



Central Dade TRANSPORT ZONE Study

Executive Summary

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Prepared for

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EXECUTIVE SUMMARY

INTRODUCTION

A significant portion of freight movement in Miami-Dade County takes place in its central region, which extends from the Port of Miami on the east to the Warehouse District on the west. The central region is home to several major freight generators and attractors including the Port of Miami, Port of Miami River, Miami International Airport, and the Warehouse/Industrial district in Doral. A significant majority of freight transport in central Miami-Dade County occurs through the roadway network. The roadways within the central region are characterized by significant levels of traffic congestion, which negatively impacts freight movement. As a result, the freight transportation industry and businesses depending on them are experiencing increased transportation costs, reduced efficiencies, and difficulties in meeting schedules. The negative consequences are also felt by the general public by way of increased cost of goods they consume. In light of the above-mentioned issues, the Miami-Dade Metropolitan Planning Organization (MPO) initiated the Central Dade Transport Zone study to identify potential solutions for freight movement.

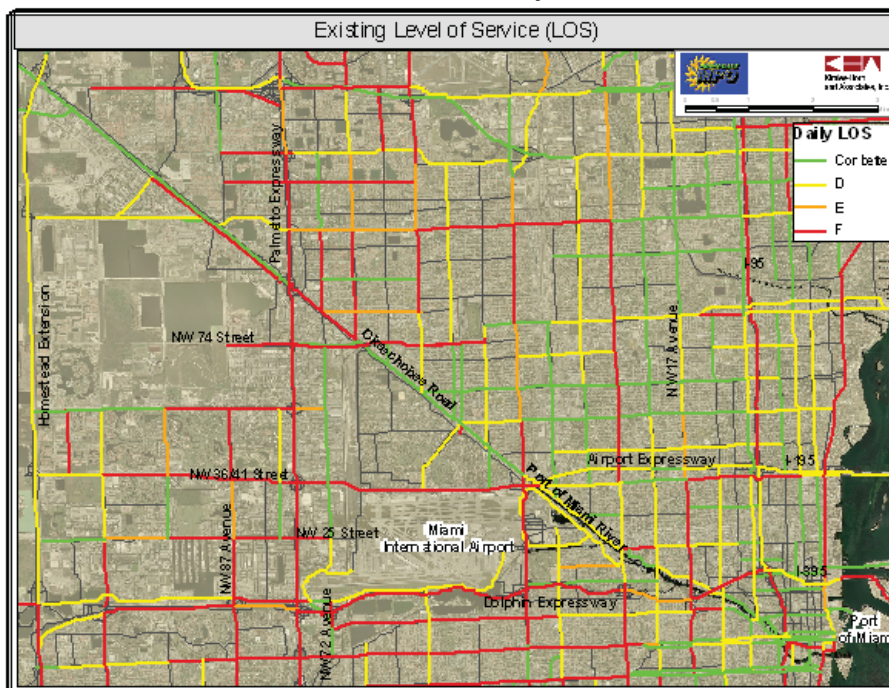
The objectives of the Central Dade Transport Zone study include:

- **identifying major obstacles to efficient movement of freight;**
- **identifying possible improvements to the existing infrastructure;**
- **identifying optional methods of moving freight such as short sea drayage; and**
- **identifying intelligent transportation systems (ITS) solutions to improve utilization of freight facilities.**

LITERATURE RESEARCH

A literature review was performed for this study consisting of previous freight studies conducted within Miami-Dade County as well as studies from other regions of the country that have addressed freight transportation issues. The previous Miami-Dade County studies were reviewed to gain a better understanding of the freight transport issues within the central county, identify previously recommended improvements, and the status of implementation of proposed improvements. The previously recommended projects that have not yet been programmed or implemented were taken into consideration while developing recommendations for the central Miami-Dade region. The literature review ensured that the Central Dade Transport Zone study did not duplicate the previous work efforts. The literature review also consisted of a selection of studies from other major urban areas that have addressed freight transportation issues in

varying capacities. Studies evaluating the feasibility of dedicated freight corridors were reviewed to learn the findings in order to assist this study's evaluation of the feasibility of dedicated truck routes in Miami-Dade County.



