

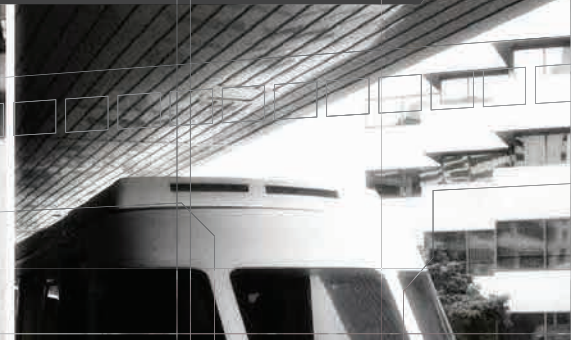
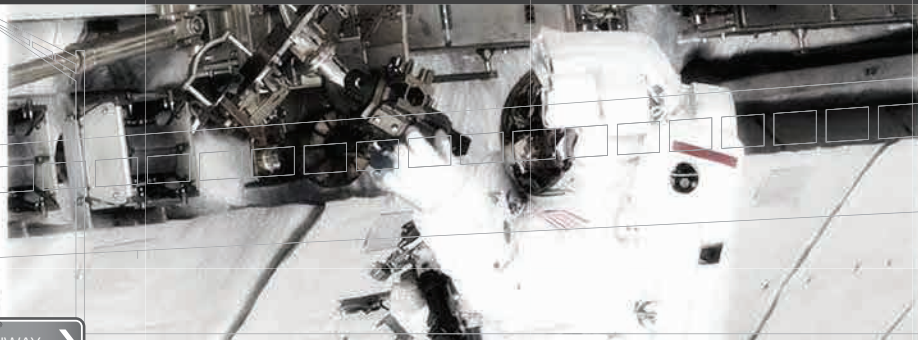
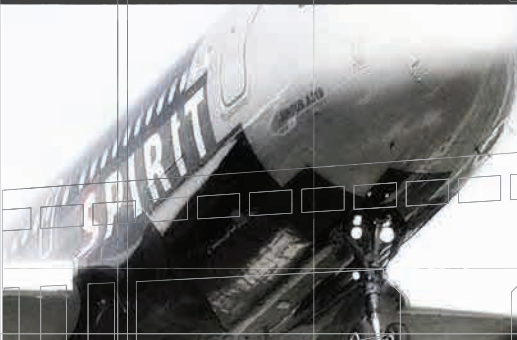


FLORIDA'S STRATEGIC INTERMODAL SYSTEM



2040

Multi-Modal Unfunded Needs Plan



- HIGHWAY →
- ← RAIL
- AVIATION →
- ← TRANSIT
- SEAPORT ↓
- ↑ SPACEPORT



OCTOBER 2011

Letter from the Secretary



Ananth Prasad
FDOT Secretary

Today, as Florida emerges from the most severe economic recession in decades, the role of transportation in shaping Florida's economic future is more significant than ever. The Florida Department of Transportation (FDOT) and its partners have collaborated to identify the future transportation needs of the state on the Strategic Intermodal System (SIS).

The FDOT's 2040 SIS Multi-Modal Unfunded Needs Plan is an update of the first ever SIS Multi-Modal Unfunded Needs Plan, approved in May 2006. With a statewide total of \$131.2 Billion, the 2040 Unfunded Needs Plan includes needs from Aviation, Highway, Rail, Seaport, Spaceport, and Transit.

Comprised of the state's largest and most strategic transportation facilities, the SIS is the state's primary means for moving people and freight between Florida's diverse regions, as well as between Florida and other states and nations. Planning for future improvements to the SIS is critical to Florida's future.

Sincerely,

A handwritten signature in black ink that reads "Ananth Prasad". The signature is fluid and cursive, written over a light background.

FDOT Secretary
Ananth Prasad



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GOALS, OBJECTIVES AND PROCESS

What is the SIS?

The Strategic Intermodal System (SIS), established in 2003, is a statewide network of high priority transportation facilities most critical for statewide and interregional travel. The SIS includes the state's largest and most significant commercial service airports, spaceports, deepwater seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways, and highways. These hubs, corridors, and connectors are the fundamental structure which satisfies the transportation needs of our travelers and our visitors, supports the movement of freight, and provides transportation links to external markets.

