
executive summary

Urban Freight/Intermodal Mobility Study

prepared for

Broward MPO

prepared by

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Executive Summary

Background

Over the last decade, the incorporation of freight issues into the transportation planning activities of metropolitan planning organizations (MPO) has received significant focus from Federal, state, and local transportation agencies and entities; business and industry leaders; and other key stakeholders. The Broward MPO has been actively working to incorporate freight into its transportation program since the late 1990s. Work began with identification and analysis of specific areas of need (the Commercial Vehicle Driver Survey, the Truck Stop Terminal Facility Research Project), moved into a more comprehensive planning effort (the Freight and Goods Movement Study and the Intelligent Transportation Systems (ITS) Intermodal Plan)), and ultimately freight projects were developed and programmed as part of the 2025 and 2030 Long-Range Transportation Plan (LRTP) Updates. The Broward MPO has continued to demonstrate its commitment to the safe and efficient movement of freight and goods for several years, as evidenced by its current plans and programs. The MPO's Unified Planning Work Program (UPWP), Transportation Improvement Program (TIP), LRTP each have freight specific elements defined.

While these initiatives have helped the MPO identify and begin to address key local freight issues, freight transportation planning and programming activities must continue to evolve over time to remain an active ingredient in the overall transportation program. This is especially critical for the Broward MPO and its counterparts in South Florida, given the significant number of local, regional, and state initiatives underway and/or under consideration. Potential development of an inland port in South Florida could shift distribution patterns and provide additional logistics capacity; redevelopment of the FEC rail line to accommodate passenger service could change commuting patterns and impact regional traffic flows; development of an ICTF at Port Everglades could improve the handling and distribution of growing international trade, and the development of a new aggregate facility at Port Everglades could serve the growing demand for foreign aggregate. Each of these possible or planned developments has the potential to improve overall freight mobility and capacity throughout South Florida.

At the programmatic level, development of the Strategic Intermodal System (SIS) and the Transportation Regional Incentive Program (TRIP) represent two changes to transportation funding programs that have dramatically impacted Broward County. In addition, operational restrictions, such as the new left lane restrictions for trucks implemented along Florida's Turnpike between the Golden Glades interchange to the Lantana toll plaza, highlight the importance of a balanced transportation program that serves all system users.

At the international level, continued globalization and shifts in international trade patterns are providing South Florida with a variety of opportunities and challenges. Port Everglades, the largest single freight hub in Broward County, is positioning itself to take advantage of these new and growing market opportunities through its current master plan

development. In response to this dynamic environment, the Broward MPO is taking the next step in its freight program development, with a specific focus on Port Everglades. The objectives of this study were to identify and summarize key initiatives impacting freight transportation in Broward County; update key freight trends, to supplement the 2003 Freight and Goods Movement Study; analyze Port Everglades' landside access conditions, including truck driver surveys; and develop recommendations for freight transportation system improvements, specifically focusing on Port Everglades. The material presented in this report complements the Port Everglades Master Plan. Both this document and the Master Plan will serve as key inputs to the freight element of the 2035 LRTP Update as well as the overall Broward County transportation program.

Findings and Recommendations

Broward County possesses a strong, efficient freight transportation system that facilitates the growth of the local and regional economy. Broward County and South Florida continue to experience significant population increases – nearly double the growth rate of the rest of the nation – which drive consumption of consumer goods and stimulate construction activities. The County is correspondingly experiencing significant growth in goods movement, with freight traffic increasing or at least stable across all modes. As recognized through the establishment of the SIS, this growth in freight traffic must be addressed not only through highway improvements (which constitute about 70 percent of current goods movements), but also through improvements to seaports, rail, airports and intermodal connections.

Port Everglades is a critical component of this freight transportation system. It stands out nationally for its excellent waterside and landside access: a short channel provides easy access to Atlantic shipping lanes, and direct connections to the Interstate Highway System and national intermodal rail network lie just outside the Port. Even with these strong qualities, further improvements are needed to increase efficiency and allow for the continued growth of the Port, Broward County and the South Florida region. A number of other freight-intensive areas also exist in Broward County. While also generally well-connected to the regional freight transportation network, a number of improvements have been identified that can facilitate goods movements for these zones and for the county as a whole.

