

Regional Economic Foundations

REGIONAL ECONOMIC FOUNDATIONS

Overview

Regional Economic Infrastructure

- Human Resources
- Technology
- Financial Capital
- Business Climate
- Infrastructure
- Advanced Communications
- Quality of Life

Economic Foundation Indicators

Cluster-Based Economic Development

Overview

Our Region's economic sustainability and competitiveness are directly related to our present and future capacity to provide vital economic infrastructure to the businesses that propel our economy. What do we mean by "economic infrastructure?" Economic infrastructure refers to a wide array of specialized economic resources including: workforce development, transportation and communications infrastructure and business climate – foundations that provide competitive advantage to regions.

Regional Economic Infrastructure

The essential elements that comprise the Region's economic infrastructure can be classified into seven categories:

1. **HUMAN RESOURCES:** Education and training systems to prepare, enhance and renew workers' skills for specific and changing markets.
2. **TECHNOLOGY:** Systems to discover and develop scientific innovations and to facilitate the commercialization of technology.
3. **FINANCIAL CAPITAL:** Access to capital for start-up, expansion or transformation of businesses.
4. **BUSINESS CLIMATE:** Reasonable costs and efficient administrative procedures to enhance business in the Region.
5. **INFRASTRUCTURE:** Access to transportation, energy and environmental systems that enable efficient operations.
6. **ADVANCED COMMUNICATIONS:** Sufficient telecommunications, data and information processing capacity to support advanced business operations.
7. **QUALITY OF LIFE:** Provision of public safety, adequate and affordable housing, health care and cultural and recreational amenities.

Economic Foundation Indicators

This section of the report presents a set of measurable indicators used to gauge the comparative strengths and weaknesses of our Region's economic infrastructure. These illustrative indicators measure the Region's present and potential economic, social and environmental resources that comprise the Treasure Coast Region. These benchmarks are thereby developed to provide the Region's decision-makers with information that they can use to guide meaningful action on economic development. The indicators fall into two broad categories – economic and quality of life. Each indicator is described by up to two measures with each measure asking the following:

- **What's the measure?** A description of the data.
- **Why the benchmark is important?** An explanation of why the measure is useful in measuring the Region's economic infrastructure.
- **Trend analysis.** An assessment of the measure as it pertains to the Treasure Coast Region.
- **Comparative analysis.** How does the Treasure Coast Region compare with other regions against this measure.

We believe these indicators reflect the fundamental condition of the Region's economic infrastructure or "resources" that underlie the economy. The indicators are intended to tell us how we are doing – whether we are moving forward or backward, up or down, getting better or worse, or staying the same. They are by no means definitive and will require further refinement. In some cases, data at the metropolitan level was unavailable, prompting the need to use state level data or other proxy measures. The overall intent in the indicator design was to construct effective and meaningful indicators. Maureen Hart, a leading sustainable communities indicator researcher states that effective indicators possess the following characteristics¹:

- ➔ They are easily understood.
- ➔ They are reliable.
- ➔ They are relevant to the community.
- ➔ They provide timely information.

¹ Guide to Sustainable Community Indicators, Maureen Hart, 1999.

The Corporation for Enterprise Development notes that a state's overall economic performance is highly correlated to its earnings, job quality and the character of its technology resources (number of patents issued, university research and development, number of scientists in the workforce, etc.), followed by human resources and entrepreneurial energy². These findings suggest that economic development policies focus on creating high-quality jobs and fostering innovation. Developing human capital and entrepreneurial talent are important components in an economic development strategy as well.

Cluster-Based Economic Development

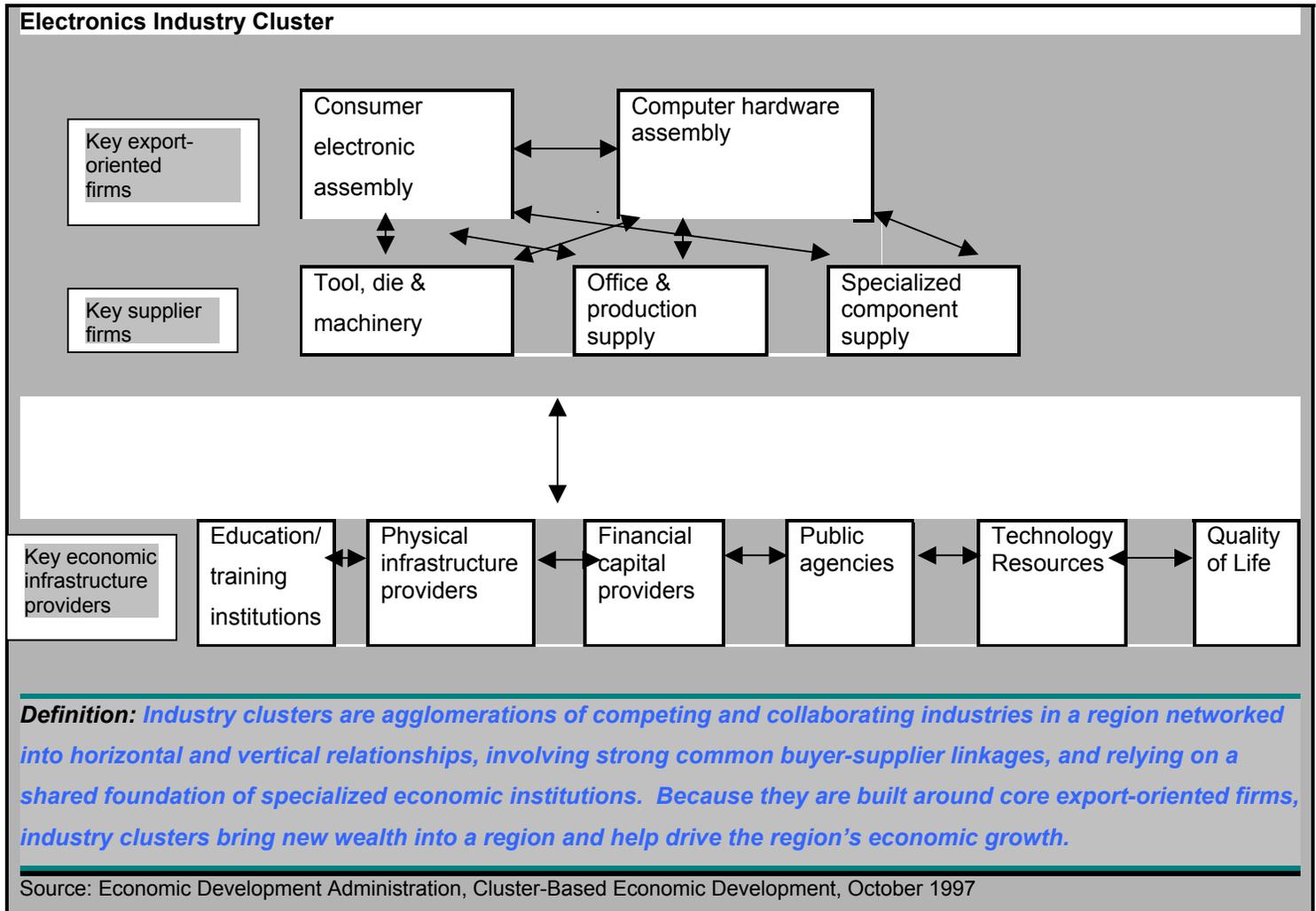
An advanced economic development framework that focuses on innovation and high-quality job creation is cluster-based economic development. The cluster-based economic development approach recognizes that the economic resources noted above provide critical sources of competitive advantage to industry clusters within a region.

Dr. Michael Porter, a noted Harvard economist, in his book, *The Competitive Advantage of Nations* concludes that a nation's most successful industries are those that consist of related groups of firms rather than single, isolated companies.

Nations (and regions within nations) succeed not in isolated industries, however, but in clusters of industries connected through vertical and horizontal relationships. A nation's economy contains a mix of clusters, whose makeup and sources of competitive advantage (or disadvantage) reflect the state of the economy's development.

² *The 1999 Development Report Card*, Corporation for Enterprise Development, 1999.

Figure II.1: Conceptual Structure of An Industry Cluster



The U.S. Economic Development Administration³ notes that a cluster framework for regional economic development is valuable for the following reasons:

Market Driven. The essential logic of cluster-based development is to facilitate the free market by bringing together the region's key industries (demand-side) with the private and public sector sources of economic inputs (supply-side) from the region.

Inclusive. The cluster approach brings together all of the region's relevant stakeholders – large and small companies, suppliers and supporting economic institutions.

Collaborative. The cluster based economic development process works because it brings together representatives from the user and supplier side of the economy that can develop joint action plans.

³ *Cluster-Based Economic Development, A Key To Regional Competitiveness*, U.S. Economic Development Administration, October, 1997.

Strategic. The cluster approach helps stakeholders create and implement a strategic vision for their region based upon a set of core, shared economic concerns.

Value Creating. One of the main functions of cluster-based economic development is value creation. For example, a cluster initiative may help to create vertical linkages in the regional economy by helping exporting firms find and develop a system of local suppliers that will enhance productivity and generate more local employment.

The Treasure Coast Region's past and present capacity to provide each of these economic foundations to enhance the Region's economy is examined. If possible, the Region's economic foundations are compared to eight comparison regions:

- Austin, Texas
- Fort Lauderdale, Florida
- Jacksonville, Florida
- Portland, Oregon
- Salt Lake City, Utah
- San Jose, California (Silicon Valley)
- Raleigh-Durham-Chapel Hill, North Carolina
- Tucson, Arizona

These comparison regions were chosen based upon relatively comparable population and labor force size and, more importantly, based on the fact that these regions have been characterized as "Booming Regions."⁴ Booming or Opportunity regions are places that are experiencing the most rapid relative job growth and are proactively preparing for the future. Our Region could also be classified as a "Booming Region" based upon rapid job and population growth and merits comparison to the above-noted regions. Each of these comparison regions have adopted a cluster-based approach to economic development and focused on strengthening their economic foundations. Their respective approaches are highlighted in Table II.1.

⁴ As defined in, *America's New Economy and The Challenge of The Cities: A HUD Report On Metropolitan Economic Strategy*, U.S. Department of Housing and Urban Development, October, 1996.

Table II.1: SELECTED REGIONAL CLUSTER INITIATIVES

Region	Economic Challenge	Cluster Development Strategy
Austin, Texas	Low growth economy dependent on non-market sectors (i.e. state government and a public university)	Build electronics & communications industry cluster with diversified strength in research and development, manufacturing and related business services.
Fort Lauderdale	Declining manufacturing base and growing proportion of relatively low-paying jobs.	Economic diversification through targeted industry and business development initiative and attraction of more working age migrants to Broward County.
Jacksonville, Florida	Population-driven growth combined with downsizing of military facilities and environmental quality problems.	Create manufacturing and higher-value service sector jobs by developing health services and medical products manufacturing industry cluster with supporting business services, trade and tourism.
Portland, Oregon	Transform a slow-growing natural resource-based economy to a technology-based economy.	Targeted strategy to invest in new industry clusters (computer and semiconductor industry) while maintaining the region's attractive quality of life.
Salt Lake City, Utah	Diversify the economy to reduce dependence on federal government and mining sector.	Develop a technology-based economy focusing on biomedical and information technology industries.
Silicon Valley, California	Defense cutbacks, increased global competition and regional business climate difficulties.	Implement collaborative initiatives to improve training, communications, and finance infrastructure for the region's advanced technology clusters.
Raleigh-Durham, North Carolina	Predominance of traditional manufacturing and low wage, low skilled workforce.	Strengthen the competitiveness of area workforce and industry through science and technology innovation.
Tucson, Arizona	Rapid population-driven economic growth but concentrated in lower wage sectors of the economy.	Develop emerging technology-based industries such as optics, software and environmental services.

Source: Cluster-Based Economic Development: A Key to Regional Competitiveness, Economic Development Administration, 1997.

