



Regional Economic Analysis Laboratory

THE ECONOMIC & FISCAL IMPACT OF
THE CITADEL MILITARY COLLEGE
FY2014-2016 with projections to 2020

Robert T. Carey, Ph.D.
carey2@clemson.edu

February 28, 2018

REGIONAL ECONOMIC ANALYSIS LABORATORY



Strom Thurmond Institute
Brackett Hall, Suite 321
Clemson University
Clemson, SC 29634-0125

Phone: 864-656-4700
<http://cu-real.com>

The views presented here are those of the author(s) and are not necessarily those of the Strom Thurmond Institute (STI) or of Clemson University. Nothing in this report should be construed to indicate endorsement by STI or by Clemson University. STI is the university's premiere public policy research institute, serving business, government, and community constituents, providing objective research and outreach in economic and regional development areas. STI is a nonprofit, nonpartisan, tax-exempt policy research organization and is a unit of the Division of Collaborative Academic Services (DCAS), Clemson University College of Behavioral, Social and Health Sciences.

Table of Contents

Executive Summary..... iv
I. Introduction..... 1
II. Methodology and Assumptions..... 1
III. Model Inputs..... 2
IV. Findings..... 3
V. Conclusion..... 6
Appendix..... 7

Executive Summary

The Citadel, South Carolina’s military college, is a significant positive contributor to the Greater Charleston economy and to local government revenue in the region. The college’s economic and fiscal impact was estimated based upon operational spending (including wages and salaries), output by outsourced activities, spending by students in the local economy, and spending by visitors to the Citadel for admissions visits and sporting events. The analysis covers the fiscal years ending 2014-2016 and projects for the years 2017-2020. This analysis does not include the amenity (“quality of life”) value of the college on the surrounding area or the financial or greater social contributions of Citadel alumni.

The Citadel enrolled an average of 2,322 cadets and 1,243 graduate and evening undergraduate students between 2014-2016. The college employed an average of 650 faculty and staff over this period. Economic impacts include direct, indirect, and induced effects and are stated in terms of the impact on employment, total compensation (wages and salaries), output (total sales), and net state and local government revenue (total revenue minus total expenditures). The economic impact analysis was carried out using the REMI PI⁺ modeling engine; fiscal modeling was done using the Regional Economic Analysis Laboratory’s Fiscal Impact Analysis Tool. A summary of findings follows:

- Citadel cadets, though less at liberty to leave campus as compared to students at other institutions, spend in the local economy and therefore generate a positive economic impact. Graduate and evening students, who live off-campus and are not limited in their off-campus activity, also spend in the local economy. Consumer spending by all students generated an estimated 80 jobs in Charleston County in the years 2014-2016 (averaged over the three years) and approximately \$9.4 million per year in total sales. Student spending positively impacted local government revenues in the county by a net of approximately \$439,000 per year.
- Spending by admissions visitors to campus generated an economic impact to Charleston County of approximately \$3.8 million per year between 2014-2016, creating an estimated 41 jobs. Including effects on hospitality and local accommodations taxes, the estimated net impact on local government revenue averaged \$40,000 per year.
- Visitors to the Citadel for sporting events created an estimated 386 jobs in Charleston County over the years 2014-2016 and generated an average total impact of \$34.3 million per year in total sales and approximately \$422,000 per year in net local government revenue.
- The total estimated economic impact of the Citadel on Charleston County over the years 2014-2016 was 2,449 jobs (averaged over the three years) and \$272.3 million per year in total sales. The total impact on wages and salaries in the county was approximately \$133 million per year. Economic activity associated with the college generated approximately \$3 million in local government revenue per year.
- The Citadel also impacted surrounding counties through indirect and induced effects, including Berkeley and Dorchester counties, which make up the remainder of the Charleston Metropolitan Statistical Area (MSA). The estimated impact on Berkeley County in 2014-2016 was approximately 164 jobs and \$427,000 in net local government revenue per year. Dorchester benefited by approximately 72 jobs and \$596,000 in net local government revenue per year. The estimated economic impact of the Citadel statewide was 2,739 jobs and \$308.2 million per year in total sales. Wages and salaries in the state were impacted by a total of approximately \$144.9 million per year. State government revenues were positively impacted by a net of approximately \$8 million per year while state appropriations averaged \$9.9 million over this period; this constituted an average return on tax investment of approximately 80.8 percent.

I. Introduction

The following is an assessment of the economic and fiscal impact of the Citadel on Charleston County, the remainder of the Charleston Metropolitan Statistical Area (MSA), which includes Berkeley and Dorchester counties, and the state of South Carolina as a whole.

