

**The Economic Impact  
of University System of Georgia Institutions  
on their Regional Economies in FY 2012**

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## **Executive Summary**

The statewide economic impact of the University System of Georgia's 35 institutions in fiscal year 2012 includes:

- \$14.1 billion in output (sales);
- \$9.9 billion in gross regional product;
- \$7 billion in income; and
- 139,263 full- and part-time jobs (3.6 percent of all 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

**H**ow 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 three 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 2012 fiscal year—July 1, 2011 through June 30, 2012.

The study does not account for all of the short-term impacts of the 35 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 35 institutions on their host communities was \$14.1 billion in FY 2012. 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 2012 total, \$9.8 billion (69 percent) is initial spending by the institutions and students; \$4.4 billion (31 percent) is the induced or re-spending (multiplier) impact. Dividing the FY 2012 total output impact (\$14.1 billion) by initial spending (\$9.8 billion) yields an average multiplier value of 1.45. On average, therefore, every dollar of initial spending generates an additional 45 cents for the economy of the region that hosts the institution.

In FY 2012, value added comprises \$9.9 billion (70 percent) of the \$14.1 billion output impact, with domestic and foreign trade comprising the remaining \$4.2 billion (30 percent). The \$9.9 billion value-added impact equals 2.4 percent of Georgia's state GDP. Labor income received by residents of the communities that host one or more institutions equals \$7 billion, and represents 70 percent of the value-added impact.

The collective or rolled-up employment impact of all 35 institutions on their host communities in FY 2012, including multiplier effects, is 139,263 full- and part-time jobs. Approximately 33 percent of these positions are on campus (University System employees) and 67 percent 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 139,263 jobs generated by the University System account for 3.6 percent of all the jobs in Georgia, or about one job in twenty-eight.

## Methodology

### ■ Short-Term Economic Impact Of a College or University ■

The total annual economic impact of college- or university-related spending is defined to consist 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 of time. 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 2012 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 Version 3.0 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 in 2012 dollars. Type SAM (social accounting matrices) multipliers from the IMPLAN modeling system 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, the IMPLAN software 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 ■

Institution-specific data on expenditures for personnel services and number of positions were obtained from the Board of Regents for FY 2012. The expenditure amounts were treated as an industry change and are reported in the first column of Tables 1 and 2, respectively. These amounts were allocated to various economic sectors recognized by the IMPLAN software based on the typical expenditure pattern for households of moderate income.

Institution-specific data on expenditures for operating expenses (non-personnel services) for FY 2012 were obtained from the Board of Regents. These amounts were treated as an industry change 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 Georgia Health Sciences University do not account for

spending by the hospital and clinics operating by MCG Health, Inc., which became a not-for-profit corporation in July 2000. Expenditures and impacts for MCG Health, Inc., are reported in Appendix 3, however.

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 2012. 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 previous editions of this study did not include the impacts of public/private ventures. The FY 2012 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) annual *Consumer Expenditure Surveys* conducted by the U.S. Bureau of Labor Statistics (BLS); (2) 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 (3) a sample of recent estimated costs of attendance prepared by individual institutions. Although the estimated costs of attendance prepared by individual institutions were not detailed enough to be used in 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 entirely. 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 \$3,816 for Summer 2011, \$6,360 for Fall 2011, and at \$6,360 for Spring 2012.

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 2012, 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 35 institutions conveyed to their host communities in FY 2012. 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 Version 3.0 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 2012 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 2012 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 2012, total initial spending for all 35 institutions was \$9.8 billion. Spending originating from personnel services accounted for 36 percent (\$3.5 billion) of initial spending, spending due to operating expenses accounted for 25 percent (\$2.4 billion) of initial spending, and students' personal expenditures accounted for 39 percent (\$3.8 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 2012 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 35 institutions of the University System of Georgia was \$14.1 billion in FY 2012 (Table 1). This amount represents the combined impact of all 35 institutions on their host communities. Of the FY 2012 output impact, \$9.8 billion (69 percent) was initial spending by the institutions and students, while \$4.4 billion (31 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 2012 was 1.45, obtained by dividing the total output impact (\$14.1 billion) by initial spending (\$9.8 billion). On average, therefore, every dollar of initial spending generated an additional 45 cents for the economy of the region hosting the institution. Thus, for all institutions, the output impact was 1.45 times greater than their initial spending.

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., Atlanta)—where multipliers are the highest, or institutions 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 2012 are reported in the third column of Tables 1 and 2.

The 35 institutions collectively generated a value-added impact of \$9.9 billion in FY 2012. For all institutions combined, the value-added impact equaled 70 percent of the \$14.1 billion output impact (with domestic and foreign trade comprising the remaining 30 percent of the output impact). The \$9.9 billion value-added impact reported for FY 2012 equals 2.4 percent of Georgia's gross domestic product.

## **Labor Income Impact**

Collectively, the 35 University System institutions generated a labor income impact of \$7 billion in FY 2012. 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 35 institutions generated an employment impact of 139,263 jobs in FY 2012. Approximately 33 percent of these positions are on-campus jobs at one of the institutions of the University System of Georgia, and 67 percent 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.

The employment impact associated with the University System accounts for 3.6 percent of all the jobs held by Georgians, or about one job in 28. For all institutions combined, 14 jobs were generated for each million dollars of initial spending in FY 2012.

