



# Port Everglades Master/Vision Plan Update

## Container and Non-Containerized Cargo Charrette Meeting

June 18, 2009



The purpose of this presentation was to review the progress of the update to the 2006 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.



# Progress to Date

## Working on Phase I Update

- **Updated Element 1: Existing Conditions Assessment**  
- Discussed at 3-27-09 Tenant/Stakeholder Meeting
- **Updating Element 2: Market Assessment**
- **Updating Element 3: Plan Development**



# Updating Element 2: Market Assessment

- **Bermello, Ajamil & Partners - Cruise**
- **Martin & Associates - Containerized Cargo**
- **Purvin & Gertz - Liquid Bulk**
- **Sclar & Associates - Non-Containerized Cargo**

**(For 20-year Design Horizon; 2009 to 2029)**



# Containerized Cargo

Presented by John Martin/Jeff Sweeney  
Martin Associates

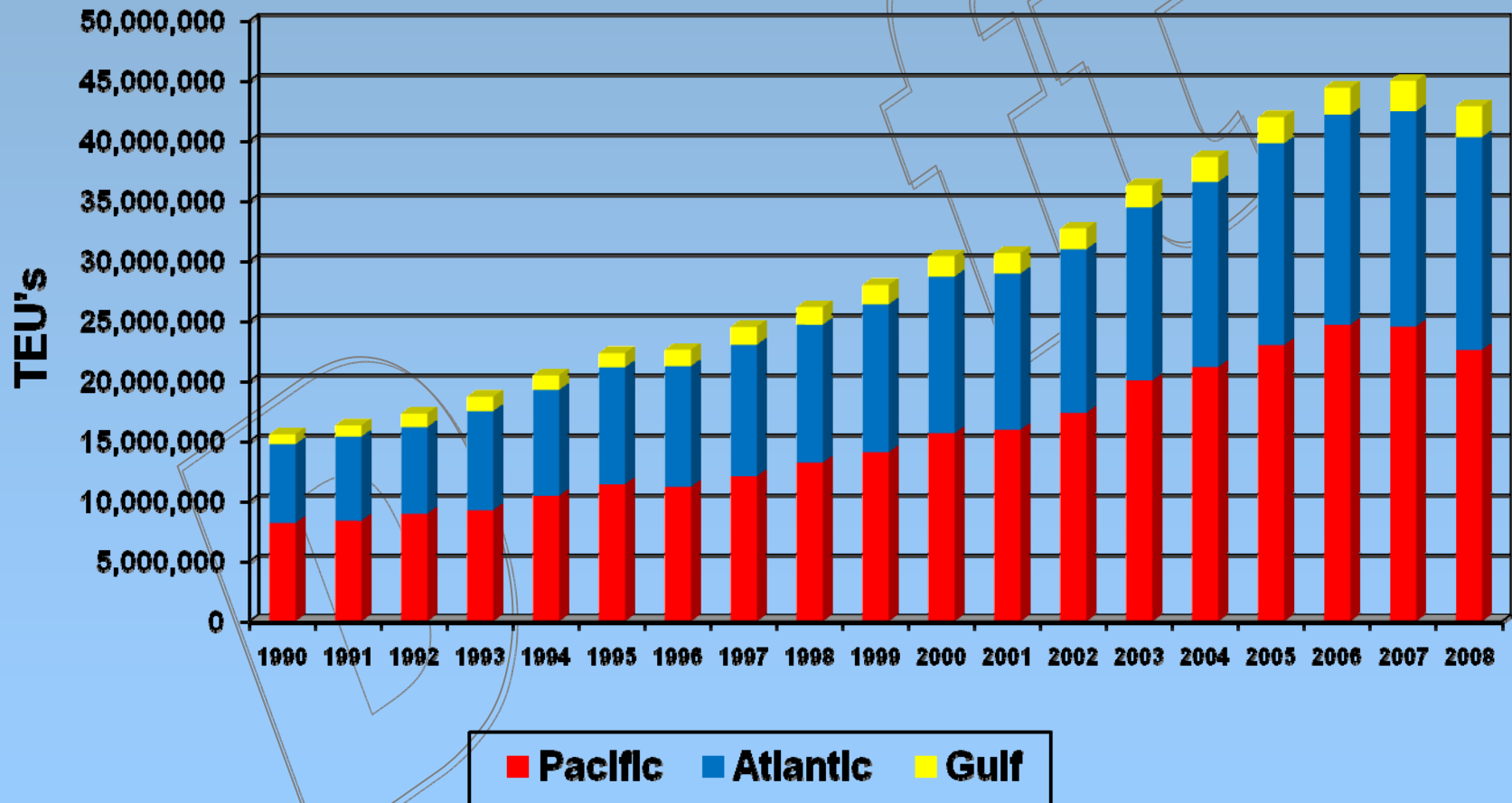


## Study Progress

- Overview of containerized trade
  - US
  - Southeast
- Review of PEV Performance (6-month FY09)
- Discussion of Current Port Shares to Key Importer/Exporter Locations
  - By Trade Route
- Competitive Market Assessment
  - Truck Hinterland
  - Intermodal Assessment
    - By Trade Route
- Preliminary Draft Forecast
  - Low Baseline Scenario
  - Potential High Scenario



# Trade Growth has Suffered Due to Economic Conditions

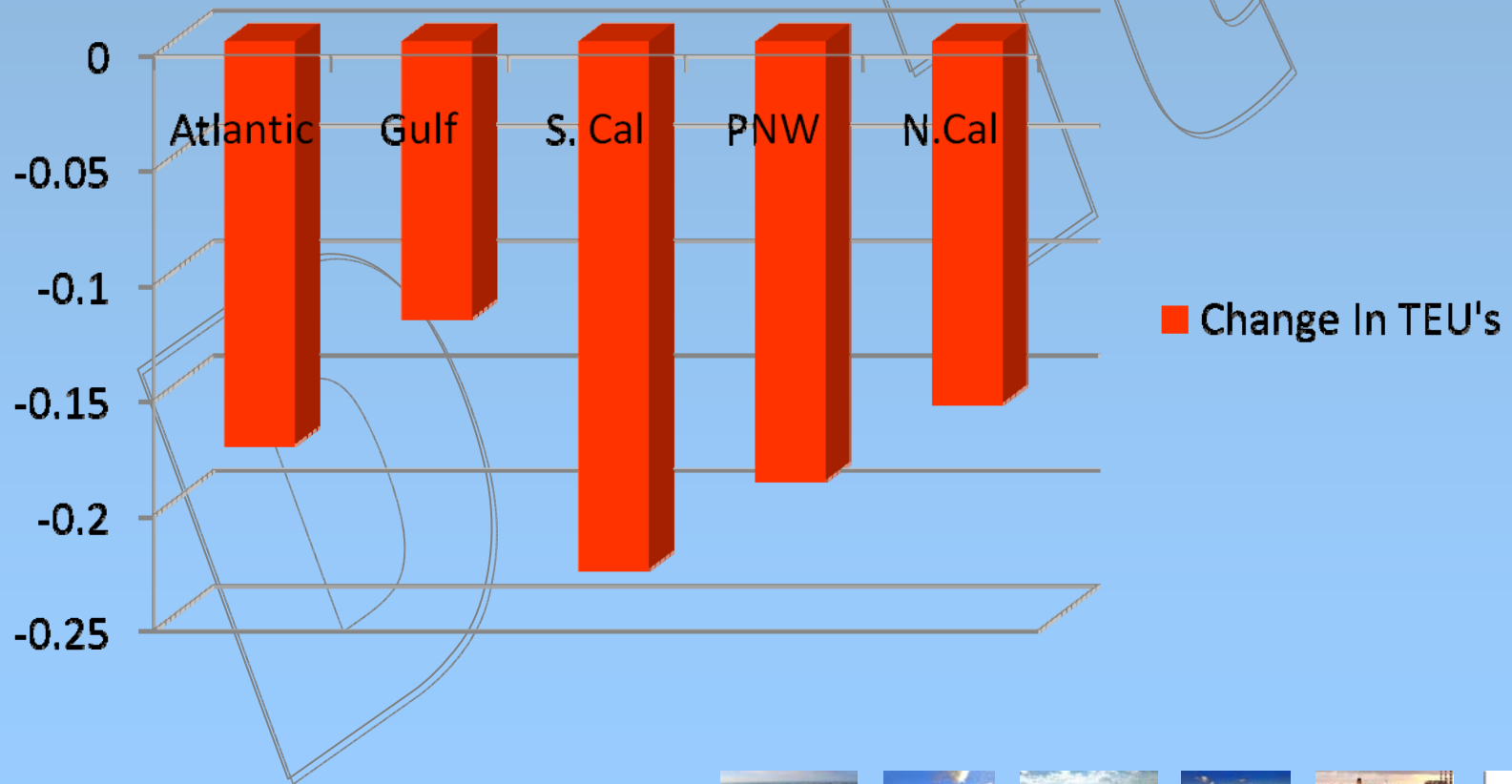


Source: AAPA



# West Coast Ports are Experiencing a Greater Decline in Containerized Trade

## Change First Quarter 2008-First Quarter 2009



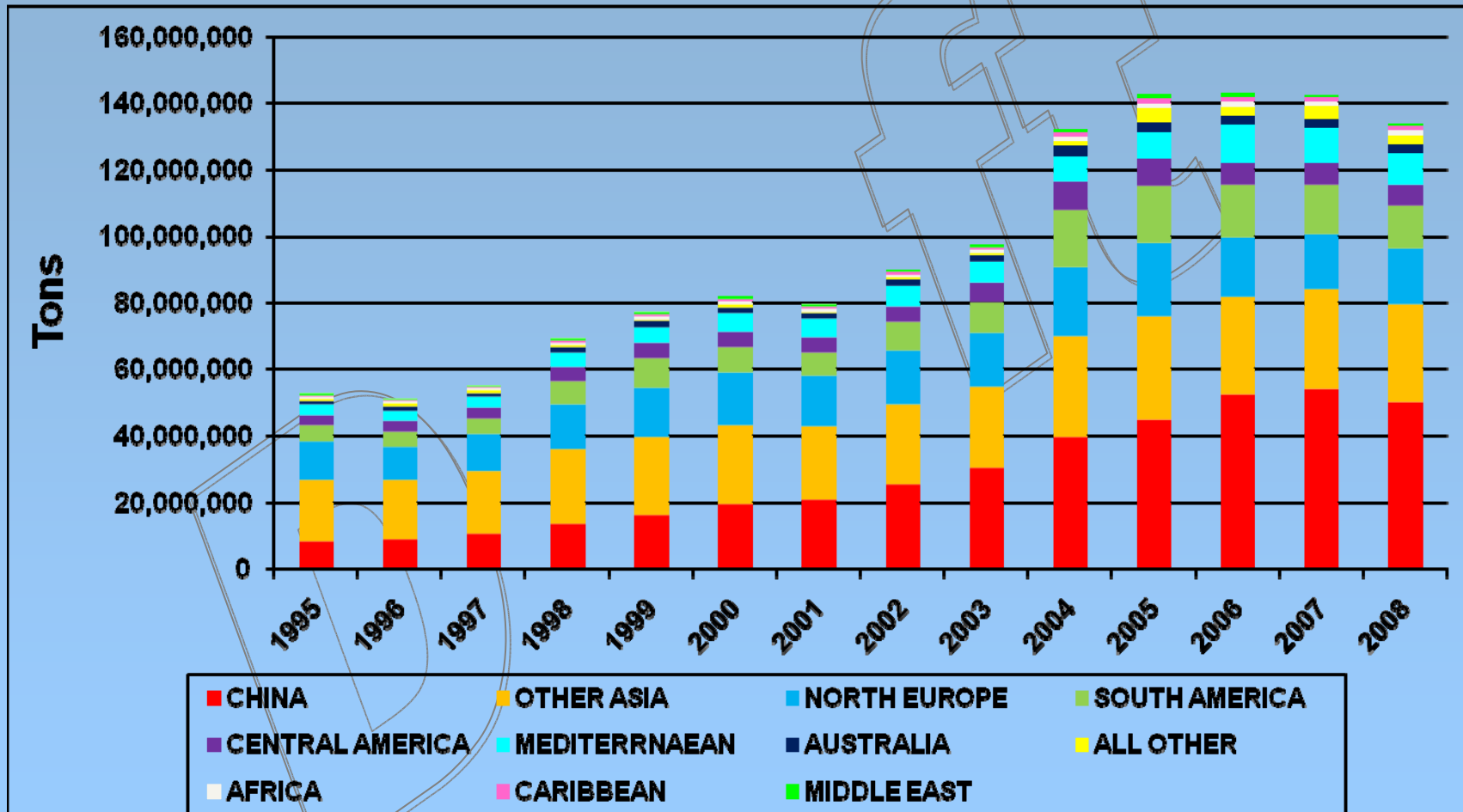
Source: AAPA



AECOM



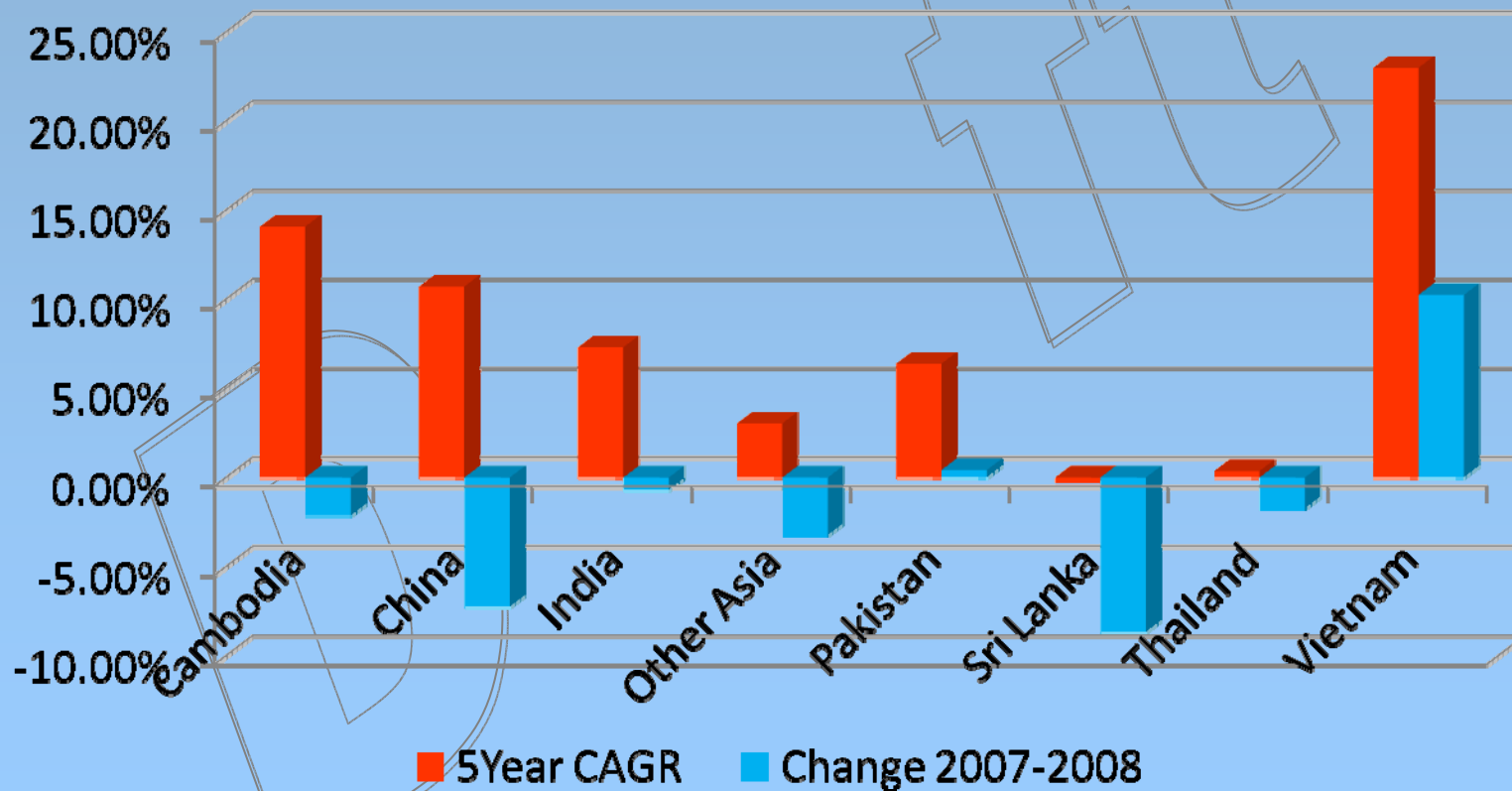
# China Has Been the Growing Source of Imported Containerized Tonnage



Source: US Bureau of Census



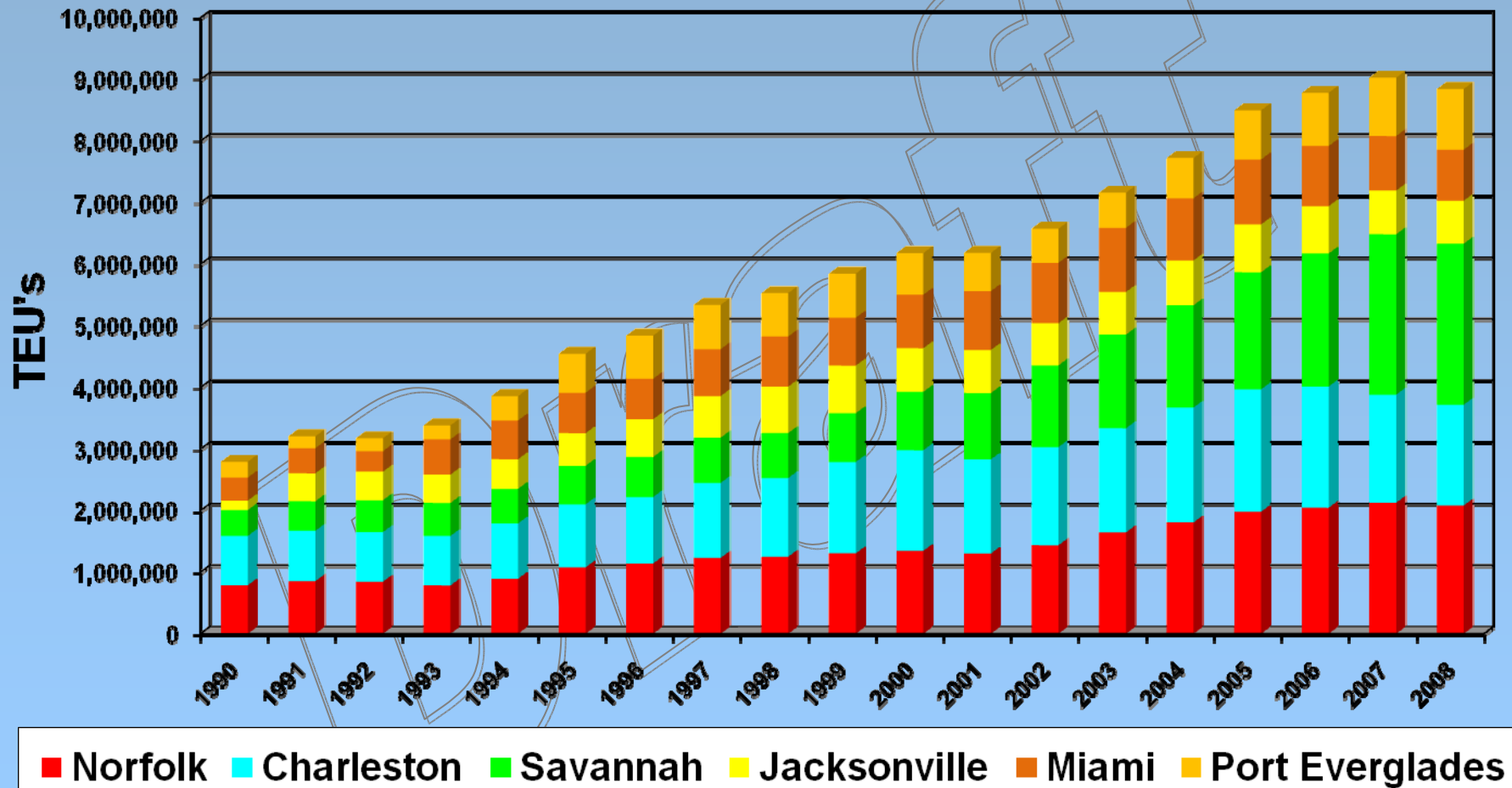
## However, Asian Supply Sources are Shifting



