

# 2006 Port Everglades Master Plan Update Public Participation Program

2<sup>nd</sup> Meeting

**December 6, 2006** 



### Where We are Today . . . .

- Public participation program, 2<sup>nd</sup> meeting: December 6
- Stakeholder meetings, 2<sup>nd</sup> meeting: December 7
- Conducted one-on-one tenant meetings
- Conducted facilities assessment
- Conducted market assessment
- Conducted capacity assessment subject to berth utilization refinements



### Where We will be Going . . . .

- Preparation of Master Plan development with assets and constraints applied
- First workshop with Board of County Commissioners scheduled for February 20, 2007



### In Spring 2007 . . . .

- Refinement of Master Plan, 10- and 20-year Vision Plans
- Preparation of 5-year Capital Improvement Program
- Workshop/presentation with Board of County Commissioners



## **Port Everglades Mission Statement**

The mission of Port Everglades is to manage the county's port-related assets to maximize the economic benefits to the citizens and businesses of Broward County and the State of Florida. The port will manage the county's assets in a financially responsible, environmentally sound manner, consistent with the local, state, and federal rules and regulations which govern international and domestic trade, transportation and the port industry.



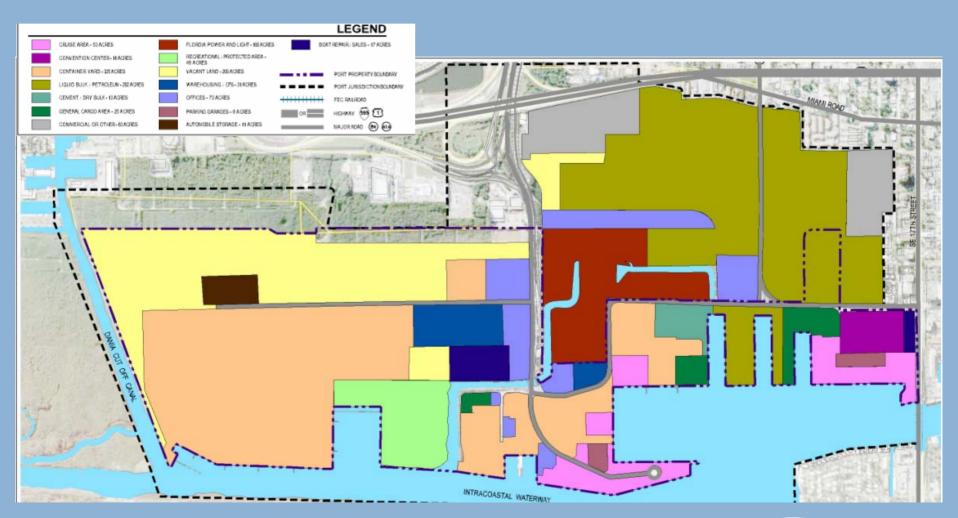
# **Port Everglades Assets Today**







# **Existing Land Uses**





#### **Market Assessment**

- Container cargo
- Non-container cargo; dry bulk & neo bulk cargos (i.e. cement, lumber, etc.)
- Liquid bulk (petroleum products)
- Cruise



#### **Container Cargo Assessment**

Prepared by Martin & Associates

#### **Non-Container Cargo Assessment**

Prepared by Michael L. Sclar Associates, Inc.

#### **Liquid Bulk**

Prepared by Purvin & Gertz

#### Cruise

Prepared by Bermello, Ajamil & Partners, Inc.