HUMAN RESOURCES

HUMAN RESOURCES

Indicators

- Educational Attainment
- High Technology Jobs

Human resources represents the single most important attribute a region possesses in its bid to enhance its economic foundations and achieve economic sustainability. Educational excellence and a highly skilled workforce are essential for economic development. The measurement of human resource excellence focuses on two indicators:

“In the old economy, states prospered by having workers who were skilled with their hands and who could reliably work in repetitive...jobs. In the New Economy, states will prosper if their workers are good with their mind, because knowledge and information-based jobs are driving the New Economy.”

*The State New Economy Index
Progressive Policy Institute
Technology & New Economy
Project*

1. The education level of the workforce
2. The share of the workforce employed in high technology jobs

Treasure Coast Regional Planning Council’s previous Overall Economic Development Program plan suggested that many outside business leaders view the quality of education in the Treasure Coast District as needing improvement. This perception strongly impacts potential business location decisions. Additionally, a continuing mismatch between employee skills and workplace needs is evident. Job training partnerships between industry, government, and the education sector will help to alleviate this persistent problem.

Indicator	Trend	Florida Rank ⁵
Educational Attainment (the proportion of Treasure Coast adults over age 25 and over who have completed a baccalaureate degree.)	Improving	30th

Educational Standards Are Improving

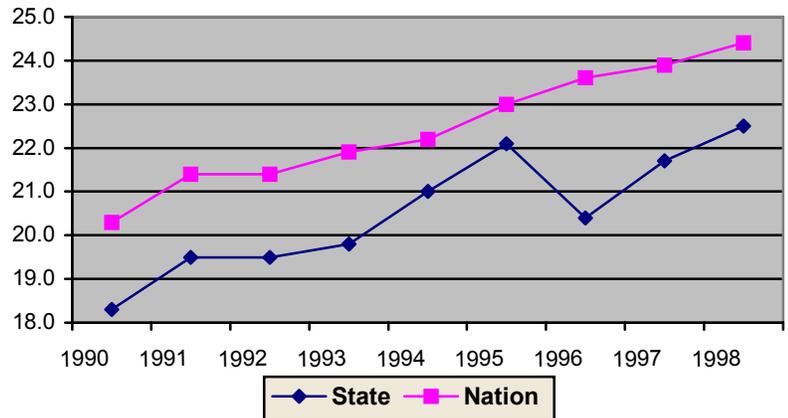
Why this Benchmark is Important

Educational attainment is one of the most important measures of community well-being. Higher education is reflected in greater socio-economic success for individuals and the nation as a whole. This is especially true as the transition to a new knowledge-based economy takes effect in cities, regions and states.

Trend Analysis

From 1990 to 1998, educational attainment for persons aged 25 years and older in the State of Florida increased from 18.3 percent to 22.5 percent. Nationally, 24.4 percent of adults ages 25 and over completed a Bachelor's degree or more.

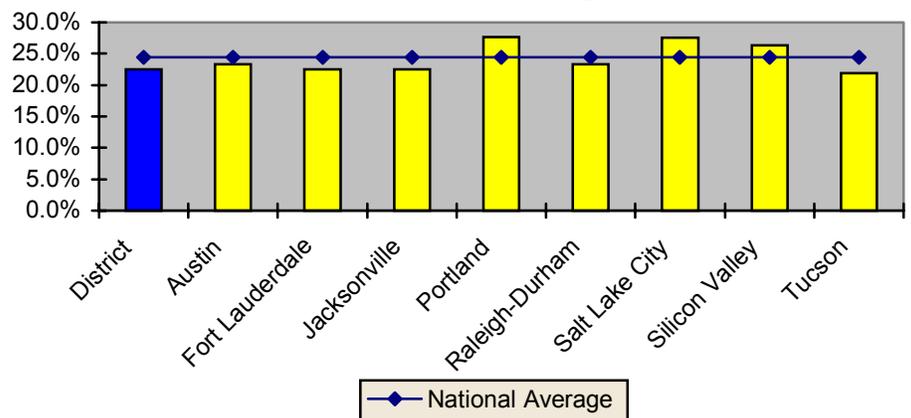
Figure II.2: Percentage of Population 25 Years Old and Over Completing a Bachelor's Degree or More



How Treasure Coast Compares to Other Regions

Only three regions had 1998 educational attainment levels that are higher than the national average of 24.4 percent – Oregon, Utah and

Figure II.3: Percentage of Persons 25 Years Old and Over, With at Least a Bachelor's Degree, 1998



⁵ The State New Economy Index, Progressive Policy Institute, 1999

California. The State of Florida ranks behind all of the comparison regions except for Arizona, which has an educational attainment level of 21.9 percent.

Foundation Partners

The Treasure Coast District has an array of educational institutions that provide a high quality of educational opportunities to residents. These educational foundations need to be continually enhanced to provide students with skills that will allow them to compete in the 21st Century knowledge-based economy. The District's array of educational institutions supporting its human resource foundation include:

Two-Year Colleges

- Indian River Community College
- Palm Beach Community College

Four-Year Colleges

- Florida Atlantic University
- Lynn University
- Barry University

Research Facilities

- Harbor Branch Oceanographic Institution
- Smithsonian Marine Station
- United States Department of Agriculture Natural Resource Conservation Service
- United States Department of Agriculture Horticultural Research Laboratory
- University of Florida, Indian River Research and Education Center, Institute of Food and Agricultural Sciences

Indicator	Trend	Florida Rank ⁶
High Technology Jobs (share of region's total employment in electronics manufacturing, software and computer-related industries)	Increasing	25th

High Technology Jobs in the District Have Grown Steadily

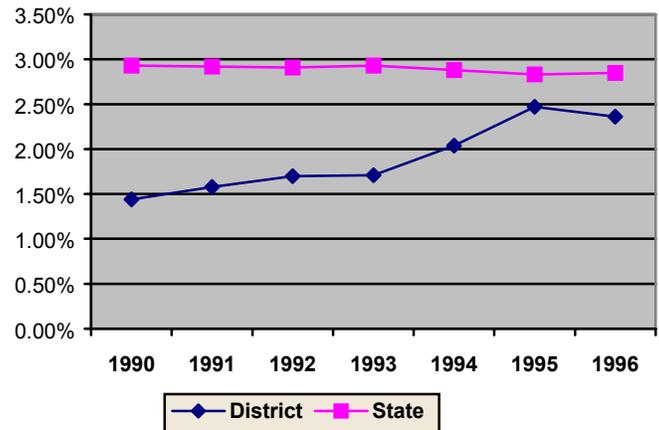
Why this Benchmark is Important

The growth engines of the New Economy are high-technology industries such as computer hardware and software, telecommunications and biotechnology. Measuring the Region's employment in these sectors provides an indication of our innovation capacity and the Region's capacity to embrace and employ technology-driven processes to spur industrial growth.

Trend Analysis

Between 1990 and 1996, high technology jobs⁷ (for example, employment in computer hardware, communications, and biotechnology) as a share of total regional employment have increased from approximately 1.5 percent to just over 2.3 percent. Over the same time period, the share of high technology jobs in the State of Florida has essentially stayed the same at just below 3.0 percent. For both the Region and State more effort needs to be focused on high-technology job creation as a direct stimulant to further economic growth. A

Figure II.4: High Technology Jobs as a Percent of Total Jobs in District 1990 - 1996



⁶ The State New Economy Index, Progressive Policy Institute, 1999

⁷ As defined by Regional Financial Associates, 1999

recent report⁸ issued by the Progressive Policy Institute determined that the leading high technology job states are primarily located in the Northeast, the Mountain States and the Pacific Region. The top five ranked states are shown in Table II.2.

Table II.2: Top 5 States with High Technology Workforce

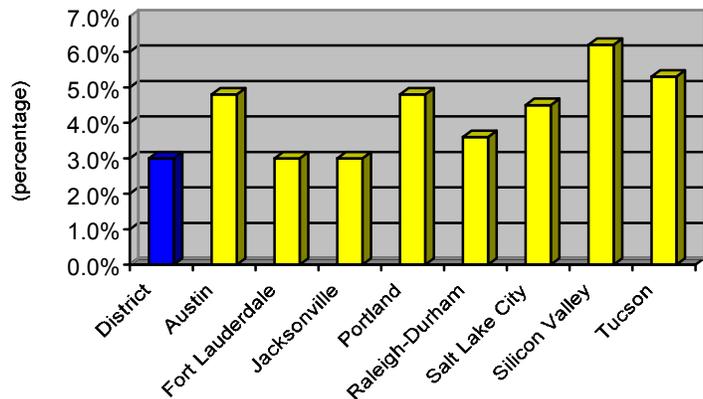
State	High Technology Jobs as a Percentage of all Jobs
1. New Hampshire	8.2 percent
2. Colorado	8.0 percent
3. Massachusetts	7.7 percent
4. California	6.9 percent
5. Vermont	6.3 percent
U.S. Average	4.5 percent

Source: Progressive Policy Institute, 1999

**How Treasure Coast
 Compares to Other
 Regions**

The four regions with the highest proportion of high technology employees are Silicon Valley (6.2 percent), Tucson (5.3 percent), Austin (4.8 percent) and Portland (4.8 percent). The Treasure Coast Region has the smallest proportion of high technology workers at about 3.0 percent.

Figure II.5: High Technology Jobs as a Percentage of All Jobs 1997



⁸ The State New Economy Index, Progressive Policy Institute, 1999

Policy Directions – Human Resources

The initial Overall Economic Development Program (OEDP) plan offered two strategies for enhancing the District’s Human Resources foundations:

Objective

- Enhance job training and educational partnership programs to meet regional industry needs

Strategies

- Cultivate collaborative partnerships between the education and business sectors to develop appropriate training programs
- Coordinate with regional workforce development providers

Additional Actions

- Support the development of a District-wide small business entrepreneurship network

TECHNOLOGY RESOURCES

TECHNOLOGY RESOURCES

Indicators

- Concentration of Patents
- Research and Development

“In the old economy, economic growth stemmed from increases in the supply of capital, labor or natural resources. Growth in the New Economy stems from increases in knowledge and innovation and its widespread adoption. Technological innovation is responsible for over two-thirds of per-capita economic growth.”

*The State New Economy
Index*

Progressive Policy Institute
Technology & New
Economy Project

The transition to a new economy necessitates a commitment to investment in research and development and educational initiatives designed to prepare the workforce of today for the challenges of the future. One of the ways to measure the Region’s competitiveness in technology resources is to review two aspects:

1. Concentration of patents
2. Research and development activities

Technological innovation drives growth in the New Economy. It is estimated that two-thirds of per capita economic growth are fueled by technological innovation. Speed, knowledge and innovation are hallmarks of the New Economy and are characteristics which differentiate our industrial economy from our knowledge-based economy. These characteristics are highlighted in Table II.3.

Table II.3		
Economy-Wide Characteristics:	Old Economy	New Economy
Markets	Stable	Dynamic
Scope of Competition	National	Global
Organizational Form	Hierarchical, Bureaucratic	Networked
Industry:		
Organization of Production	Mass Production	Flexible Production
Key Drivers of Growth	Capital/Labor	Innovation/Knowledge
Key Technology Driver	Mechanization	Digitization
Source of Competitive Advantage	Lowering Cost Through Economies of Scale	Innovation, Quality, Time- To-Market and Cost
Importance of Research/Innovation	Low-Moderate	High
Relations with Other Firms	Go It Alone	Alliances and Collaboration
Workforce:		
Policy Goal	Full Employment	Higher Real Wages and Incomes
Skills	Job-Specific Skills	Broad Skills and Cross- Training
Requisite Education	A Skill or Degree	Lifelong Learning
Labor-Management Relations	Adversarial	Collaborative
Nature of Employment	Stable	Marked by Risk and Opportunity
Government:		
Business-Government Relations	Impose Requirements	Encourage Growth Opportunities
Regulation	Command and Control	Market Tools, Flexibility

Indicator	Trend	Florida Rank ⁹
Concentration of Patents (The number of patents issued to companies or individuals per 1,000 workers)	Increasing	27th

Number of Patents Issued in Region is Increasing Steadily

Why this Benchmark is Important

The concentration of patents is a good indicator of a region’s capacity to generate new ideas and support innovation.

