The purpose of this presentation was to review the draft market forecasts findings for the four core business line for the 2014 update to the Master/Vision Plan with the audience. The information contained herein is in draft form and was accompanied by a verbal description during the presentation and has not been approved by Broward County. Since the following slides are in draft form the information thereon is subject to change.



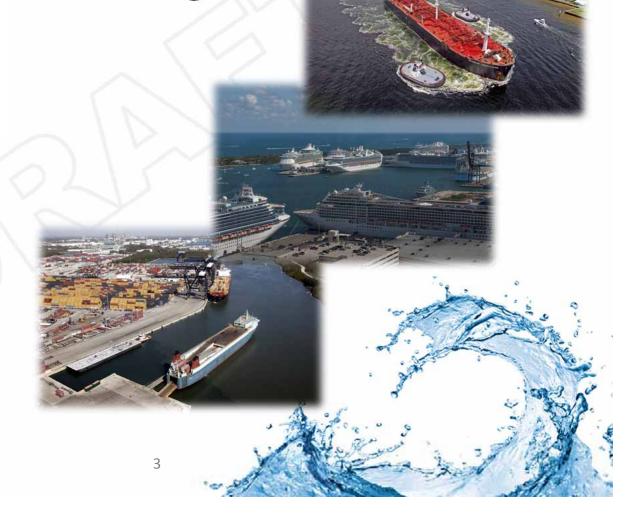


## Agenda

Market Forecasts Findings

Cargo

- Cruise
- Petroleum
- Next Steps





#### MARKET FORECASTS PRELIMINARY FINDINGS

## CARGO





#### Market Forecasts

- Goal: 20-year forecasts for containers, breakbulk, dry bulk
  - Benchmark overall growth targets
  - Identify key markets, opportunities, constraints, and plan responses
  - Focus on strategies that "move the needle"
- Data development
  - Port Everglades data historic performance, last forecast update, PIERS
  - External data Army Corps report, Alphaliner, Freight Analysis
    Framework-3, IHS, U.S. Census Bureau Foreign Trade Division, ACP,
    Florida state/regional data, landside cost model
  - Carrier/operator interviews
    - MSC, FIT, Crowley, CMA/CGM, Hamburg Sud, Portus, Dole, Cemex;, FEC, Port staff; more planned



#### Market Variables

Known Strengths	Issues, Variables, Unknowns
Strong local market	Berth limitations – length, number
Southport improvements (turning notch, wharf, cranes)	Crane limitations – air draft, number
Recommendation for 48' authorized depth	Seasonality of commodity demand
Necommendation for 48 dathonized depth	Adequacy of 48' authorization and impacts of
Truck access and backland availability generally good	maintaining at 49' vs. 50'
Future on-port ICTF	Carrier alliances (especially P3), vessel deployment strategies, vessel types, in light of improvements at competing ports and evolving fleet mixes
Americas markets	
Cost structure, strong tenant relationships and	Extent of transshipment vs. direct services
commitments	ICTF operations and ability to serve hinterland markets
	Transload/Integrated Logistics Center (ILC) potential, on site vs. at inland ports

