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COST BENEFIT ANALYSIS OF THE FLORIDA RESIDENT ACCESS GRANT

Report and Recommendations by the Florida Postsecondary Education Planning Commission

POSTSECONDARY EDUCATION PLANNING COMMISSION

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The Postsecondary Education Planning Commission, initially created by executive order in 1980, given statutory authority in 1981 (SS 240.145 and 240.147, Florida Statutes), and reauthorized by the 1991 Legislature, serves as a citizen board to coordinate the efforts of postsecondary institutions and provide independent policy analyses and recommendations to the State Board of Education and the Legislature. The Commission is composed of 11 members of the general public and one full-time student registered at a postsecondary education institution in Florida. Members are appointed by the Governor with the approval of three members of the State Board of Education and subject to confirmation by the Senate.

A major responsibility of the Commission is preparing and updating every five years a master plan for postsecondary education. The enabling legislation provides that the Plan "shall include consideration of the promotion of quality, fundamental educational goals, programmatic access, needs for remedial education, regional and state economic development, international education programs, demographic patterns, student demand for programs, needs of particular subgroups of the population, implementation of innovative educational techniques and technology, and the requirements of the labor market. The capacity of existing programs, in both public and independent institutions, to respond to identified needs shall be evaluated and a plan shall be developed to respond efficiently to unmet needs."

Other responsibilities include recommending to the State Board of Education program contracts with independent institutions; advising the State Board regarding the need for and location of new programs, branch campuses and centers of public postsecondary education institutions; periodically reviewing the accountability processes and reports of the public and independent postsecondary sectors; reviewing public postsecondary education budget requests for compliance with the State Master Plan; and periodically conducting special studies, analyses, and evaluations related to specific postsecondary education issues and programs.

Further information about the Commission, its publications, meetings and other activities may be obtained from the Commission office, 224 Collins Building, Department of Education, Tallahassee, Florida, 32399-0400; telephone (850) 488-7894; FAX (850) 922-5388.

POSTSECONDARY EDUCATION PLANNING COMMISSION

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Prepared in Response to Section 240.147(15), Florida Statutes

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Section 240.147(15), Florida Statutes, assigns the following responsibility to the Postsecondary Education Planning Commission:

In consultation with the Independent Colleges and Universities of Florida, recommend to the Legislature accountability measures and an accountability process for independent institutions that participate in the Florida resident access grant program. The process shall make use of existing information submitted to the federal and state governments. The process shall provide for an assessment of the benefits and cost-effectiveness of the Florida resident access grant program in providing state residents with access to 4-year college programs and with the successful completion of a baccalaureate degree. The commission shall provide oversight of this accountability process.

The Florida Resident Access Grant (FRAG), formerly called the Tuition Voucher Program, was created by the Legislature in 1979 as a non-need-based program to provide tuition assistance to Florida's undergraduates who attend independent, nonprofit, SACS-accredited institutions in the State. The program's enabling legislation, s. 240.605, F.S., identifies the program's primary goals:

- (1) to broaden student choice through the provision of tuition assistance to reduce the gap between public and independent institutions;
- (2) to support institutional diversity through the provision of a dual system of higher education;
 - (3) to reduce the tax burden on the citizens of the State.

A FRAG award may not exceed 40 percent of the State's cost per academic year for an undergraduate student in a state university. Eligible students must maintain a minimum cumulative grade point average of 2.0 on a 4.0 scale and earn the equivalent of at least 12 student credit hours for each term an award is received. A student may receive the award for a maximum of nine semesters or 14 quarters.

In 1995-96, the Florida Resident Access Grant accounted for over 32 percent of all appropriations of state tax funds on behalf of students in independent higher education. In 1997-98, the FRAG is the largest single appropriation benefitting independent higher education in Florida and will expend \$28.8 million to grant approximately 18,000 students a maximum award of \$1,600.

The Commission first assessed the FRAG pursuant to s. 240.147(15) in 1994. The current examination reviewed FRAG in the context of other forms of state assistance involving the independent sector. A cost benefit analysis resulted in the conclusion that the FRAG provides student

EXECUTIVE SUMMARY

Legislative Charge

assistance, broadens student choice, and promotes institutional diversity. With regard to the question of reduced taxpayer costs, the report provides a comprehensive approach for comparing the cost of the FRAG to the cost of instruction in public postsecondary education.

Based on this analysis, the FRAG is cost-effective, given the current policies governing public sector tuition and subsidies. The FRAG assists private institutions to compete for students and contributes to both student and institutional diversity. Given the policies in place, the State should continue to support the administration of the FRAG program as authorized in statute. However, the report does provide several suggestions for calculating the FRAG award level and developing cost comparisons in the future.

Finally, if the State wished to maximize efficiency and equity and strive to be more cost-effective, increasing public sector tuition to the national average would assist in reducing the tuition gap between the public and independent sectors while generating over \$268 million in additional revenue. However, since this gap has more than quadrupled since the inception of the grant program in 1979, there is room to increase both public sector tuition and the FRAG award level.