Trend Analysis

Over the past five years, patents issued to individuals and corporations within the Treasure Coast Region have increased from

301 to 438, an increase of more than 45 percent.

How Treasure Coast Compares to Other Regions

The Treasure Coast Region obtained a total of 1,806¹⁰ patents or, an average of 0.61 patents granted per 1,000 workers per year. The highest number of patents issued in any region in the United States was in Silicon Valley with 3.14 patents per 1,000

workers. Its patent rate is more than twice as high as the region with the second highest patent rate in Austin, Texas. The Treasure Coast Region leads five out of the eight comparison regions in average number of patents.

Figure II.6: Regional Patent Growth 1994 - 1998

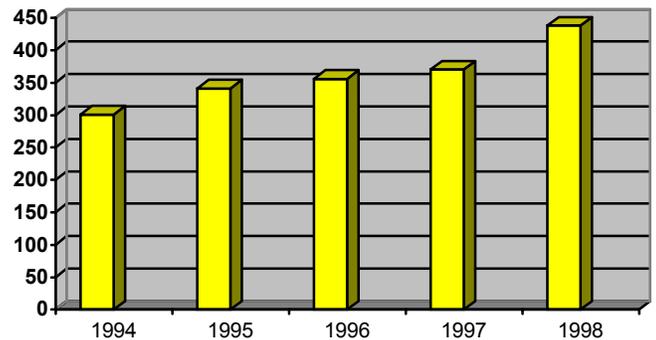
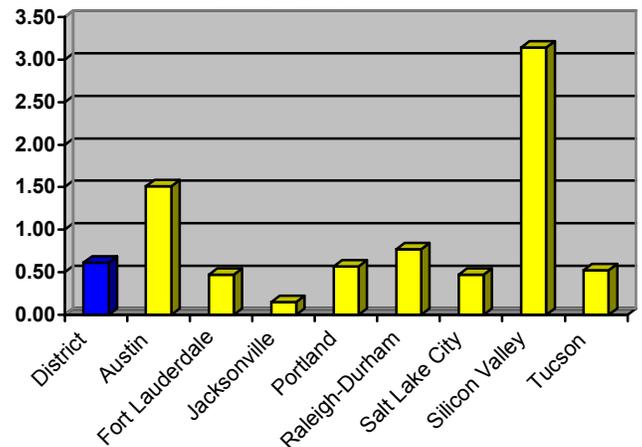


Figure II.7: Average Number of Patents Granted Per 1,000 Employees 1994 - 1998



⁹ The State New Economy Index, Progressive Policy Institute, 1999

¹⁰ Patents issued within combined Fort Pierce-Port St. Lucie and West Palm Beach-Boca Raton MSAs.

Indicator	Trend	Florida Rank ¹¹
University Research and Development Expenditures (Total research and development expenditures at universities and colleges)	Increasing	44th

University-Lead Research and Development Growing

Why this Benchmark is Important

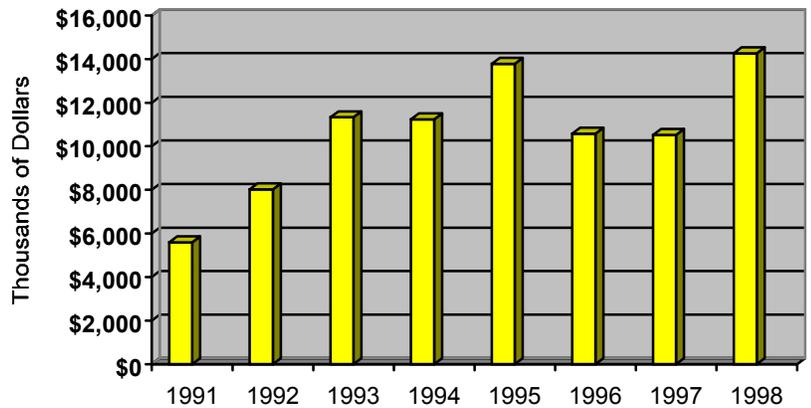
This benchmark gauges the Region’s capacity for innovation by measuring the amount of total research and development expenditures at the universities serving the Region. The assumption is that regions that attract investment in basic research and development have the knowledge resources to spur innovation.

Trend Analysis

Since 1991, total research and development expenditures at the Region’s universities and colleges has increased from \$5.6 million to more than \$14.2 million in 1998. This represents an overall increase of over 153 percent.

According to the National Science Foundation Survey of Research and Development Expenditures, total research and development expenditures at colleges and universities across the nation totaled \$25.7 billion in 1998.

Figure II.8: University R&D Expenditures 1991 - 1998



¹¹ 1999 Development Report Card for The States, Corporation for Enterprise Development, 1999.

How Treasure Coast Compares to Other Regions

The District's level of university research and development in 1998 was the lowest of any of the eight comparison regions.

Foundation Partners

The following organizations reflect the Region's best public-private partnerships designed to spur entrepreneurial talent and enhance innovations within the commercial industries:

Incubators

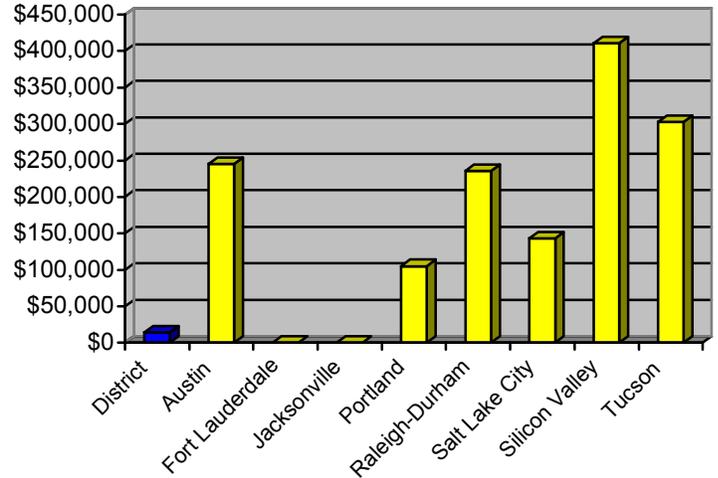
- Indian River Community College Small Business Development Center
- Indian River Community College Technology Development and Training Center
- University of Florida EDA University Center
- Enterprise Development Corporation

Significant Events

A significant event that would dramatically accelerate the State's and Region's attractiveness to developing and established Internet businesses is the establishment of a Network Access Point (NAP) in South Florida. A NAP provides a direct link to the Internet backbone. Presently, there are four primary national access points: San Francisco, Chicago, New York and Washington D.C. Legislation to sponsor the creation of a NAP in South Florida has been filed by State Senator Ron Klein in the Florida State Senate. This legislation known as "The IT Florida.com Act of 2000" would:

- Support a public-private sector partnership to build the South Florida NAP

**Figure II.9: University R & D Expenditures
1998**
(dollars in thousands)



- Promote high-technology business incubator operations in South Florida

The establishment of the “Internet Coast,” a consortium of businesses and organizations in Miami-Dade, Broward and Palm Beach counties, have come together to promote South Florida as a worldwide hub for Internet-related businesses. This movement could have significant positive implications for the Treasure Coast Region.

Policy Directions – Technology Resources

The Region needs to do more to support and engender technological innovation to drive the economy. Making the transition to a knowledge-based economy requires additional investment in the Region’s technology and knowledge resources. The initial Overall Economic Development Program (OEDP) plan presented the following technological enhancement strategies:

Objective

- Enhance educational opportunities within the Treasure Coast District

Strategies

- Support and promote the development of a new four-year educational institution in the Treasure Coast District

Additional Actions

- Support increased investment in higher education, particularly in science and engineering
- Support the commercialization of innovation
- Support and promote the advancement of the Internet Coast
- Support a Regional initiative to develop a Network Access Point
- Develop a Region-wide incubator information exchange and referral network

Additional Information



www.internetcoast.com

University of Florida EDA University Center

www.4stac.org

IT Florida.com

www.ITFlorida.com

Enterprise Development Corporation

www.edc-tech.org

FINANCIAL CAPITAL

FINANCIAL CAPITAL

Indicator

- Venture Capital

Access to capital for new start-ups and existing businesses is an important contributor to sustainable economic development. One way to measure available financial capital is to examine venture capital flows into the Region. Venture capital is the main source of equity that is invested in businesses with high growth potential that in turn can help in the formation and expansion of growth industries.

Indicator	Trend	Florida Rank ¹²
Venture Capital (Total venture capital investment in the state and region)	Increasing	12th

Florida Venture Capital Investment Soars

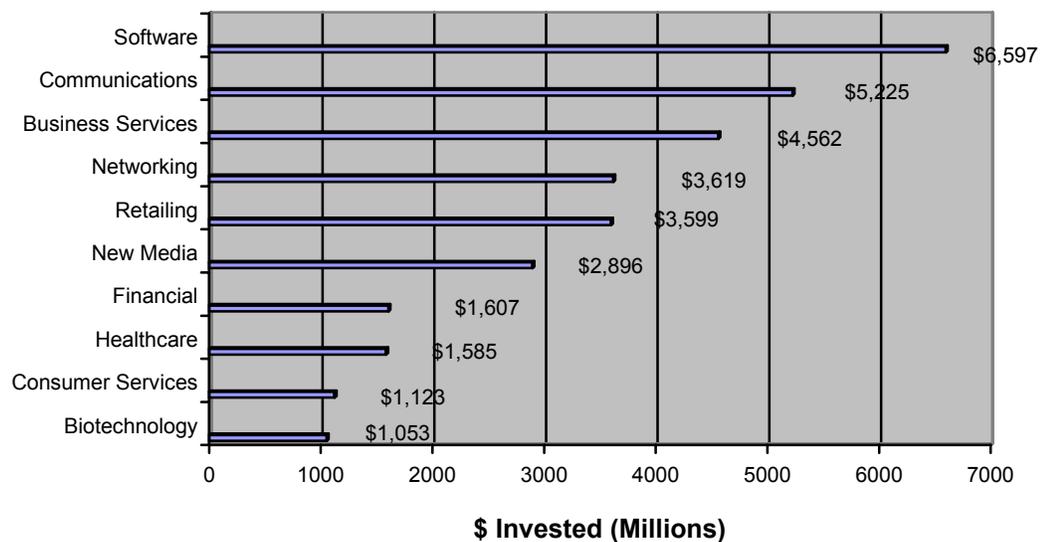
Why This Benchmark is Important

The amount of venture capital that flows into a region is an indicator of economic dynamism and future growth potential.

