

**The Economic Impact
of University System of Georgia Institutions
on their Regional Economies in FY 2022**

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Executive Summary

The statewide economic impact of the University System of Georgia's institutions in fiscal year 2022 includes:

- \$20.1 billion in output (sales);
- \$13.9 billion in gross regional product;
- \$9.7 billion in income; and
- 159,034 full- and part-time jobs (3.3 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 pillars 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 2022 fiscal year—July 1, 2021 through June 30, 2022.

The study does not account for all 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 \$20.1 billion in FY 2022. 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 2022 total, \$14.2 billion (71 percent) is initial spending by the institutions and students; \$5.9 billion (29 percent) is the induced or re-spending (multiplier) impact. Dividing the FY 2022 total output impact (\$20.1 billion) by initial spending (\$14.2 billion) yields an average multiplier value of 1.42. On average, therefore, every dollar of initial spending generates an additional 42 cents for the economy of the region that hosts the institution.

In FY 2022, value added comprises \$13.9 billion (69 percent) of the \$20.1 billion output impact, with domestic and foreign trade comprising the remaining 31 percent. The \$13.9 billion value-added impact equals about 2 percent of Georgia's GDP. Labor income received by residents of the communities that host one or more institutions equals \$9.7 billion, and represents 70 percent of the value-added impact.

The collective or rolled-up employment impact of all institutions on their host communities in FY 2022, including multiplier effects, is 159,034 full- and part-time jobs. Approximately 32 percent of these positions are on campus (50,511 FTE University System employees) and 68 percent (101,741 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 159,034 jobs generated by the University System equal 3.3 percent of all the nonfarm jobs in Georgia, or about one job in 30. To provide perspective, the rolled-up employment impact of the USG's 26 institutions is about the same as the combined number of jobs at Georgia's top five employers—Fort Benning, Delta Air Lines, Emory University/Emory Healthcare, U.S Army Signal Center and Fort Gordon, and Robins Air Force Base.

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 2022 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 2022 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 author is grateful to Zach Rigole, Budget Administration Director, Budget Office of the Board of Regents, who provided institution-specific data on expenditures for personnel services, operations, capital projects, and the number of positions. It should be noted that USG institutions received three rounds of funding from the Higher Education Emergency Relief Fund (HEERF). These funds will be used between fiscal years 2020-2023, with the majority of the spending occurring in FYs 2021 and 2022. To a minor extent, HEERF funds may limit the comparability of the FY 2022 economic impact estimates to those for other fiscal years.

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 2022 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.

The expenditures and impact reported in Tables 1-3 for Augusta University are not comparable to those for previous years because the Georgia Correctional Healthcare contract was no longer with Augusta University. In addition,

these estimates do not account for spending by the hospital and clinics operated 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 all of the funds were actually spent during fiscal year 2022. 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 2022 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 that students typically buy.

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 \$4,148 for Summer 2021, \$8,295 for Fall 2021, and at \$8,295 for Spring 2022. 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 2022, 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 2022. 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 2022 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 2022 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 2022, total initial spending for all 26 institutions was \$14.2 billion. Spending originating from personnel services accounted for 36 percent (\$5.2 billion) of initial spending, spending due to operating expenses accounted for 27 percent (\$3.9 billion) of initial spending, and students' personal expenditures accounted for 36 percent (\$5.1 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 2022 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 \$20.1 billion in FY 2022 (Table 1). This amount represents the combined impact of all 26 institutions on their host communities. Of the FY 2022 output impact, \$14.1 billion (71 percent) was initial spending by the institutions and students, while \$5.9 billion (29 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 2022 was 1.42, obtained by dividing the total output impact (\$20.1 billion) by initial spending (\$14.2 billion). On average, therefore, every dollar of initial spending generated an additional 42 cents for the economy of the region hosting the institution. Thus, for all institutions combined, the output impact was 1.42 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 2022 are reported in the third column of Tables 1 and 2.

The 26 institutions collectively generated a value-added impact of \$13.9 billion on their host communities in FY 2022. For all institutions combined, the value-added impact equaled 69 percent of the \$20.1 billion output impact

(with domestic and foreign trade comprising the remaining 31 percent of the output impact). The \$13.9 billion value-added impact reported for FY 2022 equals about 2 percent of Georgia's GDP.

