

**The Economic Impact
of University System of Georgia Institutions
on their Regional Economies in FY 2011**

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Executive Summary

The statewide economic impact of the University System of Georgia's 35 institutions in fiscal year 2011 includes:

- \$13.2 billion in output (sales);
- \$9.4 billion in gross regional product;
- \$6.1 billion in income; and
- 131,990 full- and part-time jobs (3.4 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

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 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 2011 fiscal year—July 1, 2010 through June 30, 2011.

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 \$13.2 billion in FY 2011. 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 2011 total, \$9.5 billion (72 percent) is initial spending by the institutions and students; \$3.7 billion (28 percent) is the induced or re-spending (multiplier) impact. Dividing the FY 2011 total output impact (\$13.2 billion) by initial spending (\$9.5 billion) yields an average multiplier value of 1.39. On average, therefore, every dollar of initial spending generates an additional 39 cents for the economy of the region that hosts the institution.

In FY 2011, value added comprises \$9.4 billion (71 percent) of the \$13.2 billion output impact, with domestic and foreign trade comprising the remaining \$3.8 billion (29 percent). The \$9.4 billion value-added impact equals 2.3 percent of Georgia's state GDP. Labor income received by residents of the communities that host one or more institutions equals \$6.5 billion, and represents 69 percent of the value-added impact.

The collective or rolled-up employment impact of all 35 institutions on their host communities in FY 2011, including multiplier effects, is 131,990 full- and part-time jobs. Approximately 34 percent of these positions are on campus (University System employees) and 66 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 131,990 jobs generated by the University System account for 3.4 percent of all the jobs in Georgia in 2011, or about one job in twenty-nine.

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 2011 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. Please note that the prior editions of this study relied on the IMPLAN Version 2.0 modeling system.

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 2011 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 2011. 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 2011 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 2011. 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 2011 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 2010, \$6,360 for Fall 2010, and at \$6,360 for Spring 2011.

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 2011, 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 2011. 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 2011 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 2011 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 2011, total initial spending for all 35 institutions was \$9.5 billion. Spending originating from personnel services accounted for 35 percent (\$3.4 billion) of initial spending, spending due to operating expenses accounted for 25 percent (\$2.3 billion) of initial spending, and students' personal expenditures accounted for 40 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 2011 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 \$13.2 billion in FY 2011 (Table 1). This amount represents the combined impact of all 35 institutions on their host communities. Of the FY 2011 output impact, \$9.5 billion (72 percent) was initial spending by the institutions and students, while \$3.7 billion (28 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 2011 was 1.39, obtained by dividing the total output impact (\$13.2 billion) by initial spending (\$9.5 billion). On average, therefore, every dollar of initial spending generated an additional 39 cents for the economy of the region hosting the institution. Thus, for all institutions, the output impact was 1.39 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 2011 are reported in the third column of Tables 1 and 2.

The 35 institutions collectively generated a value-added impact of \$9.4 billion in FY 2011. For all institutions combined, the value-added impact equaled 71 percent of the \$13.2 billion output impact (with domestic and foreign trade comprising the remaining 29 percent of the output impact). The \$9.4 billion value-added impact reported for FY 2011 equals 2.3 percent of Georgia's gross domestic product.

Labor Income Impact

Collectively, the 35 University System institutions generated a labor income impact of \$6.5 billion in FY 2011. The labor income received by residents of the communities that host University System institutions represents 69 percent of the value-added impact. Labor income for each institution is reported in the fourth column of Table 2.

Employment Impact

The economic impact of hosting an institution of the University System of Georgia probably is most easily understood in terms of its effects on employment. Collectively, the 35 institutions generated an employment impact of 131,990 jobs in FY 2011. Approximately 34 percent of these positions are on-campus jobs at one of the institutions of the University System of Georgia, and 66 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 3.4 percent of all the jobs held by Georgians, or about one job in 29. For all institutions combined, 14 jobs were generated for each million dollars of initial spending in FY 2011.

