



Miami-Dade Transportation
Planning Organization

SMART TRENDS TRANSPORTATION SUMMIT



BREAKOUT ROOM 1

MIAMI-DADE PORTS & ECONOMIC FORUM



PORTMIAMI™

Hydi Webb

Port Director and CEO

June 2022



MIAMI-DADE
COUNTY

About PortMiami

Economic Engine generating
**\$43 billion and supporting
334,500 jobs in Florida.**

It is recognized as the
**Cruise Capital of the
World and Cargo
Gateway of
the Americas.**



Prior to the Pandemic,
PortMiami was on track to **exceed 7 million cruise passengers.**

The sector generated **\$7 billion/40,000 jobs a year** from ground/air transportation, food/beverages, lodging, manufacturing, agriculture, travel agencies, hotels, and more.

CRUISE PASSENGERS past 6 years

| FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 |
|-----------|-----------|-----------|-----------|-----------------------|---------------------|
| 4,980,000 | 5,340,000 | 5,419,000 | 6,824,000 | 3,477,516 Pandemic | 252,099 Pandemic |

252,099 PASSENGERS

CRUISE





CT A - Royal Caribbean
Opened - November 2018
Architect - Broadway Malyan



CT B - Norwegian Cruise Line
Opened – August 2021
Architect - Bermello Ajamil



CT V - Virgin Voyages
Opened - February 2022
Architect - Arquitectonica



CT AA/AAA - MSC Cruise Line
Groundbreaking - March 2022
Completion date - December 2023
Architect - Arquitectonica



CT F - Carnival Cruise Line
Completion date - October 2022
Architect - Berenblum Busch

15% Arrivals are PortMiami Passengers

- Miami International Airport is #1 in international cargo and in international passengers in the U.S.
- About 1 out of 7 (15%) of MIA's passengers are PortMiami cruise passengers.



CRUISE

Source: Miami International Airport May 2022

Despite the Pandemic, Cargo numbers continue to exceed expectations with a recorded **1.25 million TEUs, up 17.6%**, making it the busiest year in cargo activity in PortMiami's history. The Port has surpassed the 1 million TEU mark for seven consecutive years.

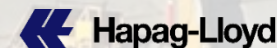


TEUs past 6 years

| FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 |
|-----------|-----------|-----------|-----------|-----------|-----------|
| 1,028,155 | 1,020,192 | 1,083,586 | 1,120,913 | 1,066,738 | 1,254,062 |

