The Economic Impact of Wisconsin's Military Installations



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Matt Kures
University of Wisconsin-Extension
Center for Community and Economic Development

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Introduction

Wisconsin's military installations contribute to the state economy in a variety of manners. Military and civilian personnel attached to each installation spend their wages and salaries in local communities. Capital investments and operational costs associated with installations generate demand and revenues for regional businesses. Installations also may attract visitors who subsequently make purchases at nearby establishments. While many other states perform economic impact studies to assess their respective installations, Wisconsin has yet to conduct a comprehensive analysis of its own military facilities.¹

To address this knowledge gap, the following economic impact analysis of Wisconsin's military installations is intended to help the state's residents, policy makers and economic development professionals better understand the combined and individual contributions of each facility. The study is a mutual effort of the Wisconsin Department of Military Affairs, the Wisconsin Economic Development Corporation, and the University of Wisconsin-Extension's Center for Community and Economic Development. Five specific installations are included in analysis:²

- Wisconsin Air National Guard 115th Fighter Wing Based in Madison at Truax Field, the 115th Fighter Wing currently accounts for over 1,500 military and civilian employees.³ The 115 FW has 18 F-16C Primary Aircraft Assigned (PAA) that support three primary federal missions: 1) Global Precision Attack by means of an Air Expeditionary Force (AEF) aviation package; 2) air superiority through AEF and Aerospace Control Alert (ACA) for Homeland Defense; and 3) global integrated intelligence surveillance and reconnaissance (ISR). Importantly, the 115th Fighter Wing also serves a state mission through emergency response to catastrophic events and natural disasters; counter-drug operations; explosive ordinance disposal; and crash and fire rescue services at Dane County Regional Airport. Approximately 35 percent of unit members attend college, with 60 members graduating per year;
- Wisconsin Air National Guard 128th Air Refueling Wing Located in Milwaukee since 1963, the 128th Air Refueling Wing serves its state and federal missions with more than 1,100 military and civilian personnel. It is currently home to 10 KC-135R Stratotanker Primary Aircraft Assigned with room for two additional PAA. As with other National Guard units, the 128th has both state and federal missions. Specifically, the 128 ARW notes that its mission is to "transfer fuel to United States' Military and Allied aircraft, provide aero-medical evacuation, and airlift personnel and equipment to strategic locations in a cost effective manner. Thus, we are protecting and defending the United States' global mission while simultaneously serving the communities of Wisconsin and incorporating a 24/7 National Guard Reaction Force." The 128th Air Refueling Wing also provides a number of fiscal benefits to General Mitchell International Airport through joint service fees paid to the airport and additional equipment made available from the FAA due to heavy aircraft touchdowns generated by the 128 ARW;

¹ Note that a number of individual installations in Wisconsin provide basic estimates on their respective economic impacts.

² The descriptions for each installation are based on information provided by the Wisconsin Air National Guard, the Wisconsin Army National Guard and Fort McCov.

³ Figures for the 115th Fighter Wing also include personnel at Joint Force Headquarters.

- Volk Field Air National Guard Base Located in Camp Douglas, Volk Field is home to the 128th Air Control Squadron (ACS) and the 126th Weather Flight. Volk Field is one of only four Combat Readiness Training Centers (CRTC) in the nation. A CRTC provides an integrated, year-round environment that allows for combined airspace, facilities and equipment training to be conducted in manners not available at a unit's home station. The facilities approximate a Forward Operating Location and provide a realistic setting for conducting unit Operational Readiness Exercises and Inspections. Additionally, the CRTC oversees the operations and scheduling of the Hardwood Air-to-Ground Gunnery Range and over 11,000 square miles of special use military training airspace. The CRTC provides training opportunities for all Department of Defense components and also hosts non-military users such as federal, state and local law enforcement agencies; the Civil Air Patrol; and youth organizations. In addition to its federal missions, one of Volk Field's primary state missions is to provide personnel and equipment to be used in protecting life and property, as well as preserving the peace, order, and safety of the general public. Volk Field also provides a Continuity of Operations (COOP) location for Wisconsin's state government and the Department of Military Affairs.
- Wisconsin Army National Guard In support of its state and federal missions, the Wisconsin Army National Guard (WIARNG) consists of almost 7,700 personnel located in 67 communities across the state. In addition to a Joint Force Headquarters and a recruiting battalion, the Wisconsin Army National Guard is comprised of several major commands:
 - 1. 32nd Infantry Brigade Combat Team (IBCT) Brigade combat teams are the basic deployable combat maneuver units in the U.S. Army. Originating from the 32nd Infantry Division, the 32nd IBCT is the largest unit in the Wisconsin Army National Guard with more than 3,400 Soldiers and units based in 36 communities. The 32nd IBCT resembles a small-scale combat division, with infantry, cavalry, field artillery, and special units for intelligence, signal, military police, and combat engineers;
 - 2. 157th Maneuver Enhancement Brigade (MEB) Headquartered in Milwaukee, the 157th MEB has an assigned strength of more than 2,100 Soldiers. The 157th commands and controls forces necessary to conduct security and functional operations in a designated area. These responsibilities of the MEB enable force application, focused logistics, battle space awareness, and protection. It includes units that specialize in communications networking; chemical detection and decontamination; and forward support. The 157th MEB also includes High Mobility Artillery Rocket System (HIMARS) firing batteries and combat engineers. Maneuver Enhancement Brigades are relatively new to the Army, with its concepts and doctrines being refined as part of U.S. Army strategic transformation initiatives.
 - 3. 64th Troop Command The 64th Troop Command primarily provides administrative, training and logistical support to unique, specialized, or smaller Wisconsin Army National Guard units that are not part of other major deployable units. The Command has an authorized strength of more than 1,700 Soldiers and includes aviation, sustainment and support, military police, band, transportation, maintenance, public affairs, rear area operations command, and medical units. The 64th Troop Command roles are: 1) to enhance personnel, training and equipment readiness; 2) to

transform units to meet new requirements for modularity within the Army; and 3) to assist units during mobilization, demobilization and reintegration following deployments or active-duty mobilizations.

- 4. The 426th Regiment (RTI) Regional Training Institute The 426th has an assigned strength of over 115 Soldiers. Through the Wisconsin Military Academy, housed at Fort McCoy, the 426th trains future leaders through its Officers Candidate School and Warrant Officer Candidate School. It also provides technical education for basic field artillery Military Occupational Specialty qualifications and the field artillery noncommissioned officer education system. Furthermore, the 426th provides instruction in truck driving, combat lifesaving, and other disciplines.
- Fort McCoy Located in Monroe County, Fort McCoy is Wisconsin's only U.S. Army installation. The complex includes 60,000 acres, 46,000 of which are available for maneuver and training. As a Total Force Training Center, Fort McCoy provides a breadth of training facilities for both reserve and active component military forces. Specific facilities include 30 live-fire ranges; 21 artillery firing points, 12 mortar firing points, and an 8,000-acre impact area. For urban training, Fort McCoy offers two fully instrumented urban training sites; a 25-building Combined Arms Collective Training Facility (CACTF); a 20-building Collective Training Facility; three wireless instrumented Combat in the Cities facilities with a total of 309 buildings; an urban assault course; and two live-fire shoot houses. Rural training capabilities comprise seven training areas that include walled farm villages with planted crops. Other specialized training sites include: an Unmanned Aerial Systems strip; a semi-improved airstrip with a Seizure/Forced-Entry training site; a Search/Site Exploitation Facility; two tunnel systems; an engineer water-bridging site; and two wireless, instrumented Home Station Training Lanes (HSTL). Fort McCoy is home to numerous tenant activities (such as the Wisconsin State Patrol Academy) and has a workforce of almost 2,900 employees;

When considering the numerous activities and missions of Wisconsin's military installations, it is clear that these facilities provide safety and security to Wisconsin communities (and the overall nation) that cannot be quantified using traditional economic measures. Accordingly, this analysis attempts only to measure the economic impacts that arise from the wages and benefits paid to personnel, as well as the spending generated by each facility. Wisconsin's military facilities also provide a number of fiscal benefits to the communities where they are located. However, these fiscal benefits are not necessarily distinct impacts that can be separated from other economic activities. The differences between economic impacts and fiscal benefits are discussed later in this study.