Source: US Bureau of Census



## TEU Growth at South Atlantic Ports has been Driven Primarily by Savannah

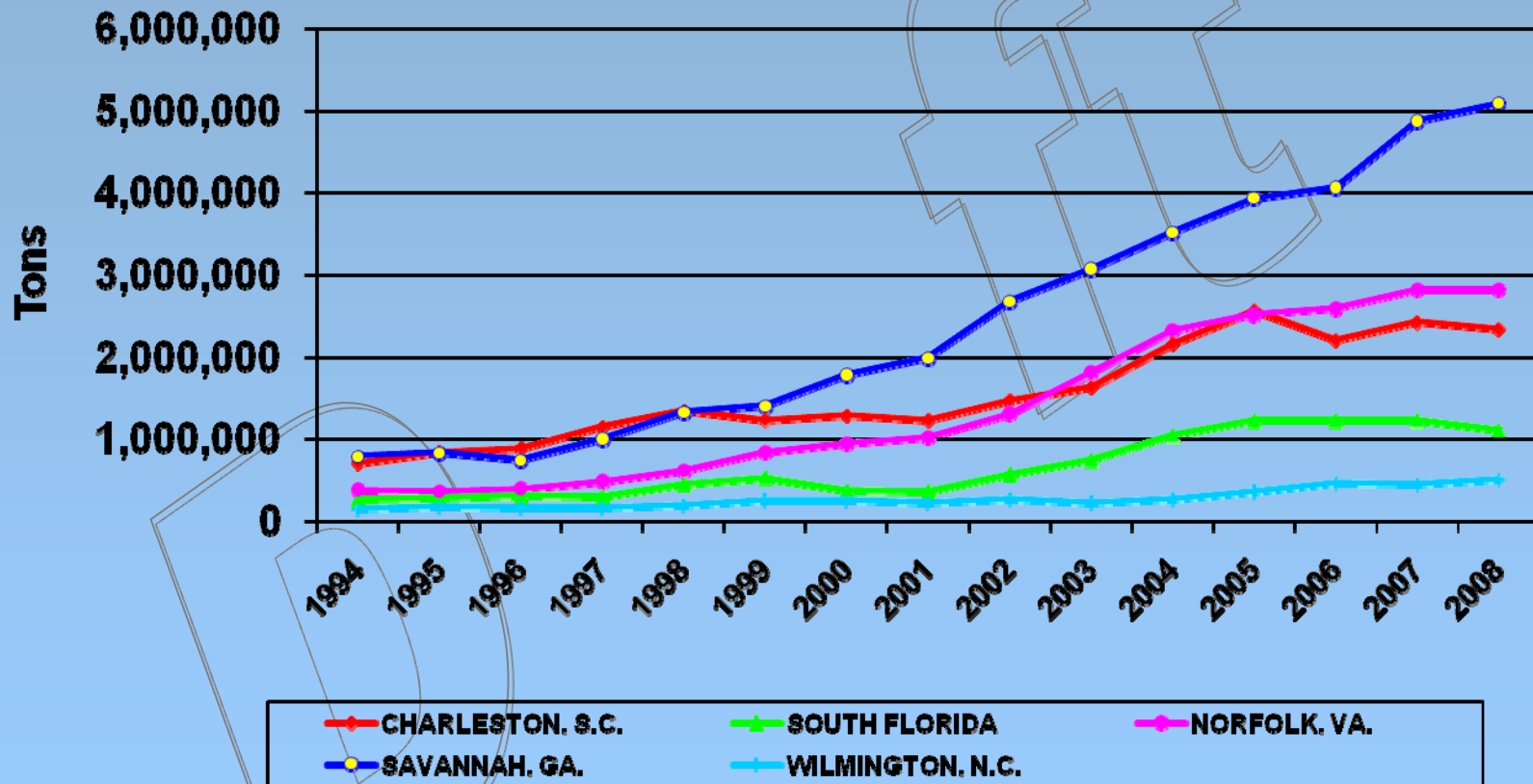


Source: AAPA



AECOM

## Imported Asian Container Tonnage South Atlantic Port Range

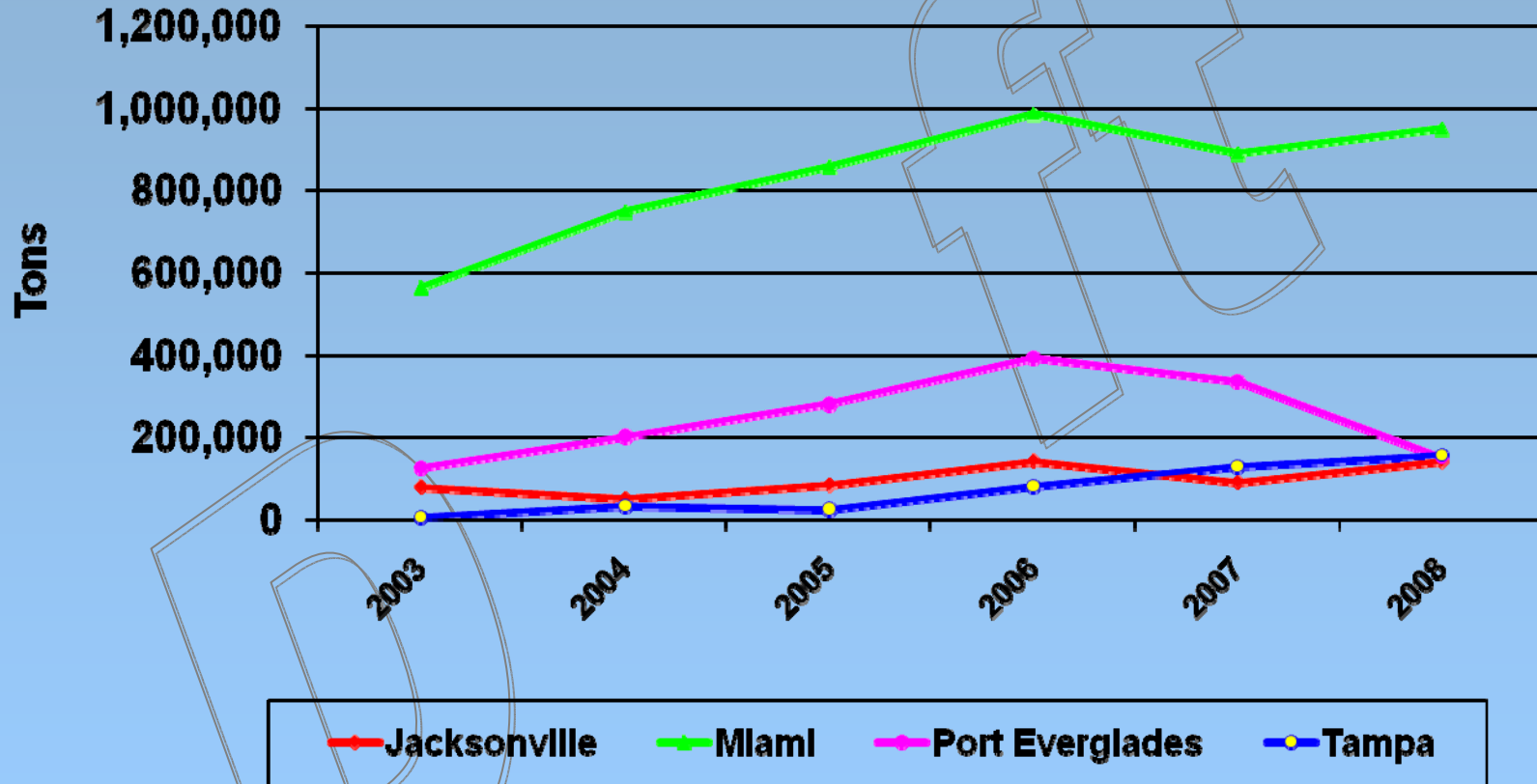


Savannah continues to increase market share in the South Atlantic

Source: US Bureau of Census



# Imported Asian Container Tonnage Florida



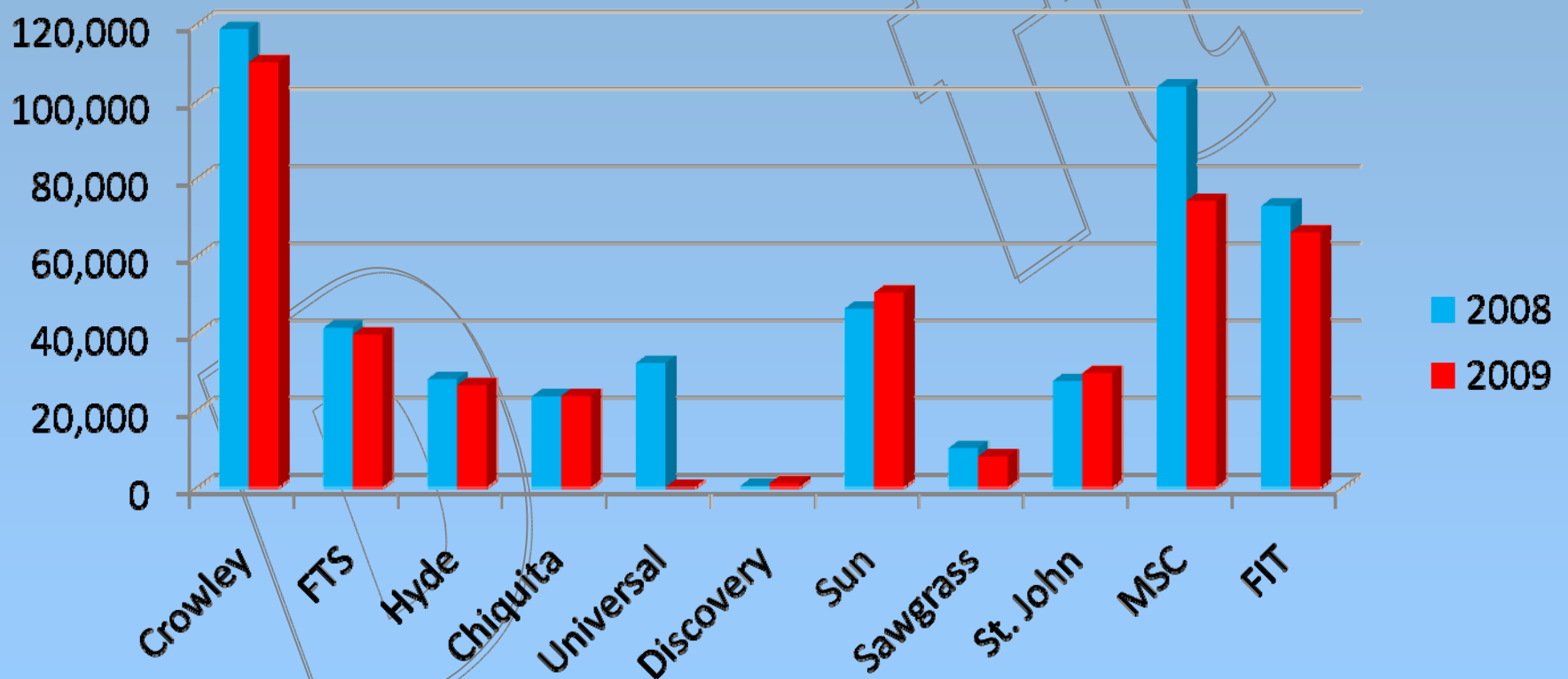
Port Everglades tonnage has decreased since 2006

Source: US Bureau of Census



# Through Six Months of FY09, Port Everglades TEUs are off by 15%

## TEU Change First Half 2008-First Half 2009



Key losses include APM/Universal and APL service to Miami  
 Source: Port Everglades



## Key Changes in PEV Tenant Base and Throughput from 2006

- **Universal APM - ceased service (Feb 08)**
  - In 2006, approximately 100,000 TEU
- **PET - lost APL service to Miami (Jan 09)**
  - In 2006, APL approximately 50,000 TEU
- **FIT - new services in place**
  - In 2006, FIT handled 76,000 TEU; 2009 estimate 125,000 -135,000 TEU



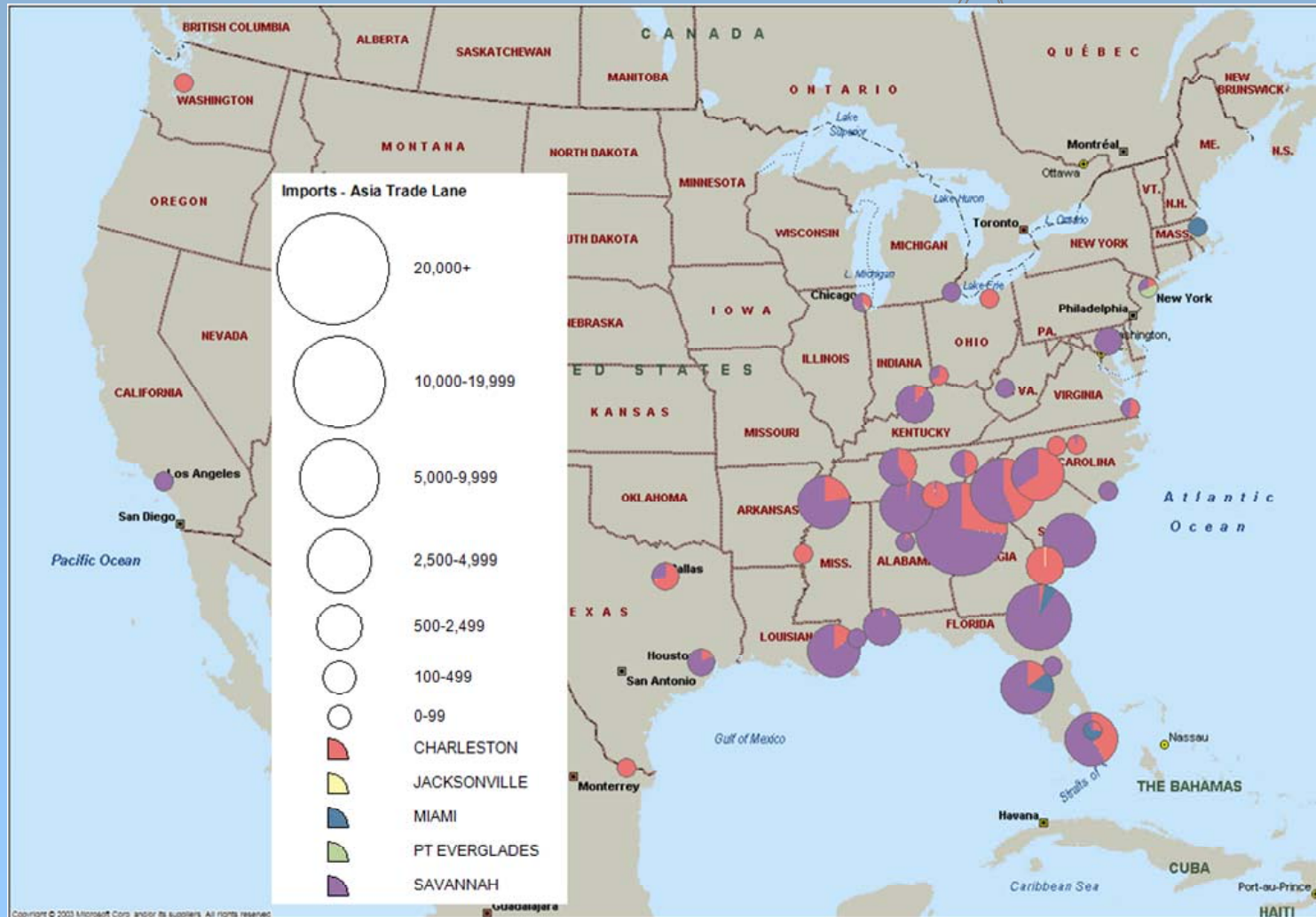
# Current South Atlantic and Florida Market Assessment

Draft





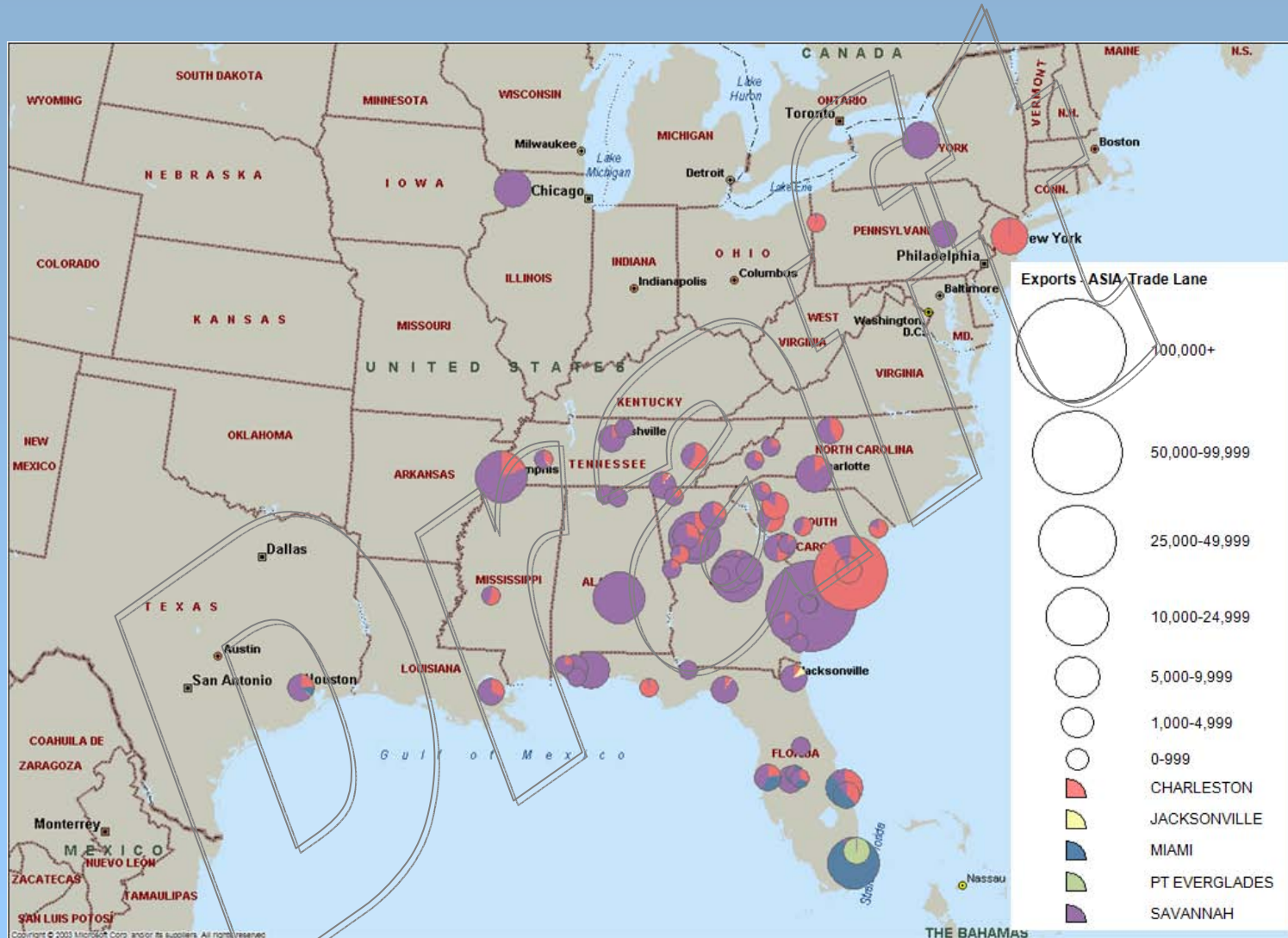
# Asian Imports Port Share by Importer Location



**Savannah controls the South Atlantic market**  
**Charleston offers some competition in South Carolina market**



# Asian Exports Port Share by Exporter Location

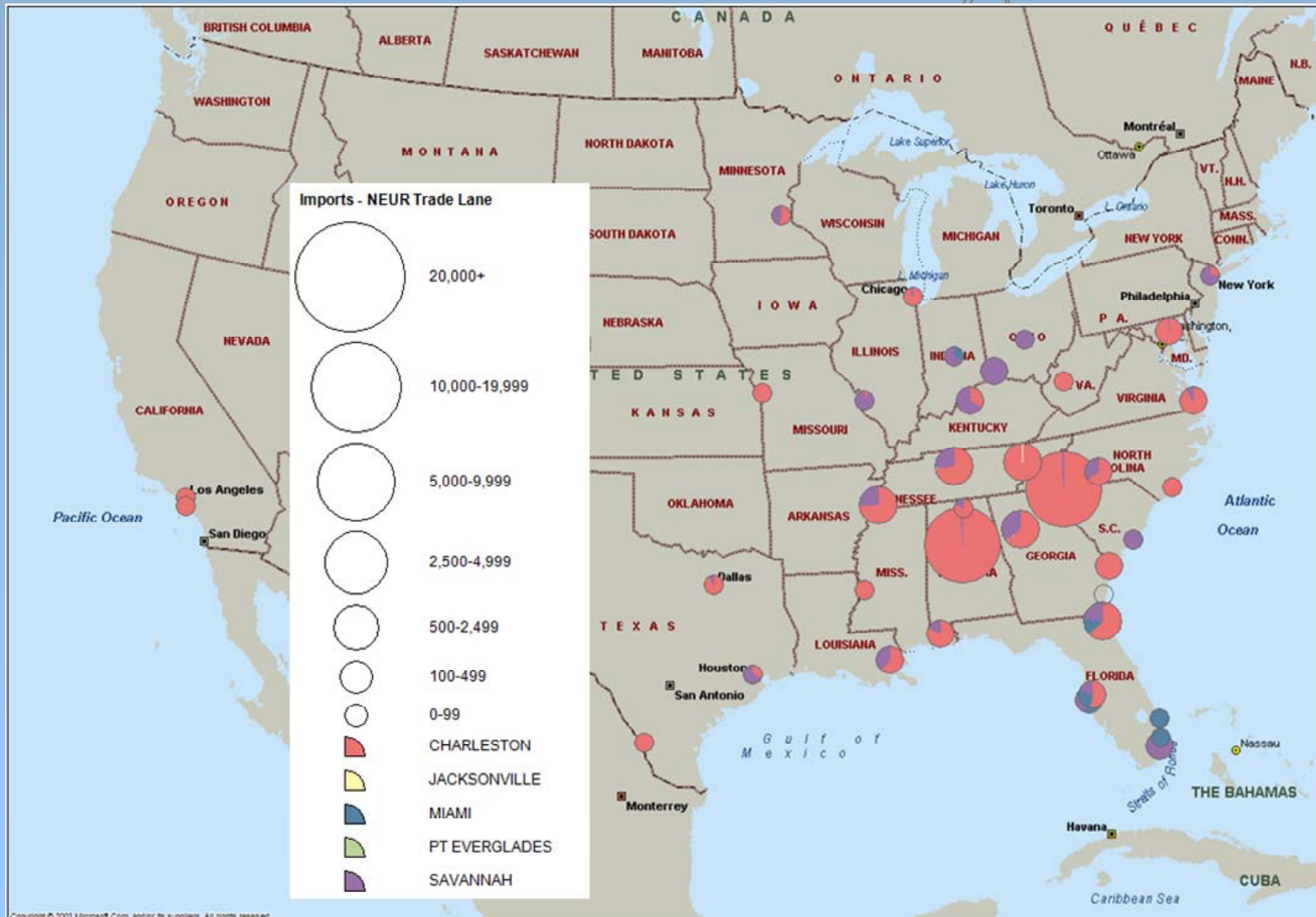


Savannah controls into Northern Florida

Miami and Port Everglades presence is in the South Florida market – consolidation activity 18



