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AUTHOR Duhart, Sharon R.

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ABSTRACT

Using data from the 2 most recent fiscal years, this report calculates the economic benefits that the University System of Georgia's 34 institutions bring to their home regions and communities. The benefits are estimated for these categories: (1) spending by institutions themselves for salary and fringe benefits, operating supplies, and expenses, and other budgeted expenses; (2) spending by the institutions for capital projects (construction); and (3) spending by the students who attend the institutions. The economic impacts estimates are based on regional input-output models of each institution's regional economy, certain necessary assumptions, and readily available data regarding annual spending in the three categories. In the simplest terms, the economic impact of all 34 University System institutions on their host communities was \$8.0 billion in fiscal year (FY) 2001, down by 2.1% (\$174 million) from the FY total of \$8.2 billion. Of the total, 63% (\$5.1 billion) is the initial spending by the institutions and students, and \$3.0 billion (37%) is the induced or respending (multiplier) impact. On average, every dollar of initial spending generates an additional 56 cents for the economy of the host region. In FY 2001, value added comprises \$4.8 billion of the output impact. The collective, or rolled-up, employment impact of all 34 institutions on their host communities is 101,427 jobs, approximately 43% of which are on campus. The report includes, in addition to the FY 2001 information, economic impact data for each of the 34 institutions and a detailed template that individual institutions may use to calculate specific local impact in FY 2002. One appendix is the template for estimating impact, and the other is a list of study areas for institutions. (SLD)

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The Economic Impact of University System of Georgia Institutions On Their Regional Economies

March 2002

**A Needs' Assessment Study
Commissioned by Georgia's Intellectual
Capital Partnership Program® (ICAPP®)**

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**Prepared by
Sharon R. Duhart
Board of Regents
Office of Economic Development**

**Based on the methodology of
Dr. Jeffrey M. Humphreys
Selig Center for Economic Growth
Terry College of Business
The University of Georgia**

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Intellectual Capital Partnership Program®
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The Selig Center for Economic Growth is a public service unit of the Terry College of Business.

**THE ECONOMIC IMPACT OF
UNIVERSITY SYSTEM OF GEORGIA INSTITUTIONS
ON THEIR REGIONAL ECONOMIES
IN FISCAL YEARS 2000 AND 2001**

EXECUTIVE SUMMARY

Using data from the two most recent fiscal years this report calculates the economic benefits that the University System of Georgia's 34 institutions bring to their home regions and communities. The benefits are estimated for three important categories of college/university-related expenditures:

- (1) spending by the institutions themselves for salaries and fringe benefits, operating supplies and expenses, and other budgeted expenditures;
- (2) spending by the institutions for capital projects (construction); and
- (3) spending by the students who attend the institutions.

The economic impact estimates are based on regional input-output models of each institution's regional economy, certain necessary assumptions, and readily available data regarding annual spending in the three specified categories. Moreover, the emphasis is on funds received by residents of the region that hosts each institution of higher education.

In the simplest terms, the total economic impact of all 34 University System institutions on their host communities was \$8.0 billion in FY 2001 down by 2.1 percent or \$174 million, from the FY 2000 total of \$8.2 billion. The output of each institution is the change in regional output that is due to spending by the institution (including capital projects) and spending by the students who attend that particular college or university. Of the FY 2001 total, \$5.1 billion (63 percent) is the initial spending by the institutions and students; \$3.0 billion (37 percent) is the induced or re-spending (multiplier) impact. Dividing the FY 2001 total output impact (8.0 billion) by initial spending by institutions and students (\$5.1 billion) yields an average multiplier value of 1.56. On average, therefore, every dollar of initial spending generates an additional 56 cents for the economy of the region hosting the institution.

In FY 2001, value added comprises \$4.8 billion (60 percent) of the \$8.0 billion output impact, with domestic and foreign trade comprising the remainder \$3.5 billion (40 percent) of the output impact. The \$4.8 billion value-added impact reported for FY 2001 equals almost 2 percent of Georgia's gross state product. Labor income received by residents of the communities that host one or more institutions equals \$3.8 billion, and represents 79 percent of the value-added impact.

The collective or rolled-up employment impact of all 34 institutions on their host communities in FY 2001, including multiplier effects, is 101,427 jobs. Approximately 43 percent of these positions are on campus – employees of the University System of Georgia – add 57 percent are off-campus jobs in either the private or public sectors. On average, for each job created on campus, there are 1.4 off-campus jobs that exist because of spending related to the institution. The 101,427 jobs generated by the University System of Georgia account for 2.8 percent of all the jobs in Georgia, or about one job in 37.

In addition to the FY 2001 information summarized here, the full report includes economic impact data for each of the 34 institutions as well as a detailed template (with instructions) that individual institutions may use to calculate its specific local impact in fiscal year 2002.

Table 1

**Total Economic Impact of all 34 Institutions of the University System of Georgia
on their Regional Economies in the 1999-00 Fiscal Year and the 2000-01 Fiscal Year¹**

Total for All 34 Institutions in 2000-01	Initial Spending^{2,3,4} (current dollars)	Output⁵ Impact (current dollars)	Value Added⁶ Impact (current dollars)	Labor Income⁷ Impact (current dollars)	Employment⁸ Impact (jobs)
System Total	5,176,913,103.5	8,080,928,617.0	4,836,467,329.4	3,715,666,192.9	101,427
Budget Unit "A" and Unit "B"	3,581,095,041.0	5,937,614,471.6	3,731,720,536.9	3,097,085,925.2	75,338
Capital Projects Funded	147,074,551.0	231,864,091.8	110,373,195.9	89,863,485.7	2,407
Students Personal Expenditures	1,448,743,511.5	1,911,450,053.6	994,373,596.6	528,716,782.0	23,682

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System Total	5,285,855,202.7	8,254,504,893.9	4,917,253,552.8	3,784,941,372.8	105,195
Budget Unit "A" and Unit "B"	3,536,547,861.2	5,850,023,563.9	3,687,045,222.2	3,056,936,912.0	75,971
Capital Projects Funded	347,393,263.0	555,589,365.4	268,560,664.7	216,243,748.1	5,877
Students Personal Expenditures	1,401,914,078.5	1,848,891,964.6	961,647,666.0	511,760,712.7	23,347

1 The impacts of spending on Output, Value-Added, Labor Income, and Employment were estimated using the IMPLAN system, version 2.0 and Type SAM multipliers.

2 Initial spending for Budget Unit "A" and Unit "B" were obtained from the report entitled, "The University System of Georgia Budget 1999-00 and 2000-01," published by the Board of Regents of the University System of Georgia.

3 Initial spending for Capital Projects Funded were obtained from the report entitled, "The University System of Georgia, Capital Projects Recent State Funding History (diskette).

4 Initial spending for Students Personal Expenditures were estimated by the author based on data obtained from the Quarterly and Semester Enrollment Reports issued by the Board of Regents of the University System of Georgia; the Bureau of Labor Statistics' 1997 Consumer Expenditure Survey; and Personal Consumption Expenditures issued by the Bureau of Economic Analysis.

5 Output refers to the value of total production, including domestic and foreign trade.

6 Value Added includes employee compensation (including fringe benefits), proprietary income, other property type income (e.g., rents, royalties, dividends), and indirect business taxes (e.g. excise taxes, property taxes, fees, licenses, and sales taxes paid by businesses).

7 Labor income included both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals.

8 Employment includes both full-time and part-time jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2000.
Office of Economic Development, Board of Regents, March 1, 2002.



How much does a region benefit economically from hosting an institution of higher education? Traditionally, the benefits are discussed in broad, qualitative terms that 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 34 institutions convey to the communities in which they are located.

The benefits are estimated for three important categories of college/university-related expenditures:

- (1) spending by the institutions themselves for salaries and fringe benefits, operating supplies and expenses, and other budgeted expenditures;
- (2) spending by the institutions for capital projects (construction); and
- (3) spending by the students who attend the institutions.

The economic impact estimates are based on regional input-output models of each institutions regional economy, certain necessary assumptions, and readily available data regarding annual spending in the three specified categories. Moreover, the emphasis is on funds received by residents of the region that hosts each institution of higher education. The study reports expenditures and impacts for fiscal years 2000 (July 1, 1999 through June 30, 2000) and 2001 (July 1, 2000 through June 30, 2001).

The study does not account for all of the short-term impacts of the 34 institutions of their host communities, however. For example, several sources of college/university-related spending are identified, but no dollar amounts are estimated for them, because this would require collecting survey data, a task beyond the resources available to this project. It also does not quantify the many long-term benefits flowing to the economic development of the host communities through the presence of an institution of higher education, or measure intangible benefits (such as cultural opportunities, intellectual stimulation, and volunteer work) to residents of their host communities. 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 cost the community.

The five-part study discusses economic impact highlights, describes the economic impact concept, and summarizes methodology and results, limitations, and conclusions.

ECONOMIC IMPACT HIGHLIGHTS

In the simplest and broadest terms, the total economic impact of all 34 institutions of the University System of Georgia on their host communities was \$8.0 billion in FY 2001, down by 2.1 percent or \$174 million, from the FY 2000 total of \$8.2 billion. The output impact of each institution is the change in regional output that is due to spending by the institution (including capital projects) and spending by the students who attend the institution. Of the FY 2001 total, \$5.1 billion (63 percent) is the initial spending by the institutions and students; \$3.0 billion (37 percent) is the induced or re-spending (multiplier) impact. Dividing the FY 2001 total output impact (\$8.0 billion) by initial spending by the institutions and students (\$5.1 billion) yields an average multiplier value of 1.56. On average, therefore, every dollar of initial spending generates an additional 56 cents for the economy of the region hosting the institution.

In FY 2001, value added comprises \$4.8 billion (60 percent) of the \$8.0 billion output impact, with domestic and foreign trade comprising the remainder \$3.5 billion (40 percent) of the output impact. The \$4.8 billion value-added impact reported for FY 2000 equals almost 2 percent of Georgia's gross state product. Labor income received by residents of the communities that host one or more institutions equals \$3.8 billion, and represents 79 percent of the value-added impact.

The collective or roll-up employment impact of all 34 institutions on their host communities in FY 2000, including multiplier effects, is 101,427 jobs. Approximately 43 percent of these positions are on campus—employees of the University System of Georgia—and 57 percent are off-campus jobs in either the private or public sectors. On average, for each job created on campus, there are 1.4 off-campus jobs that exist because of spending related to the institution. The 101,427 jobs generated by the University System of Georgia account for 2.8 percent of all the jobs in Georgia, or about one job in 37.

UNDERSTANDING THE CONCEPT OF ECONOMIC IMPACT

Short-term economic impacts are the net changes in regional output, value added, labor income, and employment that are due to new dollars flowing into a region from a given enterprise or event of economic development. In this study, the enterprises or event of economic development are the 34 institutions of the University System of Georgia and the regions are the host communities, which include in the value added, labor income, and employment impact estimates, but the output impacts include both domestic and foreign trade.

Economists speak of economic impacts in terms of the changes in output, value added, labor income, or employment that occur in the region's industries (including households) when they produce goods and services to satisfy demand by consumers, businesses, investors, or governments that are from outside the region. Throughout this study, expenditures that represent the regional repercussions of spending originating from outside the region are counted as economic impacts. Because local residents who want to attend college or university often would have to relocate to another area, the spending of the area's residents who are students at an institution of the University System of Georgia also counts as an economic impact. Expenditures that immediately flow to recipients located outside the region, however, are not counted as economic impacts.

For goods made outside of the region, local value is created by wholesale and retail firms within the region, but not by the manufacturing firms that originally produced the goods elsewhere. So when these goods are purchased locally, the benefit to the region's economy consists only of the wholesale and retail margins. For example, since the petroleum production and refining industry is not present in the host regions, the portion of student's expenditures for gasoline that represents a payment to producers and refiners is not a local economic impact, but the portion that represents payments to local retail, wholesale, and distribution companies is counted as a local economic impact.

METHODOLOGY AND RESULTS

Estimating the economic impact of University System of Georgia institutions on their regional economies in FY 2000 and in 2001 involved four distinct steps. First, initial spending and employment for each institution were obtained for Budget Unit "A" and Budget Unit "B"; and then the institutional expenditures associated with capital projects (construction) funded were obtained for each institution and allocated to the appropriate industrial sector. Third, spending by students was estimated based on each institution's enrollment reports and on data obtained from both the U.S. Bureau of Labor Statistics and the U.S. Bureau of Economic Analysis. Students' personal expenditures then were allocated to industrial sectors. Finally, the IMPLAN Professional Version 2.0 modeling system was used to build regional economic models that are specific to each institution. The study area for each institution's regional model, which includes the institution as well as the labor force directly involved, is based on standard county classifications and are reported for all 34 institutions in Appendix 2.

