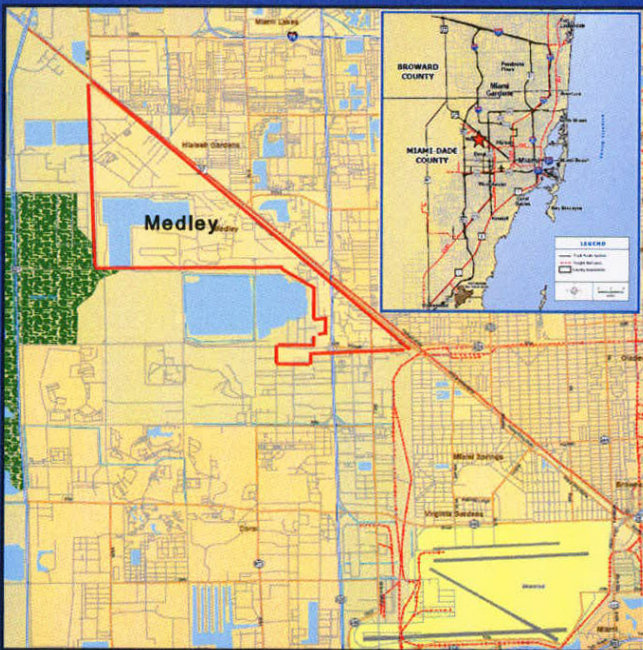
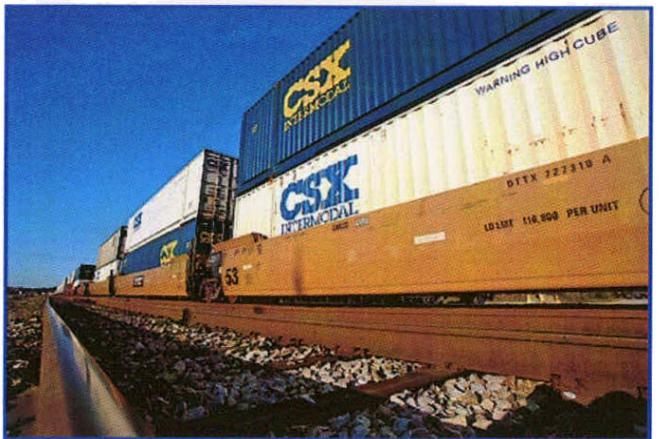




Medley Sub-Area Freight Study



Final Report
March 2009





Miami-Dade MPO Freight Transportation Advisory Committee (FTAC)

This sub-area study has been developed under the guidance of the Miami-Dade MPO Freight Transportation Advisory Committee (FTAC) which is the industry's advisory panel to the MPO that advises the MPO Board on freight movement and truck traffic needs.

The role of the FTAC is to assist the MPO in formally and systematically addressing freight related issues and providing guidance related to freight improvements that must be made for safety and freight efficiency throughout the county. FTAC members include:

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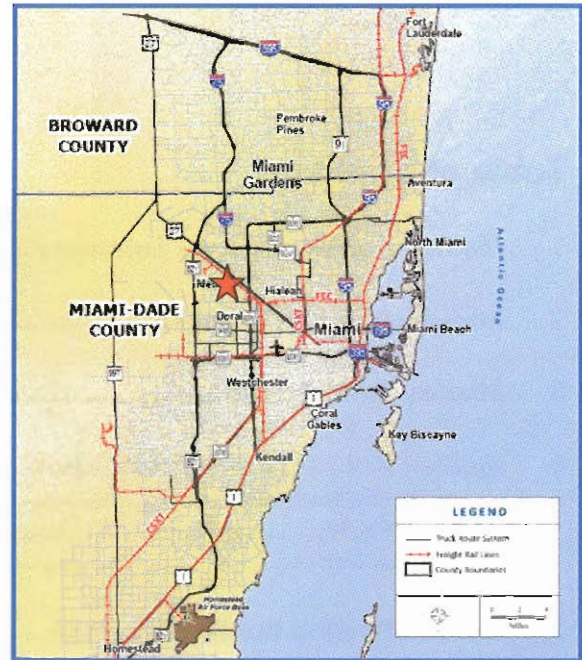
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1 Medley Sub Area Study Summary

Located 10 miles northwest of Downtown Miami, the Medley area has extensive regional freight activity. A high concentration of warehouses and distribution centers make Medley an important origin and destination for regional goods and a key part of the County economy.