Trend Analysis

Venture-backed capital investments broke all previous records in 1999 as 4,006 companies nationwide received \$35.6 billion as reported

Figure II.10: Investments by Top Ten Industries, 1999



¹² The State New Economy Index, Progressive Policy Institute, 1999

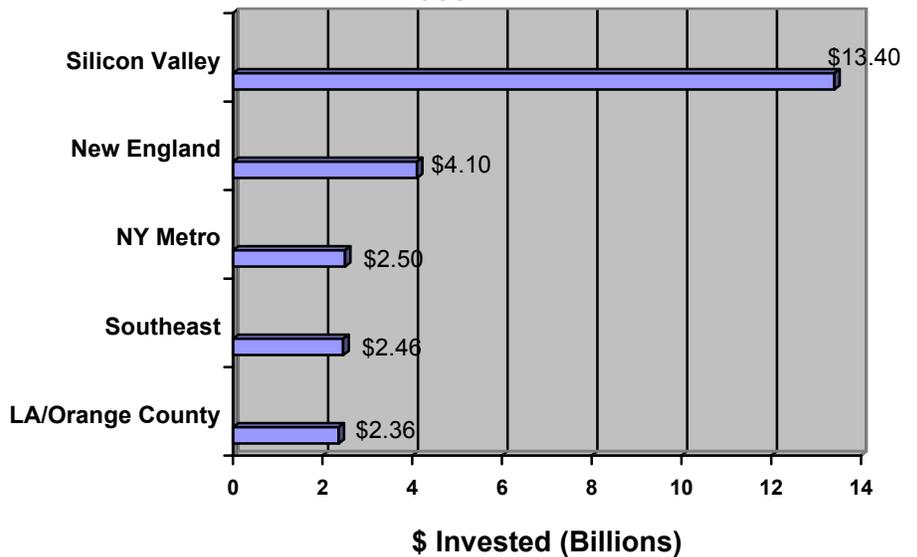
by Price Waterhouse Coopers in the Money Tree Survey. The 1999 investment level represents a 150 percent increase over 1998 at \$14.2 billion. The State of Florida's share of venture capital increased dramatically as well from \$301.4 million in 1998 to \$724.6 million in 1999. The huge surge in venture capital investment was lead primarily by technology and the Internet. The investment capital breakdown by industry is illustrated in Figure II.11 below.

Nationally, the software industry captured the highest amount of capital invested at approximately \$6.6 billion, increasing 88 percent over last year's total investment amount. Telecommunications captured the second largest share of capital at \$5.2 billion for the year. Business Services had the largest increase of any sector over the past year, growing by more than 522 percent to \$4.5 billion.

Comparing all regions, Silicon Valley attracted the most capital investment dollars at \$13.4 billion followed by New England with \$4.1 billion. The New York Metropolitan region, Southeast and Los Angeles/Orange County regions followed with more than \$2.3 billion each (See Figure II.11).

Florida's share of the Southeast's venture capital investment dollars at \$724 million represented almost one third of the total venture capital investment flow into the entire Southeast region. The Southeast region is defined as North Carolina, Georgia, Florida, Tennessee, South Carolina and Alabama.

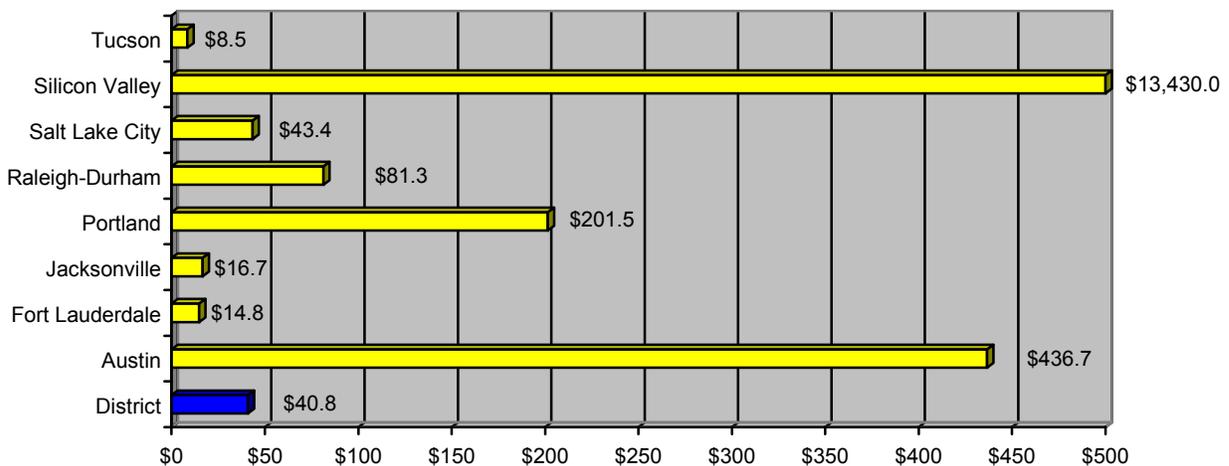
Figure II.11: Investments by Top 5 Regions, 1999



How Treasure Coast Compares to Other Regions

As mentioned, Silicon Valley California captured the most venture capital funding of any region in the nation in 1999 at \$13.4 billion. The Austin and Portland regions attracted \$436.7 and \$201.5 million, respectively. The Treasure Coast Region attracted almost \$41 million in venture capital investment or approximately 6 percent of the total venture capital invested throughout Florida. The Jacksonville, Fort Lauderdale and Tucson regions had the least amount of venture capital investment at \$16.7, \$14.8 and \$8.5 million, respectively.

**Figure II.12: Venture Capital Investments by Region
1999
(millions of dollars)**



Foundation Partners

The following group of community development organizations and government agencies help entrepreneurs and existing businesses in the Region access capital to promote start-ups and expand operations:

- Business Loan Fund of the Palm Beaches, Inc.
- Palm Beach County Economic Development Office
- Enterprise Florida
- Florida Business Development Corporation
- Florida Venture Forum

Policy Directions – Financial Capital

The Region needs to enhance the *continuum of lending* mechanisms throughout the Region. The continuum of lending relates to the path that many small businesses follow to access increasing amounts of credit over time as they grow. Although we have focused on venture capital funds above, a well-developed lending continuum would support access to a variety of financial resources including microfinance, revolving loan funds, commercial credit as well as public sector grants and loans. The initial OEDP plan presented the following objectives and related strategies for enhancing the District’s financial capital foundations:

Objective 1

- Increase local industry awareness of economic development assistance programs

Strategies

- Identify available programs and include them in resource guides for new and expanding businesses
- Help economic development agencies market local business assistance programs

Objective 2

- Increase availability of financing to small and minority-owned businesses

Strategies

- Provide technical assistance to small business owners and non-profit organizations seeking development assistance
- Develop District loan programs to address the needs of small businesses

Additional Actions

- Establish a Treasure Coast Revolving Loan Fund program
- Develop mechanisms to gauge small business access to capital

BUSINESS CLIMATE

BUSINESS CLIMATE

Indicators

- Cost of Doing Business
- Regional Business Survey

The term “Business Climate” can be characterized as the combination of factors that determines whether an area is an attractive place to do business. Generally, there are three main components of business climate¹³:

1. Labor, plant and land
2. Quality of life and amenities
3. The extent to which an area and its elected officials are perceived as “pro-business”

One way to understand the Region’s business climate is to examine the actual costs of doing business. Three considerations underlie the cost of doing business¹⁴ – unit labor costs, tax burdens and energy costs. By developing a relative cost of doing business index, business costs can be compared across regions. Another way to assess the Region’s business climate method is to survey businesses in the area and gauge overall business sentiment. This section explores the Region’s business climate from both of these perspectives within the context of the rapidly changing world economy and the implications for public policy.

The onset of the New Economy and the sweeping structural transformation it brings to the world economic landscape has profound implications for public policy and the public sector. In the old economy, business to government relations were governed by a hierarchical command and control model that delivered services inefficiently. Since business strives on constant innovation and customer service, government needs to become more user friendly. Developing customer-oriented government will improve a region’s business climate, enhance its quality of life and stimulate economic growth. The National Governors’ Association recognizes that state government must transform itself to provide a supportive

“Government should become as fast, responsive, and flexible as the new economy and society with which it interacts. The new model of governing should be decentralized, non-bureaucratic, catalytic, results-oriented, and empowering.

*Rules of the Road:
Governing Principles for
the New Economy
Progressive Policy
Institute*

¹³ *Improving Your Business Climate*, Corporation for Enterprise Development, 1996.

¹⁴ *The Relative Cost of Doing Business Index*, Regional Financial Associates, 2000.

environment for business and citizens to prosper¹⁵. To be successful in the new century, state government must become:

- Flexible and adaptable
- Consumer-friendly
- Reinvented with technology
- Innovative
- Performance-driven
- Accountable

“If state government does not adopt these characteristics, it will lose its highest skilled and educated workers, its entrepreneurs, the private capital that sparks innovation and business expansion, and the social wealth that supports the well-being of a region.”

*State Strategies for the New Economy
National Governors’ Association*

¹⁵ *State Strategies for the New Economy*, National Governors’ Association, 2000.

Indicator	Trend	Florida Rank
Business Climate	Indeterminate	17

Business Climate Needs Improvement

Why This Benchmark is Important

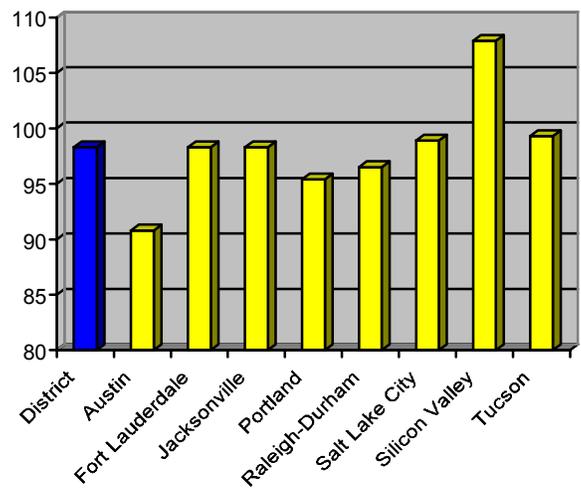
Improving the business climate will enhance the Region’s economic competitiveness and future growth prospects. Therefore, gaining an understanding of the Region’s business climate provides an important indication of the level of economic development and issues that need to be addressed.

Trend Analysis

How Treasure Coast Compares to Other Regions

Out of the nine regions surveyed, Silicon Valley had the highest cost of doing business (107.9) followed by Tucson (99.3) and Salt Lake City (98.9). The Treasure Coast Region’s Cost of Doing Business Index (98.3) in 1998 was approximately 2 percent below the national average (100) and was lower than or equal to five of the comparison regions.

**Figure II.13
 Cost of Doing Business Index
 1998**

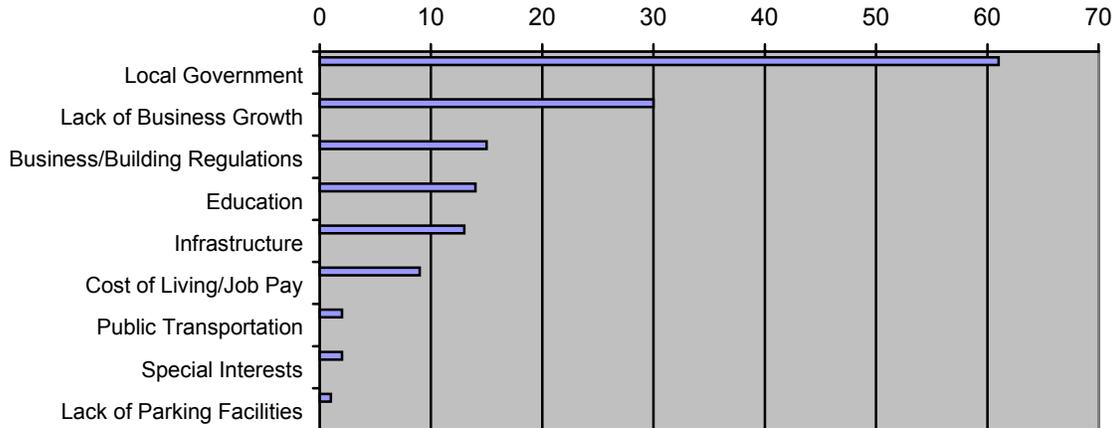


The Treasure Coast Regional Planning Council surveyed a broad section of Regional businesses to gauge business sentiment. The survey asked businesses two questions. “What do you see as barriers or impediments to commerce in the Regional Area community?” and “What are the possible solutions to addressing the impediments to commerce in our community?.” The responses are illustrated in the following figures.

Regional Business Survey

“What do you see as barriers or impediments to commerce in the Regional Area community?”

Figure II.14: BUSINESS BELIEVES GOVERNMENT IS THE PROBLEM



Clearly, the business climate is influenced by the perception that local government hampers economic growth. This warrants further study.

