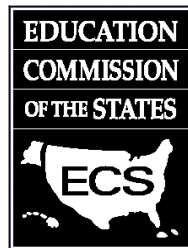


**Study of the Need for
Baccalaureate Degree Opportunities
in Five Florida Counties**

**Prepared for the
Florida Postsecondary Education Planning Commission**

Prepared by



**December 2000
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December 5, 2000

Dr. William B. Proctor, Executive Director
Florida Postsecondary Education Planning Commission
Turlington Building
325 West Gaines Street
Tallahassee, Florida 32399-0400



Dear Dr. Proctor:

I am pleased to transmit the Education Commission of the States' report on the need for baccalaureate degree opportunities in five Florida counties. To undertake this study, ECS assembled an experienced team of postsecondary analysts and leaders. Team members included:

The mission of the Education Commission of the States is to help state leaders identify, develop and implement public policy for education that addresses current and future needs of a learning society.

Dr. Gordon (Spud) Van de Water, Project Manager – Higher Education, Education Commission of the States (study director)

Dr. Kathleen Kelly, former Deputy Director of the Illinois Board of Higher Education (lead consultant)

Dr. Cheryl Lovell, Associate Professor of Higher Education, University of Denver (lead survey analyst)

Dr. Frank Budd, former president of Salt Lake City Community College (UT) (advisor)

Dr. Ray Kieft, former president of Mesa State College (CO) and Framingham State College (MA) (advisor)

Dr. James Mingle, executive director emeritus, State Higher Education Executive Officers (advisor)

Ms. Catherine Truth, doctoral student in higher education, University of Denver (research assistant).

In August, at the beginning of the study, team members reviewed documents and visited each of the study counties to conduct interviews with business and community leaders identified by the Postsecondary Education Planning Commission. This was followed in

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Dr. William B. Proctor, Executive Director
December 5, 2000
Page Two

September by a statewide survey of employers' needs for employees at various educational levels. The survey, designed by PEPC and the Florida Education and Training Placement Information Program (F.E.T.P.I.P.) of the Florida Department of Education, was administered by F.E.T.P.I.P. in September and a data set was provided to us in November. Results of the survey (for the five counties and statewide) are provided in Appendix A of our report.

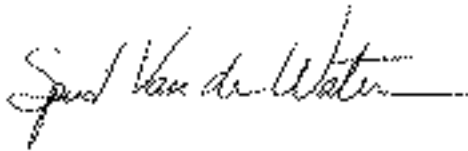
During November we conducted three public hearings (in Broward, Pinellas and Volusia counties) on the need for additional baccalaureate opportunities. Leaders in Sarasota and Manatee counties were invited to participate in the Pinellas hearing. During the same visits, we also conducted interviews with postsecondary and political leaders in the counties.

On November 20, the study team met in Denver to discuss our findings and outline our report.

Our study team was grateful for the time and insights shared with us by Florida's business, community, education and political leaders. Their views helped us understand the varying needs of the counties.

In addition, I wish to express our thanks for the excellent cooperation we received from the staff of the Postsecondary Education Planning Commission in identifying sources of information, arranging interviews and public hearings and responding to our numerous questions.

Sincerely,

A handwritten signature in cursive script that reads "Spud Van de Water" followed by a horizontal line.

Gordon (Spud) Van de Water, Ph.D.
Project Manager, Higher Education

Study of the Need for Baccalaureate Degree Opportunities in Five Florida Counties

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Study of the Need for Baccalaureate Degree Opportunities in Five Florida Counties

Prepared for the
Florida Postsecondary Education Planning Commission

By the
Education Commission of the States

December 2000

Executive Summary

This report presents the findings of a study that responded to a directive of the Florida Legislature “to conduct an independent assessment of the baccalaureate program needs of the following counties: (1) Broward, (2) Sarasota/Manatee, (3) Pinellas and 4) Volusia.” The Florida Postsecondary Education Planning Commission contracted with the Education Commission of the States, a national, nonprofit education policy organization, to undertake the study.

Conducted from August through November of 2000, the study consisted of interviews with business and community leaders in each of the five counties; analysis of a statewide Employers’ Educational Needs Inventory; public hearings; meetings with academic and political leaders; and examination of population, employment and educational data. The study considered two types of possible need: the need for expanded capacity and the need for access to specific programs. The study was limited in its scope, focusing on five counties and exploring the needs for baccalaureate degrees primarily from the perspective of employers.

The analysis of population trends, educational patterns, and survey results and the information and perspectives expressed during interviews and hearings leads us to the following general conclusions:

- Florida lags behind the rest of the nation in percent of the population with baccalaureate degrees, ranking 38th among all states and 8th among the ten largest states.
- The counties under examination have similar educational and population characteristics to the state as a whole; moreover the expansion of baccalaureate capacity should be a matter of statewide concern, not focused on a limited number of counties.
- With regard to the five study counties, we conclude that Broward County will require a moderate increase in baccalaureate capacity over the next ten years while the remaining four counties show only modest needs.

- On several measures of educational progress such as college-going rates of recent high school graduates and transfer rates of community college students, the five study counties are similar to the nine counties that have main campuses of public universities.
- With the exception of Broward County, population changes will not produce substantial new demand for higher education.
- Florida employers are satisfied with the supply of employees with bachelor's degrees and other types of postsecondary education. A large majority is satisfied with the availability of education and training programs. The responses of employers in the study counties were similar to employers throughout the state.
- Employers in the study counties said that many of the most difficult-to-fill jobs require a bachelor's degree in one of five key areas: business management, computer science, education (teacher preparation), engineering and health professions.
- Baccalaureate opportunities should be expanded in one or more key program areas in each of the study counties. None of the university branch campuses in the study counties offers a full array of programs in the key areas although programs may be available through a university center or private institution.

The analyses also lead to the following conclusions about the need for expanded baccalaureate opportunities in each of the five study counties:

- Broward County is well served by the partnership between Broward County Community College and Florida Atlantic University. However, given the relatively large increase projected in the traditional college-age population, moderate expansion of capacity in Broward County is indicated. Consideration should be given to developing programs in computer science and related fields. Capacity in teacher preparation programs needs to be expanded to meet critical shortages.
- Pinellas County has not been well served in the past by the University of South Florida but the University's new leadership is moving rapidly to address the concerns of the community, strengthen the branch campus offerings and expand access to complete upper division programs. In the next 10 years, the population is projected to grow more slowly than the rest of the state and only modest expansion of capacity in the upper division baccalaureate program is indicated. Expanded access to some high-demand programs may be needed.
- Manatee and Sarasota counties place high priority on improving K-12 education and providing strong job-skills training. Population projections indicate that only a modest expansion of capacity is required for these counties. Access to certain programs is needed but the critical mass may not be there to support permanent offerings. Short-term cohort and distance-learning formats may be considered.

- Population projections indicate that only a modest expansion of capacity is needed in Volusia County. Access to some types of programs may need to be developed although the numbers of potential students may not be sufficient to support a permanent traditional program. Increasing access to full four-year university programs should not be a high priority for investment of state resources.

Study of the Need for Baccalaureate Degree Opportunities in Five Florida Counties

Introduction

In March 2000, legislation was introduced in the Florida Senate to create four new universities to serve the five counties in the ECS study. The legislation responded to calls for expanded baccalaureate opportunities in these counties, which are among the largest counties in the state without public universities. Although new institutions were not established during the legislative session, the legislature asked the Florida Postsecondary Education Planning Commission “to conduct an independent assessment of the baccalaureate program needs of the following counties: (1) Broward, (2) Sarasota/Manatee, (3) Pinellas and (4) Volusia.” PEPC contracted with the Education Commission of the States, a national, nonprofit education policy organization, to undertake the study. Florida is a member of ECS.

Conducted from August through November 2000, the study of the need for baccalaureate degree opportunities consisted of interviews with business and community leaders in each of the five counties; analysis of a statewide Employers’ Educational Needs Inventory; public hearings; meetings with academic and political leaders; and examination of population, employment and educational data. Two types of need were considered.

- **Programs:** improved access to certain programs or groups of programs may be needed to meet the personal interests of students and the needs of employers for a well-prepared workforce.
- **Capacity:** capacity may need to be expanded to accommodate a growing population or increased participation rates.

The members of the ECS team wish to thank the students, business and community leaders, legislators and representatives of colleges and universities for their contributions to this study.

Study Limitations

This study was undertaken to examine the needs for baccalaureate opportunities in five urban counties, primarily from an employers’ perspective. Our findings and conclusions should be interpreted with this focus in mind. Had the parameters of our work been set differently, a different picture might have emerged. For example, had we examined statewide needs for baccalaureate opportunities from the perspective of student aspirations rather than or in addition to employers’ needs, the findings may have been different.

Part I Need for Increased Capacity

Part I examines indicators of the need to expand capacity to accommodate increased numbers of students in bachelor's degree programs with overviews of the state followed by comparisons with and among the five study counties. Indicators include population projections by age group, patterns of educational attainment, college-going rates and the patterns of students' choices.

Population Projections

Florida's population is now 15.5 million, the fourth-largest among the states. Table 1 shows the distribution of the state's population among age groups. Table 2 shows that Florida's population is expected to grow about 16%, from 15.5 million in 2000 to 17.9 million in 2010. As in all other states, Florida's large group of baby boomers will dominate the profile of the population, with a 39% increase in the 45 to 64 age group.

Of particular interest in this study are changes in the two age groups most likely to pursue a college degree—young people aged 15 to 24 and adults aged 25 to 44. By 2010, the number of people in the 15 to 24 age group is projected to increase 21%, almost 400,000 statewide. This reflects the “baby boom echo,” the children of the baby boomers, entering this age group. On both sides of the baby boom echo are groups with slower or negative growth. During the next decade, the population of the 25 to 44 age group will decline 2%, a reduction of over 100,000. During the same period, Florida's 0 to 14 age group will grow much more slowly than the population as a whole.