1,254,062 TEUs

CARGO



Thanks to Our County's Past Investments



SUPER POST-PANAMAX CRANES
2013

2015 -50/-52 FT. SHIPPING CHANNEL

DIRECT ACCESS TUNNEL
2014

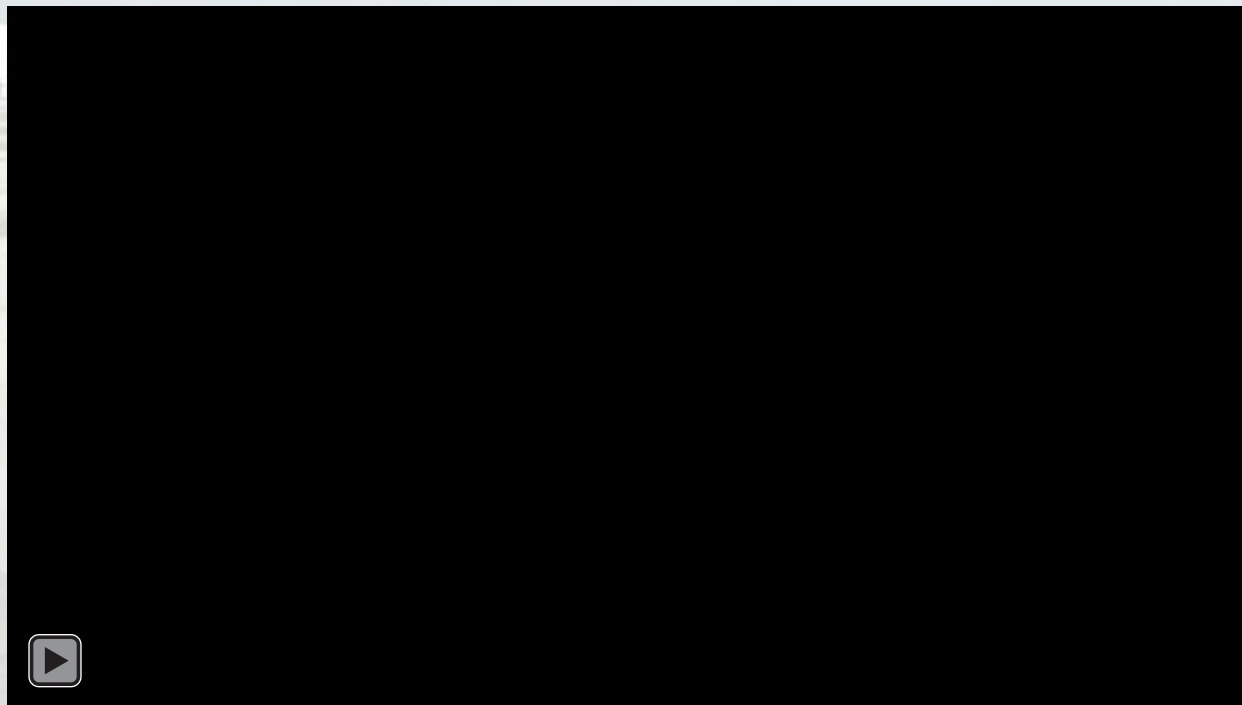
2013 ON-DOCK INTERMODAL RAIL



ZERO EMISSION E-RTGs
2021



Cargo is OPEN



Mayor Daniella Levine Cava with an “OPEN” Campaign message

Due to our commitment to the OPEN Campaign,
PortMiami is now the **#1 Port in Florida** and **#2 in North
America for efficient container performance.**

CARGO

Source: World Bank Group and S&P Global Market Intelligence



Current National Concerns

Supply Chain Challenges

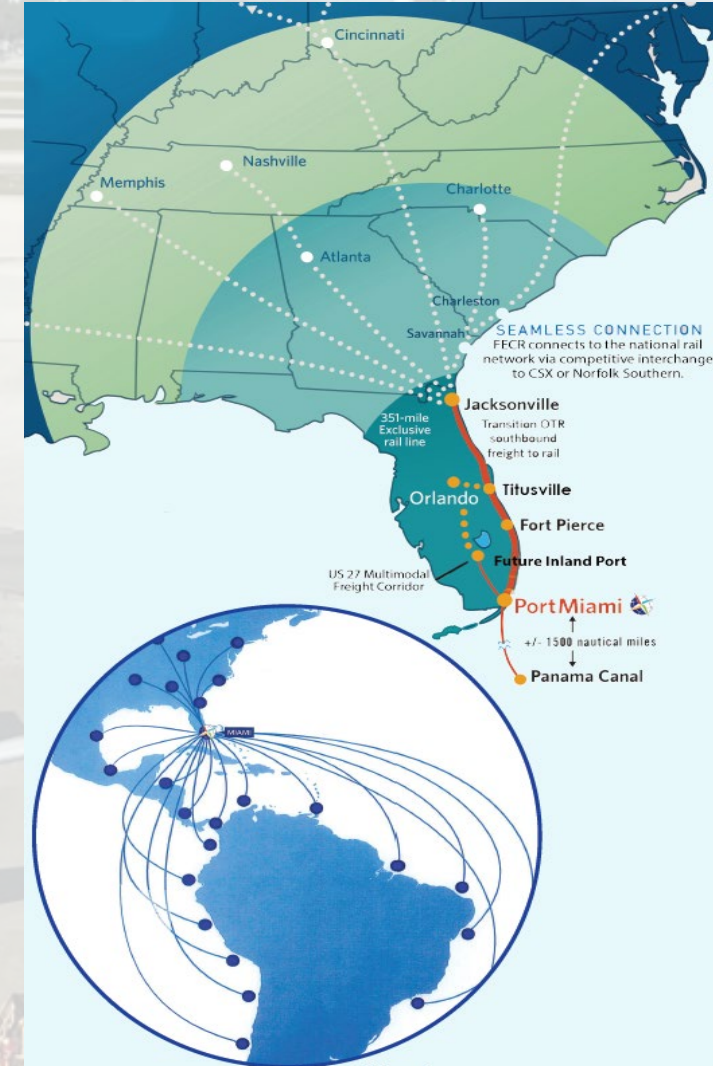
- U.S. supply chains are under duress.
 - Ships are at anchorage on the West and East Coasts
 - Ocean freight rates Asia/U.S. up 900%
 - Empties for U.S. exports are not available
 - Labor shortages - highlighted by truck driver shortages
 - Fuel prices
 - General inflation
 - Geo-political conflict
 - Goods out of stock

CURRENT



Nearshoring Program Offers Solution to Current Challenges

- Congress has made nearshoring a primary foreign policy objective, by introducing the **Latin American Nearshoring Act HR 7579**.
 - Relocation of manufacturing operations closer to the U.S.
- PortMiami, **Gateway to the Americas** is **READY** to lead this initiative due to its proximity to Latin America and the Caribbean.
- **INFRA Infrastructure for Rebuilding America** grant program will offer PortMiami **FUTURE READY** opportunities.