The Citadel is South Carolina's military college, founded in 1842. The college, located in the northwestern quadrant of the city peninsula in Charleston, South Carolina, enrolled 2,322 cadets and 1,243 graduate and evening undergraduate students on average per year during the fiscal years ending 2014-2017, and employed 650 faculty and staff.

This analysis estimates the impact of historical Citadel operational and capital spending during the years 2014-2016 and of that projected for years 2017-2020. The analysis also includes the impact of spending by members of the Corps of Cadets, graduate and evening undergraduate students, and visitors to the Citadel for both campus visits and for sporting events.

II. Methodology and Assumptions

To estimate the economic impact of the college, the Regional Economic Analysis Laboratory utilized the Regional Economic Models, Inc. (REMI) PI⁺ modeling engine along with our own Fiscal Impact Analysis Tool. REMI utilizes input-output (IO) modeling as well as computable general equilibrium (CGE) and econometric modeling to project a baseline of economic activity assuming *ceteris paribus* except for normal economic growth. Shocks to the economy can then be modeled in terms of departures from that baseline, including direct, indirect, and induced effects.

The REMI model is a new economic geography (NEG) model, taking into account trade flows between regions based upon availability of labor and natural resources and the efficacy of transporting goods and services to and from the region. The model can project economic impacts over multiple years, allowing for intertemporal effects, i.e., "spillover" effects from one year to the next.

Outputs from the REMI model are used with the Fiscal Impact Analysis Tool in order to project the net

fiscal impact that the modeled economic shocks will have on state and local (county and municipal) governments in the study region. The tool is calibrated using U.S. Census of Governments data to estimate changes in revenue and expenditures for state and local governments based upon changes in metrics generated by the REMI model. Net fiscal impact is defined as the total revenue impact minus the total impact on expenditures.

Impacts are reported using the following metrics. All dollar amounts are stated in constant 2015 dollars:

- *Employment* is the number of jobs or job equivalents created within the study region as a result of college activities through direct, indirect, and induced effects.

Direct employment are those jobs held by Citadel employees. Indirect employment effects are the jobs created at first and second tier suppliers located within the study region, while induced employment effects are jobs created by consumer spending of wage income generated by direct and indirect effects.

- *Total compensation* is the impact on aggregated wage income (including fringes) for all workers in the study region.
- *Output, or total sales*, is the dollar value of all goods and services produced within the region within a given year.
- *Net local government revenue*: Economic activity impacts local government revenue; this analysis estimates revenue impact from all revenue sources, including taxes, licensing, fees, and intergovernmental transfer. However, economic activity also creates demands on local government services, including public safety, infrastructure, and so forth; therefore, this fiscal analysis also projects the impact on local government expenditures. The estimated fiscal impact is therefore reported as revenue net of expenses. This value is aggregated for all local governments (county and municipal) within the county.

- *Net state government revenue* is the impact on revenue collected by state government from all sources, net of expenses.

Note on Differences from Previous Analyses

Earlier economic and fiscal impact analyses were conducted by the Laboratory, most recently in 2011. These earlier analyses utilized the IO capabilities of the REDYN modeling engine, which is no longer available for use by the Laboratory. A side-by-side comparison between the economic impact estimates presented in this report with those in the earlier analyses would reveal somewhat different results.

Many of these differences are the result of the different assumptions associated with IO and CGE models; primary among these is the assumption of fixed factor prices held by IO models; this assumption is unnecessary when using CGE models. Because REMI is a CGE model, it includes effects from changes in the price of labor (wages) in response to changing demand for labor; the previous reports did not include these effects due to the nature of the model used. Nonetheless, the results reported here, while different, are overall quite consistent with those in the previous studies.

Finally, the fiscal model used in the previous reports was internal to the REDYN model, whereas the Fiscal Impact Analysis Tool utilized in this report is our own. Our fiscal tool is specifically calibrated to South Carolina state and local government revenue and expenditures over the past two U.S. Censuses of Governments. The result is a much more fine-tuned and conservative fiscal impact estimate in the current study.

III. Model Inputs

Data for the analysis were obtained from the Citadel. Data included total operational spending (including wages, salaries, and fringes), outsourced activities, capital investment in buildings and equipment, student enrollment according to place of origin, and number of visitors, including visits to campus and attendees of sporting events. A summary of these data are provided in Table 1.