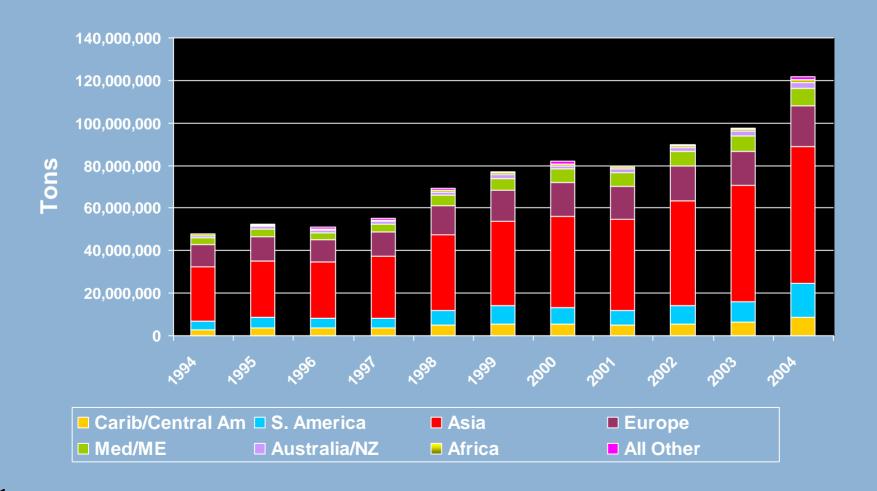


# **Container Market Assessment - Methodology**

- Assess historical containerized growth
  - US port growth
  - Southeast port growth
  - Florida port growth
- Examine historical container growth of key trading partners
  - Asia
  - Europe
  - Latin America/Caribbean
  - Other world areas
- Examine historical and future GDP growth of Latin American and Caribbean regions
  - International Monetary Fund
  - Economic Commission for Latin American and the Caribbean (ECLAC)
- Determine Florida and South Florida population growth and projections
- Interview PEV terminals and carriers to determine near-term anticipated growth



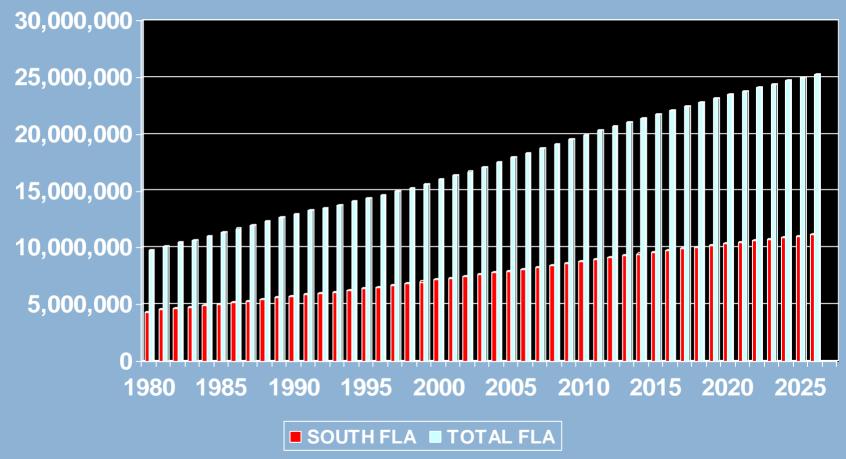
# US containerized import cargo has grown at an average annual rate of 9.8% -- driven by Asian imports





# Southern Florida population growth is expected to average nearly 1.6% annually over planning horizon

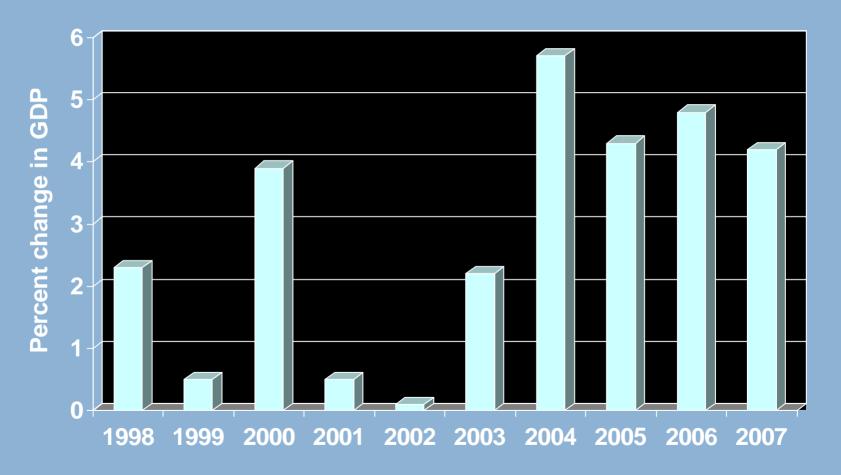
Florida/southern Florida population growth and estimates 1980-2026