For analytical purposes, all dollar amounts were converted to inflations-adjusted 1996 dollars, but the amounts expressed in this report are re-inflated to current dollars. Using the IMPLAN model and Type SAM multipliers, impacts associated with all categories of initial spending then are estimated in terms of output, value added, labor income, and employment. Type SAM multipliers capture the original expenditures resulting from the impact, the indirect effects of industries buying from industries, and the induced effects of household expenditures based on information in the social account matrix; and also account for Social Security and income tax leakage, institutional savings, commuting, and inter-institutional transfers. Wherever appropriate, the IMPLAN software applied margins to convert purchaser prices to producer prices. 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: Budget Unit “A” and Unit “B”***

Institution-specific data on total budgeted expenditures, travel, operating supplies and expenses, equipment, salaries and fringe benefits, and EFT positions (employment) were obtained from the report entitled *The University System of Georgia Budget 1999-2000*, published by the Board of Regents. Data were obtained for Budget Unit “A” and Budget Unit “B” for both FY 2000 and FY 2001. These amounts were treated as an industry change and are reported in the first column of Tables 2 and 3, respectively. Expenditures include spending for general operations, special initiative funds, lottery funds, research consortium, departmental services, and sponsored operations. To avoid double counting, the estimates of initial spending exclude 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 recreations programs operated by students). The spending associated with such activities is included in the student’s personal expenditures, however.

Since a detailed analysis of spending patterns at each institution is not practical, budgeted expenditures are allocated to various economic sectors based on a typical expenditure pattern estimated for U.S. colleges that was developed by the IMPLAN 2.0 modelers. For each institution, however, the “typical” sectoring scheme is modified to reflect that institution’s EFT positions and its spending for personnel services.

- ***Capital Projects Funded***

Institution-specific data on capital project (construction) funded were obtained on diskette from the Board of Regents. The expenditures were allocated to the year of reported funding, regardless of whether or not all of the funds actually were spent during that fiscal year. The amounts for FY 2000 and FY 2001 are reported in the first column of Tables 2 and 3, respectively. Budgeted funds were allocated to the appropriate IMPLAN 2.0 industrial sector.

- ***Students’ Personal Expenditures***

The students who attend an educational institution spend significant amounts of money in the local economy as a part of their living expenses, so the dollar value of this spending—based on average spending per quarter or semester for all items except tuition and fees—also is estimated. Since a detailed survey of students’ spending habits at each institution is impossible, the expenditure estimates primarily are based on data obtained from the 1997 Consumer Expenditure Survey released on the Internet by the U.S. Bureau of Labor Statistics (BLS) on September 8, 1998. Although expenditure data cover consumer units consisting of one person at the lowest income level, no data are available expressly for college students; therefore, in order to adapt the data for this study, spending estimates for several categories of goods or services are increased, decreased, or eliminated. For example, expenditures for books are increased substantially, while expenditures for education are eliminated because of possible double counting. (System institutions receive payments from students for tuition and fees, which in turn support the institutions’ expenditures, which has already been estimated.) After adjustment, for both Fall Semester 2000 and Spring Semester 2001, the average expenditure per student is estimated at \$4,775. These amounts do not include tuition and fees.

Many institutions also prepare annual estimates of the estimated cost of attendance, and although such estimates are not detailed enough to be used in the IMPLAN modeling system, they do provide useful comparisons. For example, The University of Georgia’s Office of Student Financial Aid indicates that the cost of attendance for undergraduates and graduates who lived off campus in FY 2001 (the 2000-01 academic year) was \$4,899 per semester (excluding tuition and fees). For students who live on campus, the Financial Aid Office estimates costs of \$3,790 per semester for undergraduates and graduate students.

Moreover, students residing in the study area are assumed to make all of their attendance-related purchases in the local economy, while those who lived outside the study area are assumed to make no attendance-related purchases (except for tuition and fees) locally. For all institutions, it is assumed that 95 percent of the students reside in the study area and 5 percent live outside it. Expenditures are distributed to the

IMPLAN sectoring scheme based on both national average expenditure patterns and data provided by the 1997 Consumer Expenditure Survey already described.

The final step in estimating students' personal expenditures is to multiply the number of quarters or semesters of student spending by the average spending per respective quarter or semester. For FY 2000 and FY 2001, these amounts are reported in the first column of Tables 2 and 3. The number of quarters or semesters of students' spending equals 95 percent of each institution's EFT enrollment as reported in the Quarterly and Semester Enrollment Reports issued by the Board of Regents.

- ***Total Initial Spending***

For each institution, total initial spending accruing to the institution's regional economy is the sum of spending originating from Budget Unit "A" and Budget Unit "B", spending due to capital projects funded, and students' personal expenditures. For FY 2000 and FY 2001, total initial spending for all 34 institutions is \$5.2 billion and \$5.1 billion, respectively—a-year-over-year percentage decrease of 2 percent.

In FY 2001, spending originating from Budget Unit "A" and Budget Unit "B" accounted for 69.2 percent (\$3.6 billion) of initial spending, spending due to capital project funded accounted for 2.9 percent (\$147 million), and students' personal expenditures accounted for 28 percent (\$1.4 billion) of initial spending. In FY 2000, spending originating from Budget Unit "A" and Budget Unit "B" accounted for 66.9 percent (\$3.5 billion) of initial spending, spending due to capital projects funded accounted for 6.6 percent (\$347 million), and students' personal expenditures accounted for 26.5 percent (\$1.4 billion).

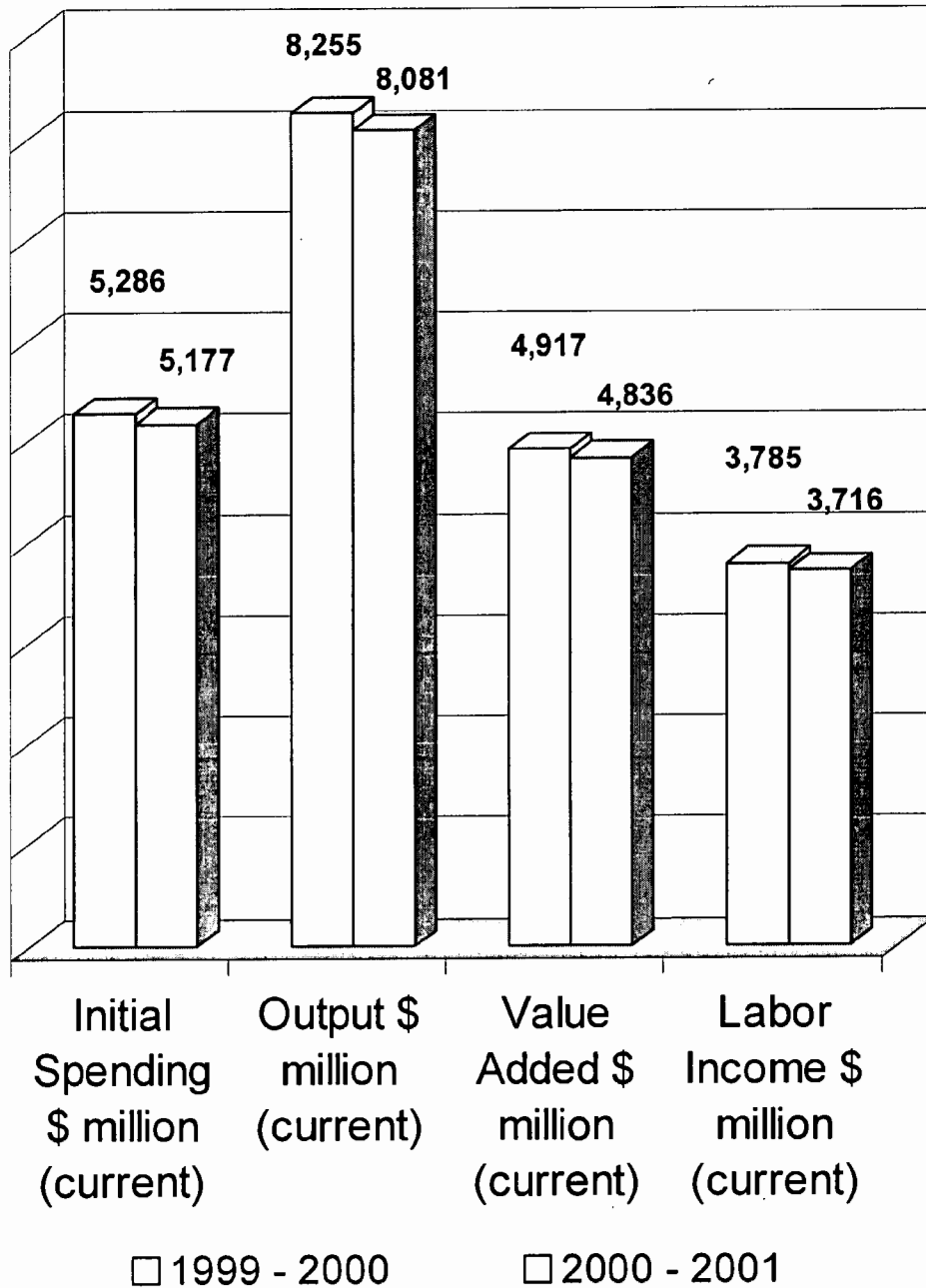
Initial spending for each institution of the University System of Georgia for FY 2000 and FY2001 is reported on the first column of Tables 2 and 3, respectively.

- ***Total Output Impact***

Output impacts, which are the most inclusive, largest, measure of economic impact, include both initial spending and the impacts generated by the re-spending of these amounts. Because of their size, output impacts typically are emphasized in economic impact studies and receive much media attention.

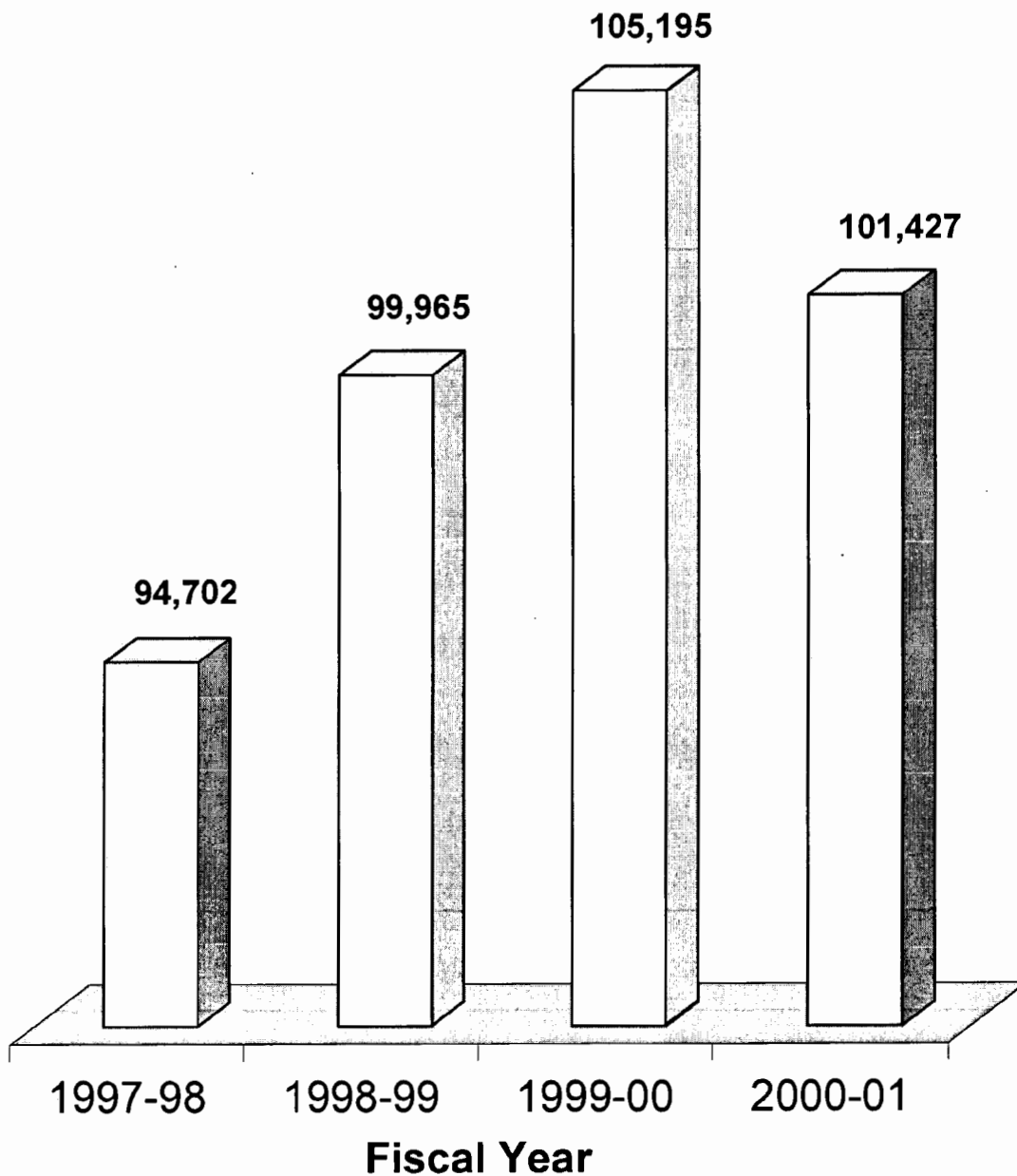
For each category of initial spending, an IMPLAN 2.0 model of the institution's regional economy is used to calculate the total output impact of that institution (shown in the second column of Tables 2 and 3, respectively). Collectively, the 34 institutions of the University System of Georgia generated an output impact on their host regions of \$8.0 billion in FY 2001 and \$8.2 billion in FY 2000—a year-over-year percentage decrease of 2.1 percent. For all institutions combined, the output impact of the 34 institutions was 1.6 times greater than their initial spending.

