

1-1-1999

Tampa Bay Region economic market report

Tampa Bay Partnership

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TAMPA BAY REGION: 1999 ECONOMIC MARKET REPORT

*Prepared for the Tampa Bay Partnership
by the USF Center for Economic Development Research*

University of
South Florida

USF

TAMPA BAY

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TAMPA BAY PARTNERSHIP

For Regional Economic Development

HERNANDO • HILLSBOROUGH • MANATEE
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TAMPA BAY REGION OF WEST CENTRAL FLORIDA
COUNTIES OF HERNANDO • HILLSBOROUGH • MANATEE
PASCO • PINELLAS • POLK • SARASOTA

TAMPA BAY REGION: 1999 ECONOMIC MARKET REPORT

The Center for Economic Development Research at the University of South Florida (USF) has prepared this report at the request of the Council of Governors of the Tampa Bay Partnership. As an overview, it presents key indicators that can be used in assessing the strength of the seven-county Tampa Bay Region in West Central Florida.

A unique feature of this report is the combination of economic and demographic data from the three MSAs that comprise the Tampa Bay region: Tampa-St. Petersburg-Clearwater; Lakeland-Winter Haven; and Sarasota-Bradenton. The report includes an extended discussion of the employment structure and associated wage levels in Tampa Bay. It also benchmarks certain indicators against a group of comparison Sunbelt areas.

This report in its entirety is also available on the Partnership's web site, www.tampabay.org or on the CEDR site, www.coba.usf.edu/centers/cedr/indexhtml. Additional copies may also be obtained by contacting the Partnership at 813-878-2208, or info@tampabay.org.

THE TAMPA BAY PARTNERSHIP, established in 1994, is a regional economic development marketing organization that works with its partners to market the region nationally and internationally, to conduct regional research, and to coordinate efforts to influence business and government issues that impact economic growth and development. The Partnership has 150 private and public investors.

The Partnership's Council of Governors establishes strategic direction, prioritizes initiatives, and measures the effectiveness of the organization and the economic growth of the Tampa Bay region.

Stuart L. Rogel is President and CEO of the Partnership.

The Center for Economic Development Research (CEDR) at USF provides information and conducts research on issues related to economic growth and development in the nation and State of Florida, particularly in the Tampa Bay Region. Besides research on factors influencing the growth of employment and business activity, CEDR's research also involves international trade and financial service industry activities in the region. CEDR's website provides easily accessible information on the seven-county USF service area and also provides links to federal, state, and county level data.

Dr. Kenneth Wieand is Director of CEDR. He is also professor of Finance and Real Estate in the College of Business Administration at USF.

CEDR staff members include economist Dr. Dennis Colie, economic data analyst Dodson Tong, office manager Nolan Kimball, research associate Brian Jacobik, and graduate research assistant Jacob Chacko.



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THE TAMPA BAY PARTNERSHIP COUNCIL OF GOVERNORS

BayCare Health Network
City of Clearwater
City of St. Petersburg
City of Tampa
Columbia/HCA Healthcare Corporation
Eckerd Corporation
Florida Power Corporation
Greater Tampa Chamber of Commerce
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Hillsborough County
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SECTION 1: TAMPA BAY REGION ECONOMIC & DEMOGRAPHIC CONDITIONS

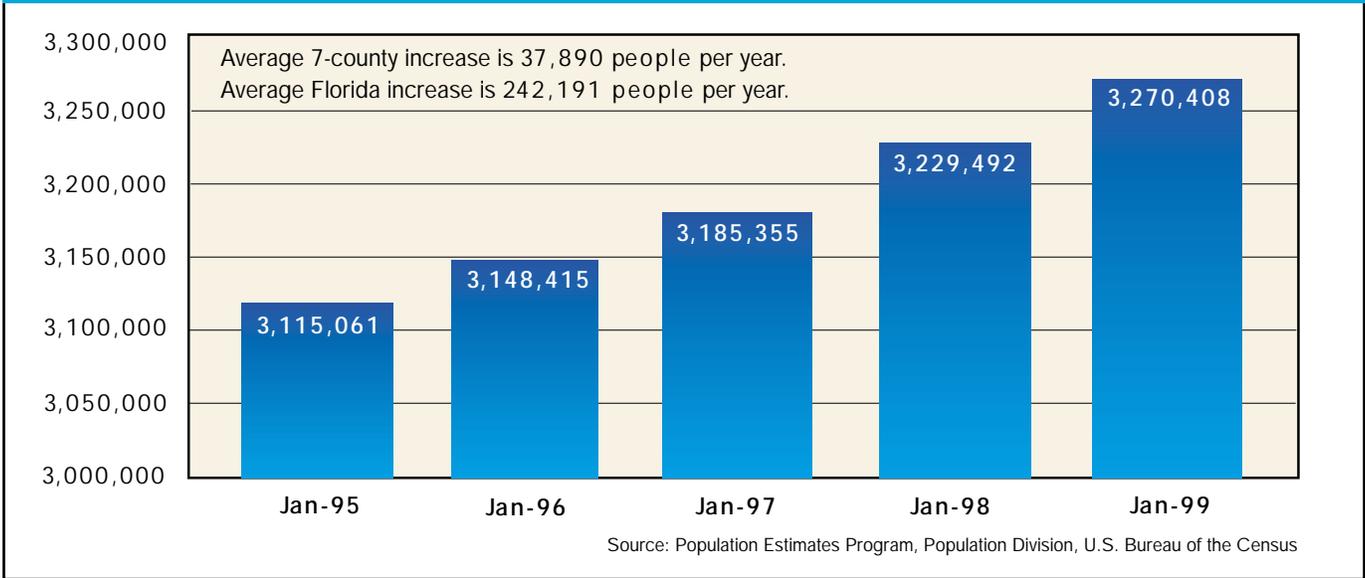
POPULATION

Since 1995, the Tampa Bay Region's population has been increas-

ing by an average of 37,890 people per year and is projected to exceed 3,300,000 by the end of 1999. The compound average rate of increase in the Region's population between

January 1995 and January 1999 was 1.22% per year, compared to an average increase of 1.69% per year for the entire State of Florida.

SEVEN-COUNTY POPULATION



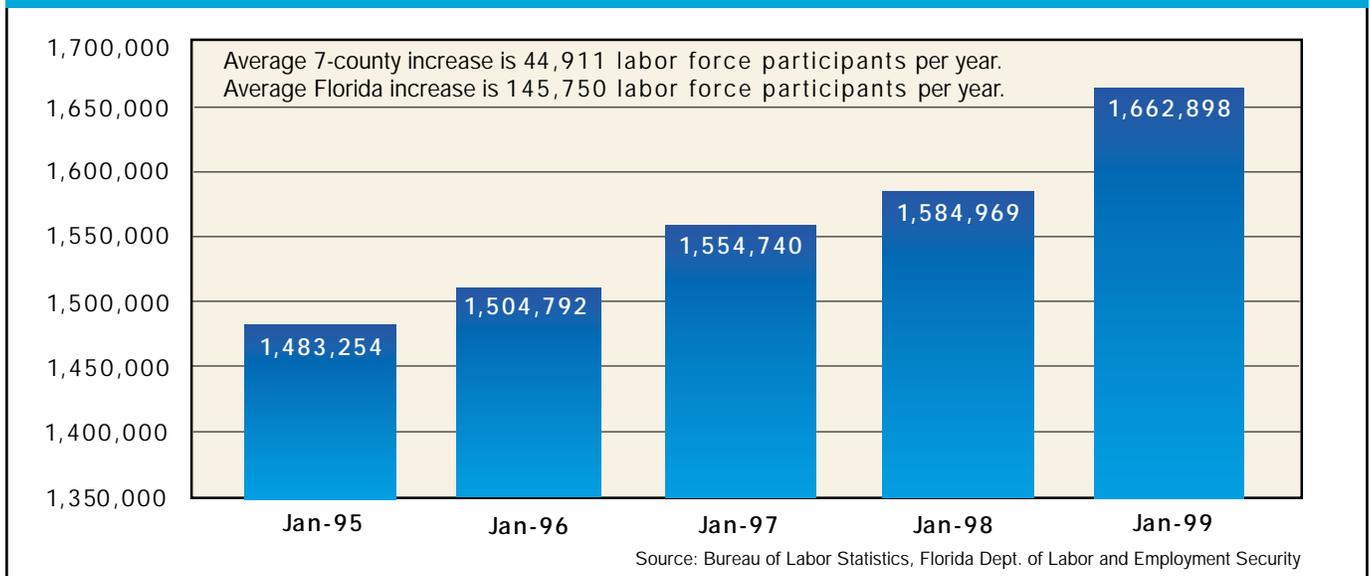
LABOR FORCE

Concurrent with the Region's average population increase of 37,890 people per year, its labor force has been growing by an average 44,911

people per year. This average growth in the Region's labor force represents almost one-third (30.8%) of the average annual growth of the state's labor force. The compound average rate of increase in Tampa Bay's labor force

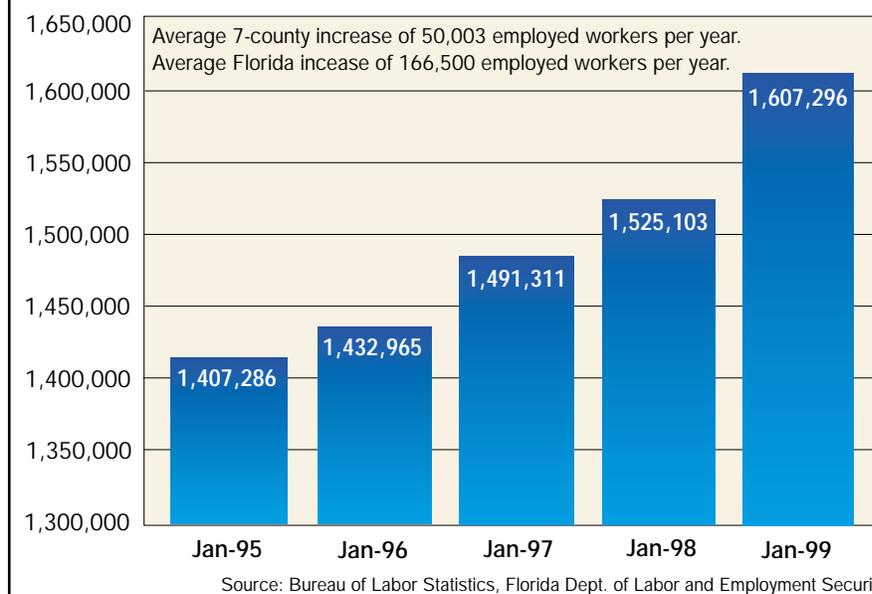
between January 1995 and January 1999 was 2.91% per year, compared to an average increase of 2.11% per year for all of Florida. By the end of 1999 the Region's labor force is expected to number about 1,707,000 people.

SEVEN-COUNTY LABOR FORCE



EMPLOYED WORKERS^{1/}

Employment in the Tampa Bay Region has been increasing by an average of 50,003 workers per year since 1995. This increase in the number of people working in the Region again amounts to almost one-third (30.0%) of the average annual growth of employment in the state. The compound average rate of increase in employment in the Tampa Bay Region between January 1995 and January 1999 was 3.39% per year, compared to an average employment increase of 2.55% in Florida. By the end of 1999 about 1,657,000 people are expected to be employed in the Tampa Bay Region.

SEVEN-COUNTY EMPLOYED WORKERS

The following table summarizes employment in the Tampa Bay Region in January 1995 and in January 1998. Employment is categorized according to the principal divisions (one-digit SIC codes) of an economy based on ES-202 reports.

