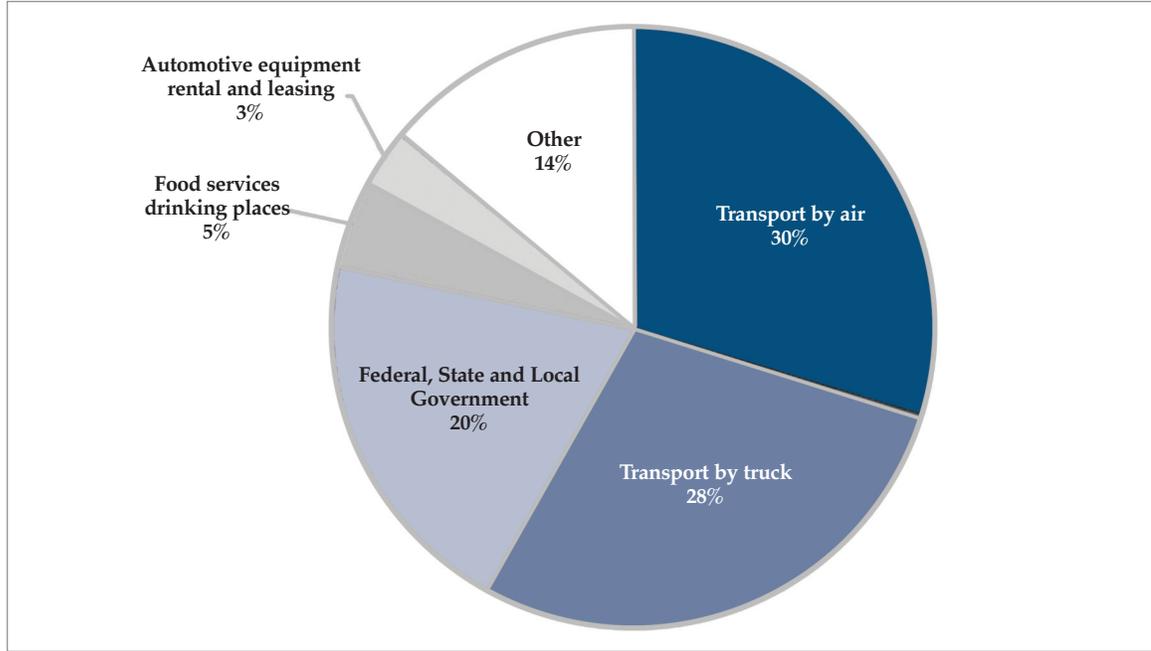
Figure 5: Output Attributable to IND Operations





Marion County is generated through the transport by air industry (30 percent). Figure 6 shows that 28 percent of that contribution comes from transport by truck. On-airport government operations generate 20 percent of the total IND economic contribution to Marion County.

Figure 6: Percentage of Marion County Total Output Attributable to IND Operations, by Industry



OTHER CONTRIBUTIONS

This analysis of the economic contribution of IND quantifies the movement of people and goods. This analysis does not take into account the value of other benefits. To fully understand the impact of IND operations on central Indiana requires a deeper understanding of the various ways in which an international airport contributes to community quality of life. For example, IND is important for attracting talent. First, it is a primary point of entry and makes an important first impression on visitors. Second, a wide array of direct flights to and from IND links talented and mobile millennials and empty nesters to friends and events throughout North America. Visit Indy reports that Marion County currently entertains approximately 26 million visitors a year. Many of those visitors contribute to the expanding convention business which necessarily relies upon accessibility through IND.

In addition to general quality of life benefits, Indianapolis businesses rely on the airport to link their Indiana operations to multiple domestic and international operations. Specifically, IND serves as an affordable bi-coastal global port. The position of IND as a bi-coastal global port con-

tributes to the sustainability of central Indiana’s competitively advantaged Transportation, Distribution, and Logistics Career Cluster and all the businesses that depend upon imports and exports. Finally, airports provide unique and important development opportunities that leverage the global access that they provide. With acres of available land, proximate to a major people and freight hub, the IND provides the city and the state with a unique and high value opportunity to leverage private investment.

SUMMARY

IND provides a wide range of economic contributions to Marion County, the Central Indiana region, and the entire state of Indiana. This analysis suggests that 22,583 jobs exist because of IND. Wages from these jobs contribute \$2.04 billion dollars to the local economy while The Airport overall contributes \$5.4B to annual regional GDP. Although these numbers represent quantifiable contribution to the region, IND plays other roles in the community with less tangible, but not necessarily less significant, impact.



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