Statewide, the projected growth in the 15 to 24 age group will have an impact on educational capacity from high school through college for the next eight to 10 years. Table 3 shows the Florida Department of Education's projection for graduates of public high schools only. Between 1999-2000 and 2009-2010, the number of graduates with standard diplomas (required by colleges and universities) is expected to increase by 28% with an average annual increase of almost 2,800 students. Statewide, the number of graduates will peak in the 2008-2009 school year, decline through 2014-2015, and then increase gradually through 2020-2021. The projections done by the Florida Department of Education indicate that the proportion of students earning the standard diploma is expected to decline throughout the projection period.¹¹

Table 1
Age Composition of the Population
Projected 2000

	<u>Population</u>	<u>Percent in Age Group</u>				
		<u>0-14</u>	<u>15-24</u>	<u>25-44</u>	<u>45-64</u>	<u>65+</u>
Florida	15,512,940	19%	12%	28%	23%	18%
Broward	1,493,017	19	10	29	23	19
Pinellas	904,284	15	10	26	25	24
Volusia	433,448	17	12	26	24	22
Sarasota	325,889	13	8	21	26	32
Manatee	257,954	16	9	24	24	27

Source: Bureau of Economic and Business Research, University of Florida

Table 2
Projected Population Changes 2000 to 2010

	<u>Projected 2010</u>	<u>Percent Growth 2000-2010</u>					
		<u>All Ages</u>	<u>0-14</u>	<u>15-24</u>	<u>25-44</u>	<u>45-64</u>	<u>65+</u>
Florida	17,927,835	16%	6%	21%	-2%	39%	19%
Broward	1,707,794	14	5	28	-5	42	13
Pinellas	955,900	6	-6	14	-12	30	4
Volusia	496,059	14	3	19	-4	40	15
Sarasota	372,011	14	-1	18	-8	37	16
Manatee	302,424	17	6	21	-3	45	16

Source: Bureau of Economic and Business Research, University of Florida

Table 3
Projected High School Graduates 2000 to 2010

	<u>Projected High School Graduates</u>		<u>Ten Year Change</u>		<u>Average Annual Increase</u>
	<u>1999-2000</u>	<u>2009-2010</u>	<u>Number</u>	<u>Percent</u>	
Florida	99,889	127,442	27,553	28%	2,755
Broward	10,117	13,880	3,763	27	376
Pinellas	4,950	5,707	757	15	76
Volusia	2,839	2,967	128	5	13
Sarasota	1,561	2,084	523	34	52
Manatee	1,198	1,431	233	19	23

Source: Florida Department of Education, Projected Florida High School Graduates 1999-2000 – 2020-2021, December 1999.

The five study counties are among the largest in the state without a public university. The five counties included in this study range in size from 257,954 in Manatee to 1,493,940 in Broward (Table 1). Broward is the second-largest county in the state, Pinellas the fifth-largest, Volusia the 10th-largest, Sarasota the 13th-largest and Manatee the 16th-largest of the 67 counties.

Four of the five counties have lower proportions of their populations in two college age groups. Table 1 shows that the four of the five counties have lower percentages in the two age groups (15 to 24 and 25 to 44) from which most college students are drawn and higher percentages in the 65 and over age group than the state as a whole. The fifth county, Broward, closely mirrors the age distribution of the state.

The study counties are projected to grow in the next 10 years, but four out of five will grow more slowly than the rest of the state. Table 2 shows that the population of Pinellas County is expected to grow much more slowly than other counties in the study and the state as a whole. Broward, Sarasota and Volusia are expected to grow at a slightly slower rate and Manatee is projected to grow at a slightly higher rate.

The study counties will experience increased demand for higher education from the growing 15 to 24 age group, which will be partially offset by declines in the 25 to 44 age group. Table 2 shows that the study counties will experience varying rates of growth in the traditional college-age groups. Broward County is expected to see an increase, well above the state average, in the number of people in the traditional college-age group aged 15 to 24. Increases in this age group in Volusia, Sarasota and Manatee counties are projected to be close to the state average. Pinellas County is projected to have slower-than-average growth in this traditional college-age group.

The projections indicate that the population in the 25 to 44 age group will decline in each of the study counties. The increased demand for higher education from growth in the 15 to 24 age group will be partially offset by declining numbers in the 24 to 44 age group, which represents 39% of the students enrolled in the State University System.²

Broward County will see a high rate of growth and large numbers of additional high school graduates with standard diplomas. As shown in Table 3, the Florida Department of Education projects that Broward County public high schools will graduate 3,700 more students with standard diplomas in 2009-2010 than last year, an increase of 27%.

Pinellas, Volusia, Sarasota and Manatee counties will experience varying rates of growth with relatively small 10-year and annual increases. Pinellas County is expected to have an increase of 15% or 757 standard-diploma graduates from public high schools between 1999-2000. Sarasota is projected to have a 34% increase producing an increase of 523 graduates over 10 years. Both Volusia and Manatee counties are projected to have relatively small increases in the number of high school graduates.³

Educational Attainment

The 1999 Current Population Survey showed that Florida ranked 36th among all states and sixth among the 10-largest states in the proportion of the population 25 and over with high school diplomas. Florida's position in bachelor's degree attainment is less favorable. The state ranked 38th among all states and ninth among the 10-largest states in the proportion of the population with bachelor's degrees or higher.⁴ More importantly, Florida lost ground to other states during the 1990s. Between 1989 and 1999, the national average for the population 25 and over that were high school graduates increased 6.5 percentage points while Florida increased 4.8 points. The national increase in the proportion with bachelor's degrees increased 4.1 percentage points and Florida increased only 1.8 points.⁵

	Percent of Population Age 25 and Over	
	High School Graduates	Bachelor's Degrees or Higher
National	83.4%	25.2%
Florida	82.7%	21.6%
Sarasota County	81.3%	21.9%
Broward County	76.8	18.8
Pinellas County	78.1	18.5
Manatee County	75.6	15.5
Volusia County	75.4	14.8

Source: U.S. Census, Current Population Survey, March 1999; Florida Enterprise

Four of the five study counties have levels of educational attainment lower than state averages. Table 4 shows that with the exception of bachelor's degree attainment in Sarasota County, the counties in this study lag substantially behind the rest of the state in both high school and bachelor's degree attainment.

Participation in Higher Education

Enrollment by county in the State University System is one measure of the participation in higher education. Table 5 shows that 1.5% of Florida's total population was enrolled in the State University System in fall 1998. The five study counties are among the 20 Florida counties sending the largest numbers of students to the university system. Also in the top 20 are all nine counties that have a public university main campus within their boundaries.

Table 5
State University System Fall 1998 Enrollment

	Total Population	Rank Among Counties in Population	Florida Residents Enrolled	Rank Among Counties in Enrollment	Percent of Population Enrolled
Florida	15,512,940	-	225,216	-	1.5%
Broward	1,493,017	2	21,382	2	1.4
Pinellas	904,284	5	11,553	6	1.3
Volusia	433,448	10	3,910	14	0.9
Sarasota	325,889	13	3,168	16	1.0
Manatee	257,954	16	1,969	20	0.8

Source: Source: Florida Board of Regents, Fact Book, Table 15: Total Headcount Enrollment by County of Residence at Time of Admission or Readmission, Fall 1998

To varying degrees, the study counties are underrepresented among the students enrolled in the State University System. Broward County is very close to the state average with 1.4% of the population enrolled in the State University System in fall 1998. Manatee County, however, would have to almost double the number of its students in the university system in order to bring enrollment up to the statewide average.

High School Postsecondary Plans and Enrollments

As shown in Table 6, the Florida Department of Education reported that 64% of 1998-99 high school graduates planned to pursue some type of postsecondary education. Of those planning to continue, 44% (representing 28% of all high school graduates) expected to go to a Florida community college and 40% planned to attend a Florida university (26% of all high school graduates). Statewide, 10% planned to go to an out-of-state institution.

In a separate follow-up study of an earlier group of high school graduates, the Florida Department of Education reported that about 50% of the 1997-98 high school graduates actually enrolled in some type of postsecondary education in Florida by the next fall semester. As shown in Table 7, 56% of those continuing their education (representing 28% of all high school graduates) enrolled in a Florida community College. Thirty-eight percent (19% of all high school graduates) enrolled in a state university and 7% attended a private institution.

Table 6
College Plans of 1998-99 High School Graduates

	High School Graduates Planning to Continue Education		Of Total Planning to Continue Percent Going to*		
	Percent of All Grads	Number	Florida Community Colleges	Florida Univer- sities	Out-of State
	Alachua (UF)	75%	1,118	53%	35%
Leon (FSU & FAMU)	73	1,115	42	40	12
Sarasota	72	1,138	35	43	17
Volusia	72	1,993	49	39	9
Dade (FIU)	72	10,147	38	47	9
Manatee	70	862	33	46	13
Pinellas	68	3,378	44	41	10
Broward	67	6,353	36	49	9
Hillsborough (USF)	66	4,435	33	51	10
Lee (FGCU)	65	1,647	42	42	10
Florida	64	65,845	44	40	10
Duval (UNF)	63	2,937	43	45	10
Orange (UCF)	60	3,471	40	34	12
Escambia (UWF)	54	1,127	48	31	14
Palm Beach (FAU)	37	2,351	37	47	12

*Not shown are the percentages of students planning to attend some other type of postsecondary institution including vocational/technical schools.

Source: Florida Department of Education, Florida Public High School Graduates 1998-99 School Year: Postsecondary Plans Report.

Table 7
High School Graduates and Postsecondary Enrollment

	Number of 1997- 98 High School Grads	Continuing Education Fall 1998		% Continuing in a Florida Institution*		
		Percent	Number	Community Colleges	Public Univer- sities	Private Institu- tions
Leon (FSU & FAMU)	59	814	47	51	2	
Pinellas	56	2,630	55	40	5	
Duval (UNF)	52	2,418	50	43	7	
Hillsborough (USF)	51	3,215	43	50	7	
Dade (FIU)	50	6,472	54	37	9	
Volusia	50	1,282	60	31	9	
Broward	50	4,653	45	48	7	
Florida	50	48,461	56	38	7	
Sarasota	49	764	51	40	9	
Palm Beach (FAU)	49	2,946	48	46	6	
Orange (UCF)	47	2,649	58	36	7	
Manatee	46	565	61	34	5	
Lee (FGCU)	45	1,186	52	39	9	
Escambia (UWF)	40	894	65	33	1	

*Excludes students enrolling in out-of-state institutions. Some students were enrolled in more than one institution. Percentages were calculated on enrollments.

Source: Florida Department of Education, 1997-98 Florida Public High School Graduates.

The five study counties had higher-than-average percentages of students planning to continue their education after high school. Broward and Pinellas counties, in particular, had large numbers of high school graduates planning to continue on to college (these counties ranked second and sixth, respectively, among all Florida counties). In contrast, high school graduates in the nine counties that have local public universities show a wide range of college continuation plans.

Pinellas, Volusia and Broward counties had average or higher-than-average percentages of high school graduates enrolling in a college or university. During the term following high school graduation, 56% of the Pinellas graduates were enrolled in a Florida institution. Enrollments from Volusia and Broward counties were at the state average of 50%.

The presence or absence of a public university main campus seems to have little relationship to students' plans to go on to college, to choices of institutions and to college-going rates. Some Floridians argued that having a main campus of a public university within their county would result in a larger than average proportion of local students enrolling. Assessing this argument, we found that college going plans among high school graduates in the nine Florida counties home to the main campuses of public universities range from 37% in Palm Beach to 75% in Alachua County, and four of these counties fall below the state average. The study of postsecondary enrollment shows that college-going rates for both the university counties and the study counties cluster within 10 percentage points of the state average. There also appears to be no difference between the two groups of counties in students' choices of institutions.

Community College Participation

Table 8 shows that during the 1998-1999 academic year, Florida's community colleges enrolled 10% of the state's 18 to 44 year old population, the group most likely to be attending college and pursue a bachelor's degree. Although a large number of students attend community colleges annually, these students have diverse educational objectives. At most colleges, students planning to pursue a bachelor's degree are the minority. Associate in Arts (AA) degree programs are designed for students who are planning to transfer, but students enrolled in these programs are more likely to be attending on a part-time or intermittent basis.