Total Economic Impact of All 34 Institutions of the University System of Georgia on Their Regional Economies in Fiscal Years 1999-2000 and 2000-2001



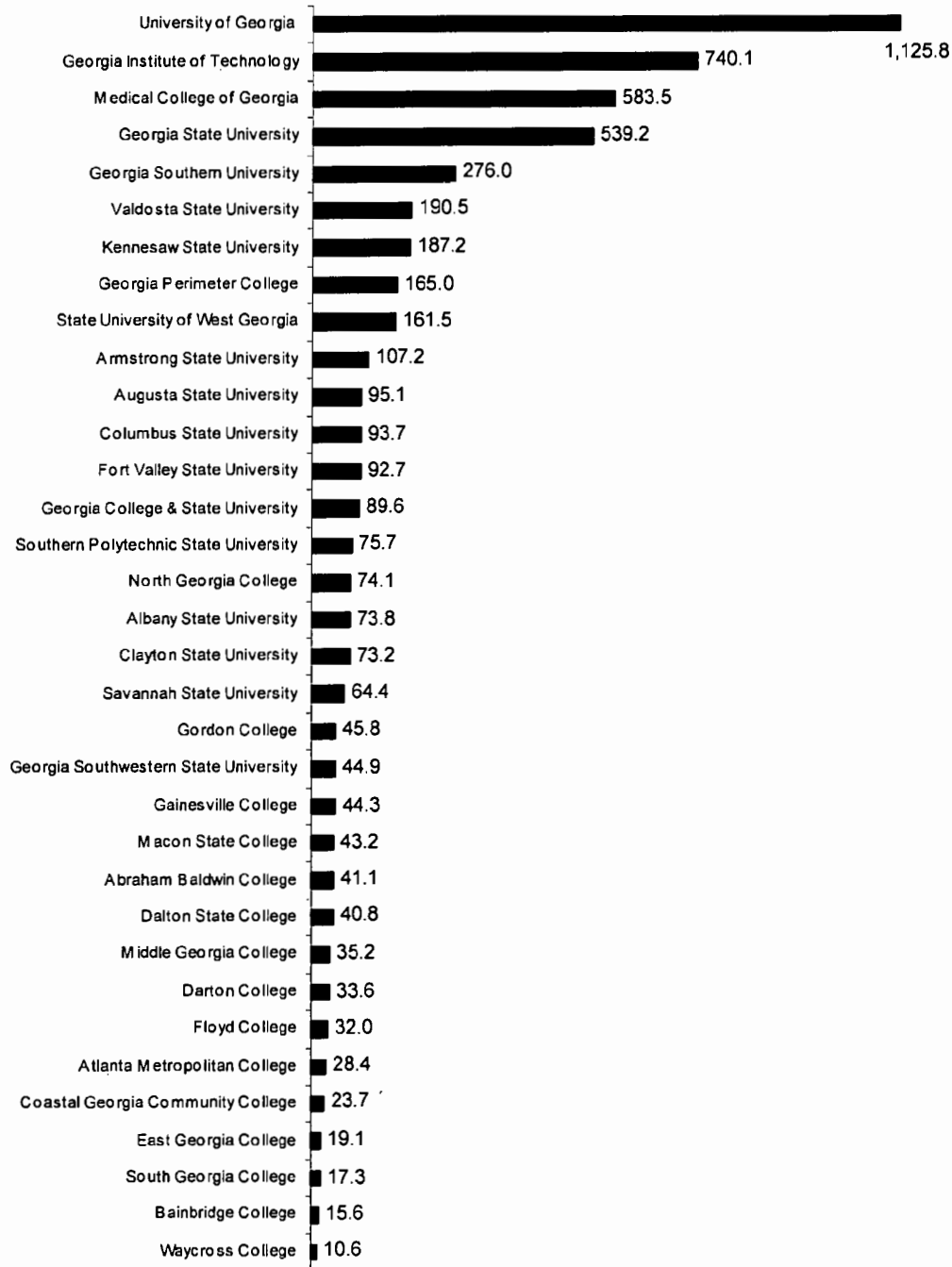
Source: Selig Center for Economic Growth, Terry College of Business, The University of Georgia, February 1, 2000.
Office of Economic Development, Board of Regents, March 1, 2002.

Total Employment Impact (Jobs) of All 34 Institutions of the University System of Georgia on Their Regional Economies in Fiscal Years 1998 through 2001



Source: Selig Center for Economic Growth, Terry College of Business, The University of Georgia, February 1, 2000.
Office of Economic Development, Board of Regents, March 1, 2002.

Total Economic Impact of University System of Georgia Institutions on their Regional Economies in Fiscal Year 2000 – Initial Spending (millions of current dollars)

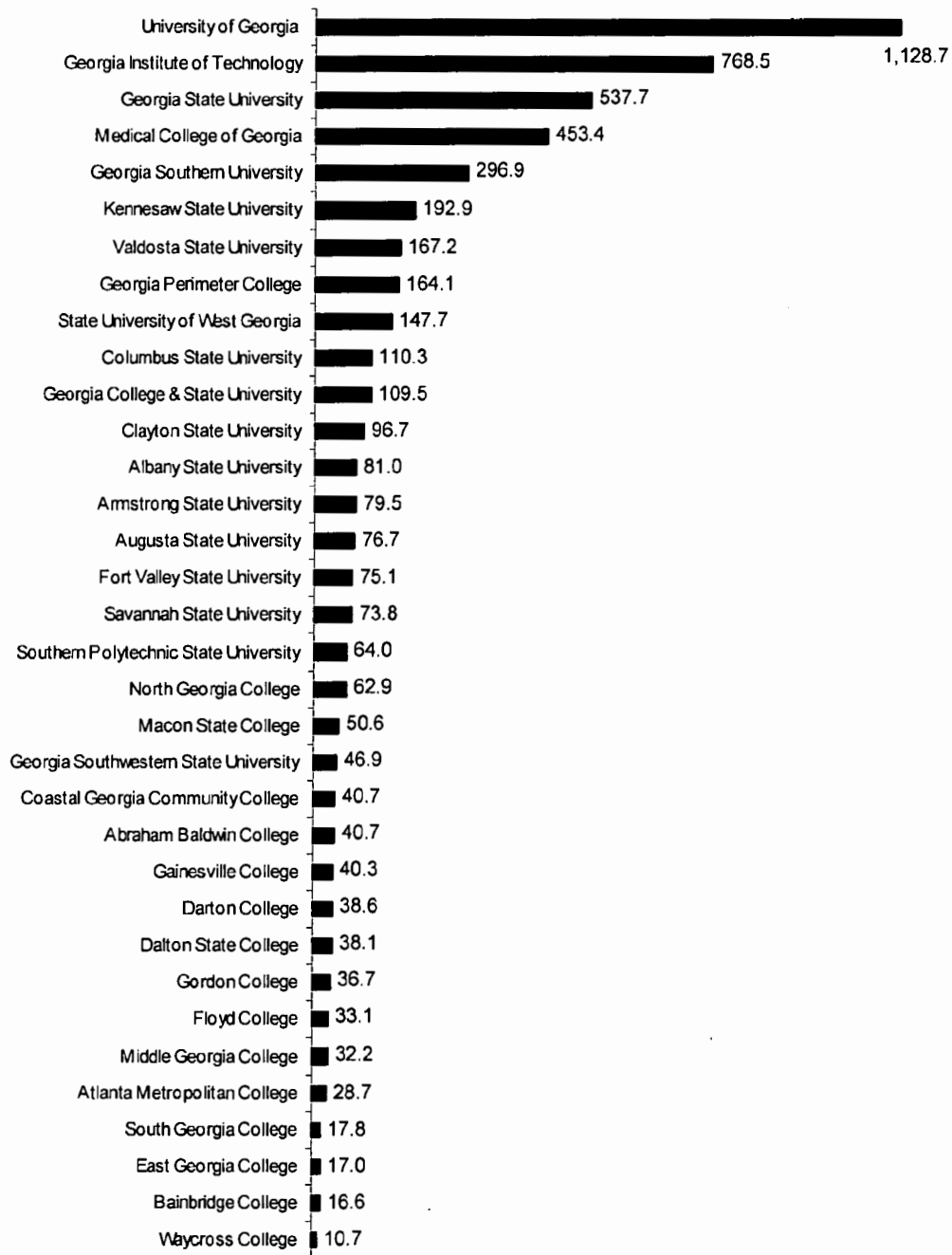


Note: Total Initial Spending is a sum of initial spending by institutions, capital projects, and students.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2000.

Office of Economic Development, Board of Regents, March 1, 2002.

Total Economic Impact of University System of Georgia Institutions on their Regional Economies in Fiscal Year 2001 – Initial Spending (millions of current dollars)



Note: Total Initial Spending is a sum of initial spending by institutions, capital projects, and students.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2000.

Office of Economic Development, Board of Regents, March 1, 2002.

- ***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.

Collectively, the 34 University System institutions generated a value-added impact of \$4.8 billion—almost 2 percent of Georgia’s gross state product—in FY 2001 and \$4.9 billion in FY 2000, a decrease of 1.6 percent. For all institutions combined, the value-added impact equaled 93.4 percent of initial spending in FY 2001 and 91 percent of initial spending in FY 2000. Value-added impacts for the individual institutions are reported in the third column of Tables 2 and 3, respectively.

- ***Labor Income Impacts***

The IMPLAN 2.0 model also is used to calculate impacts in terms of labor income. Collectively, the 34 University System institutions generated a labor income of \$3.7 billion in FY 2001 and \$3.8 billion in FY 2000, a decrease of 2 percent. For all institutions combined, the labor income impact equaled 72 percent of initial spending FY 2001 and 72 percent of initial spending in FY 2000. Labor income by fiscal year for each institution is reported in the fourth column of Tables 2 and 3.

- ***Employment Impacts***

The economic impact of hosting a unit of the University System of Georgia probably is most easily understood in terms of its effects on employment. Collectively, the 34 institutions generated an employment impact 101,427 jobs in FY 2001 and 105,195 jobs in FY 2000—a decrease of 3.6 percent. Approximately 43 percent of these positions are on campus (University System employees), and 57 percent are off-campus jobs either the private or public sectors. On average, for each job created on campus there are 1.4 off-campus jobs that exist because of spending related to the University System of Georgia (Tables 4 and 5).

The employment impact associated with the University System accounts for 2.8 percent of all the jobs held by Georgians, or about one job in 37. For all institutions combined, 19.6 jobs were generated for each million dollars of initial spending in FY 2001. Similarly, 20.0 jobs were generated for each million dollars of initial spending in FY 2000. Employment impacts for the individual institutions are reported in the fifth column of Tables 2 and 3.

LIMITATIONS

Because the goal of this study is to estimate the economic impact of all 34 institutions, certain necessary assumptions were designed to work well for the average institution makes to its host community.

Several important types of short-term college or university-related expenditures are not estimated, including spending by visitors and spending by retirees who live in the host communities. Expenditures supported by System employees’ non-institutional income also are not estimated. Such income may result from an employee’s consulting, investments, and other personal business activities, and often would not come to the host community if that person’s job at the college/university did not exist.

