

**The Economic Impact
of University System of Georgia Institutions
on their Regional Economies in FY 2020**

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Executive Summary

The statewide economic impact of the University System of Georgia's institutions in fiscal year 2020 includes:

- \$18.6 billion in output (sales);
- \$12.7 billion in gross regional product;
- \$8.8 billion in income; and
- 155,010 full- and part-time jobs (4 percent of all non-farm jobs in Georgia).

These benefits permeate both the private and public sectors of the host communities. For example, for each job created on campus there are two off-campus jobs that exist because of spending related to the college or university.

These economic impacts demonstrate that continued emphasis on colleges and universities as a pillar of the state's economy translates into jobs, higher incomes, and greater production of goods and services.

In addition to the system-wide impact summarized here, the following chapters quantify the economic benefits that each institution conveys to the community in which it is located. Each institution's benefits are estimated for several categories of college/university-related expenditures: spending by the institutions themselves for salaries and fringe benefits, operating supplies and expenses, and other budgeted expenditures; spending by the students who attend the institutions; and spending by the institutions for capital projects.

Introduction

How much does a region benefit economically from hosting an institution of higher education? Traditionally, the benefits are discussed in broad, qualitative terms that often fail to satisfy those who demand tangible evidence of the economic linkages between the academic community and the community as a whole; however, this report quantifies the economic benefits that the University System of Georgia's institutions convey to the communities in which they are located.

The benefits are estimated for several important categories of college/university-related expenditures: spending by the institutions themselves for salaries and fringe benefits, operating supplies and expenses, and other budgeted expenditures; spending by the students who attend the institutions; and spending by the institutions for capital projects (construction). The economic impact estimates are based on regional input-output models of each institution's regional economy, certain necessary assumptions, and available data on annual spending in the specified categories. Moreover, the emphasis is on funds received by residents in the region that hosts each college or university. The study reports expenditures and impacts for the 2020 fiscal year—July 1, 2019 through June 30, 2020.

The study does not account for all of the short-term impacts of the 26 institutions on their host communities, however. For example, there are no dollar amounts estimated for several sources of college/university-related spending because doing so would require collecting survey data, a task beyond the resources available to this study. In addition, the study neither quantifies the many long-term benefits that an institution of higher education imparts to the host community's economic development nor does it measure intangible benefits (such as cultural opportunities, intellectual stimulation, and volunteer work) to local residents. Finally, the study is not a net benefit analysis; it estimates only economic benefits and does not calculate what the presence of a tax-exempt college/university costs the community.

Economic Impact Highlights

In the simplest terms, the total economic impact of all 26 institutions on their host communities was \$18.6 billion in FY 2020. The output impact of each institution is the change in regional output that is due to spending by the institution and spending by the students who attend that particular college or university. Of the FY 2020 total, \$12.7 billion (68 percent) is initial spending by the institutions and students; \$5.9 billion (32 percent) is the induced or re-spending (multiplier) impact. Dividing the FY 2020 total output impact (\$18.6 billion) by initial spending (\$12.7 billion) yields an average multiplier value of 1.47. On average, therefore, every dollar of initial spending generates an additional 47 cents for the economy of the region that hosts the institution.

In FY 2020, value added comprises \$12.7 billion (68 percent) of the \$18.6 billion output impact, with domestic and foreign trade comprising the remaining \$5.9 billion (32 percent). The \$12.7 billion value-added impact equals 2.1 percent of Georgia's GDP. Labor income received by residents of the communities that host one or more institutions equals \$8.8 billion, and represents 69 percent of the value-added impact.

The collective or rolled-up employment impact of all institutions on their host communities in FY 2020, including multiplier effects, is 155,010 full- and part-time jobs. Approximately 34 percent of these positions are on campus (52,904 FTE University System employees) and 66 percent (102,106 jobs) are off-campus positions in either the private or public sectors. On average, for each job created on campus there are two off-campus jobs that exist because of spending related to the institution. The 155,010 jobs generated by the University System account for 4 percent of all the nonfarm jobs in Georgia, or about one job in 25. To provide perspective, the rolled-up employment impact of the USG's 26 institutions exceeded the combined number of jobs at Georgia's top five employers—Fort Benning, Walmart, Delta Air Lines, U.S Army Signal Center and Fort Gordon, and Emory University.

Methodology

■ Understanding the Concept of the Short-Term Economic Impact of a College or University ■

The total annual economic impact of college- or university-related spending consists of the net changes in regional output, value added, labor income, and employment that are due to initial spending by the institution (for operations as well as personnel services) and its students. The total economic impact includes the impact of the initial round of spending and the secondary, or indirect and induced spending—referred to as the multiplier effect—that occurs when the initial expenditures are re-spent. Figure 1 provides a schematic representation of impact relationships.

Indirect spending refers to the changes in inter-industry purchases as a region's industries respond to the additional demands triggered by spending by the college or university, its faculty and staff, and its students. It consists of the ripples of activity that are created when an institution and its employees and students purchase goods or services from other industries located in the host community. Induced spending is similar to indirect spending except that it refers to the additional demand triggered by spending by the region's households as their income increases due to changes in production. Basically, the induced impact captures the ripples of activity that are created when households spend more due to increases in their earnings that were generated by the direct and indirect spending.

The sum of the direct, indirect, and induced economic impacts is the total economic impact, which is expressed in terms of output (sales, plus or minus inventory), value added (gross regional product), labor income, or employment. Total industry output is gross receipts or sales, plus or minus inventory, or the value of production by industry (including households) for a given period. Total output impacts are the most inclusive, largest measures of economic impact. Because of their size, output impacts typically are emphasized in economic impact studies and receive much media attention. One problem with output as a measure of economic impact, however, is that it includes the value of inputs produced by other industries, which means that there inevitably is some double counting of economic activity. The other measures of economic activity (value added, labor income, and employment) are free from double counting and provide a much more realistic measure of the true economic impact of a college or university on its regional economy.

The regional economic areas are the host communities, including the surrounding counties from which employees and students commute. The effects of expenditures that go to people, businesses, or governments located outside the regions are not included in the value-added, labor income, and employment impact estimates.

The multiplier concept is common to most economic impact studies. Multipliers measure the response of the local economy to a change in demand or production. In essence, multipliers capture the impact of the initial round of spending plus the impacts generated by successive rounds of re-spending of those initial dollars. The magnitude of a particular multiplier depends upon what proportion of each spent dollar leaves the region during each round of spending. Multipliers therefore are unique to the region and to the industry that receives the initial round of spending.

Figure 2 illustrates the successive rounds of spending that might occur if a person buys an item locally. Assume that the amount spent is \$100 and that the appropriate regional output multiplier is 2.0. The initial injection of spending to the region is \$100, which creates a direct economic impact of \$100 to the regional economy. Of that \$100, only \$50 is re-spent locally; the rest flows out of the region through non-local taxes, non-local purchases, and income transfers. After the first round of spending, the total economic impact to the region is \$150. During the second round of re-spending, \$25 is re-spent locally and \$25 leaks out of the region, a 50 percent leakage. Now the total economic impact to the region is \$175. After seven rounds of re-spending, less than \$1 remains in the local economy, but the total economic impact has reached almost \$200. The induced (multiplier effect) impact to the region (\$100) equals the total impact (\$200) minus the direct impact (\$100).