Employment impacts in FY 2012 for the individual institutions are reported in the fifth column of Table 2. Table 3 shows a break out (by institution) of on- and off-campus jobs that exist due to institution-related spending.

### **Limitations and Topics for Future Research**

Because the goal of this study was to estimate the economic impact of all 35 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 limitations 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. Also, it would be worthwhile to investigate expenditures supported by the non-institutional income of the 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 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 this study intentionally focused 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, and local government.

A college or university improves the skills of its graduates, thereby increasing their productivity and their lifetime earnings. 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 information-based companies, which despite the recent recession and sub-par recovery, are still 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 residents. 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 35 institutions on their host communities in FY 2012 includes:

- \$14.1 billion in output (sales);
- \$9.9 billion in valued added (gross regional product);
- \$7 billion in labor income; and
- 139,263 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.

**Figure 1**

**Schematic Representation  
of Impact Relationships**

Direct  
Expenditures



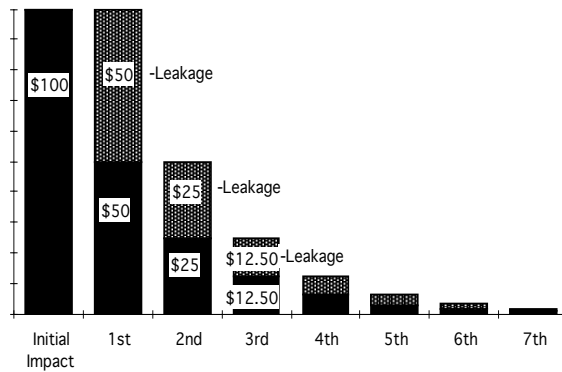
Indirect and Induced Impacts  
(Multiplier Effects)



Total Direct  
Economic Impact

**Figure 2**

**How Multipliers Capture the Impact of Re-spending Initial Impacts If the Output Multiplier Equals 2.0**



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

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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 2012**

<u>Total for All Institutions in 2012</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>
System Total	9,755,459,776	14,147,923,345	9,937,176,927	6,980,225,676	139,263
Personal Services	3,502,363,529	6,593,319,873	5,379,686,722	4,656,864,008	70,251
Operating Expenses	2,417,153,831	2,450,820,485	1,471,375,303	701,707,980	16,522
Student Spending	3,835,942,416	5,103,782,986	3,086,114,902	1,621,653,687	52,491

Notes:

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

Initial spending for personal 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](http://www.selig.uga.edu)) March 2013.

Table 2

**Total Economic Impact of University System of Georgia  
Institutions on their Regional Economies in Fiscal Year 2012**

<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>
<b>Research Universities and Regional Universities</b>					
Georgia Health Sciences University	655,268,906	957,613,213	735,938,020	568,739,929	10,115
Personal Services	419,468,785	759,352,801	620,037,608	519,159,875	8,458
Operating Expenses	194,682,721	147,405,246	86,059,105	35,035,006	1,091
Student Spending	41,117,400	50,855,166	29,841,307	14,545,048	567
Georgia Institute of Technology	1,528,855,428	2,572,648,001	1,849,061,693	1,312,715,966	20,869
Personal Services	698,906,314	1,411,710,435	1,139,846,013	947,121,869	12,285
Operating Expenses	562,840,562	759,339,615	460,427,123	227,983,483	4,831
Student Spending	267,108,552	401,597,951	248,788,557	137,610,614	3,572
Georgia State University	986,877,137	1,628,707,945	1,138,714,455	778,337,046	13,710
Personal Services	353,097,643	713,216,623	575,866,774	478,499,741	6,131
Operating Expenses	242,236,270	326,805,907	198,159,428	98,119,927	2,078
Student Spending	391,543,224	588,685,416	364,688,253	201,717,378	5,501
University of Georgia	1,510,063,178	2,161,385,390	1,575,312,863	1,139,530,515	22,196
Personal Services	669,537,914	1,241,341,589	1,914,829,286	851,370,176	13,748
Operating Expenses	393,577,536	335,416,077	204,713,306	98,681,156	2,472
Student Spending	446,947,728	584,627,724	355,770,271	189,479,184	5,976
Georgia Southern University	484,725,266	523,904,534	361,342,219	236,151,069	6,548
Personal Services	143,313,786	206,921,353	180,728,815	159,098,211	2,765
Operating Expenses	89,042,864	44,972,863	25,362,936	8,851,233	342
Student Spending	252,368,616	272,010,317	155,250,467	68,201,625	3,441
Valdosta State University	297,854,558	366,800,613	246,682,139	310,429,954	4,018
Personal Services	80,999,444	142,266,166	116,614,816	248,141,178	1,581
Operating Expenses	57,215,298	33,639,244	19,152,688	8,077,445	263
Student Spending	159,639,816	190,895,203	110,914,635	54,211,330	2,174
<b>State Universities</b>					
Albany State University	130,747,427	156,068,831	105,866,317	70,114,596	1,816
Personal Services	37,601,156	66,513,523	54,460,343	45,795,245	842
Operating Expenses	32,474,415	19,267,304	10,602,716	4,639,496	145
Student Spending	60,671,856	70,306,004	40,803,258	19,679,855	829

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia  
Institutions on their Regional Economies in Fiscal Year 2012**