Perhaps the greatest limitation of this report is that no attempt is made to evaluate the long-term impacts of the University System’s institutions on the economic development of the host communities and the state. 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; and local businesses benefit from easy access to a large pool of part-time and full-time workers. These benefits are particular important when employment rates are low and labor markets are tight. Moreover, companies and agencies that depend in highly specialized skills often cluster around universities, and this may be particularly true of high-tech and

information-based companies—which are expected to account for a disproportionately large share of future economic growth.

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

CONCLUSIONS

To the extent that currently available information allows, this report estimates some of the economic benefits that hosting a unit of the University System of Georgia brings to a community. In the simplest terms, the collective or rolled-up economic impact of all 34 institutions on their host communities was \$8.0 billion in FY 2001, down by 2.1 percent from the FY 2000 impact of \$8.2 billion. This amount represents the impact of spending by the institution (including capital projects) and spending by students. Of the \$8.0 billion output impact, \$6.2 billion was generated by the institutions' expenditures and \$1.9 billion by students' expenditures. In addition, the University System of Georgia added \$3.7 billion in labor income to the economies of the regions that host colleges/universities and over 100,000 jobs.

The actual impact is much higher than these estimates, however, because the study's limited scope does not include the short-term impacts of spending by visitors, retirees, and non-universities-related income received by University System employees. Furthermore, the study does not measure any of the long-term benefits of the University System of Georgia to the state's economic development, quality of life, or the increased lifetime earnings of its graduates. ■

Table 1

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System Total	5,285,855,202.7	8,254,504,893.9	4,917,253,552.8	3,784,941,372.8	105,195
Budget Unit "A" and Unit "B"	3,536,547,861.2	5,850,023,563.9	3,687,045,222.2	3,056,936,912.0	75,971
Capital Projects Funded	347,393,263.0	555,589,365.4	268,560,664.7	216,243,748.1	5,877
Students Personal Expenditures	1,401,914,078.5	1,848,891,964.6	961,647,666.0	511,760,712.7	23,347

1 The impacts of spending on Output, Value-Added, Labor Income, and Employment were estimated using the IMPLAN system, version 2.0 and Type SAM multipliers.

2 Initial spending for Budget Unit "A" and Unit "B" were obtained from the report entitled, "The University System of Georgia Budget 1999-00 and 2000-01," published by the Board of Regents of the University System of Georgia.

3 Initial spending for Capital Projects Funded were obtained from the report entitled, "The University System of Georgia, Capital Projects Recent State Funding History (diskette).

4 Initial spending for Students Personal Expenditures were estimated by the author based on data obtained from the Quarterly and Semester Enrollment Reports issued by the Board of Regents of the University System of Georgia; the Bureau of Labor Statistics' 1997 Consumer Expenditure Survey; and Personal Consumption Expenditures issued by the Bureau of Economic Analysis.

5 Output refers to the value of total production, including domestic and foreign trade.

6 Value Added includes employee compensation (including fringe benefits), proprietary income, other property type income (e.g., rents, royalties, dividends), and indirect business taxes (e.g. excise taxes, property taxes, fees, licenses, and sales taxes paid by businesses).

7 Labor income included both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals.

8 Employment includes both full-time and part-time jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2000.
Office of Economic Development, Board of Regents, March 1, 2002.

Table 2

Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in the 1999 - 2000 Fiscal Year¹

<u>Institution</u>	<u>Initial Spending^{2,3,4} (current dollars)</u>	<u>Output⁵ Impact (current dollars)</u>	<u>Value Added⁶ Impact (current dollars)</u>	<u>Labor Income⁷ Impact (current dollars)</u>	<u>Employment⁸ Impact (jobs)</u>
<i>Research Universities and Regional Universities</i>					
Georgia Institute of Technology	740,192,109	1,282,581,470	823,320,134	650,399,550	13,956
Budget Unit "A" and Unit "B"	565,294,393	1,017,529,907	678,353,272	565,294,393	11,080
Capital Projects Funded	50,486,903	90,876,425	45,438,213	35,340,832	873
Students Personal Expenditures	124,410,813	174,175,138	99,528,650	49,764,325	2,003
Georgia State University	539,291,341	910,537,764	542,265,488	404,313,895	11,775
Budget Unit "A" and Unit "B"	359,749,717	647,549,491	395,724,689	323,774,745	8,850
Capital Projects Funded	29,075,000	52,335,000	26,167,500	20,352,500	503
Students Personal Expenditures	150,466,624	210,653,274	120,373,299	60,186,650	2,423
Medical College of Georgia	583,568,396	924,142,910	628,103,204	508,734,017	13,293
Budget Unit "A" and Unit "B"	549,013,318	878,421,309	603,914,650	494,111,986	12,682
Capital Projects Funded	4,000,000	6,000,000	2,800,000	2,400,000	67
Students Personal Expenditures	30,555,078	39,721,601	21,388,555	12,222,031	544
University of Georgia	1,125,883,120	1,725,832,685	1,041,343,541	796,946,329	22,336
Budget Unit "A" and Unit "B"	844,084,522	1,350,535,235	844,084,522	675,267,618	16,966
Capital Projects Funded	44,796,360	67,194,540	31,357,452	26,877,816	748
Students Personal Expenditures	237,002,238	308,102,909	165,901,567	94,800,895	4,622
Georgia Southern University	276,063,778	365,054,954	171,300,809	132,977,264	4,732
Budget Unit "A" and Unit "B"	163,797,102	229,315,943	114,657,972	98,278,261	2,981
Capital Projects Funded	5,095,000	7,133,000	3,057,000	2,547,500	79
Students Personal Expenditures	107,171,676	128,606,011	53,585,838	32,151,503	1,672
Valdosta State University	190,552,673	283,575,537	147,780,066	105,778,085	3,695
Budget Unit "A" and Unit "B"	103,466,207	165,545,931	93,119,586	72,426,345	2,214
Capital Projects Funded	24,086,000	36,129,000	16,860,200	14,451,600	429
Students Personal Expenditures	63,000,466	81,900,606	37,800,280	18,900,140	1,052
<i>Colleges and State Universities</i>					
Albany State University	73,848,494	110,794,653	59,100,707	46,807,232	1,394
Budget Unit "A" and Unit "B"	49,305,368	78,888,588	44,374,831	39,444,294	1,001
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	24,543,127	31,906,064	14,725,876	7,362,938	393
Armstrong State University	107,283,215	161,106,352	91,136,423	70,576,906	2,025
Budget Unit "A" and Unit "B"	44,127,240	70,603,584	44,127,240	39,714,516	971
Capital Projects Funded	28,000,000	44,800,000	22,400,000	16,800,000	484
Students Personal Expenditures	35,155,976	45,702,768	24,609,183	14,062,390	570
Augusta State University	95,133,299	140,219,509	83,802,937	63,204,354	1,966
Budget Unit "A" and Unit "B"	43,024,068	68,838,509	47,326,475	38,721,661	1,058
Capital Projects Funded	18,195,000	27,292,500	12,736,500	10,917,000	304
Students Personal Expenditures	33,914,231	44,088,500	23,739,961	13,565,692	604
Clayton State University	73,261,081	121,090,201	71,981,381	51,939,292	1,484
Budget Unit "A" and Unit "B"	43,706,719	78,672,094	48,077,391	39,336,047	1,005
Capital Projects Funded	2,605,000	4,689,000	2,344,500	1,823,500	45
Students Personal Expenditures	26,949,363	37,729,108	21,559,490	10,779,745	434

Columbus State University	93,720,264	146,236,607	80,544,423	58,660,409	1,970
Budget Unit "A" and Unit "B"	60,560,661	102,953,123	60,560,661	48,448,528	1,435
Capital Projects Funded	880,000	1,320,000	616,000	528,000	15
Students Personal Expenditures	32,279,604	41,963,485	19,367,762	9,683,881	520
Fort Valley State University	92,793,494	149,738,243	77,615,796	62,438,099	1,872
Budget Unit "A" and Unit "B"	53,836,753	91,522,480	48,453,078	43,069,402	1,190
Capital Projects Funded	18,930,000	32,181,000	15,144,000	11,358,000	352
Students Personal Expenditures	20,026,741	26,034,763	14,018,719	8,010,696	330
Georgia College & State University	89,655,660	122,180,151	64,766,983	48,937,872	1,569
Budget Unit "A" and Unit "B"	54,397,936	76,157,110	43,518,348	38,078,555	1,001
Capital Projects Funded	940,000	1,410,000	658,000	564,000	16
Students Personal Expenditures	34,317,724	44,613,041	20,590,634	10,295,317	553
Georgia Southwestern State University	44,904,870	57,504,526	31,130,563	24,939,312	745
Budget Unit "A" and Unit "B"	25,297,229	35,416,121	22,767,506	20,237,784	481
Capital Projects Funded	2,600,000	3,380,000	1,560,000	1,300,000	38
Students Personal Expenditures	17,007,641	18,708,405	6,803,056	3,401,528	226
Kennesaw State University	187,268,370	304,220,959	180,258,627	136,340,209	3,649
Budget Unit "A" and Unit "B"	99,663,102	179,393,583	109,629,412	99,663,102	2,232
Capital Projects Funded	5,450,000	9,810,000	4,905,000	3,815,000	94
Students Personal Expenditures	82,155,269	115,017,376	65,724,215	32,862,107	1,323
North Georgia College	74,166,510	112,110,536	64,116,630	48,410,696	1,453
Budget Unit "A" and Unit "B"	30,500,184	51,850,312	33,550,202	27,450,165	702
Capital Projects Funded	17,470,000	26,205,000	12,229,000	10,482,000	299
Students Personal Expenditures	26,196,326	34,055,224	18,337,428	10,478,530	453
Savannah State University	64,442,567	98,261,185	58,653,846	44,149,692	1,319
Budget Unit "A" and Unit "B"	43,577,164	69,723,462	43,577,164	34,861,731	976
Capital Projects Funded	4,709,000	7,534,400	3,767,200	2,825,400	81
Students Personal Expenditures	16,156,403	21,003,324	11,309,482	6,462,561	262
Southern Polytechnic State University	75,706,477	126,971,025	73,545,449	57,621,227	1,456
Budget Unit "A" and Unit "B"	38,673,894	69,613,009	42,541,283	38,673,894	843
Capital Projects Funded	13,781,000	24,805,800	12,402,900	9,646,700	238
Students Personal Expenditures	23,251,583	32,552,216	18,601,266	9,300,633	374
State University of West Georgia	161,557,809	236,535,063	123,444,597	95,897,195	2,952
Budget Unit "A" and Unit "B"	80,249,704	128,399,527	72,224,734	64,199,763	1,661
Capital Projects Funded	24,350,000	34,090,000	17,045,000	14,610,000	368
Students Personal Expenditures	56,958,105	74,045,537	34,174,863	17,087,432	923
<i>Associate Degree Colleges</i>					
Abraham Baldwin College	41,190,006	56,486,387	31,607,637	25,829,762	794
Budget Unit "A" and Unit "B"	21,381,267	32,071,901	21,381,267	19,243,141	481
Capital Projects Funded	3,220,000	4,508,000	1,932,000	1,610,000	54
Students Personal Expenditures	16,588,739	19,906,486	8,294,369	4,976,622	259
Atlanta Metropolitan College	28,411,055	46,112,518	27,481,625	19,285,723	557
Budget Unit "A" and Unit "B"	15,842,603	28,516,685	17,426,863	14,258,342	355
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	12,568,453	17,595,834	10,054,762	5,027,381	202
Bainbridge College	15,641,549	20,546,508	11,374,074	9,134,089	287
Budget Unit "A" and Unit "B"	8,883,249	12,436,548	7,994,924	7,106,599	187
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	6,758,300	8,109,960	3,379,150	2,027,490	100