DATA ANALYSIS

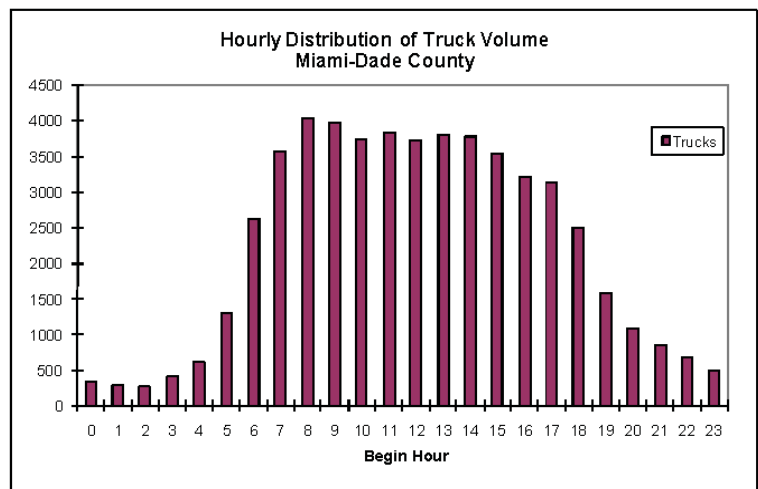
The existing roadway network, traffic and truck flow characteristics, deficiencies of existing freight facilities, and interrelationships between major freight nodes were assessed. The evaluation of existing conditions formed the basis for the identification of potential improvements. The major findings of the data analysis phase are summarized below.

Several major roadways in the western and central parts of the county currently operate at level of service (LOS) E or worse. The roadway grid network in the western part of the county is less defined (i.e., several roadway links that form the complete grid have not been built) in comparison to the eastern part of the county. As a result, arterials are used for both short and long distance trips. The lack of alternative roads results in increased traffic flow on major roadways, which leads to deterioration of level of service. Therefore, freight movement in the central corridor often experiences traffic congestion and excessive travel times.

The time-of-day distribution of truck and traffic flow on several major roadways within the study area was analyzed. The analysis indicated that approximately 86 percent of truck traffic and 80 percent of total traffic were observed between 6:00 A.M. and 7:00 P.M. In addition, the typical off-peak hours during the daytime (9:00 A.M. to 4:00 P.M.) are not evident in from the analysis. The data indicates that major roadways are experiencing at or near capacity conditions during much of the daytime. This analysis highlighted the need to develop strategies to encourage freight activities during the nighttime to take advantage of excess roadway capacity to move freight more efficiently.

Field reviews were conducted to examine the following freight facilities and roadways:

- **Commercial loading zones in Downtown Miami**
- **Port of Miami access routes**
- **Port of Miami River and access routes**
- **Miami International Airport cargo operations**
- **Warehouse District in Doral**



Delivery Vehicle Parked on Sidewalk

In Downtown Miami, the available commercial loading zones are often inadequate. This results in violation of parking rules such as parking in travel lanes, parking on sidewalks, exceeding time length restrictions, and double parking. Several potential strategies to address parking issues were identified, including commercial vehicle parking spaces in surface parking lots, extension of parking duration, and ITS applications to provide real time parking space availability information.

The roadway conditions of frequently utilized truck routes in Downtown Miami to access the Port of Miami were assessed. These roadways include Biscayne Boulevard, NE 5th and 6th Streets, and NE 1st and 2nd Avenues. Roadway improvements to better facilitate truck movements such as extension of left-turn storage, turn radii improvements, and roadway resurfacing were identified for further evaluation. The desired improvements in the vicinity of the Port of Miami River include a truck staging area and resurfacing of North River Drive.

The Warehouse District is a transit point for a significant portion of freight arriving at the Port of Miami, Port Everglades, and Miami International Airport. The Dolphin Expressway, Palmetto Expressway, Florida's Turnpike, NW 41st Street, and NW 25th Street are used to access the warehouses. The majority of freight movement to and from the warehouses takes place during the daytime. This results in severe congestion on local streets such as NW 25th Street and NW 41st Street. There is need to develop alternate routes from Miami International Airport to the Warehouse District to relieve NW 25th Street. On NW 25th Street, both geometric improvements and signal timing improvements are desired. Another desirable improvement is better access to the Florida's Turnpike from the Warehouse District to reduce truck traffic on local streets.



