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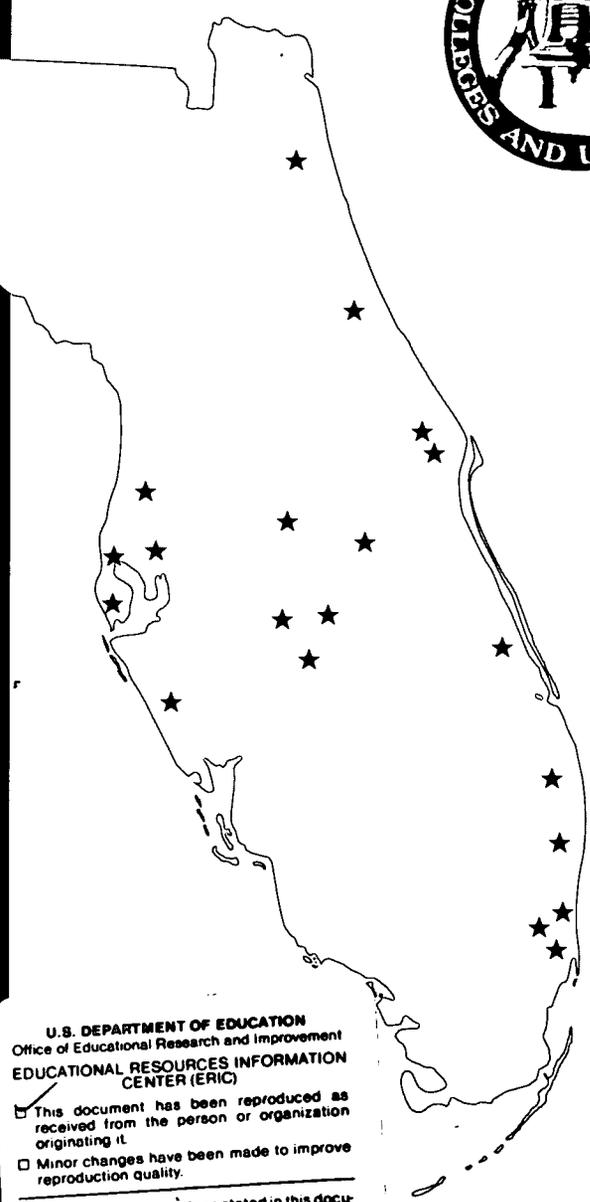
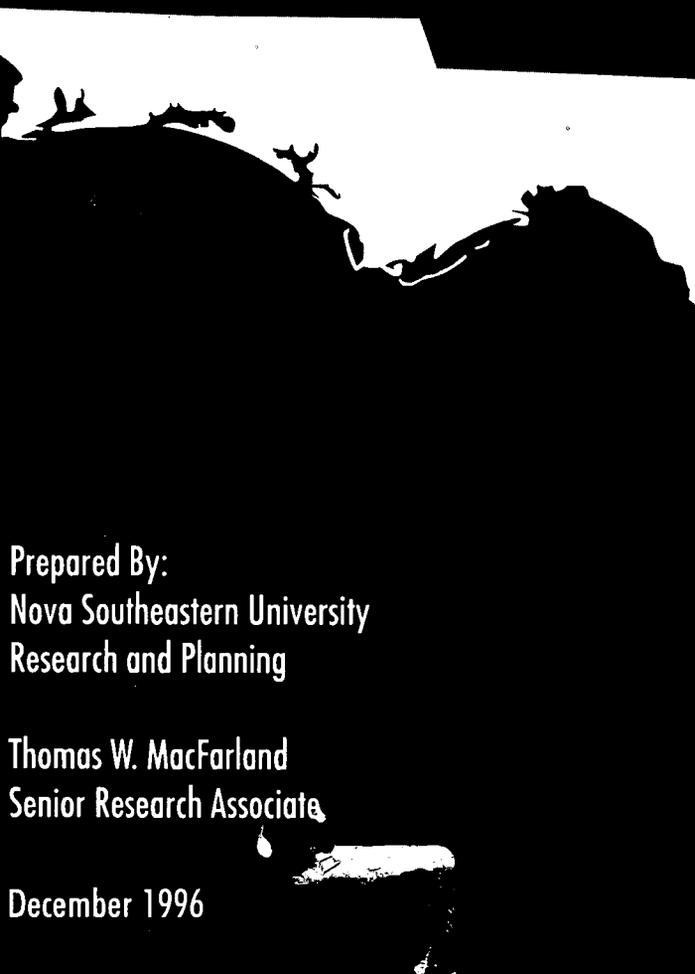
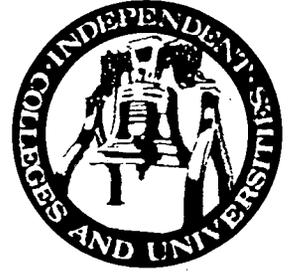
ABSTRACT

This study estimated the impact of the 22 members of the Independent Colleges and Universities of Florida (ICUF) on the state economy. Using data reported annually by 20 of the 22 institutions to the U.S. Department of Education and a standard input-output economic impact model with a conservative 1.8 multiplier, the study found that ICUF institutions contributed approximately \$1.9 billion to the Florida economy during fiscal year 1994-95. Using a 2.2 multiplier, it was estimated that ICUF institutions contributed approximately \$2.3 billion to Florida's economy in 1994-95. ICUF institutions employed over 10,000 full-time and part-time employees during 1994-95, and economic activity associated with the 22 institutions created nearly 94,500 jobs in various industries throughout the state. State and local grants to ICUF institutions in 1994-95 totaled less than \$30 million. Data on ICUF institution income, expenditures, and assets are included. An appendix contains additional tables and figures. (Contains 23 references.) (MDM)

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The Impact of Independent Colleges and Universities of Florida on the State Economy: Fiscal Year 1995



Prepared By:
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Research and Planning

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December 1996



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**THE IMPACT OF INDEPENDENT COLLEGES AND UNIVERSITIES
OF FLORIDA ON THE STATE ECONOMY:
FISCAL YEAR 1994-95**

Thomas W. MacFarland

Senior Research Associate

**Nova Southeastern University
Research and Planning**

November 1996

**Research and Planning
Report 96-16**

EXECUTIVE SUMMARY

This study used data reported annually to the United States Department of Education to estimate the impact of the 22 members of *The Independent Colleges and Universities of Florida* (ICUF) on the state economy. Complete data sets were provided by all but two ICUF institutions. After all known sources of economic contribution were examined and applied against a conservative 1.8 multiplier, it was determined that ICUF institutions contributed approximately \$1.9 billion to Florida's economy during Fiscal Year 1994-95. Because of the concern that a 1.8 multiplier may be too conservative, the impact of ICUF institutions on the state economy was also calculated with a 2.2 multiplier. Using a 2.2 multiplier, it was estimated that ICUF institutions contributed approximately \$2.3 billion to Florida's economy during Fiscal Year 1994-95.