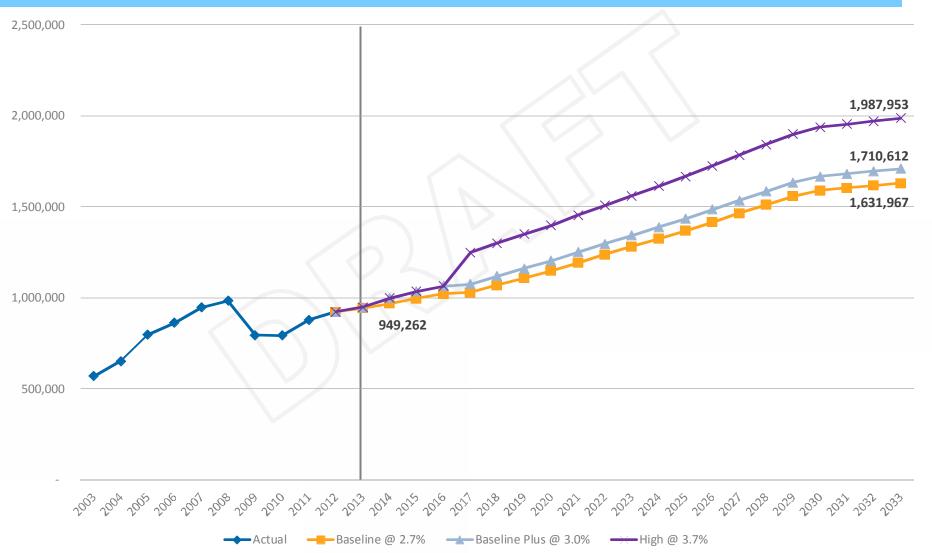
### Container Forecast Assumptions

- Baseline Forecast
  - Derived from ACOE deepening study
- Baseline Plus Forecast
  - Accounts for new ICTF and adds Hapag-Lloyd GAX traffic
- High Forecast
  - Adds all-water Asia trade to Baseline Plus scenario and impact on ICTF utilization

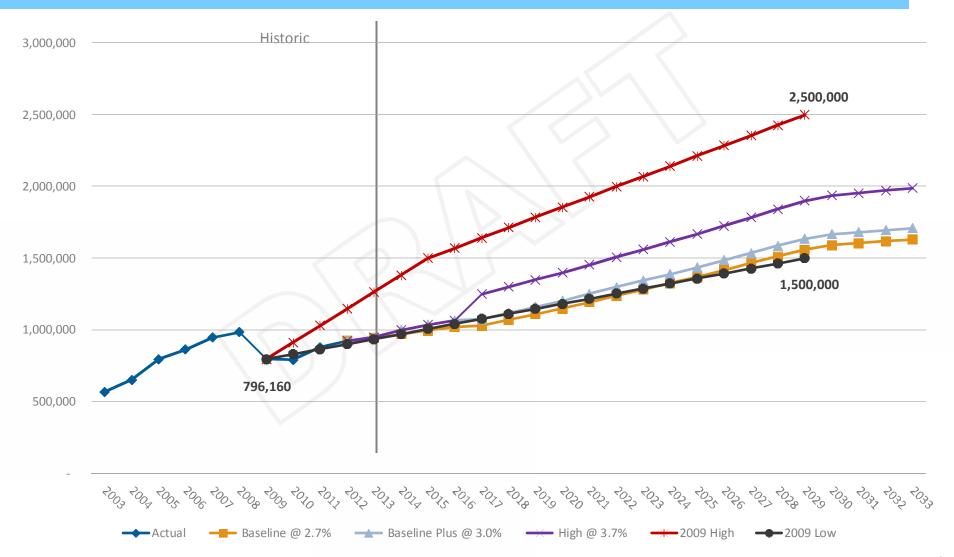




#### **Containers - Unconstrained Forecasts**



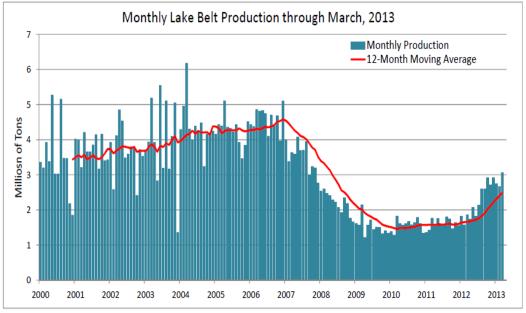
## Containers - Comparison of 2009 and 2014 Forecasts Total TEUs