# Northern European Imports Port Share by Importer Location



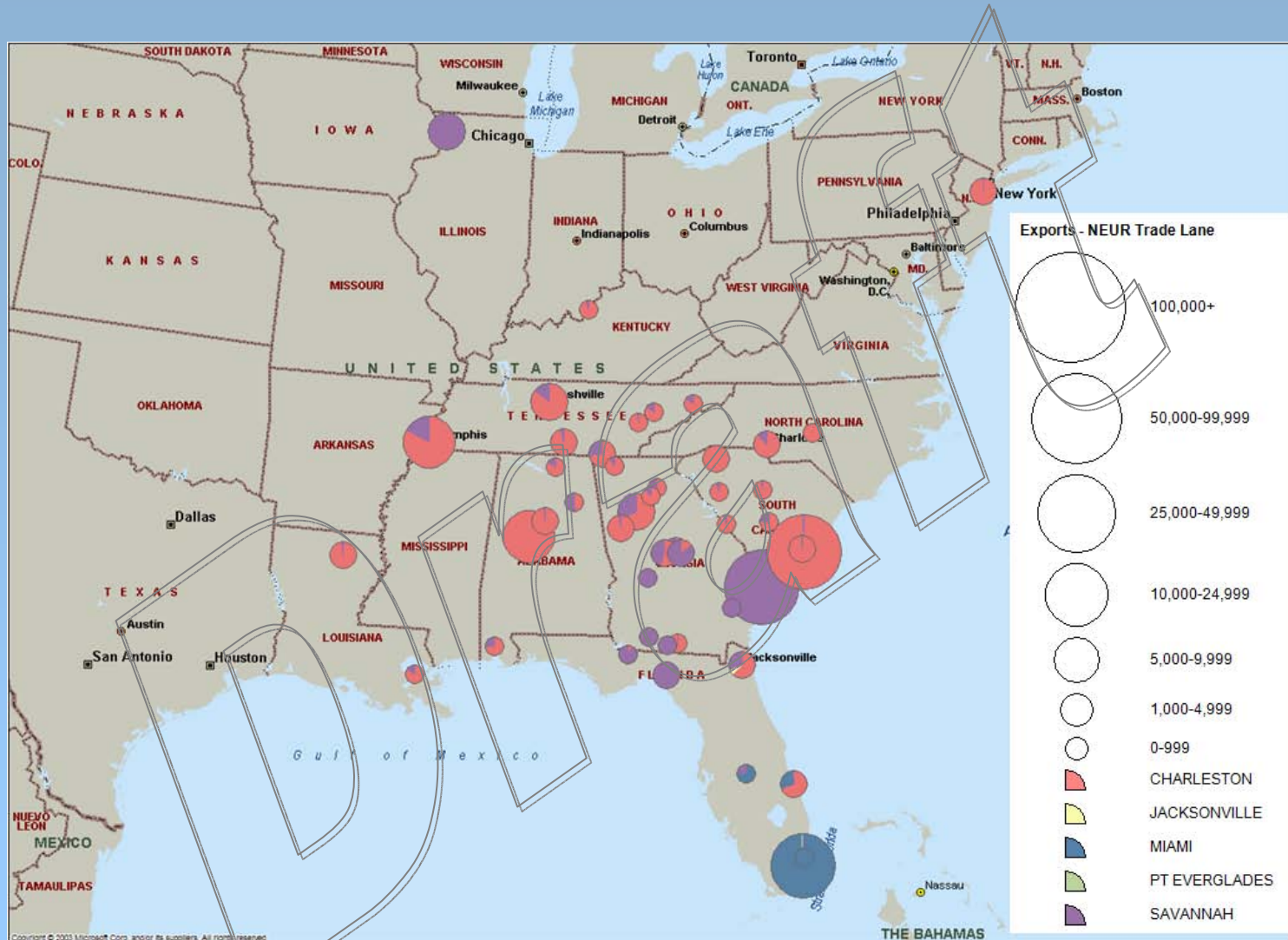
**Charleston controls key markets**

**South Florida imports move via Savannah and Miami**





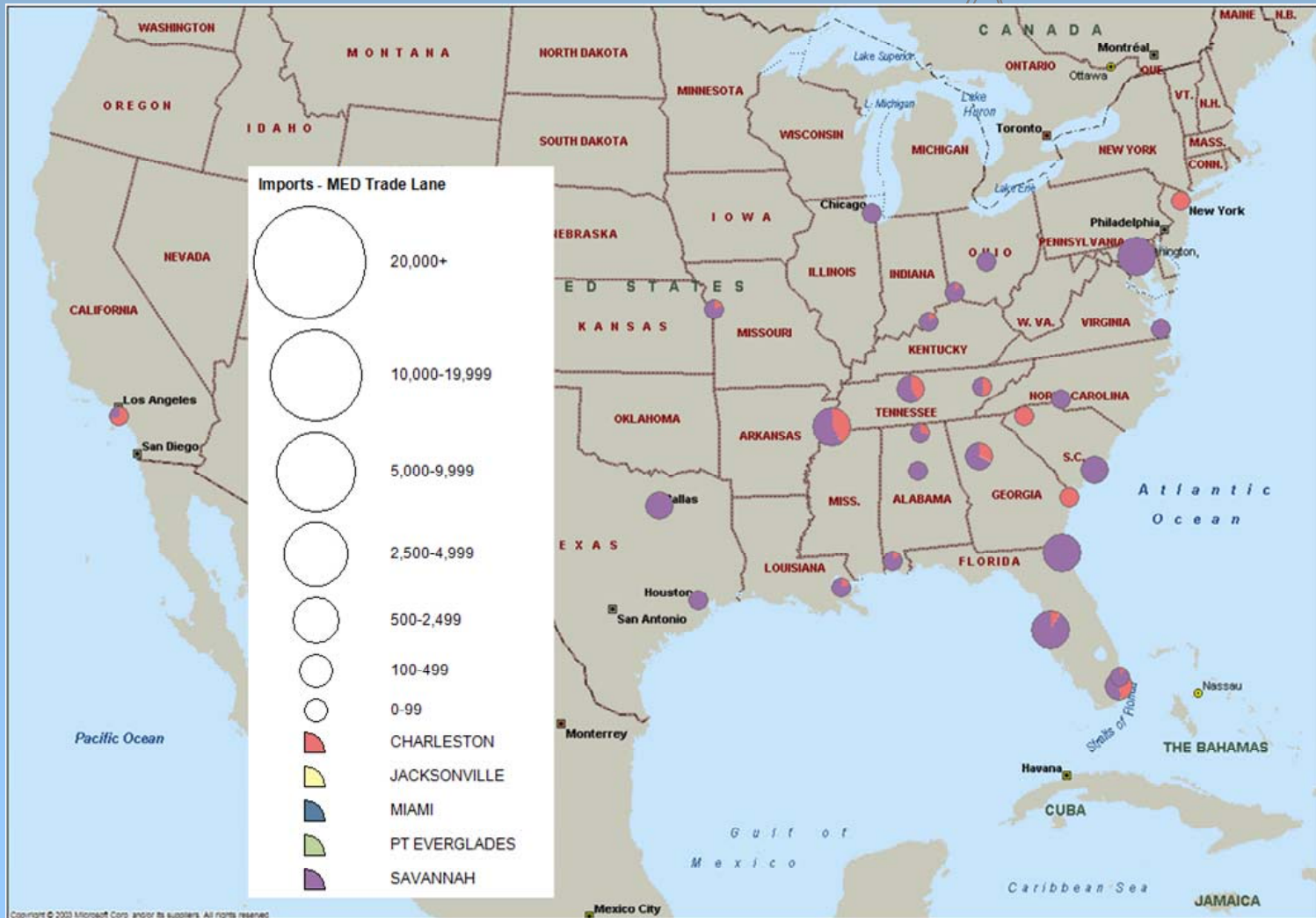
# Northern European Exports Port Share by Exporter Location



**Charleston and Savannah serve into Northern Florida**  
**Miami controls South Florida**



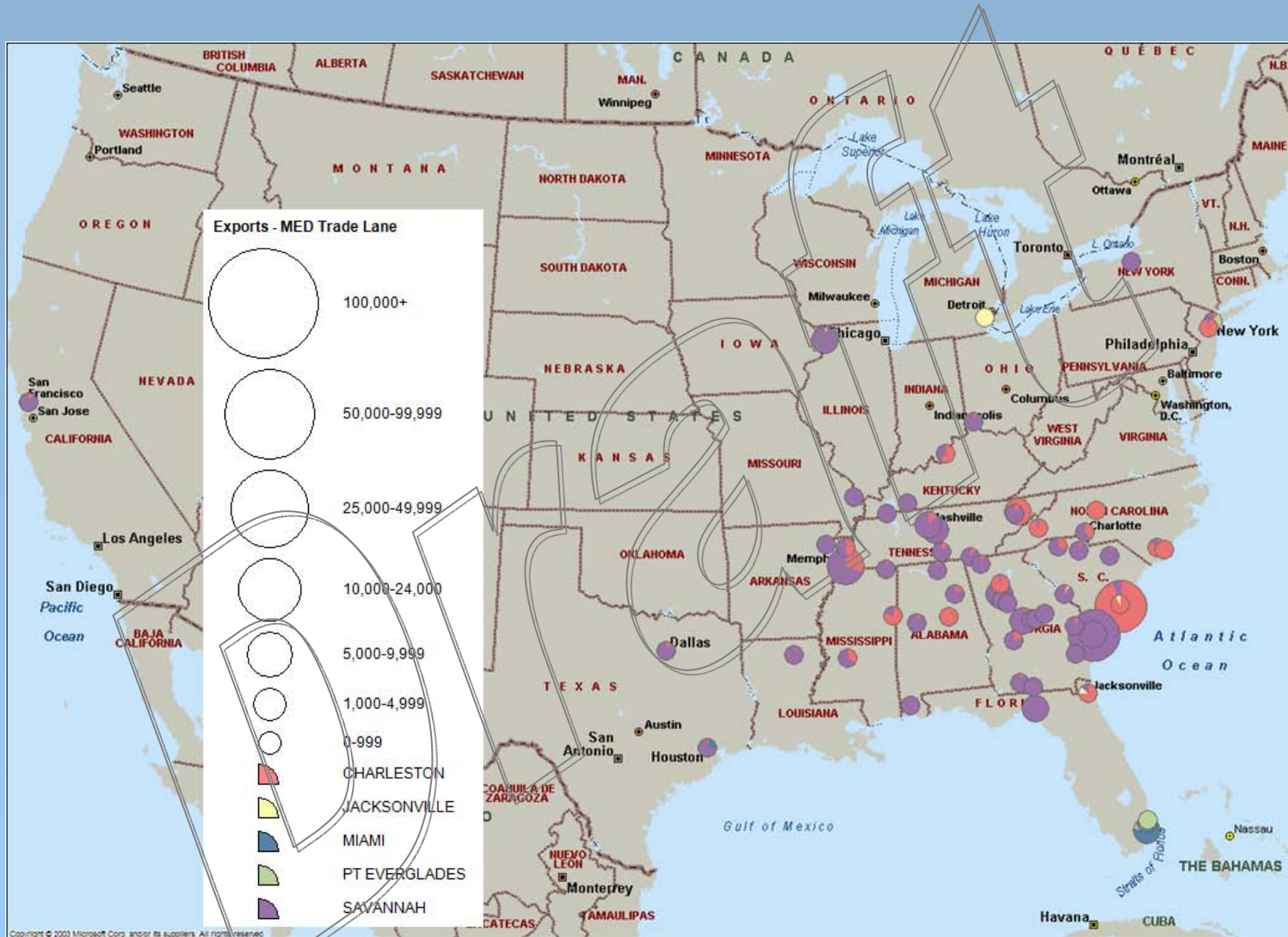
# Mediterranean Imports Port Share by Importer Location



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# Mediterranean Exports Port Share by Exporter Location

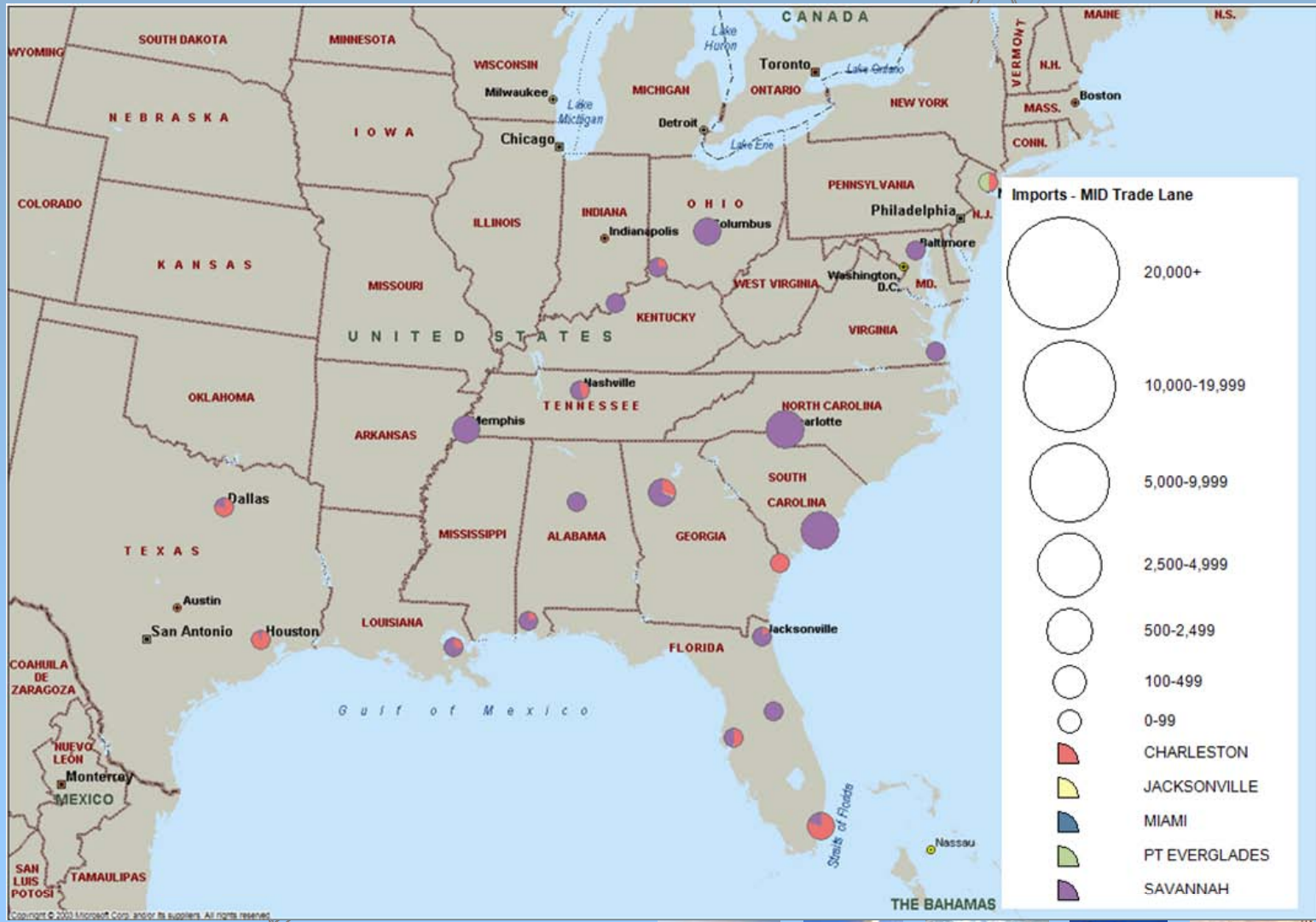


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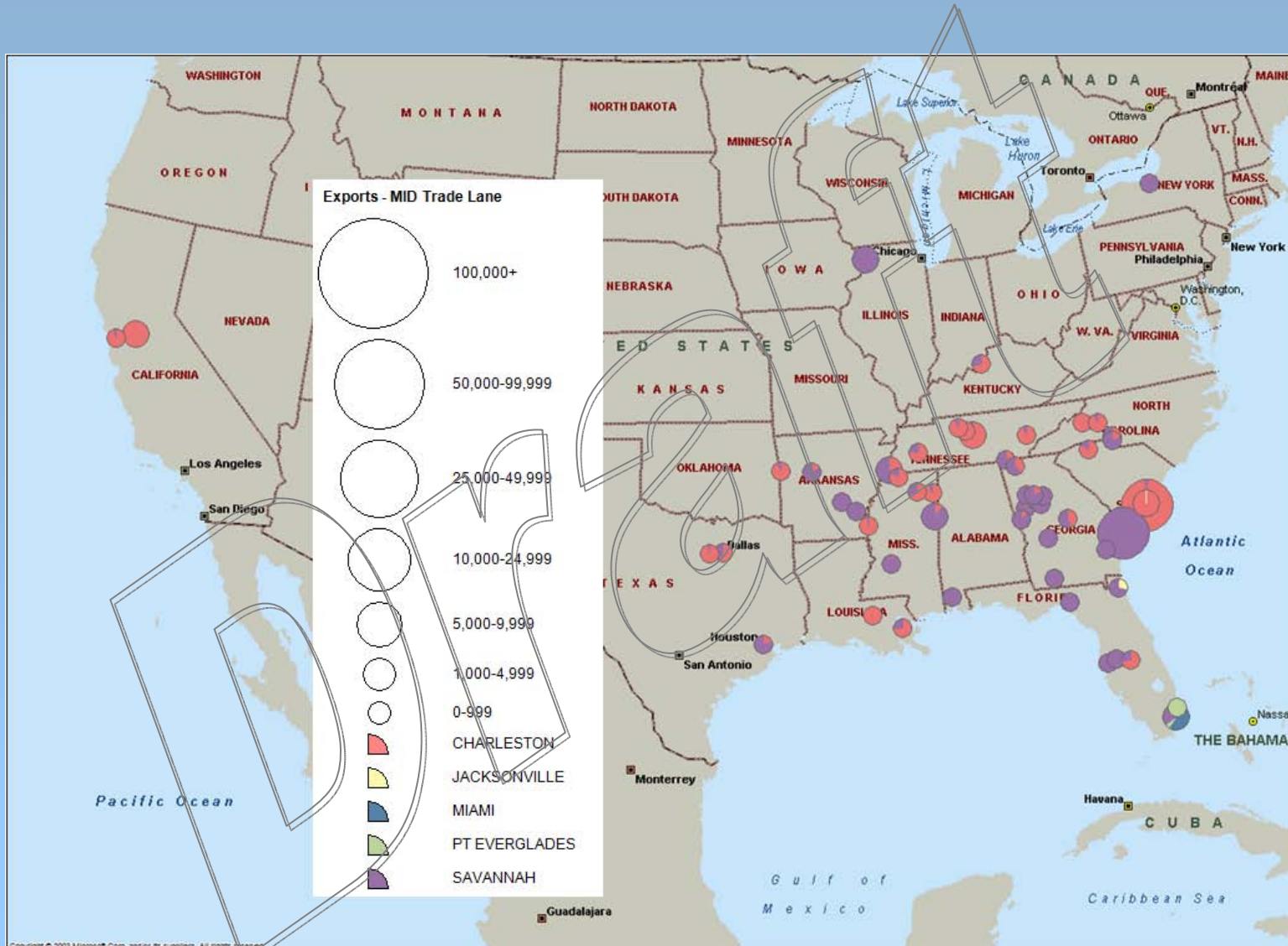




# Middle Eastern Imports Port Share by Importer Location



# Middle Eastern Exports Port Share by Exporter Location



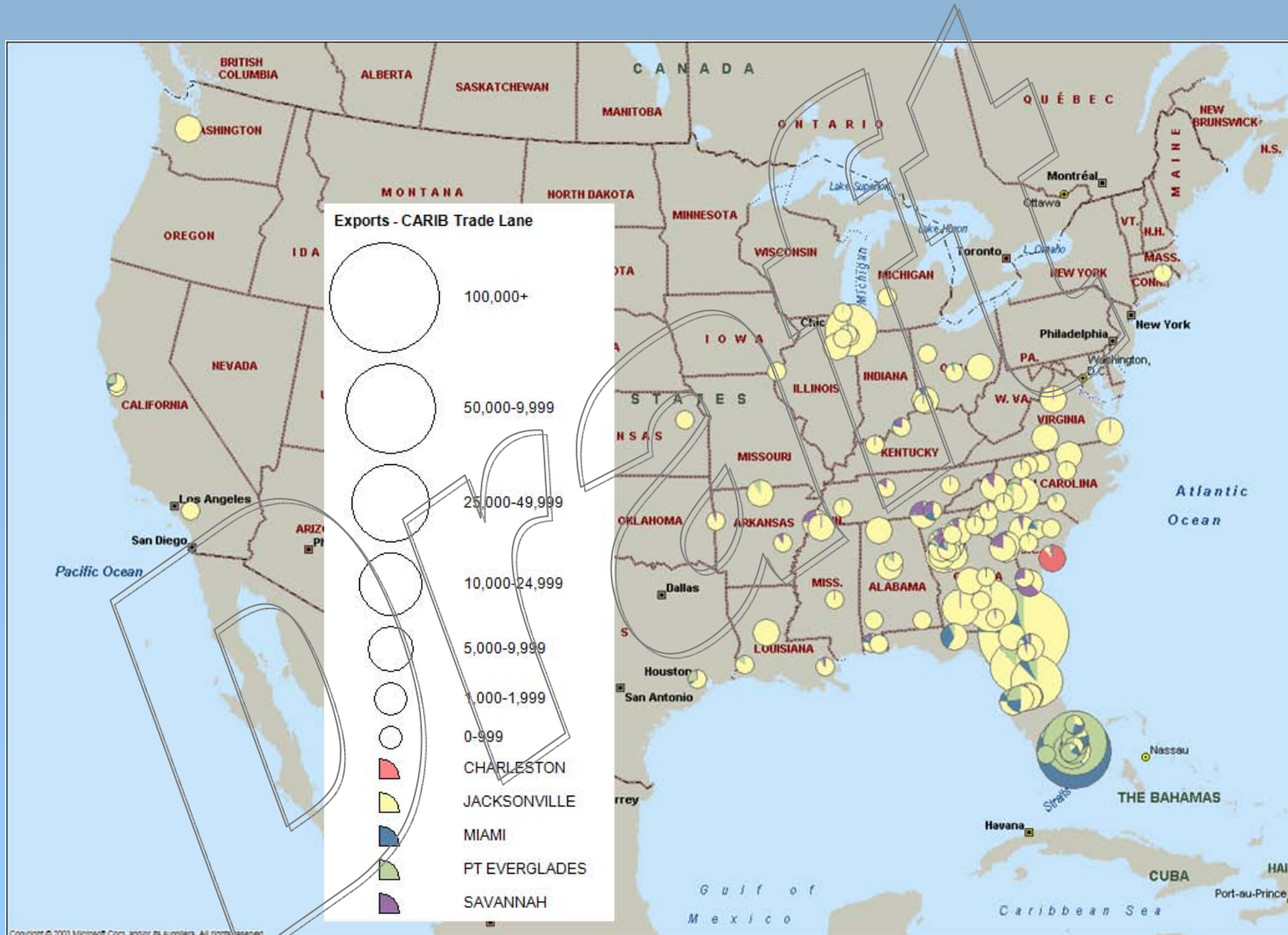
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# Caribbean Exports Port Share by Exporter Location



