

ECONOMIC IMPACT ANALYSIS OF INDIANA'S AIR NATIONAL GUARD 122ND FIGHTER WING

September 20, 2023

Abstract

Prepared for Greater Fort Wayne Inc.: Evaluating the direct, indirect, and induced economic impacts of the military base co-located with the Fort Wayne International Airport for Allen County, the 3rd Congressional District, and Indiana.

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Executive summary

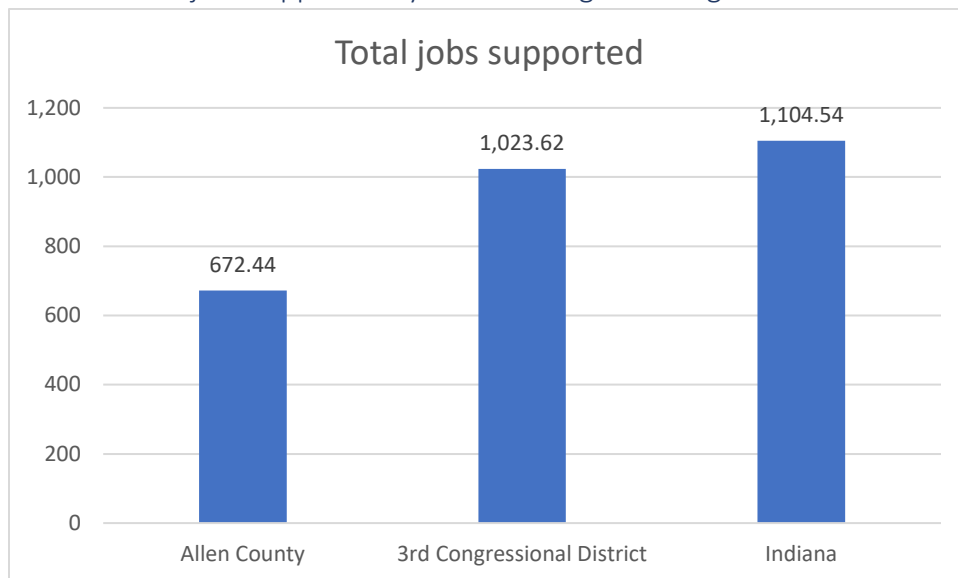
The 122nd Fighter Wing of the Indiana Air National Guard, stationed in Fort Wayne, Indiana, has been a key element of military readiness since World War II and is prepared to be part of the Air Force's domestic and international airpower for decades to come, especially as it transitions from A-10C Thunderbolt II aircraft to the F-16 Fighting Falcon aircraft starting in 2023.

This report, prepared for Greater Fort Wayne Inc., evaluates the economic impact of select spending at this base, namely employee payroll and benefits, utilities, food and lodging for part-time reservists, and Indiana's National Guard educational benefit, in three geographies: Allen County, the 3rd Congressional District, and the state of Indiana.

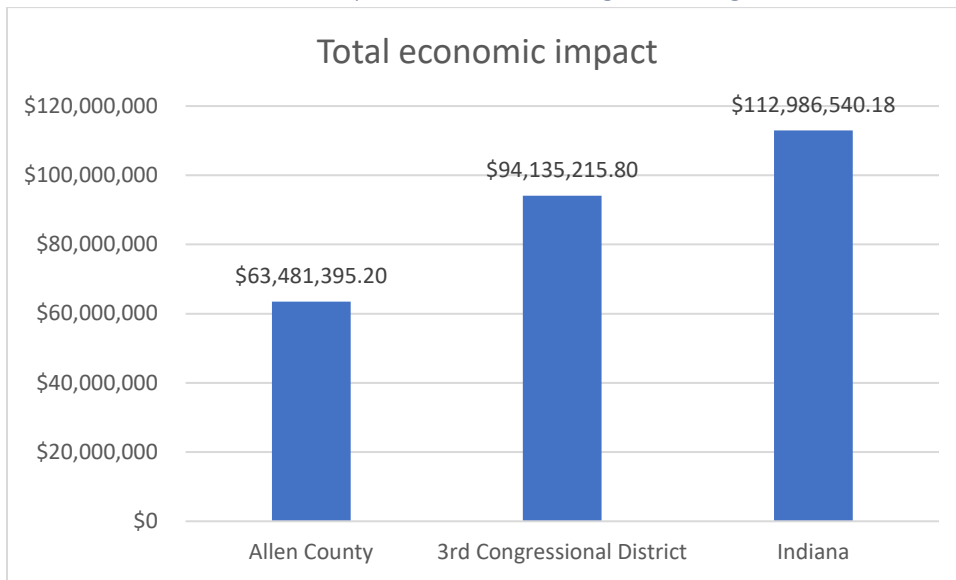
In sum, the 122nd supports more than 1,100 jobs annually in the state of Indiana with a total economic impact of almost \$113 million per year through its direct, indirect, and induced effects, according to a study conducted by the Purdue University Fort Wayne's Community Research Institute using IMPLAN software with data inputs provided by the 122nd Fighter Wing. In Indiana's 3rd Congressional District, it supports almost 1,025 jobs with an economic impact of \$94.1 million yearly. At the local level, the total economic impact is \$63.5 million with almost 675 jobs supported in Allen County annually.