Recommendations:

- 1. The Legislature should continue to support the FRAG as a tool to provide student choice through tuition assistance and maintain a strong independent postsecondary sector in Florida.
- 2. The Legislature should increase the maximum percentage of cost borne by resident students in public postsecondary education from 25 to 40 percent. This will enable Florida to move toward the goal adopted by the Commission, the State Board of Community Colleges, and the Board of Regents of assessing tuition and fees at the national average while assuring that the State continues its commitment to cover the majority of the cost of this instruction. Any increased tuition revenue should not be used to replace existing general revenue support. In addition, need-based assistance should be increased to avoid any negative effect on student access.
- 3. If public tuition policy is adjusted as recommended, the method of calculating the FRAG should be adjusted in two ways. First, the maximum percentage of cost of public undergraduate education used to set the FRAG should be increased from 40 percent to a figure closer to the recommended share of costs to be covered by the State for students in public institutions (60 percent). Second, the cost figures to which this percentage is ap-

plied should include both university and community college data in view of Florida's continued commitment to and reliance on the two-plus-two system. Any adjustments to the calculation should be done in consultation with the independent colleges and universities eligible for the awards.

- 4. The principals involved in the Education Estimating Conference conducted pursuant to s. 216.136(4), F.S., should include the independent sector in the enrollment estimating process in recognition of the important role these institutions play in providing access.
- 5. The process used to estimate and fund FRAG recipients should be comparable to that used to calculate enrollment workload funding for state universities and public community colleges.

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The Commission first assessed the FRAG pursuant to s. 240.147(15) in 1994. The current examination will build on this initial effort. The study was overseen by the Commission's Finance/Administration Committee, consisting of Mrs. Sally Gillespie, Chair, Dr. Bob Bryan, Mr. Ivie Burch, Mr. Jim Kirk, Ms. Maricela Langelier, and Dr. Maria Shelton.

FRAG is the largest single appropriation benefiting independent higher education in Florida.

NATIONAL AND STATE CONTEXTS

According to the National Center for Education Statistics (NCES), Florida, the nation's fourth largest state, ranked fifth in terms of total higher education enrollment in Fall 1994. Florida ranked eighth in undergraduate enrollment at private four-year institutions. In Florida, private four-year higher education accounts for approximately 32 percent of undergraduate enrollment at four-year institutions, one point above the national average (US DOE, 1996). Table 1 illustrates the enrollment structure of Florida's higher education system — a greater percentage of students attend the State's public two-year colleges than is the case nationally. Likewise, a smaller percentage of students attend the State's four-year institutions, both public and private, than is the case nationally. (All tables are included in Appendix A.)

Private four-year higher educatin accounts for approximately 32 percent of undergraduate enrollment at four-year institutions.

In the case of public two-year colleges, the Florida data in Table 1 reflect state policy, which through a statewide articulation agreement, established community colleges as the primary point of entry into the State's higher education system. Florida's public community colleges are "open door" institutions and, under the articulation agreement, students who earn the Associate in Arts degree at one of these colleges are guaranteed admission to the upper division of the State University System (SUS).

The data for public four-year institutions reflect not only this policy but also a relative shortage in the number of public four-year institutions. Florida ranks seventh in public four-year undergraduate enrollment but only 24th in the number of institutions available to enroll such students. When the enrollment figures in Table 1 are divided by the number of institutions in each sector, the "under-enrollments" in the private four-year sector fall away and are entirely reversed in the public four-year sector. Table 2 shows that Fall 1994 enrollment per four-year private institution in Florida was 1,332, compared to 1,417 nationally. Enrollment per four-year public institution in Florida was 17,511, compared to 7,626 nationally.

Florida has a strong record of committing state funds for private institutions and their students. In its 1993 *Master Plan for Florida Postsecondary Education*, the Florida Postsecondary Education Planning Commission reaffirmed this commitment by recommending the "utilization of independent schools, colleges, and universities" as a strategy to increase the postsecondary productivity of the State. Further, the Commission called for "stable, consistent funding to the independent sector to enhance access to postsecondary opportunities in Florida" (PEPC, 1993, September).

State funding for private higher education takes two basic forms: direct appropriations and indirect funding mechanisms. Direct appropriations are employed in about half the states (Zumeta, 1995) and go to statesupported education projects at private institutions. Examples of this approach in Florida include academic program contracts, Department of Education and Board of Regents projects, and the First Accredited Medical School Appropriation. Indirect funding mechanisms, such as a state need-based grant program in which students at private institutions may participate, are more prevalent. In Florida, examples would be the FRAG, the Private Student Assistance Grant, and other financial aid programs. In 1995-96, direct appropriations accounted for about 30 percent of all state support of private higher education in Florida and indirect funding mechanisms accounted for 70 percent (An Overview of Independent Higher Education in Florida: Enrollments and State Funding, February 1997). The major policies in Florida that seek to further state higher education goals by making explicit use of private colleges and universities include Academic Program Contracts, Limited Access Program Grants, Accountability Reporting, and the FRAG.

STATE POLICIES AFFECTING PRIVATE HIGHER EDUCATION IN FLORIDA

Florida has a strong record of committing state funds for private institutions and their students.

Since authorized by the Legislature in 1975, the State has contracted with independent colleges and universities so that Florida residents can participate at state tuition rates in selected academic programs (PEPC, 1997, August). In 1981, the Legislature transferred authority from the Board of Regents to the State Board of Education "to contract with (accredited) independent institutions...for the provision of those educational programs and facilities which will meet needs unfulfilled by the state system of postsecondary education" (s. 229.053(2)(o), F.S.). State Board of Education rule stipulates that the program or facility obtained through contract must be of equal quality as similar programs and facilities in the state system of postsecondary education.

