

EXECUTIVE SUMMARY

#GPC IV-21

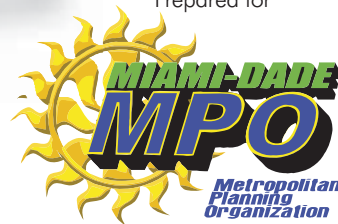
Development of Truck Parking Facilities in Miami-Dade County Phase II



Options for Implementation



Prepared for



Revised November 2012

Prepared by



Development of Truck Parking Facilities in Miami-Dade County Phase II: Options for Implementation

Executive Summary

Prepared for:



Miami-Dade County Metropolitan Planning Organization
(Miami-Dade MPO)

Prepared by:



Kimley-Horn and Associates, Inc.
Fort Lauderdale, Florida

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EXECUTIVE SUMMARY

STUDY PURPOSE

The Miami-Dade Metropolitan Planning Organization (MPO) conducted the *Development of Truck Parking Facilities in Miami-Dade County Phase II* to serve as a guide for implementing truck parking facilities it builds upon the *Comprehensive Parking Study for Freight Transport Phase I*. The potential truck parking locations identified in Phase I were examined in greater detail and additional truck parking locations were identified. These locations were analyzed in a detailed screen analysis.

Three (3) screening processes were used to analyze the potential truck parking locations. The screening process included a preliminary screen, initial detailed screen, and in-depth detailed screen. The preliminary screen concentrated on distinguishing between local trucking and interstate trucking, focusing on interstate trucking and identifying parcels where truck parking is allowed that are within 1-mile of interstate interchanges and greater than 10 acres. The initial detailed screen verified folio numbers, assessed adjacent land uses, identified usable site acreage, and determined truck routes in relation to truck parking locations, and limited potential locations to sites north of SW 8th Street within the Urban Development Boundary (UDB) and with paved access. The in-depth detailed screen assessed the neighborhood impacts, parcel distance from freeways, site visibility from freeway, freeway truck percentages, property proximity to terminal-major hubs/industrial-commercial truck generators, site accessibility, and developed a land cost feasibility threshold.

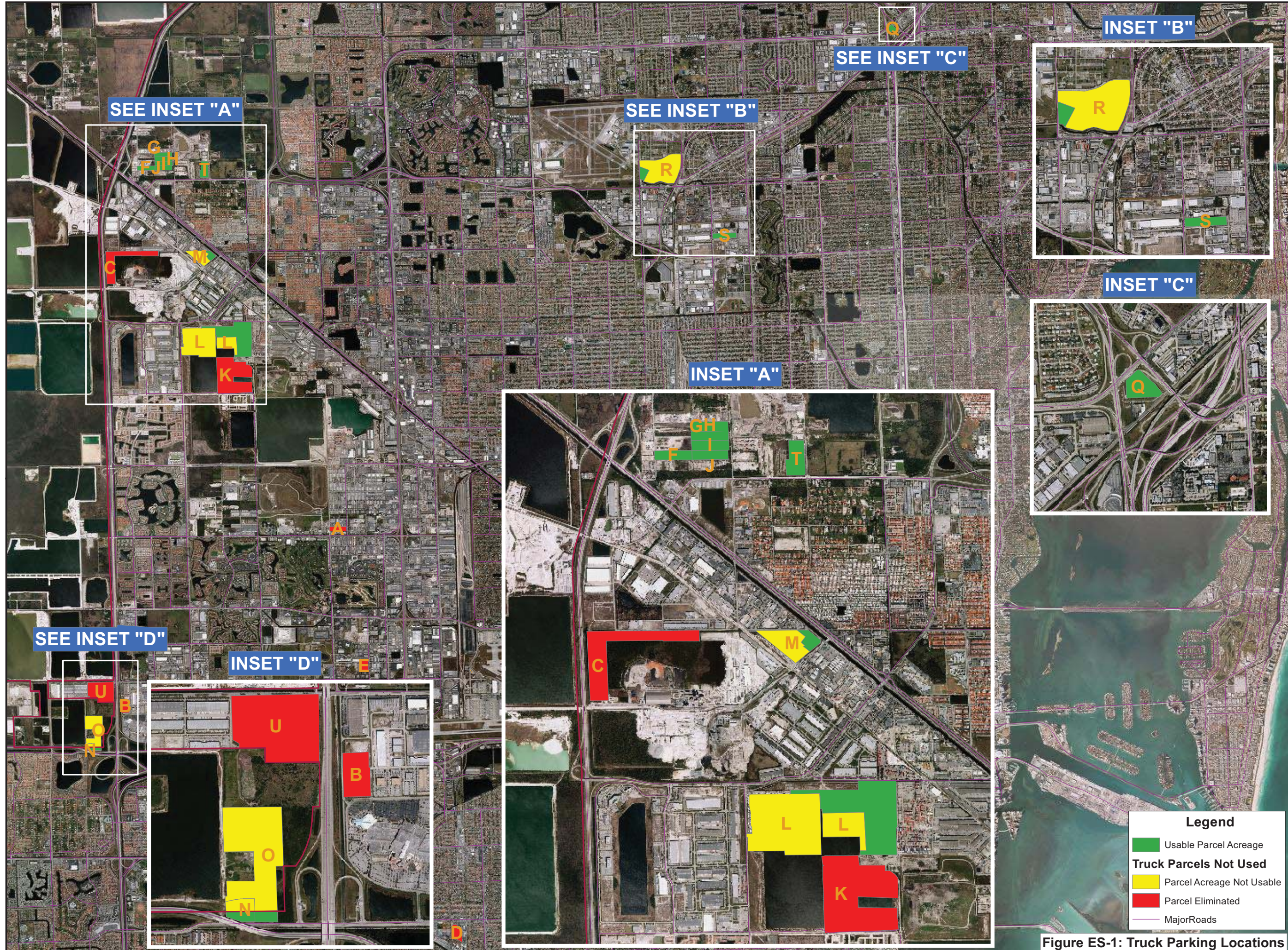
Prototype sites were developed to assist developers and land owners in determining truck parking layouts and amenities for the facilities. Local and national overnight truck parking facilities were also examined and used to determine the specific amenities to be considered in the conceptual/prototype design. Order of magnitude costs were prepared to estimate the financial capital required for site development.

