Attachments for:

Written Comments on the Federal Aviation Administration (FAA) Proposed Relocation of the Panama City-Bay County International Airport Draft Environmental Impact Statement (DEIS)

By

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For Comment 07

Attachments:

1. **Page 4 listing the criteria for airports as adopted January 20, 2005**
2. **Section on the Northwest Regions as adopted January 20, 2005**
3. **Overview of SIS criteria as adopted January 20, 2005**

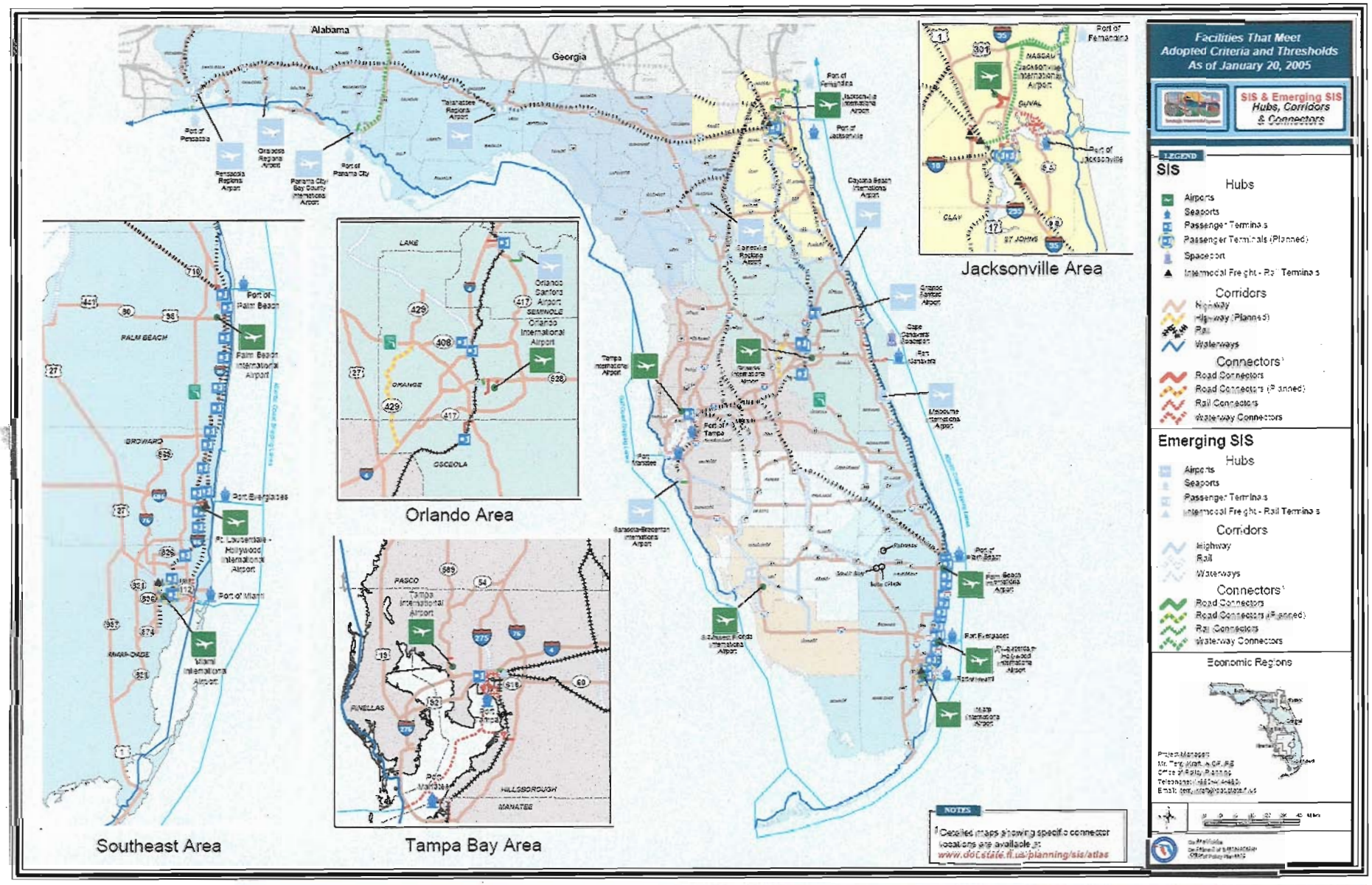
Hubs and Corridors Criteria

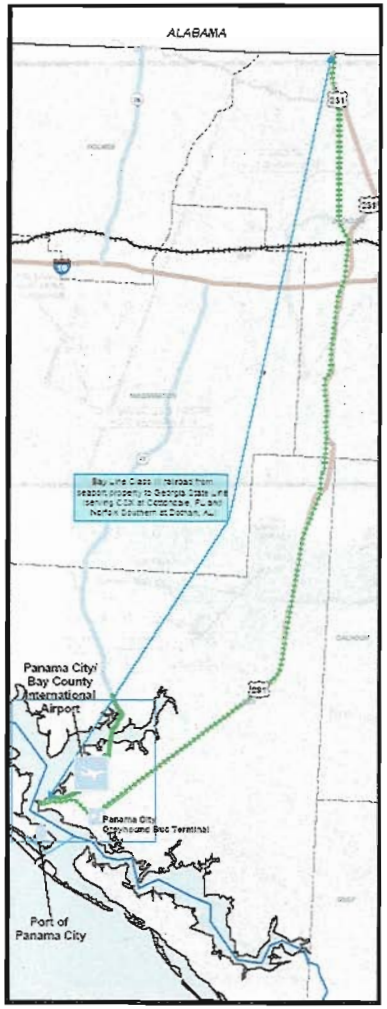
SIS Airports					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Passenger volume	Passenger enplanements at Florida commercial service airports	> 0.25 percent of total U.S. enplanements (1.8 million passengers per year in 2000)	Represents "large" or "medium" hubs as defined by the Federal Aviation Administration (FAA)	Florida Department of Transportation (FDOT) Aviation Office – *Florida Aviation Systems Plan*	2000
Freight and mail volume	Total mail and air cargo tonnage handled by Florida commercial service airports	> 0.25 percent of total U.S. air freight and mail tonnage (200,000 tons per year in 1999)	Similar concept to the "large" or "medium" passenger hubs as defined by the FAA		1999

Emerging SIS Airports – Minimum Size Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Passenger volume	Passenger enplanements at Florida commercial service airports	> 0.05 percent of total U.S. enplanements (360,000 passengers per year in 2000)	Represents "small" hubs as defined by the FAA	Florida Department of Transportation (FDOT) Aviation Office – *Florida Aviation Systems Plan*	2000
Freight and mail volume	Total mail and air cargo tonnage handled by Florida commercial service airports	> 0.05 percent of total U.S. air freight and mail tonnage (40,000 tons per year in 1999)	Similar concept to the "small" passenger hubs as defined by the FAA		1999

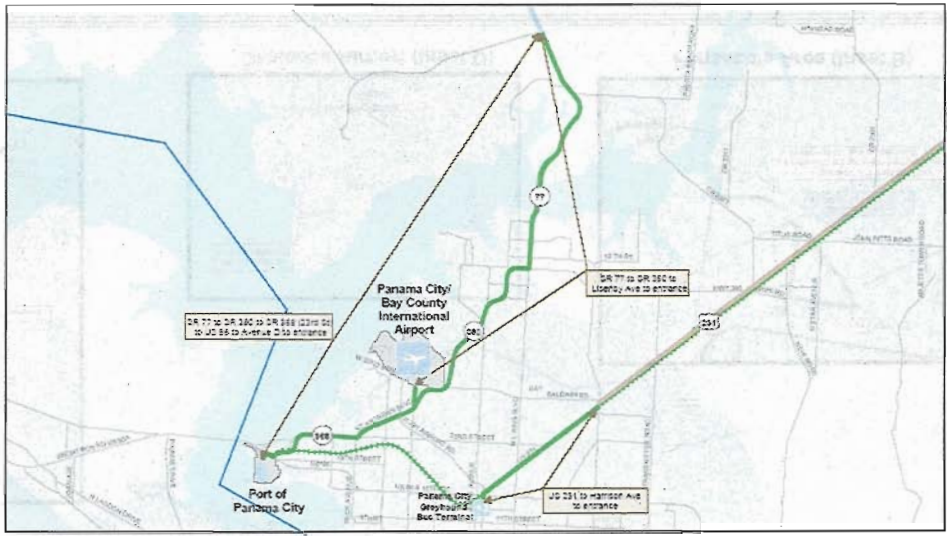
Emerging SIS Airports – Economic Connectivity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Service to clusters of industries dependent on air transportation located in or adjacent to fast-growing counties (by population)	Proximity to • Four-year colleges and universities • Federal research laboratories • High-technology industry clusters • Tourist industry clusters	Within 50 miles	These industries require convenient access to air transportation for both people and freight	Florida Division of Colleges and Universities; Foundation for Independent Higher Education; National Science Foundation; InfoUSA database	2002

Emerging SIS Airports – Proximity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Proximity to SIS airports	Distance from closest SIS airport	> 50 miles	Airports within 50 miles of a larger airport tend to function as reliever facilities, rather than providing additional economic connectivity to regions not already served by the SIS	Florida Department of Transportation (FDOT) Aviation Office – *Florida Aviation Systems Plan*	2002

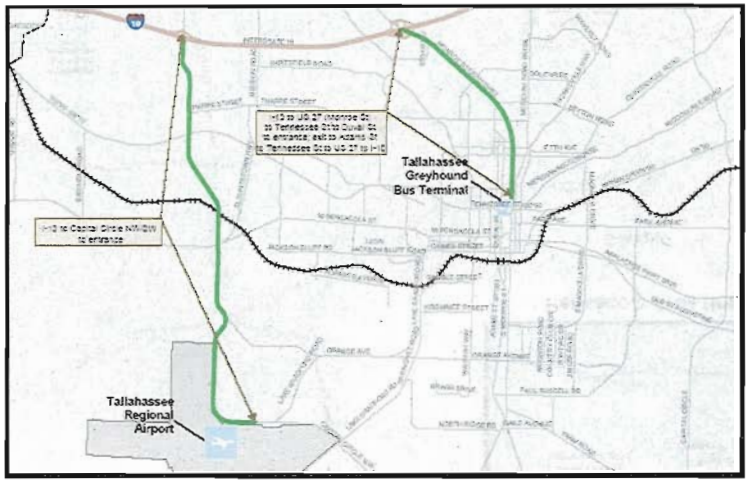

Facilities That Meet Adopted Criteria and Thresholds As of January 20, 2005
SIS & Emerging SIS Hubs, Corridors & Connectors
LEGEND
SIS
Hubs
Airports
Seaports
Passenger Terminals
Passenger Terminals (Planned)
Spaceport
Intermodal Freight - Rail Terminals
Corridors
Highway
Highway (Planned)
Rail
Waterways
Connectors
Road Connectors
Road Connectors (Planned)
Rail Connectors
Waterway Connectors
Emerging SIS
Hubs
Airports
Seaports
Passenger Terminals
Intermodal Freight - Rail Terminals
Corridors
Highway
Rail
Waterways
Connectors
Road Connectors
Road Connectors (Planned)
Rail Connectors
Waterway Connectors
Economic Regions
NOTES
1 Detailed maps showing specific connector locations are available at: www.dot.state.fl.us/planning/sis/atlas
Alabama
Georgia
Jacksonville Area
Orlando Area
Southeast Area
Tampa Bay Area



Panama City Area (Inset F)



Panama City Area (Inset E)



Tallahassee Area (Inset G)

SIS & Emerging SIS
Hubs, Corridors & Connectors

January 20
2005

NORTHWEST REGION (B)