All SIS facilities are eligible for state transportation funding, regardless of mode or ownership, with state funding covering varying shares of the project costs. The SIS is the primary focus of FDOT capacity improvement funds; however it is not the single source of funds for all projects.

What are the FTP Goals?

The SIS is a large and complex system, but ultimately its purpose is simple. The SIS is intended to enhance Florida's economic competitiveness and quality of life by ensuring mobility for both people and freight between Florida's regions and between Florida and other states and nations. SIS planning and investment decisions must address the goals established for the entire state transportation system in the Florida Transportation Plan (FTP).

There are three goals that focus on how transportation investments and decisions should support Florida's future economic prosperity, quality of life, and quality places. These three goal areas focus on the performance of the transportation system:

- Provide a safe and secure transportation system for all users
- Maintain and operate Florida's transportation system proactively
- Improve mobility and connectivity for people and freight



There are seven SIS objectives which frame the SIS process:

- **Interregional Connectivity** - Enhance connectivity between Florida's economic regions and between Florida and other states and nations for both people and freight.
- **Efficiency** - Reduce delay on and improve the reliability of travel and transport using SIS facilities.
- **Choices** - Expand modal alternatives to SIS highways for travel and transport between regions, states, and nations.
- **Intermodal Connectivity** - Provide for safe and efficient transfers for both people and freight between all transportation modes.
- **Economic Competitiveness** - Provide transportation systems to support statewide goals related to economic diversification and development.
- **Energy, Air Quality, and Climate** - Reduce growth rate in vehicle-miles traveled and associated energy consumption and emissions of air pollutants and greenhouse gases.
- **Emergency Management** - Help ensure Florida's transportation system can meet national defense and emergency response and evacuation needs.

What is the SIS Planning Process?

The SIS planning process is based on policy guidance established in the FTP. This process provides the framework for planning, programming, and implementing transportation projects and ensures that the limited transportation funds are invested in the most effective manner.

There are three key steps:

Unfunded Needs Plan: The Unfunded Needs Plan identifies transportation projects on the SIS which help meet mobility needs, but where funding is not expected to be available during the 25-year time period of the SIS Funding Strategy.

Projects in the Unfunded Needs Plan could move forward into the SIS Cost Feasible Plan as funds become available;

Cost Feasible Plan (CFP): The CFP illustrates projects on the SIS which are considered financially feasible during the last fifteen year (Years 11 to 25) of the State's SIS Long Range Plan, based on current revenue forecasts. Projects in this plan could move forward into the Work Program as funds become available. They may also move backwards into the Unfunded Needs Plan if revenues fall short of projections, or the cost estimates and/or priorities change.

SIS Work Program: Every fall, projects from the CFP are selected for inclusion in the new 10th year of the Ten Year Plan. The Ten Year Plan is used to develop the Department's Five Year Work Program, which drives the funding, implementation, and construction of the Department's projects.

The Designated SIS and Emerging SIS include:

- Seventeen commercial service airports
- One general aviation relief airport
- Eleven deepwater seaports
- Over 2,100 miles of rail corridors
- Over 2,200 miles of waterways
- 35 passenger terminals
- Seven rail freight terminals
- Over 4,300 miles of highways
- Two spaceports
- Over 500 Connector miles

The SIS carries:

- More than 99 percent of all commercial air passengers and cargo
- Virtually all waterborne freight and cruise passengers
- Almost all rail freight
- 89 percent of all interregional rail and bus passengers

The SIS accounts for:

- More than 70 percent of all truck traffic
- 55 percent of total traffic on the State Highway System



CURRENT CONDITIONS

What are the Key Influences of a Transportation Program?

A transportation program strives to provide transportation infrastructure and services to meet the needs based on demand. In Florida, three key determinants of demand are population growth, tourism, and trade.