Charts 1 and 2 list the total number of jobs supported and total economic impact respectively for the three geographies studied for this project.

Chart 1: Total jobs supported by the 122nd Fighter Wing



Source: IMPLAN with data inputs from 122nd Fighter Wing

Chart 2: Total economic impact of the 122nd Fighter Wing

Source: IMPLAN with data inputs from 122nd Fighter Wing

Introduction

The 122nd Fighter Wing Blacksnakes are located in Fort Wayne, Indiana, and share an airfield with the Fort Wayne International Airport. It is part of the Air National Guard and is transitioning from A-10C Thunderbolt II aircraft to F-16 Fighting Falcon aircraft between 2023 and 2026. In fiscal year 2022, it employed 237 full-time military and 135 civilian employees, 51 state employees, and 727 part-time military employees who live in Indiana.¹

The 122nd Fighter Wing has been an important part of international missions dating back to before World War II. In the 1990s, the 122nd Fighter Wing was the first Air Force unit to receive the night-flying systems that made the fighters fully mission-capable 24 hours a day and among the most capable fighters in the United States Air Force fleet. The 122nd Fighter Wing was one of the first American units deployed after 9/11 and war rotations continue now. It serves in the Air Expeditionary Forces deployment rotation and deploys members to augment Air Force and Army units serving at home and abroad.

The 122nd Fighter Wing has contributed multiple combat medical teams, security forces squads, vehicle drivers, pilots who are hand-picked for their outstanding combat flying skills and many individuals who are asked to serve on specialty teams in the Middle East. Combat zone assignments include Afghanistan, Iraq, Oman, Kyrgyzstan, Uzbekistan, Qatar, and Diego Garcia.

This project evaluated the economic impact of select activities at the 122nd Fighter Wing. Greater Fort Wayne Inc. (GFW) contracted with Purdue University Fort Wayne Community Research Institute (CRI) to conduct this study that measures the direct, indirect, and induced impacts of 122nd operations in Allen County, Indiana; Indiana's 3rd Congressional District; and the state of Indiana.

¹ The 122nd had 8 full-time military, 72 part-time military, and 7 civilian employees who lived outside Indiana. Their payroll numbers are not included in the employment inputs.

CRI used IMPLAN, an input-output economic impact software system, to calculate the direct, indirect, and induced jobs and economic activity of labor income and value added resulting from payroll and select spending at the 122nd Fighter Wing. The full list of inputs and their values are listed in the Data Inputs section. CRI also included IMPLAN's modeled tax impacts for the local, state, federal tax revenues using the provided inputs.

Data inputs

An economic impact analysis measures the "impact" of economic activity, such as consumer and business spending or payroll. In short, it follows how a dollar flows through the economy and adds value along the way. The coronavirus pandemic's shutdowns demonstrated how a change in spending can ripple through the economy.

To calculate the economic impact of the base, the 122nd Fighter Wing's leadership provided data about the following:

1. Payroll and benefits of full-time military employees
2. Payroll and benefits of civilian employees
3. Payroll and benefits of part-time military employees
4. Payroll and benefits of employees employed by the State of Indiana
5. Food and lodging expenses for drill weekends
6. Select base operational expenses with utilities and copier maintenance
7. Indiana's National Guard education benefit

For the model to reflect how the dollar flowed through the economy, the year and respective geography, and the dollar's value at the time it was spent to reflect its buying power must be entered into the IMPLAN model. For this exercise, CRI and the 122nd agreed to three geographies in Indiana:

1. Allen County
2. 3rd Congressional District
3. Statewide

For the employees' geography, the 122nd leadership identified guard members' and civilian residence inside one of the three geographies and assigned the payroll to the respective location. For state employees, it was estimated that 80% live in Allen County and the remaining 20% live in the 3rd Congressional District so that allocation was used for the inputs.

