2018

MIAMI-DADE COUNTY FREIGHT PLAN UPDATE

2045 Long Range Transportation Plan Steering Committee Webinar

July 6, 2018









AGENDA

- Introduction
- Existing Conditions
 - Truck
 - Seaport
 - Rail/Intermodal
 - Airport
 - Warehousing
- Freight Issues
 - Cargo Theft
 - Truck Parking
- Performance Measures
- Multi-Modal Project Needs
- FLZ Application
- Q and A



2014 to 2018 Freight Plan "Update"





IMPLIN Engineering, Inc. 15900 SW 283th Street, Ste. 208 Marri, FL 33333 P. 305.477.7575 www.mishintengineering.com MARLIN



INDUSTRY COORDINATION



Stakeholder Advisory Team

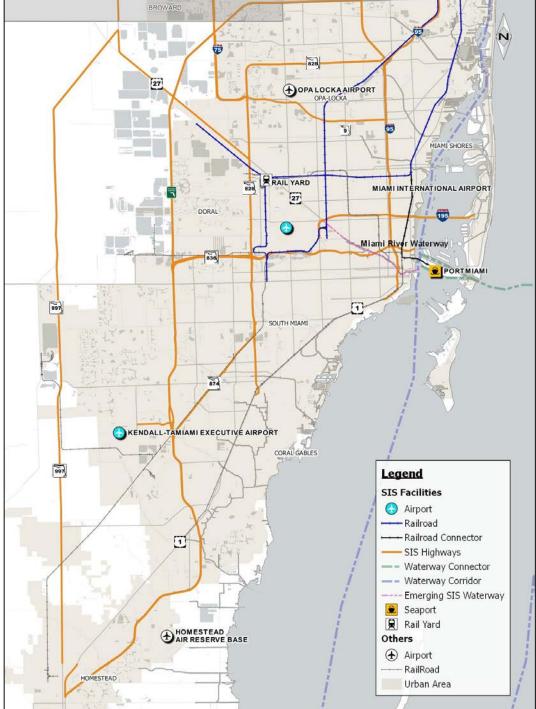
- CSX Transportation
- Miami-Dade Transportation and Public Works
- Florida East Coast Railway
- Florida Department of Transportation District 6
- Florida's Turnpike Enterprise
- Miami-Dade Aviation Department
- Miami-Dade Expressway Authority
- PORTMiami