<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>
<b>Armstrong Atlantic State University</b>	175,330,206	214,585,229	148,279,109	97,858,021	2,276
Personal Services	45,854,510	82,097,339	67,782,711	57,134,958	978
Operating Expenses	40,681,192	25,985,783	15,680,323	6,840,062	195
Student Spending	88,794,504	106,502,115	64,816,075	33,883,001	1,103
<b>Augusta State University</b>	149,061,677	198,567,315	135,251,636	88,422,374	2,189
Personal Services	45,176,879	81,782,462	66,778,185	55,913,631	955
Operating Expenses	24,397,518	18,472,736	10,784,875	4,390,567	137
Student Spending	79,487,280	98,312,117	57,688,576	28,118,176	1,097
<b>Clayton State University</b>	159,314,998	256,778,588	174,973,874	114,875,353	2,377
Personal Services	43,455,932	87,775,986	70,872,259	58,889,242	933
Operating Expenses	33,633,170	45,375,190	27,513,340	13,623,408	289
Student Spending	82,225,896	123,627,412	76,588,275	42,362,704	1,155
<b>Columbus State University</b>	197,589,532	247,387,901	168,926,340	113,213,316	2,620
Personal Services	57,887,268	103,495,318	84,816,811	71,524,944	1,132
Operating Expenses	42,516,376	27,083,159	15,638,527	6,989,278	195
Student Spending	97,185,888	116,809,424	68,471,002	34,699,094	1,293
<b>Fort Valley State University</b>	123,578,694	157,209,967	109,559,245	73,672,263	1,877
Personal Services	41,215,796	74,186,558	60,671,065	50,851,510	1,026
Operating Expenses	32,921,530	23,023,441	13,766,101	5,577,488	176
Student Spending	49,441,368	59,999,968	35,122,078	17,243,265	675
<b>Georgia College &amp; State University</b>	173,611,210	203,622,838	141,424,668	97,694,439	2,398
Personal Services	59,905,728	99,610,243	82,817,985	70,518,242	1,194
Operating Expenses	30,208,858	12,846,138	6,815,861	2,902,576	95
Student Spending	83,496,624	91,166,457	51,790,823	24,273,621	1,110
<b>Georgia Southwestern State University</b>	76,425,782	74,847,297	51,952,992	34,826,339	858
Personal Services	20,994,889	28,966,415	25,726,189	23,051,897	307
Operating Expenses	17,540,557	6,932,685	3,788,142	1,507,324	55
Student Spending	37,890,336	38,948,197	22,438,661	10,267,118	496
<b>Kennesaw State University</b>	566,585,141	926,139,993	637,783,074	426,622,984	8,788
Personal Services	173,324,219	350,094,975	282,674,378	234,880,051	3,802
Operating Expenses	98,605,938	133,031,265	80,663,781	39,941,195	847
Student Spending	294,654,984	443,013,753	274,444,916	151,801,738	4,139

(continued)

**Table 2 (continued)**

**Total Economic Impact of University System of Georgia  
Institutions on their Regional Economies in Fiscal Year 2012**

<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>
North Georgia College & State University	146,495,810	194,507,936	135,225,770	91,403,855	2,065
Personal Services	47,258,720	85,360,151	70,093,395	59,020,505	941
Operating Expenses	23,315,226	16,535,244	9,743,808	4,263,475	121
Student Spending	75,921,864	92,612,541	55,388,567	28,119,876	1,003
Savannah State University	124,198,366	147,546,203	102,070,647	67,246,482	1,564
Personal Services	31,894,207	57,102,983	47,146,417	39,740,348	694
Operating Expenses	36,151,719	23,092,507	13,934,466	6,078,485	174
Student Spending	56,152,440	67,350,713	40,989,764	21,427,649	697
Southern Polytechnic State University	136,769,971	222,737,194	153,117,449	102,050,903	2,070
Personal Services	41,110,352	83,038,187	67,046,856	55,710,634	874
Operating Expenses	26,726,123	36,056,748	21,863,082	10,825,648	229
Student Spending	68,933,496	103,642,259	64,207,510	35,514,621	968
University of West Georgia	274,081,078	442,762,618	302,122,009	198,880,865	4,263
Personal Services	75,892,426	153,293,970	123,772,920	102,845,506	1,779
Operating Expenses	55,116,636	74,358,974	45,087,715	22,325,476	473
Student Spending	143,072,016	215,109,675	133,261,374	73,709,883	2,010

**State Colleges**

Abraham Baldwin Agricultural College	73,922,381	74,880,010	49,917,436	30,827,583	972
Personal Services	16,222,109	23,588,810	20,529,986	18,052,486	393
Operating Expenses	20,468,832	10,721,808	5,863,448	2,151,174	82
Student Spending	37,231,440	40,599,392	23,524,002	10,623,923	497
Atlanta Metropolitan College	62,330,276	98,751,531	66,291,004	42,384,099	976
Personal Services	14,161,024	28,603,637	23,095,206	19,190,290	380
Operating Expenses	14,736,004	19,880,636	12,054,663	5,968,945	126
Student Spending	33,433,248	50,267,259	31,141,135	17,224,864	470
College of Coastal Georgia	70,849,946	83,931,461	56,338,840	35,503,308	943
Personal Services	17,511,220	30,302,987	25,064,037	21,065,738	368
Operating Expenses	15,350,446	9,217,895	5,344,594	2,094,995	68
Student Spending	37,988,280	44,410,579	25,930,209	12,342,575	507