LEGEND

SIS

Hubs
- Airports
- Seaports
- Passenger Terminals
- Passenger Terminals (Planned)
- Spaceport
- Intermodal Freight - Rail Terminals

Corridors
- Highway
- Highway (Planned)
- Rail
- Waterways

Connectors
- Road Connectors
- Road Connectors (Planned)
- Rail Connectors
- Waterway Connectors

Other
- Areas that are Urbanized[1]

Emerging SIS

Hubs
- Airports
- Seaports
- Passenger Terminals
- Intermodal Freight - Rail Terminals

Corridors
- Highway
- Rail
- Waterways

Connectors
- Road Connectors
- Road Connectors (Planned)
- Rail Connectors
- Waterway Connectors

Project Manager:
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Office of Policy Planning
Telephone: [illegible]
Email: [illegible]

NOTES

[1] Population density greater than 1,000 per square mile. (2000 Census)

Rail Corridor Directors
Road Corridor Directors
Waterway Corridor Director

State of Florida
Department of Transportation
Office of Policy Planning

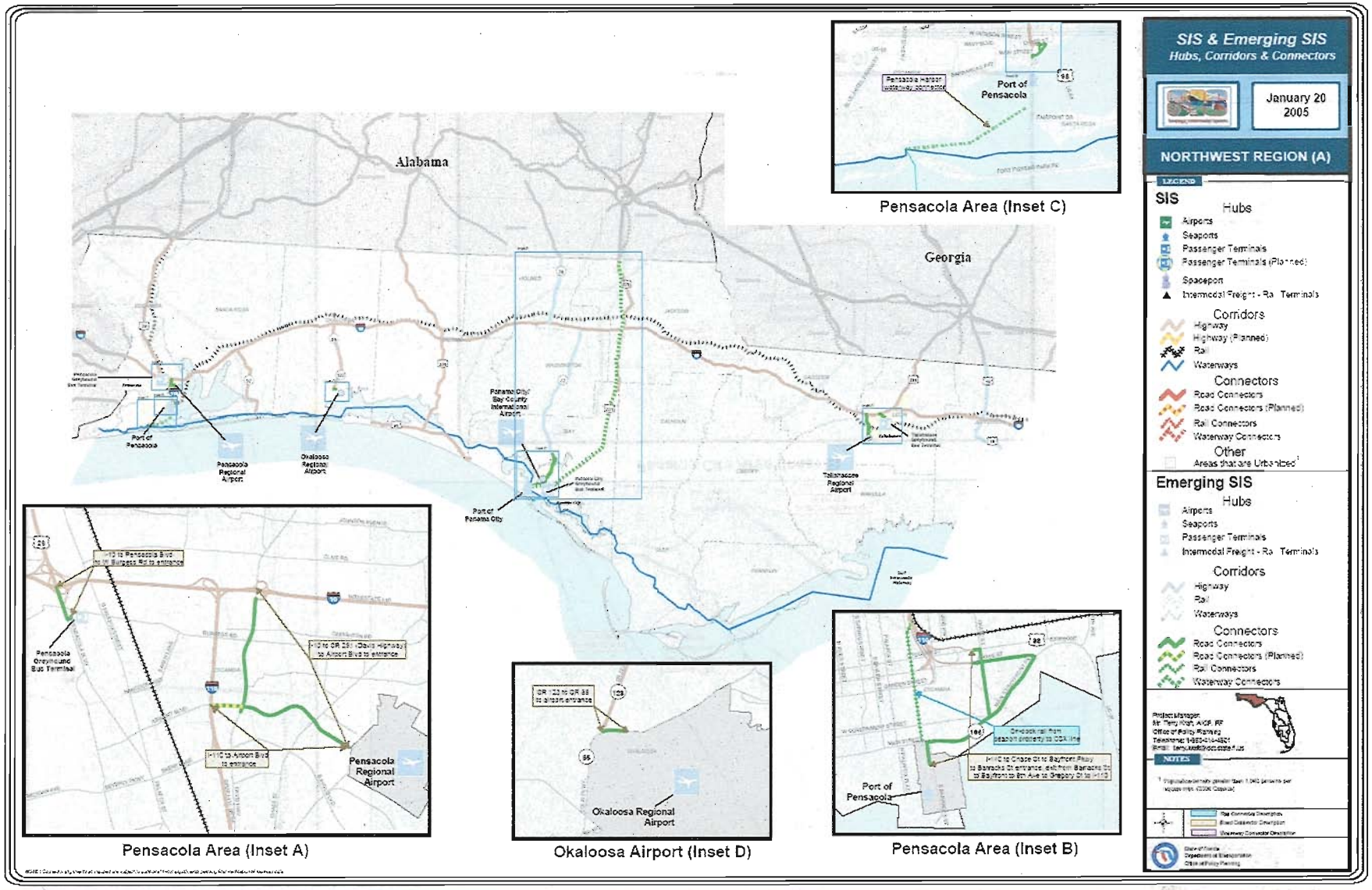
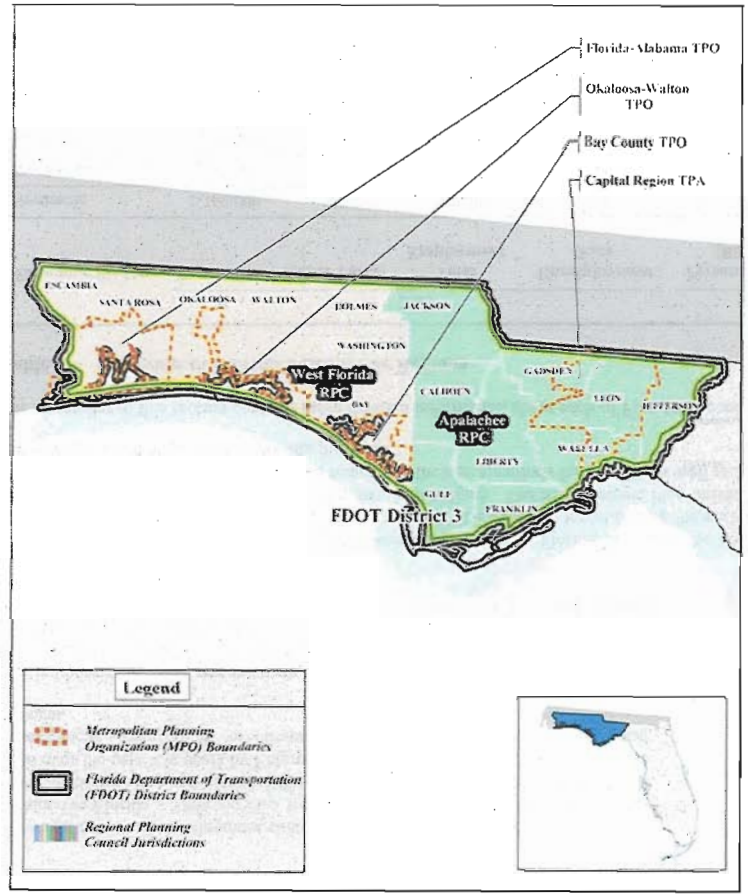

SIS & Emerging SIS
Hubs, Corridors & Connectors
January 20 2005
NORTHWEST REGION (A)
LEGEND
SIS
Hubs
Airports
Seaports
Passenger Terminals
Passenger Terminals (Planned)
Spaceport
Intermodal Freight - Rail Terminals
Corridors
Highway
Highway (Planned)
Rail
Waterways
Connectors
Road Connectors
Road Connectors (Planned)
Rail Connectors
Waterway Connectors
Other
Areas that are Urbanized
Emerging SIS
Hubs
Airports
Seaports
Passenger Terminals
Intermodal Freight - Rail Terminals
Corridors
Highway
Rail
Waterways
Connectors
Road Connectors
Road Connectors (Planned)
Rail Connectors
Waterway Connectors
NOTES
Alabama
Georgia
Port of Pensacola
Pensacola Regional Airport
Okaloosa Regional Airport
Panama City/ Bay County International Airport
Port of Panama City
Tallahassee Regional Airport
Pensacola Area (Inset C)
Pensacola Greyhound Bus Terminal
Pensacola Regional Airport
Pensacola Area (Inset A)
Okaloosa Regional Airport
Okaloosa Airport (Inset D)
Port of Pensacola
Pensacola Area (Inset B)

Figure NW1. Northwest Economic Region with Key Partners



Key Partners in Northwest Economic Region

FDOT Districts: District 3

Counties: Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Okaloosa, Santa Rosa, Wakulla, Walton, Washington

Metropolitan Planning Organizations (MPO): Okaloosa-Walton TPO, Florida-Alabama TPO, Bay County TPO, Capital Region TPA

MPO Regional Coordination Groups: Northwest Florida Regional Transportation Planning Organization

Regional Planning Councils (RPC): Apalachee RPC, West Florida RPC

Other Regional Economic Development Organizations: Opportunity Florida, Florida's Great Northwest

Other SIS Facility Owners and Operators: City of Pensacola (Pensacola Regional Airport, City of Tallahassee (Tallahassee Regional Airport), CSX Transportation, National Railroad Passenger Corporation (Amtrak), Greyhound Lines Inc. (Panama City Greyhound, Pensacola Greyhound, Tallahassee Greyhound), Panama City/Bay County Airport and Industrial District (Panama City/Bay County International Airport), Panama City Port Authority (Port of Panama City), Pensacola Port Authority (Port of Pensacola), United States Air Force (Okaloosa Regional Airport), Okaloosa Board of County Commissioners (Okaloosa Regional Airport), United States Army Corps of Engineers (Gulf Intracoastal Waterway)

Table NW1. Northwest Region Economic Overview

Economic Indicator	Northwest Region	% of Florida Total
Population, 2003	1,269,111	7%
Labor Force, 2003	592,506	7%
Total Employment, 2003	570,195	7%
Unemployment Rate, 2003	3.8%	66%[1]
Personal Income, 2002 (billions)	$31.7	6%
Per Capita Personal Income, 2002	$22,082	74%[1]

Source: Enterprise Florida.

[1] Percentage of Florida average.

Florida's Economic Regions

The eight economic development strategic planning regions, or economic regions, included in Florida's Strategic Plan for Economic Development serve as a framework for designating and planning the SIS. These eight regions have been developed over the past few years by Enterprise Florida, Inc., the State's lead economic development organization, in conjunction with its state, regional and local partners.

The boundaries of these regions were determined using economic data and stakeholder perspectives on how Florida's economy functions at a substate level. The regional boundaries have been modified over time based on stakeholder input but have not changed since 2002. Summary economic data on each of these regions are included in Table 1 below.