Table 1. Model Inputs

Category	Units	2014	2015	2016	2017*	2018*	2019*	2020*
Operational Expenditures **	Thousands of Fixed (2015) Dollars	\$ 102,912	\$ 108,097	\$ 112,875	\$ 116,262	\$ 119,749	\$ 123,342	\$ 127,042
Total Outsourced Activities	Thousands of Fixed (2015) Dollars	\$ 13,045	\$ 13,243	\$ 12,867	\$ 13,326	\$ 13,593	\$ 13,864	\$ 14,142
Capital Exp. - Construction	Thousands of Fixed (2015) Dollars	\$ 4,365	\$ 5,218	\$ 7,403	\$ -	\$ -	\$ -	\$ -
Capital Exp. - Equipment	Thousands of Fixed (2015) Dollars	\$ 841	\$ 1,317	\$ 1,179	\$ -	\$ -	\$ -	\$ -
Cadet Enrollment ***	Individuals	2,352	2,291	2,323	2,323	2,323	2,323	2,323
In-State but Out-of-BCD		878	909	950	950	950	950	950
Out-of-State		1,118	1,023	927	927	927	927	927
Grad/Evening Enrollment ***	Individuals	1,246	1,301	1,183	1,279	1,315	1,351	1,388
In-State but Out-of-BCD		17	17	17	-	17	27	37
Out-of-State		22	17	17	3	20	29	39
Campus Visits	Individuals	9,215	9,519	8,911	8,911	8,911	8,911	8,911
Out-of-Area (Estimated)		5,668	6,582	4,173	4,173	4,173	4,173	4,173
Sporting Events Visits	Individuals	99,515	105,752	114,711	117,005	119,345	121,732	124,166
Out-of-Area		52,743	56,049	59,650	63,183	78,768	67,683	69,036

* Projected.
 ** Including wages and salaries; excluding outsourced activities.
 *** 2017-2020 enrollment projections provided by the Citadel.

The primary student population at the Citadel, known as the Corps of Cadets, is different from that at other colleges and universities; cadets are not at liberty to come and go from campus at will as at other institutions. Also, tuition and fees at the Citadel are much more inclusive than at other institutions; fees include uniforms, dining, and so forth. However, from time to time, cadets are allowed off campus, during which time they spend their incomes in the local economy. In order to estimate the impact of this spending, spending per cadet was based upon Citadel estimates of approximately \$6,000 to \$8,000 per year. In the interest of conservatism, the lower of these numbers, adjusted for inflation, was used in the model.

In addition to the Corps of Cadets, the Citadel enrolls graduate and evening undergraduate students. These students live off-campus and are not subject to the restrictions in liberty that apply to cadets. As such, their spending is assumed to reflect spending patterns more typical of students at other colleges or universities.

Only spending by students not originating from within the MSA are counted in the economic impact analysis, insofar as “local” students’ spending may already be endogenous to the region. In other words, there is some probability that “local” students, failing admission to the Citadel, would have remained in the area, perhaps attending other colleges in the region, thereby keeping their spending local independent of their status with respect to the Citadel. As such, and again in the interest of building an appropriately conservative model, the Citadel is not credited with any spending in the local economy by students originating from within the MSA. For the state-level model, only students originating from out of state are counted. Estimated direct spending by all students is presented in Table 2.

Visitor spending was estimated using admissions visit and sporting event counts provided by the Citadel. Only visitors originating from outside of the study region were counted to-

ward the economic impact. The Citadel athletic department provided zip code data from ticket sales in order to determine the number of sporting event visitors originating from outside of the region. The number of campus visits originating from out-of-region was estimated based upon the proportion of admissions applications originating from out-of-state. As with student spending, this yields a somewhat conservative estimate of spending.

Spending per visitor was estimated using South Carolina Department of Parks, Recreation and Tourism (SCPRT) data from the 2015 Tourism Economic Impact Model (TEIM). SCPRT estimates traveler spending by spending category based upon survey data; these proportions were applied to Citadel visitors, building upon room rates for hotels located within a two-mile radius of the campus. Visitors were assumed to lodge one night in Charleston and were assumed two persons per room. These direct visitor spending estimates are presented in Table 3.

IV. Findings

Economic and fiscal impact estimates for each of the following models are presented in detail in the Appendix.

A. Operations

Citadel operational spending, excluding outsourced activities and including wages and salaries for its 650 employees, created an estimated average (i.e. averaged over the three years) of 1,679 jobs in Charleston County between the fiscal years ending 2014-2016. The college is projected to generate an employment impact of approximately 1,808 jobs in the county during the years 2017-2020. Total impact on output (total sales) in the county averaged approximately \$200 million per year between 2014-2016 and is projected to average \$226 million per year between 2017-2020.