NW 25th Street at Palmetto Expressway

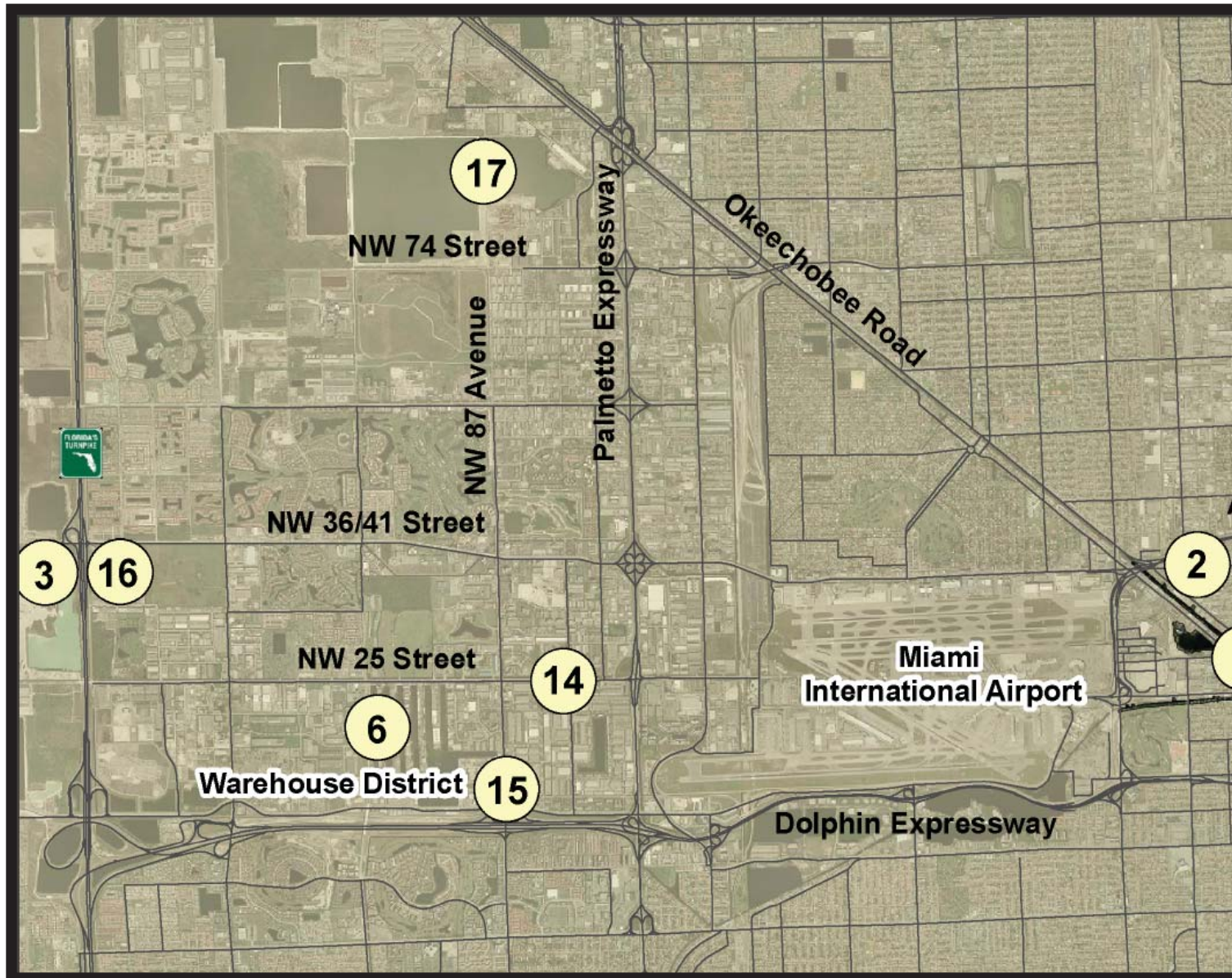
IMPROVEMENT STRATEGIES

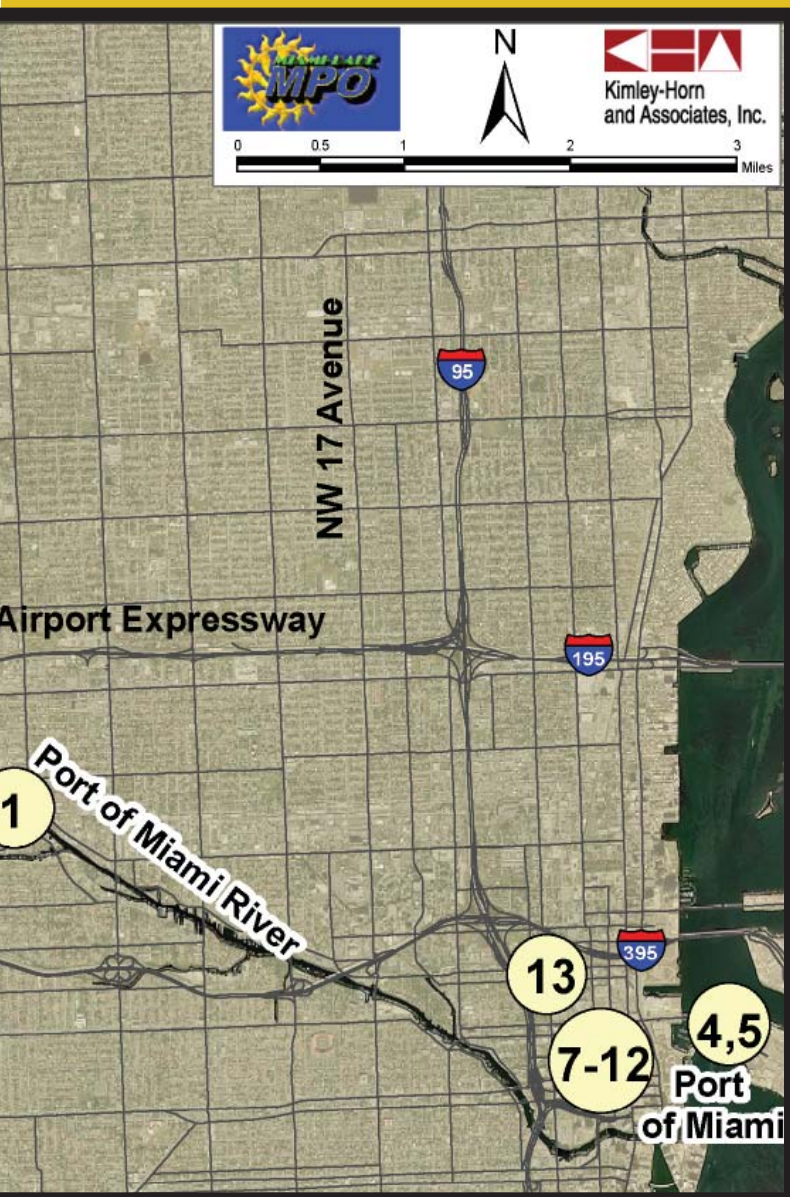
The results of data analysis and input from the Freight Transportation Advisory Committee (FTAC) were used to identify several potential improvement strategies. The following strategies were evaluated to determine their potential to improve freight movement in central Miami-Dade:

- **Strategy 1 – Short sea shipping**
- **Strategy 2 – Truck/intermodal freight facilities to serve the Port of Miami River and the Airport West Area**
- **Strategy 3 – Dedicated truck facilities**
- **Strategy 4 – Strategies to spread freight activity to off-peak periods**
- **Strategy 5 – Improvements to Downtown Miami commercial loading zones**
- **Strategy 6 – Roadway improvements**
 - ▶ Port of Miami access routes
 - ▶ Intersection improvements along NW 25th Street
 - ▶ Intersection improvements along NW 12th Street
 - ▶ Connection of NW 117th Avenue between NW 25th Street and NW 41st Street
 - ▶ Complete “missing link” projects identified in the Miami-Dade MPO’s 2030 Long Range Transportation Plan.

An evaluation of a dedicated truck toll facility (Strategy 3) between the Port of Miami and the Airport West area concluded that factors such as the associated cost, construction impacts, funding sources, revenue generation potential, and