Business models were developed which included private sector/private sector partnership and public sector/private sector partnership. Financing options including public and private sector alternatives for developers and land owners were developed. This was followed with action plan development related to the political jurisdiction of each site.

IN-DEPTH DETAILED SCREENING ANALYSIS

Thirteen (13) potential overnight truck parking locations along with the eight (8) eliminated locations are graphically depicted in Figure ES-1. Of the 13 total potential truck parking locations, five (5) are located in City of Hialeah Gardens, two (2) each in City of Medley, City of Opa Locka, and Unincorporated Miami-Dade County; and one (1) each in City of Miami Gardens and City of Hialeah.

A total of nine (9) combined sites were examined in the in-depth detailed screen. Table ES-1 provides the detailed screen for the potential truck parking sites. The in-depth detailed screen



SEE INSET "A"

SEE INSET "C"

INSET "B"

SEE INSET "B"

INSET "C"

INSET "A"

SEE INSET "D"

INSET "D"

Legend

- Usable Parcel Acreage
- Truck Parcels Not Used**
- Parcel Acreage Not Used
- Parcel Eliminated
- Major Roads

Figure ES-1: Truck Parking Locations

Table ES-1: In-Depth Detailed Screen

Truck Parking Location	Address of Nearest Intersection	Site Acreage/ Usable Acreage	Neighborhood Impact	Distance to Freeway	Parcel Visibility from Freeway	Current Freeway Truck Percentages	Within Terminal-Major Hub/Industrial-Commercial Truck Generators	Site Accessibility	Future 2030 Truck Volumes	Total Site Appraised Value	Cost per Usable Acre	Below \$1,135,500 Land Cost Feasibility Threshold
F	NW 112 th Avenue and North Okeechobee Road (Hialeah Gardens)	10.00/10.00	Existing truck parking facility and vacant land	SR 821/Florida's Turnpike HEFT: 0.52 miles I-75: 2.66 miles SR 826/Palmetto Expressway : 3.85 miles	Yes	HEFT: 2.70% I-75: 1.78% SR 826: 2.83%	No/Yes	Poor	High	\$697,750	\$69,800	Yes
G,H, I, J	NW 107 th Avenue and NW 138 th Street (Hialeah Gardens)	10.00, 10.00, 10.00, 9.53/10.00, 10.00, 10.00, 9.53 Total: 39.53/39.53	Industrial and vacant land	SR 821/Florida's Turnpike HEFT: 1.28 miles I-75: 1.88 miles SR 826/Palmetto Expressway : 3.08 miles	Yes	HEFT: 2.70% I-75: 1.78% SR 826: 2.83%	No/Yes	Poor	High	\$927,000 \$927,000 \$2,439,360 \$2,036,254 Total: \$6,329,614	\$92,700 \$92,700 \$243,900 \$213,700 Avg: \$160,100	Yes
L	NW 106 th Street and NW 97 th Avenue (Medley)	257.95/84.56	Industrial and mobile home park in immediate area	SR 821/Florida's Turnpike HEFT: 1.90 miles I-75: 2.96 miles SR 826/Palmetto Expressway : 3.96 miles	No	HEFT: 2.70% I-75: 1.78% SR 826: 2.83%	No/Yes	Average	High	\$11,903,819	\$140,800	Yes
M	NW 122 nd Street and NW South River Drive (Medley adjacent to Pilot/Flying J Truck Stop)	29.63/7.26	Industrial	SR 821/Florida's Turnpike HEFT: 1.91 miles I-75: 2.57 miles SR 826/Palmetto Expressway : 3.54 miles	No	HEFT: 2.70% I-75: 1.78% SR 826: 2.83%	Yes/Yes	Average	High	\$10,327,896 (exclusive of FedEx facility)	\$348,600	Yes
N,O	NW 12 th Street and HEFT (FDOT Parcel) [Unincorporated]	7.46, 55.86/3.49, 2.69 Total: 63.32/6.18	Vacant land, business park, and adjacent single family residential to south	SR 821/Florida's Turnpike HEFT: 0.41 miles SR 836/Dolphin Expressway: 1.91 miles	Yes	HEFT: 1.83% SR 836: -	No/No	Average	Low	\$1,045,380 \$3,285,260 Total: \$4,330,640	\$299,600 \$1,221,300 Avg: \$700,750	Yes