Furthermore, the analysis of Wisconsin's military installations does not consider each facility's economic impact net of state or federal taxes used to fund each installation. As with any government expenditure, there are potential opportunity costs attached to using tax dollars to fund a given program. Similar to most other military economic impact studies, this analysis does not attempt to estimate opportunity costs or effects that could ensue if government spending was applied to other programs. Similarly, the analysis does not attempt to quantify impacts from private expenditures or investments that might occur in lieu of tax collections used to fund facilities.

While opportunity costs associated with funding government enterprises are important and difficult to estimate, recapturing tax dollars is also an important economic development strategy. Federal taxes represent a flow of income away from a community. However, these dollars can be returned to communities through a variety of intergovernmental aids and funds transfers. While some revenue is passively returned to communities, actively pursuing dollars taxed away has been recognized as a central community economic development strategy (Pulver, 1979; Shaffer, Deller and Marcouiller, 2004). As military installations receive a large share of their operational income from the Federal Government, Wisconsin's military facilities provide one means of returning federal tax revenue to the state.

While military installations represent a potential injection of federal spending, the State of Wisconsin has traditionally lagged national levels of military employment on a per capita basis (Figure 1). In 2012, Wisconsin had 29.2 military employees per 10,000 residents compared to a national average of 65.5 per 10,000 residents. In fact, Wisconsin has one of the lowest per capita levels of military employment among all states (Figure 2). Compared to the nation and neighboring states, Wisconsin has also experienced one of larger percentage declines in per capita military employment between 1990 and 2012.

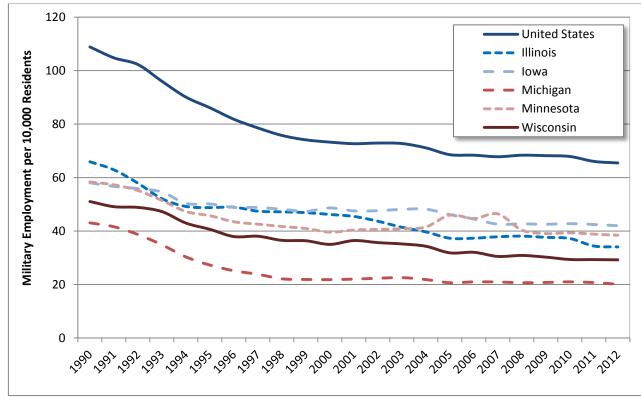


Figure 1 - Change in State Military Employment per 10,000 Residents: 1990 to 2012

Source: Bureau of Economic Analysis and Author's Calculations

⁴ The Bureau of Economic Analysis measures military employment as the number of military personnel assigned to active duty units that are stationed in the area plus the number of military reserve unit members (including the National Guard).

⁵ Wisconsin's military employment change per capita between 1990 and 2012: -42.8%; United States: -39.9%; Illinois: -48.3%; Iowa: -27.7%; Michigan: -53.4%; Minnesota: -34.2%.

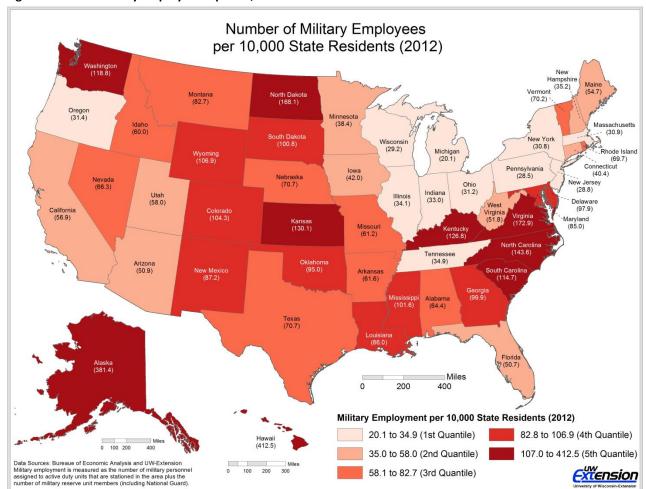


Figure 2 – State Military Employment per 10,000 Residents in 2012

Some of Wisconsin's differences in military employment may be offset through other Department of Defense procurement activity in the state. However, Wisconsin also has largely trailed national per capita DOD procurement levels (Kures, 2012). While recent contracting activity at Oshkosh Corporation and Marinette Marine pushed the state above the national average beginning in 2009, some uncertainty surrounds the future of these contracts. Consequently, Wisconsin's current military facilities remain keenly important to federal spending in the state.

Acknowledgements

This report would not be possible without the cooperation and efforts of personnel at each installation. The author wishes to thank those individuals that provided insight and operational data for each installation, as well as the support from the Wisconsin Department of Military Affairs and the Wisconsin Economic Development Corporation.

Methodology

Economic impact estimates for Wisconsin's military installations rely on input-output (I-O) modeling produced using IMPLAN economic analysis software. Also known as inter-industry analysis, I-O models examine the flow of goods and services between industries; estimate sales by industries to households and institutions; and assess how industries rely on factors of production such as labor and capital (Hughes, 2003). While an in-depth discussion of input-output modeling is beyond the scope of this study, a basic overview of I-O is important to understanding the economic impacts generated in this analysis.⁶

One way to visualize input-output analysis is to view the economy as a spreadsheet. Columns in the spreadsheet represent demand for various products while the rows depict suppliers of these products. Each intersection between a column (demand) and row (supply) represents the dollar flow between the buyer and seller of a given good or service. The sum of all values in a column is the total demand for a particular commodity, while the sum of values in each row represents total supply for a good or service. An input-output model can be quite detailed and contain several hundred industry or commodity categories. Ultimately, the total demand for any product must equal its total supply to maintain the assumption that markets are competitive and efficient (Deller and Williams, 2009).

Using these supply and demand estimates for goods and services, input-output analysis is able to determine how industries, households, and institutions interact with each other. In particular, the ability to model these interactions between supply and demand allows I-O to track how economic activity in one industry sector flows throughout entire economy. As noted earlier, a military installation generates expenditures and payments throughout the economy in several manners. First, the goods and services needed to operate and maintain an installation require purchases from a variety of sectors in the economy (i.e. construction, maintenance, information technology, fuel, food, utilities, etc.). Second, compensation paid to the installation's personnel is spent in the local economy. Finally, some installations may generate economic impacts from visitors that require hospitality and travel services. Accordingly, the demand generated by these various sources of spending in turn generates economic impacts, or ripples, in the specific industry sectors that satisfy this demand.

Understanding Multipliers

The economic ripples arising from production or activity in one industry can be viewed as a *multiplier*. Multipliers are central to I-O analysis and estimate how the production requirements of industries respond to additional demand for their products. In terms of this study, multipliers estimate how production levels in various industries must change in response to spending from military installations and their employees. The multipliers constructed in this analysis are comprised of three different effects:

⁶ For more information on input-output modeling see the *Regional Input-Output Modeling System (RIMS II) User Guide* from the Bureau of Economic Analysis: https://www.bea.gov/regional/pdf/rims/RIMSII User Guide.pdf A more technical description is also available in Chapter 15 of: Shaffer R., Deller, S. and Marcouiller, D. (2004). *Community Economics: Linking Theory and Practices* (2^{nc} ed). Ames, IA: Blackwell Publishing.