Source: Demographic Estimating Conference Database, updated July 2006; South FLA counties include: Broward, Charlotte, Collier, De Soto, Glades, Hardee, Hendry, Highlands, Indian River, Lee, Manatee, Martin, Miami-Dade, Monroe, Okeechobee, Palm Beach, St. Lucie and Sarasota



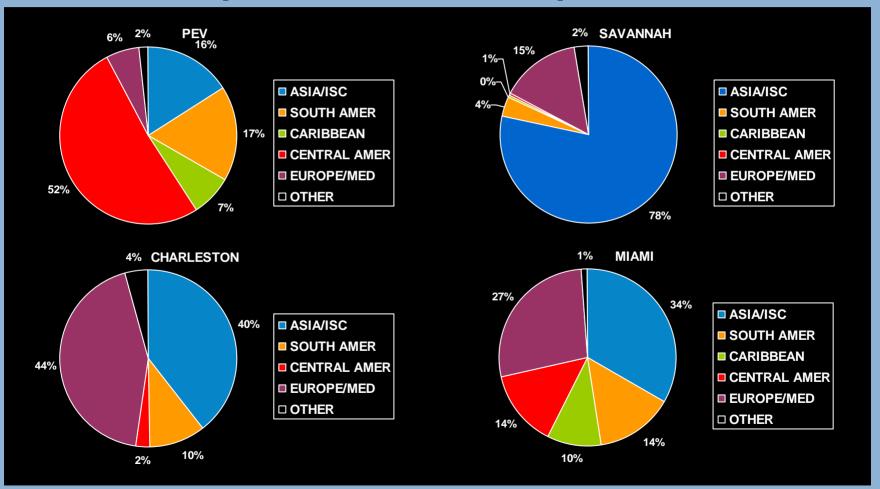
# Latin American and Caribbean GDP growth rates are expected to maintain levels between 4% and 5% in the near term



