



**BACCALAUREATE NEEDS  
ASSESSMENT IN FIVE SELECTED  
COUNTIES**

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**Report and Recommendations by the  
Florida Postsecondary Education Planning Commission**

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**January 2001**

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

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

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

Further information about the Commission, its publications, meetings and other activities may be obtained from the Commission office, Turlington Building, Department of Education, Tallahassee, Florida, 32399-0400; telephone (850) 488-7894; FAX (850) 922-5388; Website - [www.firn.edu/pepc](http://www.firn.edu/pepc)

**POSTSECONDARY EDUCATION PLANNING COMMISSION**

***BACCALAUREATE NEEDS ASSESSMENT  
IN FIVE SELECTED COUNTIES***

Prepared in Response to Proviso Accompanying Specific Appropriations 164A  
Chapter 2000-166, Laws of Florida

January 2001

**TABLE OF CONTENTS**

**INTRODUCTION ..... 1**  
Legislative Charge

**COMMISSION STUDY ACTIVITIES ..... 1**

**BACKGROUND ..... 2**

**STUDY OF THE NEED FOR BACCALAUREATE DEGREE  
OPPORTUNIES IN FIVE SELECTED COUNTIES ..... 3**

**APPENDIX**  
Study of the Need for Baccalaureate Degree Opportunities in Five Florida Counties,  
prepared by the Education Commission of the States

## INTRODUCTION

### Legislative Charge

Proviso language accompanying Specific Appropriation 164A of Chapter 2000-166, Laws of Florida, directed the 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. The Postsecondary Education Planning Commission shall submit a report of findings and recommendations to the Board of Regents, the State Board of Education, the President of the Senate, the Speaker of the House, and the Executive Office of the Governor on or before January 19, 2001.*

### COMMISSION STUDY ACTIVITIES

This assignment was undertaken by the full Commission, which served as the *Planning Committee of the Whole*, in conjunction with the Education Commission of the States.

In addition to the above legislative proviso, the Commission initiated a number of activities to examine issues relating to postsecondary access and baccalaureate degree attainment. The activities included:

- ◆ interviews with business and community leaders;
- ◆ a statewide survey of employers' needs for employees at various postsecondary education levels; and
- ◆ a series of three public hearings to review preliminary findings and receive public input.

It should be noted that this baccalaureate needs assessment is one of three activities related to the delivery of undergraduate education. The other two are:

- ◆ preparation of updated criteria for the establishment of new postsecondary institutions, and
- ◆ an analysis of the strengths and weaknesses of postsecondary delivery strategies involving branch campuses.

While these latter analyses are being addressed in separate documents, the Commission will prepare a summary overview of all three. The findings and conclusions of any one of these reports should not be considered as the sole determinant of the need for postsecondary access in any specific area of the State.

The *Planning Committee* met monthly from July through December 2000 and received testimony and other information related to these projects. Conclusions and recommendations in these reports are offered to provide direction to the state's postsecondary delivery system as it works to increase opportunities for baccalaureate degree attainment for Floridians.

## BACKGROUND

In all of the Commission's past work on state-level coordination, access to postsecondary education for Floridians has been a steadfast priority. In ongoing discussions on postsecondary access, in addition to entry-level access, the Commission has consistently identified degree attainment, particularly baccalaureate degree attainment, as the key priority of the state's public postsecondary delivery system. The total number of baccalaureate degrees produced by Florida's colleges and universities, both public and private, continues to be well below national averages in relation to the state's working age population.

In *Challenges and Choices: The Master Plan for Florida Postsecondary Education*, the Commission provided an update of the condition of Florida postsecondary education. A primary focus of the 1998 Master Plan was on ACCESS to postsecondary education, with emphasis on accommodating growing student demand and improving baccalaureate degree attainment. The Master Plan concluded that Florida must increase opportunities to higher education and includes a number of responses to meet the future postsecondary needs of the State. As a result of the Commission's work in the 1998 Plan, access issues were a major focus of the strategic plans adopted by the Board of Regents and State Board of Community Colleges. In their respective plans, the sector boards recognized the urgency to increase access into the postsecondary system and access to postsecondary degree completion.

In its 1998 study: *Evaluation of Florida's Two-Plus-Two Articulation System*, the Commission evaluated the effectiveness and efficiency of the Two-Plus-Two System through a review of admissions issues, articulation/transfer issues and access issues. The study confirmed that "*the state's postsecondary delivery system must be extended to provide greater flexibility to greater numbers of students*" and "*there is an urgent need for the State to increase access for its citizens to higher levels of educational attainment.*" The Commission provided a greater examination of access issues in its 1999 report, *Challenges and Choices: ACCESS, Supplement # 1 to the 1998 Master Plan*, and recommended that the postsecondary delivery system "*should strive to eliminate any systemic, institutional or geographic barriers to providing qualified students with postsecondary opportunities which will allow them timely access to degree attainment.*"

Since 1995, the Commission has been conducting a longitudinal study of students in Florida's postsecondary delivery system to identify factors that either impeded or accelerated the progress of students toward attainment of a baccalaureate degree. Based on high school students who graduated in 1993-94, the analysis is examining the data based on gender and race/ethnicity, pre-college and college academic accomplishment, academic ability, institutional differences, employment and enrollment load. As students of the initial cohort moves through the system, graduate and/or enter the workforce, information concerning the state's and students' return on investment in postsecondary education will be analyzed.

## **STUDY OF THE NEED FOR BACCALAUREATE DEGREE OPPORTUNITIES IN FIVE FLORIDA COUNTIES**

In its examination of the need for baccalaureate degree programs in Broward, Pinellas, Volusia, Sarasota and Manatee counties, the Commission reviewed the analysis of population trends, educational patterns, and employer survey (Note: students were not surveyed for this analysis) results conducted by the study consultant, along with the information and perspectives expressed during statewide interviews and public hearings. The report considered two types of need in the five counties that were studied: the need for expanded capacity and the need for access to specific programs. From this review, the following conclusions and recommendations are made (The complete analyses that form the basis for these conclusions are appended in the full ECS report):

- Florida lags behind the rest of the nation in percent of the population with baccalaureate degrees, ranking 38<sup>th</sup> among all states and 8<sup>th</sup> 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, it was concluded that Broward County would 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 offer a full array of programs in the key areas although programs may be available through a university center or private institution.

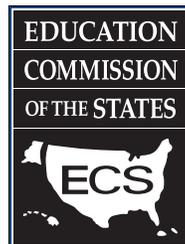
The analyses also lead to the following conclusions about the need for expanded baccalaureate opportunities in each of the five study counties:

- Broward County is well served by the partnership between Broward 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 has stated that it plans to address the concerns of the community, strengthen the branch campus offerings and expand access to complete upper-division programs. In the next ten years, the population is projected to grow more slowly than the rest of the state. While modest expansion of capacity in the upper-division baccalaureate program is indicated, expanded access to specific high-demand programs identified by business is required.
- Manatee and Sarasota counties place high priority on improving K-12 education and providing strong job-skills training. Population projections indicate that 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 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.

**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

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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". The signature is written in black ink and is positioned above the typed name of the signatory.

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

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

## Table of Contents

<b>Executive Summary</b> .....	<i>i</i>
<b>Introduction</b> .....	1
<b>Part I Need for Increased Capacity</b>	
<i>Population Projections</i> .....	2
Table 1: Age Composition of the Population .....	3
Table 2: Projected Population Changes 2000 to 2010 .....	3
Table 3: Projected High School Graduates 2000 to 2010 .....	3
<i>Educational Attainment</i> .....	5
Table 4: Educational Attainment .....	5
<i>Participation in Higher Education</i> .....	5
Table 5: State University System Fall 1998 Enrollment .....	6
Table 6: College Plans of 1998-99 High School Graduates .....	7
Table 7: High School Graduates and Postsecondary Enrollment .....	7
<i>Community College Participation</i> .....	8
Table 8: Population Served by Community Colleges .....	9
Table 9: Community College Associate in Arts Enrollment and Degrees Awarded with Transfers to State Universities .....	10
<i>University Choices</i> .....	10
Table 10: First-Time Students Enrolling in the Public University System .....	11
Table 11: Community College Students Transferring into the Public University System .....	11
<i>Summary of Capacity Needs and Estimates of Demand</i> .....	12
Table 12: Illustrations of Future Demand for Higher Education .....	13
<b>Part II Need for Expanded Programs</b>	
<i>Employers' Educational Needs Inventory</i> .....	14
Supply of Educated Employees and Availability of Programs .....	14
Table 13: Supply of Employees with Educational Credentials .....	15
Table 14: Availability of Postsecondary Educational and Training Programs .....	15
Difficult-to-Fill Jobs .....	16
Table 15: Most Difficult-to-Fill Jobs .....	17
Continuing Education and Training Needs .....	18
Table 16: Continuing Education Needs .....	18
<i>Employment Projections</i> .....	18
Employment Patterns and Projections .....	18
Table 17: Projected Number of New Jobs (10-Year Increase) .....	20
Table 18: Estimated New Jobs Requiring a Bachelor's Degree or Higher (Annual Increase) .....	20
Table 19: Examples of Jobs in Occupations Requiring a Bachelor's Degree or Higher Education .....	21
Program Availability .....	22
Table 20: Complete Programs Available at Branch Campuses .....	23
<i>Summary of Program Needs</i> .....	24

<b>Part III Evaluation of Need by County</b>	
<i>Broward County</i>	
Profile .....	25
Survey Results.....	27
Interviews and Public Hearings .....	27
Discussion .....	28
<i>Pinellas County</i>	
Profile .....	29
Survey Results.....	30
Interviews and Public Hearings .....	31
Discussion .....	32
<i>Manatee and Sarasota Counties</i>	
Profile .....	34
Survey Results.....	36
Interviews and Public Hearings .....	36
Discussion .....	37
<i>Volusia County</i>	
Profile .....	38
Survey Results.....	39
Interviews and Public Hearings .....	39
Discussion .....	40
<b>Part IV Summary of Findings</b> .....	41
<b>References and Technical Notes</b> .....	44
<b>Appendix A – Results of the Employers’ Educational Needs Inventory</b> .....	46
Survey Instrument – Employers’ Educational Needs Inventory.....	47
Respondents Vs. Nonrespondents by County, Number of Employees and SIC Industry Type .....	52
State of Florida Regional Map.....	57
<b>Part 1 Survey Results for Study Counties</b> .....	59
Broward County Summary .....	60
Pinellas County Summary .....	63
Sarasota and Manatee Counties Summary.....	66
Volusia County Summary .....	69
Comparison of Study Counties to Other Counties .....	72
<b>Part 2 Statewide Survey Results by Region</b> .....	79
Region 1 Summary .....	81
Region 2 Summary .....	84
Region 3 Summary .....	87
Region 4 Summary .....	90
Region 5 Summary .....	93
Comparison of Regions.....	96
<b>Part 3 Survey Results for Institutional Inquiries</b>	
<b>About Workforce Needs</b> .....	104

## **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 38<sup>th</sup> among all states and 8<sup>th</sup> 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.<sup>11</sup>

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**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>
<b>Florida</b>	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>
<b>Florida</b>	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>	
<b>Florida</b>	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 10<sup>th</sup>-largest, Sarasota the 13<sup>th</sup>-largest and Manatee the 16<sup>th</sup>-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.<sup>2</sup>

**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.<sup>3</sup>

### Educational Attainment

The 1999 Current Population Survey showed that Florida ranked 36<sup>th</sup> 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 38<sup>th</sup> among all states and ninth among the 10-largest states in the proportion of the population with bachelor’s degrees or higher.<sup>4</sup> 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.<sup>5</sup>

	<b>Percent of Population Age 25 and Over</b>	
	<b>High School Graduates</b>	<b>Bachelor’s Degrees or Higher</b>
<b>National</b>	83.4%	25.2%
<b>Florida</b>	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.

	<b>Total Population</b>	<b>Rank Among Counties in Population</b>	<b>Florida Residents Enrolled</b>	<b>Rank Among Counties in Enrollment</b>	<b>Percent of Population Enrolled</b>
<b>Florida</b>	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**

	<b>High School Graduates Planning to Continue Education</b>		<b>Of Total Planning to Continue Percent Going to*</b>		
	<b>Percent of All Grads</b>	<b>Number</b>	<b>Florida Community Colleges</b>	<b>Florida Universities</b>	<b>Out-of-State</b>
Alachua (UF)	75%	1,118	53%	35%	11%
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
<b>Florida</b>	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**

	<b>Number of 1997-98 High School Grads</b>	<b>Continuing Education Fall 1998</b>		<b>% Continuing in a Florida Institution*</b>		
		<b>Percent</b>	<b>Number</b>	<b>Community Colleges</b>	<b>Public Universities</b>	<b>Private Institutions</b>
Alachua (UF)	1,376	60	830	66%	30%	3%
Leon (FSU & FAMU)	1,389	59	814	47	51	2
Pinellas	4,738	56	2,630	55	40	5
Duval (UNF)	4,685	52	2,418	50	43	7
Hillsborough (USF)	6,361	51	3,215	43	50	7
Dade (FIU)	12,999	50	6,472	54	37	9
Volusia	2,583	50	1,282	60	31	9
Broward	9,237	50	4,653	45	48	7
<b>Florida</b>	97,727	50	48,461	56	38	7
Sarasota	1,557	49	764	51	40	9
Palm Beach (FAU)	5,971	49	2,946	48	46	6
Orange (UCF)	5,646	47	2,649	58	36	7
Manatee	1,219	46	565	61	34	5
Lee (FGCU)	2,619	45	1,186	52	39	9
Escambia (UWF)	2,209	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**

<b>Community College (County)</b>	<b>Students 18 to 44</b>	<b>Population 18 to 44</b>	<b>Students as Percent of Population</b>
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
<b>Florida - All Community Colleges</b>	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.<sup>6</sup>

**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	
<b>All Florida Community Colleges</b>	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)

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

	<u>Broward</u>	<u>Manatee/ Sarasota</u>	<u>Pinellas</u>	<u>Volusia</u>	<u>Florida</u>
<b>Total Number of Students</b>	959	388	839	503	13,005
<b>UF</b>	5.4%	14.2%	8.6%	9.9%	12.3%
<b>FSU</b>	4.2	8.5	7.4	5.6	11.1
<b>FAMU</b>	<1.0	<1.0	<1.0	1.2	1.4
<b>USF</b>	1.5	52.6	73.1	3.0	14.8
<b>FAU</b>	62.6	1.3	<1.0	1.0	10.8
<b>UWF</b>	<1.0	1.3	<1.0	<1.0	4.6
<b>UCF</b>	7.0	17.0	1.1	72.6	25.4
<b>FIU</b>	17.9	<1.0	6.9	<1.0	10.2
<b>UNF</b>	<1.0	2.1	<1.0	6.0	7.2
<b>FGCU</b>	<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.<sup>7</sup> 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
<b>Florida</b>	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**

	<b>Percent of Responding Firms*</b> <b>Indicating Supply of Employees is Adequate</b>			
	<b><u>Less than</u></b> <b><u>Associate</u></b>	<b><u>Associate</u></b> <b><u>Degree</u></b>	<b><u>Bachelor's</u></b> <b><u>Degree</u></b>	<b><u>Greater than</u></b> <b><u>Bachelor's</u></b>
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**

	<b>Percent of Responding Firms</b> <b>Indicating Programs Are Available</b>			
	<b><u>Less than</u></b> <b><u>Associate</u></b>	<b><u>Associate</u></b> <b><u>Degree</u></b>	<b><u>Bachelor's</u></b> <b><u>Degree</u></b>	<b><u>Greater than</u></b> <b><u>Bachelor's</u></b>
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.

