

VI. CORRIDORS OF COMMERCE: THE KEY TO INTERMODAL CONNECTIVITY

Florida's seaports cite intermodal connectivity as one of their top competitive concerns. They are not alone in this concern, as connectivity issues are a major focus of seaports throughout the country. Recognizing that Florida's freight corridors are only as efficient as the corridors with which they connect beyond state borders, Florida's seaports – in conjunction with their state partners -- have addressed this issue proactively. Since 1996, they have been looking at landside access issues and continuing to assess statewide trade corridor needs in ongoing studies. Such connectivity issues can be addressed effectively only from a regional perspective and should prompt changes in the way the state and federal governments approach freight infrastructure investment.

Seaport Access Concerns Nationwide

The U.S. Maritime Administration surveyed 84 seaports nationwide during FY 00/01 to gauge the state of roadway, rail and waterside connectivity and existing access conditions.⁷ Port Canaveral, Port Everglades, the Port of Jacksonville, Port Manatee, and the Port of Miami were among the 59 that responded to this survey. Several significant findings from the report are summarized below because of their applicability to the seaports located in Florida's key population centers, which serve a critical need by directly supplying these communities and their adjacent hinterlands with consumer goods:

- While generally acceptable today, port access conditions may not sustain continued cargo growth and international trade.
- Unacceptable conditions occur most often at the ports handling containerized cargo, particularly those situated in urban areas. These unacceptable conditions include congested access roads, at-grade railroad crossings, railroad access issues, inadequate channel depths for container ports, and a lack of truck-only routes as well as transportation information systems to manage the inland supply chain for moving cargo.
- Most ports anticipate a doubling or tripling of cargo flows in the future.
- Containerized cargo tends to be higher value and more time sensitive; accordingly, the container ports located in urbanized areas – such as those in the Miami, Fort Lauderdale, Palm Beach, and Jacksonville areas -- are the first to exhibit intermodal access system stresses.

These are among the conditions that Florida's seaports have been striving to overcome, and they take no comfort in the fact that other port communities throughout the nation face the same obstacles to the efficient movement of cargo. They do, however, take some comfort in the recent strategic efforts Florida has undertaken to address these conditions in a systemic manner.

Freight Analysis Framework

The U.S. Department of Transportation (U.S. DOT) estimates that America's transportation system by 2020 will handle cargo valued at almost \$30 trillion, compared with \$9 trillion today. Volumes, in tons, will increase by almost 70 percent over current levels of 15 billion tons. U.S. DOT also says that international freight volumes will increase at a faster rate than domestic cargo, almost doubling by 2020. As a result, each state will experience larger freight volumes on its transportation infrastructure over the next 20 years, with the potential for increased congestion and greater inefficiencies throughout the nation's transportation system.

To evaluate the effect of expected volumes on the transportation network, U.S. DOT created the Freight Analysis Framework in 2002, a collaborative effort of the department's Federal Highway Administration, the Federal Railroad Administration, the Federal Maritime Administration, the Bureau of Transportation Statistics, and the

⁷ A. Strauss-Wieder, Inc., "Intermodal Access to U.S. Ports, Report on Survey Findings," U.S. Maritime Administration, August 2002.

Secretary's Office of Intermodalism.⁸ The Freight Analysis Framework is a policy-analysis tool aimed at helping decision-makers to understand the geographic relationships between domestic and international trade flows and the nation's intermodal transportation system, including highway, railroad, water, and air.

Exhibit 13 shows Florida's combined domestic and international truck flows in 1998, based on the Freight Analysis Framework. Also based on this framework, Exhibits 14 and 15 contrast the 1998 average annual daily truck traffic with what is expected by 2020. These traffic flows establish the framework for the development of strategic trade corridors, or corridors of commerce, that link multiple transportation modes to effect the seamless movement of people and goods. Encompassed in a strategic commerce corridor are the roadways linking seaports, commercial service and general aviation airports, railyards, transportation terminals, and intermodal service centers.