The multiplier traces the flows of re-spending that occur throughout the region until the initial dollars have completely leaked to other regions. Obviously, multiplier effects within large, self-sufficient areas are likely to be larger than those in small, rural, or specialized areas that are less able to capture spending for necessary goods and services. Multiplier effects also vary greatly from industry to industry, but in general, the greater the interaction with the local economy, the larger the multiplier for that industry. For example, personal services, business services, and entertainment industries have intricate relationships with local supporting industries, and therefore have relatively high multiplier values. Conversely, electric, gas, and sanitary services usually are less intertwined with local supporting industries, and their multipliers are lower.

■ Analytic Approach ■

Estimating the economic impact of the University System of Georgia institutions on their regional economies in FY 2020 involved four basic steps. First, initial spending (and employment) for each institution were obtained for Budget Unit "A" and Budget Unit "B"; and then the institutional expenditures were allocated to industrial sectors recognized by the economic impact modeling system. Second, spending by students was estimated and then allocated to industrial sectors. Third, expenditures associated with capital projects (construction) funded were obtained for each institution and were allocated to the appropriate industrial sectors. Finally, the IMPLAN modeling system was used to build regional economic models that are specific to each institution.

The geographic areas corresponding to the regional models that were built for each institution, which include the labor force directly involved in their economic spheres, are reported in Appendix 1. These geographic areas are based on an analysis of commuting patterns data obtained from the U.S. Census Bureau. For analytical purposes, all dollar amounts were converted to inflation-adjusted dollars, but the amounts expressed in this report are expressed in 2019 dollars.

Type SAM (social accounting matrices) multipliers from IMPLAN were used to estimate the economic impacts associated with all categories of spending. Type SAM multipliers capture the original expenditures resulting from the impact, the indirect effects of industries buying from industries, and the induced effects of households' expenditures based on information in the social account matrix. The multipliers account for Social Security and income tax leakage, institutional savings, commuting, inter-institutional transfers, and people-to-people transfers.

Whenever appropriate, IMPLAN applied margins to convert purchaser prices to producer prices. In input-output models, all expenditures are in terms of producer prices, which allow all spending to be allocated to the industries that actually produce the good or service. The margins are derived from U.S. Bureau of Economic Analysis data. Moreover, margins were selected according to type of consumer to which these applied. For example, households pay transportation, wholesale, and the full retail margins. In contrast, institutions of higher education may pay little or no retail margin as they have typically more buying power than a household. In addition, some sectors of the model do not have margins. For instance, because there usually are no wholesalers or retailers involved when someone rents a room, hotels and other lodging do not have margins.

The model's default estimates of the local economy's regional purchase coefficients were used to derive the ratio of locally purchased to imported goods. The regional purchase coefficient represents the proportion of the total demands for a given commodity that is supplied by the region to itself. The regional purchase coefficients were estimated with an econometric equation that predicts local purchases based on each region's unique characteristics. In addition, the entire analysis was conducted using the full range of industrial sectors in order to avoid aggregation bias.

■ Initial Spending by the Institutions ■

Initial spending is the combination of several types of spending, including spending by USG institutions for personnel services (wages, salaries, and benefits), spending by USG institutions for operating expenses, and spending by students.

The Board of Regents provided institution-specific data on expenditures for personnel services and the number of positions. The expenditure amounts are industry changes and are reported in the first column of Tables 1 and 2, respectively. These amounts are allocated to various economic sectors recognized by IMPLAN on the typical expenditure pattern for households of moderate income.

The author is grateful to Jason Matt, Executive Budget Director, Budget Office, Strategy and Fiscal Affairs Division of the Board of Regents, who provided institution-specific data on expenditures for personnel services, operations, capital projects, and the number of positions. The expenditure amounts are industry changes and are reported in the first column of Tables 1 and 2, respectively. These amounts are allocated to various economic sectors recognized by IMPLAN on the typical expenditure pattern for households of moderate income.

Institution-specific data on expenditures for operating expenses (non-personnel services) for FY 2020 were obtained from the Board of Regents. These amounts are industry changes and are reported in the first column of Tables 1 and 2, respectively.

To avoid double-counting, the estimates of initial spending do not include expenditures arising from two budgetary classes: auxiliary enterprise funds (self-supporting activities for housing, food service, bookstore, athletics, and other)

and student activity funds (cultural and recreational programs operated by students). The spending associated with such activities is included in the student's personal expenditures, however.

The expenditures and impact reported in Tables 1-3 for Augusta University do not account for spending by the hospital and clinics operating by the AU Health System, Inc. Expenditures and impacts for the AU Health System, Inc. are reported in Appendix 3, however. Appendix 4 reports the combined impacts of Augusta University and the AU Health System, Inc. on the Augusta MSA (including the two out-of-state counties) rather than that portion of the local economy that lies within Georgia (defined in Appendix 1).

Since a detailed analysis of spending patterns at each institution was not practical, budgeted expenditures for operating expenses were allocated to various economic sectors based on a typical expenditure pattern estimated for U.S. colleges that was developed by the IMPLAN modelers.

Institution-specific data on capital projects (construction) also were obtained from the Board of Regents. The expenditures were allocated to the fiscal year of reported funding, regardless of whether or not all of the funds were actually spent during fiscal year 2020. Therefore, the amounts for capital expenditures and their impacts are not included in the economic impacts expressed in Tables 1-3, but they are reported in Appendix 2.

It should be noted that some previous editions of this study did not include the impacts of public/private ventures. The FY 2020 capital project impacts therefore are not directly comparable to those for FY 2004 or earlier fiscal years.

■ Students' Personal Expenditures ■

College students spend significant amounts of money in the local economy as a part of their living expenses, so the dollar value of this spending was estimated. Since a detailed survey of students' spending habits at each institution was not practical, typical expenditure levels per student per semester were estimated based on data obtained from several sources: (1) The College Board Annual Survey of Colleges; (2) various annual *Consumer Expenditure Surveys* conducted by the U.S. Bureau of Labor Statistics (BLS); (3) a special BLS study that appeared in the July 2001 issue of the *Monthly Labor Review* that examined the expenditures of college-age students and non-students; and (4) a sample of recent estimated costs of attendance prepared by individual institutions. Although the estimated costs of attendance prepared by the College Board and individual institutions were not detailed enough to be used by the IMPLAN modeling system, they did provide information for a profile of average expenditures for some of the items typically purchased by students.

Although the *Consumer Expenditure Surveys* cover households consisting of one person at various income levels, no recent data are available specifically for college students; therefore, to adapt the data for this study, spending estimates for several categories of goods or services were increased, decreased, or eliminated. For example, compared to a weighted average of lower-income households, students' expenditures for books and for eating out were increased substantially, while students' expenditures for groceries, cash contributions, insurance and pensions, and health care were reduced. Because spending for vacation and travel do not take place locally, these expenditures were eliminated. In addition, expenditures for tuition were eliminated because of possible double counting. Institutions receive payments from students for tuition, which in turn support the institutions' expenditures, which has already been estimated. After adjustment, the average expenditure per student by semester was estimated at \$5,366 for Summer 2019, \$8,130 for Fall 2019, and at \$6,098 for Spring 2020. The \$2,033 reduction in the average expenditure per student for the Spring 2020 semester compared to the Fall 2019 semester reflects the shift to virtual instruction that occurred approximately halfway through spring semester.