Division	Employees 1/95	% of Total	Employees 1/98	% of Total	Growth 95-98
Agriculture, Forestry, & Fisheries	40,713	3.1%	41,334	2.9%	1.53%
Mining & Construction	64,920	5.0%	77,244	5.3%	18.98%
Manufacturing	127,709	9.8%	128,153	8.8%	0.35%
Transportation, Comm. & Utilities	66,321	5.1%	69,643	4.8%	5.00%
Trade	338,382	25.8%	355,862	24.5%	5.17%
Finance, Insurance & Real Estate	82,825	6.3%	95,382	6.6%	15.16%
Services	514,187	39.2%	605,133	41.8%	17.69%
Public Administration	74,874	5.7%	76,837	5.3%	2.62%
Totals	1,310,931	100.0%	1,449,588	100.0%	10.58%

Service firms employed the largest portion, 41.8%, of the Region's labor force in January 1998, up from 39.2% of the labor force in January 1995. Employment in services grew by 17.69% from January 1995 to January 1998, eclipsed only by the

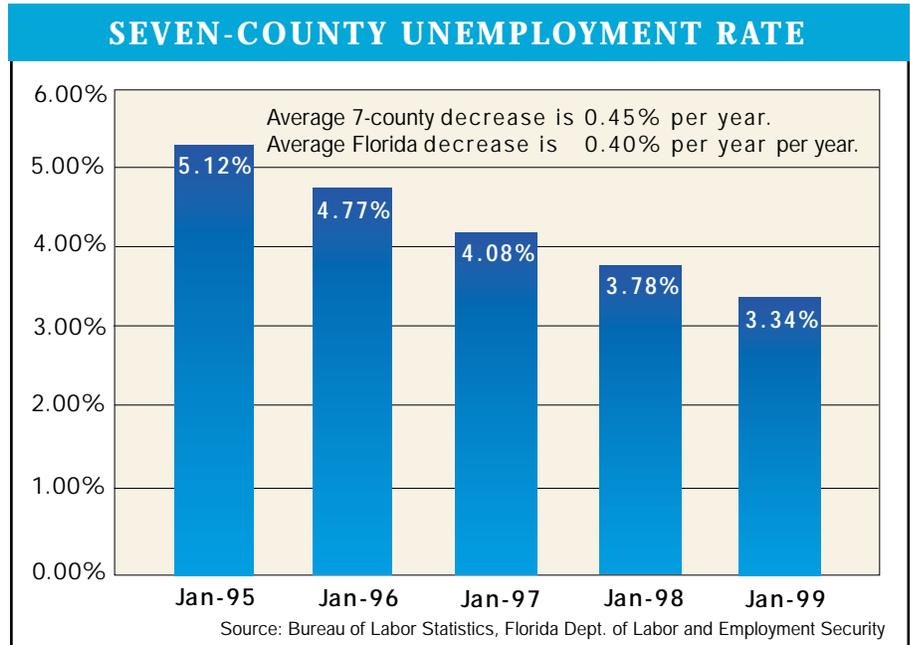
growth in mining and construction, which was 18.98% over the same time span. The finance, insurance, and real estate (FIRE) division, which includes financial services, experienced the third highest growth rate in employment, 15.16%, from January

1995 to January 1998, although FIRE only accounted for 6.6% of the labor force in January 1998. Change in employment in manufacturing has been essentially flat (0.35% increase) between January 1995 and January 1998.

UNEMPLOYMENT RATE

From the figures given above, it is apparent that the Region is adding more people to its labor force each year than it is gaining through population growth. Likewise, the number of people employed is increasing each year by more than the increase in the labor force. There are two reasons for these phenomena. First, people already living in the Region (as opposed to in-migrants who add to the population), who were not previously in the labor force, are joining the labor force. Second, a higher proportion of the labor force is being employed, that is the unemployment rate is consistently declining.

On average, the number of unemployed labor force participants in the Region has been decreasing by 5,092 per year since 1995. By the



end of 1999 it is expected that as few as 50,500 workers will be unemployed in the Tampa Bay Region. In January 1995 the Region's unemploy-

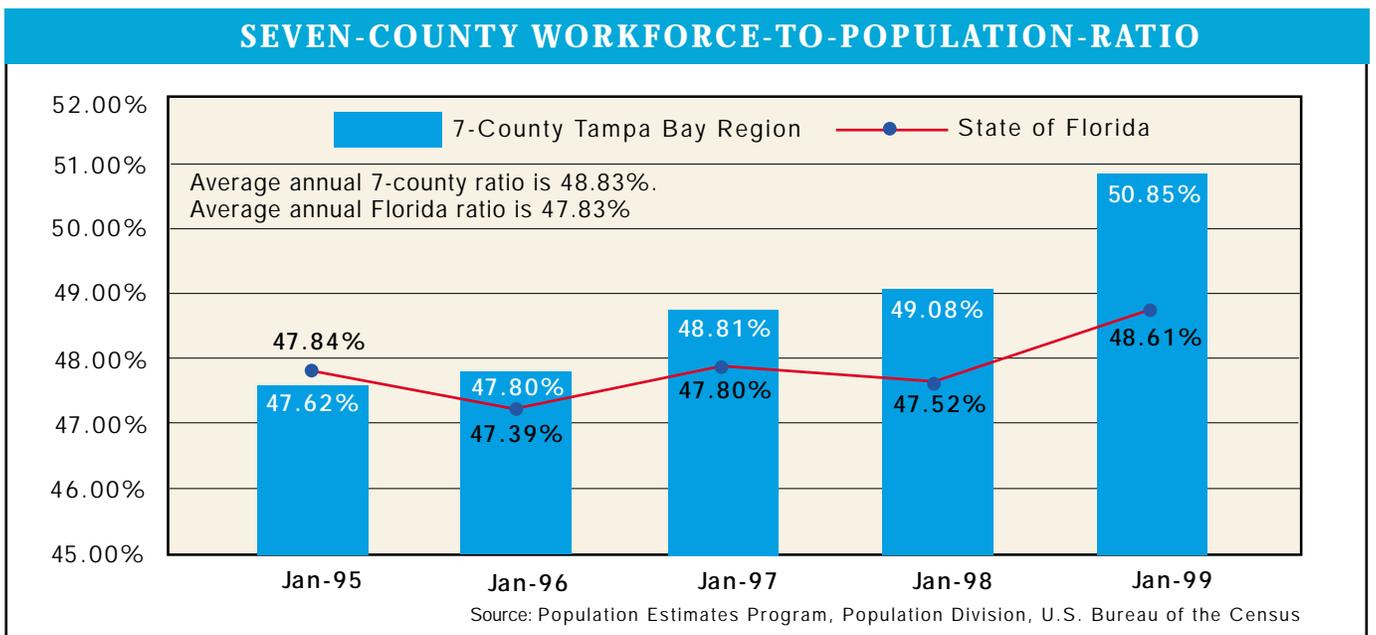
ment rate was 5.12%, and by the end of 1999, that rate is expected to have declined to approximately 2.96%.

WORKFORCE-TO-POPULATION-RATIO

The workforce-to-population ratio measures the proportion of a

region's residents who are participating in the labor force. In January 1995 the Tampa Bay Region's workforce-to-population ratio stood at 47.62% (Florida 47.84%), and in January 1999 the Region's ratio had

risen to 50.85% (Florida 48.61%). Thus, slightly over half of the people residing in Tampa Bay are in the labor force and all but about 2.96% of those people are actually working.

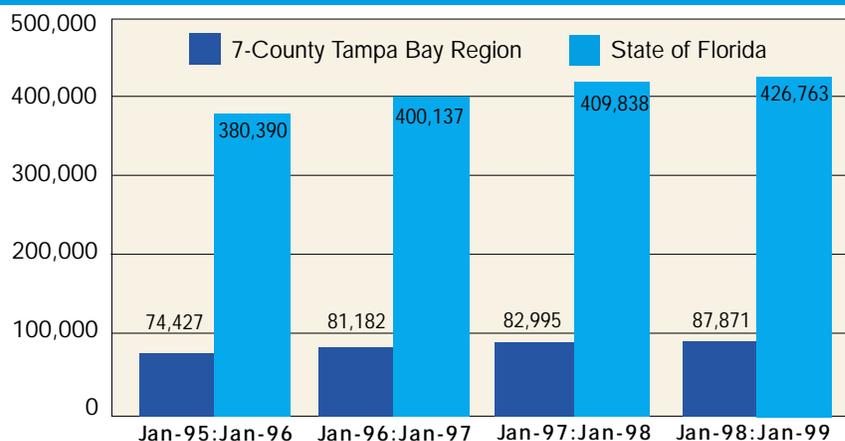


BUSINESS FORMATIONS

The Florida Department of Labor provides the ES-202 data set as a part of the federal Unemployment Insurance Covered Employment and Wages Program. Business formations reported herein are based on the number of establishments reporting covered employment to the Department of Labor in January of each year from 1995 to 1999. Since 1995 net business formations in the Tampa Bay Region have been increasing, on average, by 3,481 establishments (3.7%) per year. Net business formations in Florida over the same time period have been increasing, on average, by 15,458 establishments (3.6%) per year. Thus, the Tampa Bay Region annually accounts for about 22.5% of net business formations in Florida.

SEVEN-COUNTY BUSINESS FORMATIONS

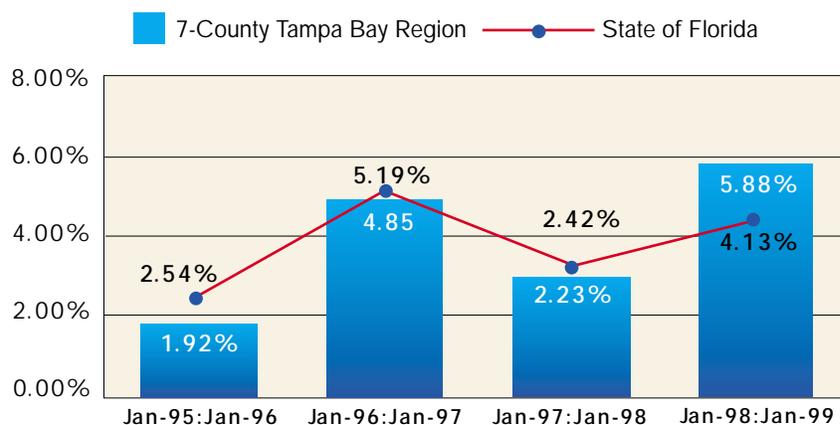
(TOTAL ESTABLISHMENTS)



Source: Florida Dept. of Labor and Emp. Security, Bureau of Labor Market Information, ES-202

SEVEN-COUNTY BUSINESS FORMATIONS

(ANNUAL % CHANGE)



Source: Florida Dept. of Labor and Employment Security, Bureau of Labor Market Information, ES-202 Program

PERSONAL INCOME

One result, in part due to the increase in the number of Tampa Bay residents who are working, is an increase in total personal income. Personal income is projected to be over \$90.8 billion during 1999. That amounts to about \$27,780 per capita personal income in 1999. In 1995 personal income per capita in

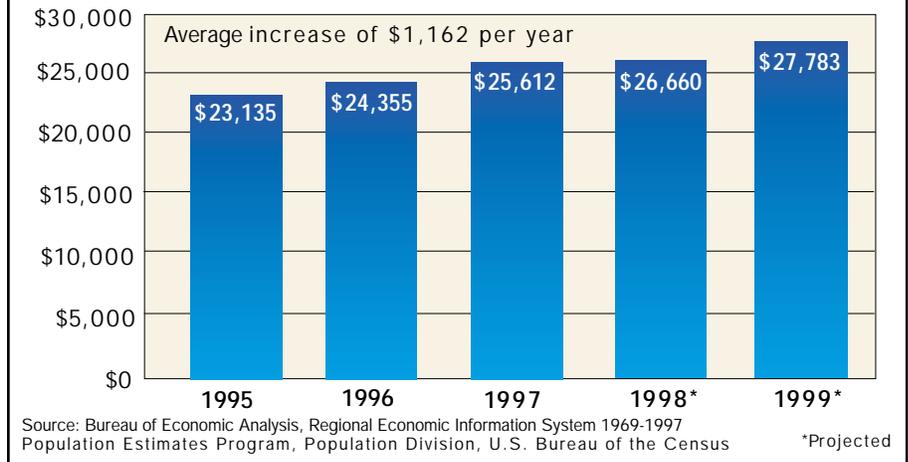
the Tampa Bay Region was \$23,135 and that amount has been increasing, on average, \$1,160 per year. The annual average rate of increase in per capita personal income in the Region has been about 4.69%, while the statewide average rate of increase has been about 4.18% over the same time period. However, the annual rate of increase has generally been declining from 5.27% (Florida

5.11%) in 1995 to a projected 4.21% (Florida 3.78%) for 1999. (Personal income per capita is measured in current dollars. The observed decline in the annual rate of increase in personal income per capita in the Region is consistent with a decline in the national rate of inflation over the 1995 to 1998 time span.)