Coastal Georgia Community College	23,707,835	33,578,807	20,523,416	15,178,213	479
Budget Unit "A" and Unit "B"	13,093,103	19,639,655	13,093,103	11,783,793	296
Capital Projects Funded	700,000	1,050,000	490,000	420,000	12
Students Personal Expenditures	9,914,732	12,889,152	6,940,312	2,974,420	172
Dalton State College	40,893,746	55,914,099	29,239,011	23,010,797	722
Budget Unit "A" and Unit "B"	19,505,345	29,258,018	17,554,811	15,604,276	414
Capital Projects Funded	4,950,000	6,930,000	3,465,000	2,475,000	77
Students Personal Expenditures	16,438,401	19,726,081	8,219,201	4,931,520	232
Darton College	33,651,535	49,069,631	27,261,935	20,725,231	692
Budget Unit "A" and Unit "B"	17,638,784	28,222,054	17,638,784	15,874,906	436
Capital Projects Funded	155,000	232,500	108,500	93,000	3
Students Personal Expenditures	15,857,752	20,615,077	9,514,651	4,757,325	254
East Georgia College	19,190,934	23,849,807	12,122,323	9,435,526	315
Budget Unit "A" and Unit "B"	7,143,899	9,287,068	6,429,509	5,715,119	154
Capital Projects Funded	4,370,000	6,118,000	2,622,000	2,185,000	73
Students Personal Expenditures	7,677,036	8,444,739	3,070,814	1,535,407	88
Floyd College	32,060,509	44,312,818	25,070,813	19,344,231	639
Budget Unit "A" and Unit "B"	19,429,357	29,144,035	17,486,421	15,543,485	449
Capital Projects Funded	57,000	79,800	39,900	28,500	1
Students Personal Expenditures	12,574,153	15,088,983	7,544,492	3,772,246	190
Gainesville College	44,330,993	69,937,821	41,479,147	30,804,660	848
Budget Unit "A" and Unit "B"	17,326,104	29,454,377	20,791,325	17,326,104	402
Capital Projects Funded	8,922,000	15,167,400	8,029,800	6,245,400	153
Students Personal Expenditures	18,082,889	25,316,045	12,658,022	7,233,156	293
Georgia Perimeter College	165,016,392	265,297,780	163,644,945	114,775,804	3,390
Budget Unit "A" and Unit "B"	76,877,079	138,378,742	92,252,495	76,877,079	1,960
Capital Projects Funded	8,810,000	15,858,000	7,929,000	6,167,000	152
Students Personal Expenditures	79,329,313	111,061,038	63,463,450	31,731,725	1,277
Gordon College	45,884,305	61,841,722	29,529,561	23,103,552	760
Budget Unit "A" and Unit "B"	12,788,521	19,182,782	11,509,669	10,230,817	267
Capital Projects Funded	14,720,000	20,608,000	8,832,000	7,360,000	228
Students Personal Expenditures	18,375,784	22,050,940	9,187,892	5,512,735	265
Macon State College	43,298,060	65,475,393	39,496,557	28,804,118	874
Budget Unit "A" and Unit "B"	22,969,789	39,048,641	25,266,768	20,672,810	533
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	20,328,271	26,426,752	14,229,790	8,131,308	342
Middle Georgia College	35,270,083	46,100,197	24,583,236	19,719,268	657
Budget Unit "A" and Unit "B"	15,860,486	22,204,680	14,274,437	12,688,389	363
Capital Projects Funded	6,040,000	7,852,000	3,624,000	3,020,000	91
Students Personal Expenditures	13,369,597	16,043,516	6,684,799	4,010,879	203
South Georgia College	17,322,356	22,737,698	12,562,919	10,073,883	321
Budget Unit "A" and Unit "B"	9,754,352	13,656,093	8,778,917	7,803,482	206
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	7,568,004	9,081,605	3,784,002	2,270,401	115
Waycross College	10,692,317	14,549,373	7,064,751	6,644,881	217
Budget Unit "A" and Unit "B"	5,728,643	8,592,964	4,582,914	5,155,779	139
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	4,963,674	5,956,409	2,481,837	1,489,102	78

Table 2 (continued)

- 1 The impacts of spending on Output, Value-Added, Labor Income, and Employment were estimated using the IMPLAN system, version 2.0 and Type SAM multipliers.
- 2 Initial spending for Budget Unit "A" and Unit "B" were obtained from the report entitled, "The University System of Georgia Budget 1999-00 and 2000-01," published by the Board of Regents of the University System of Georgia.
- 3 Initial spending for Capital Projects Funded were obtained from the report entitled, "The University System of Georgia, Capital Projects Recent State Funding History (diskette).
- 4 Initial spending for Students Personal Expenditures were estimated by the author based on data obtained from the Quarterly and Semester Enrollment Reports issued by the Board of Regents of the University System of Georgia; the Bureau of Labor Statistics' 1997 Consumer Expenditure Survey; and Personal Consumption Expenditures issued by the Bureau of Economic Analysis.
- 5 Output refers to the value of total production, including domestic and foreign trade.
- 6 Value Added includes employee compensation (including fringe benefits), proprietary income, other property type income (e.g., rents, royalties, dividends), and indirect business taxes (e.g. excise taxes, property taxes, fees, licenses, and sales taxes paid by businesses).
- 7 Labor income included both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals.
- 8 Employment includes both full-time and part-time jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2000.
Office of Economic Development, Board of Regents, March 1, 2002.

Table 3

**Total Economic Impact of University System of Georgia
Institutions on their Regional Economies in the 2000 - 2001 Fiscal Year¹**

<u>Institution</u>	Initial Spending ^{2,3,4} (current dollars)	Output ⁵ Impact (current dollars)	Value Added ⁶ Impact (current dollars)	Labor Income ⁷ Impact (current dollars)	Employment ⁸ Impact (jobs)
<i>Research Universities and Regional Universities</i>					
Georgia Institute of Technology	768,557,097	1,330,698,928	866,620,905	686,557,563	14,349
Budget Unit "A" and Unit "B"	626,984,932	1,128,572,878	752,381,918	626,984,932	12,101
Capital Projects Funded	9,812,551	17,662,592	8,831,296	6,868,786	167
Students Personal Expenditures	131,759,614	184,463,459	105,407,691	52,703,845	2,082
Georgia State University	537,787,340	905,196,372	543,570,444	404,602,556	11,626
Budget Unit "A" and Unit "B"	376,335,240	677,403,432	413,968,764	338,701,716	9,070
Capital Projects Funded	4,400,000	7,920,000	3,960,000	3,080,000	75
Students Personal Expenditures	157,052,100	219,872,940	125,641,680	62,820,840	2,481
Medical College of Georgia	453,409,502	716,259,669	486,489,740	392,742,662	10,133
Budget Unit "A" and Unit "B"	422,757,723	676,412,357	465,033,495	380,481,951	9,597
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	30,651,779	39,847,312	21,456,245	12,260,711	536
University of Georgia	1,128,700,686	1,732,829,289	1,054,088,877	804,998,137	22,178
Budget Unit "A" and Unit "B"	879,994,657	1,407,991,451	879,994,657	703,995,726	17,424
Capital Projects Funded	7,600,000	11,400,000	5,320,000	4,560,000	125
Students Personal Expenditures	241,106,029	313,437,838	168,774,220	96,442,412	4,629
Georgia Southern University	296,921,733	394,278,102	184,093,889	143,695,554	4,976
Budget Unit "A" and Unit "B"	166,470,115	233,058,161	116,529,080	99,882,069	2,980
Capital Projects Funded	23,390,000	32,746,000	14,034,000	11,695,000	358
Students Personal Expenditures	107,061,618	128,473,942	53,530,809	32,118,485	1,638
Valdosta State University	167,274,035	248,514,701	131,422,876	91,593,484	3,230
Budget Unit "A" and Unit "B"	103,528,185	165,645,095	93,175,366	72,469,729	2,184
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	63,745,850	82,869,605	38,247,510	19,123,755	1,045
<i>Colleges and State Universities</i>					
Albany State University	81,027,246	121,810,288	65,091,216	51,766,287	1,503
Budget Unit "A" and Unit "B"	54,916,226	87,865,961	49,424,603	43,932,981	1,093
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	26,111,021	33,944,327	15,666,612	7,833,306	410
Armstrong State University	79,563,919	116,884,925	69,146,574	54,245,285	1,521
Budget Unit "A" and Unit "B"	44,839,434	71,743,094	44,839,434	40,355,490	969
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	34,724,486	45,141,831	24,307,140	13,889,794	552
Augusta State University	76,731,202	112,627,004	70,559,897	51,992,950	1,624
Budget Unit "A" and Unit "B"	42,120,139	67,392,222	46,332,153	37,908,125	1,019
Capital Projects Funded	1,202,000	1,803,000	841,400	721,200	20
Students Personal Expenditures	33,409,063	43,431,782	23,386,344	13,363,625	585
Clayton State University	96,782,987	162,818,219	93,457,917	68,405,741	1,869
Budget Unit "A" and Unit "B"	46,005,093	82,809,168	50,605,603	41,404,584	1,040
Capital Projects Funded	22,300,000	40,140,000	20,070,000	15,610,000	379
Students Personal Expenditures	28,477,894	39,869,051	22,782,315	11,391,157	450

Columbus State University	110,340,929	170,715,319	91,983,669	67,938,919	2,205
Budget Unit "A" and Unit "B"	60,715,280	103,215,977	60,715,280	48,572,224	1,415
Capital Projects Funded	14,930,000	22,395,000	10,451,000	8,958,000	242
Students Personal Expenditures	34,695,648	45,104,343	20,817,389	10,408,694	548
Fort Valley State University	75,149,567	119,971,756	63,743,356	52,337,146	1,524
Budget Unit "A" and Unit "B"	55,693,297	94,678,604	50,123,967	44,554,637	1,209
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	19,456,271	25,293,152	13,619,390	7,782,508	315
Georgia College & State University	109,520,170	151,611,284	78,644,229	60,566,306	1,865
Budget Unit "A" and Unit "B"	55,430,638	77,602,893	44,344,511	38,801,447	1,003
Capital Projects Funded	18,460,000	27,690,000	12,922,000	11,076,000	299
Students Personal Expenditures	35,629,532	46,318,391	21,377,719	10,688,859	563
Georgia Southwestern State University	46,919,925	60,298,922	33,080,445	26,633,595	774
Budget Unit "A" and Unit "B"	28,127,349	39,378,289	25,314,614	22,501,879	526
Capital Projects Funded	1,244,000	1,617,200	746,400	622,000	18
Students Personal Expenditures	17,548,576	19,303,433	7,019,430	3,509,715	230
Kennesaw State University	192,980,743	313,233,569	186,346,991	141,283,590	3,708
Budget Unit "A" and Unit "B"	105,986,321	190,775,377	116,584,953	105,986,321	2,332
Capital Projects Funded	1,665,000	2,997,000	1,498,500	1,165,500	28
Students Personal Expenditures	85,329,423	119,461,192	68,263,538	34,131,769	1,348
North Georgia College	62,921,200	95,738,955	57,694,235	42,522,224	1,260
Budget Unit "A" and Unit "B"	34,123,487	58,009,928	37,535,836	30,711,139	771
Capital Projects Funded	1,460,000	2,190,000	1,022,000	876,000	25
Students Personal Expenditures	27,337,713	35,539,027	19,136,399	10,935,085	465
Savannah State University	73,861,119	113,401,676	66,291,005	49,926,743	1,458
Budget Unit "A" and Unit "B"	43,970,739	70,353,182	43,970,739	35,176,591	967
Capital Projects Funded	13,970,000	22,352,000	11,176,000	8,382,000	237
Students Personal Expenditures	15,920,380	20,696,494	11,144,266	6,368,152	253
Southern Polytechnic State University	64,035,722	106,112,688	63,370,585	50,000,804	1,238
Budget Unit "A" and Unit "B"	40,131,692	72,237,045	44,144,861	40,131,692	859
Capital Projects Funded	1,025,000	1,845,000	922,500	717,500	17
Students Personal Expenditures	22,879,031	32,030,643	18,303,224	9,151,612	361
State University of West Georgia	147,718,618	218,228,905	114,825,872	87,973,421	2,733
Budget Unit "A" and Unit "B"	87,315,671	139,705,073	78,584,104	69,852,537	1,773
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	60,402,948	78,523,832	36,241,769	18,120,884	960
<i>Associate Degree Colleges</i>					
Abraham Baldwin College	40,786,062	55,927,280	31,966,540	26,146,829	783
Budget Unit "A" and Unit "B"	23,090,018	34,635,026	23,090,018	20,781,016	510
Capital Projects Funded	285,000	399,000	171,000	142,500	5
Students Personal Expenditures	17,411,044	20,893,253	8,705,522	5,223,313	268
Atlanta Metropolitan College	28,719,269	46,795,901	27,917,109	19,723,863	556
Budget Unit "A" and Unit "B"	16,472,311	29,650,159	18,119,542	14,825,080	362
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	12,246,958	17,145,742	9,797,567	4,898,783	194
Bainbridge College	16,677,108	21,923,835	12,161,165	9,781,395	301
Budget Unit "A" and Unit "B"	9,556,526	13,379,136	8,600,873	7,645,221	198
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	7,120,583	8,544,699	3,560,291	2,136,175	103