■ Labor Income Impact ■

Collectively, the 26 University System institutions generated a labor income impact on their host communities of \$9.7 billion in FY 2022. The labor income received by residents of the communities that host University System institutions represents 70 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 159,034 jobs on their host communities in FY 2022. Approximately 32 percent (50,511) of these positions are on-campus jobs at one of the institutions of the University System of Georgia, and 68 percent (108,532 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, 11 jobs were generated for each million dollars of initial spending by USG institutions and students in FY 2021 — on average \$89,195 in initial spending supports one job.

The employment impact associated with the University System equals 3.3 percent of all the nonfarm jobs held by Georgians, or about one job in 30. To provide perspective, the rolled-up employment impact of the USG's 26 institutions (159,034 jobs) is about the same as the combined number of jobs (159,225) with Georgia's top five employers — Fort Benning (42,870 jobs), Delta Air Lines (34,500 jobs), Emory University/Emory Healthcare (32,091), U.S. Army Signal Center and Fort Gordon (25,264 jobs), and Robins Air Force Base (24,500 jobs).

Employment impacts 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 2021 Estimates

Table 4 reports the total economic impact of all USG institutions on their regional economies in FY 2022 and FY 2021. Initial spending for the fiscal year as a whole was 8 percent higher in FY 2022 than in FY 2021 — \$14.2 billion versus \$13.1 billion. The output (sales), value added (state GDP), and labor income impacts were 4.1 percent, 5.9 percent, and 9.5 percent higher in FY 2022 than reported for FY 2021. The employment impact was 4.1 percent higher in FY 2022 than reported for FY 2021. In sum, USG institutions were a vital source of economic growth.

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, inheritance 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. It should be noted that a companion report “Lifetime Earnings for the University System of Georgia Class of 2022” was produced by the Selig Center and provides estimates of the increased earnings over a working lifetime associated with their USG degrees.

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 public 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 2022 includes:

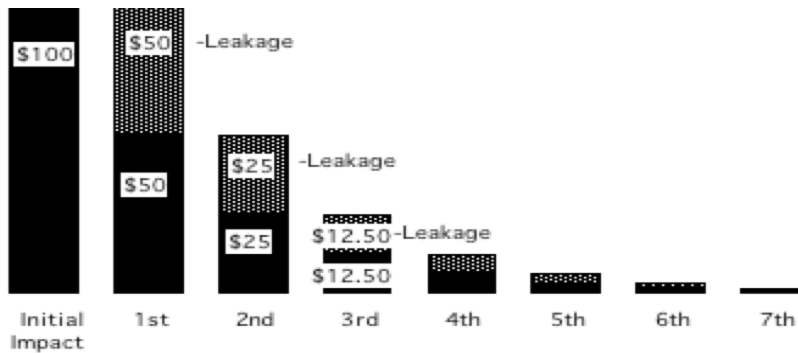
- \$20.1 billion in output (sales);
- \$13.9 billion in valued added (gross regional product);
- \$9.7 billion in labor income; and
- 159,034 full- and part-time jobs.

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. Collectively, USG institutions were a vital source of economic growth.

Figure 1
Schematic Representation of Impact Relationships



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 2022**

Total for All Institutions in 2022	Initial Spending (2022 dollars)	Output Impact (2022 dollars)	Value Added Impact (2022 dollars)	Labor Income Impact (2022 dollars)	Employment Impact (jobs)
System total	14,185,108,044	20,085,659,032	13,886,949,729	9,722,052,567	159,034
Personnel services	5,163,977,298	9,097,156,673	7,478,522,133	6,382,266,270	73,476
Operating expenses	3,886,893,386	3,637,104,150	1,918,100,634	1,146,285,990	25,413
Student spending	5,134,237,360	7,351,398,209	4,490,326,962	2,193,500,307	60,145

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), 2023.