Table 8
Population Served by Community Colleges
1998-1999

Community College (County)	Students 18 to 44	Population 18 to 44	Students as Percent of Population
Santa Fe Community College (Alachua*)	18,681	122,844	15.2%
Florida Community College-Jacksonville (Duval*)	50,400	343,237	14.7
Daytona Beach Community College (Volusia)	21,764	158,044	13.8
St. Petersburg Junior College (Pinellas)	33,974	296,705	11.5
Miami-Dade Community College	84,794	806,539	10.5
Florida - All Community Colleges	564,762	5,544,313	10.2
Pensacola Community College (Escambia)	16,951	168,239	10.1
Tallahassee Community College (Leon*)	14,792	149,005	9.9
Valencia Community College (Orange)	41,979	427,528	9.8
Palm Beach Community College (Palm)	32,172	343,748	9.4
Hillsborough Community College	31,030	383,159	8.1
Broward County Community College	41,123	539,353	7.6
Manatee Community College (Manatee & Sarasota)	10,692	162,022	6.6
Edison Community College (Lee)	14,115	242,931	5.8

*This community college services one or more additional counties.

Source: Division of Community Colleges, Office of Educational Effectiveness & Research, "Age Ratios for 1998-99 by College," 3-22-00

Community colleges differ in programmatic mix and the historic emphasis on baccalaureate-transfer programs. Table 9 shows that in 1997-98, 28,368 students received an AA degree, representing 3.7% of the 753,255 students enrolled in all types of programs at community colleges. The following fall, 13,005 community college students transferred to the State University System (8,663 of these students entered with an AA degree). The 13,005 transfers in fall 1998 included students who graduated in prior years, students with Associate in Science degrees, and students with no Florida community college degree. Transfer students represented 1.7% of all community college students enrolled during the prior academic year.

Daytona Beach Community College (Volusia) and St. Petersburg Junior College (Pinellas) serve higher-than-average proportions of the population. The counties in the study and the counties with public universities show wide variation in the proportion of the population enrolled in community colleges (among all community colleges, the percentage ranged from a low of 5% to a high of 20.1%). While both Daytona Beach Community College and St. Petersburg Junior College serve a higher-than-average proportion of their populations, Broward County Community College and Manatee Community College fall well below the state average.⁶

Table 9
Community College Associate in Arts
Enrollment and Degrees Awarded
with Transfers to State Universities

Community College	1997-98		Fall 1998	Transfers as % of Enrollment
	Unduplicated Headcount Enrollment	AA Degrees Awarded	Number of Transfers	
All Florida Community Colleges	753,255	28,368	13,005	1.7%
Tallahassee Community College (Leon*)	18,973	1,506	675	3.6
Santa Fe Community College (Alachua*)	20,508	1,477	659	3.2
Valencia Community College (Orange)	48,772	2,600	1,416	2.9
Manatee Community College (Manatee & Sarasota)	16,254	652	388	2.4
Edison Community College (Lee)	21,229	758	492	2.3
Broward County Community College	44,439	1,549	959	2.2
St. Petersburg Junior College (Pinellas)	43,956	1,979	839	1.9
Hillsborough Community College	35,869	1,988	645	1.8
Pensacola Community College (Escambia)	23,668	747	418	1.8
Palm Beach Community College (Palm)	44,956	1,817	722	1.6
Daytona Beach Community College (Volusia)	33,053	828	503	1.5
Miami-Dade Community College	100,155	4,263	1,424	1.4
Florida Community College-Jacksonville (Duval*)	76,128	1,832	829	1.1

Sources: Florida Community College System, *The Fact Book*, Table 8 Program Enrollment: Associate in Arts Degree Program 1997-98 and Table 12 Program Completers 1997-98.

State University System, *Fact Book*, Table 9. Community College Students Transferring Into the State University System, Fall 1998.

Transfer rates from Manatee Community College (Manatee and Sarasota Counties), Broward County Community College and St. Petersburg Junior College (Pinellas County) are higher than the state average. In fall 1998, transfers to the State University System from Manatee Community College represented 2.4% of the total college enrollment in the prior academic year. Broward County Community College (2.2%) and St. Petersburg Junior College (1.9%) also had transfer rates higher than the 1.7% state average. Community colleges serving the five study counties collectively send 20% of the transfer students to public universities.

University Choices

Table 10 shows that 19,893 students entered the State University System for the first time in fall 1998 (first-time students exclude transfers from community colleges and other institutions). Four universities enrolled a substantial proportion of the first-time students from the entire state: Florida State University, 21%; University of Florida, 17%; University of Central Florida, 16%; and University of South Florida, 13%.

Table 11 shows the distribution of community college students transferring into the State University System in fall 1998. The University of Central Florida enrolled 25% of the transfer students, more than any other university. Five other universities enrolled over 10% of the transfer students.

Table 10
First-Time Students Enrolling
in the Public University System
Fall 1998

(Closest Public Universities are Shaded)

	Broward	Manatee	Pinellas	Sarasota	Volusia	Florida
Total Number	2,013	185	971	312	360	19,893
UF	15%	17%	24%	24%	23%	17%
FSU	16	18	15	20	20	21
FAMU	7	4	4	2	7	9
USF	5	29	37*	21*	8	13
FAU	27*	1	1	3	1	6
UWF	1	1	2	2	3	3
UCF	20	26	15	24	23*	16
FIU	8	1	0	<1	<1	6
UNF	1	5	3	2	16	6
FGCU	<1	<1	1	2	0	1

*University has a branch campus located in this county.
Source: Florida Board of Regents, Fact Book, Table 8: Total Headcount Enrollment by County of Residence at Time of Admission for First-Time In-College Students, Fall 1998

Table 11
Community College Students Transferring
into the Public University System
Fall 1998

(Closest Public Universities are Shaded)

	Broward	Manatee/ Sarasota	Pinellas	Volusia	Florida
Total Number of Students	959	388	839	503	13,005
UF	5.4%	14.2%	8.6%	9.9%	12.3%
FSU	4.2	8.5	7.4	5.6	11.1
FAMU	<1.0	<1.0	<1.0	1.2	1.4
USF	1.5	52.6	73.1	3.0	14.8
FAU	62.6	1.3	<1.0	1.0	10.8
UWF	<1.0	1.3	<1.0	<1.0	4.6
UCF	7.0	17.0	1.1	72.6	25.4
FIU	17.9	<1.0	6.9	<1.0	10.2
UNF	<1.0	2.1	<1.0	6.0	7.2
FGCU	<1.0	2.1	1.2	<1.0	2.1

Source: Florida Board of Regents, Fact Book, Table 9: Community College Students Transferring into the State University System, Fall 1998

First-time students from the study counties tend to select one of the four largest universities, with some preference for the closest university. First-time students from the study counties, primarily recent high school graduates, who entered public universities in fall 1998 made a variety of choices. Some students, but certainly not a majority, enrolled in the closest university to their homes (21%

to 37%). For example, 37% of the first-time students from Pinellas County enrolled in the closest institution, the University of South Florida. However, a higher percentage of students from Pinellas County (24%) than the state as a whole (17%) chose the University of Florida. The presence of branch campuses in a county seems to have varying effects on enrollment patterns. Branches of the University of South Florida (USF) are located in both Pinellas and Sarasota counties. A higher proportion of Pinellas County's first-time students attends USF, either the branch or the main campus. More of Sarasota's first-time students pass up the closest university and its branch and attend other universities, particularly UF, UCF and USF.

Transfer students show a strong preference for the closest public university. Unlike the first-time students, a majority of community college students chose the public university located closest to home when they transfer. For example, 73% of the students transferring from St. Petersburg Junior College in Pinellas County transfer to the University of South Florida, to either the branch campus in St. Petersburg or the main campus in neighboring Hillsborough County.

Summary of Capacity Needs and Estimates of Demand

The five counties included in this study are among the largest in the state without a main campus of a public university. These counties' populations are generally older than the rest of the state with larger percentages of the population in the 65 and over age groups and smaller percentages in the 15 to 24 and 25 to 44 age groups than the state as a whole. The population of each county is expected to grow in the next 10 years, but most will grow more slowly than the rest of the state. Demand for higher education will increase with growth in the 15 to 24 age group but this demand will be partially offset by declines in the 25 to 44 age group.

When educational patterns for the study counties are compared to the entire state, few unique concerns are identified. The percentage of the population with high school diplomas is lower than the state average in each county, and in four of five counties the percentage with bachelor's degrees is lower than the state average. To varying degrees, the counties are underrepresented among the students enrolled in the State University System. However, both educational attainment measures and university representation may be attributed in large part to the characteristics of the population.

While the study counties share statewide concerns about educational progress and degree attainment, three of the five counties had average or higher percentages of recent high school graduates enrolling in college. Community colleges serving four of the counties have higher-than-average transfer rates. First-time students from the study counties, primarily recent high school graduates, are more likely to go to a distant university than the one closest to home. Community college transfer students, however, show a distinct preference for the university closest to their home. The presence or absence of a public university main campus seems to have little relationship to students' plans to go to college, to choices of institutions and to college-going rates.

Table 12 provides indications of the size of the future demand for higher education from recent high school graduates in each of the study counties. The Florida Department of Education projects that the number of Broward County high school students graduating with a standard diploma will increase by 3,763 between 1999-2000 and 2009-2010 at current graduation rates, or about 376 students each year. If graduation rates increase by 10%, the 10-year increase would be 5,150.⁷ Using this higher estimate with current college-going rates, 2,570 Broward County high school graduates would need to be accommodated in higher education institutions by 2010. If college-going rates increase to 65%, 3,340 more recent high school graduates would enter higher education in 2010 than in 2000, with an average annual increase of 334 students.

	Number of High School Grads 1999-2000	10-Year Increase in High School Graduates 2009-2010		Potential 10-Year Increase in First-time College Students	
		At Current Graduation Rate	10% Increase in Graduation Rate	50% College Going Rate	65% College Going Rate
Florida	99,889	27, 553	40,290	20,150	26,180
Broward	10,177	3,763	5,150	2,570	3,340
Pinellas	4,950	757	1,330	670	730
Volusia	2,839	128	420	210	270
Sarasota	1,561	523	730	270	470
Manatee	1,198	233	380	190	250

Source for 1999-2000 High School Graduates and 10-year increase at current graduation rates is the Florida Department of Education, Projected Florida High School Graduates 1999-2000 to 2020-2021, December 1999. See Table 3 in this report.

Table 12 suggests that by 2010 Broward County will need to expand capacity to accommodate fairly substantial numbers of recent high school graduates, primarily because of its large population and the projected growth in the 15 to 24 age group. Serving 2,500 to 3,500 additional students would probably require a fairly substantial investment to expand existing capacity or develop new capacity either in the county or elsewhere within the University System.

The increases in the four other study counties are less significant and could be met through a variety of approaches. Even if all of the 2010 high school graduates stayed at home for college, they could be accommodated with modest expansions of existing capacity.

Part II

Need for Expanded Programs

Employers' Educational Needs Inventory

As part of the study of the need for baccalaureate opportunities in Broward, Pinellas, Manatee, Sarasota, and Volusia counties, data from a statewide survey, the Employers' Educational Needs Inventory, were analyzed. The Florida Education, Training and Placement Information Program in cooperation with PEPC conducted this survey. Employers were asked about the adequacy of the supply of employees with appropriate educational backgrounds, the most difficult jobs to fill, availability of education and training programs, expected number of hires and education levels, continuing education needs and contacts with educational institutions. Results of this survey are provided in Appendix A of this report. This section provides highlights from the analysis of 1,282 firms responding to this survey, including 514 firms in the five study counties.

