CORRADINO

EXECUTIVE SUMMARY

Truck Route System for Miami-Dade County

Submitted to:

Miami-Dade Metropolitan Planning Organization




Submitted by:

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Executive Summary

The Miami-Dade County Metropolitan Planning Organization (MPO) has prepared a Truck Route System Plan for Miami-Dade County. The MPO and its consultants have worked closely with the MPO's Freight Transportation Advisory Committee, the local trucking community, and affected local and state agencies in developing the plan.

Freight is a major issue in the transportation community. Transportation facilities, especially roads, are running out of the capacity needed to accommodate projected increases in goods movement. When combined with projected increases in day to day traffic, the ability of the transportation system to handle efficiently and safely even small increases in freight traffic is negligible. In an economy organized around fast and reliable delivery of goods, congestion is a huge variable in the cost of business and economic development. Congestion can also cost a community economic development, jobs, etc. In Miami-Dade County, both the airport and the port cite issues associated with loss of or projected loss of business because of congestion.

Literature/Community Review

As the interest in freight movement in recent years has grown, the number of studies done locally and nationally has increased. Some of those are noted in Table S-1 along with comments on their relationship to the proposed Miami-Dade Truck Route System.

In summary, what came out of the review is that most communities have relatively narrow freight/truck route system plans. The policies and plans that are in place generally include restricted lanes, roads, and areas and some signage. Some communities such as Atlanta are assessing the possibility of Truck-only-Toll (TOT) Lanes as a companion to High Occupancy Toll (HOT) Lanes being studied in other metropolitan areas, including Miami-Dade County.

Traffic Flows and Projections

Truck traffic in Miami-Dade County has historically been related to the middle of the County with the Port of Miami on the east and the Free Trade Zone on the west as key generators. Other major generators are the FEC rail yard, Miami International Airport, and the Miami River port. Over the last decade, the Doral area around the Free Trade Zone has grown into a major warehousing and distribution center. The major roads used by trucks – I-95, SR 836, SR 826, 25th Street, and others all have significant congestion. Trucks coming to and from the Port of Miami clog downtown streets. Figure S-1 shows Average Annual Daily Traffic (AADT) for 2000 and 2030. Given that today there are approximately 16,000 trucks per day on I-95, 10,000 on SR 836, and 13,500 on SR 826, and that these numbers will grow with traffic, it is clear that major capacity relief in the future will be critical to maintaining any kind of traffic flow. This becomes more critical every day because of the economic deterrent of rampant congestion on businesses considering starting up in or locating to the County. An additional component of improving truck traffic flow is regular traffic. Despite the perception of many people that trucks are everywhere, the reality is that most roads in the County have less than 10

percent trucks, which suggests that a truck-only solution on these already very congested facilities may not be feasible.

There are several projects in current planning that affect the truck route system. The first is the 25th Street Viaduct Project, which will connect the airport to the Doral Area using an elevated bridge over 25th Street. A second project is the Port Tunnel from the Seaport to I-395. This project, which is currently anticipated for completion in 2013 but which has been on again and off again for a number of years, will have a dramatic impact on truck traffic in downtown if built. These and others will be important elements of the truck route system. Perhaps even more critical is ensuring that the facilities designated as truck routes have the correct geometrics and signalization to facilitate efficient traffic movement for both autos and trucks.

Truck Route Management System

An extensive list of recommendations has been developed as part of the system plan. Some of the key recommendations are shown in Table S-2.

Building on these recommendations, the truck route management system proposed for Miami-Dade County was developed in concert with the FTAC, which served as the steering committee for the project. The system is based on the concept of designating key routes that connect major freight generators and roadway facilities. The first step in the development of the system was a workshop with the FTAC, which resulted in the identification of a number of key facilities in the central part of the County. The results of this workshop are shown in Figure S-2. Figure S-3 shows the proposed truck route system, which combines the initial thinking developed in the workshop environment with analysis of the overall County transportation system.