The amount of the contract covers the difference between the tuition in the independent institution offering the program and the tuition that would be paid for a comparable program in the State University System. In 1996-97, the State appropriated \$7.3 million to maintain 18 academic program contracts serving nearly 1,000 students in five different private institutions (PEPC, 1997, August). The Postsecondary Education Plan-

Academic Program Contracts

ning Commission evaluates each contract proposal submitted by an independent institution. The Commission's evaluation discourages contract proposals that indicate that the program would rely predominately on state funds for its viability.

Limited Access Program Grants

In 1995, the Florida Legislature took academic program contracts a step further by establishing a Limited Access Grant program. Statutory language, revised in 1997, states that the purpose of the program is "to provide enrollment opportunities for qualified applicants in selected limited access programs or equivalent academic tracks." These are in high priority employment fields requiring a baccalaureate degree and for which state universities have insufficient capacity to serve all qualified applicants. Program applicants must be Florida residents, either community college graduates or state university students, who are qualified for admission to a selected independent college or university.

The amount of the limited access grant award equals 50 percent of the cost to the State per academic year of funding an undergraduate student in public postsecondary education. Academic programs must have greater than a ten percent denial rate in the U.S., must fill a critical state need in terms of labor supply, and must meet a minimum hourly salary threshold. Eligible programs for 1997-98 are Special Education, Education (Mentally Handicapped), Education (Emotionally Handicapped), Education (Specific Learning Disabled), Nursing, Occupational Therapy, Physical Therapy, and Radio/Television.

Accountability Reporting

The 1994 Florida Legislature mandated that accountability measures and a reporting process be developed for the 23 (at that time) Southern Association of Colleges and Schools (SACS) accredited private institutions whose students are eligible to receive the FRAG. A task force composed of institutional representatives and state higher education policymakers reached consensus on 12 measures related to the statewide priorities for higher education which had been identified in the 1993 PEPC *Master Plan for Postsecondary Education* - access, diversity, productivity, and the quality of undergraduate education. The same statute that established PEPC as the review entity for independent sector accountability reports calls on the Commission to conduct a periodic assessment of the benefits and cost-effectiveness of the FRAG program.

Florida Resident Access Grant

In 1979, the Florida Legislature established the Tuition Voucher for Florida resident full-time students who attend the State's accredited four-year independent institutions. In 1994, the name of the award was changed to the FRAG and the aforementioned accountability reporting process was put in place for institutions whose students are eligible to receive the award. The FRAG is a non-need-based "tuition equalization" program

available to state residents who are full-time undergraduate students in one of Florida's 25 SACS-accredited, four-year private institutions. According to Zumeta (1995), five other states offer non-need-based tuition equalization awards - Alabama, Georgia, North Carolina, Ohio, and Virginia. When established, the Florida Resident Access Grant award was \$750 annually, or 29 percent of the average tuition and fees among the State's accredited independent four-year institutions. After hovering around \$1,000 for several years, the annual award amount jumped to \$1,725 in 1996 but dropped back to \$1,600 for 1997-98 due to an increase in the number of recipients (Table 3). Even with the increase, the award now covers only about 14 percent of the average published tuition and fees among eligible schools (Table 4), but is approximately 19 percent of the actual tuition and fees paid by students as a result of student discounts.

As stated at the outset, there are three primary goals of the program: (1) to provide tuition assistance to broaden student choice, (2) to support institutional diversity through the provision of a dual system of higher education, and (3) to reduce the tax burden on the citizens of the State.

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COST BENEFIT ANALYSIS

As part of the review of the FRAG, the Commission undertook a cost benefit analysis, which is described as a technique for systematically estimating the efficiency impacts of policies. A more detailed description of this approach may be found in Appendix B.

Essentially, there are four questions to be answered:

- 1. Does the FRAG provide tuition assistance?
- 2. Does the FRAG broaden student choice?
- 3. Is institutional diversity supported?
- 4. Is the cost to the taxpayer reduced?

In addressing these questions, data from the recently completed 1996 Accountability Report for the Independent Colleges and Universities of Florida (August 1997) is cited along with other information.

Tuition Assistance

Impact on reducing the gap between public and independent tuition has diminished over time.

Clearly, the FRAG serves this function. However, its impact on reducing the gap between public and independent tuition has diminished over time. Table 4 indicates that FRAG was equal to 42 percent of the gap in 1979. In 1997, even with a significant increase in the FRAG last year, the maximum award only covers 18 percent of the gap. Even taking tuition discounting into account, a strategy increasingly being used by independent institutions competing for students and estimated by ICUF to equal 25 percent of tuition collected, FRAG only covers 25 percent of the gap. A significant portion (32 percent) of FRAG recipients also qualify for the need-based FSAG (Table 5). The role of FRAG in providing tuition assistance is particularly critical for this group. According to the ICUF *Accountability Report*, the five-year (1991 cohort) graduation rate for ICUF institutions is 41 percent compared to 47 percent in the SUS. ICUF institutions also admitted 100 percent of AA degree transfer students into programs of their choice.