<b>Table 15</b>				
<b>Most Difficult to Fill Jobs</b>				
<b>First or Second Most Difficult to Fill Jobs</b>				
<b>Cited by 5% or More of Survey Respondents</b>				
	<b>Broward</b>	<b>Pinellas</b>	<b>Manatee/ Sarasota</b>	<b>Volusia</b>
Occupations Typically Requiring a Bachelor's Degree or Higher are Shaded				
<b>Executive, administrative, and managerial occupations</b>				
Accountants/Financial Specialists	✓	✓	✓	✓
Specialty Managerial	✓	✓		✓
<b>Professional specialty and technical and related support occupations</b>				
Health Services*	✓	✓	✓	✓
K-12 Teachers	✓	✓	✓	
Computer Scientists	✓	✓		✓
Engineers		✓	✓	
Health Care		✓		✓
Maintenance/Treatment*				✓
Other Professional/Technical				✓
Other Social Science Occupations				✓
Writers, Artists, Entertainers				✓
<b>Marketing and sales occupations</b>				
Merchandise/Product Sales	✓	✓		
<b>Administrative support occupations</b>				
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.<sup>8</sup> 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.<sup>9</sup>

## 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.

	<b>Percent of Employers</b>				
	<b>Broward</b>	<b>Pinellas</b>	<b>Manatee/ Sarasota</b>	<b>Volusia</b>	<b>5 Study Counties</b>
<b>Employees with less than associate</b>					
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
<b>Employees with associate degrees</b>					
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
<b>Employees with bachelor's degrees</b>					
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.<sup>10</sup>

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.

**Table 17**  
**Projected Number of NEW Jobs**  
**1997 to 2007**

	<b>10-Year Increase</b>					
	<b><u>Broward</u></b>	<b><u>Pinellas</u></b>	<b><u>Manatee</u></b>	<b><u>Sarasota</u></b>	<b><u>Volusia</u></b>	<b><u>Florida</u></b>
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

**Table 18**  
**Estimated New Jobs**  
**Requiring a Bachelor's Degree or Higher**

	<b>Annual Increase in the Number of Jobs</b>					
	<b><u>Broward</u></b>	<b><u>Pinellas</u></b>	<b><u>Manatee</u></b>	<b><u>Sarasota</u></b>	<b><u>Volusia</u></b>	<b><u>Florida</u></b>
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
Social Workers	500	323	123	129	142	5,797
Computer engineers	538	447	117	75	33	5,778
Residential counselors	174	207	123	71	86	2,343
Physician assistants	168	149	39	62	48	2,144
Occupational Therapists	158	158	28	52	50	1,891
Database administrators	175	110	16	28	11	1,862

**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
Teachers, Elementary School	1,685	901	343	275	321	17,195
Teachers, Secondary School	1,581	849	322	260	301	16,175
College & university faculty	639	188	77	88	329	8,554
Computer programmers	618	552	419	96	53	7,379
Social Workers	500	323	123	129	142	5,797
Computer Engineers	538	447	117	75	33	5,778

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**

	<b>Broward FAU</b>	<b>Pinellas USF</b>	<b>Sarasota/ Manatee USF</b>	<b>Volusia UCF</b>
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, 63<sup>rd</sup> among the 67 counties.<sup>11</sup> 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).<sup>12</sup> 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 13<sup>th</sup> 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

<b>Pinellas County</b>	<b>Florida</b>
▪ 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).<sup>13</sup> 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

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

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).<sup>14</sup> 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 10<sup>th</sup> 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).<sup>15</sup> 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 38<sup>th</sup> among all states and 8<sup>th</sup> 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**

<sup>1</sup>High 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.

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

<sup>3</sup> 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.

<sup>4</sup> Background on educational attainment:

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

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

<sup>6</sup> 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.

<sup>7</sup> 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:

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

<sup>8</sup> 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).

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

<sup>10</sup> 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).

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

<sup>11</sup> Florida Department of Education, Florida Public High School Graduates 1998-99 School Year

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

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

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

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

## **Appendix A.**

### **Results of the Employers' Educational Needs Inventory**

This Employers' Educational Needs Inventory was constructed by the Florida Postsecondary Education Planning Commission and the Florida Education and Training Placement Information Program (FETPIP) of the Florida Department of Education. The survey was designed as an inventory of employers' needs for employees at various levels of education. The resulting picture of needs is presented in two ways. In Part One, employers' educational needs for each of the five counties in the study of baccalaureate needs are summarized. In Part Two, employers' educational needs are examined for each of Florida's five planning regions. A 100% sample of employers was taken in the five study counties and a one-third sample was drawn from the remaining 62 counties.

**Survey Instrument —**  
**Employers' Educational Needs Inventory**



JEB BUSH  
GOVERNOR

STATE OF FLORIDA

## Office of the Governor

THE CAPITOL  
TALLAHASSEE, FLORIDA 32399-0001

www.flgov.com  
850-488-7148  
850-487-0801 fax

August 30, 2000

Dear Employer:

The future of the quality of life for Florida citizens depends on our economic development and preparation of young people to meet rapidly changing workforce demands. Florida's employers are in a unique position to provide information to help improve access and quality in our education systems.

In an effort to ensure that our higher education institutions are providing the degree programs needed for a skilled workforce, I have asked the Postsecondary Education Planning Commission to conduct an analysis to determine the degree to which the needs of our employers are being met by our public and private colleges and universities.

I hope you will take a few minutes to fill out the enclosed questionnaire and return it. This questionnaire will assist the Commission in their evaluation of how well we are meeting our workforce needs of the state. Any additional comments and suggestions that you have would be welcome. Your participation in this survey will significantly contribute to improving our services and efforts to support economic development.

Thank you for your assistance and for your commitment and partnership in helping improve the quality of education in Florida.

Sincerely,

A handwritten signature in black ink that reads "Jeb Bush".

Jeb Bush

JB/mjw

Enclosure



Governor's Mentoring Initiative

BE A MENTOR. BE A BIG HELP.

1.800.825.3785



WILLIAM B. PROCTOR  
EXECUTIVE DIRECTOR

STATE BOARD OF EDUCATION  
POSTSECONDARY EDUCATION PLANNING COMMISSION

TURLINGTON BUILDING  
325 WEST GAINES STREET  
TALLAHASSEE, FLORIDA 32399-0400

(850)488-7894  
Fax (850)922-5388

September 27, 2000

Dear Florida Employer:

You recently received a letter from Governor Jeb Bush requesting your feedback on the extent to which the needs of Florida's employers are being met by our public and private colleges and universities. This information will be used to evaluate the need for educational programs in your area and throughout the state. As Chairman of the Postsecondary Education Planning Commission, the group that will be making policy recommendations based upon the information we receive, I remain highly interested in your views on this topic.

Our records indicate that you have not yet responded. Your response is very important as a limited number of Florida employers were selected for this effort. The information you provide will be used for research purposes only. Your response will be held in strictest confidence, and neither you nor your firm will be identified individually when we report our findings. If you have questions or require assistance, please call Dr. William Proctor, the Commission's Executive Director, at (850) 488-7894.

Thank you in advance for your participation. If you have already responded, please disregard this letter and accept my appreciation.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip E. Morgaman".

Philip E. Morgaman  
Chairman

/dw

### Employers' Educational Needs Inventory

The questions in this survey refer to positions or jobs within your firm that require postsecondary education or training. "Postsecondary" programs are formal instructional programs with a curriculum designed for students who have completed the requirements for a high school diploma or equivalent. This includes programs of an academic, vocational or continuing professional education purpose but excludes avocational and adult basic education programs. For purposes of this survey, "firm" may refer to a private business or a government agency

**(THIS SPACE RESERVED FOR ADDRESSEE INFORMATION)**

1. Does your firm have an adequate supply of employees with the following postsecondary credential or degree?

- Less than an Associate's degree.         NO    YES
- Associate's degree.                         NO    YES
- Bachelor's degree.                         NO    YES
- Greater than a Bachelor's degree.         NO    YES

Respond to Questions 2 and 3 for the positions/jobs that your firm second most difficult (COLUMN B) to fill.

COLUMN A	COLUMN B
<b>2. Most difficult job to fill</b>	<b>3. 2<sup>nd</sup> Most difficult job to fill</b>
A. Job title: _____ _____	A. Job title: _____ _____
B. We draw our labor supply for this job from the following types of postsecondary education institutions. (Check all that apply.) <input type="checkbox"/> Vocational-technical schools. <input type="checkbox"/> Private technical/career institutes. <input type="checkbox"/> Community colleges. <input type="checkbox"/> Public universities. <input type="checkbox"/> Private colleges and universities.	B. We draw our labor supply for this job from the following types of postsecondary education institutions. (Check all that apply.) <input type="checkbox"/> Vocational-technical schools. <input type="checkbox"/> Private technical/career institutes. <input type="checkbox"/> Community colleges. <input type="checkbox"/> Public universities. <input type="checkbox"/> Private colleges and universities.
C. What level of postsecondary credential or degree is preferred for people in this position? (Choose one.) <input type="checkbox"/> Less than an Associate's degree. <input type="checkbox"/> Associate's degree. <input type="checkbox"/> Bachelor's degree. <input type="checkbox"/> Greater than a Bachelor's degree.  If the degree must be from specific field(s), please specify: _____	C. What level of postsecondary credential or degree is preferred for people in this position? (Choose one.) <input type="checkbox"/> Less than an Associate's degree. <input type="checkbox"/> Associate's degree. <input type="checkbox"/> Bachelor's degree. <input type="checkbox"/> Greater than a Bachelor's degree.  If the degree must be from specific field(s), please specify: _____

4. Are there any postsecondary education or training programs needed in your firm's geographic operating area that are currently unavailable?

- NO
- YES. If YES, at what degree level(s)?
  - Less than an Associate's degree.      What field(s)? \_\_\_\_\_
  - Associate's degree.                              What field(s)? \_\_\_\_\_
  - Bachelor's degree.                              What field(s)? \_\_\_\_\_
  - Greater than an Bachelor's degree.      What field(s)? \_\_\_\_\_

5. Approximately how many hires (replacement + new hires) does your firm anticipate making *over the next two years* in positions requiring the following credential or degree?

	0	1-5	6-10	11-20	Over 20
• Less than an Associate's degree.	<input type="checkbox"/>				
• Associate's degree.	<input type="checkbox"/>				
• Bachelor's degree.	<input type="checkbox"/>				
• Greater than a Bachelor's degree.	<input type="checkbox"/>				

Questions 6-8 deal with the continuing educational needs of your employees who currently hold some type of postsecondary credential. Questions in **COLUMN A** refer to current employees who have less than an Associate's degree. **COLUMN B** deals with employees who have an Associate's Degree. **COLUMN C** refers to those who have a Bachelor's degree.

COLUMN A	COLUMN B	COLUMN C
<b>6. Employees with less than Associate's degree</b>	<b>7. Employees with an Associate's degree</b>	<b>8. Employees with a Bachelor's degree</b>
A. Employees' primary training need: <input type="checkbox"/> No further training needed. <input type="checkbox"/> Maintain or upgrade skills. <input type="checkbox"/> Associate's degree.  <input type="checkbox"/> Not applicable; we have no such employees.	A. Employees' primary training need: <input type="checkbox"/> No further training needed. <input type="checkbox"/> Maintain or upgrade skills. <input type="checkbox"/> Bachelor's degree.  <input type="checkbox"/> Not applicable; we have no such employees.	A. Employees' primary training need: <input type="checkbox"/> No further training needed. <input type="checkbox"/> Maintain or upgrade skills. <input type="checkbox"/> Advanced degree.  <input type="checkbox"/> Not applicable; we have no such employees.
B. Are the education opportunities that address this need adequate within your firm's geographic operating area? <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> Not applicable	B. Are the education opportunities that address this need adequate within your firm's geographic operating area? <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> Not applicable	B. Are the education opportunities that address this need adequate within your firm's geographic operating area? <input type="checkbox"/> NO <input type="checkbox"/> YES <input type="checkbox"/> Not applicable

9. In the last 12 months, which of the following types of postsecondary education institutions have contacted your firm about its workforce needs? (Check all that apply.)

- None
- I don't know.
- Vocational-technical schools.
- Private technical/career institutes.
- Community colleges.
- Public universities.
- Private universities and colleges.

10. If your firm employs workers in any of the following Florida counties, please check all that apply.

- Broward
- Manatee
- Pinellas
- Sarasota
- Volusia



Thank you. Please return completed questionnaire to:

**Employers' Educational Needs Inventory**  
**P.O. Box 5197**  
**Tallahassee, Florida 32314-5197**

*A postage paid return envelope is provided.*

## **Respondents vs. Nonrespondents**

**By County, Number of Employees and SIC Industry Type**

<b>Respondents vs. Nonrespondents - no substantial differences noted</b>							
	COUNTY	#SAMPLE	#RESPOND	RATE	%SAMPLE	%RESPOND	DIFFERENCE
1	ALACHUA	112	39	34.8%	2.7%	3.0%	0.3%
2	BAKER	2	1	50.0%	0.0%	0.1%	0.1%
3	BAY	27	9	33.3%	0.7%	0.7%	0.0%
4	BRADFORD	7	2	28.6%	0.2%	0.2%	0.0%
5	BREVARD	62	24	38.7%	1.5%	1.9%	0.4%
6	BROWARD	819	188	23.0%	19.9%	14.7%	-5.2%
7	CALHOUN	1	0	0.0%	0.0%	0.0%	0.0%
8	CHARLOTTE	6	1	16.7%	0.1%	0.1%	0.0%
9	CITRUS	3	0	0.0%	0.1%	0.0%	-0.1%
10	CLAY	15	6	40.0%	0.4%	0.5%	0.1%
11	COLLIER	37	14	37.8%	0.9%	1.1%	0.2%
12	COLUMBIA	6	2	33.3%	0.1%	0.2%	0.1%
13	DADE	451	112	24.8%	11.0%	8.7%	-2.3%
14	DESOTO	7	4	57.1%	0.2%	0.3%	0.1%
15	DIXIE	4	1	25.0%	0.1%	0.1%	0.0%
16	DUVAL	183	67	36.6%	4.5%	5.2%	0.7%
17	ESCAMBIA	52	22	42.3%	1.3%	1.7%	0.4%
18	FLAGLER	4	3	75.0%	0.1%	0.2%	0.1%
19	FRANKLIN	0	0	N/A			
20	GADSDEN	3	1	33.3%	0.1%	0.1%	0.0%
21	GILCHRIST	4	0	0.0%	0.1%	0.0%	-0.1%
22	GLADES	2	1	50.0%	0.0%	0.1%	0.1%
23	GULF	5	3	60.0%	0.1%	0.2%	0.1%
24	HAMILTON	2	1	50.0%	0.0%	0.1%	0.1%
25	HARDEE	10	6	60.0%	0.2%	0.5%	0.3%
26	HENDRY	8	4	50.0%	0.2%	0.3%	0.1%
27	HERNANDO	4	2	50.0%	0.1%	0.2%	0.1%
28	HIGHLANDS	5	2	40.0%	0.1%	0.2%	0.1%
29	HILLSBOROUGH	248	61	24.6%	6.0%	4.8%	-1.2%
30	HOLMES	3	2	66.7%	0.1%	0.2%	0.1%
31	INDIAN RIVER	15	4	26.7%	0.4%	0.3%	-0.1%
32	JACKSON	5	1	20.0%	0.1%	0.1%	0.0%
33	JEFFERSON	4	3	75.0%	0.1%	0.2%	0.1%
34	LAFAYETTE	0	0	N/A			
35	LAKE	21	6	28.6%	0.5%	0.5%	0.0%
36	LEE	50	16	32.0%	1.2%	1.2%	0.0%
37	LEON	168	65	38.7%	4.1%	5.1%	1.0%
38	LEVY	5	2	40.0%	0.1%	0.2%	0.1%
39	LIBERTY	0	0	N/A			
40	MADISON	6	4	66.7%	0.1%	0.3%	0.2%
41	MANATEE	71	32	45.1%	1.7%	2.5%	0.8%
42	MARION	28	7	25.0%	0.7%	0.5%	-0.2%
43	MARTIN	18	6	33.3%	0.4%	0.5%	0.1%
44	MONROE	7	5	71.4%	0.2%	0.4%	0.2%