Q	Seaboard Road (FDOT Parcel Golden Glades Site) [Miami Gardens]	5.85/5.85	Primarily industrial	I-95: 2.15 miles SR 826/Palmetto Expressway: 0.47miles Florida's Turnpike: 0.36 miles	Yes	HEFT: 1.83% SR 836: -	No/Yes	Average	Low	\$253,756	\$43,400	Yes
R	As of Notice on November 15, 2012, a recent Federal Aviation Administration (FAA) guideline related to the Runway Protection Zone in which parcel R is located in, is no longer eligible for any type of vehicle parking facility. Therefore, this location is eliminated.											
S	3025 NW 123rd Street (Gratigny Expressway)	16.88/16.88	Warehouse and industrial	SR 924/Gratigny Expressway: 0.68 miles SR 826/Palmetto Expressway/I-75: 5.20 miles	Yes	SR 924: 2.14% SR 826: 2.83%	No/Yes	Preferred	Low	\$2,538,500	\$150,400	Yes
T	10350 NW 142nd Street (Hialeah)	17.56/17.56	Existing truck parking facility, vacant land, and adjacent single family residential to south	SR 821/Florida's Turnpike HEFT: 1.92 miles I-75: 1.48 miles SR 826/Palmetto Expressway : 3.04 miles	No	HEFT: 2.70% I-75: 1.78% SR 826: 2.83%	No/Yes	Average	High	\$3,512,000	\$200,000	Yes

considered the following evaluation criteria: neighborhood impacts, distance to freeways, site visibility from freeway, freeway truck percentages, within proximity of terminal-major hub/industrial-commercial truck generators, site accessibility, future 2030 truck volumes, and land cost feasibility threshold.

Table ES-2 summarizes the truck parking locations and provides notes specific to each location.

Table ES-2: Overnight Truck Parking Locations

Truck Parking Location	Address of Nearest Intersection	Notes
F	NW 112 th Avenue and North Okeechobee Road (Hialeah Gardens)	Serves as existing truck parking facility but lacks amenities.
G	NW 107 th Avenue and NW 138 th Street (Hialeah Gardens)	Can be combined with locations H,I, and/or J to provide maximum of 40 acre site.
H	NW 107 th Avenue and NW 138 th Street (Hialeah Gardens)	Can be combined with locations G,I, and/or J to provide maximum of 40 acre site.
I	NW 107 th Avenue and NW 138 th Street (Hialeah Gardens)	Can be combined with locations G,H, and/or J to provide maximum of 40 acre site.
J	NW 107 th Avenue and NW 138 th Street (Hialeah Gardens)	Can be combined with locations G,H, and/or I to provide maximum of 40 acre site.
L	NW 106 th Street and NW 97 th Avenue (Medley)	Large parcel (84.56 usable acres) located in Medley industrial area.
M	NW 122 nd Street and NW South River Drive (Medley adjacent to Pilot)	Site can be used to expand the adjacent Pilot/Flying J Truck Stop.
N	NW 12 th Street and HEFT (FDOT Parcel)	Combine with Parcel O (5.8 acres within existing UDB, remainder of site outside UDB)
O	NW 12 th Street and HEFT (FDOT Parcel)	Combine with Parcel N
Q	Seaboard Road (Miami Gardens Site)	Small parcel (5.85 usable acres)
R	As of Notice on November 15, 2012, a recent Federal Aviation Administration (FAA) guideline related to the Runway Protection Zone in which this parcel is located in, is no longer eligible for any type of vehicle parking facility. Therefore, this location is eliminated.	
S	3025 NW 123rd Street (Gratigny Expressway)	Parcel is paved and located within warehouse and industrial area.
T	10350 NW 142nd Street (Hialeah)	Serves as existing truck parking facility with perimeter fence and lighting but lacks amenities.

