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# Tampa Bay economy 01/01 (Spring 2000)

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# THE Tampa Bay Economy

Quarterly Journal of the Center for Economic Development Research



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## CEDR's Data Center

by Dr. Dennis Colle, Associate Director of the Center for Economic Development Research

The Center for Economic Development Research (CEDR) has a long tradition of making regional economic and demographic data available to students, faculty, professional developers, and other interested citizens of the Tampa Bay Region. During 1999, CEDR initiated an effort to reconstitute the data center from a paper and magnetic tape repository to an on-line resource of immediately available data on the Internet. Go to CEDR's web site at <http://www.coba.usf.edu/centers/cedr/index.html> for immediately available data and much more.

Currently, the following data sets are available at CEDR's Web site by clicking on the words "Economic Data" or selecting "Query CEDR Databases" from the "Go to a specific location" menu.

**LAUS** - This labor force data set is prepared monthly by the Bureau of Labor Statistics (BLS) through the Local Area Unemployment Statistics (LAUS) program and describes labor force participation, employment, unemployment, and unemployment rate by place of residence. The self-employed are counted as employed persons in the LAUS data. The LAUS estimates are based on a combination of data from the Current Population Survey (CPS), unemployment insurance claim data, the Current Employment Statistics (CES) survey of establishments, and ES-202 data. State of Florida and Florida counties' data are available. The data can be displayed by month from January 1990 through November 1999, or annual averages can be displayed for 1990 through 1999.

**ES-202** - CEDR is an official State of Florida Data Repository. As such, CEDR maintains edited and unedited

(Covered Employment and Wages) ES-202 data. (Publication of unedited data may violate the confidentiality of individual reporting firms. Accordingly, the unedited data may be used to support research without directly revealing confidential data, but is not publicly available at CEDR's web site.) The edited ES-202 data set is available on CEDR's web site. This data set is a BLS-sponsored collection of job and wage data from all employers participating in Florida's unemployment insurance program. Because self-employed proprietors do not contribute to the unemployment insurance system, they are not counted in the ES-202 data. Agricultural workers are often proprietors or family members of proprietors and, thus not included in the data. Hence, it is generally understood that ES-202 data covers nonfarm civilian wage and salary employment only. The data currently available on CEDR's web site are organized by 1-digit level Standard Industrial Classification (SIC) codes (and totals for all SIC codes) and describe the number of units (i.e. an establishment designated as a single reporting unit for the unemployment insurance system), the number of covered employees, total wages of those employees, and average wages per employee. Geographically, the data are based on the location of the reporting unit. Hence the data usually, but not always, reflect the place of work of the employees. (For example, a reporting unit may be an employee leasing firm and the actual place of work for an employee may be outside of the defined geographic area of the reporting unit.) Monthly data is collected and released on a quarterly basis approximately 6 to 9 months after the periods of observation. State of Florida and Florida counties' data can be displayed for each month of a particular quarter from 1988 through 1998, or annual averages can be displayed for 1988 through 1998.

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## A Lack of High-Tech Jobs? The Numbers Show Otherwise

This article was written by Dr. Kenneth Wieand, Director of the Center for Economic Development Research, and appeared in the *Tampa Bay Business Journal*, January 2000

What do four Tampa firms—GTE Wireless, Taxmax, Health Information Copy Service and Molecular Genetic Resources Inc.—have in common?

All serve as examples of the Tampa Bay area's fastest growing high-tech service industries.

With high-tech businesses, we often visualize companies for which the continuous development and application of new technology are important components of the production process. Over time, the products of high-tech firms change and improve, embodying new technology. Communities recruit high-tech firms because they pay high salaries, attract highly educated workers and improve regional competitiveness.

A concern often raised about industrial performance in the Bay area is that our region lags in high-tech industry.

## From the Editor...



We're pleased to send you the Center for Economic Development Research's first edition of *The Tampa Bay Economy*. There will be four publications each year. The topics will cover all facets of the economy for the University of South Florida's primary service area. There are seven counties that comprise this service area, called the Tampa Bay region. Those counties are Hernando, Hillsborough, Manatee, Pasco, Pinellas, Polk and Sarasota. Each issue also will contain a 3-hole punched insert for you to maintain as a reference document. The insert contains current quarterly employment history for the Tampa Bay region as well as the state of Florida, and the United States; and Tampa Bay region employment by industry.