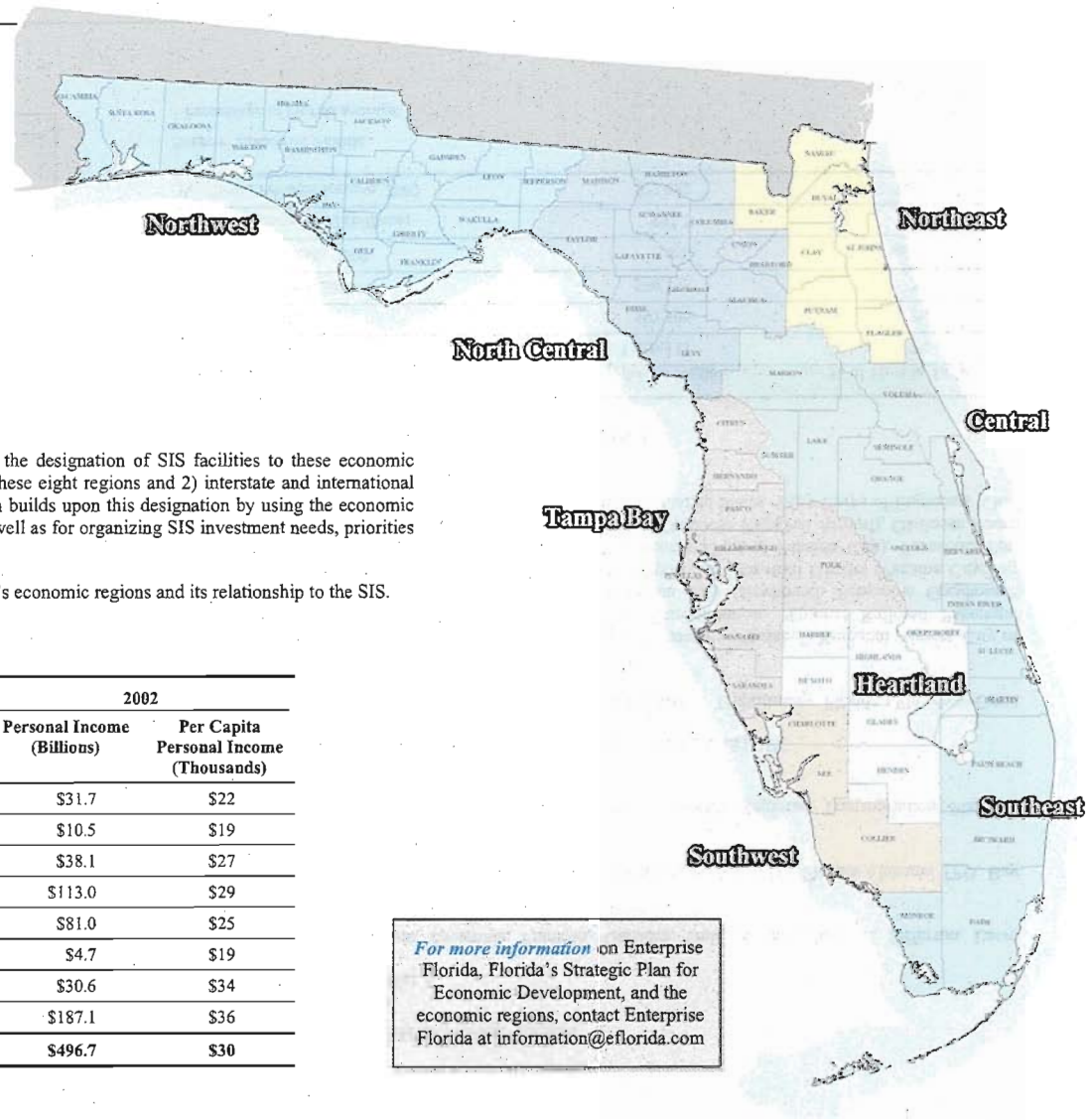
By reference to the Final Report of the SIS Steering Committee, Florida law links the designation of SIS facilities to these economic regions. The facilities that make up the SIS focus on 1) interregional travel among these eight regions and 2) interstate and international travel between these eight regions and other state and nations. The SIS Strategic Plan builds upon this designation by using the economic regions as a basis for analyzing economic trends and their implications for the SIS, as well as for organizing SIS investment needs, priorities and work program projects for reporting purposes.

The remainder of this section contains more detailed information about each of Florida's economic regions and its relationship to the SIS.

Table 1. Overview of Florida's Economic Regions

Economic Region	2003				2002	
	Population	Labor Force	Total Employment	Unemployment Rate	Personal Income (Billions)	Per Capita Personal Income (Thousands)
Northwest	1,269,000	593,000	570,000	3.8%	$31.7	$22
North Central	487,000	212,000	205,000	3.4%	$10.5	$19
Northeast	1,337,000	654,000	620,000	5.2%	$38.1	$27
Tampa Bay	3,802,000	1,897,000	1,812,000	4.4%	$113.0	$29
Central	3,117,000	1,521,000	1,447,000	4.9%	$81.0	$25
Heartland	238,000	85,000	78,000	7.8%	$4.7	$19
Southwest	932,000	391,000	374,000	4.2%	$30.6	$34
Southeast	5,837,000	2,813,000	2,590,000	7.9%	$187.1	$36
STATE TOTAL	**17,019,000**	**8,164,000**	**7,697,000**	**5.7%**	**$496.7**	**$30**

Source: Enterprise Florida.



For more information on Enterprise Florida, Florida's Strategic Plan for Economic Development, and the economic regions, contact Enterprise Florida at information@eflorida.com

Northwest Economic Region

Table NW4. SIS Intermodal Connectors That Meet Adopted Criteria and Thresholds

	SIS road connectors	None
	SIS rail connectors	None
	SIS waterway connectors	None

Table NW5. Emerging SIS Hubs and Corridors That Meet Adopted Criteria and Thresholds

	Emerging SIS commercial service airports	Okaloosa Regional Pensacola Regional Panama City/Bay County International Tallahassee Regional
	Emerging SIS deepwater seaports	Port of Pensacola Port of Panama City
	Emerging SIS interregional or interstate passenger terminals	**Greyhound Intercity Bus Terminals** Pensacola Panama City Tallahassee
	Emerging SIS intermodal freight rail terminals	None
	Emerging SIS highways	**FIHS Facilities** U.S. 19 from SR 44 to the Georgia State Line SR 77 from CR 2300 to I-10 **Non-FIHS Routes** SR 79 from I-10 to the Alabama State Line
	Emerging SIS freight rail corridors	None
	Emerging SIS waterways	None

Table NW6. Emerging SIS Intermodal Connectors That Meet Adopted Criteria and Thresholds

	Emerging SIS road connectors	**Port of Pensacola** I-110 to Chase Street to Bayfront Parkway to Barracks Street entrance, exit from Barracks Street to Bayfront to 9th Avenue to Gregory Street to I-110 **Port of Panama City** SR 77 to SR 390 to SR 368 (23rd Street) to U.S. 98 to Avenue D to entrance **Okaloosa Regional Airport** SR 123 to SR 85 to airport entrance **Panama City/Bay County International Airport** SR 77 to SR 390 to Lisenby Avenue to entrance **Pensacola Regional Airport** I-10 to SR 291 (Davis Highway) to Airport Boulevard to entrance *(existing constrained)* I-110 to Airport Boulevard to entrance *(planned)* **Tallahassee Regional Airport** I-10 to Capital Circle NW/SW to entrance **Pensacola Greyhound Bus Terminal** I-10 to Pensacola Boulevard to W. Burgess Road to entrance **Panama City Greyhound Bus Terminal** U.S. 231 to Harrison Avenue to entrance **Tallahassee Greyhound Bus Terminal** I-10 to U.S. 27 (Monroe Street) to Tennessee Street to Duval Street to entrance; exit to Adams Street to Tennessee Street to U.S. 27 to I-10
	Emerging SIS rail connectors	**Port of Pensacola** On-dock rail from seaport property to CSX line **Port of Panama City** Bay Line Class railroad from seaport property to Georgia State Line (serving CSX at Cottondale, FL and Norfolk Southern at Dothan, AL)
	Emerging SIS waterway connectors	**Port of Pensacola** Pensacola Harbor waterway connector to Gulf Intracoastal Waterway **Port of Panama City** On Gulf Intracoastal Waterway

Northwest Economic Region

Table NW2. Summary of Designated SIS and Emerging SIS Facilities

Facility Type	SIS	Emerging SIS
Commercial service airports *Percent of all Florida enplanements* *Percent of all Florida air cargo tonnage*	0 0% 0%	4 3% < 1%
Deepwater seaports *Percent of all Florida home-port cruise passengers* *Percent of all Florida waterborne freight tonnage* *Percent of all Florida waterborne containers (TEU)*	0 0% 0% 0%	2 0% 1% < 1%
Interregional or interstate passenger terminals *Percent of all interregional passengers*	0 0%	3 4%
Spaceport	0	NA
Intermodal freight-rail terminals	0	0
Highways (centerline miles) Highways (lane miles) *Percent of all traffic on State Highway System* *Percent of all truck traffic on State Highway System*	469 1,756 3% 6%	75 201 < 1% < 1%
Rail corridors (miles)	284	0
Waterways (miles)	275	0
Road connectors[1] *Miles*[1] *Percent of mileage on State Highway System*[1]	0 0 0%	9 37 91%
Rail connectors *Miles*	0 0	2 69
Waterway connectors *Miles*	0 0	1 7

[1] Includes existing connectors and mileage only, except in cases where the planned connectors will not replace existing connectors once operational.

Table NW3. SIS Hubs and Corridors That Meet Adopted Criteria and Thresholds

SIS commercial service airports	None
SIS deepwater seaports	None
SIS interregional or interstate passenger terminals	None
SIS spaceport	None
SIS intermodal freight rail terminals	None
SIS highways	**Interstates** I-10, I-110 (entire lengths) **Other FIHS Facilities** U.S. 98 from Okaloosa/Walton County Line to Panama City urban limits U.S. 231 from Baldwin Road in Panama City to the Alabama State Line U.S. 319 from I-10 to the Georgia State Line SR 85 from SR 123 to I-10 SR 87 from U.S. 98 to I-10 SR 123 from SR 85 south to SR 85 north U.S. 331 from U.S. 98 to the Alabama State Line U.S. 29 from I-10 to the Alabama State Line
SIS freight rail corridors	**CSX Lines** From the Alabama State Line east to Jacksonville via Pensacola, Chattahoochee, Tallahassee, and Baldwin
SIS interregional or interstate passenger rail corridors	**Amtrak Corridors** From the Alabama State Line east to Jacksonville via Pensacola, Chattahoochee, Tallahassee, and Baldwin (along CSX tracks)
SIS waterways	Gulf Intracoastal Waterway and shipping lanes

Adopted Criteria and Thresholds

This section describes the adopted SIS and Emerging SIS criteria and thresholds for hubs and corridors, intermodal connectors and planned facilities. The criteria used for community and environment screening also are included. Some of the common terms used in setting SIS and Emerging SIS criteria include the following:

- **Hubs** are ports and terminals that move goods or people between Florida regions or between Florida and other markets in the United States and the rest of the world.
- **Corridors** are highways, rail lines, waterways and other exclusive-use facilities that connect major markets within Florida or between Florida and other states or nations.
- **Connectors** are highways, rail lines and waterways that connect hubs and corridors.
- **Fast-growing counties** are those counties that have projected population or employment growth that rank among the top 25 percent statewide over the next 20 years, according to the forecast prepared by the Bureau of Economic and Business Research at the University of Florida.
- **Transportation-dependent industry clusters** are identified by determining the modes of interregional, interstate and international transportation typically used by Florida's eight key industries (see Table 1).
- **Economic connectivity needs** are identified by determining where designated SIS hubs and corridors do not adequately serve clusters of transportation-dependent industries in or adjacent to the fast-growing counties. A 50-mile driving distance is applied for assessing the adequacy of connections from SIS hubs to these industry clusters. To ensure that Emerging SIS facilities provide additional connectivity to developing economic regions, rather than provide redundancy to SIS hubs, Emerging SIS facilities can be designated only if they are located greater than 50 miles from the nearest SIS hub of the same type. The only exception to this 50-mile rule is for hubs that meet the Emerging SIS minimum size criteria and serve substantially different market origin/destination patterns or types of movements than the closest SIS hub of the same type for a sustained period of time. Guidance for the application of the 50-mile threshold is discussed below.

The criteria and thresholds on the following pages have been adopted pursuant to s.339.63, Florida Statutes, to identify those transportation hubs and corridors to be designated as SIS or Emerging SIS. The SIS criteria indicate the level of economic importance to the State, such as volume of passengers or freight shipments; thresholds are based on national or industry-accepted standards. Emerging SIS criteria also indicate level of economic importance and the degree of economic connectivity, but do not currently meet the SIS thresholds.