Jacksonville controls into Central Florida

Miami and Port Everglades compete for consolidated cargo in South Florida



# Central American Imports Port Share by Importer Location

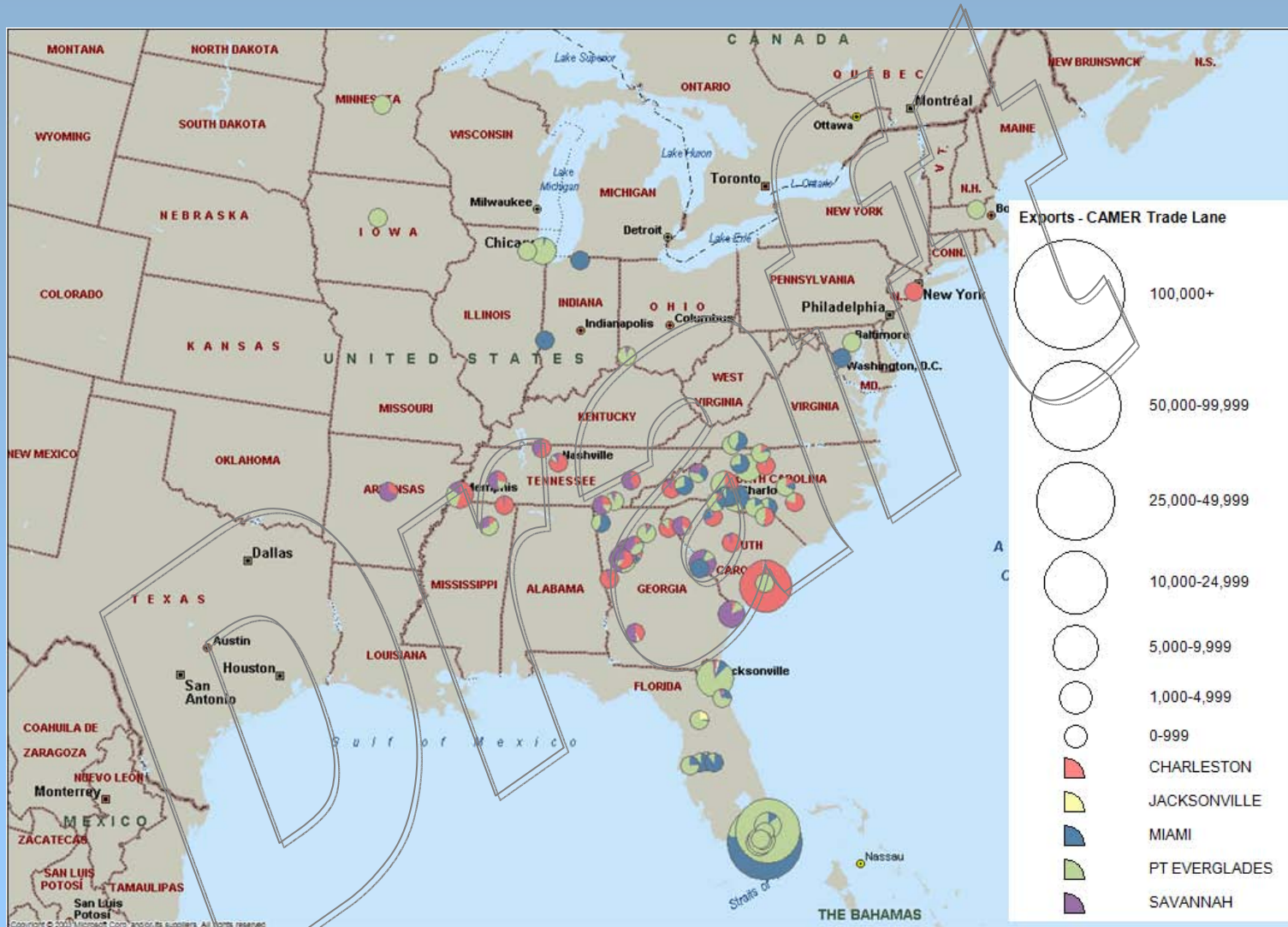


Port Everglades penetrates into the Midwest and Northeast





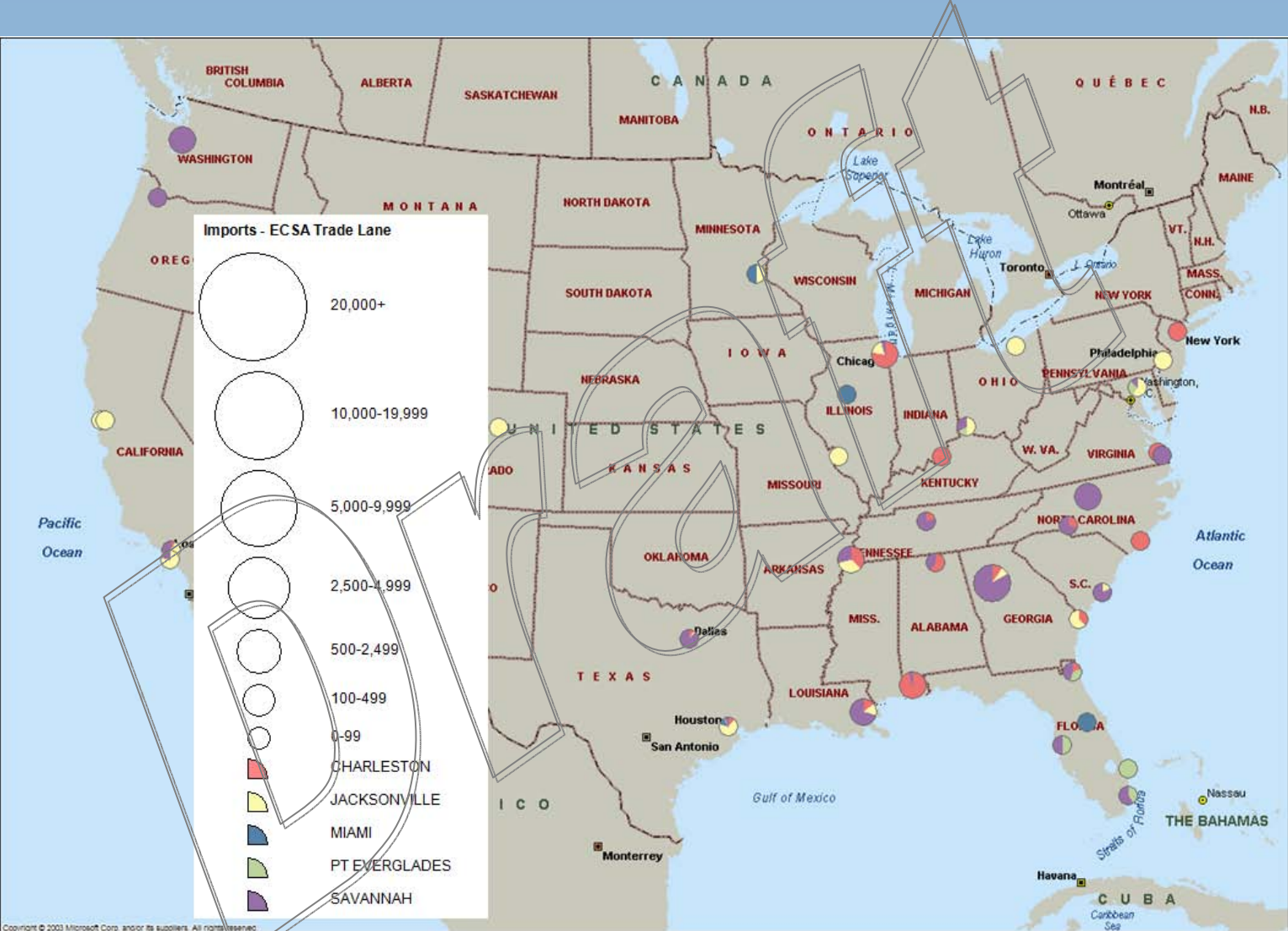
# Central American Exports Port Share by Exporter Location



Miami and Port Everglades compete for market share in South Florida as well as the Midwest and Mid-Atlantic regions



# East Coast South American Imports Port Share by Importer Location

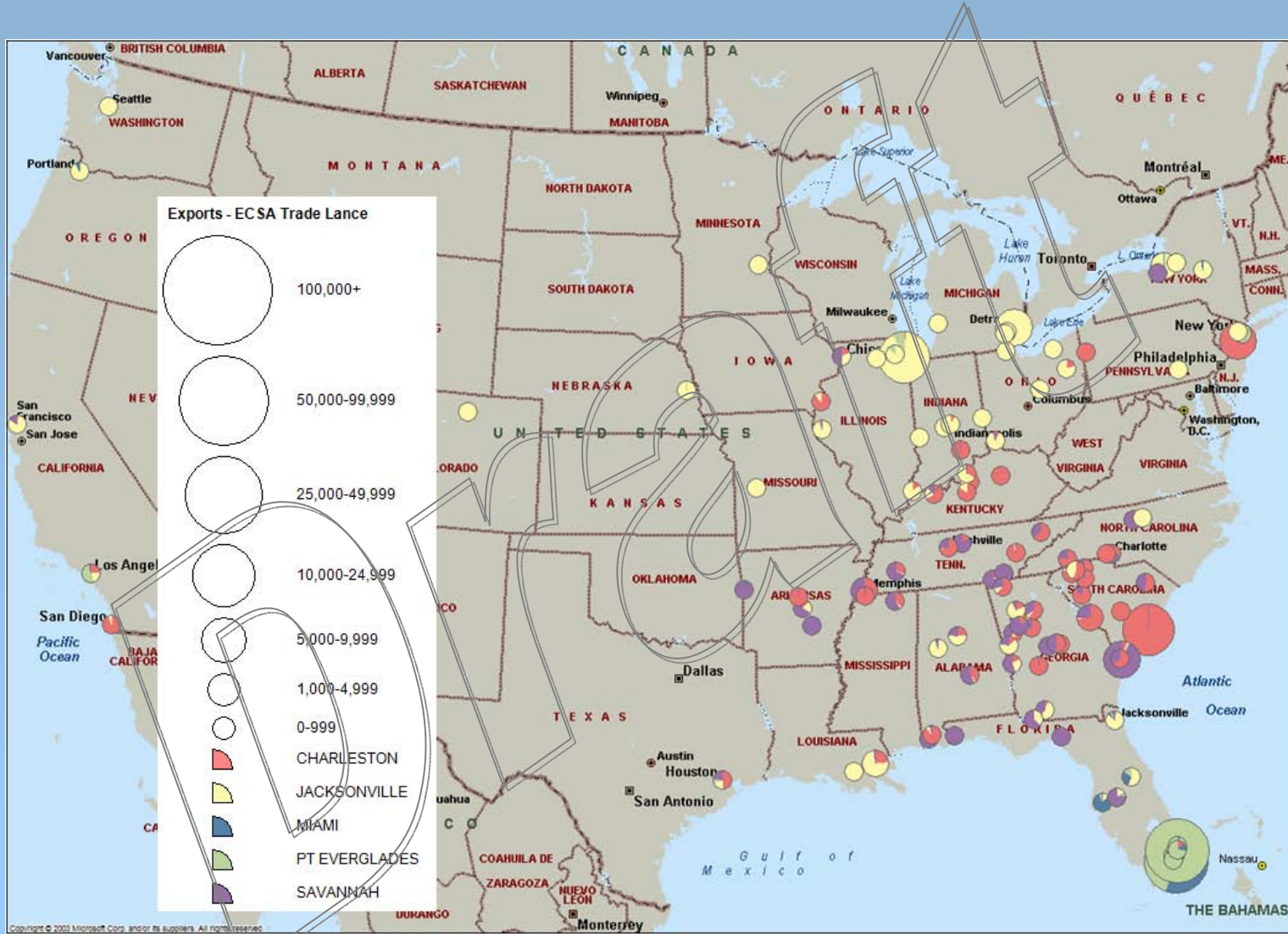


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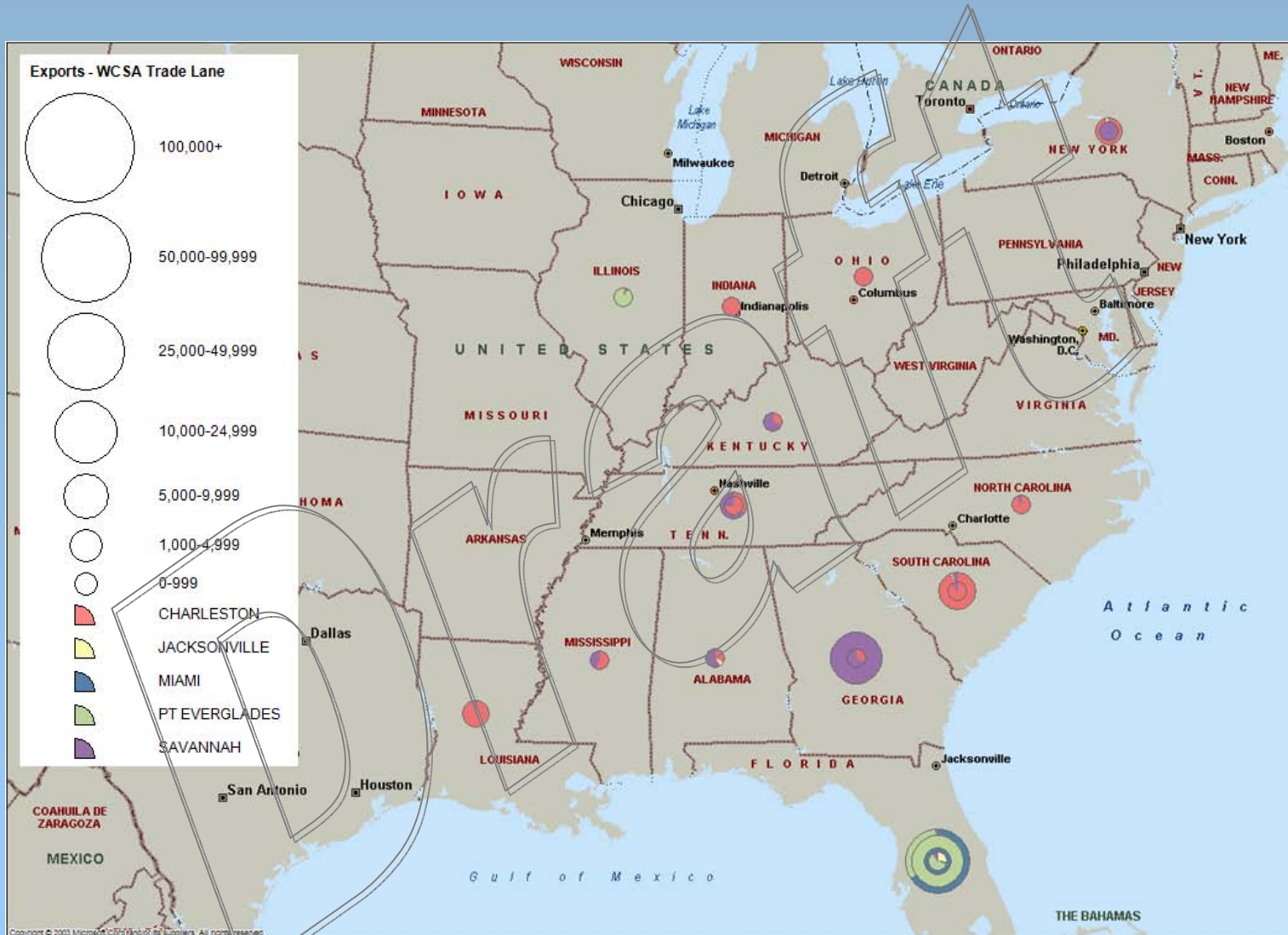
# East Coast South American Exports Port Share by Exporter Location



# West Coast South America Imports Port Share by Importer Location



# West Coast South American Exports Port Share by Exporter Location



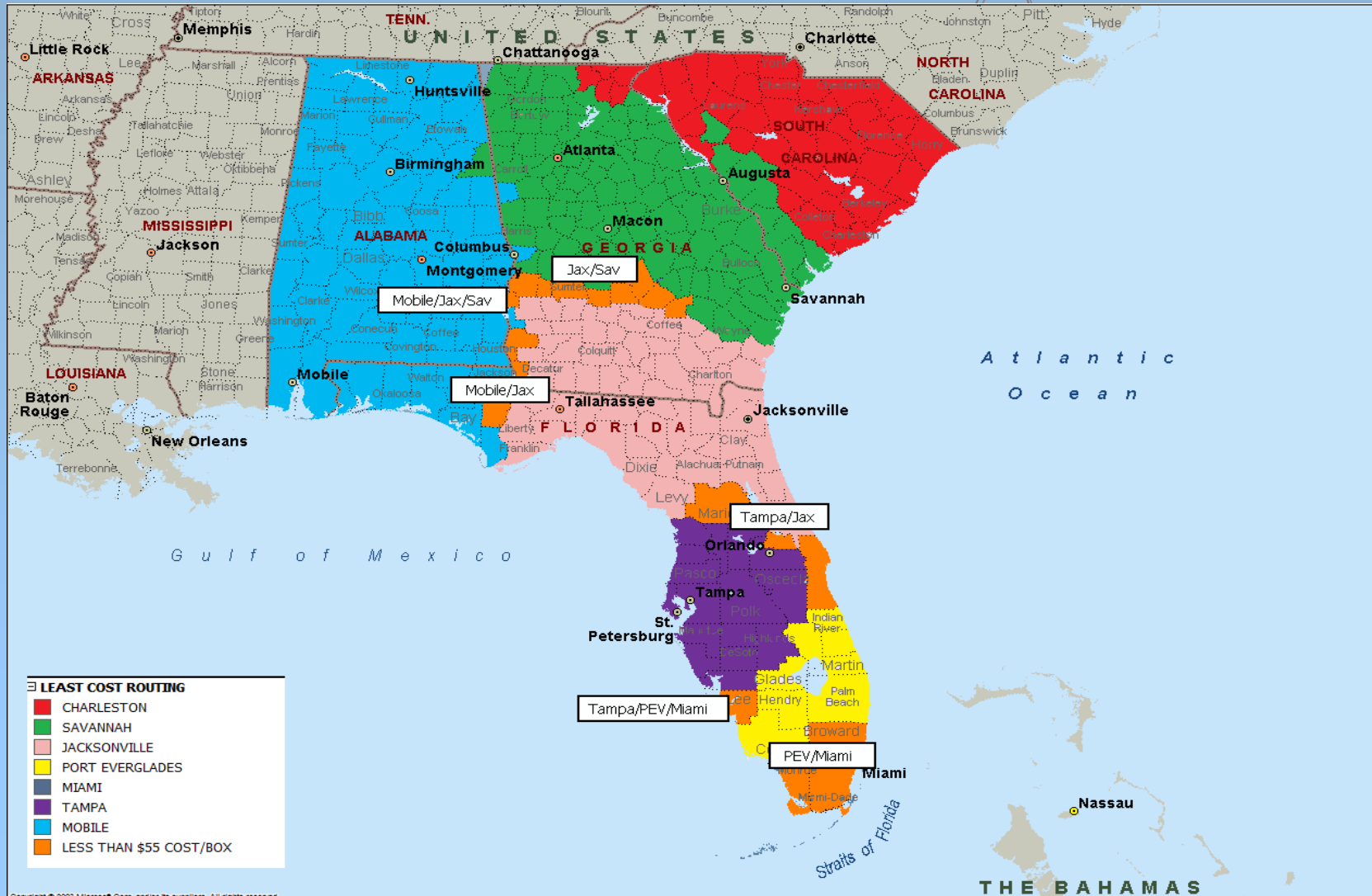


# Estimate of Potential Port Everglades Market

Draft



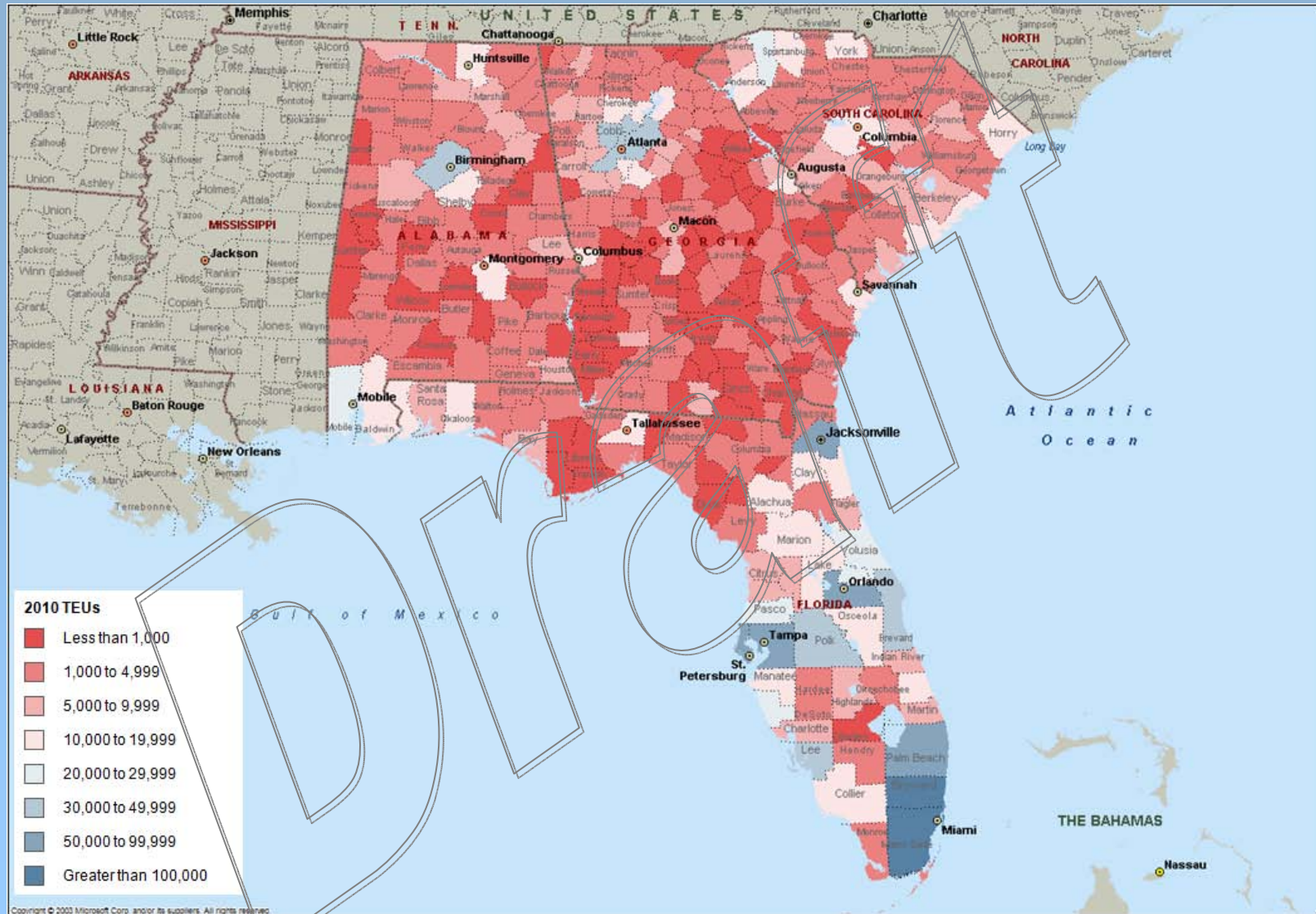
# Cost Competitive Truck Hinterland FL, GA, SC and AL



