

East Central Florida

Comprehensive Economic Development Strategy



September 2007

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CEDS Governing Board

East Central Florida Regional Planning
Council (32 members)

CEDS Strategy Committee

myregion.org Board of Directors
(103 members)

EXECUTIVE SUMMARY

I. The Comprehensive Economic Development Strategy

How shall we grow? How shall we live? How shall we prosper?

These are key questions for economic development in the high-growth six-county East Central Florida region, which had a 2006 population of 3.079 million and labor force of over 1.5 million.

After \$1 million in research, 20,000 citizens' input, seven years of study and 100% consensus of 86 cities and 7 counties (including Polk County), here are the short answers:

- Preserve a balanced ecosystem.
- Stop sprawling.
- Build more compact urban centers.
- Diversify the economy.
- Expand high tech and biomedical industries, among others.
- Improve global connectivity.
- Maintain a high quality of life.

How do we accomplish this?

By enhancing our advantages and overcoming our threats.

East Central Florida has many economic advantages.

Table 1 and Table 2 on the following pages display the advantages of the East Central Florida Economy and its potential threats.

Table 1 East Central Florida’s Economic Advantages

East Central Florida's Economic Advantages
Tourism
Disney World, Sea World, Universal Studios and Port Canaveral-based cruise ships make us a premier world tourist destination.
Olympic class sports training centers in Lake and Seminole Counties.
Environment
Our natural environment is world renowned for warm sunshine, blue skies, great beaches, the Atlantic Ocean and the largest collection of endangered wildlife and plants in the continental USA.
Growth, Connectivity, and Collaboration
Rapid population growth from 400,000 in 1959 to 3.5 million people in 2006 (including Polk County) has grown the East Central Florida local economies into a unified regional economy with a gross regional product of \$118 billion dollars.
Many colleges and universities are becoming nationally prominent, especially in research.
The region is well connected to the rest of the world. Orlando International Airport is one of the nation’s busiest, and Sanford International Airport is a major charter entry for foreign tourists. Port Canaveral is the world’s second-busiest cruise port. I-4, I-95 and the Florida Turnpike give good vehicle access. The recently announced commuter rail project will convert 61 miles of CSX track generally parallel to I-4 to passenger rail and connect the region from Deland on the north, to Orlando in the center, to Poinciana in the south.
Partnership with myregion.org. This planning and economic analysis arm of the Greater Orlando Chamber of Commerce includes representatives from local, regional and state government, citizens and private organizations. Their 18-month collaborative regional visioning project is galvanizing popular support for a shared vision of the region by 2050.
Other
Low unemployment
Kennedy Space Center and the Shuttle are world leaders in space launch and research.
Central Florida is the only place in the world that offers quadramodal transportation: Land, sea, air and space.
A growing high tech “cluster” and business incubators have brought more high paying jobs and industries to the region.
Orlando is world leader in computer simulation and modeling.
bioOrlando is the branding of the emerging Medical City at Lake Nona with four major new medical facilities soon to be constructed: UCF medical college and research center; Veterans Hospital; Burnham Institute for bio-medical research and Nemours Children’s hospital.
The region is a major agricultural producer of citrus, cattle and ornamental horticulture.

Table 2 Threats to East Central Florida's Economic Growth

Threats to East Central Florida's Economic Growth
Tourism
Violent crime in Central Florida and reported throughout the world via the internet can negatively affect the tourism industry.
Environment
Hurricanes. After four hurricanes hit the region in 2004-05 significant damage was inflicted, some of which has not yet been repaired. Worse, hurricane insurance costs shot up: annual house premiums can cost \$2-10,000 depending on location.
Rapid growth (50,000 new dwelling units per year from 2000-2005) is sprawling into sensitive environmental lands. This is destroying irreplaceable habitat of endangered species, which are part of Florida's fragile ecosystems. We have already reached one tipping point; shortages in the underground Floridan aquifer that serves the region compelled the water management districts to jointly announce no new withdrawals will be permitted after 2013.
Growth, Connectivity, and Collaboration
Projected population doubling to 7 million by 2050 necessitates a 240% increase in freight movement, but the region's transportation facilities are not planned to provide that ability.
Housing un-affordability. Housing costs doubled from 2000-05. Worse, property taxes doubled along with assessed values. Wages are below the national average, so buying a home, insuring it and paying property taxes is now unaffordable for many workforce residents. This is affecting business' ability to relocate key people to central Florida, and may be the key reason why student populations actually decreased in some districts in 2006 for the first time in decades.
Traffic congestion. Most of the major arterial roads in Orange County are rated level of service F (failure) at peak hours, and a recent study shows most of the region's arterials will fail by 2050. I-4 is a clogged central artery. Gridlock caused by long commutes and the lack of mass transit from suburban communities to traditional job centers, such as Orlando International Airport, Port Canaveral, Downtown Orlando, Disney World, Universal Studios, the I-4 corridor and University of Central Florida is adversely affecting the movement of goods and services throughout the region.
There are 93 different jurisdictions in the region; fragmented decisions on land use, transportation, and economic development are counterproductive and holding us back.
Other
Lack of alternative energy production. Dependence on coal generated electricity, and one railroad to deliver it, leaves the region susceptible to supply interruption in the event of a major disaster.
Higher fuel prices make it more costly for tourists to drive here.
The 2007 real estate recession has reduced housing starts by 40%. There is a two year supply of housing units on the market. With the national credit crunch and closure of many mortgage offices (several in the Orlando area) the housing industry has laid off many workers. The benefit may come in gradually reduced housing prices, but reductions are not likely to be enough to make housing widely affordable again.
Low K-12 educational attainments. Educational attainments vary widely across the region, but in general overall attainment scores on the FCAT are low. This is not a good indicator for growing highly skilled industries and technical fields.

The announced relocation of the massive Taft rail yard in Orange County means less global connectivity and a huge increase in heavy truck traffic on already congested I-4. Its relocation into Polk County outside the EDD means there is a need to connect the CSX and the FEC rail lines to back-feed one another in case of emergency and for freight distribution in this region.

The ending of the Space Shuttle program in 2010. There is a 4 year gap between the end of shuttle program and the start of the new constellation program. The region faces the loss of thousands of high paid high tech jobs during this period. This transition represents the potential loss of thousands of high paid high tech jobs during this period at a total economic impact of approximately \$2 billion statewide.

Freezes in the winter of 2007, and incurable citrus diseases (canker and greening) have hurt the citrus industry, as has foreign competition.

This Comprehensive Economic Development Strategy (CEDS) promotes regional economic development through public and private sector collaboration in order to be globally competitive in the 21st century. The study is funded equally by the U.S. Economic Development Administration (EDA) and the East Central Florida Regional Planning Council (ECFRPC), which prepared this document. Eligible projects can be funded by the US EDA with local matching resources.

The CEDS:

- provides a technical description of the area's economy;
- studies the major clusters within its workforce;
- examines demographic and economic characteristics;
- analyzes the region's industries, employment, and infrastructure;
- explore the EDD's economic strengths and weaknesses;
- identifies economic opportunities and threats;
- develops strategic findings and establish objectives that become the center of an action plan; and
- identifies projects that accomplish the action plan.

A Technical Advisory Committee comprised of the principal Economic Development Corporation's Directors and other business leaders was established to guide the analysis. The ECFRPC's 32-member representatives are the Governing Board. The *myregion.org* 103-member Board of Directors is the Strategy Committee.

myregion.org is a public-private planning partnership of the Greater Orlando Regional Chamber of Commerce. From 1998-2005 *myregion.org* and its partners spent over one million dollars in research on how to make Central Florida more globally economically competitive. The study area includes the six counties of East Central Florida's Economic Development District plus Polk County.

The majority of the analysis in the CEDS will be about the six counties of East Central Florida. Analysis in the "How Shall We Grow" project included Polk County which is becoming an important partner for the region as it grows into a mega economic region.

Conclusions of that research led to the "How Shall We Grow?" project in partnership with the ECFRPC and eight other state and regional organizations. "How Shall We Grow?" analyzed current and future land development patterns for their impacts on transportation, environment, quality of life and the regional economy.

To the extent that proper economic development can help control infrastructure costs by curtailing sprawl, East Central Florida could be an exceptional model for enhancing economic global competitiveness and connectivity while being environmentally sustainable and maintaining a high quality of life. This subject is further addressed in Chapter 3.

II. CEDS Overall Strategic Finding

The integration of human and natural systems must drive our region's future economic development. This integration will help the region reverse the negative effects of its current sprawling low density development patterns, and signal change to more efficient centers of commerce.

Embracing the community vision for a 21st century globally competitive region, the CEDS is all about collaboratively moving forward with practical approaches for economic prosperity set within the unique and precious environmental setting of East Central Florida.

How will we do it? By using three Mission-measuring sticks.

Mission A: Connect and build upon mature and blossoming technology centers (space, oceanographic research, bio-medical, simulation, and green energy).

Mission B: Identify, adopt and implement best practices for land and development planning, environmental preservation and green energy production.

Mission C: Improve global connectivity of all transportation systems.

Therefore, all applicant county/city/regional projects must first pass the Mission A, B or C tests.

III. Specific Recommendations

The missions will be accomplished by specific actions the region can take to:

1. Attract and retain knowledge-based industries and the innovative workforce;
2. Further diversify the economy by supporting emerging economic clusters;
3. Move towards a greater share of high technology and science-based economy that enhances the region's advantages in bio-medical, aerospace, and oceanographic research.
4. Leverage the region's environmental assets for long-term natural resource stewardship and associated economic diversification and development.
5. Implement the "How Shall We Grow?" 4 C's(Conservation, Centers, Corridors and Countryside) Regional 2050 Vision. The principal elements of the vision are:
 - preserve the most sensitive environmental lands and waters;
 - avoid continued sprawl;
 - promote more growth in urban centers;

- connect higher density, mixed-use (residential and commercial) urban centers with multi-modal transportation corridors served by new transit lines;
 - preserve countryside.
6. Provide more opportunities for affordable workforce housing to support job expansion;
 7. Enhance connections to worldwide markets.
 8. Increase global/regional freight cross-connections for ship, air, rail and road.
 9. Reduce the impact of job losses created by the Space Shuttle program retirement.

IV. Identified CEDS Projects To Accomplish The Missions

Mission A: Connect and build upon mature and blossoming technology centers (space, oceanographic research, bio-medical, simulation, and green energy.)

Projects:

- Orange County Activity and Technology Centers, such as Innovation Way and the bioOrlando medical city at Lake Nona.
- Study a Hi-Tech corridor extension from Innovation Way up SR 417 into Seminole County.
- Support green energy research and development such as agricultural biofuels, solar and wave power. Florida's twelve-month growing season could place our state in the lead in biofuels production with the proper research in plant variety and ethanol production.
- Support economic development, workforce, education and research opportunities to reduce the potential \$2 billion negative impact to the region's economy as a result of the Space Shuttle program retirement.
- Support Volusia County's Daytona Beach International Airport Corporate Center Project.

Mission B: Identify, adopt and implement best practices for land and development planning, and environmental preservation.

Projects:

- Initiate the implementation of the How Shall We Grow "Smart Growth" 4 C's 2050 Regional Vision, into the cities' and counties' comprehensive plans in six counties. Begin with Seminole County.
- Support Tavares Downtown Redevelopment, as a "model city" of the 4 C's 2050 Regional Vision incorporating mixed use higher density redevelopment of its core city with multi-modal transportation systems and regional connectivity.

- Seminole County-to-Orange County 17-92 corridor redevelopment, incorporating mixed uses, higher densities and mass transit connecting to the commuter rail line.
- Create more affordable work force housing.
- Support the Volusia County/City of DeBary Commuter Rail Fort Florida Station Project as part of the regional transportation oriented development plan.
- Support the Vine Street/US192 Corridor Redevelopment Initiative. Transform the existing strip-style, retail oriented corridor into a connected series of mixed-use, urban scale neighborhoods and villages.
- Support the Downtown Kissimmee Community Redevelopment Area (CRA) Master Plan.
- Support the Kissimmee Gateway Airport Business Development which calls for office and industrial development around the airport.

Mission C: Improve global connectivity of transportation systems.

Projects:

- Connect the CSX railroad to FEC Railroad via a 20+/- mile east/west rail spur from the north/south FEC rail tracks in Brevard County to the OUC power plant rail spur in eastern Orange County north of SR 528.
- Establish an eastern Orange County/ Brevard County multi-modal “freight village” (that includes intensive warehousing and distribution) preferably in proximity to the potential FEC-CSX rail connection.
- Establish multi-modal freight villages at other strategic locations in Orange County and the region.
- Support the Osceola County project for development of a 430-Acre Transportation district and regional distribution center.
- Support the Kissimmee Downtown Inter-Modal Transportation Center.

V. Vital CEDS Projects

- 1.) Initiate the implementation of the How Shall We Grow “Smart Growth” 4 C’s 2050 Regional Vision into the cities’ and counties’ comprehensive plans in six counties. Begin with Seminole County because the cities and county have shown a unified interest in working together to accomplish a different vision for their future.
- 2.) Support Tavares Downtown Redevelopment incorporating mixed use higher density redevelopment of its core city with multi-modal transportation systems and regional connectivity as a “model city” of the 4 C’s 2050 Regional Vision.

- 3.) Study the connection of the CSX railroad to FEC Railroad via a 20+/- mile east/west rail spur from the north/south FEC rail tracks in Brevard County to the OUC power plant rail Orange County north of SR 528.
- 4.) Establish an eastern Orange County/ Brevard County multi-modal “freight village” (that includes intensive warehousing and distribution), preferably in proximity to the potential FEC-CSX rail connection.
- 5.) Support a focused transition program for the aerospace industry to bridge the four year gap between the space shuttle termination in 2010 and the start of the constellation program. This should include targeted economic development activities, specialized workforce curriculum, training tools, career counseling and employment agreements.

CHAPTER 1

BACKGROUND INFORMATION

I. Geography of the East Central Florida Economic Development District

The East Central Florida Regional Economic Development District coincides with the planning area of the East Central Florida Regional Planning Council. It includes six counties: Brevard, Volusia, Seminole, Orange, Osceola, and Lake.

These six counties are physically and socially diverse, but are broadly joined by their shared transportation systems and intertwining economies.

Figure 1 East Central Florida Region



Brevard County

Brevard County is known for its seventy-two miles of Atlantic Ocean beaches, and significant amounts of sensitive environmental lands, critical ecosystems and strategic habitat. The county has the largest collection of endangered wildlife and plants in the continental United States. The beaches of the Archie Carr National Wildlife Refuge are the most important sea turtle nesting beaches in the western hemisphere, and the Indian River Lagoon is the most biologically diverse estuary in North America.

NASA's John F. Kennedy Space Center (KSC), is the United States' gateway to space exploration. KSC is the world's premier spaceport and is the current launch site of the nation's Space Shuttle program. NASA and Kennedy Space Center's next challenge is the Constellation Program which calls for the return of human explorers to the moon and beyond. KSC will be the assembly, test and launch site for the next generation of crew and cargo vehicles.



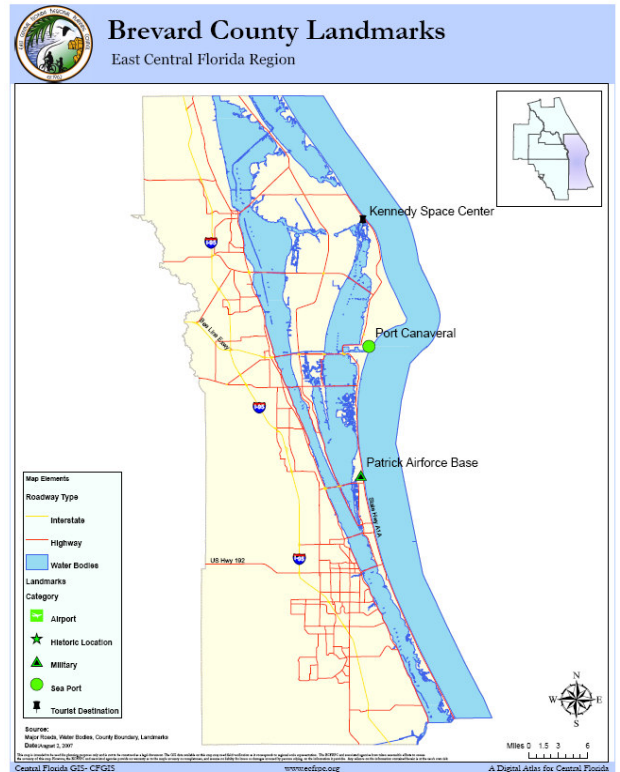
The economic impact on Florida of all NASA/KSC activities in fiscal year 2006 has been estimated at \$3.6 billion in output, \$1.8 billion in household income and over 34,000 jobs.

The Constellation program is expected to start in 2013, three years after the end of the Shuttle program. This three year gap between programs represents a major economic threat to the regional economy.

The 45th Space Wing includes Patrick Air Force Base (PAFB), Cape Canaveral Air Force Station (CCAFS), Florida instrumentation stations and the island stations of the Eastern Range, which is the busiest launch range in the world and the nation's primary launch site for commercial space programs. In 2006, the 45th Space Wing exerted a total economic impact on Brevard County of close to \$1.1 billion.

The **Naval Ordnance Test Unit (NOTU)**, an Echelon III Department of the United States Navy located in Cape Canaveral, supports the mission capability and readiness of the United States Navy's Trident Submarines by testing sea-based weapons. NOTU also operates the Navy Port at Port Canaveral, supporting submarines and surface ships of the U.S. Atlantic Fleet and foreign navies.

Brevard County is home to such high tech companies as Harris Corporation, Northrop Grumman and Lockheed Martin. Melbourne-based Harris Corporation represents one of the biggest IT and



communication high-tech companies in Brevard County with almost 7,000 local employees and 16,000 employees worldwide and annual revenues of \$4.2 billion.

Assisting such employers in their growth are the heavily workforce-oriented **Brevard Community College** and **Florida Institute of Technology**.

The **Florida Solar Energy Center (FSEC)** in Cocoa is *the* renewable energy and energy efficiency research institute of the State of Florida. Florida's **Technological Research and Development Authority (TRDA)** operates the Florida/NASA Business Incubation Center (FNBIC) which is a 31,000 square-foot incubator.

Port Canaveral is the world's second-busiest cruise port, with 4.3 million annual cruise passengers and 4.5 million short tons of cargo. It generates 50,000 jobs in central Florida, with a \$2.3 billion annual economic impact.



There is a growing cluster of ocean and coastal research and technology facilities in Brevard County including Dynamac Corp., Florida Institute of Technology (FIT), Hubbs-Sea World Research Institute, Florida Fish and Wildlife Conservation Commission and others.

Port Canaveral, Melbourne International Airport and Space Coast Regional Airport all lie within Foreign Trade Zone 136, enabling qualified businesses to defer or eliminate U.S. Customs' duties on imported goods. Operated by Canaveral Port Authority, Foreign Trade Zone 136 has now been expanded to a total of 4,160 acres, making it one of the largest (in area) general-purpose public foreign trade zones in the country.

Volusia County

Volusia County is also a coastal community, consisting of 1,207 square miles with elevations from sea level to a high elevation of 110 feet. Volusia is renowned for its 47 miles of world-class Atlantic Ocean beaches. These include Daytona Beach, Ormond Beach, and New Smyrna beach. The county's easily accessed beaches are supported by their close proximity to all East Central Florida tourism activities and venues including the preserved natural environment of the St Johns River.

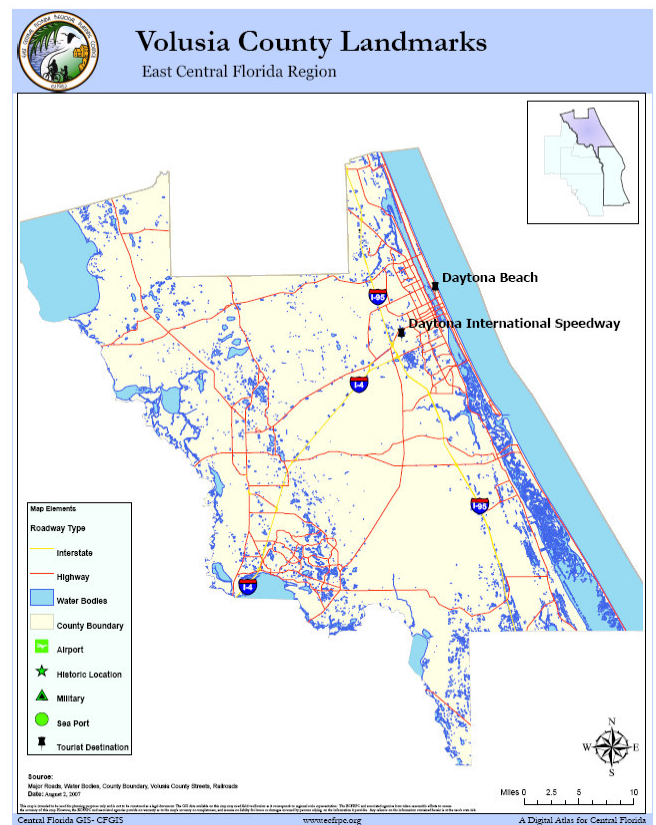


Daytona Beach



Volusia County is the headquarters of NASCAR, the Ladies Professional Golf Association, the bi-annual summer home of the London Symphony Orchestra and host to hundreds of cultural and musical entertainment venues year-round.

The city of Daytona Beach is home to the world famous Daytona International Speedway and the “Daytona 500” as well as host to hundreds of thousands of visitors for other special event venues such as Bike Week and Bike-toberfest.



Volusia County's Central Florida location, at the confluence of I-95 and I-4, enhances the ability for distribution centers to serve the Miami, Orlando, Tampa and Jacksonville metropolitan markets.

The county's diversified economy is supported by a successful ongoing economic development strategic planning process. This process continues to guide the development of projects like DeLand Crossings Industrial Park, Tomoka Farms Industrial Park, and the Daytona Beach International Airport Corporate Center. The planning and development of hundreds of acres of available shovel-ready industrial property in the Volusia County market supports future job creation and sites for technology based employers seeking a location within East Central Florida.