- 1. Direct effect Direct effects are attributed to the industry or sector that initially causes a change in the economy. In terms of a military installation, direct effects are the levels of expenditures, employment, or payroll that are generated directly by the installation itself. That is, direct effects do not incorporate how expenditures or incomes ripple throughout the economy;
- 2. Indirect effects As suggested earlier, military installations purchase a variety of goods and services from private sector businesses. These government-to-business (G2B) transactions create additional demand within a variety of industry sectors. As an example, consider an engineering company performing services for a military facility. The company uses revenues from the military installation to pay for operating expenses; purchase new equipment; pay its employees; and make other types of investments. Consequently, the direct expenditures from the military installation have an indirect impact on the company. Indirect effects capture the impacts from these types of G2B purchases;
- 3. *Induced effects* Personnel at military installations are paid wages and salaries. Induced effects estimate the impact of employees using these earnings to purchase goods and services in various sectors of the economy (i.e. food, furniture, gas, housing, medical, utilities, etc.).

Despite their importance in input-output modeling, multipliers are frequently misunderstood and misused. In the context of this study, readers should recognize several characteristics of multipliers. *First, multipliers are not interchangeable or standardized*. For instance, multipliers constructed for a military installation in one state should not be applied to military installations in Wisconsin. *Second, input-output multipliers should not be viewed as the number of times dollars or purchases recirculate in the local economy.* Instead, I-O multipliers are the net economic result of inter-industry purchases and increases in income. *Third, multipliers do not predict when an economic impact will occur in a community.* Instead, the impacts arising from demand or an industry change in a given year will occur at some non-specific time in the future (Shaffer, Deller and Marcoullier, 2004).

Perhaps most importantly, readers should be aware that multipliers based on full-time employment and wages may differ dramatically from multipliers that are influenced by part-time employees and compensation. Recognizing this difference is particularly important to understanding the economic impacts of Wisconsin's military installations. Specifically, the payroll and employment figures for the National Guard installations in this study are influenced considerably by part-time personnel with reserve or drill status. While the economic impacts generated by these individuals are important to the state's economy and should not be diminished, their subsequent multipliers will be less than those associated with full-time employment and wages.

Data Overview

As suggested by the preceding discussion, estimating the economic impacts attributed to Wisconsin's military installations requires using information on each facility's expenditures and employment. Working in conjunction with the Wisconsin National Guard and Fort McCoy, information from each installation was collected in several specific categories:

• Employment and Payroll - Wisconsin's military installations employ and compensate personnel and civilians across a number of employment categories (i.e. active duty, drill status, etc.). Employment and payroll figures are provided by each installation and are categorized according to their respective numbers of active duty, drill status, rotational, and other personnel. Importantly, only those employees and personnel living in the State of Wisconsin are included in the impact calculations. While employees living outside the state likely generate some economic impact within Wisconsin, excluding non-residents provides a more cautious, but dependable estimate.

With the exception of Fort McCoy, the distribution of personnel was also provided on a zip code basis to help refine the geographic impacts arising from their compensation. These zip code distributions are also used to allocate employment and payroll impacts to their respective congressional districts. To avoid over estimating the impact of employees with drill or reserve status, employment impacts are modeled in IMPLAN using total employee compensation, not the number of employees;

• Procurement and Operational Expenditures – Procurement and operational expenditures include the total purchases made by each installation on a category-by-category basis (i.e. construction, food, utilities, etc.). The indirect and induced impacts from these expenditures are modeled using a "Bill of Goods" approach in IMPLAN. The Bill of Goods approach improves the accuracy of impact assessments by calculating the impacts arising from each individual expenditure category, rather than relying on the generalized military purchasing pattern within IMPLAN. However, some expenditure categories provided by Wisconsin's military installations could not be assigned to a specific category. The impacts from these categories were modeled using the aforementioned overall institutional spending pattern for defense included in IMPLAN.

As with employment figures, only the share of purchases made in the State of Wisconsin are included in the analysis. Similarly, impact calculations for each congressional district only include estimates of purchases made within each respective district. Consequently, the impacts from payments made to non-resident firms performing work in Wisconsin are minimized and the figures should be viewed as conservative estimates. In those instances where purchasing distributions were somewhat incomplete, figures were distributed based on information included in IMPLAN and by using procurement information provided in the Federal Procurement Data System extracted from USASpending.gov.

Several installations provided other potential sources of economic impact including numbers of visitors and tuition reimbursement. However, these numbers were either not consistently provided by all installations, or were subject to reliability uncertainties noted by individual installations. Consequently, some of these figures are reported as economic contributions, but are not included in the input-output modeling process.

⁷ Fort McCoy provided an estimate of employment by congressional district.

⁸ The category was edited and re-balanced to remove impacts from wages paid to personnel to avoid double-counting impacts.

Distinguishing Between Economic Impacts and Other Fiscal Benefits

As suggested earlier, Wisconsin's military installations generate economic impacts and fiscal benefits that should not be confused with each other or double-counted. When estimating the economic impact of the state's installations, it is important to distinguish between the additional employment, income and tax revenue that is attributed to the presence of military installations, and the economic activity that would remain in their absence. That is, how much of Wisconsin's employment, income and output would not exist "but for" the presence of the state's installations? ⁹

As an example of an activity that might be thought of as an economic impact, consider several of the benefits that the 115th Fighter Wing provides to Dane County Regional Airport (DCRA). The 115th Fighter Wing provides crash response services to DCRA that subsequently do not need to be provided directly by the airport. The question is whether these services provide new economic impacts? In reality, these services create an economic impact, but an impact that is already captured in other economic measures. Specifically, the economic impacts of crash response services by the 115th Fighter Wing are captured through three primary means:

- 1. Any purchases of equipment used by the Wisconsin Air National Guard in crash response services are captured in the 115th Fighter Wing's procurement spending;
- 2. Similarly, maintenance of equipment used in these services is captured in the labor costs of personnel and the materials and services purchased by the 115 FW;
- 3. The actual operation of the equipment by the 115th Fighter Wing's personnel is captured in their payroll and labor costs.

Consequently, the payroll and expenditure figures provided by the 115 FW already capture these types of impacts. If the values of these services were counted as an additional impact, the analysis would double-count the economic impacts generated by the 115th Fighter Wing. *Instead, these services should be considered as an important fiscal benefit to local taxpayers, but not an additional standalone economic impact*. These costs could also be viewed as *leave behind costs* that would need to be absorbed by Dane County Regional Airport if the 115th Fighter Wing were not present. Similar activities at other installations are considered in the same manner.¹⁰

⁹ The difference between economic activity that would not exist "but for" the presence of a facility is also known as the "counterfactual" and is often overlooked in economic impact analyses. For more information see Siegfried, Sanderson and McHenry (2007).

¹⁰ An example of the differences between economic impacts and leave behind costs for a military installation is provided in the *Otis Air National Guard Economic Impact Study* by Nakajima (2005).

Analysis Interpretation and Results

The following analysis results summarize the economic impacts of each individual installation; the combined impact of all installations on the State of Wisconsin; and the combined impacts of all installations found in each of Wisconsin's eight congressional districts. The reported impacts are summarized using three measures: 1) employment, 2) labor income, and 3) output. Employment impacts include the number of employees directly associated with each installation, as well as the number of indirect and induced jobs supported by military installations. As noted earlier, induced impacts are not calculated using total employment at each facility due to the number of personnel who may have drill or reserve status. That is, the IMPLAN model does not distinguish between full and part-time employees.

