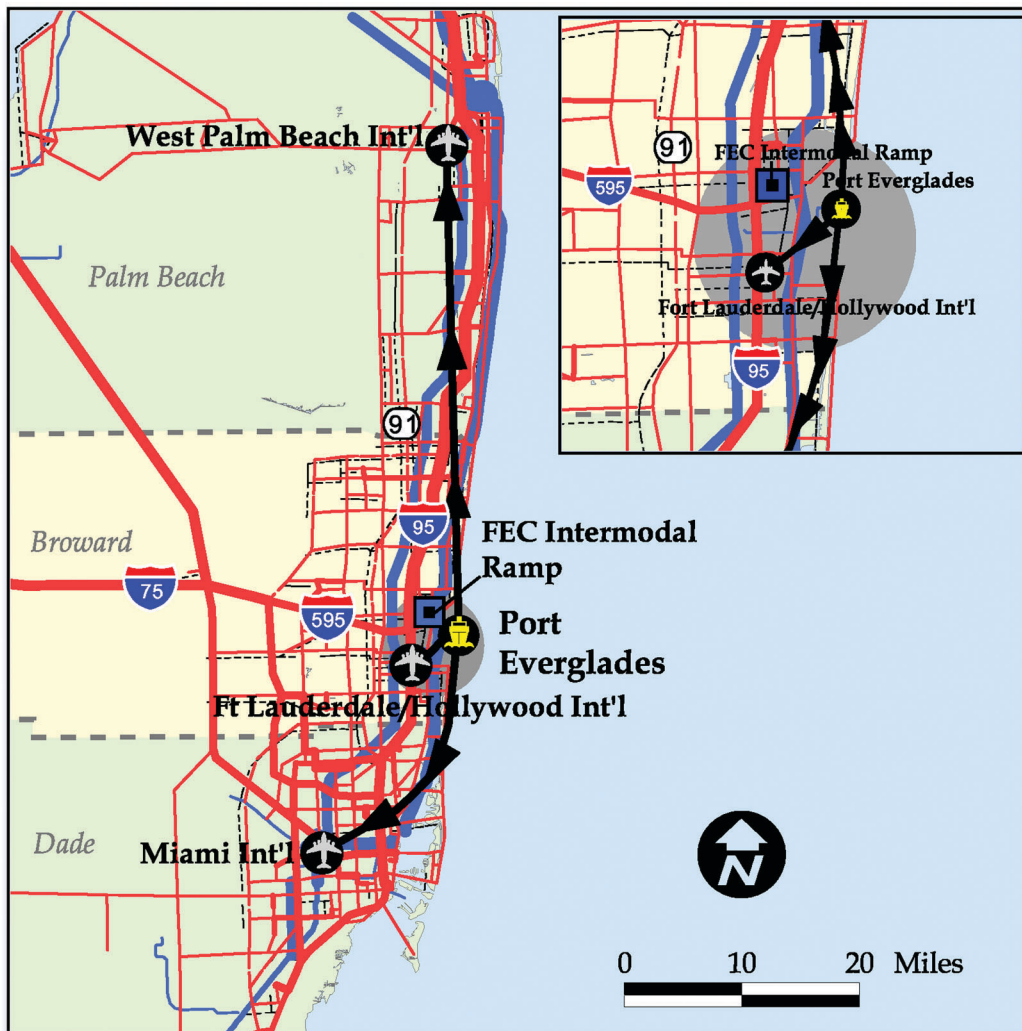


BROWARD COUNTY FREIGHT AND GOODS MOVEMENT STUDY

EXECUTIVE SUMMARY



executive summary

Broward County Freight and Goods Movement Study

prepared for

Broward County Metropolitan Planning Organization

prepared by

Cambridge Systematics, Inc.
150 CambridgePark Drive, Suite 4000
Cambridge, Massachusetts 02140

July 2002

Table of Contents

Executive Summary	ES-1
Overview of Broward County Freight Program	ES-1
Overview of National Freight Productivity Program	ES-2
Overview of the Project Approach.....	ES-5
Key Findings and Conclusions	ES-6
Recommendations	ES-16

List of Tables

ES.1 MPO Driven Recommendations	ES-17
ES.2 Other Agency Driven Recommendations	ES-20

List of Figures

ES.1 Technical Approach	ES-5
ES.2 Broward County Population Growth Comparison (1990-2000)	ES-7
ES.3 Broward County Employment Growth Comparison (1990-1999).....	ES-7
ES.4 Illustration of Supermarket Operation	ES-9
ES.5 Location of Fatal Non-Truck and Truck-Related Crashes, 1999-2001.....	ES-11
ES.6 Mode Split by Weight	ES-12
ES.7 Top Commodities by Weight.....	ES-12
ES.8 Port Everglades as a Regional Load Center.....	ES-13
ES.9 Tri-Rail Ridership (1996-2001)	ES-15

Executive Summary

■ Overview of Broward County Freight Program

Recognizing the key role that freight transportation plays in its region, the Broward County Metropolitan Planning Organization (MPO) initiated this Freight and Goods Movement Study to develop a framework for an integrated freight program for Broward County. The Broward County MPO has become increasingly focused on freight transportation planning over the last several years, undertaking several freight specific studies and research efforts, including the Freight and Goods Movement Industry Outreach Initiative, July 1998; the Commercial Vehicle Driver Survey and Truck Stop Terminal Facility Research Project, Freight and Goods Movement Industry Outreach Initiative, Final Report, March 1999; the Mega Transport Zone Feasibility Study, 2000; and the development of a Freight and Goods Movement Study Annotated Bibliography, 2001.

With these research efforts behind it, Broward County MPO recently undertook and completed the Freight and Goods Movement Study in an attempt to more formally incorporate freight transportation issues into the traditional MPO planning process. The primary objectives of this initiative consisted of the following:

- Identification and collection of existing data and information resources;
- Collection of viewpoints from select regional freight stakeholders;
- Development of a comprehensive profile of the freight transportation system in Broward County;
- Identification of key physical and operational constraints limiting the effectiveness of the freight system today;
- Development of key findings, conclusions, and recommendations for the region; and
- Development of the initial freight component of the Long-Range Transportation Plan.

The move by the Broward County MPO to initiate the development of its freight transportation planning program is noteworthy, as state departments of transportation and other MPOs are just beginning to move in the same direction. Although the U.S. Congress first encouraged the consideration of freight movement during statewide and metropolitan transportation planning processes in the Intermodal Surface Transportation Efficiency Act (ISTEA, enacted 1991) and later in the Transportation Efficiency Act for the 21st Century (TEA-21, enacted 1998), many states and MPOs still do not actively incorporate freight movements as part of their overall transportation planning programs.

Congress stressed the importance of freight movements because it had witnessed the impressive improvements in carrier productivity that resulted from deregulation of the freight transportation industry in the late 1970s and early 1980s and recognized the opportunities that a cost-efficient and competitive transportation system created for trade and economic development. Deregulation freed the freight transportation industry from many modal and jurisdictional barriers resulting in the creation of new, innovative services and increased productivity. By encouraging cross-modal coordination, Congress hoped to catalyze further advances in national freight productivity.

Freight was included among the planning factors in TEA-21, which helped focus federal, state, and MPO attention on freight issues. There is a growing awareness at the state, regional, metropolitan, and local levels of the importance of freight transportation and a corresponding movement to link state and local transportation investments, especially freight transportation investment, to economic development. State DOTs, MPOs, and business leaders are much more mindful today of the need to maintain and improve the productivity of the transportation system as a strategic competitive advantage than they were 10 or 20 years ago. The lessons learned from the rapid expansion of the domestic economy over the last decade, the challenges of global economic competition, and the prospect of losing market advantage in a recession have made it clear that the freight transportation system, as much as land cost, labor availability, and tax policy, is critical to economic success.