Employment impacts in FY 2011 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 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 35 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 2011 includes:

- \$13.2 billion in output (sales);
- \$9.4 billion in valued added (gross regional product);
- \$6.5 billion in labor income; and
- 131,990 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)

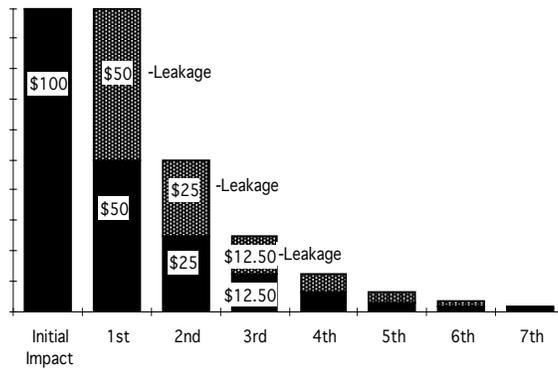
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Total Direct
Economic Impact

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

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 35 Institutions of the University System of Georgia
on their Regional Economies in the 2011 Fiscal Year**

Total for All Institutions in 2011	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
System Total	9,477,500,665	13,167,541,269	9,398,520,029	6,477,155,316	131,990
Personal Services	3,353,077,906	5,660,594,563	4,777,115,412	4,127,716,419	63,644
Operating Expenses	2,348,672,655	2,408,189,088	1,441,497,883	668,426,348	15,358
Student Spending	3,775,750,104	5,098,757,618	3,179,906,734	1,681,012,549	52,988

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 both the Medical College of Georgia and the University of Georgia are not comparable to previously published estimates. See the text for details.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia (www.selig.uga.edu) May 2012.

Table 2

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in the 2011 Fiscal Year**

<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>
Research Universities and Regional Universities					
Georgia Institute of Technology	1,411,754,986	2,289,823,610	1,677,980,358	1,191,337,144	18,640
Personal Services	683,683,032	1,245,033,632	1,032,759,049	874,567,619	10,999
Operating Expenses	464,020,018	634,820,483	386,450,533	178,772,345	3,900
Student Spending	264,051,936	409,969,495	258,770,777	137,997,180	3,741
Georgia State University	975,856,683	1,542,154,286	1,085,855,160	720,206,413	13,201
Personal Services	330,204,288	601,324,680	498,800,574	422,397,480	5,548
Operating Expenses	259,164,099	354,559,465	215,840,065	99,847,795	2,178
Student Spending	386,488,296	586,270,141	371,214,521	197,961,138	5,476
Georgia Health Sciences University	656,092,964	853,240,489	671,186,818	549,209,748	9,602
Personal Services	409,001,732	658,903,014	559,306,454	493,687,608	8,052
Operating Expenses	206,361,792	144,122,133	81,238,768	39,264,238	985
Student Spending	40,729,440	50,215,343	30,641,596	16,257,903	565
University of Georgia	1,484,743,700	2,050,186,968	1,520,842,223	1,087,725,604	20,458
Personal Services	644,615,952	1,049,309,034	898,636,171	778,302,419	12,033
Operating Expenses	395,146,532	395,004,905	240,253,873	108,482,533	2,545
Student Spending	444,981,216	605,873,029	381,952,179	200,940,653	5,880
Georgia Southern University	476,712,869	512,434,420	359,286,675	252,551,336	6,885
Personal Services	139,349,037	204,536,223	177,957,937	159,875,790	2,765
Operating Expenses	93,437,480	41,817,070	22,831,260	11,196,333	323
Student Spending	243,926,352	266,081,127	158,497,478	81,479,213	3,797
Valdosta State University	297,963,198	339,525,413	235,129,956	158,082,455	4,059
Personal Services	80,340,427	120,527,084	104,679,721	93,080,005	1,559
Operating Expenses	59,398,691	33,032,223	19,323,750	7,983,113	230
Student Spending	158,224,080	185,966,107	111,126,485	57,019,337	2,270
State Universities					
Albany State University	131,847,420	148,052,378	103,044,891	72,301,044	1,772
Personal Services	36,094,916	56,904,481	48,493,816	43,077,946	741
Operating Expenses	35,745,904	20,893,135	11,537,203	6,155,145	163
Student Spending	60,006,600	70,254,762	43,013,872	23,067,953	869