If you have any suggestions for future articles, you can e-mail me at [nkimball@coba.usf.edu](mailto:nkimball@coba.usf.edu)

The concern is buttressed by the Bay area's manufacturing base, which experienced slow growth from 1993 to 1998. Meanwhile, employment in service industries boomed, growing 32 percent during the same period.

Does the rising service industry employment mean that high-tech job creation lags in the Bay area? Not necessarily. Not all manufacturing firms employ high-tech workers. Service firms, such as GTE and Taxmax, do employ high-tech workers.

The Center for Economic Development Research represents the University of South Florida's College of Business on economic development issues. It provides data and economic analysis to businesses and governments located in the counties of Hernando, Hillsborough, Manatee, Pasco, Pinellas, Polk and Sarasota. CEDR analysts have reviewed job creation by high-tech service businesses in the Bay area.

CEDR uses a definition of high-tech service companies reported in the *West Virginia Business and Economic Review*. CEDR employs the review's definition to compare the size and growth of high-tech service employment and business formation in the Bay area with the United States.



In the Bay area, 21 [high-tech service] industries have 51,271 workers and a 13 percent growth rate.

The research shows that the Bay area experienced rapid growth in high-tech service jobs during the 1997-1998 period. Four industries that generated employment increases of more than 50 percent—radio/telephone communications (GTE), computer integrated systems design (Taxmax), information retrieval services (Health Information) and commercial physical and biological research firms (Molecular Genetic)—combined to add 3,089 new positions during the year.

Looking back at the five-year interval between 1993 and 1997, Bay area growth rates of employment in 11 computer-related service industries averaged 19 percent.

How does this performance compare with the United States? During the comparable period, employment in computer services industries averaged only 10 percent. Thus, growth in computer-related high-tech service jobs in the Bay area nearly doubled that of the nation during the past several years. National employment in other high-tech services industries rose by 4.2 percent compared with the Bay area's 5.4 percent increase.

The good news: Bay area high-tech services companies continue to be a mainstay of Florida's High-tech Corridor.

**GROWING INDUSTRIES, WORKERS,  
GROWTH RATE 1997-1998**

- Radio/telephone communications – 2,395 workers, 72.2 percent growth
- Computer integrated systems design – 3,609 workers, 53.5 percent growth
- Information retrieval services – 1,614 workers, 58.4 percent growth
- Data processing schools – 174 workers, 30.8 percent growth
- Commercial physical and biological research – 645 workers, 56.2 percent growth

**Mark your calendar to attend the 24th  
Annual Economic Development Course  
November 12 - 17, 2000 in historic Ybor City!  
Contact Nolan Kimball at 813-905-5854**

## The Structure of Nonfarm Employment in Tampa Bay

by Dr. Kenneth Weiland, Director of the Center for Economic  
Development Research

### Introduction.

When people think about jobs in Tampa Bay, what comes to mind? Tourists may imagine Busch Gardens and gulf beach hotels, or, perhaps football and ice hockey. For residents and local businesspersons, the picture is certainly much more detailed: downtown skylines loom on the horizon; streets lined with restaurants, gas stations, and retail stores are prominent. Perhaps the ports of Tampa and Manatee suggest themselves, as well as airports and highways. Perhaps large shopping malls. Those who work in the bright mid-rise office buildings near I-4, I-75, and I-275 think of finance, accounting and business services. Other will conjure images of low-rise manufacturing parks. And not a few will think of fields of crops and of phosphate mines.

Indeed the seven counties of Tampa Bay encompass a myriad of business activities and a wide variety of ways to make a living. What, in broad outline, can we say about the structure of industry in Tampa Bay? This article draws the outline and compares it with that of Florida and the nation. We shall see that, while there are differences between the region and the rest of the U.S., there are also many similarities, especially through time.

### Sources of employment numbers.

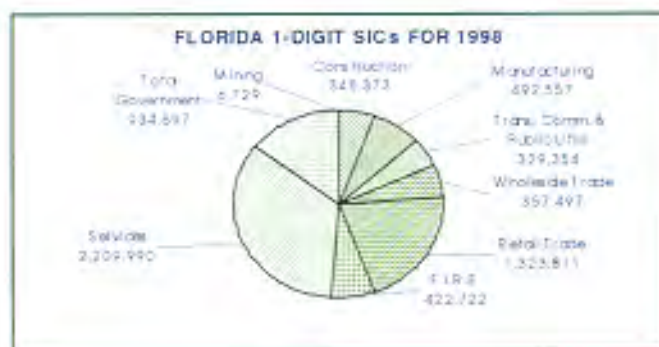
The statistical representation of a region's workforce depends heavily upon payroll and employment data of wage and salary workers in broadly defined industry groups. These groups are referred to by Standard Industrial Classification (SIC) codes. State labor departments collect employment data by SIC code for workers for whom employers report unemployment insurance payments during a given quarter. The Florida Department of Labor under the State of Florida's ES-202 program reports numbers of establishments, payroll, and employment by SIC code for Florida. The US Bureau of Labor Statistics uses ES-202 data supplied by Florida and by the state labor offices in all 50 states to construct the Current Employment Statistics (CES) series.