TPO Freight Transportation Advisory Committee Presentations

Municipal Outreach for Local Freight Plans and Projects



Miami-Dade County Multi-Modal Freight Network



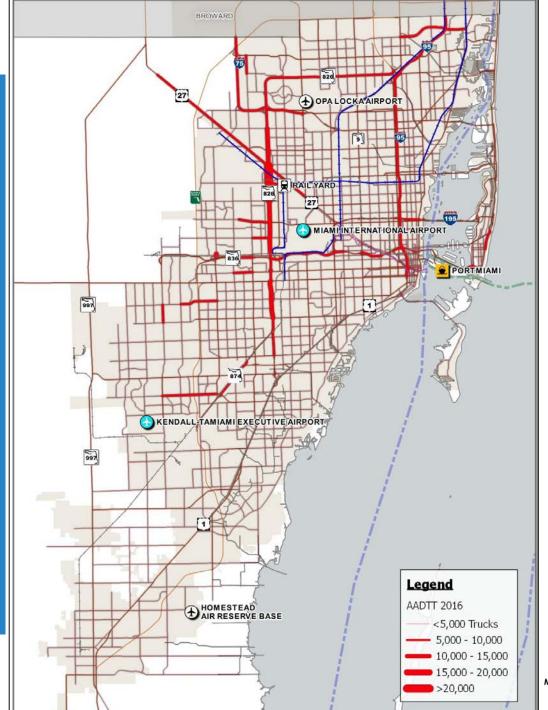


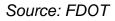
National Highway Freight Network





2016 Daily Truck Volumes

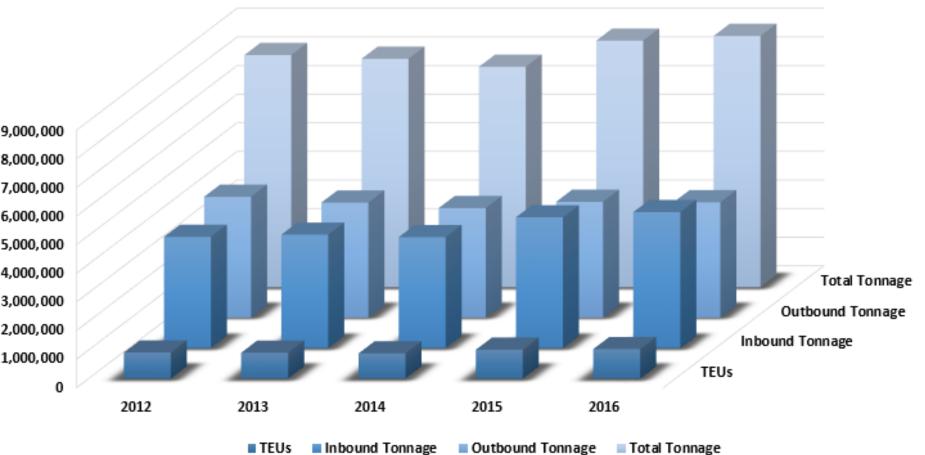






PORTMiami

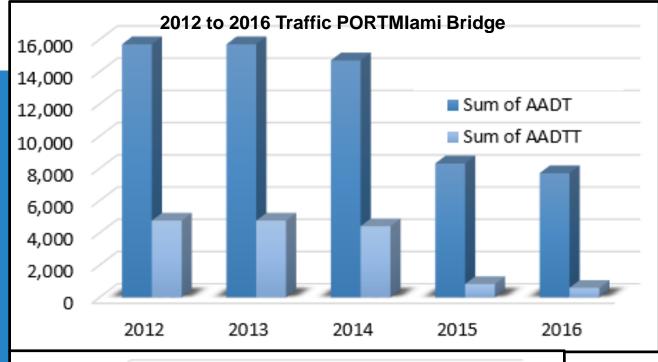
2012 to 2016 Freight PORTMiami Throughput

