

### UPDATE OF STATE-LEVEL PLANNING GUIDELINES FOR NEW COLLEGES AND UNIVERSITIES IN FLORIDA

Report and Recommendations by the Florida Postsecondary Education Planning Commission

### UPDATE OF STATE-LEVEL PLANNING GUIDELINES FOR NEW COLLEGES AND UNIVERSITIES IN FLORIDA

### Summary of Key Findings

### Overview and Background of Study

This report presents the key findings from an update of the state-level planning criteria and guidelines for new colleges and universities in Florida that were originally prepared by MGT of America, Inc. for the Postsecondary Education Planning Commission (PEPC) in 1991. The goal of the 1991 study was to develop objective criteria to assist the state in determining if and where there were justifiable needs for postsecondary education (both at the university and community college levels) that were not being met in an adequate manner, and to propose a process for addressing these unmet needs. One of the ultimate outcomes of this study was the development of Florida Gulf Coast University in Fort Myers. Since that time, PEPC has continued to address the issue of access through periodic master plan updates and other legislatively mandated studies.

The 2000 Florida Legislature mandated that PEPC conduct an independent assessment of the baccalaureate program needs in five specific counties (Broward, Pinellas, Sarasota/Manatee, and Volusia), to be submitted to the Legislature and Governor by January 2001. Given that the initial study on new college and university planning processes was conducted almost ten years ago, PEPC officials determined a need to update the supporting criteria and guidelines.

### **Key Findings**

One of the major themes underlying the original study was the direct linkage between states with strong economies and strong systems of higher education. Governmental and business leaders in Florida and across the nation see economic prosperity as being closely linked to the development and expansion of high technology and other knowledge-based industries (e.g., health care, professional services). Among the reasons for this belief are that such industries generally have relatively high wages, are environmentally-friendly, and have significant growth potential for the future.

Clearly, a strong system of higher education is one of the most important foundational elements in promoting and sustaining growth in these knowledge-based industries for a state. This linkage is even more important now than in the past, given the rapid growth in technology applications. While the globalization of the economy has also resulted in increased labor mobility among educated professionals (both at a national and international level), economists generally agree that true industry sustainability also requires a well-developed regional labor force capacity as well. In other words, knowledge-based industries cannot expect long-term growth without an adequate labor pool of trained professionals within the local region.

According to the Florida Information Service Technology Development Task Force, the lack of a well-educated and trained workforce is a serious problem for Florida:

Skilled labor and education are the biggest problems facing industry here in Florida ... The dominant problems are found in availability of skilled labor and the lack of a quality education system needed to create a skilled labor force in the state.<sup>1</sup>

In keeping with the theme of economic strength and competitiveness, comparisons of Florida to other states on key economic and educational indicators play a significant role in the analyses conducted as part of this update. In turn, the planning criteria and guidelines flow from these national comparisons. Highlights from these analyses are presented below.

### **National Comparisons**

The updated national comparisons of economic and educational indicators underlying the planning criteria and guidelines are presented in Exhibits 1 through 16 at the end of this document. The key findings are presented below:

- Exhibit 1 compares the constant dollar change in per capita personal income between 1989 and 1999 for the 50 states. As indicated, Florida ranks 46<sup>th</sup> among the states on this measure, with a growth rate that is almost half that of the U.S. average. It is also interesting to note that Florida's per capita income level dropped in the rankings during this period as well, from 15<sup>th</sup> in 1989 to 19<sup>th</sup> in 1999.
- Exhibit 2 compares Florida to the other 49 states on total institutions (public and private) per 1 million target age population (TAP), which is defined as those individuals age 18 to 44. As indicated, Florida ranks near the bottom on total institutions per TAP (46<sup>th</sup>). Exhibits 3 through 5 provide a similar look at institutions by type per TAP. Again, Florida tends to rank near the bottom by institutional type as well.
- Exhibit 6 compares the distribution of current higher education enrollment by state according to public four-year, public two-year, and private institution enrollment. As indicated, Florida tends to be below average on the percent of its enrollment in public four-year institutions when compared to the high economic growth states, although above average on percent of enrollment in public two-year and private institutions.
- Exhibits 7 through 11 provide state comparisons on degrees awarded by level per 100,000 TAP (adjusting for student migration). With one notable exception (associate degrees granted), Florida

<sup>&</sup>lt;sup>1</sup> *IT florida.com: Florida's Gateway to Information Technology*. Florida Information Service Technology Development Task Force 1999 Annual Report to the Legislature, February 14, 2000, p. 23.

ranks in the lower half of all states in degrees granted per 100,000 TAP, and is 47<sup>th</sup> on baccalaureate degrees granted.

- Exhibits 12 through 15 provide state comparisons on enrollment by level per 100,000 TAP (adjusting for student migration). Again, with one exception (lower division undergraduate), Florida ranks in the lower half of all states on these measures.
- Exhibit 16 compares Florida to the high economic growth states on enrollment by level per 100,000 TAP. Once again, Florida is above the average of the high growth states on lower division undergraduate enrollment per 100,000 TAP, but well below the high growth states' average on upper division undergraduate, graduate, and professional enrollment.

The table below summarizes Florida's performance on the previously discussed indicators versus the U.S. average, and the state's relative ranking. Florida's ranking at the time of the 1991 study is also shown in parentheses. In some cases Florida's ranking has improved marginally since the original study, in others it has declined marginally, and in others it has remained the same. The most startling change, however, is the fact that Florida now ranks near the bottom of all states on real per capita income growth since 1989, when it was in the top quintile of all states in the 1991 study on that same measure.

### SUMMARY OF FLORIDA'S PERFORMANCE ON KEY ECONOMIC AND HIGHER EDUCATION INDICATORS VERSUS THE NATIONAL AVERAGE

Indicator	U.S. Average	FLORIDA	Florida's National Rank (1991 study results in parentheses)
Growth in Per Capita Personal Income,			Jan en arace ey
1989 to 1999 (Constant 1999\$)	14.5%	7.9%	46 (12)
Institutions (per 1 Million TAP)			
Graduate and Research Universities	2.16	1.65	37 (48)
Other Four-Year Institutions	18.86	11.36	45 (46)
Two-Year Institutions	16.17	12.64	41 (46)
All Institutions	37.19	25.65	46 (46)
Degrees Granted (per 100,000 TAP)			
Associate	740	457	4 (NR)
Baccalaureate	1,045	831	47 (47)
Master's	374	288	39 (37)
Doctorate	40	33	30 (32)
First Professional (e.g., JD, MD, DDS)	68	49	33 (29)
Enrollment (per 100,000 TAP)			
Lower Division Undergraduate	8,148	8,394	21 (23)
Upper Division Undergraduate	2,765	2,304	43 (48)
Graduate	1,507	1,109	40 (37)
First Professional	254	176	32 (33)

Source: Summarized from Exhibits 1-15 and 1991 MGT study. Note: "TAP" is "Target Age Population" (18-44 Year Olds).

### Planning Criteria/Guidelines

The original planning criteria/guidelines for determining the potential need for a new institution within a region that were developed in 1991 encompass four areas:

- Participation Rate The extent to which the residents of a region are currently participating in higher education in Florida.
- Population Base The extent to which there is an adequate population base within a region to support the development of a new public institution.
- Geographic Access The extent to which residents of a region have reasonable access (measured by both time and distance) to public higher education.
- Other Extenuating Circumstances The extent to which other, more qualitative, factors support the development of a new public institution within the region.

This section presents an updated analysis of each of the guidelines underlying these four criteria, and MGT's recommendations regarding the guidelines.

**Participation Rate.** For Florida's planning purposes it is important to assess higher education participation rates at a regional level. Exhibit 17 provides an estimate of total Florida public institution (i.e., SUS institutions and community colleges) enrollments of resident students per 100,000 TAP by county of origin in Fall 1999. These data should be taken as **rough estimates** of participation rates given that the home county of community college students is not currently collected as a data element by the State Board of Community Colleges, only the fact that the student is a Florida resident. Further, no data exist in a centralized format to reasonably estimate the residency status or county of origin of students enrolled at Florida's private institutions.

As indicated, there is wide variance among the 67 counties on participation both in total and by level. In keeping with the direct linkage with economic growth, we recommend that the threshold for determining the potential need for a new institution within a region be that the regional higher education participation by level (lower level undergraduate, upper level undergraduate, and graduate) is <u>below</u> that of the average for high economic growth states as shown in Exhibit 16 earlier.

**Population Base.** Participation rate is just one factor to be considered in assessing the need for higher education at a sub-state level. Clearly, a region must have sufficiently large population base to generate enough student enrollment to establish a cost-effective institution. Our updated analyses reconfirmed the results of the 1991 study that found that overhead costs<sup>2</sup> decline significantly until a community college reaches an FTE enrollment of 4,500 and a university 7,500. In turn, this reconfirms our criteria recommendations for minimum institutional size:

- 1. A new community college must have the potential of achieving an FTE enrollment of 2,250 FTE students within five years after opening, and 4,500 within 10 years.
- 2. A new university must have the potential of achieving an FTE enrollment of 3,750 FTE students within five years after its opening date, and 7,500 within 10 years.

The intermediate enrollment levels included in the criteria (five year levels) reflect the fact that new institutions require several years to "ramp up" to full enrollment levels. For example, Florida Gulf Coast University, which officially opened its doors in Fall 1997, currently is at approximately 2,000 FTE students.

Exhibits 18 and 19 provide estimates of the target age population bases that would be needed by a region to produce 2,250 FTE students for a new community college, and 3,750 FTE students for a new state university, assuming a modest increase in the desired higher education participation rate for the state. These estimates are based on enrollment rates derived from current state enrollment patterns using the

<sup>&</sup>lt;sup>2</sup> "Overhead costs" are defined as all institutional operating expenditures that support the primary missions of instruction, research, and public service. They include academic support, institutional support, student services, and plant operations and maintenance expenditures.

methodology applied in the original study. Based on our updated analyses, we recommend that:

- to be considered for a new community college, a region must have a current population (18-44) of at least 73,800, and/or be projected to be at that level within five years after the new institution opens; and,
- to be considered for a new state university, a region must have a current population (18-44) of at least 262,500, and/or be projected to be at that level within five years after the new institution opens.

It should be noted that even with the updated enrollment pattern data, these minimum population criteria are quite similar to those produced in the 1991 study.

Geographic Access. Another criterion to be considered in determining the potential need for a new institution within a region is the extent to which residents have reasonable geographic access to a community college or state university. Geographic access should be measured in terms of both time and distance, given that the time dimension can vary substantially depending on location. For example, in large metropolitan areas the time it takes to travel 10 miles can be much longer than the time to travel the same distance in a more rural area given traffic congestion and related considerations. Likewise, the service area for a community college will need to be smaller than that for a university, given the inherent mission of community colleges to serve their local communities.