Population Growth

As of April 2010, according to the US Census Bureau, Florida's population was over 18.8 million. While growth has slowed dramatically in recent years, growth is still expected to continue into the future. Of note, the 65+ age community has been the fastest growing group since 2000. With the retirement of "baby boomers" on the horizon, this will only become more prominent. The needs of this population group are unique due to the off-peak travel patterns and need for more modal options.

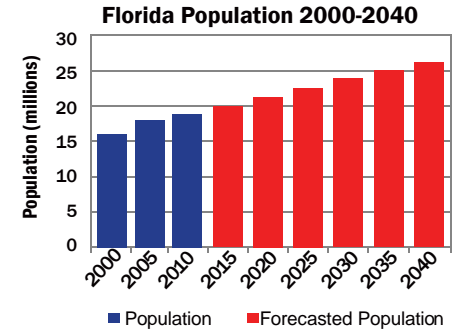
By 2040, the top three counties in terms of population will be Miami-Dade, Broward, and Hillsborough counties. Southeast Florida is projected to maintain its status as a major population center by 2040. Other large regions include the Orlando area and Tampa Bay area.

Tourism

According to Enterprise Florida, the state ranked third in the nation in leisure and hospitality employment in 2009. The industry Gross Domestic Product (GDP) was over \$42 billion, or about 5.8 percent of the state's total GDP. In 2009, there were over 80 million visitors to Florida, 53 percent arriving by air.

Population Trends

Component	Time Period	Percent Growth	Actual Increase
Total	2000 - 2010	17.6	2,818,932
65+ Age Group	2000 - 2010	17.7	497,815
Total	2010 - 2040	39.8	7,480,587
65+ Age Group	2010 - 2040	128.8	4,258,960



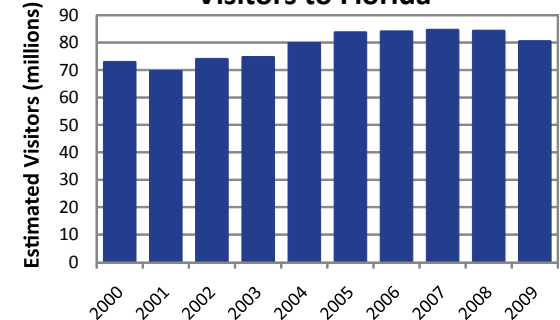
Top 10 County Populations 2040

County	Population
Miami-Dade	3,011,523
Broward	1,978,474
Hillsborough	1,751,272
Orange	1,703,531
Palm Beach	1,659,173
Duval	1,226,144
Lee	1,093,488
Pinellas	941,842
Polk	852,390
Brevard	763,735

Top 10 Metropolitan Statistical Area Populations 2040

MSA	Population
Miami-Fort Lauderdale-Pompano Beach	6,649,170
Orlando-Kissimmee-Sanford	3,335,362
Tampa-St. Petersburg-Clearwater	2,706,999
Jacksonville	2,058,463
Cape Coral-Fort Myers	1,093,488
North Port-Bradenton-Sarasota	1,018,356
Lakeland-Winter Haven	852,390
Palm Bay-Melbourne-Titusville	763,735
Port St. Lucie	683,317
Deltona-Daytona Beach-Ormond Beach	657,537

Visitors to Florida



Florida is also the cruise capital of the U.S., with over \$5.8 billion in 2009 direct spending, according to the Cruise Lines International association.

The three largest cruise ports, each carrying over 3 million passengers in 2009 are:

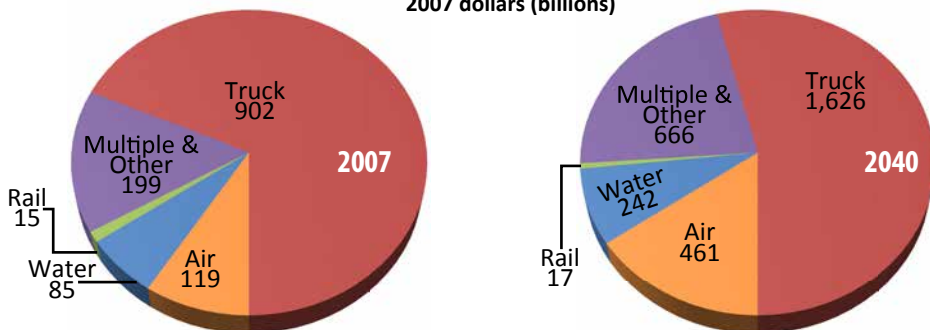
- Port of Miami
- Port Canaveral
- Port Everglades