Because of the high concentration of industrial and freight logistics related businesses, Medley's freight infrastructure is essential to the economy of the area. Roadways are the primary means of moving goods and are the critical linkages between Medley, consumers, and other freight infrastructure within the county and beyond.

Traffic is expected to increase throughout the area on all roadways. Truck movements are expected to match or exceed the growth of auto traffic on these roadways critical to Medley's freight industries.



The Florida East Coast Railway's (FEC) Hialeah Yard is a 360 acre facility located just to the east of Medley in unincorporated Miami-Dade (northwest of the Miami Airport). The yard handles the movement of containers, automobiles and stone between the yard and points in northern Florida and throughout the country.

Of the nearly 900 trucks surveyed as part of the Miami-Dade Freight Plan, about 14 percent were trucks that were either originating from or destined for the Medley area.

These trucks originated from or were destined to locations throughout the country, but most (90+ percent) were local trips. The trucks surveyed utilized most major routes in the area with Okeechobee Road being the primary access routes to and from Medley.

Potential Improvements and Supportive Policies

Even given the pressures and conditions of the freight system in Medley, there are opportunities to improve the infrastructure which would allow the city to maintain its competitive niche for freight and logistics. These include:

Maintenance and Operations

- Adjust the signal timing on Okeechobee Road
- Improve local road/pavement conditions



- Improve turning radii for trucks
- Widen South River Drive
- Improve access over the Miami River
- Establish and implement street lighting enhancements.
- Take steps as feasible to shorten project timelines
- Consider an ordinance adoption to ensure freight impacts are considered

Signing and Wayfinding

- Install a directory of companies at the gateway to the Medley freight logistics and industrial area
- Provide advance information to drivers
- Develop ITS applications that provide early warning of congestion and alternative routing
- inventory locations that pose a problem and establish advisory signing for alternate routing

Capacity and Congestion

- Increase capacity through select road widening projects.
- Promote a comprehensive logistics strategy that benefits all firms.

Intermodal Connectivity

- Explore the potential for complimentary operating adjustments (rail and truck carriers and shippers) and scheduling that would minimize the impact of delay at rail crossings.
- Revisit the earlier proposal and plan to connect 87th Ave between Medley and Doral

Safety and Security

- Determine a location(s) for truck parking/staging

Policies and Regulations

- Promote regular dialogue between the Medley Freight businesses and local elected and appointed officials



2 Introduction and Purpose

The purpose of the Medley sub-area study is to identify freight issues and needs and to make associated recommendations. This includes transportation improvements and other non-infrastructure actions as appropriate. In addition, this information will be incorporated into the county-wide Miami-Dade Freight Plan as one of several plan inputs to help set the long-range freight direction for the County. Medley was selected as a sub-area study because of its relatively concentrated degree of freight activity and its proximity to key facilities such as MIA.

Sub-area studies for freight transportation are useful for the following reasons:

- Provides an opportunity to collaborate with freight stakeholders on issues at a scale that is meaningful and relevant to them
- Helps to identify project level needs, including low cost, high impact improvements
- Provides an opportunity to evaluate partnership approaches to problem solving
- Helps to demonstrate the value of the public MPO planning process at a grass-roots level.

Located just 10 miles from Downtown Miami and the port, the Medley area is a focus for regional freight logistics. Its high concentration of warehouses and distribution centers make it an important origin and destination for regional goods and a key part of the County economy.