We have reduced the time and distance thresholds for both community colleges and state universities somewhat from those originally set in the 1991 study (by roughly 25 percent) for two reasons. First, as was demonstrated earlier, Florida continues to lag behind other states on key economic and educational indicators and we believe that providing more access to higher education for residents across the state is key to improving Florida's performance on these measures. Second, surveys of working adults conducted as part of higher education needs assessments in other states by MGT (e.g., Illinois, Missouri, Virginia) have demonstrated repeatedly (and not surprisingly) that convenient access to academic programs is one of the primary determinants to higher education participation for working adults. In short, if working adults and other potential students face academic barriers of time and/or distance, they are less likely to take advantage of higher education offerings.

**Other Extenuating Circumstances.** Finally, as originally noted in the 1991 study, there are also more qualitative criteria that should be brought to bear on the issue of potential need for a new institution within a region, including:

- The success of predecessor delivery systems in the region (e.g., joint-use centers, branch campuses) A history of robust participation in existing delivery systems in the community increases the likelihood that a new institution would be equally successful in the future.
- The lack of appropriate programs through existing delivery systems

   Special consideration should be given to those communities where there is a demonstrated need for certain academic programs that are unable to be offered through existing delivery systems.

■ There is a quantifiable demand from local employers – This criterion was not specifically recommended in the 1991 study, but given the linkage between higher education and economic growth, special consideration should be given to communities where the educational and training needs of employers are not being well-met through existing delivery systems.

The information needed to address these criteria are typically collected through surveys and focus groups with adult residents and employers in the region.

Exhibit 20 summarizes MGT's updated recommended criteria and guidelines for determining the potential need for a new institution within a region as previously discussed. The criteria and guidelines recommended in the 1991 study are also presented for comparison purposes.

### **Conclusions**

The findings of this study indicate that Florida continues to lag much of the rest of the nation in higher education participation and degree production, a situation that has not changed significantly since the original study was completed in 1991. Perhaps the most alarming finding, however, is that Florida ranks near the bottom in terms of per capita income growth over last ten years, when it was near the top in the 1991 study. It is no coincidence that Florida's position relative to the rest of the nation on higher education participation and degree production has also remained stagnant during this period.

Florida's mediocre performance in higher education was recently confirmed by the National Center for Public Policy and Higher Education's state-by-state report card on higher education.<sup>3</sup> This report card graded all 50 states on a number of performance areas including preparation for college, college participation, affordability, persistence and completion, and the benefits, or "return on investment" realized from the state's system of higher education. This report gave Florida a "D+" on participation for the low proportion of state residents enrolled in education beyond high school. Not surprisingly, the report also gave Florida a "C-" for the benefits it receives from the state's system of higher education, including educational attainment, economic benefits, and adult skill levels (e.g., literacy).

The planning criteria and guidelines originally recommended in 1991 are largely unchanged as the result of our updated analyses. We believe that this reaffirms the appropriateness of the methodology and approach used. In cases where we have recommended changes, it is due to changes in underlying quantitative or qualitative information. As underscored by the recently released national report card, however, the more significant issue for the state, is not the criteria for assessing potential regional need, but instead Florida's continued lack of competitiveness with other states on higher education participation and degree production, and the ultimate impact this has on sustainable economic growth and quality of life for the state. This situation can only be improved if all Floridians have a reasonable chance to participate in, and thereby benefit from, higher education.

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<sup>&</sup>lt;sup>3</sup> See *Measuring Up 2000: The State-by-State Report Card for Higher Education*, National Center for Public Policy and Higher Education, <a href="https://www.measuringup2000.highereducation.org">www.measuringup2000.highereducation.org</a>.

## EXHIBIT 1 COMPARISON OF FLORIDA PER CAPITA INCOME TO THAT OF OTHER STATES IN 1989 AND 1999 (EXPRESSED IN 1999 CONSTANT DOLLARS)

			Amountof	Percent	STATE
State Name	1989 A/	1999 A/	Increase	Increase B/	RANKING
Colorado	\$25,065	\$31,546	\$6,481	25.9	1
South Dakota	\$19,955	\$25,045	\$5,090	25.5	3
Utah	\$18,888	\$23,288	\$4,400	23.3	3
Mississippi	\$16,946	\$20,688	\$3,742	22.1	4
Texas	\$22,058	\$26,858	\$4,800	21.8	5
Louisiana	\$18,915	\$22,847	\$3,932	20.8	6
Washington	\$25,230	\$30,392	\$5,162	20.5	7
Georgia	\$22,707	\$27,340	\$4,633	20.4	8
North Dakota	\$19,401	\$23,313	\$3,912	20.2	9
Minnesota	\$25,630	\$30,793	\$5,163	20.1	10
Wyoming	\$22,139	\$26,396	\$4,257	19.2	11
Arkansas	\$18,666	\$22,244	\$3,578	19.2	12
Tennessee	\$21,464	\$25,574	\$4,110	19.2	13
Nebraska	\$22,808	\$27,049	\$4,241	18.6	14
Kentucky	\$19,732	\$23,237	\$3,505	17.8	15
South Carolina	\$20,046	\$23,545	\$3,499	17.5	16
Illinois	\$26,532	\$31,145	\$4,613	17.4	17
Nevada	\$26,443	\$31,022	\$4,579	17.3	18
Wisconsin	\$23,377	\$27,390	\$4,013	17.2	19
Massachusetts	\$30,349	\$35,551	\$5,202	17.1	20
North Carolina	\$22,350	\$26,003	\$3,653	16.3	21
Kansas	\$23,099	\$26,824	\$3,725	16.1	22
Oregon	\$23,273	\$27,023	\$3,750	16.1	23
Indiana	\$22,662	\$26,143	\$3,481	15.4	24
New Mexico	\$19,034	\$21,853	\$2,819	14.8	25
West Virginia	\$18,282	\$20,966	\$2,684	14.7	26
Iowa	\$22,381	\$25,615	\$3,234	14.4	27
Missouri	\$23,085	\$26,376	\$3,291	14.3	28
Alabama	\$20,134	\$22,987	\$2,853	14.2	29
New York	\$29,684	\$33,890	\$4,206	14.2	30
Idaho	\$20,004	\$22,835	\$2,831	14.2	31
Michigan	\$24,697	\$28,113	\$3,416	13.8	32
Pennsylvania	\$25,304	\$28,605	\$3,301	13.0	33
Connecticut	\$34,861	\$39,300	\$4,439	12.7	34
Ohio	\$24,088	\$27,152	\$3,064	12.7	35
Arizona	\$22,389	\$25,189	\$2,800	12.5	36
New Hampshire	\$27,885	\$31,114	\$3,229	11.6	37
New Jersey	\$31,885	\$35,551	\$3,666	11.5	38
Virginia	\$26,730	\$29,789	\$3,059	11.4	39
Montana	\$19,761	\$22,019	\$2,258	11.4	40
Oklahoma	\$20,628	\$22,953	\$2,325	11.3	41
Rhode Island	\$26,564	\$29,377	\$2,813	10.6	42
Vermont	\$23,672	\$25,889	\$2,217	9.4	43
Maryland	\$29,731	\$32,465	\$2,734	9.2	44
Delaware	\$28,284	\$30,778	\$2,494	8.8	45
FLORIDA	\$25,736	\$27,780	\$2,044	7.9	46
Maine	\$22,819	\$24,603	\$1,784	7.8	47
California	\$28,061	\$29,910	\$1,849	6.6	48
Hawaii	\$27,757	\$27,544	-\$213	-0.8	49
Alaska	\$29,089	\$28,577	-\$512	-1.8	50
WEIGHTED AVERAGE	\$23,806	\$27,250	\$3,444	14.5	

A/ Personal income is published in thousands of dollars, population in number of persons, and per capita personal income in dollars. All dollar estimates are in current dollars.

B/ Equal to [(Amount of Increase)/1989]\*100

U.S. Department of Commerce, Bureau of Economic Analysis (2000). SA2 Per capita personal income. Personal Income for States, 1958–99 [WWW document]
URL:http://www.bea.doc.gov/bea/regional/spi/recent.asp