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia  
Institutions on their Regional Economies in Fiscal Year 2012**

<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>
Dalton State College	102,325,096	112,753,350	75,085,799	48,575,607	1,392
Personal Services	23,554,423	40,493,038	33,374,730	28,329,096	543
Operating Expenses	19,256,337	8,171,836	4,486,998	2,133,535	66
Student Spending	59,514,338	64,088,476	37,224,070	18,112,976	783
Darton College	115,508,190	135,646,058	88,706,185	55,250,954	1,627
Personal Services	24,663,643	43,628,064	35,722,050	30,038,372	601
Operating Expenses	23,433,635	13,903,345	7,650,951	3,347,874	105
Student Spending	67,410,912	78,114,649	45,333,183	21,864,707	921
East Georgia College	67,420,495	69,690,604	43,916,183	25,347,896	858
Personal Services	10,367,951	15,193,469	13,196,507	11,626,005	237
Operating Expenses	16,253,144	8,018,957	4,445,621	1,762,082	60
Student Spending	40,799,400	46,478,178	26,274,056	11,959,810	561
Gainesville State College	155,421,642	206,586,107	138,755,785	89,443,912	2,278
Personal Services	33,370,116	61,799,354	50,603,229	42,545,409	872
Operating Expenses	27,304,062	22,313,954	13,507,625	6,682,570	160
Student Spending	94,747,464	122,472,800	74,644,931	40,215,933	1,246
Georgia Gwinnett College	183,081,445	295,533,185	201,485,752	132,451,166	3,029
Personal Services	50,194,007	101,388,319	81,861,387	68,020,335	1,360
Operating Expenses	36,612,302	49,394,396	29,950,393	14,830,131	316
Student Spending	96,275,136	144,750,471	89,673,973	49,600,700	1,353
Georgia Highlands College	103,003,683	123,669,913	80,697,179	48,937,986	1,455
Personal Services	21,844,008	38,643,426	31,624,039	26,515,492	517
Operating Expenses	19,287,051	12,345,054	7,051,753	2,653,302	95
Student Spending	61,872,624	72,681,433	42,021,387	19,769,202	843
Georgia Perimeter College	486,605,520	774,444,129	519,889,332	333,085,020	7,221
Personal Services	109,920,344	222,026,424	179,269,018	148,958,380	2,424
Operating Expenses	90,221,872	121,720,156	73,805,264	36,545,157	773
Student Spending	286,463,304	430,697,549	266,815,050	147,581,483	4,024
Gordon College	89,782,138	141,473,031	94,183,054	59,415,452	1,418
Personal Services	18,096,813	36,553,479	29,514,082	24,523,868	513
Operating Expenses	18,522,085	24,988,511	15,151,835	7,502,530	158
Student Spending	53,163,240	79,931,041	49,517,137	27,389,054	747

(continued)



**Table 2 (continued)**

**Total Economic Impact of University System of Georgia  
Institutions on their Regional Economies in Fiscal Year 2012**

<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>
<b>Macon State College</b>	116,864,328	149,676,491	99,961,904	63,776,470	1,635
Personal Services	29,666,596	53,473,466	43,656,588	36,577,419	609
Operating Expenses	20,637,788	14,619,313	8,566,323	3,608,789	110
Student Spending	66,559,944	81,583,712	47,738,993	23,590,262	916
<b>Middle Georgia College</b>	75,537,099	76,133,198	51,810,212	33,769,511	944
Personal Services	18,318,904	26,455,477	23,187,397	20,553,300	362
Operating Expenses	17,881,595	7,866,777	4,323,431	1,803,628	60
Student Spending	39,336,600	41,810,944	24,299,384	11,412,584	522
<b>South Georgia College</b>	53,435,542	49,955,819	31,888,210	19,424,001	624
Personal Services	9,148,655	13,137,027	11,449,764	10,183,332	204
Operating Expenses	16,534,391	6,715,826	3,482,704	1,489,256	50
Student Spending	27,752,496	30,102,966	16,955,742	7,751,413	370

**Two-Year Colleges**

<b>Bainbridge College</b>	83,432,133	81,010,381	51,322,893	30,649,082	1,024
Personal Services	13,747,338	23,053,189	19,001,422	16,154,660	345
Operating Expenses	23,212,275	9,665,213	5,054,529	2,124,109	71
Student Spending	46,472,520	48,291,979	27,266,942	12,370,313	608
<b>Waycross College</b>	18,505,497	19,948,472	13,322,639	8,597,349	250
Personal Services	4,680,410	6,882,640	5,954,451	5,262,063	100
Operating Expenses	3,557,503	1,636,686	877,849	357,178	13
Student Spending	10,267,584	11,429,146	6,490,339	2,978,108	137

Notes:

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

Initial spending for personal 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 Georgia Health Sciences University do not include impacts associated with MCG Health Inc., but such estimates are reported in Appendix 3.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