The final step in estimating students' personal expenditures was to multiply the number of semesters of student spending by the average spending per semester. For FY 2020, these amounts are reported in the first column of Tables 1 and 2. The number of semesters of students' spending equals each institution's FTE enrollment as reported in the *Semester Enrollment Report* issued by the Board of Regents.

Results

This section describes the economic benefits that the University System of Georgia's 26 institutions conveyed to their host communities in FY 2020. The estimates represent the economic impact of spending by an institution, its faculty and staff, and its students. Based on the methodology and available data described earlier, the IMPLAN modeling system was used to calculate four indicators of impact—total output, total value-added, total income, and total employment—for each category of initial spending. All dollar amounts are reported in 2019 dollars.

■ Total Initial Spending ■

For each institution, total initial spending accruing to the institution's regional economy is the combination of three types of spending—spending by the institution for personnel services, spending by the institution for operating expenses, and spending by that institution's students. Estimates of initial spending for FY 2020 are reported in the first column of Tables 1 and 2. Spending by the institutions for capital projects is reported in Appendix 2.

For FY 2020, total initial spending for all 26 institutions was \$12.6 billion. Spending originating from personnel services accounted for 39 percent (\$5 billion) of initial spending, spending due to operating expenses accounted for 25 percent (\$3.2 billion) of initial spending, and students' personal expenditures accounted for 35 percent (\$4.4 billion) of initial spending.

■ Total Output Impact ■

The output impact was calculated for each category of initial spending, based on the impact of the first round of spending and the impacts generated by the re-spending of these amounts—the multiplier effect. Total output impacts are the most inclusive, largest measures of economic impact. Conceptualized as the equivalent of business revenue, sales, or gross receipts, total output is the value of productions by all industries, including households. Output impacts for FY 2020 are reported in the second column of Tables 1 and 2.

Measured in the simplest and broadest possible terms, the total economic impact of the 26 institutions of the University System of Georgia was \$18.6 billion in FY 2020 (Table 1). This amount represents the combined impact of all 26 institutions on their host communities. Of the FY 2020 output impact, \$12.6 billion (68 percent) was initial spending by the institutions and students, while \$6 billion (32 percent) was the induced/re-spending impact or multiplier effect (i.e., the difference between output impact and initial spending). The multiplier captures the regional economic repercussions of the flows of re-spending that take place throughout the region until the initial spending has completely leaked to other regions. The average multiplier value for all institutions in FY 2020 was 1.47, obtained by dividing the total output impact (\$18.6 billion) by initial spending (\$12.6 billion). On average, therefore, every dollar of initial spending generated an additional 47 cents for the economy of the region hosting the institution. Thus, for all institutions combined, the output impact was 1.47 times greater than their initial spending, but the multiplier varies among the individual USG institutions.

It is no surprise that estimates for the various institutions show differing outcomes, given the differences in budgets, staffing, enrollment, and regional economies. Institutions located in the largest metropolitan areas (e.g., Georgia Tech in Atlanta)—where multipliers are the highest, or institutions that have the largest budgets, staffs, and enrollments—had the largest economic impacts. Thus, for the most part, institutions with large initial spending will rank highly on the various indicators of economic impact, including value-added, labor income, and employment impact described in the following subsections.

■ Total Value-Added Impact ■

Because value-added impacts exclude expenditures related to foreign and domestic trade, they provide a much more accurate measure of the actual economic benefits flowing to businesses and households in a region than the more inclusive output impacts. The value-added impacts for FY 2020 are reported in the third column of Tables 1 and 2.

The 26 institutions collectively generated a value-added impact of \$12.7 billion on their host communities in FY 2020. For all institutions combined, the value-added impact equaled 68 percent of the \$18.6 billion output impact

(with domestic and foreign trade comprising the remaining 32 percent of the output impact). The \$12.7 billion value-added impact reported for FY 2020 equals about 2.1 percent of Georgia's 2020 GDP.

■ Labor Income Impact ■

Collectively, the 26 University System institutions generated a labor income impact on their host communities of \$8.8 billion in FY 2020. The labor income received by residents of the communities that host University System institutions represents 69 percent of the value-added impact. Labor income for each institution is reported in the fourth column of Table 2.

■ Employment Impact ■

The economic impact of hosting an institution of the University System of Georgia probably is most easily understood in terms of its effects on employment. Collectively, the 26 institutions generated an employment impact of 155,010 jobs on their host communities in FY 2020. Approximately 34 percent (52,904 jobs) of these positions are on-campus jobs at one of the institutions of the University System of Georgia, and 66 percent (102,106 jobs) are off-campus positions in either the private or public sectors. On average, for each job created on campus there are two off-campus jobs that exist because of spending related to the University System of Georgia. On average, 12 jobs were generated for each million dollars of initial spending by USG institutions and students in FY 2020—on average \$81,326 in initial spending supports one job.

The employment impact associated with the University System equals 4 percent of all the nonfarm jobs held by Georgians, or about one job in 25. To provide perspective, the rolled-up employment impact of the USG's 26 institutions (155,010 jobs) is about the same as the combined number of jobs (155,484) with Georgia's top five employers – Fort Benning (40,000 jobs), Walmart (34,872 jobs), Delta Air Lines (30,813 jobs), U.S Army Signal Center and Fort Gordon (25,264 jobs), and Emory University (24,535 jobs).

Employment impacts in FY 2020 for the individual institutions are reported in the fifth column of Table 2. For each institution, a break out of on-campus and off-campus jobs that exist due to institution-related spending is reported in Table 3.

Comparisons to FY 2019 Estimates

Table 4 reports the total economic impact of all USG institutions on their regional economies in FY 2020 and FY 2019. Despite the move to virtual instruction in the second half of the Spring semester (which reduced students' spending in that semester), initial spending for the fiscal year as a whole was essentially the same in FY 2020 as in FY 2019 – \$12.6 billion in both fiscal years. The output (sales), value added (state GDP), and labor income impacts were 0.6 percent, 1.0 percent, and 2.4 percent higher in FY 2020 than reported for FY 2019. The employment impact was 1.7 percent lower in FY 2020 than reported for FY 2019. In sum, USG institutions were a vital source of economic stability during FY 2020.

Limitations and Topics for Future Research

Because the goal of this study was to estimate the economic impact of all 26 institutions, certain necessary assumptions were designed to work well for the average institution, but may lead to an over- or under-estimate of the economic contribution that a specific institution makes to its host community. For example, detailed surveys of actual spending by students at various institutions could help to refine estimates of initial spending by students.

Due to both resource and data limitations, several important types of short-term college or university-related expenditures were not estimated. For instance, studies could be conducted to measure spending by visitors to the institutions and spending by retirees who still live in the host communities. In addition, it would be worthwhile to investigate expenditures supported by the non-institutional income of each institution's employees. Such income may come from an employee's consulting, investments, and other personal business activities. Moreover, other members of an employee's household often supplement their total household income. Employees' household incomes also can be supplemented via transfers, inheritances or gifts. At least a portion of income derived from these sources would not

come to the community that hosts the institution if that person's job at the college/university did not exist.