One obstacle hindering the complete integration of freight interests into the public planning process is that public-sector planning practices have proven to be slow, inflexible, and disjointed compared to the private sector's market-driven needs and expectations. States and MPOs, which are accustomed to dealing with complex, long-term, and expensive highway and transit investments, have had difficulty responding to the private-sector freight industry's innovate-today-or-be-out-of-business-tomorrow environment. The problem has been compounded by the mismatch between the scale of private-sector transport operations, which are increasingly regional and global, and the fixed jurisdictions of state and local transportation agencies. These disparities have aggravated the difficulty of engaging private-sector freight representatives in state and MPO planning processes. A decade after ISTEA, freight industry representation and participation in planning and programming decisions at the state and MPO levels (and even at the federal level) is limited despite considerable efforts to bridge the two cultures. Through the completion of the Freight and Goods Movement Study and its associated outreach efforts, Broward County is making a positive first step to fully include the freight community in its planning process and ensure a more comprehensive transportation improvement program.

■ **Overview of National Freight Productivity Program**

The freight planning requirements of ISTEA and TEA-21 not only required state DOTs and MPOs to more actively consider freight movements in their transportation planning

programs, they also energized the U.S. DOT – and the FHWA in particular – to take a leadership role in addressing freight issues and concerns at a national level. Following TEA-21, the FHWA reorganized its headquarters structure around five Core Business Units (CBU), which are responsible for setting overall policy and providing program direction to the agency. These CBUs, which include Operations, Infrastructure, Environment and Planning, Motor Carrier and Highway Safety, and Federal Lands Highways, allow the FHWA to focus its expertise while enhancing its ability to support field units in these critical areas. The FHWA’s Operations CBU provides national leadership for the management and operation of the surface transportation system. The Office of Freight Management is one of three main program offices within the Operations CBU.

Through its National Freight Productivity Program, the Office of Freight Management has played an active role in identifying issues and constraints affecting freight movements at the local, state, and national levels, and in developing policy options for consideration in the next transportation authorization legislation (currently scheduled for federal fiscal year 2003). Through a series of issue papers, freight flow studies and analyses, and outreach efforts conducted with state DOTs, MPOs, FHWA Field Offices, and other freight stakeholders, the National Freight Productivity Program identified three key problem areas affecting freight movements:

- **International Freight Gateways** – International freight gateways are the major points of entry and departure for international trade, a key driver of the economic engines of many states and metropolitan areas. As freight movements become increasingly national and global in scope, efficient operation of these gateways becomes more and more crucial. There is concern about the capacity of these gateways – and the highways, rail lines, and waterways that serve them – to handle steadily increasing volumes of intermodal traffic, especially containerized freight. The volume of intermodal freight traffic is growing significantly, with the number of intermodal containers moving through ports worldwide having doubled during the 1990s. Intermodal air freight, intermodal traffic on United States railroads, and the volume of intermodal freight moved by truck also grew rapidly during this time period. As volumes are expected to double again over the next decade, international freight gateways have the potential to develop into bottlenecks in the intermodal supply chain, affecting not only national, but international freight productivity.
- **Statewide and Metropolitan Freight Planning Programs** – As discussed earlier, statewide and metropolitan transportation planning processes have been slow to embrace freight transportation interests due in part to several factors. These factors include: the perception by the private sector freight industry that the public planning process is not receptive to their needs; the scarcity of transportation improvement funds and the fact that these funds must be shared by all types of transportation improvement projects; and the reluctance of some public sector planning agencies to expend public funds on projects that may provide significant benefits to the private sector freight industry. These and other factors make it difficult for freight interests to be fully incorporated into statewide and metropolitan planning processes and often prevent freight improvement projects from being successfully implemented.

- **Multi-jurisdictional Freight and Trade Coalitions and Corridors** – Multi-jurisdictional coalitions, such as the I-95 Corridor Coalition, the CANAMEX Corridor, and the Latin American Trade and Transportation Study (LATTS), have been instrumental in identifying regionally significant transportation improvement projects. Though they are excellent forums for generating transportation improvement ideas, many of these regional coalitions find it difficult to actually implement improvement projects, as they often have little controlling authority to address the issues and concerns raised by coalition members or to provide funding to projects that may address those concerns. This often limits the influence these coalitions wield in providing solutions to regional transportation issues.

In order to address these and other issues affecting freight movements, the National Freight Productivity Program has developed a set of cross-cutting strategies designed to enhance the nation's freight productivity, mobility, safety, and security by:

- Modifying freight planning requirements to more effectively respond to the nation's freight needs;
- Clarifying and modifying existing Federal-aid programs to facilitate freight movements;
- Streamlining procedures to facilitate freight program development and implementation;
- Encouraging and leveraging private sector funding of freight projects with both public and private benefits; and
- Authorizing new programs to address critical gaps in the current freight system.

Examples of the types of strategies, policies, programs, and initiatives being considered include:

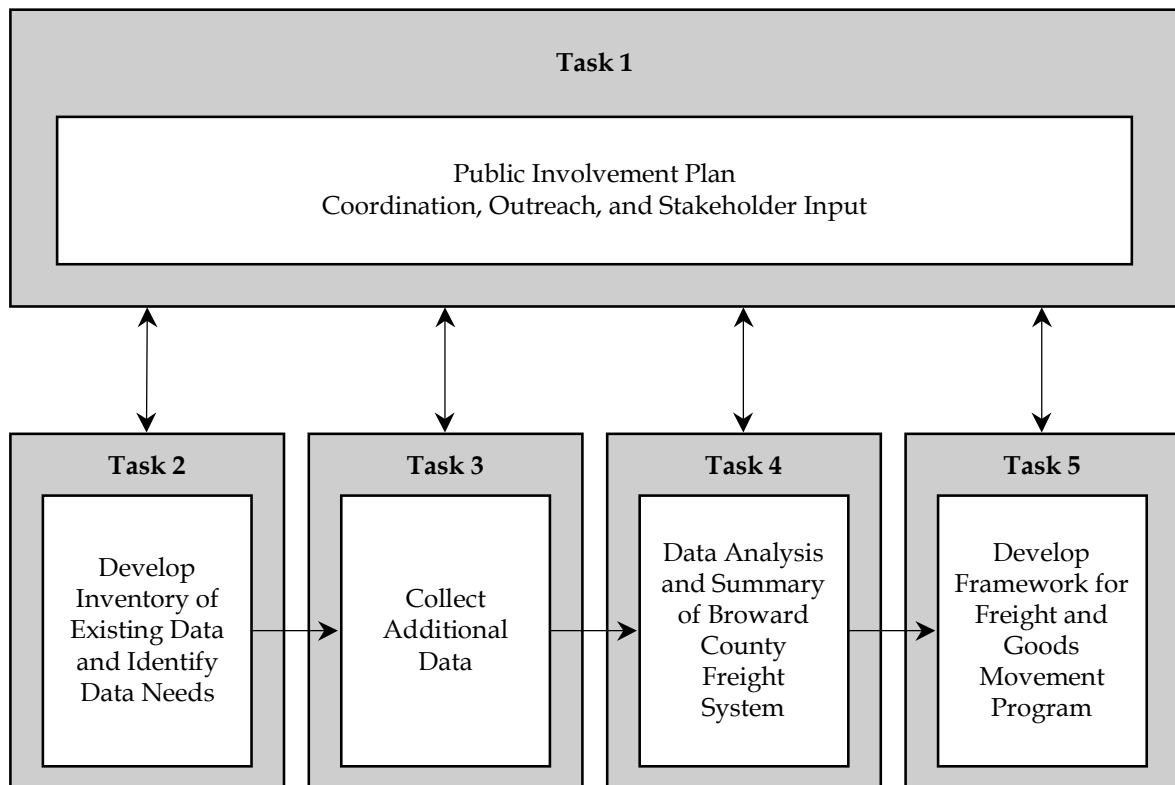
- Creating a national freight advisory council to provide advice and guidance on the issues affecting freight gateways of national and international significance;
- Creating an international gateway program to fund security initiatives and major freight access projects;
- Encouraging the improvement of the National Highway System's Intermodal Connectors through innovative financing techniques;
- Revising current border/corridor programs to provide grants to multi-jurisdictional and binational coalitions;
- Providing authority to multi-state compacts to administer federal programs; and
- Enhancing the innovative financing mechanisms available to regional coalitions.