B. Outsourced Activities

Activities outsourced by the Citadel include sales by food services, the campus book

Table 2. Estimated Direct Student Spending

Category	Units	2014	2015	2016	2017	2018	2019	2020
All Cadets, excluding BCD	Thousands of Fixed (2015) Dollars	\$ 13,014	\$ 12,597	\$ 12,238	\$ 12,238	\$ 12,238	\$ 12,238	\$ 12,238
Out-of-State Cadets only	Thousands of Fixed (2015) Dollars	\$ 7,290	\$ 6,670	\$ 6,044	\$ 6,044	\$ 6,044	\$ 6,044	\$ 6,044
Grad/Evening Students excl. BCD	Thousands of Fixed (2015) Dollars	\$ 143	\$ 143	\$ 143	\$ -	\$ 143	\$ 227	\$ 311
Out-of-State Grad/Evening Students	Thousands of Fixed (2015) Dollars	\$ 185	\$ 143	\$ 143	\$ 25	\$ 168	\$ 244	\$ 327

store, and other vendors. These are estimated to create an estimated total of over 200 jobs in Charleston County. The impact on output is estimated to have averaged \$18 million per year from 2014-2016 and is projected to increase to \$19 million per year between 2017-2020.

C. Capital Expenditures

The model was run only on historical, not projected, capital expenditures; as such, the economic impact from investment in buildings and equipment was only estimated for fiscal years 2014-2016. Because capital investment includes purchase of material and other goods and services that originate from outside of the region, some of the impact can be expected to “leak” out of the study area. However, in a large urban center like Charleston, much of the construction and supporting industries will be present locally, resulting in less leakage than would be expected in a less urbanized region. The Citadel invested a total of \$20.3 million (adjusted for inflation) in building and equipment over the years 2014-2016. This spending created approximately 50 jobs on average over this period and added an average of \$6.5 million in output to the county’s economy per year.

D. Student Expenditures

Consumer spending by students, including members of the Corps of Cadets and graduate and evening students, generated an estimated impact of 80 jobs on Charleston County between 2014-2016; the average employment impact over the period 2017-2020 is projected to decrease slightly to 70. This is due to model assumptions regarding improving worker productivity over time as well as a slight decline in enrollment between 2014 and 2016. The impact on output (total sales) is estimated to have been \$9.4 million per year between 2014-2016 and is projected to average \$9 million per year from 2017-2020. Spending by Citadel cadets generated approximately \$439,000 on average per year in net local government revenue in Charleston County between 2014-2016.

E. Admissions Visitor Spending

Spending associated with admissions visits created approximately 41 jobs on average in the county between 2014-2016. This is projected to drop to an av-

Table 3. Estimated Direct Visitor Spending

Category	Units	2014	2015	2016	2017	2018	2019	2020
Campus Visits: *								
Lodging (23.7%) **	Thousands of Fixed (2015) Dollars	\$ 567	\$ 658	\$ 417	\$ 417	\$ 417	\$ 417	\$ 417
Food (30.8%)	Thousands of Fixed (2015) Dollars	\$ 737	\$ 855	\$ 542	\$ 542	\$ 542	\$ 542	\$ 542
Entertainment/Recreation (7.1%)	Thousands of Fixed (2015) Dollars	\$ 170	\$ 197	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125
Retail (9.7%)	Thousands of Fixed (2015) Dollars	\$ 116	\$ 135	\$ 85	\$ 85	\$ 85	\$ 85	\$ 85
Public Transportation (9.1%)	Thousands of Fixed (2015) Dollars	\$ 218	\$ 253	\$ 160	\$ 160	\$ 160	\$ 160	\$ 160
Auto Transportation (19.9%)	Thousands of Fixed (2015) Dollars	\$ 476	\$ 553	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350
Total Direct Spend	Thousands of Fixed (2015) Dollars	\$ 2,283	\$ 2,651	\$ 1,680				
Sporting Events Visits: ***								
Lodging (23.7%)	Thousands of Fixed (2015) Dollars	\$ 5,274	\$ 5,605	\$ 5,965	\$ 6,318	\$ 7,877	\$ 6,768	\$ 6,904
Food (30.8%)	Thousands of Fixed (2015) Dollars	\$ 6,854	\$ 7,284	\$ 7,752	\$ 8,211	\$ 10,236	\$ 8,796	\$ 8,972
Entertainment/Recreation (7.1%)	Thousands of Fixed (2015) Dollars	\$ 1,580	\$ 1,679	\$ 1,787	\$ 1,893	\$ 2,360	\$ 2,028	\$ 2,068
Retail (9.7%)	Thousands of Fixed (2015) Dollars	\$ 1,079	\$ 1,147	\$ 1,221	\$ 1,293	\$ 1,612	\$ 1,385	\$ 1,413
Public Transportation (9.1%)	Thousands of Fixed (2015) Dollars	\$ 2,025	\$ 2,152	\$ 2,290	\$ 2,426	\$ 3,024	\$ 2,599	\$ 2,651
Auto Transportation (19.9%)	Thousands of Fixed (2015) Dollars	\$ 4,429	\$ 4,706	\$ 5,009	\$ 5,305	\$ 6,614	\$ 5,683	\$ 5,797
Total Direct Spend	Thousands of Fixed (2015) Dollars	\$ 21,242	\$ 22,573	\$ 24,023	\$ 25,446	\$ 31,723	\$ 27,259	\$ 27,804

* Campus visits for years 2017-2020 assumed fixed at 2016 levels.