Implementation and Costs

The MPO has taken the lead in promoting a truck-supportive roadway environment in the County. Initially, the primary emphasis will be improving existing streets at a low cost level and at a major cost level building projects such as the Port Tunnel and the 25th Street Viaduct to separate trucks and traffic. A second key element will be the ability of the public and private sector to embrace technology to provide truckers better information about how and where to go to best make their trips. The bottom line is these improvements and others are going to have a huge cost. But, the cost of congestion will be equally huge. With the support and leadership of the MPO, this plan is a starting point for creating a truck-supportive and friendly roadway environment.

Table S-1
Summary of Literature Review

Studies	Purpose	Recommendation	Position
Freight Movement Study	1. Improve Freight Traffic Movement. 2. Recommendations for incorporating freight movement to Miami-Dade's transportation planning process.	1. Dade County Freight and Truck Committee 2. Modify Dade County Travel Model to Include a Truck Element 3. Conduct Origin-Destination/Travel Survey Suitable for Dade County Travel Model 4. Conduct Industry/Location Specific Surveys 5. Improve Monitoring of Truck Traffic on the Roadways	Supportive
Short Range Truck Traffic Study for the Airport West Area	Develop a set of standards and an implementation plan to better accommodate truck traffic and commercial truckers' needs in the Airport West Area.	1. Intersection Improvements 2. Operational Improvements 3. Travel Behavior Change Improvements	Neutral
Trends in Heavy Truck Traffic	Develop recommendations for a heavy truck management program for Miami-Dade County.	1. Identify program leadership. 2. Establish a Technical Advisory Committee 3. Develop program strategy and operations plan. 4. Define implementation activities. 5. Establish ongoing program monitoring activities	Neutral
Cross Harbor Freight Movement	Evaluate several alternatives to move freight between locations.	▪ An enhanced and expanded regional railcar float system should be implemented. ▪ Improved height clearances should be advanced in the East of Hudson region to allow the use of modern rail equipment. ▪ Additional intermodal, bulk, and classification rail freight yards should be developed in New York City. ▪ The rail freight tunnel should be advanced, since no substantial diversion of freight from truck to rail will occur without a direct rail link across New York Harbor.	Supportive
San Francisco Regional Goods Movement Study	Determine the economic significance of goods movement in the area. Determine the most appropriate investment strategies in moving goods. Build consensus.	▪ Ensure freight firms remain economically viable ▪ Provide for the effacing movement of goods ▪ Improve the movement system ▪ Support Smart Growth strategies ▪ Coordinate City/County plans ▪ Provide priority consideration for projects that improve truck routes	Supportive

Table S-1 (continued)
Summary of Literature Review

Studies	Purpose	Recommendation	Position
Sarasota/Manatee Counties Freight Movement Study	Database development of a freight movement characteristics and pattern. Identification of current and future needs facing freight movement. Identification of possible improvements and actions for freight needs.	▪ Minimize operational impacts of heavy trucks ▪ Evaluate and rank truck corridors operating performance ▪ Improve operational characteristics of truck corridors	Supportive
Broward County Freight and Goods Movement Study	Develop a framework for an integrated freight program for Broward County.	▪ Implement Wide Ranging Strategies Including: ▪ Infrastructure Strategies ▪ Policy Strategies ▪ Operational/Technological Strategies ▪ Freight Program Enhancement Strategies ▪ Infrastructure Strategies	Supportive
Freight and Hazardous Materials Movement Study	Assist area decision makers in developing a freight transportation infrastructure that enhances safety, security, efficiency, and economy in the study area.	▪ Identify Projects That Increase Truck Movement in the Area ▪ Develop Additional Local Data on Freight Movements ▪ Coordinate With Freight Community	Neutral
Chittenden County Regional Freight Study	Incorporate freight transportation planning into its regional transportation planning process.	▪ Incorporate Study Findings Into MPO Transportation Plan ▪ Develop Freight Specific Projects ▪ Work with DOT to Prepare An Action Plan ▪ Develop Stakeholders Forum	Supportive to Neutral
Atlanta Truck-only Toll Facilities Study	Examine the feasibility and benefits of truck-only toll lanes in the Atlanta area	▪ Three scenarios examined ▪ All would have positive results ▪ Continue studies of more detailed scenarios	Supportive
Georgia DOT Truck-only Lanes Study	Examine the need for exclusive truck-only lanes in corridors throughout the state, with Savannah serving as the primary focus area.	▪ Study is ongoing and no findings have been published.	Supportive
New York DOT Truck Route Management and Community Impact Study	Study ways to improve truck movements and protect neighborhoods from adverse impacts.	▪ Recommendations in several areas including signage, enforcement, engineering and routing, and education.	Supportive