## EXHIBIT 2 NUMBER OF INSTITUTIONS OF HIGHER EDUCATION PER 1,000,000 TARGET AGE POPULATION (18-44) IN THE FIFTY STATES

		UATE/	OTUED	AVEAD						
	_	ARCH SITIES A/		4-YEAR TIONS B/	2-VEAD ING	STITUTIONS	TOTAL INS	PICTITITE	Total par 1	National
STATE	PUBLIC	PRIVATE	PUBLIC	PRIVATE	PUBLIC	PRIVATE	PUBLIC	PRIVATE	M TAP	Rank
Vermont	4.14	0.00	16.54	62.03	4.14	16.54	24.81	78.57	103.38	1
South Dakota	3.61	0.00	25.30	36.15	21.69	3.61	50.61	39.76	90.37	2
Montana	6.17	0.00	12.33	15.41	36.99	15.41	55.49	30.83	86.31	3
North Dakota	8.05	0.00	16.10	16.10	36.23	8.05	60.38	24.15	84.53	4
Maine	2.01	2.01	14.06	24.11	14.06	14.06	30.14	40.18	70.32	5
New Mexico	2.99	0.00	5.97	20.91	31.36	4.48	40.32	25.39	65.71	6
Minnesota	0.53	0.53	5.27	19.51	24.26	10.55	30.06	30.59	60.65	7
Iowa	1.84	0.00	0.92	34.13	15.68	6.46	18.45	40.59	59.03	8
Nebraska	1.56	0.00	9.36	24.96	14.04	7.80	24.96	32.76	57.71	9
Kansas	2.88	0.00	6.73	20.18	22.10	4.80	31.71	24.98	56.69	10
Pennsylvania	1.09	1.31	8.70	20.67	4.57	18.72	14.36	40.70	55.06	11
Missouri	1.88	0.94	4.22	26.76	9.39	9.39	15.49	37.09	52.58	12
New Hampshire	2.01	4.01	8.03	24.08	8.03	6.02	18.06	34.12	52.18	13
Massachusetts	0.79	3.56	5.14	29.26	7.12	5.14	13.05	37.96	51.01	14
West Virginia	1.46	0.00	17.53	14.61	5.84	10.23	24.84	24.84	49.68	15
Wyoming	5.45	0.00	0.00	0.00	38.15	5.45	43.60	5.45	49.05	16
Arkansas	1.04	0.00	9.39	10.43	23.99	4.17	34.42	14.60	49.03	17
Louisiana	2.30	0.57	5.75	6.32	28.17	5.75	36.22	12.65	48.87	18
Alabama	2.29	0.00	8.01	11.44	17.73	5.72	28.02	17.15	45.17	19
New York	0.82	2.33	4.93	20.96	6.44	8.22	12.19	31.51	43.70	20
Colorado	3.11	0.62	4.98	14.31	9.33	11.20	17.42	26.13	43.55	21
Oregon	2.37	0.00	3.95	20.53	13.42	2.37	19.74	22.90	42.64	22
Hawaii	2.11	0.00	4.22	14.76	14.76	6.33	21.08	21.08	42.17	23
Mississippi	2.74	0.00	5.48	10.04	20.09	3.65	28.31	13.70	42.00	24
Indiana	2.11	0.42	3.79	16.85	5.90	11.38	11.80	28.65	40.45	25
Kentucky	1.26	0.00	3.79	17.05	8.84	8.84	13.89	25.89	39.78	26
Ohio	2.24	0.45	3.81	14.58	8.08	10.54	14.13	25.57	39.71	27
North Carolina	0.98	0.65	4.26	13.42	18.99	1.31	24.23	15.39	39.62	28
South Carolina	1.27	0.00	6.36	14.63	13.35	3.18	20.99	17.81	38.79	29
Tennessee	1.83	0.46	2.74	19.63	6.39	6.85	10.95	26.93	37.88	30
Arizona	1.66	0.00	1.10	11.04	11.04	12.15	13.80	23.19	37.00	31
Oklahoma	1.57	0.79	9.43	10.22	12.58	1.57	23.58	12.58	36.16	32
Illinois	1.03	1.03	1.44	18.30	10.08	3.50	12.55	22.83	35.38	33
Connecticut	0.78	0.78	3.88	13.97	9.31	3.88	13.97	18.62	32.59	34
Delaware	3.21	0.00	3.21	12.83	9.62	3.21	16.04	16.04	32.08	35
Wisconsin	0.97	0.48	5.31	14.96	9.17	0.97	15.44	16.41	31.85	36
Georgia	0.92	0.92	5.20	11.61	11.00	2.14	17.11	14.67	31.78	37
Virginia	2.07	0.00	3.10	13.78	8.27	4.48	13.44	18.26	31.70	38
Idaho	4.19	0.00	4.19	10.46	6.28	6.28	14.65	16.74	31.39	39
Alaska	3.92	0.00	7.84	11.76	3.92	3.92	15.69	15.69	31.37	40
Washington	0.86	0.00	2.58	11.16	14.16	2.15	17.60	13.31	30.90	41
Rhode Island	2.52	2.52	2.52	20.14	2.52	0.00	7.55	22.66	30.21	42
California	0.72	0.87	1.59	12.26	7.86	5.26	10.16	18.38	28.55	43
Michigan	1.27	0.51	2.53	14.43	7.34	1.77	11.14	16.71	27.84	44
Maryland	0.93	0.47	5.12	9.77	9.31	1.40	15.35	11.63	26.98	45
FLORIDA	1.10	0.55	0.73	10.63	5.13	7.51	6.96	18.69	25.65	46
Utah	2.32	1.16	3.47	3.47	4.63	9.26	10.42	13.90	24.32	47
Texas	1.24	0.50	3.84	6.44	8.42	3.59	13.50	10.53	24.03	48
Nevada	1.45	0.00	1.45	4.36	5.81	7.26	8.72	11.62	20.34	49
New Jersey	0.93	0.93	3.42	5.29	5.91	1.87	10.26	8.09	18.35	50
50 States										
Weighted										
Average	1.39	0.77	4.16	14.70	10.06	6.11	15.61	21.59	37.19	
High Growth										
States Average	1.54	0.51	4.77	10.05	13.46	4.86	19.76	15.42	35.18	

National Center for Education Statistics (1999). Table 247.-Degree-granting institutions of higher education and branches, by type, control of institution, and state:1997-98. <u>Digest of Education Statistics 1999</u> [WWW document].URL:http://www.nces.ed.gov/pubs2000/digest99/d99t247.html

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex:Annual Time series, July 1, 1990 to July 1, 1999 [WWW Document] URL: http://www.census.gov/population/estimates/state/st-99-09.txt

A\ Graduate\Research institutions include those named "Research" or "Doctoral" in NCES data

B\ Other 4-Year institutions include thaose named "Master's", "Baccalaureate" or "Other specialized 4-year institutions" in NCES data

## EXHIBIT 3 NUMBER OF GRADUATE AND RESEARCH UNIVERSITIES PER 1,000,000 TARGET AGE POPULATION (18-44) IN THE FIFTY STATES

State	# Public per 1 M TAP	# Private per 1 M TAP	Total per 1 M TAP	National Rank
North Dakota	8.05	0.00	8.05	1
Montana	6.17	0.00	6.17	2
New Hampshire	2.01	4.01	6.02	3
Wyoming	5.45	0.00	5.45	4
Rhode Island	2.52	2.52	5.03	5
Massachusetts	0.79	3.56	4.35	6
Idaho	4.19	0.00	4.19	7
Vermont	4.14	0.00	4.14	8
Maine	2.01	2.01	4.02	9
Alaska	3.92	0.00	3.92	10
Colorado	3.11	0.62	3.73	11
South Dakota	3.61	0.00	3.61	12
Utah	2.32	1.16	3.47	13
Delaware	3.21	0.00	3.21	14
New York	0.82	2.33	3.15	15
New Mexico	2.99	0.00	2.99	16
Kansas	2.88	0.00	2.88	17
Louisiana	2.30	0.57	2.87	18
Missouri	1.88	0.94	2.82	19
Mississippi	2.74	0.00	2.74	20
Ohio	2.24	0.45	2.69	21
Indiana	2.11	0.42	2.53	22
Pennsylvania	1.09	1.31	2.39	23
Oregon	2.37	0.00	2.37	24
Oklahoma	1.57	0.79	2.36	25
Alabama	2.29	0.00	2.29	26
Tennessee	1.83	0.46	2.28	27
Hawaii	2.11	0.00	2.11	28
Virginia	2.07	0.00	2.07	29
Illinois	1.03	1.03	2.06	30
New Jersey	0.93	0.93	1.87	31
lowa	1.84	0.93	1.84	32
Georgia	0.92	0.00	1.83	33
Michigan	1.27	0.52	1.77	34
Texas	1.24	0.50	1.73	35
Arizona	1.66	0.00	1.66	36
FLORIDA	1.10	0.55	1.65	37
North Carolina	0.98		1.64	38
California		0.65	-	38 39
	0.72	0.87	1.59	39 40
Nebraska	1.56	0.00	1.56	40 41
Connecticut	0.78	0.78	1.55	
West Virginia	1.46	0.00	1.46	42
Nevada	1.45	0.00	1.45	43
Wisconsin	0.97	0.48	1.45	44
Maryland	0.93	0.47	1.40	45
South Carolina	1.27	0.00	1.27	46
Kentucky	1.26	0.00	1.26	47
Minnesota	0.53	0.53	1.05	48
Arkansas	1.04	0.00	1.04	49
Washington	0.86	0.00	0.86	50
50 States Weighted Average	1.39 1.54	0.77 0.51	2.16 2.06	

National Center for Education Statistics (1999). <u>Degree-granting institutions of higher education and branches, by type, control of institution, and state:1997-98. Digest of Education Statistics 1999</u> [WWW document].URL: <a href="http://www.nces.ed.gov/pubs20">http://www.nces.ed.gov/pubs20</a>

U.S. Census Bureau (2000). <u>Population Estimates for the U.S.</u>, <u>Regions, and States by Selected Age Groups and Sex:Annual Time series, July 1, 1990 to July 1, 1999</u> [WWW Document] URL: <a href="http://www.census.gov/population/estimates/state/st-99-09.txt">http://www.census.gov/population/estimates/state/st-99-09.txt</a>

## EXHIBIT 4 NUMBER OF OTHER FOUR YEAR INSTITUTIONS PER 1,000,000 TARGET AGE POPULATION (18-44) IN THE FIFTY STATES

State	# Public per 1 M TAP	# Private per 1 M TAP	Total per 1 M TAP	National Rank
Vermont	16.54	62.03	78.57	1
South Dakota	25.30	36.15	61.45	2
Maine	14.06	24.11	38.17	3
Iowa	0.92	34.13	35.05	4
Massachusetts	5.14	29.26	34.40	5
Nebraska	9.36	24.96	34.32	6
North Dakota	16.10	16.10	32.20	7
West Virginia	17.53	14.61	32.14	8
New Hampshire	8.03	24.08	32.11	9
Missouri	4.22	26.76	30.98	10
Pennsylvania	8.70	20.67	29.37	11
Montana	12.33	15.41	27.74	12
Kansas	6.73	20.18	26.91	13
New Mexico	5.97	20.91	26.88	14
New York	4.93	20.96	25.89	15
Minnesota	5.27	19.51	24.78	16
Oregon	3.95	20.53	24.48	17
Rhode Island	2.52	20.14	22.66	18
Tennessee	2.74	19.63	22.37	19
South Carolina	6.36	14.63	20.99	20
Kentucky	3.79	17.05	20.84	21
Indiana	3.79	16.85	20.64	22
Wisconsin	5.31	14.96	20.27	23
Arkansas	9.39	10.43	19.82	24
Illinois	1.44	18.30	19.74	25
Oklahoma	9.43	10.22	19.65	26
Alaska	7.84	11.76	19.60	27
Alabama	8.01	11.44	19.45	28
Colorado	4.98	14.31	19.29	29
Hawaii	4.22	14.76	18.98	30
Ohio	3.81	14.58	18.39	31
Connecticut	3.88	13.97	17.85	32
North Carolina	4.26	13.42	17.68	33
Michigan	2.53	14.43	16.96	34
Virginia	3.10	13.78	16.88	35
Georgia	5.20	11.61	16.81	36
Delaware	3.21	12.83	16.04	37
Mississippi	5.48	10.04	15.52	38
Maryland	5.12	9.77	14.89	39
Idaho	4.19	10.46	14.65	40
California	1.59	12.26	13.85	41
Washington	2.58	11.16	13.74	42
Arizona	1.10	11.04	12.14	43
Louisiana	5.75	6.32	12.07	44
FLORIDA	0.73	10.63	11.36	45
Texas	3.84	6.44	10.28	46
New Jersey	3.42	5.29	8.71	47
Utah	3.47	3.47	6.94	48
Nevada	1.45	4.36	5.81	49
Wyoming	0.00	0.00	0.00	50
50 States Weighted Average	4.16	14.70	18.86	30
High Growth States Average	4.77	10.05	14.81	

