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### 20TRANSPORTATION 24SYMPOSIUM

### FDOT Freight Mobility Initiatives in Miami-Dade County

Daniel Lameck & Armando Moscoso

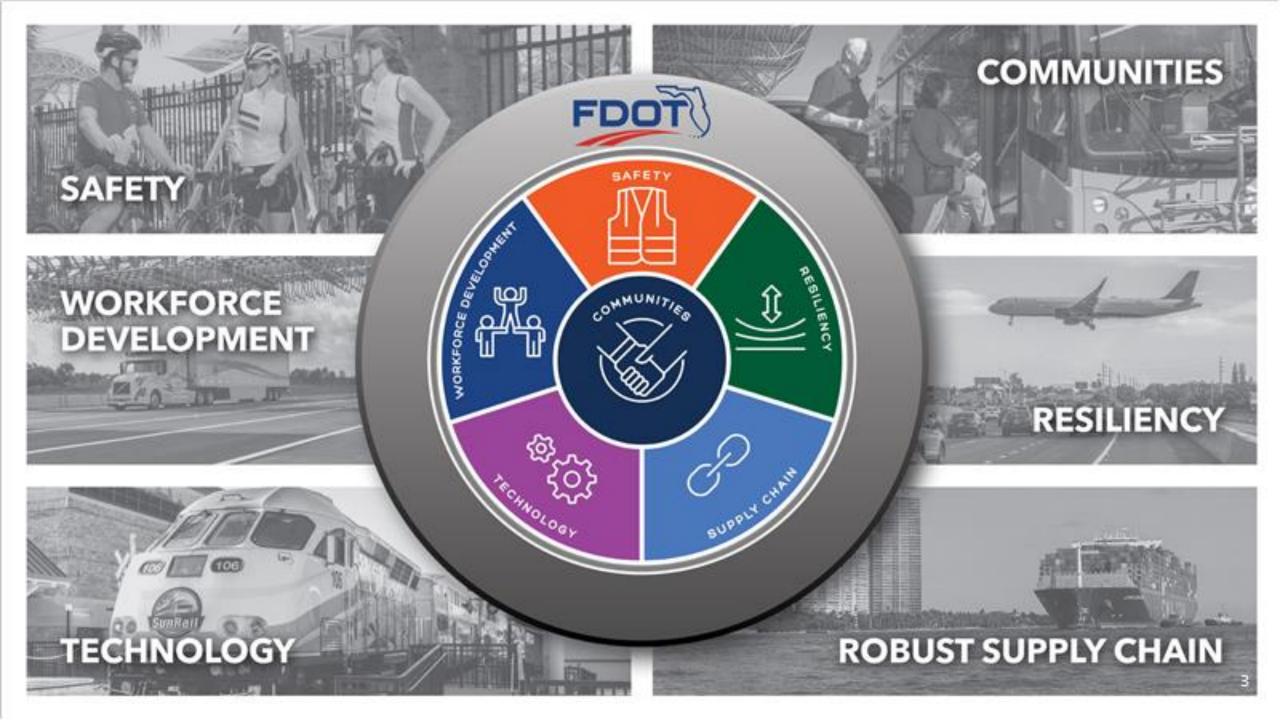




# FDOT Freight Mobility Initiatives in Miami Dade County

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### Agenda

- Freight Improvement Initiatives
- Truck Parking
- Federal Funding Opportunities
- National Highway Freight Program (NHFP) Overview
- NHFP Funding
- Project Selection
- Q&A/Discussion





### Freight Industrial Sub-Areas

District 6 identified the following freight-intensive sub-areas:

- Town of Medley
- · City of Opa-Locka
- · Port of Miami River Corridor
- City of Doral
- City of Miami Gardens
- City of Hialeah
- · City of Homestead
- Monroe County



### Freight Sub-Area Studies

- FDOT performed planning level studies that assessed freight accessibility to and from each subarea and develop strategies to enhance access and improve freight mobility. FDOT has completed all Sub-area Freight Improvement Studies.
- FDOT is currently performing one more additional Freight Study that will be countywide and look at various type of updated improvements we can make to our sub-areas. This will be known as the Miami-Dade Freight Village Countywide Analysis.
- This study will serve the purpose of providing a comprehensive updated Project Bank of freightspecific and freight-oriented projects.