The 22 members of *The Independent Colleges and Universities of Florida* employed over 10,000 full-time and part-time employees during Fall 1995. In addition to these 10,000 employees, economic activity associated with Fiscal Year 1994-95 ICUF-related expenditures in Florida created nearly 94,500 jobs in various industries throughout the state. Accordingly, it was estimated that the 22 members of *The Independent Colleges and Universities of Florida* were directly and indirectly responsible for approximately 104,500 jobs in Florida during Fiscal Year 1994-95.

Separate from an estimated \$1.9 to \$2.3 billion annual economic impact, if the 22 ICUF institutions did not exist, how would Florida's State University System provide the social, cultural, and professional contributions made by ICUF faculty, staff, students, and alumni? Could Florida's taxpayers afford the cost of building three or four more universities, to serve the educational needs of the 50,000 Florida residents and over 15,000 non-Florida residents who attend ICUF institutions? State and local grants and appropriations to ICUF institutions in Fiscal Year 1994-95 totaled less than \$30 million—certainly a small investment for the state to enjoy the many contributions of these colleges and universities.

This report concentrated only on the impact of ICUF institutions on Florida's economy. However, it is apparent that a summary and analysis of these other social, cultural, and professional contributions would be helpful also, to obtain a broader understanding of how Florida benefits from a strong body of colleges and universities independent from state governance and fiscal control.

In addition to the economic impact of the 20 ICUF institutions participating in this study, appended to this report is a summary of the impact on the state's economy of all regionally accredited independent Florida colleges and universities awarding baccalaureate or higher degrees. Using a 2.2 multiplier, the annual impact of all independent colleges and universities in Florida on the state's economy was approximately \$4.7 billion for Fiscal Year 1994-95. If a more liberal 3.0 multiplier were used, as some colleges and universities use, the annual impact of all regionally accredited four-year independent colleges and universities in Florida on the state's economy would have been approximately \$6.2 billion for fiscal year 1994-1995.

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INTRODUCTION

Background

With over 14 million residents, Florida is ranked by population as the fourth largest state in the nation (Campbell, 1994). Florida has 111 operating colleges and universities to serve the educational needs of the state and its residents: 9 operating public four-year institutions, and 1 public four-year institution scheduled to open in 1997; 29 public two-year institutions; 56 private four-year institutions; and 17 private two-year institutions (*The Chronicle of Higher Education Almanac*, 1996, p.50). Of the 56 private four-year institutions, the following 22 institutions are members of *The Independent Colleges and Universities of Florida* (ICUF):

Barry University	.....	Miami Shores
Bethune-Cookman	.....	Daytona Beach
Clearwater Christian College	.....	Clearwater
Eckerd College	.....	St. Petersburg
Edward Waters College	.....	Jacksonville
Embry-Riddle Aeronautical University	..	Daytona Beach
Flagler College	.....	St. Augustine
Florida Institute of Technology	.....	Melbourne
Florida Memorial College	.....	Miami
Florida Southern College	.....	Lakeland
Jacksonville University	.....	Jacksonville
Lynn University	.....	Boca Raton
Nova Southeastern University	.....	Fort Lauderdale
Palm Beach Atlantic College	.....	West Palm Beach
Ringling School of Art and Design	.....	Sarasota
Rollins College	.....	Winter Park
Saint Leo College	.....	Saint Leo
Saint Thomas University	.....	Miami
Stetson University	.....	Deland
University of Tampa	.....	Tampa
Warner Southern College	.....	Lake Wales
Webber College	.....	Babson Park

Over 300,000 students attend Florida's public and private four-year institutions (*The Chronicle of Higher Education Almanac*, 1996, p.50). Slightly more than 20 percent of these students are enrolled at one of the 22 ICUF institutions.

Purpose of This Report

The Independent Colleges and Universities of Florida are well known for the excellence and diversity of their academic programs. These schools, and the personal and professional contributions of their alumni, also impact the quality of life and development of Florida's thriving social infrastructure. Thousands of Florida's clergy, teachers, business persons, lawyers, doctors, and other professionals purposely chose to enroll in academic programs offered by ICUF institutions.

What is perhaps too often overlooked about these schools is that ICUF institutions also have a significant impact on the state's economy, as faculty, staff, students, and visitors earn, invest, and spend money throughout Florida. The purpose of this report is to summarize the impact of ICUF institutions on Florida's economy.

METHODOLOGY

Data Collection

In September and December 1995, *The Independent Colleges and Universities of Florida* Presidents Council agreed to the merit of an assessment of the impact of ICUF institutions on Florida's economy. To respond to this charge, in March 1996, ICUF Institutional Research directors received a request for assistance in conducting this economic impact study. The request stressed that the assessment would be based largely on the use of existing data in the public domain, which greatly minimized the time needed to contribute to the project and any concerns about confidentiality. Institutional Research directors at each of the 22 ICUF institutions were specifically asked to provide the following information:

1. Photocopies of all 1995 Integrated Postsecondary Education Data System (IPEDS) reports: Form C (*Completions Survey 1994-95*), Form IC (*Institutional Characteristics Survey 1995-96*), Form EF-1 (*Fall Enrollment Survey 1995*), Form F-1A (*Finance Survey FY 1995*), Form S (*Fall Staff Survey 1995*), and Form SA (*Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey 1995-96*).
2. An estimate of the number and percent of out-of-state students enrolled during Fall Term 1995.
3. An estimate of the annual number of on-campus visitors during Calendar Year 1995, for campus tours, sporting events, social events, meetings, graduation ceremonies, and other activities.

Data were collected throughout Spring 1996. Only two of the 22 ICUF institutions provided less than a complete data set. The economic impact estimates presented in this report, therefore, are based on data from 20 of the 22 ICUF institutions. However, the two institutions that did not provide complete data sets have a collective enrollment of fewer than 2,100 students.

Selection of an Economic Impact Model

This report is based on the standard input-output economic impact model first presented by Caffrey and Isaacs (1971). This model is accepted by the academic community as an appropriate means of determining a university's impact on a specific region.