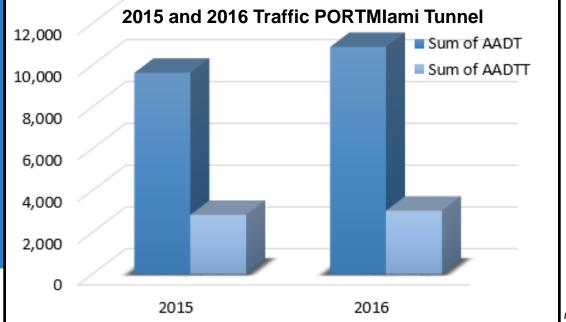


Source: http://www.miamidade.gov/portmiami/cargo.asp



PORT Miami Truck/Traffic Access

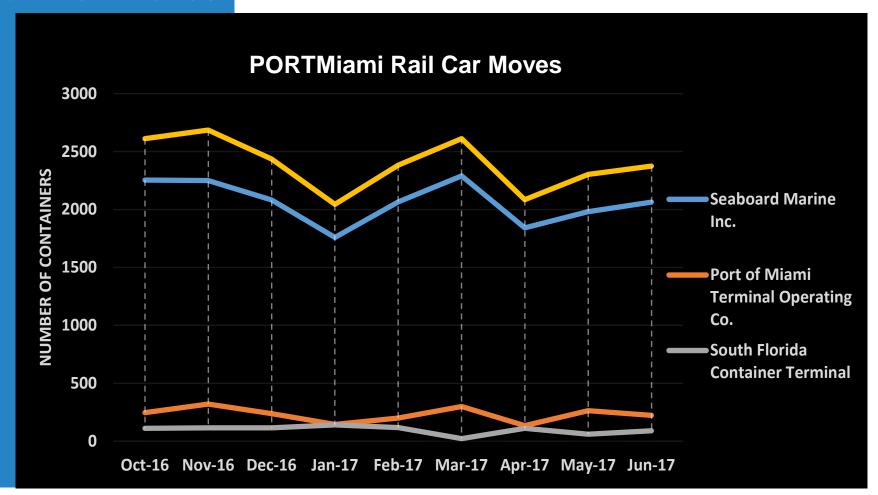




Source: FDOT

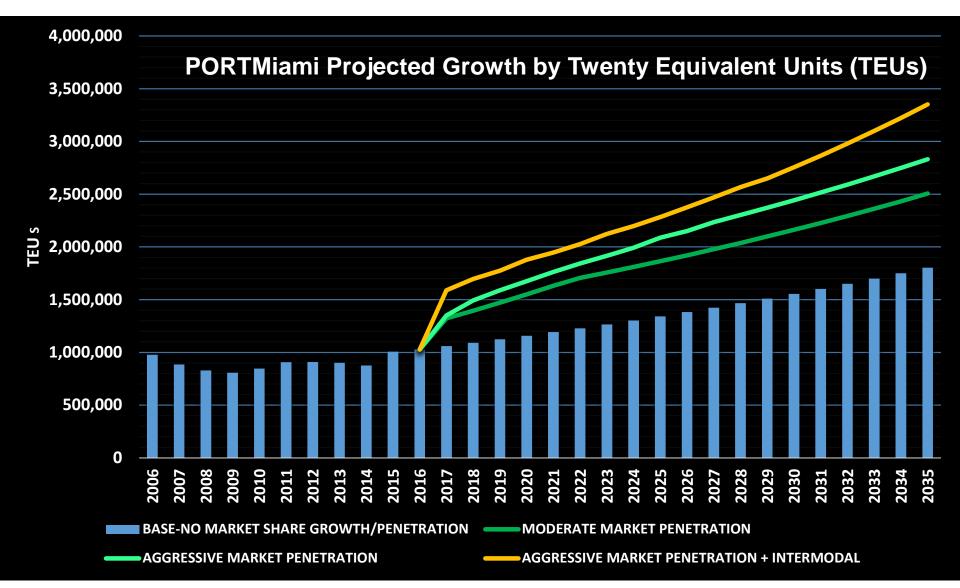


Port Rail Moves





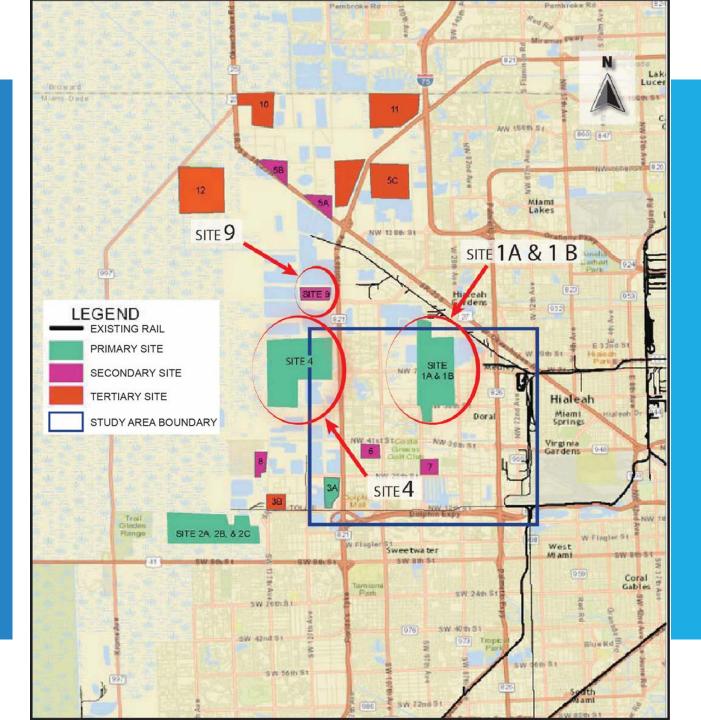