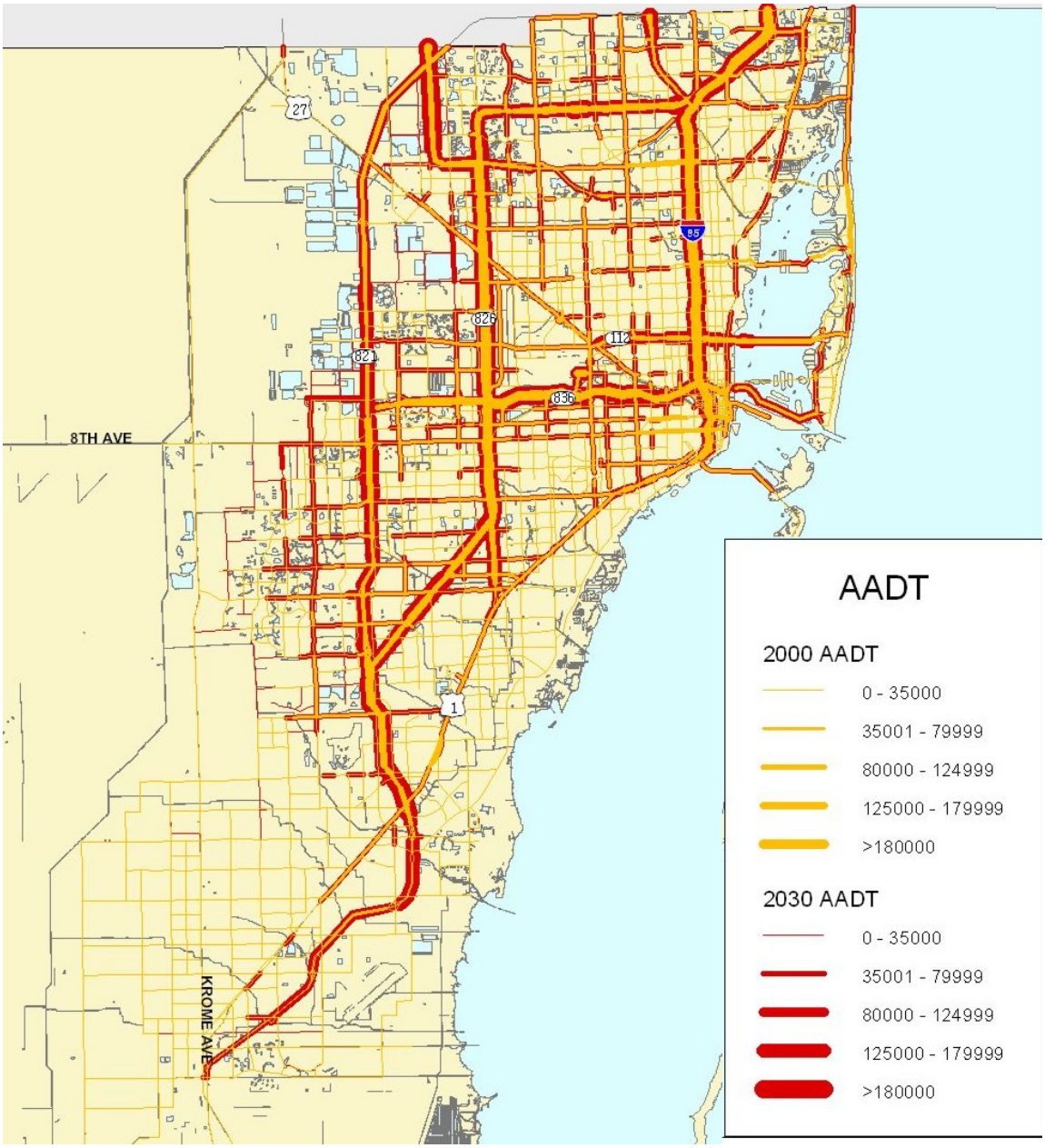
Source: The Corradino Group, Inc.