**PORTMIAMI**
netzero

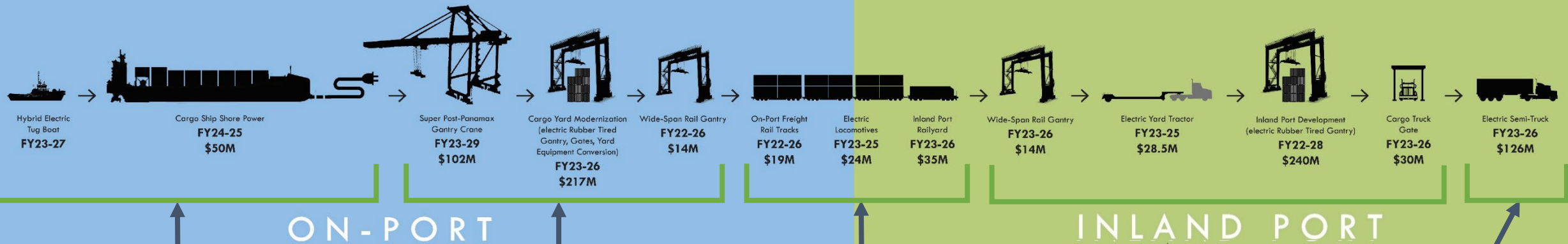
PortMiami has embarked on the development of a **visionary and transformational program to develop the nation's first end-to-end net zero carbon emission supply chain** in line with the County's 2030 50% emissions reduction goal, while also working towards the County's economic development goals.

The Infrastructure Investment and Jobs Act (IIJA) is an unprecedented opportunity. A \$1.2 trillion package with **\$17.5 billion dedicated to ports.**

FUTURE

PORTMIAMI NET ZERO

SUPPLY CHAIN PROGRAM



Cargo vessels assisted to berth by hybrid electric tugs and then plug into shore power

Cargo is transloaded by electric container handling equipment

Cargo is transported to Inland Port via electric locomotives in partnership with FEC

Electric container handling equipment and technology for innovative operations

Final delivery to distribution centers on electric truck fleet

FUTURE

- Estimated Total Program Cost: \$700-800 million.
- Costs shared among PortMiami, port partners, and federal/state grants.



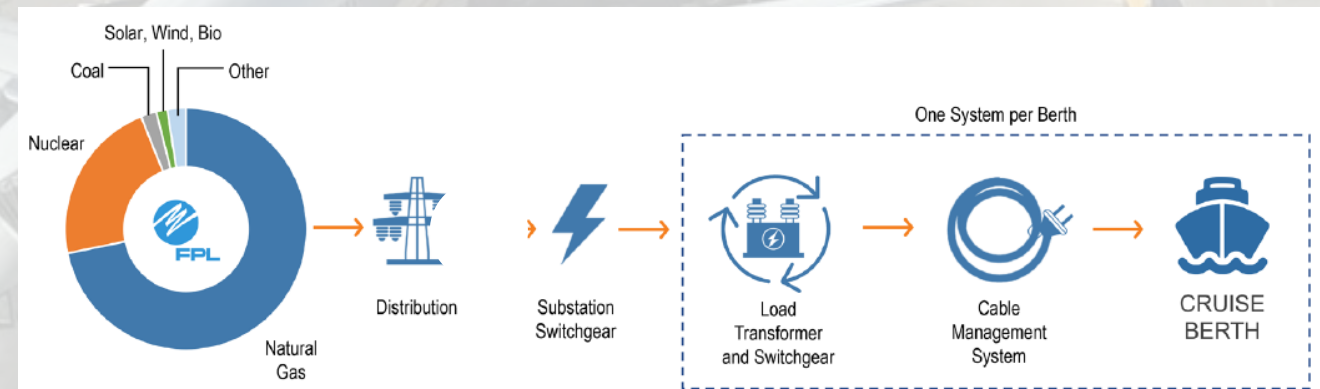
ON-PORT PROGRAM

- 1 Electric Tug Boats
- 2 Shore Power
- 3 Super Post-Panamax Electric Gantry Cranes
- 4 Cargo Yard Modernization
 - ☐ Automated Truck Gates Project
 - ☐ Electric Rubber Tired Gantry
 - ☐ Conversion of Yard Equipment to Electric
 - ☐ Electric Reefer Expansion
- 5 Railyard Capacity Upgrades
 - ☐ Railyard Expansion
 - ☐ Wide-Span Rail
- 6 Electric Locomotives
- 7 Co-Generation Facility and Other Renewable Energy Sources

- **Shore Power Phase 1** under design for five Cruise Terminals: CT AA/AAA (MSC Cruises), CT A (Royal Caribbean Group), CT F (Carnival Corp), CT B (Norwegian Cruise Line Holdings) and CT V (Virgin Voyages) for implementation in Winter 2023 for a total investment of \$110 million with Phase I at \$55 million.



- **Diesel Emission Reduction Act (DERA) Grant** for shore power infrastructure from the EPA anticipated to be awarded in the amount of \$2 million.