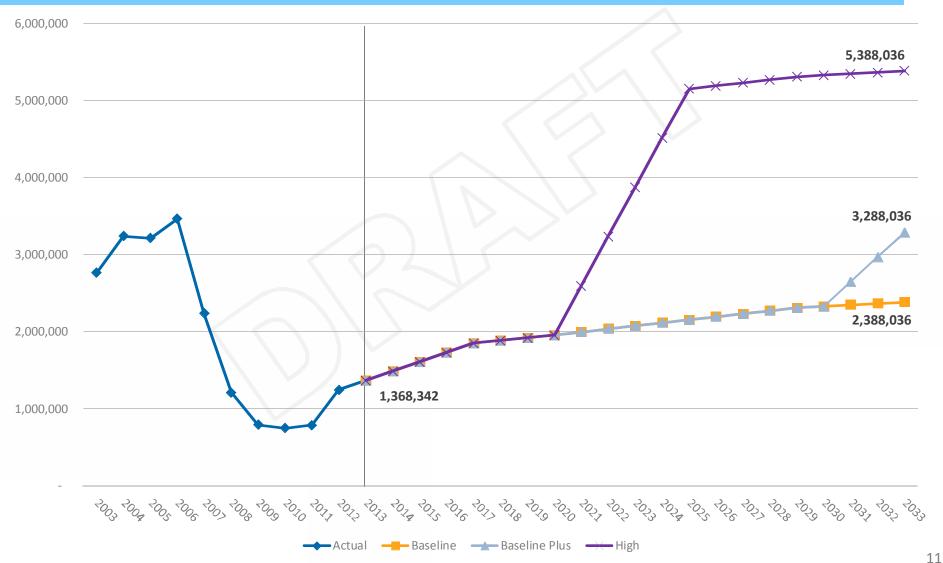
#### Dry Bulk, Break-Bulk, Yachts and Vehicles

- Baseline forecast
  - Slight rebound from 2012 through 2017, followed by slow growth (1.6% CAGR) through 2033
  - Demand for all commodity types tied to construction activity and GDP
- High forecast (provisional)
  - Possible new crushed rock import terminal
  - Demand depends on:
    - Timing and expiration of Lake Belt mining permits
    - Number of permit holders who could use Port Everglades imports to replace Lake Belt production
    - Suitable facilities, especially rail service, at Port

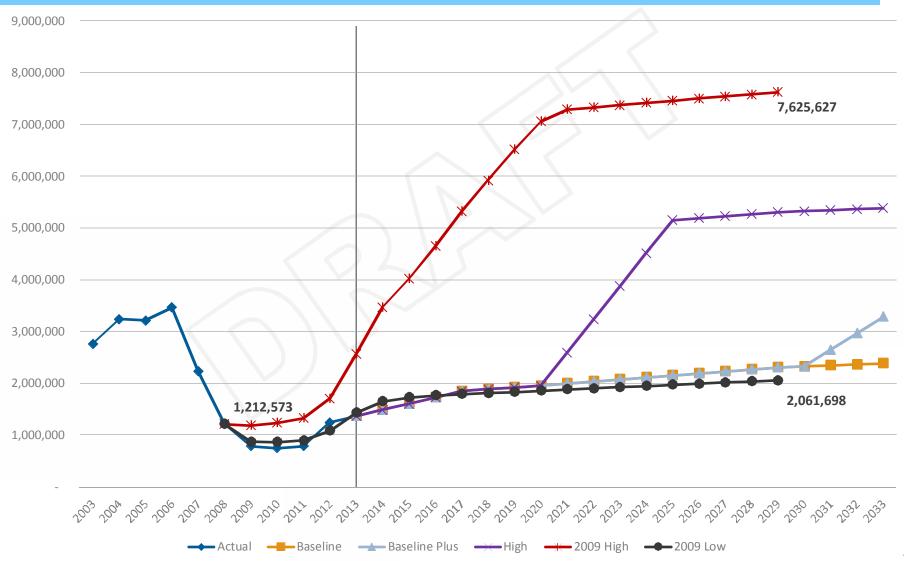
#### Miami-Dade County Aggregate Production