45	NASSAU	5	3	60.0%	0.1%	0.2%	0.1%
46	OKALOOSA	28	15	53.6%	0.7%	1.2%	0.5%
47	OKEECHOBEE	6	3	50.0%	0.1%	0.2%	0.1%
48	ORANGE	297	74	24.9%	7.2%	5.8%	-1.4%
49	OSCEOLA	11	6	54.5%	0.3%	0.5%	0.2%
50	PALM BEACH	221	67	30.3%	5.4%	5.2%	-0.2%
51	PASCO	15	5	33.3%	0.4%	0.4%	0.0%
52	PINELLAS	506	182	36.0%	12.3%	14.2%	1.9%
53	POLK	45	17	37.8%	1.1%	1.3%	0.2%
54	PUTNAM	5	4	80.0%	0.1%	0.3%	0.2%
55	SANTA ROSA	17	4	23.5%	0.4%	0.3%	-0.1%
56	ST JOHNS	15	4	26.7%	0.4%	0.3%	-0.1%
57	SEMINOLE	11	3	27.3%	0.3%	0.2%	-0.1%
58	SARASOTA	156	55	35.3%	3.8%	4.3%	0.5%
59	ST LUCIE	77	29	37.7%	1.9%	2.3%	0.4%
60	SUMTER	5	4	80.0%	0.1%	0.3%	0.2%
61	SUWANNEE	8	4	50.0%	0.2%	0.3%	0.1%
62	TAYLOR	7	3	42.9%	0.2%	0.2%	0.0%
63	UNION	3	3	100.0%	0.1%	0.2%	0.1%
64	VOLUSIA	162	57	35.2%	3.9%	4.4%	0.5%
65	WAKULLA	6	5	83.3%	0.1%	0.4%	0.3%
66	WALTON	4	2	50.0%	0.1%	0.2%	0.1%
67	WASHINGTON	6	4	66.7%	0.1%	0.3%	0.2%

	# EMPLOYEES	#SAMPLE	#RESPOND	RATE	%SAMPLE	%RESPOND	DIFFERENCE
1	0-5	592	133	22.5%	14.4%	10.4%	-4.0%
2	6-10	457	105	23.0%	11.1%	8.2%	-2.9%
3	11-20	512	154	30.1%	12.5%	12.0%	-0.5%
4	21-30	299	95	31.8%	7.3%	7.4%	0.1%
5	31-40	243	83	34.2%	5.9%	6.5%	0.6%
6	41-50	157	44	28.0%	3.8%	3.4%	-0.4%
7	51 and over	1846	668	36.2%	45.0%	52.1%	7.1%

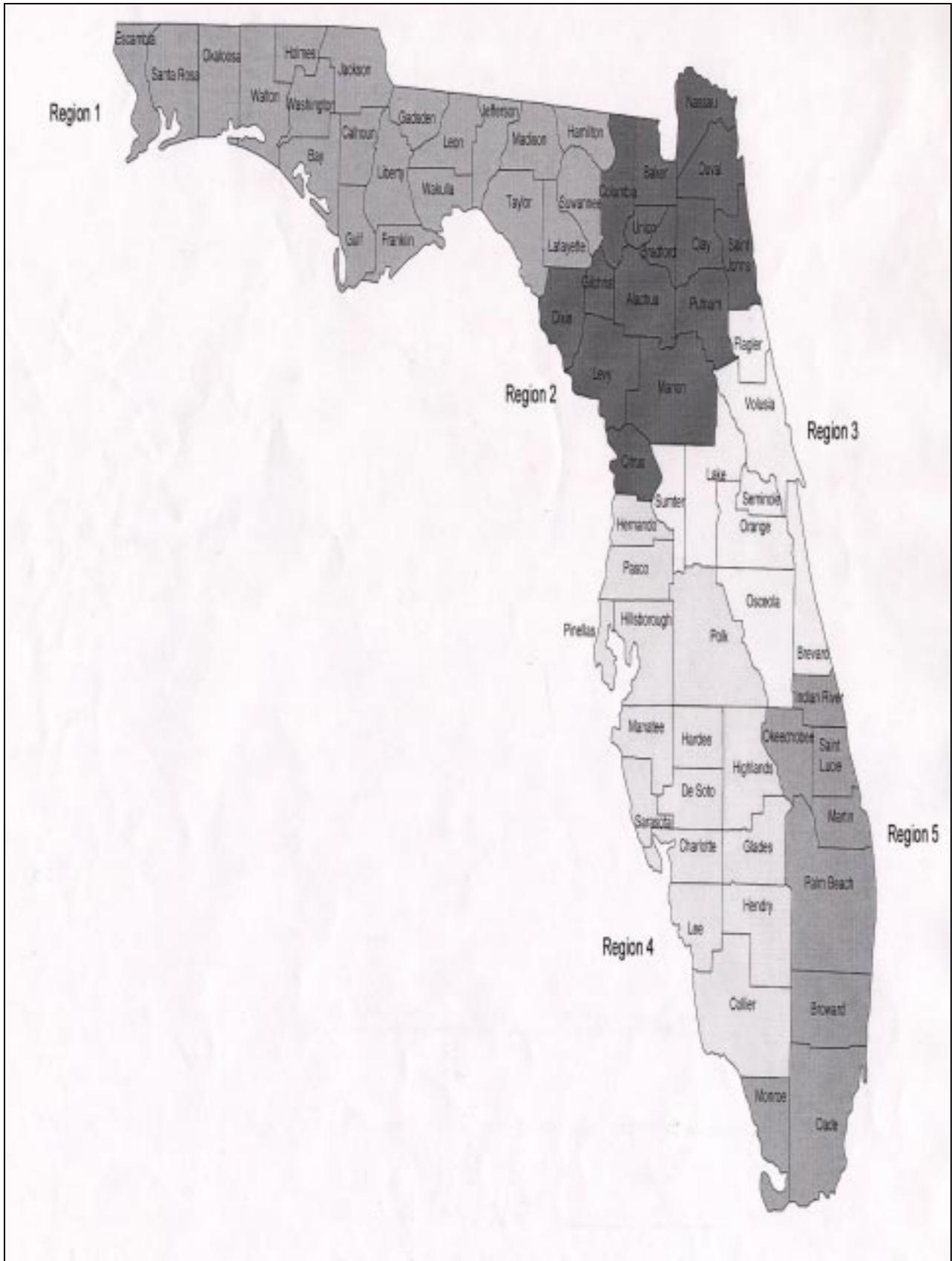
2SIC	INDUSTRY TYPE	#SAMPLE	#RESPOND	RATE	%SAMPLE	%RESPOND	DIFFERENCE
01	Agricultural Production/Crops	17	5	29.4%	0.4%	0.4%	0.0%
02	Agricultural Production/Livestock	3	0	0.0%	0.1%	0.0%	-0.1%
07	Agricultural Services	60	19	31.7%	1.5%	1.5%	0.0%
08	Forestry	1	1	100.0%	0.0%	0.1%	0.1%
15	General Building Contractors	50	16	32.0%	1.2%	1.2%	0.0%
16	Hvy Construction Contractors	14	5	35.7%	0.3%	0.4%	0.1%
17	Special Trade Contractors	78	21	26.9%	1.9%	1.6%	-0.3%
20	Food & Kindred Products	10	4	40.0%	0.2%	0.3%	0.1%
22	Textile Mill Products	2	0	0.0%	0.0%	0.0%	0.0%
23	Apparel & Other Textile Prod	3	2	66.7%	0.1%	0.2%	0.1%
24	Lumber & Wood Products	8	3	37.5%	0.2%	0.2%	0.0%
25	Furniture & Fixtures	3	1	33.3%	0.1%	0.1%	0.0%

26	Paper & Allied Products	1	1	100.0%	0.0%	0.1%	0.1%
27	Printing & Publishing	48	12	25.0%	1.2%	0.9%	-0.3%
28	Chemicals & Allied Products	13	3	23.1%	0.3%	0.2%	-0.1%
29	Petroleum & Coal Products	3	0	0.0%	0.1%	0.0%	-0.1%
30	Rubber & Misc Plastics Prods	7	3	42.9%	0.2%	0.2%	0.0%
32	Stone Clay & Glass Products	7	1	14.3%	0.2%	0.1%	-0.1%
33	Primary Metal Industries	6	2	33.3%	0.1%	0.2%	0.1%
34	Fabricated Metal Products	9	3	33.3%	0.2%	0.2%	0.0%
35	Machinery Except Electrical	8	3	37.5%	0.2%	0.2%	0.0%
36	Electric & Electronic Equip	28	6	21.4%	0.7%	0.5%	-0.2%
37	Transportation Equip	13	3	23.1%	0.3%	0.2%	-0.1%
38	Instruments & Related Prod	19	5	26.3%	0.5%	0.4%	-0.1%
39	Misc Manufacturing Industries	5	0	0.0%	0.1%	0.0%	-0.1%
41	Local/Interurban Passngr Trans	4	2	50.0%	0.1%	0.2%	0.1%
42	Trucking & Warehousing	22	4	18.2%	0.5%	0.3%	-0.2%
44	Water Transportation	7	1	14.3%	0.2%	0.1%	-0.1%
45	Transportation by Air	6	2	33.3%	0.1%	0.2%	0.1%
47	Transportation Services	26	7	26.9%	0.6%	0.5%	-0.1%
48	Communications	40	9	22.5%	1.0%	0.7%	-0.3%
49	Electric Gas & Sanitary Svcs	11	6	54.5%	0.3%	0.5%	0.2%
50	Wholesale Trade/Durable Goods	148	34	23.0%	3.6%	2.7%	-0.9%
51	Wholesale Trade/NonDur Goods	79	13	16.5%	1.9%	1.0%	-0.9%
52	Building Materials/Garden Sup	12	5	41.7%	0.3%	0.4%	0.1%
53	Gen'l Merchandise Stores	9	1	11.1%	0.2%	0.1%	-0.1%
54	Food Stores	31	7	22.6%	0.8%	0.5%	-0.3%
55	Auto Dealers/Service Stations	60	16	26.7%	1.5%	1.2%	-0.3%
56	Apparel & Accessory Stores	35	8	22.9%	0.9%	0.6%	-0.3%
57	Furniture/Home Furnishing Stores	53	14	26.4%	1.3%	1.1%	-0.2%
58	Eating & Drinking Places	260	43	16.5%	6.3%	3.4%	-2.9%
59	Misc Retail	113	24	21.2%	2.8%	1.9%	-0.9%
60	Banking	56	23	41.1%	1.4%	1.8%	0.4%
61	Credit Agencies Oth Than Banks	31	5	16.1%	0.8%	0.4%	-0.4%
62	Security Commodity Brkrs&Svcs	21	5	23.8%	0.5%	0.4%	-0.1%
63	Insurance Carriers	24	7	29.2%	0.6%	0.5%	-0.1%
64	Insurance Agents Brkrs&Svcs	59	20	33.9%	1.4%	1.6%	0.2%
65	Real Estate	75	17	22.7%	1.8%	1.3%	-0.5%
67	Holding&Oth Investment Off	11	2	18.2%	0.3%	0.2%	-0.1%
70	Hotels&Oth Lodging Places	51	14	27.5%	1.2%	1.1%	-0.1%
72	Personal Services	42	6	14.3%	1.0%	0.5%	-0.5%
73	Business Services	387	95	24.5%	9.4%	7.4%	-2.0%
75	Auto Repair Svcs&Garages	16	1	6.3%	0.4%	0.1%	-0.3%
76	Misc Repair Services	10	4	40.0%	0.2%	0.3%	0.1%
78	Motion Pictures	18	4	22.2%	0.4%	0.3%	-0.1%
79	Amusement&Rec Svcs	124	33	26.6%	3.0%	2.6%	-0.4%
80	Health Services	446	178	39.9%	10.9%	13.9%	3.0%
81	Legal Services	158	31	19.6%	3.8%	2.4%	-1.4%
82	Educational Services	210	120	57.1%	5.1%	9.4%	4.3%
83	Social Services	184	93	50.5%	4.5%	7.3%	2.8%

84	Museums,Galleries&Gardens	14	6	42.9%	<b>0.3%</b>	<b>0.5%</b>	<b>0.2%</b>
86	Membership Organizations	65	31	47.7%	<b>1.6%</b>	<b>2.4%</b>	<b>0.8%</b>
87	Engineering&Mgmt Svcs	402	135	33.6%	<b>9.8%</b>	<b>10.5%</b>	<b>0.7%</b>
89	Misc Services	5	2	40.0%	<b>0.1%</b>	<b>0.2%</b>	<b>0.1%</b>
91	Exec,Leg&Gen't Government	74	33	44.6%	<b>1.8%</b>	<b>2.6%</b>	<b>0.8%</b>
92	Justice Public Order & Safety	27	16	59.3%	<b>0.7%</b>	<b>1.2%</b>	<b>0.5%</b>
93	Finance Taxatn&Monetary Ply	11	7	63.6%	<b>0.3%</b>	<b>0.5%</b>	<b>0.2%</b>
94	Admin of Human Resources	4	2	50.0%	<b>0.1%</b>	<b>0.2%</b>	<b>0.1%</b>
95	Envirnmentl Quality&Housing	11	10	90.9%	<b>0.3%</b>	<b>0.8%</b>	<b>0.5%</b>
96	Admin of Economic Programs	9	6	66.7%	<b>0.2%</b>	<b>0.5%</b>	<b>0.3%</b>
99	Nonclassifiable Establishments	229	61	26.6%	<b>5.6%</b>	<b>4.8%</b>	<b>-0.8%</b>

## **State of Florida**

### **Regional Map**



## **Part 1**

### **Survey Results for Study Counties**

## Broward County Summary

Table 1 displays the number of responses to the survey from the top five types of firms in Broward County. A total of 819 firms in Broward County were sent surveys; 188 responded, resulting in a 23.0% response rate. Engineering, accounting and research service firms made up the largest percentage of respondents. Among the study counties, Broward County had the highest number of respondents in this category. Health services were the second largest group of firms responding. Broward County was the only study county to have respondents representing wholesale trade/durable goods among the top five types of firms.

Firm Type	#	%
<b>Engineering, Accounting, Research Services</b>	29	15.4
<b>Health Services</b>	26	13.8
<b>Business Services</b>	14	7.4
<b>Social Services</b>	14	7.4
<b>Wholesale Trade/Durable Goods</b>	7	3.7
<b>Nonclassifiable Firms</b>	18	9.6
<b>Total Respondents-Broward County</b>	188	100

Employers were asked whether there is an adequate supply of employees in the county at various levels of education. As noted in Table 2, a majority of the respondents in Broward County indicated that the supply of employees at all degree levels was adequate. At each successive level of education — less than Associate Degree, Associate, Bachelor's, and greater than Bachelor's Degree — slightly fewer employers said the supply of employees was adequate. Overall, however, a majority of the responding employers in Broward County believed that there was an adequate supply of employees at all levels of postsecondary education.