### Freight Village Countywide Analysis

#### Provide

Provide an updated profile of the state of freight and logistics in District Six in terms of transportation assets, demand and usage, and programmed improvements.

#### Describe

Describe the policy, regulatory, and funding framework for freight planning.

#### Characterize

Characterize
history,
emerging, and
anticipated
trends driving
freight and
logistics activity.

#### Examine

Examine various freight modal system components as to their resources, current funding, performance, needs outlook, shortfalls, and options and strategies for addressing future requirements.

#### Devise

Devise potential solutions to identified needs, not just for infrastructure projects, but more broadly in terms of strategies and innovations to meet expected demand and mitigate current shortfalls.

### Develop

Develop a project bank of freight infrastructure projects, prioritized based on how effectively each project meets existing and future freight transportation.



### THE TRUCK PARKING CHALLENGE

TRUCK DRIVERS
RANK PARKING A
TOP 5 INDUSTRY
ISSUE SINCE 2015
(AMERICAN TRANSPORTATION
RESEARCH INSTITUTE)

**58%** of drivers say they have parked in unauthorized places at least **three** times a week. (American Transportation Research Institute

98% of truck drivers report problems finding safe parking, costing drivers more than 56 minutes of drive time. That wasted time is estimated to cost drivers \$5,500 per year – roughly a 12% pay cut. (American Transportation Association and Owner Operator Independent Drivers Association)





### **Truck Parking**

- FDOT completed a Miami-Dade County Truck Parking supply and demand Master Plan in 2022. The objectives were:
- Evaluated truck parking supply and needs for Miami-Dade County
- Focused on the regional, short-haul truck flows that drive parking demand in South Florida.
- Performed an inventory of existing legal and illegal truck parking supply within the County
- Forecasted truck parking demand for 2045
- Coordinated with stakeholders to get support for parcel development





### **Truck Parking**

### **Challenges**

- Increased use of industrial lands for development of distribution centers —less remaining for truck parking
- Increasing Land values limit truck parking development
- Overflow of truck parking from busy industrial facilities results in unauthorized parking

### **Opportunities**

- County designated lands outside UDB
- Shared use truck parking
- Real-time Truck Parking Availability Systems





### **Truck Parking**

- District Six will continue addressing the goals of the Master Plan
  - Site Feasiblity Analysis is a core goal
  - Analysis will identify feasible brownfields, industrial, and vacant parcels that could be developed as truck parking facilities
- The Study was completed in Spring 2024
  - Implementation of Truck Parking site scheduled to in FY 28



### Golden Glades Truck Travel Center

- 135 truck parking spaces, fueling stations, travel center, truck repair facility, truck wash, and scale, Truck Parking Availability System (TPAS), security features, and Intelligent Transportation Systems (ITS)
- Scheduled to start construction after completion of Golden Glades Interchange Project





- The Wedge Parcel:
  - Potential 316 total truck parking spots
  - 30 EV truck parking.
  - Scheduled to start PD&E study 2028





### **Federal Funding Opportunities**

- The Bipartisan Infrastructure Law (BIL) includes
  - \$973 billion in funding over five years from FFY 2022 through FFY 2026,
  - \$550 billion for new investments for all modes of transportation
- Most federal transportation grants are broken into planning and capital grants
  - Planning grants may not have a minimum funding amount and may not require a match
  - FDOT encourages partners to apply for planning grants and capital grants.
  - FDOT generally will only apply for capital grants









### Freight Federal Funding Opportunities

- \$1.8 billion for the National Infrastructure
   Project Assistance (Mega) program
- \$3.1 billion for the Infrastructure for Rebuilding America (INFRA) program
- \$675 million for the Rural Surface
   Transportation Grant (Rural) program







### History

### In December 2015, the Fixing America's Surface Transportation Act (FAST Act) was signed into law

 The FAST Act established the new National Highway Freight Program (NHFP)