To fully understand Caffrey and Isaacs' (1971) original methodology, a few background notes about economic impact models may be useful:

1. This model is based on the assumption that money is spent and respent within a declared geographic area (i.e., Florida) until the money eventually makes no new contributions to the economy of the declared area. Goldstein (1989-90, p.53) defined this process as income leakage, and stated that "When inputs are purchased from businesses outside the region at any step, there is a 'leakage,' and no further indirect economic impact in the region occurs."
2. As money is spent and respent, the contribution of this money into the economy is multiplied. Taylor (1990, p.40) offered a detailed discussion of an economic multiplier and the impact of a multiplier on a local economy:

The method of estimating the total economic impact of [any university] is essentially an application of a multiplier model in which direct spending, that is money that flows into the area from other areas, is subsequently respent within the area by the initial recipients. The respending process continues in successive rounds, from each of which there are leakages into the 'external' economy until the amount respent is approximately zero. [] The ratio between the initial injection and the total spending is termed the value of the multiplier.

3. A major concern of any economic impact model is the calculation of percent of money that is initially introduced into the declared geographic area and, in turn, the money that never enters the area, and subsequently never has an opportunity to contribute to the area's economy. Weitzman (1991, p.11) and Gran, Mulkey,

and Malecki (1995, p.2) estimated that 80 percent of all expenditures by Florida's public two-year and four-year institutions were made in the state. This statistic is in general parity with the finding that 77 percent of all expenditures at Nova Southeastern University during Fiscal Year 1994 remained in the University's immediate South Florida service area (*The Impact of Nova Southeastern University on the South Florida Economy*; 1995, p.iii).

Although Caffrey and Isaacs' (1971) model is widely accepted, it is important to note that there has been discussion on how their model is viewed by some researchers as too narrow in focus, and therefore too conservative in determining a university's economic impact on a declared area. Bluestone (1993) offered a widely cited report on the long-term economic impact of a university on a regional area, going far beyond the standard deterministic input-output model presented by Caffrey and Isaacs (1971). Gana (1993) also offered alternate methodologies to standards proposed by Caffrey and Isaacs (1971).

Selection of a Multiplier

A multiplier of 1.8 has been selected for the conservative estimates presented in this study. In defense of this conservative selection, it should be noted that:

1. Posey (1983, p.3) presented a summary of the range of multipliers used in previous economic impact studies, with multipliers ranging from 1.09 to 4.35.
2. Goldstein (1989-1990, p.53) reported that "the normal range of an output multiplier is between 1.5 and 3.0."
3. Elliott, Levin, and Meisel (1988, p.26) warned that "most multipliers reported are around 2, [and] caution should be applied to the use of any multiplier substantially in excess of 2."
4. Leslie and Brinkman (1993, p.91), in a very detailed review of prior economic impact studies, reported that "Of all 41 college-related expenditure multipliers identified in the integrative review, the mean expenditure multiplier was 1.8 (n = 41), and for jobs it was 2.5 (n = 29)."

Accordingly, a 1.8 multiplier is an appropriate selection in the desire to offer a conservative estimate of the collective impact of ICUF institutions on Florida's economy.

Recognizing that there are those who purport that Caffrey and Isaacs' (1971) model may be too conservative, a more liberal multiplier of 2.2 has also been applied to the data. This statistic approximates the 2.1 multiplier recently used by the University of Miami (*University*

of Miami: *Economic Impact on Coral Gables and South Florida*, 1995) and the 2.6 multiplier used by Florida Atlantic University (*Economic Impact of Florida Atlantic University: Fiscal Year 1994-95*, 1996) in their respective economic impact reports.

Assumptions and Limitations

Assumptions

1. If *The Independent Colleges and Universities of Florida* did not operate, it is assumed that neither the State University System nor other entities would take their place, requiring students to either defer college attendance or leave the state. Accordingly, the monetary impact of ICUF institutions represents added revenue to Florida's economy.
2. Out-of-state and international students make significant contributions to Florida's economy. This contribution to Florida's economy would possibly go to other states if these students did not select enrollment at an ICUF institution.

As a conservative estimate, it is assumed that out-of-state and international students spend approximately \$11,000 per year in Florida for food, housing, transportation, and other cost-of-living expenses. This statistic is a conservative approximation of the \$11,069 on-campus and \$14,132 off-campus estimates for yearly non-tuition expenses for undergraduate students at Nova Southeastern University, in Fort Lauderdale (*Nova Southeastern University 1996-97 Student Expense Budgets*, 1996). This statistic also parallels prior estimates offered in the literature by Bluestone (1993, p. 25) for Boston, Massachusetts (\$10,327), and Sann and Tervalá (1993, p. 5) for Princess Anne, Maryland (\$8,708).

3. As suggested by Weitzman (1991, p.11) and Gran, Mulkey, and Malecki (1995, p.2), it is assumed that 80 percent of all expenditures by ICUF institutions remain in Florida and in turn contribute to the state's economic growth.

Limitations

1. It is only possible to offer broad estimates of the dollar expenditures of visitors to ICUF institutions. Some visitors, possibly attending a minor sporting event, may spend only a few dollars for refreshments during a brief afternoon visit. Other visitors, such as parents during a week-long visit, may spend \$1,000 or more in hotel costs, food, and furniture as they help their child set up an off-campus apartment. It is equally difficult to estimate the number of visitors each ICUF institution attracts, since many visitors do not sign a register, purchase tickets, or in some other way offer a means of tracking their visit.

Hogan (1992) estimated that visitors to Arizona State University in greater Phoenix, Arizona, spent \$106 per visitor-day. Morrell (1995) estimated that visitors at Rollins College in Winter Park, Florida, spent \$90 per visitor-day. For the purposes of this report, it is estimated that each visitor to an ICUF institution stayed for three days, and that, on the average, \$100 was spent each day. It is suggested that this money would not have been spent if the visit to the ICUF institution had not occurred. This estimate is obviously conservative, since many parents, grandparents, other family members, and friends spend far more than \$100 per visitor-day, but it is prudent to use a conservative estimate until more formal tracking systems are developed and analyses of visitor spending patterns are conducted.

2. Approximately 65,000 students were enrolled at ICUF institutions during Fall Term 1995. This report only assesses the direct contributions of ICUF institutions to Florida's economy in Fiscal Year 1994-95.

However, what are the long-term contributions of these students and alumni to Florida's economy and culture? The Bureau of the Census estimated that a person with a Bachelor's degree will earn over a lifetime \$1.5 million more than a high school graduate (*More Education Means Higher Career Earnings*, 1994):

- What additional taxes to local municipalities and the state government do these students contribute because of their increased earning potential after graduation from an ICUF institution?
- What other professional and cultural contributions do these students provide after graduation from an ICUF institution?