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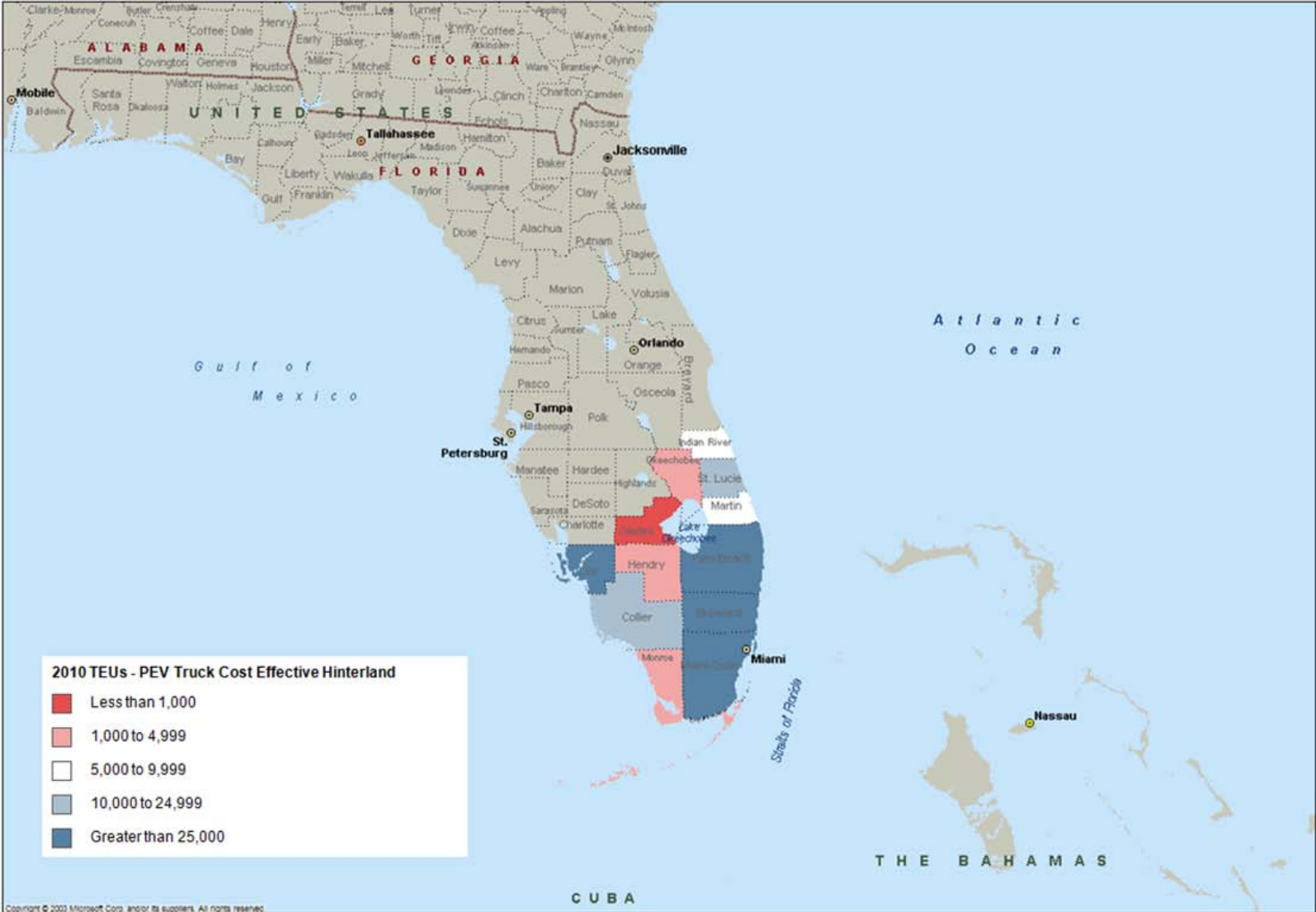
# TEU Consumption by County -FL,GA, SC and AL



Total consumption for 4-state area – inbound outbound and empty containers is about 5.7 million TEUs



# TEU Consumption by County within PEV Truck Hinterland



**PEV is competitive to serve market of 390,000 loaded inbound TEU;  
 When factoring in export loads and empties, total PEV truck market is 995,000 TEU**



## Vessel Costs and Total Logistics Costs to Serve Key Intermodal Hubs

- Analysis to show potential market beyond South/Central Florida
- Market penetration into Atlanta intermodal hub is key
  - Also
    - Memphis
    - St. Louis
    - Chicago
- Martin Associates' least cost routing methodology
  - Martin Associates' Vessel Cost Model
  - Intermodal rates obtained from 1% Waybill Sample (STB) and Carriers' Intermodal Departments
  - Drayage cost applied for ports without on-dock ICTF
    - Assume PEV will build near-dock ICTF



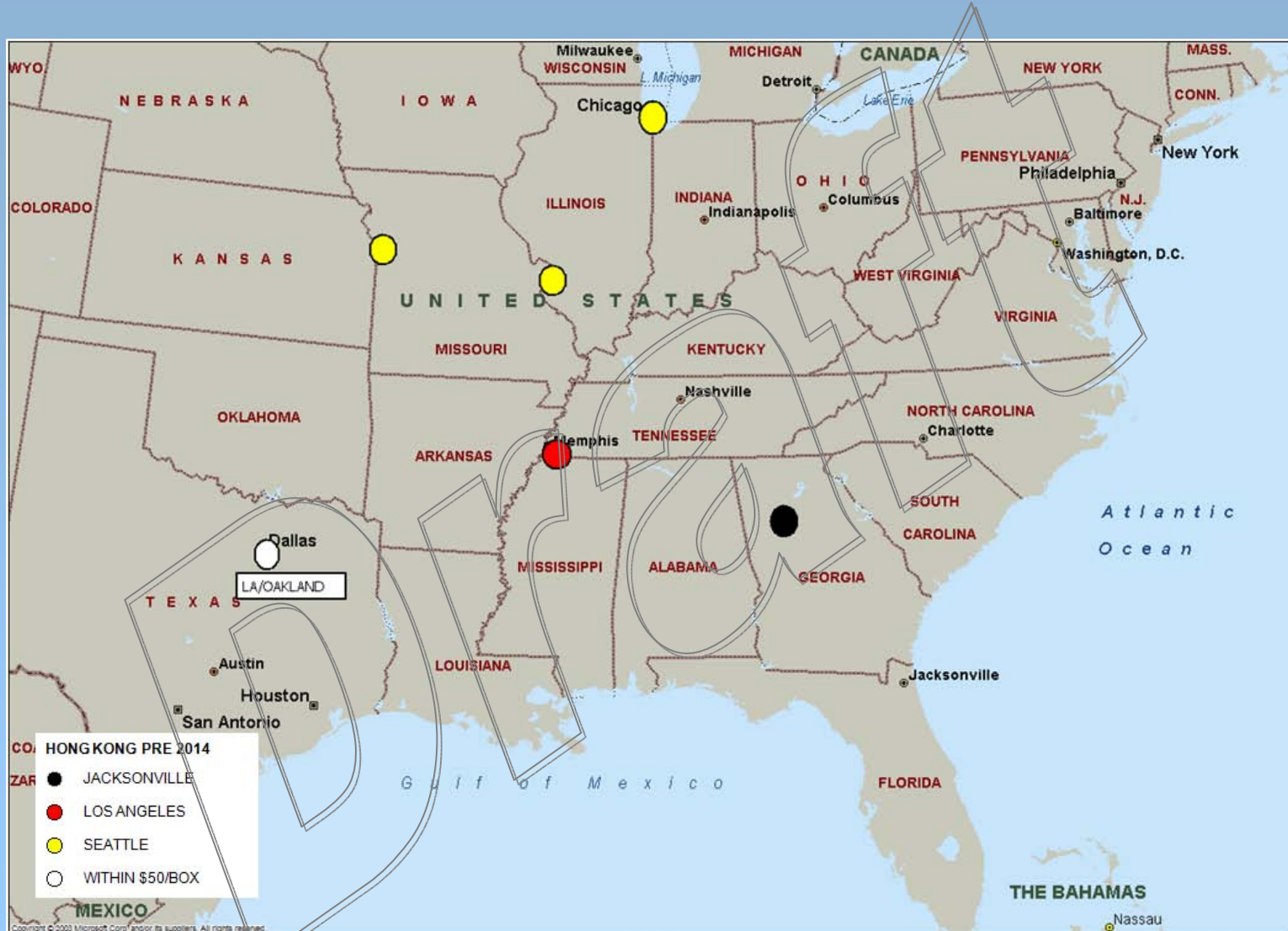
## Vessel Costs and Total Logistics Costs to Serve Key Intermodal Hubs

- Analysis completed for each trade route
- Analysis based on fully-laden first port of call
- Analysis completed for pre and post Panama Canal expansion eras
- Pre expansion assumes vessel sizes:
  - 4,800 TEU vessel Miami, PEV, Jacksonville, Tampa Savannah, Charleston, Houston, New York, Norfolk, Baltimore
  - 6,000 TEU vessel for LA/LB, Oakland and Seattle
- Post expansion assumes vessel sizes:
  - 4,800 TEU Jacksonville and Port Everglades
  - 7,000 TEU Savannah, New York, Norfolk, Baltimore
  - 7,000 TEU Miami and Houston
  - 8,500 TEU LA/LB, Oakland and Seattle



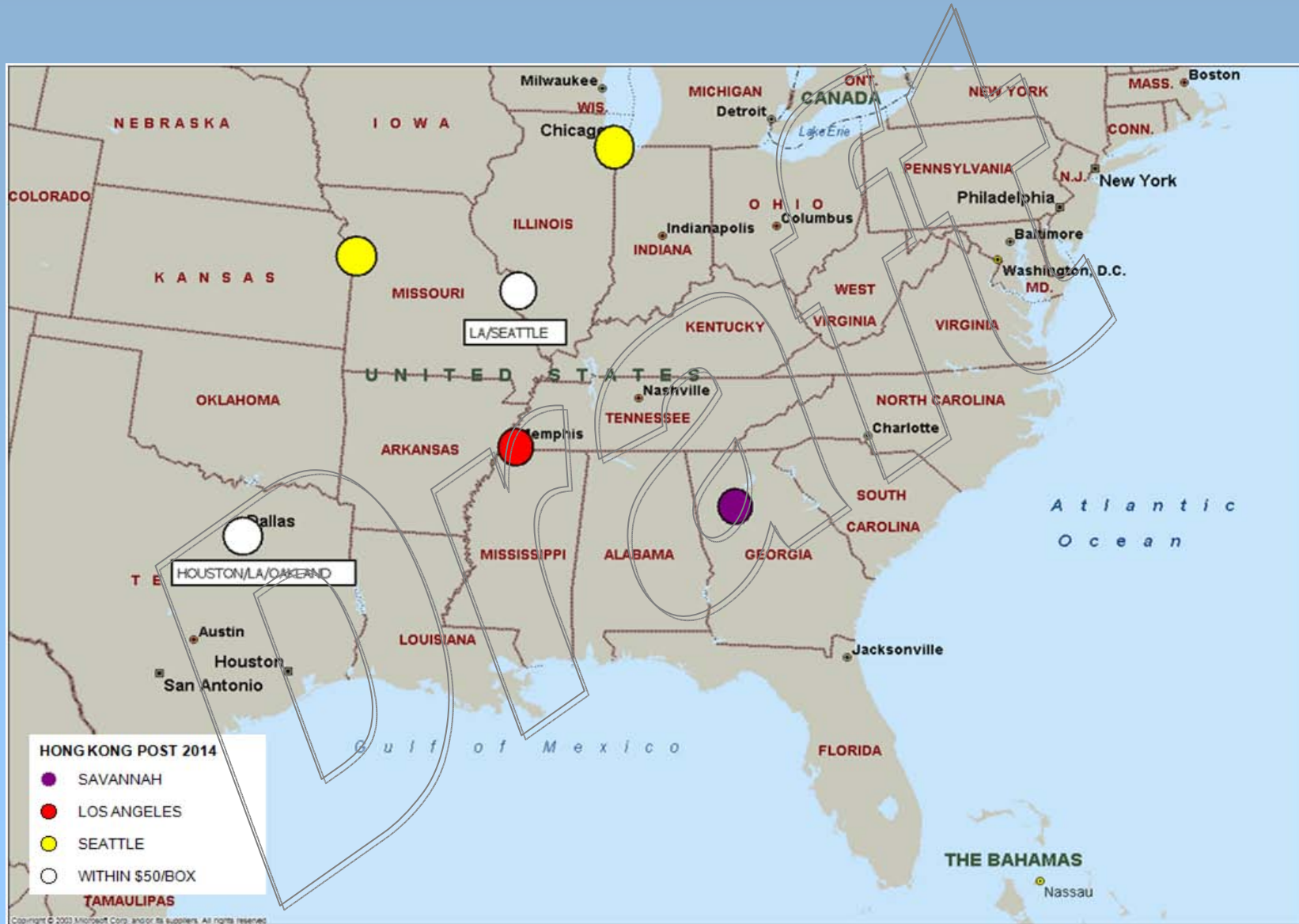
# HONG KONG PRE EXPANSION

## Jacksonville holds advantage into Atlanta



# HONG KONG POST EXPANSION

## With 7,000 TEU Savannah Captures Atlanta Market



West Coast ports continue to dominate the other Midwest intermodal hubs



# Summary of Hong Kong Routings

## HONG KONG

PRE		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
4800	Savannah	\$3,161	\$3,772	\$3,577	\$4,556	\$3,854	\$3,858
4800	New York	\$3,648	\$3,003	\$3,619	\$3,178	\$3,544	\$4,558
4800	Norfolk	\$4,056	\$3,133	\$4,047	\$3,326	\$4,293	NA
4800	Jacksonville	\$3,046	\$3,363	\$3,220	\$3,454	\$3,460	\$3,513
<b>4800</b>	<b>Miami</b>	<b>\$3,198</b>	<b>\$3,708</b>	<b>\$3,501</b>	<b>\$3,657</b>	<b>\$6,939</b>	<b>\$4,491</b>
4800	Port Everglades	\$3,115	\$3,625	\$3,418	\$3,574	\$6,856	\$4,408
4800	Houston	\$3,597	\$3,374	\$3,041	\$2,941	\$3,105	\$2,886
6000	Los Angeles	\$3,256	\$2,695	\$2,589	\$2,549	\$2,551	\$2,605
6000	Oakland	\$3,450	\$2,723	\$2,617	\$2,577	\$2,579	\$2,633
6000	Seattle/Tacoma	\$4,866	\$2,418	\$2,711	\$2,497	\$2,453	\$2,722
<b>PRE</b>	<b>Savannah-Miami differential</b>	<b>\$38</b>	<b>(\$64)</b>	<b>(\$77)</b>	<b>(\$899)</b>	<b>\$3,086</b>	<b>\$633</b>
POST		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
7000	Savannah	\$2,424	\$3,035	\$2,840	\$3,819	\$3,117	\$3,121
7000	New York	\$2,888	\$2,243	\$2,859	\$2,418	\$2,784	\$3,798
7000	Norfolk	\$3,307	\$2,384	\$3,298	\$2,577	\$3,544	NA
4800	Jacksonville	\$3,046	\$3,363	\$3,220	\$3,454	\$3,460	\$3,513
<b>7000</b>	<b>Miami</b>	<b>\$2,482</b>	<b>\$2,992</b>	<b>\$2,785</b>	<b>\$2,941</b>	<b>\$6,223</b>	<b>\$3,775</b>
4800	Port Everglades	\$3,115	\$3,625	\$3,418	\$3,574	\$6,856	\$4,408
7000	Houston	\$2,878	\$2,655	\$2,322	\$2,222	\$2,386	\$2,167
8500	Los Angeles	\$2,797	\$2,236	\$2,130	\$2,090	\$2,092	\$2,146
8500	Oakland	\$3,015	\$2,288	\$2,182	\$2,142	\$2,144	\$2,198
8500	Seattle/Tacoma	\$4,451	\$2,003	\$2,296	\$2,082	\$2,038	\$2,307
<b>POST</b>	<b>Savannah-Miami differential</b>	<b>\$58</b>	<b>(\$43)</b>	<b>(\$55)</b>	<b>(\$878)</b>	<b>\$3,106</b>	<b>\$654</b>