Student Choice

87 percent of the Fall 1996 undergraduate courses in ICUF institutions had fewer than 30 students. The FRAG is limited to 4-year, non-profit, regionally accredited, independent institutions, which for the most part are primarily dedicated to undergraduate education. With few exceptions, this type of institution does not exist in Florida's public postsecondary sectors. To the extent that these independent institutions are assisted by the FRAG, student choice is enhanced. The 1996 *Accountability Report* indicates that 87 percent of the Fall 1996 undergraduate courses in ICUF institutions had fewer than 30 students. Some have suggested that this choice would remain even if the FRAG no longer existed. Others have urged that the FRAG be extended to other independent institutions including those that offer less than a four-year degree and technical certificates. Finally, with regard to choice, portability to out-of-state institutions could be considered. Any of the options for expansion would have significant implications for the cost of the program as well as the value of individual

awards if funding were not increased. The Commission recommended in its current *Master Plan* that any expansion of independent institutional state support beyond existing levels should include a performance component. For example, programs leading to technical degrees or certificates in fields with a high labor market demand should be able to demonstrate the performance of their graduates on licensure exams or other external validation mechanisms.

The FRAG eligible institutions include three historically black college and universities - Edward Waters, Florida Memorial, and Bethune-Cookman - as well as one other whose enrollment is primarily minority - St. Thomas (59 percent). Overall, in Fall 1991, 31 percent of the FTICs enrolling in ICUF institutions were minority, according to the 1996 ICUF *Accountability Report*, compared to 35 percent at SUS institutions. As with the question of student choice, it can be agreed that the FRAG does contribute to the maintenance of a dual system of higher education. While the awards directly assist students, indirectly they free other institutional resources that can be used for financial assistance and other institutional needs.

Institutional Diversity

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The statute authorizing FRAG specifies that the maximum award may not exceed 40 percent of the State cost per academic year for an undergraduate student in a state university. Based on 1996-97 figures, the SUS full cost per undergraduate student was \$8,282. Simply applying 40 percent to this cost yields a maximum FRAG award of \$3,313.

Reduced Tax Burden

For cost comparison purposes, the value of the FRAG was converted to a credit hour basis. The SUS cost figures are based on a 40 credit hour FTE, while most national comparisons use 30 credit hours. For the independent institutions, several divisors are possible ranging from a low of 24 (representing two 12-hour semesters, the minimum a student can be enrolled annually to qualify for the FRAG) to a high of 40 (the SUS divisor). According to the recently published 1996 Accountability Report for the Independent Colleges and Universities of Florida, the mean time to graduate is 4.1 years and the mean credit hours accrued is 131, yielding an average annual load of 31.95 hours. This figure was rounded to 32 and used as the divisor for calculating the per credit hour cost of the FRAG award.

Table 6 displays the total cost per FTE for state university undergraduates as well as identifying costs within the SUS figure not directly related to undergraduate instruction (e.g., Research and Public Service). The table also includes a factor for capital outlay which is not included in the full cost figures reported by the Board of Regents. Since capital costs have totaled approximately ten percent of operating costs over the past 20 years, this percentage was used to approximate a capital outlay cost

factor. After deducting tuition, this data permits calculation of a variety of net costs to which the FRAG can be compared.

The next step in this analysis includes community college cost figures in view of the State's heavy reliance on the two-plus-two system. Since the FRAG is limited to four-year institutions, using state university system costs for comparison is a reasonable approach. However, since almost half of public undergraduate enrollment (47.3 percent in 1997-98: Community College Advanced and Professional FTEs - 97,072; State University undergraduates - 108,012, 1997 General Appropriations Act) is served by the Community College System at considerably lower cost, it is also reasonable to prepare calculations which reflect this situation. If community college costs are included, should the same be done for the independent institutions which also enroll community college transfers? In Fall 1994, there were 606 AA transfers to ICUF institutions, according to their 1996 Accountability Report. This only represented 3.8 percent of the 15,928 FRAG recipients that year. If the number of community college transfers continues to grow, this would be a factor to consider in future calculations.

If community college costs are included, only the current level of FRAG would comply with the established policy.

Tables 7A, B, C reflect variations of this step with the value of the FRAG adjusted to reflect its current value (\$1,600 - Table 7A), the request for 1998-99 (\$2,214 - Table 7B), and the stated goal of the Independent Colleges and Universities of Florida (\$3,000 - Table 7C). Examined collectively, the data reveal that if only SUS costs are used, as specified in statute, both the current and requested level for FRAG fall within the 40 percent policy. However, the goal of a \$3,000 award would actually represent 43.3 percent of the 1996-97 cost per undergraduate FTE. If community college costs are included, only the current level of FRAG would comply with the established policy.

An assessment of the performance of FRAG, in response to each of the four questions raised above, is positive. Only in the last area, related to cost and taxpayer savings, would the Commission raise any issues. At the outset, it should be stated that the FRAG, at its current level, is well within the statutory limit. The basis for that limit of 40 percent is not well defined. It could just as easily be 30 percent or 50 percent. Whether the Legislature wishes to include community college costs or capital outlay in the calculation is not a pressing concern, but the Commission believes this inclusion would result in a more accurate figure for purposes of determining the cost and benefits of the FRAG.

At its current level of \$1,600, FRAG compares favorably to the awards in similar programs in other states (Table 8). However, all of these states have significantly higher public tuitions. This leads to the point that another action that can contribute to the goal of reducing the tuition gap is increasing public sector tuition.