Freight Movement

Florida's freight transportation system is supported by an intermodal range of facilities – airports, seaports, state highways, railroad freight terminals, and the spaceports. Trade and logistics support about 1.7 million jobs in Florida, about 22 percent of total state employment, per the 2010 Florida Chamber of Commerce Trade and Logistic Study. Of the freight movement within Florida, a majority travel via trucks and highway corridors. Truck travel accounted for 11.4 percent of total volume on SIS Highways in 2009.

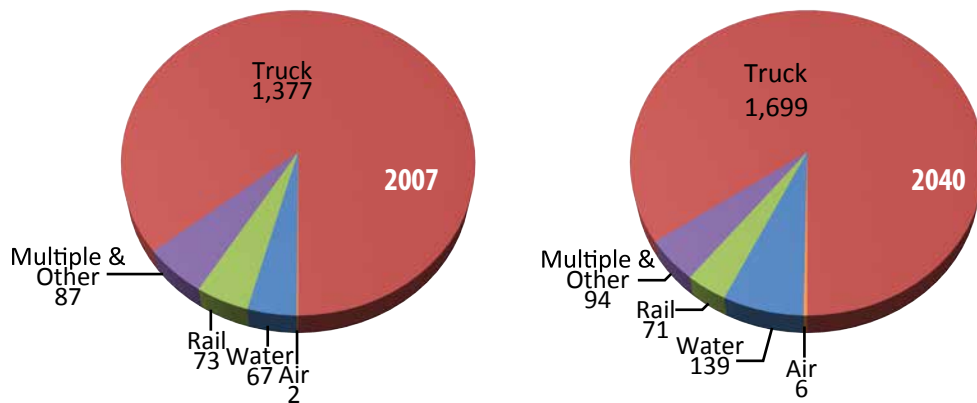
Value of Freight Movements

2007 dollars (billions)



Weight of Freight Movements

million tons (base year 2007)



WHAT HAS CHANGED

What has changed since the 2030 Unfunded Needs Plan was produced in 2006?

The 2040 Unfunded SIS needs for the 30-year period total \$131.2 billion in 2010 dollars. The Unfunded Needs identified in the 2030 Plan totaled \$53 billion in 2006 dollars. Why the significant difference?

Additional Five Years:

The 2030 Unfunded Needs Plan covered 25 years. The 2040 Plan covers a 30-year period from 2011 to 2040.

Inflation:

The impact of inflation on transportation costs between the 2030 Plan and this Plan accounts for almost a 23 percent increase.

Modal Horizon Years:

The modal planning horizon years have moved from a short term planning outlook to a long term outlook.



Funding Eligibility:

Seaport and Spaceport funding eligibility has been expanded in support of a more trade oriented economy.

Transit:

Transit is a recent addition to the Strategic Intermodal System as a result of the 2010 SIS Strategic Plan Update.

Partnership Participation:

Many of our transportation partners have recently completed complex long range plans and master plans and our coordination with these partners has resulted in significantly more needs projects.

Passenger Rail:

In the future, intercity passenger rail will help address the need for additional capacity as highway congestion between major cities is increasing at a rate much quicker than the ability to add lane miles. This is in line with the 2060 FTP objective to expand transportation options for residents, visitors, and businesses.



SIS UNFUNDED NEEDS

How are Unfunded Needs Determined?

The Unfunded Needs Plan identifies transportation projects on the SIS which help meet mobility needs, but where funding is not expected to be available during the 25 year time period of the SIS Funding Strategy. Projects in the Unfunded Needs Plan could move forward into the SIS Funding Strategy as funds become available.