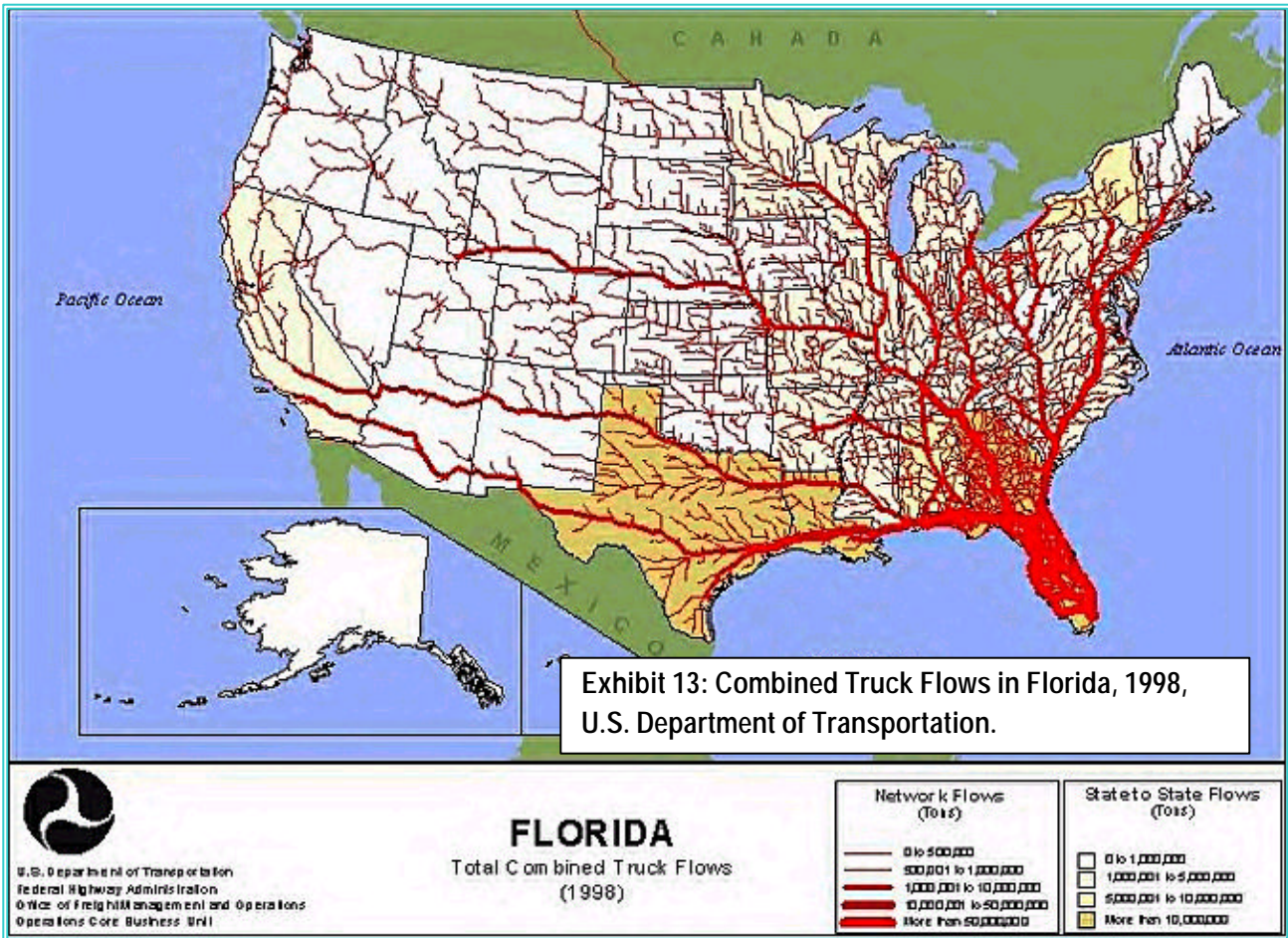


Exhibit 14: Average Annual Daily Truck Traffic, 1998, Federal Highway Administration.



Exhibit 15: Average Annual Daily Truck Traffic, 2020, Federal Highway Administration.