Table S-2
Partial List of Truck Route System Recommendations

Facility	Project	Policy	Responsible Agency
All Routes	Uniform maintenance and signage based on facility type (expressways, major arterials, minor arterials, local streets)	Fund truck-favorable improvements; continue to develop technology via internet access to improve information to community.	
I-95	Ramp metering, managed lanes, slip ramp at NW 6th Street	Promote truck access to the current HOT lanes proposal if implemented.	Florida Department of Transportation (FDOT)
SR 826	Widen/add lanes. Complete full interchange with SR 836. Add ramp lanes to increase storage for exiting trucks. Elevated flyover for auto traffic at Golden Glades. Free barriered truck lane with manageable entry/exit.	If truck-only lane added, trucks would be restricted in traffic lanes.	FDOT
US 27/Okeechobee Road	Redesign and replace bridges across Miami River Canal. Improve North River Drive.	Emphasize as a major truck route corridor; support continued FDOT improvements.	FDOT
SR-836	Elevated lanes with auto traffic elevated and truck traffic on surface. Consider truck-only toll lane on CSX corridor paralleling SR 836. Build connector with SR 112.	Support east-west passenger rail project to reduce passenger vehicle volumes.	Miami-Dade Expressway Authority (MDX)
Port of Miami	Expanded entry/exit gates; consider expansion of hours of operation; construct projects such as I-95 NB slip ramp at NW 6th Street; build Port Tunnel.	Major economic engine in County. Congestion tied directly to loss of business revenue and growth.	Port of Miami/ FDOT/DPW
NW 25th Street/NW 87th Avenue	25th Street Viaduct	Promote construction of entire project.	FDOT
Krome Avenue	Four-lane entire facility	Will experience tremendous freight growth in next twenty years.	Miami-Dade County