** Percentages obtained from 2015 SCPR T EIM Report.

*** Sporting events visits projections for years 2017-2020 provided by Citadel Athletic Department.

erage of 29 jobs between 2017-2020 due to the assumption that admissions visits will be fixed at the 2016 level in succeeding years (2016 visits were lower than in the preceding years). As such, the projected impact from admissions visits is likely conservative. The average estimated impact on output in Charleston County was \$3.8 million per year between 2014-2016 and is projected to be \$2.9 million per year on average between 2017-2020. Net fiscal impact on local governments in the county was approximately \$40,000 per year on average between 2014-2016 and is projected to be \$14,000 per year on average between 2017-2020; these estimates include impacts on hospitality and local accommodations taxes. Again note that these projections are likely conservative given assumptions regarding campus visitor numbers.

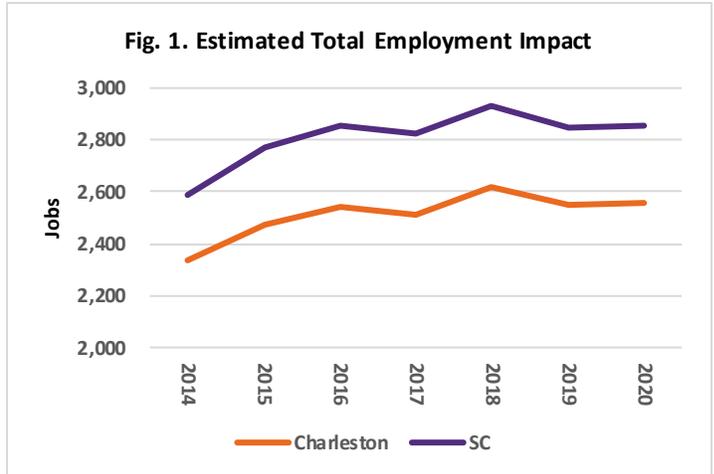
F. Sporting Events Visitor Spending

Spending by visitors to Charleston to attend Citadel sporting events generated approximately 386 jobs on average between 2014-2016 in Charleston County; based on projected future sporting event attendance, this is predicted to increase to approximately 447 jobs between 2017-2020. Output was impacted by an estimated \$34.3 million on average per year between 2014-2016; the average per-year impact on output is projected to increase to \$42.5 million between 2017-2020. Sporting events visitors contributed an estimated average of \$422,000 to local government net revenues in each year between 2014-2016; net fiscal impact is projected to be approximately \$335,000 per year on average between 2017-2020. These fiscal impacts are inclusive of hospitality and local accommodations taxes.

G. Total Economic Impact

The sum of the preceding models constitutes the total economic impact of the Citadel on Charleston County. Economic activity associated with the Citadel is estimated to have created a total of 2,449 jobs on average in the county between 2014-2016. The college is projected to generate approximately 2,559 jobs on average between 2017-2020. This is presented graphically in Figure 1.

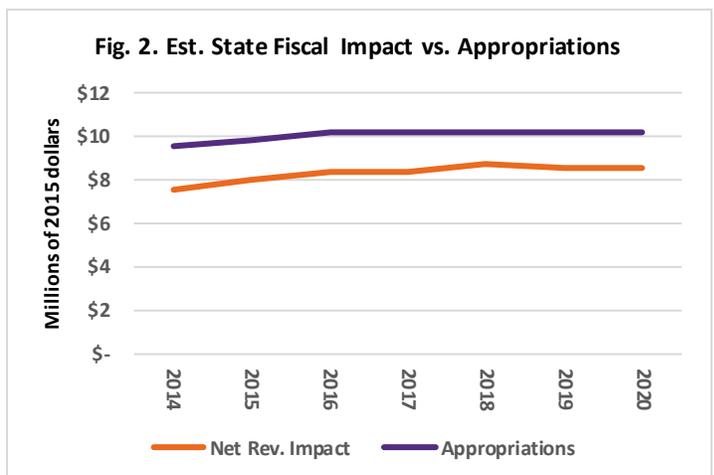
The total impact on county output (total sales) was approximately \$272.3 million average per year between 2014-2016 and is projected to be \$298.5 mil-



lion per year on average between 2017-2020. The net local fiscal impact in Charleston County averaged \$3 million per year in 2014-2016; the impact from the college is projected to contribute \$2 million average per year to net local revenue between 2017-2020.