Source: International Monetary Fund, World Economic Outlook, September 2006



# Percent of Container Imports by Trade Route 2006 comparison with other ports



Source: PIERS Database, 2006



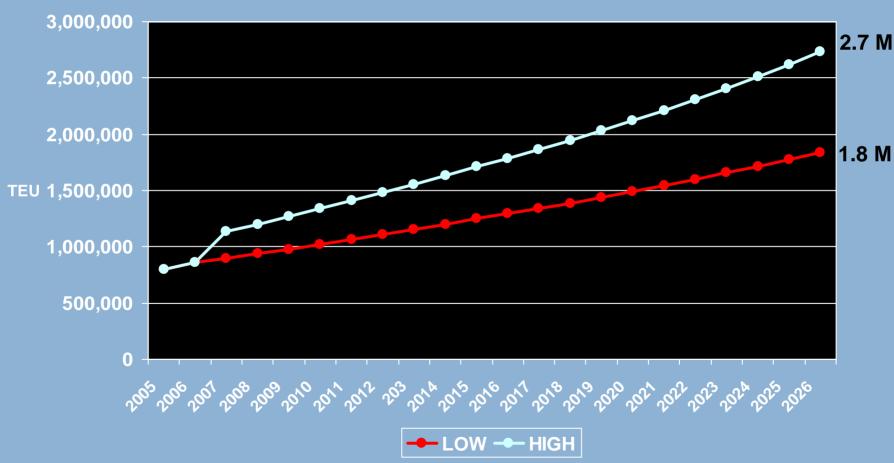
### **Container Forecast Assumptions**

- Developed LOW and HIGH scenarios
  - LOW scenario assumes modest growth based on historical and projected growth
    - South Florida population growth (import consumption)
      - Statistically closely related to container growth
    - Growth by trade lane
    - Latin American and Caribbean GDP (export)
      - ECLAC and IMF historical and near-term projections
    - South Florida (PEV + Miami) container growth
    - Assumes same carrier composition, NO NEW SERVICE
  - HIGH scenario assumes more robust growth based on historical and projected growth
    - South Florida population growth (import consumption)
    - Growth by trade lane
    - Latin American and Caribbean GDP
    - Terminal and carrier near-term projections
    - New services
      - Latin American/Caribbean
      - Asian/Northern European POTENTIAL



# **Low/High Container Forecast**

Choices will be made under analysis and implementation will be phased





### **Non-Container Cargo Market Assessment**

- Overview
  - The overwhelming proportion of dry bulk and neo bulk cargos are related to the Florida construction industry
  - Dry bulk cargos are dominated by cement and aggregates for the cement industry
  - Similarly, the largest proportion of neo bulk cargos are steel (rebar) and lumber



#### **Other Commodities - Neo Bulk**

- Yachts and autos for export represent the two other significant neo bulk commodities
- Yacht imports are projected to increase significantly with the potential to double every 5 years (until the market is saturated)
- Autos handled in Port Everglades are primarily used automobiles for export; new cars are routed via Jacksonville

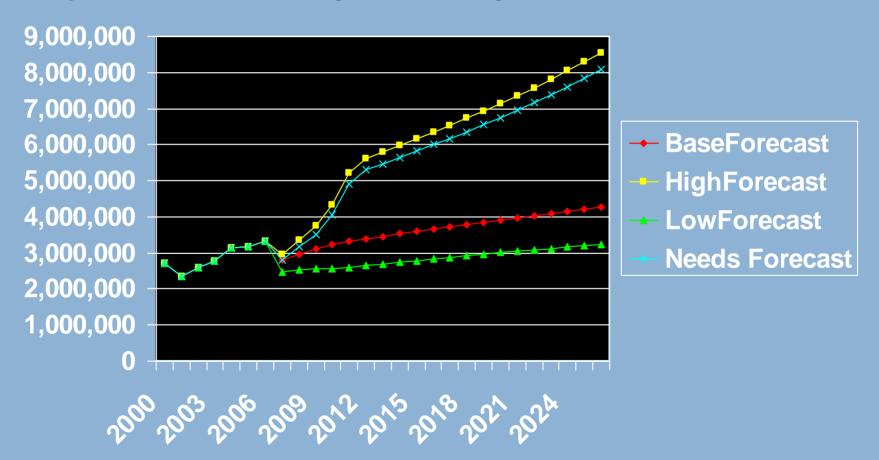


### **Primary Forecast Drivers**

- Over the long-term, the growth of the Florida construction industry will approach the growth rates for Florida population
- The economic cycles impacting construction growth rates will dominate the long-term trends
- Changes in inventory levels (e.g. resulting from steel import cycles and cement plant capacity growth) will further impact short-term trends
- Specific events such as court ordered limitations on crushed rock mining at the Lake Belt mines could create a significant opportunity for Port Everglades

# High, Baseline, Low and Needs Assessment Forecasts

Dry bulk and neo bulk tonnage for Port Everglades





#### **Conclusions**

- Cement represents the most stable market
- Lumber and steel volumes are limited in growth potential
- Growth in yachts and a stable used car market round out the neo bulk market
- The dry bulk and neo bulk markets for Port Everglades are relatively flat with limited downside
- The addition of 2-4 million tons of aggregate represents the most significant potential upside, if feasible