The economic impact of these issues must be deferred until future iterations of this report are attempted.

3. In addition to direct salary payments to faculty, it is known that many faculty offer consulting services, which in turn results in additional income and contributions to the local economy. Elliott, Levin, and Meisel (1988, p.21) addressed secondary incomes of faculty and staff and the impact of this income on an economy:

Surveys of faculty and staff can yield useful information about nonuniversity income from consulting and investment that accrues to the region only because the individual is employed by the local university or college. This response can be obtained as a percentage of the individual's university income which is available through administrative records. Thus, the surveys provide more accurate, complete, and detailed information than would be obtained from the Caffrey and Isaacs expenditure models.

Contributions to Florida's economy from this source remain unknown. Any estimate of this source of contribution to Florida's economy must be deferred in this iteration of the reporting process.

RESULTS

This study was conducted to offer an estimate of the impact made by the 22 members of *The Independent Colleges and Universities of Florida* on the state economy. After all known sources of economic contribution from the 20 ICUF institutions providing financial data were examined and applied against a conservative 1.8 multiplier, it was determined that *The Independent Colleges and Universities of Florida* contributed over \$1.9 billion to Florida's economy during Fiscal Year 1994-95. This statistic is offered in Table 1, and related summaries are appended to this report in a set of figures. Using a more liberal 2.2 multiplier, it was determined that ICUF institutions contributed over \$2.3 billion to Florida's economy during Fiscal Year 1994-95. This statistic is also presented in Table 1.

Table 1

Contribution to Florida's Economy by Independent Colleges and Universities of Florida: Fiscal Year 1994-95

Source of Contribution	\$ Amount
FY 1994-95 ICUF Expenditures in Florida (80% of \$786,341,066 Total FY 1994-95 Expenditures)	\$ 629,072,853
Out-of-State and International Students (\$11,000 per student x 17,262 students)	189,882,000
Visitors (\$100/visitor x 3 visitor-days/visit x 765,465 visitors)	<u>229,639,500</u>
Sum of all FY 1994-95 ICUF-Related Expenditures in Florida	<u>\$1,048,594,353</u>
Total ₁ FY 1994-95 ICUF Economic Impact Using a 1.8 Multiplier	<u>\$1,887,469,835</u>
Total ₂ FY 1994-95 ICUF Economic Impact Using a 2.2 Multiplier	<u><u>\$2,306,907,577</u></u>

The 22 members of *The Independent Colleges and Universities of Florida* had over 10,000 full-time and part-time employees during Fall 1995 (*Integrated Postsecondary Education Data System Fall Staff Survey 1995, Form S; 1995, p.9*). Using Caffrey and Isaacs' (1971,

p.33) model of applying a multiplier of 0.00009 against the sum of \$1,048,594,353 FY 1994-95 ICUF-related expenditures in Florida, economic activity associated with *The Independent Colleges and Universities of Florida* resulted in the creation of nearly 94,500 jobs in various industries throughout the state, in addition to the jobs held by the more than 10,000 full-time and part-time ICUF employees. Accordingly, it is estimated that the 22 members of *The Independent Colleges and Universities of Florida* were directly and indirectly responsible for approximately 104,500 jobs in Florida during Fiscal Year 1994-95.

This study used data reported annually to the United States Department of Education (*Integrated Postsecondary Education Data System Finance Survey FY 1995, Form F-1A; 1995*). Reporting is mandatory, and it is known that data are closely scrutinized for accuracy. Additionally, all but two of the 22 ICUF institutions provided a complete data set. Accordingly, the statistics presented in Table 1 and the appended figures are accurate, and they represent reasonable estimates of the impact of the 22 members of *The Independent Colleges and Universities of Florida* (ICUF) on the state economy.

SUMMARY

The 22 members of *The Independent Colleges and Universities of Florida* contributed between \$1.9 to \$2.3 billion to the state economy in FY 1994-95. This estimate represents new money that would have otherwise been lost from the state economy if these colleges and universities did not exist. To fully understand the importance of this estimate, a degree of context may be helpful, to emphasize how ICUF institutions contribute to Florida's economy at minimal expense to the State University System and Florida's taxpayers:

- In FY 1994-95, Florida provided slightly more than \$23 million in grants and \$1.5 million in appropriations to ICUF institutions (*Integrated Postsecondary Education Data System Finance Survey FY 1995, Form F-1A; 1995, p.3*).
- Local grants and appropriations for FY 1994-95 totaled \$2.6 million (*Integrated Postsecondary Education Data System Finance Survey FY 1995, Form F-1A; 1995, p.3*).

With over \$1.9 billion in economic impact in FY 1994-95, the direct employment of more than 10,000 full-time and part-time employees, and the creation of nearly 94,500 jobs because of economic activity throughout Florida, it is obvious that the 22 members of *The Independent Colleges and Universities of Florida* make a significant contribution to the state economy. Perhaps of even greater importance to Florida's taxpayers, state and local governments enjoyed the advantage of this infusion of new money and employment into the economy at the minimal expense of less than \$30 million in grants and appropriations. It would be difficult to imagine any mechanism that could offer a better return on investment for Florida's taxpayers.

Of course, ICUF institutions contribute far more to Florida than revenue alone. An immediate issue involves the educational needs of the nearly 50,000 Florida residents and over 15,000 non-Florida residents who attend ICUF institutions:

- How would these students obtain a baccalaureate, graduate, or professional degree if ICUF institutions did not exist?
- Could Florida's taxpayers afford to build three or four more universities to accommodate the needs of these students?
- Could Florida's churches, schools, businesses, and legal and health care organizations offer the services they are expected to offer if they did not have the contributions of ICUF alumni in the workforce?

Further, Florida's citizens enjoy the social, cultural, and professional contributions of ICUF faculty, staff, students, and alumni. This report concentrated only on the economic impact of ICUF institutions. It is apparent that a summary and analysis of these contributions would also be helpful, to fully understand how Florida gains from a strong body of independent colleges and universities.