While most of the economic impact remains in Charleston County as the central urban area, the college also creates jobs in the surrounding counties through indirect and induced effects. Approximately 164 jobs were created in Berkeley County and approximately 72 jobs in Dorchester County between 2014-2016. Net local government revenue is positively impacted in both counties.

Statewide, including the counties of the Charleston MSA, the total estimated employment impact of the Citadel is approximately 2,811 jobs, averaged over the entire study period, 2014-2020. (Note that state-level economic and fiscal impacts count only the impact of out-of-state student spending.)



H. Net State Government Revenue

Net state fiscal impact compared to state appropriations for the college are presented graphically in Figure 2. Appropriations for fiscal years ending 2017-2020 are assumed fixed at 2016 levels.

Not including state appropriations to the college, the Citadel contributed approximately \$8 million toward net state government revenue on average per year between 2014-2016 and is projected to contribute \$8.6 million on average per year to net revenue between 2017-2020. State appropriations to the college averaged \$9.9 million per year over the years 2014-2016. Comparing the Citadel's impact on net state revenue to appropriations reveals that the college generated a return of 79 to 82 percent on appropriations between 2014-2016 through its economic impacts. Assuming real appropriations are fixed at 2016 levels over the years 2017-2020, the college is projected to generate a return of 82 to 86 percent on appropriations.

V. Conclusion

The Citadel is a significant positive contributor to the Charleston area economy. This study only examined the impact that the college has on the state and local economy through operations and outsourced activities, capital investment, and student and visitor spending. It does not take into account the college's amenity value, i.e., its effect on surrounding property values and its tourism draw as a historic landmark. It also does not take into account the contribution of Citadel alumni on the area or on the state as a whole. These impacts would require additional study, but these would certainly be over and above those reported herein.

Table A-1. Estimated Impact of Citadel Operations

		Charleston County, SC									
Category	Units	2014	2015	2016	2017	2018	2019	2020			
Total Employment	Individuals (Jobs)	1,593	1,689	1,754	1,781	1,800	1,817	1,835			
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 93,856	\$ 105,574	\$ 115,033	\$ 121,408	\$ 126,427	\$ 130,720	\$ 134,812			
Output	Thousands of Fixed (2015) Dollars	\$ 187,487	\$ 201,269	\$ 212,274	\$ 218,468	\$ 223,578	\$ 228,124	\$ 232,823			
Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 3,233	\$ 4,015	\$ 4,828	\$ 5,570	\$ 6,261	\$ 6,913	\$ 7,531			
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 1,329	\$ 2,473	\$ 3,525	\$ 4,477	\$ 5,337	\$ 6,138	\$ 6,867			
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 1,904	\$ 1,542	\$ 1,303	\$ 1,093	\$ 924	\$ 776	\$ 664			

Table A-2. Estimated Impact of Citadel Outsourced Activities

		Charleston County, SC									
Category	Units	2014	2015	2016	2017	2018	2019	2020			
Total Employment	Individuals (Jobs)	219	223	212	214	212	209	208			
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 6,623	\$ 7,400	\$ 7,551	\$ 7,901	\$ 8,034	\$ 8,091	\$ 8,125			
Output	Thousands of Fixed (2015) Dollars	\$ 17,995	\$ 18,816	\$ 18,467	\$ 18,982	\$ 19,148	\$ 19,265	\$ 19,400			
Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 310	\$ 411	\$ 491	\$ 578	\$ 655	\$ 726	\$ 792			
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 205	\$ 377	\$ 519	\$ 646	\$ 758	\$ 860	\$ 949			
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 105	\$ 33	\$ (28)	\$ (68)	\$ (103)	\$ (133)	\$ (158)			

Table A-3. Estimated Impact of Citadel CapEx

		Charleston County, SC									
Category	Units	2014	2015	2016	2017	2018	2019	2020			
Total Employment	Individuals (Jobs)	39	47	63							
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 1,804	\$ 2,348	\$ 3,229							
Output	Thousands of Fixed (2015) Dollars	\$ 4,968	\$ 6,210	\$ 8,383							
Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 159	\$ 291	\$ 475	\$ 361	\$ 327	\$ 294	\$ 263			
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 37	\$ 75	\$ 122	\$ 105	\$ 90	\$ 77	\$ 64			
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 122	\$ 216	\$ 353	\$ 256	\$ 237	\$ 217	\$ 199			