#### **Cruise Market Assessment Factors**

- Very successful in developing new products that generate sustained interest in cruising
  - New, larger, exciting vessels, diverse onboard products and services
  - New regions, itineraries and on shore product offerings
  - Products deliver a high level of passenger satisfaction, leading to repeat clientele and lower conversion costs
  - Several lines report repeat levels of over 45%
  - Lines have learned to adapt quickly to changing market conditions and shift business models accordingly



#### **Evolution of Cruise Vessels**

Period	Length	Draft	PAX	Characteristics of the Period
1960	508 ft.	36 ft.	500	Vessels acquired & refurbished.
1970	705 ft.	32 ft.	650	Standard business model used with profitable results until the fuel crisis.
1980	803 ft.	29.5 ft.	1,500	Change in business model; experimentation with larger ships and operating itineraries.
1990	902 ft.	26.25 ft.	2,600	Larger ships becoming the destination. Shallower drafts.
1997	965 ft.	26.25 ft.	3,600	Mega-ships that are floating cities. Focus on maximizing passenger capacity. One-region vessels not capable of Panama Canal Transit.
2000	1,000 ft.	29.5 ft.	3,000	Larger ship volume concentrating on creating efficiencies with ship design, outside cabin development, ship services and flexible deployment.
2006	1,000 ft.	29.5 ft.	4,000	Freedom class, 160,000-GT. Allows for increased onboard revenue areas, largest ship in world status (ego / marketing boost), economies of scale.
Next Generation (Genesis)	1,100 – 1,400 ft.	32 - 36 ft.	5,000+	Product and service led design; new innovative marine hull design to support more above water structure. Separate apartment towers, entertainment zones and amenities. Limited port deployment options.

#### **Fantasy Class**



#### **Grand Class**



#### **Radiance Class**



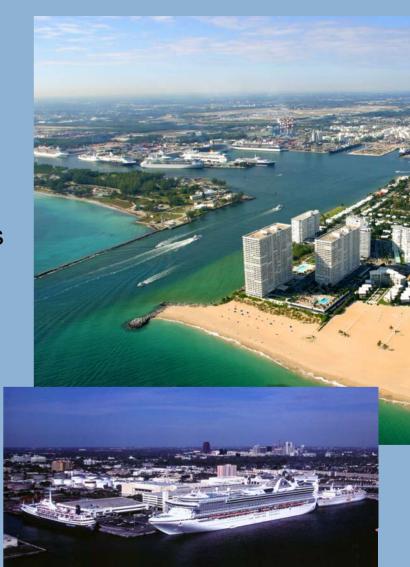
**Freedom Class** 





#### **Cruise Overview**

- Strengths include:
  - Access to regional consumers;
  - High quality tourism infrastructure demand
  - Convenient marine access
  - Number and length of cruise berths
- Improvement foreseen in cruise terminal facility offerings
  - Capability of Terminals to receive largest cruise vessels
  - Availability of additional berthing areas on peak days of operation
  - Ingress/egress issues impacting cruise operations and parking





## **Cruise Target Regions**

- Western Caribbean
- Eastern Caribbean
- Lower Southern Caribbean
- Grand Caribbean
- Bahamas
- Transcanal
- Extended Caribbean/South America
- Transatlantic
- World cruises
- US East Coast repositioning
- Daily and non-conventional cruise