Level of Education	Yes		No	
	#	%	#	%
<b>Less than Associate's Degree</b>	115	83.3	23	16.7
<b>Associate's Degree</b>	102	76.1	32	23.9
<b>Bachelor's Degree</b>	103	69.6	45	30.4
<b>Greater than Bachelor's Degree</b>	90	65.2	48	34.8

**NOTE: Percentages sum to 100% across rows**

Respondents were asked to identify the first and second most-difficult-to-fill positions in their firms. Table 3 displays the most frequently mentioned positions among Broward County firms. The most-difficult jobs to fill were in secretarial/general office occupations, which were listed frequently as the first-most-difficult or second-most-difficult positions to fill. At the Bachelor's Degree level, the first-most-difficult position to fill was in the accounting and financial specialty area. In this report, "Administrative Specialty Managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers, and engineering project managers. "Health-service" occupations include assistant-level positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides.

<b>Table 3: Most-Difficult Jobs To Fill by OES*</b>		
<b>Occupational Title</b>		
<b>First-Most-Difficult Jobs To Fill</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	17	12.3
Administrative Specialty Managers	16	11.6
Accountants/Financial Specialists	10	7.2
Computer Scientists	10	7.2
Merchandise/Product Sales	10	7.2
K-12 Teachers	8	5.8
Health Service Occupations	6	4.3
<b>Second-Most-Difficult Jobs To Fill</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	20	20.0
Administrative Specialty Managers	12	12.0
K-12 Teachers	9	9.0
Health Service	6	6.0
Merchandise/Product Sales	6	6.0
Accountants/Financial Specialists	4	4.0
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available.) More than 90% of the respondents indicated that programs were available at each level of education in their geographical operating area. Less than 7% of the responding firms said postsecondary education programs were not available. The responses indicate that postsecondary program availability is not an issue for firms in Broward County.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
	Yes		No	
<b>Level of Education</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Less than Associate's Degree	11	5.9	175	94.1
Associate's Degree	8	4.3	178	95.7
Bachelor's Degree	9	4.8	177	95.2
Greater than Bachelor's Degree	12	6.5	174	93.5

The number of new and replacement hires expected over the next two years is displayed in Table 5. At all levels of education, the largest percentage of employers expected to hire 1-5 new or replacement employees in the next two years. At the less-than-Associate's Degree level, the largest percentage of firms expected to hire 1-5 employees, but a sizeable proportion (30.8%) expected to hire more than 20 individuals. At the Associate's and Bachelor's Degree levels, the largest percentage of firms expected to hire 1-5 individuals. At the greater-than-Bachelor's Degree level, many firms also expected to hire 1-5 individuals, although a large number anticipated making no hires at this level in the next two years.

Level of Education	0		1-5		6-10		11-20		Over 20	
	#	%	#	%	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	20	12.8	58	37.2	20	12.8	10	6.4	48	30.8
<b>Associate's Degree</b>	30	21.7	56	40.6	24	17.4	12	8.7	16	11.6
<b>Bachelor's Degree</b>	27	16.8	71	44.1	29	18.0	12	7.5	22	13.7
<b>Greater than Bachelor's Degree</b>	54	40.3	55	41.0	11	8.2	4	3.0	10	7.5

**NOTE: Percentages sum to 100% across rows.**

Employers were asked about the continuing education needs of employees who currently hold some type of postsecondary education credential — whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees. Very few employers said that employees with a less-than-associate credential needed to pursue a degree but more than twice as many said that employees with Associate or Bachelor's degrees needed to obtain the next higher degree.

Level of Education	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	28	15.1	112	60.2	15	8.1
<b>Associate's Degree</b>	21	11.3	94	50.5	38	20.4
<b>Bachelor's Degree</b>	31	16.7	101	54.3	35	18.8

## Pinellas County Summary

Table 1 displays the number of responses to the survey from the top five types of firms in Pinellas County. A total of 506 firms in Pinellas County were sent surveys; 182 responded, resulting in a 36.0% response rate. The largest number of responses represented health-services firms, followed by business services (includes businesses that serve other businesses). Overall, the firms responding in Pinellas County were similar to firms responding in the other study counties.

Firm Type	#	%
<b>Health Services</b>	25	13.7
<b>Business Services</b>	20	11.0
<b>Engineering, Accounting, Research Services</b>	18	9.9
<b>Educational Services</b>	13	7.1
<b>Social Services</b>	13	7.1
<b>Nonclassifiable Firms</b>	10	5.5
<b>Total for Pinellas County</b>	182	100

Employers were asked if there is an adequate supply of employees in the county. As shown in Table 2, a majority of the respondents in Pinellas County reported that the supply of employees at all levels of education was adequate. Fewer employers reported adequate supplies at the lowest and highest levels than at the Associate's and Bachelor's Degree levels.

Level of Education	Yes		No	
	#	%	#	%
<b>Less than Associate's Degree</b>	95	66.4	48	33.6
<b>Associate's Degree</b>	103	73.0	38	27.0
<b>Bachelor's Degree</b>	95	68.8	43	31.2
<b>Greater than Bachelor's Degree</b>	87	64.4	48	35.6
<b>NOTE: Percentages sum to 100% across rows.</b>				

Respondents were asked to identify the first and second most-difficult-to-fill positions in their firms. Table 3 displays the most frequently mentioned positions among Pinellas County firms. The most-difficult jobs to fill in were in secretarial/general office occupations. At the Bachelor's Degree level, accounting and financial service area occupations were frequently mentioned. In this report, "administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers. "Health-service" occupations include assistant-level positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides. "Health care maintenance/treatment" occupations include registered nurses, physicians' assistants, pharmacists, dieticians and nutritionists.

<b>Table 3: Most-Difficult Jobs To Fill by OES*</b>		
<b>Occupational Title</b>		
<b>First-Most-Difficult Jobs To Fill</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	16	11.0
Accountants/Financial Specialists	11	7.6
Administrative Specialty Managers	10	6.9
Computer Scientists	10	6.9
Health Service	10	6.9
Health Care Maintenance/Treatment	10	6.9
K-12 Teachers	8	5.5
Engineers	7	4.8
<b>Second-Most-Difficult Jobs To Fill</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	16	13.6
Administrative Specialty Managers	12	10.2
Merchandise/Product Sales	12	10.2
Accountants/Financial Specialists	7	5.9
Computer Scientists	5	4.2
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available). More than 90% of the respondents indicated that programs were available at each level of education in their geographical operating area. Less than 8% of the responding firms said postsecondary education programs were not available in their areas. The responses indicate that postsecondary program availability is not an issue for firms in Pinellas County.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
<b>Level of Education</b>	<b>Yes</b>		<b>No</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	13	7.4	163	92.6
<b>Associate's Degree</b>	12	6.8	164	93.2
<b>Bachelor's Degree</b>	13	7.4	163	92.6
<b>Greater than Bachelor's Degree</b>	9	5.1	167	94.9

The number of new and replacement hires expected over the next two years is displayed in Table 5. Across all educational levels, 1-5 hires was most frequently mentioned. At the less-than-Associate's Degree level, 35.9% of the firms expected 20 hires and a similar proportion, 35.2%, expected 1-5 hires. At the Associate's Degree level, almost 50% expected to hire 1-5 individuals in the next two years. The largest percentage of firms planning to hire at the Bachelor's Degree level expected to hire 1-5 new or replacement employees. At the greater-than-Bachelor's Degree level, most firms expected to hire 1-5 individuals, although a large number of firms anticipated making no hires at this level in the next two years.

Level of Education	0		1-5		6-10		11-20		Over 20	
	#	%	#	%	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	7	4.8	52	35.9	23	15.9	12	8.3	51	35.2
<b>Associate's Degree</b>	21	16.3	64	49.6	12	9.3	10	7.8	22	17.1
<b>Bachelor's Degree</b>	24	16.3	66	44.9	20	13.6	8	5.4	29	19.7
<b>Greater than Bachelor's Degree</b>	45	34.4	53	40.5	10	7.6	10	7.6	13	9.9

**Note: Percentages sum to 100% across rows.**

Employers were asked if their employees who currently hold some type of postsecondary education credential need continuing education — whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees. Very few employers said that employees with a less-than-associate credential needed to pursue a degree. About twice as many said that employees with Associate or Bachelor's degrees needed to obtain the next higher degree.

Level of Education	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	31	17.6	112	63.6	17	9.7
<b>Associate's Degree</b>	22	12.5	96	54.5	37	21.0
<b>Bachelor's Degree</b>	25	14.2	100	56.8	32	18.2

## Sarasota and Manatee Counties Summary

Table 1 displays number of responses to the survey from the top five types of firms in Sarasota and Manatee Counties. A total of 227 firms in Sarasota and Manatee Counties were sent surveys; 87 responded, resulting in a 38.3% response rate. The largest number of respondents in Sarasota and Manatee Counties represented health services firms. These counties were the only ones among the five study counties to have respondents from eating/drinking places and depository institutions/firms among the top five types of firms. Although the response rate was acceptable, there were relatively small numbers of respondents from the two counties and results should be considered with this in mind.

Firm Type	#	%
Health Services	22	25.3
Educational Services	9	10.3
Eating/Drinking Places	4	4.6
Business Services	4	4.6
Depository Institutions	3	3.4
Nonclassifiable Firms	5	5.7
<b>Total Sarasota and Manatee</b>	<b>87</b>	<b>100</b>

Employers were asked if there is an adequate supply of employees in the county at various levels of education. As noted in Table 2, a majority of the respondents indicated that the supply of employees was adequate at all levels. However, employers in Sarasota and Manatee counties were far less likely to report an adequate supply of employees at the less-than-Associate's level, with almost one-half indicating an inadequate supply of employees at this level. Overall, there appears to be an adequate supply of employees at the Associate's Degree level and higher for the responding firms in Sarasota and Manatee counties but the responses indicated concerns among employers about the supply of employees at lower education levels.

Level of Education	Yes		No	
	#	%	#	%
Less than Associate's Degree	36	52.2	33	47.8
Associate's Degree	44	68.8	20	31.3
Bachelor's Degree	48	75.0	16	25.0
Greater than Bachelor's Degree	45	77.6	13	22.4
<b>Note: Percentages sum to 100% across rows.</b>				

Respondents were asked to identify the first and second most-difficult-to-fill positions in their firms. Table 3 displays the positions most frequently mentioned by Sarasota and Manatee County firms. The most-difficult jobs to fill were in secretarial/general office occupations, followed by communication equipment operators, and health services positions. At the Bachelor's Degree level, the most frequently mentioned positions included K-12 teachers, engineers and accountants/financial specialists. In this report, "administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers." "Health-service" occupations include assistant-level

positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides.

<b>Table 3: Most-Difficult Jobs To Fill by OES*</b>		
<b>Occupational Title</b>		
<b>First-Most-Difficult Jobs To Fill</b>	<b>#</b>	<b>%</b>
<b>Secretarial/General Office</b>	10	14.9
<b>Communication Equipment Operator</b>	7	9.6
<b>Health Service</b>	6	9.0
<b>K-12 Teachers</b>	5	7.5
<b>Engineers</b>	3	4.5
<b>Second-Most-Difficult Jobs To Fill</b>	<b>#</b>	<b>%</b>
<b>Health Service</b>	9	17.3
<b>Secretarial/General Office</b>	8	15.4
<b>Accountants/Financial Specialists</b>	4	6.5
<b>K-12 Teachers</b>	3	5.8
<b>Merchandise/Product Sales</b>	2	3.8
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available). A majority of the respondents indicated that programs were available at each level of education in their geographical operating area. Employers who indicated programs were unavailable were more likely to indicate a lack of Bachelor's Degree level programs. Overall, the results indicate that postsecondary program availability is not an issue for firms in Sarasota and Manatee Counties.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
	<b>Yes</b>		<b>No</b>	
<b>Level of Education</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	9	10.6	76	89.4
<b>Associate's Degree</b>	4	4.7	81	95.3
<b>Bachelor's Degree</b>	12	14.1	73	85.9
<b>Greater than Bachelor's Degree</b>	7	8.2	78	91.8

The number of new and replacement hires expected over the next two years is displayed in Table 5. At the less-than-Associate's Degree level, 48.0% of responding firms will hire over 20 new or replacement employees in the next two year. At the Associate's Degree level, almost half of the firms expected to hire 1-5 individuals. The largest percentage of firms also expected to hire 1-5 new or replacement employees in the next two years at the Bachelor's Degree level. At the greater-than-Bachelor's Degree level, the largest percentage expected to hire no new individuals, although a large number of responding firms expected to make 1-5 new hires at this level in the next two years.

Level of Education	0		1-5		6-10		11-20		Over 20	
	#	%	#	%	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	7	9.3	19	25.3	7	9.3	6	8.0	36	48.0
<b>Associate's Degree</b>	8	13.1	30	49.2	11	18.0	2	3.3	10	16.4
<b>Bachelor's Degree</b>	9	12.9	33	47.1	14	20.0	3	4.3	11	15.7
<b>Greater than Bachelor's Degree</b>	23	42.6	21	38.9	3	5.6	1	1.9	6	11.1

**Note: Percentages sum to 100% across rows.**

Employers were asked if their employees who currently hold some type of postsecondary education credential needed continuing education and whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees. Very few (15.3%) employers said that employees with a less-than-associate credential needed to pursue a degree. Larger proportions said that employees with Associate (23.5%) or Bachelor's (23.5%) degrees needed to obtain the next higher degree.

Level of Education	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	11	12.9	59	69.4	13	15.3
<b>Associate's Degree</b>	6	7.1	51	60.0	20	23.5
<b>Bachelor's Degree</b>	11	12.9	50	58.8	20	23.5

## Volusia County Summary

Table 1 displays the number of response to the survey from the top five types of firms in Volusia County. A total of 162 firms in Volusia County were sent surveys; 57 employers responded, resulting in a 35.2% response rate. Volusia County was the only county among the five study counties to have executive, legislative and government firms among the top five types of firms. Although the response rate was acceptable, there were relatively small numbers of respondents from the two counties, so results should be considered with this in mind.

Firm Type	#	%
<b>Health Services</b>	7	12.3
<b>Social Services</b>	7	12.3
<b>Educational Services</b>	6	10.5
<b>Executive, Legislative, &amp; Government</b>	5	8.8
<b>Business Services</b>	4	7.0
<b>Nonclassifiable Firms</b>	3	5.3
<b>Total Volusia County</b>	57	100

Employers were asked if there is an adequate supply of employees in the County. As noted in Table 2, a majority of the respondents indicated that the supply of employees at all degree levels was adequate. Employers in Volusia County were slightly more likely to report an adequate supply of employees at the Associate's Degree and less-than-Associate's Degrees levels and less likely to report an adequate supply at the Bachelor's Degree level and above. Overall, there appears to be an adequate supply of employees at all levels of postsecondary education for the responding firms in Volusia County.

Level of Education	Yes		No	
	#	%	#	%
<b>Less than Associate's Degree</b>	29	72.5	11	27.5
<b>Associate's Degree</b>	30	78.9	8	21.1
<b>Bachelor's Degree</b>	30	65.2	16	34.8
<b>Greater than Bachelor's Degree</b>	29	69.0	13	31.0

Respondents were asked to identify the first and second most-difficult-to-fill positions in their firms. Table 3 displays the most frequently mentioned positions among Volusia County firms. The most-difficult jobs to fill were in secretarial/general office occupations — these jobs were listed frequently as either the first- or second-most-difficult job positions to fill. In this report, "administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers. "Health-service" occupations include assistant-level positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides. "Health care maintenance/treatment" occupations include registered nurses, physicians' assistants, pharmacists, dieticians and nutritionists.