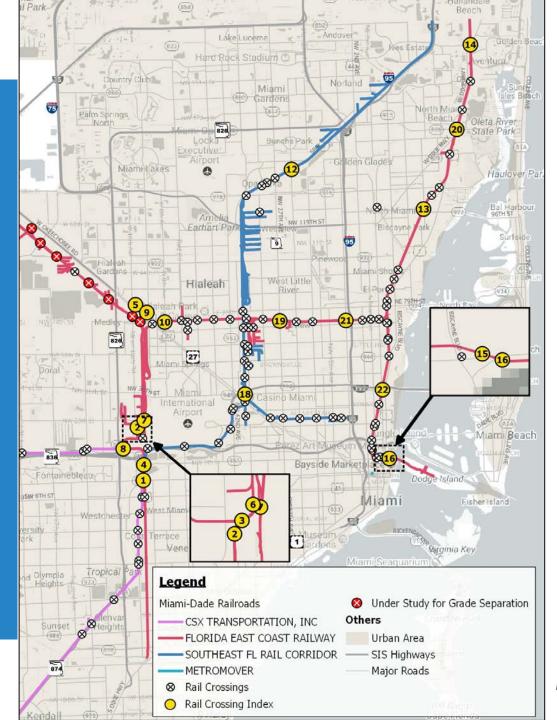


PORTMiami Potential Inland Terminal Sites

(Sites 1A&B, 4 and 9 reviewed for concepts in FDOT 6 Doral Subarea Freight Plan)



Railroad Network and Strategic Crossings





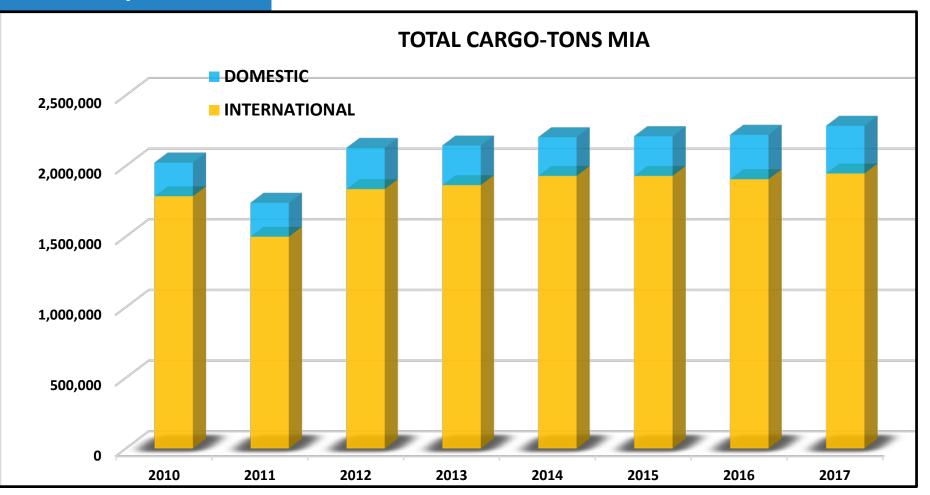
Railroad Crossing Data at Strategic Locations