Foundation Partners

All of the local governments, economic development organizations, chambers of commerce, community development corporations and schools in the Region play a key part in shaping the perception of the business climate. A conscious desire to improve the business climate of the Region goes hand in hand with the desire to create a vital and prosperous economy with opportunity for all residents.

Policy Directions – Business Climate

All of the economic resources that underpin the Region’s economy – technology, capital, human resources and infrastructure are policy areas that affect the Region’s business climate. Enhancing the Region’s economic foundations will create a better regional business climate. One of the suggested means to improve the overall business climate in the Region outlined in the initial OEDP plan was through research and marketing efforts.

Objective 1

- Support local government efforts to diversify the District economy and to make the District an effective competitor

Strategies

- Provide assistance to local governments on federal, state and local economic development assistance programs
- Identify locations for and encourage the development of industry clusters in the District
- Encourage and support industry cluster research and development activities

Objective 2

- Research, develop and disseminate information to facilitate economic development efforts.

Strategies

- Develop summary demographic and economic information for the District
- Develop marketing materials for the District highlighting its unique qualities

Additional Actions

- Launch a Region-wide cluster-based competitiveness study and process

INFRASTRUCTURE

INFRASTRUCTURE Enhancing the Region's physical infrastructure is an essential underpinning of economic development. Roadways, airports and seaports are the key components that link the Treasure Coast Region with other regions and other countries.

Indicator

- Travel Rate Index

Facilitating the movement of goods and people is crucial for industrial and regional competitiveness. Increasingly, businesses depend more and more on a seamless, integrated multimodal transportation network. A study¹⁶ recently conducted for the Florida Chamber Foundation highlights the critical importance of transportation to the State's economy. In 1997, Florida's highways, rail lines, seaports, airports and spaceport in 1997 moved:

- Over 350 million tons of freight to other parts of the United States
- Nearly \$64 billion in exports and imports to and from other nations
- Almost 47 million out-of-state tourists
- A total of 32 commercial, NASA and military launch missions

Despite these impressive statistics, Florida fails to meet its infrastructure needs as the economy continues to grow at record rates. The Florida Chamber Foundation's report, *Transportation Cornerstone Florida*, cites increasing congestion, level of service shortfalls, and physical infrastructure inefficiencies in the statewide network network. Specifically:

- ➔ More than 65 percent of all urban Interstate lane-miles in Florida are moderately or highly congested during peak periods
- ➔ More than 37 percent of all highway bridges are structurally or functionally deficient
- ➔ Almost 60 percent of all airports are at or near threshold capacity
- ➔ Almost every major seaport and airport is contending with inefficient highway, rail and transit access for movement of goods and people

“...the gap between Florida's existing transportation capacity and the needs of its burgeoning economy and population is large and growing. Every recent estimate of the unfounded transportation need in the state has been in excess of \$20 billion.”

¹⁶ Florida Chamber Foundation, *Transportation Cornerstone Florida: Moving Florida's Economy into the 21st Century*, 1999.

The study also focused on the transportation system’s prominent link to Florida’s high technology cluster. Due to the high degree of specialization and outsourcing in the industry, high technology industries tend to have long supply chains and distribution networks. Also, these industries rely on just-in-time delivery operations. Transportation delays of as little as 20 minutes can paralyze high-tech companies waiting for parts and trying to fill orders within short delivery time frames.

A useful method of determining the efficiency and capacity of the Region’s transportation infrastructure is to examine commute times and traffic delays experienced by residents.

Indicator	Trend	Florida Rank
Travel Rate Index (Percentage of extra time required to travel during peak periods)	Worsening	19th

Why This Benchmark is Important

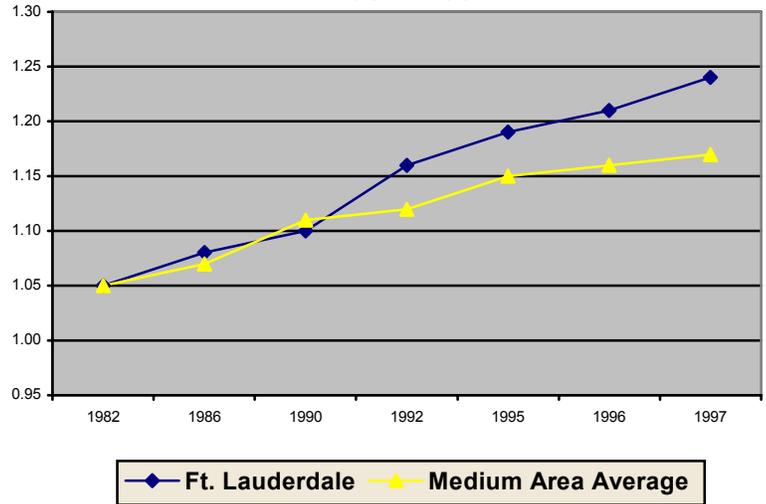
Having an integrated and efficient transportation network is critical to the Region’s economy and its quality of life. One way to conceptualize traffic congestion is to examine mobility measures – statistics that measure travel time and person movement. A measure used to indicate mobility is called the travel rate index¹⁷ (TRI). The TRI is a measure of the amount of extra time it takes to travel during the peak period. The travel rate (in minutes per mile) in the peak is compared to the free-flow travel time. A TRI of 1.30 indicates that it takes 30 percent longer to make a trip than it would take during free-flow speeds.

¹⁷ Texas Transportation Institute, The 1999 Annual Mobility Report,

Trend Analysis

The TRI increased for all urban areas¹⁸ between 1982 to 1997 by an average of 181 percent. The Fort Lauderdale MSA registered a long-term increase in the peak period time penalty of 380 percent. Using the medium size metropolitan area measure as a proxy for the Treasure Coast Region reveals a large percent change in peak period time penalty of 240 percent. In 1982, drivers in medium metropolitan areas (over 500,000 people and less than 1 million) took 5 percent longer to make a trip during peak hours but by 1997, peak hour trips took 17 percent longer to make. On average, drivers in medium-size urban areas experienced 31 hours of delay per year due to traffic congestion.

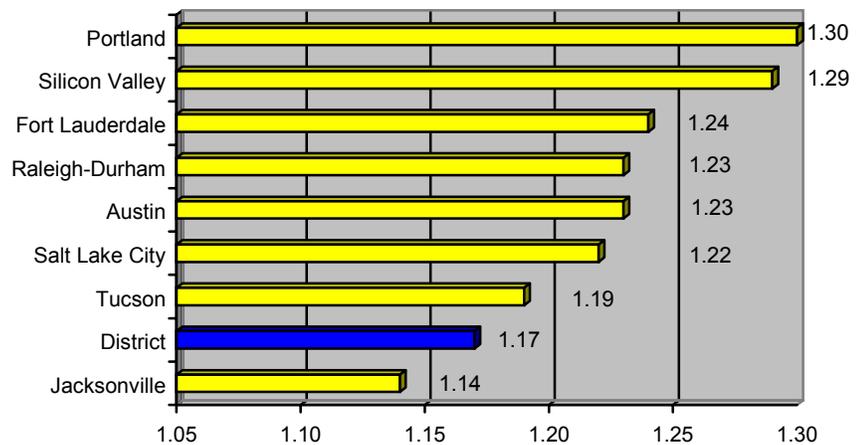
Figure II.15: Travel Rate Index, 1982 - 1997



How Treasure Coast Compares to Other Regions

The most congested regions in our comparison analysis are Portland and Silicon Valley with TRI rates of 1.30 and 1.29, respectively. The District's TRI of 1.17 is smaller than seven out of the eight comparison regions indicating that, generally, roadway congestion is not as severe in the Treasure Coast Region.

Figure II.16: Travel Rate Index, 1997



¹⁸ 69 urban areas in study.

ADVANCED COMMUNICATIONS

ADVANCED COMMUNICATIONS

Indicators

- Internet Connectivity
- “Wired” Towns and Cities

The emerging digital economy demands increased investment in electronic and communications infrastructure. Increasingly, businesses, especially those that are technology-based, require access to information on a worldwide scale. As regions across the nation and the world transition to the New Economy, growth in information technology will require specialized digital infrastructure. Florida’s Information Service Technology Development Task Force highlighted the importance of the information technology industry to Florida’s economy by noting that in 1998 the industry contributed \$8 billion in annual payroll. Annual average salaries for information technology employees at \$47,100 are 70 percent higher than the statewide annual average wage across all industries. The Task Force report also noted that merchandise exports of IT industries through Florida ports totaled \$5.2 billion. Clearly, information technology industries represent a cornerstone in Florida’s emerging knowledge-based economy. The Task Force report¹⁹ cited the following five infrastructure priorities to support Florida’s growing information economy:

- A fully deployed Statewide telecommunications backbone network
- Provide rural area access to information network
- Affordable access (last mile) to the backbone network
- Comprehensive integration of each component, and
- An In-State Global NAP

Increasingly, advanced communications infrastructure and transportation are major factors associated with expansion of the technology-generating sector of the economy. Having advanced infrastructure facilities has the potential to attract clean, high-technology industries to the District. Communications infrastructure is becoming increasingly important to enhance the development of clean high-technology industries.

¹⁹ Itflorida.com: Florida’s Gateway to Information Technology, 1999 Annual Report to the Legislature, Information Service Technology Development Task Force, February 14, 2000.

“...In the emerging digital economy, a significant share of both business and government transactions will be conducted through digital electronic means... In terms of productivity gains and increased standards of living, the digital economy is likely to do as much to foster state economic growth in the 21st century as the Industrial Revolution did in the early and mid-20th century.”

Indicator	Trend	Florida Rank
Internet Connectivity (The percentage of adults with Internet access)	Increasing	27th

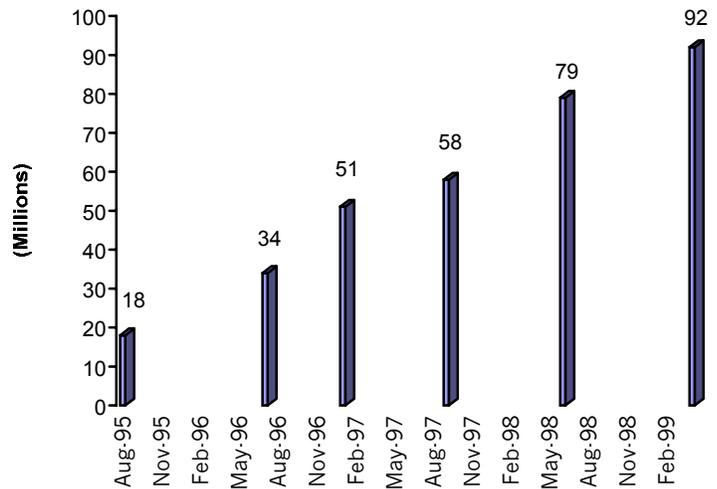
Why This Benchmark is Important

Internet connectivity provides a basic measure of a Region’s movement toward the digital economy. In one sense, Internet connectivity gauges a region’s willingness to grasp and utilize information technology in education systems and advanced business operations.

Trend Analysis

In 1995, approximately 18 million Americans and Canadians were using the Internet. By early, 1999 an estimated 92 million North Americans, or 40 percent of the population over the age of 16, reported that they use the Internet. By 2003, the online population is expected to stand at over half the population.

Figure II.17: Estimated Adult Internet Population in the U.S. and Canada

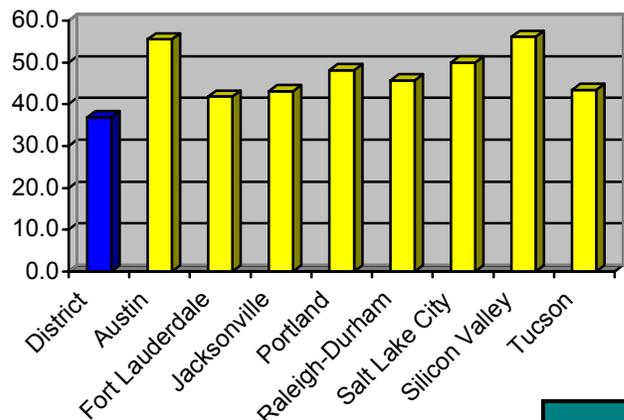


How Treasure Coast Compares to Other Regions

Alternate Method 1

One way of measuring Internet connectivity in a region is to determine the number of adults connected to the Internet.