Currently, state policy dictates that public postsecondary students pay up to 25 percent of prior years' cost of undergraduate programs, leaving the remainder to be covered by the State. In the draft Master Plan, currently being considered by the Commission, it is recommended that the ceiling on the share covered by students be increased to 40 percent. This would be a maximum, and it is not suggested that it be reached immediately or that any increased tuition revenue be used to replace existing general revenue. However, this action would provide additional flexibility for the sectors to move tuition to the national average, while assuring that a clear majority (60 percent) of the cost would continue to be covered by the State. If the SUS were to increase its tuition of \$1,888 to the national average of \$3,358 (1996-97), it would generate an additional \$211 million, of which a portion could be directed to assistance for students with financial need and the remainder used to improve access to quality postsecondary education. A comparable increase to the national average in the community colleges would generate \$57.7 million more than the \$163 million collected by that system in 1996-97. If this tuition recommendation is adopted, it would be logical to raise the maximum of the Florida Resident Access Grant from 40 percent of SUS cost up to as much as 60 percent and, based on the analysis in this report, expand the calculation of cost to include community college as well as university data.

Finally, the analysis reveals that in spite of a significant increase in funding, the value of an individual FRAG award actually declined this year due to an increase in the number of recipients (Table 3). The draft 1998 *Master Plan for Florida Postsecondary Education*, in recognition of the important role played by independent institutions in providing access, recommends their inclusion in the enrollment estimating conference. This is a consensus process involving representatives of the Executive Office of the Governor, the Legislature, and the sector boards in

ISSUES AND RECOMMENDATIONS

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projecting enrollment workload and the amount needed for support for public education. Involvement of the independent sector in this process should provide a stronger basis for determining the necessary funding level for the FRAG and assist in avoiding the need for proration of the value of individual awards in the future.

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Recommendations:

- 1. The Legislature should continue to support the FRAG as a tool to provide student choice through tuition assistance and maintain a strong independent postsecondary sector in Florida.
- 2. The Legislature should increase the maximum percentage of cost borne by resident students in public postsecondary education from 25 to 40 percent. This will enable Florida to move toward the goal adopted by the Commission, the State Board of Community Colleges, and the Board of Regents of assessing tuition and fees at the national average while assuring that the State continues its commitment to cover the majority of the cost of this instruction. Any increased tuition revenue should not be used to replace existing general revenue support. In addition, need-based assistance should be increased to avoid any negative effect on student access.
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- 5. The process used to estimate and fund FRAG recipients should be comparable to that used to calculate enrollment workload funding for state universities and public community colleges.

Based on this analysis, the FRAG is cost-effective, given the current policies governing public sector tuition and subsidies. The FRAG assists private institutions to compete for students and contributes to both student and institutional diversity. Given the policies in place, the State should continue to support the administration of the FRAG program as authorized in statute. However, the report does provide several suggestions for calculating the FRAG award level and developing cost comparisons in the future.

Finally, if the State wished to maximize efficiency and equity and strive to be more cost-effective, increasing public sector tuition to the national average would assist in reducing the tuition gap between the public and independent sectors while generating over \$268 million in additional revenue. However, since this gap has more than quadrupled since the inception of the grant program in 1979, there is room to increase both public sector tuition and the FRAG award level.

CONCLUSION

The FRAG assists private institutions to compete for students and contributes to both student and institutional diversity.

APPENDIX A TABLES

TABLE 1

UNDERGRADUATE ENROLLMENT, BY HIGHER EDUCATION SECTOR, FLORIDA AND U.S., FALL 1994

	Flori	da	U.S.		
Higher Education	Undergraduate	Percentage	Undergraduate	Percentage	
Sector	Enrollment		Enrollment		
Public Four-Year	157,598	27.8%	4,636,762	37.1%	
Public Two-Year	326,782	57.5%	5,308,366	42.5%	
Private Four-Year	78,581	13.8%	2,317,480	18.6%	
Private Two-Year	4,980	0.9%	221,243	1.8%	
Total	567,941	100.0%	12,483,851	100.0%	

Source: NCES Digest of Education Statistics, 1996.

TABLE 2

AVERAGE UNDERGRADUATE ENROLLMENT PER INSTITUTION, BY HIGHER EDUCATION SECTOR, FLORIDA AND U.S., FALL 1994

		Florida		U.S.			
Higher Education	Undergraduate	Number	Average	Undergraduate	Number	Average	
Sector	Enrollment	Institutions	Enrollment	Enrollment	Institutions	Enrollment	
Public Four-Year	157,598	9	17,511	4,636,762	608	7,626	
Public Two-Year	326,782	28	11,671	5,308,366	1,047	5,070	
Private Four-Year	78,581	59	1,332	2,317,480	1,636	1,417	
Private Two-Year	4,980	17	293	221,243	415	533	
Total	567,941	113	5,026	12,483,851	3,706	3,369	

Source: NCES, Digest of Education Statistics, 1996.