#### Dry Bulk, Break Bulk, Yachts and Vehicles 20-Year Forecast Estimates



## Dry Bulk, Break Bulk, Yachts and Vehicles Comparison of 2009 and 2014 Forecast Estimates



#### MARKET FORECASTS PRELIMINARY FINDINGS

## CRUISE





## Overview of Cruise Market Forecasts Approach

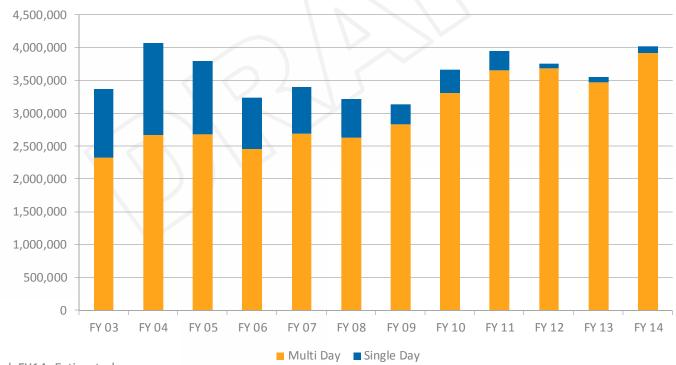
- Reviewed 2009 Master Plan forecasts
- Reviewed key market trends and identified key threats
- Identified and evaluated cruise industry perspectives and actions
- Analyzed population, income, and vacation trends for target markets
- Evaluated impact of new and existing regulations on cruise industry
- Developed and analyzed Port Everglades trends



- Reviewed capital investments at Port Everglades
- Defined key assumptions for low, medium ("most likely"), and high growth scenarios
- Prepared low, medium, and high forecasts

#### What Has Happened at Port Everglades?

- From FY03 to FY14,
  - Multi-day cruise passengers grew from 2.3 M to 3.9 M (estimated), representing a +4.9% CAGR
  - Single-day passengers fell from over 1 M to 100 k (estimated)



## What Key Factors Drove Our Growth Assumptions?

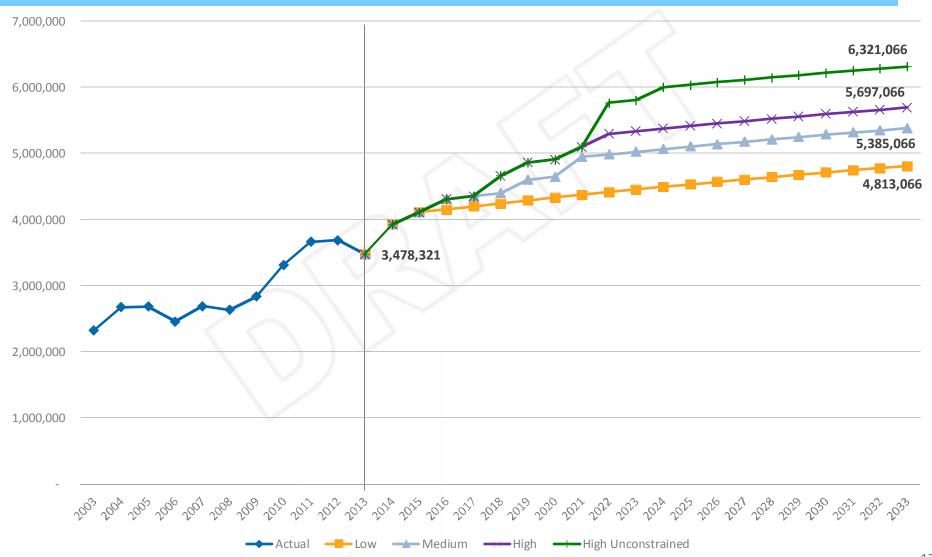
- Weekend Utilization
- Summer Sailings
- Non-weekend Sailings
- 9 Ship Maximum
- Port of Call
- Repositioning of Vessels and Vessel Size Increases
- Single Day Market