Mobility or Immobility?

In urbanized areas, trucks carrying freight are subjected to the same conditions as the other vehicles with which they share the roadway network. And in most of Florida's urbanized area, those conditions are not conducive to the efficient movement of goods. Recent reports by the Texas Transportation Institute confirm what everyone who has sat in traffic at any hour of the day already knows: rush hour can be an all-day affair in many communities.

Table 11: Sample Measures of Congestion in Selected Florida Urban Areas

Urban Area	Number of "Rush Hours" (Time when System is Congested)			Amount of Congested Travel (Percent of Peak Vehicle Miles Traveled)			Congested Lane Miles (Percent of Freeway and Street System)		
	1990	1995	2000	1990	1995	2000	1990	1995	2000
Miami-Hialeah	7.4	7.6	7.8	68%	70%	77%	55%	53%	65%
Fort Lauderdale-Hollywood-Pompano Beach	5.0	6.6	7.6	40%	53%	61%	43%	51%	53%
Orlando	5.6	5.8	7.2	47%	48%	59%	47%	48%	59%
Tampa-St. Petersburg-Clearwater	7.0	7.2	7.2	58%	65%	60%	55%	63%	58%
West Palm Beach-Boca Raton-Delray Beach	4.2	6.0	7.2	38%	47%	55%	47%	49%	49%
Jacksonville	5.4	6.6	6.4	35%	46%	48%	37%	43%	47%
Pensacola	4.2	4.8	5.2	23%	30%	37%	33%	41%	47%

Source: Texas Transportation Institute, Urban Mobility Report, 2002.

Table 11

summarizes a few of the conditions that impede the fast movement of goods from point of origin to point of destination in the major metropolitan areas where Florida's largest seaports are located.

In general, traffic conditions in the urban areas surrounding the ports are worsening. Other historical data, not shown in the table, suggest that the rate at which these conditions are worsening is accelerating.

As one example of the cost of urban traffic congestion, drivers in the South Florida region incur \$2.57 billion annually in wasted fuel and lost time. With people and commercial freight spending more time in "gridlock," the average annual cost per peak-hour driver of congestion in the region ranges from \$815 in the West Palm Beach area to \$1,255 in Miami-Dade County; elsewhere in the state, the costs are lower, but increasing. Tampa drivers, for example, are experiencing average annual costs similar to those in Palm Beach, while Jacksonville drivers are experiencing somewhat lower costs of \$615 annually.