For the base spending, the same amounts were used for all three geographies since they all tied back to Allen County-based spending.

The available information about Indiana's National Guard state tuition education benefit, funded by state dollars and separate from any federal military education benefits, was skewed based on the pandemic compared to pre-pandemic years so CRI and 122nd leadership modeled the education benefit based on past years' education spending:

- 100 program participants
- 30% of participants attending educational institutions in Allen County and the 3rd Congressional District with 100% spending occurring in Indiana

- \$8,627 average annual tuition based on past payments

The following tables list the data inputs for each of the three geographies.

Table 1: Allen County inputs

Activity	IMPLAN industry	Input
AGR/Full-time pay	545	\$10,350,133.53
Civilians	546	\$6,326,498.20
DSG/Part-time pay	545	\$8,156,755.98
State employees	541	\$2,868,724.80
Lodging	507	\$326,267.42
Quick service restaurants	510	\$62,766.81
Full service restaurants	509	\$31,383.40
Other food/drink	511	\$31,383.40
Rental cars	450	\$2,040.80
Catered meals	511	\$38,141.25
Phone/internet/cable	433	\$45,000.00
Copier maintenance	514	\$100,000.00
Electricity	47	\$629,000.00
Natural gas	48	\$142,300.00
Stormwater	534	\$18,000.00
Water	534	\$64,000.00
Sewage	534	\$40,000.00
National Guard Educational Supplement	481	\$258,819.64

Source: 122nd Fighter Wing with industry allocations by CRI

Table 2: 3rd Congressional District inputs

Activity	IMPLAN industry	Input
AGR/Full-time pay	545	\$15,662,676.36
Civilians	546	\$12,580,068.28
DSG/Part-time pay	545	\$13,358,559.20
State employees	541	\$3,585,906.00
Lodging	507	\$326,267.42
Quick service restaurants	510	\$62,766.81
Full service restaurants	509	\$31,383.40
Other food/drink	511	\$31,383.40
Rental cars	450	\$2,040.80
Catered meals	511	\$38,141.25
Phone/internet/cable	433	\$45,000.00
Copier maintenance	514	\$100,000.00
Electricity	47	\$629,000.00
Natural gas	48	\$142,300.00

Stormwater	534	\$18,000.00
Water	534	\$64,000.00
Sewage	534	\$40,000.00
National Guard Educational Supplement	481	\$258,819.64

Source: 122nd Fighter Wing with industry allocations by CRI

Table 3: Indiana inputs

Activity	IMPLAN industry	Input
AGR/Full-time pay	545	\$16,134,442.76
Civilians	546	\$12,989,349.19
DSG/Part-time pay	545	\$16,233,482.51
State employees	541	\$3,585,906.00
Lodging	507	\$326,267.42
Quick service restaurants	510	\$62,766.81
Full service restaurants	509	\$31,383.40
Other food/drink	511	\$31,383.40
Rental cars	450	\$2,040.80
Catered meals	511	\$38,141.25
Phone/internet/cable	433	\$45,000.00
Copier maintenance	514	\$100,000.00
Electricity	47	\$629,000.00
Natural gas	48	\$142,300.00
Stormwater	534	\$18,000.00
Water	534	\$64,000.00
Sewage	534	\$40,000.00
National Guard Educational Supplement	481	\$862,732.14

Source: 122nd Fighter Wing with industry allocations by CRI

Not all base spending could be reliably calculated due to limitations of government purchasing systems and national government contracts. CRI and 122nd leadership decided to limit the spending inputs to items and services that were sufficiently connected to the three geographies to ensure output accuracy. In short, the base spending inputs are underestimated for the above reasons, meaning that the 122nd's economic impact in the three geographies is probably larger than what is listed in this report.

This project does not include any current or projected construction, maintenance, or capital expenses for the 122nd Fighter Wing. It also does not measure the economic impact of employment of National Guard employees' spouses or partners.