Figure II.18: Percent of Adults Online 1999



According to statistics²⁰ on Internet use compiled by MIT's eBusiness@MIT Institute, the top two regions with the most intense Internet penetration were Washington, DC and San Francisco (Silicon Valley). Using the City of West Palm Beach as a proxy for the Treasure Coast Region, the number of adults online in 1999 was approximately 37 percent. Not surprisingly, Silicon Valley boasts an online population of more than 56 percent – the highest rate in the nation. Treasure Coast District Internet connectivity is the lowest of any of the comparison regions and the nation. With an online population of approximately 42 percent, Miami/Fort Lauderdale region's Internet usage is similar to that for the Treasure Coast.

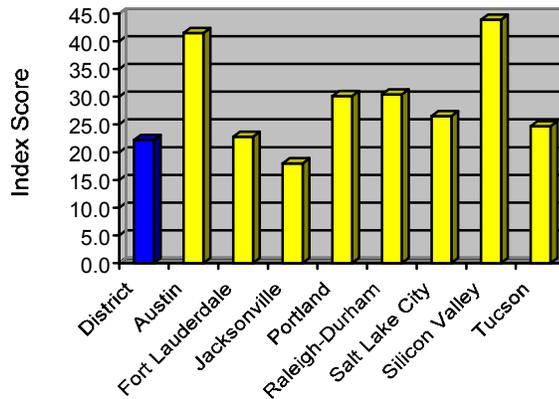
Alternate Method 2

An alternate method of measuring a region's state of Internet connectivity is to examine how "wired" it is. This measure, as reported in

YAHOO!'s Internet Life publication, *America's Most Wired Cities and Towns*, incorporates the following components:

- Home and Work Internet Use
- Directory Density
- Content Quality
- Domain Density
- Hosts Per Capita

Figure II.19
Internet Connectivity Index
1999



America's 50 Most Wired Cities

1. San Francisco, CA
2. Washington, DC
3. San Jose, CA
4. Austin, TX
5. Seattle, WA
6. San Diego, CA
7. Boston, MA
8. Dallas, TX
9. Atlanta, GA
10. Minneapolis, MN
11. Orange County, CA
12. Denver, CO
13. Los Angeles, CA
14. Raleigh-Durham, NC
15. New York, NY
16. Portland, OR
17. Chicago, IL
18. Philadelphia, PA
19. Orlando, FL
20. Baltimore, MD
21. Phoenix, AZ
22. Oakland, CA
23. Houston, TX
24. Salt Lake City, UT
25. Cincinnati, OH
26. Nashville, TN
27. Honolulu, HI
28. Sacramento, CA
29. Las Vegas, NV
30. Middlesex, NJ
31. Columbus, OH
32. Milwaukee, WI
33. Tucson, AZ
34. Detroit, MI
35. Miami, FL
36. Albany, NY
37. Ventura, CA
38. Indianapolis, IN
39. Bergen-Passaic, NJ
40. Norfolk, VA
41. Cleveland, OH
42. Fort Lauderdale, FL
43. Kansas City, MO-KS
44. Rochester, NY
45. **West Palm Beach, FL**
46. Hartford, CT
47. New Orleans, LA
48. Monmouth-Ocean, NJ
49. Tampa, FL
50. Knoxville, TN

America's 50 Most Wired Cities

YAHOO! Internet Life

²⁰ MIT, eBusiness@MIT, Internet Penetration in 64 US Markets, 2000.

Based on this measure, the Silicon Valley and Austin comparison regions are the most “wired.” The Treasure Coast District as represented by West Palm Beach has the second lowest level of connectivity compared to Jacksonville, Florida.

Policy Directions – Infrastructure and Advanced Communications

The initial OEDP plan outlined three objectives relating to infrastructure provision:

- Ensure that all communities in the Treasure Coast District have adequate infrastructure facilities
- Increase the availability of advanced infrastructure facilities
- Increase the availability of developed commercial and industrial sites that are ready for immediate use

Additional Actions

Treasure Coast Regional leaders need to keep informed of technological advances that could ensure that the Region’s electronic infrastructure meets the needs of industries. Three strategies are suggested to enhance the Region’s advanced communications infrastructure:

- Develop appropriate measures of the efficiency and effectiveness of the Region’s communications infrastructure.
- Regional leaders should seek input from industries on their existing and projected infrastructure needs.
- Support Internet access at public facilities. Ensuring that schools, libraries, community centers, workforce training centers, and other public agencies (particularly those in lower income areas) provide sufficient free Internet access will help to ensure that all the Region’s residents have access to this critical technology.

MAJOR NEW INFRASTRUCTURE INITIATIVES

Expanding port and airport facilities, transportation improvements, and a high-technology business incubator center are some of the new or expanding infrastructure facilities being built in the District.

Port of Palm Beach

- Skypass, the major transportation link between the waterfront and the Port's off-dock lands was completed in 1999. This project allows port properties to be united across U.S. Highway 1.
- A \$12 million dollar cruise terminal/office complex facility is currently under design and is expected to be completed by fall of 2000.

Palm Beach International Airport:

- One of the largest medium-hub airports in the United States underwent a major \$150 million expansion in 1988 including the construction of a new 530,000 square-foot terminal with 25 gates and the potential for 24 more gates.
- An additional 1,200 feet will be added to the west end of the airport's main east/west runway – runway 9L/27R.

St. Lucie County International Airport:

- Over the next two years, between 250,000 to 750,000 square feet of new commercial and industrial space could potentially be developed to support new businesses and existing business expansion.

Indian River County:

- County and airport officials are seeking federal funding to allow the development of new air traffic control tower at the Vero Beach Municipal Airport. This facility would improve airline safety operations and accommodate projected future traffic growth.

Martin County:

- Establishment of the new Technology Development and Training Center of the Treasure Coast – a high technology business incubator in the City of Stuart.
- Opened a new Air Traffic Control Tower at Witham Field.

General:

- Treasure Coast Regional Planning Council in partnership with the Martin and St. Lucie County Metropolitan Planning Organizations have launched a regional land use study.

Infrastructure Deficits

In contrast to these new infrastructure initiatives, which have a positive impact on the economic development of the District, are basic constraints such as a lack of water and sewer service to industrial and commercial centers, a lack of industrial building space, and a lack of developed industrial sites. Advanced communications facilities that are lacking include Internet infrastructure and fiber optic lines.

QUALITY OF LIFE

QUALITY OF LIFE

Indicators

- Housing Affordability
 - Crime Rate
 - Air Quality
 - Water Quality
 - Sprawl Index

Preserving and enhancing a region's quality of life is increasingly seen as a critical investment to ensure continued economic growth. Regions that strive to provide a high quality of life can more effectively attract and retain high-growth industries and skilled workers. The Treasure Coast District's exceptional natural resources and amenities provide a high quality of life to residents and tourists alike. These unique assets should be considered a regional competitive advantage and can be utilized to market the District to potential businesses and also to develop Eco-tourism opportunities. Rapid population growth brings economic opportunity to the District but also places pressure on the natural resources. The District's high quality of life needs to be protected for current and future generations of residents.

There is no universally accepted way to define a region's quality of life because it has many dimensions and meanings. This plan considers quality of life to be a reflection of:

- Housing affordability
- Personal safety
- Environmental quality
- Smart growth

Indicator	Trend	Florida Rank
Housing Affordability (The percentage of households that can afford to own a median priced home)	Worsening	n/a

Why This Benchmark is Important

Housing costs generally represent the largest proportion of a typical household budget. Availability of reasonably priced housing within a region is an important quality of life component – the lack of which forces families to spend a greater proportion of their household income on housing or commute long distances to find affordable housing. For low-income families, lack of affordable housing or housing that costs more than 30 percent of their gross household income creates a severe cost burden and reduces the amount of money they can allocate to other essential items such as food and medical services.

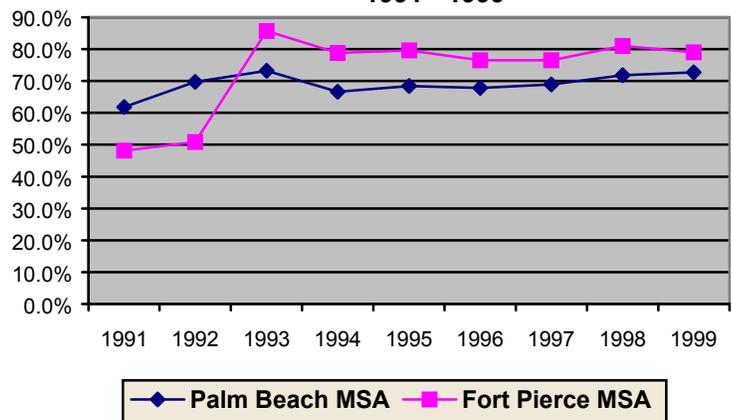
Trend Analysis

In 1993, the largest proportion of homes (73.2 percent and 85.7 percent) sold in the Treasure Coast Region (Palm Beach and Fort Pierce MSAs) could be considered affordable to families earning the median income.

The Housing Opportunity Index (HOI), developed by the National Association

of Home Builders, is defined as the share of homes sold in a given area that would have been affordable to a family earning the median income. The index assumes that the average household will finance a home purchase with a 90 percent loan and will not spend more than 28 percent of its gross income on housing – a conventional lending industry assumption. Since 1993 affordability, as measured by the HOI has declined. In 1999, the HOI Index stood at 72.7 percent and 79.0 percent for the Palm Beach and Fort Pierce MSA's, respectively.

Figure II.20: Percentage of Homes Sold That a Family Earning the Median Income Could Buy 1991 - 1999

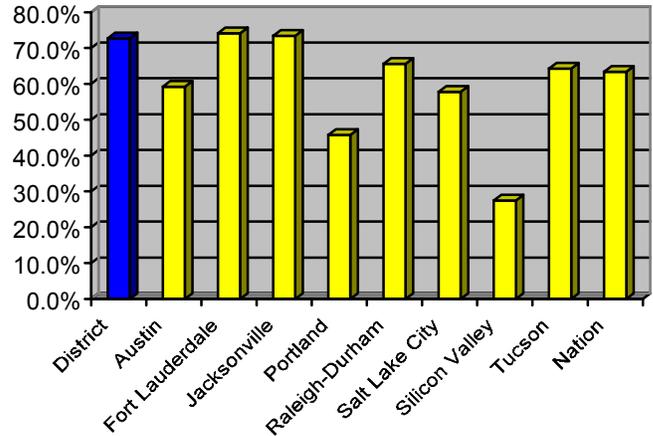


How Treasure Coast Compares to Other Regions

Comparatively, the Treasure Coast Region ranks as one of the most affordable regions. Based on information collected from the National Association of Homebuilders²¹, a median-income (\$55,600) family in the West Palm Beach – Boca Raton MSA could afford to purchase just over 72 percent of all homes

sold in the third quarter of 1999 (median sales price - \$126,000). In the Fort Pierce – Port St. Lucie MSA, a median-income family (\$47,500) could purchase 79 percent of the homes sold in the same period (median sales price - \$90,000). Only the Jacksonville and Fort Lauderdale metropolitan regions had comparable affordability rates with 73 and 74 percent of homes sold affordable to their respective median-income families. The least affordable region in the grouping is Silicon Valley. Only 27 percent of the homes sold in Silicon Valley could be purchased by a median-income family. Nationally, families earning the U.S. median income of \$47,800 could afford to purchase 63 percent of homes sold nationwide.