THANK YOU



MIA Overview

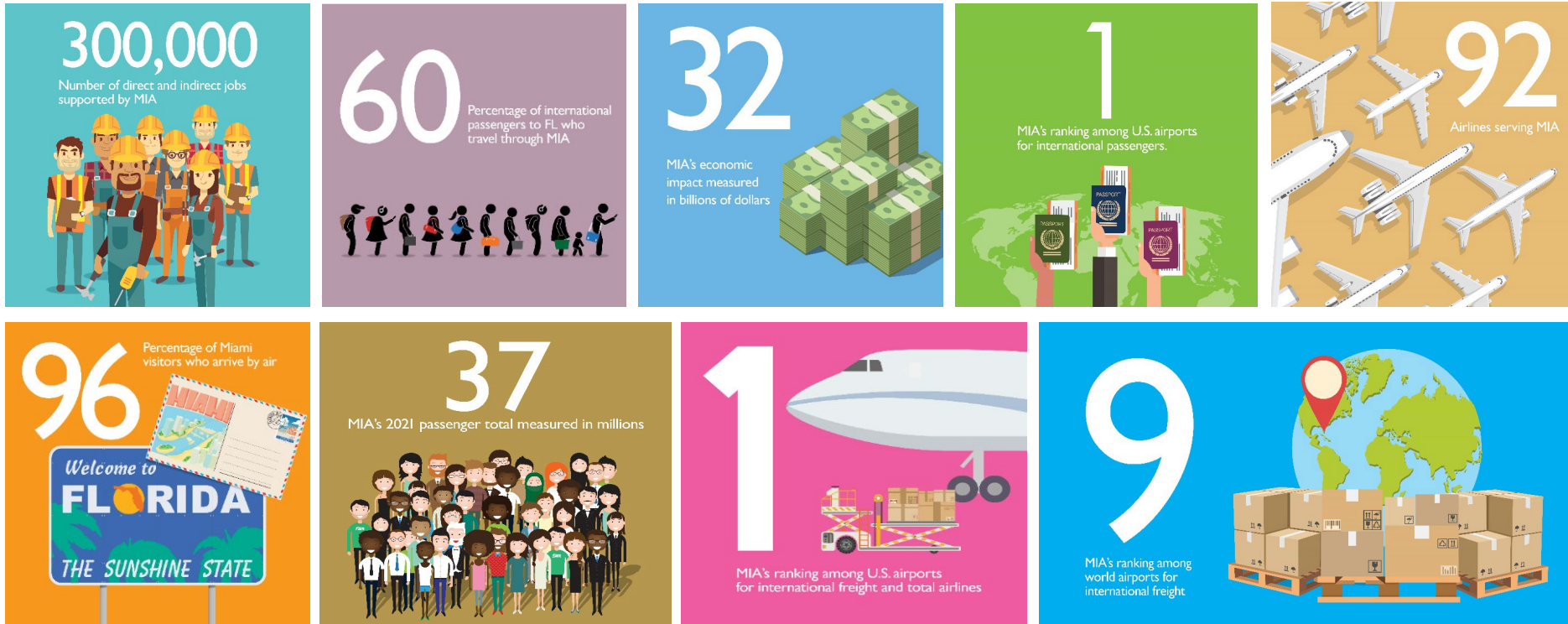
June 3, 2022



Ralph Cutie

Director and Chief Executive Officer
Miami-Dade Aviation Department

MIA BY THE NUMBERS



- **Economic impact on related airport users statewide: \$118 billion and 697,255 jobs**

New Airlines:

- **Southwest Airlines (November 2020): \$853.7 million; 6,800 jobs**
- **JetBlue Airways (February 2021): \$915 million in business revenue; 7,300 jobs**
- **Emirates (July 2021): First-ever Miami-Dubai service; MIA's 4th Middle East route**
- **Spirit Airlines (November 2021): \$1.6 billion in business revenue; 12,500 jobs**

PASSENGER GROWTH

- Largest growth in airline seats in the world, March 2022 vs. March 2019
- Three busiest days ever in March 2022, including record day of 168,000 on 3/20/22
- Passenger traffic up 9.8% May 2022 calendar year to date vs. May 2019 CYTD
- Busiest U.S. airport for international passengers, 11th-busiest in the world (2021)
- 9th-busiest in the world for aircraft operations, up from 24th in 2020 and 30th in 2019