REFERENCES

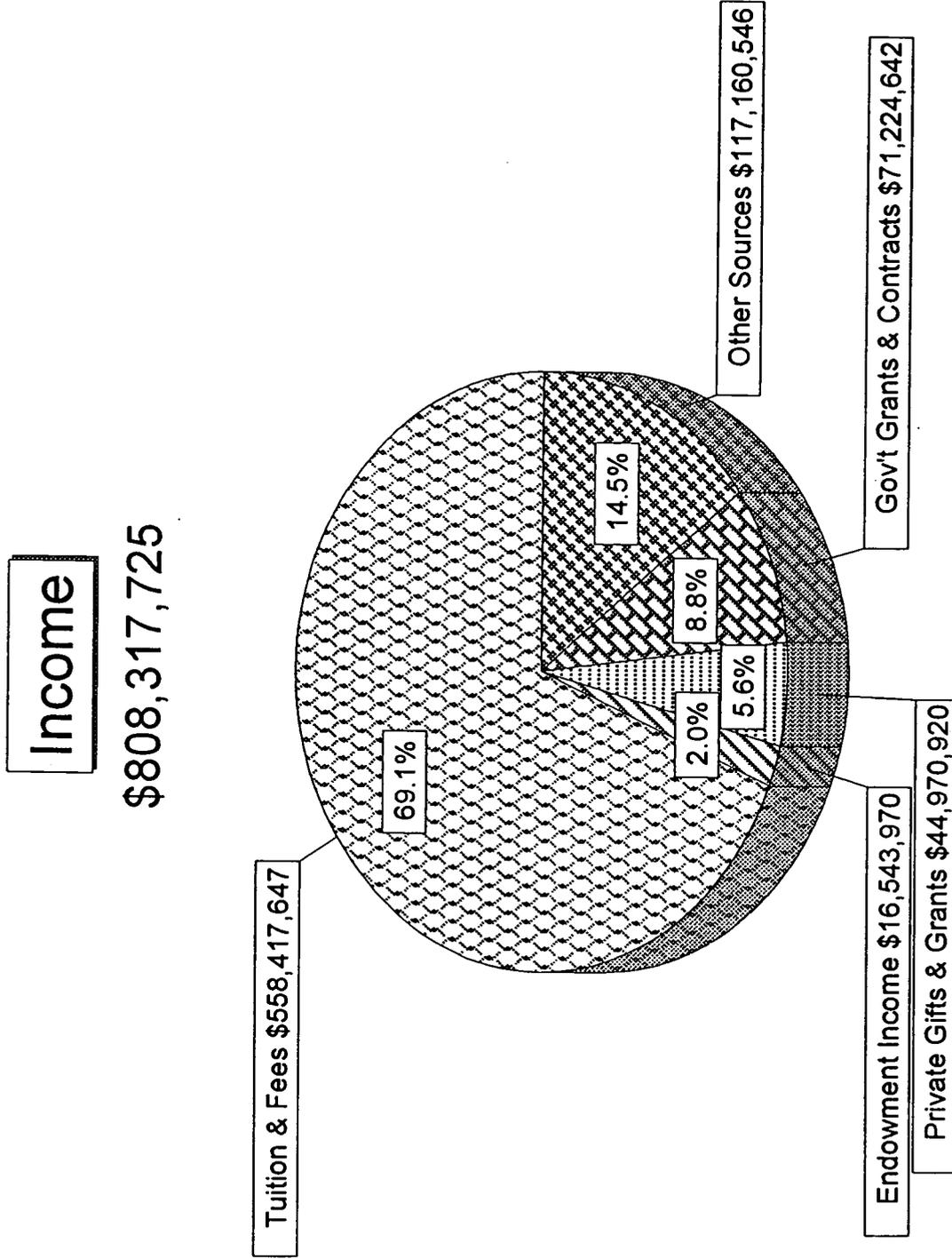
- Bluestone, Barry. (1993). *UMASS/Boston: An Economic Impact Analysis*. Boston: University of Massachusetts. ERIC ED 356733
- Bureau of the Census. (August 1994). *More Education Means Higher Career Earnings*. Statistical Brief 94-17. ERIC ED 388706
- Caffrey, John, and Herbert H. Isaacs. (1971). *Estimating the Impact of a College or University on the Local Economy*. Washington, D.C.: American Council on Education. ERIC ED 252100
- Campbell, Paul R. (1994). *Population Projections for States, by Age, Race, and Sex: 1993 to 2020*. Washington, D.C.: U.S. Government Printing Office. Bureau of the Census, Current Population Reports P25-1111.
- The Chronicle of Higher Education Almanac*. (September 2, 1996). Washington, D.C.: The Chronicle of Higher Education, Incorporated.
- Elliott, Donald S., Stanford L. Levin, and John B. Meisel. (1988). "Measuring the Economic Impact of Institutions of Higher Education." *Research in Higher Education*, V28, N1; pp. 17-33. ERIC EJ 376459
- Economic Impact of Florida Atlantic University: Fiscal Year 1994-95*. (1996). Boca Raton, Florida: Florida Atlantic University.
- Gana, Rajaram. (1993). "Econometric Estimation of the Economic Impact of a University." Chicago: A Paper Presented at the 33rd Annual Forum of the Association for Institutional Research, May 16-19, 1993. ERIC ED 360914
- Goldstein, Harvey A. (1989-90). "Estimating the Regional Economic Impact of Universities: An Application of Input-Output Analysis." *Planning for Higher Education*, V18, N1; pp. 51-64. ERIC EJ 400963
- Gran, Stephen M., David Mulkey, and Edward J. Malecki. (1995). *The Economic Impact of the University of Florida on the State of Florida*. Gainesville, Florida: The University of Florida.
- Hogan, Timothy D. (1992). "New CBR Study Reveals Economic Impact of ASU." *Arizona Business*, V39, N5; pp.1-3. ABI/INFORM 92-26707

REFERENCES (Continued)