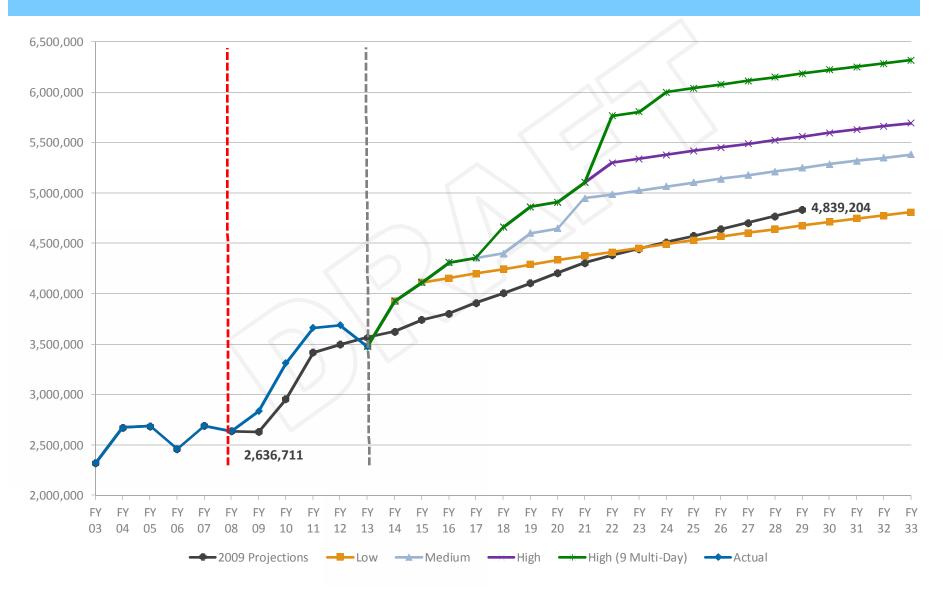




#### 20 Year Forecast for Port Everglades Multi-Day Cruise Passengers

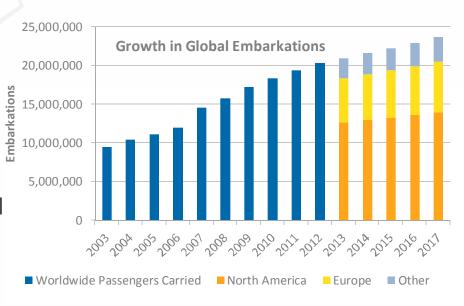


#### Multi-Day Cruise Passengers Comparison of 2009 and 2014 Forecast Estimates

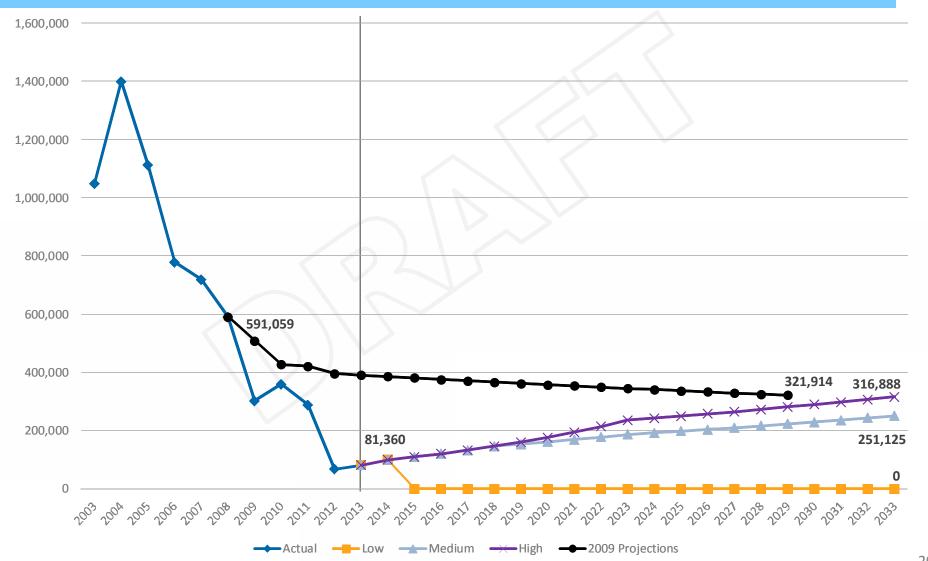


#### Is the Demand there to Feed Our Forecasts?

- U.S. population of cruisers will grow by 3.2 M revenue passengers by 2033
- This will result in a global growth of roughly 5.8 M revenue passengers in 2033
- Cruise Market Watch predicts a 3.1% annual growth rate from 2012-2017 resulting in 5.4 M more revenue passengers, signifying larger market reach
- 13 new ships added in 2014-2015 will increase capacity by 8.7%
- Since 1980, CLIA members have experienced an annual growth rate of 7.2%
- Remaining demand for Caribbean market will be in excess of 4.5 M more revenue passengers over next 20 years
- PortMiami forecasts additional 1.6 M revenue passengers by 2033