TABLE 3
FLORIDA RESIDENT ACCESS GRANT

	AMOUNT	AMOUNT	NUMBER	PROVISO	ACTUAL
	APPROPRIATED	EXPENDED	STUDENTS	MAXIMUM	AWARD
			SERVED	AWARD	AMOUNT
1979-80	\$ 2,400,000	\$ 2,400,000	3,518	\$ 750	\$ 750
1980-81	\$ 4,100,000	\$ 4,100,000	6,827	\$ 750	\$ 750
1981-82	\$ 7,299,000	\$ 7,350,000	9,914	\$ 750	\$ 750
1982-83	\$ 9,500,000	\$ 9,310,000	13,422	\$ 750	\$ 717
1983-84	\$ 10,100,000	\$ 10,100,000	14,645	\$ 750	\$ 750
1984-85	\$ 11,900,000	\$ 11,900,000	15,613	\$ 835	\$ 778
1985-86	\$ 13,323,984	\$ 13,144,215	15,886	\$ 876	\$ 852
1986-87	\$ 15,989,392	\$ 14,078,496	13,976	\$ 1,000	\$ 1,000
1987-88	\$ 15,975,700	\$ 14,920,950	14,083	\$ 1,100	\$ 1,100
1988-89	\$ 16,672,650	\$ 16,369,841	15,174	\$ 1,150	\$ 1,122
1989-90	\$ 16,672,650	\$ 16,313,685	15,035	\$ 1,150	\$ 1,110
1990-91	\$ 18,839,300	\$ 17,175,945	16,127	\$ 1,200	\$ 1,100
1991-92	\$ 18,215,531	\$ 16,588,799	16,987	\$ 1,200	\$ 990
1992-93	\$ 16,564,373	\$ 15,809,054	17,424	\$ 1,200	\$ 924
1993-94	\$ 18,539,373	\$ 17,849,215	16,820	\$ 1,200	\$ 1,090
1994-95	\$ 19,872,443	\$ 17,322,155	15,928	\$ 1,300	\$ 1,090
1995-96	\$ 19,852,300	\$ 19,454,893	16,257	\$ 1,200	\$ 1,200
1996-97	\$ 28,852,200	\$ 28,789,377	17,061	\$ 1,800	\$ 1,725
1997-98	\$ 28,852,200	NA	20,344*	\$ 1,800	\$ 1,600

Source: Department of Education, Office of Student Financial Assistance.

^{*}Preliminary estimate - Term 1

TABLE 4

NON-PROFIT BACCALAUREATE INSTITUTIONS AND OF THE INDEPENDENT/PUBLIC TUITION GAP, RESIDENT ACCESS GRANT AS A PERCENTAGE OF AVERAGE TUITION AND FEES IN INDEPENDENT

1979-80 TO 1997-98

	Independent	SOS	Independent/Public	FRAG	FRAG as %	FRAG as %
	Average T & F	Average T & F	Tuition Gap	Award	of Independent T & F of Tuition Gap	of Tuition Gap
1979-80	\$ 2,548	\$ 750	\$ 1,798	05/ \$	%67	42%
1980-81	\$ 2,866	\$ 750	\$ 2,116	05/ \$	79%	35%
1981-82	\$ 3,195	\$ 770	\$ 2,425	\$ 750	23%	31%
1982-83	\$ 3,529	\$ 795	\$ 2,734	\$ 717	20%	26%
1983-84	\$ 3,869	\$ 840	\$ 3,029	\$ 716	19%	24%
1984-85	\$ 4,254	\$ 800	\$ 3,354	<i>\$LL</i> \$	18%	23 %
1985-86	\$ 4,493	\$ 800	\$ 3,593	\$ 852	19%	24%
1986-87	\$ 4,614	\$ 1,000	\$ 3,614	\$ 1,000	22%	28%
1987-88	\$ 5,072	\$ 1,050	\$ 4,022	\$ 1,100	22%	27%
1988-89	\$ 5,520	\$ 1,100	\$ 4,420	\$ 1,122	20%	25%
1989-90	\$ 6,494	\$ 1,195	\$ 5,299	\$ 1,110	17%	21%
1990-91	\$ 6,974	\$ 1,344	\$ 5,630	\$ 1,110	16%	20%
1991-92	\$ 7,647	\$ 1,512	\$ 6,135	066 \$	13%	16%
1992-93	\$ 8,184	\$ 1,706	\$ 6,478	\$ 924	11%	14%
1993-94	\$ 8,962	\$ 1,765	\$ 7,197	\$ 1,090	12%	15%
1994-95	\$ 9,566	\$ 1,783	\$ 7,783	\$ 1,090	11%	14%
1995-96	\$ 10,677	\$ 1,795	\$ 8,882	\$ 1,200	11%	14%
1996-97	\$ 11,290	\$ 1,888	\$ 9,402	\$ 1,725	15%	18%
1997-98	\$ 11,084	\$ 1,994	060'6 \$	\$ 1,600	14%	18%

Source: Department of Education, Office of Student Financial Assistance.