National Center for Education Statistics (1999). <u>Degree-granting institutions of higher education and branches, by type, control of institution, and state:1997-98. Digest of Education Statistics 1999</u> [WWW document].URL: http://www.nces.ed.gov/pubs21

U.S. Census Bureau (2000). <u>Population Estimates for the U.S.</u>, <u>Regions</u>, <u>and States by Selected Age Groups and Sex:Annual Time series</u>, <u>July 1, 1990 to July 1, 1999</u> [WWW Document] URL: http://www.census.gov/population/estimates/state/st-99-09.txt

### EXHIBIT 5 NUMBER OF TWO YEAR INSTITUTIONS PER 1,000,000 TARGET AGE POPULATION (18-44) IN THE FIFTY STATES

	# Public per 1 M	# Private per 1 M		
State	TAP	TAP	Total per 1 M TAP	National Rank
Montana	36.99	15.41	52.40	1
North Dakota	36.23	8.05	44.28	2
Wyoming	38.15	5.45	43.60	3
New Mexico	31.36	4.48	35.84	4
Minnesota	24.26	10.55	34.81	5
Louisiana	28.17	5.75	33.92	6
Arkansas	23.99	4.17	28.16	7
Maine	14.06	14.06	28.12	8
Kansas	22.10	4.80	26.90	9
South Dakota	21.69	3.61	25.30	10
Mississippi	20.09	3.65	23.74	11
Alabama	17.73	5.72	23.45	12
Pennsylvania	4.57	18.72	23.29	13
Arizona	11.04	12.15	23.19	14
Iowa	15.68	6.46	22.14	15
Nebraska	14.04	7.80	21.84	16
Hawaii	14.76	6.33	21.09	17
Vermont	4.14	16.54	20.68	18
Colorado	9.33	11.20	20.53	19
North Carolina	18.99	1.31	20.30	20
Missouri	9.39	9.39	18.78	21
Ohio	8.08	10.54	18.62	22
Kentucky	8.84	8.84	17.68	23
Indiana	5.90	11.38	17.28	24
South Carolina	13.35	3.18	16.53	25
Washington	14.16	2.15	16.31	26
West Virginia	5.84	10.23	16.07	27
Oregon	13.42	2.37	15.79	28
New York	6.44	8.22	14.66	29
Oklahoma	12.58	1.57	14.15	30
New Hampshire	8.03	6.02	14.05	31
Utah	4.63	9.26	13.89	32
Illinois	10.08	3.50	13.58	33
Tennessee	6.39	6.85	13.24	34
Connecticut	9.31	3.88	13.19	3 <del>4</del> 35
	11.00	2.14	13.19	36
Georgia California	7.86	5.26	13.14	36 37
Nevada	7.86 5.81	5.26 7.26	13.12	37 38
Delaware	9.62	7.26 3.21	13.07	38 39
Virginia FLORIDA	8.27 <b>5.13</b>	4.48 <b>7.51</b>	12.75 <b>12.64</b>	40 <b>41</b>
Idaho	6.28	6.28	12.56	41
Massachusetts	6.28 7.12	6.28 5.14	12.56	42 43
Texas	7.12 8.42	5.14 3.59	12.26	43 44
	9.31	3.59 1.40	12.01	44 45
Maryland Wisconsin	9.31	1.40 0.97	10.71	45 46
Michigan	9.17 7.34	0.97 1.77	10.14 9.11	46 47
•				47 48
Alaska	3.92	3.92	7.84	_
New Jersey	5.91	1.87	7.78	49 50
Rhode Island	2.52	0.00	2.52	50
50 States Weighted Average	10.06	6.11	16.17	
High Growth States Average	13.46	4.86	18.32	

National Center for Education Statistics (1999). <u>Degree-granting institutions of higher education and branches, by type, control of institution, and state:1997-98. Digest of Education Statistics 1999</u> [WWW document].URL: <a href="http://www.nces.ed.gov/pubs22">http://www.nces.ed.gov/pubs22</a>

http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Census Bureau (2000). <u>Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex:Annual Time series, July 1, 1990 to July 1, 1999</u> [WWW Document] URL:

## EXHIBIT 6 PERCENTAGE OF HIGHER EDUCATION ENROLLMENTS IN PUBLIC AND PRIVATE INSTITUTIONS BY STATE, FALL 1997

	HIGH GROWTH	TOTAL	% PUBLIC	% PUBLIC		STATE
STATE	STATES	ENROLLMENT	4-YEAR	2-YEAR	% PRIVATE	RANKING
Wyoming		30,280	36.6	60.7	2.7	1
Nevada		76,417	41.5	54.5	4.1	2
Alaska		27,915	93.0	2.7	4.1	3
New Mexico		108,560	93.0 45.2	47.6	4.3 7.2	4
	***	130,561	45.2 47.5	43.5	9.0	5
Mississippi Kansas		177,544	47.5 48.6	43.5 41.5	9.9	6
North Dakota	***	38,937	46.6 68.2	21.8	10.0	7
Arkansas		,		34.7	10.0	8
		112,342	55.1	-	_	
Arizona		292,730	35.3	53.8	10.9	9
Alabama		218,785	55.8	32.9	11.3	10
Montana		44,141	72.9	14.8	12.3	11
Oklahoma 	***	177,157	52.9	34.4	12.8	12
Texas	***	969,283	42.6	44.6	12.8	13
Washington	***	315,281	28.3	58.8	12.9	14
West Virginia	***	87,965	78.9	7.6	13.5	15
Louisiana	***	219,196	67.6	18.7	13.7	16
California		1,958,200	26.3	58.7	15.0	17
Oregon		169,852	38.6	46.4	15.0	18
Colorado	***	252,245	53.6	31.0	15.4	19
South Carolina		176,278	49.0	35.3	15.7	20
South Dakota	***	39,042	71.5	12.6	15.8	21
Michigan		549,742	47.9	35.5	16.6	22
Maryland		261,262	43.3	39.8	16.9	23
Virginia		364,904	46.9	35.7	17.4	24
Kentucky		178,924	58.6	23.2	18.2	25
Wisconsin		298,248	47.7	34.0	18.2	26
Idaho		61,641	67.0	14.5	18.5	27
Delaware		44,890	54.6	26.8	18.7	28
FLORIDA		658,259	32.5	48.7	18.8	29
North Carolina		373,717	42.6	38.3	19.2	30
New Jersey		325,754	42.6	37.6	19.8	31
Nebraska		111,542	49.2	31.0	19.8	32
Tennessee		249,805	46.6	30.8	22.5	33
Georgia	***	306,238	53.4	23.4	23.3	34
Indiana		295,517	62.4	13.6	24.0	35
Ohio		537,169	48.6	26.8	24.7	36
Minnesota	***	269,887	41.1	34.2	24.8	37
Utah	***	157,891	52.9	22.2	24.9	38
Hawaii		61,514	33.6	40.5	26.0	39
Illinois		726,199	26.4	47.5	26.1	40
lowa		180,967	37.2	33.6	29.2	41
Maine		56,368	53.9	13.6	32.6	42
Missouri		302,896	38.5	24.4	37.1	43
Connecticut		153,128	35.7	26.3	37.9	44
Pennsylvania		588,185	39.7	17.2	43.1	45
Vermont		36,482	44.0	12.3	43.7	46
New York		1,024,498	31.9	23.6	44.6	47
New Hampshire		63,811	40.7	14.5	44.7	48
Rhode Island		72,078	30.6	21.1	48.3	49
Massachusetts		412,620	24.8	17.6	57.7	50
WEIGHTED AVERAGE			40.5	36.9	22.6	
HIGH GROWTH STATES	SAVERAGE		46.7	37.3	16.0	

Source: National Center for Education Statistics (1999). Table 199.-Total fall enrollment in degree-granting institutions, by control, type of institution, and state: 1996 and 1997. The Digest of Education Statistics [WWW document].

URL:http://www.nces.ed.gov/pubs2000/digest99/d99t199.html

## EXHIBIT 7 TOTAL ASSOCIATE'S DEGREES AWARDED PER 100,000 TARGET AGE POPULATION (18-44) ADJUSTED TO REFLECT IN & OUT OF STATE

**MIGRATION DIFFERENCES (1997-1998)** 

			ESTIMATED AWARDS	
	ASSOCIATE'S	ADJUSTMENT	TO STATE RESIDENTS	
STATE	AWARDED a/	FACTOR b/	c/	STATE RANKING
Idaho	1,041.73	0.97	1,010.48	1
Alabama	1,115.06	0.90	1,003.55	2
Wyoming	941.78	1.00	941.78	3
FLORIDA	778.71	0.95	739.78	4
Washington	786.93	0.94	739.71	5
Iowa	811.24	0.89	722.01	6
North Dakota	807.05	0.87	702.13	7
Hawaii	652.97	1.04	679.08	8
Utah	882.33	0.76	670.57	9
New York	661.06	1.01	667.67	10
Kansas	648.78	0.94	609.85	11
Alaska	339.21	1.74	590.23	12
Rhode Island	904.21	0.65	587.74	13
South Dakota	557.05	1.04	579.34	14
Illinois	524.57	1.08	566.53	15
New Jersey	376.23	1.44	541.77	16
Michigan	527.57	1.00	527.57	17
Oklahoma	526.58	0.97	510.79	18
New Mexico	483.25	1.04	502.58	19
Minnesota	502.76	0.99	497.74	20
Nebraska	504.75	0.97	489.60	21
Mississippi	521.01	0.93	484.54	22
Montana	455.93	1.05	478.72	23
California	454.23	1.00	454.23	24
Maine	378.50	1.16	439.06	25
Oregon	434.70	0.95	412.97	26
North Carolina	464.38	0.85	394.72	27
Connecticut	332.14	1.18	391.92	28
Ohio	395.24	0.97	383.38	29
Missouri	406.72	0.94	382.31	30
Maryland	340.80	1.09	371.47	31
Massachusetts	436.34	0.85	370.89	32
Vermont	519.36	0.71	368.75	33
South Carolina	396.50	0.91	360.82	34
New Hampshire	418.61	0.85	355.82	35
Wisconsin	355.08	0.83	351.53	36
Indiana	384.27	0.99	345.85	37
Arizona	375.16	0.87	326.39	38
West Virginia	358.26	0.90	320.39	39
Kentucky	326.28	0.90	322.43 316.49	40
Arkansas	324.43	0.97	314.70	40
Texas	324.43	1.00	304.61	41
Virginia	334.93	0.90	301.44	43
Colorado	334.93 325.33	0.90	292.80	43
Pennsylvania	325.33 314.09	0.90	292.80 288.97	44 45
Delaware	348.73	0.92	275.50	45 46
Tennessee	348.73 274.64	0.79	275.50 255.42	46 47
Georgia	274.64 258.00	0.95	255.42 245.10	47
Georgia Louisiana	258.00 252.12	0.95	245.10 244.55	48 49
Louisiana Nevada				
WEIGHTED AVERAGE	204.72	0.95	194.48 <b>457.33</b>	50
WEIGHTED AVERAG	JC .		407.33	

a/ Number awarded refers to the number of degree completions per level, per target age population aged 18-44 as of July 1998 Census estimates.