Table A-4. Estimated Impact of Citadel Student Spending (excluding BCD students)

		Charleston County, SC									
Category	Units	2014	2015	2016	2017*	2018*	2019*	2020*			
Total Employment	Individuals (Jobs)	82	80	76	71	71	70	69			
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 3,178	\$ 3,376	\$ 3,430	\$ 3,377	\$ 3,456	\$ 3,458	\$ 3,454			
Output	Thousands of Fixed (2015) Dollars	\$ 9,466	\$ 9,414	\$ 9,214	\$ 8,824	\$ 9,010	\$ 9,008	\$ 9,017			
Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 551	\$ 568	\$ 587	\$ 606	\$ 641	\$ 667	\$ 691			
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 75	\$ 133	\$ 182	\$ 221	\$ 257	\$ 288	\$ 316			
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 476	\$ 435	\$ 404	\$ 385	\$ 384	\$ 379	\$ 375			

* Projected

Table A-5. Estimated Impact of Citadel Admissions Visits

		Charleston County, SC									
Category	Units	2014*	2015	2016	2017**	2018**	2019**	2020**			
Total Employment	Individuals (Jobs)	42	50	32	31	29	28	27			
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 1,402	\$ 1,799	\$ 1,318	\$ 1,300	\$ 1,270	\$ 1,236	\$ 1,205			
Output	Thousands of Fixed (2015) Dollars	\$ 3,760	\$ 4,545	\$ 3,057	\$ 2,970	\$ 2,884	\$ 2,807	\$ 2,744			
County Hospitality Tax (2%)	Thousands of Fixed (2015) Dollars	\$ 14	\$ 17	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11			
County Accommodations Tax (2%)	Thousands of Fixed (2015) Dollars	\$ 12	\$ 14	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9			
Other Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 58	\$ 85	\$ 81	\$ 92	\$ 100	\$ 108	\$ 116			
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 33	\$ 66	\$ 81	\$ 94	\$ 105	\$ 115	\$ 123			
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 51	\$ 50	\$ 20	\$ 17	\$ 15	\$ 13	\$ 12			

* 2014 visitor count estimated as average of 2015 and 2016 counts.

** 2017-2020 visitor numbers assumed fixed at 2016 levels.

Table A-6. Estimated Impact of Citadel Sporting Events Visitors

		Charleston County, SC									
Category	Units	2014	2015	2016	2017	2018	2019	2020			
Total Employment	Individuals (Jobs)	361	389	407	422	511	430	427			
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 11,900	\$ 13,968	\$ 15,545	\$ 16,789	\$ 20,503	\$ 18,308	\$ 18,378			
Output	Thousands of Fixed (2015) Dollars	\$ 31,340	\$ 34,492	\$ 37,062	\$ 39,110	\$ 47,962	\$ 41,328	\$ 41,408			
County Hospitality Tax (2%)	Thousands of Fixed (2015) Dollars	\$ 131	\$ 139	\$ 148	\$ 157	\$ 196	\$ 168	\$ 171			
County Accommodations Tax (2%)	Thousands of Fixed (2015) Dollars	\$ 114	\$ 121	\$ 128	\$ 136	\$ 169	\$ 145	\$ 148			
Other Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 537	\$ 739	\$ 942	\$ 1,141	\$ 1,449	\$ 1,533	\$ 1,683			
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 307	\$ 584	\$ 842	\$ 1,083	\$ 1,371	\$ 1,564	\$ 1,738			
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 474	\$ 416	\$ 377	\$ 351	\$ 443	\$ 282	\$ 264			

Table A-7. Total Estimated Impact of The Citadel (excluding BCD students)

		Charleston County, SC									
Category	Units	2014	2015	2016	2017	2018	2019	2020			
Total Employment	Individuals (Jobs)	2,268	2,405	2,475	2,433	2,444	2,452	2,465			
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 116,553	\$ 131,850	\$ 143,463	\$ 147,767	\$ 153,052	\$ 157,405	\$ 161,543			
Output	Thousands of Fixed (2015) Dollars	\$ 249,071	\$ 268,119	\$ 282,057	\$ 280,632	\$ 285,905	\$ 290,476	\$ 295,387			
County Hospitality Tax (2%)	Thousands of Fixed (2015) Dollars	\$ 364	\$ 379	\$ 383	\$ 394	\$ 404	\$ 413	\$ 423			
County Accommodations Tax (2%)	Thousands of Fixed (2015) Dollars	\$ 134	\$ 142	\$ 144	\$ 145	\$ 146	\$ 147	\$ 149			
Other Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 4,751	\$ 5,977	\$ 7,243	\$ 8,137	\$ 9,049	\$ 9,901	\$ 10,701			
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 1,928	\$ 3,600	\$ 5,120	\$ 6,427	\$ 7,600	\$ 8,686	\$ 9,666			
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 3,321	\$ 2,898	\$ 2,650	\$ 2,248	\$ 1,998	\$ 1,775	\$ 1,607			