<b>Table 3: Most-Difficult Jobs To Fill by OES*</b>		
<b>Occupational Titles</b>		
<b>First-Most-Difficult Jobs To Fill</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	5	11.9
Accountants/Financial Specialists	4	7.0
Administrative Specialty Managers	4	7.0
Health Service	4	7.0
Computer Scientists	3	6.9
Other Professional/Technical	3	6.9
Health Care Maintenance/Treatment	2	4.8
<b>Second-Most-Difficult Jobs To Fill</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	4	10.3
Administrative Specialty Managers	4	10.3
Health Care Maintenance/Treatment	4	10.3
Communication Equip Operators	4	10.3
Accountants/Financial Specialists	3	7.7
Other Social Science Occupation	3	7.7
Writers, Artists, Entertainers	3	7.7
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available). A majority of the respondents indicated that programs were available at each level of education in their geographical operating area. More than 98% of firms said the supply of Bachelor's Degree level programs was adequate. The responses indicate that the availability postsecondary program, including Bachelor's Degree programs, is not an issue for responding firms in Volusia County.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
<b>Level of Education</b>	<b>Yes</b>		<b>No</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	5	8.9	51	91.9
<b>Associate's Degree</b>	2	3.5	54	96.4
<b>Bachelor's Degree</b>	1	1.8	55	98.2
<b>Greater than Bachelor's Degree</b>	5	8.9	51	91.1

The number of new and replacement hires expected over the next two years is displayed in Table 5. At the less-than-Associate's Degree level, the largest percentage of firms expected to hire over 20 new or replacement employees in the next two years. At the Associate's Degree level, the largest percentage of firms expected to hire 1-5 new individuals. Many firms expected to hire 1-5 employees at the Bachelor's Degree level. At the greater-than-Bachelor's Degree level, the largest percentage of firms expected to hire 1-5 individuals, although a large number anticipated making no hires at this level in the next two years.

Level of Education	0		1-5		6-10		11-20		Over 20	
	#	%	#	%	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	4	8.7	12	26.1	9	19.6	4	8.7	17	37.0
<b>Associate's Degree</b>	11	25.6	17	39.5	5	11.6	3	7.0	7	16.3
<b>Bachelor's Degree</b>	9	19.6	19	41.3	6	13.0	3	6.5	9	19.6
<b>Greater than Bachelor's Degree</b>	12	29.3	19	46.3	5	12.2	2	4.9	3	7.3

**Note: Percentages sum to 100% across rows.**

Employers were asked if their employees who currently hold some type of postsecondary education credential needed continuing education and whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees. Very few employers said that employees with a less-than-associate credential needed to pursue a degree and larger proportions said that employees with Associate (14.3%) or Bachelor's (16.1%) degrees needed to obtain the next higher degree.

Level of Education	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	5	8.9	42	75.0	1	1.8
<b>Associate's Degree</b>	2	3.6	33	58.9	8	14.3
<b>Bachelor's Degree</b>	6	10.7	33	58.9	9	16.1

## Comparisons of Study Counties to Other Counties

This section of the report provides comparisons among respondents to the Employers' Educational Needs Survey for three groups of Florida counties. The first group represents the firms responding from the five study counties — Broward, Pinellas, Sarasota, Manatee, and Volusia. The second group, "University Counties," represents the firms responding from the nine counties that have main campuses of public universities — Alachua, Dade, Duval, Escambia, Hillsborough, Lee, Leon, Orange, and Palm Beach. The third group, "Non-university Counties," represents the firms responding from the 53 remaining Florida counties.

Table 1 displays number of responses to the survey for the each of the three comparison groups. The percentage of each type of responding firm does not differ substantially among the three groups. In each group, the types of firms with the largest number of responses to the survey were health service and engineering, accounting and research services firms. The non-university counties had fewer firms responding than the five study counties and nine university counties. The study counties had a slightly higher percentage of health services firms responding than did the university counties and non-university counties.

<b>Table 1: Firm Types by Respondents - Top Five</b>		
	<b>5 Study Counties</b>	
<b>Firm Type</b>	<b>#</b>	<b>%</b>
<b>Health Services</b>	80	15.6
<b>Engineering, Accounting, Research Services</b>	52	10.1
<b>Business Services</b>	42	8.2
<b>Educational Services</b>	41	8.0
<b>Social Services</b>	37	7.2
<b>Total Firms Responding from the Five Study Counties</b>	<b>514</b>	<b>100.0</b>
	<b>University Counties</b>	
<b>Firm Type</b>	<b>#</b>	<b>%</b>
<b>Health Services</b>	61	11.7
<b>Engineering, Accounting, Research Services</b>	59	11.3
<b>Social Services</b>	47	9.0
<b>Business Services</b>	42	8.0
<b>Educational Services</b>	36	6.9
<b>Total Firms Responding from the University Counties</b>	<b>523</b>	<b>100.0</b>

	<b>Non-University Counties</b>	
<b>Firm Type</b>	<b>#</b>	<b>%</b>
<b>Educational Services</b>	43	17.6
<b>Health Services</b>	37	15.1
<b>Engineering, Accounting, Research Services</b>	24	9.8
<b>Business Services</b>	11	4.5
<b>Eating/Drinking Places</b>	10	4.1
<b>Total Firms Responding from Non-university Counties</b>	<b>245</b>	<b>100.0</b>

Employers were asked if there was an adequate supply of employees in their counties. As noted in Table 2, there was no substantial difference among the five study counties, university counties and non-university counties in employers’ perceptions about the adequacy of supplies of employees. Employers in each group indicated an adequate supply of employees at all education levels. Employers in each group, however, were slightly more likely report an adequate supply of employees at the Associate's Degree level and below than at the Bachelor's Degree level and above. The non-university counties were slightly less likely than the study counties and university counties to report an adequate supply of employees at the Associate's Degree level and higher.

**Table 2: Is There an Adequate Supply of Employees in Your County?**

	<b>Less than Associate’s Degree</b>		<b>Associate’s Degree</b>		<b>Bachelor’s Degree</b>		<b>Greater than Bachelors Degree</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>5 Study Counties</b>	275	70.5	279	74.0	276	69.7	251	67.3
<b>University Counties</b>	318	78.9	275	71.1	283	69.0	262	67.0
<b>Non-university counties</b>	139	75.5	116	69.5	114	63.3	103	60.2

Respondents were asked to identify the first and second most-difficult-to-fill positions in their firms. Table 3a displays the most frequently mentioned first-most-difficult jobs to fill for the three different groups, and Table 3b displays the positions most frequently mentioned as the second-most-difficult to fill. For Tables 3a and 3b, "administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers. "Health-service" occupations include assistant-level positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides. "Health care maintenance/treatment" occupations include registered nurses, physicians’ assistants, pharmacists, dieticians and nutritionists.

For both the five study counties and university counties, secretarial/general office positions were the most-difficult positions to fill. For the non-university counties, K-12 teaching positions were hardest to fill. Regardless of the degree level required, secretarial/general office positions were the most-difficult positions to fill statewide. For all three groups, administrative specialty manager positions were the next most frequently mentioned. Accounting and financial services

positions and positions in health services were difficult to fill across the three groups. Overall, the three groups of counties provided similar responses about the first most difficult to fill positions.

<b>Table 3a: First-Most-Difficult Job To Fill – Group Comparisons</b>		
	<b>5 Study Counties</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	48	12.2
Administrative Specialty Managers	33	8.4
Accountants/Financial Specialists	27	6.9
Health Service	26	6.6
Computer Scientists	25	6.4
	<b>University Counties</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	46	12.1
Administrative Specialty Managers	33	8.7
Accountants/Financial Specialists	28	7.4
K-12 Teachers	22	5.8
Computer Scientists	20	5.3
	<b>Other Counties</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
K-12 Teachers	26	14.4
Administrative Specialty Managers	16	8.9
Health Care Maintenance/Treatment	14	7.8
Secretarial/General Office	12	6.7
Accountants/Financial Specialists	12	6.7
	<b>Statewide</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	107	11.3
Administrative Specialty Managers	82	8.6
K-12 Teachers	70	7.4
Accountants/Financial Specialists	67	7.0
Health Services	52	5.5

The three groups also were similar in responses about second-most-difficult positions to fill. The most frequently mentioned was secretarial/general office positions, administrative specialty manager positions, K-12 teaching positions, positions in the health fields, and accounting and financial specialty positions were among the second-most-difficult to fill for firms in all counties.

<b>Table 3b: Second-Most-Difficult Position To Fill - Group Comparisons</b>		
	<b>5 Study Counties</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	48	15.5
Administrative Specialty Managers	30	9.7
Health Care Maintenance/Treatment	24	7.8
Merchandise/Product Sales	20	6.5
Accountants/Financial Specialists	17	5.5
	<b>University Counties</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	39	13.2
Administrative Specialty Managers	27	9.1
Accountants/Financial Specialists	25	8.4
Health Care Maintenance/Treatment	16	5.4
Computer Scientists	15	5.1
	<b>Non-university counties</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	16	10.3
K-12 Teachers	12	7.7
Health Care Maintenance/Treatment	10	6.4
Administrative Specialty Managers	10	6.4
Engineers	9	5.8
	<b>Statewide</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	103	13.5
Administrative Specialty Managers	67	8.8
Health Care Maintenance/Treatment	50	6.6
K-12 Teachers	42	5.6
Merchandise/Product Sales	40	5.3

The academic areas or disciplines that the employers associated with the first-difficult-to-fill positions are shown in Table 4. The responses of employers in the five study counties were almost identical to those of the university counties about the academic disciplines needed for the most-difficult positions to fill — business management, health professions and education. Engineering and computer and information sciences were the other disciplines frequently cited. The non-university counties also cited the same academic disciplines for their most-difficult positions to fill, although in a slightly different order than the study counties and university counties.

<b>Table 4: Academic Disciplines of Most-Difficult Job (Top Five)</b>		
	<b>5 Study Counties</b>	
<b>Academic Discipline</b>	<b>#</b>	<b>%</b>
<b>Business Management</b>	33	20.2
<b>Health Professions</b>	31	19.0
<b>Education</b>	16	9.8
<b>Engineering</b>	15	9.2
<b>Computer and Information Sciences</b>	13	8.8
	<b>University Counties</b>	
<b>Academic Discipline</b>	<b>#</b>	<b>%</b>
<b>Business Management</b>	41	21.0
<b>Health Professions</b>	35	17.9
<b>Education</b>	22	11.3
<b>Computer and Information Sciences</b>	21	10.8
<b>Engineering</b>	12	6.2
	<b>Other Counties</b>	
<b>Academic Discipline</b>	<b>#</b>	<b>%</b>
<b>Health Professions</b>	21	23.9
<b>Education</b>	18	20.5
<b>Business Management</b>	12	13.6
<b>Engineering</b>	12	13.6
<b>Computer and Information Sciences</b>	5	5.7

Respondents were asked whether postsecondary education or training programs were *unavailable* in their geographic operating area. Table 5 shows the "no" responses, which indicate that these programs were available. There were no substantial differences in the responses by firms in the study counties compared to responses by firms in university and non-university counties. Across all three groups, an overwhelming majority of responding firms indicated there was an adequate supply of postsecondary education at all levels in their geographic area. These responses indicate that postsecondary program availability is not an issue for responding firms in any of these areas.

**Table 5: Are Postsecondary Education and Training Programs Unavailable in Your Area?**

	Less than Associate's Degree # %	Associate's Degree # %	Bachelor's Degree # %	Greater than Bachelors Degree # %
<b>5 Study Counties</b>	465 92.4	477 94.8	468 93.0	470 93.4
<b>University Counties</b>	482 93.2	490 94.8	479 92.8	488 94.6
<b>Other Counties</b>	223 91.4	230 94.3	209 85.7	220 90.2

Table 6 shows expected hires by level of postsecondary education in the next two years. Responses from all three groups were very similar. At the less-than-Associate's Degree level, many firms planned to hire 20 or more new or replacement employees in the next two years. At the same level, a significant number of firms in each group will hire 1-5 new individuals. At the Associate's Degree level, many firms will hire 1-5 new or replacement employees. The same holds true in all three groups for the Bachelor's Degree level. The largest percentage of firms will hire 1-5 new or replacement employees at the greater-than-Bachelor's degree level, although a large percentage of employers in all three groups do not intend to make any new hires at this level in the next two years.

**Table 6: Expected Number of Hires by Level of Postsecondary Education**

No Hires Expected	Less than Associate's Degree # %	Associate's Degree # %	Bachelor's Degree # %	Greater than Bachelors Degree # %
<b>5 Study Counties</b>	38 9.0	70 18.9	69 16.3	134 37.2
<b>University Counties</b>	47 11.0	81 21.3	60 13.9	112 29.5
<b>Other Counties</b>	11 5.2	33 19.1	35 17.2	65 36.3
1-5 Hires	Less than Associate's Degree # %	Associate's Degree # %	Bachelor's Degree # %	Greater than Bachelors Degree # %
<b>5 Study Counties</b>	141 33.4	167 45.0	189 44.6	148 41.4
<b>University Counties</b>	148 34.7	154 40.4	195 45.0	192 50.5
<b>Other Counties</b>	69 32.9	74 42.8	93 45.8	75 41.9
6-10 Hires	Less than Associate's Degree # %	Associate's Degree # %	Bachelor's Degree # %	Greater than Bachelors Degree # %
<b>5 Study Counties</b>	59 14.0	52 14.0	69 16.3	29 8.1
<b>University Counties</b>	44 10.3	49 12.9	62 14.3	25 6.6
<b>Other Counties</b>	35 16.7	27 15.6	26 12.8	17 9.5
11-20 Hires	Less than Associate's Degree # %	Associate's Degree # %	Bachelor's Degree # %	Greater than Bachelors Degree # %
<b>5 Study Counties</b>	32 7.6	27 7.3	26 6.1	17 4.7
<b>University Counties</b>	30 7.0	32 8.4	52 12.0	20 8.2
<b>Other Counties</b>	20 9.2	15 8.7	15 7.4	10 5.6