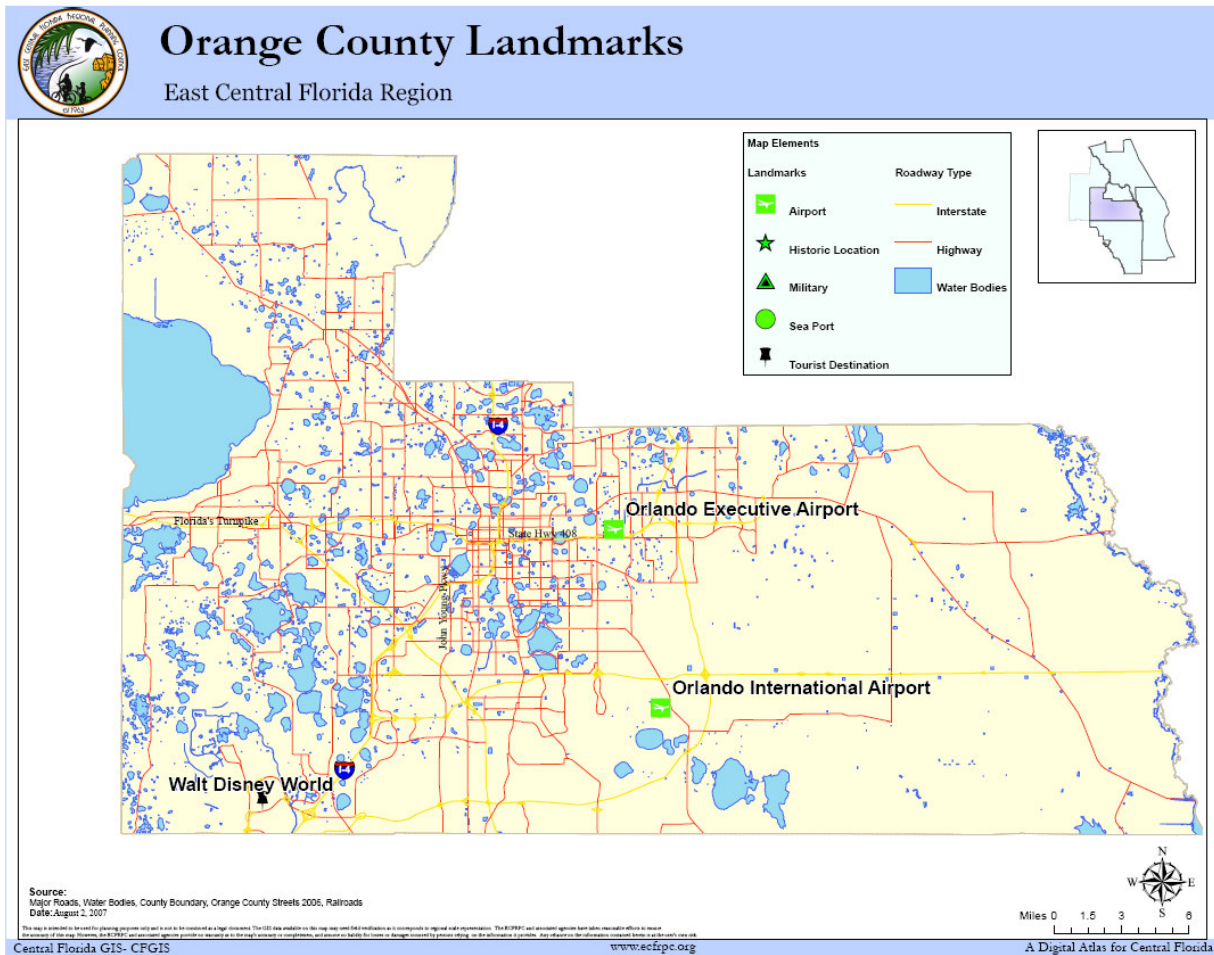
Volusia is home to a growing manufacturing workforce supporting more than 430 manufacturing companies with strong production clusters focusing on medical related products, automotive components, aviation and marine recreational. Among the leading manufacturers are Covidien (formerly Tyco Kendal Healthcare), Florida Manufacturing, Ocean Design/Teledyne, Boston Whaler, Brunswick Corporation's Government and Commercial Division, Sparton Electronics Corporation, Gambro Renal Products, Hawaiian Tropic and Raydon Corporation.

The corporate offices of industry leaders such as Brown and Brown Insurance, NASCAR, and the nation's 7th largest telecommunications company, Frontier Communications are also located in Volusia County communities.

Volusia County is also home to Embry-Riddle Aeronautical University, Stetson University, Bethune-Cookman University, Daytona Beach Community College, University of Phoenix, Webster College and the University of Central Florida Daytona Campus.

Volusia County is a leader in conservation through its Volusia Forever program, which acquires and improves environmentally sensitive, water resource protection, and outdoor recreation lands. Each property/project accepted under Volusia Forever must achieve a public purpose for the conservation, restoration, or preservation of environmentally sensitive lands and water areas and for providing public use opportunities. It is estimated that \$191 Million will be raised over the life of the program. To maximize the amount of money to achieve this goal, the program attempts to leverage every county dollar with a dollar from other land acquisition programs.

Orange County



Orange County is the geographic, transportation, and economic center of the region. It is a geographically diverse county ranging from the low coastal plain and the Econlockhatchee River on its eastern boundary to the hills rising into Lake County on its west, from the Kissimmee Plain on its south along the Osceola County line to the pristine Wekiva National Scenic River on its northern edge.

Tourism is one of the largest sectors of the central Florida economy. Interstate 4 and the Florida Turnpike intersect at the world famous attractions of Disney World, Universal Studios, and Sea World, which collectively attract 50 million tourists annually, making Orlando a premier world tourist destination.



Disney World

Ninety five thousand passengers arrive daily at the Orlando International Airport (OIA), which equates to 35,000,000 visitors annually- carried by 49 different airlines. OIA also handles 202,000 short tons of cargo annually.

Orange County is home to thirteen colleges and universities, the largest being the University of Central Florida, the sixth largest university in the USA, with a 2007 enrollment of over 50,000. UCF is renowned for its advanced research, which topped \$100 million for the third year in a row in 2007.



Orlando International Airport

Rollins College, Seminole and Valencia Community Colleges have a unique partnership that helps prepare hi tech student to transfer to UCF. The Chelonian Institute in Oviedo is one of the top three turtle research centers in the world.

Orlando is an international center for simulation modeling and animation technology. The Metro Orlando area boasts a \$13.4 billion technology industry that employs close to 53,000 people. Top sectors include digital media; modeling, simulation and training; optics and photonics; aviation/aerospace; homeland security/defense; financial services technology (fi-tech); information technology; agri-technology; energy and alternative fuels; and life science/biotechnology.

Companies enjoy an environment of technological innovation and infrastructure supporting the region's established technology sectors. The University of Central Florida's business incubator has created 700 jobs in 7 years, with an average wage of \$60,000. bioOrlando, the brand name for an emerging medical city at Lake Nona, will include a new University of Central Florida medical college and research center, a Veterans Hospital, the Burnham Institute for bio-medical research and the Nemours Children's Hospital.

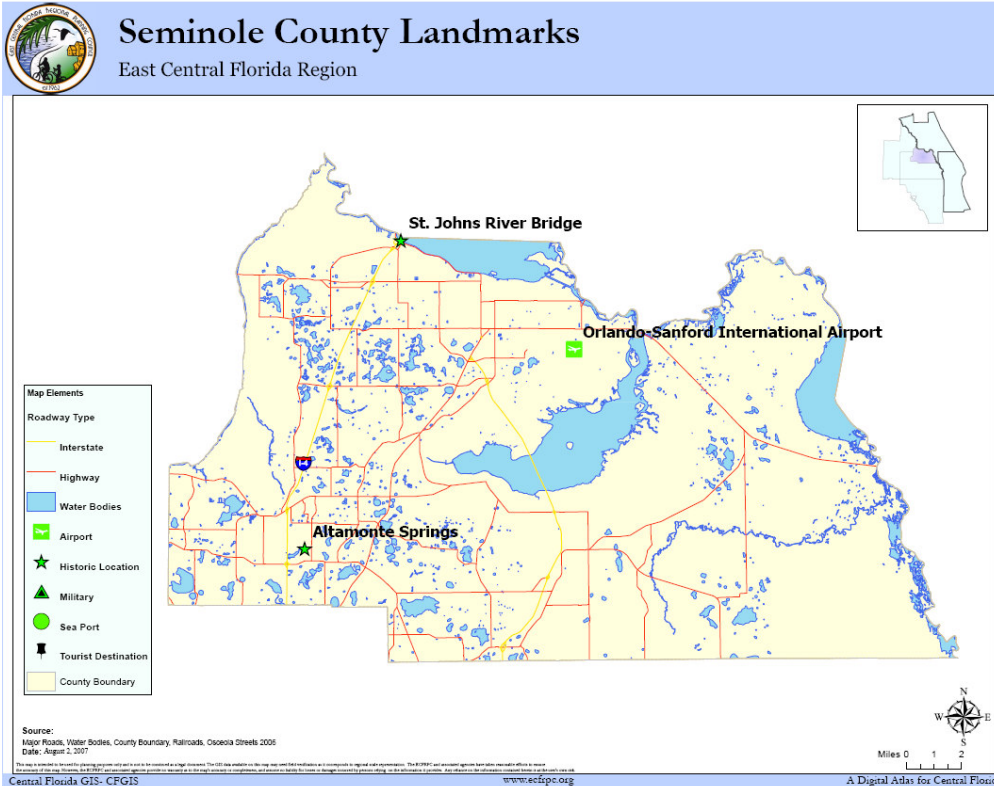
Three new venues, a new Orlando Magic arena, a performing arts center and a refurbishment of the Citrus Bowl football stadium-all in downtown Orlando-have recently been approved. Their estimated economic impact to the region is \$620 million a year.

Orlando is the social, cultural (museums and arts), legal, medical and banking center of the region. It is a city of 225,000 that expects to double in size by 2050. It is ethnically diverse, with between 5 and 10 percent of its population being Hispanic. Births outpace deaths by almost three to one- it is the youngest county and the most dynamic in terms of its population growth. A recent study by the United Arts Council shows that the arts contribute \$160 million annual to the regional environment.

Major retail space exists downtown, but also along International Drive, the Millenia Mall, the Florida Mall, and Fashion Square Mall.



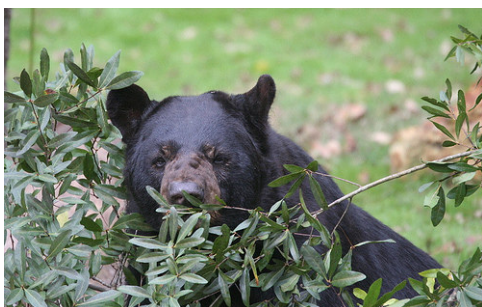
Seminole County



Seminole County is home to seven suburban cities, making it a desirable bedroom community for job centers in Seminole and to the north in Volusia and to the south in Orange Counties. Valencia and Seminole Community Colleges are the backbone of providing skilled labor to the emerging hi tech industry at Lake Mary on the I-4 corridor.

The county has been a leader in land conservation and trails building. Many upscale neighborhoods lie near the Wekiva River, which is both a national and state scenic river. The proposed Wekiva Parkway will complete the outer beltway around Orlando, and do it in a world-class, environmentally sensitive manner that protects the sensitive ecosystems it crosses.

The surrounding Wekiva ecosystem is Florida Black Bear habitat. The Wekiva River Protection Act established a set of strict environmental guidelines and



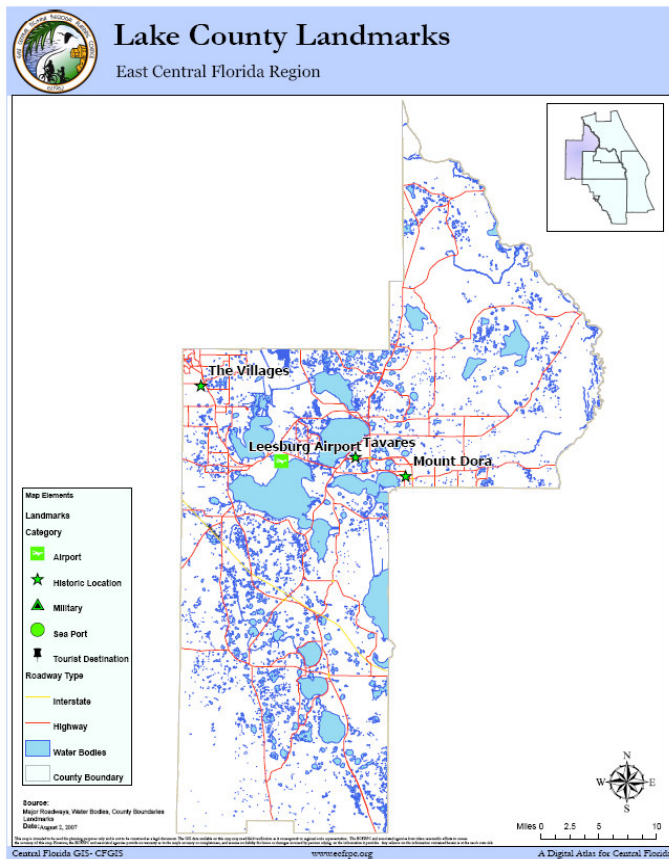
process for evaluating new development that has become a national model. This protection area extends from Seminole into Lake County.

The Orlando Sanford International Airport is the hub for international charter flights. It has grown from 48,000 annual passengers in 1996 to 1.645 million annual passengers in 2006, of which one million were direct international passengers.



The Seminole Mall is one of the largest retail malls in the region. The county also is home to a wide range of sports facilities for everything from high school training to professional competitions, such as: the Merrill Park Softball Complex, a USA Softball National Training Center and home to the U.S. Olympic Gold Women’s Team, Sanlando Park, which has hosted the U.S. Tennis Association Championships, and the Lake Brantley Aquatic Center for Olympic-caliber athletes.

Lake County



Lake County is an “L” shaped 1,156-square-mile County that lies in the northwest corner of the region. It is geographically different from the other counties because of its 1,400 named lakes and its rolling topography, with elevations exceeding 300 feet in some areas.

The County was second in the world for citrus production in the 1960s. A series of freezes in the 1980s killed many orchards, and many of the growers moved south.

As a result of the loss of much of its citrus industry, the county purchased land for the Christopher C. Ford Commerce Park industrial park in the 1980s on U.S. Highway 27 at the crossroads of State Road 19 and the Florida Turnpike. The intent was to develop an industrial park which would enable Lake County to diversify the economy and create quality jobs. More than 700 acres have been sold

in the park. Companies such as Circuit City Stores Inc., Goodyear Tire & Rubber Co., Carroll Fulmer Trucking, Domino’s Pizza, Maritec Industries, and Metals, USA have realized the benefits of the strategic location of the Park.

Osceola County

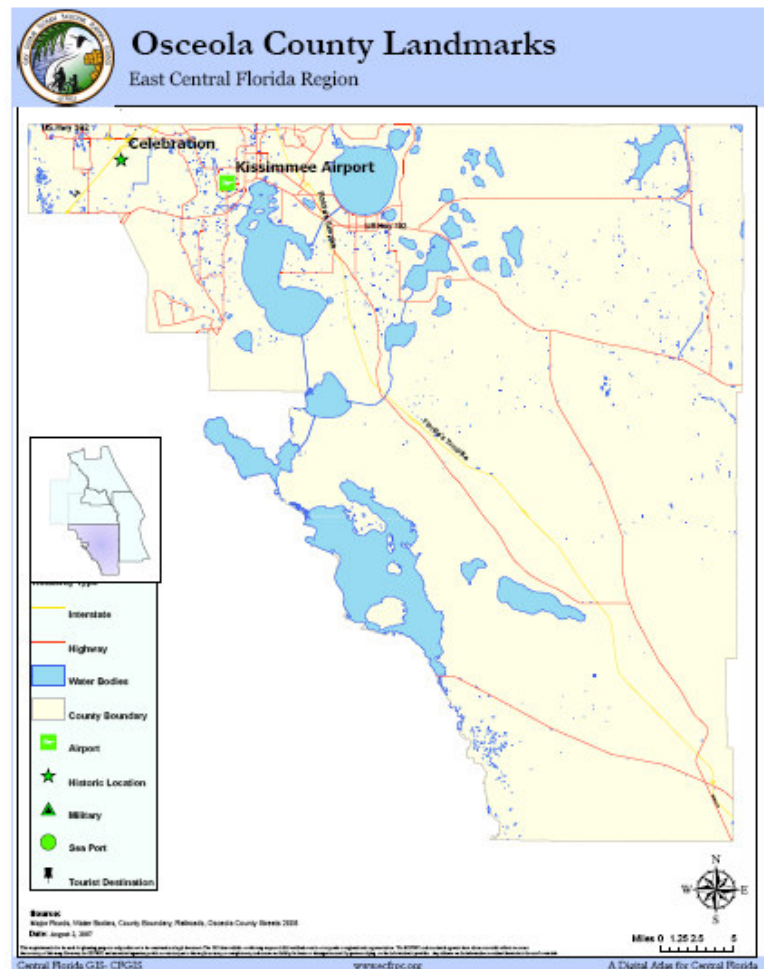
Osceola County lies to the south of Orlando. Although it has the smallest population of the six counties in the region, it is also the center of the latest explosion of growth. There are 19 Developments of Regional Impact (7 approved, 12 in the process), which, if fully developed as proposed, would make Osceola County home to many new “cities”. Most of these developments consist of low density residential with a small commercial core. These bedroom and retirement/resort communities are connected to the region only by a system of improved farm to market roads that will be inadequate to support the new traffic that will be generated.

Commuter rail will serve Kissimmee, the county seat and connect it to Orlando in the next ten years, but many of the proposed DRIs have no connection to the future commuter rail.

Agriculture and ranching are still

important industries, but are under pressure to sell for development.

There also is a significant amount of ecologically sensitive lands in the county. The Kissimmee River forms the headwaters of Lake Okeechobee.



Growth must accommodate ecosystems like the largest concentration of bald eagles in the lower 48 United States at Lake Toho.

For Osceola County, one of its greatest strengths is the diversity of its population. Osceola County has a large percentage of Hispanics.

The county’s economic development office has begun a program called Real Economic Development (RED) which means that it matches industries to its community.

The “Attractions” (Disney, etc.) extend into Osceola County, making tourism a significant portion of its economy. Celebration, a “New Town” developed by Disney, represents a traditional neighborhood with a small compact downtown and walk-able neighborhoods.

II. Population

Florida is one of the fastest growing states in the nation with a tremendous population growth of approximately 37.5 % between 1990 and 2005. East Central Florida is one of the fastest growing areas of the state. See Table 3 below.

Table 3: Florida Population

	1990	2000	2005
Population	12,937,926	15,982,378	17,789,864

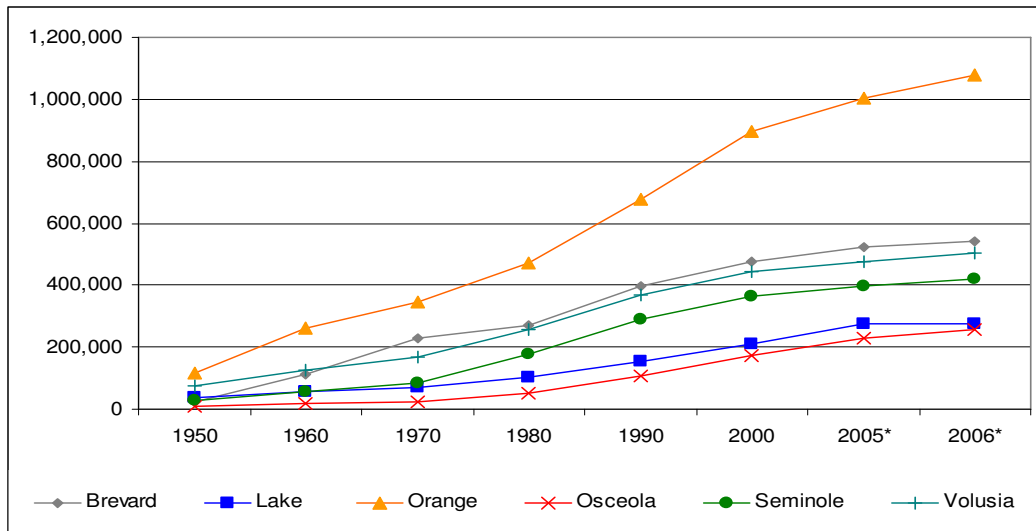
Source: U.S. Census Bureau, 2005 Population Estimates, Census 2000, 1990 Census

The changes in population, composition of workers, and services needed has made the region what it is today: a booming region full of jobs, opportunities, and growing needs. Table and Figure 2 Historic Population Growth by County display the historical growth pattern in East Central Florida from 1950 to the population estimates of 2005 and 2006.

Table 4: Historic Population Growth by County

County	1950	1960	1970	1980	1990	2000	2005*	2006*
Brevard	23,653	111,435	230,006	272,959	398,978	476,230	521,226	543,050
Lake	36,340	54,383	69,305	104,870	152,104	210,528	273,277	276,783
Orange	114,950	263,540	344,311	471,016	677,491	896,344	1,002,849	1,079,524
Osceola	11,406	19,029	25,267	49,287	107,728	172,493	229,134	255,903
Seminole	26,883	54,947	83,692	179,752	287,529	365,196	398,013	420,667
Volusia	74,229	125,319	169,487	258,762	370,712	443,343	475,189	503,844
Source: US Decennial Census, 1950-2000, American Community Survey 2005 estimate, and the University of Florida's Bureau of Business and Economic Research, Population Studies 2007								
*Estimates								

Figure 2 Historic Population Growth by County



Source: US Decennial Census, 1950-2000, American Community Survey 2005 estimate, and the University of Florida's Bureau of Business and Economic Research, Population Studies 2007

Florida Trend Magazine (February 2007, Incoming) reported 1,000 people move to Florida daily. The American Community Survey reported that in 2005, 14 percent of East Central Florida residents had just moved into the region that year and they came from all parts of the world. In 2005 East Central Florida gained 155,386 new residents from outside the state and outside the country, which accounted for 22.7 percent of Florida's immigration. Another 128,946 people moved from other regions within Florida to East Central Florida (See Table and Table).

Table 5 Where East Central Florida Residents Lived One Year Ago, by Percentage

	Same House	Same County	Same State	Different State	Abroad
Brevard County	82.5	9.3	2.6	4.4	0.3
Lake County	79.9	6.2	6.6	5.6	1.1
Orange County	77.4	11.7	4.3	3.4	1.5
Osceola County	74.4	10.0	7.0	6.3	1.2
Seminole County	79.7	8.1	6.5	3.7	0.5
Volusia County	82.0	9.6	2.5	4.4	0.3
East Central Florida region	79.4	9.8	4.4	4.2	0.9
Florida	80.3	10.8	3.1	3.6	0.8
United States	82.7	9.8	3.1	2.4	0.6

Source: U.S. Census Bureau, 2005 American Community Survey: (B007001)

Table 6 Where East Central Florida Residents Lived One Year Ago, by Number

	Same House	Same County	Same State	Different State	Abroad
Brevard County	429,987	48,500	13,638	22,695	1,774
Lake County	218,272	16,868	18,010	15,340	2,931
Orange County	775,795	117,399	43,082	33,702	15,474
Osceola County	170,543	22,818	16,113	14,331	2,666
Seminole County	317,115	32,290	26,042	14,765	2,102
Volusia County	389,550	45,685	12,061	21,096	1,493
East Central Florida region	2,301,262	283,560	128,946	121,929	26,440
Florida	13,963,889	1,879,347	535,903	632,168	147,547
United States	238,488,435	28,195,874	8,868,144	7,052,128	1,762,246

Source: U.S. Census Bureau, 2005 American Community Survey: (B007001)

III. Income and Housing Costs

The district's counties are part of three, Metropolitan Statistical Areas (MSA) and one Economic Area (EA). Lake, Orange, Osceola, and Seminole counties belong to the Orlando-Kissimmee MSA while Brevard County is part of the Palm Bay-Melbourne-Titusville, MSA. Volusia County belongs to the Deltona-Daytona Beach-Ormond Beach, MSA.

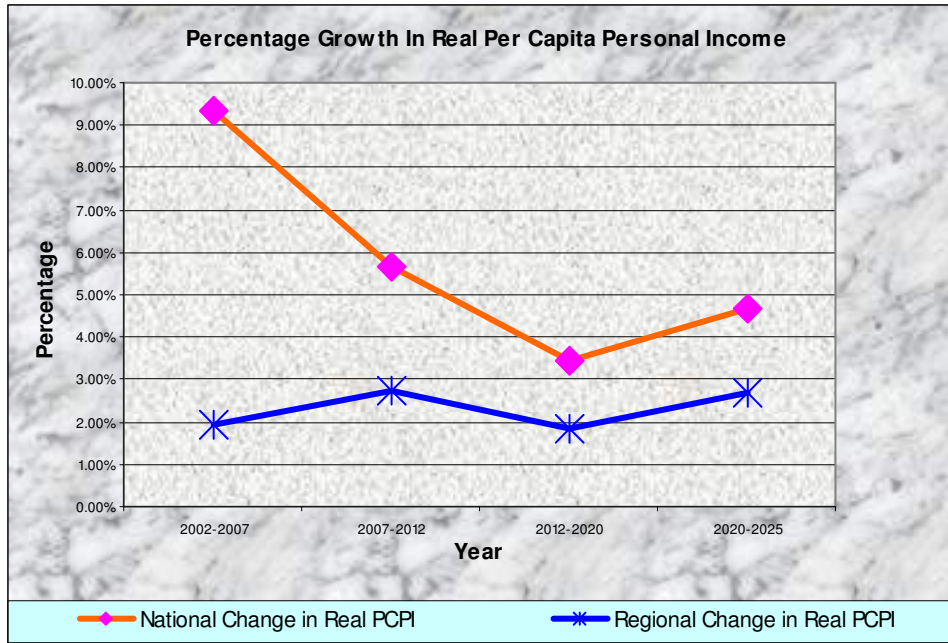
In 2004, median Household Income in the six-county district was \$42,430 compared to \$40,900 in Florida and \$44,334 in the United States. The percentage of people in poverty in the region was 10.53%.