Supply of Educated Employees and Availability of Programs

Table 13 shows the perceptions of employers about the supply of employees with certain educational credentials. Statewide, it appears that a majority of employers are satisfied with the availability of employees with appropriate educational credentials, but the satisfaction with the supply of employees declines slightly with each successive level of education.

Employers' perceptions about the availability of education and training programs are shown in Table 14. Statewide, over 90% of the firms said that programs at each level were available in their geographic regions and there were only small differences across the levels of education. The low unemployment levels in the state undoubtedly influence perceptions about the supply of employees, and more firms are concerned about the supply of employees than the availability of programs.

Table 13
Supply of Employees
With Educational Credentials

Percent of Responding Firms*
Indicating Supply of Employees is Adequate

	Less than Associate	Associate Degree	Bachelor's Degree	Greater than Bachelor's
Statewide	75%	72%	68%	66%
5 Study Counties	70	74	70	67
9 University Counties	79	71	69	67
Other Counties	75	70	63	60
Broward	83	76	70	65
Pinellas	66	73	69	64
Manatee & Sarasota	52	69	75	78
Volusia	73	79	65	69

**About half of the firms responding to the survey answered the questions about the supply of employees by education levels.*

Source: Employers' Educational Needs Inventory, Survey Results, Table 2 from Regional Comparisons, Comparisons of Study Counties with Other Counties and the reports on individual counties.

Table 14
Availability of Postsecondary
Educational and Training Programs

Percent of Responding Firms
Indicating Programs Are Available

	Less than Associate	Associate Degree	Bachelor's Degree	Greater than Bachelor's
Statewide	93%	95%	92%	93%
5 Study Counties	92	95	93	93
9 University Counties	93	95	93	95
Other Counties	91	94	86	90
Broward	94	96	95	94
Pinellas	93	93	93	95
Manatee & Sarasota	89	95	86	92
Volusia	92	96	98	91

Source: Employers' Educational Needs Inventory, Survey Results, Table from Regional Comparisons, Table 6 Comparisons of Study Counties with Other Counties and Table 5 from the reports on individual counties.

A majority of employers in the five study counties are generally satisfied with the supply of educated employees and the availability of education and training programs. They are as satisfied as employers in the nine university counties are. It was expected that employers from the five study counties would report that supplies of appropriately trained employees were inadequate and that needed academic programs were not available. It was also expected that there would be differences between the five study counties and the

nine counties that have a main campus of a public university—that the latter group would be more satisfied with the supply of employees and the availability of education and training programs. However, there is no substantial difference between the study counties and the university counties on either measure. Across both groups of counties, satisfaction with the supply of employees is high given the tight labor market, and satisfaction with education and training programs is very high.

The perceptions of employers in Broward, Pinellas and Volusia counties about the supply of employees and the availability of programs were similar to the university counties and the rest of the state. Employers in Manatee and Sarasota counties were somewhat less satisfied with the supply of employees at the lower educational levels and somewhat more satisfied with the supply at higher levels. Although levels of satisfaction with the availability of programs were high in Manatee, they were slightly lower at the less-than-associate and bachelor's degree levels than other study counties and the rest of the state.

Difficult-to-Fill Jobs

At the state level, the five most difficult to fill jobs were in secretarial/general office occupations, specialty managerial occupations, K-12 teachers, accountants/financial specialists, and health services (aides and assistants). Employers in the five study counties and the nine counties with main campuses also identified secretarial/general office occupations, specialty managerial occupations and accountants/financial specialists among the most difficult to fill but also included computer science jobs.

There were no important differences between the study counties and the nine counties with main campuses of universities in the levels of postsecondary education and academic fields preferred for the most difficult-to-fill jobs. Because secretarial/office and health services occupations were mentioned so frequently, associate degree and less-than-associate degree were mentioned more often than higher levels. For both groups of counties, the top five academic fields preferred by employers included business management, health professions, education, engineering and computer and information.

Table 15				
Most Difficult to Fill Jobs				
First or Second Most Difficult to Fill Jobs				
Cited by 5% or More of Survey Respondents				
	Broward	Pinellas	Manatee/ Sarasota	Volusia
Occupations Typically Requiring a Bachelor's Degree or Higher are Shaded				
Executive, administrative, and managerial occupations				
Accountants/Financial Specialists	✓	✓	✓	✓
Specialty Managerial	✓	✓		✓
Professional specialty and technical and related support occupations				
Health Services*	✓	✓	✓	✓
K-12 Teachers	✓	✓	✓	
Computer Scientists	✓	✓		✓
Engineers		✓	✓	
Health Care		✓		✓
Maintenance/Treatment*				✓
Other Professional/Technical				✓
Other Social Science Occupations				✓
Writers, Artists, Entertainers				✓
Marketing and sales occupations				
Merchandise/Product Sales	✓	✓		
Administrative support occupations				
Secretarial/General Office	✓	✓	✓	✓
Communication Equipment Operator			✓	✓
* "Health Services" occupations include assistant level positions such as dental assistants and nursing aids. "Health Maintenance/Treatment" occupations include registered nurses, physician's assistants, pharmacists, and other similar occupations.				
Source: Tables 3a and 3b from the reports on individual counties.				

Difficult-to-fill jobs in the study counties include several occupations that typically require a bachelor's or higher degree. Table 15 shows the occupations that were identified as difficult to fill by 5% or more of the employers in the study counties. Among these jobs were several occupations that typically require a bachelor's degree.⁸ Positions requiring graduates from accounting, management, computer science, engineering, teaching and health programs appear to be difficult to fill.

Although some of the most difficult-to-fill jobs require a bachelor's degree or higher, employers in the study counties indicated that many future hires will require lower levels of education. Sixteen percent of employers in the study counties indicated that they did not plan to hire anyone with a bachelor's degree and 37% said that they would not be hiring anyone with greater than a bachelor's degree. Forty to forty-five percent of the employers said they would hire 1 to 5 employees in each degree level—associate, bachelor's and greater than bachelor's. Less than 40% planned to hire more than five employees with a degree. On the other hand, about 58% said they would make more than five hires for jobs requiring less than an associate degree, and 36% would hire over 20 at this educational level.⁹

Continuing Education and Training Needs

Statewide, employers want more training and education for their employees but they are more interested in having employees maintain and upgrade skills than obtain degrees. Employers' descriptions of employee needs for continuing education were similar across the state.

	Percent of Employers				
	Broward	Pinellas	Manatee/ Sarasota	Volusia	5 Study Counties
Employees with less than associate					
No further education needed	15%	18%	13%	9%	15%
Maintain or upgrade skills	60	64	70	75	65
Obtain an additional degree	8	10	15	2	9
Employees with associate degrees					
No further education needed	11	13	7	4	10
Maintain or upgrade skills	51	55	60	59	55
Obtain an additional degree	20	21	24	14	21
Employees with bachelor's degrees					
No further education needed	17	14	13	11	15
Maintain or upgrade skills	54	57	59	59	57
Obtain an additional degree	19	18	24	16	19

Source: Table 8 in the reports on individual counties

Employers in the study counties want training and education for their employees—primarily for maintaining and upgrading skills. They were more likely to say that employees who already had a degree should advance to the next degree. Table 16 shows that employers from the study counties reported that their employees at each level of education need additional training or education. Among the study counties, employers in Manatee/Sarasota and Volusia counties were somewhat more likely to indicate that employees needed more education.

Employment Projections

In addition to the findings of the Employers' Educational Needs Inventory, current and projected employment patterns provide some indication of workforce needs and the fields of study that will be required to meet them. This section provides employment projections and an assessment of the demand for people to fill jobs at certain education levels.

Employment Patterns and Projections

In 1997, 7.1 million people were employed in Florida. Statewide employment is expected to increase 26%, adding about 1.8 million jobs between 1997 and 2007. Faster-than-average growth is projected for professional specialty and service occupations. Strong growth is also expected in executive, administrative and management occupations, marketing and sales, and administrative support. However, professional specialty and executive, administrative and managerial occupations will grow at a rate slower than the projection for the nation.

Table 17 shows the number of new jobs in Florida and each of the study counties by occupational category. In 2007, for example, there will be 137,910 new jobs in executive, administrative and managerial occupations statewide. Among the study counties, new jobs in this category range from 2,108 in Volusia to 14,076 in Broward County.

National employment patterns indicate that certain occupational categories are more likely than others to require a bachelor's degree or above. For example, 93% of executive, administrative, and managerial occupations require at least a bachelor's degree. Sixty-five percent of professional specialty and technical occupations (which include most professional, scientific, health and education occupations) require a bachelor's degree. Very small percentages of agriculture, marketing and sales, and operator occupations require a degree. Bachelor's degrees are generally not required for jobs in the other occupational categories.¹⁰

Table 18 provides estimates of the number of jobs requiring a bachelor's degree or above to be filled annually in the study counties and statewide. At the state level and in most of the counties, 24% of the new jobs will require a bachelor's degree or higher. Fewer of Florida's new jobs require this level of education than national patterns because of differences in projected employment patterns. Florida jobs in the two categories with the highest educational credentials—executive/administrative/managerial occupations and professional specialty occupations—are projected to grow more slowly than national averages.

Table 19 provides examples of the specific occupations that require a bachelor's degree or higher. These examples are drawn from the list of fastest-growing occupations and the occupations expected to have the largest number of job openings based on Florida projections for 1998 to 2008. These projections are consistent with the conclusion from the Employers' Educational Needs Inventory that graduates of business management, health professions, education, engineering, and computer and information programs will be in demand.