Table 1. Interregional, Interstate and International Transportation Needs for Florida's Key Industries

	Airports	Spaceport	Seaports	Rail	Highway	Intercity Bus
Agriculture/Forestry	○	○	◑	◑	●	○
Mining	○	○	●	●	◑	○
Distribution	◑	○	◑	●	●	○
High-Tech	●	◑	◑	○	●	○
Universities	◑	○	○	○	●	○
Health Care	◑	○	○	○	◑	○
Tourism	●	○	●	◑	●	◑
Military	●	◑	◑	◑	●	○

Key: Less Important ○ → ◑ → ● More Important

Hubs and Corridors Criteria

SIS Airports					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Passenger volume	Passenger enplanements at Florida commercial service airports	> 0.25 percent of total U.S. enplanements (1.8 million passengers per year in 2000)	Represents "large" or "medium" hubs as defined by the Federal Aviation Administration (FAA)	Florida Department of Transportation (FDOT) Aviation Office – *Florida Aviation Systems Plan*	2000
Freight and mail volume	Total mail and air cargo tonnage handled by Florida commercial service airports	> 0.25 percent of total U.S. air freight and mail tonnage (200,000 tons per year in 1999)	Similar concept to the "large" or "medium" passenger hubs as defined by the FAA		1999

Emerging SIS Airports – Minimum Size Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Passenger volume	Passenger enplanements at Florida commercial service airports	> 0.05 percent of total U.S. enplanements (360,000 passengers per year in 2000)	Represents "small" hubs as defined by the FAA	Florida Department of Transportation (FDOT) Aviation Office – *Florida Aviation Systems Plan*	2000
Freight and mail volume	Total mail and air cargo tonnage handled by Florida commercial service airports	> 0.05 percent of total U.S. air freight and mail tonnage (40,000 tons per year in 1999)	Similar concept to the "small" passenger hubs as defined by the FAA		1999

Emerging SIS Airports – Economic Connectivity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Service to clusters of industries dependent on air transportation located in or adjacent to fast-growing counties (by population)	Proximity to • Four-year colleges and universities • Federal research laboratories • High-technology industry clusters • Tourist industry clusters	Within 50 miles	These industries require convenient access to air transportation for both people and freight	Florida Division of Colleges and Universities; Foundation for Independent Higher Education; National Science Foundation; InfoUSA database	2002

Emerging SIS Airports – Proximity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Proximity to SIS airports	Distance from closest SIS airport	> 50 miles	Airports within 50 miles of a larger airport tend to function as reliever facilities, rather than providing additional economic connectivity to regions not already served by the SIS	Florida Department of Transportation (FDOT) Aviation Office – *Florida Aviation Systems Plan*	2002

SIS Seaports					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Cruise passenger volume	Annual homeport cruise passenger embarkations and disembarkations at Florida deepwater seaports	> 250,000 homeport passengers per year	Represents the minimum threshold for inclusion on the National Highway System (NHS) Intermodal Connectors Inventory	Florida Seaport Transportation and Economic Development Council – *Five-Year Plan to Accomplish the Mission of Florida's Seaports 2001/2002-2005/2006*	Fiscal Year 2000-2001
Freight tonnage	Annual freight throughput measured in tons at Florida deepwater seaports	> 0.25 percent of total U.S. waterborne freight tonnage (6 million tons of inbound and outbound freight per year in FY 2000-2001)	Similar concept to the "large" or "medium" hub airports		Fiscal Year 2000-2001
Container volume	Annual containerized freight throughput measured in 20-foot equivalent units (TEU) at Florida deepwater seaports	> 0.25 percent of total U.S. waterborne container movements (75,000 TEUs shipped inbound or outbound per year in FY 2000-2001)	Similar concept to the "large" or "medium" hub airports		Fiscal Year 2000-2001

Emerging SIS Seaports – Minimum Size Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Cruise passenger volume	Annual homeport cruise passenger embarkations and disembarkations at Florida deepwater seaports	> 50,000 homeport passengers per year	Represents 20 percent of the minimum threshold for inclusion on the NHS *Intermodal Connectors*	Florida Seaport Transportation and Economic Development Council – *Five-Year Plan to Accomplish the Mission of Florida's Seaports 2001/2002-2005/2006*	Fiscal Year 2000-2001
Freight tonnage	Annual freight throughput at measured in tons at Florida deepwater seaports	> 0.05 percent of total U.S. waterborne freight tonnage (1.2 million tons of inbound and out-bound freight per year in FY 2000-2001)	Similar concept to the "small" hub airports (i.e., 20 percent of the SIS threshold)		Fiscal Year 2000-2001
Container volume	Annual containerized freight throughput measured in TEUs at Florida deepwater seaports	> 0.05 percent of total U.S. waterborne container movements (15,000 TEUs shipped inbound or outbound per year in FY 2000-2001)	Similar concept to the "small" hub airports (20 percent of the SIS threshold)		Fiscal Year 2000-2001

Emerging SIS Seaports – Economic Connectivity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Service to industries dependent on waterborne transportation service located in or adjacent to fast-growing counties	Proximity to • Counties with annual agricultural production valued at more than $100 million. • *Mining industry clusters.* • Wood and paper industry clusters. • Warehouses and distribution centers.	Within 50 miles	These industries require convenient access to waterborne freight transportation	U.S. Census of Agriculture; InfoUSA database	1997 for agri-culture data; 2002 for all other data

Emerging SIS Seaports – Proximity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Proximity to SIS seaports	Distance from closest SIS seaport	> 50 miles	Seaports within 50 miles of a larger sea-port may function as supporting facilities, rather than providing additional economic connectivity to regions not already served by the SIS	Florida Seaport Transportation and Economic Development Council – *Five-Year Plan to Accomplish the Mission of Florida's Seaports 2001/2002-2005/2006*	Fiscal Year 2000-2001

SIS Passenger Terminals					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Passenger volume (interregional or interstate bus terminals)	Annual interregional or interstate passenger boardings; on-site ticketing and other support services	>100,000 passengers per year	Represents minimum threshold for inclusion on NHS Intermodal Connectors Inventory	Greyhound Lines, Inc.	2002
Passenger volume (interregional or interstate rail terminals)	Annual interregional or interstate passenger boardings; on-site ticketing and other support services	> 100,000 passengers per year	Represents minimum threshold for inclusion on NHS Intermodal Connectors Inventory	Amtrak; Tri-County Commuter Rail Authority (Tri-Rail)	2001
Passenger volume (multimodal terminals providing interregional or interstate service)	Annual interregional or interstate bus or rail passenger boardings at multimodal terminals; on-site ticketing and other support services	> 100,000 passengers per year	Represents minimum threshold for inclusion on NHS Intermodal Connectors Inventory	Multimodal terminal interviews	2002

Emerging SIS Passenger Terminals – Minimum Size Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Passenger volume (interregional or interstate bus terminals)	Annual interregional or interstate passenger boardings by bus terminal; on-site ticketing and other support services	> 50,000 passengers per year	Represents one-half of minimum threshold for inclusion on NHS Intermodal Connectors Inventory	Greyhound Lines, Inc.	2002
Passenger volume (interregional or interstate rail terminals)	Annual interregional or interstate passenger boardings by rail terminal; on-site ticketing and other support services	> 50,000 passengers per year	Represents one-half of minimum threshold for inclusion on NHS Intermodal Connectors Inventory	Amtrak; Tri-Rail	2001
Passenger volume (multimodal terminals providing interregional or interstate service)	Annual interregional or interstate bus or rail passenger boardings at multimodal terminals; on-site ticketing and other support services	> 50,000 passengers per year	Represents one-half of minimum threshold for inclusion on NHS Intermodal Connectors Inventory	Multimodal terminal interviews	2002

Emerging SIS Passenger Terminals – Economic Connectivity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Service to fast-growing counties (by population) and industries dependent on interregional passenger transportation	Proximity to • Counties with population growth among top 25 percent statewide • Tourism industry clusters • *Four-year colleges and universities*	Within 50 miles	These industries require convenient access to interregional passenger transportation	University of Florida Bureau of Economic and Business Research Florida Division of Colleges and Universities; Foundation for Independent Higher Education; National Science Foundation; InfoUSA database	2002

Emerging SIS Passenger Terminals – Proximity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Proximity to SIS passenger terminals	Distance from closest SIS passenger terminal	> 50 miles	Passenger terminals within 50 miles of a larger terminal tend to function as reliever facilities, rather than providing additional economic connectivity to regions not already served by the SIS	Amtrak; Tri-Rail; Greyhound	2002

SIS Passenger Rail Corridors					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Scheduled intercity rail service	Existing rail corridors that provide scheduled intercity or interstate passenger service	N/A	Reflects statewide commitment to interregional passenger rail service	Florida DOT – *Florida Rail System Plan* 2001	2000

SIS Freight Rail Terminals					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Containerized (intermodal) rail freight volume	Annual containerized freight throughput at intermodal freight rail terminals measured in tons	> 0.25 percent of total U.S. intermodal rail movements (360,000 tons per year in 2001)	Similar to large or medium hubs concept	Surface Transportation Board (STB) Rail Waybill data	2001
Bulk rail tonnage volume	Annual total freight throughput at freight rail terminals measured in tons	> 0.25 percent of total U.S. bulk rail movements (4 million tons per year in 2001)	Similar to large or medium hubs concept	Surface Transportation Board (STB) Rail Waybill data	2001

Emerging SIS Freight Rail Terminals – Minimum Size Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Containerized (intermodal) rail freight volume	Annual containerized freight throughput at intermodal freight rail terminals measured in tons	> 0.25 percent of total U.S. intermodal rail movements (72,000 tons per year in 2001)	Similar to small hub concept	Surface Transportation Board (STB) Rail Waybill data	2001
Bulk rail tonnage volume	Annual total freight throughput at freight rail terminals measured in tons	> 0.05 percent of total U.S. bulk rail movements (800,000 tons per year in 2001)	Similar to small hub concept	Surface Transportation Board (STB) Rail Waybill data	2001

Emerging SIS Freight Rail Terminals – Economic Connectivity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Service to industries dependent on freight rail transportation service located in or adjacent to fast-growing counties (by employment)	Proximity to warehouses and distribution centers	Within 50 miles	These industries require convenient access to intermodal rail freight transportation	InfoUSA database	2002
	Proximity to • Counties with annual agricultural production valued at more than $100 million • Mining industry clusters • Wood and paper industry clusters • Coal-burning utility facilities	Within 50 miles	These industries require convenient access to bulk rail freight transportation	U.S. *Census of Agriculture*; InfoUSA database	1997 for agriculture data; 2002 for all other data

Emerging SIS Freight Rail Terminals – Proximity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Proximity to SIS freight rail terminals	Distance from closest SIS freight rail terminal	> 50 miles	Freight rail terminals within 50 miles of a larger freight rail tend to function as reliever facilities, rather than providing additional economic connectivity to regions not already served by the SIS	FDOT – *Florida Rail System Plan* 2001	2000

SIS Freight Rail Corridors					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Freight density	Rail line freight density measured in million gross ton-miles per mile per year (MGTM/M)	> 10 MGTM/M	Based on data specific to Florida; threshold is comparable to those established within the rail industry	FDOT – *Florida Rail System Plan* 2001	2000

Emerging SIS Freight Rail Corridors – Minimum Size Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Freight density	Rail line freight density measured in MGTM/M per year	> 5 MGTM/M	One-half of SIS threshold; threshold is comparable to those established within the rail industry	FDOT – *Florida Rail System Plan* 2001	2000

Emerging SIS Freight Rail Corridors – Economic Connectivity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Service to industries dependent on rail transportation located in or adjacent to fast-growing counties (by employment)	Proximity to • Counties with annual agricultural production valued at more than $100 million • Mining industry clusters • Wood and paper industry clusters • Warehouses and distribution centers • Coal-burning utility facilities	Within 50 miles	These industries require convenient access to rail freight transportation	U.S. Census of Agriculture; InfoUSA database	1997 for agriculture data; 2002 for all other data