**Table 3**  
**On-Campus and Off-Campus Jobs that Exist**  
**Due to Institution-Related Spending in Fiscal Year 2012**

Institution	Total Employment Impact	On-Campus Jobs	Off-Campus Jobs That Exist Due to Institution-Related Spending
<b>System Total</b>	<b>138,263</b>	<b>45,432</b>	<b>93,831</b>
<b>Research Universities and Regional Universities</b>	<b>77,457</b>	<b>28,094</b>	<b>49,363</b>
Georgia Health Sciences University	10,116	5,469	4,647
Georgia Institute of Technology	20,869	6,941	13,928
Georgia State University	13,710	3,431	10,279
University of Georgia	22,196	9,042	13,154
Georgia Southern University	6,548	2,188	4,360
Valdosta State University	4,018	1,023	2,995
<b>State Universities</b>	<b>35,161</b>	<b>10,340</b>	<b>24,281</b>
Albany State University	1,816	585	1,231
Armstrong Atlantic State University	2,276	666	1,610
Augusta State University	2,189	633	1,556
Clayton State University	2,377	601	1,776
Columbus State University	2,620	740	1,880
Fort Valley State University	1,877	735	1,142
Georgia College & State University	2,398	814	1,584
Georgia Southwestern State University	858	236	622
Kennesaw State University	8,788	2,476	6,312
North Georgia College & State University	2,065	620	1,445
Savannah State University	1,564	476	1,088
Southern Polytechnic State University	2,070	559	1,511
University of West Georgia	4,263	1,199	3,064
<b>State Colleges</b>	<b>25,371</b>	<b>6,658</b>	<b>18,713</b>
Abraham Baldwin Agricultural College	972	329	643
Atlanta Metropolitan College	976	272	704
College of Coastal Georgia	943	256	687
Dalton State College	1,392	388	1,004
Darton College	1,627	432	1,195
East Georgia College	858	193	665
Gainesville State College	2,278	641	1,637
Georgia Gwinnett College	3,029	976	2,053
Georgia Highlands College	1,455	363	1,092
Georgia Perimeter College	7,221	1,583	5,638
Gordon College	1,418	374	1,044
Macon State College	1,635	397	1,238
Middle Georgia College	944	285	659
South Georgia College	624	169	455
<b>Two-Year Colleges</b>	<b>1,274</b>	<b>340</b>	<b>934</b>
Bainbridge College	1,024	259	765
Waycross College	250	81	169

Notes: Employment includes both full-time and part-time jobs. Estimates for Georgia Health Sciences University exclude impacts associated with MCG Health Inc., which are reported in Appendix 3.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

## Appendix 1

### Study Areas for Institutions

#### Research and Regional Universities

Georgia Health Sciences University – Richmond, Columbia, Burke, McDuffie, Jefferson, Lincoln, Warren, and Glascock  
Georgia Institute of Technology – Atlanta MSA  
Georgia State University – Atlanta MSA  
University of Georgia – Clarke, Oconee, Madison, Oglethorpe, Jackson, Barrow, Walton, and Gwinnett  
Georgia Southern University – Bulloch, Screven, Candler, Jenkins, Evans, Tattnall, and Emanuel  
Valdosta State University – Lowndes, Brooks, Lanier, Echols, Cook, and Berrien

#### State Universities

Albany State University – Dougherty, Lee, Worth, Mitchell, Terrell, Colquitt, Baker, Sumter, Calhoun, and Tift  
Armstrong Atlantic State University – Chatham, Effingham, Bryan, Liberty, and Bulloch  
Augusta State University – Richmond, Columbia, Burke, McDuffie, Jefferson, Lincoln Warren, and Glascock  
Clayton State University – Atlanta MSA  
Columbus State University – Muscogee, Harris, Chattahoochee, Marion, Talbot, Stewart, Troup, Meriwether  
Fort Valley State University – Peach, Houston, Bibb, Crawford, Macon, and Taylor  
Georgia College & State University – Baldwin, Hancock, Putnam, Wilkinson, Jones, and Washington  
Georgia Southwestern State University – Sumter, Schley, Macon, Lee, Crisp, Marion, Webster, and Dooly  
Kennesaw State University – Atlanta MSA  
North Georgia College & State University – Lumpkin, Hall, Dawson, White, Forsyth, and Union  
Savannah State University – Chatham, Effingham, Bryan, Liberty, and Bulloch  
Southern Polytechnic State University – Atlanta MSA  
University of West Georgia – Atlanta MSA

#### State Colleges

Abraham Baldwin Agricultural College – Tift, Berrien, Worth, Colquitt, Irwin, Cook, and Turner  
Atlanta Metropolitan College – Atlanta MSA  
College of Coastal Georgia -- Glynn, Brantley, McIntosh, Camden, and Wayne  
Dalton State College – Whitfield, Murray, Catoosa, Gordon, Walker, and Gilmer  
Darton College – Dougherty, Lee, Worth, Mitchell, Terrell, Colquitt, Baker, Sumter, Calhoun, and Tift  
East Georgia College – Emanuel, Candler, Bulloch, Johnson, Jefferson, Toombs, Treutlen, and Jenkins  
Gainesville State College – Hall, Gwinnett, Jackson, White, Habersham, Lumpkin, Banks, and Forsyth  
Georgia Gwinnett College – Atlanta MSA  
Georgia Highlands College – Floyd, Polk, Chattooga, Bartow, and Gordon  
Georgia Perimeter College – Atlanta MSA  
Gordon College – Atlanta MSA  
Macon State College – Bibb, Houston, Jones, Monroe, Peach, Crawford, Twiggs, Baldwin, Wilkinson, and Laurens  
Middle Georgia College – Bleckley, Dodge, Pulaski, Twiggs, and Laurens  
South Georgia College – Coffee, Atkinson, Bacon, Jeff Davis, Ware, Telfair, Ben Hill, and Irwin