Figure II.21: Percentage of Homes Sold That a Family Earning the Median Income Could Buy 1999



²¹ National Association of Homebuilders, Housing Opportunity Index, Third Quarter of 1999

Indicator	Trend	Florida Rank ²²
Overall Crime (The overall crime rate per 100,000 population)	Improving	50th

District Crime Rate Continues to Decline

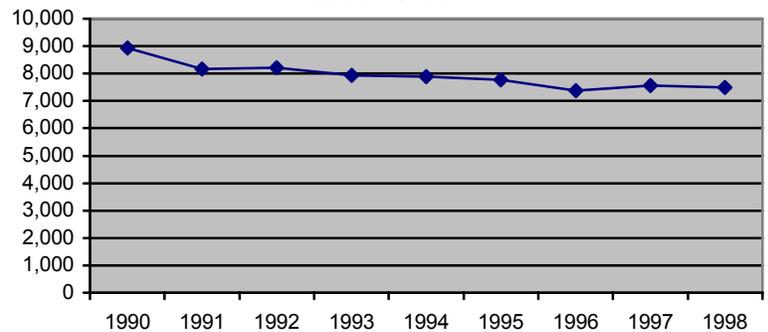
Why This Benchmark is Important

The overall crime rate is an important indicator of the amount of criminal activity in the District. A relatively high crime rate increases social costs and diminishes a region’s quality of life. A commonly used measure of crime rates nationally is “index crimes” (homicide, forcible rape, burglary, larceny and motor vehicle theft).

Trend Analysis

Since 1990, the District’s overall crime index per 100,000 population has declined fairly steadily from a high of 8,930 to just under 7,500. The crime index comprises crimes against property and crimes against persons.

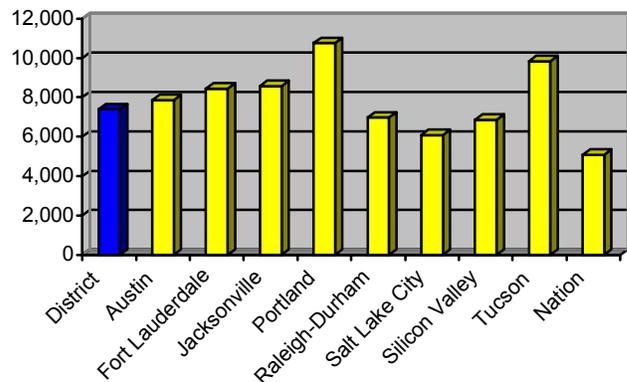
Figure II.22
 Overall Crime Rate Per 100,000 Population,
 1990 - 1998



How Treasure Coast Compares to Other Regions

The Region’s overall crime rate compares favorably to most of the comparison regions. At a rate of just under 7,400, the Region has a lower crime rate than five of the comparison regions. However, the State of Florida’s crime rate is the worst in the nation.

Figure II.23: Overall Crime Rate Per 100,000 Population 1996



²² 1999 Development Report Card for The States, Corporation for Enterprise Development, 1999.

Indicator	Trend	Florida Rank
Air Quality (U.S. EPA -defined Pollutant Standards Index)	Stable	n/a

Why This Benchmark is Important

Environmental quality is a prime component in the measurement and conceptualization of quality of life. One method of measuring air quality is to examine what the U.S. Environmental Protection Agency calls “Pollutant Standards Index” (PSI) values²³. PSI values are derived from pollutant concentrations reported daily in all urban areas of the country with populations over 200,000. A PSI value greater than 100 indicates that the level of the National Ambient Air Quality Standards (NAAQS) for at least one criteria pollutant (PM-10, SO₂, CO, O₃ and NO₂) has been exceeded on a given day. The number of days in a region with PSI values greater than 100 provides an indicator of air quality in urban areas.

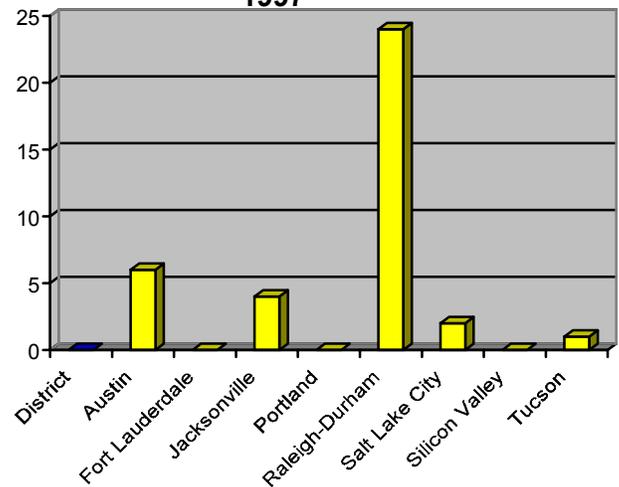
Trend Analysis

Over the last decade, air quality in the District can be generally described as good. Using the Palm Beach MSA as a proxy for the District, the Region experienced no days with PSI values greater than 100.

How Treasure Coast Compares to Other Regions

The Treasure Coast Region ties for first place in air quality with Fort Lauderdale, Portland and Silicon Valley – all registering no days in 1997 with PSI values of greater than 100. The Raleigh-Durham region had the highest incidence of negative air quality with 24 days with PSI values greater than 100.

Figure II.24: Number of Days with PSI Values Greater than 100, 1997



²³ Environmental Protection Agency, National Air Quality and Emissions Trends Report, 1997.

Indicator	Trend	Florida Rank
Water Quality (Index of Watershed Indicators values as defined by U.S. EPA)	Improving	n/a

Why This Benchmark is Important

Water quality is the other important component in any overall assessment of a region’s environmental quality. The water quality measure we use has been defined by the U.S. EPA as the “Index of Watershed Indicators” (IWI)²⁴. The IWI is a compilation of indicators relating to a watershed’s condition and vulnerability. Each watershed in the nation is identified as having good quality, less serious or more serious problems and high or low vulnerability.

Trend Analysis

Since the Overall IWI’s scores have only been published since 1997, only a very general statement about the Region’s watersheds quality can be made using this index. However, even within this short time frame, regional watershed quality, as indicated in Table II.4 below, has generally improved or has remained the same. The Lake Okeechobee, watershed is the exception. It has deteriorated over this time period as evidenced by more serious water quality problems.

- 1** Better Water Quality – Low Vulnerability
- 2** Better Water Quality – High Vulnerability
- 3** Less Serious Water Quality Problems – Low Vulnerability
- 4** Less Serious Water Quality Problems – High Vulnerability
- 5** More Serious Water Quality Problems – Low Vulnerability
- 6** Less Serious Water Quality Problems – High Vulnerability

²⁴ Environmental Protection Agency, Index of Watershed Indicators Version 1.4, September, 1999

Table II.4: Overall Index of Watershed Indicators Scores for Regional Watersheds

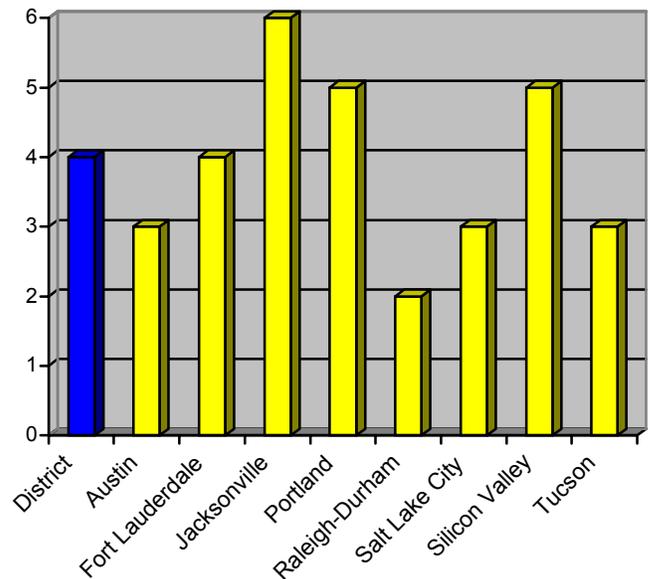
Watershed	Year	1	2	3	4	5	6
Everglades	1999						
	1998						
	1997						
Lake Okeechobee	1999						
	1998						
	1997						
Vero Beach	1999						
	1998						
	1997						
Northern Okeechobee Inflow	1999						
	1998						
	1997						
Upper St. Johns	1999						
	1998						
	1997						

Source: U.S. EPA, 1999 Index of Watershed Indicators

**How Treasure Coast
 Compares to Other Regions**

Treasure Coast watersheds are, generally speaking, healthier than watersheds in only three comparison regions – Jacksonville, Portland and Silicon Valley. Most of the comparison regions have healthier water quality.

Figure II.25
 Overall Index of Watershed Indicators Score,
 1999



Indicator	Trend	Florida Rank
Sprawl Index	Worsening	

Why This Benchmark is Important

As defined in TCRPC’s²⁵ Strategic Regional Policy Plan, sprawl is any type of development that does not create cities, towns and villages composed of neighborhoods and districts. Examples of sprawl are isolated housing subdivisions; strip commercial development; schools disconnected from the urban areas they serve; isolated office and industrial parks; and isolated, gated and walled development. Sprawl is costly for Treasure Coast residents as taxes increase to pay for ever-expanding roads, sewer and water lines and other municipal service needs generated by inefficient subdivisions and planned unit developments. Sprawl decreases quality of life in the Region.

The measure used to profile the general conditions of sprawl in the nation consists of four indicators developed by the Sierra Club²⁶ to rank programs adopted by the 50 states to manage growth and promote smart growth solutions, namely:

- Open space protection
- Land use planning
- Transportation planning
- Community revitalization

“...suburban sprawl is not inevitable. We are not doomed to a future of traffic congestion, air pollution, overcrowded schools, abandoned city centers, and lost open space and farm land. There are solutions... Communities and states across the nation are working hard to rein in sprawl and manage growth so that it enhances and does not undercut our quality of life.”

*Solving Sprawl
 The Sierra Club Rates
 the States
 Sierra Club*

The information provided by these indicators is only available at the State level so all comparisons are based on statewide rather than metropolitan area statistics.

²⁵ Treasure Coast Regional Planning Council

²⁶ Solving Sprawl: The Sierra Club Rates the States, Sierra Club, San Francisco, California, October, 1999.

Trend Analysis

National

The Sierra Club estimates that approximately 1 million acres of productive farm land and open space are destroyed by sprawling development every year in the U.S. Sprawl also threatens the nation's wetlands as well. It is estimated that every year more than 110,000 acres of wetlands are destroyed. The American Farmland Trust estimates that up to 70 percent of prime or unique farmland is now in the path of rapid development.

Regional

Since 1970, the Region has changed significantly. In 1970, approximately two-thirds (62 percent) of the Region's population lived in the older coastal cities on the mainland, barrier islands or in the small cities along Lake Okeechobee. Although approximately one-third of the population lived in unincorporated areas (34 percent), the Region was primarily one of coastal cities with an agricultural interior and large expanses of natural systems.

By 1990, however, only approximately one-third (33.4 percent) of the population lived in the older coastal communities and Glades settlements. Several "new" cities, (e.g. Greenacres, Port St. Lucie, Palm Beach Gardens, Royal Palm Beach) which had less than 4 percent of the Region's population in 1970, had exploded in population growth, and these cities now contain over 13 percent of the Region's population. Even more significantly, nearly a half million people moved to unincorporated areas, which now contain more than half of the Region's population (50.4 percent).

As a result of the dynamic population growth in the interior areas, agricultural uses disappeared or were pushed further to the west. This new and rapid growth also led to a number of serious problems such as stormwater management and great difficulty in building enough schools, parks, and roads to accommodate the new population. The new interior growth areas also absorbed a good deal of the vitality which was formerly found only in coastal cities. While many coastal cities continued to grow in population, much of this growth was a result of annexation. In many cases, the older parts of coastal cities have experienced distress.