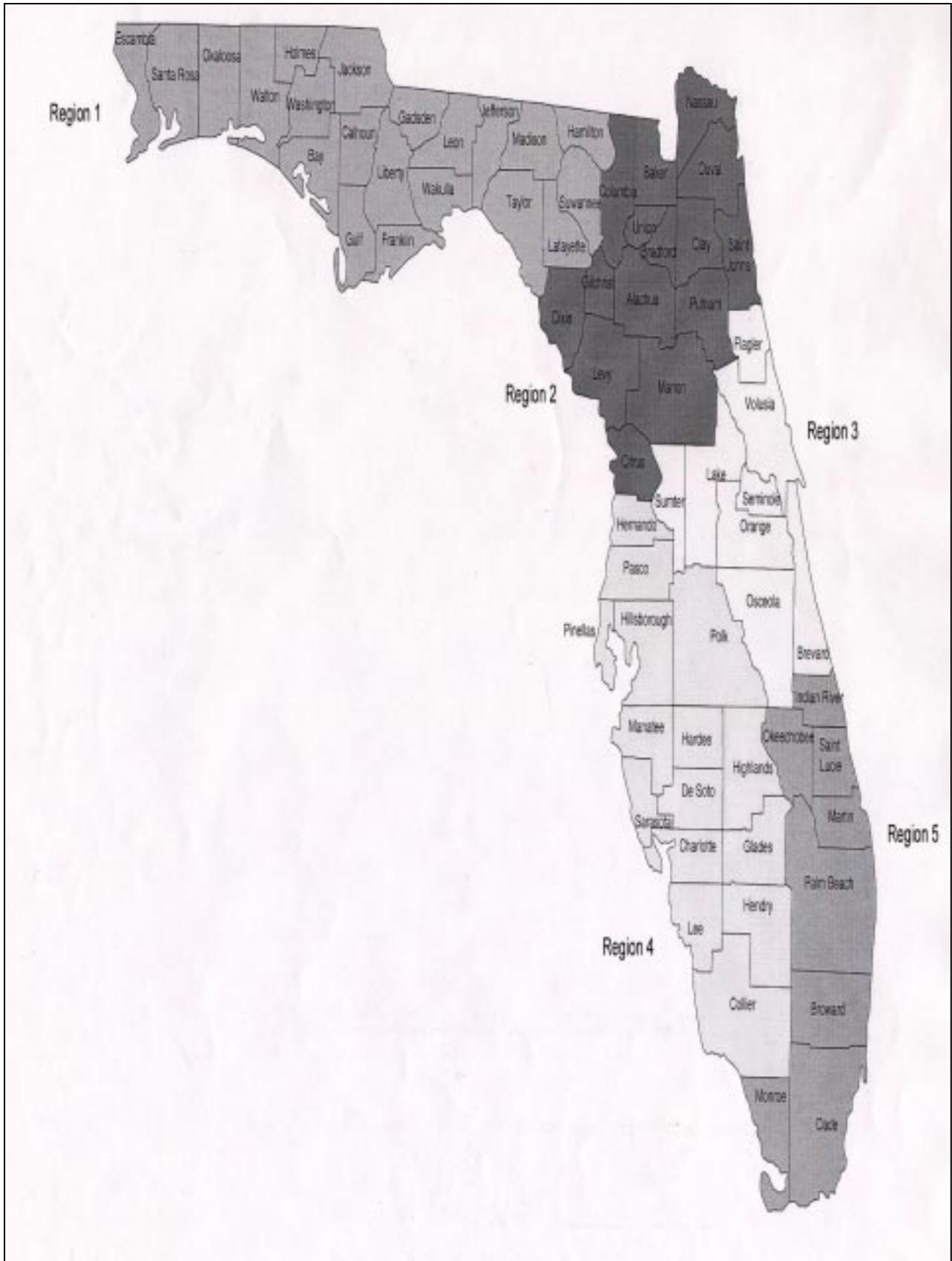
Over 20 Hires	Less than Associate's Degree		Associate's Degree		Bachelor's Degree		Greater than Bachelors Degree	
	#	%	#	%	#	%	#	%
<b>5 Study Counties</b>	152	36.0	55	14.8	71	16.7	32	8.9
<b>University Counties</b>	158	37.0	65	17.1	64	14.8	31	8.2
<b>Other Counties</b>	75	35.7	24	13.9	34	16.7	12	6.7

Employers were asked about the continuing education needs of employees who currently hold some type of postsecondary education credential — whether they needed no further education, needed to maintain/upgrade their current skills, or needed to seek an additional degree (beyond their existing level of education). Table 7 displays the data for those indicating a "yes" response. The responses from the five study counties are similar to responses from university counties and non-university counties. Most employers in all counties indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees. Few employers said that employees with a less-than-associate credential needed to pursue a degree but larger proportions said that employees with Associate or Bachelor's Degrees needed to obtain the next higher degree.

Less Than Associate's Degree	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
<b>5 Study Counties</b>	75	14.9	325	64.6	46	9.1
<b>University Counties</b>	68	13.2	343	66.5	62	12.0
<b>Other Counties</b>	25	10.2	168	68.9	29	11.9
Associate's Degree	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
<b>5 Study Counties</b>	51	10.1	274	54.5	103	20.5
<b>University Counties</b>	65	12.6	265	51.4	104	20.2
<b>Other Counties</b>	15	6.1	146	59.8	58	23.8
Bachelor's Degree	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
<b>5 Study Counties</b>	73	14.5	284	56.5	96	19.1
<b>University Counties</b>	71	13.8	331	64.1	98	19.0
<b>Other Counties</b>	25	10.2	146	59.8	63	25.8

## **Part 2**

### **Statewide Survey Results by Region**



## Region 1 Summary

Table 1 displays the number of firms responding to the survey in the top five types of firms in Region 1. A total of 147 firms responded from this region. Many of responding firms in this region were in the educational service field. Several firms from engineering, accounting, and research services, and social services also responded. Health-services and eating/drinking firms also are represented among the respondents from Region 1.

Firm Type	#	%
<b>Educational Services</b>	20	3.6
<b>Engineering, Accounting, Research Services</b>	13	8.8
<b>Social Services</b>	12	8.2
<b>Health Services</b>	11	7.5
<b>Eating/Drinking Places</b>	9	6.1
<b>Total Firms Responding from Region 1</b>	147	100.0

Employers were asked to indicate whether there is an adequate supply of employees in their county. As noted in Table 2, a majority of the respondents indicated that the supply of employees at all degree levels was adequate. Employers were more likely to find an adequate supply of employees at the Associate's Degree level and lower and less likely to find an adequate supply of employees at the Bachelor's Degree level or higher.

Level of Education	Yes		No	
	#	%	#	%
<b>Less than Associate's Degree</b>	95	83.3	18	15.8
<b>Associate's Degree</b>	80	74.8	27	25.2
<b>Bachelor's Degree</b>	73	66.4	37	33.6
<b>Greater than Bachelor's Degree</b>	69	63.9	39	36.1

**Note: Percentages sum to 100% across rows.**

Respondents were asked to identify the most-difficult-to-fill positions in their firms. Table 3 displays the most frequently mentioned positions in this region. The most--difficult jobs to fill in Region 1 are administrative specialty managers followed by K-12 teachers — both requiring Bachelor's Degrees or above. For the purposes of this table, "Administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers. "Therapists" include respiratory, occupational and physical therapists.

<b>Table 3: Most-Difficult Jobs To Fill</b>		
<b>First-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Administrative Specialty Managers	13	11.3
K-12 Teachers	10	8.7
Secretarial/General Office	9	7.8
Computer Scientists	8	7.0
Therapists	8	7.0
<b>Second-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Computer Scientists	8	9.0
K-12 Teachers	7	7.9
Accountants/Financial Specialists	6	6.7
Health Care Maintenance/Treatment	6	6.7
Secretarial/General Office	6	6.7
Librarians, Archivists, Curators	5	5.6
Administrative Specialty Managers	5	5.6
Engineers	3	3.4
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available). A majority of the respondents indicated that programs were available at each level of education in their geographical operating area.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
<b>Level of Education</b>	<b>Yes</b>		<b>No</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Less than Associate's Degree	8	5.5	138	94.5
Associate's Degree	5	3.4	141	96.6
Bachelor's Degree	11	7.5	135	92.5
Greater than Bachelor's Degree	7	4.8	139	95.2

The number of new and replacement hires expected over the next two years is displayed in Table 5. At the less-than-Associate's Degree level, many employers expected to hire 20 or more new or replacement employees in the next two years. A significant number of firms expected to hire 1-5 employees at this level. At the Associate's Degree level, the largest percentage of firms expected to hire 1-5 individuals. Many firms also expected to hire 1-5 employees at the Bachelor's Degree level. At the greater-than-Bachelor's Degree level, most firms expected to hire 1-5 individuals, although a large number of responding firms anticipated making no hires at this level in the next two years.

Level of Education	0		1-5		6-10		11-20		Over 20	
	#	%	#	%	#	%	#	%	#	%
Less than Associate's Degree	12	9.3	43	33.3	13	10.1	11	8.5	50	38.8
Associate's Degree	20	19.2	39	37.5	18	17.3	11	10.6	16	15.4
Bachelor's Degree	23	17.7	52	40.0	12	9.2	18	13.8	25	19.2
Greater than Bachelor's Degree	38	35.2	44	40.7	10	9.3	5	4.6	11	10.2

**Note: Percentages sum to 100% across rows.**

Employers were asked if their employees who currently hold some type of postsecondary education credential need continuing education and whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees.

Level of Education	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
Less than Associate's Degree	15	10.3	101	69.2	14	9.6
Associate's Degree	14	9.6	86	58.9	23	15.8
Bachelor's Degree	19	13.0	96	65.8	20	13.7

## Region 2 Summary

Table 1 displays number of responses to the survey from the top five types of firms in Region 2. A total of 141 firms responded to the survey in this region, the largest percentage from the health-services field. Several firms from social services and educational services also responded. Business services and engineering, accounting and research services firms are also represented in the respondents from Region 2. Business services include businesses that supply services to other businesses.

Firm Type	#	%
Health Services	21	14.9
Social Services	17	12.1
Educational Services	16	11.3
Business Services	15	10.6
Engineering, Accounting, Research Services	10	7.1
<b>Total Firms Responding from Region 2</b>	<b>141</b>	<b>100.0</b>

Employers were asked to indicate whether there is an adequate supply of employees in their county. As noted in Table 2, a majority of the respondents indicated that the supply of employees at all degree levels was adequate. Employers were less likely to find an adequate supply of employees at the greater-than-Bachelor's Degree level and more likely to find an adequate supply of employees at the less-than-Associate's Degree level.

Level of Education	Yes		No	
	#	%	#	%
Less than Associate's Degree	88	79.3	23	20.7
Associate's Degree	72	68.6	33	31.4
Bachelor's Degree	75	68.8	34	31.2
Greater than Bachelor's Degree	66	64.7	36	35.3

**Note: Percentages sum to 100% across rows.**

Respondents were asked to identify the first and second most-difficult-to-fill positions in their firms. Table 3 displays the most frequently mentioned position among Region 2 firms. The most-difficult jobs to fill were in secretarial/general office occupations, followed by K-12 teachers. In this report, "administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers. "Health-service" occupations include assistant-level positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides. "Other health professional/technician" occupations include radiation therapists, medical record technicians and radiological technologists.

<b>Table 3: Most-Difficult Jobs To Fill by OES* Occupational Level</b>		
<b>First-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	14	13.6
K-12 Teachers	12	11.1
Computer Scientists	8	7.4
Food & Beverage Preparations/Service	8	7.4
Health Care Maintenance/Treatment	8	7.4
Administrative Specialty Managers	7	6.5
Merchandise/Product Sales	5	4.6
<b>Second-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
K-12 Teachers	6	7.1
Administrative Specialty Managers	6	7.1
Secretarial/General Office	6	7.1
Accountants/Financial Specialists	6	7.1
Computer Scientists	5	6.0
Health Services	5	6.0
Merchandise/Product Sales	4	4.8
Agricultural, Forestry, Fishing	4	4.8
Legal Assistants	3	3.6
Other Health Professional/Technicians	3	3.6
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available). Over 90% of the firms in Region 2 reported that there was an adequate supply of postsecondary programs at all educational levels in their area, indicating postsecondary program availability is not an issue in their operating area.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
<b>Level of Education</b>	<b>Yes</b>		<b>No</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
Less than Associate's Degree	5	3.5	136	96.5
Associate's Degree	7	5.0	134	95.0
Bachelor's Degree	9	6.4	132	93.6
Greater than Bachelor's Degree	6	4.3	135	95.7

The number of new and replacement hires expected over the next two years is displayed in Table 5. At the less-than-Associate's Degree level, the largest percentage of responding firms planned to hire over 20 new or replacement employees in the next two years. At the Associate's Degree level, more of firms expected to hire 1-5 new individuals. Many firms also expect to hire 1-5 employees at the Bachelor's Degree level. At the greater-than-Bachelor's Degree level, many

firms expected to hire 1-5 individuals, although a large number of responding firms expected to make no hires at this level

**Table 6: Expected Number of Hires by Level of Postsecondary Education**

Level of Education	0		1-5		6-10		11-20		Over 20	
	#	%	#	%	#	%	#	%	#	%
Less than Associate's Degree	9	7.4	41	33.6	12	9.8	14	11.5	46	37.7
Associate's Degree	19	18.6	41	40.2	15	14.7	5	4.9	22	21.6
Bachelor's Degree	16	13.2	49	40.5	21	17.4	17	14.0	18	14.9
Greater than Bachelor's Degree	34	31.5	50	46.3	10	9.3	10	9.3	4	3.7

**Note: Percentages sum to 100% across rows.**

Employers were asked about the continuing education needs of employees who currently hold some type of postsecondary education credential — whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees.

**Table 6: Continuing Education Needs**

Level of Education	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
Less than Associate's Degree	17	12.1	96	68.1	18	12.8
Associate's Degree	12	8.5	80	56.7	32	22.7
Bachelor's Degree	11	7.8	94	66.7	28	19.9

### Region 3 Summary

Table 1 displays the number of responses to the survey from the top five types of firms in Region 3. A total of 203 firms responded to the survey in this region, with many from the health-services, engineering, accounting and research services, and educational services fields. Business services and social services firms also are represented in the respondents from Region 3. Business services include businesses that supply services to other businesses.

<b>Firm Type</b>	<b>#</b>	<b>%</b>
<b>Health Services</b>	27	13.3
<b>Engineering, Accounting, Research Services</b>	26	12.8
<b>Educational Services</b>	22	10.8
<b>Business Services</b>	15	7.4
<b>Social Services</b>	13	6.4
<b>Total Firms Responding from Region 3</b>	203	100.0

Employers were asked to indicate whether there is an adequate supply of employees in their county. As noted in Table 2, a majority indicated that the supply of employees at all degree levels was adequate. Employers were more likely to find an adequate supply of employees at the Associate Degree level and below than at the Bachelor's Degree level and above.

<b>Level of Education</b>	<b>Yes</b>		<b>No</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	109	73.6	39	26.4
<b>Associate's Degree</b>	107	75.4	35	24.6
<b>Bachelor's Degree</b>	106	65.8	55	34.2
<b>Greater than Bachelor's Degree</b>	99	66.9	49	33.1

**Note: Percentages sum to 100% across rows.**

Respondents were asked to identify the most-difficult-to-fill positions in their firms. Table 3 displays the top most-difficult positions to fill in this region. The most-difficult jobs to fill are in secretarial/general office occupations, followed by accountants and financial specialists. In this report, "administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers. "Health-service" occupations include assistant-level positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides. "Health care maintenance/treatment" occupations include registered nurses, physicians' assistants, pharmacists, dieticians and nutritionists.

<b>Table 3: Most-Difficult Jobs To Fill by OES* Occupational Title</b>		
<b>First-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	16	10.9
Accountants/Financial Specialists	15	10.2
Administrative Specialty Managers	14	9.5
K-12 Teachers	10	6.8
Health Services	10	6.8
Health Care Maintenance/Treatment	9	6.1
<b>Second-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	15	12.7
Administrative Specialty Managers	13	11.0
Health Care Maintenance/Treatment	8	6.8
Accountants/Financial Specialists	6	5.1
Engineers	5	4.2
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available). Over 90% of respondents in Region 3 reported that there was an adequate supply of employees with postsecondary education at all levels, indicating that program availability is not an issue in their operating area.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
<b>Level of Education</b>	<b>Yes</b>		<b>No</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	19	9.5	182	90.5
<b>Associate's Degree</b>	11	5.5	190	94.5
<b>Bachelor's Degree</b>	16	8.0	185	92.0
<b>Greater than Bachelor's Degree</b>	17	8.5	184	91.5

The number of new and replacement hires expected over the next two years is displayed in Table 5. At the less-than-Associate's Degree level, the largest percentage of employers expected to hire over 20 new or replacement employees in the next two years, and many expected to hire 1-5 individuals. At the Associate's Degree level, the majority of firms expected to hire 1-5 individuals. Most firms also expect to hire 1-5 employees at the Bachelor's Degree level. At the greater-than-Bachelor's Degree level, most firms expected to hire 1-5 individuals, although a large number of responding firms anticipated making no hires at this level in the next two years.