Labor income includes employee compensation (e.g. wages and benefits) and proprietor income. Total labor income impacts include the total wages and salaries paid directly to the personnel and employees at each facility as well as the indirect and induced labor income generated by installation and employee spending. Finally, output impacts include the "output" produced directly by military installations, as well as the industry revenues or production values generated through indirect and induced impacts. Note that defining output for a military installation is different than the concept of output in other industries. Output in most industries can be thought of the as the total cost of production. For the military installations analyzed here, output is defined as total labor income plus the value of procurement and operational expenditures. ¹¹

In interpreting the results, readers should recognize several factors and conditions:

- Caution should be used when comparing the economic impacts of each installation. By default, installations with a greater number of personnel or larger expenditure levels will have a larger overall impact. Furthermore, construction activity at each installation can have a significant influence on a facility's economic impact. As construction activity is uneven from year-to-year, those facilities with larger levels of construction spending in the period analyzed in this study will likely have a higher relative impact. Future impacts from each facility also will vary according to construction cycles;
- Similarly, readers should be careful when comparing the economic impact of installations in Wisconsin to the impact of facilities in other states. As mentioned in the introduction, numerous other states have produced economic impact studies for military installations and activities. Many of these studies either focus on the impact of very large installations or originate in states with significant levels of full-time military employees. Consequently, the direct, indirect and induced impacts found in other states may be larger than those found in Wisconsin;

¹¹ In IMPLAN, the value of production includes the costs of industrial inputs, labor, proprietor income, taxes on production and imports, corporate profits, capital consumption allowances, payments for rent, dividends, royalties and interest income. As military facilities do not pay taxes or have profits, these types of contributions are excluded from their output.

- The economic impact figures here differ from those reported in previous economic impact overviews
 conducted for Fort McCoy and the three Wisconsin Air National Guard installations. These prior impact
 analyses rely on standardized employment multipliers and do not restrict their impacts to payroll and
 spending that only occurs in the State of Wisconsin.
- While the economic impacts are calculated at the state or congressional level, impacts will often be
 localized or concentrated in distinct geographic areas. The concentration of activity depends on the
 distribution of personnel and contractors providing goods or services to a facility. Again, the figures
 produced here should be viewed as the gross contributions to the state's economy rather than impacts
 that are net of tax dollars.

Combined Economic Impact of all Installations on the State of Wisconsin

Wisconsin's military installations directly account for over 13,600 employees and generate \$396.4 million in payroll. An estimated 93% of installation employees reside in Wisconsin, allowing the state to retain a significant share of their earnings. During the fiscal period analyzed, \$287.4 million in purchases were reported by Wisconsin installations, with \$137.5 million attributed to in-state spending. These estimates

Category	Total	In-State
Employment	13,603	12,651
Employment	(8,104 drill status)*	(7,460 drill status)*
Payroll	\$396,400,000	\$372,980,000
Purchases	\$287,380,000	\$137,490,000

Sources: Wisconsin National Guard and Fort McCoy. In-state figures partially rely on IMPLAN estimates and the author's calculations. *includes technicians Employment and payroll figures include military and civilian personnel

should be viewed conservatively as the tuition assistance provided by the Wisconsin National Guard and visitor spending generated by several facilities, are not included in these figures.

When combined with indirect and induced effects, Wisconsin's military installations support 16,776 jobs and generate almost \$1.04 billion in economic activity within the state. Some of this activity is inherently concentrated around individual facilities, but installation purchases and payroll influences every region of the state. In particular, large shares of these impacts arise from the payroll received by installation employees. These earnings in-turn generate spending in many industries across Wisconsin. Several industry categories associated with hospitality, retail, and health care experience some of the largest employment impacts from installation purchases and payroll. Other industries receiving several of the 10 largest employment influences include construction, real estate, and professional and technical services.

Combined Impacts of All Installations on the State of Wisconsin

	Employment	Labor Income	Output
Direct Effect	12,651 (7,460 drill status)	\$373,000,000	\$510,470,000
Indirect and Induced Effects	4,125	\$187,200,000	\$527,400,000
Total Effect	16,776	\$560,200,000	\$1,037,870,000

Source: IMPLAN and Author's Calculations

Combined Impacts by Industry - Top 10 Industries Impacted in Wisconsin (Top 10 by Employment)

Industry	Employment	Labor Income	Output
Food services and drinking places	399	\$7,530,000	\$21,310,000
Hospitals	181	\$12,170,000	\$25,140,000
Maintenance and repair construction of nonresidential structures	179	\$9,790,000	\$24,640,000
Architectural, engineering, and related services	150	\$9,110,000	\$16,230,000
Offices of physicians, dentists, and other health practitioners	148	\$14,140,000	\$21,490,000
Real estate establishments	139	\$1,490,000	\$22,690,000
Services to buildings and dwellings	135	\$3,260,000	\$7,770,000
Nursing and residential care facilities	123	\$4,130,000	\$7,260,000
Retail Stores - Food and beverage	123	\$3,370,000	\$6,380,000
Wholesale trade businesses	116	\$8,880,000	\$22,650,000
Source: IMPLAN and Author's Calculations			

Economic Impact of the 115th Fighter Wing – Wisconsin Air National Guard

The 115th Fighter Wing directly accounts for 1,505 employees across military and civilian categories with a total payroll of almost \$48.1 million. A large majority of 115 FW employees reside in the state, allowing an estimated 95% of the installation's payroll to remain in Wisconsin. Purchases by the installation total \$11 million for FY 2013, with \$6.3 million of this amount occurring in the state. Due to a lack of significant construction activity during the period analyzed, the overall indirect and induced impacts may be

Employment,	Payroll and	d Purchase	Summary
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Category	Total	In-State
Employment	1,505 (1,010 drill status)*	1,293 (815 drill status)*
Payroll	\$48,060,000	\$ 45,680,000
Purchases	\$11,020,000	\$6,290,000

Source: WIANG 115th Fighter Wing *includes technicians Employment and payroll figures include military and civilian personnel

somewhat lower than those found in years with greater construction purchasing. The 115th Fighter Wing also is responsible for over \$1.02 million in tuition payments to local higher education institutions that are not included in the impact calculations.

Overall, the 115th Fighter Wing generates \$99.2 million of total economic activity (output) within the State of Wisconsin and supports over 1,650 in-state jobs. As suggested earlier, a large share of impacts are attributed to the installation's payroll. Consequently, many of the top 10 industries receiving the largest employment impacts tend to be categories driven by consumer purchases, such as retail and health care.

Impacts of the 115th Fighter Wing on the State of Wisconsin

	Employment	Labor Income	Output
Direct Effect	1,293 (815 drill-status)	\$ 45,680,000	\$51,970,000
Indirect and Induced Effects	366	\$16,280,000	\$47,230,000
Total Effect	1,659	\$61,960,000	\$99,200,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin by the 115th Fighter Wing (Top 10 by Employment)

Industry	Employment	Labor Income	Output
Food services and drinking places	41	\$2,180,000	\$770,000
Maintenance & repair construction of nonresidential structures	25	\$3,460,000	\$1,560,000
Hospitals	20	\$2,810,000	\$1,360,000
Offices of physicians, dentists, and other health practitioners	17	\$2,400,000	\$1,580,000
Real estate establishments	14	\$2,250,000	\$150,000
Nursing and residential care facilities	14	\$810,000	\$460,000
Retail Stores - General merchandise	12	\$640,000	\$320,000
Retail Stores - Food and beverage	11	\$590,000	\$310,000
Wholesale trade businesses	11	\$2,120,000	\$830,000
Retail Stores - Motor vehicle and parts	8	\$630,000	\$370,000
Source: IMPLAN and Author's Calculations			

Economic Impact of the 128th Air Refueling Wing – Wisconsin Air National Guard

The 128th Air Refueling Wing employs 1,173 employees across military and civilian categories, with a total payroll of \$46.91 million. Almost 90% of the personnel employed at the 128 ARW reside in Wisconsin, with an estimated 91% of its payroll remaining in the state. Installation purchases total \$8.95 million, with a large estimated amount of these dollars (\$6.26 million) remaining in Wisconsin. As with the 115th Fighter Wing, construction activity generated

Employment, Payroll and Purchase Summary			
Category	Total	In-State	
Employment	1,173 (803 drill status)	1,075 (710 drill status)	
Payroll	\$46,910,000	\$42,770,000	
Purchases	\$8,950,000	\$6,260,000	

Source: WIANG 128th Fighter Wing *includes technicians
Employment and payroll figures include military and civilian personnel

by the 128 ARW was somewhat limited in FY 2013 relative to prior years. Consequently, the overall indirect and induced impacts may be lower than those calculated for years with significant construction projects. The 128 ARW is also responsible for \$408,000 in tuition assistance not included in the impact figures below.