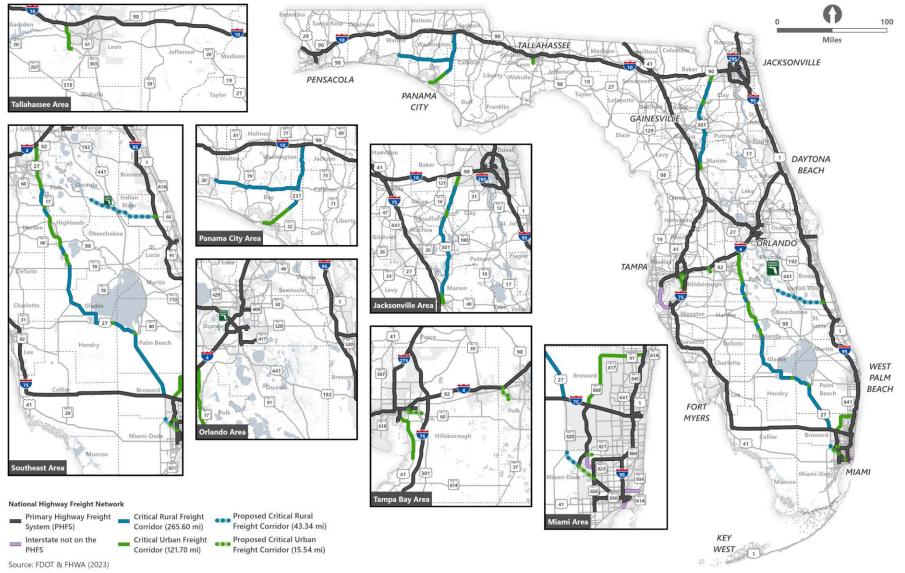
### **Federal Policy**

- Federal Requirements for NHFP
  - Establishment of the National Highway Freight Network (NHFN)
    - -The Primary Highway Freight System (PHFS)
    - Critical Rural Freight Corridors (CRFC)
    - Critical Urban Freight Corridors (CUFC)



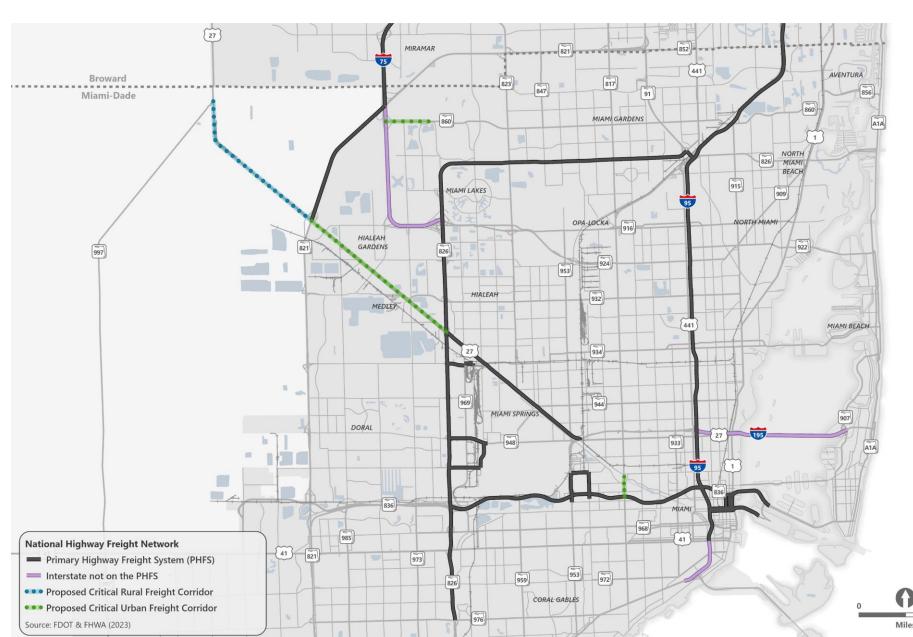


### **Statewide Network**





### **FDOT District 6 Network**



FREIGHT & RAIL

### Requirements for Projects



The project must be on the NHFN Link to ArcGIS network map



- The project must be in the state's Freight Mobility and Trade Plan (FMTP)
- The project must be an eligible project type