It is important to note that these strategies, policies, programs, and initiatives are still in draft form and will undergo further refinement as the TEA-21 reauthorization process begins in earnest in federal fiscal year 2003. However, the National Freight Productivity Program has already been a key instrument in identifying the key issues and constraints affecting freight movements on a national level and in identifying potential strategies and initiatives to address them.

■ Overview of the Project Approach

The Freight and Goods Movement Study consisted of five separate tasks that were designed to review the existing data, collect additional data, analyze all data to develop a freight system profile, and prepare a comprehensive set of key findings, conclusions, and recommendations that could be used to develop and expand a freight program for Broward County. Figure ES.1 illustrates the approach used for this study.

Figure ES.1 Technical Approach



■ Key Findings and Conclusions

The data collection and analysis conducted as part of the Freight and Goods Movement Study has been used to develop key findings and conclusions that summarize the freight transportation system in Broward County. The following summarizes the freight system in Broward County.

Demographics, Land Use, and Environment

- **Significant population growth will present a challenge to the Broward County transportation system.** The population of Broward County swelled from 1.25 million in 1990 to 1.62 million in 2000, an increase of 29 percent. Broward County is the most rapidly growing Florida county, with a projected population of over 2.5 million (representing a 58 percent increase) in 2030. Such rapid population growth will undoubtedly lead to increased travel, congestion, and delay on Broward County's transportation system, affecting the overall mobility of both people and goods in the region. Figure ES.2 compares the population growth in Broward County with other counties, Florida, and the U.S.
- **Significant employment growth will also affect Broward County's transportation system.** Total employment in Broward County increased from 632,664 in 1990 to 818,928 in 1999, an increase of 29 percent. The prime driver in this growth has been the services industry, which has grown nearly 50 percent in the last decade and now employs more people than any other sector in Broward County. The increased emphasis on service-based and information industries in the County will result in an increased demand for premium transportation services such as those provided by less-than-truckload (LTL) carriers, couriers, and air cargo carriers. Figure ES.3 illustrates the growth in employment in Broward County.
- **The diverse land use patterns in Broward County generate truck trips throughout the region.** Based on employment and household data by traffic analysis zone (TAZ), there are many areas throughout the county that generate significant truck trips. Future forecasts of these truck trips suggest that by 2025 the region will continue to experience truck traffic in support of specific land use patterns. Service and retail employment, as well as population centers, are responsible for many of these trips. As a result, truck trips in the region not only stem from major trip generators, such as Port Everglades, Fort Lauderdale-Hollywood International Airport, and the surrounding industrial area, but also rapidly-growing employment and population hubs within the County.

Figure ES.2 Broward County Population Growth Comparison
1990-2000

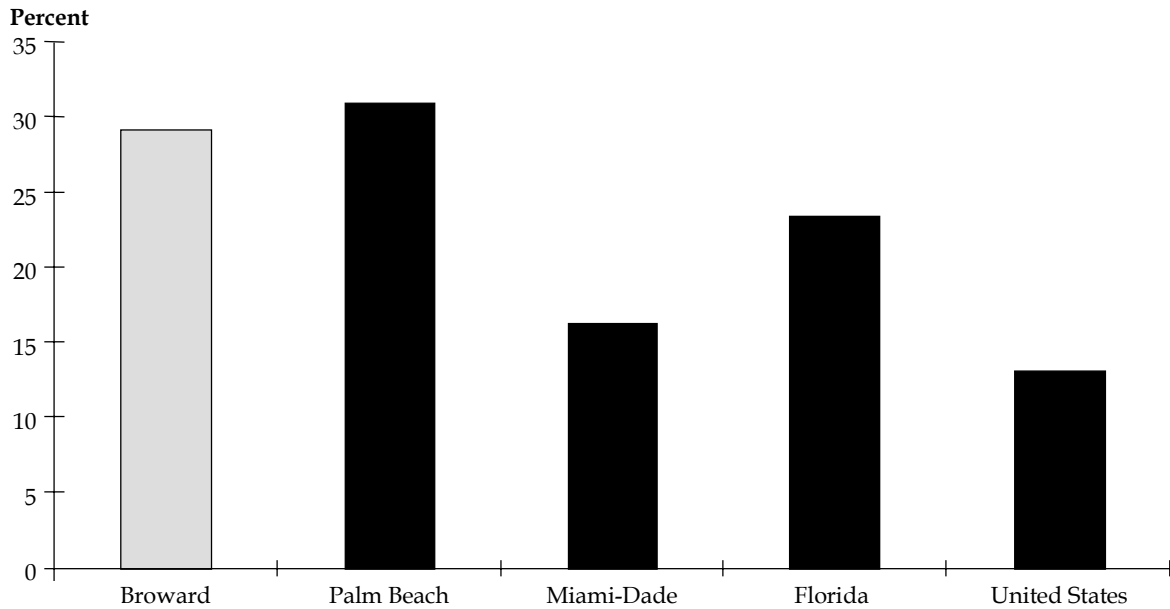
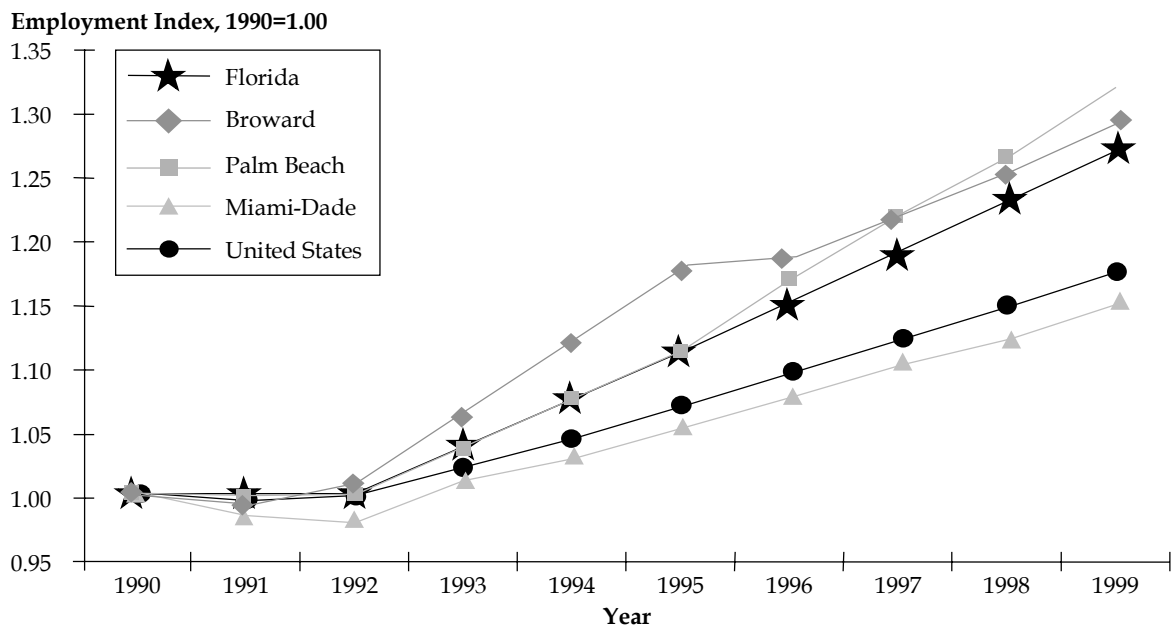