In total, the 128th Air Refueling Wing generates \$93.82 million in economic activity within the State of Wisconsin and supports an estimated 1,433 in-state jobs through direct, indirect and induced effects. As with the 115th Fighter Wing, and other National Guard installations, industries experiencing the ten largest employment impacts are driven by consumer purchases arising from the installation's payroll (i.e. hospitality, health care, etc.).

Impacts of the 128th Air Refueling Wing on the State of Wisconsin

	Employment	Labor Income	Output
Direct Effect	1,075 (710 drill status)	\$42,770,000	\$49,030,000
Indirect and Induced Effects	358	\$15,540,000	\$44,790,000
Total Effect	1,433	\$58,310,000	\$93,820,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin by the 128th ARW (Top 10 by Employment)

Industry	Employment	Labor Income	Output
Food services and drinking places	41	\$770,000	\$2,180,000
Services to buildings and dwellings	20	\$490,000	\$1,130,000
Hospitals	19	\$1,280,000	\$2,650,000
Offices of physicians, dentists, and other health practitioners	16	\$1,530,000	\$2,330,000
Real estate establishments	13	\$140,000	\$2,150,000
Nursing and residential care facilities	13	\$430,000	\$760,000
Outpatient and other ambulatory care services	12	\$860,000	\$1,820,000
Retail Stores - General merchandise	11	\$300,000	\$590,000
Retail Stores - Food and beverage	11	\$290,000	\$550,000
Maintenance and repair of nonresidential structures	10	\$630,000	\$1,400,000
Source: IMPLAN and Author's Calculations			

Economic Impact of Volk Field Air National Guard Base

Almost 440 personnel are employed at Volk Field. The installation accounts for \$19.3 million in payroll, with less than 2.0% of this value leaving the state through non-resident employees. Purchases of goods and services at Volk Field total almost \$15.6 million during the fiscal year with \$6.63 million of this amount remaining in Wisconsin. Volk Field also generates a significant amount of travel to its facilities. Over the

Employment, Payroll and Purchase Summary			
Category	Total	In-State	
Employment	437	417	
Employment	(209 drill status)	(189 drill status)	
Payroll	\$19,300,000	\$19,000,000	
Purchases	\$15,570,000	\$6,630,000	
C	·		

Source: Volk Field

year, Volk Field accounts almost 35,000 bed nights from out-of-state military visitors. The installation generates an additional 26,000 bed nights from in-state military personnel, with an additional 3,300 bed nights produced by in-state civilians. While some economic activity generated by this travel is already captured elsewhere in this analysis, the specific impact cannot be modeled without knowing expenditure estimates from these visitors. Nonetheless, the potential impacts from these bed nights should not be overlooked.

In total, Volk Field accounts for \$52.4 million in economic activity within the State of Wisconsin and sustains an estimated 625 total jobs through direct, indirect and induced impacts. As with the previous two Air National Guard installations assessed, many industries receiving the largest impact from Volk Field are related to retail and health care. However, the categories of *services to buildings and dwellings* and *maintenance & repair of nonresidential structures* also suggest a notable impact from the installation.

Impacts of Volk Field Air National Guard Base on the State of Wisconsin

	Employment	Labor Income	Output
Direct Effect	417 (189 drill status)	\$19,000,000	\$25,630,000
Indirect and Induced Effects	208	\$9,400,000	\$26,780,000
Total Effect	625	\$28,400,000	\$52,410,000

Source: IMPLAN and Author's Calculations

Impacts by Industry - Top 10 Industries Impacted in Wisconsin by Volk Field (Top 10 by Employment)

			•
Industry	Employment	Labor Income	Output
Food services and drinking places	22	\$407,000	\$1,154,000
Services to buildings and dwellings	14	\$347,000	\$808,000
Maintenance & repair of nonresidential structures	10	\$652,000	\$1,436,000
Hospitals	9	\$623,000	\$1,288,000
Offices of physicians, dentists, and other health practitioners	8	\$753,000	\$1,146,000
Construction of other new nonresidential structures	7	\$430,000	\$1,072,000
Real estate establishments	7	\$72,000	\$1,090,000
Nursing and residential care facilities	6	\$211,000	\$372,000
Retail Stores - Food and beverage	6	\$170,000	\$320,000
Wholesale trade businesses	6	\$434,000	\$1,107,000
Source: IMPLAN and Author's Calculations			

Economic Impact of the Wisconsin Army National Guard

The Wisconsin Army National Guard (WIARNG) accounts for over 7,600 employees, generating a payroll of \$157.6 million. Almost 95% of WIARNG employees reside in the state, allowing Wisconsin communities to potentially retain a large share of employee spending. While most soldiers have part-time or drill status, these individuals are distributed across the state and their payroll

Employment,	Pavro	II and	Purchase	Summary
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Category	Total	In-State
Employment	7,614	7,193
Employment	(6,082 drill status)	(5,746 drill status)
Payroll	\$157,590,000	\$149,710,000
Purchases	\$66,130,000	\$35,190,000

Source: WIARNG Note: In-State figures are based on IMPLAN and author's estimates.

impacts many regional economies in some manner. The Wisconsin Army National Guard also is responsible for \$66.1 million in purchases across a variety of industry categories. While the WIARNG was unable to provide a complete breakdown of purchases made in-state, an estimated \$35.2 million of these expenditures remain in Wisconsin. The Wisconsin Army National Guard also contributes \$5.9 million in tuition assistance that is not included in the impact figures.

Statewide, the Wisconsin Army National Guard accounts for almost \$353.9 million in total economic activity. In addition to its almost 7,200 in-state employees, the WIARNG sustains an additional 1,345 jobs through indirect and induced effects, for a total of more than 8,500 jobs. The largest industry employment impacts generated by the WIARNG are found across retail, hospitality, real estate, health care and services. However, wholesale trade and architectural, engineering, and related services are also among those industries receiving the ten largest employment impacts.

Impacts of the Wisconsin Army National Guard on the State of Wisconsin

	Employment	Labor Income	Output
Direct Effect	7,193 (5,746 drill status)	\$149,710,000	\$184,900,000
Indirect and Induced Effects	1,345	\$59,560,000	\$168,990,000
Total Effect	8,538	\$209,270,000	\$353,890,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin by the Army National Guard (Top 10 by Employment)

Industry	Employment	Labor Income	Output
Food services and drinking places	147	\$2,780,000	\$7,880,000
Hospitals	67	\$4,530,000	\$9,370,000
Offices of physicians, dentists, and other health practitioners	55	\$5,230,000	\$7,950,000
Real estate establishments	54	\$580,000	\$8,840,000
Retail Stores - Food and beverage	47	\$1,290,000	\$2,450,000
Nursing and residential care facilities	46	\$1,540,000	\$2,710,000
Wholesale trade businesses	40	\$3,100,000	\$7,900,000
Retail Stores - General merchandise	39	\$1,060,000	\$2,090,000
Architectural, engineering, and related services	37	\$2,230,000	\$3,970,000
Retail Stores - Motor vehicle and parts	36	\$1,790,000	\$3,060,000

Source: IMPLAN and Author's Calculations

Economic Impact of Fort McCoy

Fort McCoy accounts for almost 2,900 employees, making it the largest single employer in Monroe County and one of the largest in West-Central Wisconsin. The installation reports a payroll of \$124.54 million, with an estimated 93% of these earnings generated by Wisconsin residents. More than \$185.7 million in purchases were made by Fort McCoy in the fiscal year analyzed (FY '12), with an estimated \$82.7 million remaining in Wisconsin.