TOP TWENTY AIRPORTS

Top Twenty Airports

| Airports | Seats in Mar-22 | Change v Mar-19 | Change v Feb-22 |
|-------------------|-----------------|-----------------|-----------------|
| Atlanta | 4,552,931 | -16.4% | 3.4% |
| Dubai | 3,703,845 | -23.1% | 5.8% |
| Delhi | 3,504,739 | 6.7% | 18.4% |
| Guangzhou | 3,453,950 | -7.1% | 6.6% |
| Dallas/Fort Worth | 3,413,061 | -3.2% | 0.4% |
| Chicago O'Hare | 3,331,536 | -19.4% | 5.8% |
| Denver | 3,267,307 | 0.8% | 1.3% |
| Los Angeles | 3,167,305 | -26.5% | 2.7% |
| Tokyo Haneda | 2,974,916 | -35.6% | 12.1% |
| London Heathrow | 2,914,169 | -30.2% | 21.0% |
| New York JFK | 2,817,356 | -10.7% | 4.2% |
| Istanbul | 2,798,427 | -15.7% | 6.7% |
| Jakarta | 2,784,238 | -13.7% | -1.4% |
| Shanghai Pudong | 2,771,643 | -27.9% | 5.3% |
| Miami | 2,748,878 | 17.2% | 0.6% |
| Beijing | 2,631,166 | -49.0% | 12.1% |
| Orlando | 2,625,881 | -2.4% | 6.8% |
| Paris CDG | 2,580,804 | -27.3% | 15.2% |
| Shenzhen | 2,523,846 | -5.4% | 0.8% |
| Amsterdam | 2,509,452 | -24.5% | 13.0% |

Source: Official Airline Guide (OAG)

MIA INDUSTRY RANKINGS & AIR SERVICE

#1 Airport in USA for International Cargo (2021)

#1 International Passenger Gateway to the USA (2021)

**Largest and Best Served Gateway
to Latin American & Caribbean Region**

37.3 million (2021)

18.9 million (2020)
45.9 million (2019 – record)



2022 Passenger Status:
16.88 million (Jan-Apr 2022)
15.65 million (Jan-Apr 2019)

SERVICE TO

159 **100**

PASSENGER
DESTINATIONS

FREIGHTER
DESTINATIONS

56

PASSENGER
AIRLINES

42

CARGO
AIRLINES



MIAMI-DADE AVIATION DEPARTMENT

2022 MIA
MIAMI INTERNATIONAL AIRPORT

MIA CARGO HIGHLIGHTS (2021)



2.75 million

TONS OF FREIGHT
RECORD YEAR
(+18% over 2020)

82% International/
was 18% Domestic
International

Tonnage: **86%** Freighter Aircraft /
14% Passenger Aircraft



International Trade

57% Origin/Destination Freight
(IMPORTS & EXPORTS)

VALUED
AT: **\$67.5 BILLION**
(+28% over 2020)