Table 2

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in Fiscal Year 2022**

<u>Institution</u>	<u>Initial Spending (2022 dollars)</u>	<u>Output Impact (2022 dollars)</u>	<u>Value Added Impact (2022 dollars)</u>	<u>Labor Income Impact (2022 dollars)</u>	<u>Employment Impact (jobs)</u>
Research Universities					
Augusta University	1,025,972,386	1,338,895,429	1,025,064,917	836,741,876	9,996
Personnel Services	636,207,054	1,004,363,687	842,892,276	745,242,985	7,252
Operating Expenses	232,153,281	127,140,249	60,720,054	33,695,425	977
Student Spending	157,612,051	207,391,493	121,452,587	57,803,466	1,767
Georgia Institute of Technology	2,861,466,483	4,501,800,766	3,183,731,495	2,321,765,632	30,283
Personnel Services	1,267,271,709	2,404,999,699	1,953,919,570	1,638,167,474	15,784
Operating Expenses	1,005,178,603	1,181,677,538	651,058,644	393,533,907	7,501
Student Spending	589,016,171	915,123,529	578,753,281	290,064,251	6,998
Georgia State University	1,870,341,385	2,920,899,280	2,003,667,472	1,347,103,951	20,606
Personnel Services	595,842,387	1,130,776,177	918,688,622	770,229,156	7,657
Operating Expenses	496,469,971	581,346,590	320,510,065	193,732,146	3,705
Student Spending	778,029,027	1,208,776,513	764,468,785	383,142,649	9,244
University of Georgia	2,369,391,824	3,178,791,157	2,245,188,526	1,644,786,365	27,102
Personnel Services	1,019,268,211	1,729,243,269	1,427,925,535	1,224,296,884	15,086
Operating Expenses	668,866,461	522,552,482	257,405,085	153,137,338	4,469
Student Spending	681,257,152	926,995,406	559,857,906	267,352,143	7,547
Comprehensive Universities					
Georgia Southern University	888,768,559	1,107,110,359	746,999,650	495,953,603	10,045
Personnel Services	246,768,802	404,808,081	337,728,479	293,109,742	4,278
Operating Expenses	211,490,335	137,270,555	67,323,043	38,374,506	1,106
Student Spending	430,509,422	565,031,723	341,948,128	164,469,355	4,661
Kennesaw State University	1,304,749,377	2,033,717,725	1,375,408,914	886,412,455	15,917
Personnel Services	341,840,181	648,736,595	527,059,994	441,887,452	5,759
Operating Expenses	290,154,170	339,758,993	187,317,134	113,223,746	2,165
Student Spending	672,755,026	1,045,222,137	661,031,786	331,301,257	7,993
University of West Georgia	405,447,160	633,498,452	431,789,626	284,268,008	5,003
Personnel Services	118,099,437	224,126,451	182,089,444	152,663,912	2,017
Operating Expenses	96,864,993	113,425,054	62,533,903	37,798,586	723
Student Spending	190,482,730	295,946,947	187,166,279	93,805,510	2,263
Valdosta State University	348,695,561	409,706,961	265,105,525	175,338,176	4,028
Personnel Services	97,549,869	146,651,709	124,587,695	109,850,901	1,663
Operating Expenses	75,775,373	41,503,592	19,133,134	10,568,951	345
Student Spending	175,370,319	221,551,660	121,384,696	54,918,324	2,020