	10-Year Increase					
	<u>Broward</u>	<u>Pinellas</u>	<u>Manatee</u>	<u>Sarasota</u>	<u>Volusia</u>	<u>Florida</u>
Executive, Administrative, & Managerial	14,076	6,462	2,625	2,726	2,108	137,910
Professional specialty & Technical & related occupations	41,556	25,380	9,755	8,940	7,274	442,610
Marketing & sales	27,423	11,118	5,551	5,417	4,145	246,067
Administrative support	31,215	17,980	12,621	5,733	4,070	309,747
Service	31,326	15,908	6,703	8,232	8,003	349,906
Agriculture, forestry, fishing & related occupations	3,542	1,900	862	930	261	33,387
Precision production, craft & repair and Operators, fabricators, & laborers	30,224	15,921	17,841	4,929	3,502	302,040
All Occupations	179,362	94,669	55,958	36,907	29,363	1,821,667

	Annual Increase in the Number of Jobs					
	<u>Broward</u>	<u>Pinellas</u>	<u>Manatee</u>	<u>Sarasota</u>	<u>Volusia</u>	<u>Florida</u>
Executive, Administrative, & Managerial	1,323	607	247	256	198	12,964
Professional specialty & Technical & related occupations	2,743	1,675	644	590	480	29,212
Marketing & sales	192	78	39	38	29	1,722
Administrative support	0	0	0	0	0	0
Service	0	0	0	0	0	0
Agriculture, forestry, fishing & related occupations	0	0		0	0	0
Precision production, craft & repair and Operators, fabricators, & laborers	7	4	4	1	1	66
Total Bachelor's and above	4,265	2,364	934	885	708	43,964
Percent of All Jobs	24%	25%	17%	24%	24%	24%

Table 19
Examples of Jobs in Occupations Requiring
a Bachelor's Degree or Higher
Projected 1997 – 2007

Among Fastest Growing Occupations
10-Year Increase in the Number of Jobs

Broward Pinellas Manatee Sarasota Volusia Florida

Executive, administrative & managerial occupations

Engineering, natural science &
computer & information

systems managers	357	248	48	66	40	4,068
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Professional specialty occupations

Systems analysts	1,608	1,363	607	234	165	17,963
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Social Workers	500	323	123	129	142	5,797
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Computer engineers	538	447	117	75	33	5,778
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Residential counselors	174	207	123	71	86	2,343
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Physician assistants	168	149	39	62	48	2,144
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Occupational Therapists	158	158	28	52	50	1,891
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Database administrators	175	110	16	28	11	1,862
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Marketing & sales occupations

Securities, commodities & financial services sales agents	957	826	43	148	60	6,149
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Among Occupations with the Largest Number of Jobs,
10-Year Increase in the Number of Jobs

Broward Pinellas Manatee Sarasota Volusia Florida

Executive, administrative & managerial occupations

General managers & top executives	14,076	6,462	2,625	2,726	2,108	137,910
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Professional specialty occupations

Systems analysts	1,608	1,363	607	234	165	17,963
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Teachers, Elementary School	1,685	901	343	275	321	17,195
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Teachers, Secondary School	1,581	849	322	260	301	16,175
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College & university faculty	639	188	77	88	329	8,554
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Computer programmers	618	552	419	96	53	7,379
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Social Workers	500	323	123	129	142	5,797
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Computer Engineers	538	447	117	75	33	5,778
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Source: Florida Department of Labor and Employment Security

All of the study counties will experience significant increases in employment in the next 10 years. Over the 10-year period between 1997 and 2007, the number of new jobs will range from 29,363 in Volusia to 179,362 in Broward County. The largest numbers of new jobs will be found in professional specialty, service and production occupations.

About one-fourth of the new jobs in the study counties will require a bachelor's degree or higher. With the exception of Manatee County, the study counties follow the state pattern in employment growth and in the proportion of new jobs requiring a bachelor's degree.

Business management, health professions, education, engineering, and computer and information programs are needed to meet workforce demands. Table 19 shows that programs in these fields will be needed to provide large numbers of managers, K-12 teachers, systems analysts and computer scientists, and health professionals among the fastest-growing and largest-growth occupations.

Program Availability

Broward, Pinellas, Sarasota and Volusia counties each have a branch of one of the public universities within county borders and the Sarasota branch of the University of South Florida serves Manatee County. In addition to the programs available at the branch campuses, programs are available from private institutions within each county and from other public and private institutions through university centers or distance-learning technologies. Table 20 lists only the complete programs that are currently available through the branch campuses located within the study counties as reported by the State University System in September 2000. Complete programs offer all of the upper-division coursework needed to complete a degree at the branch location.

All of the programs offered by Florida Atlantic University and Florida International University at the Broward County branch campus are complete programs. The University of South Florida offers partial programs at the St. Petersburg branch campus in 18 additional fields, and in 17 fields at the Sarasota branch campus. The University of Central Florida provides partial programs in three additional fields at the Daytona Beach campus.

None of the study counties have access to complete programs in each of the critical areas—business management, computer science, education, engineering and health professions. Employers responding to the survey identified these five broad fields that supply graduates for the most difficult-to-fill jobs. These fields also supply graduates to fill most of the jobs in the occupations with fastest and largest growth. Table 20 shows that complete programs in business are available in all five counties and Broward and Pinellas counties have access to an array of programs, including information systems. Programs are less available in other fields. Three counties have one or more programs in education, two counties have engineering programs and two have programs in the health professions. None of the counties has computer science programs (although information systems programs are available in two counties). None of the branch campuses offers even partial programs in these key fields.

Table 20
Complete Programs Available
at Branch Campuses

	Broward FAU	Pinellas USF	Sarasota/ Manatee USF	Volusia UCF
Business & Related Fields	Accounting Finance Information Sys Hospitality Mgmt* International Bus Construction Mgmt* Public Mgmt	Accounting Finance Economics General Bus Information Sys Management Marketing	Accounting General Bus Information Sys	General Bus
Computer Science	<i>none</i>	<i>none</i>	<i>none</i>	<i>none</i>
Education	Elementary Special Ed	Early Childhood Elementary Special Ed	<i>none</i>	Elementary Early Childhood Special Ed
Engineering	Engineering	<i>none</i>	<i>none</i>	Engineering
Health Professions	Health Admin Nursing**	<i>none</i>	<i>none</i>	Nursing
Other Complete Programs	Architecture Criminal Justice English Exercise Science History Liberal Studies Mass Comm. Political Science Psychology Social Psychology Social Science Sociology Urban Planning	Criminal Justice Governmental Affr Psychology English Mass Comm	Communication Criminal Justice Liberal Studies Social Work Psychology	Criminal Justice Legal Studies Liberal Studies Psychology Social Science

*These programs are offered by Florida International University. ** Offered by both FIU and FAU. All other programs at the Broward branch campus are offered by Florida Atlantic University.
Source: State University System of Florida, *Five-Year Enrollment Plan for Increasing Access and Growing Branch Campuses and Centers*, September 29, 2000.

New delivery methods and private institutions provide access to key programs in each of the counties. In Broward County, for example, Nova Southeastern University offers a full array of programs in the education and health professions. In Pinellas County, Eckerd College offers a baccalaureate degree completion program that currently serves over 1,000 county residents. In Sarasota, the Ringling School of Art and Design provides specialized programs. The College University Center at St. Petersburg Junior College provides 22 undergraduate and nine graduate programs offered by nine public and private institutions. Included in the programs are computer and information sciences, technical management, engineering and other programs that address unmet needs in the county.

Summary of Program Needs

Florida employers responding to the Employers' Educational Needs Inventory indicated that they were generally satisfied with the supply of educated employees and in the availability of training and education programs. It was expected that employers in the study counties would report that supplies of employees were inadequate and programs were unavailable, but that was not the case. There was no substantial difference in the responses from the five study counties and the nine counties that have main campuses of public universities or the other counties in the state.

Employers' most difficult-to-fill jobs included several that usually require a bachelor's degree, particularly in executive, administrative and managerial occupations and professional specialty occupations. However, employers indicated that many future hires will require lower levels of education.

Employers in the study counties want training and education opportunities for their employees but they are more interested in having employees upgrade their skills than obtain degrees. They are more likely to support employees who already have a degree to advance to the next degree than support employees obtaining their first degree.

Employment patterns and projections for Florida and the study counties indicate significant increases in employment between 1997 and 2007. About one-fourth of the new jobs will require a bachelor's degree or higher in the same fields that employers identified as providing graduates for their most difficult-to-fill jobs—business management, computer science, education, engineering and health professions. None of the five counties has access to a full array of the employer-identified programs through the local branch campus of a public university. While there may not be sufficient demand in each of the counties to support traditional programs in expensive fields (health professions, engineering and computer science), these programs can be made available through joint ventures and distance learning. The early success of the St. Petersburg Junior College University Center shows that cooperative organizational structures and nontraditional delivery systems have strong potential to address the needs of under-served communities.

Part III

Evaluation of Need by County

Part III draws from Parts I and II and summarizes the relevant information about the need for additional capacity or expanded programs for each county. In addition, this section provides summaries of interviews and public hearings held in each county. In August 2000, members of the consulting team interviewed a total of 17 community and business leaders in the study counties. In November 2000, meetings were held with 15 representatives of colleges and universities and three governmental leaders. In addition, a total of 36 people spoke at public meetings held in Broward, Pinellas and Volusia counties in November.

Broward County

Profile

Broward County

- Population age 15-44: 39%
- Population growth by 2010: 14%
- Adults with high school diploma: 76.8%
- Adults with bachelor's: 18.8%
- Community college enrollment: 7.6% of age 18-44 population
- SUS enrollment: 1.4% of total population
- Job growth by 2008: 26%
- University choices: FAU, UCF

Florida

- Population age 15-44: 40%
- Population growth by 2010: 16%
- Adults with high school diploma: 82.7%
- Adults with bachelor's: 21.6%
- Community college enrollment: 10.2% of age 18-44 population
- SUS enrollment: 1.5% of total population
- Job growth by 2008: 26%

Broward County is Florida's second most populous county with over 1.5 million residents in 2000. Between 2000 and 2010, the county is projected to show a larger increase (28%) in the 15 to 24 age group and a steeper decline (-5%) in the much larger 25 to 44 age group than the state as a whole. An increase of over 42,000 is projected for the 15 to 24 age group, while the 25 to 44 age group will decline 21,000. Overall, the population of this county is expected to grow slightly more slowly than the rest of the state, and the average age in the county, like the state, will be older in 2010 than it is in 2000. The Florida Department of Education projects that the number of high school graduates will increase by 3,763 between 1999 and 2009, an average annual increase of 376 students.

Measures of educational attainment for Broward County are lower than the state averages. In 1999, 76.8% of the over-25 population had received a high school diploma and 18.8% had completed a bachelor's degree. At 53%, the county's high school graduation rate was well below the state average in 1998-99, 63rd among the 67 counties.¹¹ Among those who received a high school diploma in 1998-99, however, a slightly larger-than-average percentage planned to continue in postsecondary education and relatively more of these said they wanted to attend a public university. A follow-up study of the 1997-98 high school graduating class showed that 50%, the same as the state average, were enrolled in postsecondary education the following fall.

Higher education institutions located within the county include Broward County Community College (with the third-largest annual enrollment in the state), Nova Southeastern University, Keiser College and several small special-purpose institutions. Florida Atlantic University's main campus is in Boca Raton in neighboring Palm Beach County and FAU has branch campuses in Ft. Lauderdale and Davie in Broward County. In fall 1998, 8,525 students from Broward County were enrolled at FAU, representing 43% of the total FAU enrollment. The proportion of BCCC's enrollment that transferred to a public university in 1998 is higher than the state average. A majority (62%) of the community college students from Broward County who transferred to a public university in 1998 enrolled in Florida Atlantic University.

A broad array of bachelor's degree programs is offered by FAU in joint-use facilities shared with BCCC. Programs are available in business, education, engineering and selected health professions—four of the five key fields identified by employers. A program in computer sciences is not currently available at this branch location.

Information from the State University System shows that 2,013 students from Broward County entered a public university for the first time in fall 1998. The largest proportion, 27%, enrolled at Florida Atlantic University (FAU). Other universities serving substantial numbers of these students were the University of Central Florida (20%), Florida State University (16%) and the University of Florida (15%).

Although Broward County Community College annually serves a very large number of students, the proportion of the 18 to 44 population of the county that is enrolled there is below the state average. On the other hand, the proportion of Broward County students enrolled in the State University System in fall 1998 was close to the statewide average.