- The Impact of Nova Southeastern University on the South Florida Economy.* (1995). Fort Lauderdale, Florida: Nova Southeastern University Research and Planning Report 95-03.
- Leslie, Larry L., and Paul T. Brinkman. (1993). *The Economic Value of Higher Education.* Phoenix, Arizona: The Oryx Press (American Council on Education Series on Higher Education).
- Morrell, Louis R. (1995). "Measuring Economic Impact: A Plan for Institutional Self-Defense from Taxation." *NACUBO Business Officer*, V29, N1; pp.43-46. ERIC EJ 510280
- Nova Southeastern University 1996-97 Student Expense Budgets.* (1996). Fort Lauderdale, Florida: Nova Southeastern University.
- Posey, Ellen I. (1983). *Georgia State University Spending Patterns and the Atlanta Economy, 1983.* Atlanta, Georgia: Georgia State University, Office of Institutional Planning. ERIC ED 234712
- Sann, David, and Victor Tervalá. (1993). *Development Opportunities: The Effect of UMES on the Town of Princess Anne.* College Park, Maryland: The Institute for Governmental Service at the University of Maryland. ERIC ED 359894
- State of Florida, Department of Commerce, Bureau of Economic Analysis. (February 2, 1995). *Florida Facts: Florida's Fifty Largest Private Employers.*
- Taylor, Peter. (1990). "The Impact of Institutions of Higher Education on Local Income and Employment: The Case of Bristol Polytechnic." *Higher Education Review*, V22, N2; pp. 39-58. ERIC EJ 411949
- United States Department of Education. (1995). *Integrated Postsecondary Education Data System Fall Staff Survey 1995, Form S.* Washington, D.C.: National Center for Education Statistics/IPEDS.
- United States Department of Education. (1995). *Integrated Postsecondary Education Data System Finance Survey FY 1995, Form F-1A.* Washington, D.C.: National Center for Education Statistics/IPEDS.
- University of Miami: Economic Impact on Coral Gables and South Florida.* (1995). Coral Gables, Florida: The University of Miami.
- Weitzman, Scott M. (1991). *The Economic Impact of the Community College System on the State of Florida.* Gainesville, Florida: Inter-Institutional Research Council. ERIC ED 336145

APPENDIX

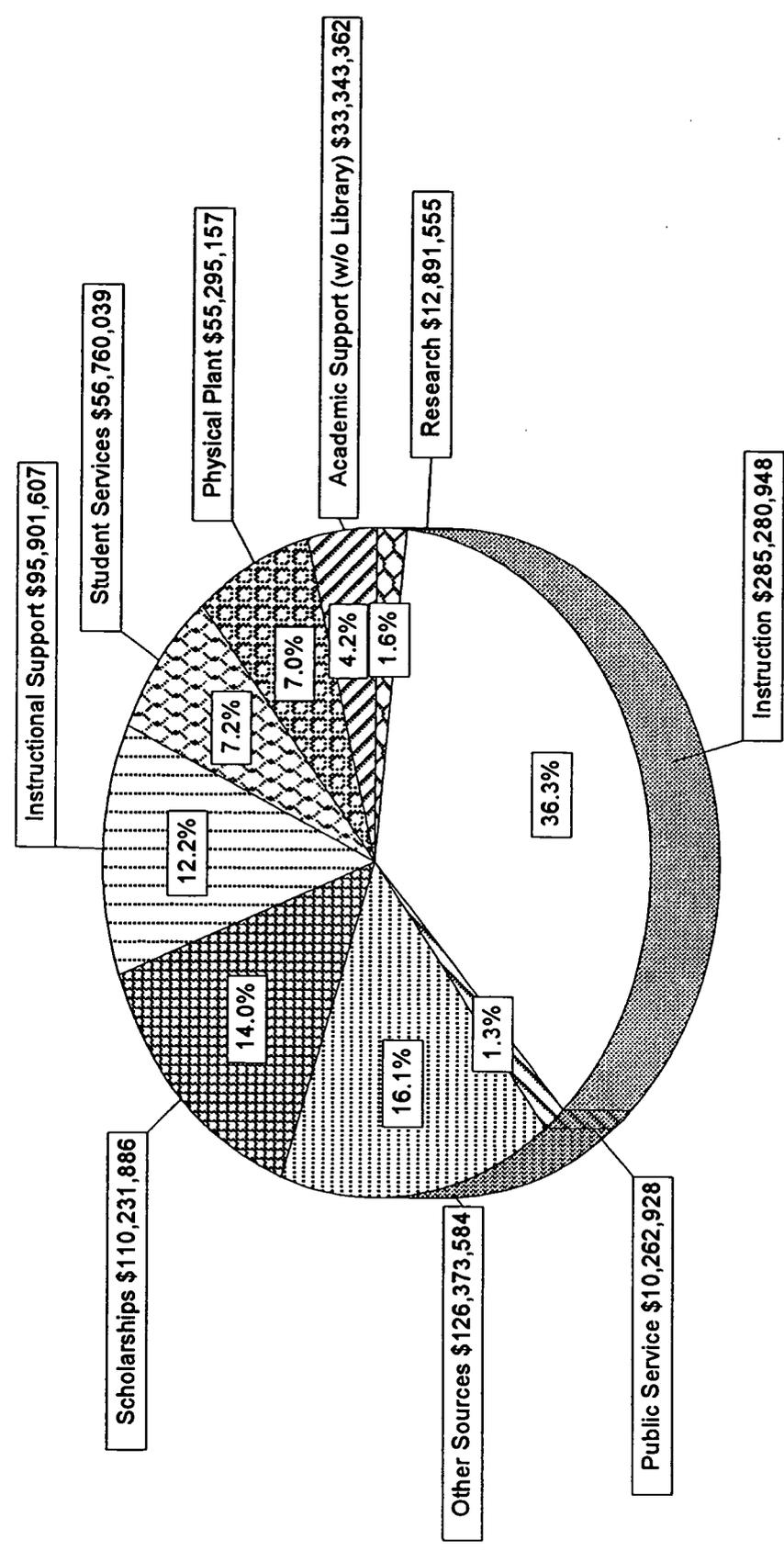
Independent Colleges and Universities of Florida Fiscal Year 1995