### Sources

b/ Adjustment factor =state residents/students enrolled

c/ Estimated awards =Degrees awarded per 100,000 TAP \* Adjustment Factor

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document]. URL:http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000).Fall Enrollment Survey, Fall 1996 Table 1.Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (1998). IPEDS Completions Survey, Survey Year 1997-1998.

# EXHIBIT 8 TOTAL BACHELOR'S DEGREES AWARDED PER 100,000 TARGET AGE POPULATION (18-44) ADJUSTED TO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES (1997-1998)

North Dakota Montana South Dakota Nebraska Iowa Utah Massachusetts Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	BACHELOR'S AWARDED a/ 1,848.77 1,522.22 1,513.55 1,573.51 1,615.66 1,891.69 2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80 1,212.95	ADJUSTMENT FACTOR b/  0.87 1.05 1.04 0.97 0.89 0.76 0.85 0.65 1.01 0.99 0.71 0.85 1.18 0.92 1.16	ESTIMATED AWARDS TO STATE RESIDENTS  1,608.43 1,598.33 1,574.09 1,526.31 1,437.94 1,437.69 1,363.48 1,344.50 1,316.24 1,304.94 1,303.83 1,296.55 1,283.54	STATE RANKING  1 2 3 4 5 6 7 8 9 10 11 12
North Dakota Montana South Dakota Nebraska Iowa Uttah Massachusetts Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illiinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,848.77 1,522.22 1,513.55 1,573.51 1,615.66 1,891.69 1,604.09 2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.87 1.05 1.04 0.97 0.89 0.76 0.85 0.65 1.01 0.99 0.71 0.85 1.18 0.92	RESIDENTS  1,608.43 1,598.33 1,574.09 1,526.31 1,437.94 1,437.69 1,363.48 1,344.50 1,316.24 1,304.94 1,303.83 1,296.55	1 2 3 4 5 6 7 8 9 10
Montana South Dakota Nebraska Iowa Utah Massachusetts Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,522.22 1,513.55 1,573.51 1,615.66 1,891.69 1,604.09 2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	1.05 1.04 0.97 0.89 0.76 0.85 0.65 1.01 0.99 0.71 0.85 1.18	1,598.33 1,574.09 1,526.31 1,437.94 1,437.69 1,363.48 1,344.50 1,316.24 1,304.94 1,303.83 1,296.55	2 3 4 5 6 7 8 9 10
South Dakota Nebraska lowa Utah Massachusetts Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illiinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana Louisiana	1,513.55 1,573.51 1,615.66 1,891.69 1,604.09 2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	1.04 0.97 0.89 0.76 0.85 0.65 1.01 0.99 0.71 0.85 1.18	1,574.09 1,526.31 1,437.94 1,437.69 1,363.48 1,344.50 1,316.24 1,304.94 1,303.83 1,296.55	3 4 5 6 7 8 9 10
Nebraska Iowa Utah Massachusetts Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,573.51 1,615.66 1,891.69 1,604.09 2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,347.72	0.97 0.89 0.76 0.85 0.65 1.01 0.99 0.71 0.85 1.18 0.92	1,526.31 1,437.94 1,437.69 1,363.48 1,344.50 1,316.24 1,304.94 1,303.83 1,296.55	4 5 6 7 8 9 10
Iowa Utah Massachusetts Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,615.66 1,891.69 1,604.09 2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.89 0.76 0.85 0.65 1.01 0.99 0.71 0.85 1.18	1,437.94 1,437.69 1,363.48 1,344.50 1,316.24 1,304.94 1,303.83 1,296.55	5 6 7 8 9 10
Utah Massachusetts Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,891.69 1,604.09 2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.76 0.85 0.65 1.01 0.99 0.71 0.85 1.18 0.92	1,437.69 1,363.48 1,344.50 1,316.24 1,304.94 1,303.83 1,296.55	6 7 8 9 10 11
Massachusetts Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,604.09 2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.85 0.65 1.01 0.99 0.71 0.85 1.18	1,363.48 1,344.50 1,316.24 1,304.94 1,303.83 1,296.55	7 8 9 10
Rhode Island New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	2,068.46 1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.65 1.01 0.99 0.71 0.85 1.18 0.92	1,344.50 1,316.24 1,304.94 1,303.83 1,296.55	8 9 10 11
New York Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,303.20 1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	1.01 0.99 0.71 0.85 1.18 0.92	1,316.24 1,304.94 1,303.83 1,296.55	9 10 11
Wisconsin Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,318.12 1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.99 0.71 0.85 1.18 0.92	1,304.94 1,303.83 1,296.55	10 11
Vermont New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,836.38 1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.71 0.85 1.18 0.92	1,303.83 1,296.55	11
New Hampshire Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,525.35 1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.85 1.18 0.92	1,296.55	7.7
Connecticut Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	1.18 0.92		12
Pennsylvania Maine Kansas Missouri Oklahoma Minnesota Indiana Illilinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,087.75 1,381.70 1,093.72 1,347.72 1,338.82 1,251.80	0.92	1,283.54	
Maine Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,093.72 1,347.72 1,338.82 1,251.80	****		13
Kansas Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,347.72 1,338.82 1,251.80	1.16	1.271.17	14
Missouri Oklahoma Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,347.72 1,338.82 1,251.80		1,268.71	15
Oklahoma Minnesota Indiana Illiinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,338.82 1,251.80	0.94	1,266.85	16
Minnesota Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,251.80	0.94	1,258.49	17
Indiana Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1 212 05	0.97	1,214.25	18
Illinois Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana		0.99	1,200.82	19
Colorado New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,296.75	0.90	1,167.08	20
New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1.059.87	1.08	1,144.66	21
New Jersey Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	1,260.88	0.90	1,134.79	22
Delaware Michigan Maryland West Virginia Ohio Alabama Louisiana	778.50	1.44	1,121.03	23
Maryland West Virginia Ohio Alabama Louisiana	1,417.40	0.79	1,119.74	24
Maryland West Virginia Ohio Alabama Louisiana	1,117.56	1.00	1,117.56	25
West Virginia Ohio Alabama Louisiana	1,008.01	1.09	1,098.73	26
Ohio Alabama Louisiana	1,211.23	0.90	1,090.11	27
Alabama Louisiana	1.090.91	0.97	1.058.18	28
	1,161.83	0.90	1,045.65	29
0	1,067.91	0.97	1,035.88	30
Oregon	1.074.00	0.95	1.020.30	31
Alaska	580.00	1.74	1,009.19	32
Hawaii	965.85	1.04	1,004.48	33
New Mexico	928.57	1.04	965.71	34
North Carolina	1,117.45	0.85	949.83	35
Washington	1,003.12	0.94	942.94	36
Virginia	1,047.15	0.90	942.43	37
Arkansas	962.02	0.97	933.16	38
Idaho	961.58	0.97	932.73	39
Wyoming	929.79	1.00	929.79	40
South Carolina	1.005.15	0.91	914.69	41
Tennessee	980.12	0.93	911.51	42
Kentucky	937.47	0.97	909.35	43
Texas	880.56	1.00	880.56	44
Mississippi	940.11	0.93	874.31	45
Georgia	884.53	0.95	840.31	46
FLORIDA	874.23	0.95	830.52	47
Arizona		0.87	786.09	48
California	903.55	1.00	772.95	49
Nevada	903.55 772.95	0.95	528.10	50
WEIGHTED AVERAGE			1,044.87	

a/ Number awarded refers to the number of degree completions per level, per target age population aged 18-44 as of July 1998 Census estimates.

### Sources

b/ Adjustment factor =state residents/students enrolled

c/ Estimated awards =Degrees awarded per 100,000 TAP \* Adjustment Factor

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document]. URL:http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000).Fall Enrollment Survey, Fall 1996 Table 1.Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (1998). IPEDS Completions Survey, Survey Year 1997-1998.

# EXHIBIT 9 TOTAL MASTER'S DEGREES AWARDED PER 100,000 TARGET AGE POPULATION (18-44) ADJUSTEDTO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES (1997-1998)

			ESTIMATED	
	MASTER'S	ADJUSTMENT	AWARDS TO STATE	
STATE	AWARDED a/	FACTOR b/	RESIDENTS	STATE RANKING
Massachusetts	933.86	0.85	793.78	1
Connecticut	556.17	1.18	656.28	2
New York	625.36	1.01	631.61	3
Illinois	507.00	1.08	547.56	4
Maryland	469.76	1.09	512.04	5
Missouri	544.64	0.94	511.96	6
Michigan	451.00	1.00	451.00	7
Vermont	624.39	0.71	443.32	8
Nebraska	452.34	0.97	438.77	9
Colorado	473.84	0.90	426.46	10
Pennsylvania	452.55	0.92	416.34	11
Kansas	441.62	0.94	415.12	12
Oklahoma	417.40	0.97	404.88	13
New Hampshire	475.61	0.85	404.26	14
New Jersey	276.46	1.44	398.10	15
Ohio	387.77	0.97	376.13	16
Minnesota	378.83	0.99	375.04	17
Delaware	461.66	0.79	364.72	18
New Mexico	350.49	1.04	364.51	19
South Dakota	338.71	1.04	352.26	20
West Virginia	374.33	0.90	336.90	21
Virginia	368.32	0.90	331.49	22
Alaska	189.80	1.74	330.26	23
Alabama	361.28	0.90	325.15	24
Wisconsin	319.95	0.99	316.75	25
Oregon	333.39	0.95	316.72	26
Louisiana	325.77	0.97	315.99	27
Rhode Island	485.58	0.65	315.63	28
Hawaii	301.08	1.04	313.12	29
Arizona	356.27	0.87	309.96	30
Georgia	321.20	0.95	305.14	31
Indiana	336.45	0.90	302.80	32
Tennessee	323.21	0.93	300.58	33
Washington	318.82	0.94	299.69	34
lowa	331.05	0.89	294.63	35
Kentucky	301.27	0.97	292.23	36
Texas	291.22	1.00	291.22	37
Mississippi	310.91	0.93	289.14	38
FLORIDA	302.89	0.95	287.74	39
California	280.53	1.00	280.53	40
South Carolina	301.37	0.91	274.24	41
Utah	360.50	0.76	273.98	42
North Dakota	308.33	0.87	268.25	43
Montana	253.40	1.05	266.07	44
Maine	222.60	1.16	258.22	45
North Carolina	266.26	0.85	226.32	46
Arkansas	227.52	0.97	220.69	47
Wyoming	210.92	1.00	210.92	48
Idaho	214.71	0.97	208.27	49
Nevada	158.95	0.95	151.00	50
WEIGHTED AVERAGE	Ξ		373.95	

a/ Number awarded refers to the number of degree completions per level, per target age population aged 18-44 as of July 1998 Census estimates.