Economic impact

The IMPLAN model follows a dollar through the economy to create the economic impact of that activity. It reports three levels of economic activity with both supported jobs and economic value:²

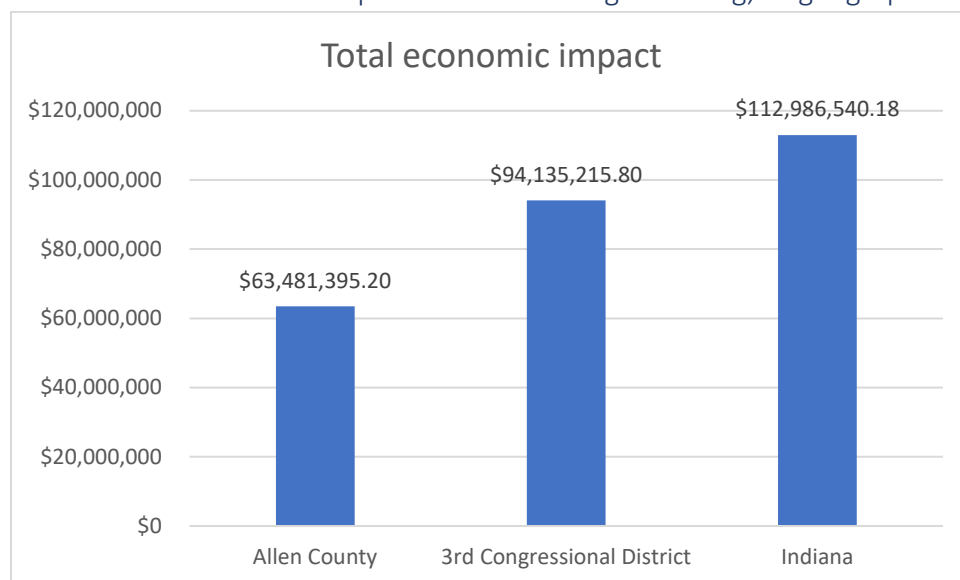
1. **Direct:** These come from the inputs into the IMPLAN model. For this project, CRI entered amounts provided by 122nd leadership, and CRI allocated to the respective industries.
2. **Indirect:** Indirect values are derived from the business-to-business supply chain transactions as a result of the direct spend. For example, the hotels need to purchase landscaping services so a landscaper could be an indirect support from the direct spend.
3. **Induced:** Induced values are a result of the employees supported by the direct spend and their household purchases. In this case, a civilian employee who dines out at a local restaurant creates the induced economic activity as a result of their employment at the 122nd Fighter Wing.

This project shows minimal indirect or business-to-business impact because the majority of the spending reflects government payrolls, which do not create indirect impact. Instead, this analysis reflects consumer spending, which creates the induced impact. If more government-contract spending could have been reliably captured for this analysis, the measured indirect impact would have been larger.

IMPLAN's economic impact is calculated from adding the labor income and value-added outputs to create the total economic impact, with each category for the direct, indirect and induced impacts.

As shown in the introduction and the same chart below, the total economic impact of the 122nd Fighter wing is \$63,481,395.20 in Allen County, \$94,135,215.80 for the 3rd Congressional District, and \$112,986,540.18 for the state of Indiana.