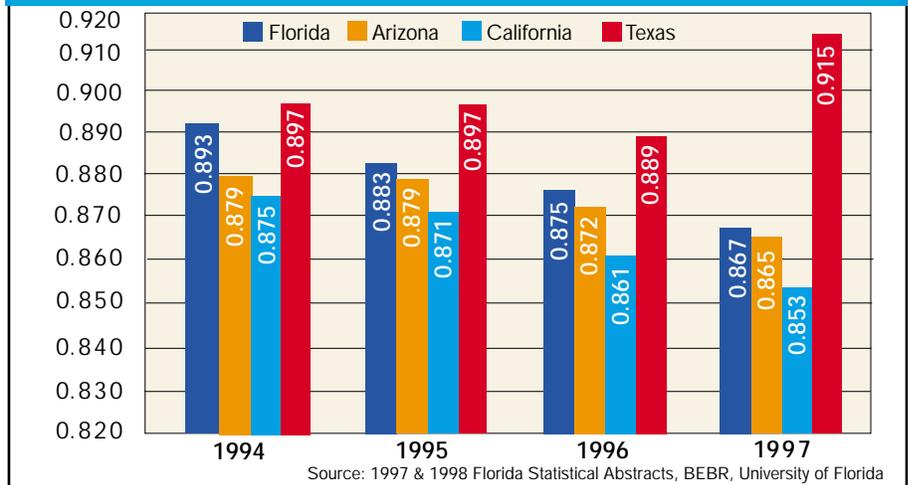
DISPOSABLE PERSONAL INCOME

A disposable personal income factor indicates the proportion of personal income that a person retains after paying taxes and other items, such as fines and donations. A disposable personal income factor can be understood as the percentage of personal income available for further discretionary spending. (Disposable income factors for geographic areas below state level were not obtainable.) From 1994 through 1997 – the latest year for which the data is available – the personal disposable income factor for Florida has steadily declined from 0.893 to 0.867, indicating a consistent loss of spending power for the state’s citizens. Other southeastern states have experienced similar losses in discretionary spending power. In contrast, the disposable income factor for Texas has increased from 0.897 to 0.915 from 1994 to 1997. (See, for example, “Texas Monthly,” July 1999, page 95. Since 1997 a statewide tax package for Texans included reductions in local school property taxes and an exemption from franchise taxes for small businesses. Like Florida, Texas does not have a personal income tax.)

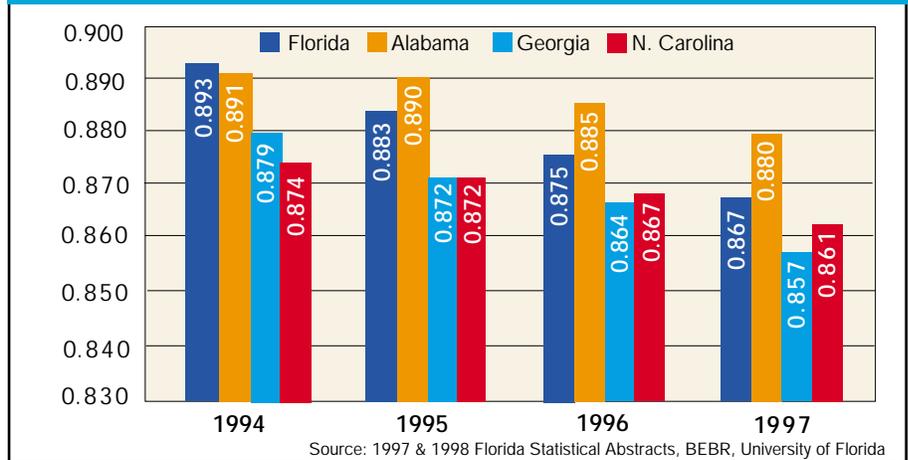
SEVEN-COUNTY PER CAPITA PERSONAL INCOME



DISPOSABLE PERSONAL INCOME FACTOR



DISPOSABLE PERSONAL INCOME FACTOR



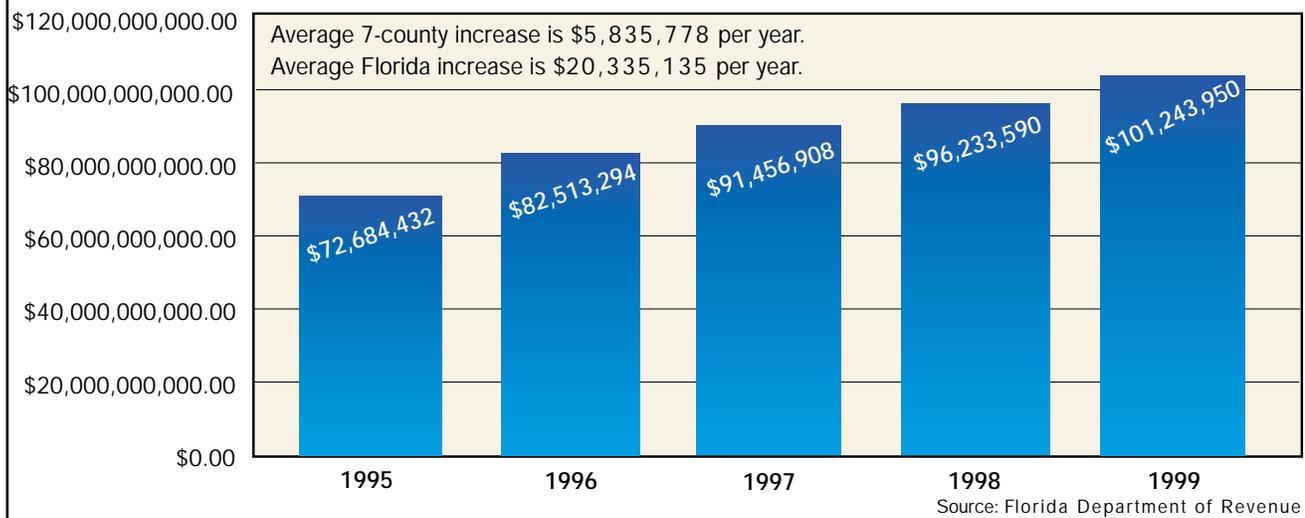
GROSS SALES

Increasing personal income in Tampa Bay, notwithstanding Florida's decreasing disposable income factor, has accompanied increasing gross

(taxable and non-taxable) sales in the Region. The Region's gross sales have been annually increasing, on average, approximately \$5.84 billion, from \$72.68 billion in 1995 to \$96.23 billion in 1998. Gross sales are expected to top \$101.24 billion in 1999. The

Tampa Bay Region's average \$5.84 billion annual increase in gross sales represents about 28.7% per year of the average annual increase in statewide gross sales between 1995 and 1998.

SEVEN-COUNTY GROSS SALES ('000'S)



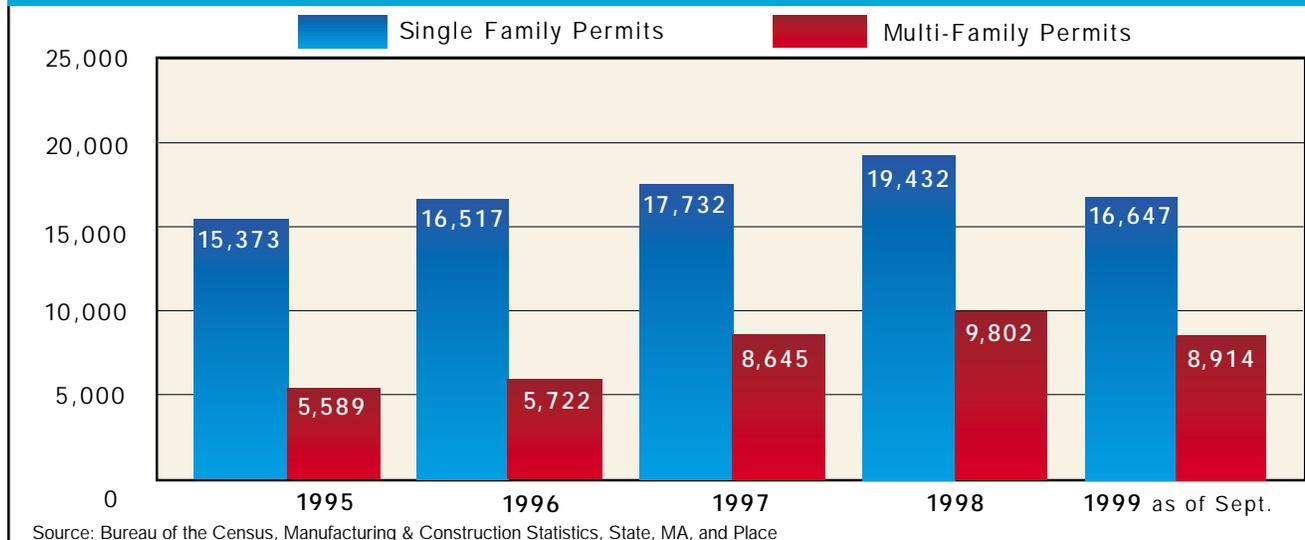
BUILDING PERMITS

The total numbers of single-family and multi-family building permits issued throughout the seven-county

Region have been consistently on the rise. In 1995, 15,373 single-family permits and 5,589 multi-family permits were issued. By 1998, the numbers were 19,432 single-family per-

mits issued and 9,802 multi-family permits issued. And, as of September 1999, 16,647 and 8,914 single- and multi-family permits, respectively, had been issued.