In 2004 the Orlando-Kissimmee MSA had a per capita personal income (PCPI) of \$29,576. This PCPI ranked 166th in the United States and was 89 percent of the national average, \$33,050. The 1994-2004 average annual growth rate of this PCPI in the Orlando-Kissimmee MSA was 3.9 percent. The average annual growth rate for the nation was 4.1 percent.

The Palm Bay-Melbourne-Titusville MSA had a per capita personal income (PCPI) of \$30,142 which ranked 150th in the United States and was 91 percent of the national average. Deltona-Daytona Beach-Ormond Beach MSA had a per capita personal income (PCPI) of \$26,118. This PCPI ranked 290th in the United States and was 79 percent of the national average, \$33,050. (Source: Bureau of Economic Analysis).

Compared to the nation, the Regional Real Per Capita Personal Income has been lagging behind, and its yearly change is expected to continue the trend of growing, but at a much lower percentage rate than the nation. Figure 3 Percentage Growth in Real Per Capita Income shows the percentage growth in the national and regional Real PCPI for the coming years.

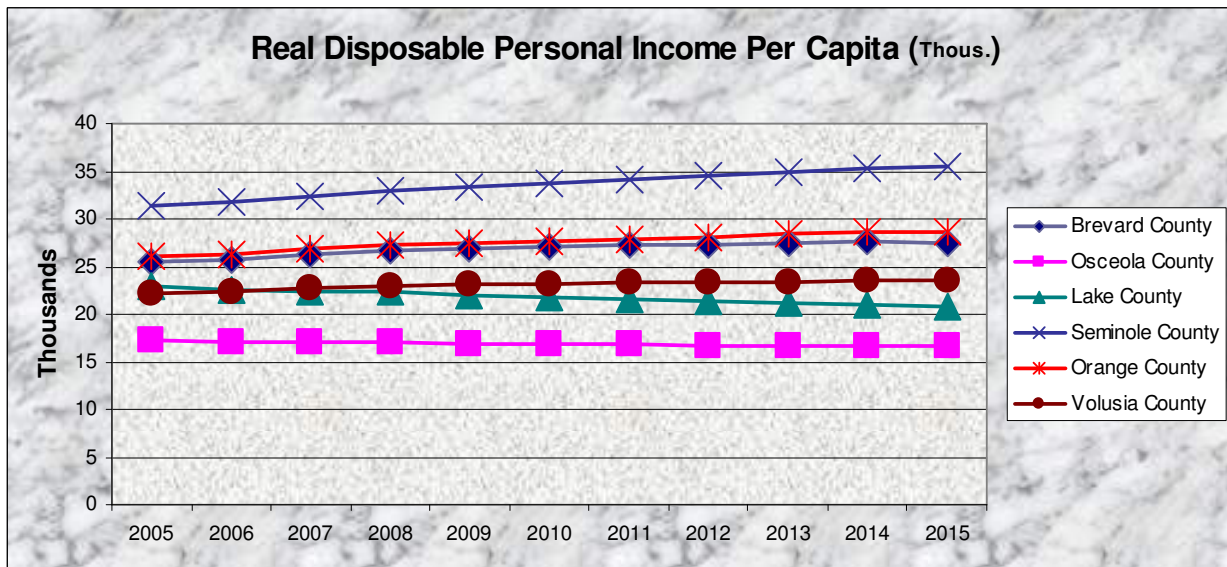
Figure 3 Percentage Growth in Real Per Capita Income



Slow growth in personal income directly affects real disposable personal income, which is the money available for consumption after taxes. As consumer prices go up due to inflation and high demand, consumers lose purchasing power if their income is not keeping up.

Despite low unemployment, compensation and real disposable income remain lower than the national average. Figure 4 Real Disposable Personal Income per Capita shows the projected real disposable income to 2015 (Source: Regional Economic Models Inc).

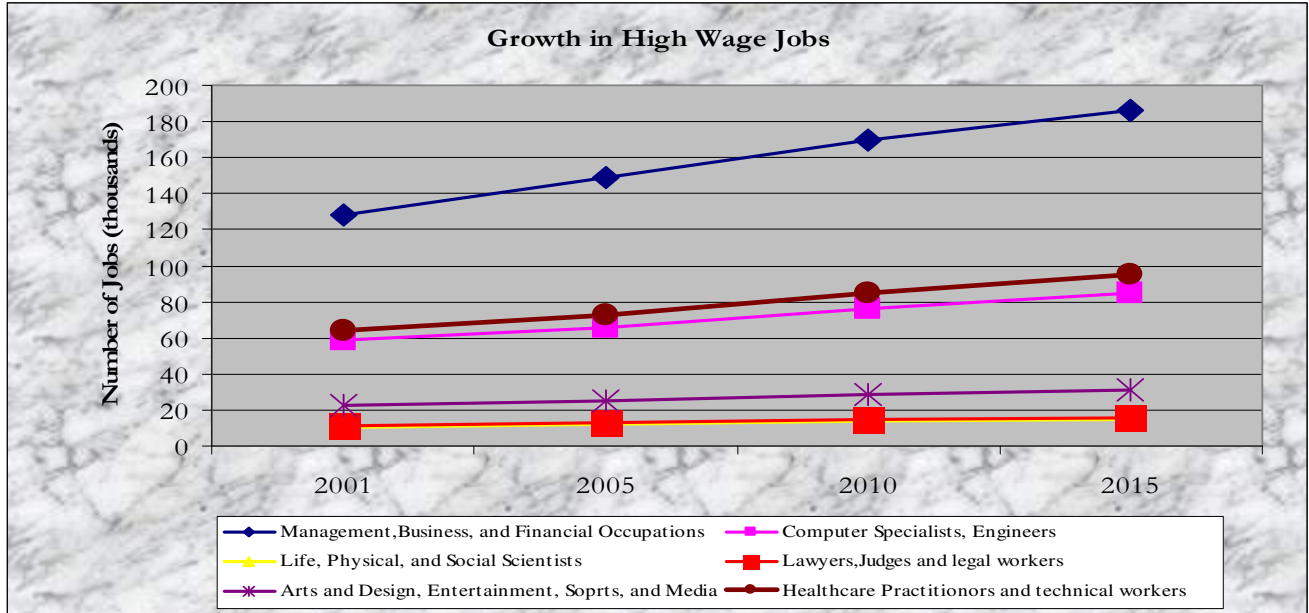
Figure 4 Real Disposable Personal Income per Capita



Source: Regional Economic Models Inc. 2007

Job creation remains one of the primary goals of regional economic development. The region has taken major steps towards diversifying the economy in ways that allow industries with high paying jobs better access to our markets. Figure 5 shows the increase in number of jobs until 2015 for job categories that have higher than average wages in the region.

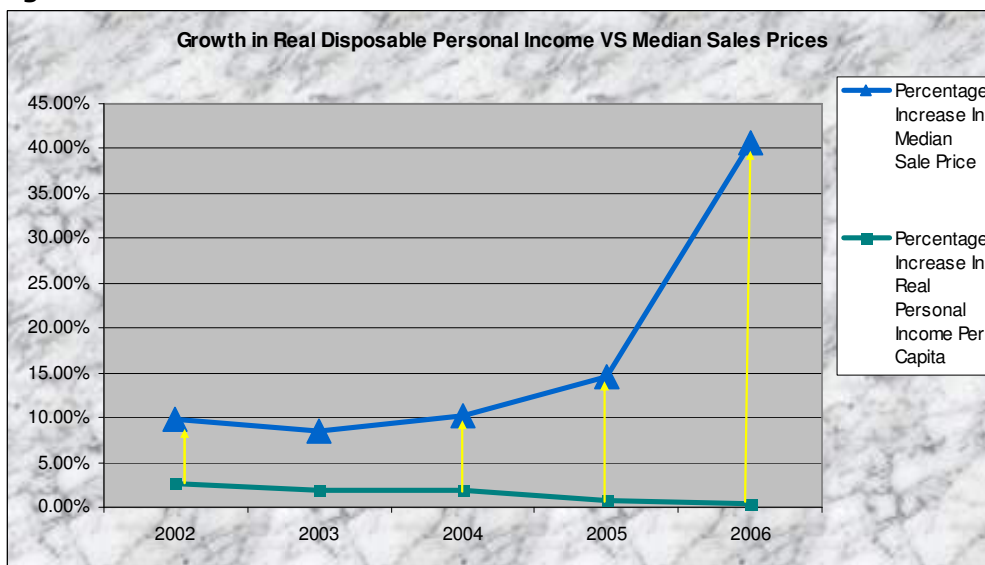
Figure 5 Growth in High Wage Jobs



Source: Regional Economic Models Inc. 2007

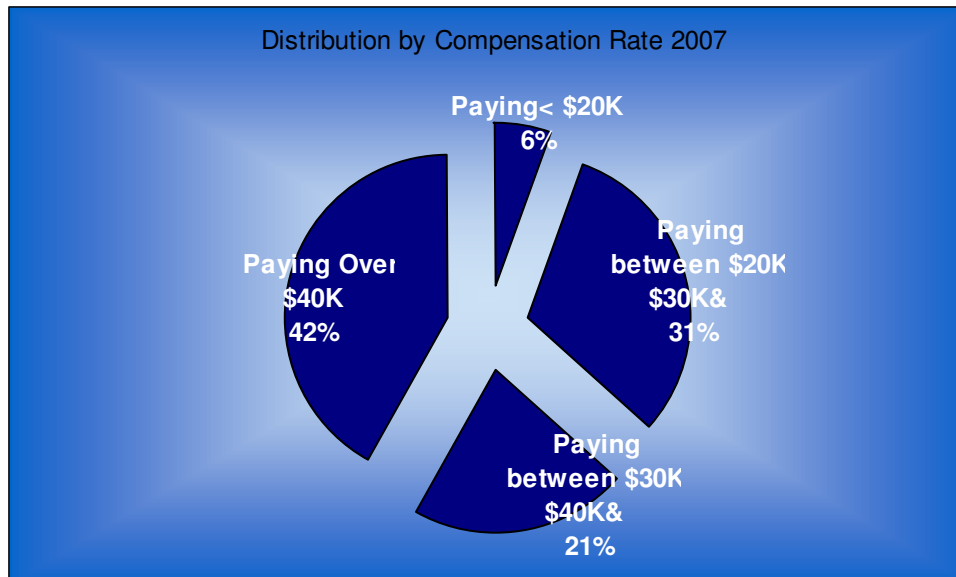
Housing costs doubled from 2000-2005, and property taxes and hurricane insurance also doubled for many people. By contrast, average wages remained relatively flat. Figure 6 shows the percentage changes in median house sales and disposable income in the region in recent years. The combination of these events means that housing, which was once generally affordable and available, is now unaffordable and a growing crisis for business. Workers have sought cheaper housing farther from job centers, which contributes to the long commutes and traffic congestion.

Figure 6 Percent increase in Median Sale Price of Homes and Personal Income, Orlando MSA



Source: Florida Sales Report & Regional Economic Models Inc. 2007

Figure 7 Income Distribution by Compensation, Orlando MSA



Source: Regional Economic Models Inc. 2007

The recent and rapid increase in housing prices in the region (Figure) is proving to be a major negative factor that is adversely affecting economic development. Affordable housing in 2007 is now scarce throughout the region. Although the economy is continuously adding jobs, with many offering higher than the average compensation rates (Figure), the extremely high prices of houses and the lack of diversity of housing stock make it more difficult for the region to compete for and attract the innovative and knowledgeable workforce needed to fill these new jobs.

In 2007 the housing market stalled (evident in the decrease in number of permits issued in Table 7), and prices have begun to fall, but it will take much more price deflation before the market corrects itself and provides significant affordable workforce housing.

Table 7 New Privately-Owned Residential Building Permits

	2000	2004	2006
Brevard	3,506	6,667	4,024
Lake	3,832	5,687	5,687
Orange	6,474	11,925	9,817
Osceola	3,215	6,443	5,916
Seminole	2,590	3,898	2,714
Volusia	3,147	4,920	2,961
Region	22,764	39,540	31,119

Source: U.S. Census Bureau

Table 8 below shows the yearly percentage change in realtor sales of single-family existing houses and their median sales price for Florida and two metropolitan areas in the region along with the Tampa metropolitan area. Each year shows the number of units sold and the median sales price. The numbers in the last table show the downward direction that the residential market started to take by the end of 2005 and is very obvious now in 2007.

Table 8 Florida Sales Reports – Single Family Existing Homes, 2000-2005

Year End 2000 Single-Family, Existing Homes

Statewide & MSAs	Realtor Sales			Median Sales Price		
	YTD 2000	YTD 1999	%Change	YTD 2000	YTD 1999	%Change
STATEWIDE	157,312	148,361	6%	\$115,900	\$108,400	7%
Orlando	22,328	20,699	8%	\$109,300	\$102,800	6%
Melbourne-Titusville-Palm Bay	4,886	4,706	4%	\$92,700	\$87,600	6%
Tampa-St. Petersburg-Clearwater	26,960	24,873	8%	\$100,500	\$94,700	6%

Year End 2002 Single-Family, Existing Homes

Statewide & MSAs	Realtor Sales			Median Sales Price		
	YTD 2002	YTD 2001	%Change	YTD 2002	YTD 2001	%Change
STATEWIDE	154,231	140,364	10%	\$137,800	\$126,600	9%
Orlando	27,548	24,911	11%	\$129,800	\$120,100	8%
Melbourne-Titusville-Palm Bay	5,796	5,213	11%	\$116,100	\$99,400	17%
Tampa-St. Petersburg-Clearwater	15,813	14,518	9%	\$132,100	\$124,400	6%

December data for Tampa-St. Petersburg-Clearwater MSA was not available.

Orlando area figures do not include Osceola for April or November due to lack of historical data.

Year End 2004 Single-Family, Existing Homes

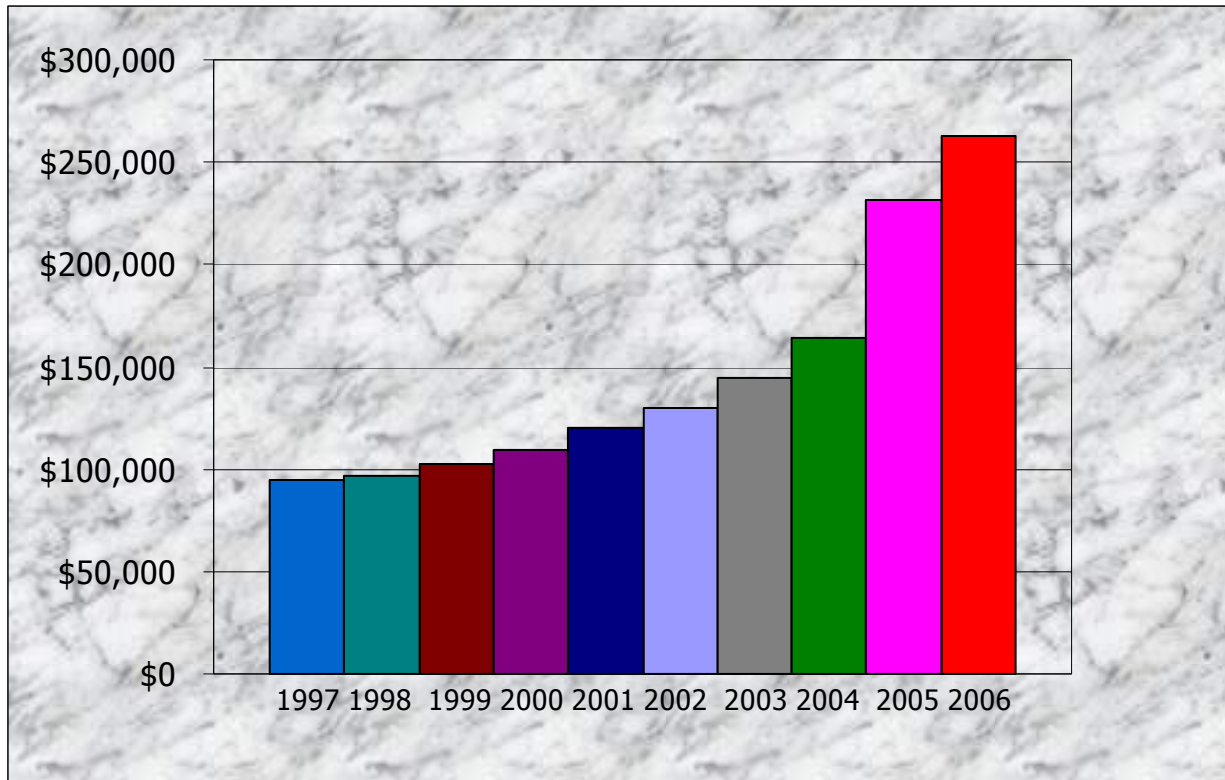
Statewide & MSAs	Realtor Sales			Median Sales Price		
	YTD 2004	YTD 2003	%Change	YTD 2004	YTD 2003	%Change
STATEWIDE	242,234	218,739	11%	\$182,400	\$155,800	17%
Orlando	36,659	32,103	14%	\$164,500	\$143,500	15%
Melbourne-Titusville-Palm Bay	8,101	7,565	7%	\$166,600	\$133,400	25%
Tampa-St. Petersburg-Clearwater	47,639	40,867	17%	\$159,900	\$139,300	15%

Year End 2005 Single-Family, Existing Homes

Statewide & MSAs	Realtor Sales			Median Sales Price		
	YTD 2005	YTD 2004	%Change	YTD 2005	YTD 2004	%Change
STATEWIDE	248,565	242,597	2%	\$235,100	\$181,900	29%
Orlando	36,727	36,659	0.1%	\$231,400	\$164,500	41%
Melbourne-Titusville-Palm Bay	8,055	8,101	-1%	\$226,100	\$166,600	36%
Tampa-St. Petersburg-Clearwater	53,183	47,639	12%	\$201,700	\$159,900	26%

Figure 8 shows the increase in the median sales of homes in the Orlando metropolitan area from 1997 until today. Although the region has benefited a lot from the boom in the real estate market, however the sharp increase in the prices of homes in Central Florida is proving to have a negative affect on the market. With high prices of homes and scarce availability of rentals, it is harder to recruit new businesses and professionals into the region.

Figure 8 Increase in Median Sales Price, Orlando MSA



Source: Florida Sales Report

IV. Transportation Access

The EDD is almost totally dependent on motor vehicles for local transportation. Bus service represents less than one percent of daily trips in the region. Because the region is almost completely reliant on automobiles for commuting and personal transportation, the road network is quickly failing. Orlando is turning into Atlanta, but it does not have a mass transit system.

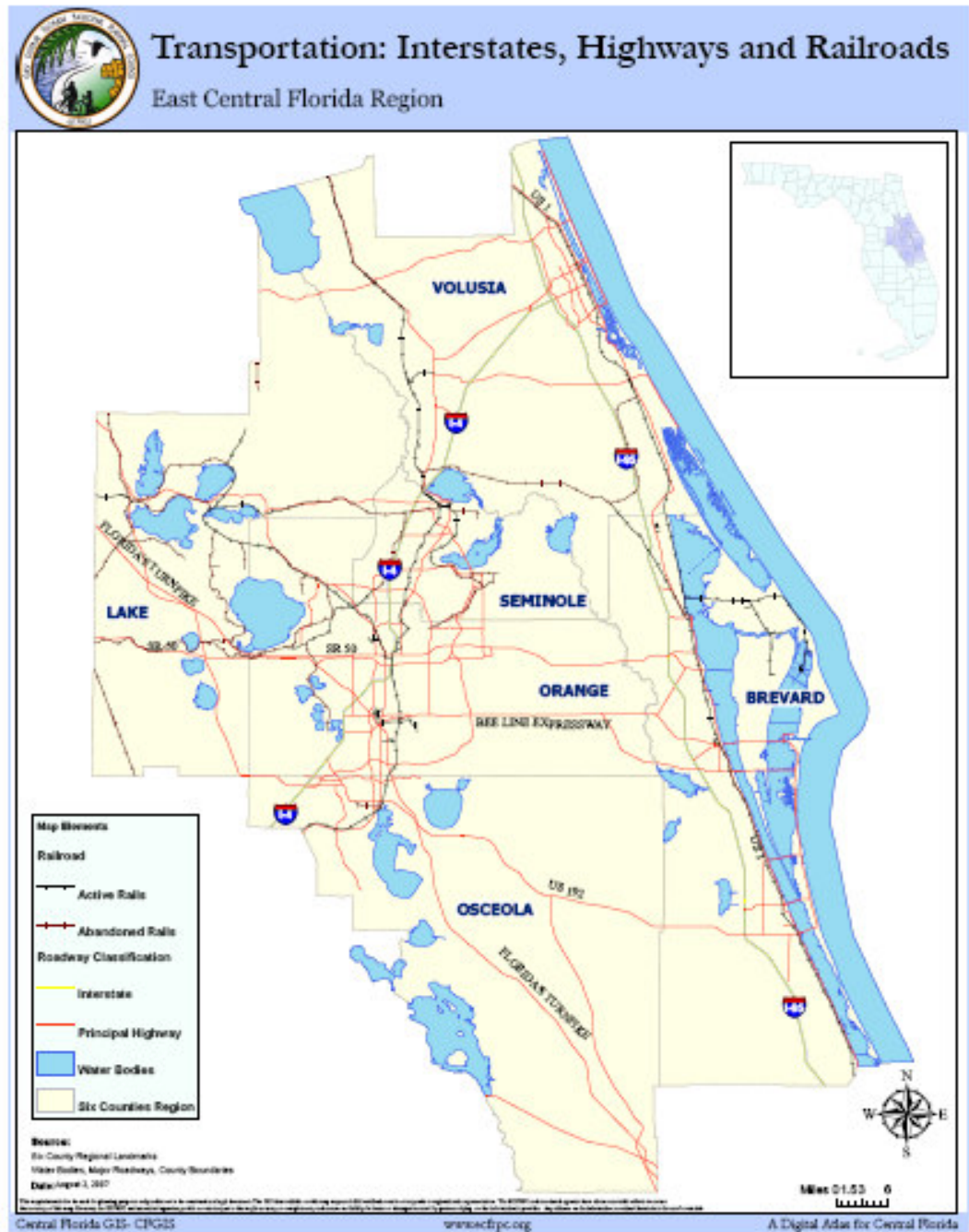
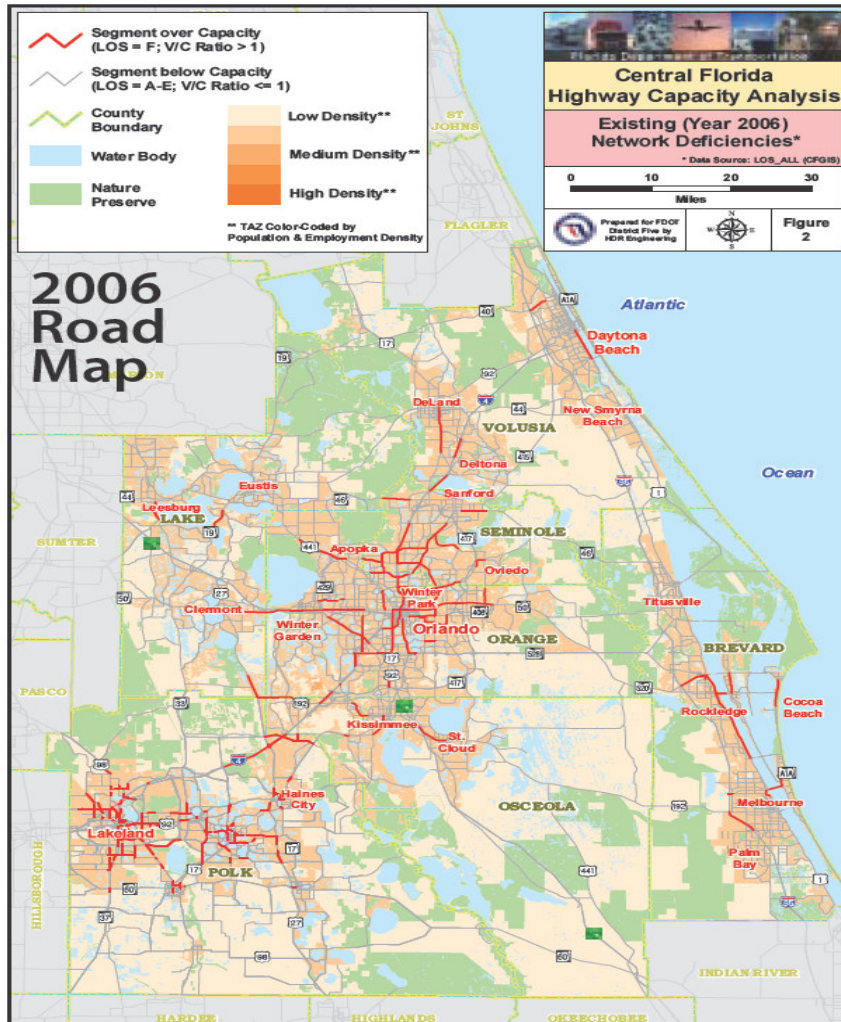


Figure 9 Transportation Level of Service, 2006 shows how roads are failing (level of service F at peak commuting hours) in 2006. Those roads in red are level of service F, for failure. The lack of transportation alternatives, the thousands of lakes, wetlands and sensitive ecosystems make building new road corridors very difficult.