Employment, Payroll and Purchase Summary				
Category	Total	In-State		
Employment	2,874	2,673		
Payroll	\$124,540,000	\$115,820,000		
Purchases	\$185,730,000	\$82,740,000		

Source: Fort McCoy. Note: In-state purchases are partially based on author's estimates.

Fort McCoy also generates a significant amount of visitors to the region. More than 122,000 authorized personnel traveled to Fort McCoy in FY 2012, generating over one million room nights at the installation. While the exact economic impact of these visitors cannot be determined without knowing their expenditures, these travelers likely have a significant impact on the region. Furthermore, the installation serves more than 144,000 retired military employees, survivors and annuitants in a five-state region.

In total, Fort McCoy contributes an estimated \$437.93 million in economic activity to the State of Wisconsin. Importantly, the installation also generates additional impacts that cannot be modeled without further data (such as estimates of visitor spending). Conservatively, the facility sustains 4,500 jobs either directly, or through indirect and induced effects. These figures are particularly important when considering that only 19,400 total jobs were found in Monroe County during 2012. Again, employment impacts arising from Fort McCoy are prevalent in industry categories related to hospitality, real estate and health care. However, construction and professional and technical services are also among the top impacted industries.

Impacts of Fort McCoy on the State of Wisconsin

	Employment	Labor Income	Output
Direct Effect	2,673	\$115,820,000	\$198,560,000
Indirect and Induced Effects	1,844	\$86,390,000	\$239,370,000
Total Effect	4,517	\$202,210,000	\$437,930,000

Source: IMPLAN and Author's Calculations

Impacts by Industry - Top 10 Industries Impacted in Wisconsin by Fort McCoy (Top 10 by Employment)

Industry	Employment	Labor Income	Output
Food services and drinking places	148	\$2,790,000	\$7,910,000
Maintenance and repair construction of nonresidential structures	121	\$6,230,000	\$16,690,000
Architectural, engineering, and related services	103	\$6,260,000	\$11,150,000
Construction of nonresidential structures	103	\$4,980,000	\$15,300,000
Hospitals	65	\$4,370,000	\$9,020,000
Services to buildings and dwellings	62	\$1,450,000	\$3,580,000
Offices of physicians, dentists, and other health practitioners	53	\$5,040,000	\$7,650,000
Real estate establishments	51	\$550,000	\$8,350,000
Scientific research and development services	51	\$4,040,000	\$8,680,000
Wholesale trade businesses	49	\$3,730,000	\$9,520,000
Source: IMPLAN and Author's Calculations			

Economic Impact of All Installations on Wisconsin's 1st Congressional District

Almost 1,270 employees of Wisconsin's military installations reside in Wisconsin's 1st Congressional District. Many of these employees are attached to the 128th Air Refueling Wing and the Wisconsin Army National Guard, but the 115th Fighter Wing and Volk Field also report personnel living in the district. Additionally, installations across Wisconsin purchase some level of goods and services from businesses located in the district. However, the \$37.04 million in employee payroll (labor income) found in the 1st Congressional District is the primary source of economic impact arising from installations. When combined with indirect and induced effects, military installation payroll and spending in the 1st Congressional District supports over 1,500 jobs and accounts for almost \$72 million in total economic activity (output).

Economic Impact Summary – 1st Congressional District

	Employment	Labor Income	Output
Direct Effect	1,265	\$37,040,000	\$41,840,000
Indirect and Induced Effects	239	\$10,060,000	\$29,770,000
Total Effect	1,504	\$47,100,000	\$71,610,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin's 1st Congressional District (Top 10 by Employment)

	Employment	Labor Income	Output
Food services and drinking places	30	\$560,000	\$1,580,000
Offices of physicians, dentists, and other health practitioners	12	\$1,090,000	\$1,700,000
Hospitals	12	\$780,000	\$1,610,000
Nursing and residential care facilities	9	\$320,000	\$550,000
Retail Stores - General merchandise	9	\$240,000	\$480,000
Real estate establishments	9	\$90,000	\$1,480,000
Retail Stores - Food and beverage	9	\$250,000	\$470,000
Wholesale trade businesses	8	\$640,000	\$1,570,000
Retail Stores - Motor vehicle and parts	6	\$280,000	\$480,000
Maintenance and repair of nonresidential structures	5	\$300,000	\$670,000

Source: IMPLAN and Author's Calculations

Economic Snapshot of Wisconsin's $\mathbf{1}^{\text{st}}$ Congressional District - Congressman Paul Ryan

Population	713,436
Households	274,550
Median age	39.6
Median household income	\$56,421
Mean household income	\$70,885
Percent below poverty level (all ages)	11.7%
Unemployment rate (age 16 and over)	8.5%
Civilian labor participation rate (age 16 and over)	66.9%
High school graduate or higher (age 25 and over)	90.2%
Bachelor's degree or higher (age 25 and over)	26.1%



Economic Impact of All Installations on Wisconsin's 2nd Congressional District

Wisconsin's 2nd Congressional District is home to the 115th Fighter Wing, Joint Force Headquarters, and a number of Army National Guard facilities. An estimated 1,758 employees from both the Wisconsin Air National Guard and Wisconsin Army National Guard reside in the district and directly account for \$47.77 million in labor income. In addition to payroll, installations also generate an estimated \$14.25 million in direct spending in the district. Combined with indirect and induced effects, military installations support over 2,100 employees and contribute \$109.45 million in total economic activity to Wisconsin's 2nd Congressional District.

Economic Impact Summary – 2nd Congressional District

	Employment	Labor Income	Output
Direct Effect	1,758	\$47,770,000	\$61,950,000
Indirect and Induced Effects	366	\$16,430,000	\$47,500,000
Total Effect	2,124	\$64,200,000	\$109,450,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin's 2nd Congressional District (Top 10 by Employment)

	Employment	Labor Income	Output
Food services and drinking places	40	\$850,000	\$2,240,000
Maintenance and repair of nonresidential structures	18	\$1,250,000	\$2,610,000
Offices of physicians, dentists, and other health practitioners	15	\$1,480,000	\$2,240,000
Retail Stores - Food and beverage	14	\$380,000	\$720,000
Real estate establishments	13	\$150,000	\$2,180,000
Hospitals	13	\$920,000	\$1,860,000
Services to buildings and dwellings	13	\$300,000	\$720,000
Nursing and residential care facilities	12	\$400,000	\$700,000
Wholesale trade businesses	11	\$910,000	\$2,210,000
Retail Stores - General merchandise	11	\$290,000	\$570,000

Source: IMPLAN and Author's Calculations

Economic Snapshot of Wisconsin's 2nd Congressional District - Congressman Mark Pocan

Population	729,417
Households	297,146
Median age	36.4
Median household income	\$56,111
Mean household income	\$72,512
Percent below poverty level (all ages)	12.7%
Unemployment rate (age 16 and over)	5.8%
Civilian labor participation rate (age 16 and over)	71.5%
High school graduate or higher (age 25 and over)	93.1%
Bachelor's degree or higher (age 25 and over)	37.7%



Economic Impact of All Installations on Wisconsin's 3rd Congressional District

Wisconsin's 3rd Congressional District receives the state's largest levels of economic activity supported by military installation payroll and spending. The direct, indirect and induced contributions of installations in the district are not surprising as the 3rd Congressional District is home to Fort McCoy, Volk Field, and a significant number of Army National Guard facilities. These installations employ 4,165 district residents and directly contribute \$224 million in economic activity through payroll and installation spending. When the direct impacts of installation payroll and spending are combined with induced and indirect effects, Wisconsin's military facilities support an estimated 5,626 jobs and \$422.68 million in economic activity within Wisconsin's 3rd Congressional District. Note that these figures do not include the economic contributions from significant levels of travel activity generated by Fort McCoy and Volk Field.

