

***The Economic Impact of the S.C. Military Community: 2019 Update***

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***Summary Overview***

The purpose of this memo is to provide a supplemental analysis to the April 2017 Moore School of Business report that documented the economic impact of the military community on South Carolina.<sup>1</sup> Specifically, since the original release of this report two years ago, new data have become available on the federal TRICARE Military Health Care Program, which facilitates a significant volume of South Carolina health care expenditures related to active duty & reserve personnel, military veterans, and military family members. These ongoing expenditures represent a regular injection of funding into the state’s economy that increases overall economic activity both directly and through additional rounds of spending due to various economic multiplier effects. The new supplemental analysis detailed in this memo generates estimates of the total economic impact associated with the TRICARE program. ***Because the economic activity generated through TRICARE was not accounted for in the April 2017 report, all estimates reported in this memo should be considered as additional impacts of the South Carolina military community that extend beyond the \$24.1 billion as reported in April 2017.***

Through a detailed examination of TRICARE-related spending in South Carolina, including data on all provider and beneficiary claims broken down by age group, this analysis finds that the annual economic impact of these expenditures totals approximately \$1.2 billion in economic output. This is associated with 9,672 jobs and \$552.8 million in labor income for South Carolinians. ***When added to the previous estimates from the April 2017 report, this brings the total economic impact of South Carolina’s military community to \$25.3 billion annually.*** Table 1 summarizes these results.

**Table 1 – Total Annual Economic Impact of the S.C. Military Community**

	<b>Employment</b>	<b>Labor Income</b>	<b>Economic Output</b>
Total Economic Impact of S.C. Military Community <i>Estimated: April 2017</i>	181,847	\$9,947,152,445	\$24,090,432,079
Total Economic Impact of TRICARE <i>Estimated: June 2019</i>	9,672	\$552,774,012	\$1,230,029,496
<b>Total Economic Impact of S.C. Military Community <i>Estimated: June 2019</i></b>	<b>191,519</b>	<b>\$10,499,926,457</b>	<b>\$25,320,461,575</b>

<sup>1</sup> This report, prepared by the Moore School of Business’ Division of Research, was titled *The Economic Impact of South Carolina’s Military Community: A Statewide and Regional Analysis* and was completed in partnership with the South Carolina Military Base Task Force.

## **Methodology**

All data on South Carolina TRICARE-related expenditures were provided by the U.S. Military Health System via the South Carolina Department of Health and Human Services (SCDHHS).<sup>2</sup> Estimates were provided detailing all benefits and services paid for on behalf of TRICARE members and families residing in South Carolina by age for calendar years 2016 through 2018. Table 2 displays a summary of these estimates as well as the 3-year average. Because of the year-to-year variance in TRICARE expenditures, all economic impact estimates calculated in this analysis use these 3-year averages in order to provide a more accurate assessment of the average annual economic impact.

**Table 2 – TRICARE Claims Paid in South Carolina by Calendar Year: 2016-2018**

<b>Expenditure Category</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>3-Year Avg.</b>
Inpatient	\$112,603,882	\$110,398,293	\$106,818,862	\$109,940,346
Professional/Outpatient	\$320,216,499	\$341,833,627	\$346,190,423	\$336,080,183
Pharmacy	\$216,682,012	\$228,524,207	\$219,939,506	\$221,715,241
<b>Total</b>	<b>\$649,502,392</b>	<b>\$680,756,126</b>	<b>\$672,948,791</b>	<b>\$667,735,770</b>

Between 2016 and 2018, the average annual benefits and services paid for on behalf of South Carolina TRICARE members and families totaled approximately \$667.7 million. As Table 2 shows, this consists of inpatient care, professional/outpatient care, and pharmaceutical-related purchases (e.g., prescribed medications). South Carolinians eligible for TRICARE include active duty, active duty family, veteran (retired) members, and veteran family members.