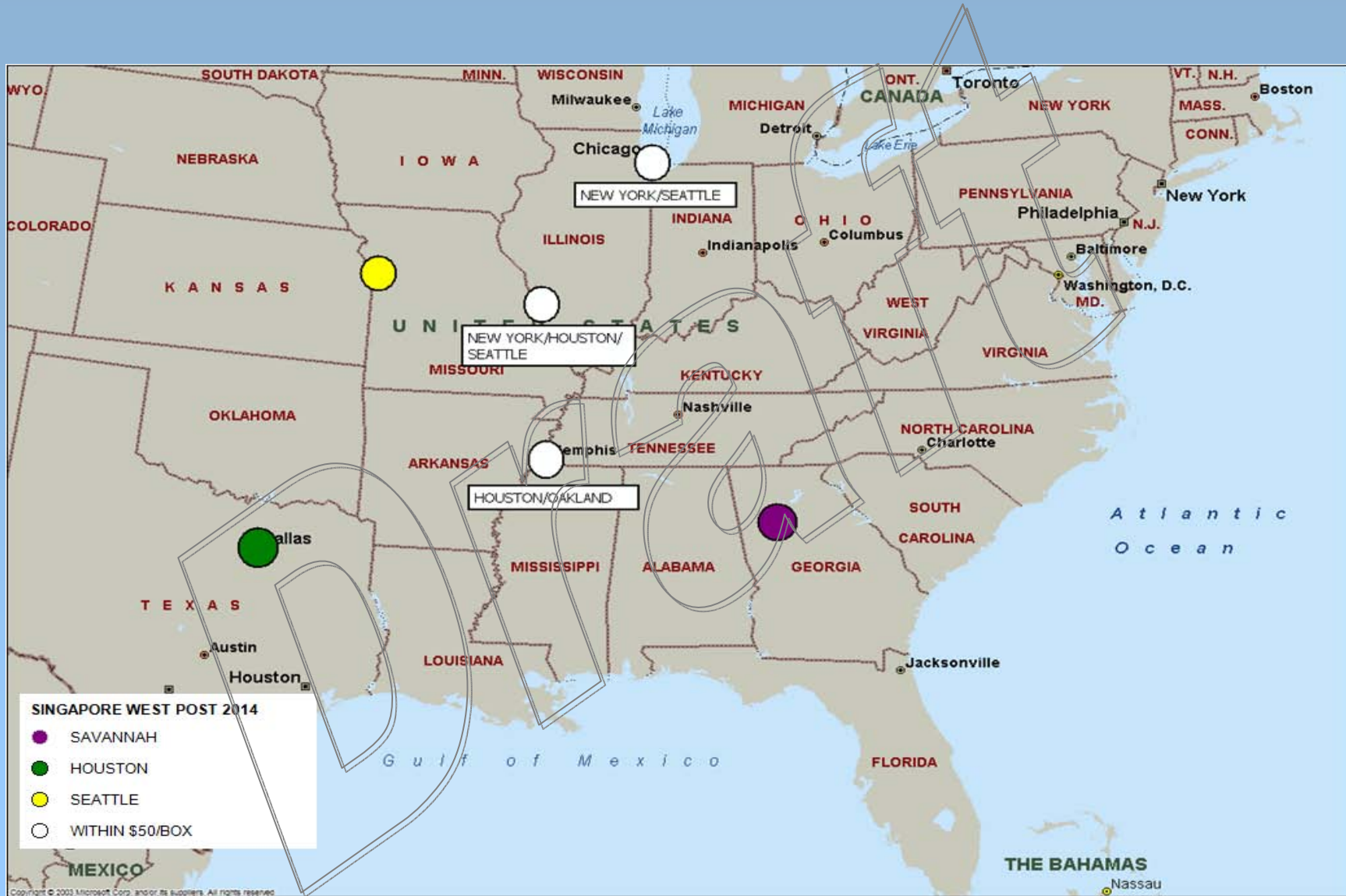
# SINGAPORE PRE EXPANSION

## Jacksonville Holds Advantage into Atlanta



# SINGAPORE POST EXPANSION

## Savannah Cost Effectively Serves Atlanta



Houston captures Dallas; competes for Memphis and St Louis





# Summary of Singapore Routings

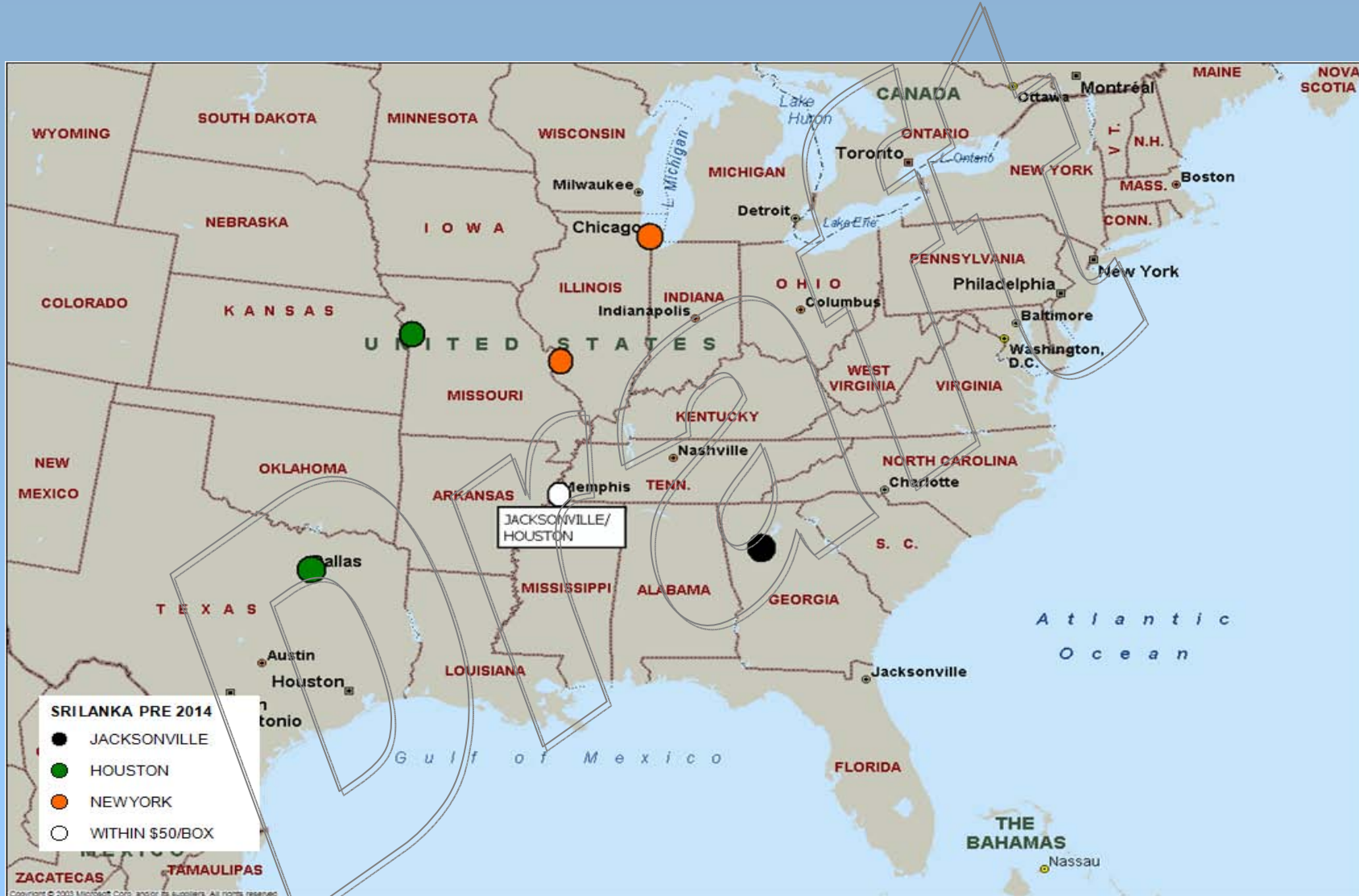
## SINGAPORE

PRE		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
4800	Savannah	\$2,909	\$3,520	\$3,325	\$4,304	\$3,602	\$3,606
4800	New York	\$3,292	\$2,647	\$3,263	\$2,822	\$3,188	\$4,202
4800	Norfolk	\$3,756	\$2,833	\$3,747	\$3,026	\$3,993	NA
4800	Jacksonville	\$2,857	\$3,174	\$3,031	\$3,265	\$3,271	\$3,324
<b>4800</b>	<b>Miami</b>	<b>\$3,067</b>	<b>\$3,577</b>	<b>\$3,370</b>	<b>\$3,526</b>	<b>\$6,808</b>	<b>\$4,360</b>
4800	Port Everglades	\$2,985	\$3,495	\$3,288	\$3,444	\$6,726	\$4,278
4800	Houston	\$3,616	\$3,393	\$3,060	\$2,960	\$3,124	\$2,905
6000	Los Angeles	\$3,488	\$2,927	\$2,821	\$2,781	\$2,783	\$2,837
6000	Oakland	\$3,655	\$2,928	\$2,822	\$2,782	\$2,784	\$2,838
6000	Seattle/Tacoma	\$5,068	\$2,620	\$2,913	\$2,699	\$2,655	\$2,924
<b>PRE</b>	<b>Savannah-Miami differential</b>	\$159	\$57	\$44	(\$778)	\$3,207	\$754
POST		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
6000	Savannah	\$2,222	\$2,833	\$2,638	\$3,617	\$2,915	\$2,919
7000	New York	\$2,618	\$1,973	\$2,589	\$2,148	\$2,514	\$3,528
7000	Norfolk	\$3,073	\$2,150	\$3,064	\$2,343	\$3,310	NA
4800	Jacksonville	\$2,857	\$3,174	\$3,031	\$3,265	\$3,271	\$3,324
<b>7000</b>	<b>Miami</b>	<b>\$2,358</b>	<b>\$2,868</b>	<b>\$2,661</b>	<b>\$2,817</b>	<b>\$6,099</b>	<b>\$3,651</b>
4800	Port Everglades	\$2,985	\$3,495	\$3,288	\$3,444	\$6,726	\$4,278
7000	Houston	\$2,851	\$2,628	\$2,295	\$2,195	\$2,359	\$2,140
8500	Los Angeles	\$2,922	\$2,361	\$2,255	\$2,215	\$2,217	\$2,271
8500	Oakland	\$3,125	\$2,398	\$2,292	\$2,252	\$2,254	\$2,308
8500	Seattle/Tacoma	\$4,559	\$2,111	\$2,404	\$2,190	\$2,146	\$2,415
<b>POST</b>	<b>Savannah-Miami differential</b>	\$136	\$35	\$23	(\$800)	\$3,184	\$732



# SRI LANKA PRE EXPANSION

## Jacksonville Competes in Atlanta and Memphis



# SRI LANKA POST EXPANSION

## Savannah Serves Atlanta



Houston strengthens its position in the Midwest



# Summary of Sri Lanka Routings

## SRI LANKA

PRE		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
4800	Savannah	\$2,655	\$3,266	\$3,071	\$4,050	\$3,348	\$3,352
4800	New York	\$3,038	\$2,393	\$3,009	\$2,568	\$2,934	\$3,948
4800	Norfolk	\$3,502	\$2,579	\$3,493	\$2,772	\$3,739	NA
4800	Jacksonville	\$2,602	\$2,919	\$2,776	\$3,010	\$3,016	\$3,069
<b>4800</b>	<b>Miami</b>	<b>\$2,813</b>	<b>\$3,323</b>	<b>\$3,116</b>	<b>\$3,272</b>	<b>\$6,554</b>	<b>\$4,106</b>
4800	Port Everglades	\$2,730	\$3,240	\$3,033	\$3,189	\$6,471	\$4,023
4800	Houston	\$3,354	\$3,131	\$2,798	\$2,698	\$2,862	\$2,643
6000	Los Angeles	\$3,735	\$3,174	\$3,068	\$3,028	\$3,030	\$3,084
6000	Oakland	\$3,901	\$3,174	\$3,068	\$3,028	\$3,030	\$3,084
6000	Seattle/Tacoma	\$5,314	\$2,866	\$3,159	\$2,945	\$2,901	\$3,170
PRE	Savannah-Miami differential	\$159	\$57	\$44	(\$778)	\$3,207	\$754
POST		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
6000	Savannah	\$2,056	\$2,667	\$2,472	\$3,451	\$2,050	\$2,753
7000	New York	\$2,452	\$1,807	\$2,423	\$1,982	\$2,348	\$3,362
7000	Norfolk	\$2,908	\$1,985	\$2,899	\$2,178	\$3,145	NA
4800	Jacksonville	\$2,602	\$2,919	\$2,776	\$3,010	\$3,016	\$3,069
<b>7000</b>	<b>Miami</b>	<b>\$2,193</b>	<b>\$2,703</b>	<b>\$2,496</b>	<b>\$2,652</b>	<b>\$5,934</b>	<b>\$3,486</b>
4800	Port Everglades	\$2,730	\$3,240	\$3,033	\$3,189	\$6,471	\$4,023
7000	Houston	\$2,681	\$2,458	\$2,125	\$2,025	\$2,189	\$1,970
8500	Los Angeles	\$3,054	\$2,493	\$2,387	\$2,347	\$2,349	\$2,403
8500	Oakland	\$3,257	\$2,530	\$2,424	\$2,384	\$2,386	\$2,440
8500	Seattle/Tacoma	\$4,692	\$2,244	\$2,537	\$2,323	\$2,279	\$2,548
POST	Savannah-Miami differential	\$137	\$36	\$24	(\$799)	\$3,884	\$733





# BREMERHAVEN

## Jacksonville Is Competitive into Atlanta and Memphis





# Summary of Bremerhaven Routings

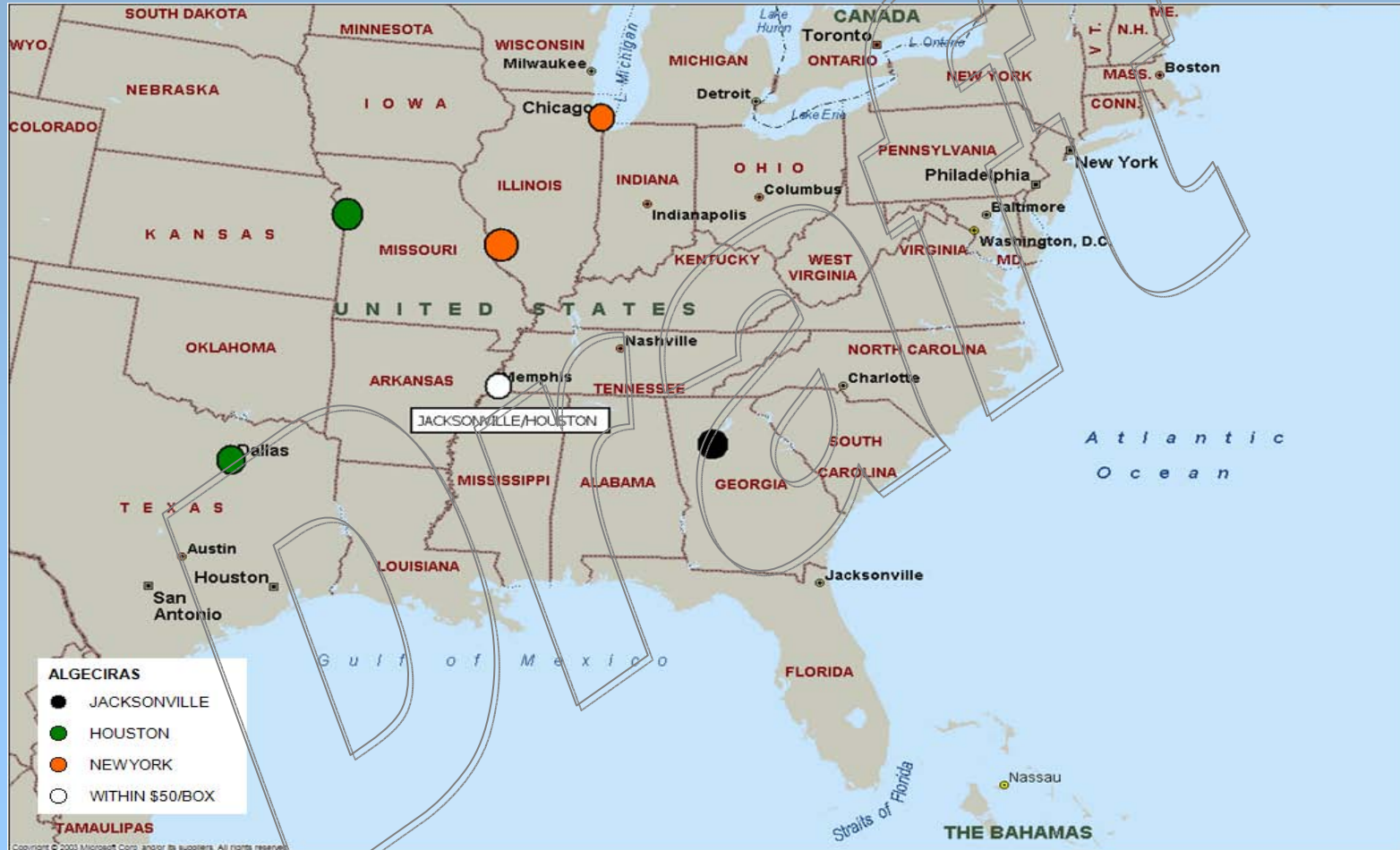
## BREMERHAVEN

		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
4800	Savannah	\$1,567	\$2,178	\$1,983	\$2,962	\$2,260	\$2,264
4800	New York	\$1,935	\$1,290	\$1,906	\$1,465	\$1,831	\$2,845
4800	Norfolk	\$2,401	\$1,478	\$2,392	\$1,671	\$2,638	NA
4800	Jacksonville	\$1,512	\$1,829	\$1,686	\$1,920	\$1,926	\$1,979
<b>4800</b>	<b>Miami</b>	<b>\$1,729</b>	<b>\$2,239</b>	<b>\$2,032</b>	<b>\$2,188</b>	<b>\$5,470</b>	<b>\$3,022</b>
4800	Port Everglades	\$1,642	\$2,152	\$1,945	\$2,101	\$5,383	\$2,935
4800	Houston	\$2,266	\$2,043	\$1,710	\$1,610	\$1,774	\$1,555
	<b>Savannah-Miami differential</b>	<b>\$163</b>	<b>\$61</b>	<b>\$48</b>	<b>(\$774)</b>	<b>\$3,211</b>	<b>\$758</b>



# ALGECIRAS

## Jacksonville is Competitive into Atlanta and Memphis



# Summary of Algeciras Routings

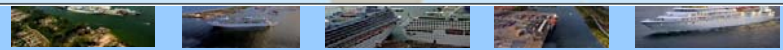
## ALGECIRAS

		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
4800	Savannah	\$1,488	\$2,099	\$1,904	\$2,883	\$2,181	\$2,185
4800	New York	\$1,871	\$1,226	\$1,842	\$1,401	\$1,767	\$2,781
4800	Norfolk	\$2,336	\$1,413	\$2,327	\$1,606	\$2,573	NA
4800	Jacksonville	\$1,436	\$1,753	\$1,610	\$1,844	\$1,850	\$1,903
<b>4800</b>	<b>Miami</b>	<b>\$1,647</b>	<b>\$2,157</b>	<b>\$1,950</b>	<b>\$2,106</b>	<b>\$5,388</b>	<b>\$2,940</b>
4800	Port Everglades	\$1,764	\$2,274	\$2,067	\$2,223	\$5,505	\$3,057
4800	Houston	\$2,195	\$1,972	\$1,639	\$1,539	\$1,703	\$1,484
	<b>Savannah-Miami differential</b>	<b>\$160</b>	<b>\$58</b>	<b>\$45</b>	<b>(\$777)</b>	<b>\$3,208</b>	<b>\$755</b>



# SANTOS

## Jacksonville Holds a Strong Position into Atlanta, Memphis and Chicago





# Summary of Santos Routings

SANTOS

		Atlanta	Chicago	Memphis	St. Louis	KC	DFW
4800	Savannah	\$1,730	\$2,341	\$2,146	\$3,125	\$2,423	\$2,427
4800	New York	\$2,158	\$1,513	\$2,129	\$1,688	\$2,054	\$3,068
4800	Norfolk	\$2,590	\$1,667	\$2,581	\$1,860	\$2,827	NA
4800	Jacksonville	\$1,629	\$1,946	\$1,803	\$2,037	\$2,043	\$2,096
<b>4800</b>	<b>Miami</b>	<b>\$1,843</b>	<b>\$2,353</b>	<b>\$2,146</b>	<b>\$2,302</b>	<b>\$5,584</b>	<b>\$3,136</b>
4800	Port Everglades	\$1,766	\$2,276	\$2,069	\$2,225	\$5,507	\$3,059
4800	Houston	\$2,320	\$2,097	\$1,764	\$1,664	\$1,828	\$1,609
	<b>Savannah-Miami differential</b>	<b>\$114</b>	<b>\$12</b>	<b>(\$1)</b>	<b>(\$823)</b>	<b>\$3,162</b>	<b>\$709</b>



## Logistics Cost Analysis Summary

- Port Everglades competitive truck hinterland is South Florida
- Before canal expansion, Jacksonville holds intermodal advantage to Atlanta
- After canal expansion, Savannah emerges as the key port of entry due to the ability to handle 7,000 and dual on-dock ICTF
  - JAXPORT - Authorization to -45 ft still limits to a fully-laden 4,800 TEU vessel based on design draft
- Issue at Miami is dray to railhead in Hialeah or Medley – on-dock rail is questionable
- Assumption that PEV will have on site ICTF, but needs to be able to accommodate a fully-laden 7,000 TEU vessel to compete with Miami and Savannah for Atlanta market
  - Currently, pilots will only bring in a ship with a draft of -40 ft (-41 ft. on high tide)
- PEV near-dock ICTF will increase intermodal throughput on baseline operations
- In post-expansion era, Houston strengthens its position in other Midwest markets such as St. Louis, Memphis, Kansas City



# Potential Market

- **380,000 estimated inbound consumption market**
  - Of this PEV handles about 80,000 boxes based on Piers data -- 21% of local market
  - Assume can get 50% of South Florida Market
    - 150,000 TEU loads
    - Balance outbound loads and exports – 150,000 TEU's
    - Total 300,000 TEU loads
- **400,000 TEU inbound loaded Central Florida market potential**
  - Assume 25% market penetration
  - 100,000 TEU inbound loaded
  - Assume 100,00 TEU match outbound load and empty
  - Total potential 200,000 additional TEUs from Central Florida
- **With current 850,000 TEUs - current potential 1.3 -1.4 million TEUS**
- **If assume 10% intermodal - Total is 1.5 million TEUs in near term**