SIS Waterway Corridors					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Intracoastal waterways and coastal shipping lanes	Designated intracoastal waterways and Gulf or Atlantic coastal shipping lanes handling international waterborne trade	Yes	Connect Florida seaports, inland waterways and markets to major domestic and international shipping lanes and markets	U.S. Army Corps of Engineers – *Waterborne Commerce of the United States* 2001	2001
Freight tonnage	Annual freight tonnage on inland interregional waterways	> 0.25 percent of total U.S. inland waterway freight traffic (1.5 million tons per year in 2001)	Connect Florida seaports, inland waterways and markets to major domestic and international shipping lanes and markets	U.S. Army Corps of Engineers – *Waterborne Commerce of the United States* 2001	2001

Emerging SIS Waterways – Minimum Size Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Freight tonnage	Annual freight tonnage on inland interregional waterways	> 0.05 percent of total U.S. inland waterway freight traffic (300,000 tons per year in 2001)	Comparable to small hubs concept (i.e., 20 percent of SIS threshold)	U.S. Army Corps of Engineers – *Waterborne Commerce of the United States* 2001	2001

Emerging SIS Waterways – Economic Connectivity Criteria					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Inland interregional service to industries dependent on water transportation located in or adjacent to fast-growing counties (by employment)	Proximity to • Counties with annual agricultural production valued at more than $100 million • Mining industry clusters • Wood and paper industry clusters • Coal-burning utility facilities	Within 50 miles	These industries require convenient access to waterway transportation	U.S. Census of Agriculture; InfoUSA database	2002

SIS Highway Corridors – FIHS Facilities					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
FIHS facility	Designated FIHS facility	Yes	Meets statutory criteria for high-volume, high-speed interregional limited access or controlled access facilities	Florida DOT – Systems Planning Office, *FIHS Modal Plan*	2002
Passenger volume	Average annual daily traffic (AADT)	> 9,000 AADT	Approximately equal to the average AADT on Federal-aid highways nationwide	Florida DOT – Roadway Characteristics Inventory (RCI) data	2000
Truck percentage of traffic	Percent trucks	> 20 percent trucks	Represents the generally accepted definition of a truck corridor		2000
Connectivity on segments between SIS corridors	*Percentage of segment length required to meet SIS criteria for full segment to be designated*	75 percent	Ensures that highway segments that do not fully meet criteria are included only when they connect to other SIS highways and where a supermajority of the segment's length meets the criteria		2000

SIS Highway Corridors – NHS Facilities					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Connection to Georgia or Alabama	Interstate connection to major markets not already secured by SIS facilities	Yes	Ensures connections to major markets in Alabama and Georgia	Federal Highway Administration – Office of Planning	2001

Emerging SIS Highway Corridors – FIHS Facilities					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
FIHS facility	Designated FIHS facility	Yes	Meets statutory criteria for high-volume, high-speed interregional limited access or controlled access facilities	Florida DOT – Systems Planning Office, *FIHS Modal Plan*	2002
Vehicle volume	Average annual daily traffic (AADT)	> 6,000 AADT	Represents two-thirds of average AADT Federal-aid highways nationwide and is approximately equal to average AADT in rural and small urban areas (<50,000 population) on Federal-aid highways nationwide	Florida DOT – Roadway Characteristics Inventory (RCI) data	2000
Truck percentage and volume	Percent trucks in traffic and Average Annual Daily Truck Traffic (AADTT)	> 13 percent trucks and > 800 AADTT	Percent trucks represents two-thirds of the generally accepted definition of a truck corridor; 800 AADTT minimum helps to identify true rural truck corridors (i.e., prevents a corridor with low truck volume, but 13 percent trucks from being designated).		2000
Connectivity on segments between SIS corridors	Percentage of segment length required to meet Emerging SIS criteria for full segment to be designated	50 percent	Ensures that highway segments that do not fully meet criteria are included only when they connect to other SIS highways and where a majority of the segment's length meets the criteria		2000

Emerging SIS Highway Corridors – SHS Facilities					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Interregional corridors connecting Rural Areas of Critical Economic Concern to the SIS	SHS facilities that provide service to at least one county or city within a designated Rural Area of Critical Economic Concern; that are interregional corridors; and that are bounded by existing SIS highway corridors.	Yes	Interregional SHS facilities in Rural Areas of Critical Economic Concern that are bounded by SIS facilities allow these rural areas to connect to other regions in Florida and nationwide.		2000
Vehicle volume	Average annual daily traffic (AADT)	> 6,000 AADT	Represents two-thirds of average AADT Federal-aid highways nationwide and is approximately equal to average AADT in rural and small urban areas (<50,000 population) on Federal-aid highways nationwide	Florida DOT – Roadway Characteristics Inventory (RCI) data	2000
Truck percentage and volume	Percent trucks in traffic and Average annual daily truck traffic (AADTT)	> 13 percent trucks and > 1,000 AADTT	Percent trucks represents two-thirds of the generally accepted definition of a truck corridor; 1,000 AADTT minimum helps to identify true rural truck corridors (i.e., prevents a corridor with low truck volume, but 13 percent trucks from being designated)		2000

Emerging SIS Highway Corridors – SHS Facilities (continued)					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Connectivity on segments between SIS corridors	Percentage of segment length required to meet Emerging SIS criteria for full segment to be designated	50 percent	Ensures that highway segments that do not fully meet criteria are included only when they connect to other SIS highways and where a majority of the segment's length meets the criteria	Florida DOT – Roadway Characteristics Inventory (RCI) data	2000

SIS Exclusive-Use Busways, Truckways, and Transit Facilities					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Intercity or interregional intermodal service	Provides intercity or interregional service with connection to other modes	Yes	Ensures focus on interregional rather than local trips	FDOT – Public Transit Office	2002

Emerging SIS Exclusive-Use Busways, Truckways, and Transit Facilities					
Criterion	**Description**	**Threshold**	**Rationale**	**Source**	**Year**
Alternative travel mode	Provides alternative travel mode within designated SIS interregional highway or rail corridors	Yes	Reflects statewide commitment to use of alternative modes of transportation for people and freight	FDOT – Public Transit Office	2002

Application of the 50-Mile Threshold

In March 2004, the Secretary of Transportation approved the application of the 50-mile threshold used in the proximity criteria for Emerging SIS hubs as a *driving distance over SIS and Emerging SIS corridors* and connectors, rather than as a straight line radius. The only exception to the 50-mile threshold is for hubs that meet the Emerging SIS minimum size criteria AND serve substantially different market origin/destination patterns or types of movements for a sustained period of time. Exceptions to the 50-mile threshold were approved by the SIS Steering Committee for the Port of Fernandina and by the Secretary of Transportation for Orlando-Sanford International Airport. *The 50-mile threshold is to be* applied as follows:

- The driving distance between a SIS and a potential Emerging SIS hub must be equal to or greater than 50.0 miles.
- The driving distance will be measured on SIS and Emerging SIS corridors and connectors only. These officially designated facilities provide an objective, consistent method of measuring driving distance between all types of SIS hubs in all regions of the State. For the purposes of measuring driving distance, the route used to connect the potential Emerging SIS hub to a SIS corridor will be determined using the Department's adopted criteria for designating SIS and Emerging SIS connectors.
- The driving distance will be measured to each hub at the point where the SIS or Emerging SIS connector (for the most commonly used passenger or freight entrance, depending on the type of comparison) first meets or crosses the hub property boundary.
- Where multiple potential SIS and Emerging SIS routes exist between two hubs, the shortest distance will be used.
- For airports, seaports, and spaceports, the *50-mile driving distance will be measured between hubs* of the same mode (i.e., airport to airport, seaport to seaport). For interregional passenger terminals, the 50-mile driving distance will be measured between hubs offering the same mode or type of service (i.e., Amtrak rail service to Amtrak rail service, Greyhound bus service to Greyhound bus service). For rail freight terminals, the 50-mile driving distance will be measured between hubs offering the same type of service (i.e., bulk rail service to bulk rail service, intermodal rail service to intermodal rail service).In the event that new types of intermodal hubs are designated in the future (for example, an "inland port" offering rail and air cargo service), the Department's modal offices, in consultation with partners, will determine at that time to which types of hubs the 50-mile driving distance should be applied.
- An exception to this 50-mile threshold can be provided only if the hub 1) meets the Emerging SIS minimum size criteria and 2) has served substantially different market origin/destination patterns or types of movement for a sustained period of time, as defined by meeting at least one of the following conditions:
  - *Airports*: A majority of passenger enplanements or freight tonnage is destined for direct service to other medium/large U.S. hubs or international destinations that are not directly served by the SIS airport; or a majority of passenger enplanements or freight tonnage are for particular market niches (e.g., international or charter passengers) that are not significantly served by the SIS airport.
  - *Seaports*: A majority of passenger trips or freight tonnage is destined for direct service to other medium/large U.S. seaports or international destinations that are not directly served by the SIS seaport; or a majority of passenger trips or freight tonnage are for particular market niches (e.g., containerized cargo) that are not significantly served by the SIS seaport.
  - *Interregional Passenger Terminals*: A majority of passenger trips is destined for direct service to other medium/large U.S. passenger terminals that are not directly served by the SIS terminal; or a majority of passenger trips are for particular types of service (e.g., intercity bus or interregional passenger rail) that are not significantly served by the SIS terminal. The terminal also must be located on an existing designated SIS or Emerging SIS corridor.
  - *Freight Rail Terminals*: A majority of freight tonnage is destined for direct service to other medium/large U.S. freight rail terminals that are not directly served by the SIS terminal; or a majority of freight tonnage are for particular types of service (e.g., containerized cargo) that are not significantly served by the SIS terminal. The terminal also must be on an existing designated SIS or Emerging SIS corridor.

Intermodal Connector Designation Criteria

As authorized by s. 339.63(2), Florida Statutes, the Secretary of Transportation adopted the following criteria in September 2004 for designating SIS and Emerging SIS intermodal connectors. The guiding policies for designating connectors are as follows:

- The purpose of SIS connectors is to connect SIS hubs to the nearest or most appropriate SIS corridor;
- The purpose of Emerging SIS connectors is to connect Emerging SIS hubs to the nearest or most appropriate SIS or Emerging SIS corridor; and
- The function of the SIS and Emerging SIS connectors is to provide safe, secure, efficient, reliable, and direct access between hubs and corridors.

The following criteria and implementation guidance were used to identify the SIS and Emerging SIS intermodal connectors.

- **Criterion: Connect to the nearest or most appropriate SIS or Emerging SIS corridor.**

  Implementation guidance: SIS hubs generally are connected to the nearest SIS corridor, while Emerging SIS hubs are connected to the nearest SIS or Emerging SIS corridor. In certain cases, other SIS or Emerging SIS corridors may be more appropriate (for example, cases where there are unique interregional trip patterns for passengers and freight).

- **Criterion: Choose among multiple potential connectors based on:**
  - Frequency of use for interregional passengers or freight;
  - Ability to provide high-speed, high-capacity, limited access service;
  - Most direct access; and
  - Ability to provide two-way directional movement.

  Implementation guidance: Potential connectors are compiled from the National Highway System intermodal connector inventory, the National Highway Planning Network, the U.S. Department of Defense's Strategic Highway Network and Strategic Rail Corridor Network, facility access studies and other sources. Of the multiple potential access routes for each hub, potential connectors are evaluated based on all four factors. A connector's ability to provide high-speed, high-capacity, limited access service reflects anticipated future design standards for most SIS and Emerging SIS connectors. However, in recognition of the unique constraints faced by some connectors and the need for flexible design standards in some situations, all four factors are considered together in determining a facility's potential designation.