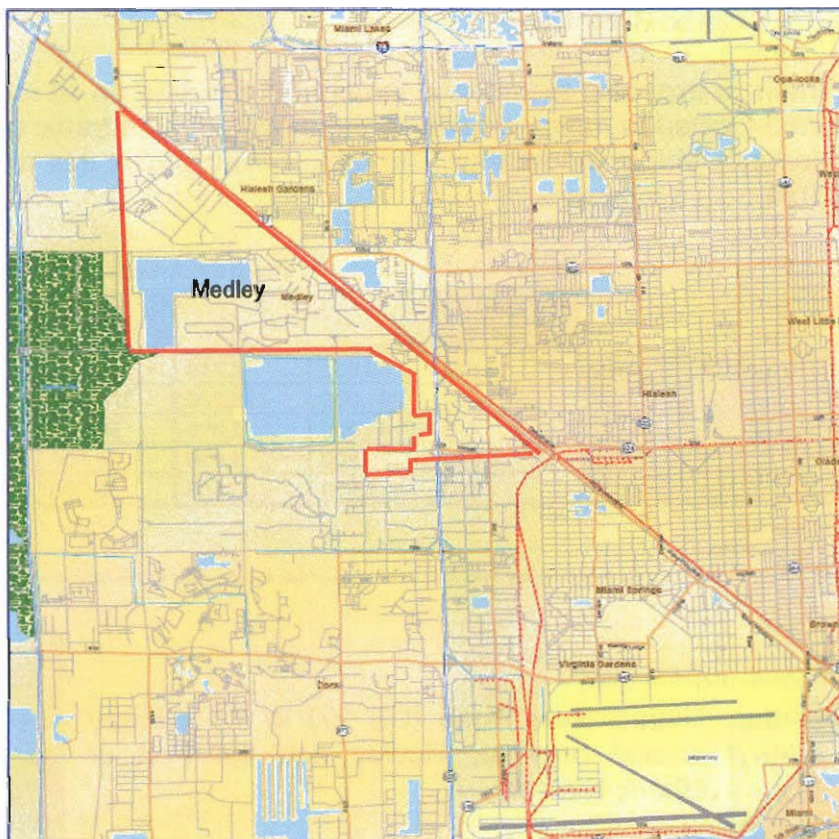
Freight and logistics is Medley's economic engine. The Medley freight industry, however, is experiencing growing constraints as freight volumes continue to outpace system improvements—maintenance and capacity. The Miami-Dade MPO recognizes the strategic importance of Medley in relation to the County's overall emphasis on freight mobility. As a freight hub, goods movement activity in Medley places great demand on the local infrastructure.

3 Medley Area Profile

The Town of Medley was incorporated in 1949 and encompasses a total land area of about 4 square miles. Medley's key characteristics are its concentration of industrial uses and its proximity to the regional transportation system. The primary Medley access routes are Okeechobee Rd. and SR 826 (Palmetto Expressway). Nearly all traffic utilizes at least one of these roads.

According to the US Census Bureau, the city of Medley had a total population of 1,100 residents in 2000 and 363 households.

Although Medley has a small residential population, it is a major center of employment with nearly 1,800 businesses and 50,000 jobs¹. Of the four square miles within Medley, over 80 percent of the Town's land area is designated for industrial use.



4 Medley Area Freight Infrastructure and Movement

Because of the high concentration of industrial and freight logistics related businesses, Medley's freight infrastructure is essential to the economy of the area. Roadways are the primary means of moving goods and are the critical linkages between Medley, consumers, and other freight infrastructure within the county and beyond.

4.1 Primary Roadways

Primary roadways that provide access to and from the Town of Medley include:

- Okeechobee Rd (SR-25)
- SR826—Palmetto Expressway

¹ Source: City of Medley

- SR934–NW 74th Street
- SR821–Florida’s Turnpike
- South River Drive

Traffic is expected to increase throughout the area on all roadways. Truck movements are expected to match or exceed the growth of auto traffic on these roadways critical to Medley’s freight industries. The table below shows this expected growth by the year 2030.