projected level of service do not support a dedicated truck facility. The recommended projects are summarized in Figure ES-1. A notable recommendation is to re-evaluate the 6th Street Slip Ramp due to several benefits including the potential to serve as maintenance of traffic route during the reconstruction of I-395 and improved access to SR 836 west and I-95 from Downtown Miami.

Figure ES-1: Recommended Projects





Project Reference Number and Description

1. Short Sea Shipping Pilot Project
2. Truck Facility Near NW 36th Street & NW 37th Avenue
3. Truck Facility Near HEFT & NW 41st Street
4. A Study to Exam Expansion of POM Hours of Operation
5. PierPASS Feasibility Study
6. Congestion Pricing Study for Doral
7. Expand Commercial Loading Zones in Downtown Miami
8. Commercial Vehicle Parking in Downtown Miami Surface Parking Lots
9. ITS Applications for Downtown Miami Parking
10. Increase Left-Turn Storage on Biscayne Blvd. at Port Blvd
11. Intersection Improvements on NE 6th Street at NE 1st Avenue
12. Improve NE 2nd Avenue between NE 5th Street and I-395
13. Re-evaluate 6th Street Slip Ramp
14. NW 25th Street Corridor Study
15. NW 12th Street Flyover at NW 87th Avenue
16. NW 117th Avenue Connection to HEFT at NW 41st Street
17. Expedite NW 87th Avenue Construction between NW 74th Street and NW 103rd Street



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