Independent Colleges and Universities of Florida Fiscal Year 1995

Expenditures

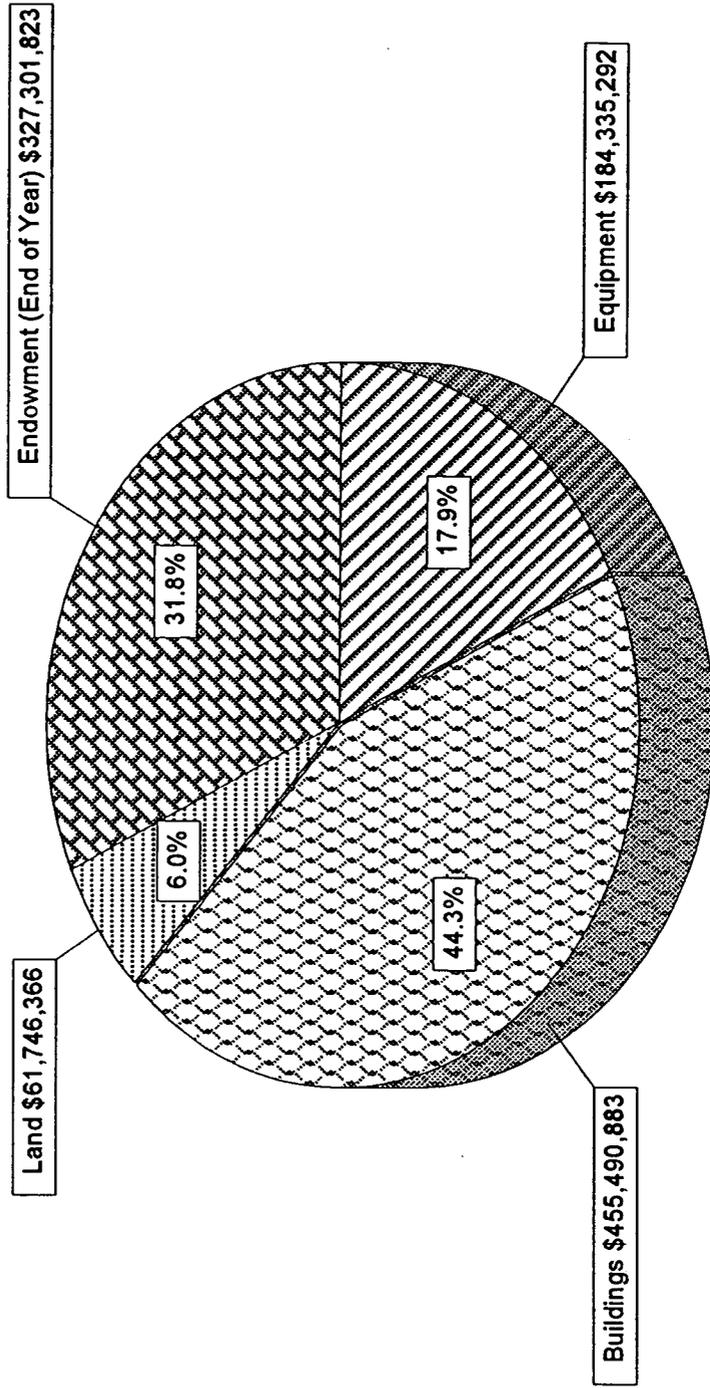
\$786,341,066



Independent Colleges and Universities of Florida Fiscal Year 1995

Assets

\$1,028,874,364



Note: Building and Land market value may be substantially higher. However, based on generally accepted accounting principles, data must show cost, not current market value.

Independent Colleges and Universities of Florida Fiscal Year 1994-1995

Total Current Funds Revenue

Nova Southeastern University	\$169,344,730
Embry-Riddle Aero. University	\$105,250,874
Stetson University	\$64,503,000
Barry University	\$61,291,336
Florida Institute of Tech.	\$60,935,312
Rollins College	\$49,667,407
Eckerd College	\$37,736,900
Jacksonville University	\$31,701,349
Bethune-Cookman College	\$31,666,483
University of Tampa	\$31,517,042
Saint Leo College	\$29,914,625
Florida Southern College	\$28,939,688
Saint Thomas University	\$27,497,505
Palm Beach Atlantic College	\$21,735,291
Florida Memorial College	\$16,892,466
Flagler College	\$12,552,841
Ringling School of Art and Design	\$11,316,490
Wamer Southern College	\$6,245,699
Clearwater Christian College	\$5,963,207
Webber College	\$4,173,001
Total	\$808,845,246

Independent Colleges and Universities of Florida
Fiscal Year 1994-1995

Total Current Funds Expenditures and Transfers

Nova Southeastern University	\$167,521,191
Embry-Riddle Aero. University	\$98,554,063
Barry University	\$61,105,119
Stetson University	\$61,023,000
Florida Institute of Technology	\$60,248,108
Rollins College	\$48,103,039
Eckerd College	\$38,627,600
University of Tampa	\$32,385,672
Bethune-Cookman College	\$31,275,504
Jacksonville University	\$31,109,817
Florida Southern College	\$28,523,792
Saint Leo College	\$28,137,566
Saint Thomas University	\$26,468,456
Palm Beach Atlantic College	\$22,053,674
Florida Memorial College	\$16,437,938
Flagler College	\$12,412,258
Ringling School of Art & Design	\$10,443,882
Clearwater Christian College	\$6,141,495
Warner Southern College	\$6,031,081
Webber College	\$3,811,203
Total	\$790,414,458

Independent Colleges and Universities of Florida

1995 Fall Term Enrollment

Nova Southeastern University	13,941
Saint Leo College	7,176
Barry University	7,048
Florida Institute of Technology	4,232
Embry-Riddle Aeronautical University *	4,154
Rollins College	3,237
Stetson University	2,897
Florida Southern College	2,571
University of Tampa	2,521
Jacksonville University	2,415
Bethune-Cookman College	2,402
Saint Thomas University	2,125
Palm Beach Atlantic College	1,953
Lynn University	1,564
Florida Memorial College	1,457
Flagler College	1,426
Eckerd College	1,335
Ringling School of Art and Design	823
Warner Southern College	581
Clearwater Christian College	532
Webber College	453
Total	64,843

* Daytona Beach Campus only.

Prepared by: Nova Southeastern University
 Research and Planning
 September 1996

Table 4

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Independent Colleges and Universities of Florida 1995 Fall Term Enrollment

Non-Florida Students

	Non-Florida Students	Total Enrollment	% Non-Florida Students
Saint Leo College	* 5,163	7,176	72%
Nova Southeastern Univ.	2,800	13,941	20%
Embry-Riddle Aeronautical Uni	2,579	4,154	62%
Florida Institute of Tech.	2,256	4,232	53%
Barry University	1,024	7,048	15%
Rollins College	982	3,237	30%
Eckerd College	916	1,335	69%
University of Tampa	867	2,521	34%
Jacksonville University	769	2,415	32%
Bethune-Cookman College	627	2,402	26%
Stetson University	565	2,897	20%
Flagler College	540	1,426	38%
Florida Southern College	471	2,571	18%
Palm Beach Atlantic Coll.	468	1,953	24%
Ringling School of Art	427	823	52%
Florida Memorial College	355	1,457	23%
Webber College	300	453	66%
Clearwater Christian Coll.	221	532	42%
Saint Thomas University	160	2,125	8%
Warner Southern College	62	581	11%
Total	** 17,262	64,843	27%

* Includes 873 non-Florida students attending classes in Florida .

** Reflects 873 non-Florida students at Saint Leo College attending classes in Florida and not non-Florida students attending classes outside of Florida.