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in Fiscal Year 2022**

Institution	Initial Spending (2022 dollars)	Output Impact (2022 dollars)	Value Added Impact (2022 dollars)	Labor Income Impact (2022 dollars)	Employment Impact (jobs)
State Universities					
Albany State University	235,653,684	260,389,529	165,760,512	110,953,786	2,588
Personnel Services	57,678,281	90,511,988	75,995,688	66,990,878	956
Operating Expenses	81,497,087	45,473,252	21,037,854	11,746,946	340
Student Spending	96,478,316	124,404,289	68,726,970	32,215,962	1,292
Clayton State University	197,474,937	307,617,085	208,804,462	136,323,104	2,505
Personnel Services	54,863,592	104,118,889	84,590,420	70,920,665	1,020
Operating Expenses	47,220,006	55,292,749	30,484,195	18,426,156	352
Student Spending	95,391,339	148,205,447	93,729,847	46,976,283	1,133
Columbus State University	251,403,001	290,202,166	196,066,747	134,292,551	2,844
Personnel Services	74,149,066	117,125,342	98,387,216	86,375,959	1,189
Operating Expenses	61,626,612	27,966,635	12,922,816	7,337,599	235
Student Spending	115,627,323	145,110,189	84,756,715	40,578,993	1,420
Fort Valley State University	144,364,574	163,124,086	105,620,059	74,893,753	1,653
Personnel Services	42,490,789	69,316,962	57,376,689	50,106,364	767
Operating Expenses	58,053,291	39,003,516	17,019,503	10,312,429	332
Student Spending	43,820,494	54,803,608	31,223,867	14,474,960	554
Georgia College & State University	239,066,650	303,493,598	201,434,172	140,069,654	3,023
Personnel Services	80,688,841	132,352,793	109,014,536	95,331,606	1,325
Operating Expenses	46,339,069	31,044,448	13,265,916	7,870,185	227
Student Spending	112,038,740	140,096,357	79,153,720	36,867,863	1,471
Georgia Southwestern State University	93,228,105	95,787,234	60,639,545	40,718,393	1,169
Personnel Services	26,624,606	36,921,961	32,153,618	29,016,958	442
Operating Expenses	20,296,993	6,930,455	2,843,919	1,636,108	67
Student Spending	46,306,506	51,934,818	25,642,008	10,065,327	660
Middle Georgia State University	236,404,615	288,151,452	184,368,284	122,384,568	2,930
Personnel Services	63,788,568	104,401,221	85,974,923	74,953,458	1,095
Operating Expenses	58,310,698	37,296,503	16,234,138	9,582,239	324
Student Spending	114,305,349	146,453,728	82,159,223	37,848,871	1,511
Savannah State University	141,043,644	160,965,617	108,345,077	73,415,740	1,458
Personnel Services	36,824,087	60,522,926	50,674,552	43,979,267	643
Operating Expenses	54,335,335	35,029,115	17,596,168	10,118,713	281
Student Spending	49,884,222	65,413,576	40,074,357	19,317,760	534
University of North Georgia	539,402,306	733,667,402	490,836,227	323,010,135	6,314
Personnel Services	158,751,019	270,143,834	222,740,970	191,175,032	2,605
Operating Expenses	103,197,721	82,182,211	40,785,243	23,876,740	641
Student Spending	277,453,566	381,341,357	227,310,014	107,958,363	3,068

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in Fiscal Year 2022**

<u>Institution</u>	<u>Initial Spending (2022 dollars)</u>	<u>Output Impact (2022 dollars)</u>	<u>Value Added Impact (2022 dollars)</u>	<u>Labor Income Impact (2022 dollars)</u>	<u>Employment Impact (jobs)</u>
State Colleges					
Abraham Baldwin Agricultural College	113,824,508	121,924,856	77,586,463	51,754,319	1,239
Personnel Services	27,994,305	41,095,784	35,162,602	31,341,252	435
Operating Expenses	31,479,621	14,057,795	6,212,555	3,540,268	125
Student Spending	54,350,582	66,771,277	36,211,306	16,872,799	679
Atlanta Metropolitan State College	52,790,018	77,270,695	50,286,055	31,899,770	579
Personnel Services	10,124,976	19,214,952	15,611,008	13,088,280	167
Operating Expenses	21,492,635	25,167,021	13,875,171	8,386,840	160
Student Spending	21,172,407	32,888,722	20,799,876	10,424,650	252
College of Coastal Georgia	87,356,266	101,025,070	65,400,128	42,486,406	995
Personnel Services	22,552,009	35,132,383	29,752,959	25,907,511	376
Operating Expenses	20,711,023	11,212,439	4,866,181	2,685,592	91
Student Spending	44,093,234	54,680,248	30,780,988	13,893,303	528
Dalton State College	124,752,794	132,558,867	85,106,840	55,230,796	1,155
Personnel Services	27,216,285	40,004,659	34,454,347	30,719,518	358
Operating Expenses	32,764,006	15,204,751	6,350,786	3,832,586	123
Student Spending	64,772,503	77,349,457	44,301,707	20,678,692	674
East Georgia State College	57,310,487	59,599,717	34,974,885	22,232,628	612
Personnel Services	12,956,730	19,277,611	16,412,659	14,540,336	225
Operating Expenses	18,291,779	8,006,798	3,629,741	1,943,528	68
Student Spending	26,061,978	32,315,308	14,932,485	5,748,764	319
Georgia Gwinnett College	333,117,127	514,234,861	346,070,385	223,082,419	3,798
Personnel Services	84,601,338	160,554,514	130,441,017	109,361,836	1,220
Operating Expenses	84,743,208	99,230,926	54,708,346	33,068,432	632
Student Spending	163,772,581	254,449,421	160,921,022	80,652,151	1,946
Georgia Highlands College	126,846,293	167,963,900	108,953,092	69,099,932	1,559
Personnel Services	26,858,653	46,138,372	38,093,646	32,780,845	551
Operating Expenses	32,285,177	27,311,284	13,691,922	7,958,545	201
Student Spending	67,702,463	94,514,244	57,167,524	28,360,542	807
Gordon State College	78,388,150	120,631,716	80,712,475	51,313,152	990
Personnel Services	18,381,068	34,883,177	28,340,512	23,760,704	363
Operating Expenses	19,564,652	22,909,429	12,630,508	7,634,504	146
Student Spending	40,442,430	62,839,110	39,741,455	19,917,944	481