Chart 3: Total economic impact of the 122nd Fighter Wing, all geographies

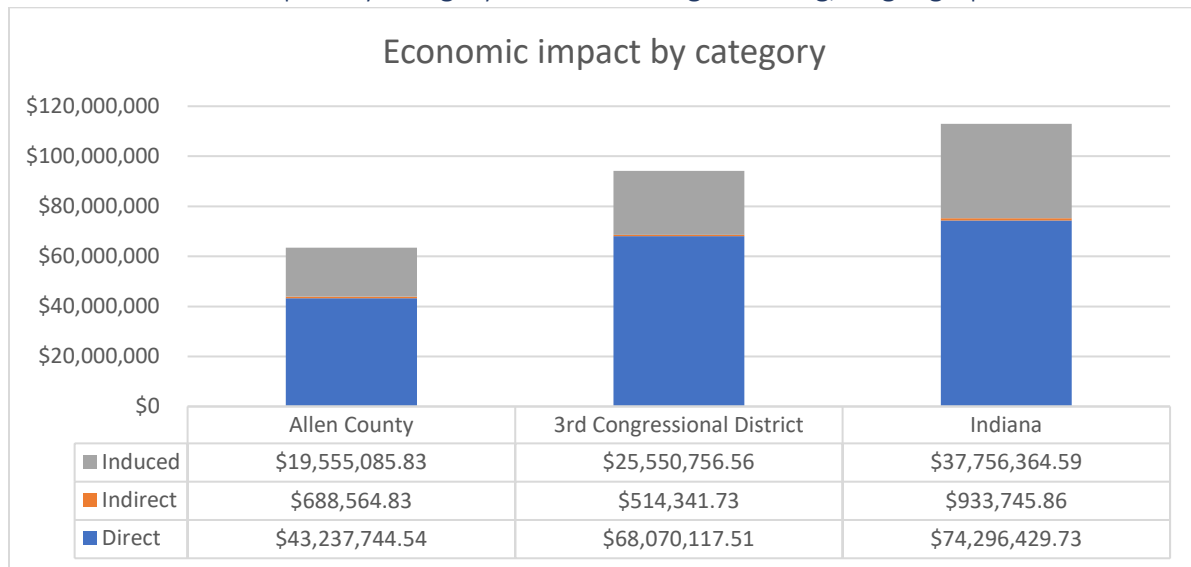


Source: IMPLAN with data inputs from 122nd Fighter Wing

² <https://blog.implan.com/understanding-implan-effects>

Chart 4 shows the economic impact as measured by the direct, indirect, and induced impacts for each of the respective geographies. The 122nd has a direct impact in Allen County of \$43,237,744.54, \$68,070,117.51 for the 3rd Congressional District, and \$74,296,429.73 in Indiana. The indirect effect for Allen County is \$688,564.83, \$514,341.73 for the 3rd Congressional District, and \$933,745.86 statewide. The induced effects are \$19,555,085.83 in Allen County, \$25,550,756.56 for the 3rd Congressional District, and \$37,756,364.59 statewide.

Chart 4: Economic impact by category of the 122nd Fighter Wing, all geographies



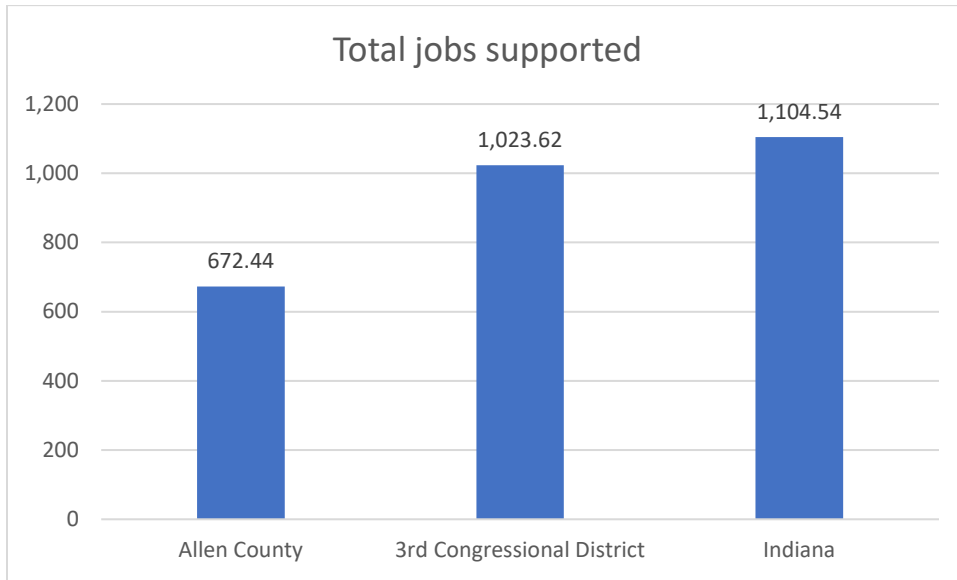
Source: IMPLAN with data inputs from 122nd Fighter Wing

Employment and labor income

This section explores the employment impacts of 122nd activity in each of the three geographies – Allen County, 3rd Congressional District, and Indiana – in the direct, indirect, and induced categories to identify the total number of jobs supported and the labor income associated with the respective inputs.

As shown in the introduction and again in Chart 5, the 122nd supports 672.44 jobs in Allen County, 1,023.62 jobs in the 3rd Congressional District, and 1,104.54 jobs in Indiana.