SEVEN-COUNTY BUILDING PERMITS



HIGH SCHOOL GRADUATION RATES

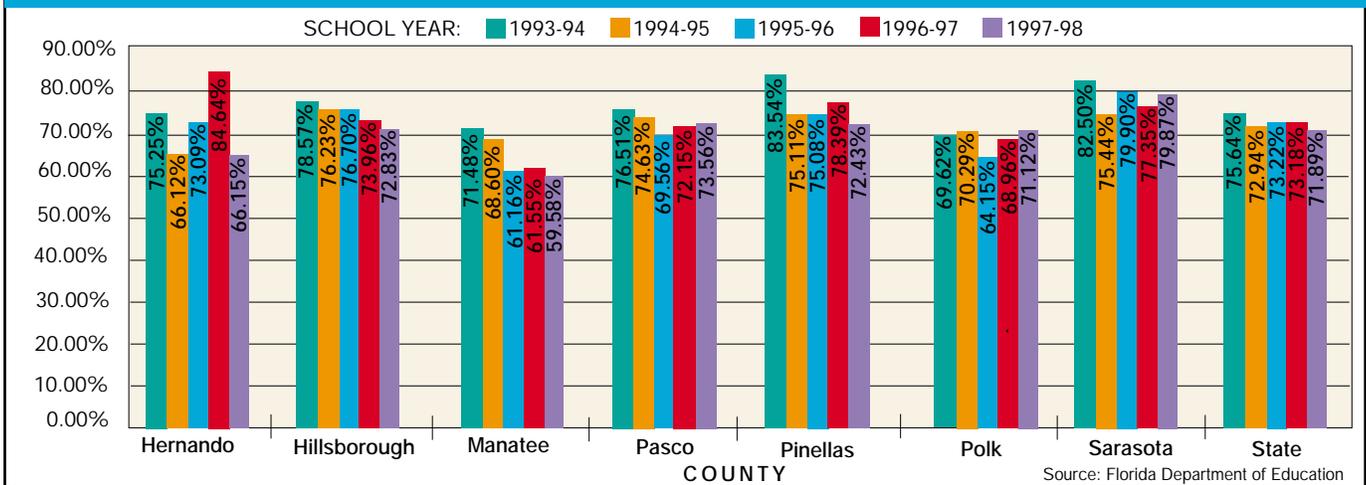
Unfortunately, in the state of Florida and, in general, in each of the Region's seven counties, the public high school graduation rates have been falling. (However, these Florida Department of Education statistics are somewhat difficult to interpret, because they fail to take into account migration into or out of a county's school system.) For school year 1997-98, Florida's high school graduation rate was reported at 71.89%. Among the Tampa Bay counties the rate ranged from a high of 79.87% in

Sarasota County to a low of 59.58% in Manatee County. (According to the Statistical Abstract of the United States, in 1997, 81.4% of Florida's residents, 25 years old and over, had attained at least a high school education. By comparison, nationwide 82.1% of persons who are 25 and over had attained a high school education.)

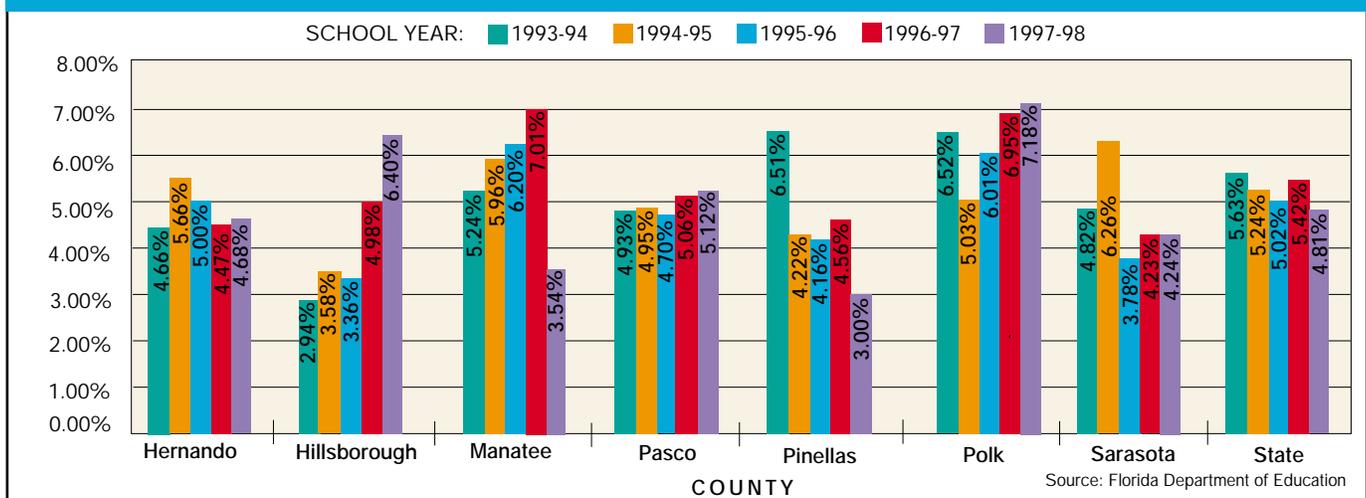
While high school graduation rates seem to be falling, dropout rates are also generally declining. The state's dropout rate has declined from 5.63% in school-year 1993-94 to 4.81% in year 1997-98. There is no clear pattern of change for reported dropout rates among the counties.

The dropout rate in Hillsborough County has been on the rise from 2.94% in 1993-94 to 6.40% in 1997-98. Conversely, the dropout rate in Pinellas County has fallen from 6.51% in 1993-94 to 3.00% in 1997-98. And, in Manatee County, the dropout rate was reported at 5.24% in 1993-94, rising abruptly to 7.01% in 1996-97, then sharply falling to 3.54% in 1997-98. The highest dropout rate for the most recently reported school year was 7.18% in Polk County for 1997-98. (Nationally, the high school dropout rate was reported in the Statistical Abstract of the United States to be 4.7% in 1996.)

SEVEN-COUNTY HIGH SCHOOL GRADUATION RATE



SEVEN-COUNTY HIGH SCHOOL DROPOUT RATE



SUMMARY EMPLOYMENT & WAGE DATA

Tampa Bay's business community typifies that of a large, diversified metropolitan region. All major industrial activities are present. In 1998, the latest year for which information is available, ES 202 data report just over 72,000 businesses employing 1,355,246 workers for selected indus-

tries covered in this section. This figure is an increase of 152,556, or 12.7%, over the 1995 total. Reported employment increases in Tampa Bay exceeded national growth during the three-year period. Total reported employment for the U.S. in 1995 was 91,126,000. This figure grew to 98,012,000 in 1998, an increase of 7.6%.

The average reported annual salary for Tampa Bay employees in

1998 was \$25,677. Wages in 1998 were 13.2% percent above the average wage figure of \$22,682 in 1995.^{2/} By comparison, annual wages in the US were \$23,774 in 1995 and grew by 11.4% to \$26,478 in 1998. Thus, on an aggregate basis, wages in Tampa Bay were 4% below US wages in 1998, but the gap, in percentage terms, narrowed by 1.8% over the three-year period.

EMPLOYMENT AND WAGE CHANGES BY INDUSTRY GROUPS

Over the three-year period 1995-1998, employment in 19 manufacturing industries rose by 2,383 in the seven-county Region. Employment in seven finance, insurance, and real estate industries rose by 15,986.

Employment in mining and construction increased by 14,231.

Employment in 17 industries related to trade, utilities, communications, and transportation was up 25,801, and employment in 14 service industries rose by 94,154.

Manufacturing wages averaged \$30,342 in 1998. Service industry wages were \$25,237; wages in mining and construction were \$28,022; and wages in trade, communication firms, transportation and utilities averaged \$24,998. Financial firms paid the highest wages in 1998, an average of \$37,827. However, average changes in employment and wages in these four industry groups mask significant differences in individual 2-digit industries.

EMPLOYMENT GAINS 1995-98: SEVEN-COUNTY REGION TOTALS

Mining and construction	14,231
19 manufacturing industries	2,383
17 industries related to trade, utilities, communications, and transportation	25,801
7 finance, insurance, and real estate industries	15,986
14 services industries	94,154

WAGES 1998: SEVEN-COUNTY REGION TOTALS

Manufacturing industries	\$30,342
Service industries	\$25,237
Trade, communication firms, transportation and utilities	\$24,998
Finance, insurance, and real estate industries	\$37,827

EMPLOYMENT & WAGES IN 2-DIGIT INDUSTRY GROUPS

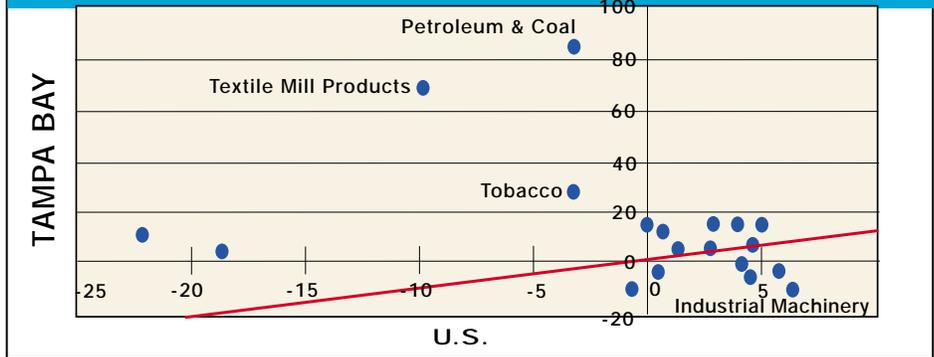
Charts 1 and 2 summarize the changes in employment in manufacturing businesses from 1995-1998 in comparison to total manufacturing employment changes nationally. The two charts present a picture of the changing relative structure of Tampa Bay businesses versus national trends.

The diagonal line in Chart 1 indi-

Manufacturing employment displays no clear relationship between national and regional rates of change. Employment in many industries has remained the same or has declined slightly during the past several years.

Chart 2 reports 1995 employment by industry and the change in employment to 1998. Examination of the chart reveals significant differences

Chart 1 – CHANGE IN MANUFACTURING EMPLOYMENT 1995: 1998 U.S. & TAMPA BAY



cates equal changes in the U.S. and in Tampa Bay. Observations above the line indicate faster growth in the Tampa Bay

Region, and points below the line indicate industries for which national growth exceeded regional growth.

Low growth rates reflect continuing mechanization in manufacturing processes and a movement of standardized jobs offshore. The relatively large decline in industrial machinery reflects a one-time event – the closing

of the Lockheed Martin Plant in Pinellas County. A few industries with small total employment experienced rapid growth vs. the nation: Tobacco products, textiles, and leather goods are examples.

in both total employment and employment change by industry. Overall, the chart shows no indications of increasing concentrations of

employment in 2-digit industries in Tampa Bay. Industries that experienced rapid growth between 1995 and 1998 employed few persons in 1995.