Economic Impact Summary – 3rd Congressional District

	Employment	Labor Income	Output
Direct Effect	4,165	\$144,820,000	\$223,940,000
Indirect and Induced Effects	1,461	\$55,470,000	\$198,740,000
Total Effect	5,626	\$200,290,000	\$422,680,000

Source: IMPLAN and Author's Calculations

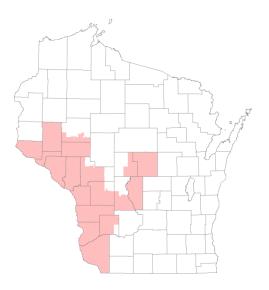
Impacts by Industry – Top 10 Industries Impacted in Wisconsin's 3rd Congressional District (Top 10 by Employment)

	Employment	Labor Income	Output
Food services and drinking places	155	\$2,520,000	\$7,890,000
Hospitals	63	\$4,450,000	\$8,950,000
Architectural, engineering, and related services	56	\$2,530,000	\$5,190,000
Services to buildings and dwellings	53	\$1,180,000	\$2,950,000
Retail Stores - Food and beverage	50	\$1,290,000	\$2,510,000
Offices of physicians, dentists, and other health practitioners	49	\$4,230,000	\$6,640,000
Nursing and residential care facilities	44	\$1,320,000	\$2,420,000
Wholesale trade businesses	42	\$2,470,000	\$7,540,000
Retail Stores - General merchandise	41	\$1,120,000	\$2,190,000
Scientific research and development services	41	\$1,890,000	\$5,630,000

Source: IMPLAN and Author's Calculations

Economic Snapshot of Wisconsin's 3rd Congressional District - Congressman Ron Kind

Population	712,440
Households	282,612
Median age	38.2
Median household income	\$46,641
Mean household income	\$59,409
Percent below poverty level (all ages)	14.3%
Unemployment rate (age 16 and over)	6.4%
Civilian labor participation rate (age 16 and over)	65.7%
High school graduate or higher (age 25 and over)	91.8%
Bachelor's degree or higher (age 25 and over)	23.2%



Economic Impact of All Installations on Wisconsin's 4th Congressional District

Wisconsin's 4th Congressional District is home to the 128th Air Refueling Wing and a number of Army National Guard facilities. While the district has the state's smallest geographic footprint, an estimated 723 military installation employees reside in the district with \$20.67 million in labor income (payroll). The 4th Congressional District also receives a notable level of estimated spending (\$26.7 million) from Wisconsin military installations conducting business with local establishments. Note that not all of the installation spending occurring in the 4th Congressional District arises from facilities located directly in the district, For instance, Fort McCoy is responsible for some these purchases, even though it is located across the state. Through direct, indirect and induced effects, Wisconsin's military installations support an estimated 1,055 jobs in the 4th Congressional District and contribute \$95.3 million in total economic activity.

Economic Impact Summary – 4th Congressional District

	Employment	Labor Income	Output
Direct Effect	723	\$20,670,000	\$47,360,000
Indirect and Induced Effects	332	\$20,280,000	\$47,940,000
Total Effect	1,055	\$40,950,000	\$95,300,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin's 4th Congressional District (Top 10 by Employment)

	Employment	Labor Income	Output
Maintenance and repair of nonresidential structures	34	\$2,960,000	\$5,540,000
Services to buildings and dwellings	26	\$650,000	\$1,510,000
Food services and drinking places	24	\$590,000	\$1,410,000
Construction of new nonresidential structures	23	\$1,960,000	\$3,950,000
Architectural, engineering, and related services	13	\$1,150,000	\$1,770,000
Hospitals	11	\$710,000	\$1,470,000
Investigation and security services	9	\$270,000	\$400,000
Retail Stores - Food and beverage	9	\$280,000	\$490,000
Scientific research and development services	9	\$900,000	\$1,700,000
Offices of physicians, dentists, and other health practitioners	8	\$870,000	\$1,250,000

Source: IMPLAN and Author's Calculations

Economic Snapshot of Wisconsin's 4th Congressional District - Congresswoman Gwen Moore

Population	715,059
Households	281,126
Median age	31.8
Median household income	\$37,782
Mean household income	\$52,531
Percent below poverty level (all ages)	26.5%
Unemployment rate (age 16 and over)	11.9%
Civilian labor participation rate (age 16 and over)	65.4%
High school graduate or higher (age 25 and over)	84.0%
Bachelor's degree or higher (age 25 and over)	25.9%



Economic Impact of All Installations on Wisconsin's 5th Congressional District

Almost 1,100 employees of Wisconsin's military installations reside in the 5th Congressional District. The Wisconsin Army National Guard accounts for most of these employees, but the 115th Fighter Wing and the 128th Air Refueling Wing each report over 100 personnel living in the district. While some installation spending and purchases occur in the district, the \$29.52 million in labor income (payroll) from employees are the district's primary source of economic impact from military installations. In total, direct, indirect and induced effects of military installation payroll and spending support an estimated 1,278 jobs in Wisconsin's 5th Congressional District. Installations also account for \$60.13 million in total economic activity.

Economic Impact Summary – 5th Congressional District

	Employment	Labor Income	Output
Direct Effect	1,077	\$29,520,000	\$34,500,000
Indirect and Induced Effects	201	\$9,320,000	\$25,630,000
Total Effect	1,278	\$38,840,000	\$60,130,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin's 5th Congressional District (Top 10 by Employment)

	Employment	Labor Income	Output
Food services and drinking places	23	\$460,000	\$1,270,000
Hospitals	11	\$720,000	\$1,520,000
Offices of physicians, dentists, and other health practitioners	9	\$860,000	\$1,310,000
Real estate establishments	8	\$90,000	\$1,240,000
Retail Stores - Food and beverage	8	\$230,000	\$410,000
Retail Stores - General merchandise	7	\$180,000	\$360,000
Nursing and residential care facilities	7	\$240,000	\$410,000
Wholesale trade businesses	6	\$500,000	\$1,210,000
Services to buildings and dwellings	6	\$160,000	\$350,000
Retail Stores - Motor vehicle and parts	5	\$270,000	\$450,000

Source: IMPLAN and Author's Calculations

Economic Snapshot of Wisconsin's 5th Congressional District - Congressman Jim Sensenbrenner

716,218
288,965
41.0
\$61,675
\$77,763
8.2%
5.5%
69.2%
93.4%
34.7%



Economic Impact of All Installations on Wisconsin's 6th Congressional District

The 6th Congressional district is home to an estimated 1,029 employees from Wisconsin's military installations, as well as a number of bricks and mortar Army National Guard facilities. Most installation employees residing in the district are personnel from the Wisconsin Army National Guard, but almost 150 personnel from the 115th Fighter Wing also reside in the 6th Congressional District. Additionally, the district includes a number of employees from the 128th Air Refueling Wing and Volk Field. The personnel from all facilities generate almost \$25.9 million in payroll (labor income) and are the district's primary source of economic impact arising from installations. The combined direct, indirect and induced effects of installation payroll and spending generates an estimated 1,204 jobs and accounts for \$50.82 million in total economic activity within Wisconsin's 6th Congressional District.