Exports: \$38.3B
Imports: \$29.2B



95% Of Florida's Total
Air Trade Value
41% Of Florida's Total
Air & Sea Values

43% Of International
Tonnage In-Transit
to Third Countries

← 83% **→ 79%**
OF U.S. AIR IMPORTS OF U.S. AIR EXPORTS

Between Latin American /
Caribbean Region and USA

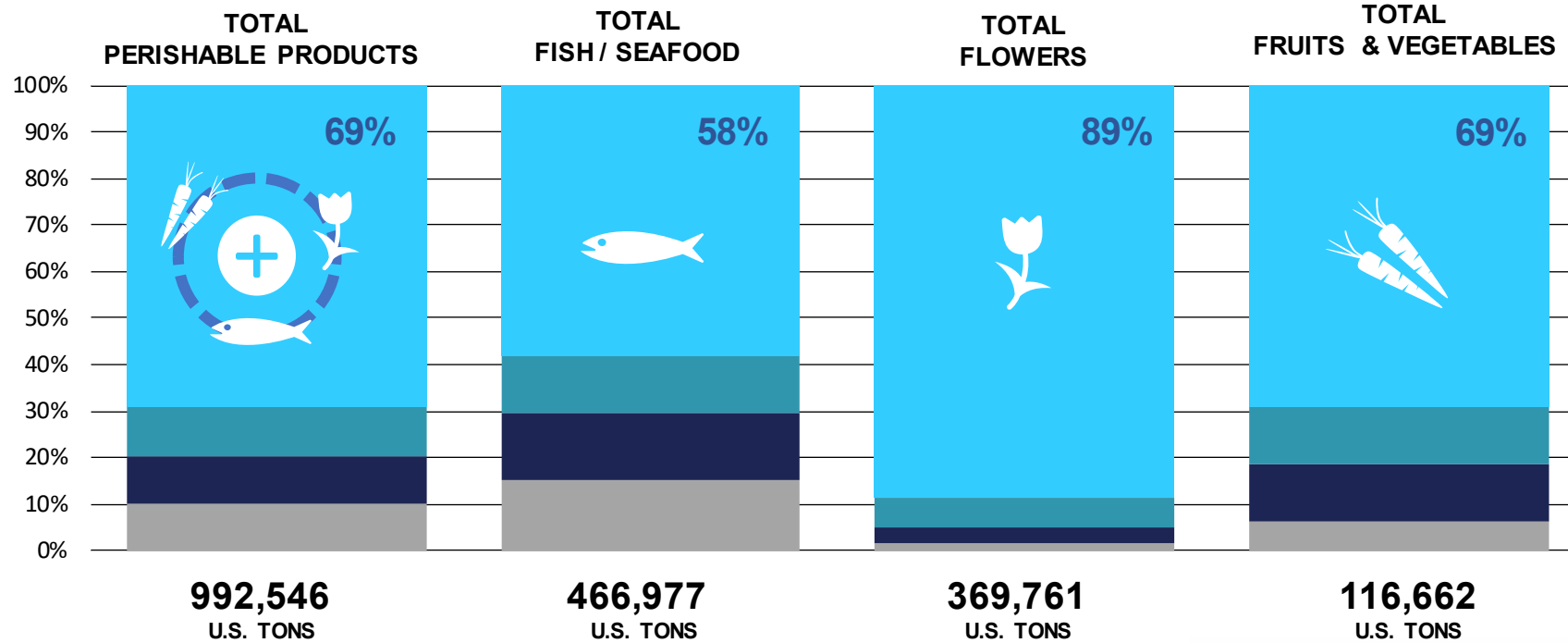


MIAMI-DADE AVIATION DEPARTMENT

2022 MIA
MIAMI INTERNATIONAL AIRPORT

MIA TOP IMPORT COMMODITIES (2021)

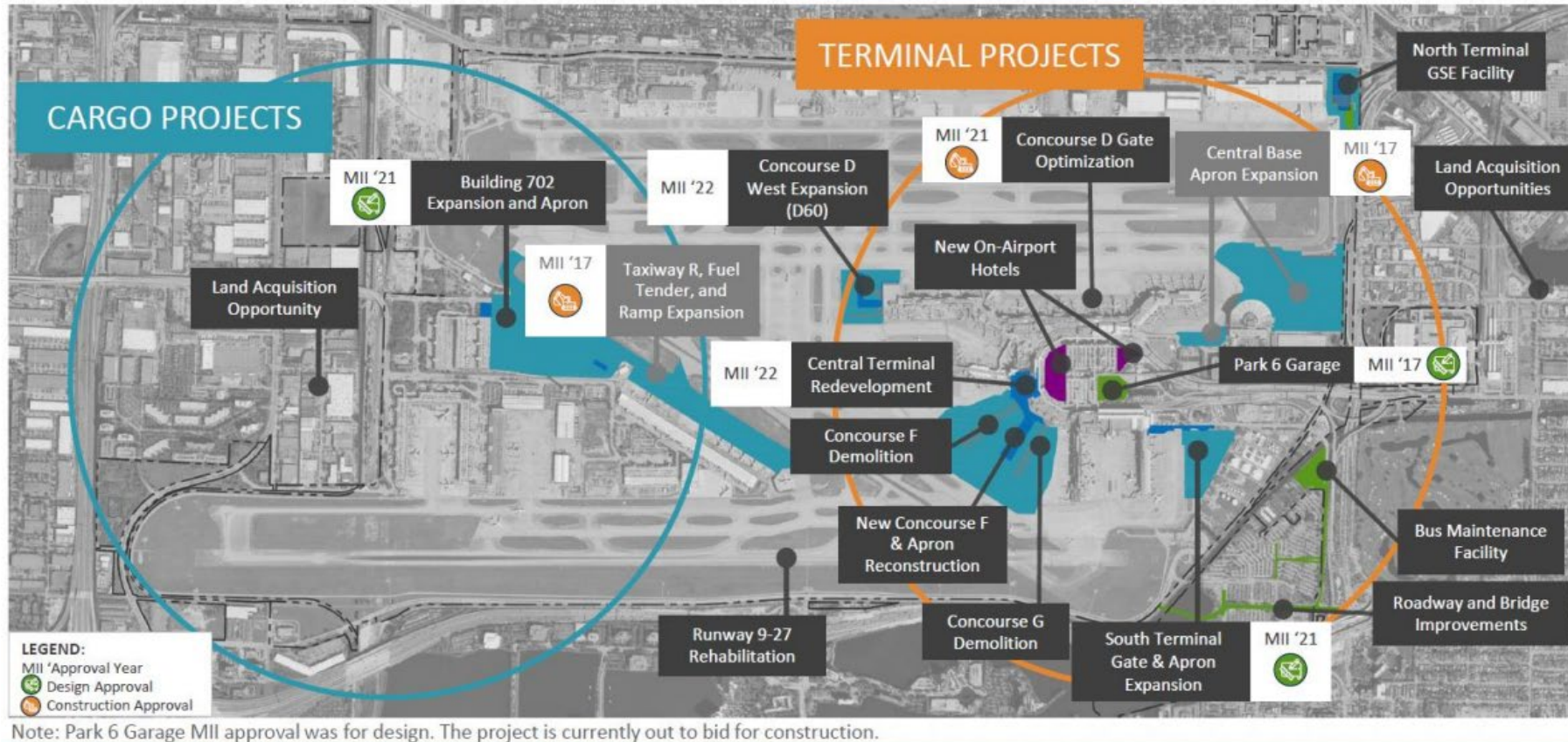
MIA leads all U.S. Airports in Perishables Cargo by a wide margin