Chart 2 – MANUFACTURING EMPLOYMENT IN 1995 & CHANGE TO 1998



SECTION 2: THE STRUCTURE OF EMPLOYMENT IN TAMPA BAY

Chart 3 – CHANGE IN NON-MANUFACTURING EMPLOYMENT 1995: 1998 U.S. & TAMPA BAY

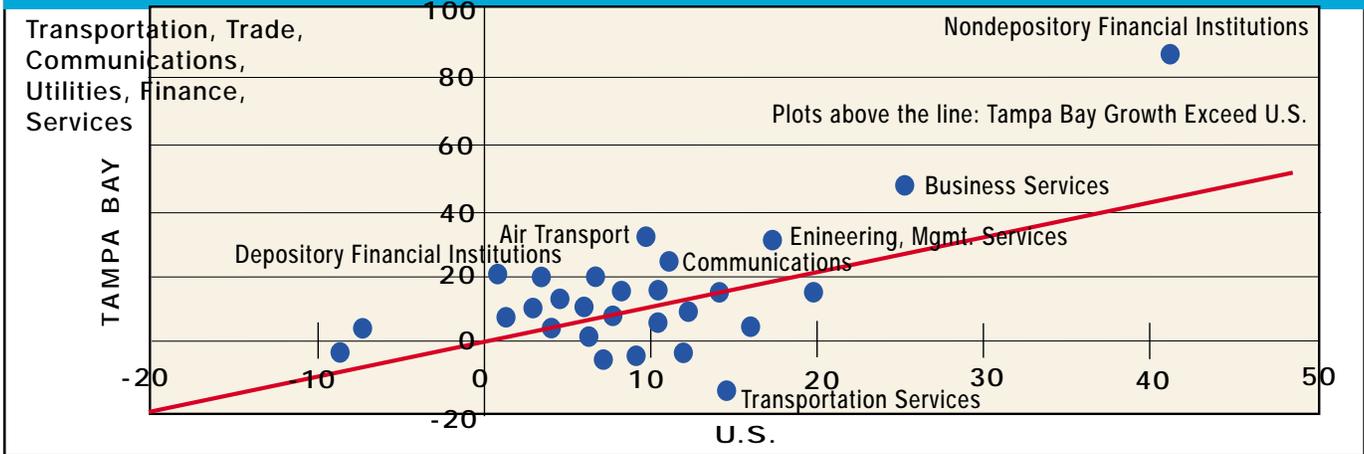


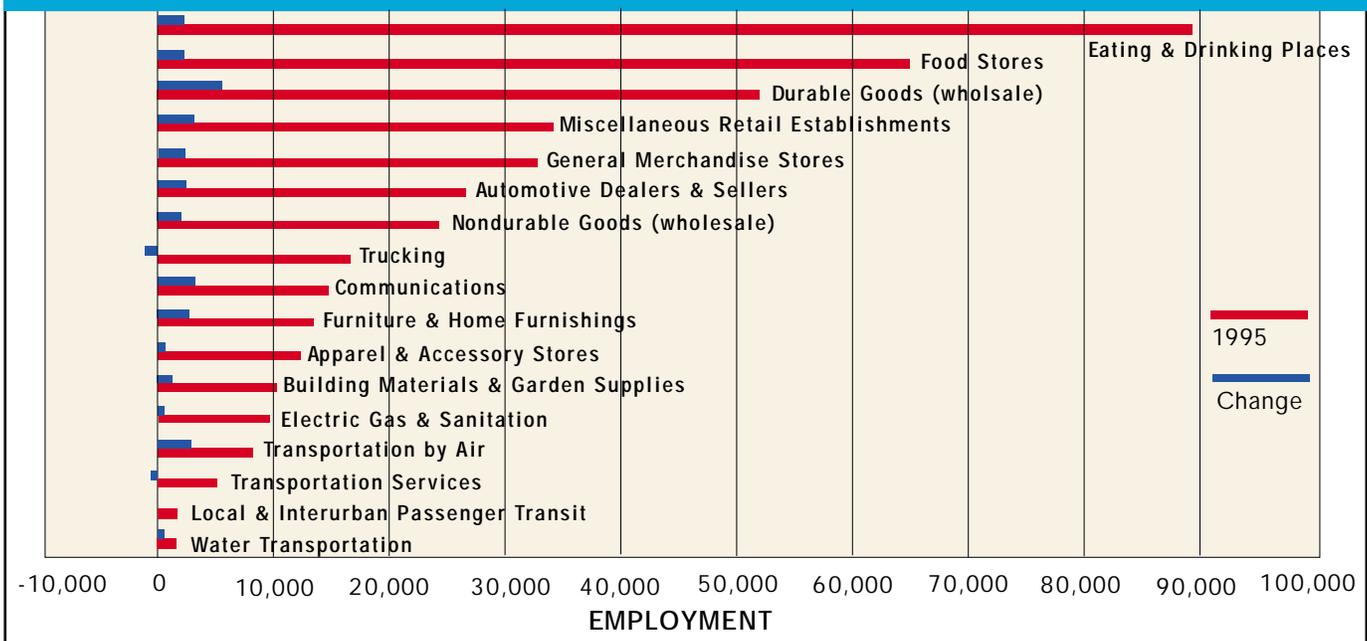
Chart 3 reports the three-year growth rate for non-manufacturing industries in Tampa Bay and the nation. The chart reveals that employment in the majority of non-manufacturing industries rose faster in Tampa Bay than in the nation, a fact in keeping with the record of Tampa Bay's above-average employ-

ment growth in overall labor force and employment.

Employment in financial services, business services, management and engineering services, and wholesale trade increased rapidly in the U.S. and in Tampa Bay. In these industries Tampa Bay's growth outpaced the nation. Additional industries report-

ing rapid percentage growth in the Tampa Bay Region included air transport, textiles, petroleum and coal manufacturing, and tobacco products. Industrial machinery and food products manufacturing, and trucking and warehousing experienced low or negative employment change in both Tampa Bay and the nation.

Chart 4 – EMPLOYMENT IN 1995 & CHANGE TO 1998



Charts 4 through 6 report 1995 employment and growth through 1998 by individual non-manufactur-

ing industries. Chart 4 summarizes employment in a mix of industries that provide infrastructure to the

Tampa Bay business community: transportation, communication, utilities, and trade.

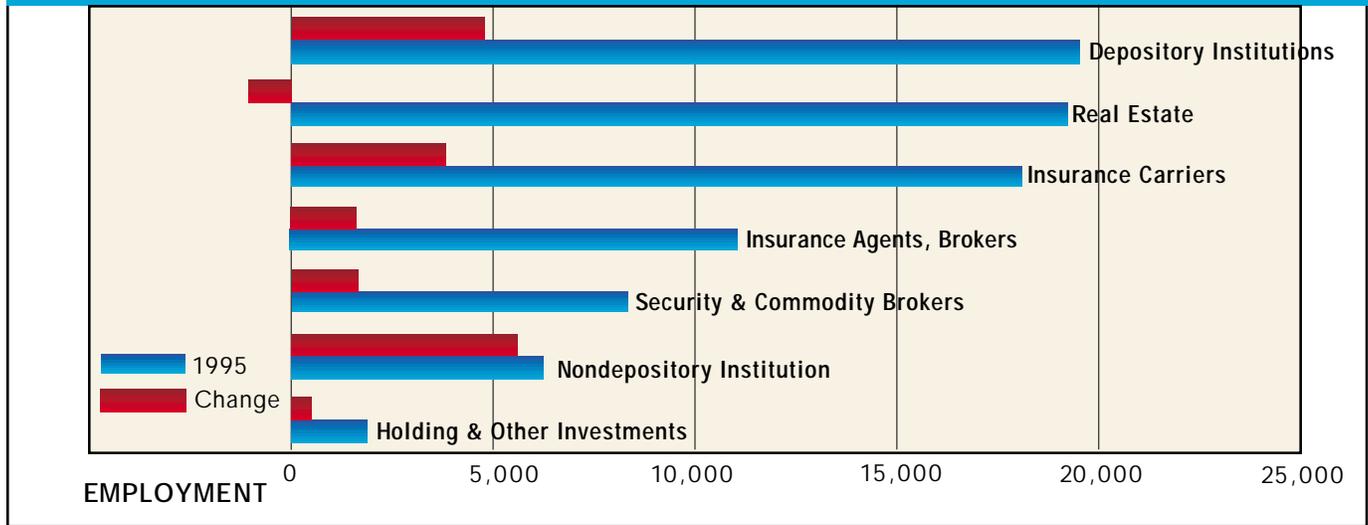
SECTION 2: THE STRUCTURE OF EMPLOYMENT IN TAMPA BAY

Chart 5 reports growth in seven financial services groups. Employment in financial firms grew at a rapid pace reflecting the Tampa Bay Region's attractiveness to national financial services firms, many of whom are locating their service and record-keeping

activities here. Employment in non-depository financial companies and related businesses increased by 5,625, and employment in banking and other depository institutions rose by 4,445. Insurance carriers added 3,538 new jobs. Much of the new employment in

these three groups was "export oriented"; that is, served customers located outside of the Tampa Bay Region. Job increases in local financial services, such as real estate and stock brokerage, were much smaller.

Chart 5 – FINANCE EMPLOYMENT IN 1995 & CHANGE TO 1998

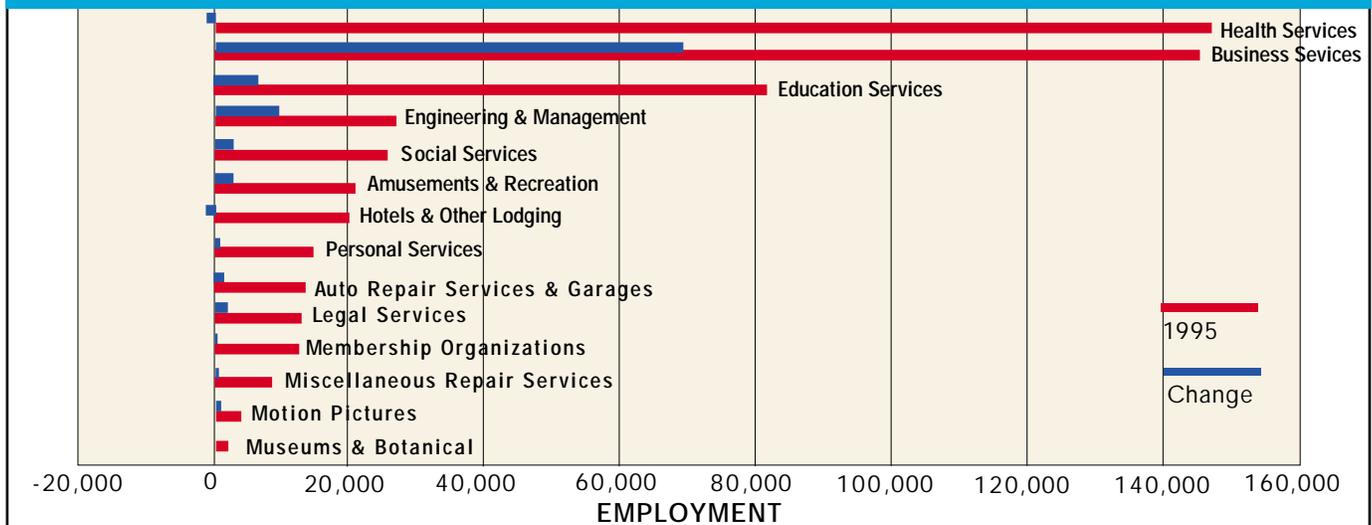


Employment levels in 1995 and changes to 1998 for service industries are reported in Chart 6. The most rapid growth of any industry, 91,154 employees between 1995 and 1998, occurs in service industries. Within service industries, business services

added the lion's share of new jobs, 68,432 jobs between 1995 and 1998. Business services include advertising firms, credit agencies, mailing, copying, and document reproduction activities, real estate services, news agencies, personnel supply services,

computer and data processing businesses, among others. Within business services, personnel supply firms dominated employment growth, adding 12,423 jobs from 1995 to 1998, 28% of new employment created in business services.^{3/}

Chart 6 – SERVICES EMPLOYMENT IN 1995 & CHANGE TO 1998



EMPLOYMENT GROWTH & WAGES IN TAMPA BAY

Rapid labor force growth and declining unemployment rates in Tampa Bay have contributed to strong employment growth in the Region. The overall picture is of a robust regional economy in which financial services firms, business and information services companies, and businesses providing infrastructure to the Region have boosted their workforces. Local service companies, retail establishments, restaurants and food stores have responded by increasing employment to deal with a growing regional population whose wages and incomes are rising rapidly.

Some observers, however, have been concerned that wages in Florida continue to lag the nation. They worry that the types of jobs created in the Region pay low wages. In particular, the relatively small increase in manufacturing jobs, which paid \$30,342 in 1998, and the large growth in service jobs, which paid an average of \$24,998, is seen as contributing to the relatively low wage structure in Florida.^{4/}

Average wages are computed by multiplying wages in each two-digit SIC industry by the fraction of the total workforce that is employed in that industry and summing the results over all industries.^{5/}

Historically, wages in the Tampa Bay Region have trailed national wages. In 1998, non-farm private employees earned on average \$26,582 nationwide, and only \$25,668 in Tampa Bay.