FRAG RECIPIENTS IN ICUF INSTITUTIONS ALSO RECEIVING FSAG

PRELIMINARY 1996-97 AWARDS

TABLE 5

	FRAG	FSAG	Number FRAG	Percent FRAG
Institution	Recipients	Recipients	Recipients also	Recipients also
	_	-	Receiving FSAG	Receiving FSAG
Barry University	1,018	360	354	35%
Bethune Cookman College	1,321	584	486	37%
Clearwater Christian	275	98	95	35%
Eckerd College	494	185	182	37%
Edward Waters College	62	19	10	16%
Embry-Riddle University	517	209	201	39%
Flagler College	861	213	211	25%
Florida Institute of Technology	377	188	164	44%
Florida Memorial College	922	345	286	31%
Florida Southern College	1,271	308	305	24%
Jacksonville University	738	225	222	30%
Lynn University	198	42	38	19%
Nova Southeastern Univ.	1,447	475	447	31%
Palm Beach Atlantic Univ.	762	195	189	25%
Ringling School	338	131	131	39%
Rollins Collins	811	246	184	23%
Saint Leo College	1,092	389	351	32%
Saint Thomas University	596	188	186	31%
Stetson University	1,276	411	401	31%
University of Miami*	3,513	1,441	1,384	39%
University of Tampa	705	223	223	32%
Warner Southern College	541	130	127	23%
Webber College	209	64	63	30%
Total	19,344	6,669	6,240	34%

FRAG - Florida Resident Access Grant FSAG - Florida Student Assistance Grant

*Note: The University of Miami is not a member of ICUF.

Source: Department of Education, Office of Student Financial Assistance.

TABLE 6

COST-BENEFIT ANALYSIS OF THE FRAG SUS Cost Factors

SUS Cost Factors Per Undergraduate FTE

	\$	SCH	\$/SCH	Tuition/SCH	NET
Instruction	3,910	40	98		de a la company
Academic Advising	443	40	11		
Academic Administration	910	40	23		
Public Service	145	40	4		
Research	1,264	40	32		
Library Staffing	395	40	10		
Library Resources	290	40	7		
University Support	1,322	40	33		
Financial Aid	146	40	4		
Student Services, Other	536	40	13		
Capital Outlay	936		23		
TOTAL	10,297		257		
Shaded Total	8,742		211.30		
w/o Capital Outlay	9,361	20000	234		
w/o Capital Outlay	7,806		188		

NOTE: Capital Outlay Costs for SUS are italicized and assumed to be 10% of Operating Costs.

SOURCE: SUS - 1996-97 Allocation

TABLE 7A

COST-BENEFIT ANALYSIS OF THE FRAG

Per Credit Hour Cost to Taxpayers

(Using highest and lowest estimates for public sector and 1997-98 FRAG award level)

	\$	SCH	\$/SCH	Tuition/SCH	NET	FRAG % of Public
FRAG	1,600	32	50	0	50	## ***********************************
CCS	4,107	30	137	33	104	48.1%
CCS	3,734	30	124	33	91	54.7%
SUS	10,297	40	257	41	217	23.1%
SUS	7,806	40	195	41	154	32.4%

When CCS	When CCS and SUS Costs are combined, e.g., "2+2", then:							
"2 + 2"	7,367	35	209	37	<i>172</i> 2	29.1%		
"2 + 2"	5,879	35	167	37	1 29 3	88.6%		

"2+2" Enrollment calculations based on the undergraduate and A&P FTE in the 1997-98 Appropriations Act for public institutions.

NOTE: Capital Outlay Costs for CCS & SUS are italicized and assumed to be 10% of Operating Costs.

SOURCES:

CCS - Gary Yancey, 1995-96 Cost Analysis

SUS - 1996-97 Allocation

TABLE 7B

COST-BENEFIT ANALYSIS OF THE FRAG

Per Credit Hour Cost to Taxpayers

(Using highest and lowest estimates for public sector and 1998-99 requested FRAG award level)

]	FRAG % of
	\$	SCH	\$/SCH	Tuition/SCH	NET	Public
FRAG	2,214	32	69	. 0	69	
CCS	4,107	30	137	33	104	66.6%
ccs	3,734	30	124	33	91	75.7%
SUS	10,297	40	257	41	217	31.9%
SUS	7,806	40	195	34	161	43.0%

When	CCS and SUS (Costs are c	ombined, e.g.	., "2+2", then:		
"2 + 2"	7,367	35	209	37	172	40.3%
"2 + 2"	5,879	35	167	34	133	52.0%

"2+2" Enrollment calculations based on the undergraduate and A&P FTE in the 1997-98 Appropriations Act for public institutions.

 $NOTE: \ \textit{Capital Outlay Costs for CCS \& SUS are italicized and assumed to be 10\% of Operating \ \textit{Costs}.}$

SOURCES:

CCS - Gary Yancey, 1995-96 Cost Analysis

SUS - 1996-97 Allocation

TABLE 7C

COST-BENEFIT ANALYSIS OF THE FRAG

Per Credit Hour Cost to Taxpayers

(Using highest and lowest estimates for public sector and 1999-2000 potential FRAG award level)

	\$	SCH	\$/SCH	Tuition/SCH	NET	FRAG % of Public
FRAG	3,000	32	94	0	94	·
CCS	4,107	30	137	33	104	90.2%
CCS	3,734	30	124	33	91	102.5%
SUS	10,297	40	257	41	217	43.3%
SUS	7,806	40	195	34	161	58.2%

When	CCS and SUS Co	osts are co	mbined, e.g.,	"2+2", then:		
"2 + 2"	7,367	35	209	37	172	54.6%
"2 + 2"	5,879	35	167	34	133	70.4%

"2+2" Enrollment calculations based on the undergraduate and A&P FTE in the 1997-98 Appropriations Act for public institutions.

NOTE: Capital Outlay Costs for CCS & SUS are italicized and assumed to be 10% of Operating Costs.