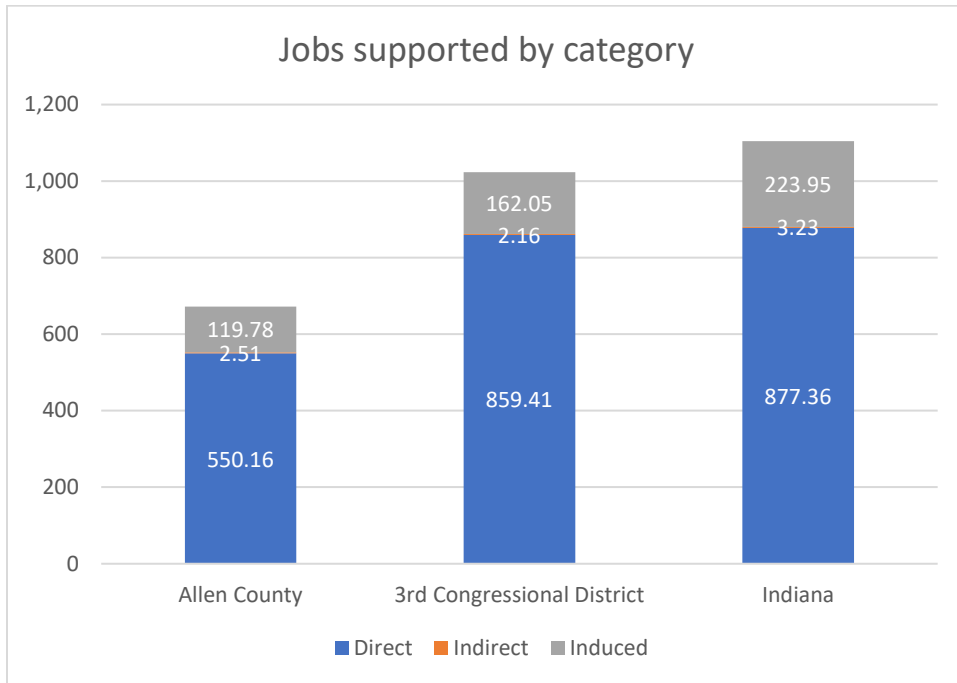
Chart 5: Total jobs supported by the 122nd Fighter Wing, all geographies



Source: IMPLAN with data inputs from 122nd Fighter Wing

Chart 6 shows the direct, indirect, and induced jobs for each of the respective geographies. The direct jobs supported ranged between 550.16 in Allen County to 877.36 statewide. Indirect jobs were much smaller – less than 3.5 statewide – for the reasons explained in the economic impact section due to input limitations. Induced jobs were between 119.78 to 223.95 from the local level to Indiana.

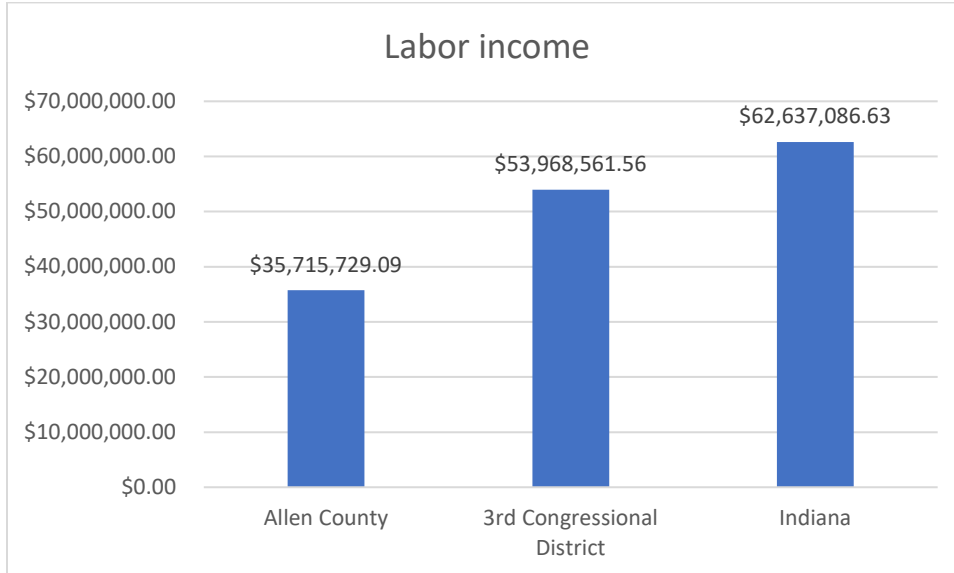
Chart 6: Jobs by category supported by the 122nd Fighter Wing, all geographies



Source: IMPLAN with data inputs from 122nd Fighter Wing

IMPLAN’s models also create a labor income output for direct, indirect, induced effects as shown in the next two charts. Allen County has \$35,715,729.09, \$53,968,561.56 for the 3rd Congressional District, and \$62,637,086.63 for Indiana in total labor income, as shown in Chart 7.