Since the focus here is only on the short-term impacts of several types of college- or university-related spending, there was no attempt to evaluate the long-term impacts of the University System's institutions on the economic development of the host communities and the state. After all, colleges and universities not only spend money year by year, but also have long-term impacts on the labor force, local business and industry, nonprofits, and local government.

Local businesses benefit from easy access to a large pool of part-time and full-time workers. Moreover, companies and agencies that depend on highly specialized skills often cluster around universities. This may be particularly true of high-tech and innovation-based companies, which are expected to account for a disproportionately high share of future economic growth.

Finally, the outreach and service units of the college or university provide valuable services to local businesses and households. Cultural and educational programs and facilities often are available to the general public and provide intangible benefits to the host community by improving residents' quality of life.

Summary

The fundamental finding of this study is that each of the University System of Georgia's institutions creates substantial economic impacts in terms of output, value added, labor income, and employment. The combined economic impact of the University System's institutions on their host communities in FY 2020 includes:

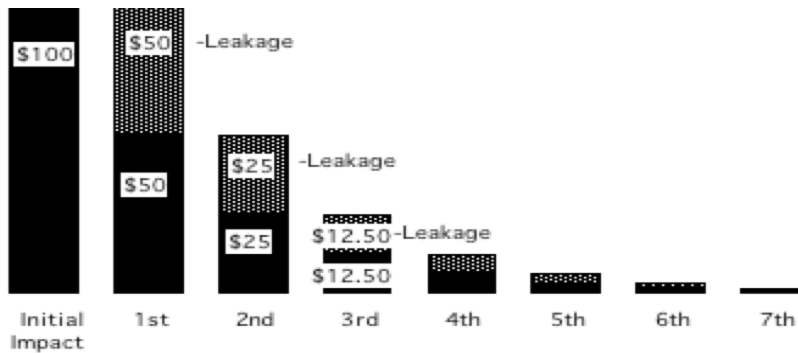
- \$18.6 billion in output (sales);
- \$12.7 billion in valued added (gross regional product);
- \$8.8 billion in labor income; and
- 155,010 full- and part-time jobs.

These economic impacts demonstrate that continued emphasis on higher education as an enduring pillar of the regional economy translates into jobs, higher incomes, and greater production of goods and services for local households and businesses. In FY 2020, USG institutions were a vital source of economic stability.

Figure 1
Schematic Representation of Impact Relationship



Figure 2
How Multipliers Capture the Impact of Re-spending



Initial Direct or Indirect Impact	\$100	
First Round of Re-spending	\$50 re-spent locally	\$50 leakage*
Second Round of Re-spending	\$25 re-spent locally	\$25 leakage
Third Round of Re-spending	\$12.50 re-spent locally	\$12.50 leakage
Fourth Round of Re-spending	\$6.25 re-spent locally	\$6.25 leakage
Fifth Round of Re-spending	\$3.12 re-spent locally	\$3.12 leakage
Sixth Round of Re-spending	\$1.56 re-spent locally	\$1.56 leakage
Seventh Round of Re-spending	\$.78 re-spent locally	\$.78 leakage
Total Economic Impact	\$200	Total Leakage \$100

*Leakage indicates amounts spent outside area and not re-circulated locally.

Table 1

**Total Economic Impact of All Institutions of the University System of Georgia
on their Regional Economies in Fiscal Year 2020**

Total for All Institutions in 2020	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
System total	12,606,286,003	18,584,935,804	12,714,706,137	8,798,237,646	155,010
Personnel services	4,958,307,615	8,602,960,598	7,083,973,273	6,097,625,159	78,494
Operating expenses	3,199,985,957	3,875,909,590	1,886,300,660	998,595,756	24,108
Student spending	4,447,992,431	6,106,065,616	3,744,432,204	1,702,016,731	52,408

Notes:

The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using IMPLAN and production functions provided by IMPLAN.

Initial spending for personnel services and operating expenses were obtained from the Board of Regents of the University System of Georgia. The author estimated initial spending by students.

Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals. Employment includes both full-time and part-time jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Table 2

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in Fiscal Year 2020**

Institution	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
Research Universities					
Augusta University	1,128,288,439	1,452,453,819	1,072,436,931	875,460,396	11,858
Personnel Services	654,523,557	1,026,088,309	863,879,254	765,821,720	8,548
Operating Expenses	341,590,028	254,150,358	109,537,117	61,946,016	1,744
Student Spending	132,174,854	172,215,152	99,020,560	47,692,660	1,566
Georgia Institute of Technology	2,364,603,990	4,008,439,560	2,768,819,000	1,975,796,151	28,516
Personnel Services	1,123,716,320	2,107,387,756	1,711,678,406	1,446,255,495	16,099
Operating Expenses	799,149,979	1,242,114,177	640,408,248	334,852,232	7,185
Student Spending	441,737,691	658,937,627	416,732,346	194,688,424	5,232
Georgia State University	1,698,517,701	2,786,822,976	1,891,337,456	1,243,762,454	20,604
Personnel Services	595,254,653	1,116,324,775	906,709,743	766,110,002	8,667
Operating Expenses	395,583,872	614,853,718	317,005,795	165,753,796	3,556
Student Spending	707,679,176	1,055,644,483	667,621,918	311,898,656	8,381
University of Georgia	2,099,360,104	2,964,843,643	2,072,594,617	1,519,610,997	25,613
Personnel Services	983,313,073	1,651,595,864	1,363,762,115	1,181,098,331	15,178
Operating Expenses	540,313,073	562,500,574	253,027,710	136,390,612	3,868
Student Spending	575,733,958	750,747,205	455,804,792	202,122,054	6,567
Comprehensive Universities					
Georgia Southern University	751,370,691	961,126,047	655,936,397	437,825,227	9,435
Personnel Services	243,730,206	385,718,446	325,834,602	286,057,366	4,471
Operating Expenses	143,049,495	121,083,030	52,635,308	28,592,246	865
Student Spending	364,590,990	454,324,571	277,466,487	123,175,615	4,099
Kennesaw State University	1,019,783,683	1,650,279,707	1,109,367,892	701,895,747	13,630
Personnel Services	303,467,510	569,114,854	462,250,814	390,571,487	5,722
Operating Expenses	201,764,124	313,600,808	161,686,057	84,541,287	1,814
Student Spending	514,552,049	767,564,045	485,431,021	226,782,973	6,094
University of West Georgia	383,987,896	626,323,337	424,266,526	274,551,368	5,229
Personnel Services	126,488,313	237,212,824	192,670,793	162,794,127	2,407
Operating Expenses	79,779,532	124,000,864	63,932,268	33,428,462	717
Student Spending	177,720,051	265,109,649	167,663,465	78,328,779	2,105
Valdosta State University	308,716,051	368,809,331	239,528,219	155,206,877	4,031
Personnel Services	94,523,702	139,237,330	119,644,355	106,337,609	1,827
Operating Expenses	62,650,326	46,131,537	17,675,969	8,816,843	338
Student Spending	151,542,023	183,440,464	102,207,895	40,052,425	1,866