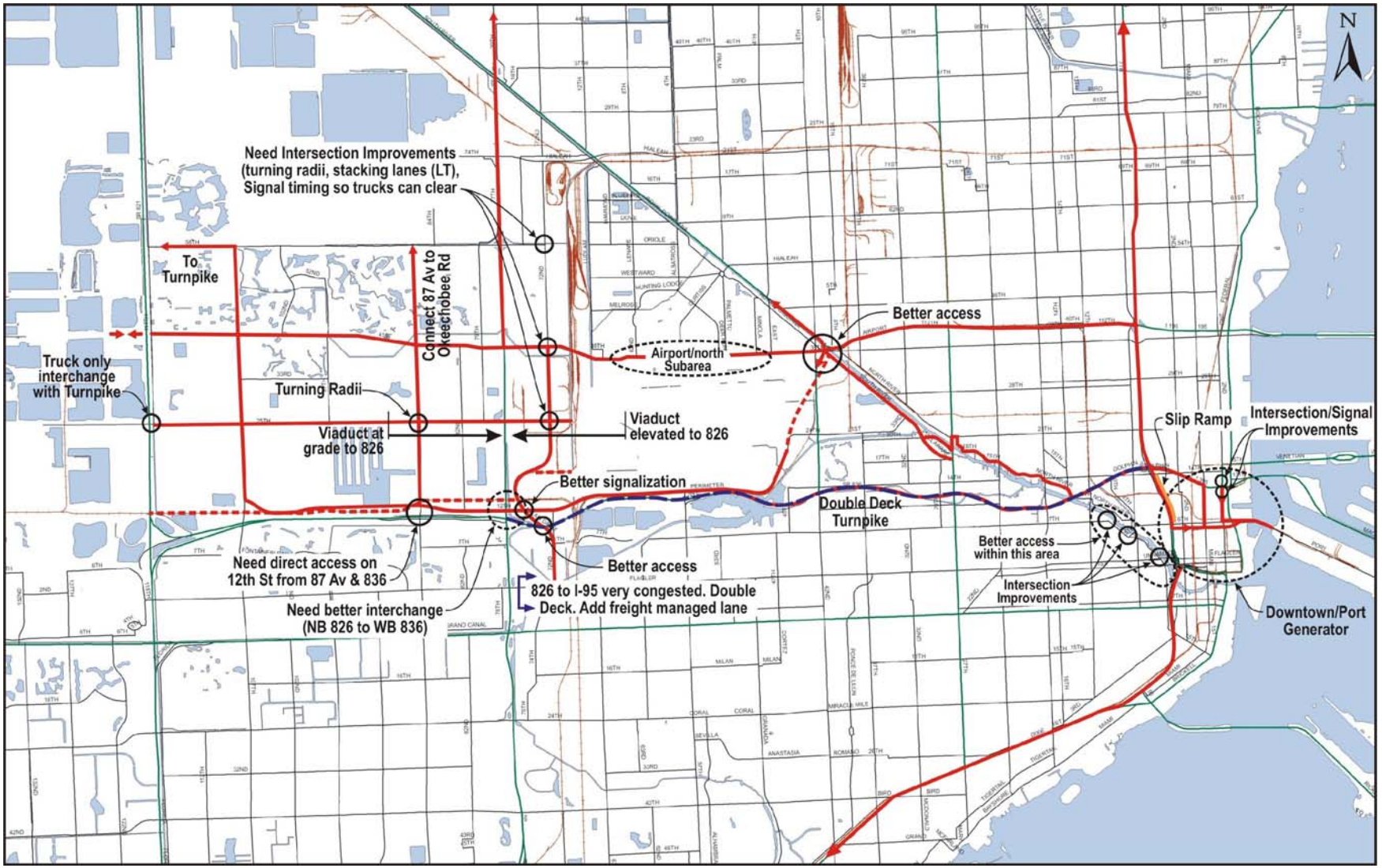
Source: The Corradino Group, Inc.