Medley Area Traffic Volumes

	2008*			2030**		Percent Change	
	% truck	AADT	Truck AADT	AADT	Truck AADT	AADT	Truck AADT
Okeechobee Road	11%	43,000	4,710	56,510	6,190	31%	31%
Palmetto Expressway	7%	231,000	15,270	275,300	19,240	19%	26%
NW74th Street	7%	44,000	2,890	54,900	4,150	25%	44%
Florida's Turnpike	6%	95,800	5,930	106,600	12,340	11%	108%
South River Drive***	18%	3,690	663	5,790	1,040	57%	57%

* Source: FDOT

** Source: SERPM

*** Source: Derived from base data in the NW South River Drive Corridor Study Area Expansion (Volume II: Traffic Report) ; Town of Medley

Okeechobee Road



Okeechobee Road (US 27) is the primary arterial between Medley and the Port of Miami, Hialeah

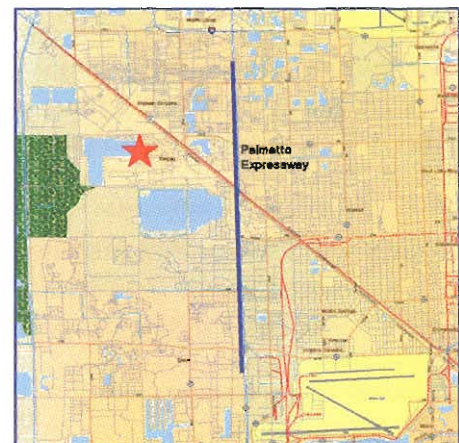
The 4-lane major arterial is heavily traveled throughout the day by both autos and trucks. The roadway has been redesigned to maximize through movements.



Palmetto Expressway



The Palmetto Expressway (SR-826) is a major 10-lane expressway that runs north-south through Medley, linking the town with Doral, Miami International Airport to the south and Miami Lakes and I-75 to the north. The roadway has recently completed improvements primarily at heavily congested interchanges including the Medley interchange.



NW 74th Street



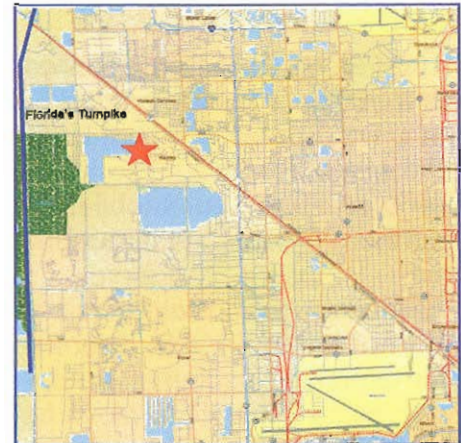
NW 74th Street (SR-934) is a 4-lane east-west expressway between the Palmetto and NW 84th Ave. on the border between Medley and Doral. The roadway provides access to the southern end of Medley and is a major connection between the rock mines to the west and the Florida East Coast Railway's (FEC).



Florida Turnpike



Florida's Turnpike (SR-821) is to the west of Medley and provides access to Florida City at the southern end of Miami-Dade County and to the central and eastern Florida to the north. The Homestead Extension (HEFT) is the most heavily traveled segment of Florida's Turnpike. In 2007, average daily traffic exceeded 178,000 vehicles at its busiest location.



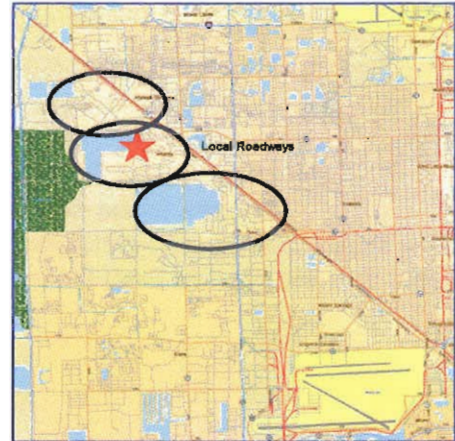
South River Drive

South River Drive runs parallel to Okeechobee Road south of the Miami River. This roadway is a primary local access road to Medley businesses by connecting to local roads that run north-south and east-west.