Figure ES.3 Broward County Employment Growth Comparison
1990-1999



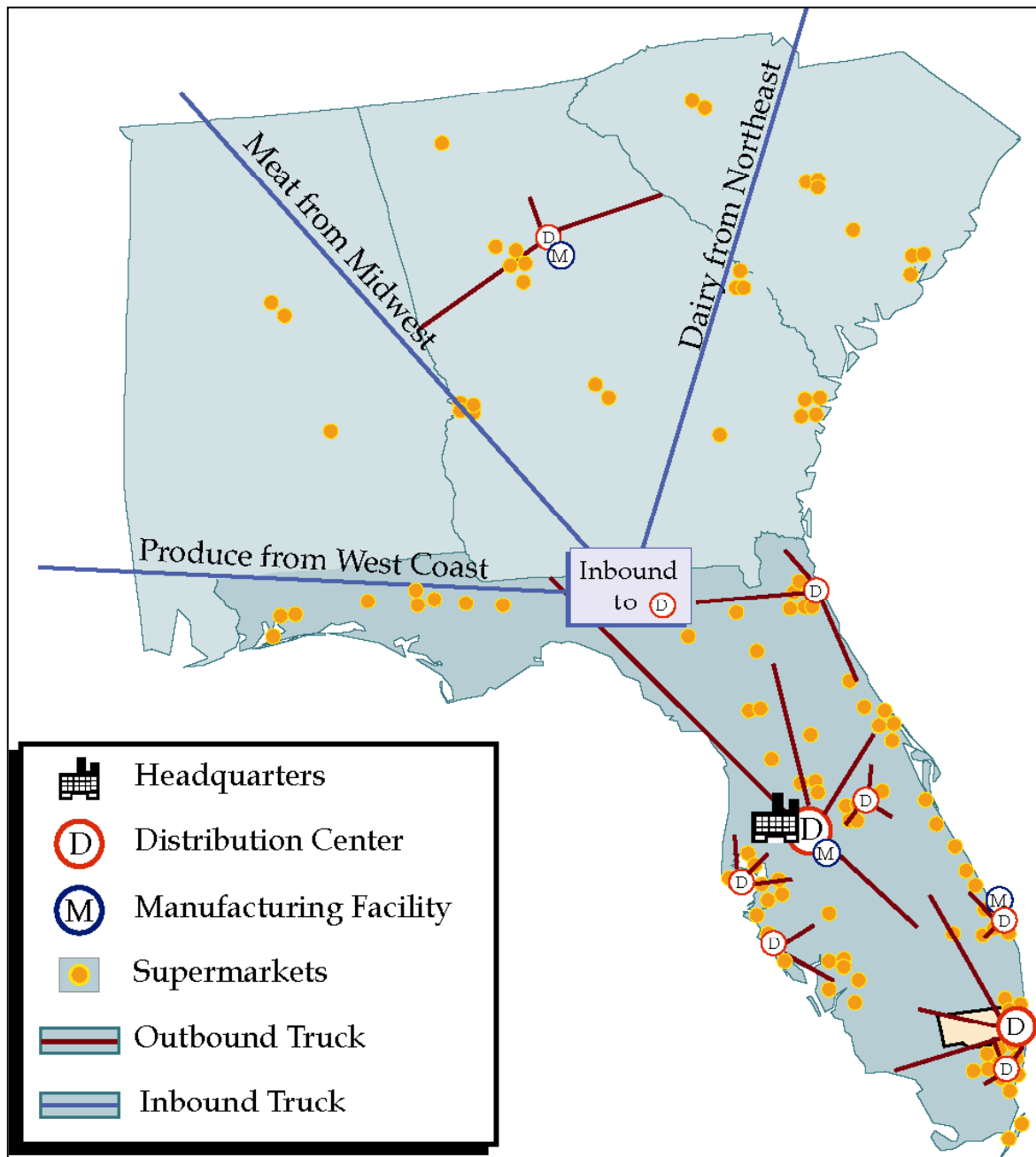
Source: U.S. Bureau of Economic Analysis. www.bea.doc.gov. Florida employment profile 1990-1999.

- **Although Broward County has succeeded in managing environmental impacts, it has an environment that is extremely fragile.** Transportation improvement projects can often have significant impacts on both the natural and human environment, particularly in an area such as Broward County, which is home to several wetlands, natural preserves, and both rural and urban populations. While the region once held the categorization of “non-attainment” for air quality, it has since returned to the “maintain” level. Broward County’s water resources are particularly vulnerable to transportation improvement impacts. The water flow characteristics of southeast Florida, particularly the permeability of its aquifers, make contamination very easy; potential impacts on this and other environmental factors should be continuously monitored and addressed as part of the region’s development and transportation improvement planning process.

Characteristics of Freight Movement

- **Several operational characteristics of Broward County’s roadway system adversely affect freight movements.** Like most urban areas, Broward County experiences highway congestion, particularly during the morning and afternoon peak periods. The County has employed several operational strategies designed to improve the flow of vehicles on its highway system during these peak hours, including the use of high-occupancy vehicle (HOV) lanes on I-95 and restricting trucks to the right lanes of I-95. Such regulations, while beneficial to passenger travel in the region, combine to hinder the safety and efficiency of truck flows. High numbers of truck crashes, at-grade rail crossings, and draw bridges also negatively impact freight moving into, out of, and through Broward County.
- **Freight movements in and around Broward County are truly regional in nature.** Broward County shippers enjoy easy access to carriers and transportation facilities throughout the tri-county region, affording them greater transportation options, but also providing a challenge to local transportation planners. As in most metropolitan areas, transportation planning in Broward County has traditionally focused on the local level, with many decisions made to address specific transportation problems and opportunities. This approach is important for many reasons, but major employers and shippers in Broward County, particularly those that sell their goods and services outside of the State, tend to view their local offices and factories at just one link in an increasingly regional, national, and global supply chain and distribution network. This concept is demonstrated in Figure ES.4, which illustrates the local and regional nature of a super market chain. It relies on local roadways for store deliveries, and major highways to access metropolitan markets, distribution centers/warehouses, and suppliers. While southeast Florida continues to emphasize the need for a regional transportation system, the focus has been on development of transit service and Intelligent Transportation Systems (ITS). Broward County may wish to work with the neighboring counties in the region to develop a strategy to address freight movements at a regional level.

