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**The Economic Impact  
of the Vermont Air and Army National Guard Bases**

Prepared for the Greater Burlington Industrial Corporation

by  
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## **Executive Summary Key Points**

### **Vermont Air National Guard**

- Has more than 1,000 people on its payroll with wages of \$41.4 million
- Employees receive \$15.6 million in benefits
- Total compensation package is \$57 million
- Nearly all wages and benefits are paid for by the federal government
- Past capital expenditures average \$3.3 million annually
- Future capital expenditures with the arrival of the F-35 are estimated to be \$100 million over next five years
- Other base expenditures paid to local businesses are \$1.51 million annually
- Air Guard expenditures for personnel devoted to fire and safety equipment used by both military and commercial aircraft are \$2.6 million annually
- Capital fire and safety equipment purchased and maintained by the Air Guard but used by both military and commercial aircraft cost \$2.7 million and are leased to Burlington International Airport for \$1 per year
- Absent the presence of the Air Guard at Burlington International Airport the airport would have to pay for the capital cost, maintenance, and operations of fire and safety equipment 24/7 at its own expense

### **Vermont Army National Guard**

- Has nearly 2,600 people on its payroll with wages of \$66 million
- Employees receive \$25.4 million in benefits
- Total compensation package is \$91.4 million
- Nearly all wages and benefits are paid for by the federal government
- Past capital expenditures average \$5 million annually
- Future capital funding request is for \$230 million over next five years
- Other base expenditures paid to local businesses are \$3.75 million annually

### **Combined Impact**

- With more than 3,600 people on its payroll, the Air and Army Guard employs as many people as GlobalFoundries and more than Keurig Green Mountain or Dealer.com
- The payroll of the two organizations combined is more than \$107 million, and employees receive an additional \$41 million in benefits

## **I. Introduction**

More than one-half million people use the Burlington International Airport each year, making it an important economic asset for the Burlington area and for the state as a whole. The airport enhances the local and regional economy in a number of ways. One is simply the level of employment at the airport, an issue that this study does not address. The airport makes it easier for local businesses to interact with their customers and suppliers by providing easy access to cities across the nation and around the world. It also makes it easier for tourists and others to travel to Vermont from far-away locations and for Vermonters to visit friends and family and travel to distant locations.

The airport is also home to a significant Air National Guard presence, and to a smaller extent, and Army National Guard. The Army Guard has a much larger presence outside of the airport, including a large base in Chittenden County. This report measures and discusses the impacts that the two Guard units have on the regional and state economy.

The Vermont Air National Guard was established in the immediate post-World War II period and has been located at the Burlington Airport since 1946. The Army National Guard can trace its lineage back to Ethan Allen during the American Revolution. Indeed, the nickname of the Air National Guard, The Green Mountain Boys, is based on the nickname of Ethan Allen's troops and the Army Guard is based at Fort Ethan Allen.

## **II. How the National Guard Serves as an Economic Driver for Chittenden County and Vermont**

The economic activity in any geographic area, such as a town or county or a state can be divided into two parts. The first part is one where economic activity occurs for the benefit of the people living in the area. People eat out at restaurants and other people own and work at those restaurants. Other people work as attorneys, accountants, or architects serving local residents' needs.

The second division is that part of an economy that produces goods and services for sale to people outside of the local area—people living in other states or nations. Vermont companies produce many products that are sold to people living outside of the state's borders, such as coffee pods produced at Keurig Green Mountain, computer chips at GlobalFoundries, software at dealer.com, and many others. Of course, many organizations serve both local residents and people living elsewhere. Out-of-state skiers come to Vermont to ski and snowboard but Vermonters ski as well. Those tourists eat at the same restaurants that Vermonters do and shop at stores that are frequented by locals.

Vermonters buy products and services produced by people and businesses outside of the state so those organizations within Vermont's borders that sell goods and services to people outside of the state are important to balance the outflow of money. Essentially, we can think of Vermont as

a country that imports and exports goods and services to and from people living outside of our borders. We buy things that other people can produce more cheaply than we can and we sell goods and services to people outside of Vermont that we can produce more cheaply, or provide a higher quality service or experience, than they can obtain elsewhere.

Although this discussion has focused on the production of goods and services that we sell to others, there are other ways financial resources come into Vermont. One way is via federal dollars that flow into the state. A large amount of this comes from the federal government to state government for a variety of programs. An additional amount goes directly to individuals via their Social Security checks. Another is through the provision of federal government services that are located in Vermont, especially the Army and Air National Guard.