Local Roadways

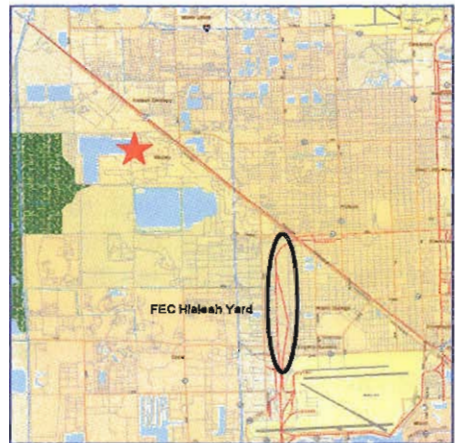
Medley's local roadways provide internal access to businesses and employment centers. They are the critical link between the freight industry and the regional highway system. It is important that that these roadways operate efficiently.



4.2 Rail Facility

FEC Hialeah Yard

The Florida East Coast Railway's (FEC) Hialeah Yard is a 360 acre facility located just to the east of Medley in unincorporated Miami-Dade County (northwest of the Miami Airport). The yard handles the movement of containers, automobiles and stone to points in northern Florida and throughout the country.



At present, FEC maintains a single track lead into the Port of Miami (POM). This track is occasionally used for oversized equipment and would require significant upgrading if it were to move freight on a regular basis.

In addition, the entire corridor is at grade, intersecting or impacting most major port access roadways.

Plans to reestablish rail service to the POM have been prepared and would require significant upgrades to the rail line accessing the port. The proposed plan would provide two trains daily (one in and one out) during overnight hours to handle the existing traffic currently being drayed to the Hialeah rail terminal.

Currently, 11 percent of the POM's containers are drayed to the Hialeah rail yard for northbound service.²

4.3 Travel Patterns

As part of the Miami-Dade Freight Plan, origin-destination surveys were completed to assess truck travel patterns. Of the nearly 900 truck surveys completed, about 14 percent were trucks that were either originating from or destined for the Medley area.

² Port of Miami Freight Access Study



These trucks originated from or were destined to locations throughout the country, but most (90+ percent) were local trips. The trucks surveyed utilized most major routes in the area with Okeechobee Road being the primary access routes to and from Medley.

5 Issues Effecting the Medley Area

Medley is impacted by a variety of national, state, and local issues and trends. These varied issues are highlighted below as important context for this study.

Issue	Description
National Trucking Activity	Trucking activity has increased dramatically over the past two decades. The increasingly global economy and increase of imported consumer goods makes staging and distribution to consumer markets an important focus for regional planning.
Fuel Prices	The cost of doing business for industries that rely on freight has been rising as a result of escalating fuel prices and clean fuels requirements on equipment. National average diesel prices in September 2008 were nearly 40 percent higher than during September 2007.
Truck Sizes	A recent trend in the industry is the right sizing of trucks. This is the practice of fitting the truck size to the load rather than using the same size for all. The impact has been increased efficiency in the movement of goods by truck, realizing a smaller cost for each ton shipped.
On-Board Equipment	On-board equipment such as Global Positioning Systems (GPS) have given drivers a tool to prevent circuitous routes and getting lost which cuts down on excessive drive times and unnecessary congestion
Port Capacity	The strike of the Longshoremen at the Port of LA/Long Beach in 2007 underscored the fragility of the national logistics system. Port capacity throughout the US is growing, particularly in the southeast where once small regional ports have grown to be able to accommodate the largest of container ships.
Funding for Freight Projects	Funding for freight projects was enhanced with the passage of ISTEA in 1992. This legislation specifically addressed the need for funding infrastructure projects that directly impact freight movements. Subsequent legislation has increased the number of programs for freight projects.