While the classification of businesses into SIC codes has changed over time, SIC classifications remained the same over the period discussed in this study, 1993 to 1998. Not all employment is covered in the data. Payroll data generally do not include agricultural workers. Therefore, although there is significant agricultural activity in Tampa Bay, agriculture is not discussed in this article. Also not included are workers for whom unemployment insurance is not paid. The largest classes of workers not covered by unemployment insurance are sole proprietors and members of partnerships. This is a large and important class of workers. Our results in this article must be interpreted only for wage and salary workers.

### Industrial Comparisons, 1998.

We report employment in 9 broad industrial classifications below. The following charts show employment by industry in the U.S., in Florida, and in Tampa Bay.



The salient fact disclosed by these charts is that employment structures in Tampa Bay and Florida differ from the employment structure in the nation. Florida is more heavily weighted toward service jobs, and there are more manufacturing and mining jobs in other states. Thirty-four percent of workers in Florida and 37% of workers in Tampa Bay hold jobs in the service sector. Only 30% of all employees hold service jobs in the US. Nationally, 15.4% of employment is in mining and manufacturing. But only 7.8% of Florida workers and 9.3% of Tampa Bay workers hold jobs in mining and manufacturing.

Location quotients are used to quantify *employment structure* data such as that presented in the pie-charts. A location quotient (LQ) for an industry computes the ratio of the percentage of employment in the region and the percentage of employment in the nation. For example, 5.2% of total employment in Tampa Bay was in wholesale trade, and 5.4% of employment in the nation was in wholesale trade. The location quotient for wholesale trade in Tampa Bay is the ratio of the two percentages: 5.2%/5.4%. This ratio is .96. A LQ of 1.0 indicates the percentage of employment is the same in the region as in the nation. A LQ of less than 1.0 indicates that employment is less heavily concentrated in the region, and a LQ of over 1.0 indicates that employment is more concentrated in the region than the nation as a fraction of all employment. The accompanying table compares LQs for Florida and Tampa Bay. In the table, the location quotient for services in Florida and Tampa Bay exceed 1.0 and the location quotients for manufacturing and mining are well below 1.0.

INDUSTRY	LOCATION QUOTIENTS	
	FLORIDA	TAMPA BAY
Mining	0.2282	0.2891
Construction	1.1402	1.1071
Manufacturing	0.5107	0.5965
Trans. Comm. and Public Utilities	0.9772	0.8072
Wholesale Trade	1.0082	1.0000
Retail Trade	1.1025	1.1184
Finance, Insurance & Real Estate	1.1174	1.1539
Services	1.1281	1.0481
Total Government	0.9238	0.7779

### What Accounts for Differences in Employment Structure in Florida?

Observers attribute the differences in employment structure observed in the location quotients to several