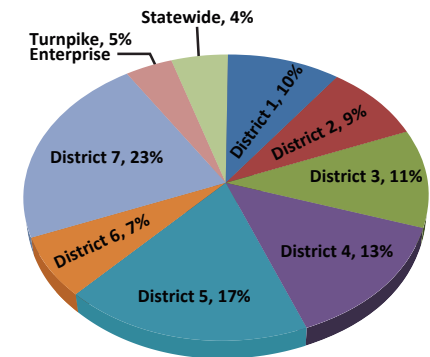
The Unfunded Needs Plan projects were identified using FDOT statewide modal plans, transportation corridor plans, regional plans and visions, MPO and Expressway Authority plans, and other partner plans.

Most needs are attributed to one of the seven FDOT Districts, but some needs, such as rail, which are systemwide and are therefore not broken down by district. Similarly, the Florida Turnpike System, overseen by the Florida Turnpike Enterprise, is not broken down by district.

What are the SIS Unfunded Needs by Location?

Through 2040 the Unfunded SIS needs total \$131.2 billion. Needs are distributed across districts (\$119.9 billion, or 91 percent), on the Turnpike system (\$6.0 billion, or five percent), or are rail projects within multiple statewide districts (\$5.3 billion, or four percent).

SIS Needs By District*



*may not add to 100 percent due to rounding

What are the SIS Unfunded Needs by Type?

Highway needs represent 63 percent of the total needs. Rail and transit represent eleven percent and eighteen percent of total needs, respectively. Seaport needs account for six percent of total needs, while aviation and spaceport needs combined total two percent of the total needs.



District	Unfunded Needs By Mode (2010 Millions of Dollars)						
	Aviation	Highway	Rail	Seaport	Spaceport	Transit	Total
1	\$151	\$10,556	\$614	\$123		\$1,984	\$13,428
2	\$166	\$9,011	\$1,050	\$1,871	\$18	\$184	\$12,300
3	\$57	\$12,812	\$1,942	\$61			\$14,872
4	\$1,150	\$6,646	\$1,753	\$2,716		\$4,990	\$17,255
5	\$162	\$16,487	\$469	\$533	\$673	\$4,099	\$22,423
6	\$37	\$4,753	\$491	\$1,494		\$2,741	\$9,516
7	\$672	\$16,356	\$2,965	\$413		\$9,661	\$30,067
Turnpike Enterprise		\$6,055					\$6,055
Multiple Districts			\$5,270				\$5,270
TOTAL	\$2,395	\$82,676	\$14,554	\$7,211	\$691	\$23,659	\$131,186

What are the SIS Unfunded Needs by Type?

Snapshots of the SIS Unfunded Needs by mode follow. Information on total needs by location is provided, as well as some general background on the mode and sample notable projects.





AVIATION

Total Needs \$2.4 Billion

Aviation Needs in Millions \$

District	\$	%
1 Southwest Florida	150.9	6.3%
2 Northeast Florida	166.0	6.9%
3 Northwest Florida	57.2	2.4%
4 Southeast Florida	1,149.5	48.0%
5 Central Florida	162.0	6.8%
6 South Florida	37.4	1.6%
7 West Central Florida	672.1	28.1%
Total	2,395.1	*100.0%

*may not add to 100 percent due to rounding

Designated SIS Airports

- Ft. Lauderdale/Hollywood International
- Jacksonville International
- Miami International
- Orlando International
- Palm Beach International
- Southwest Florida International
- Tampa International

General Aviation Reliever Airports

- Kissimmee Gateway Airport

Emerging SIS Airports

- Daytona Beach International
- Gainesville Regional
- Melbourne International
- Northwest Florida Regional
- Orlando Sanford International
- Northwest Florida Beaches/
Bay County International
- Pensacola/Gulf Coast Regional
- Sarasota-Bradenton International
- St. Petersburg/Clearwater International Airport
- Tallahassee Regional

Aviation projects have been identified by the airports and district offices and incorporated into the statewide aviation plan. The Florida Joint Automated Capital Improvement Program (JACIP) is an electronic database that is utilized by the airports, FDOT, and the FAA in planning aviation needs. This database along with the state aviation plan provided the source of aviation needs.