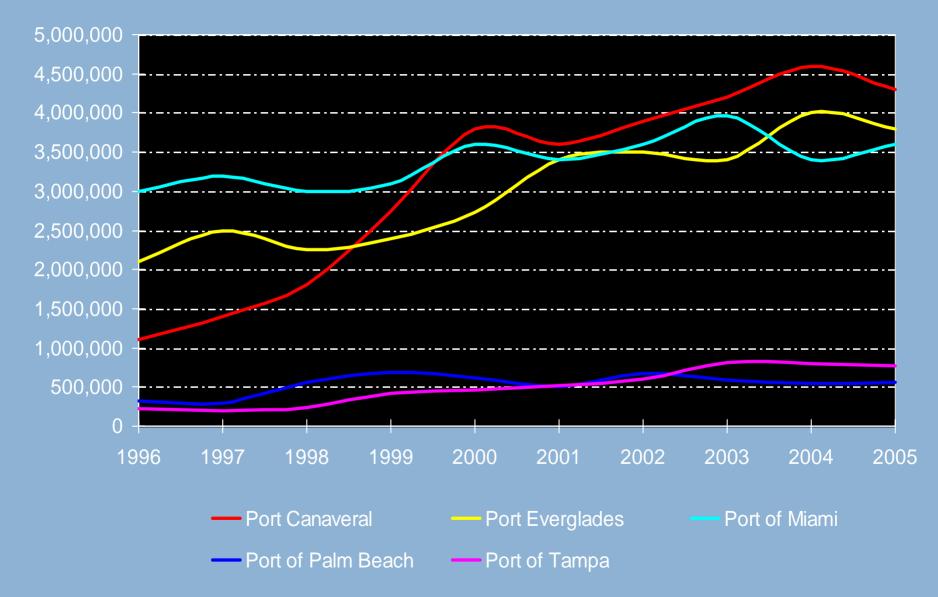
#### **Caribbean Growth Factors**

- Cuba to provide increased port of call options, not necessarily increased regional capacity (shifting)
- Port infrastructure needed for next ship generation
- Expansion of out-islands and destinations key
- Larger ships on shorter sailings