Miami-Dade Strategic Rail Crossings													
Map Index #	RR Street Crossing	Primary Operating Railroad	Crossing number	Position	Туре	Rail Crash History (2012- 2016)	Roadway	Total Serious Injuries	FRA Rail Crossing Crash Prediction Index	# of trains	Max Speed	AADT	Conflicts (#Trains x AADT)
12	NW 22nd Ave	SFRC	628320N	At Grade	Public	2	4	0	18.0%	55	79	30,500	1,677,500
19	NW 27th Ave	FEC	272717K	At Grade	Public	1	0	0	6.8%	22	35	27,300	600,600
14	NE 203rd St	FEC	272596P	At Grade	Public	0	1	0	6.3%	34	50	49,600	1,686,400
16	Port Boulevard	FEC	272960A	At Grade	Public	1	0	0	5.7%	3	25	9,999	29,997
20	NE 163rd St	FEC	272604E	At Grade	Public	0	0	0	5.7%	18	45	44,500	801,000
18	NW 36th St	SFRC	628377P	At Grade	Public	0	0	0	4.6%	43	45	20,700	890,100
1	W Flagler St	CSX	631055E	At Grade	Public	1	0	1	4.3%	1	25	47,500	47,500
10	W 8th Ave	FEC	272748J	At Grade	Public	N/A	0	0	2.6%	21	35	17,500	367,500
7	NW 25th St	FEC	272776M	At Grade	Public	0	0	0	2.2%	6	20	21,512	129,072
9	NW 74th St	FEC	272755U	At Grade	Public	0	4	0	2.2%	18	20	2,485	44,730
5	Milam Dairy Road	FEC	272780C	At Grade	Public	0	0	0	1.6%	6	20	30,825	184,950
8	Milam Dairy Road	CSX	628536U	At Grade	Public	0	0	0	1.4%	1	10	23,500	23,500
2	NW 22nd St	FEC	272779H	At Grade	Public	0	0	0	1.4%	6	20	2,712	16,272
22	NE 36th St	FEC	272633P	At Grade	Public	0	0	0	1.1%	4	15	15,500	62,000
3	NW 70th Ave	FEC	272778B	At Grade	Public	0	0	0	0.9%	6	20	4,558	27,348
6	NW 26th St	FEC	272899Y	At Grade	Public	0	0	0	0.6%	6	15	101	606
13	NE 125th ST	FEC	272612W	At Grade	Public	1	0	0	0.1%	18	45	33,350	600,300
21	NW 7th AVE	FEC	272712B	At Grade	Public	0	0	0	0.0%	18	35	23,662	425,916
4	NW 68th Ave	FEC	272787A	At Grade	Private	N/A	0	0	N/A	2	10	N/A	
10	Yard Xings	FEC	273151T	At Grade	Private	1	0	0	N/A	N/A	N/A	N/A	
11	FEC TOFC D/W	FEC	272948T	At Grade	Private	N/A	0	0	N/A	12	20	9,999	119,988
15	Pedestrian	FEC	273139L	At Grade	NA	N/A	0	0	N/A	1	25	N/A	
17	Pedestrian Arena	FEC	273133V	At Grade	NA	N/A	0	0	N/A	1	25	N/A	

Source: USDOT Federal Rail Road Administration



MIA Update

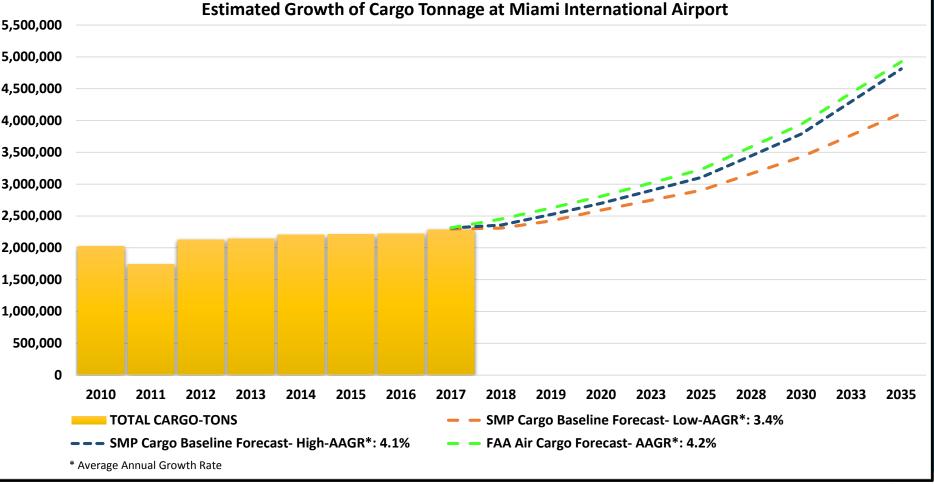


Source: Miami-Dade County Aviation Division



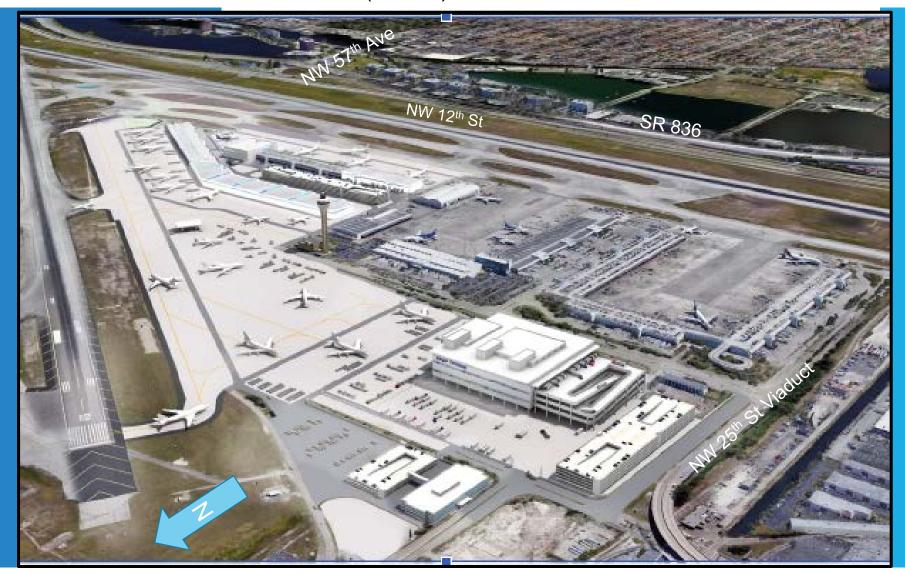
MIA Strategic Master Plan Growth Projections