Figure ES.4 Illustration of Supermarket Operation

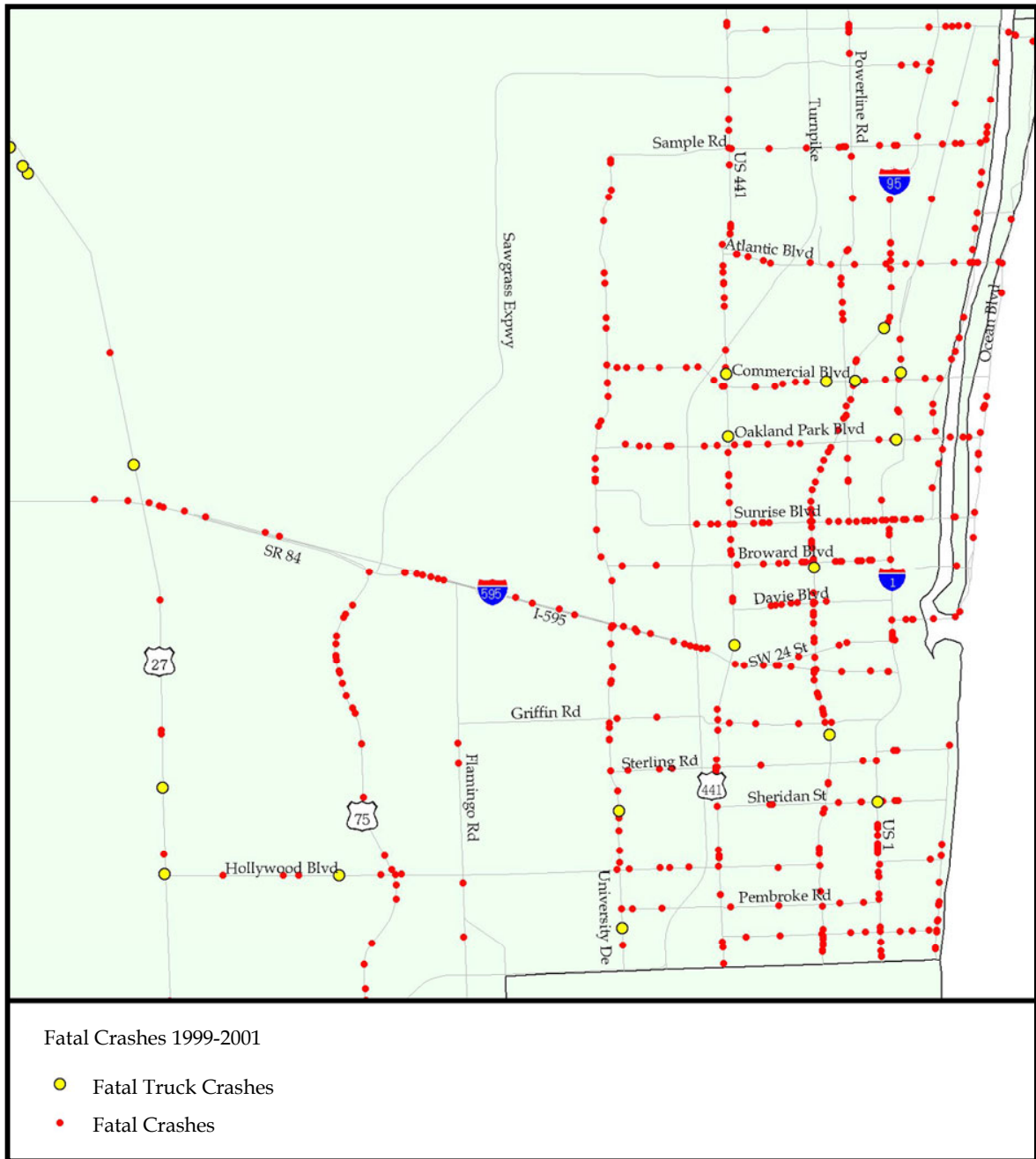


- **High numbers of truck crashes adversely affect freight movements in the region.** Florida ranks third in the United States for the number of fatal truck crashes. Broward County is comparable with the State accident characteristics with truck crashes representing approximately three percent of all traffic accidents. Florida also ranks third in total vehicle-miles of travel, which suggests that the high number of truck accidents is related to distance traveled as opposed to uncharacteristically high accident rates. Whatever the cause, truck crashes do have a significant impact upon freight operations in the region. In addition to the obvious public safety impacts, truck crashes also negatively affect freight movements along the region's highway infrastructure, as truck accidents are a major source of transportation system unreliability, increasing travel times and transportation costs for regional travelers and shippers, respectively. Figure ES.5 shows the locations of all fatal accidents and fatal accidents involving trucks in Broward County.
- **Broward County is dependent upon trucks for much of its freight shipments.** Like most metropolitan areas, Broward County is dependent upon trucks for the movement of much of its freight. As can be seen in Figure ES.6, trucks account for 65 percent of all freight shipments in the county by weight. In addition, trucks are even more important in the transport of high-value, low-weight commodities, such as electronics and other consumer goods. Trucks are particularly important in the Broward County region as they provide the last link in the transportation chain, transporting all types of commodities from their intermediate destinations, such as seaports or rail terminals, to their final destinations. This is highlighted by Figure ES.7 which shows the distribution of commodities being moved. The top three commodities (petroleum; clay, concrete, glass; and warehousing shipments) represent more than 70 percent of the goods moving in Broward County and often rely on a combination of port, rail, and truck transport. While trucks are an important segment of the freight transportation system in the region, Broward County is not as dependent upon trucks as are other metropolitan areas around the country due, in part, to the County's highly developed, highly intermodal transportation system.

Facilities and Services

- **Port Everglades is a major load center for both passenger and freight traffic.** Port Everglades is the sole seaport within Broward County and is one of 14 state-designated deepwater ports. The Port is a major generator of bulk and containerized cargo as well as cruise passengers, all of which are expected to grow significantly over the next several decades. The Port is pursuing aggressive strategies to deal with this projected growth, including the development of a Southport Intermodal Complex to increase container capacity and the construction of a people mover to connect the Fort Lauderdale-Hollywood International Airport with cruise ship facilities at the Port. Figure ES.8 illustrates the concentration of freight facilities in the Port region.

Figure ES.5 Location of Fatal Non-Truck and Truck-Related Crashes
1999-2001



Source: Florida Traffic Crash Database provided by the Department of Highway Safety and Motor Vehicles, Office of Management and Planning Services, 2002.