Sample aviation projects in the SIS Unfunded Needs Plan include:

District 1: • Southwest Florida International Terminal Apron Expansion

District 3: • Pensacola/Gulf Coast Regional Runway Extension

District 4: • Ft. Lauderdale/Hollywood International Runway Extension

District 5: • Orlando International Taxiway Extension

District 7: • Tampa International Runway Construction

Sample highway projects in the SIS Unfunded Needs Plan include:

District 1: • I-75 Special Use Lanes

District 2: • I-95 Special Use Lanes (Jacksonville)

District 3: • Reconstruction of I-110 in Pensacola
• Widening of I-10 throughout the District

District 4: • I-95 Special Use Lanes
I-75 Special Use Lanes

District 5: • New Interchange at Melbourne Airport
• I-4 Special Use Lanes

District 6: • SR 836

• Interchange Improvements at I-75/SR 826

District 7: • I-275/I-4/I-75 Special Use Lanes

• Improvements on US 19

Turnpike

Enterprise:• Six-laning of Mainline

Types of highway projects include roadway widening, interchange modifications, special use lanes, and access management systems and new facilities. Approximately 74 percent of highway needs are roadway widening and fifteen percent are interchange modifications/intersection improvements. New highway facilities account for eight percent of the total.

Note: remaining three percent is access management, toll facilities, and bridge replacement.

The 2006 SIS Multi-Modal Unfunded Needs Plan originally provided the basis for many of the highway projects. Corridor and sketch plans as well as master plans and long range plans from MPOs and Expressway Authorities identified needed projects. Also, LOS analysis and modeling were utilized in project identification.

HIGHWAY

Total Needs **\$82.7 Billion**

Highway Needs in Millions \$

District	\$	%
1 Southwest Florida	10,556.1	12.8%
2 Northeast Florida	9,011.3	10.9%
3 Northwest Florida	12,811.9	15.5%
4 Southeast Florida	6,645.5	8.0%
5 Central Florida	16,486.8	19.9%
6 South Florida	4,753.1	5.8%
7 West Central Florida	16,356.4	19.8%
Turnpike Enterprise	6,055.3	7.3%
Total	82,676.4	*100.0%

*may not add to 100 percent due to rounding





RAIL

Total Needs \$14.6 Billion

Rail Needs in Millions \$

District	\$	%
1 Southwest Florida	614.4	4.2%
2 Northeast Florida	1,050.3	7.2%
3 Northwest Florida	1,941.8	13.3%
4 Southeast Florida	1,753.4	12.0%
5 Central Florida	468.5	3.2%
6 South Florida	490.6	3.4%
7 West Central Florida	2,965.1	20.4%
Multiple Districts	5,269.8	36.2%
Total	14,553.9	*100.0%

*may not add to 100 percent due to rounding

Rail includes both freight and passenger rail projects. It is not possible to always distinguish between the two since a track improvement could benefit both. Passenger rail improvements include intercity rail and regional commuter rail projects.

The Florida Statewide Rail Plan has recently been completed and has provided the bulk of rail projects for inclusion in the Unfunded Needs Plan. Many of these are track and freight improvements. Additional projects have been identified by regional transportation authorities and are included in their master plans.

Sample rail projects in the SIS Unfunded Needs Plan include:

- District 1:**• CSX Corridor Multiple Grade Separations
- District 2:**• Jacksonville Transportation Authority (JTA) Commuter Rail
 - District Rail Grade Separations
 - District Rail Track Upgrades
- District 3:**• Commuter Rail Projects
- District 4:**• Florida East Coast Railway (FEC) Corridor Improvements
 - TRI-RAIL Station Improvements
- District 5:**• Passenger and Freight Rail Upgrades

- District 6:**• District Rail Grade Separation
 - Intermodal Centers Improvements
- District 7:**• Commuter Rail Projects
 - New Freight Lines

Sample seaport projects in the SIS Unfunded Needs Plan include:

- District 1:** • Port Manatee Short-term Storage Facilities
- District 2:** • JaxPort Rail Connections
- District 3:** • Port of Panama City Short-term Storage Facilities