OVERNIGHT TRUCK PARKING PROTOTYPE DEVELOPMENT

Conceptual site plans were developed for a prototype truck parking facilities. Three (3) site concepts were examined, including a 5-acre, 10-acre, and 40-acre site. The majority of sites examined in the detailed screen are approximately 10 acres and rectangular in shape. All sites should provide a secured perimeter fence along the property and parking lot lighting, with closed-circuit television (CCTV) cameras throughout the site.

Figure ES-2 illustrates the 10-acre site layout. This layout can be applied to various locations including Locations F, G, H, I, J, and R.

Site Development Cost

Order of magnitude site development costs were developed for the 5, 10, and 40-acre prototype sites. The purpose of these site development costs is to provide planning level estimates related to the development of the three (3) prototype sites.

Cost estimates were based on several sources, including vendor provided information, local area construction costs, and the FDOT pricing vendor for the sites. A summary of the costs per site is provided in Table ES-3. The costs include general site development, drainage, water system, sanitary sewer system, building, fueling station, electrical services, landscaping and irrigation, and miscellaneous items.

Since truck electrification is one of higher costs associated with a truck parking facility, the overall site costs were developed for three scenarios. These scenarios are (1) providing truck electrification for all parking spaces, (2) providing truck electrification for 50 percent of the parking spaces, and (3) providing truck electrification for 25 percent of the parking spaces.

Table ES-3: Site Development Costs

Truck Parking Acreage	Cost with Truck Electrification for all Parking Spaces	Cost with Truck Electrification for 50 Percent of Parking Spaces	Cost with Truck Electrification for 25 Percent of Parking Spaces
5	\$3,800,000	\$3,400,000	\$3,100,000
10	\$5,600,000	\$4,600,000	\$4,100,000
40	\$16,800,000	\$11,800,000	\$9,400,000

K:\FTL_0170\0408200205-10021 Dev Truck Parking Facilities\CAD\02 24 12 Site Layouts with Electrification\ES-2 Layout Concept.dwg Aug 08, 2012 vladimir.welaso
 REFERENCE: 10 ACRE PROTOTYPE
 THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND EXHIBITS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SERVICE PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE
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- ① 10,000 S.F. Building
- ② 3,050 S.F. Truck Wash (100'x30.5')
- ③ 1,000 S.F. Maintenance Facility
- ④ Diesel Fuel Pumps
- ⑤ Vehicle Fuel Pumps
- ⑥ Leaky Load Containment
- ⑦ Street Light and CCTV Camera Locations
- ⑧ Secured Perimeter Fence
- ⑨ HVAC - Internet - Hook up
- ⑩ 99 Truck Parking Spaces

FIGURE ES-2 10-ACRE PROTOTYPE	 NORTH
PROJECT NO. _____ DRAWING NAME _____ OF _____	SCALE (H): 1"=120' SCALE (V): NONE DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____ DATE: _____
 Kimley-Horn and Associates, Inc. <small>© 2011 KIMLEY-HORN AND ASSOCIATES, INC. 7878 North 16th Street, Suite 300 Phoenix, Arizona 85020 (602) 944-5000</small>	
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BUSINESS MODEL DEVELOPMENT AND FINANCING/FUNDING

In order to obtain financing, attract private investment, and operate a viable truck parking facility, a well-developed business plan is needed.

Two (2) business models were examined for overnight truck parking facilities: private sector/private sector partnerships and public sector/private sector partnerships. The private sector/private sector partnership model aligns private businesses to develop the facility. Partnerships can range from a land owner teaming with a fuel provider or a truck wash operator, to the business owner partnering with a financing firm. Several private companies such as US Energy Capital Corporation and PetroMac specialize in financing retail petroleum and convenience store business ventures.

The public sector/private sector partnership involves public sector assistance with real estate locations, providing financial and/or tax incentives for development, and streamlining the permitting process. The public sector can provide financing through the Miami-Dade County Industrial Development Authority with bonding financing, BAC Funding Corporation with minority business assistance, and Small Business Administration (SBA) funding through 504 Loans.

CONCLUSION

This study developed options for implementing overnight truck parking for Miami-Dade Dade County due to the severe shortage of overnight truck parking within the County. Input was obtained from the Freight Transportation Advisory Committee which served as the study advisory committee, Miami-Dade County Public Works Department, and Florida Department of Transportation. This study is a unique effort for the MPO, as the target audience for this study is not the typical public agency but rather the private sector, specifically land owners and potential developers of truck parking facilities. This study provides information that may facilitate the partnerships likely to be required to advance the development of truck parking facilities in Miami-Dade County.