### Sources

b/ Adjustment factor =state residents/students enrolled

c/ Estimated awards =Degrees awarded per 100,000 TAP \* Adjustment Factor

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document]. URL:http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000).Fall Enrollment Survey, Fall 1996 Table 1.Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (1998). IPEDS Completions Survey, Survey Year 1997-1998.

# EXHIBIT 10 TOTAL DOCTORAL DEGREES AWARDED PER 100,000 TARGET AGE POPULATION (18-44) ADJUSTED TO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES (1997-1998)

	DOCTORAL	ADJUSTMENT	ESTIMATED AWARDS TO STATE	
STATE	AWARDED a/	FACTOR b/	RESIDENTS	STATE RANKING
Massachusetts	100.99	0.85	85.84	1
Nebraska	66.91	0.97	64.91	2
Connecticut	53.23	1.18	62.82	3
Illinois	52.94	1.08	57.18	4
New York	54.24	1.01	54.78	5
lowa	59.77	0.89	53.20	6
Maryland	45.78	1.09	49.90	7
Ohio	50.52	0.97	49.01	8
Pennsylvania	52.62	0.92	48.41	9
New Mexico	45.85	1.04	47.68	10
Colorado	52.14	0.90	46.92	11
Alaska	26.67	1.74	46.40	12
Wisconsin	45.75	0.99	45.29	13
Kansas	46.79	0.94	43.29	14
Indiana	48.58	0.94	43.99	15
Indiana Delaware	48.58 55.18	0.90		16
		1.44	43.59 42.95	17
New Jersey	29.83			17
Minnesota Rhode Island	42.40	0.99 0.65	41.98 40.58	18
	62.43			
Michigan	39.61	1.00	39.61	20
Missouri	40.37	0.94	37.95	21
California	37.89	1.00	37.89	22
Arizona	43.29	0.87	37.66	23
Hawaii -	33.94	1.04	35.30	24
Texas	35.09	1.00	35.09	25
Wyoming	34.88	1.00	34.88	26
Oregon	36.17	0.95	34.36	27
Virginia	37.32	0.90	33.59	28
Louisiana	34.21	0.97	33.18	29
FLORIDA	34.83	0.95	33.09	30
Montana	30.21	1.05	31.72	31
Utah	41.34	0.76	31.42	32
Oklahoma	32.23	0.97	31.26	33
Georgia	32.36	0.95	30.75	34
North Carolina	35.46	0.85	30.14	35
Mississippi	32.05	0.93	29.81	36
Tennessee	32.00	0.93	29.76	37
Alabama	32.54	0.90	29.28	38
Washington	30.35	0.94	28.52	39
South Dakota	25.67	1.04	26.69	40
Kentucky	25.89	0.97	25.11	41
New Hampshire	29.50	0.85	25.07	42
North Dakota	28.58	0.87	24.86	43
South Carolina	26.20	0.91	23.84	44
West Virginia	23.09	0.90	20.78	45
Idaho	19.04	0.97	18.47	46
Vermont	25.64	0.71	18.20	47
Arkansas	16.90	0.97	16.39	48
Nevada	13.22	0.95	12.56	49
Maine	9.84	1.16	11.42	50
WEIGHTED AVERAGE	GE .		40.43	

a/ Number awarded refers to the number of degree completions per level, per target age population aged 18-44 as of July 1998 Census estimates.

### Sources

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document].

URL:http://www.census.gov/population/estimates/state/st-99-09.txt

b/ Adjustment factor =state residents/students enrolled

c/ Estimated awards =Degrees awarded per 100,000 TAP \* Adjustment Factor

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000).Fall Enrollment Survey, Fall 1996 Table 1.Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (1998). IPEDS Completions Survey, Survey Year 1997-1998.

## TOTAL FIRST PROFESSIONAL DEGREES AWARDED PER 100,000 TARGET AGE POPULATION (18-44) ADJUSTED TO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES (1997-1998)

			ESTIMATED	
	PROFESSIONAL	ADJUSTMENT	AWARDS TO STATE	
STATE	AWARDED a/	FACTOR b/	RESIDENTS	STATE RANKING
Massachusetts	156.03	0.85	132.63	1
Iowa	144.45	0.89	128.56	2
Nebraska	119.17	0.97	115.59	3
Missouri	112.38	0.94	105.64	4
New York	101.08	1.01	102.09	5
Illinois	92.16	1.08	99.53	6
Louisiana	99.18	0.97	96.20	7
Delaware	110.36	0.79	87.19	8
Minnesota	87.86	0.99	86.99	9
Connecticut	68.60	1.18	80.95	10
Oregon	84.26	0.95	80.04	11
New Jersey	55.52	1.44	79.94	12
Pennsylvania	86.42	0.92	79.50	13
Oklahoma	80.65	0.97	78.23	14
Kentucky	74.51	0.97	72.28	15
Georgia	76.07	0.95	72.26	16
Ohio	74.17	0.97	71.94	17
South Dakota	68.32	1.04	71.05	18
Vermont	97.59	0.71	69.29	19
Michigan	64.44	1.00	64.44	20
Maryland	59.04	1.09	64.35	21
Tennessee	68.10	0.93	63.33	22
North Dakota	71.65	0.87	62.33	23
Virginia	67.64	0.90	60.88	24
Texas	59.85	1.00	59.85	25
California	59.55	1.00	59.55	26
Indiana	63.33	0.90	57.00	27
Alabama	62.61	0.90	56.35	28
North Carolina	62.73	0.85	53.32	29
Kansas	56.11	0.94	52.75	30
West Virginia	55.81	0.90	50.23	31
Wisconsin	49.27	0.99	48.78	32
FLORIDA	51.31	0.95	48.75	33
Colorado	51.89	0.90	46.70	34
Arkansas	47.99	0.97	46.55	35
South Carolina	48.08	0.91	43.75	36
Maine	36.77	1.16	42.65	37
Mississippi	45.11	0.93	41.95	38
Washington	41.51	0.94	39.01	39
Rhode Island	58.15	0.65	37.80	40
Utah	43.89	0.76	33.36	41
Wyoming	32.70	1.00	32.70	42
New Hampshire	32.70 37.93	0.85	32.70	42
Idaho	37.93	0.65	32.24	43
New Mexico	27.63	1.04	28.73	45
Hawaii	26.99	1.04	28.07	45 46
Montana	20.96	1.04	20.07	46
Arizona	20.96	0.87	22.01	47
Arizona Nevada	24.19 6.97	0.87 0.95	21.04 6.63	48 49
Alaska	0.00	1.74	0.00	49 50
WEIGHTED AVERAGE		1.74	67.95	50
WEIGHTED AVERAG	OE .		07.93	

a/ Number awarded refers to the number of degree completions per level, per target age population aged 18-44 as of July 1998 Census estimates.

### Sources

b/ Adjustment factor =state residents/students enrolled

c/ Estimated awards =Degrees awarded per 100,000 TAP \* Adjustment Factor

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document]. URL:http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000).Fall Enrollment Survey, Fall 1996 Table 1.Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (1998). IPEDS Completions Survey, Survey Year 1997-1998.

## LOWER DIVISION HEADCOUNT ENROLLMENTS PER 100,000 TARGET AGE POPULATION (18-44) BY STATE ADJUSTED TO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES (FALL 1997)

	ENROLLMENTS IN			
	STATE	MIGRATION	ESTIMATED	
	INSTITUTIONS PER	ADJUSTMENT	ENROLLMENTS OF	
STATE	100,000 TAP a/	FACTOR b/	STATE RESIDENTS c/	STATE RANKING
Alaska	8,049.61	1.74	14,006.32	1
Wyoming	11,869.29	1.00	11,869.29	2
New Mexico	10,578.30	1.04	11,001.43	3
Kansas	11,613.34	0.94	10,916.54	4
Illinois	9,646.27	1.08	10,417.97	5
Nebraska	10,359.43	0.97	10,048.65	6
California	9,966.88	1.00	9,966.88	7
New Jersey	6,471.97	1.44	9,319.63	8
Washington	9,893.39	0.94	9,299.79	9
Arizona	10,519.40	0.87	9,151.88	10
Iowa	10,127.00	0.89	9,013.03	11
Oklahoma	9,250.60	0.97	8,973.08	12
Utah	11,717.18	0.76	8,905.05	13
Wisconsin	8,986.80	0.99	8,896.93	14
Hawaii	8,468.09	1.04	8,806.81	15
Minnesota	8,843.43	0.99	8,755.00	16
South Dakota	8,259.47	1.04	8,589.84	17
Colorado	9,539.74	0.90	8,585.77	18
Oregon	8,947.92	0.95	8,500.52	19
Michigan	8,488.42	1.00	8,488.42	20
FLORIDA	8,835.60	0.95	8,393.82	21
Maryland	7,543.28	1.09	8,222.17	22
Montana	7,789.18	1.05	8,178.64	23
New York	7,874.46	1.01	7,953.21	24
Arkansas	8,148.15	0.97	7,903.70	25
Idaho	8,082.98	0.97	7,840.49	26
North Dakota	9,002.74	0.87	7,832.39	27
Texas	7,798.43	1.00	7,798.43	28
Connecticut	6,554.36	1.18	7,734.15	29
Missouri	8,077.99	0.94	7,593.31	30
Nevada	7,947.62	0.95	7,550.24	31
Massachusetts	8,840.82	0.85	7,514.70	32
Maine	6,452.10	1.16	7,484.44	33
Mississippi	7,937.43	0.93	7,381.81	34
Ohio	7,413.95	0.97	7,191.54	35
Delaware	9,083.68	0.79	7,176.10	36
Rhode Island	10,753.34	0.65	6,989.67	37
Alabama	7,716.80	0.90	6,945.12	38
Virginia	7,706.43	0.90	6,935.78	39
North Carolina	8,091.19	0.85	6,877.51	40
Louisiana	7,020.28	0.97	6,809.67	41
West Virginia	7,421.96	0.90	6,679.76	42
Tennessee	7,152.08	0.93	6,651.43	43
Kentucky	6,811.59	0.97	6,607.24	44
South Carolina Indiana	7,087.34	0.91	6,449.48	45 46
	7,155.26	0.90	6,439.74	46
Pennsylvania	6,995.81	0.92	6,436.15	47
Vermont	8,763.70	0.71 0.95	6,222.22	48 49
Georgia	6,011.50		5,710.93	49 50
New Hampshire	6,716.95	0.85	5,709.41	50
WEIGHTED AVERAG	E		8,147.75	

a/ Enrollment refers to the number of students enrolled per level, per target age population aged 18-44 as of July 1998 Census estimates.