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in the 2011 Fiscal Year**

Institution	Initial Spending (current dollars)	Output Impact (current dollars)	Value-Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
Armstrong Atlantic State University	172,827,701	208,723,005	144,989,761	96,737,961	2,074
Personal Services	43,054,865	69,736,126	59,193,218	52,132,224	756
Operating Expenses	39,292,932	27,139,163	15,768,500	7,128,023	183
Student Spending	90,479,904	111,847,717	70,028,043	37,477,714	1,136
Augusta State University	150,736,491	188,626,720	130,834,955	89,682,912	2,168
Personal Services	43,062,407	69,373,668	58,887,483	51,978,696	904
Operating Expenses	25,253,572	17,636,978	9,941,613	4,804,970	120
Student Spending	82,420,512	101,616,075	62,005,860	32,899,246	1,144
Clayton State University	162,019,052	252,426,600	173,350,060	109,767,530	2,311
Personal Services	41,575,144	75,711,186	62,802,650	53,182,942	836
Operating Expenses	40,230,316	55,038,643	33,505,083	15,499,480	338
Student Spending	80,213,592	121,676,771	77,042,327	41,085,108	1,137
Columbus State University	192,581,625	235,954,567	163,451,835	110,812,408	2,657
Personal Services	54,042,813	87,202,179	74,076,169	65,018,808	1,240
Operating Expenses	41,807,028	30,325,183	16,727,705	7,606,133	175
Student Spending	96,731,784	118,427,206	72,647,961	38,187,467	1,242
Fort Valley State University	120,731,427	151,387,515	106,859,801	74,598,147	1,760
Personal Services	39,655,015	66,616,884	55,939,261	48,745,747	896
Operating Expenses	34,101,452	24,975,605	14,570,138	6,717,758	180
Student Spending	46,974,960	59,795,026	36,350,403	19,134,643	684
Georgia College & State University	170,591,611	183,360,141	134,218,835	97,216,766	2,256
Personal Services	58,429,292	81,150,688	72,187,076	65,388,189	1,039
Operating Expenses	28,132,727	12,265,618	6,498,300	3,127,690	83
Student Spending	84,029,592	89,943,835	55,533,459	28,700,887	1,135
Georgia Southwestern State University	77,477,606	73,470,742	52,384,323	36,459,143	902
Personal Services	19,565,121	27,259,909	24,224,088	21,971,029	335
Operating Expenses	19,906,397	7,034,703	3,950,210	1,997,825	53
Student Spending	38,006,088	39,176,131	24,210,025	12,490,289	514
Kennesaw State University	540,460,127	853,577,035	593,369,194	385,151,410	8,324
Personal Services	156,712,690	285,384,552	236,727,321	200,466,942	3,427
Operating Expenses	93,527,917	127,954,480	77,893,008	36,033,373	785
Student Spending	290,219,520	440,238,003	278,748,866	148,651,095	4,112

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in the 2011 Fiscal Year**

<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	136,382,924	171,501,515	122,128,309	84,583,690	1,917
Personal Services	42,539,553	65,257,292	56,490,484	50,163,771	776
Operating Expenses	20,490,947	15,047,908	8,916,545	4,338,570	110
Student Spending	73,352,424	91,196,316	56,721,280	30,081,349	1,031
Savannah State University	116,854,707	138,747,544	97,404,816	66,297,830	1,462
Personal Services	32,155,060	52,136,191	44,207,815	38,934,388	660
Operating Expenses	33,167,111	22,908,133	13,310,170	6,016,755	155
Student Spending	51,532,536	63,703,221	39,886,831	21,346,687	647
Southern Polytechnic State University	125,847,714	198,587,902	138,037,713	89,567,195	1,826
Personal Services	36,547,639	66,555,757	55,208,195	46,751,756	695
Operating Expenses	23,033,963	31,512,500	19,183,410	8,874,263	193
Student Spending	66,266,112	100,519,645	63,646,108	33,941,176	939
University of West Georgia	266,261,470	418,399,052	289,602,072	186,348,527	3,880
Personal Services	74,074,212	134,894,209	111,895,142	94,755,761	1,469
Operating Expenses	53,933,578	73,785,920	44,917,593	20,778,918	453
Student Spending	138,253,680	209,718,923	132,789,338	70,813,849	1,959