#### Two-Year Colleges

Bainbridge College – Decatur, Seminole, Miller, Grady, Early, Mitchell, and Baker  
Waycross College – Ware, Pierce, Brantley, Bacon, Coffee, Clinch, and Atkinson

Note: Study areas were defined by the author based on commuting data obtained from the Residence County to Workplace County Flows for Georgia, U.S. Census Bureau, Internet release date March 6, 2003.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

## Appendix 2

### Economic Impact of Capital Outlays in Fiscal Year 2012

Institution	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
<b>System Total</b>	<b>232,490,000</b>	<b>386,629,159</b>	<b>202,194,236</b>	<b>151,926,656</b>	<b>3,535</b>
<b>Research Universities and Regional Universities</b>	<b>74,390,000</b>	<b>112,751,924</b>	<b>52,884,025</b>	<b>38,365,387</b>	<b>1,151</b>
Georgia Health Sciences University	0	0	0	0	0
Georgia Institute of Technology	4,200,000	8,185,485	4,880,672	3,785,940	69
Georgia State University	0	0	0	0	0
University of Georgia	21,910,000	36,733,425	19,197,205	12,986,077	291
Georgia Southern University	48,280,000	67,833,014	28,806,148	21,593,370	791
Valdosta State University	0	0	0	0	0
<b>State Universities</b>	<b>98,440,000</b>	<b>173,542,482</b>	<b>96,140,298</b>	<b>72,388,279</b>	<b>1,431</b>
Albany State University	0	0	0	0	0
Armstrong Atlantic State University	2,750,000	4,140,774	2,302,608	1,844,116	43
Augusta State University	0	0	0	0	0
Clayton State University	0	0	0	0	0
Columbus State University	6,700,000	9,571,821	4,751,561	3,783,421	99
Fort Valley State University	0	0	0	0	0
Georgia College & State University	0	0	0	0	0
Georgia Southwestern State University	7,800,000	10,134,877	4,327,905	3,369,298	119
Kennesaw State University	18,000,000	34,387,763	19,750,815	15,419,900	284
North Georgia College & State Univ.	3,000,000	0	0	0	0
Savannah State University	0	0	0	0	0
Southern Polytechnic State University	0	0	0	0	0
University of West Georgia	60,190,000	115,307,247	65,007,409	47,971,544	886
<b>State Colleges</b>	<b>59,660,000</b>	<b>100,334,753</b>	<b>53,169,913</b>	<b>41,172,990</b>	<b>953</b>
Abraham Baldwin Agricultural College	3,250,000	4,629,124	1,976,547	1,459,882	61
Atlanta Metropolitan College	1,000,000	327,278	230,983	138,878	2
College of Coastal Georgia	7,600,000	10,906,833	5,400,013	4,226,098	115
Dalton State College	0	0	0	0	0
Darton College	0	0	0	0	0
East Georgia College	0	0	0	0	0
Gainesville State College	0	0	0	0	0
Georgia Gwinnett College	23,825,000	46,637,829	26,910,068	20,802,842	381
Georgia Highlands College	0	0	0	0	0
Georgia Perimeter College	0	0	0	0	0
Gordon College	0	0	0	0	0
Macon State College	22,785,000	36,155,588	17,906,487	13,972,862	373
Middle Georgia College	0	0	0	0	0
South Georgia College	1,200,000	1,678,101	745,815	572,428	21
<b>Two-Year Colleges</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Bainbridge College	0	0	0	0	0
Waycross College	0	0	0	0	0

Notes: The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using the IMPLAN Professional System and production functions provided by MIG, Inc. 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 Georgia Health Sciences University exclude impacts associated with MCG Health Inc., which are reported in Appendix 3.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

### Appendix 3

#### Combined Economic Impact of Georgia Health Sciences University and MCG Health, Inc. in Fiscal Year 2012

<u>Institution</u>	<u>Initial Spending</u> <u>(current dollars)</u>	<u>Output Impact</u> <u>(current dollars)</u>	<u>Value Added Impact</u> <u>(current dollars)</u>	<u>Labor Income Impact</u> <u>(current dollars)</u>	<u>Employment Impact</u> <u>(jobs)</u>
<b>Georgia Health Sciences University</b>	<b>655,268,906</b>	<b>957,613,213</b>	<b>735,938,020</b>	<b>568,739,929</b>	<b>10,116</b>
Personal Services	419,468,785	759,352,801	620,037,608	519,159,875	8,458
Operating Expenses	194,682,721	147,405,246	86,059,105	35,035,006	1,091
Student Spending	41,117,400	50,855,166	29,841,307	14,545,048	567
Capital Spending	0	0	0	0	0