**ECONOMIC IMPACT OF FLORIDA'S INDEPENDENT COLLEGES AND UNIVERSITIES:
ALL REGIONALLY ACCREDITED BACCALAUREATE
OR HIGHER INSTITUTIONS**

1. Develop a conversion factor

Based on 96-16, \$786,341,066 Total FY 1994-95 Expenditures for 20 of the 22 ICUF institutions resulted in \$2,306,907,577 economic impact in Florida

$$\$2,306,907,577 / 786,341,066 = 2.934 \text{ conversion factor}$$

2. Find additional contributions from the two remaining ICUF institutions

Lynn University FY 1993-94 (IPEDS F9394-B.DAT)	\$ 22,563,355
Edward Waters FY 1993-94 (IPEDS F9394-B.DAT)	\$ 8,506,657

3. Add ALL 22 ICUF expenditures, realizing that Lynn and Edward Waters are from FY 1993-94, and the 20 others are from FY 1994-95

96-16 (N = 20) Expenditures	\$ 786,341,066
Lynn and Edward Waters Expenditures	<u>\$ 31,070,012</u>
TOTAL of all 22 ICUF	\$ 817,411,078

4. Economic Impact with a 2.934 conversion factor \$2,398,284,103

Including all 22 ICUF institutions, the annual impact of Independent Colleges and Universities of Florida on the state's economy was approximately \$2.4 billion in Fiscal Year 1994-95.

5. Visit <gopher://gopher.ed.gov> to obtain FY 1993-94 IPEDS data

6. Use the 1996 Higher Education Directory to find all other regionally accredited Florida independents that award baccalaureate or higher degrees

7. All other regionally accredited Florida independents had total FY 1993-94 expenditures of \$800,812,960 (University of Miami and its Jackson Memorial Hospital complex contributed over \$756 million in FY 1993-94 expenditures.)

8. ICUF institutions	\$ 817,411,078
Non-ICUF institutions	\$ 800,812,960
Total	\$ 1,618,224,038
9. Economic Impact with a 2.934 conversion factor	\$ 4,747,869,327

The annual impact of all regionally accredited independent colleges and universities in Florida on the state's economy was approximately \$4.7 billion in Fiscal Year 1994-95.

10. Had a more liberal multiplier been used (e.g., 3.0), as some colleges and universities use, the following estimates¹ would have been obtained regarding the impact of independent colleges and universities on Florida's economy:

All ICUF Members	3.1 billion
All regionally accredited independent four-year colleges and Universities	6.2 billion

To place the \$6.2 billion impact of independent colleges and universities on Florida's economy in context, in 1993 tourism was responsible for \$32.0 billion economic impact, and agriculture was responsible for \$8.0 billion economic impact.

11. To further place the impact of the *Independent Colleges and Universities of Florida* on the State economy, the ranking by number of employees of leading industries of Florida is presented in Table 6. With over 10,000 full-time and part-time employees during Fall 1995, the *Independent Colleges and Universities of Florida* are collectively a major employer in the State and are in the same ranking as employers such as Florida Power and Light and United Parcel Service of America, Inc.

¹ By using a 3.0 multiplier, a 3.848 conversion ratio was generated and used against total FY expenditures.

Table 6

**Name and Location of Corporate Headquarters of the
50 Largest Private Employers in Florida
February 1995**

15,001 and Over Florida Employees

Barnett Banks, Inc., Jacksonville, FL
Columbia/HCA Healthcare Corp., Miami Lakes, FL
Walt Disney World Co., Lake Buena Vista, FL
Eckerd Corp., Largo, FL
Kelly Services, Inc., Troy, MI
K Mart Corp., Troy, MI
Olsten Corp., Westbury, NY
Publix Super Markets, Inc., Lakeland, FL
Sears, Roebuck and Co., Chicago, IL
Southern Bell Telephone and Telegraph Co., Atlanta, GA
The Staff Leasing Group, Bradenton, FL
Wal-Mart Stores, Inc., Bentonville, AR
Winn Dixie Stores, Inc., Jacksonville, FL

10,001 to 15,000 Florida Employees

American Telephone & Telegraph Co., New York, NY
Burdine's Inc., Miami, FL
First Union National Bank of Florida, Jacksonville, FL
Florida Power & Light Co., Juno Beach, FL
General Mills Restaurants, Inc., Orlando, FL
Independent Colleges and Universities of Florida, Tallahassee, FL
Payroll Transfers, Inc., Tampa, FL
United Parcel Service of America, Inc., Atlanta, GA
The Vincam Group, Inc., Coral Gables, FL

Table 6 (Continued)

**Name and Location of Corporate Headquarters of the
50 Largest Private Employers in Florida
February 1995**

7,501 - 10,000 Florida Employees

Albertson's Inc., Boise, ID
American Airlines, Inc., Dallas/Ft. Worth Airport, TX
Anheuser-Busch Companies, Inc., St. Louis, MO
Beverly Enterprises, Fort Smith, AR
GTE Florida, Inc., Tampa, FL
Harris Corporation, Melbourne, FL
The Home Depot, Inc., Atlanta, GA
Kash-N-Karry Food Stores, Inc., Tampa, FL
Martin Marietta Corp., Bethesda, MD
J. C. Penney Co., Inc., Dallas TX
Sun Bank, N.A., Orlando, FL
Walgreen Co., Deerfield, IL

5,000 - 7,500 Florida Employees

American Express Co., New York, NY
Blue Cross/Blue Shield of Florida, Inc., Jacksonville, FL
Brinker International, Inc., Dallas, TX
Delta Air Lines, Inc., Atlanta, GA
Employee Services, Inc., Bradenton, FL
Food Lion, Inc., Salisbury, NC
Morrison Restaurants, Inc., Mobile, AL
Motorola, Inc., Schaumburg, IL
NationsBank of Florida, N.A., Tampa, FL
The Prudential Insurance Co. of America, Newark, NJ

Table 6 (Continued)

**Name and Location of Corporate Headquarters of the
50 Largest Private Employers in Florida
February 1995**

Scotty's Inc., Winter Haven, FL

Staff Management Systems, Inc., Tampa, FL

Staffing Concepts International, Inc., Tampa, FL

Steak & Ale of Florida, Dallas, TX

Target Stores, Minneapolis, NM

United Technologies Corp., Hartford, CT

United Telephone Company of Florida, Altamonte Springs, FL

Note: Employers are listed alphabetically within employment size ranges. Employment estimates do not include out-of-state employees in cases where the employer also has operations outside of Florida. Employees of franchise operations are not included in corporate totals. Hospitals and universities are excluded. Employment estimates for help supply services employers include the total number of help available for supplying temporary or continuing help.

Source: State of Florida, Department of Commerce, Bureau of Economic Analysis. *Florida Facts: Florida's Fifty Largest Private Employers*, February 2, 1995.

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