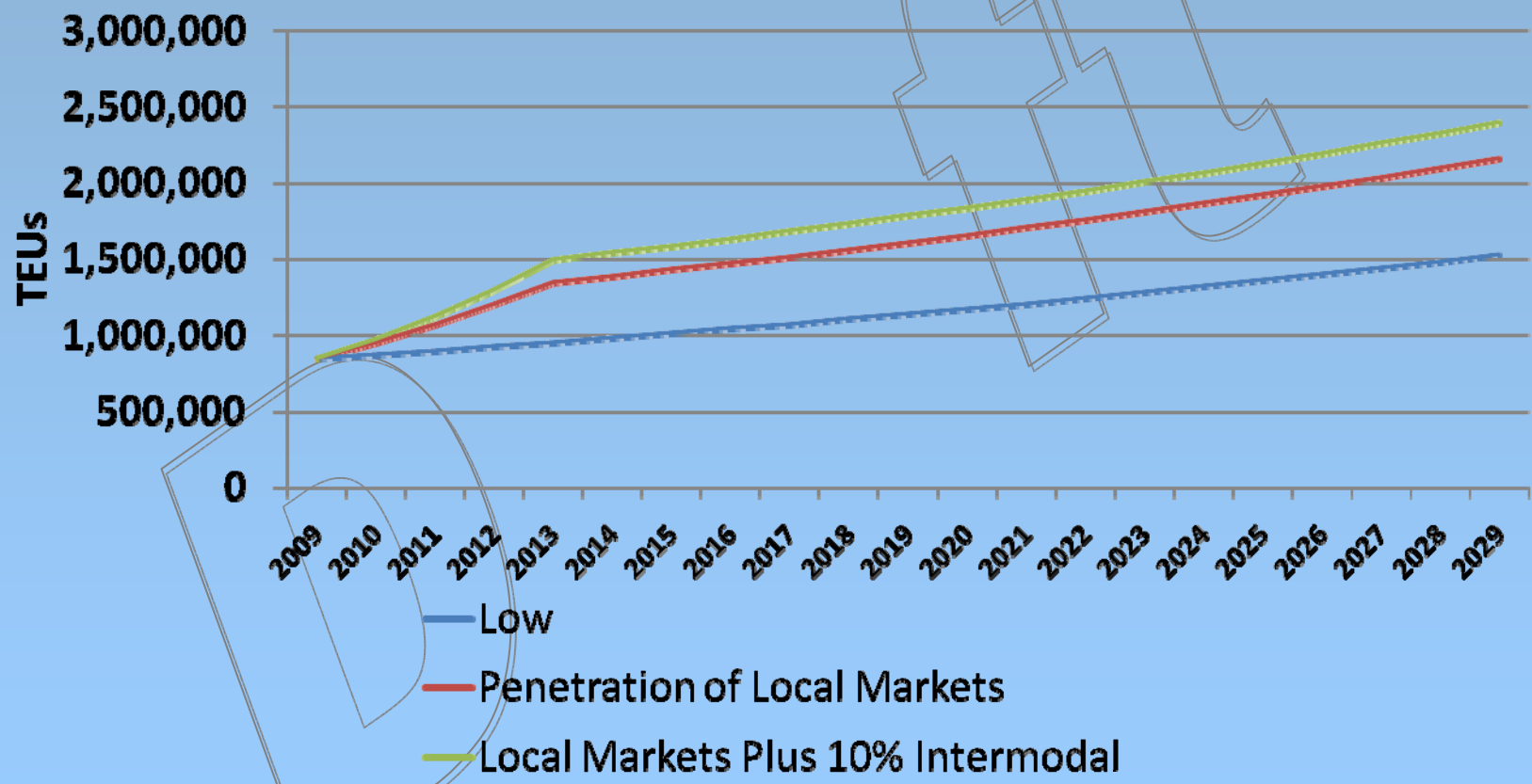
# Projected Container Throughput

- **Projection Assumptions:**
  - **Low – 3% of base cargo, no new market penetration**
  - **Medium - Capture 50% of local market and 25% of Tampa market by 2014 and grow at 3% thereafter**
  - **High - Capture local and Tampa market shares and achieve 10% intermodal, and grow 3% thereafter**
- **By 2029, container throughput projected to range between 1.5 million and 2.4 million TEU's**





# Container Projections



# **Non-Containerized Cargo (Dry Bulk and Neo Bulk)**

**Presented by Mike Sclar  
Sclar & Associates**

DRAFT

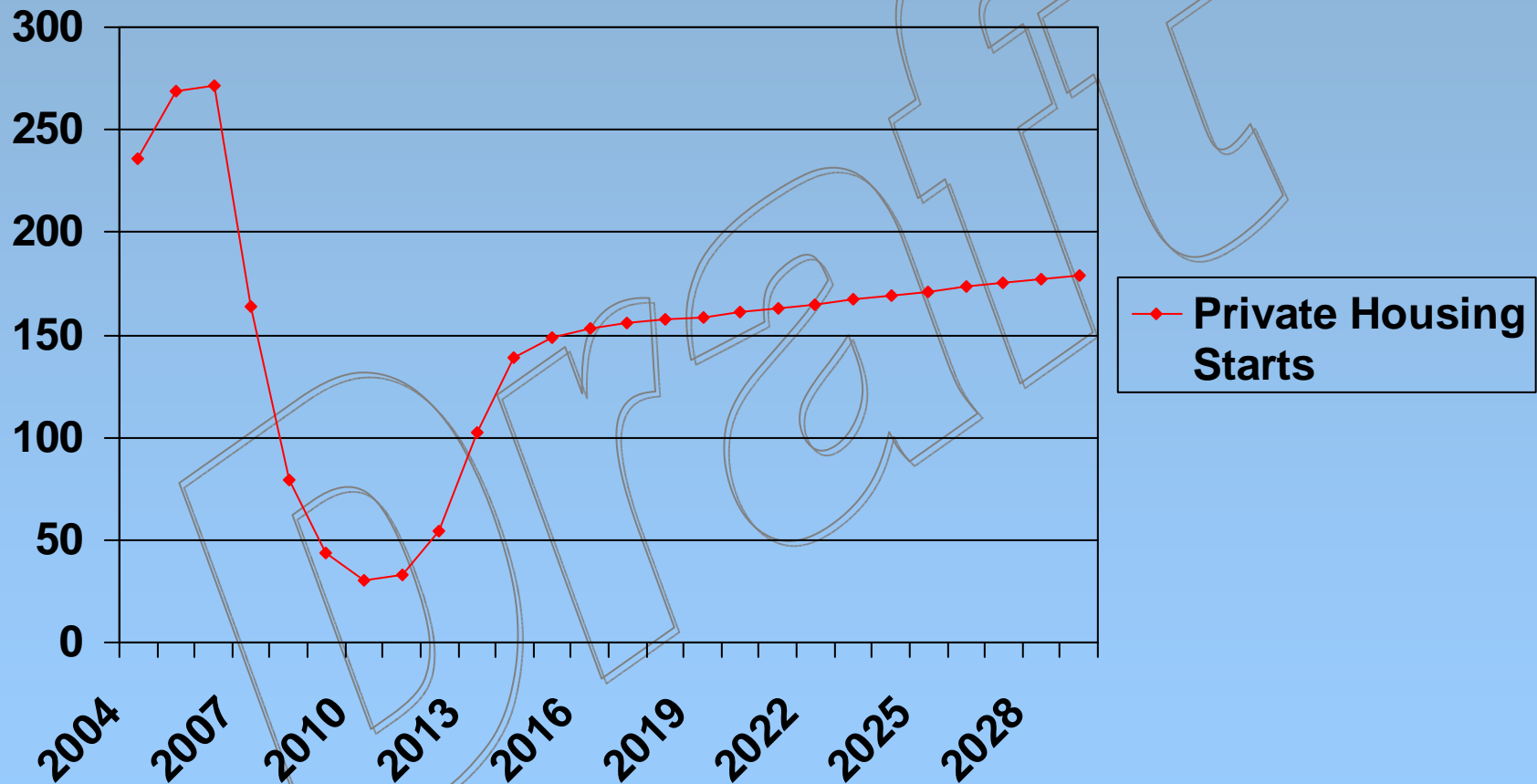


# Housing Starts and Population Growth

- **Dry Bulk and Neo Bulk Commodities Handled in Port Everglades are Primarily Related to Construction Activity in Florida. Near Term Housing Starts are Driven by the Economic Cycle and Long Term Housing Starts are Projected to Increase with Population Growth**
- **In 2006 Housing Starts Were Projected to Decline by 35.9% in FY2007 and then Recover in FY2008 and Beyond**
- **Housing Starts Fell 39.8% in FY2007 but Subsequently Declined 51.6% in FY2008 and are Projected to Decline by 44.8% in FY2009 and 30.0% in FY2010**
- **2029 Population Projections are 4.0% Below Previous Projections and 2029 Housing Starts are 30.7% Lower than Projected in 2006**
- **The Reduced Housing Start and Population Projections Result in Housing Starts Falling Below the 2006 Peak Throughout the Forecast**



# Private Housing Starts (000's)



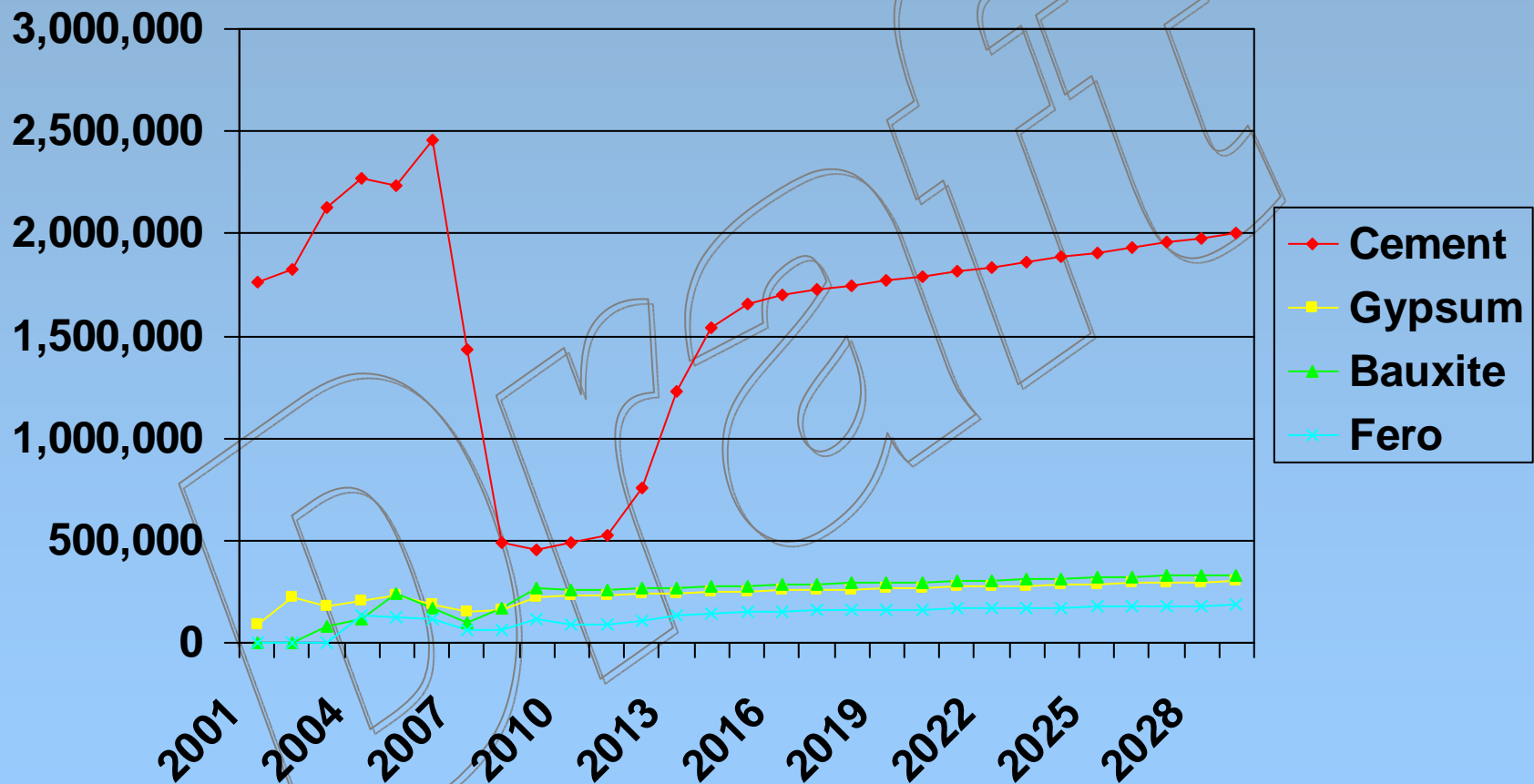


# Cement and Aggregates

- **Cement Declined Faster than Housing Starts in 2007 and 2008 Due to Lower Demand Plus New Domestic Cement Capacity**
- **Aggregates ( Bauxite, Gypsum and Fero) Fell Moderately in 2007 and Have Recovered and Increased in 2008 and First Half 2009 As They Are Required for Domestic Cement Production**
- **Cement Imports Have Levelled Off in 2009 Despite Continued Declines in Housing Starts**
- **Cement Is Not Declining as Much as Housing Starts in 2009 and Will Recover With Housing Start Increases**
- **Longer Term, Base Line Cement Imports Will Approach 81.4% of the Peak Levels of 2006 In the Base Line Forecast**



# Cement, Gypsum, Bauxite and Fero Base Line Forecast

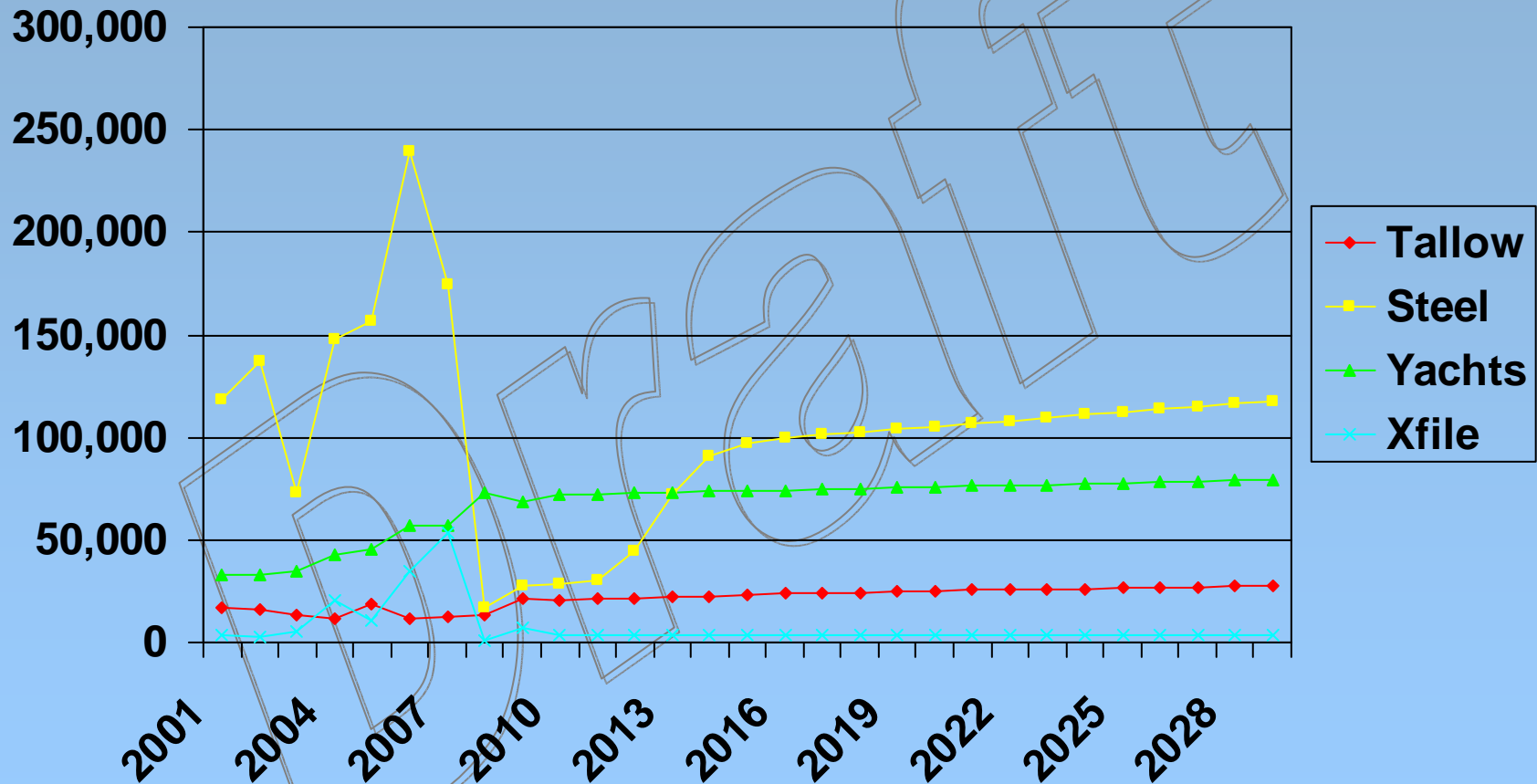


# Tallow, Steel, Yachts and Xfile

- **Steel declined due to high inventories and falling demand relative to domestic production. Current steel imports are sporadic, but will return to growth with the recovery of the construction market**
- **Tallow exports increased in FY2009 and are projected to increase moderately in the future**
- **Yachts have shown strong growth but are projected to soften in the near term before returning to moderate long term growth**
- **Xfile has included various shipments such as ceramic tiles and more recently bagged cement. Future volumes are projected to show small, sporadic volumes with moderate growth**



# Tallow, Steel, Yachts and Xfile





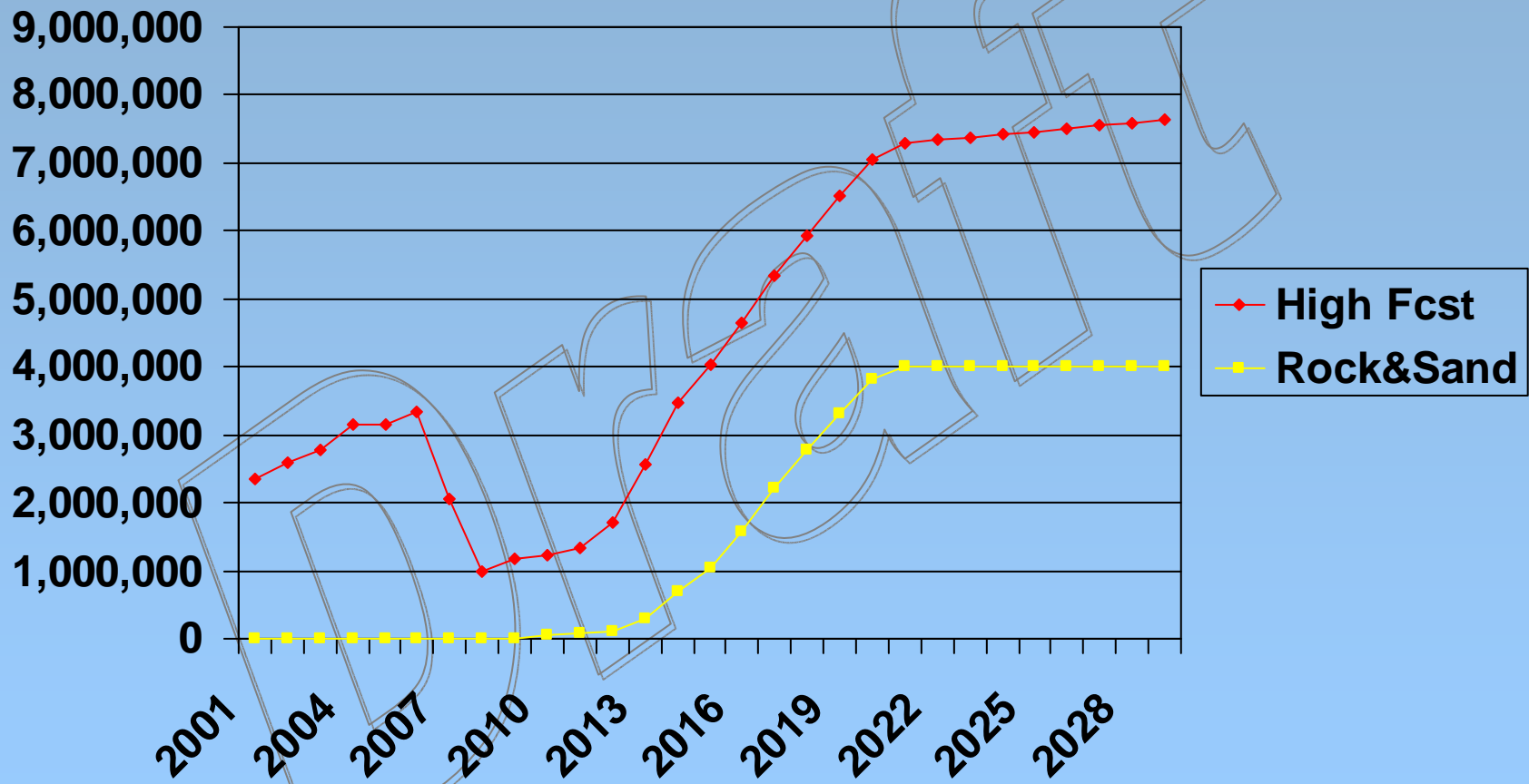
# Crushed Rock

## Crushed Rock Remains an Opportunity For PEV

- **Lake Belt Mining Has Shut Down Under Court Order**
- **The Army Corps SEIS Is Under Comment Period**
- **New Mining Permits Are Under Consideration**
- **New Mining Permits Will Likely Be Granted But Will Be Challenged**
- **Lake Belt Mining Will Likely Be Restarted But Will Not Likely Meet Future Demand**
- **The ACE SEIS identifies Jacksonville and Tampa as Ports Capable of Increased Crushed Rock Imports. However, PEV is better positioned to serve critical parts of the Florida Market**