Figure 9: Transportation Level of Service, 2006



The region's development patterns have exacerbated the problem. This is the typical sequence of events: new homes are built in low cost farmland that was once citrus. Soon there are enough rooftops and the commercial developers follow. Local authorities zone strip-commercial parallel to the major arteries serving the subdivisions. Every commercial entity is given one or two driveways. The vehicle turning movements from these driveways choke the flow of traffic. Soon the two-lane roads with excessive commercial curb cuts must be widened to four lanes, then six, and then in many cases the corridor cannot be widened further.

Commutes that were 20 minutes 20 years ago are now an hour, and still the region pushes outward. The average commute from place of residence to place of work in 2005 was 27 minutes. In Seminole and Orange Counties forty percent of commuters drive over thirty minutes to work.

The I-4 corridor is the north-south transportation backbone of the region and it is severely congested, as is shown on the map below. The numbers indicate daily vehicle trips, with the percentage of trucks.

Figure 10: I-4 Corridor and Daily Vehicle Trips, with Percentage by Trucks

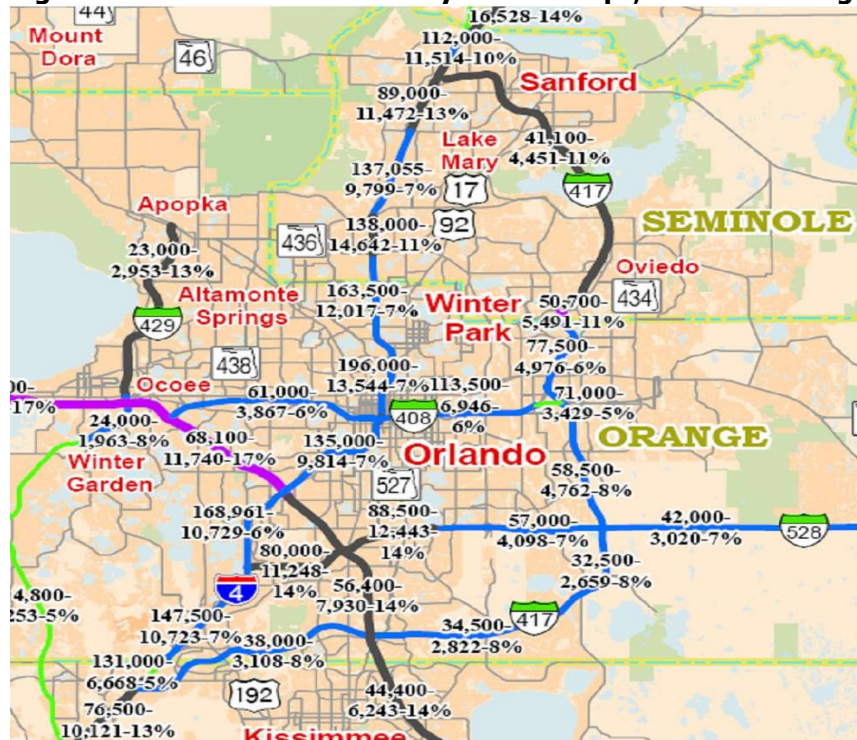
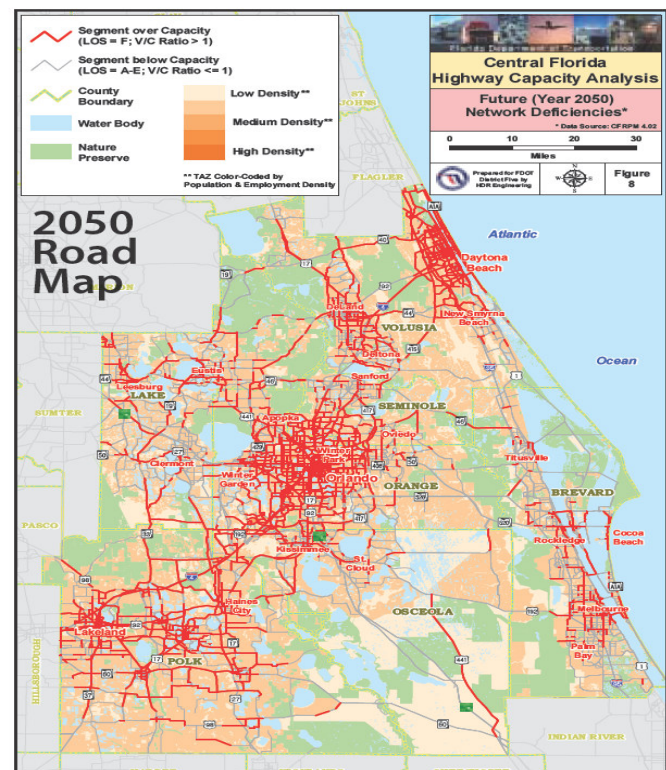


Figure 11 Transportation Level of Service, 2050

Figure 11: Transportation level of Service 2050 shows what the region’s roads will look like in 2050 (even with planned road projects) if we continue to sprawl like we have for the last 50 years. Roads in red will be in failure (long backups and congestion at peak commuting hours).

Clearly, there is a need for additional transportation alternatives.



Commuter Rail

Central Florida Commuter Rail is a proposed 61 mile commuter rail system for the Central Florida (Orlando) area. It would help relieve up to 14,000 automobile trips per day on I-4 upon its completion, and would begin to provide mass transit service to the transportation spine, the I-4 corridor of Central Florida. The total cost of the system is \$615 million. See Figure .

Volusia County, Seminole County, Orange County, the City of Orlando and Osceola County are the partners in the project. The local partners will combine to foot 25% of the bill, which the State of Florida will match. The remaining 50% will come from a Federal grant provided for by the 2005 SAFETEA-LU act. The approval in August 2007 of the local funding for the Commuter Rail project was an important milestone in providing rail transit service to the region.

Jacksonville-based CSX operates two major rail lines in peninsular Florida, dubbed the A- and S-lines. The A-line runs through Jacksonville and Orlando, roughly following Interstate 95 and Interstate 4 into Polk County. The S-line runs through Baldwin and Ocala slightly west of the center of the state. A CSX spokesman calls the lines "our I-75 and I-95."

The two lines touch near the Florida-Georgia border, then split and intersect again only in north central Polk County. There they essentially merge in an east-west line between Auburndale and a spot just west of downtown Lakeland.

Commuter Rail would run along the CSX Transportation "A" Line (former Atlantic Coast Line Railroad main line) from Poinciana Boulevard near Kissimmee through downtown Orlando to DeLand. This line is presently used by two daily Amtrak round trips.

Phase I extends 31 miles from the Fort Florida Station in Volusia County to the Sand Lake Road Station in Orange County and is expected to be operational by December 2010.

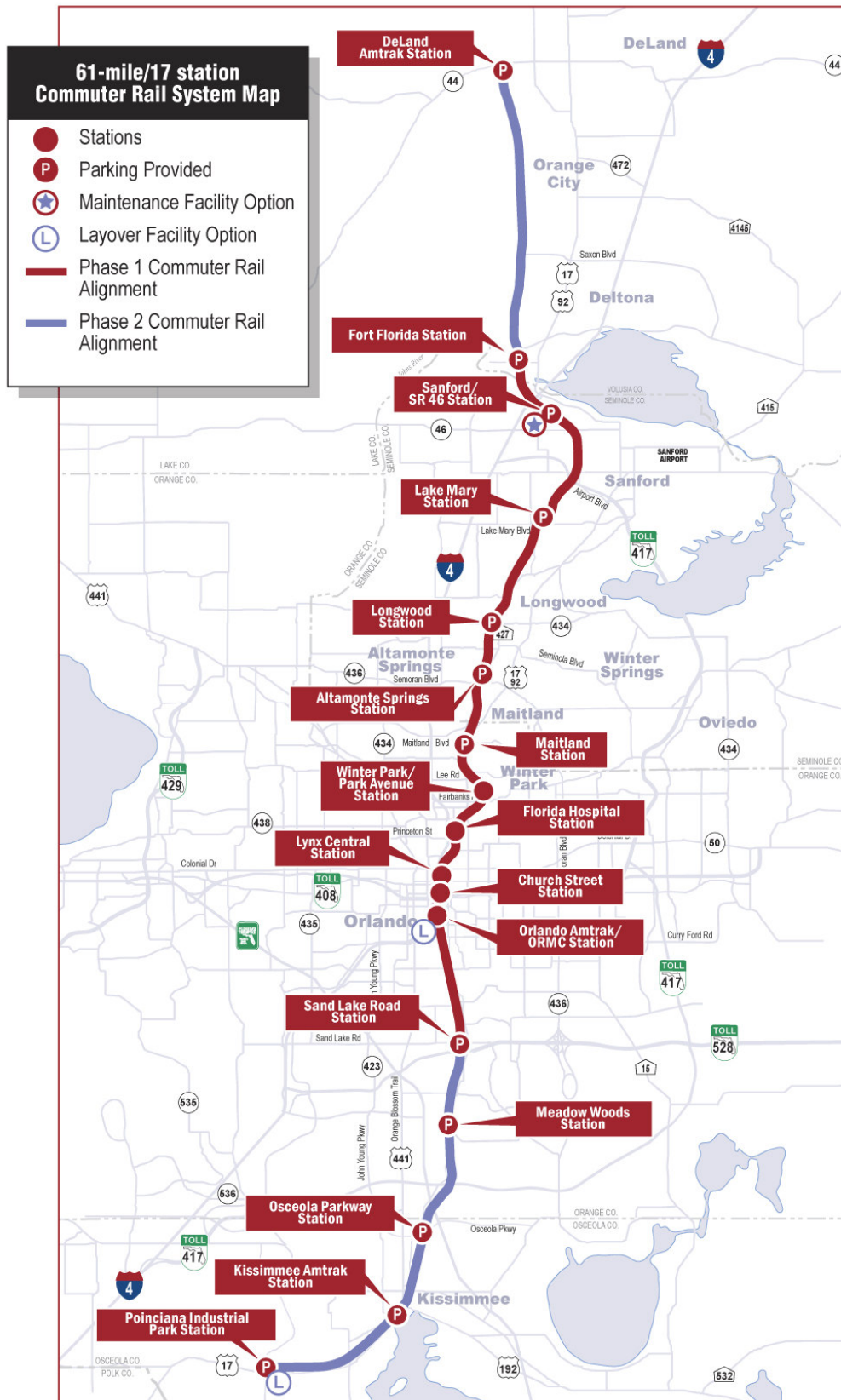
Phase II extends 23 miles south from the Sand Lake Road Station in Orange County to the Poinciana Station in Osceola County and north from the Fort Florida Station to the Deland Station in Volusia County and is expected to be operational in 2013.

The deal with the state will consolidate most of CSX's existing and future freight traffic onto the S-line. It will shut down CSX's aging Taft rail hub in Orlando and transfer its operations to the Winter Haven center. The ability to move people, goods and services through the region is important to maintain a healthy economy. Commuter rail offers an opportunity to stimulate regional economic development, and reduce automobile trips if:

- Cities allow higher densities and mixed use centers of commerce near the proposed stations.
- CSX builds a proposed 2-mile long freight distribution depot and transfer yard in Winter haven (Polk County) to serve the relocated freight from the A line to the S line. This would also be a major economic stimulation to the transportation and export industries.

Even with commuter rail, there will be a need for other transportation options (bike/scooter lanes, bus, bus rapid transit, light rail, streetcar, etc.) as the region grows. As population doubles by the year 2050, it will simply not be possible to just double the number of lane-miles of roads.

Figure 12 Central Florida Commuter Rail System



V. Workforce- Employment

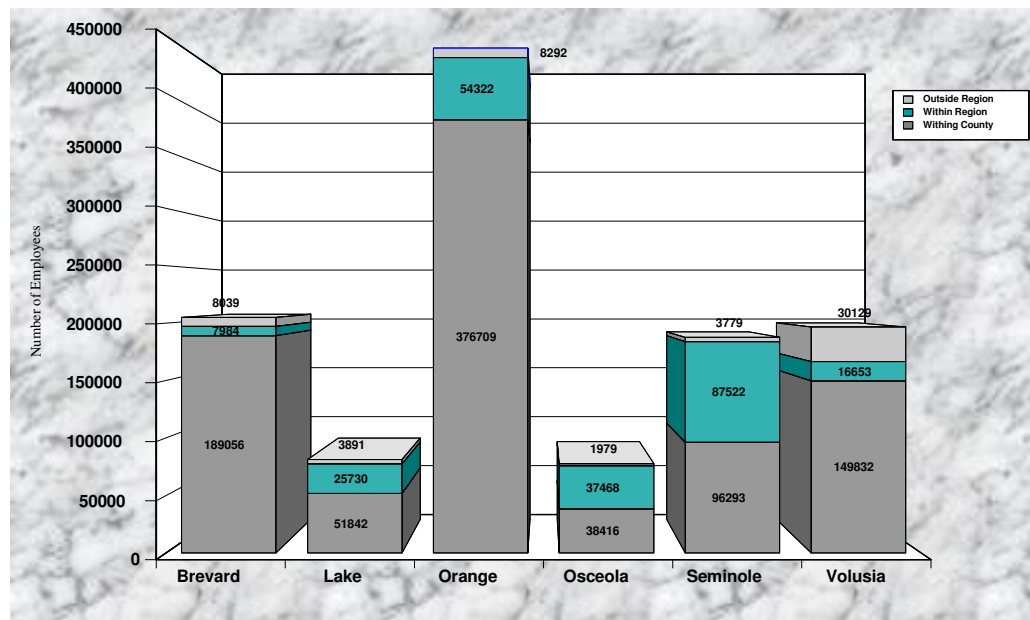
East Central Florida's total employment is approximately 1.65 million. The service sector employs more than 50% of total private employment, including industries such as Professional and Technical Services, Management of Companies, Healthcare, and Arts and Entertainment, etc. A third of these occupations are in innovative, knowledge-based jobs.

The June 2007 unemployment rate was 3.6 percent in nine counties of Central Florida, an increase from May's rate of 3 percent according to Workforce Central Florida. Seminole County had the second lowest rate in June 2007 at 3.4 percent, up from 2.8 percent in May; Orange's rate was 3.5 percent, up from 3 percent in May; Volusia, 3.9 percent, 3.3 percent in May; Osceola, 4 percent, 3.5 percent in May; Lake, 4 percent, 3.3 percent in May; Brevard, 4.1 percent, 3.6 percent in May.

Despite increases, regional unemployment is less than Florida (3.8 %) and USA (4.7%) rates. In 2005 the Milken Institute (a publicly supported independent economic think tank) rated the Palm Bay-Melbourne-Titusville and the Orlando-Kissimmee metropolitan areas of East Central Florida as the 1st and 6th best places in the nation to create and sustain jobs. The Institute ranked these two metropolitan areas at the 36th and 45th places, respectively out of 315 metropolitan areas in the nation in high-tech capacity.

The figure shows where people work based on their county of residence.

Figure 13 Employment by Place of Work



Source: Regional Economic Models Inc

For example, in Seminole County 96 thousand residents work in Seminole County. Another 87 thousand Seminole County residents work in a different part of the region, and another four thousand residents leave the region to work.

In 2005, total exports from the region were \$43,693 Billion and total imports were \$46,794 Billion. The Gross Regional Product was \$104,819 Billion and Real Disposable Income was \$ 74 Billion.

VI. Natural Resources

Central Florida has diverse land, solar, water, estuarine and ocean resources, but the six county EDD is not a region rich in extractive resources (i.e. metal ore, oil, gas), except for off shore resources. Early economies were based on agriculture and ocean related commerce.

The majority of agriculture land is low intensity cattle grazing. Back to back freezes of the 1980s killed much of the traditional citrus acreage. Current problems with two citrus diseases, canker and greening now threaten the remaining acreage. Citrus farmers are changing to other crops.

East Central Florida has world class beaches and inland lakes for recreation. This is a large part of the local economy. In addition, there is an extensive network of public lands in conservation and recreation that contributes significant current and potential economic value to the region. Included in this natural area inventory are ecosystems, habitats and species of national and international significance, and the Florida Greenway and Trails system.

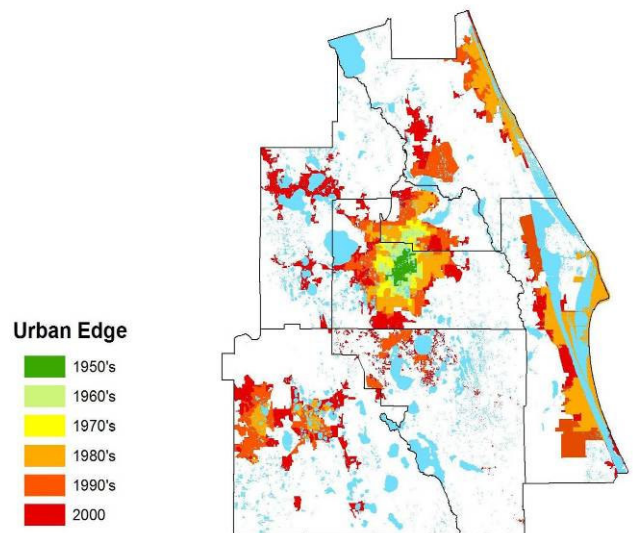
In 2004, Naturally Central Florida (a regional partnership initiative between myregion.org and the University of Central Florida Metropolitan Center for Regional Studies) conducted a regional evaluation of the most significant natural area assets. Naturally Central Florida identified seven regional “jewels” that represented “must save” places that contributed local, regional, statewide and national environmental and economic value.

These systems represent a green infrastructure for regional growth decisions. Conservation land efforts are underway for each of the systems, but current land acquisition funding is insufficient and local growth management policies do not adequately plan for large ecosystem protection in the region.

In addition to these seven “jewels”, the region has a number of other exceptional ecosystems of national and global significance. These other systems were not included with the list of seven because land acquisition is largely completed and conservation measures are underway.

As the region grows, there is an urgent need to expand the conservation areas as development pressure continues to encroach on the most critical natural systems.

The tipping point has been passed on groundwater usage. The two Water Management Districts announced in 2006 that after 2013 there will be no new permits issued for withdrawal from the underground aquifer. This means future water use will come from treated surface waters, or high tech desalination plants, which is significantly more expensive.



Over 2,100 square miles of exceptional conservation land has been preserved in the region (including the EDD and Polk County). The conservation areas are critical for groundwater recharge, sustaining fragile ecosystems, maintaining migratory wildlife corridors and providing recreation.

If the natural systems are allowed to fail, the region's growth will be unsustainable; therefore, preservation of the most critical ecosystems must be the basic building block of future development patterns.

The Important Ecological Resource Map (Figure 13) shows critical ecosystems that have been conserved, and those that still need to be considered for preservation.

The Archie Carr National Wildlife Refuge in Brevard and Indian River Counties exemplifies a regional conservation project with global ecological and economic significance. This 20-mile stretch of central east coast barrier island oceanfront represents one of the most important sea turtle nesting areas in the world. This project represents one of the most important coastal conservation initiatives in America. It reshaped coastal development patterns on a Florida east coast barrier island by integrating with coastal settlements in Brevard and Indian River Counties.

Over \$100 million in public funds (federal, state and local) was invested in the conservation initiative, together with significant private conservation land funding from the Richard King Mellon Foundation American Land Conservation Program (over \$40 million).

This conservation network:

- protects natural habitats and species;
- creates valuable green space for local communities;
- attracts visiting scientists from around the world;
- is the planned location for construction of a world-class marine and coastal research center;
- secures exceptional beach and water access opportunities for recreation and tourism' and
- decreases development density in a fragile, high-hazard coastal community.

The Archie Carr National Wildlife Refuge regional partnership represents a good small area study to demonstrate the potential economic value of an expanded green space network strategically located and designed for the central Florida region.