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in Fiscal Year 2022**

<u>Institution</u>	<u>Initial Spending (2022 dollars)</u>	<u>Output Impact (2022 dollars)</u>	<u>Value Added Impact (2022 dollars)</u>	<u>Labor Income Impact (2022 dollars)</u>	<u>Employment Impact (jobs)</u>
South Georgia State College	57,848,150	62,631,052	39,028,197	26,521,397	643
Personnel Services	14,585,435	21,733,637	18,453,157	16,467,297	243
Operating Expenses	17,731,286	9,109,770	3,944,610	2,263,975	77
Student Spending	25,531,429	31,787,645	16,630,430	7,790,125	323

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), 2023.

Table 3

**On-Campus and Off-Campus Jobs that Exist
Due to Institution-Related Spending in Fiscal Year 2022**

<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	159,034	50,511	108,523
Research Universities	87,986	29,916	58,070
Augusta University	9,996	4,823	5,173
Georgia Institute of Technology	30,283	9,617	20,666
Georgia State University	20,606	4,757	15,849
University of Georgia	27,102	10,719	16,383
Regional Universities	34,993	10,113	24,880
Georgia Southern University	10,045	3,250	6,795
Kennesaw State University	15,917	4,095	11,822
University of West Georgia	5,003	1,442	3,561
Valdosta State University	4,028	1,326	2,702
State Universities	24,484	7,554	16,930
Albany State University	2,588	733	1,855
Clayton State University	2,505	753	1,752
Columbus State University	2,844	906	1,938
Fort Valley State University	1,653	583	1,070
Georgia College & State University	3,023	973	2,050
Georgia Southwestern State University	1,169	371	798
Middle Georgia State University	2,930	815	2,115
Savannah State University	1,458	489	969
University of North Georgia	6,314	1,931	4,383
State Colleges	11,571	2,928	8,643
Abraham Baldwin Agricultural College	1,239	348	891
Atlanta Metropolitan State College	579	118	461
College of Coastal Georgia	995	292	703
Dalton State College	1,155	277	878
East Georgia State College	612	181	431
Georgia Gwinnett College	3,798	808	2,990
Georgia Highlands College	1,559	436	1,123
Gordon State College	990	274	716
South Georgia State College	643	194	449

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), 2023.

Table 4

**Total Economic Impact of All USG Institutions on Their Regional Economies
in FY 2022 Compared to FY 2021**

<u>Impact Category</u>	<u>Fiscal Year 2022 (2022 dollars/jobs)</u>	<u>Fiscal Year 2021 (2021 dollars/jobs)</u>	<u>Percent Change</u>
Initial Spending	14,185,108,044	13,132,946,150	8.0
Output Impact	20,085,659,032	19,296,498,232	4.1
Value Added Impact	13,886,949,729	13,111,890,733	5.9
Labor Income Impact	9,722,052,567	8,882,265,952	9.5
Employment Impact	159,034	152,784	4.1

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2023.