Coastal Georgia Community College	40,785,526	59,112,211	32,676,409	25,498,739	763
Budget Unit "A" and Unit "B"	13,755,136	20,632,703	13,755,136	12,379,622	305
Capital Projects Funded	16,700,000	25,050,000	11,690,000	10,020,000	282
Students Personal Expenditures	10,330,390	13,429,507	7,231,273	3,099,117	176
Dalton State College	38,168,326	52,107,702	27,491,777	21,960,015	676
Budget Unit "A" and Unit "B"	21,019,035	31,528,553	18,917,132	16,815,228	437
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	17,149,291	20,579,149	8,574,645	5,144,787	238
Darton College	38,602,533	56,435,896	31,376,824	24,013,067	781
Budget Unit "A" and Unit "B"	20,356,012	32,569,620	20,356,012	18,320,411	495
Capital Projects Funded	729,000	1,093,500	510,300	437,400	12
Students Personal Expenditures	17,517,520	22,772,776	10,510,512	5,255,256	275
East Georgia College	17,095,180	20,632,960	11,271,228	8,753,824	281
Budget Unit "A" and Unit "B"	8,766,313	11,396,207	7,889,682	7,013,051	186
Capital Projects Funded	250,000	350,000	150,000	125,000	4
Students Personal Expenditures	8,078,867	8,886,753	3,231,547	1,615,773	91
Floyd College	33,115,318	45,692,106	25,822,915	19,857,469	647
Budget Unit "A" and Unit "B"	19,845,747	29,768,620	17,861,172	15,876,598	450
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	13,269,572	15,923,486	7,961,743	3,980,871	196
Gainesville College	40,367,953	62,708,117	38,189,204	28,143,146	777
Budget Unit "A" and Unit "B"	19,343,274	32,883,566	23,211,929	19,343,274	441
Capital Projects Funded	1,300,000	2,210,000	1,170,000	910,000	22
Students Personal Expenditures	19,724,679	27,614,551	13,807,275	7,889,872	314
Georgia Perimeter College	164,145,193	262,365,945	163,008,829	113,632,089	3,327
Budget Unit "A" and Unit "B"	78,506,686	141,312,036	94,208,024	78,506,686	1,971
Capital Projects Funded	2,900,000	5,220,000	2,610,000	2,030,000	49
Students Personal Expenditures	82,738,507	115,833,909	66,190,805	33,095,403	1,307
Gordon College	36,754,615	49,099,922	24,909,819	19,249,023	622
Budget Unit "A" and Unit "B"	16,141,278	24,211,917	14,527,150	12,913,022	331
Capital Projects Funded	760,000	1,064,000	456,000	380,000	12
Students Personal Expenditures	19,853,338	23,824,005	9,926,669	5,956,001	280
Macon State College	50,690,295	76,608,180	46,064,003	33,550,864	991
Budget Unit "A" and Unit "B"	26,289,492	44,692,136	28,918,441	23,660,543	599
Capital Projects Funded	650,000	1,040,000	520,000	390,000	0
Students Personal Expenditures	23,750,803	30,876,044	16,625,562	9,500,321	392
Middle Georgia College	32,234,264	42,193,903	22,963,705	18,362,745	607
Budget Unit "A" and Unit "B"	16,668,932	23,336,504	15,002,039	13,335,145	375
Capital Projects Funded	1,790,000	2,327,000	1,074,000	895,000	26
Students Personal Expenditures	13,775,333	16,530,399	6,887,666	4,132,600	205
South Georgia College	17,852,621	23,451,541	12,983,104	10,426,778	327
Budget Unit "A" and Unit "B"	9,889,984	13,845,977	8,900,985	7,911,987	206
Capital Projects Funded	252,000	352,800	226,800	201,600	5
Students Personal Expenditures	7,710,637	9,252,764	3,855,319	2,313,191	116
Waycross College	10,715,101	14,642,545	7,141,975	6,783,379	215
Budget Unit "A" and Unit "B"	5,948,081	8,922,122	4,758,465	5,353,273	142
Capital Projects Funded	0	0	0	0	0
Students Personal Expenditures	4,767,019	5,720,423	2,383,510	1,430,106	73

Table 3 (continued)

- 1 The impacts of spending on Output, Value-Added, Labor Income, and Employment were estimated using the IMPLAN system, version 2.0 and Type SAM multipliers.
- 2 Initial spending for Budget Unit "A" and Unit "B" were obtained from the report entitled, "The University System of Georgia Budget 1999-00 and 2000-01," published by the Board of Regents of the University System of Georgia.
- 3 Initial spending for Capital Projects Funded were obtained from the report entitled, "The University System of Georgia, Capital Projects Recent State Funding History (diskette).
- 4 Initial spending for Students Personal Expenditures were estimated by the author based on data obtained from the Quarterly and Semester Enrollment Reports issued by the Board of Regents of the University System of Georgia; the Bureau of Labor Statistics' 1997 Consumer Expenditure Survey; and Personal Consumption Expenditures issued by the Bureau of Economic Analysis.
- 5 Output refers to the value of total production, including domestic and foreign trade.
- 6 Value Added includes employee compensation (including fringe benefits), proprietary income, other property type income (e.g., rents, royalties, dividends), and indirect business taxes (e.g. excise taxes, property taxes, fees, licenses, and sales taxes paid by businesses).
- 7 Labor income included both the total payroll costs (including fringe benefits) of workers who are paid by employers and payments received by self-employed individuals.
- 8 Employment includes both full-time and part-time jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2000.
Office of Economic Development, Board of Regents, March 1, 2002.

Table 4

On-Campus and Off-Campus Jobs that Exist Due to Institution-Related Spending in the 1999-00 Fiscal Year

<u>Institution</u>	<u>Total Employment¹ Impact</u>	<u>On-Campus² Jobs</u>	<u>Off-Campus Jobs³ that Exist Due to Institution-Related Spending</u>
Research Universities and Regional Universities			
Georgia Institute of Technology	13,956	5,008	8,948
Georgia State University	11,775	4,949	6,827
Medical College of Georgia	13,293	7,129	6,164
University of Georgia	22,336	9,686	12,650
Georgia Southern University	4,732	1,882	2,850
Valdosta State University	3,695	1,882	1,813
Colleges and State Universities			
Albany State University	1,394	570	823
Armstrong State University	2,025	575	1,450
Augusta State University	1,966	556	1,410
Clayton State University	1,484	587	897
Columbus State University	1,970	654	1,315
Fort Valley State University	1,872	634	1,238
Georgia College & State University	1,569	603	966
Georgia Southwestern State University	745	304	441
Kennesaw State University	3,649	1,223	2,427
North Georgia College	1,453	359	1,094
Savannah State University	1,319	417	903
Southern Polytechnic State University	1,456	488	968
State University of West Georgia	2,952	885	2,067
Associate Degree Colleges			
Abraham Baldwin College	794	250	544
Atlanta Metropolitan College	557	190	367
Bainbridge College	287	117	170
Coastal Georgia Community College	479	173	306
Dalton State College	722	294	428
Darton College	692	263	429
East Georgia College	315	91	224
Floyd College	639	277	363
Gainesville College	848	229	619
Georgia Perimeter College	3,390	1,226	2,164
Gordon College	760	169	591
Macon State College	874	312	562
Middle Georgia College	657	219	438
South Georgia College	321	129	192
Waycross College	217	90	127
TOTAL	105,195	42,418	62,777

1 The Total Employment Impact includes both full-time and part-time jobs.

2 On-Campus Employment is expressed in full-time equivalents.

3 Off-Campus Employment includes both full-time and part-time jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2000.

Table 5

On-Campus and Off-Campus Jobs that Exist Due to Institution-Related Spending in the 2000-01 Fiscal Year

<u>Institution</u>	<u>Total Employment¹ Impact</u>	<u>On-Campus² Jobs</u>	<u>Off-Campus Jobs³ that Exist Due to Institution-Related Spending</u>
Research Universities and Regional Universities			
Georgia Institute of Technology	14,349	5,613	8,736
Georgia State University	11,626	5,431	6,195
Medical College of Georgia	10,133	7,048	3,085
University of Georgia	22,178	9,857	12,321
Georgia Southern University	4,976	1,890	3,085
Valdosta State University	3,230	1,192	2,037
Colleges and State Universities			
Albany State University	1,503	589	914
Armstrong State University	1,521	584	937
Augusta State University	1,624	574	1,049
Clayton State University	1,869	567	1,302
Columbus State University	2,205	661	1,544
Fort Valley State University	1,524	659	865
Georgia College & State University	1,865	618	1,247
Georgia Southwestern State University	774	307	467
Kennesaw State University	3,708	1,297	2,411
North Georgia College	1,260	386	875
Savannah State University	1,458	401	1,057
Southern Polytechnic State University	1,238	488	750
State University of West Georgia	2,733	913	1,820
Associate Degree Colleges			
Abraham Baldwin College	783	262	521
Atlanta Metropolitan College	556	205	351
Bainbridge College	301	122	179
Coastal Georgia Community College	763	181	582
Dalton State College	676	300	375
Darton College	781	287	494
East Georgia College	281	99	182
Floyd College	647	281	366
Gainesville College	777	234	543
Georgia Perimeter College	3,327	1,213	2,114
Gordon College	622	176	446
Macon State College	991	295	696
Middle Georgia College	607	218	389
South Georgia College	327	127	199
Waycross College	215	86	129
TOTAL	101,427	43,163	58,264

1 The Total Employment Impact includes both full-time and part-time jobs.

2 On-Campus Employment is expressed in full-time equivalents.

3 Off-Campus Employment includes both full-time and part-time jobs.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2002

APPENDIX ONE: A TEMPLATE FOR ESTIMATING ECONOMIC IMPACTS

Exhibit A-1 provides a template to estimate the economic impact of each institution of the University System of Georgia for FY 2000 (July 1, 1999 through June 30, 2000), FY 2001 (July 1, 2000 through June 30, 2001), and FY 2002 (July 1, 2001 through June 30, 2002). This template relies on simple multipliers derived from the more precise model-based estimates calculated for FY 1999 and FY 1998. The multipliers are reported in Exhibit A-2. Although economic impact estimates based on the template will be less accurate than those produced by an updated regional input-output model, they provide an inexpensive and relatively easy way to update the results reported for FY 1998 and FY 1999.

The template consists of four parts. Part 1 estimates the economic impact of spending by the institutions themselves for salaries and fringe benefits, operating supplies and expenses, and other budgeted expenditures. Part 2 estimates the economic impact of spending by the institutions for capital projects (construction). Part 3 estimates the economic impact of spending by the students who attend each institution. Finally, Part 4 provides total economic impacts in terms of output, value added, labor income, and employment.

■ Instructions

Part One Estimating the Economic Impact of Spending by the Institution

Lines 1, 2, and 3: Total budgeted expenditures can be obtained from the report *The University System of Georgia Budget*, which is issued annually by the Board of Regents of the University System of Georgia. Expenditures for each institution are reported by fiscal year for the most recent three fiscal years. Expenditures for Budget Unit "A" and Budget Unit "B" are reported separately, however. Because all institutions are included in the "A" budget, the **budgeted expenditure amount from budget "A"** should be entered on line 1 of the worksheet. Institutions with items in Budget Unit "B" should enter such expenditures on line 2. The sum of the amounts in row 1 and row 2 should be entered into line 3 (Initial Spending).

Lines 4 and 5: Output multipliers specific to each institution's "A" and "B" budgets are reported in column 1 of Exhibit A-2. Enter the value on line 4. Multiply the dollar amount entered on line 3 by the multiplier entered on line 4 to estimate the output impact of spending by the institution.

Lines 6 and 7: Value-added multipliers specific to each institution's "A" and "B" budgets are reported in column 2 of Exhibit A-2. Enter the value on line 6. Multiply the dollar amount entered on line 3 by the value-added multiplier entered on line 6 to estimate the value-added impact of spending by the institution.

Lines 8 and 9: Labor income multipliers specific to each institution's "A" and "B" budgets are reported in column 3 of Exhibit A-2. Enter the value on line 8. Multiply the dollar amount entered on line 3 by the labor income multiplier entered on line 8 to estimate the labor income impact of spending by the institution.

Line 10: Employment multipliers estimate the number of jobs generated per million dollars in spending, so divide the dollar amount entered on line 3 by 1,000,000.



Line 11: Due to the effects of inflation, the value of an employment multiplier will decline each year. The inflation-adjusted employment multipliers specific to each institution's "A" and "B" budgets are reported in columns 4-6 of Exhibit A-2. If the budgeted expenditure is for FY 2000, enter the employment multiplier from column 4; if it is for FY 2001, enter the employment multiplier from column 5; and if it is for FY 2001, enter the employment multiplier from column 6.

Line 12: Multiply the dollar amount entered on line 10 by the employment multiplier entered on line 11 to estimate the employment impact of spending by the institution.

Part Two Estimating the Economic Impact of Capital Projects Funded

Line 13: Spending for capital projects funded can be obtained from the Board of Regents of the University System of Georgia, Capital Projects Recent Funding History (diskette). Some institutions may have more than one project funded in a single fiscal year, so it is important to check the entire list of projects and enter the sum of all projects funded within the fiscal year. [Note: This template allocates all expenditures to the year of reported funding, regardless of whether or not all of the funds were actually spent during that fiscal year.]