# CENTER FOR ECONOMIC DEVELOPMENT RESEARCH



UNITED STATES ECONOMY	OCT	NOV	DEC	ANNUAL	JAN	FEB
	1999	1999	1999	1999	2000	2000
UNEMPLOYMENT RATE (%) sa	4.1	4.1	4.1	4.2	4.0	4.1
CHANGE IN PAYROLL EMPLOYMENT sa	284,000	257,000	305,000	2,712,000	384,000(p)	43,000(p)
AVERAGE HOURLY EARNINGS (\$) sa	13.39	13.40	13.44	13.24	13.49(p)	13.53(p)
CONSUMER PRICE INDEX sa (% change)	0.2	0.2	0.2	2.7	0.2	0.5
PRODUCER PRICE INDEX sa (% change)	0.0	0.2(p)	0.1(p)	3.0	0.0(p)	1.0(p)
U.S. IMPORT PRICE INDEX not sa (12 mth % change)	3.9	5.4	7.1	7.1	6.9	9.0
EMPLOYMENT COST INDEX (Q4 data, 3 mth % change) sa				3.4		
PRODUCTIVITY (non-farm business, % chg from previous Q) sa				3.0		
FLORIDA EMPLOYMENT	OCT	NOV	DEC	ANNUAL	JAN	FEB
	1999	1999	1999	1999	2000	2000
CIVILIAN LABOR FORCE	7,481,000	7,506,000	7,497,000	7,366,000	7,427,000	7,455,000
EMPLOYMENT	7,191,000	7,211,000	7,240,000	7,082,000	7,130,000	7,191,000
UNEMPLOYMENT RATE	3.9	3.9	3.4	3.9	4.0	3.5
TAMPA BAY EMPLOYMENT	OCT	NOV	DEC	ANNUAL	JAN	FEB
	1999	1999	1999	1999	2000	2000
HERNANDO COUNTY						
CIVILIAN LABOR FORCE	46,587	49,010	48,998	47,777	48,696	48,797
EMPLOYMENT	46,583	47,145	47,313	46,169	46,733	47,137
UNEMPLOYMENT RATE	3.3	3.8	3.4	3.3	4.0	3.4
HILLSBOROUGH COUNTY						
CIVILIAN LABOR FORCE	556,080	558,350	559,220	546,338	555,284	558,319
EMPLOYMENT	541,157	543,028	544,952	532,012	538,262	542,932
UNEMPLOYMENT RATE	2.7	2.7	2.6	2.6	3.1	2.8
TAMPA - ST. PETERSBURG - CLEARWATER MSA						
CIVILIAN LABOR FORCE	1,222,247	1,228,572	1,229,456	1,201,359	1,220,303	1,226,140
EMPLOYMENT	1,188,585	1,192,604	1,196,920	1,168,498	1,182,270	1,182,482
UNEMPLOYMENT RATE	2.8	2.9	2.6	2.7	3.1	2.7
MANATEE COUNTY						
CIVILIAN LABOR FORCE	123,451	123,766	123,614	121,309	123,384	124,164
EMPLOYMENT	120,320	121,010	121,352	118,646	120,768	121,708
UNEMPLOYMENT RATE	2.5	2.2	1.8	2.2	2.1	2.0
PASCO COUNTY						
CIVILIAN LABOR FORCE	138,153	139,112	139,112	136,965	137,961	138,555
EMPLOYMENT	133,980	134,443	134,919	131,716	133,268	134,419
UNEMPLOYMENT RATE	3.0	3.4	3.0	3.1	3.4	3.0
PINELLAS COUNTY						
CIVILIAN LABOR FORCE	479,426	482,099	482,127	471,280	478,381	480,468
EMPLOYMENT	466,465	468,077	469,736	458,582	463,987	467,994
UNEMPLOYMENT RATE	2.7	2.9	2.6	2.7	3.0	2.6
POLK COUNTY (LAKELAND - WINTER HAVEN MSA)						
CIVILIAN LABOR FORCE	202,114	203,722	203,042	200,266	201,941	202,382
EMPLOYMENT	191,870	193,977	195,274	190,575	192,909	194,564
UNEMPLOYMENT RATE	5.1	4.8	3.8	4.8	4.5	3.9
SARASOTA COUNTY						
CIVILIAN LABOR FORCE	154,697	155,628	155,454	152,524	156,075	156,352
EMPLOYMENT	151,384	152,252	152,683	149,277	151,947	153,131
UNEMPLOYMENT RATE	2.1	2.2	1.8	2.1	2.6	2.1
SARASOTA - BRADENTON MSA						
CIVILIAN LABOR FORCE	278,148	279,394	279,068	273,832	279,459	280,516
EMPLOYMENT	271,704	273,262	274,035	267,922	272,715	274,840
UNEMPLOYMENT RATE	2.3	2.2	1.8	2.2	2.4	2.0