# Regional Homeport Passenger Throughput



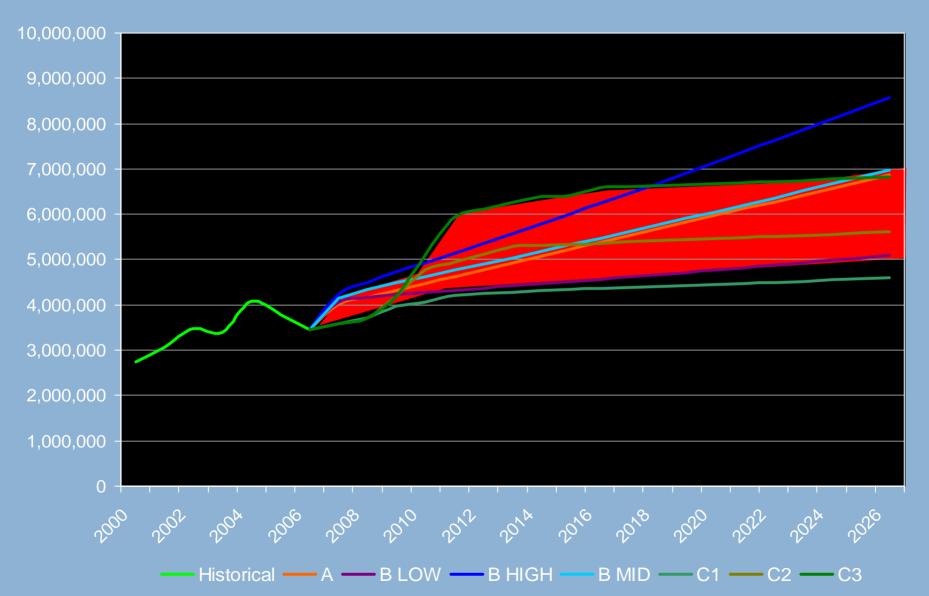


# **Attractiveness of Port Everglades to Cruise Market**

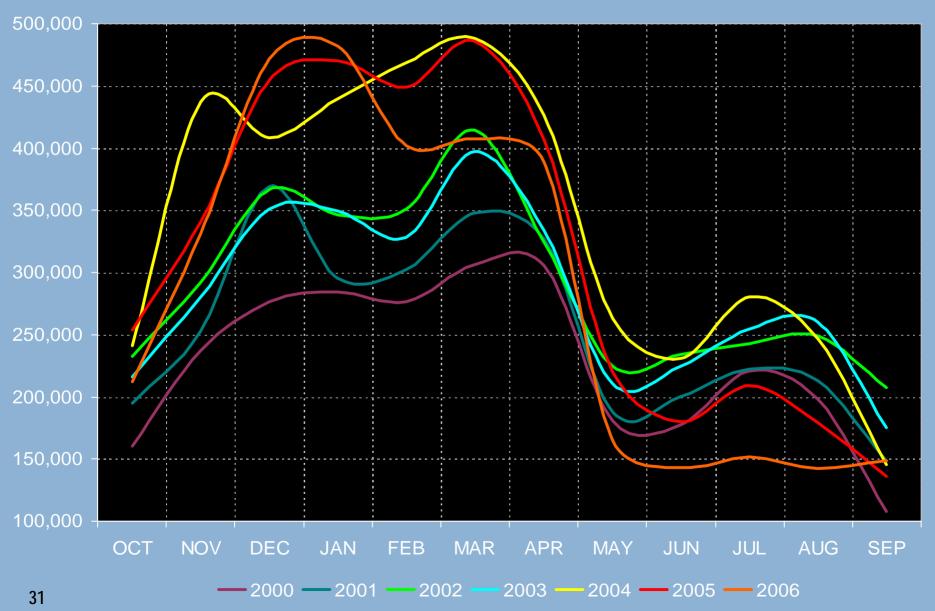
Criteria	Assessment			
Marine Access	(short channel for large ships) ■ / 🌴			
Terminal Location(s)	<b>↑</b>			
Pier / Berthing	(length of berths) ■ / 🌴			
Apron				
Gangways	(new systems installed) ■ / 🌴			
Terminal Operations				
Ground Transportation Areas (GTA)	<b>=</b> / <b>^</b>			
Parking	(proximity to terminals) ■			
Provisioning	<b>↑</b>			
Security	<b>=</b> / <b></b>			
Landside Access	(gate and roadway access) ■ / 🌴			
Airport and Airlift	(proximity and capacity) ■ / 🎓			
Lodging	<b>★</b>			
Attractions and Venues	<b>★</b>			
Access to Consumers	<b>↑</b>			
General Appeal	<b>↑</b>			
Marketing / Communications	<b>=</b> / <b></b>			
Key: Strong (♠), Fair (■), Weak (♥)				



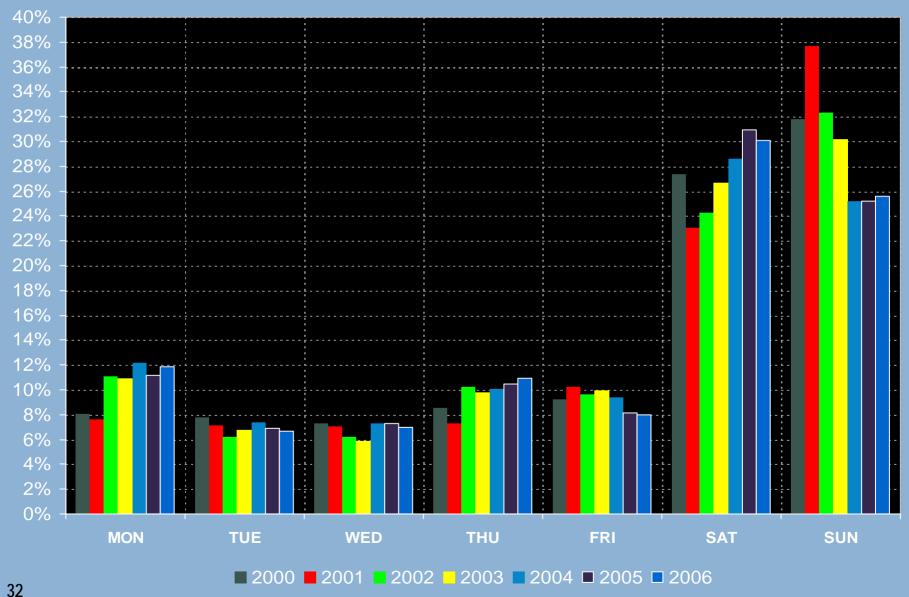
#### Range of Revenue Total Passenger Projections