### **Eligible Project Types**

- 1. Development phase and preconstruction activities.
- 2. Construction, reconstruction, rehabilitation, and operational improvements directly relating to improving system performance.
- 3. Intelligent transportation systems and other technology to improve the flow of freight.
- 4. Efforts to reduce the environmental impacts of freight movement.
- 5. Environmental and community mitigation for freight movement.
- 6. Railway-highway grade separation.
- 7. Geometric improvements to interchanges and ramps.
- 8. Truck-only lanes.
- 9. Climbing and runaway truck lanes.
- 10. Adding or widening of shoulders.

- 11. Truck parking facilities eligible for funding under section 1401 (Jason's Law) 19. Additional road capacity to address of MAP-21.
- 12. Real-time traffic, truck parking, roadway condition, and multimodal transportation information systems.
- 13. Electronic screening and credentialing systems for vehicles.
- 14. Track signal optimization, including synchronized and adaptive signals.
- 15. Work zone management and information systems.
- 16. Highway ramp metering.
- 17. Electronic cargo and border security technologies that improve truck freight movement.
- 18. Intelligent transportation systems that would increase truck freight efficiencies inside the boundaries of

intermodal facilities.

- highway freight bottlenecks.
- 20. Physical separation of passenger vehicles from commercial motor freight.
- 21. Enhancement of the resiliency of critical highway infrastructure to improve the flow of freight.
- 22. A highway or bridge project to improve the flow of freight on the NHFN.
- 23. Any other surface transportation project to improve the flow of freight into and out of an eligible intermodal freight facility.
- 24. Diesel retrofit or alternative fuel projects.
- 25. Conducting analyses and data collection related to the NHFP





### FDOT Statewide Totals by Fiscal Year

 Expected Statewide funding amount per FY is \$70M

Year

 Totals finalized in yearly approval process

Fiscal Year	Estimated NHFP Funding* **	Estimated NHFP Project Cost ***	Estimated Cumulative Spending
2016	\$53,926,568	\$-	
2017	\$51,581,934	\$38,711,324	\$38,711,324
2018	\$56,271,202	\$78,429,007	\$117,140,331
2019	\$63,305,102	\$39,417,950	\$156,558,281
2020	\$70,339,002	\$62,388,661	\$218,946,942
2021	\$69,530,857	\$18,791,915	\$237,738,857
2022	\$65,707,643	\$66,540,501	\$304,279,358
2023	\$67,021,795	\$92,425,049	\$396,704,407
2024	\$68,362,231	\$67,000,335	\$463,704,742
2025	\$69,729,476	\$53,361,508	\$517,066,250
2026	\$70,000,000	\$62,611,063	\$579,677,313
2027	\$70,000,000	\$61,162,124	\$640,839,437
2028	\$70,000,000	\$60,229,759	\$701,069,196
2029	\$70,000,000	\$53,726,602	\$754,795,798
Total	\$949,424,734	\$754,795,798	





## FDOT District 6 Totals By Year

- Expected Statewide funding amount per FY is \$70M
  - Totals finalized in yearly approval process

Fiscal Year	Estimated NHFP Funding	
2019	\$	849,478
2020	\$	500,000
2021	\$	1,924,665
2022	\$	464,598
2023	\$	23,014,024
2024	\$	8,283,193
2025	\$	12,590,388
2026	\$	704,970
2027	\$	5,720,000
2028	\$	12,983,000
Total	\$	67,034,316