SOURCE: Bureau of Labor Statistics

NOTE: (p) preliminary (sa) seasonally adjusted

## TAMPA BAY EMPLOYMENT

	Q1 1998 AVG. EMP	Q1 1999 AVG. EMP	ANNUAL % CHANGE	Q2 1998 AVG. EMP	Q2 1999 AVG. EMP	ANNUAL % CHANGE
<b>HERWANDO</b>						
Agriculture, Forestry & Fishing	379	423	10.40%	385	436	12.95%
Mining	359	334	-7.49%	357	321	-10.08%
Construction	1,604	1,792	10.49%	1,690	1,823	7.87%
Manufacturing	1,368	1,342	-1.94%	1,401	1,329	-5.14%
Trans, Comm And Public Utilities	831	868	4.26%	852	879	3.17%
Wholesale Trade	885	909	2.64%	879	909	3.41%
Retail Trade	7,821	8,829	11.42%	7,736	8,632	14.17%
Finance, Insurance & Real Estate	1,209	1,220	0.90%	1,168	1,245	6.59%
Services	7,536	7,460	-1.02%	7,582	7,450	-1.74%
Total Government	2,428	2,461	1.34%	2,463	2,493	1.22%
<b>HILLSBOROUGH</b>						
Agriculture, Forestry & Fishing	14,001	14,496	3.41%	11,537	12,174	5.52%
Mining	22	30	26.67%	27	33	22.22%
Construction	25,686	27,245	5.72%	26,530	27,383	3.22%
Manufacturing	37,246	36,967	-0.75%	37,460	37,084	-1.00%
Trans, Comm And Public Utilities	28,871	31,973	9.70%	30,096	31,784	5.61%
Wholesale Trade	35,241	34,944	-0.85%	35,303	34,595	-2.01%
Retail Trade	88,773	90,415	1.82%	88,289	91,030	3.10%
Finance, Insurance & Real Estate	43,904	46,585	5.76%	45,083	46,296	2.69%
Services	199,067	218,158	8.75%	207,726	223,059	7.38%
Total Government	23,496	25,070	6.28%	23,904	25,397	6.25%
<b>MANATEE</b>						
Agriculture, Forestry & Fishing	6,464	6,759	4.36%	6,776	7,288	7.56%
Mining	n/a	n/a	n/a	n/a	n/a	n/a
Construction	4,080	4,659	12.43%	4,254	5,003	17.61%
Manufacturing	12,938	13,524	4.33%	12,964	13,644	5.25%
Trans, Comm And Public Utilities	1,840	1,861	1.18%	1,678	1,876	11.80%
Wholesale Trade	3,201	3,516	8.96%	3,509	3,652	4.08%
Retail Trade	18,512	19,323	4.20%	18,044	18,759	3.96%
Finance, Insurance & Real Estate	3,096	3,075	-0.68%	3,140	3,077	-2.01%
Services	48,092	41,787	-15.09%	50,888	47,846	-5.98%
Total Government	5,041	5,115	1.45%	5,043	5,117	1.47%
<b>PASCO</b>						
Agriculture, Forestry & Fishing	2,908	2,867	-1.43%	2,645	2,448	-7.45%
Mining	41	41	0.00%	41	45	9.76%
Construction	4,789	5,174	7.83%	4,982	5,302	6.42%
Manufacturing	3,766	3,688	-2.11%	3,766	3,433	-8.64%
Trans, Comm And Public Utilities	2,216	2,313	4.19%	2,202	2,251	2.23%
Wholesale Trade	1,855	1,871	0.86%	2,001	1,870	-6.55%
Retail Trade	19,282	18,874	-2.16%	19,145	18,906	-1.25%
Finance, Insurance & Real Estate	3,252	3,108	-4.63%	2,820	3,106	10.14%
Services	23,450	22,588	-3.62%	23,416	22,400	-4.34%
Total Government	4,525	4,614	1.93%	4,601	4,690	1.93%
<b>PINELLAS</b>						
Agriculture, Forestry & Fishing	2,830	3,185	11.15%	3,107	3,317	6.76%
Mining	8	7	-14.29%	8	8	0.00%
Construction	19,158	20,036	4.38%	19,925	19,942	0.09%
Manufacturing	46,201	46,673	1.01%	46,186	47,025	1.82%
Trans, Comm And Public Utilities	13,483	16,174	16.64%	14,045	15,900	13.21%
Wholesale Trade	20,546	20,822	1.33%	20,644	20,821	0.86%
Retail Trade	79,032	78,802	-0.29%	79,312	79,595	0.36%
Finance, Insurance & Real Estate	28,193	30,093	6.31%	28,773	30,073	4.52%
Services	151,333	153,796	1.60%	154,612	157,357	1.78%
Total Government	19,394	19,580	0.95%	19,727	19,844	0.59%
<b>POLK</b>						
Agriculture, Forestry & Fishing	11,903	10,795	-10.26%	9,544	8,591	-9.99%
Mining	3,148	2,592	-21.45%	3,224	2,497	-22.55%
Construction	9,519	9,790	2.77%	9,766	9,670	-0.98%
Manufacturing	20,778	20,869	0.44%	20,716	20,660	-0.27%
Trans, Comm And Public Utilities	8,175	8,731	6.37%	8,375	8,744	4.41%
Wholesale Trade	8,481	8,524	0.50%	8,329	8,251	-0.94%
Retail Trade	38,611	40,025	3.63%	39,141	40,985	4.71%
Finance, Insurance & Real Estate	7,753	8,049	3.68%	8,027	8,135	1.35%
Services	43,762	44,663	2.02%	43,175	44,676	3.48%
Total Government	12,560	12,099	-3.61%	11,948	12,004	0.47%
<b>SARASOTA</b>						
Agriculture, Forestry & Fishing	1,965	2,333	15.77%	2,006	1,996	-2.46%
Mining	54	N/A		48	N/A	
Construction	8,294	9,217	10.99%	8,261	9,370	13.42%
Manufacturing	7,816	7,962	1.83%	7,672	8,168	3.76%
Trans, Comm And Public Utilities	3,276	3,549	7.69%	3,443	3,472	0.84%
Wholesale Trade	4,640	4,123	-12.54%	4,603	4,003	-13.03%
Retail Trade	32,195	32,089	-0.33%	31,091	31,637	1.76%
Finance, Insurance & Real Estate	8,138	8,481	4.04%	8,598	8,453	-1.69%
Services	48,603	65,375	25.66%	49,448	67,146	35.79%
Total Government	5,730	5,862	2.22%	5,868	5,900	0.55%