State Colleges

Abraham Baldwin Agricultural College	75,541,433	75,705,218	51,237,431	34,571,234	1,052
Personal Services	17,012,422	24,577,715	21,521,087	19,352,528	380
Operating Expenses	20,463,139	8,839,135	4,580,005	2,347,310	70
Student Spending	38,065,872	42,288,368	25,136,339	12,871,396	602
College of Coastal Georgia	79,364,502	84,278,435	57,475,783	36,850,756	942
Personal Services	16,340,290	23,964,114	21,074,735	18,744,947	318
Operating Expenses	24,140,444	14,810,170	8,469,880	3,697,725	98
Student Spending	38,883,768	45,504,151	27,931,168	14,408,084	527
Dalton State College	114,490,167	122,610,490	82,817,341	55,261,827	1,559
Personal Services	24,305,736	35,982,033	31,370,637	28,166,417	534
Operating Expenses	23,394,255	11,205,928	5,993,900	3,204,913	85
Student Spending	66,790,176	75,422,530	45,452,804	23,890,498	940

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in the 2011 Fiscal Year**

<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>
Gainesville State College	153,528,503	206,192,309	140,648,504	88,145,585	2,250
Personal Services	31,427,639	50,428,431	43,271,425	37,695,526	795
Operating Expenses	22,873,416	22,016,688	13,379,058	6,151,573	145
Student Spending	99,227,448	133,747,191	83,998,021	44,298,487	1,310
Georgia Gwinnett College	134,418,152	211,104,945	146,317,844	94,355,622	2,254
Personal Services	38,144,799	69,464,293	57,620,834	48,794,843	1,061
Operating Expenses	29,551,865	40,429,565	24,611,725	11,385,405	248
Student Spending	66,721,488	101,211,087	64,085,285	34,175,374	945
Gordon College	100,333,055	154,032,590	102,997,246	61,826,096	1,504
Personal Services	17,472,951	31,819,441	26,394,320	22,351,407	463
Operating Expenses	23,377,568	31,982,588	19,469,580	9,006,645	198
Student Spending	59,482,536	90,230,562	57,133,346	30,468,044	843
Macon State College	125,600,771	157,405,870	106,157,478	69,078,154	1,714
Personal Services	28,093,723	47,016,213	39,490,998	34,458,171	561
Operating Expenses	26,565,064	19,755,018	11,372,200	5,358,945	135
Student Spending	70,941,984	90,634,640	55,294,280	29,261,038	1,018
Middle Georgia College	79,864,236	82,692,711	56,420,734	38,725,076	1,089
Personal Services	18,545,925	27,521,662	23,885,833	21,498,453	453
Operating Expenses	19,349,943	8,497,445	4,347,148	2,400,320	60
Student Spending	41,968,368	46,673,604	28,187,753	14,826,303	576
Two-Year Colleges					
Atlanta Metropolitan College	69,570,856	106,877,867	71,955,429	43,766,457	1,007
Personal Services	13,760,960	25,059,572	20,787,004	17,602,999	327
Operating Expenses	19,088,528	26,114,803	15,897,533	7,354,213	160
Student Spending	36,721,368	55,703,493	35,270,892	18,809,246	520
Bainbridge College	83,619,943	76,755,786	50,044,698	31,754,949	1,014
Personal Services	12,549,566	17,544,676	15,494,028	14,027,241	256
Operating Expenses	24,498,641	10,322,958	5,289,105	2,800,698	80
Student Spending	46,571,736	48,888,153	29,261,565	14,927,011	678
Darton College	110,361,322	119,493,358	82,311,077	54,343,376	1,481
Personal Services	24,411,391	35,715,167	31,271,224	27,984,878	540
Operating Expenses	22,576,347	11,500,720	6,447,168	3,110,115	85
Student Spending	63,373,584	72,277,471	44,592,685	23,248,383	856

(continued)

Table 2 (continued)