- **Criterion: Designate more than one connector to a single hub when any of the following conditions are met:**
  - Hub meets both SIS or Emerging SIS freight and passenger thresholds, and freight and passenger handling facilities have discrete access points at different locations (e.g., separate passenger terminal and air cargo facilities at airports);
  - Hub has multiple terminals with discrete access points for separate terminals; or
  - Existing interregional flows of people or goods are divided significantly among more than one mode (e.g., truck, rail and water access to seaports).

  Implementation guidance: To keep the system as strategic as possible, the SIS Steering Committee recommended that the number of connectors be generally limited to one per hub, except in those cases where more than one connector may be appropriate. Based on input from partners and the public, these three conditions identify the cases where additional connectors should be designated for the SIS and Emerging SIS hubs. The application of these conditions should be on a case-by-case basis that reflects the unique characteristics of each hub. Changes in the number and location of terminals or access points at an individual hub should be reflected in the designation of connectors only when such changes are included in the hub's adopted master plan.

- **Criterion: Designate both an existing constrained and a planned future connector when the planned connector is funded in an adopted cost-feasible plan.**

  Implementation guidance: At several of the SIS and Emerging SIS hubs, new alignments for connectors have been identified to address capacity and geometric constraints where expansion is not possible, or to address unique facility plans such as major terminal relocations. To limit the designation of future connectors to those most likely to be built, planned connectors are designated plannedonly when included in an adopted cost-feasible plan. In these cases, the existing connectors are interim solutions until new connectors are open for traffic. Capacity expansions of the existing connectors will not be eligible for SIS funding if a planned connector is planned; however, maintenance, safety, and security enhancements to the existing connector may be funded using other sources. Improvements to other constrained connectors that do not have a planned future connector may be identified during the future needs assessment for SIS and Emerging SIS facilities.

- **Criterion: Identify connectors with potential community and environmental impacts for more detailed study with resource agencies and community partners.**

  Implementation guidance: SIS and Emerging SIS connectors are subject to the adopted community and environment screening criteria. Due to the existing locations of SIS and Emerging SIS hubs, and the nature and volume of the traffic traveling between SIS hubs and corridors, improvements to intermodal connectors could in some cases have adverse impacts on communities and/or sensitive natural environments. If no suitable alternative solution exists, context-sensitive design features should be considered to reduce or mitigate impacts of the improvements on the built and natural environments.

Planned Facilities Criteria

As part of the SIS Strategic Plan, the Secretary of Transportation is adopting the following planned facilities criteria and implementation guidance, as authorized by s. 339.63(2), Florida Statutes. Facilities must meet all of the following criteria to be designated as planned SIS facilities.

- **Criteria and Thresholds:** The planned facility or service is projected to meet all applicable SIS or Emerging SIS criteria and thresholds within the first three years of operation.

  Implementation Guidance: The facility or service is projected to meet all applicable SIS or Emerging SIS criteria and thresholds within three years after opening, including the requirements of the community and environmental screening process if it will be a SIS facility (exceptions to this timeframe may be considered on a case-by-case basis at the Secretary's discretion). Forecast procedures will vary by mode, but must reflect national or industry standards and methodologies that are accepted by FDOT. Requests originating from outside FDOT will be subject to additional technical review by Department modal staff. If a hub is being designated, a connector on an existing or planned alignment would be identified as well, using the adopted connector designation criteria.

- **Partner Consensus/Record of Decision:** The appropriate partners have reached consensus on the implementation of the planned facility or service.

  Implementation Guidance: For facilities and services that receive Federal funding and have been determined by the National Environmental Policy Act (NEPA) process to have a significant impact on the environment, partner consensus is demonstrated by a favorable Record of Decision issued by the designated lead agency. For facilities and services determined to be qualifying non-Federal major transportation projects as defined by the FDOT Project Development and

Environmental (PD&E) Manual, partner consensus is demonstrated by an approved State Environmental Impact Report (SEIR). For all other facilities and services, the Secretary will determine whether partner consensus has been achieved by reviewing input from partners and the public during an open comment period, following the completion of the environmental checklist required for non-major state actions or following the completion of environmental analysis required by Rule Chapter 14-107 for privately funded facilities.

- **Financial Feasibility:** The planned facility or service is financially feasible.

  Implementation Guidance: Financial feasibility is demonstrated by inclusion in the appropriate FDOT and partner cost-feasible plan(s), work program(s), and/or capital improvement plans, or by agreement between FDOT and the appropriate partners to move forward with construction after the facility or service has been designated on the SIS.

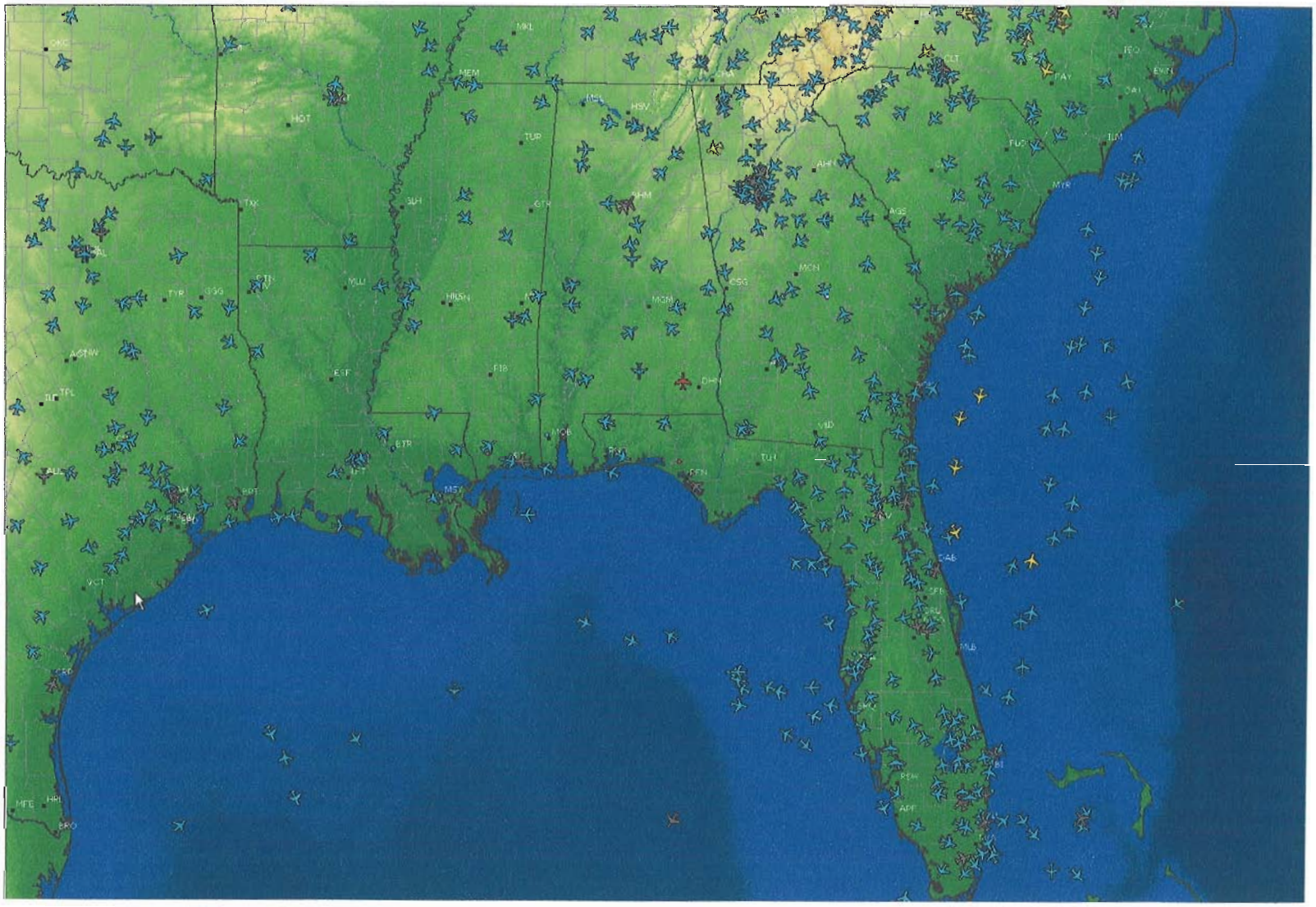
Community and Environment Screening Criteria

The community and environment screening criteria are intended to influence choices where possible and manage impacts where there are no choices, ensuring that the SIS rests lightly on the natural and built environment. The criteria apply to the initial selection of connectors and alternative facilities within corridors, to the operation of SIS facilities and services and to future improvements and additions to the SIS.

Community and Environment Screening Criteria

Measure	Description	Source	Year
Community Livability – Character and Function	Corridors and connectors should be designated, designed and constructed in such a way as to avoid or minimize negative impacts and preserve the function and character of local communities, using processes such as the Efficient Transportation Decision-making Process as a tool beginning in early planning phases of a project. • SIS corridors serving high volumes of freight traffic should consist of facility types designed to accommodate freight movements, and should not pass through residential and commercial areas with high levels of pedestrian activity or other activities sensitive to the noise, vibration, emissions and safety impacts associated with freight movement. • Except where supported by local community plans or necessary for connections to transit hubs, through passenger trips should be accommodated by major arterials and limited access facilities, and should be discouraged from using streets primarily intended to serve local vehicular, bicycle and pedestrian traffic. Where the SIS designation process identifies an existing transportation connector between two SIS facilities that does not conform to this criterion, the process shall identify the nonconformity as a gap in the SIS to be filled by a connector conforming to the criteria.	FDOT District Work Programs; FDOT – RCI data; Department of Revenue property classifications; Local comprehensive plans and local land use plans	2000 2000 Latest available
Community Livability – Land Use	The SIS and local comprehensive plans should be mutually compatible and supportive. SIS hubs should be located in areas where intense economic activities exist or are planned in local comprehensive plans, and in amendments and updates to comprehensive plans. Access to SIS facilities should be provided only where existing and planned land uses support the facility's purpose.	FDOT District Work Programs; FDOT – RCI data; Department of Revenue property classifications; Local comprehensive plans and local land use plans	2000 2000 2002 Latest available