Sources

b/ Adjustment factor =state residents/students enrolled

c/ Estimated enrollment = Enrollment per 100,000 TAP \* Adjustment Factor

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document]. URL:http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000). Fall Enrollment Survey, Fall 1996 Table 1. Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

## UPPER DIVISION HEADCOUNT ENROLLMENTS PER 100,000 TARGET AGE POPULATION (18-44) BY STATE ADJUSTED TO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES (Fall 1997)

	ENROLLMENTS IN			
	STATE	MIGRATION	ESTIMATED	
	INSTITUTIONS PER	ADJUSTMENT	ENROLLMENTS OF	
STATE	100,000 TAP a/	FACTOR b/	STATE RESIDENTS c/	STATE RANKING
Montana	4,458.51	1.05	4,681.44	1
North Dakota	5,165.01	0.87	4,493.56	2
Nebraska	4,414.89	0.97	4,282.44	3
Utah	5,512.91	0.76	4,189.81	4
South Dakota	3,870.88	1.04	4,025.72	5
Iowa	4,234.59	0.89	3,768.79	6
Maine	3,162.37	1.16	3,668.35	7
Alaska	2,070.87	1.74	3,603.31	8
Wisconsin	3,577.65	0.99	3,541.87	9
Kansas	3,747.14	0.94	3,522.31	10
Oklahoma	3,570.48	0.97	3,463.37	11
Louisiana	3,556.88	0.97	3,450.17	12
Missouri	3,537.13	0.94	3,324.90	13
West Virginia	3,595.32	0.90	3,235.79	14
Rhode Island	4,926.40	0.65	3,202.16	15
Idaho	3,272.44	0.97	3,174.27	16
New York	3,132.87	1.01	3,164.20	17
Colorado	3,490.06	0.90	3,141.06	18
Michigan	3,093.76	1.00	3,093.76	19
Massachusetts	3,602.83	0.85	3,062.41	20
Connecticut	2,589,46	1.18	3,055.56	21
Indiana	3,334.78	0.90	3,001.30	22
New Jersey	2,062.50	1.44	2,970.00	23
Pennsylvania	3.176.21	0.92	2.922.11	24
Minnesota	2,947.18	0.99	2,917.71	25
Vermont	4,090.41	0.71	2,904.19	26
Alabama	3,197.35	0.90	2,877.62	27
Illinois	2,653.73	1.08	2,866.03	28
Kentucky	2,954.48	0.97	2,865.84	29
New Mexico	2.696.53	1.04	2.804.40	30
Maryland	2,546.98	1.09	2,776.20	31
Hawaii	2,634.20	1.04	2,739.56	32
New Hampshire	3,175.86	0.85	2,699.48	33
Tennessee	2,890.68	0.93	2,688.33	34
Arkansas	2,766.09	0.97	2,683.11	35
Delaware	3,371.30	0.79	2,663.33	36
Texas	2.619.92	1.00	2,619.92	37
Wyoming	2,614.21	1.00	2,614.21	38
Ohio	2.679.52	0.97	2,599.14	39
Mississippi	2,769.18	0.93	2,575.33	40
Oregon	2,655.54	0.95	2,522.77	41
North Carolina	2,784.35	0.85	2,366.70	42
FLORIDA	2,425.75	0.95	2,304.47	43
Virginia	2,534.53	0.90	2,281.08	44
Arizona	2,571.88	0.87	2,237.53	45
Washington	2,361.78	0.94	2,220.07	46
California	2,201.97	1.00	2,201.97	47
Georgia	2,312.69	0.95	2,197.06	48
South Carolina	2,373.37	0.93	2,159.76	49
Nevada	1,930.50	0.95	1,833.98	50
WEIGHTED AVERAGE		0.33	2,764.58	30
TILIOTTILD AVENAG			2,704.00	

a/ Enrollment refers to the number of students enrolled per level, per target age population aged 18-44 as of July 1998 Census estimates.

### Sources

b/ Adjustment factor =state residents/students enrolled

c/ Estimated enrollment = Enrollment per 100,000 TAP \* Adjustment Factor

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document]. URL:http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000). Fall Enrollment Survey, Fall 1996 Table 1. Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

# EXHIBIT 14 GRADUATE HEADCOUNT ENROLLMENTS PER 100,000 TARGET AGE POPULATION (18-44) BY STATE ADJUSTED TO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES (Fall 1997)

	ENDOLL MENTS IN			
	ENROLLMENTS IN STATE	MIGRATION	ESTIMATED	
	INSTITUTIONS PER	ADJUSTMENT	ENROLLMENTS OF	
STATE	100.000 TAP a/	FACTOR b/	STATE RESIDENTS c/	STATE RANKING
Massachusetts	3,228.40	0.85	2.744.14	1
Connecticut	2.277.09	1.18	2.686.97	2
New York	2,299.93	1.01	2,322.93	3
Maryland	2,001.12	1.09	2,181.22	4
Illinois	1.935.22	1.08	2,090.04	5
Colorado	2,260.05	0.90	2,034.04	6
New Mexico	1,900.47	1.04	1,976.49	7
New Jersey	1,349.53	1.44	1,943.32	8
Kansas	1,932.33	0.94	1,816.39	9
Missouri	· ·		· ·	10
	1,909.26	0.94	1,794.70	-
Nebraska	1,826.23	0.97	1,771.44	11
Michigan	1,759.92	1.00	1,759.92	12
Pennsylvania	1,742.88	0.92	1,603.45	13
New Hampshire	1,884.11	0.85	1,601.49	14
Oklahoma	1,613.30	0.97	1,564.90	15
Minnesota	1,522.80	0.99	1,507.58	16
Virginia	1,637.85	0.90	1,474.06	17
Hawaii	1,393.27	1.04	1,449.00	18
Rhode Island	2,218.53	0.65	1,442.04	19
West Virginia	1,593.01	0.90	1,433.71	20
Louisiana	1,473.00	0.97	1,428.81	21
Idaho	1,471.40	0.97	1,427.26	22
Wisconsin	1,403.74	0.99	1,389.70	23
Ohio	1,424.66	0.97	1,381.92	24
lowa	1,541.24	0.89	1,371.71	25
Maine	1,176.23	1.16	1,364.43	26
South Dakota	1,283.11	1.04	1,334.44	27
Oregon	1,374.98	0.95	1,306.23	28
Texas	1,299.27	1.00	1,299.27	29
Delaware	1,638.13	0.79	1,294.13	30
Kentucky	1,325.00	0.97	1,285.25	31
Indiana	1,426.52	0.90	1,283.86	32
South Carolina	1,380.36	0.91	1,256.12	33
California	1,248.22	1.00	1,248.22	34
	· ·		· ·	35
Arizona	1,390.25	0.87	1,209.51	
Wyoming	1,186.18	1.00	1,186.18	36
Tennessee	1,249.34	0.93	1,161.89	37
Alabama	1,262.49	0.90	1,136.24	38
Georgia	1,184.78	0.95	1,125.54	39
FLORIDA	1,167.38	0.95	1,109.01	40
Vermont	1,530.87	0.71	1,086.92	41
Montana	1,023.05	1.05	1,074.20	42
Alaska	602.96	1.74	1,049.15	43
Mississippi	1,106.53	0.93	1,029.07	44
Nevada	1,076.64	0.95	1,022.81	45
North Carolina	1,183.70	0.85	1,006.14	46
Utah	1,294.83	0.76	984.07	47
North Dakota	1,072.74	0.87	933.29	48
Washington	976.67	0.94	918.07	49
Arkansas	837.01	0.97	811.90	50
WEIGHTED AVERAG	E		1,507.33	

a/ Enrollment refers to the number of students enrolled per level, per target age population aged 18-44 as of July 1998 Census estimates.

### Sources

b/ Adjustment factor =state residents/students enrolled

c/ Estimated enrollment = Enrollment per 100,000 TAP \* Adjustment Factor

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document]. URL:http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000).Fall Enrollment Survey, Fall 1996 Table 1.Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

## PROFESSIONAL HEADCOUNT ENROLLMENTS PER 100,000 TARGET AGE POPULATION (18-44) BY STATE ADJUSTED TO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES (Fall 1997)

	ENROLLMENTS IN			
	STATE	MIGRATION	ESTIMATED	
	INSTITUTIONS PER	ADJUSTMENT	ENROLLMENTS OF	
STATE	100.000 TAP a/	FACTOR b/	STATE RESIDENTS c/	STATE RANKING
lowa	619.25	0.89	551.13	1
Massachusetts	549.28	0.85	466.89	2
Nebraska	477.95	0.97	463.61	3
Missouri	461.32	0.94	433.64	4
Illinois	351.12	1.08	379.21	5
New York	372.40	1.01	376.12	6
Louisiana	330.85	0.97	320.93	7
Minnesota	317.27	0.99	314.10	8
Pennsylvania	338.70	0.92	311.60	9
Connecticut	260.53	1.18	307.43	10
Delaware	385.94	0.79	304.89	11
Kentucky	304.72	0.97	295.58	12
Oregon	306.85	0.95	291.51	13
Georgia	305.64	0.95	290.35	14
Ohio	278.76	0.97	270.39	15
South Dakota	257.77	1.04	268.08	16
Oklahoma	264.67	0.97	256.73	17
Michigan	255.84	1.00	255.84	18
Maryland	231.57	1.09	252.41	19
New Jersey	170.67	1.44	245.76	20
Tennessee	260.67	0.93	242.42	21
Texas	239.00	1.00	239.00	22
Alabama	249.78	0.90	224.81	23
Virginia	249.07	0.90	224.16	24
Indiana	237.68	0.90	213.91	25
North Carolina	248.17	0.85	210.94	26
California	203.66	1.00	203.66	27
Kansas	207.81	0.94	195.34	28
West Virginia	209.06	0.90	188.15	29
Wisconsin	181.32	0.99	179.50	30
Colorado	197.43	0.90	177.69	31
FLORIDA	185.56	0.95	176.28	32
Maine	148.93	1.16	172.75	33
Wyoming	171.99	1.00	171.99	34
South Carolina	188.06	0.91	171.14	35
Arkansas	173.00	0.97	167.81	36
Washington	171.09	0.94	160.83	37
Mississippi	166.46	0.93	154.81	38
North Dakota	166.65	0.93	144.99	39
Rhode Island	215.71	0.65	140.21	40
New Mexico	125.06	1.04	130.06	41
New Hampshire	142.93	0.85	121.49	42
Idaho	118.98	0.85	115.41	43
Vermont	118.98	0.97	115.41	43
Utah	147.03	0.71	111.94	44 45
Utan Hawaii	93.62	1.04	97.37	45 46
		-		
Arizona Montana	97.85	0.87	85.13	47 48
Montana Nevada	73.51	1.05	77.18	-
Nevada Alaska	30.60 0.00	0.95	29.07	49 50
		1.74	0.00 <b>254.23</b>	50
WEIGHTED AVERAG	E		254.23	

a/ Enrollment refers to the number of students enrolled per level, per target age population aged 18-44 as of July 1998 Census estimates.