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in the 2011 Fiscal Year**

<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>
East Georgia College	61,047,667	63,282,323	41,182,869	25,730,820	834
Personal Services	9,158,922	13,653,996	11,835,669	10,600,447	232
Operating Expenses	14,934,601	7,315,710	3,936,113	1,920,178	55
Student Spending	36,954,144	42,312,617	25,411,087	13,210,195	547
Georgia Highlands College	96,574,636	113,331,575	76,534,720	49,622,371	1,411
Personal Services	20,198,459	31,717,266	27,123,642	24,060,129	476
Operating Expenses	16,893,641	10,578,110	5,933,180	2,765,323	75
Student Spending	59,482,536	71,036,199	43,477,898	22,796,919	860
Georgia Perimeter College	457,030,790	712,836,576	485,528,450	303,046,439	6,762
Personal Services	102,981,301	187,536,016	155,561,672	131,733,728	2,200
Operating Expenses	79,027,825	108,117,068	65,816,873	30,446,940	665
Student Spending	275,021,664	417,183,492	264,149,905	140,865,771	3,897
South Georgia College	47,473,558	48,216,325	31,856,241	21,159,752	662
Personal Services	9,258,389	13,688,484	11,838,565	10,678,705	214
Operating Expenses	11,467,553	4,871,085	2,423,950	1,318,928	38
Student Spending	26,747,616	29,656,756	17,593,726	9,162,120	410
Waycross College	20,936,799	22,544,987	15,076,431	10,279,538	302
Personal Services	4,712,238	7,088,698	6,101,115	5,486,880	106
Operating Expenses	4,317,369	1,957,858	872,745	531,865	15
Student Spending	11,907,192	13,498,431	8,102,571	4,260,793	181

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), May 2012.

Table 3
On-Campus and Off-Campus Jobs that Exist
Due to Institution-Related Spending in the 2011 Fiscal Year

Institution	Total Employment Impact	On-Campus Jobs	Off-Campus Jobs That Exist Due to Institution-Related Spending
System Total	131,990	44,659	87,3316
Research Universities and Regional Universities	72,845	27,953	44,892
Georgia Institute of Technology	18,640	6,699	11,941
Georgia State University	13,201	3,471	9,730
Georgia Health Sciences University	9,602	5,761	3,841
University of Georgia	20,458	8,773	11,685
Georgia Southern University	6,885	2,100	4,785
Valdosta State University	4,059	1,149	2,910
State Universities	33,309	9,934	23,375
Albany State University	1,772	537	1,235
Armstrong Atlantic State University	2,074	515	1,559
Augusta State University	2,168	662	1,506
Clayton State University	2,311	575	1,736
Columbus State University	2,657	957	1,700
Fort Valley State University	1,760	646	1,114
Georgia College & State University	2,256	813	1,443
Georgia Southwestern State University	902	260	642
Kennesaw State University	8,324	2,441	5,883
North Georgia College & State University	1,917	580	1,337
Savannah State University	1,462	480	982
Southern Polytechnic State University	1,826	465	1,361
University of West Georgia	3,880	1,003	2,877
State Colleges	12,364	3,539	8,825
Abraham Baldwin Agricultural College	1,052	305	747
College of Coastal Georgia	942	247	695
Dalton State College	1,559	424	1,135
Gainesville State College	2,250	644	1,606
Georgia Gwinnett College	2,254	821	1,433
Gordon College	1,504	353	1,151
Macon State College	1,714	385	1,329
Middle Georgia College	1,089	360	729
Two-Year Colleges	13,471	3,233	10,238
Atlanta Metropolitan College	1,007	240	767
Bainbridge College	1,014	205	809
Darton College	1,481	432	1,049
East Georgia College	834	187	647
Georgia Highlands College	1,411	366	1,045
Georgia Perimeter College	6,762	1,552	5,210
South Georgia College	662	169	493
Waycross College	302	82	220

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), May 2012.