Issue	Description
Security	After 9/11 there have been many initiatives to address the vulnerabilities within the freight industry. State and federal regulations on hazmat movements, screening of drivers entering the port, and other security measures have impacted the industry. Increased costs to the freight industry have impacted smaller freight forwarders and trucking companies which have seen recent consolidation.
Freight Planning	Although much work has been done in recent years, statewide freight planning, MPO freight planning initiatives are the impetus for statewide freight planning conducting freight plans of their own which can then feed the state's plans and policies. Because the movement of freight rarely respects political boundaries within the US, the state surely has a coordination role.
Increasing Traffic	Traffic with south Florida is increasing beyond the ability to increase capacity. Many roads undergoing capacity improvements are over capacity the day that they open to the public. Efforts to decrease demand have been marginally successful region-wide.
Connectivity	<p>Connectivity between freight generators is the key to an efficient regional freight system. Some freight generators in Miami-Dade County lack critical connections, while others are well connected.</p> <p>For example, the major freight terminals at the Miami International Airport connect very well with freight forwarders and distributors within Doral. However, the connection between Doral and Medley is less ideal, as trucks have to use the congested Palmetto Expressway to travel between the two areas.</p>
Freight Impact Education	Educating the public on freight issues is a large hurdle for the region. The logistics component of the regional economy rivals tourism as the largest generator of regional economic activity. Unfortunately, the general public does not witness the economic activity but only the slower truck traffic on the highways.
Congestion and Obsolete Infrastructure	Congestion in Medley is increasing which costs businesses and consumers time and money. This is a result of the town's large freight cluster and antiquated local roadway system which was not designed for heavy truck traffic or fifty-three foot trailers.

Issue	Description
Local Connectivity/Access	The Miami River is Medley's major natural border to the north. To access Medley from Okeechobee Road, traffic must cross the river at designated points. This barrier limits the amount of traffic that can enter or exit at a given time, resulting in congestion on either side.

6 Medley Area Freight Opportunities, Needs, and Solutions

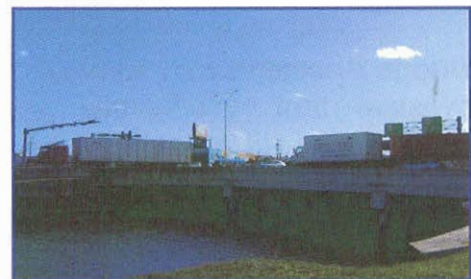
Even given the pressures and conditions of the freight system in Medley, there are opportunities to improve the infrastructure which will allow the city to maintain its competitive advantage.

6.1 Maintenance and Operations

Medley's existing infrastructure requires additional investment for improved pavements, traffic signals, as well as some minor intersection improvements and road widening projects.

Okeechobee Road Traffic Signals

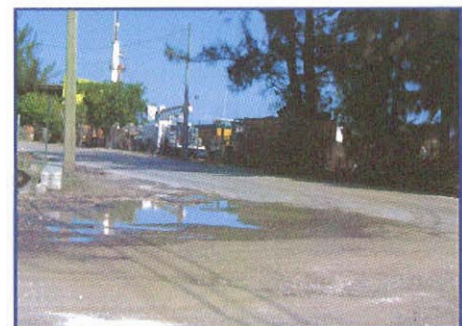
Problem: The signals along Okeechobee Road are primarily help in moving through traffic, but delay truck movements turning into Medley or accessing Okeechobee from Medley. Current signal timing does not allow for multiple vehicles to make turning movements during a single light cycle.



Solution: Adjust signal timing to increase the throughput of trucks that require access to and from Medley.

Local Road/Pavement Conditions

Problem: pavement conditions in the Medley area are poor and are further deteriorating due to the heavy truck traffic. These sub-par conditions are resulting in damage to trucks and equipment, reduced speeds, and increased congestion.



Solution: Identify and prioritize needed roadway improvements. Advance improvements over time following the priorities established with the input of the Medley Freight Stakeholders. Factor truck weights into the design of any improvements to the extent feasible for pavement

maintenance and rehabilitation projects. Work with local officials to formulate a maintenance program. The benefit of a value-engineering approach should be considered given the need to optimize pavement life.

Inadequate Turning Radii

Problem: The older infrastructure in Medley and Doral was not built to accommodate today's larger trucks. The tight turning radii at intersections has resulted in damage to trucks, curbs and sidewalks.



Solution: Identify and prioritize intersection improvements; in particular those that will improve truck turning movements and that will accommodate the increase in truck traffic in the area.