Table 5

**Output Impact For All USG Institutions
in FY 2022 Compared to FY 2021, With Percent Change**

<u>Institution</u>	<u>Output Impact in FY 2022 (2022 dollars)</u>	<u>Output Impact in FY 2021 (2021 dollars)</u>	<u>Percent Change</u>
System Total	20,085,659,032	19,296,497,232	4.1
Research Universities	11,940,386,633	11,525,010,100	3.6
Augusta University	1,338,895,429	1,424,485,256	-6.0
Georgia Institute of Technology	4,501,800,766	4,191,622,850	7.4
Georgia State University	2,920,899,280	2,831,478,423	3.2
University of Georgia	3,178,791,157	3,077,423,571	3.3
Comprehensive Universities	4,184,033,497	3,905,522,722	7.1
Georgia Southern University	1,107,110,359	1,032,034,518	7.3
Kennesaw State University	2,033,717,725	1,842,463,978	10.4
University of West Georgia	633,498,452	626,706,803	1.1
Valdosta State University	409,706,961	404,317,423	1.3
State Universities	2,603,398,168	2,508,682,670	3.8
Albany State University	260,389,529	231,145,754	12.7
Clayton State University	307,617,085	306,712,742	0.3
Columbus State University	290,202,166	283,182,500	2.5
Fort Valley State University	163,124,086	147,465,579	10.6
Georgia College & State University	303,493,598	285,281,637	6.4
Georgia Southwestern State University	95,787,234	103,180,597	-7.2
Middle Georgia State University	288,151,452	267,738,078	7.6
Savannah State University	160,965,617	161,184,100	-0.1
University of North Georgia	733,667,402	722,791,683	1.5
State Colleges	1,357,840,734	1,357,281,740	0.0
Abraham Baldwin Agricultural College	121,924,856	119,695,860	1.9
Atlanta Metropolitan State College	77,270,695	73,875,746	4.6
College of Coastal Georgia	101,025,070	98,748,886	2.3
Dalton State College	132,558,867	130,673,091	1.4
East Georgia State College	59,599,717	63,927,337	-6.8
Georgia Gwinnett College	514,234,861	512,945,913	0.3
Georgia Highlands College	167,963,900	175,687,450	-4.4
Gordon State College	120,631,716	122,148,230	-1.2
South Georgia State College	62,631,052	59,579,227	5.1

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu), 2023.

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, Dodge, 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), 2023.

Appendix 2

Economic Impact of Capital Outlays in Fiscal Year 2022

<u>Institution</u>	<u>Initial Spending (2022 dollars)</u>	<u>Output Impact (2022 dollars)</u>	<u>Value Added Impact (2022 dollars)</u>	<u>Labor Income Impact (2022 dollars)</u>	<u>Employment Impact (jobs)</u>
System Total	190,950,000	292,416,015	155,653,133	94,070,546	1,615
Research Universities	50,300,000	67,078,103	38,110,278	23,901,475	375
Augusta University	5,000,000	7,289,752	3,848,693	1,932,660	29
Georgia Institute of Technology	0	0	0	0	0
Georgia State University	6,200,000	3,280,476	1,998,918	1,058,308	13
University of Georgia	39,100,000	56,507,875	32,262,667	20,910,507	333
Comprehensive Universities	80,400,000	133,604,557	72,450,427	42,993,565	738
Georgia Southern University	36,700,000	56,615,982	32,269,416	19,977,342	372
Kennesaw State University	5,000,000	9,399,216	4,791,541	2,682,120	39
University of West Georgia	26,300,000	49,439,875	25,203,501	14,107,949	206
Valdosta State University	12,400,000	18,149,484	10,185,969	6,226,154	121
State Universities	28,050,000	40,791,664	19,698,907	11,305,191	217
Albany State University	7,600,000	11,252,028	6,323,717	3,863,268	76
Clayton State University	0	0	0	0	0
Columbus State University	0	0	0	0	0
Fort Valley State University	12,200,000	19,838,206	8,501,224	4,609,381	94
Georgia College & State University	0	0	0	0	0
Georgia Southwestern State University	0	0	0	0	0
Middle Georgia State University	0	0	0	0	0
Savannah State University	4,050,000	6,442,701	2,990,786	1,563,252	29
University of North Georgia	4,200,000	3,258,729	1,883,180	1,269,290	18
State Colleges	32,200,000	50,941,691	25,393,521	15,870,315	285
Abraham Baldwin Agricultural College	11,800,000	16,611,067	8,982,842	5,658,238	119
Atlanta Metropolitan State College	3,200,000	6,015,498	3,066,586	1,716,557	25
College of Coastal Georgia	3,000,000	4,369,804	1,865,084	990,992	21
Dalton State College	8,300,000	12,516,725	4,997,710	2,919,149	60
East Georgia State College	0	0	0	0	0
Georgia Gwinnett College	3,500,000	7,545,821	4,572,872	3,551,320	43
Georgia Highlands College	2,400,000	3,882,776	1,908,427	1,034,059	17
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), 2023.