The average wage paid during 1998 to employees holding jobs created between 1995 and 1998 was \$25,842.^{6/} This amount slightly exceeds the average wage paid all

workers in 1998. The wage difference for new jobs and all jobs is less than 1% — new jobs pay wages that are slightly larger than existing wages. There is no evidence that jobs added in Tampa Bay between 1995 and 1998 pay less than jobs that were created prior to 1995.

Additional insight can be gained by disaggregating the total figures by industry groups.

MANUFACTURING SHOWS SLIGHT GAIN

New jobs in manufacturing paid slightly greater wages than the average of all manufacturing jobs. The average wage of jobs created since 1994 was \$30,688 compared to a wage of \$30,342 for all manufacturing workers. Manufacturing wages vary widely across different types of firms and job increases also were distributed across a number of industries. The result is that wages in new jobs reflect the existing wage structure in manufacturing.

Employment growth in industries supporting local infrastructure, in trade, transportation, communications and utilities, also varied widely by 2-digit SIC code. Growth in several high wage industries, notably durable goods and communications, pulled up average wages in this sector. Overall, new wages were \$26,525, higher than wages in existing jobs in this industry group, which averaged \$24,998 in 1998.

FINANCIAL SECTORS RISE

Employment in non-depository financial businesses and in insurance carriers grew by more than 9,000. These two industries, which pay high average wages, pulled wages in new finance jobs up to over \$41,000, compared with all average wages of \$37,827. Employment increased by nearly 4,500 workers in banks and

other depository institutions. Wages in banking in 1998 were \$32,036. The financial sector continues to be a strong factor in rising wages in the Tampa Bay Region.

The 14 industries comprising the service sector vary widely in the types of workers employed and in the activities undertaken. One half paid wages of less than \$20,000 per year in 1998. On the other side of the story, legal services and engineering and management services workers were among the highest paid in the Region. Business services establishments dominated overall growth in services industries employment. Business services firms added over 68,000 employees from 1995 to 1998. Service sector employment was the only industry group where jobs created from 1995 to 1998 paid less than average jobs. Average wages in services in 1998 were \$25,237 and new salaries of the average new workers were \$22,613. By contrast, the largest service sector industry, health services, experienced a small decrease in jobs.

Mining employment was essentially stable over the 1995-1998 period. Construction, in contrast, experienced rapid growth, adding 14,231 jobs to a base of 66,878. Special trade contractors added more than 9,600 employees. Wages paid by special trade contractors were a little lower than average wages in the Region \$25,051.

AVERAGE WAGES INCREASE

Two salient facts emerge from the analysis of wages and employment in Tampa Bay. The first fact, noted above, is that employment in a number of sectors has risen rapidly. The second fact, as noted above, is that average wages in Tampa Bay have risen rapidly absolutely and relative to the national average. We now turn to the question of what factors underlie

SECTION 2: THE STRUCTURE OF EMPLOYMENT IN TAMPA BAY

the increase in average wages. An annual increase can stem from one or both of two changes. First, average wages will rise when workers shift from low-wage industries to jobs in higher-paying industries. Second, average wages rise when wages paid in individual industries increase. We answer the question, “Has the growth in average wages been a result of workers moving to higher-tech, higher-wage positions, or have average wages simply risen rapidly across the entire spectrum of industries - high-wage and low-wage alike?”

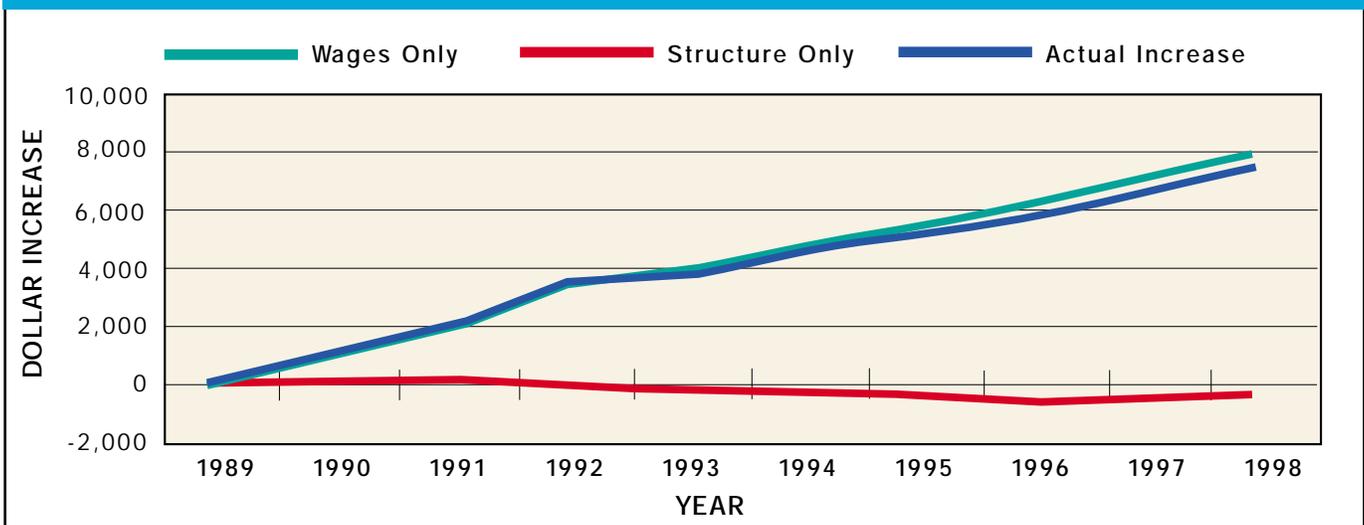
To answer this question, CEDR has divided the year-to-year change in average wages between wage changes

using the previous year’s employment and the current year’s wages industry by industry, and wage changes resulting from shifts in employment structure. To find the latter, CEDR uses the previous year’s wages and the current year’s employment levels, industry by industry. The chart below reports the resulting wage figures for 10-year period 1989-1998.

Average wages rose rapidly during the first two years of the period. Wage gains ceased during 1991 at a time of national economic slowdown. Thereafter, wage gains resumed slowly and have accelerated during the past few years. The chart shows that the entire increase in average wages

resulted from wage increases within industries. Changes in industry structure actually result in a small decrease in average wages over the 10-year period. The series “Structure” shows that there has been an increase in the number of lower wage jobs relative to the number of higher wage jobs over the period. However, this shift has been quite small in absolute and percentage terms. The important changes have been the absolute gain in wage rates and the increase in wages relative to the national average. The following table quantifies the increases in industry wages and the negative impact of industry structure on average wages in Tampa Bay.

AVERAGE WAGE INCREASES & COMPONENTS IN TAMPA BAY: 1989-1998



The table on the right shows that average wages rose by \$7,748 from 1989 to 1998. The contribution of changes in industry structure was negative and the total wage gains, holding industry structure constant, were \$8,157. The data provide little support for the contention that job creation within low wage industries has retarded wage and income growth in Tampa Bay. Recent history reports rapid wage growth across all business sectors.

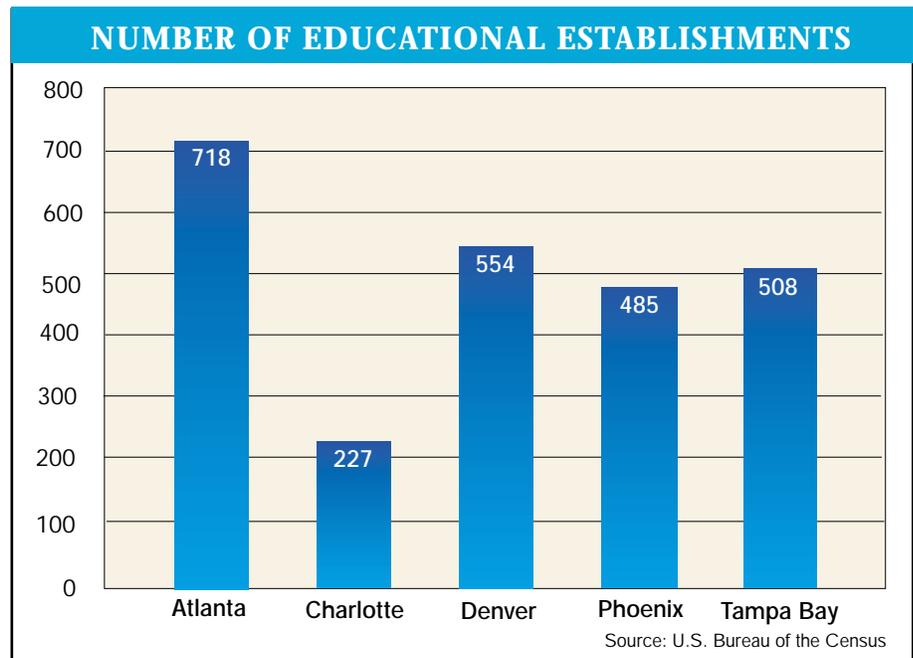
CHANGES IN ANNUAL WAGES FROM CHANGES IN INDUSTRY STRUCTURE AND FROM ACROSS-THE-BOARD INCREASES IN WAGES

Average Wages In 1989	Average Wages In 1998	10-Year Change in Wages	
\$18,020	\$25,768	Total wage gains	\$7,748
		Due to industry structure	-\$409
		From gains across all industries	\$8,157

This section of the report deals with benchmarking the Tampa Bay Region against other metropolitan areas in the nation. The selected metropolitan areas for comparison are Atlanta, Charlotte, Denver, and Phoenix. Because no two metropolitan areas are exactly alike, some subjectivity is necessarily involved in choosing a set of comparison cities.

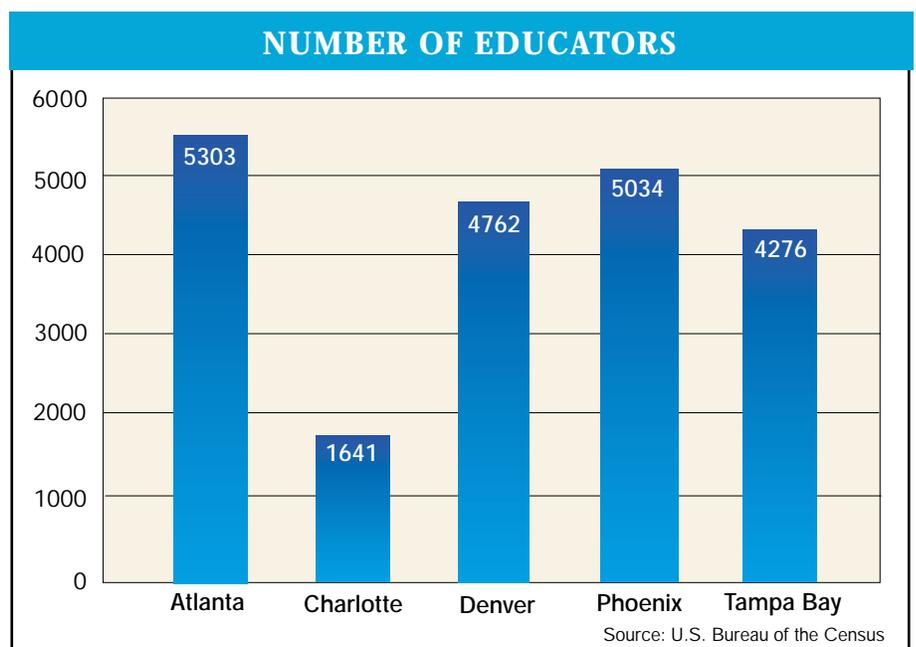
NUMBER OF EDUCATIONAL ESTABLISHMENTS

The number of educational service establishments in the Tampa Bay Region is 508. This number includes primary, secondary, colleges, and technical, trade, and business schools as well as educational support services. This number falls short of Atlanta (718) and Denver (554). However, this number exceeds that of Charlotte (227) and Phoenix (485).