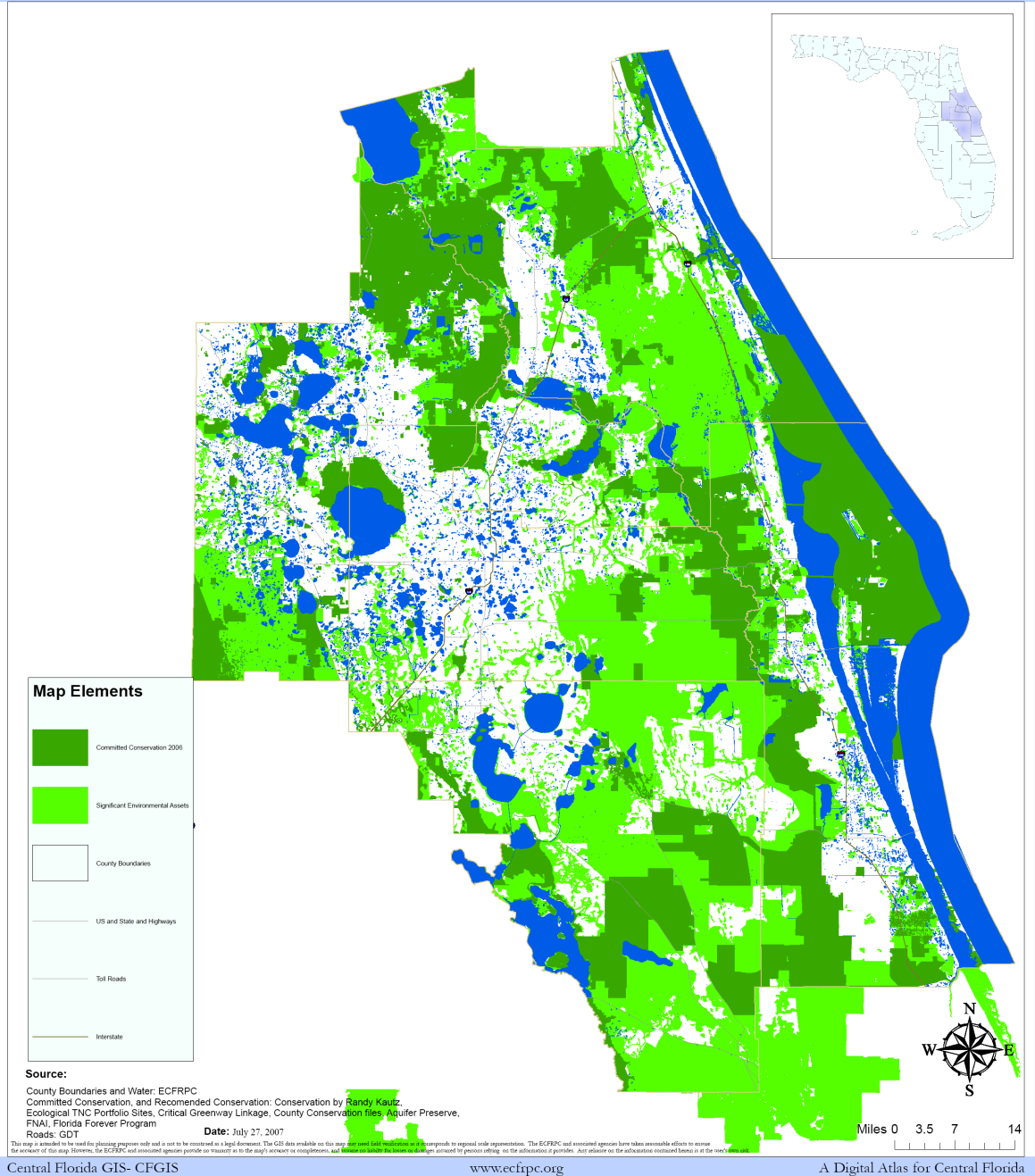
The combined inventory of natural land and water assets in the region serves as the foundation for many economic opportunities and holds the potential to become a cornerstone economic engine for the region and the entire state. There is growing economic evidence to suggest that central Florida needs to take a much more detailed look at the economic values and growth potentials of the land and water-based economy of Florida.

Figure 14 Important Ecological Resource Areas



Important Ecological Resource Areas

East Central Florida Region - How Shall We Grow Project



CHAPTER 2

ANALYSIS

I. Shift Share Analysis

It is important to understand the change in employment and unemployment number as a way for testing the current status of the economy. Using the Shift-Share Analysis Technique we can subdivide the reasons behind changes in employment into three components: National Growth component, Industrial Mix component, and the Competitive component.

- The National Growth Component represents the change in the area's employment due to the growth or contraction of the United States economy.
- The Industrial Mix Component represents the change in the area's employment that is due to unique reasons related to an industry itself.
- The Competitive Component represents the change in the area's employment that is due to the total change in the competitiveness of the area or the region as a whole.

The table below shows changes in employment for select industries in East Central Florida District between 2001 and 2006.

For example, the Construction industry added 36,549 jobs during this period. More than 70% of that change- 25,857 jobs- were created because of the region's unique attributes which attracted demand for residential and commercial construction. Low mortgage interest rates stimulated the housing boom period from 2001-2006. This led to the creation of 10,692 construction jobs in the region (6,255+ 4,437, national & industrial components). However, with the 2007 housing recession and credit crunch, the construction industry is starting to lose a lot of jobs.

By contrast, an analysis of the 3,207 jobs added in the Arts, Entertainment, and Recreation sectors indicates that the positive change can be attributed more to national and industrial trends rather than to what the region was or was not offering in relation to that industry. In fact the region lost 7,399 jobs between 2001 and 2006 in this industry due to competition. Nonetheless, a recent study by the United Arts Commission indicated a \$160 million dollar annual impact on the regional economy from the arts.

Table 9 Shift Share Analysis

Industry Sector	National Component	Industrial Component	Competitive Component	Total Employment Change	2006 Total Employment	Percentage Change in Employment
Construction	6,255	4,437	25,857	36,549	139,201	26.26%
Manufacturing (includes space industry)	5,232	-16,793	2,124	-9,437	76,437	-12.35%
Wholesale Trade	3,600	-5,822	892	-1,330	57,757	-2.30%
Retail Trade	11,240	-652	15,444	26,032	210,508	12.37%
Transportation and Warehousing	2,568	-2,032	-2,895	-2,359	39,788	-5.93%
Real Estate and Rental and Leasing	3,987	7,514	3,906	15,407	80,842	19.06%
Professional and Technical Services (includes ocean and bio tech research, computer simulation)	5,587	1,154	14,617	21,358	113,060	18.89%
Management of Companies and Enterprises	595	-623	4,135	4,106	13,866	29.61%
Educational Services	1,259	3,055	3,306	7,620	28,283	26.94%
Health Care and Social Assistance	8,309	12,584	3,306	24,199	160,572	15.07%
Arts, Entertainment and Recreation	5,121	5,486	-7,399	3,207	87,249	3.68%
Accommodation, Food Services	8,884	14,410	11,614	34,907	180,706	19.32%

II. Economic Cluster Analysis

Industries can be defined either as Local or Traded, depending on the type of market they serve. Local industries produce most of their products and services for local consumption. Construction is typically a local industry. Traded industries produce goods and services are produced mainly for export reasons.

Traded industries can create more wealth for local economies from their export activities and their ability to bring in outside money. We will use the location quotient and the percentage of regional share of national employment ratios to analyze the local and traded industries operating in the East Central Florida Economic Development District.

Location Quotient is a ratio of the region's employment in a certain industry to the total employment in the region, divided by the national employment in that industry to the total national employment. Location Quotient (LQ) can be used to identify how employment is concentrated in the industries that operate in the region.

If the LQ of an industry is higher than 1, then the industry has a higher ratio of employment to total employment in the region than that in the nation. The extra employment is used to produce goods and services for export reasons. This can be a signal of regional strength in that particular industry.

On the other hand, if the LQ is less than 1, then the local industry has lower employment than the national rate which means less production of goods and services than that needed to satisfy local demand, and the region needs to import the additional needed supply.

The other ratio of percentage of regional share of national employment is equal to the regional employment in one industry divided by the national employment of that industry. If this percentage grows over time, it can be seen as a regional gain of market share. That can translate to more regional exports.

Figure 14 and Figure 15 below show local and traded industries compared on the basis of their respective total employment (seen through the size of the bubble), and their LQs in 2007 as well as the change in percentage of the regional share of national employment of the industries.

The top right quadrant (industries with LQs over 1 and growing regional share of national employment) represents economic **Strength** of the region.

The right lower quadrant (industries with LQs lower than 1 and growing regional share) presents regional **Opportunities**.

The top left quadrant (industries with LQs over 1 but dropping regional share of national employment) shows the **Threats** to the region because the region is losing market share in that industry although it still enjoys higher than national average employment.

Finally, the lower left quadrant (industries with LQs less than 1 and dropping regional share of national employment) shows **Weaknesses** of the region evident in the low LQs and declining share of national employment.

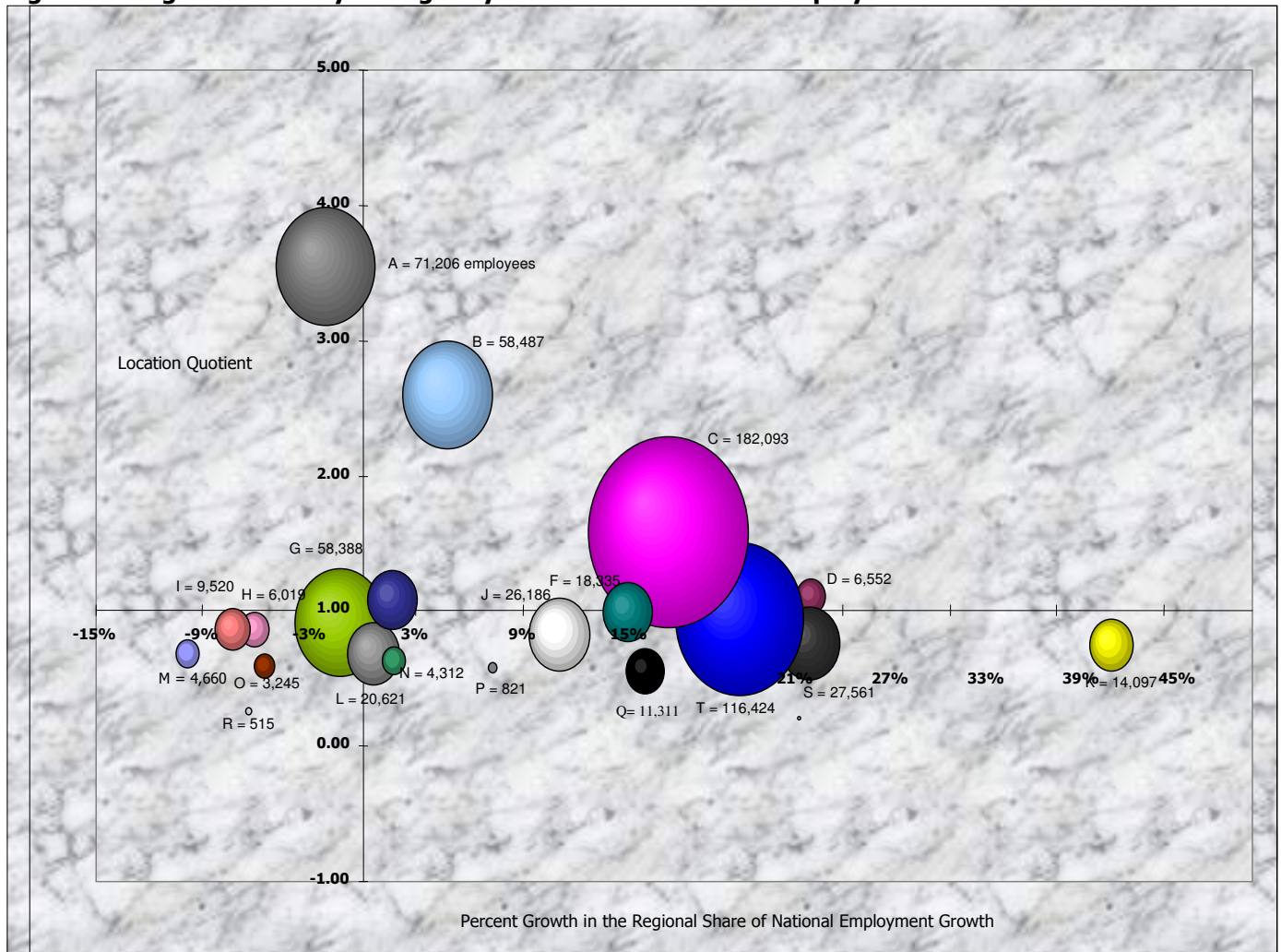
The charts give a “snap-shot” of some traded industries in the region, and the Strengths, Weaknesses, Opportunities and Threats (SWOTS) of local industries. Two of the biggest industries in terms of employment are the Amusement, Gambling, and Recreation industry and the Accommodation industry.

Traded Industries

Figure 15 shows Central Florida is a premier tourist destination in the world. It has a big tourism cluster which includes two industries that employ 71,206 and 58,487 people respectively. The industries' LQs are 3.548 and 2.595 respectively. This is an indicator of regional specialization. However, the dropping market share in the amusement, gambling, and recreation industry and the slow growth in market share of the accommodation industry are signs of industry maturation. This can be a sign of rising competition in these two industries from other regions and countries around the world.

Management of Companies and Enterprises grew by 42.08% between 2001 and 2007. Even though the region is not home to many corporate headquarters, and has lower than the national average of management occupation (LQ of 0.743), it has been gaining market share in the past six years. This represents an opportunity for the region and shows the ability of Central Florida to capture more market share by attracting new businesses to the area or the expansion of existing businesses.

Figure 15 Regional industry strength by sector and number of employees added



Source: REMI Policy Insight, 2007

Table 10 Location Quotient

		Percent Growth of Regional Share of National Employment	Location Quotient
A	Amusement, gambling, recreation	-0.021	3.548
B	Accommodation	0.047	2.595
C	Administrative, support services	0.172	1.580
D	Internet serv, data proc, other	0.252	1.108
E	Broadcasting, ext Internet, Telecom	0.017	1.086
F	Performing Arts, spectator sports	0.149	0.992
G	Wholesale Trade	-0.013	0.909
H	Transit, ground transportation	-0.061	0.866
I	Publishing, exc Internet	-0.074	0.865
J	Ins carriers, re act	0.110	0.828
K	Mgmt of companies, enterprises	0.421	0.743
L	Truck transport, couriers, messengers	0.006	0.679
M	Warehousing, storage	-0.098	0.677
N	Scenic, sightseeing transport, suppliers	0.018	0.636
O	Motion Picture, sound recording	-0.055	0.599
P	Museums et al.	0.073	0.582
Q	Sec, comm contracts, in v	0.158	0.554
R	Rail Transportation	-0.065	0.253
S	Monetary authorities, et al.	0.251	0.251
T	Prof, tech services	0.212	0.212

The Rail Transportation industry employs only 515 people and has a very low LQ of 0.253. There is no breakdown of employees related to freight versus passenger rail, but there is very little passenger rail currently in the region, so the expectation is that most of these employees are freight related. Rail freight is still a vital industry to the region and could become much more so if freight villages were distributed around the region to encourage large scale manufacturing at the rail head. The proposed \$615 million commuter rail project should also contribute to a regional rail-resurgence.

Professional and technical service is a rising cluster that includes computer simulation and modeling. Central Florida is the leading world center of this industry. It also includes bio medical and technical research, two additional rising clusters and strong emerging regional industries.

Local Industries

The next chart shows select local industries. As mentioned earlier, these industries mostly supply local markets with consumer goods and services. In Central Florida these industries are also affected by tourists, who drive up the demand on many of the commodities and services produced by these industries.

For example, the real estate industry saw a big increase in the regional share of national employment between 2001 and 2007. The 30.57% increase in market share was due to the increase in demand on residential and commercial capital stock from population growth in Central Florida and low interest rates.

The rental and leasing industry shown in the top left quadrant has been experiencing a downturn in its market share. This industry has lost employment in recent years as its regional market share declined by 15.68%. This can be partially explained by the condo conversion trend that converted apartments to condos to the point of over supply and the market collapse.

The Educational Services industry employed 29,668 people in 2007 with a 33.07% regional share of national employment. Although the region still has lower employment in this industry than the national average (LQ of 0.725), the regional share has been growing. This shows an expanding industry that needs support in order to better compete on the national level.

Education is one of the most important industries. It directly affects regional economic development today and into the future. Companies seeking to relocate or expand into the area want access to a well-educated workforce and a higher educational system that is prosperous in research and development. Without a proper educational system the workforce will be at a disadvantage in competing for jobs in the knowledge-based economy.

These two charts provide a snapshot of the performance of some industries in the region compared to the nation. This is one way to identify regional strengths, weaknesses, opportunities, and threats by identifying in which sectors of the economy employment is really concentrated. The East Central Florida Economic Development District's economy has been experiencing expansion into new sectors, which allows the region to become more diversified.

Figure 16 Locally traded industry strength by sector and employees

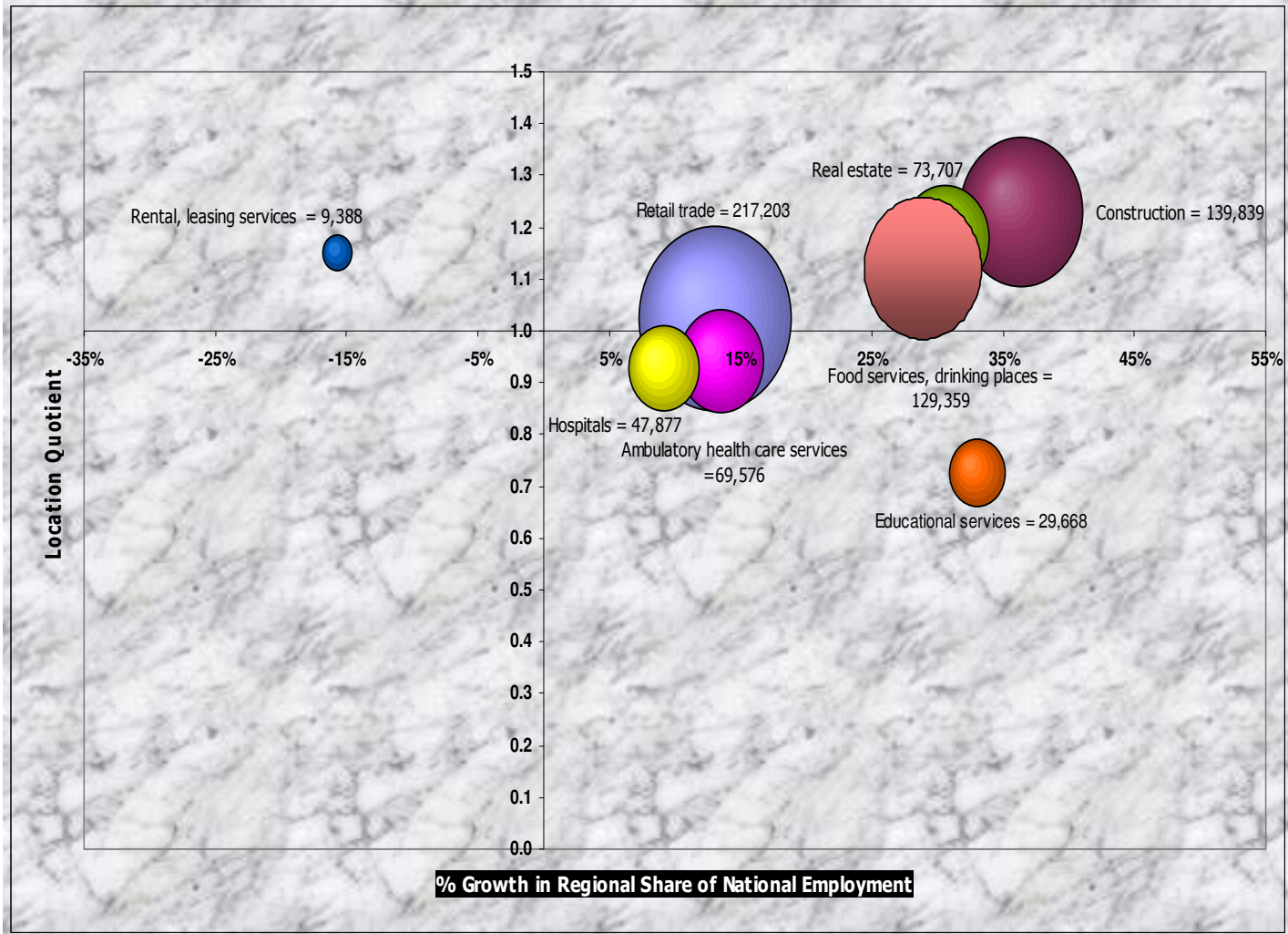


Table 11 Locally Traded Location Quotient

Industry Sector	Percent Growth of Regional Share of National Employment	Location Quotient
Construction	36.350	1.228
Real Estate	30.570	1.179
Rental, leasing services	-15.680	1.150
Food services, drinking places	28.850	1.120
Retail trade	13.050	1.023
Ambulatory health care services	13.560	0.943
Hospitals	9.190	0.929
Educational services	33.070	0.725

III. Rising Clusters

The region's low unemployment rates and strong job creation in diversified industries are advancing some clusters to world-class levels. Industries like Advanced Manufacturing, Aviation & Aerospace, Digital Media, Entertainment Technology, Life Science & Biotechnology, Modeling, Simulation & Training, and Photonics are thriving. These industries present opportunities to the region to lead in the new "creative economy". Furthermore, their rise corresponds with the goals of Enterprise Florida, the state's economic development arm, to diversify the Florida economy.

The "creative economy" refers to the growth of technical, medical, professional and creative jobs. People with these portable skills can live or work anywhere they desire. They have been extensively studied by Dr. Richard Florida in his books "The Rise of the Creative Class" and "Cities and the Creative Class". Dr. Florida has found that the creative class is attracted to attractive urban centers with mixed commercial and residential uses in higher density cores. These neighborhoods typically offer many cultural and higher educational amenities, social tolerance, parks, trails, and opportunities to interact with others without long auto commutes. These urban centers typically have a good mass transit system such as the light rail found in Portland Oregon, and streetcars in San Francisco.

Biotechnology Cluster

In 2006 central Florida leaders announced that firm commitments had been made to build a regional "Medical City" at Lake Nona, a large new development southeast of downtown Orlando. The four major tenants of this "medical city" will be:

- The Burnham Institute for Medical Research, a major cancer and biotechnology research facility;
- The University Of Central Florida's first College Of Medicine, Burnett School of Health Sciences, and College of Nursing
- A new Veteran's Administration Hospital;
- A Dupont de Nemours Children's Hospital.

Earth work began in 2007 for the UCF Medical Center. This Biotechnology cluster will make the region a leading biotechnology center, just as it is a national center. According to the Metro Orlando EDC, the biotechnology sector in the Metro Orlando region includes 155 biotechnology and life science companies employing 9,248 workers and earning an estimated \$2.6 billion.

The region is home to Central Florida Technology Research Park, one of the top 10 parks of its kind in the world.



Aviation and Aerospace Cluster

The aviation & aerospace industry in the region makes it a hub for advanced flight training, air defense projects, space exploration, and missile and rocket systems projects. In addition the region is the world's capital for modeling, simulation and training, and includes more than 100 companies that employ approximately 6,000 direct employees.

Orlando and east central Florida is home to the most elite simulation and modeling industry in the world, especially for military simulation.

As stated in Chapter I, there were 13,640 workers at Kennedy Space Center in 2006. Total economic impact of all KSC/NASA activities in Florida was \$3.6 billion in 2006 and 34,000 jobs. 93% of this total economic impact occurred in Central Florida.

Film Production and Digital Media Clusters

The film production industry in the metro region, which includes digital media, accounts for \$845.5 million in direct sales and 3,400 direct employees. The district is also home to one of the 12 largest clusters in the nation in entertainment technology. The State of Florida is the third largest film and entertainment production center in the U.S. after California and New York. According to the Metro Orlando EDC, more than 7,500 higher education students annually enroll in digital media programs throughout the metro region.

In addition to these particular clusters, the University of Central Florida has the number one business incubator in the nation.

IV. Strengths, Weaknesses, Opportunities, and Threats to the Regional Economy

To understand the dynamics of the regional economy, it is vital to know the main strengths and weaknesses that make this economy what it is today, and identify the potential opportunities and threats facing the region.

Issues like traffic congestion, transportation access, affordable housing, hurricane insurance costs, educational attainment, cost of living, environmental quality and labor access, availability of technology and the amount of venture capital available can influence regional economic growth.

The CEDS technical committee members were asked to identify and prioritize regional strengths, weaknesses, opportunities, and threats (SWOT). The SWOT components were assembled and committee members voted for the top four issues in each category. Results are shown below in Table 12.