South River Drive Width Restrictions

Problem: South River Drive is very narrow and has many access points. This causes slower speeds, congestion, and safety concerns associated with the proliferation of traffic egress at the multiple access points.



Solution: Widen roadway to river and incorporate access management improvements.

Bridge Access

Problem: The bridges that access Medley from Okeechobee Rd. are narrow and in poor condition. Congestion at the bridge access points on both sides of the river results in damage to trucks, curbs, and sidewalks.



Solution: Bridges are the first chokepoint into Medley and should be widened as a priority for project programming. In tandem with the diversion of the river through a pipeline, this will eliminate the barrier between Okeechobee Road and Medley.

Inadequate Lighting

Problem: There are no streetlights in Medley and no lighting of key directional/facility signs. This makes it difficult to navigate and find locations at night.

Solution: Establish and implement needed lighting enhancements.

Construction Delay

Problem: Prolonged periods of congestion and increased costs are resulting from the extended timeframes of construction projects.

Solution: Take steps for increased coordination with Medley freight stakeholders in advance of construction projects. Take steps as feasible to shorten project timelines or explore other measures to mitigate the impacts on freight movement.

Restrictive City Regulations

Problem: Freight stakeholders generally indicated that municipal regulations should be reviewed in terms of being relevant to freight related development and activity.

Solution: Define the specific issues and areas for improvement. Consider the potential for model ordinance adoption and checklists for municipal officials to use to ensure that freight impacts of development or other land use decisions is routinely considered.

6.2 Signing and Wayfinding

Improved signing and wayfinding is relatively low-cost. Yet, this is an area of considerable interest among the Medley freight stakeholders. The MPO may want to give priority to a signing initiative as a short term means of building long term commitment to the regional planning process.

Inadequate Signing

Problem: There is a general lack of directional signing in the Medley area. This includes company signs as well as public way-finding. As a result freight stakeholders have indicated that there is driver confusion. Longer delivery time/cost, and congestion associated with circuitous routing and turnarounds. Signing should also be replaced as quickly

Solution: Organize a group of tenants and drivers to provide input on signing. Install a directory of companies at the gateway to the Medley freight logistics and industrial area.

Driver Confusion In Medley Area

Problem: Many drivers are not familiar with the area causing delay and congestion.

Solution: Provide advance information to drivers in advance of arrival to the greatest extent practicable. Make greater use of street and building identification at curbside. Establish dedicated truck routes where possible. Collective these improvements will have both energy and safety benefits.

ITS and GPS Applications

Problem: There is an opportunity to make greater use of ITS and GPS for freight movement.



Solution: Develop ITS applications that provide early warning of congestion and alternative routing to drivers. Consideration should also be given to dedicated Highway Advisory Radio for Trucks, expanded knowledge of truck routes by 511 System Operators, and a consolidated FDOT traffic center. GPS should be enhanced for truck routing. Finally, ITS improvements can provide advance information regarding the availability of truck parking.

Lack of Signing for Low Clearances

Problem: Drivers cannot seek alternate routes without knowledge on detours or alternate roads.

Solution: inventory locations that pose a problem and establish advisory signing for alternate routing.

6.3 Capacity and Congestion

Short of building additional highway capacity, there are other operational and logistical approaches for making more efficient use of existing capacity in the Medley area.

Heavy Congestion in the Medley Area

Problem: Slow moving and stopped trucks delay transportation and add to cost while also adversely impacting air quality.

Solution: Increase capacity through select road widening projects. Explore the concept of a 24/7 Port Operation to spread the traffic peak (although there presently does not appear to have the volume of activity to support such an operational change.). Advance a peer to peer business education and awareness initiative focusing on how together the Medley freight business can operate more efficiently Consider incentives that would smooth the peak hour traffic.



Comprehensive Logistics Strategy

Problem: The freight sector operates on a business by business basis in many instances. However the technology exists to support logistics strategy development that spans firms and operations.

Solution: the Medley Area could benefit substantially by a comprehensive logistics strategy that benefits all firms. It is recommended that FTAC promote this concept with a group of Medley shippers.