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in Fiscal Year 2020**

Institution	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
State Universities					
Albany State University	181,921,238	214,895,053	138,571,227	91,640,240	2,328
Personnel Services	53,650,610	83,314,613	70,193,064	61,915,815	1,026
Operating Expenses	45,330,155	29,661,076	11,496,028	6,302,384	231
Student Spending	82,940,473	101,919,364	56,882,135	23,422,041	1,071
Clayton State University	180,477,996	292,455,756	196,827,323	125,028,780	2,545
Personnel Services	54,676,834	102,539,483	83,285,393	70,370,671	1,158
Operating Expenses	36,157,284	56,199,057	28,975,065	15,150,282	325
Student Spending	89,643,878	133,717,216	84,566,865	39,507,827	1,062
Columbus State University	224,878,552	272,665,158	182,254,397	123,143,659	2,823
Personnel Services	73,959,914	115,456,804	96,856,237	85,777,249	1,337
Operating Expenses	48,687,935	34,597,101	13,890,413	6,741,535	250
Student Spending	102,230,703	122,611,253	71,507,747	30,624,875	1,236
Fort Valley State University	122,107,975	140,985,030	95,003,549	67,256,686	1,487
Personnel Services	41,535,835	65,629,341	55,174,346	48,547,210	814
Operating Expenses	43,539,859	30,489,551	13,185,120	7,320,773	228
Student Spending	37,032,281	44,866,138	26,644,083	11,388,703	445
Georgia College & State University	225,637,666	282,507,363	194,644,104	133,005,020	2,931
Personnel Services	80,449,058	129,044,875	107,822,993	94,636,255	1,499
Operating Expenses	42,528,929	30,587,856	13,383,479	7,284,430	223
Student Spending	102,659,679	122,874,632	73,437,632	31,084,335	1,209
Georgia Southwestern State University	87,472,349	89,737,776	56,389,225	37,280,167	1,091
Personnel Services	26,396,110	36,236,656	31,763,525	28,758,405	480
Operating Expenses	21,931,812	10,495,537	3,402,932	1,824,540	90
Student Spending	39,144,427	43,005,583	21,222,768	6,697,222	521
Middle Georgia State University	202,341,130	247,992,739	163,045,744	105,866,726	2,579
Personnel Services	58,300,596	92,049,118	77,009,705	67,782,165	1,083
Operating Expenses	40,739,336	28,492,875	11,899,294	6,503,654	215
Student Spending	103,301,198	127,450,746	74,136,745	31,580,907	1,281
Savannah State University	132,502,085	162,883,237	103,819,933	69,865,319	1,562
Personnel Services	37,778,483	60,871,244	47,892,056	43,264,395	720
Operating Expenses	43,719,714	38,372,015	16,805,187	9,155,648	272
Student Spending	51,003,888	63,639,978	39,122,690	17,445,276	570
University of North Georgia	494,577,241	692,023,560	458,491,784	298,881,943	6,411
Personnel Services	150,698,143	255,902,754	210,315,144	182,156,079	2,848
Operating Expenses	89,933,696	99,385,020	43,536,212	24,134,552	682
Student Spending	253,945,402	336,735,786	204,640,428	92,591,312	2,881

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in Fiscal Year 2020**

Institution	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
State Colleges					
Abraham Baldwin Agricultural College	101,556,174	115,093,083	73,484,554	50,644,280	1,276
Personnel Services	28,624,113	40,795,906	35,319,705	31,841,021	570
Operating Expenses	24,084,295	14,912,482	5,619,015	3,159,997	109
Student Spending	48,847,766	59,384,695	32,545,834	15,643,262	597
Atlanta Metropolitan State College	46,331,566	74,647,381	49,180,103	30,679,453	612
Personnel Services	12,438,495	23,326,823	18,946,689	16,008,704	246
Operating Expenses	12,241,275	19,026,543	9,809,690	5,129,223	110
Student Spending	21,651,796	32,294,015	20,423,724	9,541,526	256
College of Coastal Georgia	83,242,049	99,716,374	64,867,080	41,650,071	1,036
Personnel Services	23,135,007	35,607,978	30,242,384	26,627,480	437
Operating Expenses	16,854,750	13,136,090	5,007,937	2,605,757	103
Student Spending	43,252,292	50,972,306	29,616,759	12,416,834	496
Dalton State College	117,708,121	132,070,425	82,829,857	55,466,034	1,290
Personnel Services	28,170,623	40,752,926	35,284,508	31,676,528	417
Operating Expenses	28,060,117	17,435,250	6,777,100	3,849,395	126
Student Spending	61,477,381	73,882,249	40,768,249	19,940,111	747
East Georgia State College	64,318,392	70,056,633	43,260,621	26,742,232	774
Personnel Services	14,587,374	21,384,707	18,335,449	16,345,789	279
Operating Expenses	15,474,970	7,502,789	2,934,499	1,540,874	56
Student Spending	34,256,048	41,169,137	21,990,673	8,855,569	439
Georgia Gwinnett College	316,121,271	508,419,001	338,518,072	210,224,229	3,834
Personnel Services	85,448,373	160,247,610	130,157,525	109,974,534	1,288
Operating Expenses	65,158,363	101,275,266	52,215,422	27,302,038	586
Student Spending	165,514,535	246,896,125	156,145,125	72,947,657	1,960
Georgia Highlands College	127,899,127	174,859,790	112,702,318	67,435,137	1,708
Personnel Services	28,271,359	47,525,404	39,571,421	34,188,792	669
Operating Expenses	27,011,619	29,624,771	13,604,122	6,787,175	194
Student Spending	72,616,149	97,709,615	59,526,775	26,459,170	845
Gordon State College	81,031,392	129,708,936	85,344,164	52,199,894	1,088
Personnel Services	19,965,839	37,443,404	30,412,565	25,696,614	419
Operating Expenses	18,830,097	29,267,511	15,089,720	7,890,008	169
Student Spending	42,235,456	62,998,021	39,841,879	18,613,272	500

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in Fiscal Year 2020**

<u>Institution</u>	<u>Initial Spending (current dollars)</u>	<u>Output Impact (current dollars)</u>	<u>Value Added Impact (current dollars)</u>	<u>Labor Income Impact (current dollars)</u>	<u>Employment Impact (jobs)</u>
South Georgia State College	61,533,124	65,120,087	41,185,046	27,118,560	720
Personnel Services	15,203,515	22,150,792	18,960,484	17,011,317	286
Operating Expenses	15,821,322	7,013,734	2,760,953	1,591,997	52
Student Spending	30,508,287	35,955,561	19,463,609	8,515,246	382

Notes:

The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using IMPLAN and production functions provided by IMPLAN.

Initial spending for personnel services and operating expenses were obtained from the Board of Regents of the University System of Georgia. The author estimated initial spending by students.

Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals. Employment includes both full-time and part-time jobs.