#### 20 Year Forecast for Port Everglades Single-Day Cruise Passengers



#### MARKET FORECASTS PRELIMINARY FINDINGS

### **PETROLEUM**

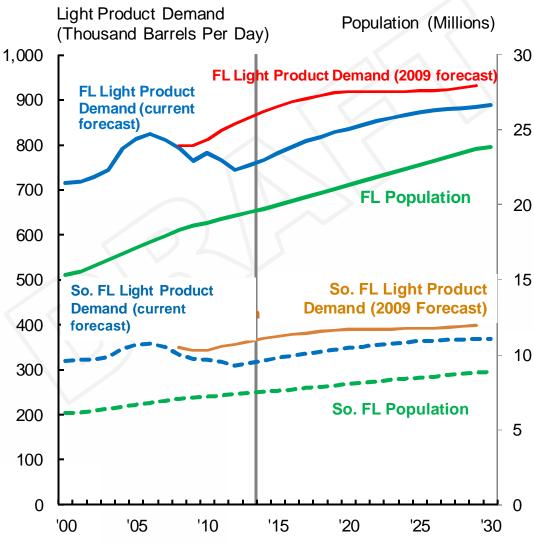


## General Methodology

- Petroleum import and export data is sourced from ACOE, DOE, public and private ports, and IHS estimates
- U.S. petroleum demand data is obtained from the DOE
- U.S. and regional PADD level petroleum demand forecasts are determined through analysis of relative strength of the economy, petroleum prices, the regulatory environment, the extent of travel, fuel efficiency of the fleet, and assumptions regarding alternative motor fuels
- State historical light product consumption estimates for Florida are based on the EIA's State Energy Data System (SEDS) data
  - The state level forecast is based on an independent forecast of state population and the PADD-level demand forecast
  - Port Everglades light product demand forecast is based on the regional
     12 county area served by the port
- State historical heavy fuel oil and bunker consumption is estimated utilizing DOE prime supplier sales volume data along with ACOE import data