Port Everglades

Within the Port, its own success and growth have led to strains on the capacity and efficiency of trucking access to Port cargoes. These strains have arisen from both physical capacity and operational issues. While these issues have been identified in the course of the Port's master planning program, and are addressed in the recently completed master plan, it is beneficial to discuss these and related topics here to integrate them and place them within the context of the broader county freight-related strategies. Figure ES.1 illustrates the general areas at and adjacent to the Port where improvements are recommended. In many cases, the port has already identified the issues and begun to take corrective actions through their capital improvement program and through improvements included in the new Port Master Plan. Recommendations are summarized below.

Figure ES.1 Key Improvement Areas at and adjacent to Port Everglades



Source: Cambridge Systematics, Inc. and Port Everglades Master Plan.

- **Construct Eller Drive overpass.** This project is funded and in the State’s work program and represents a major landside improvement for both highway and rail access to the Port.
- **Develop queue management system for cruise operations/provisioning deliveries.** In the Midport area there is limited queuing and maneuvering space. A more formal staging area for cruise ship service vehicles is recommended. This should be coordinated with the port’s On-Demand Dispatch System pilot.
- **Develop improved queue management system for Southport container terminals.** For the Southport container terminals, McIntosh Road can become crowded and confused. Staging areas should be better established for trucks waiting for the cruise berths,

awaiting dispatch, or that represent overflow from the individual container terminal's queuing lanes. Port Everglades' Master Plan includes the development of a loop road along McIntosh Road to help improve traffic flow and queuing.

- **Improve the physical lane and queue demarcation in the spaces immediately near the individual berths and terminals.** Improved staging areas should be developed to reduce congestion immediately near to berths and terminals. This can be accomplished through improved signage, physical expansion, and streamlined traffic management activities. A Midport expansion project will create additional vehicle queuing space and serve to alleviate roadway congestion in this area. In addition, a Port-wide way-finding signage program will help users find their way.
- **Develop a port terminal working group to discuss terminal delay improvements.** Truck drivers consistently reported excessive delays for entry into the private container terminals. An incentive-based system that encourages terminal operators to address broader Port efficiency issues outside their own gates should be discussed.
- **Continue to improve and upgrade SIS connectors to Port Everglades.** Continued improvements along Spangler Road/State Route 84 near the Port, in coordination with improvements on the west side of U.S. 1, are warranted. Traffic signal timing, road and lane widths, and turning radii on Eller Drive, especially at the intersections with McIntosh Road and with I-595, should be improved.