Figure ES.6 Mode Split by Weight

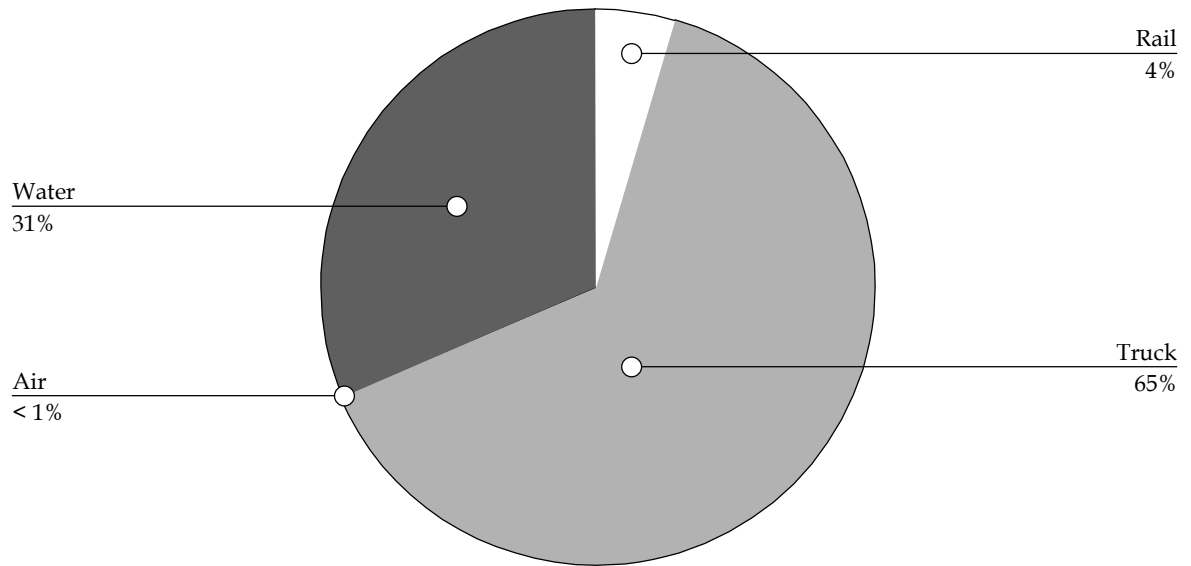


Figure ES.7 Top Commodities by Weight

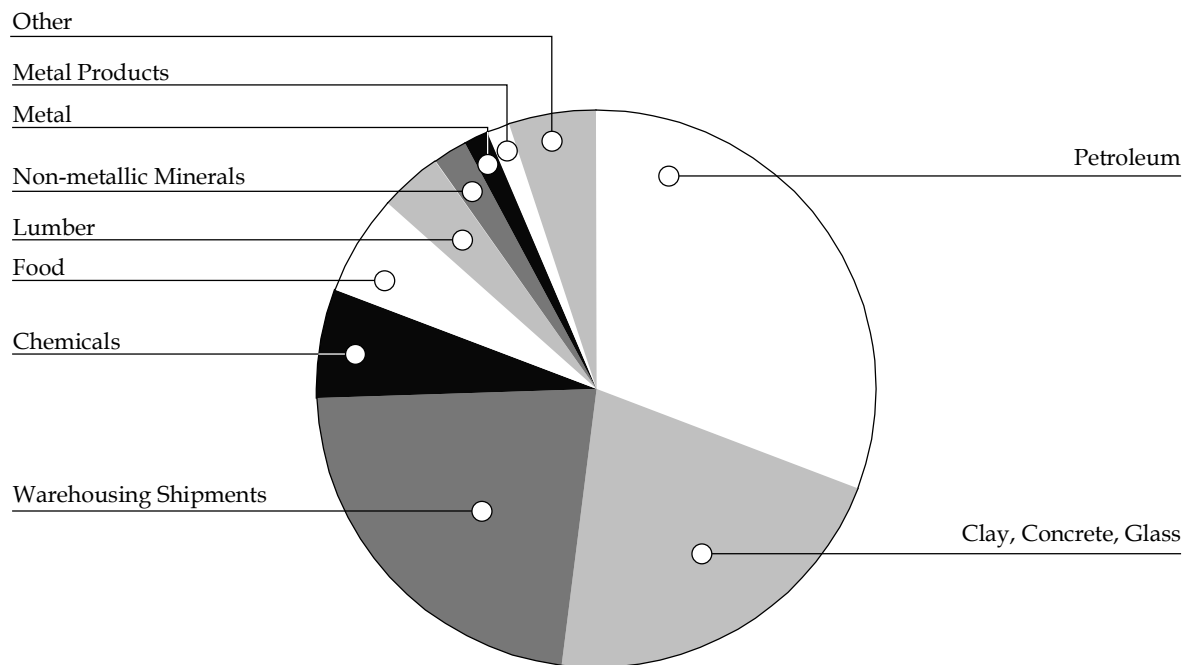
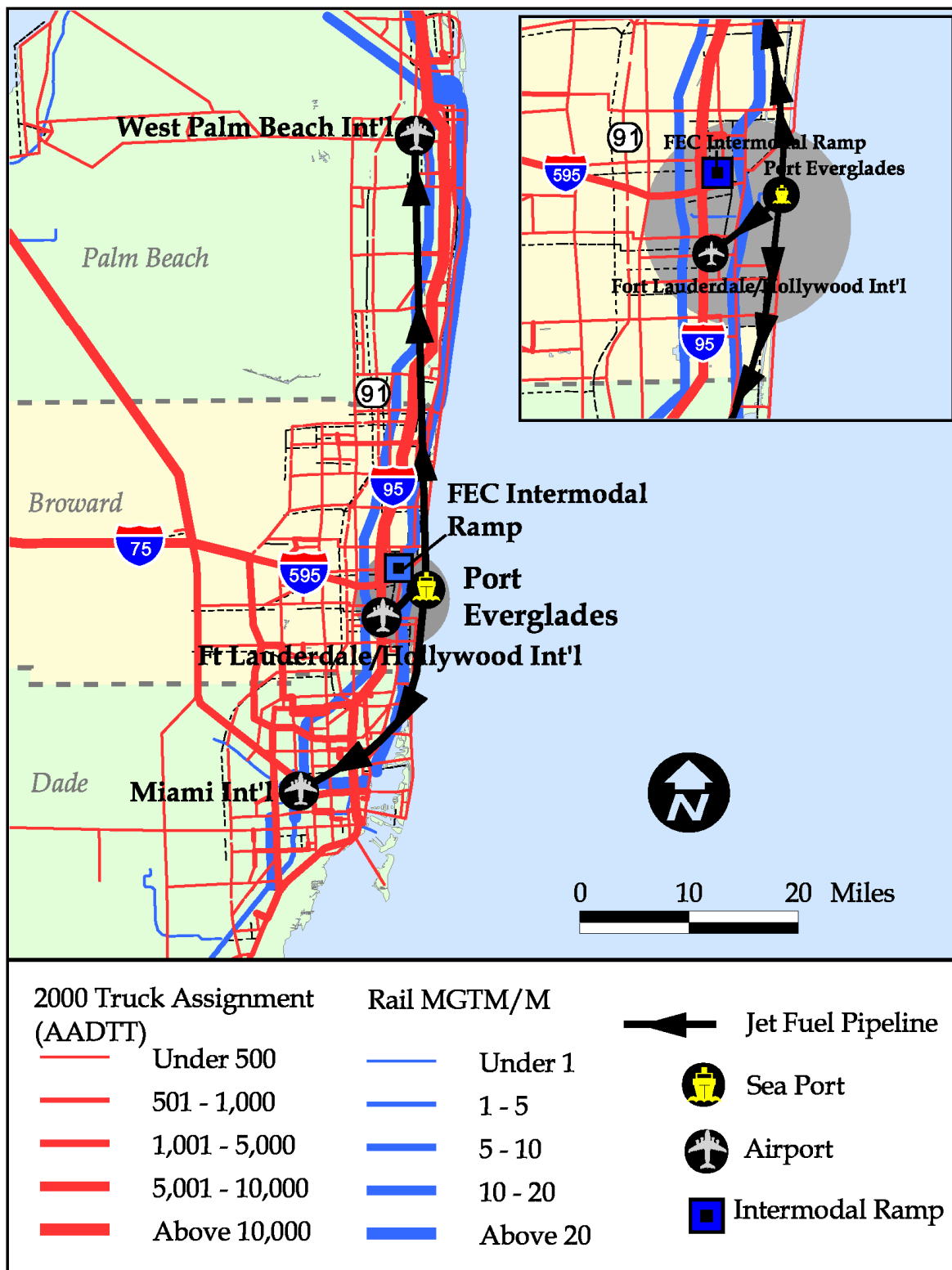
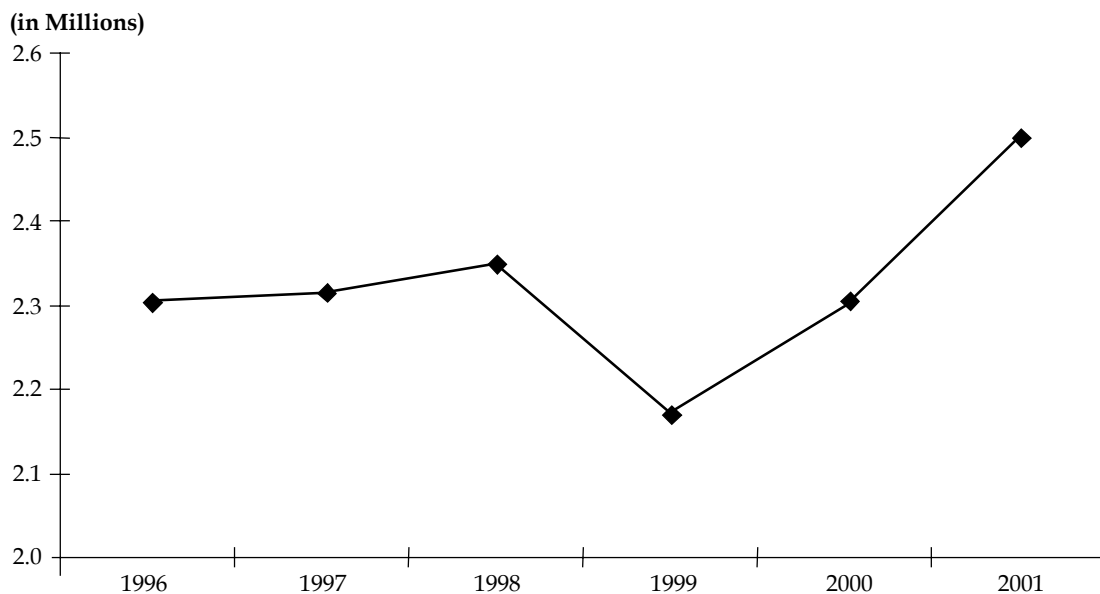