Expenditures and impacts for Augusta University do not include impacts associated with the AU Health System, Inc., which are reported in Appendix 3.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Table 3

**On-Campus and Off-Campus Jobs that Exist
Due to Institution-Related Spending in Fiscal Year 2020**

<u>Institution</u>	<u>Total Employment Impact</u>	<u>On-Campus Jobs</u>	<u>Off-Campus Jobs That Exist Due to Institution-Related Spending</u>
System Total	155,010	52,904	102,106
Research Universities	86,590	30,795	55,795
Augusta University	11,858	5,689	6,169
Georgia Institute of Technology	28,516	9,667	18,849
Georgia State University	20,604	5,260	15,344
University of Georgia	25,613	10,179	15,434
Regional Universities	32,324	10,506	21,818
Georgia Southern University	9,435	3,375	6,060
Kennesaw State University	13,630	3,985	9,645
University of West Georgia	5,229	1,683	3,546
Valdosta State University	4,031	1,463	2,568
State Universities	23,757	8,211	15,546
Albany State University	2,328	781	1,547
Clayton State University	2,545	845	1,700
Columbus State University	2,823	1,011	1,812
Fort Valley State University	1,487	623	864
Georgia College & State University	2,931	1,114	1,817
Georgia Southwestern State University	1,091	396	695
Middle Georgia State University	2,579	809	1,770
Savannah State University	1,562	556	1,006
University of North Georgia	6,411	2,076	4,335
State Colleges	12,338	3,392	8,946
Abraham Baldwin Agricultural College	1,276	473	803
Atlanta Metropolitan State College	612	175	437
College of Coastal Georgia	1,036	338	698
Dalton State College	1,290	319	971
East Georgia State College	774	222	552
Georgia Gwinnett College	3,834	799	3,035
Georgia Highlands College	1,708	532	1,176
Gordon State College	1,088	305	783
South Georgia State College	720	229	491

Notes: On-campus and off-campus jobs reported for Augusta University exclude employment impacts for the AU Health System, Inc., which are reported in Appendix 3.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Table 4

**Output Impact of All USG Institutions
in FY 2020 Compared to FY 2019, With Percent Change**

<u>Impact Category</u>	<u>Fiscal Year 2020 (2019 dollars/jobs)</u>	<u>Fiscal Year 2019 (2019 dollars/jobs)</u>	<u>Percent Change</u>
Initial Spending	12,606,286,003	12,591,482,010	0.1
Output Impact	18,584,935,804	18,471,540,386	0.6
Value Added Impact	12,714,706,137	12,584,029,470	1.0
Labor Income Impact	8,798,237,646	8,590,406,952	2.4
Employment Impact	155,010	157,770	-1.7

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Table 5

**Output Impact For All USG Institutions
in FY 2020 Compared to FY 2019, With Percent Change**

<u>Institution</u>	<u>Output Impact in FY 2020 (2019 dollars)</u>	<u>Output Impact in FY 2019 (2019 dollars)</u>	<u>Percent Change</u>
System Total	18,584,935,804	18,471,540,386	0.6
Research Universities	11,212,559,998	10,943,690,806	2.5
Augusta University	1,452,453,819	1,375,595,910	5.6
Georgia Institute of Technology	4,008,439,560	3,852,743,729	4.0
Georgia State University	2,786,822,976	2,803,161,755	-0.6
University of Georgia	2,964,843,643	2,912,189,412	1.8
Comprehensive Universities	3,606,538,423	3,619,884,058	-0.4
Georgia Southern University	961,126,047	984,130,600	-2.3
Kennesaw State University	1,650,279,707	1,619,942,802	1.9
University of West Georgia	626,323,337	632,323,791	-0.9
Valdosta State University	368,809,331	383,486,865	-3.8
State Universities	2,396,145,672	2,461,234,531	-2.6
Albany State University	214,895,053	222,070,453	-3.2
Clayton State University	292,455,756	302,478,169	-3.3
Columbus State University	272,665,158	290,480,614	-6.1
Fort Valley State University	140,985,030	143,749,305	-1.9
Georgia College & State University	282,507,363	290,331,157	-2.7
Georgia Southwestern State University	89,737,776	90,984,938	-1.4
Middle Georgia State University	247,992,739	249,508,413	-0.6
Savannah State University	162,883,237	172,199,505	-5.4
University of North Georgia	692,023,560	699,431,977	-1.1
State Colleges	1,369,691,711	1,446,730,991	-5.3
Abraham Baldwin Agricultural College	115,093,083	128,754,568	-10.6
Atlanta Metropolitan State College	74,647,381	90,544,053	-17.6
College of Coastal Georgia	99,716,374	104,946,126	-5.0
Dalton State College	132,070,425	137,758,116	-4.1
East Georgia State College	70,056,633	77,977,155	-10.2
Georgia Gwinnett College	508,419,001	519,538,555	-2.1
Georgia Highlands College	174,859,790	181,400,770	-3.6
Gordon State College	129,708,936	137,669,238	-5.8
South Georgia State College	65,120,087	68,142,410	-4.4

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Appendix 1

Study Areas for Institutions

Research Universities

Augusta University – Richmond, Columbia, Burke, McDuffie, Lincoln, Jefferson, Jenkins, and Warren
Georgia Institute of Technology – Atlanta MSA
Georgia State University – Atlanta MSA
University of Georgia – Clarke, Oconee, Madison, Jackson, Oglethorpe, Barrow, Gwinnett, Walton, and Elbert

Comprehensive Universities

Georgia Southern University – Bulloch, Screven, Candler, Emanuel, Evans, Tattnall, Jenkins, Chatham, Effingham, Bryan, and Liberty
Kennesaw State University – Atlanta MSA
University of West Georgia – Atlanta MSA
Valdosta State University – Lowndes, Brooks, Lanier, Berrien, Cook, and Echols

State Universities

Albany State University – Dougherty, Lee, Worth, Mitchell, Terrell, Sumter, Tift, and Crisp
Clayton State University – Atlanta MSA
Columbus State University – Muscogee, Harris, Chattahoochee, Marion, Talbot, Troup, and Stewart
Fort Valley State University – Peach, Houston, Crawford, Bibb, Taylor, and Macon
Georgia College & State University – Baldwin, Putnam, Hancock, Wilkinson, Washington, Jones, and Bibb
Georgia Southwestern State University – Sumter, Schley, Lee, Macon, Crisp, Webster and Marion
Middle Georgia State University – Bibb, Houston, Jones, Monroe, Peach, Crawford, Twiggs, Baldwin, Wilkinson, Henry, Laurens, Lamar, Bleckley, and Pulaski
Savannah State University – Chatham, Effingham, Bryan, Liberty, and Bulloch
University of North Georgia – Lumpkin, Hall, Dawson, Forsyth, White, Oconee, Clarke, Barrow, Madison, Jackson, Gwinnett, Fannin, Gilmer, and Union

State Colleges

Abraham Baldwin Agricultural College – Tift, Worth, Cook, Colquitt, Irwin, Turner, Decatur, Seminole, Miller, Grady, Early, Thomas, Mitchell, and Baker
Atlanta Metropolitan State College – Atlanta MSA
College of Coastal Georgia – Glynn, Brantley, McIntosh, Camden, and Wayne
Dalton State College – Whitfield, Murray, Catoosa, Gordon, Walker, Bartow, and Gilmer
East Georgia State College – Emanuel, Bulloch, Candler, Jefferson, Johnson, Burke, and Toombs
Georgia Gwinnett College – Atlanta MSA
Georgia Highlands College – Floyd, Polk, Bartow, Chattooga, Gordon, Cobb, Paulding, Douglas, and Carroll
Gordon State College – Atlanta MSA
South Georgia State College – Coffee, Atkinson, Bacon, Jeff Davis, Ware, Pierce, Brantley, and Clinch

Note:

Study areas were defined by the author based on commuting data obtained from the Residence County to Workplace County Flows for Georgia, 5-Year ACS, 2009-2013, U.S. Census Bureau (data extracted on March 8, 2018).