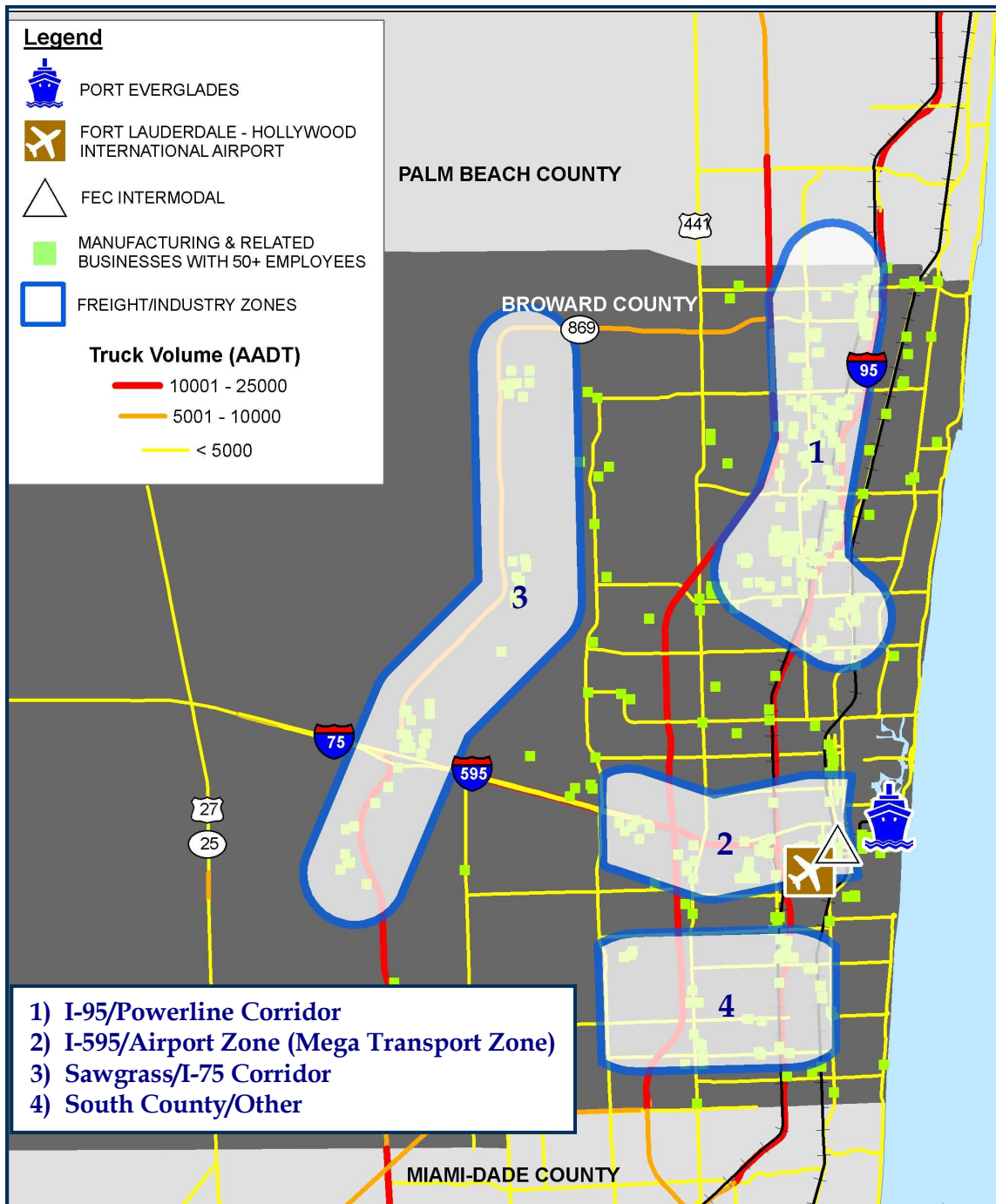
Other Broward County Freight Areas

Outside of Port Everglades and its immediate environs, there are a number of freight-oriented areas that are home to the County's largest clusters of truck-trip producing facilities. These tend to be located near major transportation corridors such as I-95. These areas have been grouped into four zones (as illustrated in Figure ES.2). To identify potential needs for freight-related improvements, each zone was analyzed from the perspective of truck and rail access, with potential improvements identified and noted.

I-95/Powerline Road Corridor. This cluster is generally located between Florida's Turnpike and I-95, south of Hillsboro Boulevard and north of Commercial Boulevard. The businesses are centered around Powerline Road, and to a lesser extent Dixie Highway in the south of the zone. Generally excellent roadway access is provided to I-95 and Florida's Turnpike. At-grade crossings of the South Florida (CSX) Rail Corridor impact the east/west arterials serving the area. The MPO has programmed a number of improvements that will serve trucks in the area. A number of additional improvements have been identified, including:

- Andrews Avenue Extension/Copans Intersection - intersection improvements: curb reconstruction, improved turning radius, signal and signing improvements;
- Andrews Avenue Extension: NW 18th Street to Copans Road - roadway improvements. Curb and drainage, median and access enhancements, drainage; and
- Powerline Road/NW 15th Street - install a new traffic signal to provide safe truck access.

Figure ES.2 Illustration of Key Freight/Industrial Zones



Source: Cambridge Systematics, Inc. Note: Truck AADT is 2006 data.