Figure ES.8 Port Everglades as a Regional Load Center



- **Fort Lauderdale-Hollywood International is focused on passenger service, though air cargo handling capability will be expanded as demand warrants.** Air freight is a relatively small component of Broward County's current freight transportation system, though the increased emphasis on service-based and information industries in the County will result in an increased demand for air cargo services. Because of its proximity to Miami International, it is difficult for Fort Lauderdale-Hollywood International Airport to attract significant amounts of air freight; its cargo operations currently consist of domestic freight shipped in the belly of passenger aircraft and cargo aircraft operated by courier companies like Federal Express. However, as demand for air cargo services in the County grows, Fort Lauderdale-Hollywood International plans to enhance its ability to efficiently handle air cargo shipments.
- **Highway access to Port Everglades and Fort Lauderdale-Hollywood International airport is a major regional strength.** Four major highways in the region provide trucks with access to and from Broward County: I-95, Florida's Turnpike, I-75, and U.S. Route 27. I-595 provides direct access to both Port Everglades and the Fort Lauderdale-Hollywood International Airport. While these highway facilities provide strong north-south service, efficient east-west highway service within the county is limited to I-595.
- **The Broward County region has strong access to freight rail service.** Broward County is served by two freight railroads: FEC and CSX. FEC provides direct rail service to Port Everglades and is the only provider of single and double-stack intermodal service to southeast Florida. CSX is the State's largest railroad and operates transload facilities in Fort Lauderdale.
- **The region's expanding passenger rail service may impact freight operations.** Passenger rail service in Broward County is provided by Tri-Rail and Amtrak. Tri-Rail operates along state-owned right-of-way between Miami and Palm Beach while Amtrak operates intercity service in Florida and nationwide. Tri-Rail is employing strategies to improve service levels by increasing passenger train frequency, double tracking the line, and assuming responsibility for train dispatching along the South Florida Rail Corridor. These service increases may affect freight operations along this important corridor, as the line is utilized by both passenger and freight traffic. Figure ES.9 shows the growth in Tri-Rail ridership since inception of its service.
- **Development and expansion of transit operations provide an opportunity to improve regional mobility.** Expansion of Broward County's existing transit systems and the development of new transit services will provide more diverse transportation options to Broward County residents and will result in improved mobility regionwide. This is particularly important as Broward County's population continues to grow at a rapid pace. Because the enhancement of regional transit systems may improve congestion on local highways, it will have a positive effect on goods moving through the area, particularly those goods that are moving by truck.

Figure ES.9 Tri-Rail Ridership
1996-2001



Source: Florida Department of Transportation, Transit 2020.

Programs and Tools

- **Outreach activities have worked to build support for freight transportation programs.** The importance of freight transportation and the link between freight transportation and economic development is not always clear. However, the public outreach efforts conducted in the late 1990s and as part of this project have helped build support for Broward County's freight planning program. The private sector, in particular, is enthusiastic about the increased emphasis on freight transportation within the public planning process.
- **The Florida Statewide Intermodal Highway Freight Model can be a useful tool for the Broward County MPO.** The Florida Statewide Intermodal Highway Freight Model is designed to estimate base year and future truck trips on the FIHS, but can also have important local and regional applications. Though the Florida Statewide Intermodal Highway Freight Model does not accurately estimate local truck trips at the county level, the Broward County MPO will have the opportunity to identify the major freight generators in the county, define the origins and destinations of its internal truck trips, and integrate that information into the model in order to gain a better understanding of the truck traffic occurring in the County.

■ Recommendations

A set of detailed recommendations based on the Broward County region's freight transportation deficiencies and issues identified during the project's public involvement process have been developed as a result of the Freight and Goods Movement Study. These recommendations will be used to guide future transportation planning activities undertaken by the Broward County MPO and other regional agencies. Significant work had already been undertaken by the MPO in 1998 and 1999 to reach out to the freight community and solicit input on issues and constraints facing the region's freight system. As part of that effort, industry participants identified short- and long-term proposals and supportive programs and actions that might improve freight flows in the region. As part of the Freight and Goods Movement Study, additional outreach was conducted. The input provided, along with an analysis of the Broward County freight system, were used to develop recommendations for the County's freight program. Not all of these recommendations represent projects or initiatives to be led by the Broward County MPO. Some will require leadership by the MPO's partner agencies, such as Port Everglades, Fort Lauderdale-Hollywood International Airport, and Florida DOT District IV.

As the Broward County MPO is responsible for urban transportation planning efforts and the allocation of state and federal transportation funds for the county, it is often the lead agency for identifying and implementing transportation improvement projects and initiatives within the region. Table ES.1 summarizes the Freight and Goods Movement Study recommendations that should be led by the MPO. Several recommendations have been developed that the MPO should support, but need to be led by other regional agencies. Table ES.2 summarizes those recommendations developed that should be led by other agencies. In addition, the tables provide an overview of all agencies that should be involved in planning and implementing these initiatives, as well as the timeframe for project completion (short, medium or long), and the current project status.