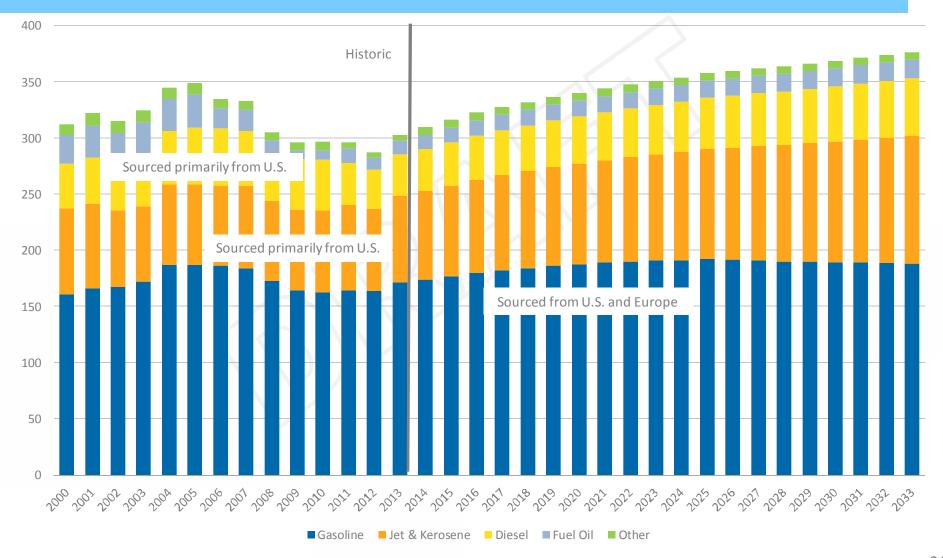
### **Light Product Demand**

Florida and Port Everglades (South Florida) Light Product Demand and Population

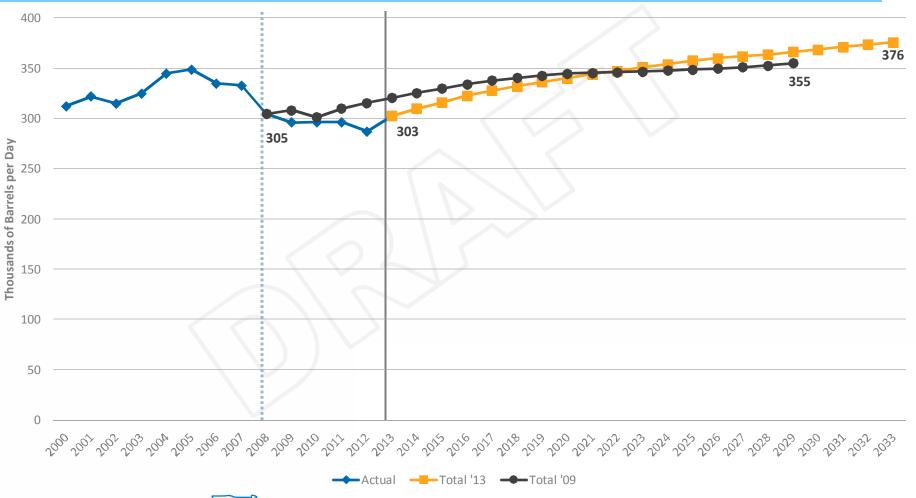


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### Port Everglades Petroleum Throughput

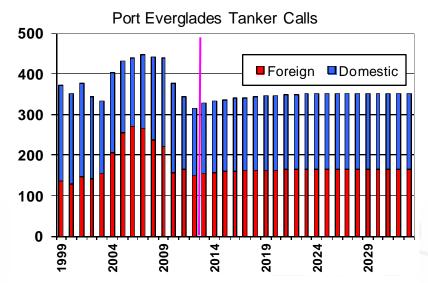


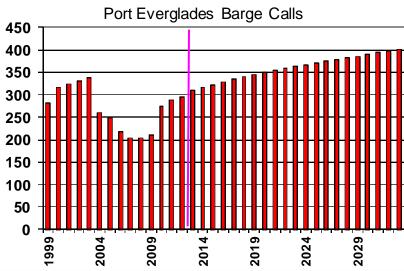
## 2009 and 2014 Comparison (Thousands of Barrels per Day)



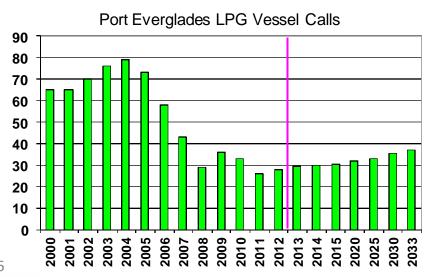


### Port Everglades Vessel Calls





- Reduced product demand, refinery shutdowns and increasing competition = declines in tanker calls since 2009
- Domestic tanker calls to increase modestly through 2025, then flatten.
- Foreign tanker calls have fallen significantly since the Hovensa refinery shutdown
- Barge calls saw very strong increases since 2009 as the port depended on barge shipments from Gulf Coast refineries to meet product demand as tanker calls fell.
- Barge calls are expected to continue to increase to meet local demand growth and expected to reach more than 400 calls by 2033, an increase of 33%
- Hurricane Katrina destroyed the Dynegy plant in Venice, LA and volumes decreased significantly afterwards. As demand grows, LPG calls are expected to resume growth



## Master/Vision Plan NEXT STEPS





## **Upcoming Meetings**

- Friday, Oct. 4: Presentation to PEA on Market Forecasts
- Tuesday, Oct. 8: Public Meeting to present Market Forecasts, Broward County Main Library, 5-7pm





# Port Everglades Master/Vision Plan Update Contact Person and Email

Natacha J. Yacinthe, Ph.D. Project Manager

(954) 468-0213

To Submit Comments by E-mail:

portmasterplan@broward.org