Appendix 3

Combined Economic Impact of Augusta University and AU Health System, Inc. in Fiscal Year 2022

<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>
Augusta University	1,030,972,386	1,346,185,181	1,028,913,610	838,674,536	10,039
Personnel Services	636,207,054	1,004,363,687	842,892,276	745,242,985	7,252
Operating Expenses	232,153,281	127,140,249	60,720,054	33,695,425	977
Student Spending	157,612,051	207,391,493	121,452,587	57,803,466	1,767
Capital Spending	5,000,000	7,289,752	3,848,693	1,932,660	29
AU Health System, Inc.	1,185,730,885	1,510,460,520	1,122,867,412	931,593,809	10,730
Wages & Salaries and Benefits	677,931,932	1,090,613,091	910,769,793	798,820,371	7,691
Other Operating Expenditures	477,392,537	376,666,367	185,331,371	116,868,358	2,809
Student Spending	0	0	0	0	0
Capital Spending	30,406,416	43,361,062	26,766,248	15,905,080	230
Grand Total Economic Impact of Augusta University and AU Health System, Inc.					
Grand Total	2,216,703,271	2,856,825,701	2,151,781,022	1,770,268,346	20,755
Wages & Salaries and Benefits	1,314,138,986	2,094,976,778	1,753,662,069	1,544,063,357	14,943
Operating Expenses	709,545,818	503,806,616	246,051,425	150,563,783	3,786
Student Spending	157,612,051	207,391,493	121,452,587	57,803,466	1,767
Capital Spending	35,406,416	50,650,814	30,614,941	17,837,740	259

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, 2022 and 2021). Other operating expenditures do not include \$42.9 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), 2023.

Appendix 4

Combined Economic Impact of Augusta University and AU Health System, Inc. on the Augusta MSA in Fiscal Year 2022

<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	1,030,972,386	1,377,608,419	1,047,468,691	847,963,513	10,176
Personnel Services	636,207,054	1,023,457,978	855,051,235	749,283,964	7,354
Operating Expenses	232,153,281	136,621,104	65,930,481	37,767,652	987
Student Spending	157,612,051	210,122,723	122,694,293	58,931,612	1,805
Capital Spending	5,000,000	7,406,614	3,792,682	1,980,285	30
AU Health System, Inc.	1,185,730,885	1,510,675,669	1,126,982,007	938,303,484	10,719
Wages & Salaries and Benefits	677,931,932	1,090,580,243	911,128,747	798,424,856	7,692
Other Operating Expenditures	477,392,537	375,809,556	188,925,671	123,432,157	2,782
Student Spending	0	0	0	0	0
Capital Spending	30,406,416	44,285,870	26,927,589	16,446,471	245
Grand Total Economic Impact of Augusta University and AU Health System, Inc. on Augusta MSA					
Grand Total	2,216,703,271	2,888,284,087	2,174,450,699	1,786,266,997	20,895
Wages & Salaries and Benefits	1,314,138,986	2,114,038,220	1,766,179,983	1,547,708,820	15,046
Operating Expenses	709,545,818	512,430,660	254,856,152	161,199,809	3,769
Student Spending	157,612,051	210,122,723	122,694,293	58,931,612	1,805
Capital Spending	35,406,416	51,692,484	30,720,271	18,426,756	275

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, 2022 and 2021). Other operating expenditures do not include \$42.9 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), 2023.