### District 6 Totals by type

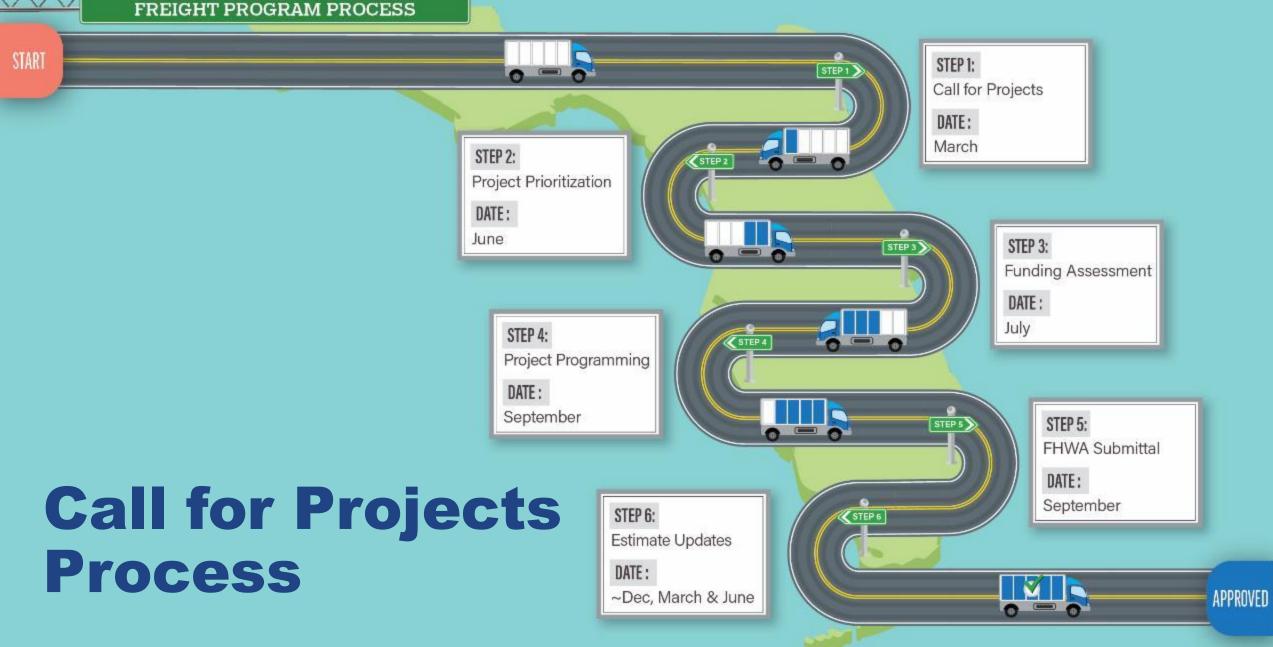
- Total funding for projects through 2028 is \$67M
- 13 Projects funded through 2028
  - Variety of project types

Work Mix	Total Cost
VVOIRIVIIX	Total cost
ADD LANES & RECONSTRUCT	\$ 1,968,000.00
ADD LANES & REHABILITATE PVMNT	\$ 595,000.00
BRIDGE - PAINTING	\$ 704,970.00
BRIDGE-REPAIR/REHABILITATION	\$ 1,040,388.00
MODAL SYSTEMS PLANNING	\$ 2,645,908.00
OTHER ITS	\$ 4,930,000.00
PD&E/EMO STUDY	\$ 53,800,572.00
PTO STUDIES	\$ 1,349,478.00
Grand Total	\$ 67,034,316.00









### **Scoring and Ranking**

- The 2024 FMTP has two parts to the prioritization scoring process
  - The quantitative portion is based on geographical/locational factors,
  - The qualitative portion weighs a project's ability to affect FRO priorities
- The quantitative score is a GIS-based analysis run in Central Office
- The qualitative score is done as the Districts fill out the excel template for project information
  - The template scores the projects' qualitative criteria in real time. Each "Yes" response requires additional details in the "Project Details" box to receive points



### Quantitative

The quantitative score is tied to freight performance measures:

- Truck Injuries/Truck VMT) \*1000
- (Truck Fatalities/Truck VMT) \*1000
- Crime Index
- Roadways within 100 Year Flood Zones
- Presence of Structurally Deficient Bridges
- Presence of Poor Pavement Condition
   Segments
- Roadways with Top Bottlenecks
- Truck AADT
- Vicinity to Hubs
- Roadways within Freight Intensive Areas