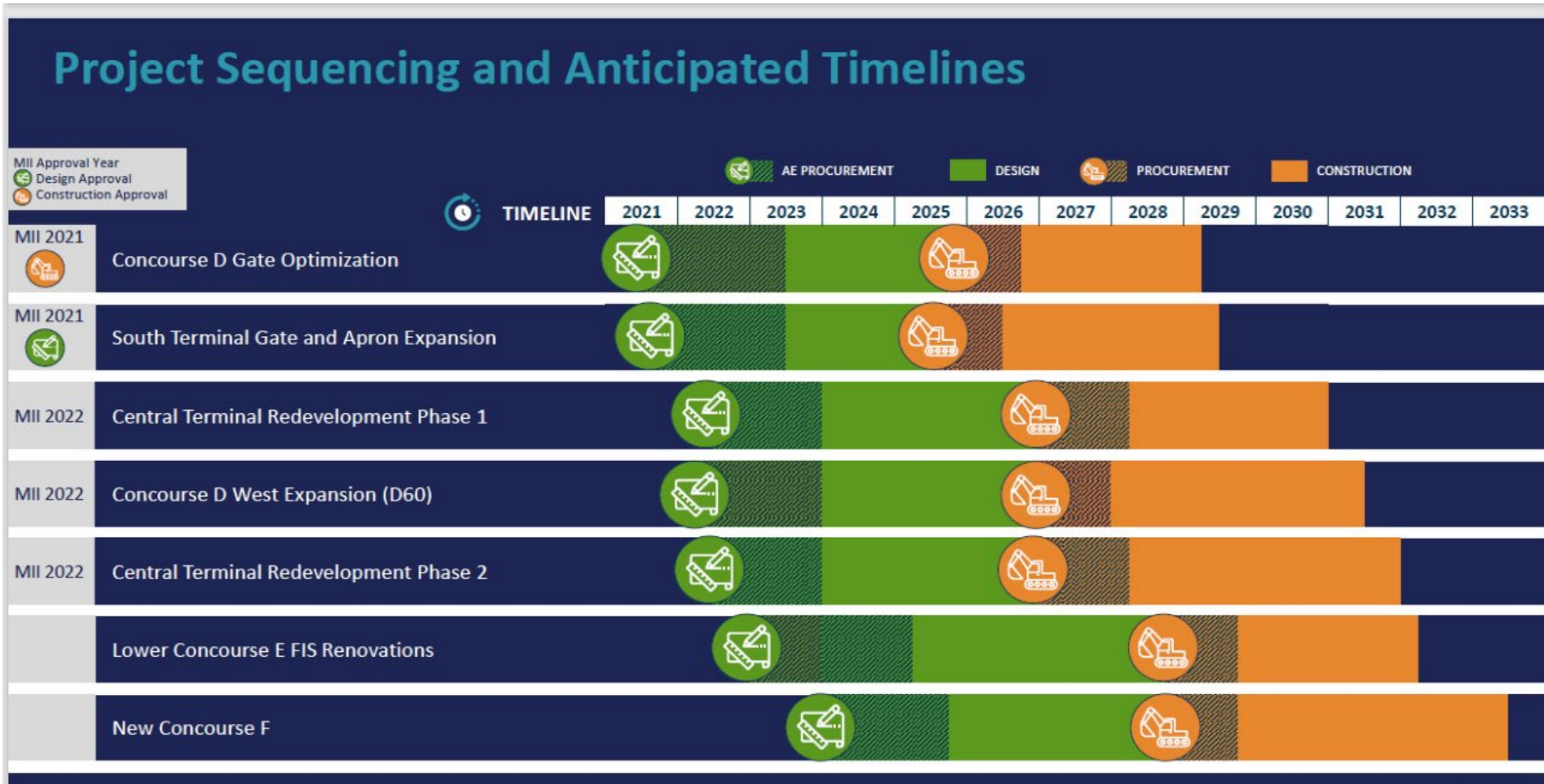
- **Negotiations approved by BCC in March 2022**
- **Five-level, 1.7M square-foot, state-of-the-art cargo handling facility**
- **Private investment of \$2 billion; 13,620 jobs during construction**
- **Over 3,000 permanent cargo operations jobs**
- **Annual capacity of 4.5M metric tons**
- **Projected completion: 2027**

MIA'S CAPITAL IMPROVEMENT PROGRAM (CIP)