NUMBER OF EDUCATORS

The number of educators in the Tampa Bay Region in 1997 was 4,276. This number lags behind that of Atlanta (5,303), Denver (4,762), and Phoenix (5,034). However, this number is far greater than that of Charlotte (1,641).



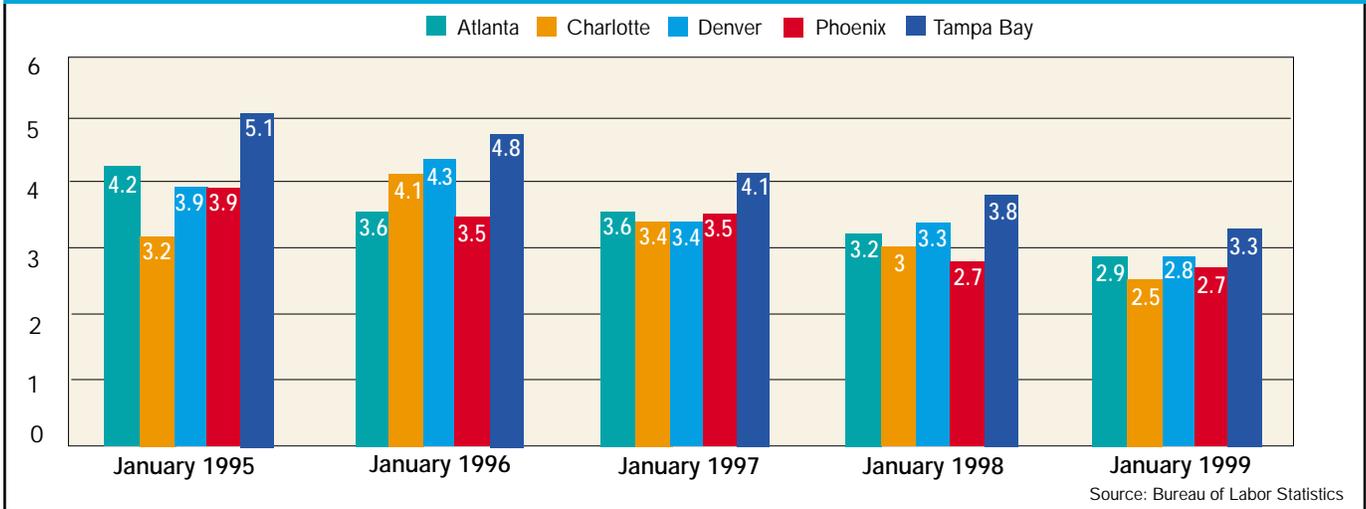
UNEMPLOYMENT RATE

The Tampa Bay Region's unemployment rate is steadily declining from 1995-1999; however, the rate remains higher than other areas. The unemployment rate in the Tampa

Bay Region declined from 1995-1999 from 5.1% to 3.3%. Meanwhile, unemployment in Atlanta declined from 4.2% to 2.9%. Charlotte's unemployment rate rose from a 1995 level of 3.2% to a 1996 level of 4.1% before declining to

2.5% in January of this year. Denver also exhibited a 1995-1996 rise from 3.9% to 4.3% before declining to 2.8% in January of 1999. Phoenix's unemployment rate declined over these years from 3.9% to 2.7%.

UNEMPLOYMENT RATE



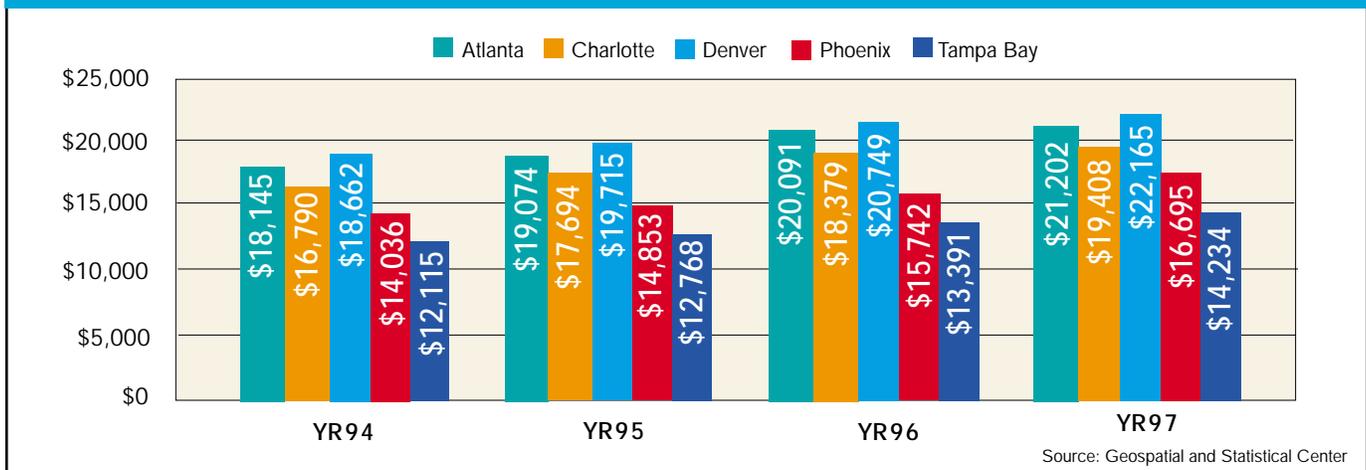
PER CAPITA NET EARNINGS

Per capita net earnings are trending upward in Tampa Bay; this is consistent with the pattern observed in other areas. It would be reasonable to believe that workers earning lower

wages in the Tampa Bay Region would relocate to where the wages are higher until the wage rates in the two areas is the same. This does not appear to be the case. It should be noted that there are differences in the cost of living in different areas. This implies that the real wage, or the pur-

chasing power of wages will vary according to the cost of living. If the real wage rate were the same in all locations, then those with lower cost of living would experience lower nominal wage rates, and workers would have no incentive to relocate.

PER CAPITA NET EARNINGS

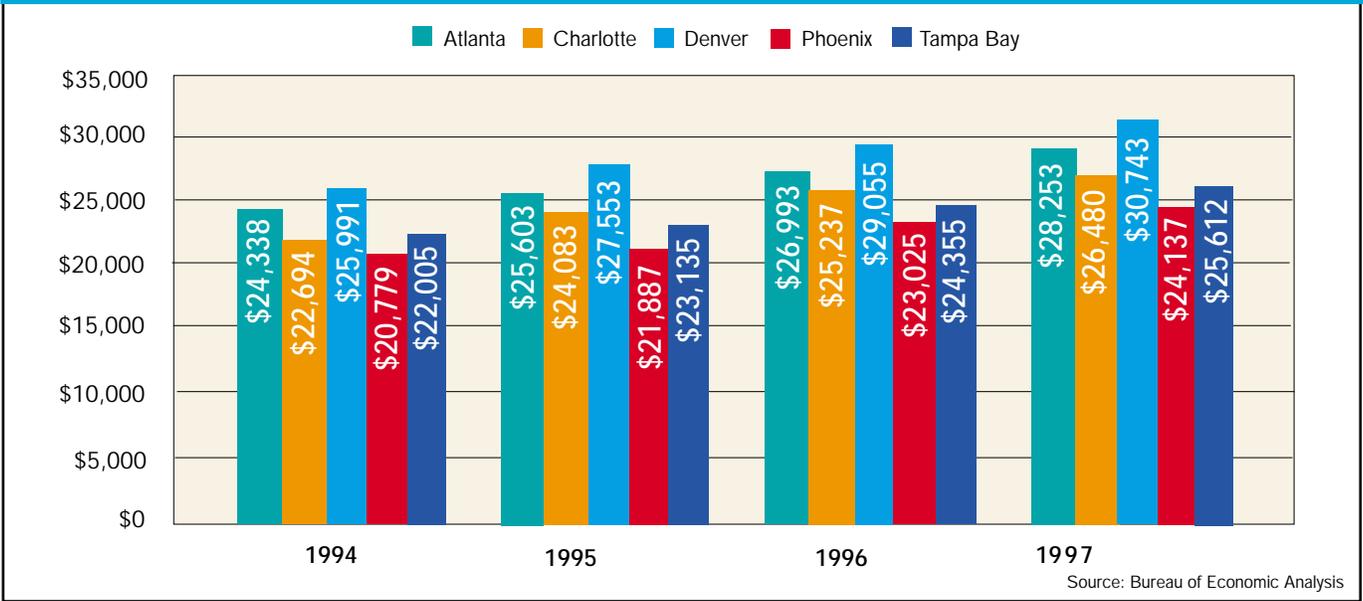


PER CAPITA PERSONAL INCOME

Likewise, the trend in personal income is consistently upward. From 1994-1997, personal income has risen from \$22,005 to \$25,612 in Tampa Bay. This compares with a rise

from \$24,338 to \$28,253 in Atlanta; \$22,694 to \$26,480 in Charlotte; from \$25,991 to \$30,743 in Denver; and \$20,779 to \$24,137 in Phoenix.

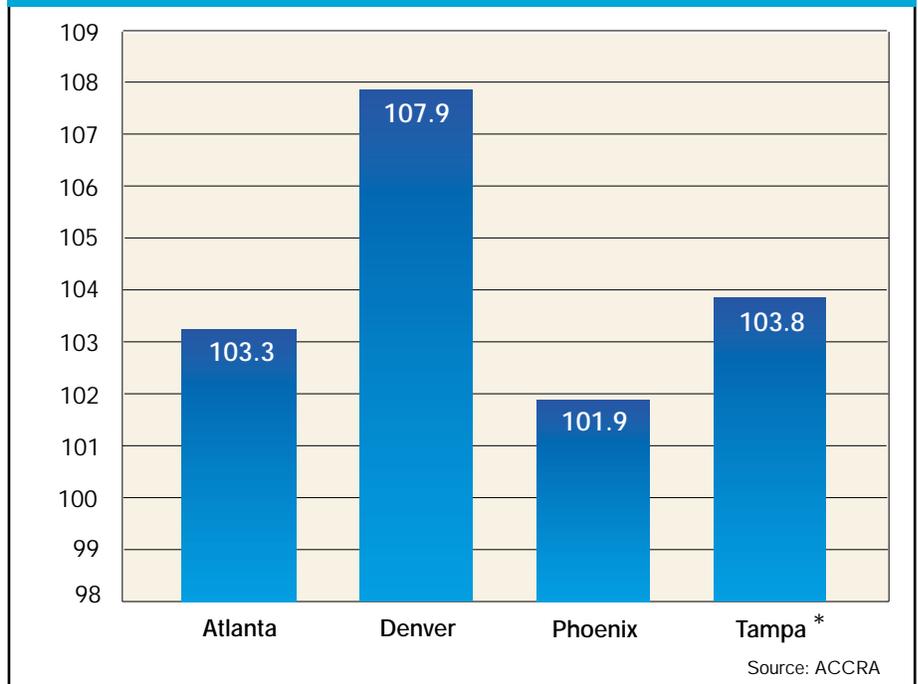
PER CAPITA PERSONAL INCOME



COST OF LIVING INDEX

The American Chambers of Commerce Researchers Association (ACCRA) cost of living index (COLI) is prepared by ACCRA on a quarterly basis by gathering data via survey on prices of a variety of commodities such as grocery items, housing, utilities, and transportation in various MSAs around the country. The prices are averaged and the average is designated 100. The resulting number for each area is then the area's prices as a percentage of national prices. It is therefore not a measure of inflation. The cost of living in Tampa* was higher than both Atlanta and Phoenix. Denver was the only locality with a higher cost of living than Tampa, Charlotte being omitted due to insufficient data.