A 1998 sprawl report²⁷ produced by the Sierra Club indicates that two Florida cities – Orlando and West Palm Beach were among the “five most sprawl-threatened medium cities.” During the 1980’s, West Palm Beach’s urban area expanded by nearly 65 percent. Between 1990 and 1996, the City’s land area has grown by 75 percent.

In recent years, however, a number of cities in the Region have initiated and carried out successful revitalization efforts. In the City of Delray Beach, downtown revitalization efforts date from the creation of the Downtown Development Authority in 1971. Efforts gained momentum in 1985 with the formation of a Community Redevelopment Agency. Citizen groups recommended plans for a downtown streetscape, and the City’s Comprehensive Plan of 1989

promotes a vision of a “village like community by the sea.” As a result of these efforts, the City’s downtown has once again become the heart of the community. Delray has maintained a compact urban core centered on Atlantic Avenue, and downtown neighborhoods have remained vital components. There has been significant public investment including major streetscape improvements, landscaping, improvements to alleys, park redevelopment, reuse of abandoned school property, etc. The City feels it is at a beginning of a major revitalization of the downtown area and acknowledges the need to remove disincentives to development and replace them with incentives to attract business to downtown.

Other cities in the Region have a history of revitalization and redevelopment efforts although there are few major success stories. Many cities in the Region have held planning charrettes and initiated redevelopment efforts in recent years.

Suburban growth has slowed, but existing regulations and market practices (i.e. Bank lending criteria, location of public infrastructure, etc.) still encourage western expansion. The various participants in the development process are beginning to experiment with better development patterns in the hope of preventing some of the shortcomings of the past. Most

***FIVE MOST SPRAWL-
THREATENED MEDIUM CITIES***

1. *Orlando, FL*
2. *Austin, TX*
3. *Las Vegas, NV*
4. ***West Palm Beach, FL***
5. *Akron, OH*

*The Dark Side of The
American Dream: The Costs
and Consequences of
Suburban Sprawl
Sierra Club*

²⁷ The Dark Side of the American Dream: The Costs and Consequences of Suburban Sprawl, 1998.

banks are lending money to mixed-use projects (i.e. Mizner Park, etc.) and some developers are designing well-balanced neighborhoods within close proximity of shopping and schools (i.e. Abacoa in Jupiter).

THE FUTURE

After over 400 years of recorded development history, the Treasure Coast Region is still growing. However, growth is not as rapid or as haphazard as it was in the past. The draining of wetlands is no longer permitted. Traffic problems have forced a more careful analysis of development impacts. New development and redevelopment projects have reached new levels of quality.

As the Treasure Coast Region matures, planning efforts should differentiate between acceptable and excellent. The Region is ready to set standards that reach beyond the mere provision of basic services and propose the creation of complete and sustainable communities.

How Treasure Coast Compares to Other Regions

In terms of Open Space Protection and Land Use Planning measures, the Treasure Coast Region ranks favorably (third) among the comparison regions and 14th and 11th nationally. On the sprawl aspect of community revitalization and transportation planning, the District ranks 4th among the comparison regions. Nationally, however, the State of Florida ranks 29th for transportation planning.

Figure II.26
Open Space Protection

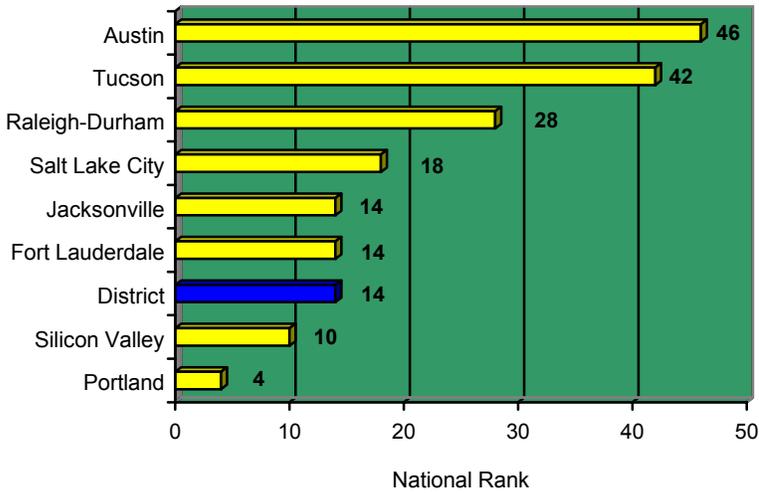


Figure II.27
Land Use Planning

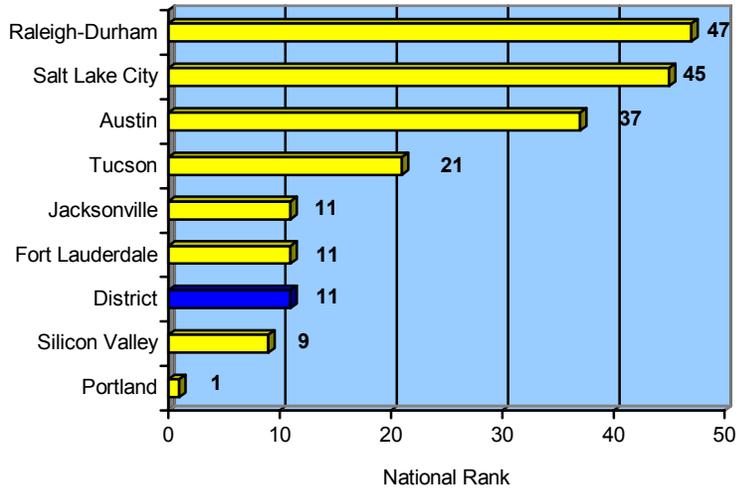


Figure II.28
Community Revitalization

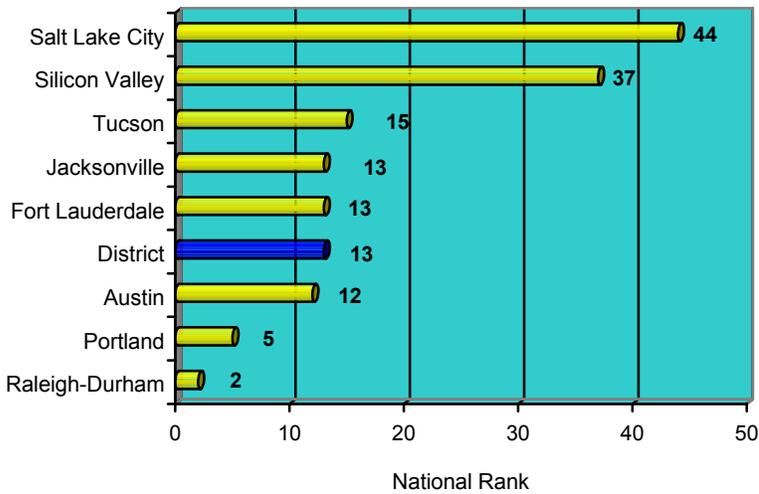
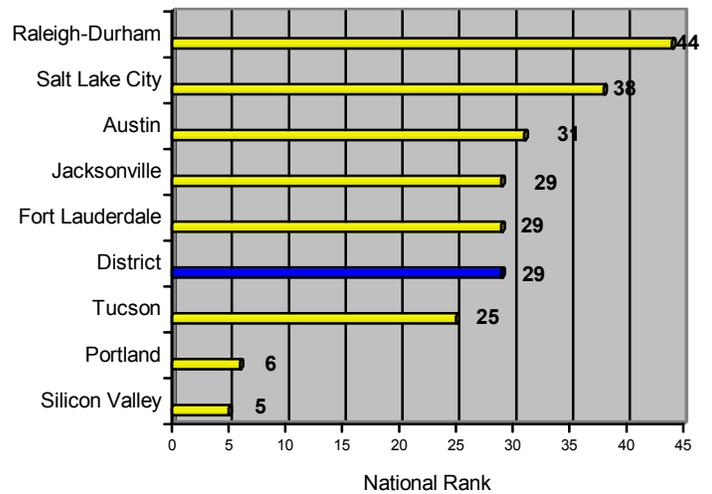


Figure II.29
Transportation Planning



Policy Directions – Quality of Life

The initial OEDP plan outlined one primary objective relating to natural resource preservation and quality of life enhancement.

Objective

- Support local government initiatives to protect and preserve the District’s natural resources and ensure that growth is well-planned and coordinated

Strategies

- Protect the District’s natural resources
- Encourage regionalism by marketing the District
- Coordinate with communities to develop eco-tourism, greenways and similar conservation corridors where possible

Additional Actions

- Support regional and multi-jurisdictional initiatives to improve the overall quality of life

ECONOMIC INFRASTRUCTURE CAPACITY

The District's economic infrastructure capacity is relatively strong in some component areas – Technology and Financial Capital for example - but relatively weak in others – Human Resources, Business Climate and Infrastructure (see Table 11.5).

Human Resources. *Educational Standards are Improving.* The District's workforce has become better educated over time as evidenced by the increasing percentage of the population over age 25 that has obtained a bachelor's degree or more. Since 1990, educational attainment for this population group has increased from 18.3 percent to 22.5 percent.

Low Proportion of High Technology Jobs. At about 3 percent, the share of high technology jobs to total jobs in the District is lower than the national average of 4.5 percent and significantly lower than most of the comparison regions.

Technology. *Increasing Patent Growth and Concentration.* Treasure Coast patent growth has increased significantly along with patent concentration. Patents in the District have increased by more than 45 percent over the past five years. Comparatively, the District leads five out of the eight comparison regions in patent concentration.

Low Level of University Research and Development. From 1991 to 1998, total research and development expenditures in the District have increased by a significant margin of over 153 percent. Comparatively, however, the District's research and development level is lower than any other region.

Financial Capital. *Florida Venture Capital Investment Soars.* Venture capital investments in Florida have doubled over the past two years from \$301 million in 1998 to over \$724 million in 1999. The District garnered almost \$41 million in venture capital in 1999, ranking sixth among comparison regions.

Business Climate. [The Region's Business Climate Needs Improvement.](#) The District ranked third overall as measured by the "Cost of Doing Business" indicator. However, when businesses were asked in a recently completed survey to identify the barriers to commerce, one out of every two businesses surveyed indicated that local government was an impediment to economic growth.

Infrastructure. [Our Transportation Infrastructure is Declining.](#) On average, drivers in medium-sized metropolitan areas like the Treasure Coast Region experienced a 240 percent increase in delay per driver during peak period travel. This translates to a dramatic change from an average annual delay per driver in 1982 of 7 hours to 31 hours in 1997.

Advanced Communications. [Internet Connectivity is Relatively Low.](#) With an online adult population of approximately 37 percent, the District's Internet connectivity ranks lower than any comparison region or the nation.

Quality of Life. [Threatened Quality of Life.](#) This indicator tracks progress in housing affordability, overall crime rate, environmental quality and proliferation of urban sprawl. Generally, while measures of overall crime and environmental quality (air and water) suggest improvement in conditions, housing affordability has declined, and rates of urban sprawl are threatening the Region's rural and unincorporated areas.

Table II.5: TREASURE COAST – ECONOMIC FOUNDATIONS INDICATORS

		Treasure Coast Region Rank By Indicator									
Economic Infrastructure		Measures	9 th	8 th	7 th	6 th	5 th	4 th	3 rd	2 nd	1 st
Human Resources	Educational Attainment										
	High Technology Jobs										
Financial Resources	Venture Capital										
Business Climate	Cost of Doing Business (least cost)										
Infrastructure	Transportation										
Technology Resources	Concentration of Patents										
	Research and Development										
Advanced Communications	Online Population										
	Internet Connectivity Index										
QUALITY OF LIFE											
	Housing Affordability										
	Crime Rate (lowest)										
	Air Quality										
	Water Quality										
	Sprawl Index										