Measure	Description	Source	Year
Environmental Quality – Air Quality	In air quality non-attainment and maintenance areas, greater weight will be given to connectors that link the SIS to public transit facilities and services and non-highway freight facilities. During the selection process, greater weight will be given to transportation facilities and services that utilize Intelligent Transportation Systems (ITS) technology (related to incident management, traveler information, electronic toll collection, commercial vehicle logistics and security) to reduce vehicle idling times, increase vehicle throughput and increase travel speeds to allow for more efficient energy use and lower emissions.	FDOT District Work Programs; FDOT – *RCI data*	2000 2000
Environmental Quality – *Natural Resource Lands*, Cultural and Historical Sites, Agricultural Areas	Transportation facilities that do not negatively impact important natural resource lands, cultural and historic sites and agricultural areas will be given a higher rating than those that do. Negative environmental impacts include: habitat fragmentation; increasing the difficulty of using vital habitat management techniques such as prescribed fire; reduction in water quality or quantity; reduction in air quality; increase in noise and vibration; or decreasing aesthetic value. Lands to be protected include: (a) Important natural resource lands, such as: • National Wildlife Refuges, Preserves, Parks and Seashores; • State Parks, Preserves, Reserves, Forests and Recreation Areas; County and Local Parks, Preserves, Reserves, Forests and Recreation Areas; • Wildlife Management Areas, Aquatic Preserves, Marine Protected Areas, and other Conservation Areas listed by the Florida Fish and Wildlife Conservation Commission; • Strategic Habitat Conservation Areas and Biodiversity Hotspots, as defined by the Florida Fish and Wildlife Conservation Commission; • Florida Ecological Network lands as identified by the University of Florida; • Conservation Needs Assessment lands, as defined by Florida Natural Areas Inventory; and • Aquifer recharge zones. (b) Historic sites and gardens, cultural sites, and archaeological resources as identified by the appropriate state agency(ies), and Native American Traditional Cultural Properties and sites containing human remains of Native Americans. (c) Agricultural protection agreement areas, conservation easements, and rural protection easements as recorded by the Florida Department of Agriculture and Consumer Services.	Florida Fish and Wildlife's Strategic Habitat Conservation Areas, elements of Department of Environmental Protection's Greenways, the FNAI Conservation Needs Assessment areas, University of Florida research, and areas on such conservation lists as Florida Forever and state/local land acquisition programs; Florida Department of Environmental Protection; Florida Department of State; Florida Department of *Agriculture and Consumer Services*	2000, 2002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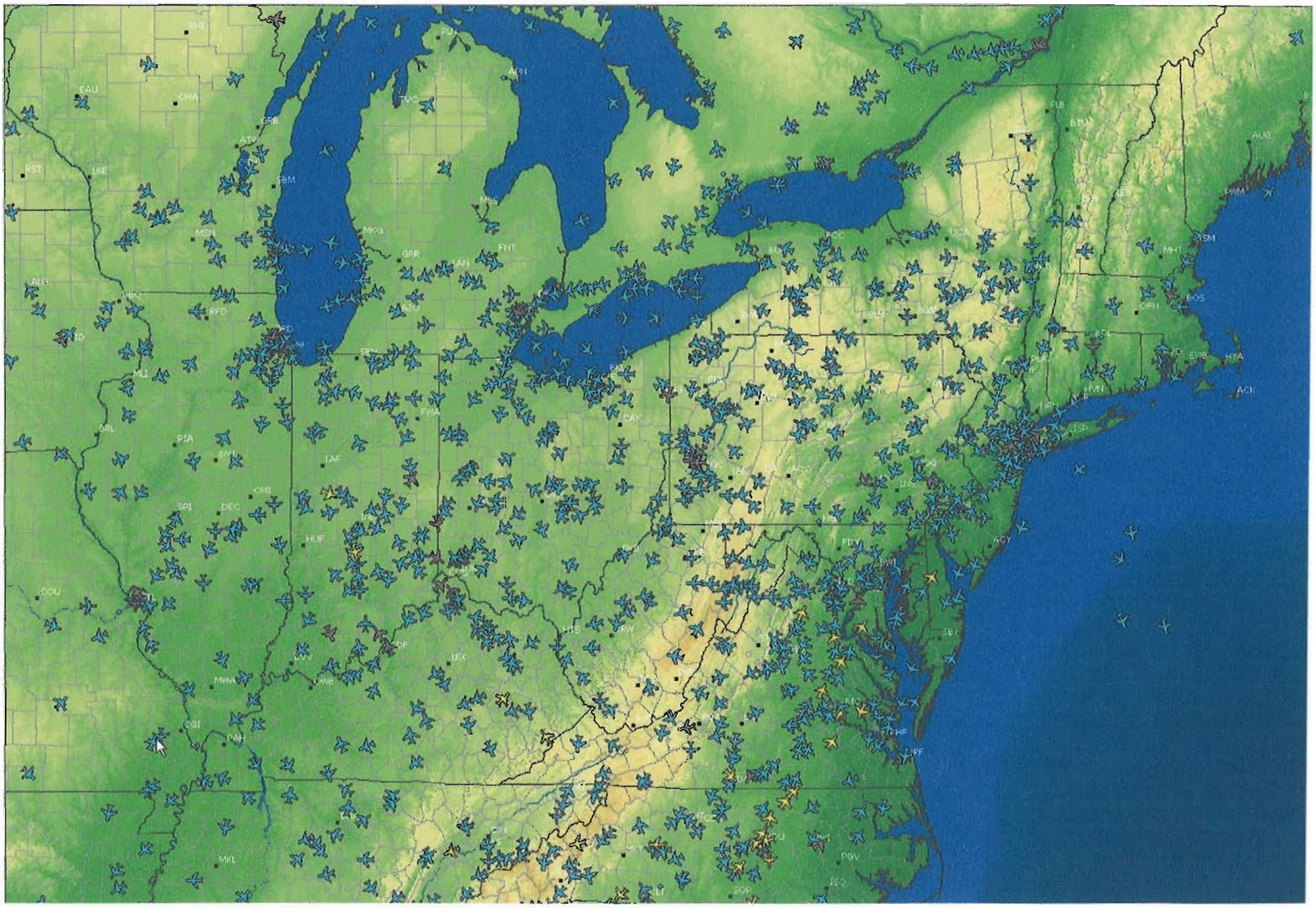
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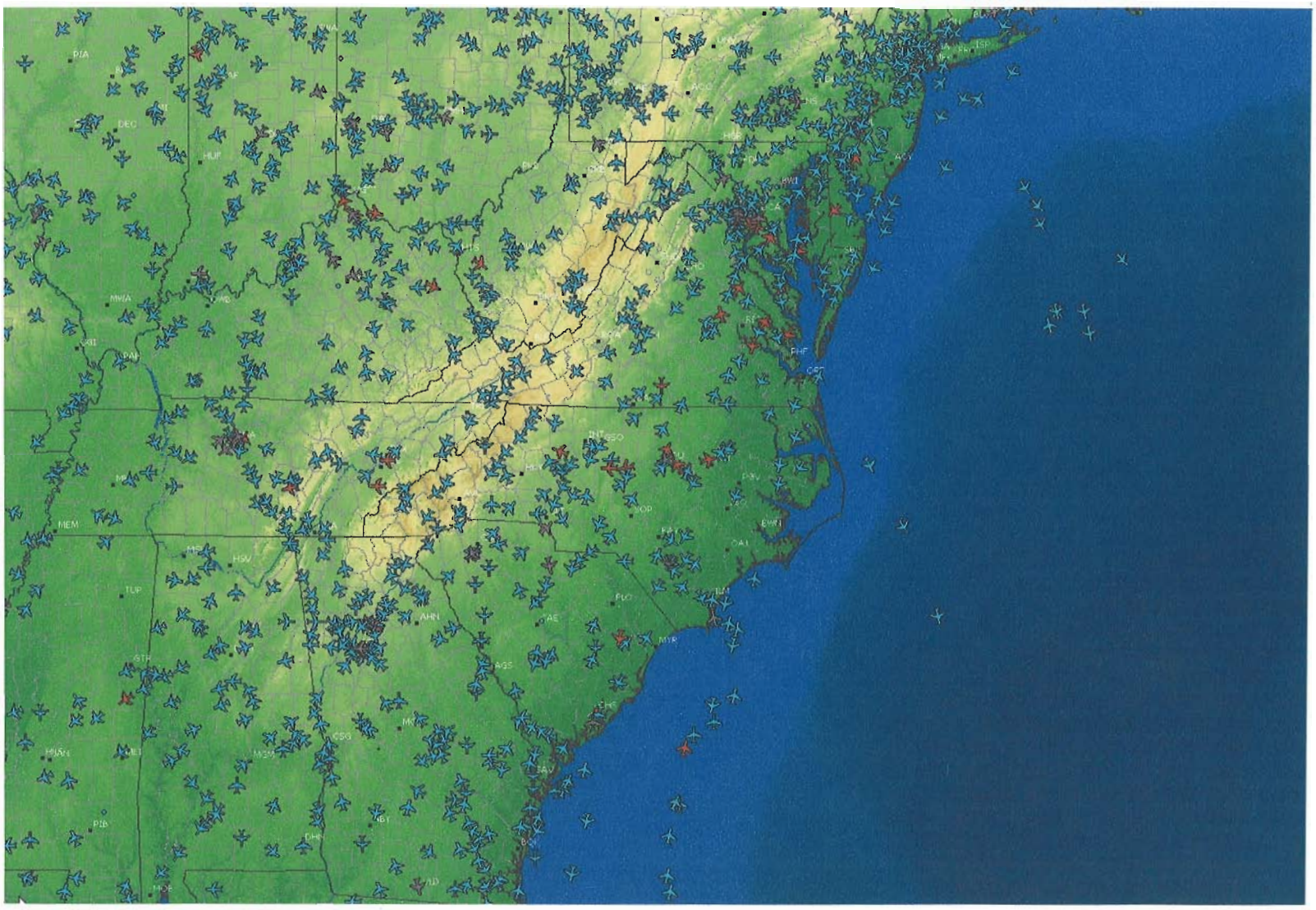
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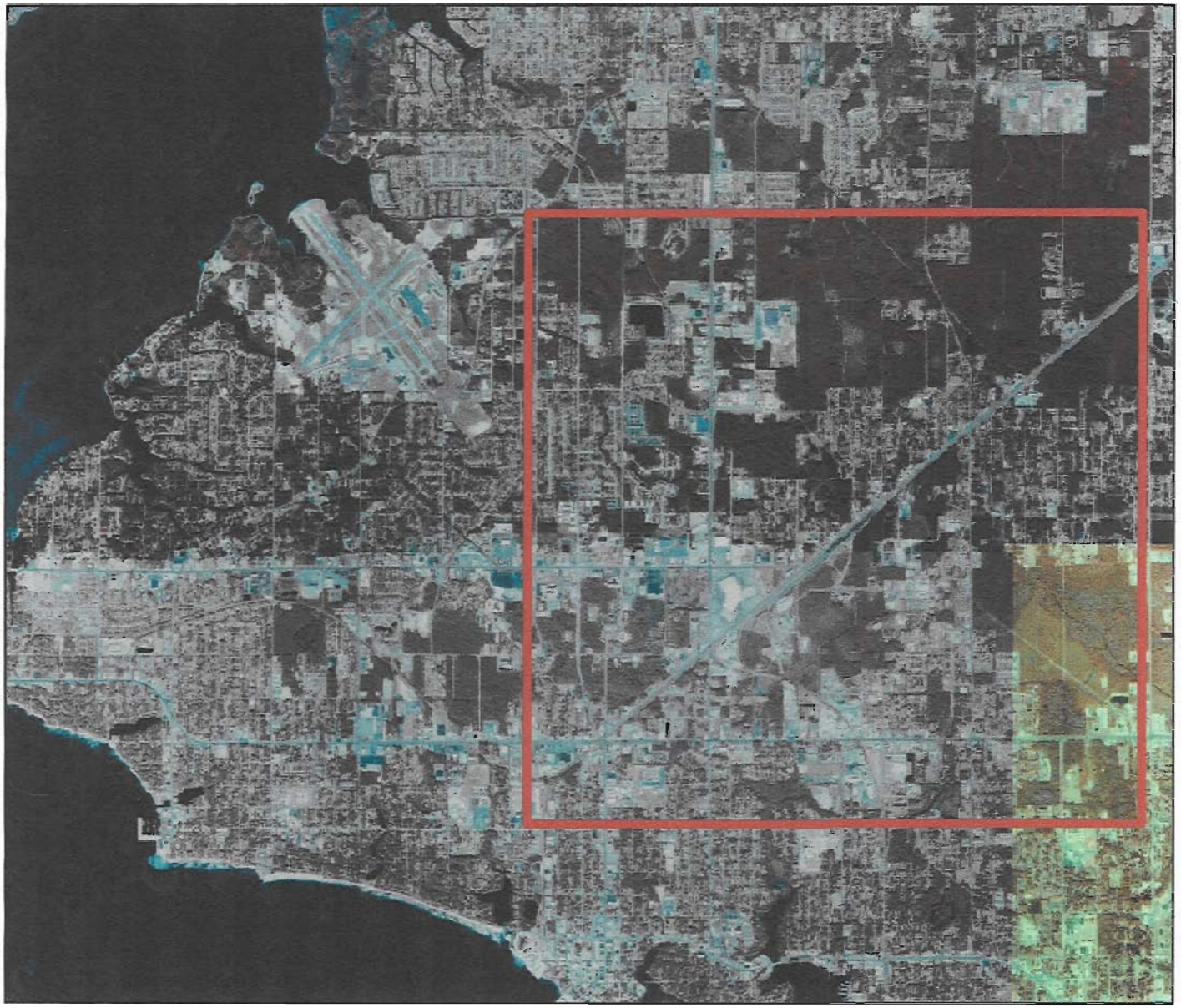

If 46% of the West Bay site is wetlands then an area of approximately 2.875 square miles would be impacted. This area approximates a square 8,953 feet square.