#### **Monthly Passenger Traffic**



#### **Daily Passenger Traffic Comparison**





TOTAL BERTHS DEMANDED TOTAL +/- 1,100 LOA DEMANDED - PASSENGERS

Source: B&A, 2006.



#### **Conclusions**

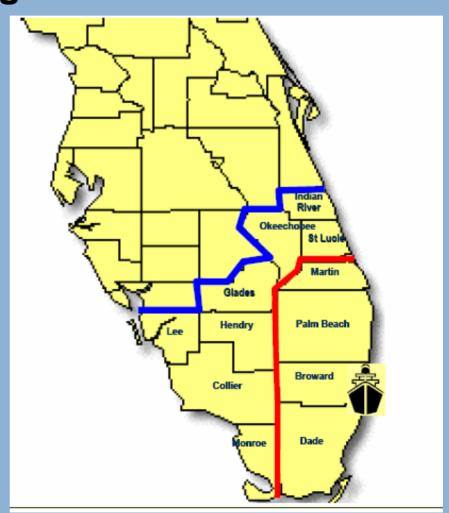
- Its all about the berths
  - More passengers, longer berths
- New terminals/berths are needed in the next 2 to 5 years to support larger ships more passengers
- Landside infrastructure must be modified to meet demand of more passengers, baggage, vehicles
  - Expansion through planning, technology, partnerships



# Port Everglades' Petroleum Industry serves a 12-County Region

- Primary Market: Broward,
   Miami-Dade, Palm Beach,
   Martin Counties
- Secondary Market:

   Collier, Glades, Hendry,
   Indian River, Lee,
   Monroe, Okeechobee,
   and St. Lucie
- Port supplies 87 percent of gasoline demand in region and 37 percent of Florida's gasoline requirements
- Port supplies jet fuel to FLL and MIA





### **Petroleum Product Diversity**

- Regional petroleum product demand is growing at about 2.7 percent annually
- Gasoline predominates, but Port also supplies diesel, asphalt, jet fuel, fuel oil for the power plants, propane, and some biodiesel fuels
- Industry services include
  - Selling gasoline to retail gas stations in the region supplying the region's international airports
  - Fueling the Port's cargo and cruise ships
  - Serving military needs
  - Providing emergency storage



#### **Market Characteristics**

- Percentage of vessel calls is shifting from barge to tanker, with more product coming from international sources
- Tankers coming from international markets are larger than those from domestic sources
- Existing petroleum berths are utilized to capacity.
- Fully loaded larger tankers can experience constraints (berth length, slip width, water depth)
- Emergency situations such as hurricanes during peak seasonal demand can stress tenants' storage and distribution capabilities



#### What is Needed to meet Market Forecasts . . . .

- Container Cargo
  - Increase berth and yard utilization
    - Add Berths/Terminal Yards
    - Increase Efficiencies
      - Increase berth occupancy
      - Increase lifts per call
      - Use higher density stacking equipment
  - Deepen and widen channel

#### Non-Container Cargo

- Determine feasibility of aggregate as major import commodity
- Cruise
  - Have 9 berths to handle 1100+ foot LOA ships
  - Increase cruise season/weekday use
  - Continue dual use of berths for cargo and cruise
- Petroleum
  - Increase receiving system efficiencies
  - Add berth capacity



#### Conclusion

Berth Capacity is the primary limiting factor to Port growth

#### **NEXT STEPS**

Balance capital improvements with operational efficiencies and environmental stewardship to achieve optimum Master Plan