Table A-8. Total Estimated Impact of The Citadel (excluding BCD students)
Berkeley County, SC

Category	Units	2014	2015	2016	2017	2018	2019	2020
Total Employment	Individuals (Jobs)	142	169	181	178	178	170	164
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 5,049	\$ 6,551	\$ 7,514	\$ 7,823	\$ 8,147	\$ 8,076	\$ 8,008
Output	Thousands of Fixed (2015) Dollars	\$ 15,430	\$ 18,538	\$ 20,367	\$ 20,381	\$ 20,808	\$ 20,247	\$ 19,873
Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 952	\$ 1,244	\$ 1,524	\$ 1,744	\$ 1,983	\$ 2,157	\$ 2,329
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 449	\$ 823	\$ 1,168	\$ 1,467	\$ 1,750	\$ 1,992	\$ 2,209
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 503	\$ 422	\$ 356	\$ 277	\$ 233	\$ 165	\$ 120

Table A-9. Total Estimated Impact of The Citadel (excluding BCD students)
Dorchester County, SC

Category	Units	2014	2015	2016	2017	2018	2019	2020
Total Employment	Individuals (Jobs)	65	73	77	76	77	74	73
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 2,363	\$ 2,856	\$ 3,213	\$ 3,370	\$ 3,586	\$ 3,651	\$ 3,750
Output	Thousands of Fixed (2015) Dollars	\$ 7,476	\$ 8,581	\$ 9,242	\$ 9,247	\$ 9,509	\$ 9,346	\$ 9,338
Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 587	\$ 661	\$ 765	\$ 856	\$ 981	\$ 1,079	\$ 1,194
Local Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 31	\$ 64	\$ 132	\$ 227	\$ 346	\$ 478	\$ 622
Net Local Government Revenue	Thousands of Fixed (2015) Dollars	\$ 556	\$ 598	\$ 633	\$ 628	\$ 636	\$ 601	\$ 573

Table A-10. Total Estimated Impact of The Citadel (including out of state students only)
Statewide, South Carolina

Category	Units	2014	2015	2016	2017	2018	2019	2020
Total Employment	Individuals (Jobs)	2,587	2,771	2,858	2,826	2,932	2,849	2,852
Total Compensation	Thousands of Fixed (2015) Dollars	\$ 128,307	\$ 146,540	\$ 159,896	\$ 165,450	\$ 174,864	\$ 176,819	\$ 180,983
Output	Thousands of Fixed (2015) Dollars	\$ 285,753	\$ 310,875	\$ 327,942	\$ 328,051	\$ 343,003	\$ 339,797	\$ 344,281
State Accommodations Tax (2%)	Thousands of Fixed (2015) Dollars	\$ 156	\$ 165	\$ 167	\$ 173	\$ 206	\$ 181	\$ 184
Other State Government Revenue	Thousands of Fixed (2015) Dollars	\$ 10,587	\$ 13,374	\$ 15,710	\$ 17,379	\$ 19,346	\$ 20,562	\$ 21,885
State Government Expenditures	Thousands of Fixed (2015) Dollars	\$ 3,153	\$ 5,519	\$ 7,533	\$ 9,186	\$ 10,786	\$ 12,157	\$ 13,465
Net State Government Revenue	Thousands of Fixed (2015) Dollars	\$ 7,590	\$ 8,019	\$ 8,345	\$ 8,366	\$ 8,766	\$ 8,586	\$ 8,604

Table A-11. State Net Fiscal Impact vs. State Appropriations for The Citadel
Statewide, South Carolina

Category	Units	2014									
		2014	2015	2016	2017	2018	2019	2020			
State Appropriations *	Thousands of Fixed (2015) Dollars	\$ 9,575	\$ 9,870	\$ 10,195	\$ 10,195	\$ 10,195	\$ 10,195	\$ 10,195	\$ 10,195	\$ 10,195	\$ 10,195
Net State Government Revenue	Thousands of Fixed (2015) Dollars	\$ 7,590	\$ 8,019	\$ 8,345	\$ 8,366	\$ 8,766	\$ 8,586	\$ 8,604			
Net Return (+) or Cost (-) to State	Thousands of Fixed (2015) Dollars	\$ (1,985)	\$ (1,851)	\$ (1,850)	\$ (1,828)	\$ (1,429)	\$ (1,609)	\$ (1,590)			

* Appropriations for 2017-2020 assumed fixed at 2016 levels.