This square area has been superimposed over Panama City for purposes of comparing wetlands impacts between the two sites.

0 2,500 5,000 10,000 15,000 20,000 Feet

1 inch equals 4,712 feet

Panama City West Bay Wetands Impact Area Superimposed Over Panama City

N
W E
S

Air Transportation Action Program - ATAP

DRAFT
TIER ONE SCREENING ANALYSIS

Appendix B. Aircraft Runway Length Requirements

Prepared for:

San Diego County Regional Airport Authority

Prepared by:

Landrum & Brown

June 23, 2003

APPENDIX
SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY
AIR TRANSPORTATION ACTION PROGRAM

B. Aircraft Runway Length Requirements

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APPENDIX B – AIRCRAFT RUNWAY LENGTH REQUIREMENTS

Introduction

Aircraft runway length requirements were evaluated in accordance with Federal Aviation Regulations for both take-offs and landings. The lengths are based on aircraft type and percentage of maximum take-off and landing weight. A runway length reflects the highest payload version of the aircraft or lowest engine thrust rating to reflect greatest potential distance. The source of this information is the Aircraft Manufacturer's Airport Planning Guidelines. This appendix includes specific information used to develop the ATAP runway length requirements.

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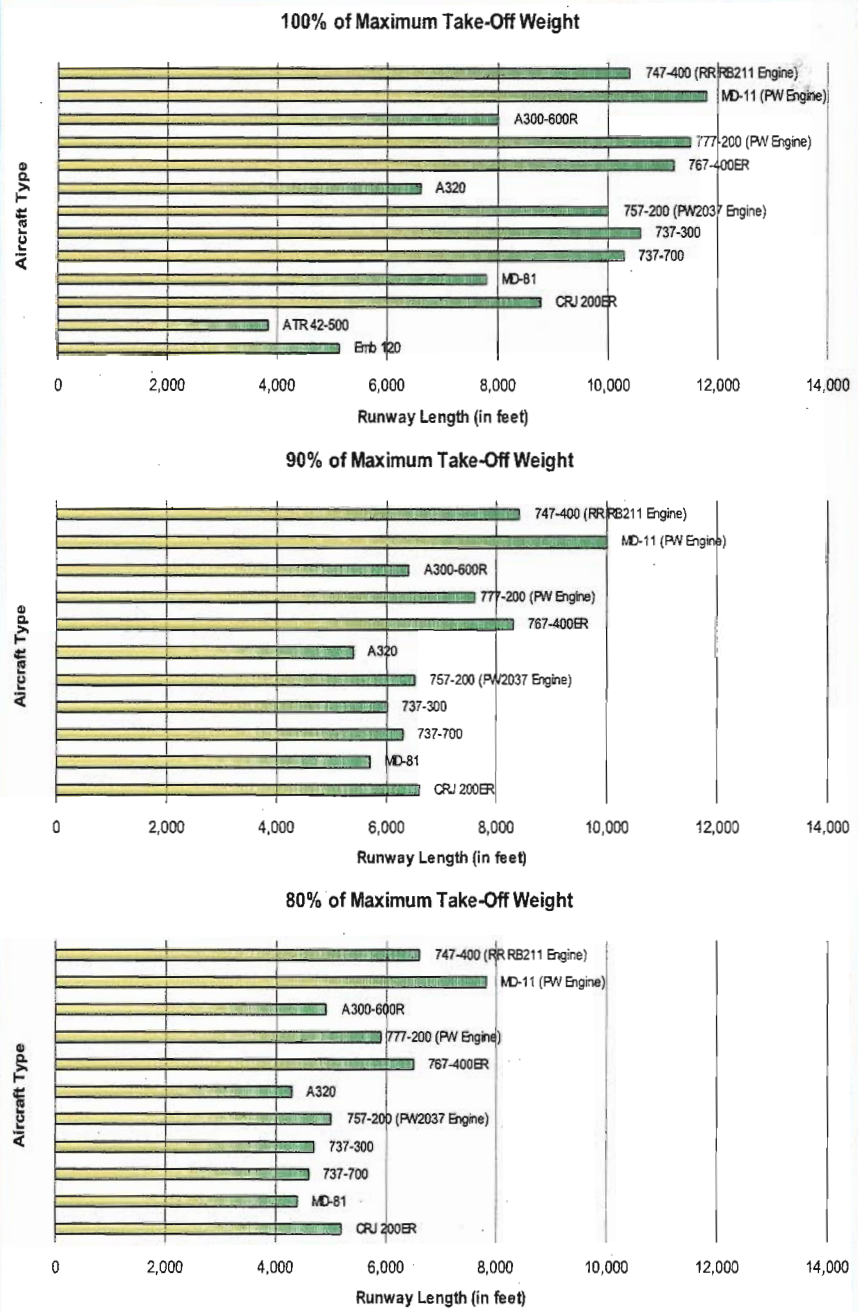
San Diego
Air Transportation Action Program

Runway Take-Off Length Requirements



Federal Aviation Regulation
Take-Off Runway Length Requirements (in feet)

Aircraft	Percent of Maximum Take-Off Weight		
	100%	90%	80%
Embraer Emb 120	5,118	n/a	n/a
ATR 42-500	3,822	n/a	n/a
Bombardier CRJ 200ER	8,800	6,600	5,200
McDonnell-Douglas MD-81	7,800	5,700	4,400
Boeing 737-700	10,300	6,300	4,600
Boeing 737-300	10,600	6,000	4,700
Boeing 757-200 (PW2037 Engine)	10,000	6,500	5,000
Airbus A320	6,600	5,400	4,300
Boeing 767-400ER	11,200	8,300	6,500
Boeing 777-200 (PW Engine)	11,500	7,600	5,900
Airbus A300-600R	8,000	6,400	4,900
McDonnell-Douglas MD-11 (PW Engine)	11,800	10,000	7,800
Boeing 747-400 (RR RB211 Engine)	10,400	8,400	6,600

Abbreviations:

PW = Pratt & Whitney Aircraft Engine

RR = Rolls Royce Aircraft Engine

Notes:

All Aircraft: Consult using airline for specific operating procedure.

Boeing Products: No Engine Air-Bleed, Zero Wind, Zero Runway Gradient, Dry Runway Surface, Hot Day

Airbus Products: Dry Runway Surface

Bombardier Products: Hot Day, No Engine Air-Bleed, Flaps Position 20, Zero Wind, Zero Runway Gradient

Lengths shown reflect highest payload version of aircraft or lowest engine thrust rating to reflect greatest potential distance.

Source: Aircraft Manufacturer's Airport Planning Guidelines

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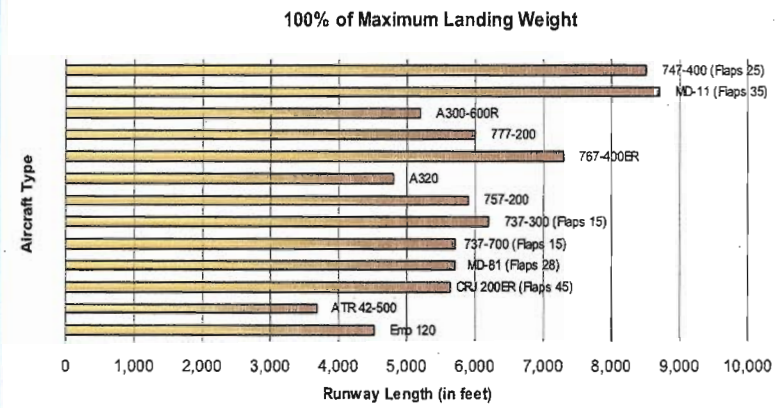
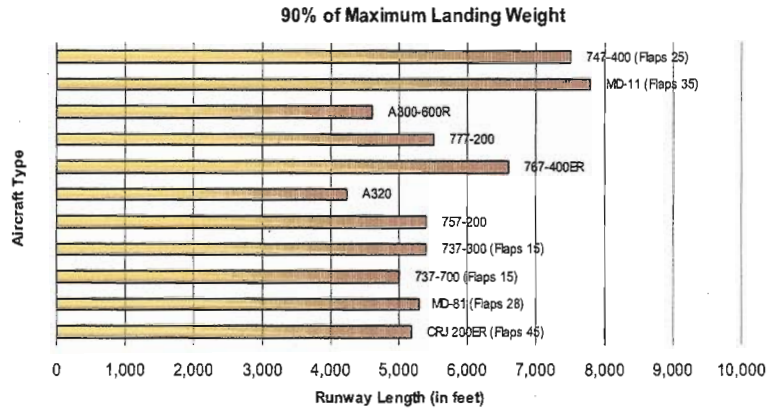
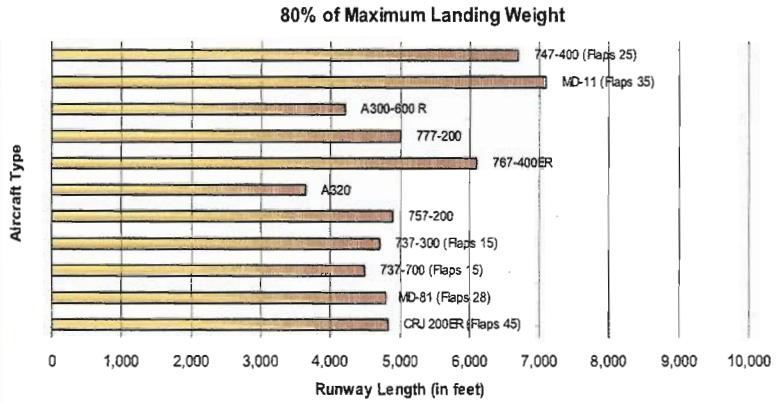
San Diego
Air Transportation Action Program

Runway Landing Length Requirements







Federal Aviation Regulation
Landing Runway Length Requirements (in feet)

Aircraft	Percent of Maximum Landing Weight		
	100%	90%	80%
Embraer Emb 120	4,528	n/a	n/a
ATR 42-500	3,694	n/a	n/a
Bombardier CRJ 200ER (Flaps 45)	5,635	5,175	4,830
McDonnell-Douglas MD-81 (Flaps 28)	5,700	5,300	4,800
Boeing 737-700 (Flaps 15)	5,700	5,000	4,500
Boeing 737-300 (Flaps 15)	6,200	5,400	4,700
Boeing 757-200	5,900	5,400	4,900
Airbus A320	4,800	4,225	3,650
Boeing 767-400ER	7,300	6,600	6,100
Boeing 777-200	6,000	5,500	5,000
Airbus A300-600R	5,200	4,600	4,200
McDonnell-Douglas MD-11 (Flaps 35)	8,700	7,800	7,100
Boeing 747-400 (Flaps 25)	8,500	7,500	6,700

Notes:

All Aircraft: Consult using airline for specific operating procedure.

Boeing Products: Standard Day, Wet Runway, Auto Spoilers Operative, Anti-Skid Operative, Zero Wind

Airbus Products: Dry Runway Conditions

Bombardier Products: Standard Day, Zero Wind, Zero Runway Gradient

Embraer Products: Standard Day, Sea Level, Zero Wind

Source: Aircraft Manufacturer's Airport Planning Guidelines

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