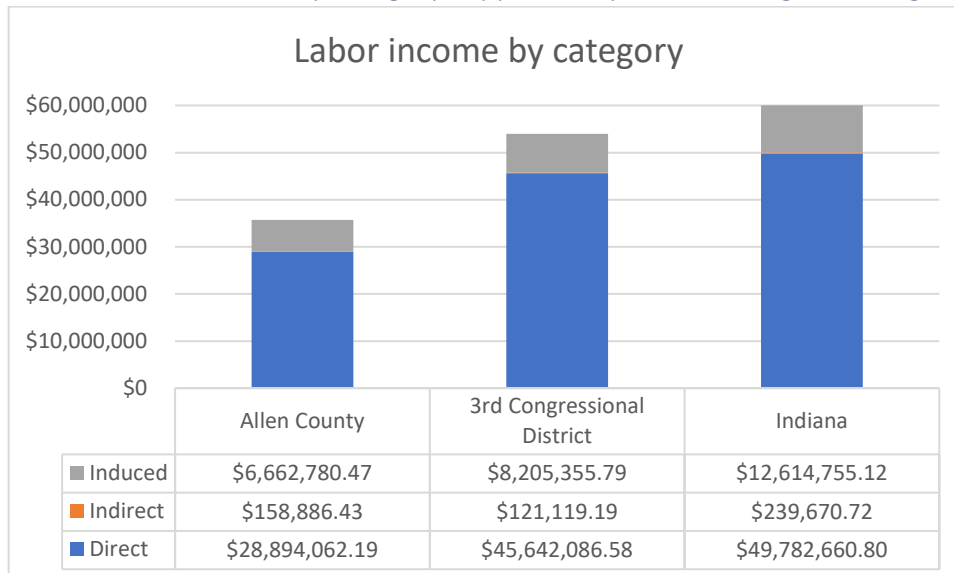
Chart 7: Total labor income supported by the 122nd Fighter Wing, all geographies



Source: IMPLAN with data inputs from 122nd Fighter Wing

Chart 8 shifts to the labor income in each geography to direct, indirect, and induced amounts. The direct labor income was \$28,894,062.19 for Allen County, \$45,642,086.58 for the 3rd Congressional District, and \$49,782,660.80 for Indiana. The indirect labor income ranged from \$121,119.19 in the 3rd Congressional District to \$239,670.72 in Indiana. The induced labor income was \$6,662,780.47 for Allen County, \$8,205,355.79 in the 3rd Congressional District, and \$12,614,755.12 statewide.

Chart 8: Labor income by category supported by the 122nd Fighter Wing, all geographies



Source: IMPLAN with data inputs from 122nd Fighter Wing

Tax impact

IMPLAN uses a tax impact model based on the collected and reported taxes within the region for the given data year, which for this project are Allen County, the 3rd Congressional District, and the state of Indiana.

IMPLAN offers the following methodology:

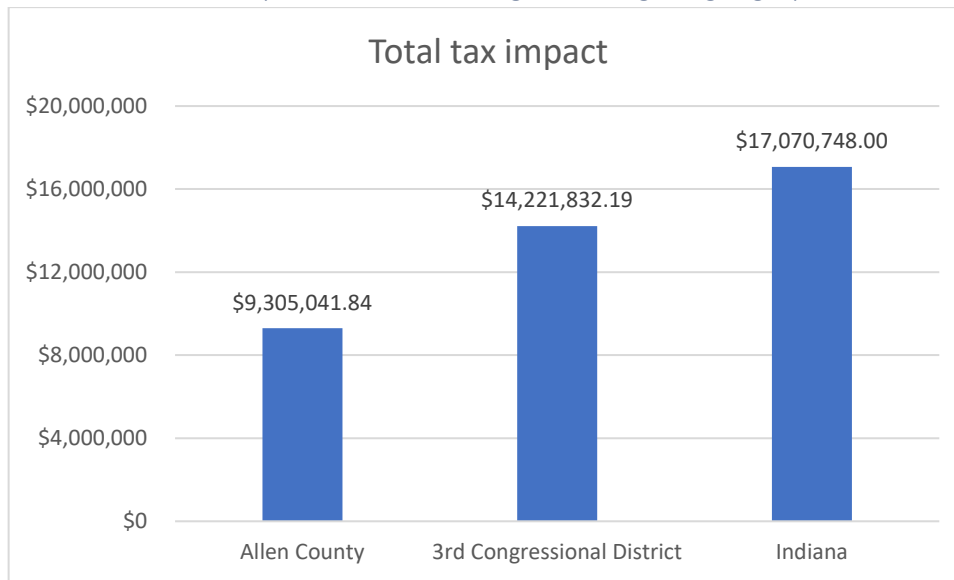
Taxes by level of government are obtained by combining data from the Annual Survey of State and Local Government Finances, which usually is lagged a year or two with respect to the IMPLAN data reference year, the most recent state government tax collections (also reported by the Census Bureau), and the most recent Census of Government Finance, which is like the Annual Survey, but covers every single unit of government. Those sources report tax by type, by unit of government (ergo by level of government), and by location. State government revenue is assigned only at the state level (i.e., the data do not tell us how much state income tax came from a given county). Federal government revenue is known only at the national level from the National Income and Product Accounts.