Employment patterns among industries in Broward County are similar to the rest of the state. The five largest employers include a financial services firm, a private university (Nova Southeastern University), a hospital, a publishing company and an automobile sales and service company. Between 1997 and 2007, employment is expected to grow 26%, a rate equal to the state as a whole. About 180,000 new jobs will be developed during this period and the largest number of jobs will be in services, wholesale and retail trades, government, financial services, and transportation and utilities. Among service industries, business services, health care, and engineering and management services are expected to have the largest number of jobs.

Occupational projections indicate that Broward County employers will need to fill over 4,000 jobs each year through 2007 that typically require a bachelor's degree, and these jobs will represent about 24% of all new jobs. The largest numbers of new jobs are expected in such occupations as systems analysts, managers, and elementary and secondary schoolteachers.

Survey Results

Employers in Broward County submitted 188 responses to the Employers' Educational Needs Inventory (23% response rate).¹² In general, the responses of Broward County employers were very similar to responses from employers across the state.

A majority (70%) of the employers reported that the supply of employees with bachelor's degrees was adequate and similar proportions reported satisfaction with the supply of employees at other levels. A large majority (95%) said that bachelor's degree programs were available in their region.

Broward County employers reported that their most difficult-to-fill jobs included several occupations that typically require a bachelor's degree: accounting/financial specialists, specialty managerial, K-12 teachers and computer scientists. Other difficult-to-fill jobs were in health services (aides and assistants), merchandise/product sales and secretarial/general office.

Interviews and Public Hearings

Business and community leaders interviewed in August 2000 believed that area colleges and universities, both public and private, had been responsive to their needs but they stressed a need for improved cooperation among the higher education institutions serving the area and better communication between businesses and higher education. They also wanted higher education to improve communications about the value of a bachelor's degree and increase college-going and completion rates.

Broward County Community College, Florida Atlantic University and Nova Southeastern University had good standing with these business and community leaders. However, these individuals had more interest in and had greater awareness of the University of Florida and Florida State University than Florida Atlantic University, which has been designated to serve the area.

Interviewees reported problems in hiring people with technical skills and emphasized the need for training and retraining in this field, primarily at the community college level. While they agreed with the goal of raising educational attainment, they placed higher priority on K-12 education and short-term training than on baccalaureate-level programs.

The presidents of Broward County Community Colleges, Florida Atlantic University and Nova Southeastern University were interviewed in November 2000. The President of FAU noted that the Broward campus is "one of two main campuses of FAU." Each president independently emphasized the success of their mutual cooperative initiatives and the efforts they were making to meet the county's needs. They agreed that most of the baccalaureate needs were currently being met except for programs that would help meet a critical shortage of K-12 teachers. The presidents noted that there are no incentives for public and private institutions to help expand access to higher education opportunities. It was reported that FAU

planned to expand the Davie campus to accommodate 10,000 students, up from 5,000, with enhanced programs.

Over 60 people attended the November 13th public hearing and 14 made presentations during a public hearing. Two themes emerged—the critical shortage of K-12 teachers and the strength of the BCCC-FAU partnership in meeting the needs of the community. Several speakers said they felt that a new public university is not needed in the county and that incentives should be provided for existing institutions to expand their offerings.

Discussion

Some expansion of capacity will probably be required to meet the needs of Broward County during the next decade. Among the study counties, Broward is projected to have the fastest growth in the 15 to 24 year old age group, the group comprising the traditional college-age population, with an increase of over 40,000 projected. The substantial employment growth projected for the county, including growth in occupations that typically require a bachelor's degree, also suggests a need for expanded opportunities.

There was general agreement that the cooperation between FAU and BCCC is high, although community leaders indicated that better cooperation between baccalaureate institutions was needed. Bachelor's degree programs are available in all but one of the key fields. Consideration should be given to developing opportunities in computer science and related fields. In addition, there was strong agreement that programs need to be added and existing programs expanded to meet critical shortages of teachers.

Pinellas County

Profile

Pinellas County	Florida
▪ Population age 15-44: 36%	▪ Population age 15-44: 40%
▪ Population growth by 2010: 6%	▪ Population growth by 2010: 16%
▪ Adults with high school diploma: 78.1%	▪ Adults with high school diploma: 82.7%
▪ Adults with bachelor's: 18.5%	▪ Adults with bachelor's: 21.6%
▪ Community college enrollment: 11.5% of age 18-44 population	▪ Community college enrollment: 10.2% of age 18-44 population
▪ SUS enrollment: 1.3% of total population	▪ SUS enrollment: 1.5% of total population
▪ Job growth by 2008: 21%	▪ Job growth by 2008: 26%
▪ University choices: USF, UF	

With a population estimated to be 904,554 in 2000, Pinellas County is the second-largest of the counties included in this study and the fourth-largest in the state. The county is densely populated and its position on a peninsula complicates commuting to neighboring counties, a critical factor in its access to higher education.

During the next 10 years, the population of the county is projected to grow 6%, much more slowly than the rest of the state. The 15 to 24 age group is projected to increase 15% during this period but the potential demand for higher education that this population represents will be partially offset by declines in the 25 to 44 age group. The Florida Department of Education projects that the number of high school graduates with a standard diploma will increase by 757 over the next ten years, an average annual increase of about 76 students.

The educational attainment of the population over 25 is lower than Florida averages—78% with high school diplomas and 19% with bachelor's degrees. In 1998-99, Pinellas County ranked sixth among Florida counties in the number of high school graduates. Both the 1998 high school completion rate (66%) and college-going rate (56%) were higher than the state average.

In fall 1998, 2,667 recent high school graduates from Pinellas County were enrolled in a college or university in Florida. Fifty-five percent of these students were enrolled in a community college and 40 percent in a public university. Information from the State University System shows that 37% of the first-time university students from Pinellas County enrolled at the University of South Florida, 24% at the University of Florida, 15% at Florida State University and 15% at the University of Central Florida. A higher percentage of Pinellas County first-time students enroll in the closest university, USF, than students from other study counties.

St. Petersburg Junior College is the fourth-largest in the state in enrollment and fourth in the number of students transferring into the State University System. In fall 1998, 839 St. Petersburg Junior College students transferred to a public university. Seventy-three percent transferred to the University of South Florida. The county is also served by Clearwater College (641 students) and Eckerd College (1,568).

In 1999, over 7,000 Pinellas County students attended USF, representing 20% of the university's total headcount enrollment. The St. Petersburg Campus enrolled 3,400 students. A College University Center has been established at St. Petersburg Junior College with nine public and private colleges and universities offering 22 bachelor's degree and nine graduate programs through two-way interactive television, the Internet and other technologies as well as traditional classroom delivery.

USF offers seven business programs, three education programs and five other programs at the St. Petersburg campus but no programs in computer science, engineering or health professions. The College University Center at St. Petersburg Junior College provides programs in computer and information sciences, technical management, engineering and other fields that address unmet needs in the county.

Employment patterns among industries in Pinellas County are similar to the rest of the state except for higher-than-average employment in manufacturing and services. The 10 largest employers are three technology manufacturers or distributors, three financial and business services firms, a merchandiser, a publisher, a drug retailer and an electric utility. Although the number of jobs is expected to grow more slowly than the rest of the state, almost 95,000 new jobs are projected between 1997 and 2007, an increase of 21%. A majority of the new jobs are expected to be in service industries, particularly business services, health services, and engineering and management services.

Through 2007, Pinellas County employers will annually need to fill over 2,300 jobs that require a bachelor's degree or higher. The largest number of jobs requiring a bachelor's degree will be in executive and management occupations, systems analysts and elementary and secondary school teachers.

Survey Results

Employers in Pinellas County submitted 182 responses to the Employers' Educational Needs Inventory (36% response rate).¹³ In general, the responses of Pinellas County employers were very similar to responses from employers across the state.

A majority (69%) of the employers reported that the supply of employees with bachelor's degrees was adequate and similar proportions reported satisfaction with the supply of employees at other levels. A large majority (93%) said that bachelor's degree programs were available in their region.

Pinellas County employers reported that their most difficult-to-fill jobs included several occupations that typically require a bachelor's degree: accounting/financial specialists, specialty managerial, K-12 teachers, engineers, computer scientists and health professionals. Difficult-to-fill jobs at lower educational levels were in health services (aides and assistants), merchandise/product sales and secretarial/general office.

Interviews and Public Hearings

The Pinellas County community and business leaders interviewed during August 2000 were unanimous in their appreciation of the work of St. Petersburg Junior College. The college has been responsive to their needs, innovative in programming and accessible throughout the county. The Pinellas County Technical Institute was mentioned positively but not frequently. Eckerd College's program for experienced learners was respected.

Most interviewees, however, were dissatisfied with the contributions and responsiveness of the University of South Florida -- both the main campus in Tampa and the St. Petersburg campus. There were complaints about the array of programs, course schedules, location and campus safety. Interviewees believed that the St. Petersburg campus was a low priority for the main campus. Several people were impressed that the new president at USF made contact with members of the community but they were not yet convinced that the campus would enjoy higher priority under her administration.

Pinellas County leaders agreed that opportunities for baccalaureate studies need to be expanded. The most frequently mentioned problem was the 1-hour commute to the USF main campus, a major barrier to those thinking of beginning or continuing their education. Expanded program and course offerings with convenient schedules and formats were identified as high-priority needs.

Several people mentioned the College University Center and were hopeful that it would meet some of their needs. However, community leaders also called for expanded capacity for a "traditional university experience" to serve the expected increase in the number of high school graduates, higher graduation and college-going rates, and community college transfer students. Additional capacity is also needed to meet the needs of working adults who are interested in upgrading their educational credentials. Programs are needed that are designed to prepare qualified workers for local employment and to provide advancement opportunities for existing employees. Fields mentioned include teacher education, health professions, business management, marketing and technology, including engineering and computer science.

In November 2000, additional interviews were conducted with governmental leaders and college and university representatives. Governmental leaders stressed the need for a full four-year university opportunity in Pinellas County—an opportunity to enroll in a university as a freshman and continue at a single institution. They also commented upon USF's lack of responsiveness to the needs of the community and noted that things were improving under the administration of the new USF president. While they supported recent and planned changes—increased autonomy for USF-SP, expanded program offerings and increased faculty—they were skeptical that the plans could be implemented without substantial new funds that aren't likely to be available.

During an interview and in the public hearing, the USF President conceded that many of the complaints about the university had been justified. She outlined plans to improve communication between USF-SP and the main campus, increase the

branch's autonomy and expand programming. She mentioned that the Arizona State University's West Campus provides an organizational model.

The President of SPJC described the development of the College University Center, noting that it took only two months to start offering courses and, after the first year, 650 students were enrolled in programs offered by nine colleges and universities. He related examples of lack of cooperation from USF but noted that things had improved significantly in the past few months.

Representatives from Eckerd College described the Program for Experienced Learners, which currently serves over 1,200 Pinellas County students and is available at several sites throughout the county. The college is willing to modestly expand capacity in its existing programs and in the Program for Experienced Learners, but affordability is a major issue for students.