MIA Update





MIA Strategic Master Plan Cargo Operations, Redevelopment and Expansion (CORE) Plan

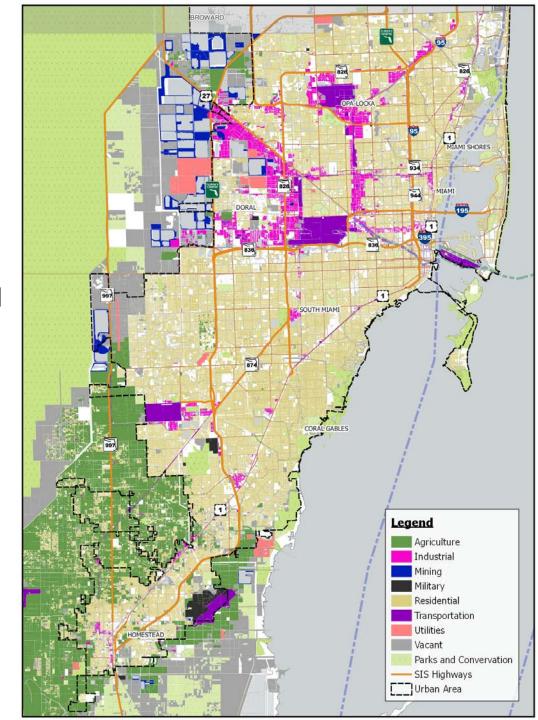


Source: Miami-Dade County Aviation Division

Warehousing

- Current industrial uses are located primarily in the northern portion of the county
- Further development is limited due to a lack of undeveloped land
- Potential for development of an additional 40 million square feet of warehousing space over next five years
- Many projects are fully leased before fully built out

Source: Miami-Dade County GIS Hub



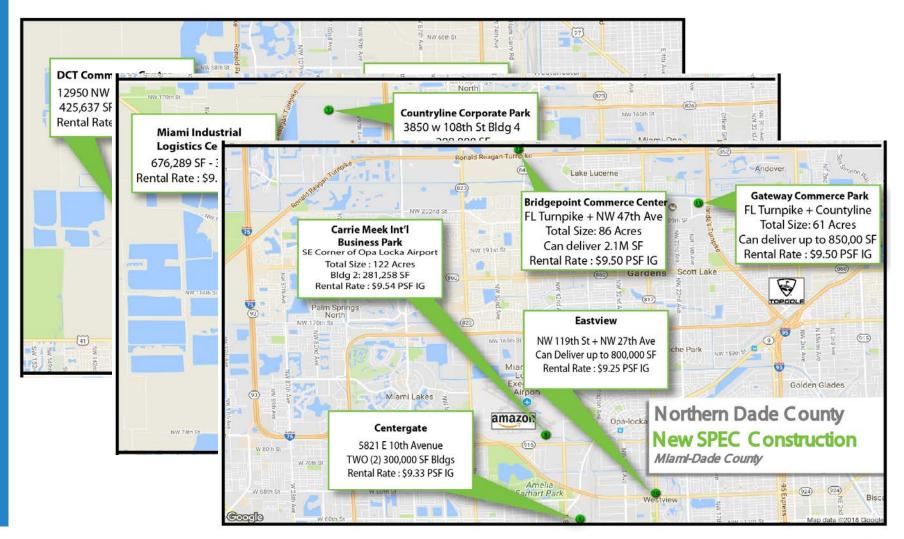
Warehousing/Industrial Space is Limited and Expensive

SUBMARKET	TOTAL INVENTORY (MSF)	TOTAL VACANCY	TOTAL AVAIL	2017 NET ABSORP- TION (SF)	UNDER CONSTRUC- TION (SF)	AVG. ASKING LEASE RATE (\$/SF/IG)		
Airport/Doral	58.00	3.40%	8.30%	702,729	920,033	\$	9.94	
Central Dade	38.10	3.90%	6.70%	-114,180	59,959	\$	8.14	
Hialeah	13.60	7.30%	9.00%	323,411	17,901	\$	8.50	
Kendall/ Tamiami	12.40	0.80%	2.60%	39,870	13,413	\$	10.61	
Medley	42.80	4.20%	8.00%	1,266,131	549,410	\$	8.58	
Miami-Lakes	6.70	2.70%	4.10%	398,557	1,917,107	\$	8.81	
North Central Dade	36.20	2.50%	6.20%	-64,418	1,368,122	\$	8.72	
North East Dade	2.80	0.20%	5.20%	19,196	0	\$	12.89	
South Dade	4.80	US	.80%	271,748	40,375		US	
Total	215.50	Averag		2,841,044	4,886,320		Averag	
Manufacturing	19.20	5.10%	.20%	-66,456	0		\$5.84	
Warehousing/Distribution	177.80	3.80%	7.70%	2,473,465	4,868,419	\$	8.91	
R&D/Flex	10.60	2.30%	3.80%	37,768	0	\$	13.66	
Other Industrial	7.90	1.80%	2.40%	396,267	17,901	\$	13.15	

