Gate Innovations & Technologies for Improving Throughput, Efficiency and Security

April 25, 2007
Stats On Port of Miami

- Acreage: 520
- Miles of Roads (Lanes): 18
- Berths (Number): 17
- Berth Length (Ft.): 19,690
- Water Depth (Ft.): 30, 36, & 42
Value of Port of Miami - Cargo

Port of Miami is an important economic engine for Miami-Dade County, the tri-county region, and the state of Florida.

9.4 Million Tons of Cargo a Year!

35% Heads North

65% 50 miles

Source: Economic Impact of Dante B. Fascell Port Miami-Dade County, 2006
Prepared by Four Gates Company
2025 Container TEU Projection
(3.4% Conservative Growth; 5.4% Aggressive Growth)

199% increase
103% increase
Vehicular Volume on Bridge

2006 – 13,600 Vehicles (2,050 Trucks)
2025 – 24,350 Vehicles (3,600 Trucks)

In Each Direction
Every Day
Existing Gate Lane Configuration

Out  Out  Out
In   In   In   In

Cars  In

Bob Tails and Chassis In
Existing Gate Operations

- **Gate Processing**
  - Valid Port ID
  - Verification of Company Permit
  - Manual Entry of Container and Chassis Numbers
  - Weigh Truck (if requested) and Collect Scale Fee
  - Average Processing Time – 1.5 minutes
The Path Forward: An Action Plan Approach for the Future...
New Gate

16 Lanes

Cruise

New Gate

Out

 Longer Stacking Distance

Cargo

In

Cargo
New Gate Improvements Underway

16 Lanes

- Inbound 10 lanes
  - 7 truck technology only
  - 2 multi-use
  - 1 Personal Vehicle Only (POV)

- Outbound 6 lanes
  - 4 truck technology only
  - 1 multi-use
  - 1 Personal Vehicle Only (POV)
New Gate Operations

- Pedestals allow driver to enter information and process themselves
- Gate Operators verify data and approve entry from the command center
- Processing for permanent ID Card holders will reduce processing time to 20 seconds or less
Optical Character Recognition acquires the Container, Chassis, Tractor License Plate Numbers
Closed Circuit Television Backup to Optical Character Recognition System
Inbound Pedestal

- Driver follows easy to use menus to enter data.
Multi-use Lanes
Scales and Collection of Money

Weighing the trucks and hand collection of the fees, takes extra time, therefore delays result.

The Port set up an automatic debit system for the truckers to collect the scale fees; to eliminate money transactions at the gate.

- Multi-use lanes still available for cash transactions ($2.50 surcharge for cash transactions)
Outbound Lanes

- Integrated with U.S. Customs & Border Protection Radiation Portal Monitors
  - Bar code Reading of Gate Pass
  - OCR Reading of Container and Chassis Numbers
  - Arrival & Departure Messages From Cargo Terminals
Processing done from the remote command center

Gate clerk reviews data AFTER driver inputs data. Operator only intervenes when there are exceptions and to complete transaction.
Gate Operations Command Center
Secret to Success

Integration of Business Processes

- Cashiering
- Cargo Gate System
- Business Permitting
- Credentialing / Access Control
- Radiation Portal Monitors
- Terminal Operators
Thank You