Over 50 people attended the public hearing on November 8 and 19 people spoke including several who expressed strong support for USF and the continuation of the USF-SP branch campus. Speakers cited the prestige of the well-established research university, opportunities to participate in university activities, the strong USF alumni presence in the county and the high quality of the programs and courses. Some speakers said that a full four-year university experience was needed while others spoke to the merits of the existing 2+2 system. Several mentioned that the appropriate solution for the county would involve increased autonomy, flexibility and responsiveness; efficient use of existing facilities and academic resources; and greater ability to provide the programs that business and industry need.

Discussion

Indicators of the need for expanded baccalaureate opportunities in Pinellas County present a mixed picture. The strong community college, higher-than-average college-going rates, and the relatively high and growing employment in college-level occupations all suggest a need to provide access to certain kinds of programs including engineering, computer science and health professions. Modest expansion of existing capacity may be needed to accommodate growth in the traditional college-age population. Major new facilities are not indicated.

Enrollment at USF-SP (3,400) compares favorably with Florida Gulf Coast University's enrollment of 2,893, suggesting significant interest in higher education despite the expressed dissatisfaction with the branch campus mentioned in August interviews. The USF-SP has physical plant and library located in the heart of redevelopment in the city's downtown.

The concerns about baccalaureate opportunities in Pinellas County go beyond capacity and program availability. Speakers at the public hearing and interviewees were less interested in helping to define the needs of the community and much more interested in addressing the form of the response to the need—converting the USF branch campus to a separate, free-standing institution or maintaining a branch with ties to USF.

Central to the discussions are concerns about the paucity of offerings at USF-SP that require almost all students to commute to the main campus to complete their degrees. Proponents want a full set of upper-division courses available on a regular schedule so that community college transfer students can complete a bachelor's degree without a long commute. Some are apparently not satisfied with a 2+2 approach and are seeking access to a full four-year university experience.

Manatee and Sarasota Counties

Profile

Manatee County	Sarasota County	Florida
<ul style="list-style-type: none"> ▪ Population age 15-44: 33% ▪ Population growth by 2010: 17% ▪ Adults with high school diploma: 75.6% ▪ Adults with bachelor's: 15.5% ▪ Community college enrollment: 6.6% of the age 18-44 age population ▪ SUS enrollment: 0.8 of total population ▪ Job growth by 2008: 43% ▪ University choices: USF, UCF 	<ul style="list-style-type: none"> ▪ Population age 15-44: 29% ▪ Population growth by 2010: 14% ▪ Adults with high school diploma: 81.3% ▪ Adults with bachelor's: 21.9% ▪ SUS enrollment: 1.0% of total population ▪ Job growth by 2008: 26% ▪ University choices: UF, UCF, USF, FSU 	<ul style="list-style-type: none"> ▪ Population age 15-44: 40% ▪ Population growth by 2010: 16% ▪ Adults with high school diploma: 82.7% ▪ Adults with bachelor's: 21.6% ▪ Community college enrollment: 10.2% of age 18-44 population ▪ SUS enrollment: 1.5% of total population ▪ Job growth by 2008: 26%

Manatee and Sarasota Counties were considered as a single geographic unit for purposes of this study. If additional opportunities for bachelor's degree programs are developed, they would be designed to serve both counties.

Together these counties have a population of 583,000 and projections show an increase of over 90,000 by 2010. Both Manatee and Sarasota counties have larger proportions of their populations in the over-45 age groups and smaller proportions in the typical college-age groups. As in the rest of the state, projections for both counties show growth in the 15 to 24 age group and declines in the 25 to 44 age group. By 2010, 64% of the Sarasota population is expected to be over 45 while 47% of the state population will be in this age group. According to projections by the Florida Department of Education, the number of high school graduates in the two counties together will increase by about 750 between 2000 and 2010, or 75 students each year.

Among the study counties, Sarasota has the highest percentage of the population with high school diplomas and bachelor's degrees, probably associated with the relatively affluent retirement community. Manatee County is considerably lower on both of these measures. Both counties have relatively low rates of participation in the public university system. Higher-than-average proportions of the 1998-99 high school graduates in both counties reported plans to go to college but actual college-going rates are lower than average. A substantially lower-than-average proportion of the 18-44 age population of the two counties are enrolled in Manatee Community College.

Manatee Community College enrolled over 10,000 students in fall 1999. MCC enrolls a lower-than-average proportion of the population of its district. However, a relatively high proportion of MCC students transferred to a public university in 1998-99. A branch of the University of South Florida also serves the two counties. Also located in Sarasota is New College, a campus of USF. Formerly a private institution and still partially supported by a private foundation, this selective college offers liberal arts programs for undergraduate students from all over the country. USF's campus in Sarasota and the New College share a campus and enrolled 1,380 and 615 students, respectively, in fall 1999.

In fall 1998, 312 students from Sarasota County enrolled in a public university for the first time and more of these students chose the University of Florida and the University of Central Florida than the more conveniently located University of South Florida. Twenty-nine percent of the 185 first-time students from Manatee enrolled at USF and 26% at the University of Central Florida. Over half of the community college transfer students, however, enrolled at University of South Florida. However, Manatee Community College transfer students were less likely than transfer students in the other study counties to choose the universities closest to their home.

Employment in Manatee and Sarasota counties is expected to grow 43% and 26%, respectively, between 1997 and 2007, substantially faster than employment growth for the state as a whole. About 94,000 new jobs will be created, with almost two-thirds in service industries.

The employment profile in Manatee County differs from the rest of the state, with higher employment in agriculture, manufacturing and services and lower-than-average employment in construction, transportation and utilities, wholesale and retail trade, and finance industries. The largest employer in the county is Tropicana Products and among the other top 10 employers are five manufacturers, two services, one food distribution company and the corporate headquarters of a major clothing retailer.

Between 1997 and 2007, Manatee County is expected to have almost 56,000 new jobs. About 17% of these jobs are expected to require a bachelor's degree or higher. Each year during this period, employers will need to fill over 900 jobs at this level. Occupations with relatively high numbers of new jobs during this period include management, teachers and systems analysts.

Employment in Sarasota will grow at a rate similar to the rest of the state and the largest numbers of new jobs will be in professional specialty and service occupations. Proportionally more people are employed in service industries than in the rest of the state. The top three employers in the county are health care providers. Other employers in the top eight are two hospitality companies, a financial services firm, a business service and a manufacturer.

Survey Results

Employers in Manatee and Sarasota counties submitted 87 responses to the Employers' Educational Needs Inventory (38% response rate).¹⁴ In general, the responses of Manatee and Sarasota county employers were very similar to responses from employers across the state.

A majority of the employers reported that the supply of employees with bachelor's and graduate degrees was adequate, 75% and 78% respectively. However, satisfaction with the supply of employees at associate degree level was lower (69%) than the rest of the study counties and satisfaction with the supply at the less-than-associate level was very low (52%). A majority said that education and training programs were available in their region.

Manatee and Sarasota County employers reported that their most difficult-to-fill jobs included several occupations that typically require a bachelor's degree: accounting/financial specialists, K-12 teachers and engineers. As with other counties, difficult-to-fill jobs at lower educational levels were in health services (aides and assistants) and secretarial/general office positions. They also identified needs for communication equipment operators. Because of the relatively small number of responses, the number of employers mentioning each occupation was small.

Interviews and Public Hearings

In August 2000, community and business leaders in the Sarasota-Manatee area expressed concern about K-12 education. The failure of a recent referendum and the turnover of school superintendents were very much on their minds. The business and economic development organizations seemed to be focusing on secondary education, particularly through workforce preparation initiatives.

Interviewees in Sarasota and Manatee were generally positive about the higher education institutions in the area. Manatee Community College is providing good programs that are responsive to needs. USF-Sarasota was seen as a "player" in local economic development activities. Ringling School of Art & Design and Eckerd College were seen as providing good opportunities. Several interviewees said that there were critical shortages in selected baccalaureate fields, most notably information technology and engineering. Despite these needs, people in Sarasota-Manatee did not see expansion of bachelor's degree programs as their highest priority.

In a November interview, the President of Manatee Community College confirmed the community's priority on K-12 education. She noted that relations with USF have been good and the university is generally responsive to community needs. She said that there were needs for baccalaureate programs in management information systems, teaching, computer programming and engineering but noted that establishing full-scale programs was probably not feasible. She suggested that baccalaureate opportunities for graduates with Associate in Science degrees should be expanded.

None of the speakers at the November 8 public hearing in St. Petersburg identified themselves as being from Manatee or Sarasota counties. However, the USF President included these counties in her plans for expanding opportunities in the university's region.

Discussion

There is no indication that a major expansion of capacity is required for Manatee and Sarasota counties. Community leaders and employers are more concerned about K-12 education than baccalaureate opportunities. Access to certain programs is needed but the critical mass may not be there to support permanent offerings. Short-term cohort and distance-learning formats should be considered.

Volusia County

Profile

Volusia County	Florida
▪ Population age 15-44: 38%	▪ Population age 15-44: 40%
▪ Population growth by 2010: 14%	▪ Population growth by 2010: 16%
▪ Adults with high school diploma: 75.4%	▪ Adults with high school diploma: 82.7%
▪ Adults with bachelor's: 14.8%	▪ Adults with bachelor's: 21.6%
▪ Community college enrollment: 13.8% of age 18-44 population	▪ Community college enrollment: 10.2% of age 18-44 population
▪ SUS enrollment: 0.9% of total population	▪ SUS enrollment: 1.5%
▪ Job growth by 2008: 19%	▪ Job growth by 2008: 26%
▪ University choices: UF, UCF	

The Volusia County population in 2000 is 433,448 and ranks 10th in the state. The age profile is very similar to the state as a whole. By 2010, the county is expected to grow about 14%. The demand for higher education from an increase in the 15 to 24 age population will be at least partially offset by declines in the 25 to 44 age group. The Florida Department of Education projects an increase of 128 high school graduates between 2000 and 2010, about 13 additional students each year. A relatively high proportion of the 1998 high school graduates reported plans to continue on to college and a relatively high proportion were enrolled in the following fall with a high percentage attending a community college. This is consistent with the relatively low enrollment of county residents in the university system and relatively high enrollment in Daytona Beach Community College.

Measures of educational attainment for Volusia County are the lowest among the study counties—14.8% of the population 25 and over have a bachelor's degree, substantially lower than the statewide average of 21.6%.

The University of Central Florida has a branch campus in Volusia County that enrolled 1,600 students in fall 1999. In 1998, 23% of the first-time university students from Volusia County enrolled at UCF, either the main campus or a branch, and the same proportion attended the University of Florida. A majority of the community college transfer students chose UCF. With the exception of computer science, UCF provides complete programs in each of the key areas. The county is also served by Embry-Riddle Aeronautical University (4,909 students) and Stetson University (2,647 students).

Employment in Volusia County is expected to increase about 19% between 1997 and 2007, slower than the state as a whole, producing over 29,000 new jobs. Employers will need to fill about 700 jobs annually that require a bachelor's degree, particularly in management and teaching.

Among industries, the largest number of new jobs will be found in wholesale and retail trades and in services, particularly business and health services. Little change is expected in the distribution of jobs among occupations. Service and professional specialty jobs will have the most openings. Among the largest employers are four health care providers, three higher education institutions (Embry-Riddle

Aeronautical University, Daytona Beach Community College and Stetson University), two manufacturing companies and a newspaper.