In addition to this \$667.7 million in new spending on healthcare-related purchases in South Carolina, this new economic activity also generates additional rounds of local spending, known more generally as economic multiplier effects. These multiplier effects can be broken down into a supply chain multiplier effect and a consumer spending multiplier effect.

When a healthcare provider purchases goods or services from one of its vendors, this vendor experiences an increase in demand. To satisfy this demand, it must then hire more workers and increase purchases from its own suppliers. These suppliers then experience an increase in demand, and so on. Thus, the initial dollars that are spent by the healthcare providers are re-spent over and over again through a local supplier network. The resulting total increase in demand from this process is known as the supply chain multiplier effect. A similar effect occurs when the healthcare providers and their suppliers hire new workers to satisfy an increase in demand. The new workers spend part of their incomes in the local economy, thereby increasing the demand for suppliers for a variety of goods and services (such as food, entertainment, or housing). Once again, the initial payroll dollars are re-spent multiple times in the region. This is known as the consumer spending multiplier

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<sup>2</sup> Original Data Source: TRICARE Health Plan-Decision Support; M2, TRICARE Encounter Data Institutional/Non-Institutional; extracted 5/7/2019 & 5/13/2019 by SCDHHS.

effect. Collectively, these subsequent rounds of spending makes the ultimate impact of TRICARE-related expenditures in South Carolina far greater and extends it to a wider-range of industries in the state's economy.

Through the use of a highly customized regional input-output model for the state of South Carolina, local supply chain and consumer spending patterns can be determined that allow for the estimation of these multiplier effects.<sup>3</sup> The input-output model estimates economic impacts in terms of three specific measures: economic output, employment, and labor income. Economic output reflects the dollar value of all final goods and services that can be attributed (directly or indirectly) to TRICARE-related expenditures. It can also be thought of as an aggregate measure of total spending activity that results from an initial direct expenditure. Because it includes all spending by consumers and businesses on both goods and services, it is an all-inclusive measure of the impact on total economic activity. Employment measures the total number of full-time equivalent positions associated with total economic output. Total labor income reflects all wages, salaries, and benefits associated with total employment estimates.

### ***Additional Recent Expansions of South Carolina's Military Community***

Since the release of the April 2017 report, the South Carolina military community has added two new components that have further expanded its impact on South Carolina. These include a new MQ-9 Reaper Support unit established at Shaw Air Force Base and a new F-16 production line located at Lockheed Martin in Greenville.

#### ***MQ-9 Reaper Support at Shaw Air Force Base***

As of 2018, Shaw Air Force Base is the home to a new MQ-9 Reaper Support unit – an operations and support group for MQ-9 Reaper/Predator B remotely piloted aircraft. This group of approximately 300 Airmen is responsible for the ongoing operation and expansion of the MQ-9 Reaper program, including conducting operations with these aircraft at different locations – both domestically and overseas. The dollar volume of investment in Shaw's infrastructure to support the MQ-9 group is \$15 million since April 2017, which does not include the ongoing local support contracts that introduces even more spending into the local economy. In the coming months, fully-manned squadrons are also likely to be incorporated and by January 2020 Phase 3 of the MILCON project is scheduled to break ground. Each of these elements will further increase the economic impact of Shaw Air Force Base.

#### ***Lockheed Martin F-16 Production Line***

Beginning in the second half of 2019, Lockheed Martin will begin manufacturing F-16 Block 70 aircraft in Greenville, South Carolina. This production activity follows on the heels of a \$25 million investment for a newly refurbished hanger and all of

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<sup>3</sup> All economic multiplier effects were generated using a combination of proprietary regional econometric models developed by the Division of Research and the *IMPLAN* input-output modeling software.

the supporting infrastructure and materials required for this new production line. This new production activity is also expected to create about 32 new jobs at Lockheed Martin by the end of 2019. Such a production expansion represents a sizable increase in the total economic activity associated with South Carolina's military community as well as a significant boost to the economy of the Upstate.