Level of Education	0		1-5		6-10		11-20		Over 20	
	#	%	#	%	#	%	#	%	#	%
Less than Associate's Degree	11	6.7	55	33.5	26	15.9	14	8.5	58	35.4
Associate's Degree	28	19.0	61	41.5	19	12.9	13	8.8	26	17.7
Bachelor's Degree	24	14.4	80	47.9	23	13.8	14	8.4	26	15.6
Greater than Bachelor's Degree	47	32.4	70	48.3	12	8.3	6	4.1	10	6.9

Note: Percentages sum to 100% across rows.

Employers were asked about the continuing education needs of employees who currently hold some type of postsecondary education credential — whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees. Only 20.9% of employers indicated they had employees with Associate's Degrees who needed to seek a Bachelor's Degree and the same proportion indicated that employees with Bachelor's needed to pursue an additional degree.

Level of Education	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
Less than Associate's Degree	25	12.4	142	70.6	19	9.5
Associate's Degree	21	10.4	115	57.2	42	20.9
Bachelor's Degree	27	13.4	126	62.7	42	20.9

## Region 4 Summary

Table 1 displays the number of responses to the survey from the top five types of firms in Region 4. A total of 402 firms responded from this region, the largest percentage from the health-services field. Several firms from the business services and engineering, accounting and research services fields also responded. Business services include businesses that supply services to other businesses. Educational services and social services firms also are represented among the respondents from Region 4.

Firm Type	#	%
Health Services	69	17.2
Business Services	34	8.5
Engineering, Accounting, Research Services	34	8.5
Educational Services	31	7.7
Social Services	21	5.2
<b>Total Firms Responding from Region 4</b>	<b>402</b>	<b>100.0</b>

Employers were asked to indicate whether there is an adequate supply of employees in their county. As noted in Table 2, a majority of the respondents indicated that the supply of employees at all degree levels was adequate. Employers were slightly more likely to report an adequate supply of employees at the three higher degree levels than at the less-than-Associate's Degree level. Overall, there appears to be an adequate supply of employees in this region at all levels of postsecondary education.

Level of Education	Yes		No	
	#	%	#	%
Less than Associate's Degree	198	63.9	112	36.1
Associate's Degree	203	68.8	92	31.2
Bachelor's Degree	201	67.7	96	32.3
Greater than Bachelor's Degree	189	66.5	95	33.5
<b>Note: Percentages sum to 100% across rows.</b>				

Respondents were asked to identify the most-difficult-to-fill positions in their firms. Table 3 displays the top most frequently mentioned positions. The most-difficult jobs to fill in Region 4 are in secretarial/general office occupations, followed by administrative specialty managers. "Administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers. "Health-service" occupations include assistant-level positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides. "Other health professional/technicians" occupations include radiation therapists, medical records technicians and radiology technologists.

<b>Table 3: Most-Difficult Jobs To Fill by OES* Occupational Title</b>		
<b>First-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Health Services	23	7.6
Secretarial/General Office	34	11.2
K-12 Teachers	22	7.2
Administrative Specialty Managers	18	5.9
Accountants/Financial Specialists	17	5.6
<b>Second-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	42	16.9
Administrative Specialty Managers	18	7.3
Merchandise/Product Sales	17	6.9
Health Care Maintenance/Treatment	17	6.9
Other Health Professional/Technicians	12	4.8
Accountants/Financial Specialists	11	4.4
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available). Over 90% of the firms in Region 4 found that there is an adequate supply of postsecondary programs at most educational levels in their area, indicating that postsecondary program availability is not an issue for them.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
<b>Level of Education</b>	<b>Yes</b>		<b>No</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	34	8.7	356	91.3
<b>Associate's Degree</b>	22	5.6	368	94.4
<b>Bachelor's Degree</b>	40	10.3	355	89.7
<b>Greater than Bachelor's Degree</b>	27	6.9	363	93.1

The number of new and replacement hires expected over the next two years is displayed in Table 5. At the less-than-Associate's Degree level, many firms expected to hire over 20 new or replacement employees in the next two years. Also at this level, a significant number of firms expected to hire 1-5 employers. At the Associate's Degree level, the many of firms expected to hire 1-5 individuals. Many firms also expected to hire 1-5 employees at the Bachelor's Degree level. At the greater-than-Bachelor's Degree level, many firms expected to hire 1-5 individuals, although a large number of responding firms anticipated making no hires at this level in the next two years.

<b>Level of Education</b>	<b>0</b>		<b>1-5</b>		<b>6-10</b>		<b>11-20</b>		<b>Over 20</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	21	6.3	114	34.3	45	13.6	26	7.8	126	38.0
<b>Associate's Degree</b>	53	18.2	137	46.9	36	12.3	23	7.9	43	14.7
<b>Bachelor's Degree</b>	52	16.0	144	44.4	55	17.0	17	5.2	56	17.3
<b>Greater than Bachelor's Degree</b>	96	33.4	129	44.9	21	7.3	17	5.9	24	8.4

**Note: Percentages sum to 100% across rows.**

Employers were asked about the continuing education needs of employees who currently hold some type of postsecondary education credential — whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that these employees needed to maintain and upgrade their existing skills, not seek a new degree. Only 23.6% of employers indicated that employees with Associate's Degrees need to seek a Bachelor's Degree and 21.8% reported that employees with Bachelor's Degrees needed to pursue an advanced degree.

<b>Level of Education</b>	<b>No Further Education Needed</b>		<b>Maintain/Upgrade</b>		<b>Need Additional Degree</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	58	14.9	257	65.9	49	12.6
<b>Associate's Degree</b>	38	9.7	214	54.9	92	23.6
<b>Bachelor's Degree</b>	48	12.3	231	59.2	85	21.8

## Region 5 Summary

Table 1 displays the number responses to the survey from the top five types of firms in Region 5. A total of 389 firms responded to the survey from this region, with the largest number of respondents from engineering, accounting and research firms or health-services firms. Educational, social and business services also were represented in the survey. A business service includes firms that provide services to other businesses.

Firm Type	#	%
<b>Engineering, Accounting, Research Services</b>	52	13.4
<b>Health Services</b>	50	12.9
<b>Educational Services</b>	31	8.0
<b>Social Services</b>	30	7.7
<b>Business Services</b>	27	6.9
<b>Total Firms Responding from Region 5</b>	389	100.0

Employers were asked to indicate whether there is an adequate supply of employees in their county. As noted in Table 2, a majority of the respondents indicated that the supply of employees at all degree levels was adequate. In this region, employers were more likely to find an adequate supply of employees at the Associate's Degree level and below than at the Bachelor's Degree level or higher.

Level of Education	Yes		No	
	#	%	#	%
<b>Less than Associate's Degree</b>	242	82.0	53	18.0
<b>Associate's Degree</b>	208	73.8	74	26.2
<b>Bachelor's Degree</b>	218	70.6	91	29.4
<b>Greater than Bachelor's Degree</b>	193	65.9	100	34.1
<b>Note: Percentages sum to 100% across rows</b>				

Respondents were asked to identify the first and second most-difficult-to-fill positions in their firms. Table 3 displays the most frequently mentioned position among Region 5 firms. The most-difficult jobs to fill were in secretarial/general office occupations, followed by administrative specialty managers. In this report, "administrative specialty managers" include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers. "Health care maintenance/treatment" occupations include registered nurses, physician assistants, pharmacists, dieticians and nutritionists.

<b>Table 3: Most-Difficult Jobs To Fill by OES* Occupational Titles</b>		
<b>First-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	34	12.3
Administrative Specialty Managers	30	10.8
Accountants/Financial Specialists	24	8.7
Merchandise/Product Sales	17	6.1
K-12 Teachers	16	5.8
<b>Second-Most-Difficult Jobs To Fill</b>		
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	34	15.3
Administrative Specialty Managers	25	11.3
Accountants/Financial Specialists	19	8.6
K-12 Teachers	18	8.1
Merchandise/Product Sales	13	5.9
Health Care Maintenance/Treatment	13	5.9
<i>*OES = Occupational Employment Statistics</i>		

Respondents were asked whether postsecondary education or training programs were unavailable in their geographic operating area. Table 4 displays their responses. (Note that a "yes" response means that programs are NOT available). Over 90% of the firms in Region 5 found that there is an adequate supply of postsecondary programs at all educational levels in their area, indicating that postsecondary program availability is not an issue in their firm's geographic operating area.

<b>Table 4: Are Postsecondary Education and Training Programs Unavailable in Your Area?</b>				
<b>Level of Education</b>	<b>Yes</b>		<b>No</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>Less than Associate's Degree</b>	28	7.3	358	92.7
<b>Associate's Degree</b>	22	5.7	364	94.3
<b>Bachelor's Degree</b>	31	8.1	354	91.9
<b>Greater than Bachelor's Degree</b>	28	7.3	357	92.7

The number of new and replacement hires expected over the next two years is displayed in Table 5. At the less-than-Associate's Degree level, many firms expected to hire over 20 or 1-5 new or replacement employees in the next two years. At the Associate's Degree level, the largest percentage of firms expected to hire 1-5 individuals. Many firms also expected to hire 1-5 new or replacement employees at the Bachelor's Degree level. At the greater-than-Bachelor's Degree level, many firms expected to hire 1-5 individuals, although a large number of responding firms anticipated making no hires at this level in the next two years.

Level of Education	0		1-5		6-10		11-20		Over 20	
	#	%	#	%	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	43	13.8	105	33.7	42	13.5	17	5.4	105	33.7
<b>Associate's Degree</b>	64	22.9	117	41.8	40	14.3	22	7.9	37	13.2
<b>Bachelor's Degree</b>	49	15.4	152	47.8	46	14.5	27	8.5	44	13.8
<b>Greater than Bachelor's Degree</b>	96	35.4	122	45.0	18	6.6	9	3.3	26	9.6

**Note: Percentages sum to 100% across rows.**

Employers were asked about the continuing education needs of employees who currently hold some type of postsecondary education credential — whether employees needed no further education, needed to maintain and upgrade skills, or needed to seek an additional degree. Table 6 displays the data for those responding "yes" to the question. Most employers indicated that employees needed to maintain/upgrade their current skills rather than obtain degrees.

Level of Education	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
<b>Less than Associate's Degree</b>	53	13.8	240	62.3	37	9.6
<b>Associate's Degree</b>	46	11.9	190	49.4	76	19.7
<b>Bachelor's Degree</b>	64	16.5	214	55.0	82	21.3

## Comparisons of Regions

Table 1 displays the number of response to the survey for the top five types of firms in each of the five regions. Region 1 is the only region to have eating/drinking firms among the top five. Otherwise, the types of responding firms are similar across the regions, although different percentages of each type of firm responded in each of the regions. All regions had a large number of responses from the health-services firms. Social services, engineering, accounting and research services, and educational services firms were represented in all regions. Business service firms were represented in the top five in every region except Region 1.

<b>Table 1: Respondents by Firm Type – Top Five</b>		
	<b>Region 1</b>	
<b>Firm Type</b>	<b>#</b>	<b>%</b>
<b>Educational Services</b>	20	13.6
<b>Engineering, Accounting, Research Services</b>	13	8.8
<b>Social Services</b>	12	8.2
<b>Health Services</b>	11	7.5
<b>Eating/Drinking Places</b>	9	6.1
<b>Total Firms Responding from Region 1</b>	147	100.0
	<b>Region 2</b>	
<b>Firm Type</b>	<b>#</b>	<b>%</b>
<b>Health Services</b>	21	14.9
<b>Social Services</b>	17	12.1
<b>Educational Services</b>	16	11.3
<b>Business Services</b>	15	10.6
<b>Engineering, Accounting, Research Services</b>	10	7.1
<b>Total Firms Responding from Region 2</b>	141	100.0
	<b>Region 3</b>	
<b>Firm Type</b>	<b>#</b>	<b>%</b>
<b>Health Services</b>	27	13.3
<b>Engineering, Accounting, Research Services</b>	26	12.8
<b>Educational Services</b>	22	10.8
<b>Business Services</b>	15	7.4
<b>Social Services</b>	13	6.4
<b>Total Firms Responding from Region 3</b>	203	100.0

	<b>Region 4</b>	
<b>Firm Type</b>	<b>#</b>	<b>%</b>
Health Services	69	17.2
Business Services	34	8.5
Engineering, Accounting, Research Services	34	8.5
Educational Services	31	7.7
Social Services	21	5.2
<b>Total Firms Responding from Region 4</b>	<b>402</b>	<b>100.0</b>
	<b>Region 5</b>	
<b>Firm Type</b>	<b>#</b>	<b>%</b>
Engineering, Accounting, Research Services	52	13.4
Health Services	50	12.9
Educational Services	31	8.0
Social Services	30	7.7
Business Services	27	6.9
<b>Total Firms Responding from Region 5</b>	<b>389</b>	<b>100.0</b>

Employers were asked if there was an adequate supply of employees in their counties. The results in Table 2 show that there was no substantial difference among the five regions. Employers in all regions indicated that overall there is an adequate supply of employees at all educational levels. They were slightly more likely to report an adequate supply of employees at the Associate's Degree level and below than the Bachelor's Degree level and higher, however.

	Less than Associate's Degree		Associate's Degree		Bachelor's Degree		Greater than Bachelors Degree	
	#	%	#	%	#	%	#	%
<b>Region 1</b>	95	84.1	80	74.8	73	66.4	69	63.9
<b>Region 2</b>	88	79.3	72	68.6	75	68.8	66	64.7
<b>Region 3</b>	109	73.6	107	75.4	106	65.8	99	66.9
<b>Region 4</b>	198	63.9	203	68.8	201	76.7	189	66.5
<b>Region 5</b>	242	82.0	208	73.8	218	70.6	193	65.9
<b>Statewide</b>	732	74.9	670	72.0	673	68.3	616	65.9

Respondents were asked to identify the first and second most-difficult-to-fill positions in their firms. Table 3a displays the top first-most-difficult jobs to fill for the five different regions, and Table 3b displays the top second-most-difficult positions to fill.

Although the regions showed different priorities for difficult positions to fill, there are similarities. Secretarial positions, administrative specialty managers, K-12 teaching and health-care positions were among the difficult-to-fill positions in all regions. Other difficult positions to fill in more than one region included computer scientists, accountants and financial specialists, and merchandise/product sales. Region 2 was the only region to indicate that food and beverage service positions were difficult to fill. For Tables 3a and 3b, "health-services" occupations include assistant-level positions such as dental assistants, medical assistants, nursing aides, and occupational therapy assistants and aides. "Health care maintenance/treatment" occupations include registered nurses, physician assistants, pharmacists, dieticians and nutritionists.

"Therapist" occupations include respiratory, occupational and physical therapists. "administrative specialty manager" occupations include upper-level managers in a variety of roles such as human resource directors, marketing managers and engineering project managers.