<u>Institution</u>	<u>Initial Spending</u> <u>(current dollars)</u>	<u>Output Impact</u> <u>(current dollars)</u>	<u>Value Added Impact</u> <u>(current dollars)</u>	<u>Labor Income Impact</u> <u>(current dollars)</u>	<u>Employment Impact</u> <u>(jobs)</u>
<b>MCG Health, Inc.</b>	<b>456,857,000</b>	<b>638,943,845</b>	<b>478,602,312</b>	<b>371,079,066</b>	<b>6,887</b>
Wages, Salaries, and Benefits	252,356,000	456,833,119	373,019,913	312,331,009	5,095
Other Operating Expenditures	166,785,000	125,115,565	77,092,816	36,576,191	1,209
Student Spending	0	0	0	0	0
Capital Spending	37,716,000	56,995,160	28,489,582	22,171,866	583

#### Grand Total Economic Impact of GHSU and MCG Health, Inc.

<u>Institution</u>	<u>Initial Spending</u> <u>(current dollars)</u>	<u>Output Impact</u> <u>(current dollars)</u>	<u>Value Added Impact</u> <u>(current dollars)</u>	<u>Labor Income Impact</u> <u>(current dollars)</u>	<u>Employment Impact</u> <u>(jobs)</u>
<b>GHSU and MCG Health, Inc.</b>	<b>1,112,125,906</b>	<b>1,596,557,057</b>	<b>1,214,540,332</b>	<b>939,818,995</b>	<b>17,003</b>
Wages, Salaries, and Benefits	671,824,785	1,216,185,920	993,057,522	831,490,884	13,553
Operating Expenses	361,467,721	272,520,811	163,151,921	71,611,197	2,300
Student Spending	41,117,400	50,855,166	29,841,307	14,545,048	567
Capital Spending	37,716,000	56,995,160	28,489,582	22,171,866	583

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 MCG Health, Inc., d/b/a Georgia Health Sciences Medical Center (a component unit of MCG Health Systems, Inc.) Financial Statements and Report of Independent Certified Public Accountants (June 30, 2012 and 2011). Other operating expenditures does not include \$38.5 million in purchased services (a transfer to GHSU and PPG) and \$25.6 million in depreciation and amortization. The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using the IMPLAN system, version 3.0, Type SAM multipliers, 2011 data, and consumption functions provided by MIG, Inc.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

## Appendix 4

### GHSU's Albany, Savannah, and Rome Clinical Campuses: Economic Impact of FY 2012 Expenditures

Georgia Health Sciences University has established clinical campuses in Albany, Savannah, and Rome, which generate economic impacts for their host communities. In fiscal years 2009, 2010, and 2011 these clinical campuses were in their earliest stages of development. Appendix 4 documents the economic impact that the Albany, Savannah, and Rome clinical campuses had on their host communities in FY 2012. Although the economic impacts in FY 2012 are quite small, the impacts should expand rapidly once more students are enrolled at these GHSU branch campuses.

**Albany:** In FY 2012, total expenditures at the Albany clinical campus were \$951,114, including \$266,482 personnel expense, \$277,592 operating expense, and \$407,040 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:

- \$951,114 in initial expenditures and 5 on-campus jobs,
- \$1,107,754 in output (sales),
- \$750,331 in gross regional product (value added),
- \$496,237 in income, and
- 16 jobs.

**Savannah:** Total expenditures at the Savannah clinical campus were \$589,281, including \$403,786 personnel expense, \$96,455 operating expense, and \$89,040 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:

- \$589,281 in initial expenditures and 5 on-campus jobs,
- \$891,343 in output (sales),
- \$699,056 in gross regional product (value added),
- \$553,313 in income, and
- 9 jobs.

**Rome:** Total expenditures at the Rome clinical campus were \$335,866, including \$317,787 personnel expense and \$18,089 operating expense (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:

- \$335,866 in initial expenditures and 3 on-campus jobs,
- \$573,757 in output (sales),
- \$466,679 in gross regional product (value added),
- \$388,236 in income, and
- 5 jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

## Appendix 5

### **GHSU/UGA Medical Partnership's Athens Campus: Economic Impact of FY 2012 Expenditures**

The GHSU/UGA Medical Partnership opened a new campus in Athens in FY 2011, which eventually will generate significant economic impacts for Athens' regional economy. Appendix 5 documents the economic impact that the Athens campus had on its host community in FY 2012.

In FY 2012, initial expenditures at the Athens campus were \$15,644,940, including \$8,479,441 personnel expense, \$6,147,899 operating expense, and \$1,017,600 in student spending (Assistant Vice Chancellor for Fiscal Affairs/Budget Director, Board of Regents, University System of Georgia provided expense data for personnel, operations, and capital projects as well as enrollment data).

The economic impact accruing to Athens includes:

- \$15,644,940 in initial expenditures and 58 on-campus jobs,
- \$22,291,568 in output (sales),
- \$16,860,166 in gross regional product (value added),
- \$12,755,132 in income, and
- 171 jobs.

In FY 2012, the economic impact of the Athens campus was still modest, but its economic impact will expand substantially in future fiscal years.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

## Appendix 6

### Combined Economic Impact of UGA's Griffin Campus (Budget Unit "A" and Budget Unit "B") On Its Regional Economy in Fiscal Year 2012

<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)
<b>Total</b>	<b>19,011,839</b>	<b>34,430,781</b>	<b>26,079,871</b>	<b>19,970,865</b>	<b>382</b>
Personal Services	12,734,642	25,722,511	20,768,921	17,257,331	320
Operating Expenses	4,725,357	6,375,075	3,865,540	1,914,046	39
Student Spending	1,551,840	2,333,194	1,445,410	799,489	22

Notes: The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using the IMPLAN Professional System and production functions provided by MIG, Inc. Initial spending for personal 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 382 jobs consists of 223 on-campus jobs (expressed on a FTE basis) and 159 off-campus jobs. For each FTE job created on the Griffin campus, there are 0.7 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](http://www.selig.uga.edu)), March 2013.