SOURCES:

CCS - Gary Yancey, 1995-96 Cost Analysis

SUS - 1996-97 Allocation

TABLE 8

COMPARISON OF INDEPENDENT SECOTR TUITION OFFSET GRANT PROGRAMS

State	Program	Maximum Award Maximum Award	Maximum Award	1996-97 Average Public
		(26-94)	(94-68)	University Tuition and Fees
Alabama	Student Grant	\$1,200	\$1,200	\$2,470
Florida	Resident Access Grant	\$1,725	\$1,600	\$1,888
Georgia	Tuition Equalization Grant	\$1,000	\$1,000	\$2,694
North Carolina	North Carolina Legislative Tuition	\$1,300	\$1,450	\$2,110
Ohio	Student Choice Grant	00/\$	008\$	\$3,468
Virginia	Tuition Assistance Grant	\$1,750	\$2,000	\$4,648

Sources: Commission Phone Survey, October, 1997; Tuition and Fee Rates, Washington State Higher Education Coordinating Board, January, 1997.

APPENDIX B COST BENEFIT ANALYSIS

COST BENEFIT ANALYSIS

A cost benefit analysis (sometimes refereed to as benefit cost analysis or cost effectiveness) is "a technique for systematically estimating the efficiency impacts of policies" (Weimer and Vining 1992, p. 259). Formal cost benefit analysis can trace its roots to early 19th century analyses of bridge building (Averch 1990). This type of study seeks to maximize social surplus (cost benefit ratio) for a particular policy or set of policies by calculating the cost to provide specific benefits while balancing issues of equity and efficiency (Rhoads 1985). Of course, bridge building and higher education are very dissimilar, but the principles underlying a cost benefit analysis are the same and will be used here.

A cost benefit study entails some basic steps that guide the analysis (adapted from Weimer and Vining - for a fuller treatment see Thompson 1980, Anderson and Settle 1977, and Gramlich 1981): 1) relevant policies and impacts; 2) monetarily estimating impacts and policies; 3) calculating cost benefit ratios; and 4) choosing among policies.

Identifying the relevant policies and impacts for each of the affected stakeholders is the first step in a cost benefit analysis. Each impact must then be classified as a cost or a benefit. The second step is to assign a dollar amount to each impact. Next, the costs and benefits for each policy or policy option are summed and a ratio of costs to benefits is calculated. The final step is to choose a policy based on either the best ratio, cost limitations, or to reach a specific benefit level.

Policies, Impacts, and Stakeholders

The policy under analysis is the funding of private education through the use of public tax dollars, specifically the FRAG. There are three different stakeholders with standing concerning this policy - students, institutions, and taxpayers. Each stakeholder feels the impact differently, and at times, the impacts are contradictory. For instance, low tuition is beneficial to the student, but unless it is subsidized from another source, it is damaging to the institution. Of course, when tuition is subsidized by the taxpayers, then cost to the taxpayer increases. Thus, there are trade-offs between policies, impacts, and stakeholders.

Monetizing Policies and Impacts

This is the most difficult step in performing a cost benefit analysis because a series of assumptions about costs, benefits, behavior, and policies will have to be made. The validity of the analysis hinges on making the correct assumptions and taking the measurements with the right instrument in the proper metric.

According to Davis Weimer and Aidan Vining, "the basic principle underlying benefit-cost analysis is the Kaldor-Hicks criterion: a policy should be adopted only if those who will gain could fully compensate losers and still be better off" (1992, p. 263). Oftentimes, this criterion is confused with the more stringent Pareto efficient criterion which demands that "winners" must actually compensate "losers." The difference between Kaldor-Hicks and the Pareto efficient condition is that Kaldor-Hicks may cause harm to one or more of the stakeholders, while at the same time maximizing the social surplus of benefits to costs. The Pareto condition, on the other hand, demands that no one be more worse off. The present study, unlike most cost benefit

analyses, will use the more rigorous and socially equitable Pareto efficient condition as a criteria for policy evaluation.

There are two broad concepts that help us understand and estimate changes in social surplus: opportunity costs and willingness to pay. The opportunity cost of a policy is the "value of the required resources in their best alternative use" (Weimer and Vining 1992, p. 264). In other words, can the resources that are used be put to a different use that increases social surplus? More plainly, if we spend the money differently, can we achieve a better outcome for all of the stakeholders. The concept of opportunity costs required the policy analyst to specify alternative policies and estimate the costs and benefits of each.

The second concept, willingness to pay, concerns how much persons are willing to pay in order to achieve a certain outcome (benefit) or to avoid outcomes that they do not like. Thus, the policy analyst does not offer alternative policies, but calculates social surplus by balancing costs and benefits under different assumptions. There are two methods of determining willingness to pay: surveys and actual behavior.

Calculating Cost Benefit Ratios

This is the easiest part of a cost benefit analysis. After the costs and benefits have been monetized for each policy alternative, then we simply divide the cost of each by the requisite benefit. This is the cost benefit ratio, and here the objective is to achieve the lowest ratio of costs to benefits.

Choosing Among Policies

If there are no constraints with regard to costs, then the policy that produces the greatest benefit should be adopted. However, if there are cost constraints, then policy selection is reduced to selecting the most efficient option, or the option that produces a specific benefit level at the lowest possible cost. For instance, it is reasonable to assume that the State of Florida has a cost constraint, namely the requirement that the budget stay balanced and that there are no specific targeted benefit levels. Thus, this analysis will seek the most efficient solution that meets the Pareto condition.