I-595/Airport Zone (Mega Transport Zone). The area is well served by I-95, I-595, Florida’s Turnpike and US 1. This zone contains both Port Everglades and Fort Lauderdale - Hollywood International Airport, and sees a great deal of truck traffic. Recent improvements have included the loop ramp from Eller Drive to US 1 southbound and safety enhancements at State Road 84 and I-95. Primary rail access within this zone is

provided via the FEC Intermodal yard on Andrews Avenue south of SR 84. State Road 84 continues to constitute a major constraint to port access, due largely to the inherent conflict between port traffic and the local community and neighborhoods. The City of Fort Lauderdale and FDOT have been working on a comprehensive corridor action plan to address conflicts, enhance safety and continue to provide viable port access. Additional improvements identified include:

- Eller Drive Extension/I-595 – intersection improvements: signal timing modifications to provide improved left-turn phase access to Port Everglades.

I-75 / Sawgrass Corridor. This linear cluster of industries stretches from approximately Griffin Road north to Wiles Road. Most of the transportation infrastructure serving these businesses was developed within the last three decades and is, therefore, more consistent with current standards. Roadway lane widths and turning radii accommodate modern trucks, and good drainage is generally provided. The western part of Broward County is not served by rail, and these businesses all rely on truck transportation. The main obstacles to trucks within these areas stem from an incomplete roadway grid – for example where future connections have not yet been built – and high volumes of traffic, particularly at commuter times, which stem from the same network deficiencies. The MPO has programmed a number of improvements that will serve trucks in the area. Additional improvements identified in this zone include:

- Signal installation at Sawgrass/Commercial Boulevard. This would provide safe truck access at this interchange.

South County/Other. This zone is well served by I-95 and Florida’s Turnpike via interchanges at Pines Boulevard and Griffin Road. Similar to the Powerline Road corridor, the roadway infrastructure in this area tends to be older, with narrower lanes, less access control and poor drainage. The railroad crossings add delay and danger for truck traffic. A limited number of rail spurs and sidings along the SFRC continue to serve businesses in this zone, although there are fewer than in the northern part of the county. The MPO has programmed a number of improvements within this area. Additional projects identified in this area include:

- Hollywood Boulevard/Florida’s Turnpike interchange improvements: this is an area of significant congestion and improvements would benefit truck traffic by reducing delay.

Other Recommendations

- **Improve content and dissemination of traffic information services.** Traffic information services are recommended as a cost-effective means to reduce the impacts of non-recurring congestion on goods movements. It is critical that real time traffic information is accurate, in a form that is useful to truck drivers, and available at key venues convenient to truckers. In addition, drivers and dispatchers must be aware of these services.
- **Incorporate SAFETEA-LU’s revised set of planning factors distinctly into freight planning.** It is recommended that Broward County make a distinct effort to apply

these factors to planning for the freight transportation system, and not just at the level of the overall LRTP. This will insure that important concerns receiving increased recent emphasis, including safety, security, and the environment (notably increasing climate concerns), will receive and be integrated with freight-specific considerations in the planning process.

- **Form a regular Freight Advisory Committee and use annually to guide transportation program investment decisions.** This Committee should include public sector, shipper, and carrier perspectives, and possibly other stakeholders. This group's establishment with some continuity and periodic meetings would provide insights that will allow freight to receive proactive consideration with regard to future improvements, rather than merely having *ad hoc* committees formed in reaction to situations that have already begun to deteriorate. This should be coordinated, as appropriate, with the Miami-Dade MPO's Freight Transportation Advisory Committee (FTAC).
- **Monitor and attend critical regional meetings.** FDOT sponsors a regional freight summit annually. Broward MPO staff should attend and participate. In addition, staff should participate in other specific project meetings (e.g., Inland Port Study) and state and regional activities that can improve Broward freight planning.
- **Participate in key regional initiatives.** As documented in this report, there are many initiatives underway that impact freight mobility. It is important that the Broward MPO formally participate in these initiatives and serve as the voice for all Broward County freight stakeholders. Examples include the Florida East Coast Corridor Study, the Atlantic Commerce Corridor/HPC #49 Initiative, and the South Florida Inland Port Feasibility Study.
- **Ensure freight remains a focus area of Broward's LRTP and is incorporated into the regional LRTP.** Staff should continue to include freight projects in the LRTP and promote a larger freight element in the regional LRTP.