- Labor Force Size (Ratio of labor force by county population relative to average statewide ratio)
- County GRP Level (Relative to the average county GRP level in FL)
- Transportation and Warehousing Industry Share of Total Employment
- County Population Density (Relative to the average county-level population density in FL)
- On Designated Alternative Fuels Corridors
- Number of Alternative Fueling Stations within 1 Mile of Roadway



### Qualitative

### The qualitative score weighs a project's ability to effect FRO priorities:

- Does this project implement safety or security enhancements?
- Does this project improve the state's data gathering efforts?
- Does this project address the environmental or economic resiliency of the freight system?
- Does this project optimize the functionality and efficiency of the freight system?
- Does this project preserve the existing State Highway System?
- Does this project address Truck Parking?
- Does this project create a Grade separation?
- Is this a tech driven and/or TSM&O project?
- Does this project improve multimodal freight

- connectivity?
- Does this project use public/private partnerships?
- Does this project capitalize on emerging freight trends?
- Is this project on the MPOAC freight project list?
- Does this project promote the use of LNG/CNG/electric vehicles?



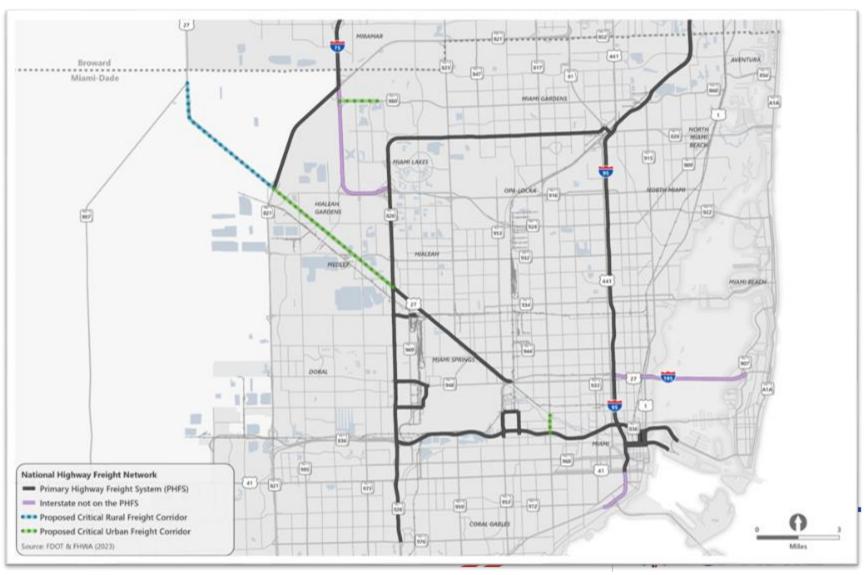
### What to do if your project is not on the NHFN?

- Baseline Requirement
  - Only real requirement is:
     "Is the segment
     determined by the State
     to be vital to improving
     the efficient movement
     of freight of importance
     to the economy of the
     State"
  - Does your Off-Network project meet this requirement?
    - If so, we can redesignate the CUFC-CRFC

- Redesignating CUFC-CRFC
  - By redesignating the CUFC-CRFC sections, off network projects can be brought into the network
- How to know if Project will score well
  - We have created a dashboard that shows scores of roadways near NHFN
    - Potential NHFN Critical Freight Corridors (arcgis.com)

### **Network Designation**

 FDOT District 6 is one of the first Districts to submit projects off the active network to have it updated.





Make a Plan
Build a Disaster Supply Kit
Know Your Home, Know Your Zone
Stay Safe Before, During, & After a Storm

**VISIT FLORIDADISASTER.ORG** 



### **SAFETY MESSAGE**

- Hurricane season began on June 1<sup>st</sup>
- Be sure to have a plan for you and your family's safety
- Create a disaster supply kit and keep it ready
  - Ensure that all supplies are effective and not expired
- Know the safe areas within your home and understand which flood zones you are in
  - Understand the evacuation routes and plan for their use
- And of course, stay safe



### Questions?