Economic Impact Summary – 6th Congressional District

	Employment	Labor Income	Output
Direct Effect	1,029	\$25,850,000	\$29,230,000
Indirect and Induced Effects	175	\$6,940,000	\$21,590,000
Total Effect	1,204	\$32,790,000	\$50,820,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin's 6th Congressional District (Top 10 by Employment)

	Employment	Labor Income	Output
Food services and drinking places	21	\$360,000	\$1,090,000
Offices of physicians, dentists, and other health practitioners	8	\$800,000	\$1,210,000
Hospitals	8	\$560,000	\$1,130,000
Nursing and residential care facilities	7	\$220,000	\$390,000
Retail Stores - Food and beverage	7	\$160,000	\$320,000
Real estate establishments	6	\$50,000	\$990,000
Retail Stores - General merchandise	6	\$170,000	\$330,000
Retail Stores - Motor vehicle and parts	4	\$210,000	\$360,000
Wholesale trade businesses	4	\$290,000	\$800,000
Maintenance and repair of nonresidential structures	4	\$260,000	\$570,000

Source: IMPLAN and Author's Calculations

Economic Snapshot of Wisconsin's 6th Congressional District - Congressman Tom Petri

Population	709,482
Households	285,816
Median age	41.4
Median household income	\$52,150
Mean household income	\$66,481
Percent below poverty level (all ages)	9.8%
Unemployment rate (age 16 and over)	6.7%
Civilian labor participation rate (age 16 and over)	66.4%
High school graduate or higher (age 25 and over)	91.2%
Bachelor's degree or higher (age 25 and over)	25.2%



Economic Impact of All Installations on Wisconsin's 7th Congressional District

Wisconsin's 7th Congressional District covers a large geographic area. The district is home to a number of Army National Guard facilities as well as 1,600 military installation employees. Most of these employees are attached to the Wisconsin Army National Guard, but a number of employees from Fort McCoy and the Wisconsin Air National Guard also reside in the district. The overall distribution of installation employees in the district is not surprising given that the southern portion of the 7th Congressional District is adjacent to both Fort McCoy and Volk Field. In total, the payroll and spending generated by Wisconsin's military installations support over 1,870 jobs and an estimated \$78.7 million in total economic activity (output) in the 7th Congressional District.

Economic Impact Summary – 7th Congressional District

	Employment	Labor Income	Output
Direct Effect	1,600	\$43,280,000	\$45,980,000
Indirect and Induced Effects	272	\$9,560,000	\$32,700,000
Total Effect	1,872	\$52,840,000	\$78,680,000

Source: IMPLAN and Author's Calculations

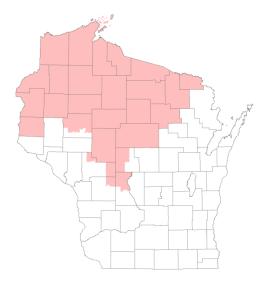
Impacts by Industry – Top 10 Industries Impacted in Wisconsin's 7th Congressional District (Top 10 by Employment)

	Employment	Labor Income	Output
Food services and drinking places	34	\$530,000	\$1,690,000
Hospitals	17	\$990,000	\$2,190,000
Nursing and residential care facilities	11	\$360,000	\$650,000
Offices of physicians, dentists, and other health practitioners	11	\$900,000	\$1,450,000
Retail Stores - General merchandise	11	\$290,000	\$570,000
Retail Stores - Food and beverage	10	\$250,000	\$500,000
Wholesale trade businesses	8	\$500,000	\$1,510,000
Real estate establishments	8	\$50,000	\$1,210,000
Retail Stores - Motor vehicle and parts	7	\$330,000	\$590,000
Individual and family services	7	\$120,000	\$200,000

Source: IMPLAN and Author's Calculations

Economic Snapshot of Wisconsin's 7th Congressional District - Congressman Sean Duffy

Population	711,054
Households	294,277
Median age	43.0
Median household income	\$47,118
Mean household income	\$60,617
Percent below poverty level (all ages)	9.8%
Unemployment rate (age 16 and over)	7.9%
Civilian labor participation rate (age 16 and over)	64.6%
High school graduate or higher (age 25 and over)	90.3%
Bachelor's degree or higher (age 25 and over)	20.7%



Economic Impact of All Installations on Wisconsin's 8th Congressional District

Wisconsin's 8th Congressional District includes a number of Army National Guard facilities and more than 1,000 Wisconsin National Guard personnel. Given the district's geographic separation from Wisconsin Air National Guard facilities, it is not surprising that almost 85 percent of the personnel residing in the district are attributed to the Wisconsin Army National Guard. Personnel from all installations generate \$25.4 million in labor income and are the primary source of military installation economic impact in the district. Through direct, indirect, and induced effects, payroll and spending from Wisconsin's military installations support an estimated 1,184 jobs and \$43.7 million in total economic activity within the 8th Congressional District.

Economic Impact Summary – 8th Congressional District

	Employment	Labor Income	Output
Direct Effect	1,034	\$24,050,000	\$25,430,000
Indirect and Induced Effects	150	\$6,020,000	\$18,220,000
Total Effect	1,184	\$30,070,000	\$43,650,000

Source: IMPLAN and Author's Calculations

Impacts by Industry – Top 10 Industries Impacted in Wisconsin's 8th Congressional District (Top 10 by Employment)

	Employment	Labor Income	Output
Food services and drinking places	20	\$350,000	\$1,030,000
Hospitals	9	\$620,000	\$1,260,000
Offices of physicians, dentists, and other health practitioners	8	\$740,000	\$1,110,000
Nursing and residential care facilities	6	\$200,000	\$350,000
Retail Stores - General merchandise	6	\$150,000	\$300,000
Retail Stores - Food and beverage	6	\$150,000	\$280,000
Real estate establishments	5	\$50,000	\$840,000
Wholesale trade businesses	5	\$360,000	\$960,000
Retail Stores - Motor vehicle and parts	4	\$190,000	\$320,000
Retail Stores - Miscellaneous	4	\$50,000	\$120,000

Source: IMPLAN and Author's Calculations

Economic Snapshot of Wisconsin's 8th Congressional District - Congressman Reid Ribble

Population	719,292
Households	283,870
Median age	39.9
Median household income	\$51,900
Mean household income	\$67,647
Percent below poverty level (all ages)	10.3%
Unemployment rate (age 16 and over)	6.1%
Civilian labor participation rate (age 16 and over)	68.2%
High school graduate or higher (age 25 and over)	91.3%
Bachelor's degree or higher (age 25 and over)	23.5%



Summary

Wisconsin's military installations generate local economic impacts through employee payroll, purchases made by facilities, and visitor spending. When combined, the state's five installations directly account for over 13,600 employees and generate \$396.4 million in payroll. An estimated 93% of installation employees reside in Wisconsin, allowing the state's communities to retain a significant share of their earnings. Wisconsin's installations also generate a total of \$287.4 million in purchases, with an estimated \$137.5 million attributed to in-state spending.

When combined with indirect and induced effects, Wisconsin's military installations support an estimated 16,776 jobs and generate almost \$1.04 billion in total economic activity within the state's borders. These estimates should be viewed conservatively as the tuition assistance provided by the Wisconsin National Guard and visitor spending generated by several facilities are not included in these impact figures. While some of this activity is concentrated around individual facilities, the economic impacts of installations influence businesses and communities in every region and Congressional District in the state. These impacts also are spread across many economic sectors, including hospitality, health care, retail, construction, real estate and others.

The combined economic impact of Wisconsin's military installations may be smaller than some of the state's legacy industries. However, it is important to note installations and their personnel also provide other fiscal benefits to local communities that are not measured here. Furthermore, installations also represent an important means of returning federal dollars taxed away from the state's residents. This final consideration is important given Wisconsin's long-standing inequity in terms of military personnel and facility spending relative to other states.

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