<b>Table 3a: First-Most-Difficult Jobs To Fill</b>		
	<b>Region 1</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Administrative Specialty Managers	13	11.3
K-12 Teachers	10	8.7
Secretarial/General Office	9	7.8
Computer Scientists	8	7.0
Therapists	8	7.0
Accountants/Financial Specialists	6	5.2
	<b>Region 2</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	14	13.6
K-12 Teachers	12	11.1
Computer Scientists	8	7.4
Food & Beverage Preparations/Service	8	7.4
Health Care Maintenance/Treatment	8	7.4
Administrative Specialty Managers	7	6.5
Merchandise/Product Sales	5	4.6
	<b>Region 3</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	16	10.9
Accountants/Financial Specialists	15	10.2
Administrative Specialty Managers	14	9.5
K-12 Teachers	10	6.8
Health Services	10	6.8
Health Care Maintenance/Treatment	9	6.1
	<b>Region 4</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	34	11.2
Health Services	23	7.6
K-12 Teachers	22	7.2
Administrative Specialty Managers	18	5.9
Accountants/Financial Specialists	17	5.6
	<b>Region 5</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	34	12.3
Administrative Specialty Managers	30	10.8
Accountants/Financial Specialists	24	8.7
Merchandise/Product Sales	17	6.1
K-12 Teachers	16	5.8

The five regions had some similarities in the second-most-difficult positions to fill. All counties indicated secretarial/general office positions and administrative specialty managers were difficult positions to fill. Other positions cited as difficult to fill by more than one region include K-12 teaching, accounting/financial services, merchandise/product sales and positions in various health professions. Region 1 was the only region to include librarian, archivist and curator positions among the difficult to fill positions.

<b>Table 3b: Second-Most-Difficult Positions To Fill</b>		
	<b>Region 1</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
<b>Computer Scientists</b>	8	9.0
<b>K-12 Teachers</b>	7	7.9
<b>Accountants/Financial Specialists</b>	6	6.7
<b>Health Care Maintenance/Treatment</b>	6	6.7
<b>Secretarial/General Office</b>	6	6.7
<b>Librarians, Archivists, Curators</b>	5	5.6
<b>Administrative Specialty Managers</b>	5	5.6
<b>Engineers</b>	3	3.4
	<b>Region 2</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
<b>K-12 Teachers</b>	6	7.1
<b>Administrative Specialty Managers</b>	6	7.1
<b>Secretarial/General Office</b>	6	7.1
<b>Accountants/Financial Specialists</b>	6	7.1
<b>Computer Scientists</b>	5	6.0
<b>Health Services</b>	5	6.0
<b>Merchandise/Product Sales</b>	4	4.8
<b>Agricultural, Forestry, Fishing</b>	4	4.8
<b>Legal Assistants</b>	3	3.6
<b>Other Health Professional/Technicians</b>	3	3.6
	<b>Region 3</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
<b>Secretarial/General Office</b>	15	12.7
<b>Administrative Specialty Managers</b>	13	11.0
<b>Health Care Maintenance/Treatment</b>	8	6.8
<b>Accountants/Financial Specialists</b>	6	5.1
<b>Engineers</b>	5	4.2

	<b>Region 4</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	42	16.9
Administrative Specialty Managers	18	7.3
Merchandise/Product Sales	17	6.9
Health Care Maintenance/Treatment	17	6.9
Other Health Professional/Technicians	12	4.8
Accountants/Financial Specialists	11	4.4
	<b>Region 5</b>	
<b>OES Job Title</b>	<b>#</b>	<b>%</b>
Secretarial/General Office	34	15.3
Administrative Specialty Managers	25	11.3
Accountants/Financial Specialists	19	8.6
K-12 Teachers	18	8.1
Merchandise/Product Sales	13	5.9
Health Care Maintenance/Treatment	13	5.9

The academic areas or disciplines that the employers associated with the first-difficult-to-fill positions are shown in Table 4. The responses of employers about the academic disciplines needed for the most-difficult positions to fill were similar across all five regions — business management, health professions and education were the most frequently mentioned disciplines. Engineering and computer and information sciences were the other disciplines most frequently cited. Region 2 was the only region to cite communications as a discipline needed for most-difficult-to-fill positions, and Region 3 was the only region to cite the visual and performing arts.

<b>Table 4: Academic Disciplines of Most Difficult Jobs To Fill (Top Five)</b>		
	<b>Region 1</b>	
<b>Academic Discipline</b>	<b>#</b>	<b>%</b>
Health Professions	14	23.3
Business Management	13	21.7
Computer and Information Sciences	8	13.3
Education	8	13.3
Engineering	4	6.7
	<b>Region 2</b>	
<b>Academic Discipline</b>	<b>#</b>	<b>%</b>
Health Professions	15	30.0
Education	9	18.0
Computer and Information Sciences	8	16.0
Business Management	4	8.0
Communications	2	4.0

	<b>Region 3</b>	
<b>Academic Discipline</b>	#	%
<b>Health Professions</b>	12	19.4
<b>Engineering</b>	11	17.7
<b>Business Management</b>	9	14.5
<b>Education</b>	6	6.7
<b>Visual and Performing Arts</b>	4	6.5
	<b>Region 4</b>	
<b>Academic Discipline</b>	#	%
<b>Health Professions</b>	26	20.3
<b>Business Management</b>	26	20.3
<b>Education</b>	15	11.7
<b>Computer and Information Sciences</b>	12	9.4
<b>Engineering</b>	12	9.4
	<b>Region 5</b>	
<b>Academic Discipline</b>	#	%
<b>Business Management</b>	34	23.3
<b>Health Professions</b>	20	13.7
<b>Education</b>	18	12.3
<b>Engineering</b>	10	6.8
<b>Computer and Information Sciences</b>	8	5.5

Respondents were asked whether postsecondary education or training programs were *unavailable* in their geographic operating area. Table 5 shows the "no" responses, which indicate that these programs were available. There were no substantial differences in the responses by firms in these regions. Across all five regions, an overwhelming majority of responding firms indicated there is an adequate supply of postsecondary education at all levels in their geographic area, indicating that postsecondary program availability is not an issue for responding firms in these regions.

	<b>Less than Associate's Degree</b>		<b>Associate's Degree</b>		<b>Bachelor's Degree</b>		<b>Greater than Bachelors Degree</b>	
	#	%	#	%	#	%	#	%
<b>Region 1</b>	138	94.5	141	96.6	135	92.5	139	95.2
<b>Region 2</b>	136	96.5	134	95.0	132	93.6	135	95.7
<b>Region 3</b>	182	90.5	190	94.5	185	92.0	184	91.5
<b>Region 4</b>	356	91.3	368	94.4	350	89.7	363	93.1
<b>Region 5</b>	358	92.7	364	94.3	354	91.9	357	92.7
<b>Statewide</b>	1170	92.6	1197	94.7	1156	91.5	1178	93.3

Table 6 displays expected hires by level of postsecondary education in the next two years. Responses from all five regions were similar for this question. At the less-than-Associate's Degree level, many firms planned to hire 20 or more new or replacement employees in the next two years, although, at the same level, a sizable number of firms expected to hire 1-5 new individuals in the next two years. At the Associate's Degree level, the largest proportion of firms will hire 1-5 new or replacement employees. The same holds true in all regions for the Bachelor's Degree level, where most firms will hire 1-5 new individuals. Many firms also expect to hire 1-5 new or replacement employees at the greater-than-Bachelor's degree level, although a larger percentage of employers in all five regions do not intend to make any new hires at this level in the next two years.

<b>Table 6: Expected Number of Hires by Level of Postsecondary Education</b>				
<b>No Expected Hires</b>	<b>Less than Associate's Degree # %</b>	<b>Associate's Degree # %</b>	<b>Bachelor's Degree # %</b>	<b>Greater than Bachelor's Degree # %</b>
<b>Region 1</b>	12 9.3	20 13.6	23 17.7	38 35.2
<b>Region 2</b>	9 7.4	19 18.6	16 13.2	34 31.5
<b>Region 3</b>	11 6.7	28 19.0	24 14.4	47 32.4
<b>Region 4</b>	21 6.3	53 18.2	52 16.0	96 33.4
<b>Region 5</b>	43 13.8	64 22.9	49 15.4	96 35.4
<b>1-5 Hires</b>	<b>Less than Associate's Degree # %</b>	<b>Associate's Degree # %</b>	<b>Bachelor's Degree # %</b>	<b>Greater than Bachelors Degree # %</b>
<b>Region 1</b>	43 33.3	39 37.5	52 40/0	44 40.7
<b>Region 2</b>	41 33.6	41 40.2	49 40.5	50 46.3
<b>Region 3</b>	55 33.5	61 41.5	80 47.9	70 48.3
<b>Region 4</b>	114 34.3	137 46.9	144 44.4	129 44.9
<b>Region 5</b>	105 33.7	117 41.8	152 47.8	122 45.0
<b>6-10 Hires</b>	<b>Less than Associate's Degree # %</b>	<b>Associate's Degree # %</b>	<b>Bachelor's Degree # %</b>	<b>Greater than Bachelors Degree # %</b>
<b>Region 1</b>	13 10.1	18 17.3	12 9.2	10 9.3
<b>Region 2</b>	12 9.8	15 14.7	21 17.4	10 9.3
<b>Region 3</b>	26 15.9	19 12.9	23 13.8	12 8.3
<b>Region 4</b>	45 13.6	36 12.3	55 17.0	21 7.3
<b>Region 5</b>	42 15.3	40 14.3	46 14.5	18 6.6
<b>11-20 Hires</b>	<b>Less than Associate's Degree # %</b>	<b>Associate's Degree # %</b>	<b>Bachelor's Degree # %</b>	<b>Greater than Bachelors Degree # %</b>
<b>Region 1</b>	11 8.5	11 10.6	18 13.8	5 4.6
<b>Region 2</b>	14 11.5	5 4.9	17 14.0	10 9.3
<b>Region 3</b>	14 8.5	13 8.8	14 8.4	6 4.1
<b>Region 4</b>	26 7.8	23 7.9	17 5.2	17 5.9
<b>Region 5</b>	17 5.4	22 7.9	27 8.5	9 3.3

Over 20 Hires	Less than Associate's Degree		Associate's Degree		Bachelor's Degree		Greater than Bachelors Degree	
	#	%	#	%	#	%	#	%
Region 1	50	38.8	16	15.4	25	19.2	11	10.2
Region 2	46	37.7	22	21.6	18	14.9	4	3.7
Region 3	58	35.4	26	17.7	26	15.6	10	6.9
Region 4	126	38.0	43	14.7	56	17.3	24	8.4
Region 5	105	33.7	37	13.2	44	13.8	26	9.6

Employers were asked about the continuing education needs of employees who currently hold some type of postsecondary education credential — whether they needed no further education, needed to maintain/upgrade their current skills, or needed to seek an additional degree (beyond their existing level of education). Table 7 displays the data for those indicating a "yes" response to the question. The responses from the five regions are similar, with most employers indicating that employees needed to maintain/upgrade their current skills rather than obtain a degree.

Less Than Associate's Degree	No Further Education Needed		Maintain/Upgrade		Need Additional Degree	
	#	%	#	%	#	%
Region 1	15	10.3	101	69.2	14	9.6
Region 2	17	12.1	96	68.1	18	12.8
Region 3	25	12.4	142	70.6	19	9.5
Region 4	58	14.9	257	65.9	49	12.6
Region 5	53	13.8	240	62.3	37	9.6
Associate's Degree	No Further Ed Needed		Maintain/Upgrade		Need Additional Degree	
Region 1	14	9.6	86	58.9	23	15.8
Region 2	12	8.5	80	56.7	32	22.7
Region 3	21	10.4	115	57.2	42	20/9
Region 4	38	9.7	214	54.9	92	23.6
Region 5	46	11.9	190	49.4	76	19.7
Bachelor's Degree	No Further Ed Needed		Maintain/Upgrade		Need Additional Degree	
Region 1	19	13.0	96	65.8	20	13.7
Region 2	11	7.8	94	66.7	28	19.9
Region 3	27	13.4	126	62.7	42	20.9
Region 4	48	12.3	231	59.2	85	21.8
Region 5	64	16.6	214	55.6	82	21.3

## **Part 3**

# **Survey Results for Institutional Inquiries About Workforce Needs**

## Survey Results for Institutional Inquiries About Workforce Needs

Question 9 of the Employers' Educational Needs Inventory asked: "In the last 12 months, which of the following types of postsecondary education institutions have contacted your firm about its workforce needs?" This section provides employers' responses to this question.

As indicated in Table 1 below, slightly more than half of all employers responding to the survey said that no postsecondary institution had contacted them within the last 12 months about their workforce needs. Roughly equal proportions of all respondents had been contacted by a vocational/technical institution, community college, or public university. Private technical/career institutes and private universities made fewer contacts than public institutions.

This same overall pattern is evident across regions. Within regions, the pattern among public institutions varies somewhat with community colleges having the most contacts in Regions 1,3,5 while universities had the most contacts in Region 2 and vocational/technical institutions had the most contacts in Region 4.

	Statewide		Region 1		Region 2		Region 3		Region 4		Region 5	
	#	%	#	%	#	%	#	%	#	%	#	%
<b>Contact by:</b>												
<b>a. No postsecondary institution</b>	642	50.8	75	51.4	73	51.8	98	48.8	179	45.9	217	56.4
<b>b. Vocational/technical institution</b>	242	19.2	24	16.4	26	18.4	40	19.9	96	24.6	56	14.5
<b>c. Community college</b>	272	21.5	32	21.9	32	22.7	52	25.9	94	24.1	62	16.1
<b>d. Public university</b>	257	20.3	29	19.9	36	25.5	44	21.9	88	22.6	60	15.6
<b>e. Private career/ technical institute</b>	181	14.3	16	11.0	18	12.8	29	14.4	72	18.5	46	11.9
<b>f. Private university</b>	182	14.4	29	19.9	21	14.9	44	21.9	63	16.2	50	13.0
<b>g. Does not know</b>	80	6.3	7	4.8	10	7.1	14	7.0	19	4.9	30	7.8

Survey results among the five study counties are presented in Table 2 below. The lowest percentage of employers saying they had no contact with a postsecondary institution in the last 12 months was found in Sarasota/Manatee Counties. The highest percentage was in Broward County. Sarasota/Manatee also had the highest percentage of employers contacted by a vocational/technical institute (31.8%) and by a community college (30.6%).

The highest rate of contact by baccalaureate granting institutions (public and private) was the public university category in Pinellas County where 21.6% of employers had been contacted by a public university.

Contact by:	Broward		Manatee/Sarasota		Pinellas		Volusia	
	#	%	#	%	#	%	#	%
<b>a. No postsecondary institution</b>	108	58.1	34	40.0	84	47.7	25	44.6
<b>b. Vocational/technical institution</b>	31	16.7	27	31.8	39	22.2	10	17.9
<b>c. Community college</b>	25	13.4	26	30.6	37	21.0	13	23.2
<b>d. Public university</b>	30	16.1	16	18.8	38	21.6	11	19.6
<b>e. Private career/technical institute</b>	27	14.5	8	9.4	38	21.6	5	8.9
<b>f. Private university</b>	24	12.0	8	9.4	33	18.8	9	16.1
<b>g. Does not know</b>	14	7.5	5	5.9	6	3.4	5	8.9

The table below compares the responses of the five study counties as a group to other counties with public universities and non-university counties. The contact rates are similar across these groups. Public university contacts are slightly higher in those counties home to a main campus of a public university while community colleges have their best contact rates in those counties without a main campus of a public university.

Contact by:	5 Study Counties		Other Counties With Public Univ		Non-university Counties	
	#	%	#	%	#	%
<b>a. No postsecondary institution</b>	251	49.9	265	51.4	126	51.6
<b>b. Vocational/technical institution</b>	107	21.3	85	16.5	50	20.5
<b>c. Community college</b>	101	20.1	103	20.0	68	27.9
<b>d. Public university</b>	95	18.9	118	22.9	44	18.0
<b>e. Private career/technical institute</b>	78	15.5	69	13.9	34	13.9
<b>f. Private university</b>	74	14.7	81	15.7	27	11.1
<b>g. Does not know</b>	30	6.0	39	7.6	11	4.5