Source: Florida Department of Labor and Employment Security

NOTE: For historical data please visit our website at <http://www.coba.usf.edu/centers/cedr>



factors, the most important of which is the nature of the service industry in Florida. There are two reasons why Florida has a high demand for service workers. One reason is that the state is a prime tourist destination, not only for U.S. citizens, but also for residents of other countries. The tourist and associated recreation industry, as well as related businesses like eating establishments, are labor intensive; that is, they require a good deal of labor costs relative to overall costs.

A second reason is that Florida is a popular retirement destination. Consequently, the population is somewhat older in Florida than in the nation. In 1996, 12.8 % of the US population was 65 years of age or older. The percentage in Florida was the highest in the nation at 18.5%. Elderly persons have relatively low workforce participation rates, but they require services at the same or greater level, as do younger persons. Thus service employment is higher in Florida than nationally. The same factors cause the location quotients for retail trade in Florida to exceed the U.S.

Using location quotients, we can shed additional light on the importance of tourists and retirees on retail trade and service employment in Florida. The following table reports location quotients for those specific retail and service activities that are likely to reflect tourism and the service-sector demands of a retired population. The magnitudes of the location quotients for food stores, amusement and recreation services, and hotels and lodging services are striking. They indicate that the proportions of jobs in these categories in Florida are 37%, 69% and 60% respectively above the national proportions. Location quotients for eating and drinking establishments,

health services and automotive repairs are more than 10% above the national averages.

The number of service and retail workers in any state or region is determined by the needs of those employees that produce goods and services sold nationwide and worldwide. Workers in these so-called "basic" industries generate the demand for retailers and services firms. We may think of retirees and tourists as generating "basic" demand (that is, demand outside of the Florida economy) and therefore creating the need for a higher percentage of retail and service employees in Florida and in Tampa Bay than in the nation.

### Industrial Comparisons: 1993-1998.

Comparisons of the change in employment structure through time are as revealing as comparisons of industrial structure at a given point in time. The table titled "Employment Changes" on the next page reports the growth of employment by industry classification between 1993 and 1998 for Tampa Bay, Florida, and the U.S. This table reports something quite different from the pie charts on page 4. Broad trends in the structure of employment, similar in Tampa Bay, Florida, and the nation, are apparent. The growth of services stands out. Another common trend is the slow rate of growth in manufacturing employment. Tampa Bay, Florida, and the nation experienced a rising proportion of services employment and a declining proportion of manufacturing employment over the period.