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Appendix 2

Economic Impact of Capital Outlays in Fiscal Year 2020

Institution	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
System Total	224,955,000	368,722,349	215,670,645	137,494,982	2,529
Research Universities	63,800,000	115,036,305	68,778,423	44,664,600	725
Augusta University	4,900,000	6,926,528	4,241,526	2,180,026	38
Georgia Institute of Technology	4,300,000	9,178,712	5,433,183	3,976,862	53
Georgia State University	48,000,000	87,737,270	53,573,540	34,842,824	569
University of Georgia	6,600,000	11,193,795	5,530,174	3,664,888	65
Comprehensive Universities	81,020,000	134,337,895	82,830,104	52,752,707	924
Georgia Southern University	26,620,000	34,902,322	22,113,425	13,264,173	279
Kennesaw State University	39,500,000	72,200,462	44,086,559	28,672,741	468
University of West Georgia	14,900,000	27,235,111	16,630,120	10,815,793	177
Valdosta State University	0	0	0	0	0
State Universities	73,335,000	112,097,600	59,852,548	37,416,138	830
Albany State University	0	0	0	0	0
Clayton State University	0	0	0	0	0
Columbus State University	600,000	267,681	143,034	75,281	1
Fort Valley State University	0	0	0	0	0
Georgia College & State University	18,300,000	27,215,989	15,063,342	9,679,125	215
Georgia Southwestern State University	3,000,000	4,129,249	1,542,365	917,611	26
Middle Georgia State University	31,435,000	47,101,292	26,643,110	16,615,976	401
Savannah State University	4,100,000	6,001,445	3,223,078	1,613,279	31
University of North Georgia	15,900,000	27,381,944	13,237,619	8,514,866	156
State Colleges	6,800,000	7,250,549	4,209,570	2,661,537	50
Abraham Baldwin Agricultural College	2,100,000	862,107	458,977	224,222	5
Atlanta Metropolitan State College	0	0	0	0	0
College of Coastal Georgia	0	0	0	0	0
Dalton State College	800,000	1,218,855	520,257	396,651	10
East Georgia State College	3,900,000	5,169,587	3,230,336	2,040,664	35
Georgia Gwinnett College	0	0	0	0	0
Georgia Highlands College	0	0	0	0	0
Gordon State College	0	0	0	0	0
South Georgia State College	0	0	0	0	0

Notes: The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using IMPLAN and production functions provided by IMPLAN. Initial spending for capital projects were obtained from the Board of Regents of the University System of Georgia. Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals. Employment includes both full- and part-time jobs. Estimates for Augusta University exclude impacts associated with the AU Health System, Inc., which are reported in Appendix 3.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Appendix 3

Combined Economic Impact of Augusta University and AU Health System, Inc. in Fiscal Year 2020

<u>Institution</u>	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
Augusta University	1,133,188,439	1,459,380,347	1,076,678,457	877,640,422	11,896
Personnel Services	654,523,557	1,026,088,309	863,879,254	765,821,720	8,548
Operating Expenses	341,590,028	254,150,358	109,537,117	61,946,016	1,744
Student Spending	132,174,854	172,215,152	99,020,560	47,692,660	1,566
Capital Spending	4,900,000	6,926,528	4,241,526	2,180,026	38
AU Health System, Inc.	1,021,578,608	1,267,891,729	930,149,975	777,497,860	9,520
Wages & Salaries and Benefits	592,030,682	928,119,019	781,397,429	692,702,272	7,248
Other Operating Expenditures	403,768,989	300,412,849	129,475,944	73,221,927	2,062
Student Spending	0	0	0	0	0
Capital Spending	25,776,937	39,359,861	19,276,602	11,573,661	210
Grand Total Economic Impact of Augusta University and AU Health System, Inc.					
Grand Total	2,154,765,047	2,727,272,075	2,006,828,432	1,655,138,282	21,415
Wages & Salaries and Benefits	1,246,554,239	1,954,207,327	1,645,276,683	1,458,523,992	15,796
Operating Expenses	745,359,017	554,563,207	239,013,061	135,167,943	3,806
Student Spending	132,174,854	172,215,152	99,020,560	47,692,660	1,566
Capital Spending	30,676,937	46,286,389	23,518,128	13,753,687	248

Note: Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property type income, and indirect business taxes. Labor income includes both the total payroll costs of workers who are paid by employers and payment received by self-employed individuals. Employment includes both full-time and part-time jobs. Initial spending estimates are based on financial data obtained from AU Health System, Inc., (a component unit of the State of Georgia) Financial Statements and Report of Independent Certified Public Accountants (June 30, 2020 and 2019). Other operating expenditures do not include \$36.4 million in depreciation and amortization. The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using IMPLAN, Type SAM multipliers, and consumption functions provided by IMPLAN.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, (www.selig.uga.edu), 2021.

Appendix 4

Combined Economic Impact of Augusta University and AU Health System, Inc. on the Augusta MSA in Fiscal Year 2020

<u>Institution</u>	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
Augusta University	1,133,188,439	1,495,841,096	1,091,180,564	888,545,982	12,184
Personnel Services	654,523,557	1,040,786,347	869,906,626	771,589,933	8,678
Operating Expenses	341,590,028	270,863,744	116,285,221	66,086,586	1,849
Student Spending	132,174,854	177,018,597	100,710,411	48,628,043	1,616
Capital Spending	4,900,000	7,172,408	4,278,306	2,241,420	41
AU Health System, Inc.	1,021,578,608	1,301,753,926	943,596,070	787,706,899	9,773
Wages & Salaries and Benefits	592,030,682	941,413,711	786,849,315	697,919,745	7,367
Other Operating Expenditures	403,768,989	320,168,540	137,452,392	78,116,197	2,186
Student Spending	0	0	0	0	0
Capital Spending	25,776,937	40,171,675	19,294,363	11,670,957	220
Grand Total Economic Impact of Augusta University and AU Health System, Inc.					
Grand Total	2,154,765,047	2,797,595,022	2,034,776,634	1,676,252,881	21,956
Wages & Salaries and Benefits	1,246,554,239	1,982,200,058	1,656,755,941	1,469,509,678	16,044
Operating Expenses	745,359,017	591,032,284	253,737,613	144,202,783	4,035
Student Spending	132,174,854	177,018,597	100,710,411	48,628,043	1,616
Capital Spending	30,676,937	47,344,083	23,572,669	13,912,377	261

Note: Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property type income, and indirect business taxes. Labor income includes both the total payroll costs of workers who are paid by employers and payment received by self-employed individuals. Employment includes both full-time and part-time jobs. Initial spending estimates are based on financial data obtained from AU Health System, Inc., (a component unit of the State of Georgia) Financial Statements and Report of Independent Certified Public Accountants (June 30, 2020 and 2019). Other operating expenditures do not include \$36.4 million in depreciation and amortization. The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using the IMPLAN, Type SAM multipliers, and consumption functions provided by IMPLAN.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, (www.selig.uga.edu), 2021.