Figure S-1
2000/2030 AADT



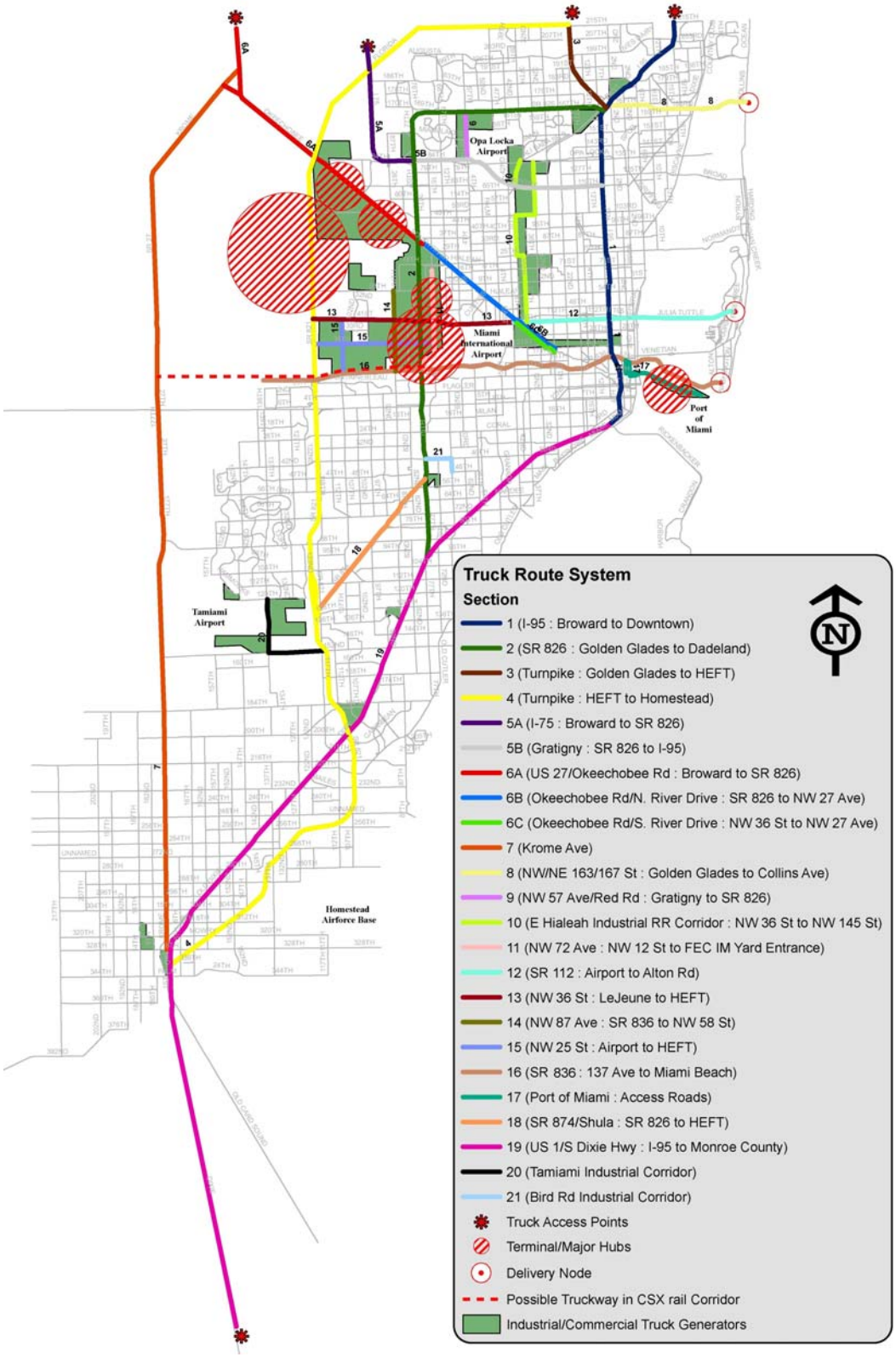
Source: The Corradino Group, Inc.

Figure S-2
Concepts from FTAC



Source: The Corradino Group,

Figure S-3
Miami-Dade County Truck Route System



Conclusions

As the MPO implements its Truck Route System for Miami-Dade County, the following activities are recommended:

1. Work with responsible agencies to identify operational issues on roads defined as part of the system and incorporate specific design parameters into future projects on truck roads.

2. Develop and implement signage program with uniform signage consistently placed on facility type (similar logo but different designs and fonts for expressways, major arterials, minor arterials, and local streets).

3. Identify and monitor municipalities with truck restrictions and maintain a freight information Web site that trucks and companies can access for information on current streets with truck restrictions as well as construction updates and other factors in the truck route system routes.

4. Continue to encourage strong participation through FTAC in the planning process.

5. Support truck-only and/or major capital projects such as the Port Tunnel, elevated lanes on 836, and other projects that will facilitate efficient and timely movement of trucks at all times of day.

6. Explore concept of truck-only or truck-only toll lanes in rail corridor in the County with no or limited rail service with particular emphasis on east-west connections.

It is clear that since the mid-1990s, the MPO has and will continue to provide direction to the various state, regional, and local agencies building and maintaining the County's transportation infrastructure. This is a critically important benefit to the economy of Miami-Dade County and southeast Florida as a whole. With the support and leadership of the MPO, this plan is a starting point for creating a truck-supporting and friendly roadway environment.