Source: CBRE Marketview Industrial, Q4 2017



Planned and Ongoing Warehousing Developments





Cargo Security

FGBF

PORVIANA

GOIA GATRAY

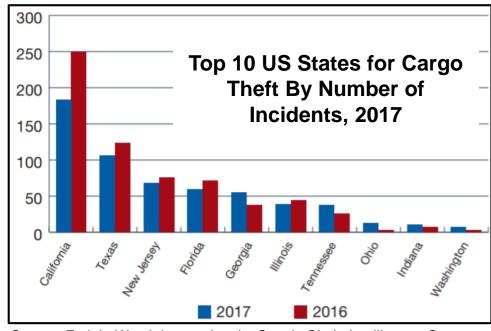
CARGO SECURITY AND THEFT PREVENTION

Cargo theft can occur at any point in the supply chain, with thefts most commonly

occurring at:

 Warehouses and distribution centers

- Truck Stops
- Side of the road
- Carrier or terminal lots
- Most common thefts are food and beverage items followed by electronics
- Average loss value per report is approximately \$207,000



Source: Freight Watch International - Supply Chain Intelligence Center

 Florida ranked 4th in the US in 2016 and 2017 for most incidents and Miami-Dade County ranked as the fifth highest county in the US for reported cargo thefts between from 2013 to 2016



Truck Parking

- Remains a critical concern
 - Demand exceeds 12,000 (2010 Estimate)
 - Supply is 293 spaces
 - Several hundred spaces provided outside Urban Development Boundary
 - but no services
- Limited availability in Miami-Dade leaves drivers vulnerable to theft and bodily harm. Basic needs: Fencing, Lighting, Security, Restrooms, Food
- FDOT has programmed funds for the Golden Glades Interchange Truck Travel Center and \$14 million for truck parking to be co-located with a PORTMiami Inland Terminal





Performance Measures

- MAP-21/FAST Act final rule established Truck Travel Time Reliability (TTTR) as the freight performance measure
- State DOTs must establish 2- and 4-year targets on or before May 20, 2018.
- FDOT set their targets on May 18, 2018 (below)
- Miami-Dade TPO has until November 14, 2018 (180 days from May 18, 2018) to support the FDOT 4-year target or set its own by November 14, 2018
- FDOT is also responsible for identifying bottlenecks and will provide TTTR for the Interstate System to each MPO in Florida

		Annual TT1	2-Year	4-Year		
Study Area	2014	2015	2016	2017	Target	Target
Miami-Dade County Interstates	4.14	4.56	3.84	2.98	N/A	TBD
Statewide Interstates	1.42	1.45	1.44	1.43	1.75	2.00



Multi-Modal Lists of Project Needs

	11	/IUILI-IVIO	uai	LISIS OF FTOJE	CLINEEU	S					
/lode	Project	Description	Mode	Project	Description	Mode	Project	Description			
	MIA Fuel Tanker Parking Facility	Ops Improvement at West Cargo		POM Gantry Crane Rail Repair and Replacement	Maintenance/Other	-	FEC Miami Freight Forwarding Yard	Freight Capacity-Access			
	MIA Perimeter Road Widening and Realignment Access MIA North East Apron and Drainage Improvements Cargo Ramp		-	POM Bays 148-195 Seawall Upgrades	Maintenance/Other	-	FEC N. Miami to Ojus Double Track	Freight Capacity-Line Expansion			
				POM North Bulkhead Repairs	Maintenance/Other	-	FEC NE 203RoadStreet & NE 215th Street Intersection Improvements between US-1 & W Dixie Hwy	Safety-Grade Crossing			
	MIA Building 702 Conversion and Hardstand Project	d Project Airport Ops		POM Bays 0-65 Seawall Rehabilitation	Maintenance/Other		SFRC MR MIC Double Track Last Mile of SFRC	System Capacity			
	MIA New Cargo Clearance Center Airport Ops MIA Building 702 Extension (Optional) Airport Ops			POM SFCT Cargo Yard Densification (eRTG)	Capacity	aii	FEC N. Miami to Little River Track Upgrade	Freight Capacity-Rehabilitation			
				POM Cargo Gates	Capacity		SFRC/SFRTA Positive Train Control	Safety-Grade Crossing			
	MIA Building 702 Freighter Conversion and Airside	Airport Ops		POM Procurement Super Post-Panamax Gantry Cranes	Capacity	0	US 27 Ramp Connection to Miami Hialeah FEC Intermodal	Freight Capacity-Access			
	Improvements		-	POM Seaboard Redevelopment Phase V	Capacity		Terminal	. , ,			
	MIA Demo Building 703/703A	Airport Ops	_	POM Shed E Demolition and Paving	Capacity		JS 27 Southeast Florida Rail Bypass	Freight Capacity-Line Expansion			
its i	MIA Fuel Tender Relocation	Airport Ops		POM Shed G Demolition and Paving	Capacity		FEC Hialeah from Expand Hialeah Yard to Capacity	Rail Yard			
	MIA Taxiway R Realignment	Airport Ops		POM Seaboard Building 1306 Demolition and Paving	Capacity		FEC at Auto Handling Facility	Terminal			
	MIA Construct Cargo Truck Staging Area	Airport Ops	_	POM Seaboard Building 1630 Demolition and Paving	Capacity		Railroad crossing closures and repairs on Downtown Lead				
	MIA Building 716 Apron Extension	Airport Ops		POM Federal Inspection Facility	Capacity		Tun opur				
	/IIA Partial Demolition Building 704 - North 1/3 Airport Ops		4	POM Inland Terminal	Capacity						
	MIA Taxiway R Realignment and Extension	New Cargo Clearance Center Airport Ops Relocate Fuel Tender Staging Area Airport Ops		POM Port Crane Management Facility	Maintenance/Other						
	MIA New Cargo Clearance Center			POM Facilities Move	Maintenance/Other						
	MIA Relocate Fuel Tender Staging Area			POM Improvements to Gate Complex	Seaport						
0	MIA Demolition Building 704			POM Bays 177-183 Sea Wall Construction	Berth						
	MIA Airside Expansion (Hardstands/GSE)	Airport Ops		POM Repair to Vehicular Bascule Bridge	Seaport						
	IA Cargo Building Expansion 714 (Hardstands/GSE) Airport Ops		4	POM Redevelopment of Port Blvd.	INROAD		TDA				
	MIA Redeveloped Cargo Building 716 and Hardstands	Airport Ops	O	POM Gantry Cranes Acquisition Program	BERTH						
	MIA New Vertical Core Facility Concept	Airport Ops	(1)	POM Expand and Modernize Port Utilities	Seaport		Miami-Dade Transportation FDOT				
	MIA Taxi Lot Relocation	Airport Ops		POM Cargo Terminals	Seaport						
	MIA Consolidated Maintenance Facility	Airport Ops		POM Extend Railroad Tracks	Seaport	COUN.	Y Figurials	F4 O4			
	MIA Relocation of NW 15th Street Perimeter Road Bridge	· · ·		POM Roadway Realignments	Seaport		Florida East Co				
		Access		POM Channel Modifications	Seaport		PORT//II/A	FLORIDA'S			
	Opa-Locka Rehab Aprons	Airport Ops		POM Berth O - West New Apron	Berth			/			
	Opa-Locka OPF Taxiway Repair	Underway - Airport Ops		POM Channel Modifications	Seaport	MIAMI INT	SWATIONAL AIRPORT	7 7			
	Miami Exec RIM Program	Airport Ops		POM Crane Maintenance Facility	Seaport	4	CGX NO				
	Miami Exec 128th Street Connector Improvements Access			POM Cargo Yard Stacker Cranes Program	Seaport	4	TRANSPORTATION	ENTERPRISE			
	Miami Exec SR 874 Connector	Access		POM Cargo Yard Improvements	Yard						