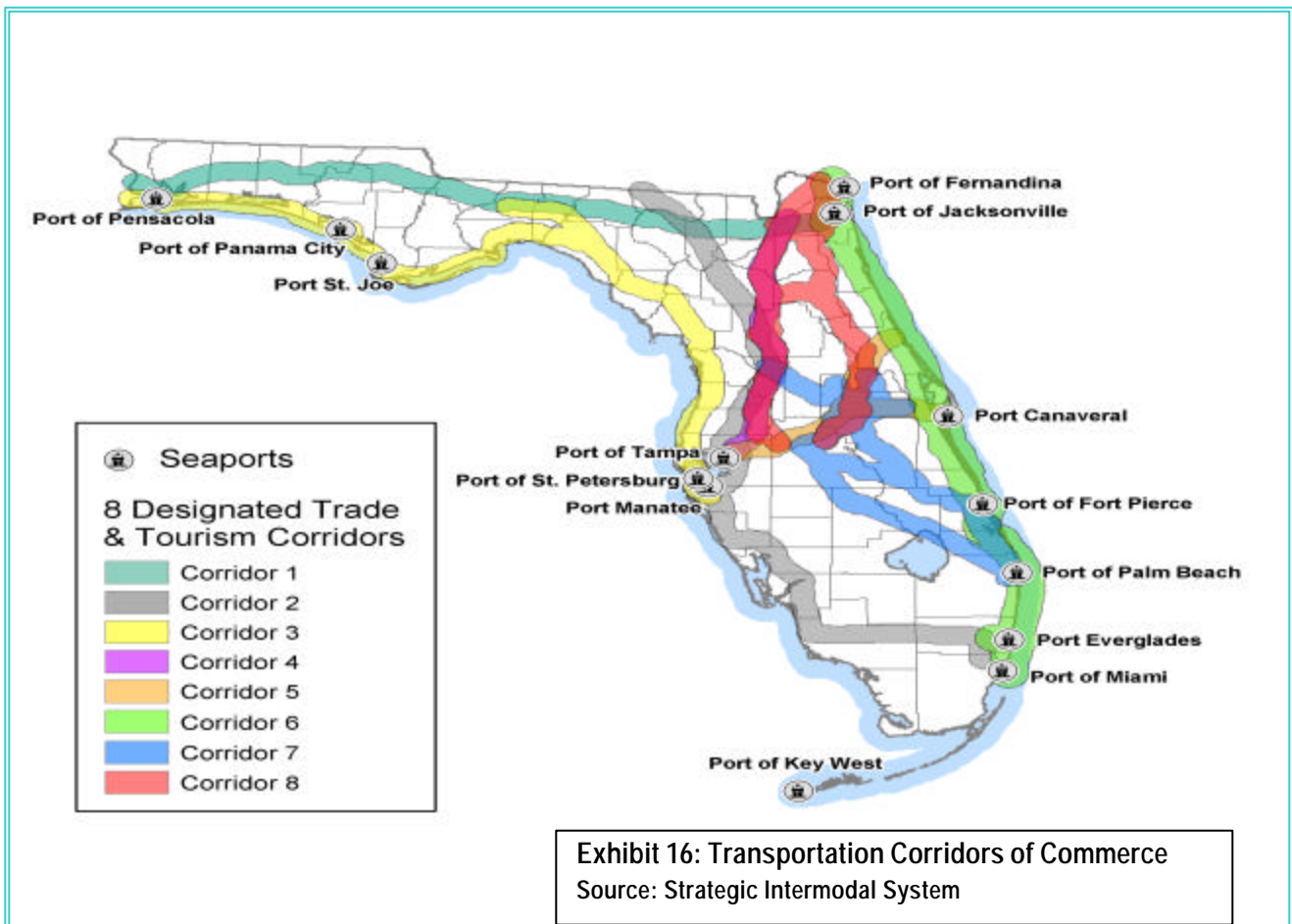
In Florida, these and other logistics costs present a much larger problem than elsewhere because of the state's lengthy peninsula and the transport imbalances inherent in existing trade patterns. Several ocean carriers who conduct business in Florida find that goods, services, and transportation cost more here than elsewhere. These transportation system inefficiencies can not be totally eliminated, but they can be mitigated by undertaking innovative measures that lower transportation costs.

Florida's Strategic Intermodal System

Among the efforts Florida has made in the last six years to address statewide connectivity and access issues, and resulting cost factors, is FDOT's development of the SIS, a strategic intermodal transportation system for both passengers and freight. The SIS identifies transportation corridors, hubs, and connectors – the latter to be identified in a second phase of development -- throughout the state, based on their primary function.

Underlying the SIS is the expectation that, by 2020, Florida will add about 5 million new residents, imports and exports will double, and the number of annual tourists will reach nearly 85 million. To meet the needs generated by such dynamic growth, funds must be invested in a well-planned strategic transportation system that efficiently connects the various forms of travel. Limited resources must be focused on statewide and regional priorities that are essential to Florida's economy and quality of life. To achieve this, the SIS complements existing planning initiatives by integrating all transportation modes -- road, railroad, water, air, and space -- while addressing future transportation needs through a regional, corridor-based approach to strategic planning and programming.

From the perspective of some of Florida's seaports and their industry partners, the SIS, despite its laudable intentions, has not given their needs sufficient attention. Criteria used to establish the strategic facilities -- corridors, hubs, and connectors -- have relegated several entire regions of the state to a second-tier status and evoked fears that their future funding opportunities, and resultant ability to expand capacity and attract new



business and industry, will be constrained. Exhibit 16, taken from the SIS, shows the strategic corridors of statewide significance identified in that document.