Appendix 5

Augusta University's Albany, Savannah, and Rome Clinical Campuses: Economic Impact of FY 2020 Expenditures

Augusta University has established clinical campuses in Albany, Savannah, and Rome, which generate economic impacts for their host communities. Appendix 5 documents the economic impact that the Albany, Savannah, and Rome clinical campuses had on their host communities in FY 2020.

Albany: In FY 2020, total expenditures at the Albany clinical campus were \$1,430,872, including \$665,714 personnel expense, \$181,830 operating expense, and \$583,328 in student spending (Assistant Vice Chancellor for Fiscal Affairs/Budget Director, Board of Regents, University System of Georgia provided the estimates for personnel and operating expenses as well as enrollment).

The economic impact accruing to Albany includes:

- \$1,430,872 in initial expenditures and 4 on-campus jobs,
- \$1,867,231 in output (sales),
- \$1,315,836 in gross regional product (value added),
- \$957,740 in income, and
- 16 jobs.

Savannah: Total expenditures at the Savannah clinical campus were \$1,482,406, including \$732,986 personnel expense, \$137,637 operating expense, and \$611,783 in student spending (Assistant Vice Chancellor for Fiscal Affairs/Budget Director, Board of Regents, University System of Georgia provided the estimates for personnel and operating expenses as well as enrollment).

The economic impact accruing to Savannah includes:

- \$1,482,406 in initial expenditures and 4 on-campus jobs,
- \$2,039,039 in output (sales),
- \$1,501,097 in gross regional product (value added),
- \$1,099,998 in income, and
- 16 jobs.

Rome: Total expenditures at the Rome clinical campus were \$1,146,322, including \$665,714 personnel expense, \$181,830 operating expense, and \$298,778 in student spending (Assistant Vice Chancellor for Fiscal Affairs/Budget Director, Board of Regents, University System of Georgia provided the estimates for personnel and operating expenses).

The economic impact accruing to Rome includes:

- \$1,146,322 in initial expenditures and 5 on-campus jobs,
- \$1,720,523 in output (sales),
- \$1,268,289 in gross regional product (value added),
- \$959,602 in income, and
- 12 jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, (www.selig.uga.edu), 2021.

Appendix 6

Augusta University and UGA Medical Partnership's Athens Campus: Economic Impact of FY 2020 Expenditures

In partnership, Augusta University and the University of Georgia opened a new campus in Athens in FY 2011, which generates significant economic impacts for Athens' regional economy. Appendix 6 documents the economic impact that the Athens campus had on its host community in FY 2020.

Initial expenditures at the Athens campus (including St. Mary's) were \$21,721,344, including \$14,343,670 personnel expense, \$3,219,309 operating expense, and \$2,337,375 in student spending, and \$1,820,990 in capital outlays (Assistant Vice Chancellor for Fiscal Affairs/Budget Director, Board of Regents, University System of Georgia provided expense data for personnel and operations as well as enrollment data).

The economic impact accruing to Athens includes:

- \$21,721,344 in initial expenditures and 123 on-campus and St. Mary's jobs,
- \$33,360,639 in output (sales),
- \$24,931,829 in gross regional product (value added),
- \$19,984,666 in income, and
- 267 jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, (www.selig.uga.edu), 2021.

Appendix 7

**Combined Economic Impact of UGA's Griffin Campus (Budget Unit "A" and Budget Unit "B")
On Its Regional Economy in Fiscal Year 2020**

<u>UGA's Griffin Campus</u>	<u>Initial Spending (current dollars)</u>	<u>Output Impact (current dollars)</u>	<u>Value Added Impact (current dollars)</u>	<u>Labor Income Impact (current dollars)</u>	<u>Employment Impact (jobs)</u>
Total	19,936,727	35,075,029	25,932,134	19,955,164	284
Personnel Services	13,310,182	24,961,562	20,274,468	17,130,590	217
Operating Expenses	4,065,595	6,319,131	3,258,012	1,703,527	37
Student Spending	2,560,950	3,794,336	2,399,654	1,121,067	30

Notes: The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using IMPLAN and production functions provided by IMPLAN. Initial spending for personnel services and operating expenses were obtained from the Board of Regents of the University System of Georgia. The author estimated initial spending by students. Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals. Employment includes both full-time and part-time jobs. The total employment impact of 284 jobs consists of 141 on-campus jobs (expressed on a FTE basis) and 143 off-campus jobs. For each FTE job created on the Griffin campus, there are 1.0 off-campus jobs that exist because of spending related to UGA at Griffin.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Appendix 8

**Total Economic Impact of Information Technology Services in Athens
On the Regional Economy in Fiscal Year 2020**

<u>ITS in Athens</u>	<u>Initial Spending (current dollars)</u>	<u>Output Impact (current dollars)</u>	<u>Value Added Impact (current dollars)</u>	<u>Labor Income Impact (current dollars)</u>	<u>Employment Impact (jobs)</u>
Total	37,777,228	52,141,678	36,123,529	28,572,674	414
Personnel Services	20,065,727	33,702,869	27,829,263	24,101,781	287
Operating Expenses	17,711,501	18,438,809	8,294,266	4,470,893	127

Notes: The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using IMPLAN and production functions provided by IMPLAN. Initial spending for personal services and operating expenses were obtained from the Board of Regents of the University System of Georgia. ITS operating expenditures expensed by USG institutions (\$47,936,647) are not included because this amount represents various contracts and software licenses with suppliers that are unlikely to be located in the Athens area. In addition, a substantial of this amount represents USG institutions' purchasing software directly through ITS due to its ability to obtain better pricing. Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals. Employment includes both full-time and part-time jobs. The total employment impact of 414 jobs consists of 185 USG jobs (expressed on a FTE basis) and 229 off-site jobs that are primarily in the private sector. For each FTE job created at ITS in Athens there are 1.2 off-site jobs that exist because of ITS-related spending.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2021.

Appendix 9

**Total Economic Impact of the Shared Services Center in Sandersville
On the Regional Economy in Fiscal Year 2020**

<u>SSC Sandersville</u>	<u>Initial Spending (current dollars)</u>	<u>Output Impact (current dollars)</u>	<u>Value Added Impact (current dollars)</u>	<u>Labor Income Impact (current dollars)</u>	<u>Employment Impact (jobs)</u>
Total	5,929,509	7,458,227	6,194,078	5,485,765	87
Personnel Services	4,890,602	6,946,996	6,013,820	5,391,542	83
Operating Expenses	1,035,907	511,231	180,258	94,223	4

Notes: The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using IMPLAN and production functions provided by IMPLAN. Initial spending for personal services and operating expenses were obtained from the Board of Regents of the University System of Georgia. Output refers to the value of total production, including domestic and foreign trade. Value added includes employee compensation, proprietary income, other property income, and indirect business taxes. Labor income includes both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals. Employment includes both full-time and part-time jobs. The total employment impact of 87 jobs consists of 65 USG jobs at the Shared Services Center (expressed on a FTE basis) and 22 off-site jobs that are primarily in the private sector. For each FTE job created at the Shared Services Center, there are 0.3 off-site jobs that exists because of Center-related spending.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, (www.selig.uga.edu), 2021.