POM Fill SW Corner (Transhipment Yard)

POM New Berth SW Corner 1

POM New Berth SW Corner 2

POM Cargo Berth 5

POM Cargo Berth 6

POM Cargo Berth 7

POM Multimodal Terminal

Transhipment yard

Intermodal Container Transfer

Berth

Berth

Berth

Berth

Berth



Miami Exec SW 157th Avenue Access Improvements

MIA South Terminal Apron Expansion

MIA Central Base Apron Expansion

TMB Taxway H Eastward Extension

TMB RIM HS1

MIA Homestead General X51 Widen Building Six Parking

Access

Airport Ops

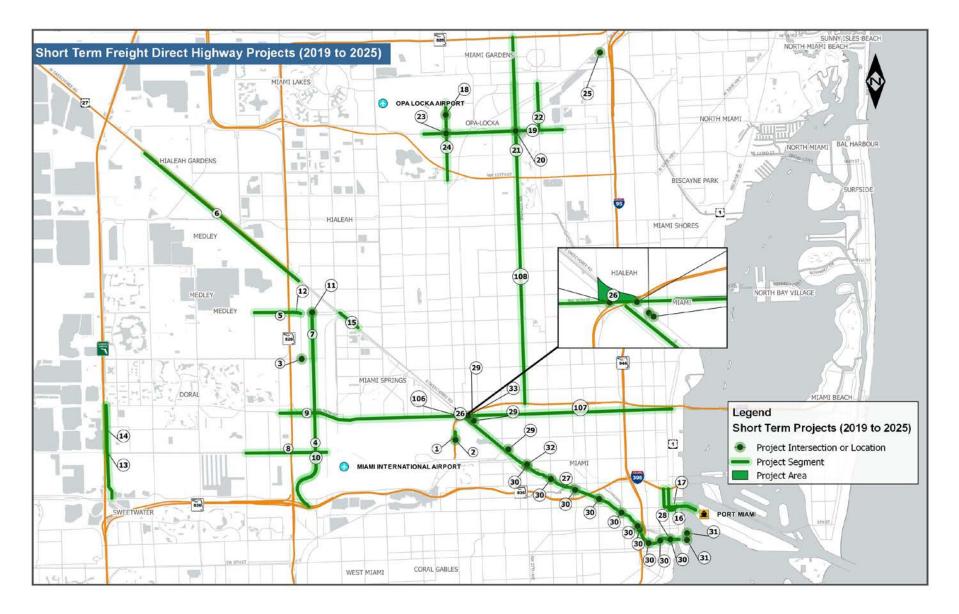
Airport Ops

Ongoing

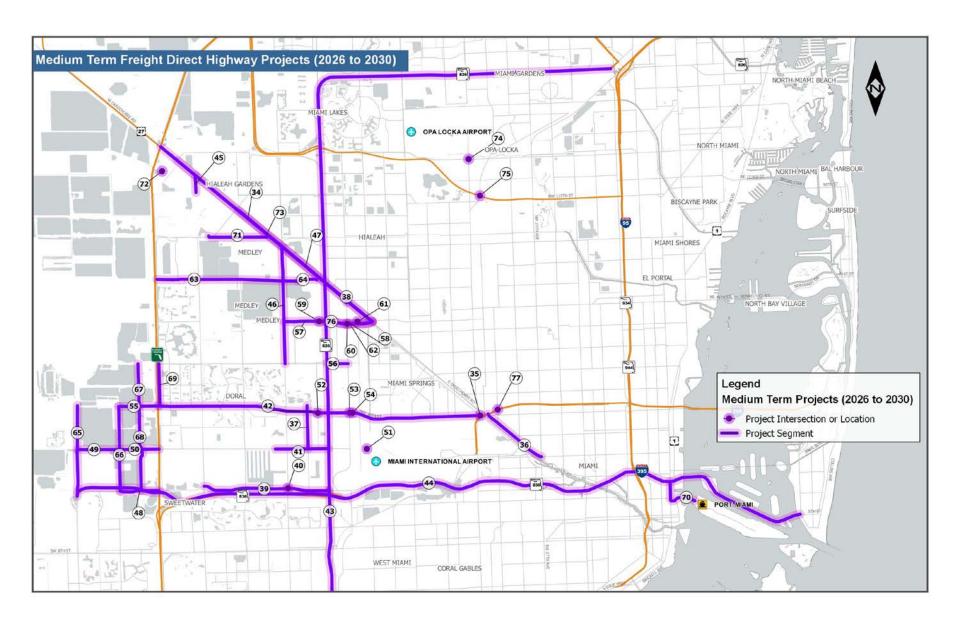
Roadway Access

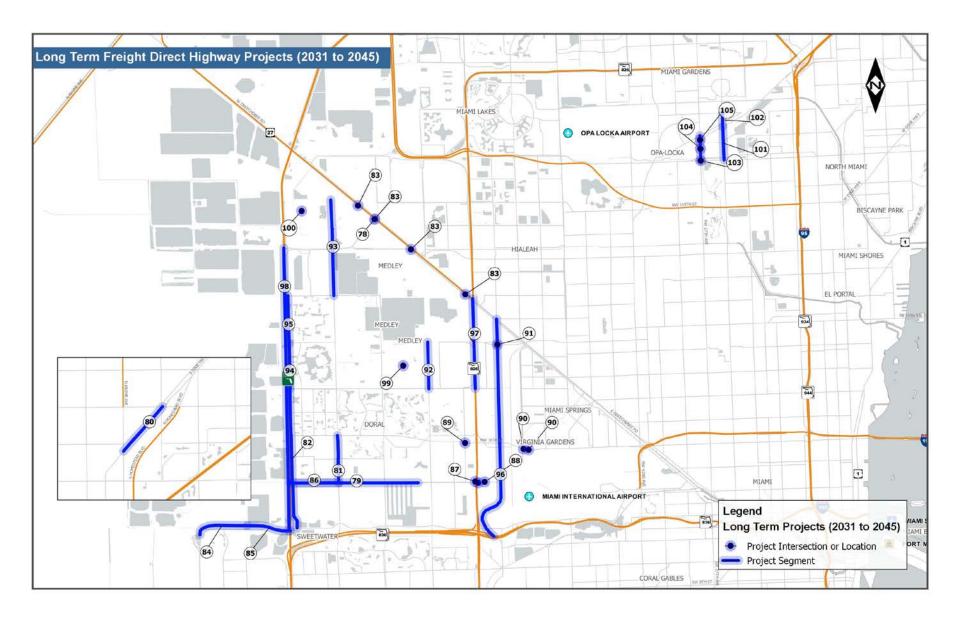
Runway Incursion Mitigation









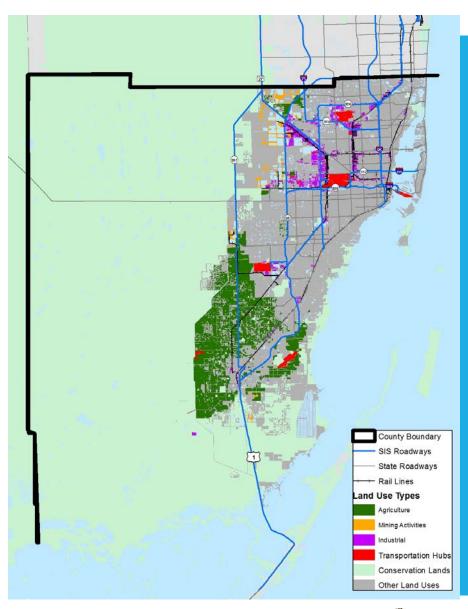


Freight Logistics Zone

In 2015, the Florida Legislature created a Florida Statutes Chapter 311, "Designation of state freight logistics zones (FLZs)". FLZs provide a framework for directing potential funding to freight projects within the defined boundaries.

No funding to date. Proactive approach to submit applications when funding appears

Miami-Dade's proposed Freight Logistics Zone covers the entire county as funding also allows for work force training





THANK YOU

Jeff Weidner jweidner@MARLINengineering.com 954-205-2471

Kevin Walford @MDTPO.org 305-375-2642