ACCRA COST OF LIVING INDEX FOR 1ST QUARTER 1999



*COLI data only applies to City of Tampa and is not to be construed necessarily as a representation of the Tampa Bay Region.

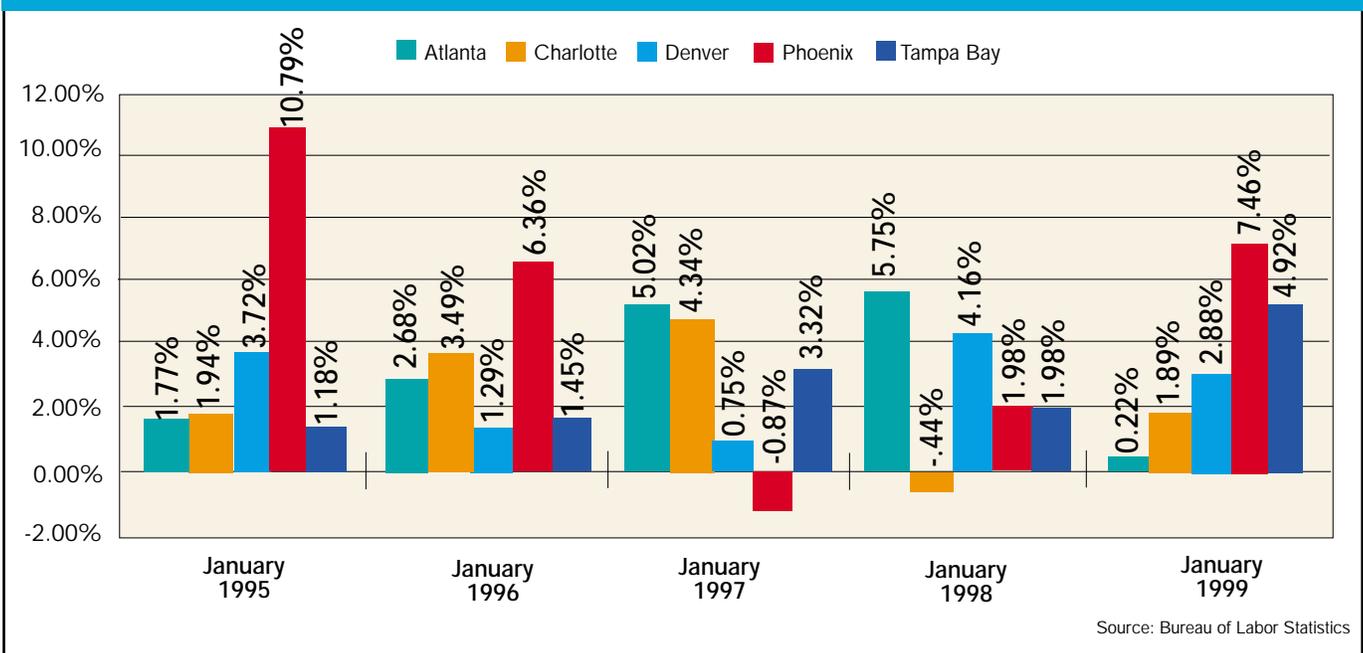
PERCENTAGE IN LABOR FORCE

The labor force is the set of all employed and unemployed persons. Growth in the labor force represents an increase in the number of persons either working or looking for work. The labor force represents the local supply of labor, the demand side of

the market being represented by the number of jobs available in the area. If the growth rate of the labor supply exceeds the growth rate of labor demand, this will result in an increase in jobs but a decline in the real wage rate. If the growth rate of labor demand exceeds the growth rate of labor supply, then the level of employment and the wage rate will

rise. A decline in the supply of labor leads to higher wages, but a decline in the number of jobs filled. Therefore, a slow, steady growth rate is most conducive to rising wages and production. Atlanta, Charlotte, and Phoenix show very large relative fluctuations in the growth of their labor forces. Denver and Tampa Bay show a more controlled growth rate.

PERCENT CHANGE IN LABOR FORCE



ENDNOTES

Endnote 1. See glossary for definitions of an employed worker.

Endnote 2. Annual wages in 1989 are computed as average private non-farm wages of \$9.65*2,080 hours annually, or \$20,072, to \$12.78*2,080 hours annually in 1998, or \$26,478 per year.

Endnote 3. Two facts are germane to evaluating the performance of personnel services firms. First, temporary employment services supply employees to other industries who outsource positions. Therefore, employment growth in temporary employment agencies really reflects added workers that are not showing up in other industries. Second, employee-leasing companies handle payroll records for firms located in other regions of the state and in other states. For this reason, it is useful to consider the growth in business services excluding SIC code 736, personnel services. Employment in SIC 73 excluding personnel services was 168,878 in 1995, and added 56,000 workers between 1995 and 1998.

Endnote 4. Several points concerning average wages and wage growth must be kept in mind.

- First, wages in Tampa Bay have been growing at a faster pace than the national average. Regional wages have grown 42.4%, from \$18,022 in 1989 to \$25,668 in 1998. This compares favorably with the national wage rate growth of 32% over the same period.
- Second, the composition of Tampa Bay's labor force should be taken into account when comparing local performance with that of the U.S. If the higher average age of the population causes a larger number of part-time employment, or of employment in less demanding occupations, and if the number of seasonal residents and seasonal jobs reduces average earnings, these factors should be accounted for in wage comparisons. We do not deal with these issues in this report.
- Third, when comparing wages, differences in the cost of living should be accounted for. "Real wages" are money wages divided by a cost of living adjustment factor. Some indications are that the cost of living is up to 5% below that of the nation, adjusting for size of place. If this is the case, real wages in Tampa Bay are up to five percent greater vs. the nation than reported money wages.
- Many jobs in any urban area exist to supply the needs of the local population. Such jobs are sometimes referred to as "secondary jobs." Examples are restaurant employees, food store employees, and barbers and hair stylists. These jobs pay lower wages than wages in other industries, but they are necessary for the growth of a region. In any region where employment is growing, employment in these secondary jobs will grow also.

The result does not stem from poor growth management or economic development efforts.

Endnote 5. For example, average wages in a region that has three industries with wages and employment:

	Industry A	Industry B	Industry C
Industry Wages	\$20,000	\$25,000	\$40,000
Employment	3,000	2,000	5,000

Average wages =
 $\$20,000 \cdot .3 + \$25,000 \cdot .2 + \$40,000 \cdot .5 = \$31,000$

Endnote 6. Average wages of new jobs created between 1995 and 1998 are computed by multiplying the changes in employment in each two-digit industry between 1995 and 1998 by the 1998 wage rate paid in each industry. The products of these two terms are summed and added over all industries. This total is then divided by total employment growth to find the average wage paid in new positions. Continuing the previous example:

	Industry A	Industry B	Industry C
Industry Wages	\$20,000	\$25,000	\$40,000
Change in Employment, 1995-98	100	600	500

Average wages = $\$20,000 \cdot 100 + \$25,000 \cdot 600 + \$40,000 \cdot 500 = \underline{\$35,200,000} = \$29,333$
 New employees 1,200

SOURCES

Bureau of the Census, Manufacturing & Construction Statistics, State, MA, and Place.

Bureau of Labor Statistics, Florida Dept. of Labor and Employment Security.

Population Estimates Program, Population Division, U.S. Bureau of the Census.

Florida Department of Labor & Employment Security, Bureau of Market Information, ES-202 Program.

Florida Department of Education.

1997 & 1998 Florida Statistical Abstracts, Bureau of Economic and Business Research, University of Florida.

Bureau of Economic Analysis, Regional Economic Information System 1969-1997 Population Estimates Program, Population Division, U.S. Bureau of the Census.

Florida Department of Revenue.

Center for Economic Development Research, College of Business Administration, University of South Florida.

GLOSSARY

Disposable personal income. Personal income less personal tax and nontax payments. Personal taxes include income, estate, gift, personal property, and license taxes. Nontax payments include fines and penalties, tuition, and donations.

Dropout. A student over the age of compulsory school attendance (16 years old) who has voluntarily removed himself from the school system before graduation, or who has not met attendance requirements; or who has withdrawn from school but has not transferred to another public or private school or enrolled in any other educational program; or has withdrawn from school due to hardship without official granting of such withdrawal; or is not eligible to attend school because of reaching maximum age for an exceptional student program.

Employed worker.

(1) The Florida Department of Labor and Employment Security, in cooperation with the federal government, estimates labor force, unemployment, and employment data for the state's metropolitan areas. The labor force and unemployment data are publicly released as the Local Area Unemployment Statistics (LAUS) program and non-farm payroll employment estimates are called the Current Employment Statistics (CES) program. An employed worker for the purpose of the CES estimate is a person on an establishment payroll who receives pay for any part of the pay period which includes the 12th of the month, except for federal government employment, which represents the number of persons who occupied positions at the last day of the month. Persons are counted at their place of work rather than at their place of residence; those appearing on more than one payroll are counted on each payroll.

(2) Employment, Wages, and Contributions (ES-202) Program data is provided by the U.S. Department of Labor as part of the Unemployment Insurance ES-202 Covered Employment and Wages program. States collect the data as part of the Unemployment Insurance Program. An employed worker for the purpose of the ES-202 data is a person working for an establishment that pays Unemployment Insurance premiums. Hence, ES-202 data does not include self-employed people, railway employment, or any others working for an establishment that does not pay into the Unemployment Insurance program. Most farm employment is self-employment missed by ES-202 data. State government employment is reported at the state level only and is not included in county or regional data.

Educational service establishment. As defined in the North American Industrial Classification System (NAICS) manual, educational service establishments are "establishments that provide instruction and training in a wide variety of subjects. This instruction and training are provided by specialized establishments, such as schools, colleges, universities, and training centers. These establishments may be privately owned and operated. They may also offer food and accommodation services to their students." Examples include kindergartens, elementary schools, high schools, professional schools (e.g., business, secretarial, computer training), theological seminaries, technical schools (e.g., flight training, cosmetology, modeling, real estate, truck driving, bartending, graphic arts), fine arts schools (e.g., dance, acting, music), sports and recreation instructional establishments (e.g., martial arts, cheerleading), and other schools such as academic tutoring services, automobile driving schools, exam preparation services, public speaking training, survival training, and speed reading instruction.

Labor force. All civilians in the non-institutional population 16 years and over classified as "employed" or "unemployed" and members of the Armed Forces stationed in the United States.

Net earnings. The sum of wage and salary income and net income from self-employment less deductions for personal income taxes, Social Security and Medicare contributions, savings bond purchases, union dues, and other payroll deductions.

Personal income. The sum of current income received by persons from all sources, measured before deductions for Social Security, income, and other personal taxes. It is reported in current dollars and includes the following categories of earnings: property income, business and government transfer payments, non-monetary income at an estimated net rental value to the owner of owner-occupied homes, the value of services furnished without payment, and food and fuel produced and consumed on farms.

Unemployed persons. All civilians 16 years or over who do not work and who actively seek employment, and who are available to work except for temporary illness.