Table 12 SWOT Analysis Summary

Top 4 Strengths					
	Total	Rank			
		1	2	3	4
Global/brand recognition – How Shall We Grow (<i>myregion.org</i>)	9	5	1	1	2
Knowledge Infrastructure: Rollins, FIT, USF, UCF, UF, Embry Riddle, other	8	1	4	2	1
Environmental assets: Beaches, Lakes, Parks, and Natural Areas, Critical Wildlife Habitat	8	2	1		5
Emerging medical/bio tech: Medical City, Burnham Institute, VA Hospital, University of Central Florida Medical School	5	1		3	1
Orlando International Airport	5	1		3	1
Top 4 Weaknesses					
	Total	Rank			
		1	2	3	4
Transportation system (Traffic, Congestion, and Unbalanced) (some of the longest commutes in the nation)	8	3	2	3	
Housing costs (formerly affordable and now not affordable)	8	2	1		5
Education -12 (inadequate funding)	7		4	2	1
Fragmented governmental/regional leadership-93 jurisdictions in 7 counties	4	1	2		1
Lack of Infrastructure to keep up with rapid growth	4		1	2	1
Top 4 Opportunities					
	Total	Rank			
		1	2	3	4
Improve Transportation system to achieve better regional and worldwide connectivity for smoother mobility of people and movement of goods and services	9	1	7		1
Bio-med Industry (emerging bio-medical cluster: Burnham Institute, UCF Medical School...)	7	1	2	4	
Modeling – simulation – training – digital media (international center of simulation)	6			3	3
HSWG – regional vision and altering development patterns- change the way the region is developing	6	2		1	3
Improve K-12 education	6	4	1		1
<i>Commuter rail 2013</i>	*				
<i>New Performing arts center, new sports arena for Orlando Magic, Citrus Bowl football stadium upgrade</i>	*				
Top 4 Threats					
	Total	Rank			
		1	2	3	4
Excessive Housing / rent costs compared to personal income	11	5	2	3	1
Increase gasoline prices with current transportation options in region and lack of options.	7		3	2	2
High Cost of Property taxes, property insurance	6	1	3	1	1
"Hometown Democracy"- Voter referendum on land use changes	6	1	2	2	1
Increasing crime rates	6			2	4
Lack of diversity in local economies	6	3			3
Relocation of Taft rail distribution yard	*				
End of shuttle program at KSC could mean 3-5,000 hi tech layoffs	*				
Environmental encroachment and damage	*				
<i>*Major Issues included after the SWOT exercise was completed.</i>					

A. Inter-Related SWOT Themes

There are related threats and weaknesses that are holding back the region's economy. These could be resolved by enhancing the appropriate strengths and seizing the related opportunities. We have paired the most critical and obvious cases below.

Issue : Low Density Sprawling Regional Development Patterns

The "How Shall We Grow" (HSWG) regional growth-visioning project showed the clear negative impacts that poor planning and inefficient utilization of the regions resources are having on the economy. The project involved more than 20,000 citizens through outreach efforts, community presentations, and online surveys. Transportation, environment and economic models were used to study the impacts of the region's demographic growth under different land use, environmental and transportation policies.

a.) Threat:

- The "How Shall We Grow" (HSWG) regional growth-visioning project showed the clear negative impacts that poor planning and inefficient utilization of the regions resources are having on the economy. The project involved more than 20,000 citizens through outreach efforts, community presentations, and online surveys. Transportation, environment and economic models were used to study the impacts of the region's demographic growth under different land use, environmental and transportation policies.

b.) Weakness:

- Fragmented governmental/regional leadership; 93 different land use jurisdictions, 93 different plans for the future.
- Lack of Infrastructure to keep up with rapid growth;
- Transportation system failing (roads seriously overloaded, traffic choking arteries all day long, lack of mass transit, long commutes, and lack of redundancy in critical transportation corridors;
- Lack of transportation cross connections between transportation modes of water, rail, road and air.
- Need for better pedestrian and bicycle lanes in urban centers to accept some commuting trips of less than 5 miles.

c.) Strengths:

- Global/brand recognition – The How Shall We Grow (myregion.org) project is now a nationally recognized and award- winning community visioning process that involved over 10,000 people directly and an additional 10,000 via the internet and on line surveys.

- The adopted, fully-supported (by 93 jurisdictions) “2050 4 C’s Vision” for conserving most sensitive ecosystems, developing more compact urban centers, and connecting centers with corridors of transit, thus preserving countryside. This Vision offers a beacon of hope for a new regional development pattern. The results of the HSWG project showed that the majority of Central Floridians preferred a different future development pattern from current trends, and that 96% supported Smart Growth alternatives over than the current trend.

d.) Opportunities

- Implement the 2050 4-C’s Vision over the next 45 years by working together to reduce sprawl by conserving the most critical ecosystems, promoting more growth in attractive urban centers with increased densities, connecting urban centers with corridors of transit, and preserving countryside.
- Promoting more population growth at higher densities in urban centers can help the region attract a more knowledgeable workforce and creative industries, and accomplish the goals behind all the strategic findings of the East Central Florida EDD.
- Implementing the HSWG 4 C’s vision (Conservation, Centers, Corridors, and Countryside) has a potential saving of \$100 Billion in avoided infrastructure costs from 2005 to 2050 by reducing the urban growth from 2,600 square miles to 660 square miles.
- The urban centers become centers of commerce and stimulate the region by adding \$92 Billion to the regional gross domestic product and 456,000 potential additional jobs by 2050 over the standard sprawling low density development patterns currently used.

V. Knowledge-Based “Creative Class” Economy

There is a lack of diversity in some local economies. For regions like East Central Florida that are experiencing continuous demographic growth, economic changes happen very fast. To remain competitive in the global economy, where trade flows freely and talent is highly mobile, these regions have to continuously invest in their workforce and their capital.

The lack of local funding for education at K-12 levels is an obstacle to increasing educational attainment in preparation for higher education.

Sprawling low density residential development patterns do not attract the creative professional class; they prefer urban centers, with a mixture of eclectic uses.

Talent, Education and Technology are basic requirements for the “creative class” new economy. If a region and its workforce do not possess these tools then it will be hard for the region to attract certain creative and knowledge-based industries. As a result regions have to build their markets to be more innovation-friendly for the creative businesses and the innovative workforce.

New state legislation requires the reduction of classroom sizes in K-12 classrooms. This is intended and expected to give a better teacher to student ratio, which in turn should improve understanding,

and over time, increase educational attainment levels. This means raising education attainment levels and standards so that graduates have the right knowledge to fulfill the needs of the emerging innovation economy.

Occupations that depend on knowledge, technology and or innovation in the region were 22.9 percent of all jobs in 2005 with a total of 388,390 jobs. These types of jobs are expected to increase to 528,343 by 2020 for a 24.9 percent share of total employment in two of the groups Dr. Richard Florida calls the Super-Creative Core and the Creative Professionals, which together include ten different types of occupations.

Table 13 Knowledge Base and Creative Employment

	2005	2010	2015	2020
Total Number of Occupations (jobs)	1,692,988	1,900,331	2,045,550	2,122,831
Knowledge and Technology Based Occupations	388,390	447,131	497,778	528,343
Percent of Innovative Workforce	22.9%	23.5%	24.3%	24.9%

Source: e florida

The HSWG 4 C’s Vision, if implemented, would create many urban centers with mixed uses, a breeding ground for commerce and the preferred locales of the mobile professionals with creative skills. Companies use Capital and Labor to produce Output. Places provide companies with these inputs and receive investment in the economy.

The soon-to-be constructed “Medical city” at Lake Nona will be staffed with the creative class professional. Lake Nona and nearby areas need to thus be built as mixed use urban centers to attract and retain these creative class professionals.

Mixed use urban centers at Downtown Orlando, downtown Altamonte Springs, the newly approved Performing Arts Center, the International Corporate Park, Innovation Way, Innovation Place and the University of Central Florida will also be strong creative class attractions. Mass transit will be needed to connect these places.

Implementing the HSWG 2050 4 C’s Vision would create additional centers of mixed use and commerce, and thus attract the creative class and stimulate the regional economy. In a separate exercise, the region’s 86 cities and seven counties were asked to envision themselves in 2050. Judging from their responses, we could have 12 regional cities of over 100,000 people in the year 2050 compared to two (Orlando and Palm Bay) today. Each of these regional cities presents an opportunity to attract the creative class to its urban core.

ECFRPC staff worked with the Regional Economic Modeling Institute of Amherst, Massachusetts, to measure the potential economic impact of the alternative growth scenarios from the “How Shall We Grow” project.

Using Dr. Richard’s Florida’s theory of the “Creative Class,” the Corridors scenario, which comes closest to the 2050 Regional Vision, is estimated in 2050 to produce 456,000 additional new jobs more than the low density suburban sprawl Trend model. These jobs would add \$92 billion of gross regional annual product in 2050 over the Trend.

Table 13 Knowledge Base and Creative Employment shows the numbers of knowledge based jobs in the East Central Florida Economic Development District in 2005, and those projected from the 4C's Vision in 2010 to 2020.

VI. Efficient Movement of People and Goods & Services

In 2004, 31 Million U.S. jobs depended on trade. 1 in every 5 jobs is linked to exports and imports of goods and services (Trade and American Jobs economic study).

Because trade is making the world act as a single entity, with each country producing specialized commodities and services, the efficient movement of people and goods and services is the key for success.

As noted in Chapter I (Section IV Transportation Access), the region relies primarily on roads and vehicles for the movement of people and goods within the region. Orlando international airport is one of the nations' busiest with over 35 million passengers per year, bringing tourists and business travelers into the region.

Total exports of goods and services from Florida amount to some \$54 Billion annually. Central and South America led the top destinations for Florida's exported merchandise. The economic development district of East Central Florida is home to major transportation links connecting the region to the rest of the world.

The region is served by one spaceport, seven airports, led by the Orlando International Airport, several rail freight lines, and Port Canaveral, a deepwater port and one of the 3 leading passenger sea ports in the nation. As container traffic continues to grow, the region must increase its investment in the goods moving infrastructure to capture a bigger market share of international trade.

To expand on the brief description of Port Canaveral in Chapter I Section I (Brevard County), Port Canaveral has a total annual economic impact of \$3.9 Billion, of which \$2.3 Billion is regional. Total number of jobs linked to the port was approximately 90 thousand, of which 50 thousand were regional. The port has multiple uses, serving cruise ships, cargo vessels, and is also used by the U.S. military.

Many of the transportation hubs in the Space Coast are part of the Foreign Trade Zone 136, which is one of 240 zones nationwide. The free trade zones allow qualified businesses to defer or eliminate U.S. customs on imported goods.

Table 14 Florida's International Trade

Indicator	Value (millions)	Period	Change from previous period	Annual Growth
Total Merchandise Trade	\$26,698	Q1 2007	-5.1%	3.8%
Merchandise Exports	\$13,340	Q1 2007	-3.2%	7.7%
Merchandise Imports	\$13,358	Q1 2007	-6.9%	0.1%
Florida-Origin Exports	\$10,477	Q1 2007	1.7%	14.7%
Services Exports	\$5,908	Q1 2007	0.5%	7.7%

Source: e-Florida, 2007

In 2006 the Florida Seaport Transportation Economic Development and the Florida Ports Financing Commission identified a set of challenges in achieving the Florida Seaports' 2016 vision. These challenges are listed below:

- To be competitive in attracting new and existing markets and business opportunities, such as discretionary vs. captive cargo markets.
- Providing facilities and services that address the needs of port users.
- Expanding ports' role as economic engines.
- Operating globally within a local governance structure.
- Creating efficient freight and passenger mobility and connectivity in transportation corridors.
- Maintaining and improving waterside navigation compatible with environmental stewardship.
- Developing adequate port/industrial land and facilities.
- Improving cargo and passenger capacity.
- Balancing the elements of a secure, sustainable and cost-effective logistics chain.
- Developing inter-modal transportation partnerships to provide innovative market service strategies.
- Increasing public awareness and support for the maritime industry.
- Increasing regional cooperation.
- Attracting and retaining a reliable well trained workforce to service the maritime industry.
- Funding/investment, funding/investment and more funding/investment!

These challenges are important to the advancement of the regional economy, which is tied in one way or another to international trade and the movement of goods and services.

In 2006, gasoline prices increased significantly, driving up transportation costs. In the rapidly growing ECF region, transportation congestion is becoming a major challenge because of the limited transportation options and nearly saturated road capacity (see Chapter I, Section IV).

One important conclusion of the How Shall We Grow Project was the need for a more balanced transportation system as we grow. The land use-transportation linkage has a major effect on the economic growth in East Central Florida.

VII. Natural Asset Value and Environment-Reliant Economic Sectors

1. Land and Freshwater

The approximately 2,000 square mile conservation land network in public ownership in the region represents a "green and blue" infrastructure of land and water resource assets that:

- create a regional brand-identity;
- contribute current and future economic value;
- provides expansive outdoor recreational activities;
- enhances a high quality of life for the region's population;
- sustains its native plants and animal species. (See Chapter I, Section VI);
- stimulates tourism;

- stimulates fishing, boating, and other outdoors activities and related retail sales;
- provides a diverse range of natural resources related jobs;
- attracts new businesses dependent on conservation and the outdoors.

Conservation of the most sensitive environmental ecosystems contributes:

- economic value to residential and commercial property values;
- aesthetic value;
- protection of the vital recharge areas for the underground Floridan aquifer;
- surface water and wetlands protection;
- air quality protection;
- protection of native migratory wildlife and plant systems.

Continuation of agriculture contributes vital local, national and international shipment of Florida's fruits, vegetables and meat. A second advantage is that ongoing agriculture under private ownership also retains critical ecological resources within these agricultural lands.

In 2005, the University of Pennsylvania Urban Design Studio prepared a regional analysis for the University of Central Florida Metropolitan Center for Regional Studies (Barnett et al., 2005).

This study recommended:

- strategic regional planning based on protection of critical natural areas;
- developing a multimodal transportation system to connect compact urban centers.
- Avoiding the proliferation of low density urban sprawl by adopting Smart Growth policies.

The U. Penn study also concluded that developing in this more compact, Smart Growth fashion could save the region \$90,000 per acre in avoided infrastructure costs for every acre of land that was not developed with low density urban sprawl.

The U. Penn study sowed the seeds for the How Shall We Grow Regional Visioning Project by myregion.org. That project, completed August 10, 2007, recommended a similar regional vision for 2050 (4C's of Conservation, Centers, Corridors and Countryside) that could prevent almost 2,000 additional square miles of urban sprawl by 2050.

Based upon the U. Penn's \$90,000 per acre projected savings from avoided infrastructure costs, implementation of the myregion.org 2050 4 C's Regional Vision (see Chapter 5) could result in a \$110 billion savings in avoided infrastructure costs by 2050 relative to the current trend.

2. Potable Water

One of the most immediate threats to sustainable natural resources in central Florida is the availability of potable water. Sixty percent of potable water is currently being used for lawn irrigation. With population expected to double to 7.2 million by 2050, water is a future crisis issue. Central Florida counties and regional water management districts have already passed strict ordinances which restrict the use of potable water for irrigation.

In 2003, the St. Johns River Water Management District made projections that if major water users' current water supply plans for 2025 are implemented, the elevation of the potentiometric surface of the Floridan aquifer is expected to decline regionally in response to cumulative withdrawals. In response to these declines in the elevation of the potentiometric surface of the Floridan aquifer system, and in response to withdrawals from the intermediate and surficial aquifer systems, water levels in the surficial aquifer system would decline and contribute to unacceptable impacts to wetlands and lakes in Brevard, Flagler, Lake, Marion, Orange, Osceola, Seminole, and Volusia counties.

Also in response to these declines, the discharge of Starbuck Spring in Seminole County and a total of 14 lakes in Lake, Seminole, and Volusia counties would fall below established minimum flows and levels. In addition, chloride concentrations would likely increase to unacceptable levels in public supply well fields in parts of Brevard, Flagler, Seminole, and Volusia counties, mainly in areas in or near the Atlantic coast and the St. Johns River.

To emphasize the severity of the looming water crisis, a unified announcement was made by the St. John's WMD and the South Florida WMD in 2006 that after 2013, no new groundwater permits will be issued for the Floridan aquifer, which supplies all of central Florida's water. After 2013, additional potable water supplies will have to come from treated surface water, desalination of sea water, or captured rain fall.

The delivery of high quality potable water to Florida's current and future residents is a conservation and technology challenge of great significance to the economic sustainability and growth of the region.

3. Estuary and Ocean

The 2004 U.S Commission on Ocean Policy report, "An Ocean Blueprint for the 21st Century", presented national ocean policy in a coordinated and comprehensive strategy to President George W. Bush and Congress. The report confirmed that our ocean and coastal resources are in trouble. It cited research that quantified the importance of America's ocean and coastal economy and stated, "Our oceans and coasts are among the chief pillars of our nation's wealth and economic well-being."

Investments in ocean and coastal science, technology development and new approaches to resource use and management are not special-interest environmental issues; these are national economic issues and critical issues for the future of Florida.

Florida's Ocean Economy represents an overlooked economic sector of significant size today and with room to grow.

Ocean Economy opportunities include the following components:

- scientific research
- technology R&D
- potential for national training centers;
- product development in Aquaculture/Mariculture (food from the sea and fisheries stock enhancement);
- ocean related energy technologies (waves, wind, thermal);
- potable water production (desalination)

- coastal and ocean monitoring through the emerging Florida Coastal and Ocean Observation system (FLCOOS)
- expanded maritime shipping and transportation (cruise industry development, commercial fishing, cargo transport;
- a Florida east coast center for short-sea shipping at Port Canaveral (“blue water highway”).

One local example is the emerging partnership between Hubbs-Seaworld Research Institute and University of Central Florida to focus research and technology development in ocean health and human health and coastal scientific research.

SRI International (founded by Stanford University in 1946). SRI is an ocean R&D non-profit corporation that came to Florida in 2006, affiliated with the University of South Florida. By 2015, SRI-St. Petersburg is projected to have more than one hundred staff conducting scientific research, engineering, and commercialization in 5 focus areas: Marine Research, Maritime Security, MEMs and Nanotechnology, Energy and Environment and Bio-medical.

4. Existing Nature-Based Economic Sectors (Selected Examples)

- a) Environmental Consulting: Metro Orlando and the central Florida region have a robust and growing environmental consulting sector. A recent article in Orlando CEO (Seidel, 2007) cited data from the 2004 U.S. Census Bureau that showed more than 600 private-sector companies in Metro Orlando were involved in environmental consulting with median salaries of \$51,080-\$85,940. This sector is projected to grow by 9-17% over the next 8 years based on Bureau of Labor Statistics.
- b) New Technology R&D: New technology opportunities in the region related to natural resource assets include: advances in commercial and recreational fishing technologies and equipment, high-tech boat building, marine material development, marine industries and instrumentation technologies, water-based port and homeland security R&D, pollution mitigation technology, weather and natural events forecasting R&D, potable water technology development (conservation, desalination, etc), energy research (solar, biofuels from natural sources, wind, ocean currents, etc), natural hazard mitigation technology, and others.

Scientific Research: The region has a diversified research capacity with strong potential for sustained regional growth represented by public and private universities, private for-profit research labs and not-for-profit non-governmental organizations (NGO’s). Unfortunately this economic sector is often overlooked in economic development strategies and is poorly represented as an economic sector by sound economic analysis and value estimations.

Professional Training: As a result of an expansive natural area land conservation network coupled with world-class freshwater, estuarine and ocean resources, Central Florida is uniquely positioned to develop professional training programs in conservation, scientific research, resource management, nature tourism and other natural asset related professional training areas. This potential economic growth sector remains poorly understood.

CHAPTER 3

THE ROLE OF *myregion.org* IN THE 2007 CEDS

Myregion.org is a collaborative private-public partnership begun in 1998 by the Greater Orlando Area Chamber of Commerce to analyze how the region could better compete in the global economy. Regional demographic and economic analyses transitioned into an extended inquiry into environmental, demographic, transportation and educational constraints to the economy.

Elected leaders and residents from eighty six cities and seven counties joined together to discuss the future of the fast growing central Florida region in an unprecedented partnership. All 93 political jurisdictions were represented on various committees and boards of *myregion*. The Board of Directors is comprised of 103 members of business, industry, elected officials and citizens.

Extensive public and business surveys confirmed the alarm at the rapid loss of sensitive environmental lands and open space and the loss of perceived quality of life. All of these things were negatively affecting business's perception of central Florida as an attractive economic environment. Six universally agreed upon regional growth principles came from extensive surveys and discussion by *myregion*:

- Preserve open space recreational areas, farmland, water resources and regionally significant natural areas.
- Design communities that integrate educational, health care and cultural amenities.
- Provide a variety of transportation choices.
- Encourage a diverse, globally competitive economy.
- Foster distinct, attractive and safe places to live.
- Create a range of obtainable housing opportunities and choices.

By 2005, over \$1 million worth of research was pointing to one conclusion: if the region continued to grow in a pattern of low density sprawl, it would have negative effects on the economy, environment, transportation, and quality of life.

Thus was born the "How Shall We Grow?" regional visioning project of 2006-07. *myregion.org*'s goal was an in-depth analysis of current land use patterns and the following future development scenarios.

Trend 1- showed what the region would look like in 2050 with the extension of existing development patterns and densities, with all known new road projects through 2030, and without any additional conservation lands added. Included the 61 miles of commuter rail from Deland to Poinciana.

Trend 2- Same as Trend 1, but included a toll road outer beltway around Orlando.

Conservation- Preserved over 2000 additional square miles of conservation in the most sensitive ecosystems and in area citizens preferred not to be developed. Also added 272 miles of passenger rail and all known road projects through 2030. Allowed the same current development patterns and densities to sprawl outside of the preserved conservation areas.

Centers- Promoted more growth in mixed use urban centers, also conserved approximately 2,000 square miles of sensitive ecosystems, included all know road projects through 2030, plus added 370 miles of toll road parallel to I-4 and I-95, added 282 miles of commuter rail.

Corridors- Promoted more growth in mixed use urban centers, but also along rail corridors linking centers. Conserved approximately 1,700 square miles of sensitive ecosystems, included all known road projects through 2030.

A set of 11 indicators were devised to compare the present, and various alternative futures. These became the “regional scorecard” and were used to compare the various alternative scenarios provided by the ECFRPC and its partner the University of Florida’s Geo Plan Center.

Those indicators are:

- Urban Area (in square miles)
- Square miles of preserved conservation, or recommended for future conservation
- Square miles of endangered species habitat destroyed
- Commute Time (average minutes per person per day spent in an automobile)
- Air quality in kilograms of carbon monoxide
- Average auto speed in miles per hour
- Passenger rail (number of miles)
- Water consumed (total consumption in gallons)
- Employment (number of jobs)
- Economy (gross regional product in dollars)
- Average annual wages

Figure 17 2005 Existing Development Condition shows the extent of urban land in the EDD plus Polk County. The indicators below the map are “scorecard” for the region.