Appendix 1

Study Areas for Institutions

Research and Regional Universities

Georgia Institute of Technology – Atlanta MSA
Georgia State University – Atlanta MSA
Georgia Health Sciences University – Richmond, Columbia, Burke, McDuffie, Jefferson, Lincoln, Warren, and Glascock
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
College of Coastal Georgia -- Glynn, Brantley, McIntosh, Camden, and Wayne
Dalton State College – Whitfield, Murray, Catoosa, Gordon, Walker, and Gilmer
Gainesville State College – Hall, Gwinnett, Jackson, White, Habersham, Lumpkin, Banks, and Forsyth
Georgia Gwinnett 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

Two-Year Colleges

Atlanta Metropolitan College – Atlanta MSA
Bainbridge College – Decatur, Seminole, Miller, Grady, Early, Mitchell, and Baker
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
Georgia Highlands College – Floyd, Polk, Chattooga, Bartow, and Gordon
Georgia Perimeter College – Atlanta MSA
South Georgia College – Coffee, Atkinson, Bacon, Jeff Davis, Ware, Telfair, Ben Hill, and Irwin
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), May 2012.

Appendix 2

Economic Impact of Capital Outlays in Fiscal Year 2011

Institution	Initial Spending (current dollars)	Output Impact (current dollars)	Value Added Impact (current dollars)	Labor Income Impact (current dollars)	Employment Impact (jobs)
System Total	276,775,000	450,887,116	214,646,777	151,837,573	3,603
Research Universities and Regional Universities	83,320,000	119,034,935	55,054,332	40,030,016	974
Georgia Institute of Technology	7,300,000	3,216,864	2,114,557	1,291,673	20
Georgia State University	4,700,000	10,448,594	6,361,145	4,752,400	81
Georgia Jearth Sciences University	0	0	0	0	0
University of Georgia	10,750,000	16,147,545	9,986,571	7,513,180	124
Georgia Southern University	57,770,000	84,881,786	34,095,074	24,441,095	709
Valdosta State University	2,800,000	4,340,146	2,496,985	2,031,668	40
State Universities	106,650,000	195,969,079	92,713,387	62,917,183	1,405
Albany State University	1,800,000	2,979,389	1,635,244	1,320,352	30
Armstrong Atlantic State University	5,000,000	7,797,807	3,785,012	2,911,158	70
Augusta State University	2,000,000	3,344,810	1,960,628	1,589,444	29
Clayton State University	28,925,000	56,529,4382	26,496,339	17,502,129	386
Columbus State University	2,000,000	3,013,078	1,396,346	1,060,613	26
Fort Valley State University	1,500,000	442,651	292,256	169,965	3
Georgia College & State University	0	0	0	0	0
Georgia Southwestern State University	6,500,000	8,726,505	3,984,267	3,154,466	85
Kennesaw State University	30,215,000	59,050,545	27,678,027	18,282,691	403
North Georgia College & State Univ.	1,300,000	2,106,320	1,048,685	804,839	18
Savannah State University	0	0	0	0	0
Southern Polytechnic State University	1,000,000	364,276	244,075	141,190	2
University of West Georgia	26,410,000	51,614,260	24,192,508	15,980,336	353
State Colleges	38,885,000	54,932,154	26,796,078	18,990,362	486
Abraham Baldwin Agricultural College	4,750,000	6,841,194	3,227,564	2,421,533	79
College of Coastal Georgia	7,400,000	9,020,223	4,635,333	3,424,273	92
Dalton State College	1,300,000	2,037,049	1,087,206	882,057	22
Gainesville State College	3,560,000	1,135,049	764,622	439,448	7
Georgia Gwinnett College	7,000,000	13,706,766	7,542,611	5,367,765	121
Gordon College	0	0	0	0	0
Macon State College	14,875,000	22,191,873	9,538,742	6,455,286	165
Middle Georgia College	0	0	0	0	0
Two-Year Colleges	47,920,000	80,950,948	40,082,980	29,900,012	738
Atlanta Metropolitan College	22,645,000	44,071,942	23,063,587	16,825,547	362
Bainbridge College	0	0	0	0	0
Darton College	1,600,000	2,370,594	1,199,880	899,727	25
East Georgia College	640,000	956,880	475,015	358,713	10
Georgia Highlands College	19,285,000	28,166,822	12,769,152	9,846,181	281
Georgia Perimeter College	0	0	0	0	0
South Georgia College	3,750,000	5,384,710	2,575,346	1,969,844	60
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), May 2012.