Sources

b/ Adjustment factor =state residents/students enrolled

c/ Estimated enrollment = Enrollment per 100,000 TAP \* Adjustment Factor

U.S. Census Bureau (2000). Population Estimates for the U.S., Regions, and States by Selected Age Groups and Sex: Annual Time series, July 1, 1990 to July 1, 1999 [WWW document]. URL:http://www.census.gov/population/estimates/state/st-99-09.txt

U.S. Department of Education National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS) (2000).Fall Enrollment Survey, Fall 1996 Table 1.Residence and migration of all first-time freshmen enrolled in degree-granting institutions, by state: Fall 1996 1/ [WWW document]. URL:http://nces.ed.gov/pubs98/migration/efrmt1.html

## EXHIBIT 16 COMPARISON OF HEADCOUNT ENROLLMENT PER 100,000 TARGET AGE POPULATION (18-44) IN FLORIDA AND SELECTED OTHER STATES ADJUSTED TO REFLECT IN & OUT OF STATE MIGRATION DIFFERENCES

LEVELOFENROLLMENT	FLORIDA	HIGH GROWTH STATESa/
Lower Division	8,393.27	7,611.80
Upper Division	2,304.31	2,671.64
Graduate and Postbaccalaureate	1,108.94	1,456.66
Professional	176.27	245.69
TOTAL	11,982.79	11,985.80

a/High Growth states are those in which per capita income has increased greater than 20% since 1989. These states include Colorado, South Dakota, Utah, Mississippi, Texas, Louisiana, Washington, Georgia, North Dakota, and Minnesota.

EXHIBIT 17
ESTIMATED TOTAL HEADCOUNT ENROLLMENTS OF RESIDENT STUDENTS PER 100,000 TARGET AGE POPULATION (18-44) BY HOME COUNTY, 2000

	LOWER	UPPER	GRADUATE&	
COUNTY	DIVISION	DIVISION	PROFESSIONAL	TOTAL
Bay County	21,066.84	1,696.58	505.33	23,268.75
Gulf County	20,786.63	1,199.61	373.65	22,359.88
Franklin County	21,095.80	918.64	229.66	22,244.09
Alachua County	13,547.43	2,813.54	1,495.52	17,856.49
Martin County	14,989.18	1,558.67	456.05	17,003.90
Indian River County	14,881.16	1,465.06	397.30	16,743.53
St. Lucie County	14,646.27	1,492.90	286.29	16,425.46
Leon County	10,989.71	3,368.53	1,536.12	15,894.36
Okeechobee County	14,638.75	933.79	273.53	15,846.07
Highlands County	12,686.26	1,454.74	270.92	14,411.92
Bradford County	12,853.19	740.96	365.54	13,959.69
Okaloosa County	11,333.38	1,883.13	738.51	13,955.03
Hardee County	12,640.34	858.54	171.71	13,670.59
DeSoto County	12,537.64	927.38	168.61	13,633.63
Brevard County	10,771.99	1,995.25	569.54	13,336.78
Pinellas County	10,412.87	2,048.47	616.40	13,077.75
Gadsden County	10,634.39	1,822.70	473.43	12,930.52
Wakulla County	10,313.70	1,864.46	429.12	12,607.28
Duval County	10,035.32	1,601.99	495.92	12,133.23
Seminole County	9,310.76	2,018.10	697.72	12,026.57
Escambia County	9,348.97	1,559.69	717.46	11,626.11
Walton County	10,535.02	756.44	299.42	11,590.89
Flagler County	9,384.82	1,752.94	281.13	11,418.89
Santa Rosa County	9,319.00	1,504.93	574.37	11,398.29
Nassau County	9,876.06	1,140.68	202.46	11,219.20
Volusia County	9,087.16	1,371.95	416.55	10,875.66
Jefferson County	8,521.46	1,810.05	467.76	10,799.27
•	·		540.47	10,760.79
Orange County	8,550.57	1,669.75		
Citrus County	8,957.21	1,272.92	391.95	10,622.08
Marion County	8,891.95	1,048.98	319.01	10,259.95
Hillsborough County	7,344.70	2,028.22	779.82	10,152.74
Taylor County	8,104.97	1,493.40	434.97	10,033.35
Dade County/Miami	7,862.36	1,522.51	492.59	9,877.45
Jackson County	7,742.59	1,598.43	481.31	9,822.33
Osceola County	8,213.65	1,217.69		9,737.96
Suwannee County	8,014.07	1,309.62	381.16	9,704.85
_evy County	8,610.49	734.54	204.04	9,549.07
Madison County	7,923.01	1,298.12		9,474.78
Palm Beach County	7,117.90	1,820.43		9,459.10
Calhoun County	7,655.81	1,207.68	431.31	9,294.80
Lafayette County	7,708.78	785.15	428.27	8,922.20
Liberty County	7,684.63	898.20	332.67	8,915.50
Washington County	7,654.97	873.67	332.82	8,861.46
Sarasota County	6,291.03	1,863.03	538.10	8,692.17
Holmes County	7,746.26	655.69	259.23	8,661.18

## EXHIBIT 17 (Continued) ESTIMATED TOTAL HEADCOUNT ENROLLMENTS OF RESIDENT STUDENTS PER 100,000 TARGET AGE POPULATION (18-44) BY HOME COUNTY, 2000

COUNTY	LOWER DIVISION	UPPER DIVISION	GRADUATE& PROFESSIONAL	TOTAL
Columbia County	7,240.27	963.61	410.72	8,614.61
Hamilton County	7,966.30	421.29	191.50	8,579.09
Polk County	7,111.18	1,129.77	326.58	8,567.54
Gilchrist County	7,267.04	937.68	234.42	8,439.15
Baker County	7,352.76	791.65	263.88	8,408.30
Monroe County	7,388.54	673.82	234.66	8,297.02
Broward County	5,981.86	1,667.88	423.68	8,073.42
Lee County	5,947.97	1,622.93	409.04	7,979.94
Clay County	5,634.32	1,778.58	538.52	7,951.42
Hemando County	5,842.33	1,663.71	383.69	7,889.73
St. Johns County	5,774.60	1,433.09	572.30	7,779.99
Union County	7,018.39	516.30	161.34	7,696.03
Manatee County	5,884.71	1,382.28	352.92	7,619.91
Collier County	5,919.88	1,325.98	362.06	7,607.91
Charlotte County	5,877.87	1,384.82	326.38	7,589.07
Dixie County	6,980.20	396.04	173.27	7,549.50
Pasco County	5,725.02	1,353.24	366.17	7,444.44
Lake County	5,622.28	1,159.07	281.46	7,062.81
Hendry County	5,555.56	965.77	248.61	6,769.94
Glades County	5,246.37	779.87	212.69	6,238.92
Sumter County	5,294.20	562.64	176.25	6,033.08
Putnam County	4,870.34	827.21	325.31	6,022.86
WEIGHTEDAVERAGE	8,396.08	1,670.72	535.43	10,602.23

Note: Based on estimated home county of Florida residents enrolled in SUS institutions or Florida community colleges in Fall 1999. Does not include Florida private institution enrollments given that no data are available to reasonably estimate the home county of Florida residents enrolled in those institutions.

Sources: State University System and State Board of Community Colleges, October 2000.

## EXHIBIT 18 PROCESS FOR ESTIMATING REGIONAL TARGET AGE POPULATION BASE FOR OPENING A NEW COMMUNITY COLLEGE WITH A 2,250 FTE ENROLLMENT

Flow of Potential Students (Shown in Reverse Order)	Current	Target
Potential Pool of Students in Region (Target Age Population)	101,000	73,800
Overall Higher Education Participation Rate	11.0%	<b>™</b> 15.0%
Projected Higher Education Headcount Enrollment from Region	11,070	<b>1</b> 11,070
Community College System Market Share	<b>1</b> 49%	<b>1</b> 49%
Projected Community College System Enrollment from Region	<b>1</b> 5,390	<b>1</b> 5,390
New Community College Market Share of System's Regional Enrollment	93%	<b>1</b> 93%
Projected New Community College Market Share of System's Regional Enrollment	5,000	<b>1</b> 5,000
Ratio of Total Enrollment to Enrollment from Region	108%	<b>1</b>
Projected New College Headcount Enrollment	<b>1</b> 5,390	<b>1</b> 5,390
, Headcount to FTE Student Conversion Rate	1 42%	<b>1</b> 42%
Projected New College FTE Student Enrollment	2,250	2,250

Note: "Current" factors based on existing enrollment patterns for Florida community colleges. "Target" factors are the same with the exception of an increase in the desired higher education participation rate for the state. Estimated enrollment figures are rounded to nearest ten.

## EXHIBIT 19 PROCESS FOR ESTIMATING NEEDED REGIONAL TARGET AGE POPULATION BASE FOR OPENING A NEW STATE UNIVERSITY WITH A 3,750 FTE ENROLLMENT

Flow of Potential Students (Shown in Reverse Order)	Current	Target
Potential Pool of Students in Region (Target Age Population)	359,300	262,500
Overall Higher Education Participation Rate	11.0%	<b>T</b> 15.0%
Projected Higher Education Headcount Enrollment from Region	<b>1</b> 39,380	<b>1</b> 39,380
State University System Market Share	<b>1</b> 33%	<b>1</b> 33%
Projected Community College System Enrollment from Region	12,800	<b>1</b> 12,800
New State University's Market Share of System's Regional Enrollment	41%	<b>1</b> 41%
Projected New State University Market Share of System's Regional Enrollment	5,210	<b>1</b> 5,210
Ratio of Total Enrollment to Enrollment from Region	115%	115%
Projected New State University Headcount Enrollment	6,000	6,000
Headcount to FTE Student Conversion Rate	63%	63%
Projected New State University FTE Student Enrollment	3,750	3,750

Note: "Current" factors based on existing enrollment patterns for SUS institutions. "Target" factors are the same with the exception of an increase in the desired state higher education participation rate. Estimated enrollment figures are rounded to nearest ten.