Turn lanes used for truck storage

Problem: Turn lanes in the congested Medley area are sometimes being used to park trucks for extensive time periods.

Solution: Advance efforts to expand parking and to explore greater enforcement of parking restrictions with local law enforcement.

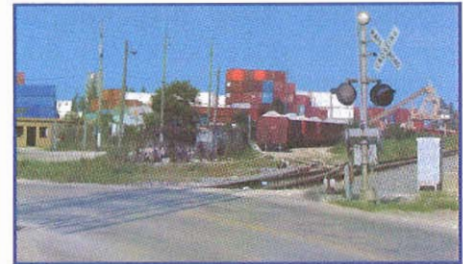
6.4 Intermodal Connectivity

Medley's strategic advantage is access to the road system and other modes, making Intermodal Connectivity an area of particular importance.

FEC Rock Trains Cause Delay

Problem: Peak hour FEC trains cause traffic delay at grade crossings

Solution: Explore the short term potential for complimentary operating adjustments (rail and truck carriers and shippers) and scheduling that would minimize the impact of delay. Longer term evaluate the potential for grade separation.



Connection Between Medley and Doral

Problem: there is an extensive amount of shipments between these two locations, but with poor connectivity.

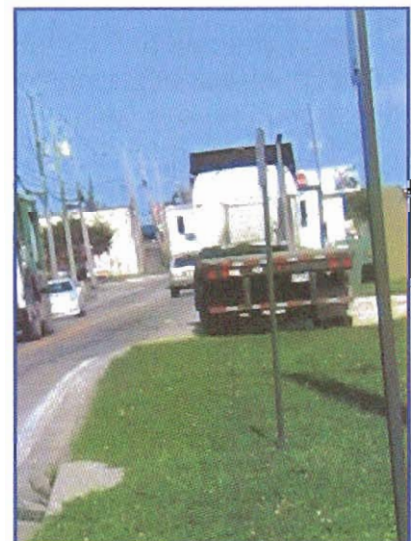
Solution: Revisit the earlier proposal and plan to connect 87th Ave between the two locations which would help with the connectivity of truck traffic.

6.5 Safety and Security

Safety and security is central to the business of Medley's freight stakeholders. Some of their concerns are covered in other areas of this document, including improved lighting and signing. Truck parking is also an area of particular interest and need.

Truck Parking

Problem: Truck parking and staging is difficult due to the lack of truck parking locations throughout the entire County. Overnight parking in the county in undesignated locations is strictly enforced.





Solution: Determine a location(s) for truck parking—possibly in or near the Medley area where residential impacts would be minimal or none at all. Staging locations closer to origins/destinations would allow drivers to avoid peak traffic periods and comply with Federal Driver Hours of Service regulations.

6.6 Policies and Regulations

Medley Freight Stakeholders are interested in having a voice in local, regional and state policy issues. To date, there has not been a forum for them to “speak as one”. This section suggests some approaches for their continued input on policy matters.

Medley Policy Forum

Problem: Medley Stakeholders spoke to a wide range of policy issues during their workshop. They also see an opportunity for greater communication with Medley municipal government to address specific issues and just to keep open lines of communication.

Solution: There is an opportunity for more regular dialogue between the Medley Freight businesses and local elected and appointed officials. Initial conveners of a forum or forums to explore policy issues could be the MPO Staff and/or Florida Trucking Association. The forum(s) would be structured to begin framing issues to be addressed as well as establishing a facilitated process for addressing each issue. This is also an opportunity for regular information meetings in which pending municipal actions or policies could be vetted with these businesses that are such an important part of the Medley economic base.

7 Implementation/Next Steps

The Medley study will be reviewed by the FTAC. FTAC will consider the range of potential projects. The projects will also be considered in relation to the County’s Long Range Freight Plan and the pending Long Range Transportation Plan.



8 Appendix

Medley Stakeholder Meeting Participants

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Marty Poucher, Winn-Dixie
Carlos Suastegui, Florida Power & Light
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