### III. Employment

The Guard employs a variety of personnel. Some are civilian but most are military personnel. These include full-time employees and part-time employees, the latter including military personnel who have other jobs and are what some call “weekend warriors”—members of the Guard who train on weekends and for longer periods of time during the year.

Table 1			
<b>2017 Guard Employment</b>			
	<u>Air Guard</u>	<u>Army Guard</u>	<u>Total</u>
Full-time	463	580	1,043
Part-time	586	2,005	2,591
Total	1,049	2,585	3,634

Table 1 shows that the Air Guard has 463 full-time workers and another 586 part-time workers on their payroll for a total of 1,049 employees. The Army Guard is larger, with a payroll of 580 full-time workers and 2,005 part-time workers. The conventional way of

measuring employees by the Vermont Department of Labor is to count all part-time and full-time employees of an organization. Using this method, there are a total of 3,634 people on the payroll of the Air and Army Guard statewide. Since the Air Guard is in South Burlington and most Army Guard personnel are affiliated with the base at Fort Ethan Allen in Colchester, that makes the Guard one of the largest employers in Chittenden County, accounting for about three percent of the county’s total employment.<sup>1</sup> That puts the Guard as an employer as the same size as GlobalFoundries and larger than companies such as Dealer.com and Keurig Green Mountain.

Although most Guard employees are Vermont residents, many live out of state and travel to Vermont to participate in exercises.<sup>2</sup> Table 2 shows the state of residence of Guard employees who were employed at any time in calendar year 2017. More than one-quarter of the Guard

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<sup>1</sup> As military employees, members of the Guard are not counted in the standard payroll employment counts used by the Vermont Department of Labor.

<sup>2</sup> The standard method of analyzing the location of employment by the U.S. and Vermont Department of Labor is to measure employment at the location of the employer, not the residential location of the employee.

employees live outside of Vermont and they come from 34 states and Canada. When they stay in Vermont, they stay at hotels, eat at restaurants, and spend money at local businesses, supporting the local economy through that spending.

	<u>Air Guard</u>	<u>Army Guard</u>	<u>Total</u>
Vermont	794	1,848	2,642
New York	136	148	284
New Hampshire	35	176	211
Massachusetts	15	146	161
Maine	11	25	36
Other	69	209	278
Total	1,060	2,552	3,612

Some Guard members who are Vermont residents live relatively close to the Army and Air bases, with about twenty percent residing in Chittenden County. But members of the Guard live in every county in Vermont.

U.S. government, which means their incomes represent a source of export earnings for Vermont. In this regard, the Guard acts like a manufacturer that exports goods from Vermont to customers outside of the state or like a ski resort or tourist attraction that brings people, and their spending, into the state.

Members of the Guard earn salaries that are paid for by the

The total salaries earned by members of the Air and Army Guard combined comes to \$107.3 million in 2017. Members also receive significant benefits, including health care, retirement,

	<u>Air Guard</u>	<u>Army Guard</u>	<u>Total</u>
Salary	\$41.4	\$66.0	\$107.3
Benefits	\$15.6	\$25.4	\$41.0
Total	\$57.0	\$91.4	\$148.3

housing and food allowances, and others, worth an additional \$41 million for a total wage and benefit package of \$148.3 million. That wage bill alone, not including benefits, is as large as the payroll in Chittenden County's banking sector and thirty percent larger

than the county's food manufacturing sector's payroll.

#### IV. Capital and Spending

Similar to any organization, the Air and Army National Guards have to maintain and improve their infrastructure. The Air Guard has spent approximately \$3.3 million each year over the past ten years on capital expenditure projects and spends \$500,000 per year to maintain its existing infrastructure. In doing this, it purchases supplies from local businesses and hires contractors and subcontractors to do this work.

	<u>Army Guard</u>	<u>Air Guard</u>	<u>Total</u>
Capital Expenditures/year	\$5.0 million	\$3.8 million	\$8.8 million
Base Operating Expenses/year	\$3.75 million	\$1.51 million	\$5.3 million
Total	\$8.75 million	\$5.31 million	\$14.1 million

As the Air Guard prepares for the arrival of the new aircraft, its leadership anticipates capital expenditures of approximately \$100 million over the next five years to accommodate the new aircraft. Although some of that may be spent on out-of-state contractors with specialized skills, historically they employ local subcontractors. This represents spending in the local economy that will employ civilian workers and lead to increased purchases of products and services from local businesses.