- District 4:** • Port Everglades Berth Construction
- District 5:** • Port Canaveral Dredging
- District 6:** • Port of Miami Cranes and Berths

The Seaport Component includes needs for:

Designated SIS Ports

- Canaveral
- Everglades
- Jacksonville
- Manatee
- Miami
- Palm Beach
- Tampa

Emerging SIS Ports

- Fernandina
- Panama City
- Pensacola

Planned Emerging SIS Port

- Port St. Joe

The Seaports Capital Improvement Program (SeaCIP) is a grant management database that is used by the FDOT and Florida seaports to plan and manage seaport projects. Along with SeaCIP, the Statewide System Seaport Plan and input from the Florida Ports Council provided the basis for port needs.

SEAPORT

Total Needs \$7.2 Billion

Seaport Needs in Millions \$

District	\$	%
1 Southwest Florida	123.0	1.7%
2 Northeast Florida	1,871.4	26.0%
3 Northwest Florida	60.6	0.8%
4 Southeast Florida	2,716.0	37.7%
5 Central Florida	533.2	7.4%
6 South Florida	1,493.7	20.7%
7 West Central Florida	412.9	5.7%
Total	7,210.8	*100.0%

*may not add to 100 percent due to rounding



A photograph of a space shuttle launch, showing the shuttle ascending vertically against a blue sky. The shuttle is illuminated by bright light, and the word "USA" is visible on its side.

SPACEPORT

Total Needs **\$691.3 Million**

Spaceport Needs in Millions \$

District	\$	%
2 Northeast Florida	\$18.4	2.7%
5 Central Florida	\$672.9	97.3%
Total	\$691.3	*100.0%

*may not add to 100 percent due to rounding

Needs for the Spaceport Component include projects from Space Florida's Master Plan. These Needs are associated with Cape Canaveral and the planned facilities at Cecil Field in northeast Florida.

The recently completed Spaceport 2010 Master plan provided projects for Florida's Spaceports.

Sample spaceport projects in the SIS Unfunded Needs Plan include:

District 2: • Initial Launch Facilities

District 5: • Spacecraft Launch Preparation and Access Road Expansion

Sample transit projects in the SIS Unfunded Needs Plan include:

- District 1:** • Bus Rapid Transit and Light Rail from Downtown Sarasota to Downtown Bradenton
- District 2:** • Jacksonville Transportation Center (Amtrak, Greyhound, local)
- District 4:** • I-595 - Central Broward East-West Transitway
 - Sunport Hub-to-Hub
 - Ft. Lauderdale/Hollywood International Airport to Port Everglades
- District 5:** • Central Florida Light Rail System
 - Kissimmee Intermodal Center

- District 6:** • Metrorail Extension
- District 7:** • Intermodal Centers (St. Petersburg and Tampa)
 - Tampa Bay Area Regional Transportation Authority (TBARTA) Expansion
 - Bus Rapid Transit and Light Rail Transit

Transit is a recent addition to the SIS as a result of the 2010 SIS Update. Transit projects for the SIS Multi-Modal Needs Plan are broken down into two categories; Designated SIS facilities and SIS projects that potentially meet adopted SIS designation criteria and thresholds.

Transit projects have been identified from FDOT corridor and master plan, as well as regional transportation plans. Intermodal centers as well as inter-county passenger service are included.

In this report, Transit projects include public transportation facilities that operate on dedicated right-of-way crossing multiple urbanized counties under the regulations of the Federal Transit Administration; this may include bus rapid transit (BRT) or light rail. The Transit section also includes passenger transit hubs and terminals.

TRANSIT

Total Needs \$23.7 Billion

Transit Needs in Millions \$

District	\$	%
1 Southwest Florida	1,983.7	8.4%
2 Northeast Florida	183.9	0.8%
3 Northwest Florida	0.0	0%
4 Southeast Florida	4,990.0	21.1%
5 Central Florida	4,099.5	17.3%
6 South Florida	2,740.9	11.6%
7 West Central Florida	9,660.7	40.8%
Total	23,658.7	*100.0%

*may not add to 100 percent due to rounding



For Additional Information Contact:

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<http://www.dot.state.fl.us/planning>