Table ES.1 MPO Driven Recommendations

Recommendation	Current Status	Primary Agency	Support Agency	Timeframe
Infrastructure Review NHS intermodal connectors in Broward County	Broward County MPO and FDOT District IV have worked to identify and update the NHS connectors, however with the SIS project, it is an appropriate time to review the designated highway links for possible additions and improvements.	Broward County MPO	FDOT, District IV	Short term
Policy Strategies Investigate strategies to improve at grade rail crossings throughout the county.	Rail grade crossings have been identified as congestion and safety issue.	Broward County MPO	FDOT, District IV Railroad industry	Short term
Investigate strategies to improve loading/unloading zones and access to industrial parks/locations.	Industry outreach identified issue as an impediment to urban freight operations.	Broward County MPO	Broward County Traffic	Short term
Develop a program to encourage off-peak road usage.	Peak-period spreading has created desire to divert traffic to off-peak periods.	Broward County MPO	FDOT, District IV Regional businesses	Medium term
Consider expansion of the existing petroleum pipeline system to serve additional high-volume customers to reduce dependence on tank trucks.	Pipelines are used significantly for jet fuel to tri-county airports.	Broward County MPO Port Everglades	Pipeline industry	Medium term
Support the development of the truck stop at the intersection of I-595 and Florida's Turnpike and work to develop other truck service centers throughout the region.	Truck stop at I-595 and Turnpike is moving forward.	Broward County MPO	FDOT, District IV Turnpike Private developers	Medium term
Review existing weight limits on county roadways.	Industry identified this issue as an impediment to efficient freight operations.	Broward County MPO	FDOT, District IV Broward County Traffic	Medium term
Investigate the development of an additional east-west limited-access highway in the county.	Need for increased east/west roadway capacity has been repeatedly identified by agencies and industry.	Broward County MPO	FDOT, District IV	Long term

Table ES.1 MPO Driven Recommendations (continued)

Recommendation	Current Status	Primary Agency	Support Agency	Timeframe
<i>Operational Improvements/Technology</i> Improve maintenance of downtown areas to facilitate truck access.	Industry has identified truck access to downtown areas as issue.	Broward County MPO	Broward County Traffic	Short term
Improve highway access to air cargo terminals.	Industry has identified highway access to air cargo facilities as issue; 2020 Vision calls for overall airport access improvements.	Broward County MPO	Fort Lauderdale-Hollywood International Airport FDOT, District IV	Medium term
Provide improved information regarding port access and regional traffic conditions via additional signage and ITS.	ITS Intermodal Plan for Broward County is underway.	Broward County MPO	FDOT, District IV Broward County Traffic Port Everglades	Medium term
Improve and expand regional ITS for freight.	ITS Intermodal Plan for Broward County is underway.	Broward County MPO	FDOT, District IV FDOT, District VI Broward County Traffic Port Everglades	Medium term
<i>Freight Program Enhancement Strategies</i> Conduct origin/destination surveys at key freight generators.	Need more detailed freight data for next phase of freight program.	Broward County MPO	Miami/Dade MPO Palm Beach MPO	Short term
Evaluate the economic impact of the freight industry.	Need more detailed analysis of importance of freight to the economy.	Broward County MPO	Broward County Industry associations	Short term
Develop and enhance regional freight modeling tools.	Completion of statewide intermodal highway freight model provides foundation for expansion of local freight modeling.	Broward County MPO	FDOT, District IV FDOT, District VI Miami/Dade MPO Palm Beach MPO	Short term
Establish a Freight Advisory Committee.	Enhancement and expansion of the freight program requires continued outreach to private industry.	Broward County MPO	FDOT, District IV Industry Associations	Short term

Table ES.1 MPO Driven Recommendations (continued)

Recommendation	Current Status	Primary Agency	Support Agency	Timeframe
<i>Freight Program Enhancement Strategies (continued)</i>				
Collect additional vehicle classification counts.	Development of a volume database for the freight highway system is critical for ongoing planning activities.	Broward County MPO	Broward County Traffic FDOT, District IV	Short term
Conduct mail-out surveys to freight stakeholders.	Need more detailed freight data for next phase of freight program.	Broward County MPO	Industry associations	Short term
Develop a detailed train volume data set.	Planned expansions of Tri-Rail and freight traffic growth require detailed data on demand for rail capacity.	Broward County MPO	FDOT, District IV Railroad industry	Short term
Revise the existing ranking/ prioritization methodology for transportation projects to specifically accommodate freight considerations.	Development of freight component for LRTP was first step in integrating freight into the TIP process.	Broward County MPO	FDOT, District IV	Medium term
Establish an urban freight mobility program.	Growth in region requires a mobility program to address congestion and safety needs.	Broward County MPO	FDOT, District IV Broward County Traffic	Medium term
Coordinate with the tri-county area to develop a regional freight plan.	Transportation Summit in January 2002 stressed need for unified regional transportation program.	Broward County MPO	Miami/Dade MPO Palm Beach MPO FDOT, District IV FDOT, District VI	Medium term
Develop commodity flow forecasts for the region.	Future freight volume data is necessary for operational and capacity planning.	Broward County MPO	FDOT, District IV FDOT, Central Office	Medium term

Table ES.2 Other Agency Driven Recommendations

Recommendation	Current Status	Primary Agency	Support Agency	Timeframe
<p>Infrastructure</p> <p>Fort Lauderdale-Hollywood International Airport and Port Everglades should continue their joint development for an advanced passenger and baggage transfer system to service the cruise ship industry.</p>	<p>Prior to 9/11, the port and airport had an established program to facilitate this operation; they now must revisit to deal with security.</p>	<p>Port Everglades Fort Lauderdale-Hollywood International Airport</p>	<p>Broward County MPO</p>	<p>Short term</p>
<p>Continue with plans to develop the ICTF in South Port to reduce drayage moves and stimulate rail use.</p>	<p>Port Everglades' 2020 Vision calls for development of this facility in coordination with the reconstruction of Eller Drive.</p>	<p>Port Everglades FEC Railroad</p>	<p>FDOT, District IV Broward County MPO</p>	<p>Medium term</p>
<p>Expand roadway capacity on high-use roads, such as Eller Drive and Eisenhower Boulevard.</p>	<p>Eller Drive reconstruction PD&E is moving forward.</p>	<p>Port Everglades</p>	<p>FDOT, District IV Broward County MPO</p>	<p>Medium term</p>
<p>Policy Strategies</p> <p>Ensure the security program provides efficient access to Port Everglades' terminals.</p>	<p>Port Everglades is undertaking an extensive security program including restricting/controlling access to the port.</p>	<p>Port Everglades</p>	<p>Broward County MPO</p>	<p>Short term</p>
<p>Consider the development of truck only lanes within the county.</p>	<p>FDOT, District IV has an active HOV program and is interested in improving freight mobility.</p>	<p>FDOT, District IV</p>	<p>Broward County MPO</p>	<p>Medium term</p>

Table ES.2 Other Agency Driven Recommendations (continued)

Recommendation	Current Status	Primary Agency	Support Agency	Timeframe
<i>Operational Improvements/Technology</i> Improve the signal synchronization and signage throughout the county to facilitate more efficient freight flows.	Industry representatives have identified this issue; advanced system is in place and needs programming.	Broward County Traffic	Broward County MPO	Short term
Broward County should continue to look for opportunities to develop and expand air cargo operations at Fort Lauderdale-Hollywood International Airport.	Existing plans to expand the air cargo facilities have been placed on hold since 9/11.	Fort Lauderdale-Hollywood International Airport	Broward County MPO	Medium term
Improve the management of passenger and cargo traffic within the port to mediate conflicts and congestion.	2020 Vision calls for a new circulation pattern and people mover system.	Port Everglades Fort Lauderdale-Hollywood International Airport	Broward County MPO	Medium term
<i>Freight Program Enhancement Strategies</i> NA	NA	NA	NA	NA