## Appendix 7

### Total Economic Impact of Merged Institutions on Their Regional Economies in Fiscal Year 2012

<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>
<b>Georgia Regents University</b>	<b>804,330,583</b>	<b>1,156,180,527</b>	<b>871,189,656</b>	<b>657,162,303</b>	<b>12,305</b>
Personal Services	464,645,664	841,135,262	686,815,793	575,073,506	9,413
Operating Expenses	219,080,239	165,877,982	96,843,980	39,425,573	1,228
Student Spending	120,604,680	149,167,283	87,529,883	42,663,224	1,664
<b>Middle Georgia State College</b>	<b>192,401,427</b>	<b>225,809,689</b>	<b>151,772,116</b>	<b>97,545,981</b>	<b>2,579</b>
Personal Services	47,985,500	79,928,943	66,843,986	57,130,719	970
Operating Expenses	38,519,383	22,486,090	12,889,754	5,412,416	171
Student Spending	105,896,544	123,394,656	72,038,377	35,002,846	1,438
<b>South Georgia State College</b>	<b>71,941,039</b>	<b>69,904,290</b>	<b>45,210,849</b>	<b>28,021,350</b>	<b>874</b>
Wages, Salaries, and Benefits	13,829,065	20,029,666	17,404,214	15,445,395	304
Operating Expenses	20,091,894	8,352,512	4,360,553	1,864,434	63
Student Spending	38,020,080	41,532,112	23,446,081	10,729,521	507
<b>University of North Georgia</b>	<b>301,917,452</b>	<b>401,094,043</b>	<b>273,981,555</b>	<b>180,847,767</b>	<b>4,343</b>
Wages, Salaries, and Benefits	80,628,836	147,159,504	120,696,624	101,565,914	1,813
Operating Expenses	50,619,288	38,849,198	23,251,433	10,946,044	281
Student Spending	170,669,328	215,085,341	130,033,498	68,335,809	2,249

Notes:

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

Initial spending for personal 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 Georgia Regents University do not include impacts associated with MCG Health, Inc., but such estimates are reported in Appendix 3.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

## Appendix 8

### On-Campus and Off-Campus Jobs that Exist Due to Merged Institution-Related Spending in Fiscal Year 2012

<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>
Georgia Regents University	12,305	6,102	6,203
Middle Georgia State College	2,579	682	1,897
South Georgia State College	874	250	624
University of North Georgia	4,343	1,261	3,082

Notes: Employment includes both full-time and part-time jobs. Estimates for Georgia Regents University exclude impacts associated with MCG Health Inc., which are reported in Appendix 3.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.

## Appendix 9

### Combined Economic Impact of Georgia Regents University and MCG Health, Inc. in Fiscal Year 2012

Institution	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
<b>Georgia Regents University</b>	<b>804,330,583</b>	<b>1,156,180,527</b>	<b>871,189,656</b>	<b>657,162,303</b>	<b>12,305</b>
Personal Services	464,645,664	841,135,262	686,815,793	575,073,506	9,413
Operating Expenses	219,080,239	165,877,982	96,843,980	39,425,573	1,228
Student Spending	120,604,680	149,167,283	87,529,883	42,663,224	1,664
Capital Spending	0	0	0	0	0
<b>MCG Health, Inc.</b>	<b>456,857,000</b>	<b>638,943,845</b>	<b>478,602,312</b>	<b>371,079,066</b>	<b>6,887</b>
Wages, Salaries, and Benefits	252,356,000	456,833,119	373,019,913	312,331,009	5,095
Other Operating Expenses	166,785,000	125,115,565	77,092,816	36,576,191	1,209
Student Spending	0	0	0	0	0
Capital Spending	37,716,000	56,995,160	28,489,582	22,171,866	583

#### Total Economic Impact of Georgia Regents University and MCG Health, Inc.

<b>GRU and MCG Health, Inc.</b>	<b>1,261,187,583</b>	<b>1,795,124,372</b>	<b>1,349,791,968</b>	<b>1,028,241,369</b>	<b>19,192</b>
Wages, Salaries, and Benefits	717,001,664	1,297,968,381	1,059,835,706	887,404,515	14,508
Operating Expenses	385,865,239	290,993,547	173,936,796	76,001,764	2,437
Student Spending	120,604,680	149,167,283	87,529,883	42,663,224	1,664
Capital Spending	37,716,000	56,995,160	28,489,582	22,171,866	583

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 MCG Health, Inc., d/b/a Georgia Health Sciences Medical Center (a component unit of MCG Health Systems, Inc.) Financial Statements and Report of Independent Certified Public Accountants (June 30, 2012 and 2011). Other operating expenditures do not include \$38.5 million in purchased services and \$25.6 million in depreciation and amortization. The impacts of spending on Output, Value Added, Labor Income, and Employment were estimated using the IMPLAN system, version 3.0, Type SAM multipliers, 2011 data, and consumption functions provided by MIG, Inc.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia ([www.selig.uga.edu](http://www.selig.uga.edu)), March 2013.