- **Future Fumigation and Cold Chain Processing Facility at SW corner of MIA**
- **100,000-sq-ft facility for airport and PortMiami cargo imports**
- **Capacity to reduce average truck gate processing time from 2 hours to 1 hour**
- **Provides alternative to offload perishables at PortMiami presently diverted to Northeast U.S. ports and trucked back to South Florida**
- **Funded by \$44M U.S. DOT grant, FDOT & County match of \$21M**

MIA'S CAPITAL IMPROVEMENT PROGRAM (CIP)



CUSTOMER EXPERIENCE ENHANCEMENT INITIATIVE

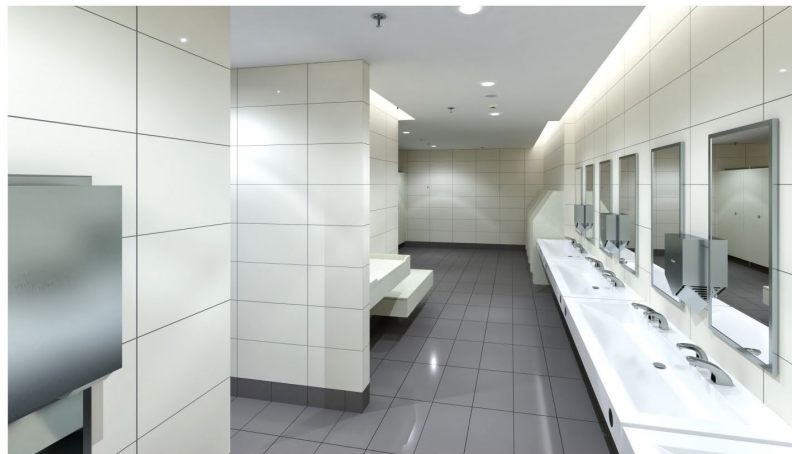


Passenger Loading Bridges (PLBs)

- Total of 128 PLBs
- Replacement of first 42 bridges underway
- Annual refurbishments in progress
- Completion by 2025 (2/3 new or refurbished)



CUSTOMER EXPERIENCE ENHANCEMENT INITIATIVE



Terminal Restroom Renovation Program

- ADA compliant
- Total of 447 Terminal Restrooms
- Phase 1 - Renovation of 192 Restrooms underway
- First 52 Restrooms - Notices to Proceed (NTP) issued for construction
- Design selection for remaining 140 Restrooms in Fall of 2021
- Total of 128 single occupancy Restrooms to be designated Gender Neutral

CUSTOMER EXPERIENCE ENHANCEMENT INITIATIVE



Conveyance Modernization Program

- Total of 617 units
- Modernization of first 46 elevators underway
- Annual refurbishments in progress
- Completion by 2025

Parking Access and Revenue Control System



The new Parking Access and Revenue Control System (PARCS) will offer the following:

- 16 “Pay-On-Foot” Systems will be installed in centralized areas throughout the Dolphin and Flamingo parking garages. This should reduce congestion at the exit as the prepaid ticket is processed faster
- Ability to pay for parking by use of either credit cards, debit cards or mobile pay (Apple Pay, Samsung Pay and Google Wallet).
- All exit lanes will be equipped with Exit Terminals that will allow unattended payment allowing for more throughput regardless of staffing levels
- Intercoms at each device will allow parkers to contact a Customer Service Representative in the 24/7 staffed Parking Control Room to assist them with any issue

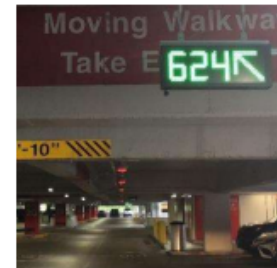


DESIGNA

Parking Guidance System



- The Parking Guidance System installed in the Dolphin and Flamingo Garages will assist parkers to find an available space
- Camera sensors installed above the drive lanes equipped with LED lights will detect available spaces and light up the LED signs with different colors to illustrate available spaces
- LED Space available signs strategically placed at each decision point will direct parkers to lanes and levels where there are spaces, reducing dwell time for finding a space
- Six (6) strategically Monument signs with LED signs will reflect available spaces at each level allowing parkers to drive directly to levels with available spaces
- Camera sensors will read License Plates of parked vehicles allowing parkers to use the “Find your Car” feature in the POF stations. A map will be displayed after payment with a map illustrating where the vehicle is parked



| P Dolphin | | |
|-----------|---|--------|
| Level | | Spaces |
| 6 | | 0000 |
| 5 | | 0000 |
| 4 | | 0000 |
| 3 | ♿ | 0000 |
| 2 | | 0000 |
| 1 | ♿ | 0000 |
| G | ♿ | 0000 |

MIA THE NEXT CHAPTER

Expanding the Gateway of the Americas



Scan the QR code or visit
www.iflyMIA.com to learn more
about Miami International Airport's
Capital Improvement Program



“Thank You!”