Appendix 3

Total Economic Impact of MCG Health, Inc. in Fiscal Year 2011

<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>
MCG Health, Inc.	447,718,901	562,044,104	438,287,092	353,517,641	6,353
Wages & Salaries and Benefits	250,647,904	403,794,558	342,758,938	302,545,831	4,797
Other Operating Expenditures	157,858,861	114,817,880	69,310,406	36,982,572	1,008
Student Spending	0	0	0	0	0
Capital Spending	39,212,136	60,174,891	28,973,307	22,474,462	548

Total Economic Impact of Georgia Health Sciences University in Fiscal Year 2011

<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>
Georgia Health Sciences University	656,092,964	853,240,489	671,186,818	549,209,748	9,602
Personal Services	409,001,732	658,903,014	559,306,454	493,687,608	8,052
Operating Expenses	206,361,792	144,122,133	81,238,768	39,264,238	985
Student Spending	40,729,440	50,215,343	30,641,596	16,257,903	565
Capital Spending	0	0	0	0	0

Grand Total Economic Impact of GHSU and MCG Health, Inc. in Fiscal Year 2011

<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>
MCG Health, Inc.	1,103,811,865	1,432,027,819	1,112,229,469	911,212,614	15,955
Wages & Salaries and Benefits	659,649,636	1,062,697,572	902,065,392	796,233,439	12,849
Operating Expenses	364,220,653	258,940,013	150,549,174	76,246,810	1,993
Student Spending	40,729,440	50,215,343	30,641,596	16,257,903	565
Capital Spending	39,212,136	60,174,891	28,973,307	22,474,462	548

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., Consolidate Financial Statements and Report of Independent Certified Public Accountants (June 30, 2011 and 2010). Other operating expenditures does not include \$37.9 million in purchased services (a transfer to GHUS and PPG) and \$21.8 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, 2010 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), May 2012.

Appendix 4

GHSU's Albany, Savannah, and Rome Clinical Campuses: Economic Impact of FY 2011 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 2011, providing base levels of impact that can be referenced in future years as the programs expand. Although the economic impacts in FY 2011 are quite small, the impacts should expand rapidly once more students are enrolled at these GHSU branch campuses.

Albany: In FY 2011, total expenditures at the Albany clinical campus were \$1,182,830, including \$303,265 personnel expense, \$663,325 operating expense, and \$216,240 in student spending (Assistant Vice Chancellor for Fiscal Affairs/Budget Director, Board of Regents, University System of Georgia provided the estimates for personnel and operating expenses as well as enrollment).

The economic impact accruing to Albany includes:

- \$1,182,830 in initial expenditures and 5 on-campus jobs,
- \$1,118,982 in output (sales),
- \$776,536 in gross regional product (value added),
- \$559,284 in income, and
- 12 jobs.

Savannah: Total expenditures at the Savannah clinical campus were \$991,931, including \$415,348 personnel expense, \$360,343 operating expense, and \$216,240 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:

- \$991,931 in initial expenditures and 4 on-campus jobs,
- \$1,189,638 in output (sales),
- \$883,007 in gross regional product (value added),
- \$657,858 in income, and
- 13 jobs.

Rome: Total expenditures at the Rome clinical campus were \$183,241, including \$154,275 personnel expense and \$28,966 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:

- \$183,241 in initial expenditures and 3 on-campus jobs,
- \$260,393 in output (sales),
- \$217,342 in gross regional product (value added),
- \$188,512 in income, and
- 4 jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, (www.selig.uga.edu), May 2012.

Appendix 5

GHSU/UGA Medical Partnership's Athens Campus: Economic Impact of FY 2011 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 2011, providing a base level of impact that can be referenced in future years.

In FY 2011, initial expenditures at the Athens campus were \$12,899,361, including \$7,238,302 personnel expense, \$2,152,259 operating expense, \$508,800 in student spending, and \$3,000,000 in capital outlays (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:

- \$12,899,361 in initial expenditures and 54 on-campus jobs,
- \$19,678,758 in output (sales),
- \$14,659,225 in gross regional product (value added),
- \$11,614,771 in income, and
- 157 jobs.

In FY 2011, 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), May, 2012.