Data for county, city, and special district governments are assigned to the counties containing those units of government. Data for state and federal government revenue are allocated to counties based on proxies (e.g., personal income by county is used to allocate state government personal income tax revenue to counties). We have national level controls for taxes by level of government and type of tax from the National Income and Product Accounts. We first distribute taxes to states using a combination of the combined finances data and data on total taxes by state (covering both state and local governments) from the (U.S. Bureau of Economic Analysis) Regional Economic Accounts. We then distribute those state values to counties based on the combined finances data, where possible, and by proxies where not possible.³

Chart 9 evaluates the total tax impact of the 122nd Fighter Wing in each geography, consisting of payments for local and county taxes, state taxes, and federal taxes. For Allen County, the total tax impact was \$9,305,041.84, \$14,221,832.19 in the 3rd Congressional District, and \$17,070,748.00 statewide.

³ <https://support.implan.com/hc/en-us/articles/115009674528-Generation-and-Interpretation-of-IMPLAN-s-Tax-Impact-Report>

Chart 9: Total tax impact of the 122nd Fighter Wing, all geographies

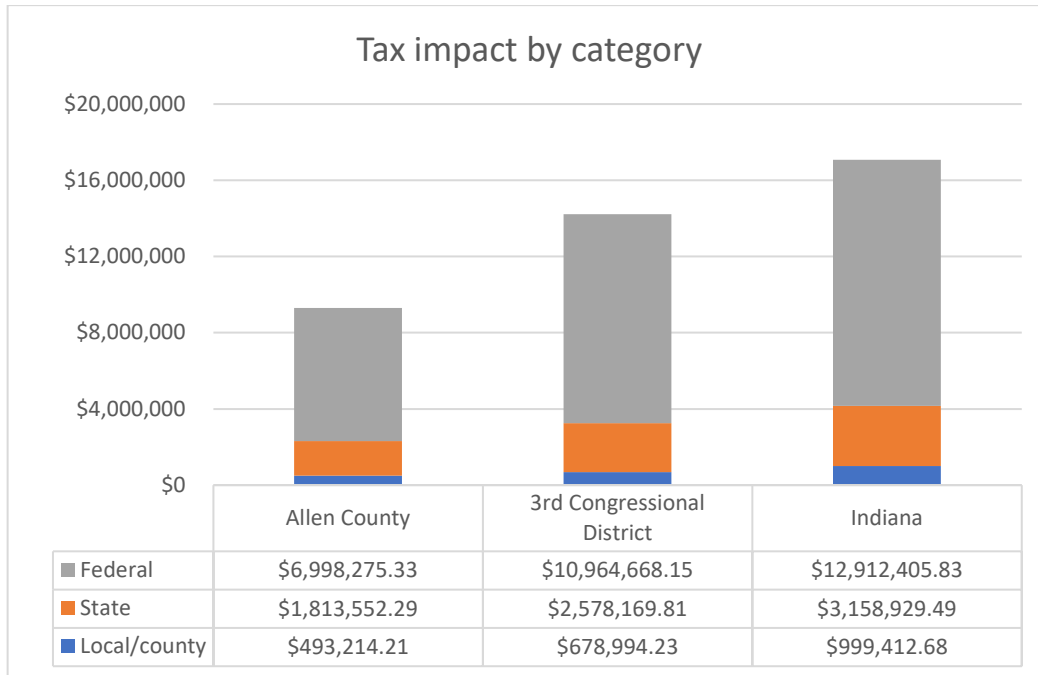


Source: IMPLAN with data inputs from 122nd Fighter Wing

Chart 10 evaluates the tax impact by the three tax jurisdictions – local/county, state, and federal – for the three geographies. The sum of each tax jurisdiction creates the total impact. In short, the geographies measure the tax impact of all three levels, not just the level that corresponds with the unit of government.

The 122nd Fighter Wing economic activity generates local and county taxes between \$493,214.21 and \$999,412.68. For state tax revenue, the direct, indirect, and induced impacts amount to \$1,813,552.29 in Allen County, \$2,578,169.81 from the 3rd Congressional District, and \$3,158,929.49 statewide. At the federal level, Allen County's tax effect from the base is \$6,998,275.33, while the 3rd Congressional District has \$10,964,668.15 and \$12,912,405.83 across Indiana.

Chart 10: Tax impact by category of the 122nd Fighter Wing, all geographies



Source: IMPLAN with data inputs from 122nd Fighter Wing