Lines 14 and 15: Output multipliers specific to each institution's capital projects are reported in column 1 of Exhibit A-2. Enter the value on line 14. Multiply the dollar amount entered on line 13 by the multiplier entered on line 14 to estimate the output impact of spending by the institution.

Lines 16 and 17: Value-added multipliers specific to each institution's capital projects are reported in column 2 of Exhibit A-2. Enter the value on line 16. Multiply the dollar amount entered on line 13 by the value-added multiplier entered on line 16 to estimate the value-added impact of spending by the institution.

Lines 18 and 19: Labor income multipliers specific to each institution's "A" and "B" budgets are reported in column 3 of Exhibit A-2. Enter the value on line 18. Multiply the dollar amount entered on line 13 by the labor income multiplier entered on line 18 to estimate the labor income impact of spending by the institution.

Line 20: Because employment multipliers estimate the number of jobs generated per million dollars in spending, divide the dollar amount entered on line 13 by 1,000,000.

Line 21: Due to the effects of inflation, the value of an employment multiplier will decline each year. The inflation-adjusted employment multipliers specific to each institution's "A" and "B" budgets are reported in columns 4-6 Exhibit A-2. If the budgeted expenditure is for FY 2000, enter the employment multiplier from column 4; if it is for FY 2001, enter the employment multiplier from column 5; and if it is for FY 2001, enter the employment multiplier from column 6.

Line 22: Multiply the dollar amount entered on line 20 by the employment multiplier entered on line 21 to estimate the employment impact of spending by the institution.

Part Three Estimating the Economic Impact of Spending by Students

Lines 23, 24, and 25: The EFT enrollment for all institutions can be obtained from the Semester Enrollment Reports issued by the Office of Planning and Policy Analysis, Board of Regents of the University System of Georgia.



Lines 26, 27, and 28: Because it is assumed that 5 percent of students live outside the study area, multiply the EFT enrollment for each semester by 0.95.

Lines 29 and 30: Because Summer Semester is shorter than both Fall and Spring Semesters, the average spending per EFT student varies. Also, over time, average spending increased due to the effects of inflation. Enter the values corresponding to the appropriate fiscal year.

Line 31: Multiply the number of students on line 26 by the average spending per EFT student on line 29.

Line 32: Multiply the number of students on line 27 by the average spending per EFT student on line 30.

Line 33: Multiply the number of students on line 28 by the average spending per EFT student on line 30.

Line 34: Add the dollar amounts on lines 31, 32, and 33.

Lines 35 and 36: Output multipliers specific to each institution's capital projects are reported in column 1 of Exhibit A-2. Enter the value on line 35. Multiply the dollar amount entered on line 34 by the multiplier entered on line 35 to estimate the output impact of spending by the institution.

Lines 37 and 38: Value-added multipliers specific to each institution's capital projects are reported in column 2 of Exhibit A-2. Enter the value on line 37. Multiply the dollar amount entered on line 34 by the value-added multiplier entered on line 37 to estimate the value-added impact of spending by the institution.

Lines 39 and 40: Labor income multipliers specific to each institution's "A" and "B" budgets are reported in column 3 of Exhibit A-2. Enter the value on line 39. Multiply the dollar amount entered on line 34 by the labor income multiplier entered on line 39 to estimate the labor income impact of spending by the institution.

Line 41: Because employment multipliers estimate the number of jobs generated per million dollars in spending, divide the dollar amount entered on line 34 by 1,000,000.

Line 42: Due to the effects of inflation, the value of an employment multiplier will decline each year. The inflation-adjusted employment multipliers specific to each institution's "A" and "B" budgets are reported in columns 4-6 of Exhibit A-2. If the budgeted expenditure is for FY 2000, enter the employment multiplier from column 4; if it is for FY 2001, enter the employment multiplier from column 5; and if it is for FY 2001, enter the employment multiplier from column 6.

Line 43: Multiply the dollar amount entered on line 41 by the employment multiplier entered on line 42 to estimate the employment impact of spending by the institution.

Part Four Estimating the Total Economic Impact of All Spending

Lines 44, 45, 46, and 47: On line 44, enter the amount on line 3. On line 45, enter the amount on line 13. On line 46, enter the amount on line 34. Add the amounts on lines 44, 45, and 46 and enter the total on line 47.

Lines 48, 49, 50, and 51: On line 48, enter the amount on line 5. On line 49, enter the amount on line 15. On line 50, enter the amount on line 36. Add the amounts on lines 48, 49, and 50 and enter the total on line 51.



Lines 52, 53, 54, and 55: On line 52, enter the amount on line 7. On line 53, enter the amount on line 17. On line 54, enter the amount on line 38. Add the amounts on lines 52, 53, and 54 and enter the total on line 55.

Lines 56, 57, 58, and 59: On line 56, enter the amount on line 9. On line 57, enter the amount on line 19. On line 58, enter the amount on line 40. Add the amounts on lines 56, 57, and 58 and enter the total on line 59.

Lines 60, 61, 62, and 63: On line 60, enter the amount on line 12. On line 61, enter the amount on line 22. On line 62, enter the amount on line 43. Add the amounts on lines 60, 61, and 62 and enter the total on line 63.



APPENDIX TWO: STUDY AREAS FOR INSTITUTIONS

Universities and Regional Universities

Georgia Institute of Technology — Atlanta MSA
Georgia State University — Atlanta MSA
Medical College of Georgia — Columbia, Lincoln, McDuffie, and Richmond
University of Georgia — Barrow, Clarke, Jackson, Madison, Oconee, and Oglethorpe
Georgia Southern University — Bryan, Bulloch, Candler, Effingham, Evans, Jenkins, Screven
Valdosta State University — Berrien, Brooks, Cook, Echols, Lanier, Lowndes

State Colleges and Universities

Albany State University — Baker, Calhoun, Dougherty, Lee, Mitchell, Terrell, and Worth
Armstrong Atlantic State University — Bryan, Chatham, Effingham, and Liberty
Augusta State University — Columbia, Lincoln, McDuffie, and Richmond
Clayton College & State University — Atlanta MSA
Columbus State University — Chattahoochee, Harris, Marion, Muscogee, Stewart, and Talbot
Fort Valley State University — Bibb, Crawford, Houston, Jones, Macon, Peach, and Twiggs
Georgia College and State University — Baldwin, Hancock, Jones, Putnam, Washington, and Wilkinson
Georgia Southwestern State University — Crisp, Dooley, Lee, Macon, Sumter, Terrell, Schely, and Webster
Kennesaw State University — Atlanta MSA
North Georgia College & State University — Dawson, Hall, Lumpkin, Union, and White
Savannah State University — Bryan, Chatham, Effingham, and Liberty
Southern Polytechnic State University — Atlanta MSA
State University of West Georgia — Carroll, Coweta, Douglas, Haralson, and Heard

Associate Degree Colleges

Abraham Baldwin Agric. College — Berrien, Colquitt, Cook, Irwin, Tift, Turner, and Worth
Atlanta Metropolitan College — Atlanta MSA
Bainbridge College — Decatur, Grady, Miller, Mitchell, and Seminole
Coastal Georgia Community College — Brantley, Camden, Glynn, McIntosh, and Wayne
Dalton College — Catoosa, Goron, Murray, Walker, and Whitfield
Darton College — Baker, Calhoun, Dougherty, Lee, Mitchell, Terrell, Worth
DeKalb College — Atlanta MSA
East Georgia College — Burke, Candler, Emanuel, Jerrerson, Jenkins, Johnson, and Treutlen
Floyd College — Bartow, Chattooga, Floyd, Gordon, and Polk
Gainesville College — Banks, Dawson, Forsyth, Gwinnett, Habersham, Hall, Jackson, Lumpkin, and White
Gordon College — Butts, Lamar, Monroe, Pike, Spalding, and Upson
Macon State College — Bibb, Crawford, Houston, Jones, Monroe, Peach, and Twiggs
Middle Georgia College — Bleckley, Dodge, Laurens, Pulaski, Twiggs
South Georgia College — Atkinson, Bacon, Ben Hill, Coffee, Irwin, Jeff Davis, Telfair, and Ware
Waycross College — Atkinson, Bacon, Brantley, Charlton, Clinch, Coffee, Pierce, and Ware



**Exhibit A-1
Economic Impact Template**

PART ONE Estimating the Economic Impact of Spending by the Institution

- 1. Expenditures Budget Unit "A" 1. _____
- 2. Expenditures Budget Unit "B" 2. _____
- 3. Initial Spending. Add lines 1 and 2 3. _____
- 4. Output Multiplier. See Column 1 of Exhibit A-2 4. _____
- 5. Output Impact. Multiply line 3 by line 4 5. _____
- 6. Value-Added Multiplier. See Column 2 of Exhibit A-2 6. _____
- 7. Value-Added Impact. Multiply line 3 by line 6 7. _____
- 8. Labor Income Multiplier. See Column 3 of Exhibit A-2 8. _____
- 9. Labor Income Impact. Multiply line 3 by line 8 9. _____
- 10. Initial Spending Expressed in millions of dollars.
Divide line 3 by 1,000,000 10. _____
- 11. Employment Multiplier
If FY 2000 see Column 4 of Exhibit A-2
If FY 2001 see Column 5 of Exhibit A-2
If FY 2002 see Column 6 of Exhibit A-2 11. _____
- 12. Employment Impact. Multiply line 10 by line 11 12. _____

PART TWO Estimating the Economic Impact of Capital Projects Funded

- 13. Initial Spending 13. _____
- 14. Output Multiplier. See Column 1 of Exhibit A-2 14. _____
- 15. Output Impact. Multiply line 13 by line 14 15. _____
- 16. Value-Added Multiplier. See Column 2 of Exhibit A-2 16. _____
- 17. Value-Added Impact. Multiply line 13 by line 16 17. _____
- 18. Labor Income Multiplier. See Column 3 of Exhibit A-2 18. _____
- 19. Labor Income Impact. Multiply line 13 by line 18 19. _____
- 20. Initial Spending in millions of dollars.
Divide line 13 by 1,000,000 20. _____
- 21. Employment Multiplier
If FY 2000 see Column 4 of Exhibit A-2
If FY 2001 see Column 5 of Exhibit A-2
If FY 2002 see Column 6 of Exhibit A-2 21. _____
- 22. Employment Impact. Multiply line 20 by line 21 22. _____

PART THREE Estimating the Economic Impact of Spending by Students

- 23. EFT Enrollment Summer Semester 23. _____
- 24. EFT Enrollment Fall Semester 24. _____
- 25. EFT Enrollment Spring Semester 25. _____



- 26. 95% of EFT Enrollment Summer Semester.
Multiply line 23 by 0.95 26. _____
- 27. 95% of EFT Enrollment Fall Semester.
Multiply line 24 by 0.95 27. _____
- 28. 95% of EFT Enrollment Spring Semester.
Multiply line 25 by 0.95 28. _____
- 29. Spending per EFT Student Summer Semester
If FY 2000 enter \$2300
If FY 2001 enter \$2335
If FY 2002 enter \$2390 29. _____
- 30. Spending per EFT Student Fall/Spring Semester
If FY 2000 enter \$4590
If FY 2001 enter \$4670
If FY 2002 enter \$4775 30. _____
- 31. Total Student Spending Summer Semester
Multiply line 26 by line 29 31. _____
- 32. Total Student Spending Fall Semester
Multiply line 27 by line 30 32. _____
- 33. Total Student Spending Spring Semester
Multiply line 28 by 30 33. _____
- 34. Initial Spending by Students. Add lines 31, 32, and 33 34. _____
- 35. Output Multiplier. See Column 1 of Exhibit A-2 35. _____
- 36. Output Impact. Multiply line 34 by line 35 36. _____
- 37. Value-Added Multiplier. See Column 2 of Exhibit A-2 37. _____
- 38. Value-Added Impact. Multiply line 34 by line 37 38. _____
- 39. Labor Income Multiplier. See Column 3 of Exhibit A-2 39. _____
- 40. Labor Income Impact. Multiply line 34 by line 39 40. _____
- 41. Initial Spending in millions of dollars.
Divide line 34 by 1,000,000 41. _____
- 42. Employment Multiplier
If FY 2000 see Column 4 of Exhibit A-2
If FY 2001 see Column 5 of Exhibit A-2
If FY 2002 see Column 6 of Exhibit A-2 42. _____
- 43. Employment Impact. Multiply line 41 by line 42 43. _____

PART FOUR Estimating the Total Economic Impact of All Spending

- 44. Initial Spending by the Institution. Line 3 44. _____
- 45. Initial Spending for Capital Projects. Line 13 45. _____
- 46. Initial Spending by Students. Line 34 46. _____
- 47. Total Initial Spending. Add lines 44, 45, and 46 47. _____

- 48. Output Impact of Spending by Institution. Line 5 48. _____
- 49. Output Impact of Spending for Capital Projects. Line 15 49. _____
- 50. Output Impact of Spending by Students. Line 36 50. _____
- 51. Total Output Impact. Add lines 48, 49, and 50 51. _____
- 52. Value-Added Impact of Spending by the Institution. Line 7 52. _____
- 53. Value-Added Impact of Spending for Capital Projects.
Line 17 53. _____



- | | | |
|--|-----|-------|
| 54. Value-Added Impact of Spending by Students. Line 38 | 54. | _____ |
| 55. Total Value-Added Impact. Add lines 52, 53, and 54 | 55. | _____ |
| 56. Labor Income Impact of Spending by the Institution. Line 9 | 56. | _____ |
| 57. Labor Income Impact of Spending for Capital Projects.
Line 19 | 57. | _____ |
| 58. Labor Income Impact of Spending by Students. Line 40 | 58. | _____ |
| 59. Total Labor Income Impact. Add lines 56, 57, and 58 | 59. | _____ |
| 60. Employment Impact of Spending by the Institution. Line 12 | 60. | _____ |
| 61. Employment Impact of Spending for Capital Projects. Line 22 | 61. | _____ |
| 62. Employment Impact of Spending by Students. Line 43 | 62. | _____ |
| 63. Total Employment Impact. Add lines 60, 61, and 62 | 63. | _____ |

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia,
February 1, 2000.