Appendix 5

Augusta University's Albany, Savannah/Brunswick, and Rome Clinical Campuses: Economic Impact of FY 2022 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 2022.

Albany: Total expenditures at the Albany clinical campus were \$1,650,018, including \$648,403 personnel expense, \$271,655 operating expense, and \$729,960 in student spending (The 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:

- \$1,650,018 in initial expenditures and 5 on-campus jobs,
- \$2,110,328 in output (sales),
- \$1,444,435 in gross regional product (value added),
- \$1,035,994 in income, and
- 18 jobs.

Savannah/Brunswick: Total expenditures at the Savannah/Brunswick clinical campus were \$2,825,440, including \$987,933 personnel expense, \$78,967 operating expense, and \$1,758,540 in student spending (The 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/Brunswick includes:

- \$2,825,440 in initial expenditures and 4 on-campus jobs,
- \$3,980,544 in output (sales),
- \$2,797,756 in gross regional product (value added),
- \$1,875,573 in income, and
- 29 jobs.

Rome: Total expenditures at the Rome clinical campus were \$1,744,628, including \$555,062 personnel expense, \$235,639 operating expense, and \$953,925 in student spending (The Board of Regents, University System of Georgia provided the estimates for personnel and operating expenses).

The economic impact accruing to Rome includes:

- \$1,744,626 in initial expenditures and 5 on-campus jobs,
- \$2,484,509 in output (sales),
- \$1,692,650 in gross regional product (value added),
- \$1,135,128 in income, and
- 22 jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, (www.selig.uga.edu), 2023.

Appendix 6

Augusta University and UGA Medical Partnership's Athens Campus: Economic Impact of FY 2022 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 2022.

Initial expenditures at the Athens campus (including St. Mary's) were \$25,178,740, including \$17,923,974 personnel expense, \$2,248,496 operating expense, \$3,185,280 in student spending, and \$1,820,990 in capital outlays (The 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:

- \$25,178,740 in initial expenditures and 140 on-campus and St. Mary's jobs,
- \$40,240,102 in output (sales),
- \$30,373,461 in gross regional product (value added),
- \$24,317,507 in income, and
- 286 jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, (www.selig.uga.edu), 2023.

Appendix 7

Combined Economic Impact of UGA's Griffin Campus (Budget Unit "A" and Budget Unit "B") On Its Regional Economy in Fiscal Year 2022

<u>UGA's Griffin Campus</u>	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
Total	21,798,313	37,210,284	28,103,147	21,964,088	285
Personnel Services	14,593,716	27,695,625	22,501,052	18,864,898	218
Operating Expenses	4,372,518	5,120,045	2,822,801	1,706,241	33
Student Spending	2,832,079	4,394,614	2,779,294	1,392,949	34

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 285 jobs consists of 147 on-campus jobs (expressed on a FTE basis) and 138 off-campus jobs. For each FTE job created on the Griffin campus, there are 0.9 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), 2023.

Appendix 8

**Total Economic Impact of Information Technology Services in Athens
On the Regional Economy in Fiscal Year 2022**

<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	28,379,387	39,584,954	30,252,540	24,993,515	328
Personnel Services	19,024,887	32,276,743	26,652,575	22,851,797	265
Operating Expenses	9,354,500	7,308,211	3,599,965	2,141,718	63

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 (\$55,605,387) 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 328 jobs consists of 184 USG jobs (expressed on a FTE basis) and 144 off-site jobs that are primarily in the private sector. For each FTE job created at ITS in Athens there are 0.8 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), 2023.

Appendix 9

Total Economic Impact of the Shared Services Center in Sandersville On the Regional Economy in Fiscal Year 2022

<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	5,842,763	7,157,016	6,218,876	5,610,286	75
Personnel Services	5,170,042	6,932,381	6,117,664	5,552,893	73
Operating Expenses	672,721	224,635	101,212	57,393	3

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 75 jobs consists of 61 USG jobs at the Shared Services Center (expressed on a FTE basis) and 14 off-site jobs that are primarily in the private sector. For each FTE job created at the Shared Services Center, there are 0.2 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), 2023.