#### LOCATION QUOTIENTS: FLORIDA TO THE US

*Retail and Services That Reflect Demand from Tourists and Persons Over 65 Years of Age*      *Location Quotients*

<b>Retail Trade Employment</b>	
General Merchandise Stores	1.03
Food Stores	1.37
Automobile Dealers & Service Stations	1.04
Apparel and Accessory Stores	1.15
Furniture & Home Furnishings	1.21
Eating and Drinking Places	1.10
Miscellaneous Retail	1.03
<b>Consumer Services Employment</b>	
Hotels and Lodging Services	1.60
Personal Services	1.11
Automobile Repair, Services & Garages	1.15
Motion Pictures	0.78
Amusement and Recreation Services	1.69
Health Services	1.11

**The Tampa Bay area led the state in existing home sales in November compared with the same month last year, according to the Florida Association of Realtors. Sales were up 9% in the Tampa-St. Petersburg-Clearwater area to 2,413 units last month, topping Orlando's 1,544 and 1,221 in West Palm Beach-Boca Raton. Statewide, sales were up 2% to 10,933. Nationally, Realtors reported a seasonally adjusted annual rate of 5.09 million units, up 6%. (Source: *The Tampa Tribune*, Business & Finance section, page 1, dated December 29, 1999.)**





EMPLOYMENT CHANGES									
INDUSTRY	U.S.			FL			TB		
	1993	1998	% Chg	1993	1998	%Chg	1993	1998	% Chg
Mining	609,417	590,250	-3.25%	6,364	6,729	5.42%	3,250	3,548	8.40%
Construction	4,865,250	5,982,000	22.01%	284,725	348,373	18.27%	57,168	75,818	24.60%
Manufacturing	18,076,083	18,773,000	3.71%	484,247	492,557	1.69%	123,541	130,231	5.14%
Trans, Comm & Public Utilities	5,811,000	6,598,600	11.94%	278,923	329,354	15.31%	52,965	60,983	13.12%
Wholesale Trade	5,981,667	6,830,100	12.42%	293,400	357,497	17.93%	64,004	75,307	15.01%
Retail Trade	19,771,750	22,294,000	11.31%	1,162,259	1,323,811	12.20%	257,829	285,458	9.68%
Finance, Insurance & Real Estate	6,756,583	7,406,400	8.77%	357,076	422,722	15.53%	79,739	97,839	18.50%
Services	30,193,000	37,521,000	19.53%	1,692,075	2,209,990	23.44%	393,240	634,860	26.48%
Total Government	18,827,167	19,808,000	4.95%	868,150	934,697	7.12%	165,485	176,198	6.07%
ANNUAL TOTALS	110,691,917	125,803,350	12.01%	5,427,219	6,425,730	15.54%	1,197,241	1,440,232	16.87%

We conclude that, while there are differences in industry structure in Florida and the nation, the differences are not increasing rapidly over time and that the nature of the job structure is changing in the same way for the State as for the nation. Again, we may use location quotients to

quantify this information. The table below reports location quotients for Florida and Tampa Bay in 1993 and compares them with 1998. We see that, over the 5-year period the LQs for manufacturing and retail trade declined, and the LQs for finance and for services rose.

LOCATION QUOTIENT CHANGES							
INDUSTRY	FL			TB			
	1993	1998	%Chg	1993	1998	% Chg	
Mining	0.2130	0.2232	4.57%	0.4931	0.5251	6.09%	
Construction	1.2448	1.1402	-9.17%	1.1330	1.1071	-2.34%	
Manufacturing	0.5464	0.5137	-6.37%	0.6319	0.6060	-4.28%	
Trans, Comm & Public Utilities	0.9790	0.9772	-0.18%	0.8430	0.8073	-4.43%	
Wholesale Trade	1.0004	1.0247	2.37%	0.9893	0.9631	-2.72%	
Retail Trade	1.1989	1.1625	-3.13%	1.2056	1.1184	-7.80%	
Finance, Insurance & Real Estate	1.0779	1.1174	3.54%	1.0911	1.1539	5.44%	
Services	1.1430	1.1531	0.88%	1.2042	1.2452	3.29%	
Total Government	0.9405	0.9238	-1.80%	0.8127	0.7770	-4.60%	

### Why Has Industry Structure in Florida and the U.S. Changed Over Time?

What is responsible for these changes over time in industry structure? The reasons are varied, but may be classified into technological reasons, trade-related and income-related. As technology has changed, businesses have been able to replace increasing numbers of employees with automated systems. This trend has happened more rapidly in manufacturing than in services. The result is a decline in manufacturing employment even as manufacturing output continues to climb. Increasing openness in trade among countries is also responsible for the decline in U.S. manufacturing jobs. Many such jobs can be

routinized and production can take place in countries where workers with suitable skills earn lower wages. Firms have taken advantage of labor cost savings by moving manufacturing jobs overseas. Many service jobs require the mutual physical presence of the employee and customer. Such jobs are less likely to move offshore.