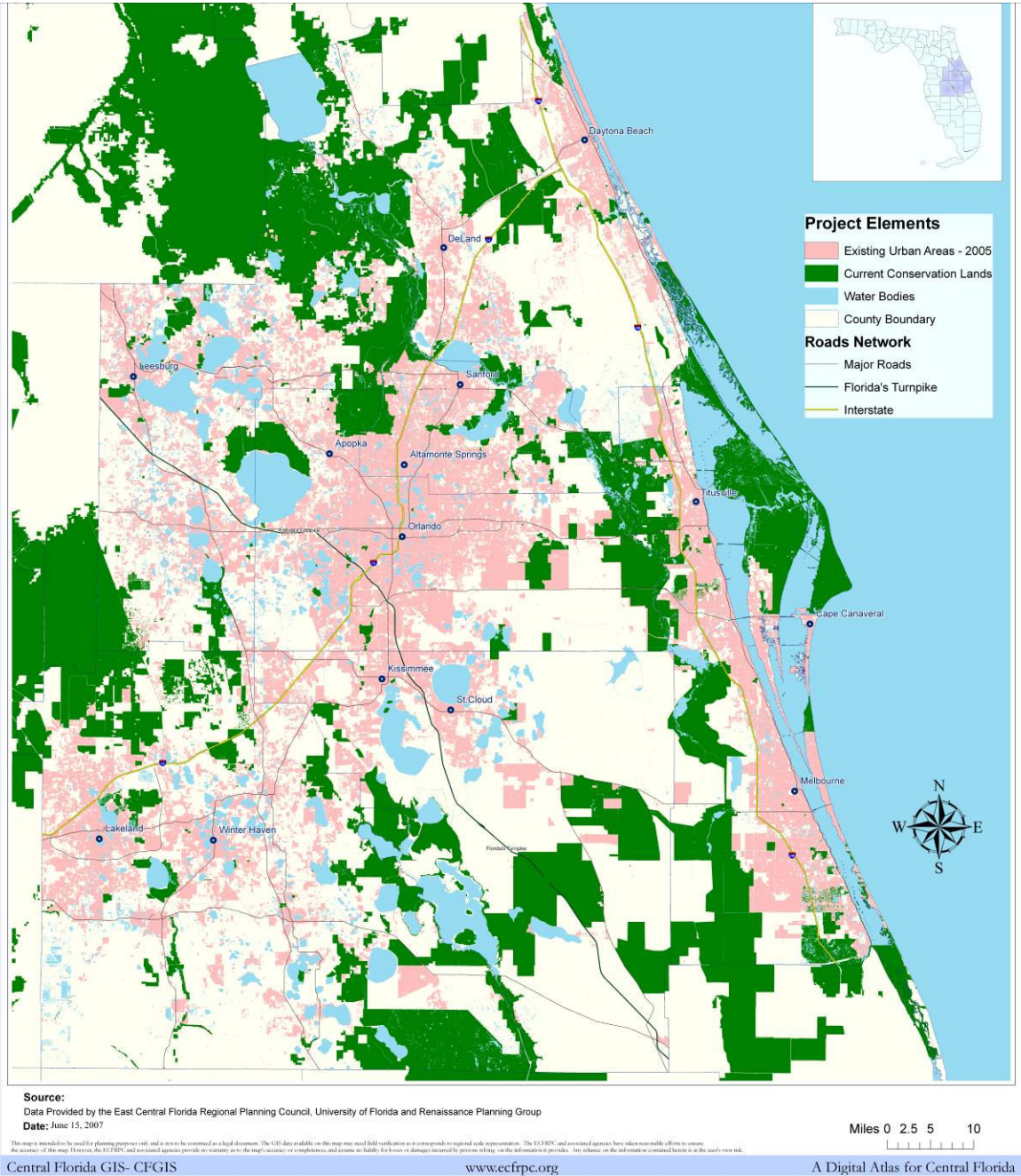
Figure 18 2050 Trend shows the how much land will be urbanized from 2005-2050 if the region continues its current development patterns and densities.

The total of urban developed land in the region (six counties region plus Polk County) in 2005 was 2,618 square miles. Following current land development trends largely represented by low density sprawl, the region is expected to double the amount of urban land to accommodate the 2050 population projection of 7.1 million people.

This extreme land consumption sprawl pattern is already having regional negative environmental, transportation, and economic consequences which are expected to get much worse by 2050.

Urban Developed Land (7 counties)	
Year	Square Miles
1980	681
1990	1,217
2000	1,675
2005	2,618
<i>2050</i>	<i>(projected) 5,195</i>

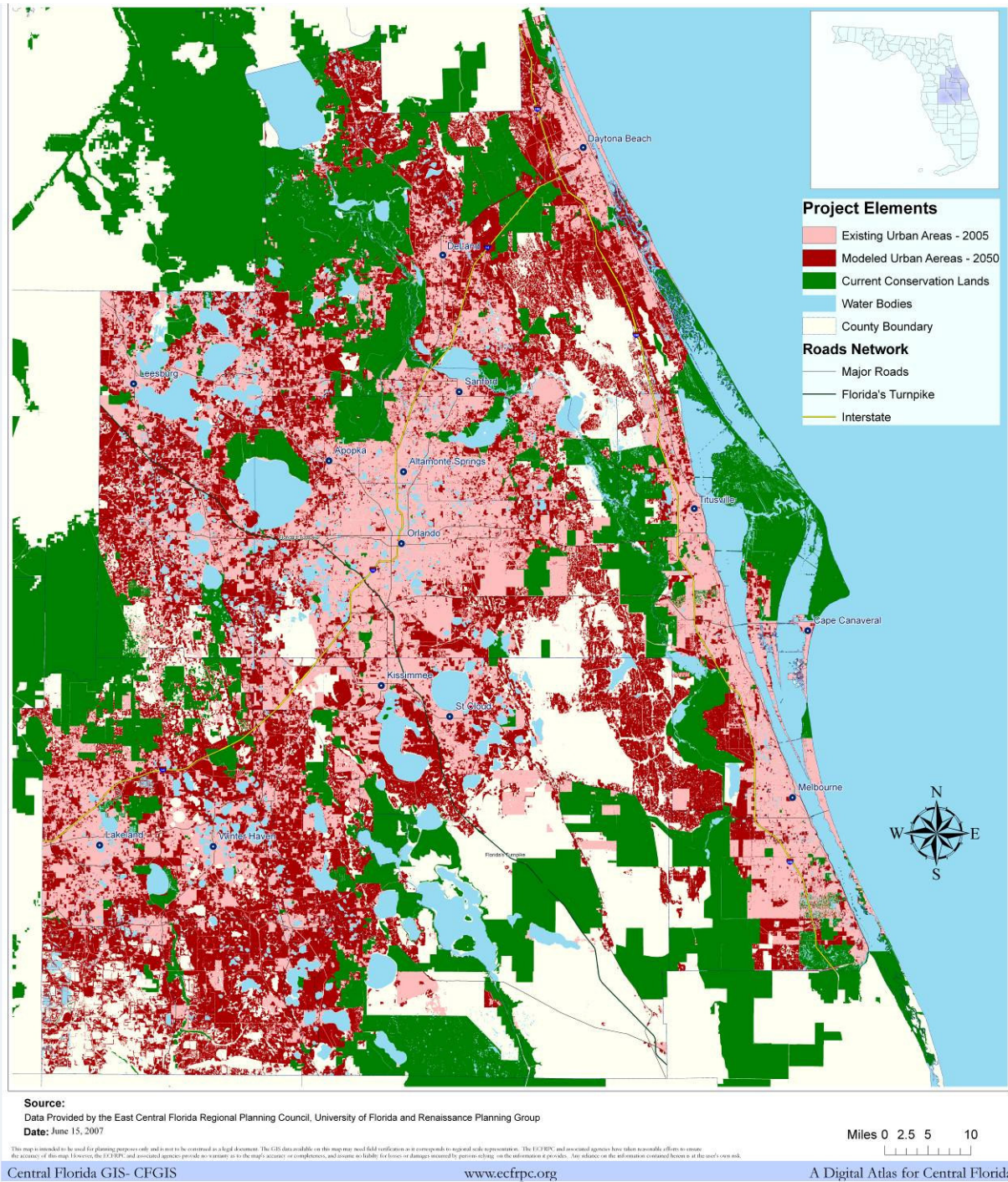
Figure 17 2005 Existing Development Condition



2005 Indicators Score Card

Urban Area	2,618 sq. mi. (32%)	Air quality	1.045 million kg CO
Habitat destroyed	394 sq. mi.	Water consumed	1.02 billion gals/day
Conservation	2,144 sq. mi. (24 %)	Employment	1,963,000 jobs
Auto Commute	20 min./person/day	Economy	\$118 billion GRP (2000 \$)
Avg. auto speed	34 mph	Avg. wage/yr	\$35,617 (2007 \$)
Passenger rail	0 mi.		

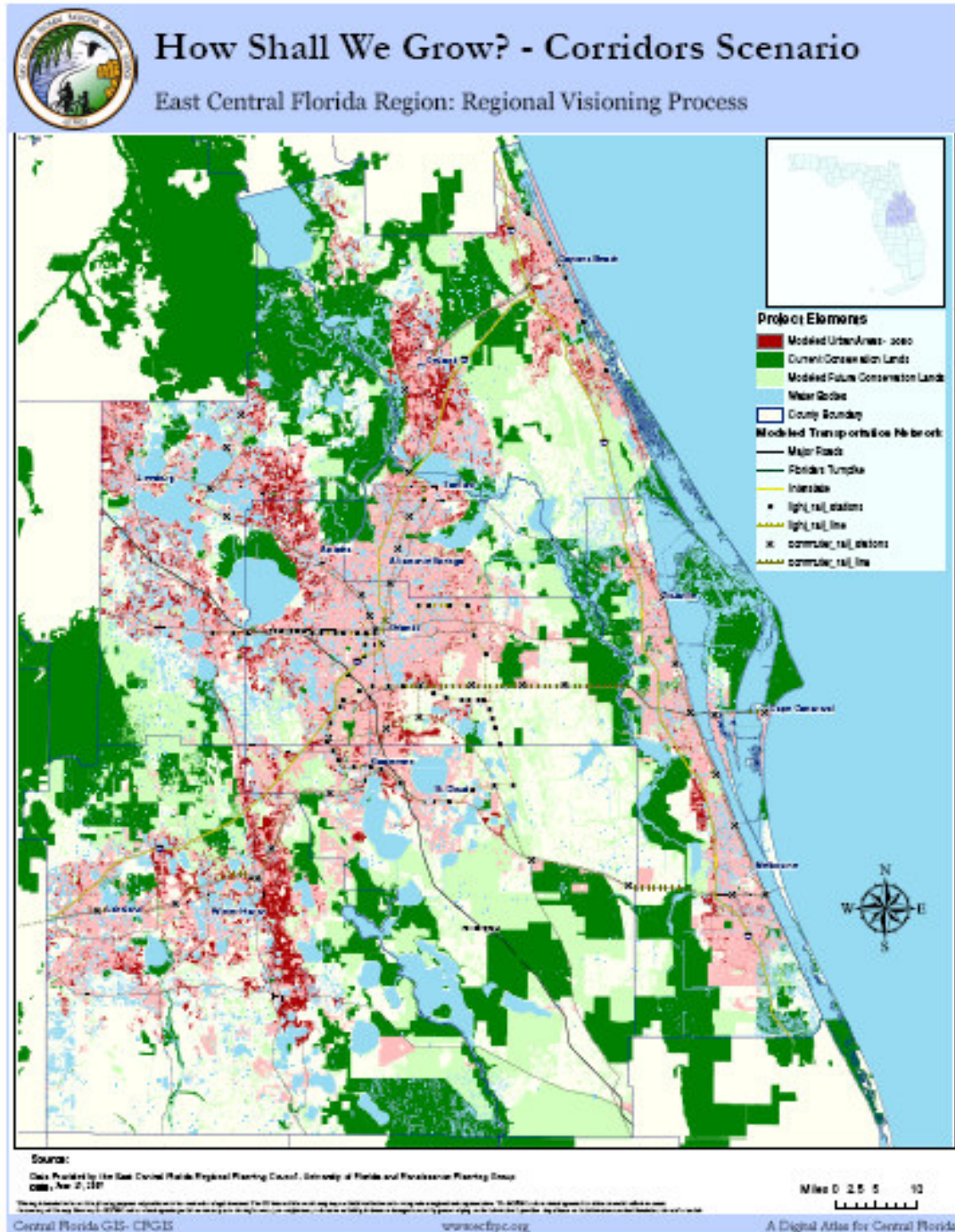
Figure 18 Trend 2050



2050 Indicator Score Card

Urban Area	2,577 sq. mi.	Air quality	3.419 m. kg. CO
Habitat destroyed	344 sq. mi.	Water consumed	1.7 billion gals/day
Conservation	0 sq. mi.	Employment	3,768,000
Auto Commute	90 min./person/day	Economy	\$421 billion
Avg. auto speed	21.36 mph	Avg. wage/yr	\$55,169
Passenger rail	61 miles		

Figure 19 Corridors 2050



Corridors 2050 Indicators Score Card

Urban Area	660 sq. mi.	Air quality	3.125 m.k.g. CO.
Habitat destroyed	28 sq. mi.	Water consumed	1.55 billion gals/day
Conservation	1,672 sq. mi.	Employment (Trend + 456,000 jobs)	4,225,000
Auto Commute	88 min./ person/day	Economy (Trend +93 billion)	\$513 billion
Avg. auto speed	23.18 mph.	Avg. wage/yr	\$58,990
Passenger rail	413 sq. mi.		

The following is a comparison of the modeling results of the least robust economic scenario (Trend) and the most robust economic scenario (Corridors).

A. The Trend Scenario offers the least economic growth.

1. Difficulty moving people and goods restrains economic expansion.
2. Lower paying service jobs remain dominant.
3. Total employment is 3,768,000.
4. Gross regional product is \$421.3 billion dollars.

B. The Corridors Scenario offers the most economic growth:

1. Conserves the most sensitive environmental lands of all five scenarios modeled. Only develops 660 square miles of newly urbanized areas from 2005-50. Saves almost 2,000 square miles of the most sensitive ecosystems, ground water recharge areas, migratory wildlife corridors.
2. Avoids \$110 billion in unnecessary urban infrastructure.
3. Balanced transportation systems (bike, auto, air, roads, rail, shipping) stimulates the movement of people, goods and services.
4. Transit system, green areas and urban amenities attracts the creative and professional classes.
5. More dense development patterns, with mixed uses (residential and commercial in proximity along transportation corridors) provide more affordable housing opportunities.
6. Consumes less water than the Trend of sprawl, has cleaner air than the Trend.
7. Adds 456,000 more jobs than the Trend. Two thirds of these are higher wage jobs created by attracting the creative class.
8. Gross Regional Product in 2050 is projected to be \$513.57 billion dollars, \$92 billion more than the Trend scenario.

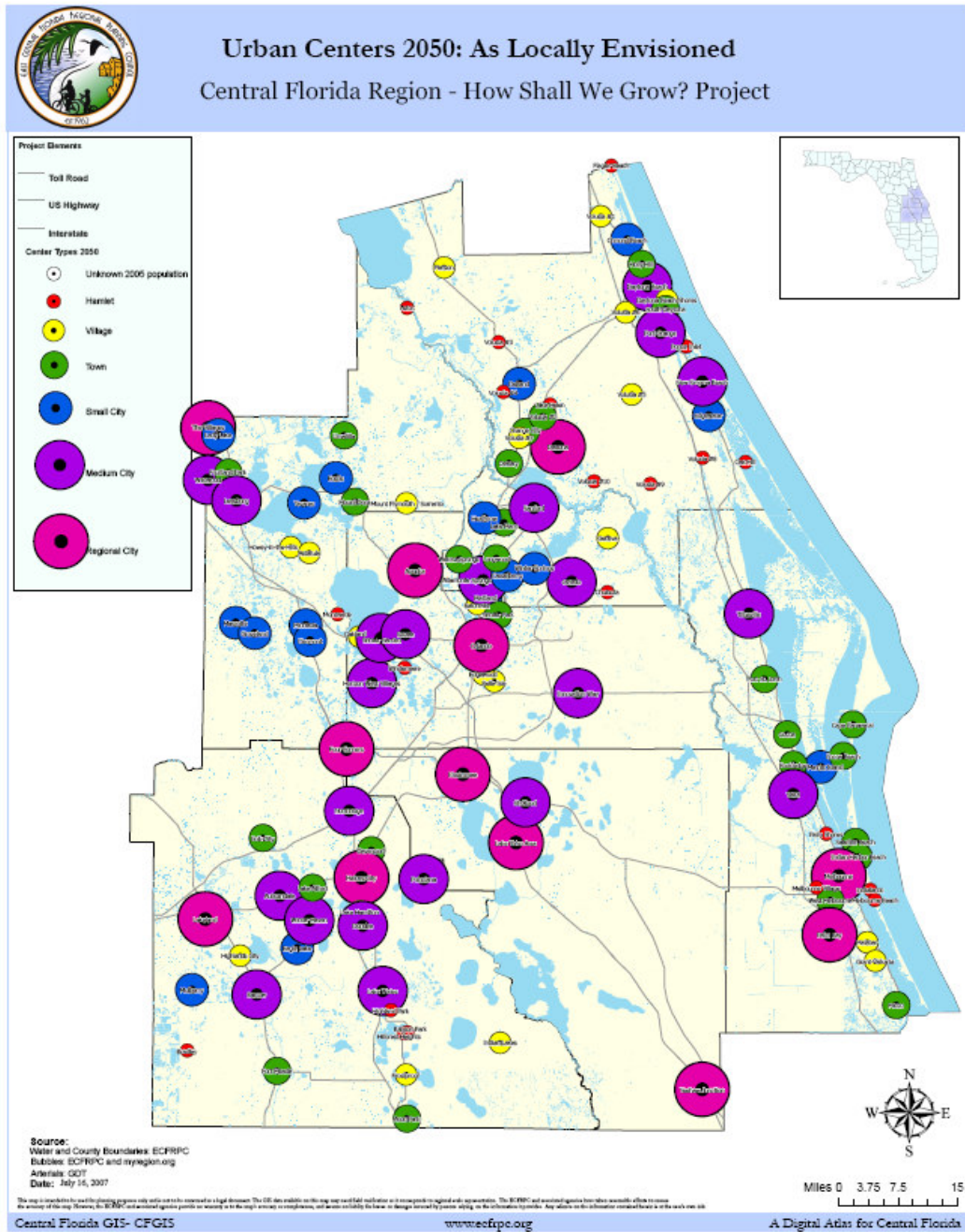
The “How Shall We Grow?” project ultimately resulted in a “vision” for the year 2050 that would shift future development from the suburban sprawl to a much more urban form. See map below.

Figure 20 Regional Vision Map



Source: *myregion.org*

Figure 21 Urban Centers 2050 As Locally Envisioned



The map above shows that by 2050, there could be 12 regional cities of more than 100,000 people. In 2007 there are only two regional cities of more than 100,000 people (Orlando, and Palm Bay).

Such emergence of new regional cities will necessitate new transportation systems and protection of the environmentally sensitive ecosystems that are in the path of development. If cities grow more vertically, with more compact centers of commerce and residential density, they can help preserve the sensitive environmental ecosystems. The following table shows the population for urban centers in 2050 as locally envisioned by the region’s cities and unincorporated counties.



Current and Locally Envisioned 2050 Population of Urban Centers

County Name	City	Population by 2005 and/or 2000 Census	Development Type	Maximum Population by 2050	Minimum Population by 2050	Classification
Brevard	Cape Canaveral	10523 Town	Town	12250	10000	Incorporated
	Cocoa	68098 Town	Town	20000	10000	Incorporated
	Cocoa Beach	12435 Town	Town	20000	10000	Incorporated
	Grant Valkaria	** Village	** Village	5000	5000	Incorporated
	Indian River	3076 Hamlet	Hamlet	4000	1	Incorporated
	Indian Harbor Beach	8441 Town	Town	20000	10000	Incorporated
	Marabar	2772 Village	Village	5000	5000	Incorporated
	Melbourne	75246 Regional City	Regional City	150000	150000	Incorporated
	Melbourne Beach	3114 Hamlet	Hamlet	4000	1	Incorporated
	Melbourne Village	702 Hamlet	Hamlet	4000	700	Incorporated
	Norfolk Island	** Small City	** Small City	40000	30000	Unincorporated
	Moo	9498 Town	Town	20000	10000	Unincorporated
	Palm Bay	62933 Regional City	Regional City	400000	100000	Incorporated
	Palm Shores	565 Hamlet	Hamlet	4000	960	Incorporated
	Port St. John	14112 Town	Town	20000	10000	Unincorporated
	Rockledge	24245 Town	Town	30000	10000	Incorporated
	Satellite Beach	9811 Town	Town	20000	10000	Incorporated
	Tiwanala	42767 Medium City	Medium City	50000	50000	Incorporated
	Viera	** Medium City	** Medium City	50000	50000	Unincorporated
	Polk	West Melbourne	15054 Town	Town	20000	10000
Alicia		13811 Medium City	Medium City	50000	50000	Incorporated
Avon Park		8542 Town	Town	20000	10000	Incorporated
Bayton Park		1182 Hamlet	Hamlet	4000	1	Unincorporated
Barrow		15276 Medium City	Medium City	50000	50000	Incorporated
Bradley		** Hamlet	** Hamlet	4000	1	Unincorporated
Clearport		2017 Town	Town	20000	10000	Incorporated
Deltona		5644 Medium City	Medium City	50000	50000	Incorporated
Edgewater		3699 Small City	Small City	40000	30000	Incorporated
Essex Lake		5742 Town	Town	20000	10000	Incorporated
Fort Meade		2562 Village	Village	5000	5000	Incorporated
Propper		** Regional City	** Regional City	150000	100000	Incorporated
Haines City		15711 Regional City	Regional City	150000	100000	Incorporated
Highland Park		264 Hamlet	Hamlet	4000	1	Incorporated
Highlands City		** Village	** Village	5000	5000	Unincorporated
Hilcrest Heights		285 Hamlet	Hamlet	4000	1	Incorporated
Indian Lakes		** Village	** Village	5000	5000	Unincorporated
Lake Alfred		3250 Town	Town	20000	10000	Incorporated
Lake Hamilton		1414 Village	Village	5000	5000	Incorporated
Lake Wales		12644 Medium City	Medium City	50000	50000	Incorporated
Lakeland	92713 Regional City	Regional City	150000	100000	Incorporated	
Maitland	3233 Small City	Small City	40000	30000	Incorporated	
Northridge	** Medium City	** Medium City	50000	50000	Unincorporated	
Polk City	13627 Medium City	Medium City	50000	50000	Unincorporated	
Polk City	1522 Town	Town	20000	10000	Incorporated	
Winter Haven	29501 Medium City	Medium City	50000	50000	Incorporated	
Starbuck	1529 Village	Village	5000	5000	Incorporated	
Astor	1487 Hamlet	Hamlet	4000	1	Unincorporated	
Clemons	11617 Small City	Small City	40000	30000	Incorporated	
Eustis	17683 Small City	Small City	40000	30000	Incorporated	
Fruitland Park	3578 Town	Town	20000	10000	Incorporated	
Groveland	5205 Small City	Small City	40000	30000	Incorporated	
Howe-in-the-Hills	1194 Village	Village	5000	5000	Incorporated	
Lady Lake	13244 Small City	Small City	40000	30000	Incorporated	
Lakeland	18151 Medium City	Medium City	50000	50000	Incorporated	
Mascotte	4382 Small City	Small City	40000	30000	Incorporated	
Mimico	7285 Small City	Small City	40000	30000	Incorporated	
Moravia	646 Hamlet	Hamlet	4000	1	Incorporated	
Mount Dora	10225 Town	Town	20000	10000	Incorporated	
Mount Plymouth / L. Serrano	755 Village	Village	4000	1	Unincorporated	
Rawlins	11114 Small City	Small City	40000	30000	Incorporated	
Umatilla	2508 Town	Town	20000	10000	Incorporated	
The Villages	** Regional City	** Regional City	150000	100000	Unincorporated	
Wetumpka	3624 Medium City	Medium City	50000	50000	Unincorporated	
Four Corners	** Regional City	** Regional City	150000	100000	Unincorporated	