Corridors of Commerce

In early 2002, FDOT's Seaport Office, in support of the freight element of the SIS, initiated preparation of a *Florida Freight Network and Modal Linkages Systems Report*. This effort refines previous initiatives that resulted in the *Year 2020 Florida Statewide Intermodal System Plan* and the private/public Freight Stakeholders Task Force partnership, both of which initiatives formally outlined the concept of a systems-based planning approach for passenger and freight.

The following list, taken from the *Florida Freight Network and Modal Linkages Systems Report*, describes these corridors in greater detail:

- The Interstate 95-Atlantic Coast Corridor, from the Florida-Georgia border to Miami.
- The Gulf Coast Corridor, from Pensacola to St. Petersburg and to Tampa along US 98 and US 19/State Road 27.
- The Central Florida/North-South Corridor, from the Florida-Georgia border to Naples and Fort Lauderdale/Miami, along Interstate 75.
- The Central Florida/East-West Corridor, from St. Petersburg to Tampa and to Titusville, along Interstate 4 and the Beeline Expressway.
- The Interstate 10 Corridor, from Pensacola to Jacksonville, to include U.S. 231, State Road 77, and State Road 79 from the Florida-Alabama border to Panama City.
- The Jacksonville to Tampa Corridor, along U.S.301.
- The Jacksonville to Orlando Corridor, along U.S.17.
- The Southeastern Everglades Corridor, linking Wildwood, Winter Garden, Orlando, and West Palm Beach via Florida's Turnpike.

Within each of these corridors, many critical connections between seaports, airports, highways, and rail are lacking and must be the focus of a comprehensive approach to intermodal transportation system development.

Intermodal Rail Transportation

Florida's railroad system is an integral part of the state's intermodal transportation infrastructure. Because of its potential importance in alleviating some of the highway congestion that is expected to increase with the forecasted growth both in population and trade, this system deserves particular attention.

The majority of Florida's fourteen seaports rely on the railroad network to transport a portion of the domestic and international cargoes crossing their docks:

- In South Florida, only the Florida East Coast Railway (FEC) serves the three ports, although the CSXT carries domestic bulk cargoes over the South Florida Rail Corridor, which it shares with the regional passenger service provided by Tri-Rail. Through interline agreements, the FEC is able to move commodities through Atlanta and beyond, as well as up the East Coast and along the Gulf Coast.
- Three of the deep-water seaports (Port Manatee, the Port of Palm Beach, and the Port of Jacksonville) operate their own terminal switching railroads.
- Others, such as Port Panama City and the Port of Port St. Joe, depend on Class III railroads (the Bay Line and the Apalachee Northern, respectively) to connect to the mainline/trunk-route system of the CSXT.

All of Florida's ports experience to differing degrees the constraints of one-railroad service. Even in Jacksonville, where interchanges with several railroads occur, the port experiences this constraint at its Blount Island and Dames Point terminals. This and other physical and policy constraints hurt the ability of Florida's seaports to compete with out-of-state rail-oriented load centers including New Orleans, Houston, Savannah, and Charleston. These constraints include a general lack of on-dock railroad transfer capability, numerous highway/grade crossings, service and scheduling problems in reaching major consumption points at either end of the peninsula, and multiple cargo-handling movements.

As part of its Corridors of Commerce development, Florida needs an effective and efficient railroad network to serve its citizens. The state's strategic railroad system must be better recognized and equipped in partnering with the public sector as a key component of the state's economic development planning. State policymakers should consider providing capital resources to rail system projects where public benefits can be demonstrated to exceed resource costs and where operating efficiencies will provide relief to congested highway transportation networks.

By minimizing commodity transfers and enhancing road and rail connections with markets beyond state borders, Florida will go a long way towards improving both internal and external conditions. Internally, the state will address the otherwise inevitable constraints and costs generated by serious traffic congestion; externally, the state will address one of the top competitive issues facing its role in the global marketplace. With its 1,350-mile coastline, Florida is a natural trade border. The key to its continued success as a trading state is what happens within that border.