**Exhibit A-2
Template Multipliers**

Institution Name	Output Multiplier (Column 1)	Value-Added Multiplier (Column 2)	Labor Income Multiplier (Column 3)	Employment Multiplier		
				FY 2000 (Column 4)	FY 2001 (Column 5)	FY 2002 (Column 6)
Universities and Regional Universities						
Georgia Institute of Technology						
Budget Unit "A" and Unit "B"	1.8	1.2	1.0	19.6	19.3	18.9
Capital Projects Funded	1.8	0.9	0.7	17.3	17.0	16.6
Students Personal Expenditures	1.4	0.8	0.4	16.1	15.8	15.4
Georgia State University						
Budget Unit "A" and Unit "B"	1.8	1.1	0.9	24.6	24.1	23.6
Capital Projects Funded	1.8	0.9	0.7	17.3	17.0	16.6
Students Personal Expenditures	1.4	0.8	0.4	16.1	15.8	15.4
Medical College of Georgia						
Budget Unit "A" and Unit "B"	1.6	1.1	0.9	23.1	22.7	22.2
Capital Projects Funded	1.5	0.7	0.6	16.7	16.4	16.0
Students Personal Expenditures	1.3	0.7	0.4	17.8	17.5	17.1
University of Georgia						
Budget Unit "A" and Unit "B"	1.6	1.0	0.8	20.1	19.8	19.4
Capital Projects Funded	1.5	0.7	0.6	16.7	16.4	16.0
Students Personal Expenditures	1.3	0.7	0.4	19.5	19.2	18.8
Georgia Southern University						
Budget Unit "A" and Unit "B"	1.4	0.7	0.6	18.2	17.9	17.5
Capital Projects Funded	1.4	0.6	0.5	15.5	15.3	14.9
Students Personal Expenditures	1.2	0.5	0.3	15.6	15.3	15.0
Valdosta State University						
Budget Unit "A" and Unit "B"	1.6	0.9	0.7	21.4	21.1	20.6
Capital Projects Funded	1.5	0.7	0.6	17.8	17.5	17.1
Students Personal Expenditures	1.3	0.6	0.3	16.7	16.4	16.0
State Colleges and Universities						
Albany State University						
Budget Unit "A" and Unit "B"	1.6	0.9	0.8	20.3	19.9	19.5
Capital Projects Funded	1.5	0.7	0.6	16.5	16.2	15.9
Students Personal Expenditures	1.3	0.6	0.3	16.0	15.7	15.4
Armstrong Atlantic State University						
Budget Unit "A" and Unit "B"	1.6	1.0	0.9	22.0	21.6	21.1
Capital Projects Funded	1.6	0.8	0.6	17.3	17.0	16.6
Students Personal Expenditures	1.3	0.7	0.4	16.2	15.9	15.6
Augusta State University						
Budget Unit "A" and Unit "B"	1.6	1.1	0.9	24.6	24.2	23.7
Capital Projects Funded	1.5	0.7	0.6	16.7	16.4	16.1
Students Personal Expenditures	1.3	0.7	0.4	17.8	17.5	17.1
Clayton College & State University						
Budget Unit "A" and Unit "B"	1.8	1.1	0.9	23.0	22.6	22.1
Capital Projects Funded	1.8	0.9	0.7	17.3	17.0	16.6
Students Personal Expenditures	1.4	0.8	0.4	16.1	15.8	15.4

(continued)



Institution Name	Output Multiplier (Column 1)	Value-Added Multiplier (Column 2)	Labor Income Multiplier (Column 3)	Employment Multiplier		
				FY 2000 (Column 4)	FY 2001 (Column 5)	FY 2002 (Column 6)
Columbus State University						
Budget Unit "A" and Unit "B"	1.7	1.0	0.8	23.7	23.3	22.8
Capital Projects Funded	1.5	0.7	0.6	16.5	16.2	15.8
Students Personal Expenditures	1.3	0.6	0.3	16.1	15.8	15.4
Fort Valley State University						
Budget Unit "A" and Unit "B"	1.7	0.9	0.8	22.1	21.7	21.2
Capital Projects Funded	1.7	0.8	0.6	18.6	18.2	17.9
Students Personal Expenditures	1.3	0.7	0.4	16.5	16.2	15.8
Georgia College and State University						
Budget Unit "A" and Unit "B"	1.4	0.8	0.7	18.4	18.1	17.7
Capital Projects Funded	1.5	0.7	0.6	16.5	16.2	15.8
Students Personal Expenditures	1.3	0.6	0.3	16.1	15.8	15.4
Georgia Southwestern State University						
Budget Unit "A" and Unit "B"	1.4	0.9	0.8	19.0	18.7	18.3
Capital Projects Funded	1.3	0.6	0.5	14.8	14.5	14.2
Students Personal Expenditures	1.1	0.4	0.2	13.3	13.1	12.8
Kennesaw State University						
Budget Unit "A" and Unit "B"	1.8	1.1	1.0	22.4	22.0	21.5
Capital Projects Funded	1.8	0.9	0.7	17.3	17.0	16.6
Students Personal Expenditures	1.4	0.8	0.4	16.1	15.8	15.4
North Georgia College & State Univ.						
Budget Unit "A" and Unit "B"	1.7	1.1	0.9	23.0	22.6	22.1
Capital Projects Funded	1.5	0.7	0.6	17.1	16.8	16.4
Students Personal Expenditures	1.3	0.7	0.4	17.3	17.0	16.7
Savannah State University						
Budget Unit "A" and Unit "B"	1.6	1.0	0.8	22.4	22.0	21.5
Capital Projects Funded	1.6	0.8	0.6	17.3	17.0	16.6
Students Personal Expenditures	1.3	0.7	0.4	16.2	15.9	15.6
Southern Polytechnic State Univ.						
Budget Unit "A" and Unit "B"	1.8	1.1	1.0	21.8	21.4	21.0
Capital Projects Funded	1.8	0.9	0.7	17.3	17.0	16.6
Students Personal Expenditures	1.4	0.8	0.4	16.1	15.8	15.4
State University of West Georgia						
Budget Unit "A" and Unit "B"	1.6	0.9	0.8	20.7	20.3	19.9
Capital Projects Funded	1.4	0.7	0.6	15.1	14.8	14.5
Students Personal Expenditures	1.3	0.6	0.3	16.2	15.9	15.6
Associate Degree Colleges						
Abraham Baldwin Agric. College						
Budget Unit "A" and Unit "B"	1.5	1.0	0.9	22.5	22.1	21.6
Capital Projects Funded	1.4	0.6	0.5	16.7	16.4	16.0
Students Personal Expenditures	1.2	0.5	0.3	15.6	15.4	15.0
Atlanta Metropolitan College						
Budget Unit "A" and Unit "B"	1.8	1.1	0.9	22.4	22.0	21.6
Capital Projects Funded	1.7	0.9	0.7	17.3	17.0	16.6
Students Personal Expenditures	1.4	0.8	0.4	16.1	15.8	15.4

(continued)



Institution Name	Output Multiplier (Column 1)	Value-Added Multiplier (Column 2)	Labor Income Multiplier (Column 3)	Employment Multiplier		
				FY 2000 (Column 4)	FY 2001 (Column 5)	FY 2002 (Column 6)
Bainbridge College						
Budget Unit "A" and Unit "B"	1.4	0.9	0.8	21.0	20.7	20.2
Capital Projects Funded	1.4	0.9	0.8	21.0	20.7	20.2
Students Personal Expenditures	1.2	0.5	0.3	14.8	14.5	14.2
Coastal Georgia Community College						
Budget Unit "A" and Unit "B"	1.5	1.0	0.9	22.6	22.2	21.7
Capital Projects Funded	1.5	0.7	0.6	17.2	16.9	16.5
Students Personal Expenditures	1.3	0.7	0.3	17.3	17.0	16.6
Dalton College						
Budget Unit "A" and Unit "B"	1.5	0.9	0.8	21.2	20.8	20.4
Capital Projects Funded	1.4	0.7	0.5	15.5	15.2	14.9
Students Personal Expenditures	1.2	0.5	0.3	14.1	13.9	13.6
Darton College						
Budget Unit "A" and Unit "B"	1.6	1.0	0.9	24.7	24.3	23.8
Capital Projects Funded	1.5	0.7	0.6	16.5	16.2	15.9
Students Personal Expenditures	1.3	0.6	0.3	16.0	15.7	15.4
DeKalb College						
Budget Unit "A" and Unit "B"	1.8	1.2	1.0	25.5	25.1	24.5
Capital Projects Funded	1.8	0.9	0.7	17.3	17.0	16.6
Students Personal Expenditures	1.4	0.8	0.4	16.1	15.8	15.4
East Georgia College						
Budget Unit "A" and Unit "B"	1.3	0.9	0.8	21.6	21.2	20.8
Capital Projects Funded	1.4	0.6	0.5	16.6	16.3	15.9
Students Personal Expenditures	1.1	0.4	0.2	11.5	11.3	11.0
Floyd College						
Budget Unit "A" and Unit "B"	1.5	0.9	0.8	23.1	22.7	22.2
Capital Projects Funded	1.4	0.7	0.5	14.1	13.8	13.5
Students Personal Expenditures	1.2	0.6	0.3	15.1	14.8	14.5
Gainesville College						
Budget Unit "A" and Unit "B"	1.7	1.2	1.0	23.2	22.8	22.3
Capital Projects Funded	1.7	0.9	0.7	17.2	16.9	16.5
Students Personal Expenditures	1.4	0.7	0.4	16.2	15.9	15.6
Gordon College						
Budget Unit "A" and Unit "B"	1.5	0.9	0.8	20.9	20.5	20.1
Capital Projects Funded	1.4	0.6	0.5	15.5	15.2	14.9
Students Personal Expenditures	1.2	0.5	0.3	14.4	14.1	13.8
Macon State College						
Budget Unit "A" and Unit "B"	1.7	1.1	0.9	23.2	22.8	22.3
Capital Projects Funded	1.6	0.8	0.6	18.7	18.4	18.0
Students Personal Expenditures	1.3	0.7	0.4	16.8	16.5	16.1
Middle Georgia College						
Budget Unit "A" and Unit "B"	1.4	0.9	0.8	22.9	22.5	22.0
Capital Projects Funded	1.3	0.6	0.5	15.0	14.8	14.5
Students Personal Expenditures	1.2	0.5	0.3	15.2	14.9	14.6
South Georgia College						
Budget Unit "A" and Unit "B"	1.4	0.9	0.8	21.1	20.8	20.3
Capital Projects Funded	1.4	0.9	0.8	21.1	20.8	20.3
Students Personal Expenditures	1.2	0.5	0.3	15.2	15.0	14.7
Waycross College						
Budget Unit "A" and Unit "B"	1.5	0.8	0.9	24.3	23.8	23.3
Capital Projects Funded	1.4	0.6	0.5	16.0	15.7	15.4
Students Personal Expenditures	1.2	0.5	0.3	15.7	15.4	15.1

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, February 1, 2000.



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