County Name	City	Population by 2005 and/or 2000 Census	Development Type	Maximum Population by 2050	Minimum Population by 2050	Classification
Orange	Apopka	34728 Regional City	Regional City	140000	100000	Incorporated
	Belle Isle	5531 Village	Village	6431	5000	Incorporated
	Edgewater	6431 Village	Village	9000	5000	Incorporated
	Edgewater	2302 Village	Village	9000	5000	Incorporated
	Horizon West Village	2008 Medium City	Medium City	50000	50000	Unincorporated
	Interlachen Way	** Medium City	** Medium City	50000	50000	Unincorporated
	Midland	14125 Small City	Small City	40000	30000	Incorporated
	Orlando	1023 Village	Village	6431	5000	Incorporated
	Orlando	29846 Medium City	Medium City	70000	50000	Incorporated
	Orlando	21823 Regional City	Regional City	450000	100000	Incorporated
	Winter Park	4999 Hamlet	Hamlet	4999	1	Incorporated
	Winter Garden	25553 Medium City	Medium City	50000	55000	Incorporated
	Winter Park	29000 Town	Town	29000	10000	Incorporated
	Winter Park	4999 Hamlet	Hamlet	4999	1	Incorporated
	Winter Park	25553 Medium City	Medium City	50000	55000	Incorporated
	Winter Park	29000 Town	Town	29000	10000	Incorporated
	Winter Park	4999 Hamlet	Hamlet	4999	1	Incorporated
	Winter Park	25553 Medium City	Medium City	50000	55000	Incorporated
	Winter Park	29000 Town	Town	29000	10000	Incorporated
	Volusia	Daytona Beach	64421 Medium City	Medium City	90000	50000
Daytona Beach		4920 Village	Village	9000	5000	Incorporated
Daytona Beach		15413 Town	Town	25000	10000	Incorporated
Deland		24718 Small City	Small City	40000	30000	Incorporated
Deland		82788 Regional City	Regional City	138000	100000	Incorporated
Edgewater		21132 Small City	Small City	40000	30000	Incorporated
Flagler Beach		70 Hamlet	Hamlet	70	1	Incorporated
Holly Hill		13632 Town	Town	16500	10000	Incorporated
Lake Helen		2816 Hamlet	Hamlet	2817	1	Incorporated
New Smyrna Beach		22355 Medium City	Medium City	56700	50000	Incorporated
Orlando		1484 Hamlet	Hamlet	4900	1	Incorporated
Orlando		7853 Town	Town	25000	10000	Incorporated
Orlando		35813 Small City	Small City	40000	30000	Incorporated
Orlando		9999 Village	Village	9999	5000	Incorporated
Palma Sola		864 Village	Village	9999	5000	Incorporated
Ponce de Leon		5202 Hamlet	Hamlet	4999	1	Incorporated
Port Orange		5746 Medium City	Medium City	57000	50000	Incorporated
South Daytona		13733 Town	Town	20000	10000	Incorporated
Volusia #1		** Village	** Village	9000	5000	Unincorporated
Volusia #2		** Town	** Town	20000	10000	Unincorporated
Volusia #3	** Hamlet	** Hamlet	4000	1	Unincorporated	
Volusia #4	** Hamlet	** Hamlet	4000	1	Unincorporated	
Volusia #5	** Village	** Village	9000	5000	Unincorporated	
Volusia #6	** Village	** Village	9000	5000	Unincorporated	
Volusia #7	** Village	** Village	9000	5000	Unincorporated	
Volusia #8	** Hamlet	** Hamlet	4000	1	Unincorporated	
Volusia #9	** Hamlet	** Hamlet	4000	1	Unincorporated	
Volusia #10	** Hamlet	** Hamlet	4000	1	Unincorporated	
Altamonte Springs	41057 Medium City	Medium City	50000	50000	Incorporated	
Casselberry	20228 Small City	Small City	35000	30000	Incorporated	
Chuluota	1921 Hamlet	Hamlet	4999	1	Unincorporated	
Geneva	2671 Village	Village	9999	5000	Unincorporated	
Heathrow	4083 Small City	Small City	40000	30000	Unincorporated	
Lake Mary	14658 Town	Town	20000	10000	Incorporated	
Longwood	13952 Town	Town	20000	10000	Incorporated	
Orlando	29848 Medium City	Medium City	90000	50000	Incorporated	
Sanford	47357 Medium City	Medium City	85000	80000	Incorporated	
Wekiwa Springs	** Town	** Town	20000	10000	Unincorporated	
Winter Springs	32553 Small City	Small City	40000	30000	Incorporated	
Winter Springs	52954 Regional City	Regional City	100000	100000	Incorporated	
Winter Springs	** Regional City	** Regional City	150000	100000	Unincorporated	
St. Cloud	22528 Medium City	Medium City	50000	50000	Incorporated	
Yeshiva Junction	** Regional City	** Regional City	150000	100000	Unincorporated	

* Only a small portion of city is located in Volusia County
 ** Population by 2005 and/or 2000 Census Not Available

CHAPTER 4

STRATEGIC FINDINGS, GOALS AND OBJECTIVES

I. Overall Strategic Findings

The integration of human and natural systems must drive economic development. This integration will help the region reverse the negative effects of its current sprawling low density development patterns, and signal change to more efficient centers of commerce.

II. Specific Strategic Findings:

1. The region must stop its current development pattern of low density suburban sprawl.
2. The region must conserve its most sensitive ecosystems (water, wildlife, air). Leveraging the environmental assets of the region is a primary building block of a sustainable development pattern, lowering business and government costs and aiding in the growth of a diversified economy.
3. The region must have a balanced and efficient intra-regional multi-modal transportation system connecting existing and future urban centers and preserving sensitive environmental lands.
4. The region must also be globally connected with balanced transportation and communication systems.
5. The regional economy must be diversified by encouraging rising high technology, aerospace, bio-medical and oceanographic research and development clusters;
6. The region must retain and increase its quality of life to attract the “creative class” and support an innovative economy.
7. The region must speak with one voice on regional economic issues to take advantage of opportunities for diversification, and competitive positioning in the Global Marketplace by initiating studies and projects to achieve the regional vision and to also diversify the economy.
8. The region must accelerate development activities to ensure the region remains Florida’s and the world’s primary gateway to space.

III. Goals

The region should:

1. Attract, retain and grow knowledge-based industries and an innovative workforce;
2. Further diversify the economy by attracting, retaining and growing rising economic clusters and business incubators;

3. Move towards an economy that has a greater proportionate share of high technology and science-based business that capitalizes on the region's advantages in bio-medical, space, and oceanographic research.
4. Leverage the region's environmental assets for long-term natural resource stewardship and associated economic diversification and development.
5. Implement the "How Shall We Grow?" Four C's (Conservation, Centers, Corridors and Countryside) Regional 2050 Vision. The principal elements of the vision are:
 - a.) avoid continued sprawl;
 - b.) preserve the most sensitive environmental lands;
 - c.) promote more growth in urban centers;
 - d.) connect urban centers with multi-modal transportation corridors of high density mixed use (residential and commercial) vertical development served by new transit lines;
 - e.) preserve countryside (including agriculture);
6. Provide more opportunities for affordable workforce housing to support job expansion;
7. Implement a CEDS plan of action. Specific projects are identified.
8. Reduce the impact of job losses created by the Space Shuttle program retirement.

IV. Objectives

1. **Regional Planning.** From 2007-2013 work with the individual six counties in the EDD and their 67 respective cities to review their current comprehensive land use plans, development policies and land development regulations and make corrective suggestions to accomplish the regional vision for the year 2050 and to avoid the current sprawling low density residential development patterns.
2. **Transportation.** Implement regional transportation projects that induce efficient movement of people, goods and services across the region, and connect existing and future urban centers with more affordable housing that attract and retain the creative workforce and industries. In Year One of the CEDS, initiate a study on one proposed transportation project that improves the efficiency of alternative modes of transporting people, goods or services within the region or connecting the region to the global marketplace.
3. **Natural Capital.** Leverage the natural capital to preserve the most sensitive environmental areas before doubling the population by 2050. In Year One of the CEDS, have both the ECFRPC and the myregion.org Board of Directors adopt a "green print" map that represents the most Important Ecological Resources, and study how to purchase conservation easements or apply transferable development rights to enhance the compact centers that will become urban centers of living and commerce, and maintain the viability of regional agriculture.

CHAPTER 5

COMMUNITY AND PRIVATE SECTOR PARTICIPATION

CEDS Citizen Participation

The CEDS process leveraged historic levels of citizen participation by “piggy-backing” on the myregion.org citizen input from the just completed “How Shall We Grow?” regional visioning project. The HSWG project involved over 20,000 citizens, tens of thousand of hits to its website, five hours of prime time television coverage that was rerun daily on cable television over the course of four weeks, and several hours of radio time.

In addition, the 103-member myregion Board of Directors serves as the CEDS strategy committee because of their broad representation of the public and private sectors of the EDD.

The ECFRPC organized a 17-member Technical Advisory Committee (TAC) CEDS committee made up of the Directors of the primary Economic Development Commissions and business leaders.

The 32-member ECFRPC Council serves as the CEDS Governing Board.

The How Shall We Grow (HSWG) visioning project by *myregion.org* partnered with 10 public and private entities:

- East Central Florida Regional Planning Council;
- Central Florida Planning Council;
- Greater Orlando Chamber of Commerce;
- Five Metropolitan Planning Organizations (transportation) representing 7 counties;
- Florida Department of Community Affairs;
- Florida Department of Transportation.

myregion established citizen oversight boards as follows:

- Council of Mayors- 86 Mayors representing all 86 cities;
- Council of Chairs- 7 County Commission Chairs representing all 7 counties;
- MPO Alliance- representing all five MPOs;
- myregion.org Board of Directors- 103 members, more than 50% of whom were from the private sector;
- Regional Leadership Council-representing the seven partners;
- School Boards Coalition-representing all of the school boards from 7 counties;
- Smart Growth Alliance- group of approximately 50 interested citizens, most of whom are from the private sector (architects, engineers, planners, conservationists) who are committed to using Smart Growth principles to improve the development patterns of the region.

myregion did outreach meetings in schools, churches, community centers and also established a website (www.myregion.org) and a blog site (www.howshallwegrow.org).

Over the course of the 18 month HSWG project there were over 150 public meetings, five hours of television documentary coverage, several hours of radio coverage, and 20,000 people participating.



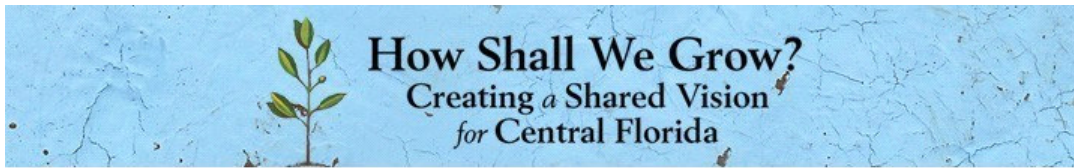
When the on line survey was done to gauge citizen preferences, 7,319 people responded.

As a result of the public participation of 3,000 citizens at 30 workshops in seven counties, five scenarios were agreed to be modeled.

Ultimately, four scenarios (Trend plus the Green Areas, Centers and Corridors alternatives) were included in an on-line citizen survey that ran for 20 days in January and February 2007.

The impacts of all scenarios were reported out on the television, radio, and internet coverage. The 7,319 citizens who responded to the internet preference survey were asked questions about which economy and which scenario they preferred.

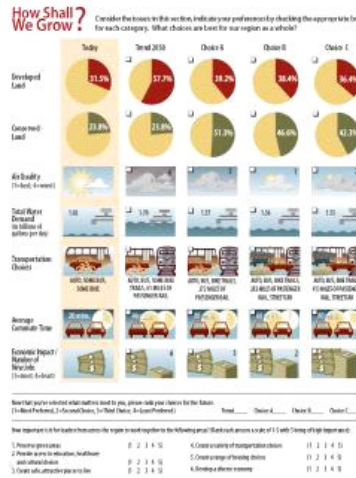
None of the five scenarios garnered a majority (more than 50%) of votes on the internet preference survey. The Conservation (Green Areas) scenario received 27% of first choice votes. Centers received 38% of first choice votes, and Corridors received 31%. The Trend only received 4% of first choice votes, meaning that 96% of respondents surveyed did not want the region to continue to grow the way it has been.



7,319 Citizens Provided Feedback On-Line

Selected Preference in Seven Areas

- Percentage developed land, 2050
- Percentage conserved land, 2050
- Air Quality
- Water Demand
- Transportation choices
- Commute Times
- Economic Impact



What was the conclusion from the citizen feedback?

They wanted the best elements of the three alternatives.

They wanted a future development pattern with:

- the smallest urban footprint;
- the least amount of sensitive habitat destroyed;
- the lowest water consumption;
- the best air quality;
- the most transportation options;
- the most robust economy.

In short, they wanted a composite scenario that integrates the best of the three alternatives, and avoids the Trend. For the purposes of displaying the 2050 Vision, the Corridors scenario comes closest to the Composite.

CHAPTER 6

ALL PROJECTS LIST

Embracing the community vision for a 21st century globally competitive region, the CEDS is all about collaboratively moving forward with practical approaches for economic prosperity set within the unique and precious environmental setting of East Central Florida.

How will we do it? By using three Mission-measuring sticks.

Mission A: Connect and build upon mature and blossoming technology centers (space, oceanographic research, bio-medical, simulation, green energy and industry).

Mission B: Identify, adopt and implement global best practices for land and development planning, environmental preservation and green energy production.

Mission C: Improve global connectivity of all transportation systems.

Therefore, all applicant county/city/regional projects must first pass the Mission A, B or C tests.

Mission A: Connect and build upon mature and blossoming technology centers (space, oceanographic research, bio-medical, simulation, and green energy.)

Projects:

- Orange County Activity and Technology Centers, such as Innovation Way and the bioOrlando medical city at Lake Nona.
- Study a Hi-Tech corridor extension from Innovation Way up SR 417 into Seminole County.
- Support green energy research and development such as agricultural biofuels, solar and wave power. Florida's twelve-month growing season could place our state in the lead in biofuels production with the proper research in plant variety and ethanol production.
- Support Volusia County's Daytona Beach International Airport Corporate Center Project.
- Support economic development, workforce, education and research opportunities to reduce the potential \$2 billion negative impact to the region's economy as a result of the Space Shuttle program retirement.
- Support the Kissimmee Vine Street/US192 Corridor Redevelopment Initiative. Transform the existing strip-style, retail oriented corridor into a connected series of mixed-use, urban scale neighborhoods and villages.

- Support the Downtown Kissimmee Community Redevelopment Area (CRA) Master Plan.
- Support the Kissimmee Gateway Airport Business Development which calls for office and industrial development around the airport.

Mission B: Identify, adopt and implement best practices for land and development planning, and environmental preservation.

Projects:

- Initiate the implementation of the How Shall We Grow “Smart Growth” 4 C’s 2050 Regional Vision, into the cities’ and counties’ comprehensive plans in six counties. Begin with Seminole County.
- Support Tavares Downtown Redevelopment, as a “model city” of the 4 C’s 2050 Regional Vision incorporating mixed use higher density redevelopment of its core city with multi-modal transportation systems and regional connectivity.
- Seminole County-to-Orange County 17-92 corridor redevelopment, incorporating mixed uses, higher densities and mass transit connecting to the commuter rail line.
- Create more affordable work force housing.
- Support the Volusia County/City of DeBary Commuter Rail Fort Florida Station Project as part of the regional transportation oriented development plan.

Mission C: Improve global connectivity of transportation systems.

Projects:

- Connect the CSX railroad to FEC Railroad via a 20+/- mile east/west rail spur from the north/south FEC rail tracks in Brevard County to the OUC power plant rail spur in eastern Orange County north of SR 528.
- Establish an eastern Orange County/ Brevard County multi-modal “freight village” (that includes intensive warehousing and distribution) preferably in proximity to the potential FEC-CSX rail connection.
- Establish multi-modal freight villages at other strategic locations in Orange County and the region.
- Support the Osceola County project for development of a 430-Acre Transportation district and regional distribution center.
- Support the Kissimmee Downtown Inter-Modal Transportation Center.

CHAPTER 7

VITAL PROJECTS LIST

The Region's Greatest Needs and Immediate Opportunities

The CEDS implementation needs to start with both soft and hard projects.

Soft projects are those that can have a huge impact over time, but will be slow in getting going. Long range planning and changing development patterns projects like #1 fall into this category.

Hard projects are those leading to immediate construction of infrastructure or improvements that can directly stimulate the region's economy in the next few years and for a very long time thereafter. Items #2 and #3 are hard projects.

Vital CEDS Projects::

1. Move forward with the implementation of the community-based "How Shall We Grow" Four C's 2050 Regional Vision into the cities' and counties' comprehensive plans in six counties. Begin with Seminole County because it is the most urban and the most prepared for commuter rail and redevelopment around those rail stations, and because the cities and county have shown a unified interest in working together to accomplish a different vision for their future. Move towards "how shall we live" initiative.
2. Support the city of Tavares' Downtown Redevelopment within its Community Redevelopment Area incorporating mixed use higher densities in its core city with multi-modal transportation systems (rail, water taxi, seaplane basin) and regional connectivity as a "model city" of the Four C's 2050 Regional Vision.
3. Study/fund the connection of the CSX railroad to FEC Railroad via a 20+/- mile east/west rail spur from the north/south FEC railroad tracks in Brevard County to the OUC power plant rail spur in eastern Orange County north of SR 528.
4. Study/Establish a multi-modal "freight village" in eastern Orange County/Brevard County (that includes intensive warehousing and distribution) near the OUC power plant rail junction to replace the loss of the Taft distribution yard in Orange County, and seek connection to Port Canaveral.
5. Support a focused transition program for the aerospace industry to bridge the gap from the termination of the space shuttle in 2010 to the start of the constellation program 4 years later. This should include targeted economic development activities, specialized workforce curriculum, training tools, career counseling, employment agreements and advocacy programs.

CHAPTER 8

PLAN OF ACTION

As the region continues to grow demographically and economically, it is essential to tie land development and planning with regional economic development. The district will support local government's efforts to grow in the most efficient, feasible and economically robust way.

Encouraging development in urban centers and attracting the right industries and companies to the region will enhance the region's economy. Urban centers better connected by multimodal transportation systems will attract more Talent to the region. This Talent will help attract the jobs that pay higher wages.

The region will succeed in achieving the goals of the CEDS when economic and land use planning are closely synchronized. This will be the strategy for East Central Florida in the coming years. The planning council will be a leader in promoting a successful economy supported by a diverse selection of industries and backed by a well compensated, talented workforce. Following are some of the projects the planning council will be involved in. This will be the beginning of the implementation of the action plan.

Project Number 1

The implementation of the 4 C's 2050 Regional Vision agreed upon through the How Shall We Grow project will be a major step for the region towards achieving efficiency in the use of its resources. This will positively affect many concerns facing the East Central Florida economy.

Curtailing sprawl, creating attractive urban centers, creating a balanced transportation system (including transit) and avoiding sensitive ecosystem encroachment can improve:

- the movement of goods and people around the region;
- global connectivity
- air quality;
- economic diversification.

Project Number 2

Redevelopment projects like the ones in downtown Tavares and the Seminole County to Orange County 17-92 project are essential to provide the needed diversification in residential and non-residential development to accommodate for our population and economic growth. Creating attractive mixed use higher density urban centers is a key element to increasing live-ability and commerce and curtailing sprawl. A positive side effect is the attraction of the creative class of higher wage professionals who are attracted to life in such centers.

Project Number 3

Establishing an essential cross connection between the two principal railroads that serve the region increases global connectivity and provides a key second means of coal access to the main electric generating power plant serving the region. This could be critical in post hurricane power delivery.

Project Number 4

Establishing new distribution centers and freight villages across the region will help the region to better manage the flow of commodities to and through the different areas of the region. The region needs to stay the main hub for commodity distribution in the Central Florida area.

Project Number 5

Kennedy Space Center is currently the only launch facility in the United States for human space flight. The Constellation program's Orion spacecraft is expected to begin manned launches in 2014, four years after the retirement of the Space Shuttle program. This four year gap between programs represents a major economic threat to the regional economy. In addition, there is a rise in competition from other states for space flight activities. As a result, we need to establish a focused transition program for the aerospace industry (to include economic development, workforce and advocacy programs) which will mitigate regional job losses and take advantage of new regional economic opportunities.

CHAPTER 9

PERFORMANCE MEASURES

Successful implementation of the CEDS will be measured through annual review of the following indicators:

- The number of knowledge-based jobs with high average wages created or retained.
- The increase in average annual compensation rates in the region.
- Number of jobs created and retained especially in falling economic clusters.
- Increase in private and public investment in rising economic clusters.
- Providing more transportation options measured by the increase in number of miles of mass transit options (commuter rail, light rail/streetcars, bus, bus rapid transit, flex bus, bike trails, and pedestrian trails).
- Increases in urban density.
- Number of square miles of sensitive habitat conserved.
- Increase in square miles of preserved conservation, or recommended for future conservation (Green Print).
- Number of work force housing units created.

Implementing the regional vision agreed upon through the How Shall We Grow project will be a major step for better land and development planning, environmental preservation, and great economic impact on our region's economy.

Establishing new distribution centers and freight villages across the region will help the region to better manage the flow of commodities to and through the different areas of the region. The region needs to stay the main hub for commodity distribution in the Central Florida area.

Redevelopment projects like the ones in downtown Tavares and the Seminole County to Orange County 17-92 project are essential to provide the needed diversification in residential and non-residential development to accommodate for our population and economic growth.

CHAPTER 10

INTEGRATION WITH STATE PRIORITIES

Enterprise Florida (EF) is Florida's primary organization devoted to statewide economic development. EF put together the 2007-2012 Roadmap to Florida's Future. This roadmap is the statewide strategic plan for economic development. It identifies six strategic priorities for Florida to accelerate high, value-added economic growth.

2007-2012 Roadmap to Florida's Future (State's economic priorities):

Build World-Class Talent: Talent has emerged as the top economic development issue for a knowledge-based economy.

- Education is the new bedrock for economic development. Skilled, educated talent at all levels (pre-K to 12, workforce, higher education) is key to Florida's economic success for high-wage jobs and innovation.

Ensure Business Climate Competitiveness: Two business climate issues currently threaten Florida's competitiveness: Available and affordable insurance and affordable workforce housing.

- To maintain a competitive business climate, Florida must also address the need for new incentive tools that reward productivity and innovation.

Promote Sustainable Development to Ensure Florida's Superior Quality of Life: Florida is expected to become the third largest state in the U.S.

- Key to Florida's future quality of life will be a proactive approach to multi-faceted growth management challenges with balanced land use planning and multimodal infrastructure to meet future needs.

Invest in Florida's Innovation Economy: Science and technology-based economic growth founded on research and development has become the underlying source of wealth in the 21st Century.

- Innovation and new technologies are the major drivers for new firm formation that ultimately translate into the jobs of the future – high-wage, high value-added jobs in emerging industries that help to accelerate the diversification of the economy.

Establish Florida as a Pre-eminent Global Hub: Florida is known as the gateway to Latin America.

- To maintain global leadership, Florida's must advance its status from "international gateway" to "premier global business hub."

Accelerate Florida’s Economic Diversification: A large, diversified economic structure is crucial for Florida’s stability, prosperity, and global competitiveness.

The key elements of diversification include:

- having multiple engines of industry growth;
- fostering balanced geographic growth, and raising the quality of that economic growth;
- addressing issues of both the quantity and quality of growth of Florida’s targeted industries;
- Taking advantage of core competencies and unique Florida opportunities.

East Central Florida Economic Development District Overall Regional Missions:

Mission A: Connect and build upon mature and blossoming technology centers (space, oceanographic research, bio-medical, simulation, and green energy).

Mission B: Identify, adopt and implement best practices for land and development planning, environmental preservation, and green energy production.

Mission C: Improve global connectivity of all transportation systems.

The Goal of the ECFRPC in the next five years is to accomplish these missions through regional projects. The regional economy has to continue growing and diversifying to sustain the population growth of the region. This calls for investment in rising regional clusters and nurturing of mature ones. This will help attract more Talent to the region and create more high-paying jobs in markets with an agglomeration of Talent.

As the region continues to grow, high quality of life remains a top priority for this district. This is best achieved through efficient development patterns that guide growth and save the regions’ environmental qualities.

Projects like the ones identified in this CEDS will help the region accomplish these goals and objectives for the next five years.

The implementation of the “How Shall We Grow” vision in both Seminole County and downtown Tavares will be great examples of how to guide growth and development in the region while preserving the environment and using multimodal transportation to connect its parts.

Supporting new missions for Kennedy Space Center in Brevard County and establishing new activity centers in Orange County will guarantee the continuous diversification of the district’s economy.

These are some of the goals the East Central Florida Economic Development District will accomplish in the next few years. Through cooperation between public- and private-sector stakeholders represented by our strategy committee, and under guidance from the State’s economic development leaders, and coordination with local governments, the planning council will implement its plan of action.