As incomes rise, individuals and households become more willing to pay others to do what they have in the past done for themselves. Wealthy consumers eat at restaurants more often, have hairdressers coif their hair, hire lawn-services to take care of their lawns, and so forth. Service employment rises and individual leisure increases. Corollary growth occurs as technology creates



services. Fifty years ago, airline travel was limited, there were no computer games to be developed and sold, there were no copy services for individuals to use, and no electronics and computer stores.

Changes in the definition of business activity provide a final source of service employment growth. Firms now outsource services that previously were incorporated within the core business. The growth of business services reflects the movement of these jobs from manufacturing, mining, retail and wholesale trade into the service sector. In this sense, the growth of business services merely reflects a change in how firms contract for labor rather than a change in the number of accountants, engineers, clerical staff, and real estate professionals, etc. employed by businesses.

## Conclusion.

Florida's attraction as a tourist destination and as a haven for retired persons boosts the percentage of service employment above the proportion for the nation. While average wages paid in the retail and service occupations that serve these two groups are lower than wages in manufacturing and mining, high levels of service employment are not a cause for concern. Retired persons bring disposable income and wealth into the state. Indeed, personal income per capita in Florida is about the same as the nation's. Tourists bring money into the state as well. And the recreational and leisure facilities that serve tourists and retirees improve the quality of life for all Florida residents.

The long-term national trends of expanding service employment and static manufacturing employment result from deep-rooted technological and demographic factors. Florida shares in the national trend. Over the past decade, shifts in industrial employment structure have coincided with a rising standard of living and strong economic growth combined with stable prices and declining unemployment rates.

The University of South Florida's service area is comprised of the following seven counties: Hernando, Hillsborough, Manatee, Pasco, Pinellas, Polk and Sarasota.



## CEDR's Data Center

Continued from page 1



**Housing Permits** - This data set of construction authorized by building permits is distributed by the Manufacturing and Construction Division, Bureau of the Census. The data set is primarily based on reports submitted to the Bureau by local building permit officials in response to a mail survey, although some data may be generated by Census Bureau interviewers or imputed from past data. The data on CEDR's web site is organized by state, by county, and by Metropolitan Statistical Area (MSA) for each month of a year from January 1996 to November 1999. The data describe the number of units and aggregate value for which building permits have been issued by single-family, 2-family, 3&4-family, and 5-family units.

**Personal Income, Per Capita (Personal) Income, and Population** - These three data sets are organized by county, or by MSA, per year and are released annually through the Regional Economic Information System (REIS) of the Bureau of Economic Analysis (BEA). The data is based on place of employment and reflect annual averages. In producing REIS, BEA makes use of data that are by-products of the administration of various federal and state programs, including unemployment insurance, Social Security, federal income taxes, veterans benefits, and military payroll. Hence, the REIS data series, which includes farming and nonfarming, military and civilian, proprietorships (i.e. self-employment) and wage and salary employment, are more comprehensive than ES202 data that covers nonfarm and salary employment only. Personal income is defined by BEA, as the current income received by persons from all sources (including investment income and transfer payments) minus their personal contributions for social insurance. Personal income includes both monetary income (including non-paycheck income such as employer contributions to pensions) and non-monetary income (such as food stamps and net rental value to owner-occupants of their homes). The REIS county and MSA data are issued about 16 months after the year in which the observations were made. Currently the CEDR Web site has data from 1969 to 1997.



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## CEDR's Data Center Continued from page 7

**Cost of Living** - This data set provides relative costs of living for Florida's 67 counties and is released annually by the Florida Department of Education. The average cost of living in a given year is set at 100% and a Florida County's relative cost of living is expressed as a percentage of the average. For example, in 1998 Hernando County's relative cost of living was 93.26% of the average, or 6.74% below average. The county's rank is also shown. In the example, Hernando County ranked 40<sup>th</sup> in 1998. That is only 27 other counties had a lower relative cost of living in 1998 than Hernando. Currently the CEDR Web site has data from 1993 to 1998.

CEDR is planning to add more data sets to its Web site soon. Additionally, click on "Data Links" while visiting CEDR's Web site and you find more than 100 Internet connections to other valuable economic development sites.

Tampa International Airport placed fifth on the list of favorite North American airports as voted by readers of *Business Travel International* magazine. For the second year in a row, Chicago's O'Hare was named North America's favorite airport. The rankings appear in the magazine's Dec. 1999 - Jan. 2000 issue. (Source: *The Tampa Tribune*, Business & Finance section, page 1, dated December 29, 1999.)