Survey Results

Employers in Volusia County submitted 57 responses to the Employers' Educational Needs Inventory (35% response rate).¹⁵ In general, the responses of Volusia County employers were very similar to responses from employers across the state.

A majority (65%) of the employers reported that the supply of employees with bachelor's degrees was adequate and similar proportions reported satisfaction with the supply of employees at other levels. A large majority (98%) said that bachelor's degree programs were available in their region.

Volusia County employers reported that their most difficult-to-fill jobs included several occupations that typically require a bachelor's degree: accounting/financial specialists, specialty managerial, computer scientists, health professionals, professional/technical and social service occupations. Difficult-to-fill jobs at lower educational levels were reported in health services (aides and assistants), secretarial/general office, and communications equipment operators.

Interviews and Public Hearings

In August 2000, Volusia County interviewees described two sectors of the county with different characteristics and different educational needs. The eastern section is characterized by beach-related hospitality and recreation businesses. Most of the jobs in these fields do not require an associate or bachelor's degree. The west side of the county has more manufacturing companies. Daytona Beach Community College has made an effort to connect with the community and meets many educational needs. The University of Central Florida branch provides limited offerings and, according to some interviewees, programs are not available consistently.

Volusia County employers place higher priority on elementary-secondary education and on short-term technical training at the postsecondary level. However, they identified several fields in which access to bachelor's degree programs is needed: technology, engineering, production management, general management, accounting, nursing, pharmacy, nuclear medicine and teacher preparation.

In November 2000, the consulting team met with a Florida state legislator and the presidents and other representatives of the University of Central Florida and Daytona Beach Community College, who also spoke at the public hearing. The legislator reported that there was a strong need for full four-year university programs in Volusia County and UCF does not provide these opportunities. She suggested that the 2+2 approach is not working and that branch campuses are second priority to the main campus. She noted that Florida has a good record getting people into college but a poor record producing graduates. She suggested conversion of Daytona Beach to a four-year institution.

The president of Daytona Beach Community College suggested that the cost effectiveness of various levels of access (2+2 and a full four-year university program) be weighed against the expected benefits. The presidents and other representatives of DBCC and the University of Central Florida described joint initiatives including the joint-use facility that houses the UCF branch in Daytona Beach. The UCF President expects the future growth of the university will be limited to branch campuses throughout the service region. UCF representatives said they were constantly assessing the needs of the community and would offer any program for which there was a reasonable demand.

Discussion

There is no indication that substantial expansion of capacity is needed in Volusia County. Access to some types of programs may need to be developed, although the numbers of potential students may not be sufficient to support a permanent traditional program.

The first level of baccalaureate access seems to be adequately provided by DBCC and UCF—through the ability of county residents to complete a degree by attending DBCC for two years and the UCF branch campus for two years, the 2+2 approach. Providing a set of full four-year university programs in Volusia County would provide a higher level of access. While this level of access may be desirable, it may not emerge as the highest priority for investment by the state.

Part IV Summary of Findings

This report examines the need for baccalaureate programs in five Florida counties—Broward, Pinellas, Manatee, Sarasota and Volusia. Having reviewed the data and listened closely to business, community, education and political leaders, the study team found the following:

- Florida lags behind the rest of the nation in the production of baccalaureate degrees, ranking 38th among all states and 8th among the ten largest states.
- The counties under examination have similar educational and population characteristics to the state as a whole.
- With regard to the five study counties, Broward County will require a moderate increase in baccalaureate capacity over the next ten years while the remaining four counties show only modest needs. With the exception of Broward County, population changes will not produce substantial new demand for higher education.
- On several measures of educational progress such as college-going rates of recent high school graduates and transfer rates of community college students, the five study counties are not markedly different from the nine counties that have main campuses of public universities.
- With the exception of Broward County, population changes will not produce substantial new demand for higher education.
- Florida employers are satisfied with the supply of employees with bachelor's degrees and other types of postsecondary education. A large majority is satisfied with the availability of education and training programs. The responses of employers in the study counties were similar to employers throughout the state.
- Employers in the study counties said that many of the most difficult-to-fill jobs require a bachelor's degree in one of five key areas: business management, computer science, education (teacher preparation), engineering and health professions.
- Baccalaureate opportunities should be expanded in one or more key program areas in each of the study counties. None of the university branch campuses in the study counties offers a full array of programs in the key areas, although programs may be available through a university center or private institution.

Our analyses also lead to the following conclusions about the need for expanded baccalaureate opportunities in each of the five study counties:

- Broward County is well served by the partnership between Broward County Community College and Florida Atlantic University. However, given the relatively large increase projected in the traditional college-age population, moderate

expansion of capacity in Broward County is indicated. Consideration should be given to developing programs in computer science and related fields. Capacity in teacher preparation programs needs to be expanded to meet critical shortages. Consideration should be given to developing alternative-certification programs and expanding the innovative program developed by BCCC and Nova Southeastern University.

- Pinellas County has not been well served in the past by the University of South Florida but the University's new leadership is moving rapidly to address the concerns of the community, strengthen the branch campus offerings and expand access to complete upper division programs. The university has made a commitment to expand access to complete upper-division programs. In the next 10 years, the population is projected to grow more slowly than the rest of the state and only modest expansion of capacity in the upper division baccalaureate program is indicated. Expanded access to some high-demand programs may be needed.
- Manatee and Sarasota counties place high priority on improving K-12 education and providing strong job-skills training. Population projections indicate that only a modest expansion of capacity is required for these counties. Access to certain programs is needed but the critical mass may not be there to support permanent offerings. Short-term cohort and distance-learning formats may be considered.
- Population projections indicate that only a modest expansion of capacity is needed in Volusia County. Access to some types of programs may need to be developed, although the numbers of potential students may not be sufficient to support a permanent traditional program. DBCC and UCF provide county residents with the means to complete a bachelor's degree without leaving the county. Providing a set of full four-year university programs in Volusia County is a higher level of access that may not be justified. Raising access to full four-year university programs should not be a high priority for investment of state resources.

Finally, we wish to call attention to certain policy issues and approaches that arise from this study:

- First, we believe that the expansion of baccalaureate capacity should be a matter of statewide concern, not focused on a limited number of counties.
- Second, various levels of access beyond community college programs and within a 30-minute commute are at issue in the study counties: Level 1 - access to upper-division coursework, Level 2 - all upper-division courses needed for a bachelor's degree, Level 3 - a wide array of upper-division programs, and Level 4 - full four-year university programs. The study counties generally have level 2 access with an interest among some leaders in moving to level 4. A move to level 4 access -full four-year university programs within a 30-minute commute - amounts to a change in policy direction away from Florida's well-established 2+2 policy. Given other developments that can significantly affect the mission and role of community colleges (e.g. the Bright Futures program and credit-hour caps), possible changes to the 2+2 policy will need a thorough examination.

- Third, although interviewees and speakers at public hearings did not necessarily agree on the organizational structure through which access might be expanded, there was some consensus on the characteristics of appropriate responses. Appropriate responses would focus on students, continuously assess local needs, develop programs quickly and eliminate out-dated programs, use existing resources and avoid duplication, collaborate with community colleges and private institutions, and use technology to enhance instruction and expand programmatic options.

References and Technical Notes

¹High school graduates, including public and private high schools and all types of diplomas, are projected to grow from 127,905 in the 2000-01 academic year to a high of 154,314 in 2007-08, an increase of 21% according to Western Interstate Commission for Higher Education (WICHE), *Knocking at the College Door: Projections of High School Graduates by State and Race/Ethnicity 1996-2012*, February 1998.

² Florida Board of Regents, *Fact Book*, Table 22: Age Characteristics of Students by University and SUS Total, Fall 1998.

³ The growth in high school graduates projected for Broward, Pinellas, and Manatee are within two percentage points of the projected population growth. However, the projections for Sarasota and Volusia counties high school graduates do not parallel the population projections for these counties. Volusia County is expected to have a 19% increase in the 15 to 24 population but only a 5% increase in high school graduates. In Sarasota County the projected increase in high school graduates is 34%, substantially higher than the 18% increase projected for the 15 to 24 population.

⁴ Background on educational attainment:

	High School Graduates			Bachelor's Degree or Higher		
	Rank			Rank		
	Percent of Population	Among All States & DC	Among 10 Largest States	Percent of Population	Among All States & DC	Among 10 Largest States
United States	83.4%			25.2%		
New Jersey	87.4	15	1	30.5	8	1
California	80.4	42	9	27.1	13	2
New York	81.9	37	7	26.9	14	3
Illinois	85.4	24	5	25.6	20	4
Ohio	86.1	21	3	25.5	22	5
Texas	78.2	49	10	24.4	24	6
Pennsylvania	86.1	22	2	23.9	28	7
Florida	82.7	36	6	21.6	38	8
Georgia	80.7	41	8	21.5	39	9
Michigan	85.5	23	4	21.3	40	10

Sources: Postsecondary Education Opportunity, October 2000 and US Census Bureau, Posted on Web Site September 15, 2000 from March, 1999

⁵ "Educational Attainment and State Economic Welfare", *Postsecondary Education OPPORTUNITY*, October 2000.

⁶ A Broward County Community College official attributes the low proportion to the ease with which BCCC students can transfer to Florida Atlantic University and other 4-year institutions.

⁷ For purposes of this illustration, the number of high school graduates in 1999-2000 (Y) was held constant. The number of high school graduates in 2009-2010 (X) was increased by 10%. Average annual increases were calculated as follows:

$$\frac{(X * 1.1) - Y}{10} = \text{Average Annual Increase}$$

10

⁸ U.S. Bureau of Labor Statistics, Occupational and Educational Data, Education and Training Data, <http://stats.bls.gov/empeted.htm>.

⁹ Employers' Educational Needs Inventory, Survey Results, Table 7 Comparisons of Study Counties with Other Counties and Table 6 from the reports on individual counties.

¹⁰ Percentages are calculated from U.S. Bureau of Labor Statistics, Occupational and Educational Data, Education and Training Data, [http://:stats.bls.gov/empeted.htm](http://stats.bls.gov/empeted.htm).

	Percent of Jobs		
	Bachelor's Degree or Above	Associate Degree, some postsecondary, or experience	On-the-Job Training (long, moderate, or short-term)
Executive, Administrative, & Managerial Professional specialty & Technical & related occupations	94%	6%	0%
Marketing & sales Administrative support	66	28	5
Service	7	14	80
Agriculture, forestry, fishing & related occupations	0	18	82
Precision production, craft & repair Operators, fabricators, & laborers	0	11	89
	-3	7	96
	0	31	70
	>1	1	99
All Occupations	33%	18%	50%

¹¹ Florida Department of Education, Florida Public High School Graduates 1998-99 School Year

¹² Detailed analyses of the Employers' Educational Needs Inventory for each county is provided in Appendix A of this report.

¹³ Detailed analyses of the Employers' Educational Needs Inventory for each county is provided in Appendix A of this report.

¹⁴ Detailed analyses of the Employers' Educational Needs Inventory for Broward County is provided in Appendix A of this report.

¹⁵ Detailed analyses of the Employers' Educational Needs Inventory for Broward County is provided in Appendix A of this report.