The Air Guard also spends money locally on operational support of the base itself. This includes civilian workers, spending on miscellaneous materials and services, government contracts with private sector firms, utilities, and the cost to house military personnel who attend weekend drills and exercises. The Guard estimates its annual expenditures on these items at \$1.51 million.

	<u>Army Guard</u>	<u>Air Guard</u>	<u>Total</u>
Capital Expenditures/year	\$46 million	\$20 million	\$66 million
Base Operating Expenses/year	\$3.75 million	\$1.51 million	\$5.2 million
Total	\$49.75 million	\$21.85 million	\$71.6 million

The Army Guard has similar types of expenditures at its base at the airport and at Fort Ethan Allen. In the past, its capital expenditures have averaged \$5 million per year. The base has requested \$230 million in capital expenditures over the next five years. If this funding is approved and obtained, that means an average of \$46 million of capital expenditures per year, nearly all of which will be done by local businesses and contractors. The Army also annually spends \$3.75 million to maintain and support its base, including contracts, utilities, and other operational expenditures.

## V. Burlington International Airport

The Air National Guard base at the Burlington International Airport provides economic benefits to the civilian portion of the airport. Its facilities are separate from the commercial airport activities but the two share use of the airport runways. The Federal Aviation Administration regulates airport safety requirements and part of those regulations deal with required firefighting and emergency equipment. The Air Guard is also required to have safety equipment and it pays for the capital and operating cost of the equipment. Table 6 shows the equipment and estimated cost of each.

Table 6		
<b>Fire and Safety Equipment</b>		
<u>Use</u>	<u>Model</u>	<u>Estimated Cost</u>
Aircraft Rescue and Fire Fighting Quick Response	P-19/1986	\$700,000
Aircraft Rescue and Fire Fighting Quick Response	P-34/2015	\$225,000
Aircraft Rescue and Fire Fighting Quick Response	P-19R	\$600,000
Aircraft Rescue and Fire Fighting Quick Response	P-34	\$225,000
Rescue	P-32/2004	\$285,000
Rescue Pumper	P-22/2011	\$382,000
Water Tanker	P-26/2011	\$294,000
<b>Total</b>		<b>\$2,711,000</b>

This equipment is also required for the commercial portion of the airport, which takes advantage of the Air National Guard facilities. That is, this equipment, which is paid for and supported by the Guard, is used by the airport at a cost of \$1 per year. That means the airport itself did not have to lay out the \$2.7 million cost of the equipment or the maintenance of the equipment, or to replace the equipment when it needs replacing. Air Guard personnel staff the equipment 24 hours a day and 29 people are required for that staffing, which currently costs \$2.6 million per year.

In the absence of the Air Guard base, the Burlington International Airport would have to pay the entire cost of the equipment, maintenance, and staffing of the firefighting and rescue equipment. Based on federal regulations, that would require the Airport to cut back on other things it does. The airport could not increase its landing fees, its major source of revenue, to fund this budget item, which would most likely be well in excess of \$3 million annually.

## Conclusion

The Vermont Air and Army National Guard are significant economic engines in the Chittenden County and Vermont economies. Their total employment of more than 3,600 people amounts to more than one percent of the total payroll employment in Vermont, if members of the military were counted in the official employment numbers.

The Guard also represents an important part of Vermont's export economy because it brings in financial capital from outside the state. Nearly all of the \$148 million paid to employees in salaries and benefits as well as other operating expenditures comes from the federal government. As with any other Vermont employee, a portion of Guard employees' wages are spent locally and help support local businesses. The Guard also spends at least \$15 million annually in payments to local businesses for support, operations, and maintenance activities to support their mission.

The presence of the Air Guard at the Burlington International Airport provides a significant cross subsidy to the commercial operations of the Airport by purchasing, maintaining, and operating the fire and safety equipment required by FAA regulations. If the Airport had to pay for that capital equipment, it would have spent \$2.7 million and it would cost \$2.6 million annually to operate and maintain it. Those costs would come at the expense of other activities and amenities that the airport now offers its patrons, which would make the airport a less desirable airport and possibly be one with fewer and more expensive flights.