# Crushed Rock: High Forecast

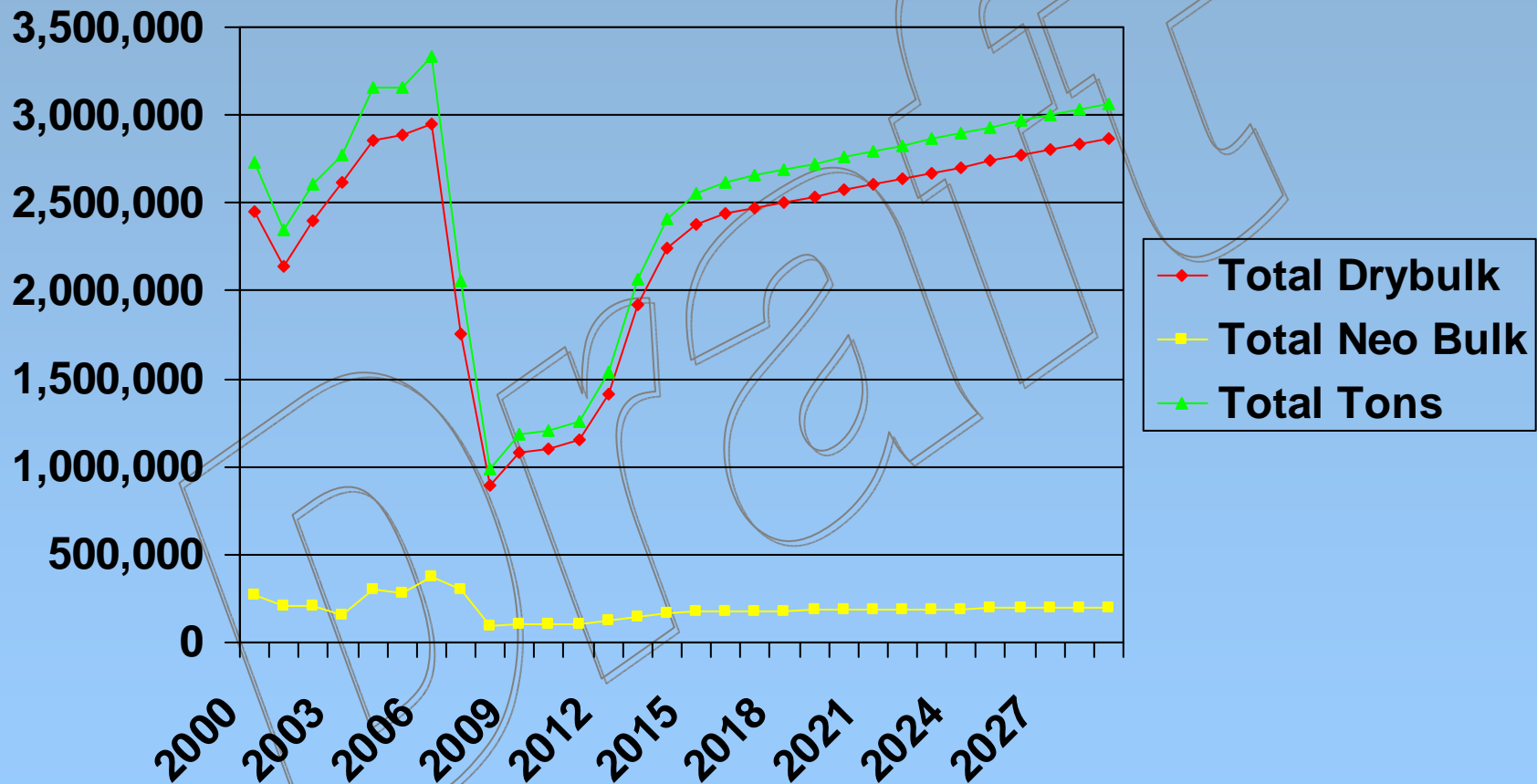


# Base Line Forecast

- **The Base Line Forecast Results in Total Dry Bulk and Neo Bulk Tons Returning to 92.1% of the Peak 2006 Levels by 2029**
- **The Base Line Forecast Reaches 3.067 Million Tons in 2029 Compared with 3.329 Million Tons in 2006 and 0.986 Million Tons in 2008**
- **The Base Line Forecast Includes a Small Increase in 2009 Holding the Gains in the First Half of FY2009**
- **The Forecast Includes Moderate Recovery Relative to the Recovery in the Housing Market Followed by Longer Term Growth in Line with Population Growth Projections**



# Baseline Forecast



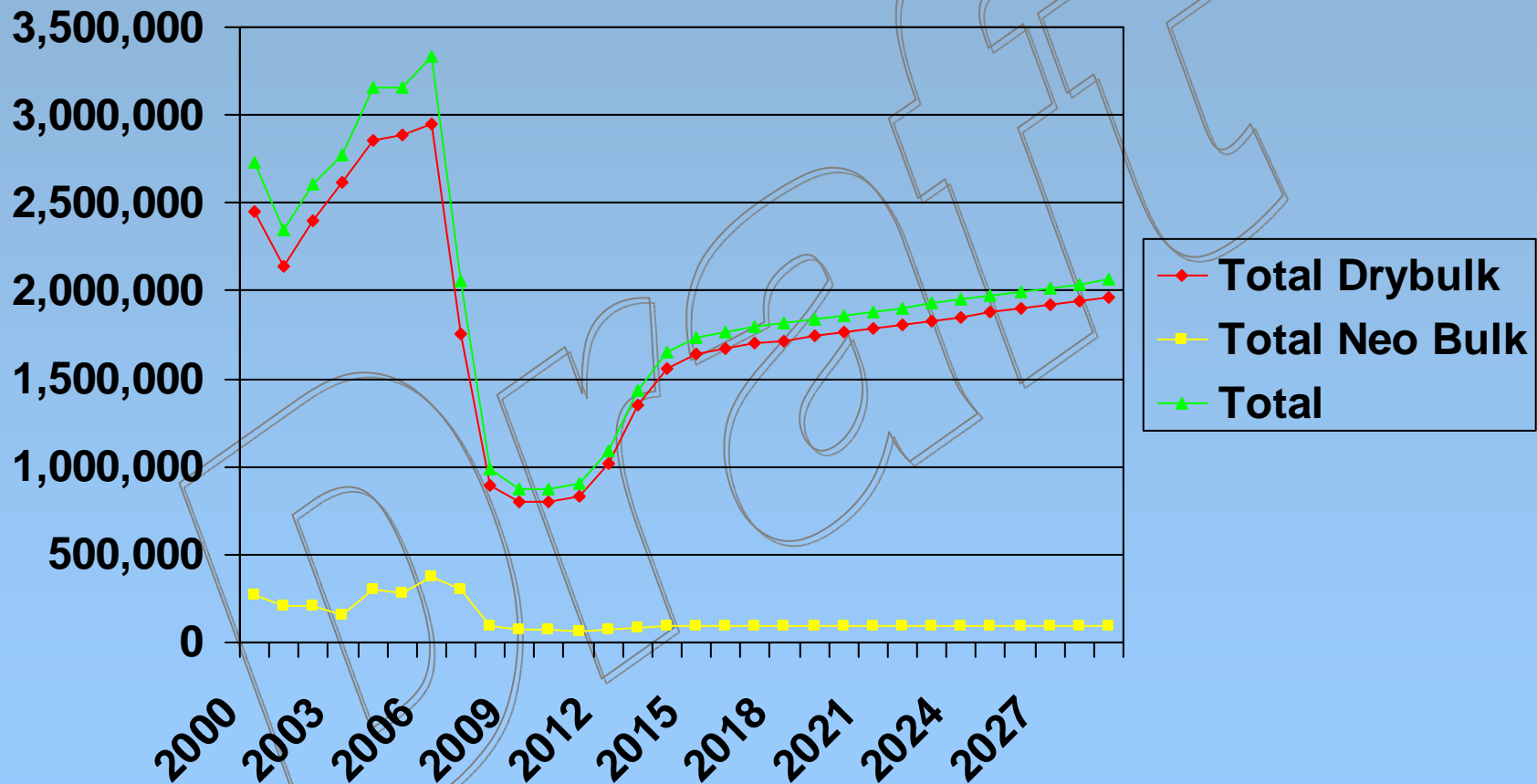


# Low Forecast

- The Low Forecast Reaches Only 61.9% of the 2006 Dry Bulk and Neo Bulk Tons
- The Low Forecast Includes Lower Volumes in the Second Half of FY2009 followed by more modest growth over the forecast period
- The Low Forecast reaches 2.062 Million Tons in 2029 Compared with 3.329 Million Tons of Dry Bulk and Neo Bulk in 2006 and 0.986 Million Tons in 2008



# Low Forecast



# High Forecast

- **The High Forecast Includes Crushed Rock Imports Rising to 4 Million Tons Per Year Over the Forecast Period**
- **In Addition, other PEV Dry Bulk and Neo Bulk Commodities are Projected to Increase at Higher Growth Rates Than Projected in the Base Line Case**
- **The High Forecast Reaches 7.626 Million Tons Compared with 3.329 Million Tons in 2006**



# High Forecast



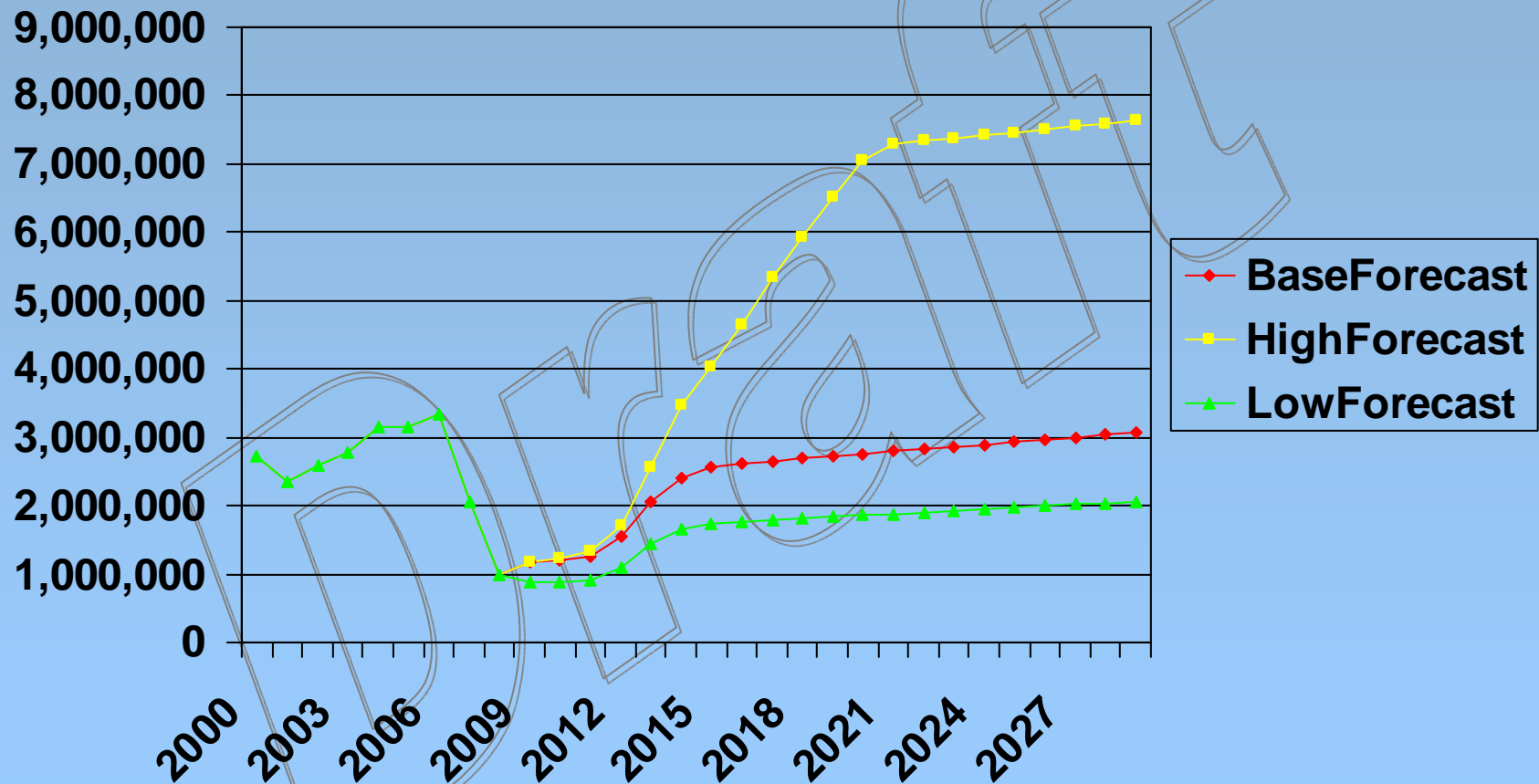


# Dry Bulk and Neo Bulk Base, High and Low Forecasts

- The Base Line Forecast Reaches 3.067 Million Tons in 2029 or 92.1% of the 3.329 Million Tons in 2006
- The Low Forecast Only Recovers to 2.063 Million Tons or 61.9% of the 2006 Tons
- The High Forecast Reaches 7.626 Million Tons or 229.1% of the 2006 Tons Including 4 Million Tons of Crushed Rock



# Dry Bulk and Neo Bulk Base, High and Low Forecasts



# Updating Element 3: Plan Development

- **Updating Project Development:**
  - **Southport Berth Expansion**
  - **Crushed Rock Import Facility**
  - **McIntosh Road Development**
  - **ICTF Development**
  - **Midport Berth Expansion**
  - **Port–Wide Traffic and Parking Strategies**



# Southport Berth Expansion

- **Location of berth(s) for post-panamax ships to accommodate:**
  - Vessel air draft: 180 feet
  - Vessel LOA: 1140 feet
  - Vessel Beam: 140 feet
  - Crane Height, above mean sea level (AMSL): 190 feet
- **Location of berth(s) for panamax ships to accommodate:**
  - Existing crane height of 160 feet AMSL
  - Vessel LOA: 900 feet
- **Location of berth(s) for RO/RO and other ships to accommodate:**
  - Vessel LOA: 600 feet
  - RORO ramps or ship gear





# TEU Throughput Capacity Based on Yard Acreage

## 5-YEAR MASTER PLAN

Storage Mode	Annual Throughput (TEU/gross ac)
Wheeled (RORO)	5,300
Wheeled (Banana)	10,500
Top-Pick (2-wide)	3,600
Top-Pick (4-wide)	7,400
RTG	12,000

## 10-YEAR VISION PLAN

Storage Mode	Annual Throughput (TEU/gross ac)
Wheeled (RORO)	5,400
Wheeled (Banana)	10,500
Top-Pick (4-wide)	7,600
RTG	13,900

## 20-YEAR VISION PLAN

Storage Mode	Annual Throughput (TEU/gross ac)
Wheeled (RORO)	5,400
Wheeled (Banana)	10,500
Top-Pick (4-wide)	7,600
RTG	15,300



# TEU Throughput Capacity Based on Berths

## 5 YEAR MASTER PLAN

Vessel Loading Mode	Annual Berth Throughput (TEU/Berth)
RORO	153,000
Ship Mounted Crane	95,000
STS Crane (Shared)	113,000
STS Crane	204,000

## 10 YEAR VISION PLAN

Vessel Loading Mode	Annual Berth Throughput (TEU/Berth)
RORO	157,000
Ship Mounted Crane	133,000
STS Crane (Shared)	144,000
STS Crane	242,000

## 20 YEAR VISION PLAN

Vessel Loading Mode	Annual Berth Throughput (TEU/Berth)
RORO	163,000
Ship Mounted Crane	169,000
STS Crane (Shared)	174,000
STS Crane	315,000



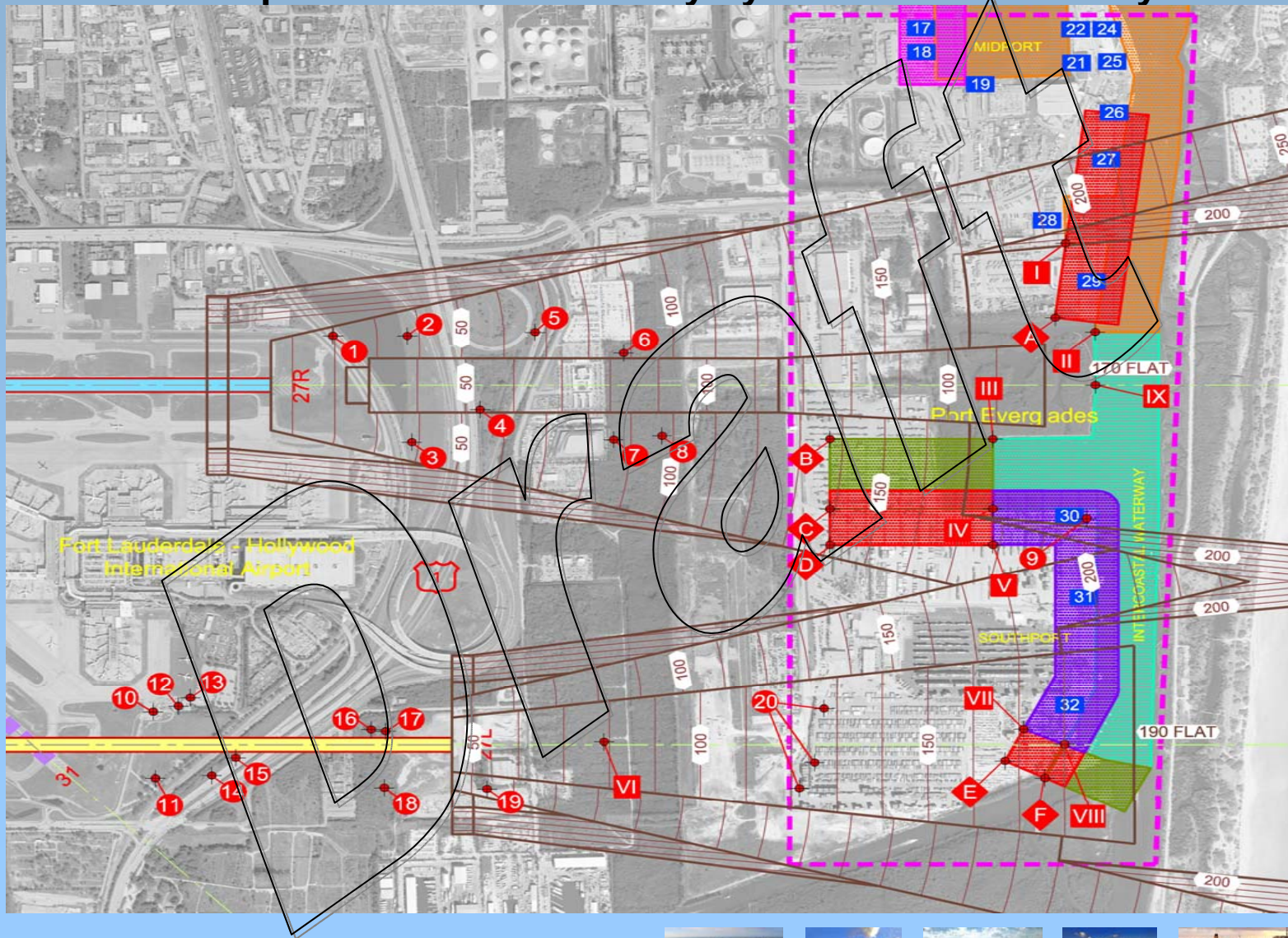
# TEU Throughput Capacity Based on Berths

## 20 YEAR VISION PLAN

Vessel Loading Mode	Annual Berth Throughput (TEU/Berth)	Number of Berths Available	Estimated Annual Throughput
RORO	163,000	3	489,000
Ship Mounted Crane	169,000	1	169,000
STS Crane (Shared)	174,000	2	348,000
STS Crane	315,000	4	1,260,000
Total			2,266,000

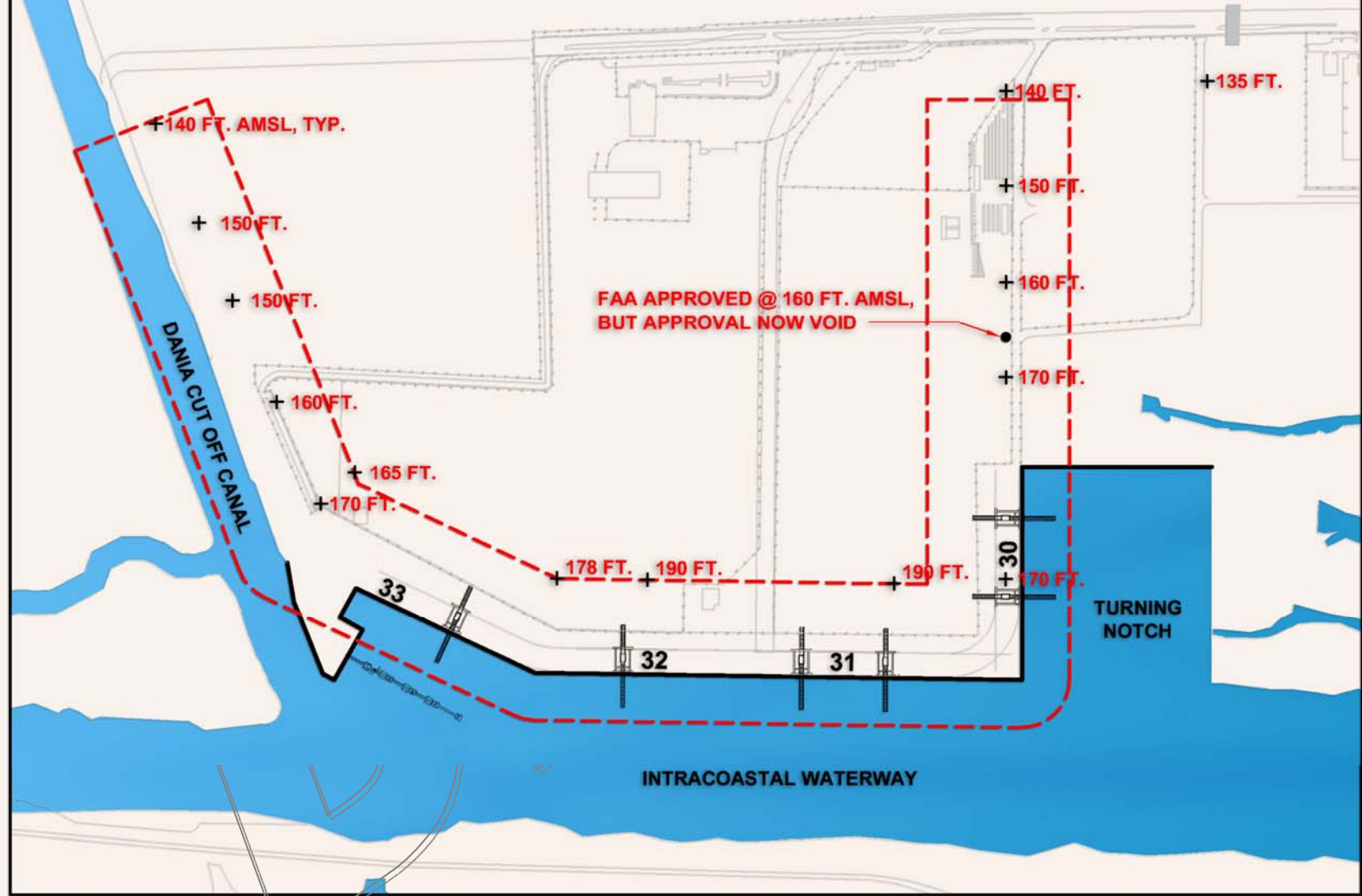


# Lowest Composite Surface/Proposed Conditions Airspace Obstruction Study by Jacobs Consultancy

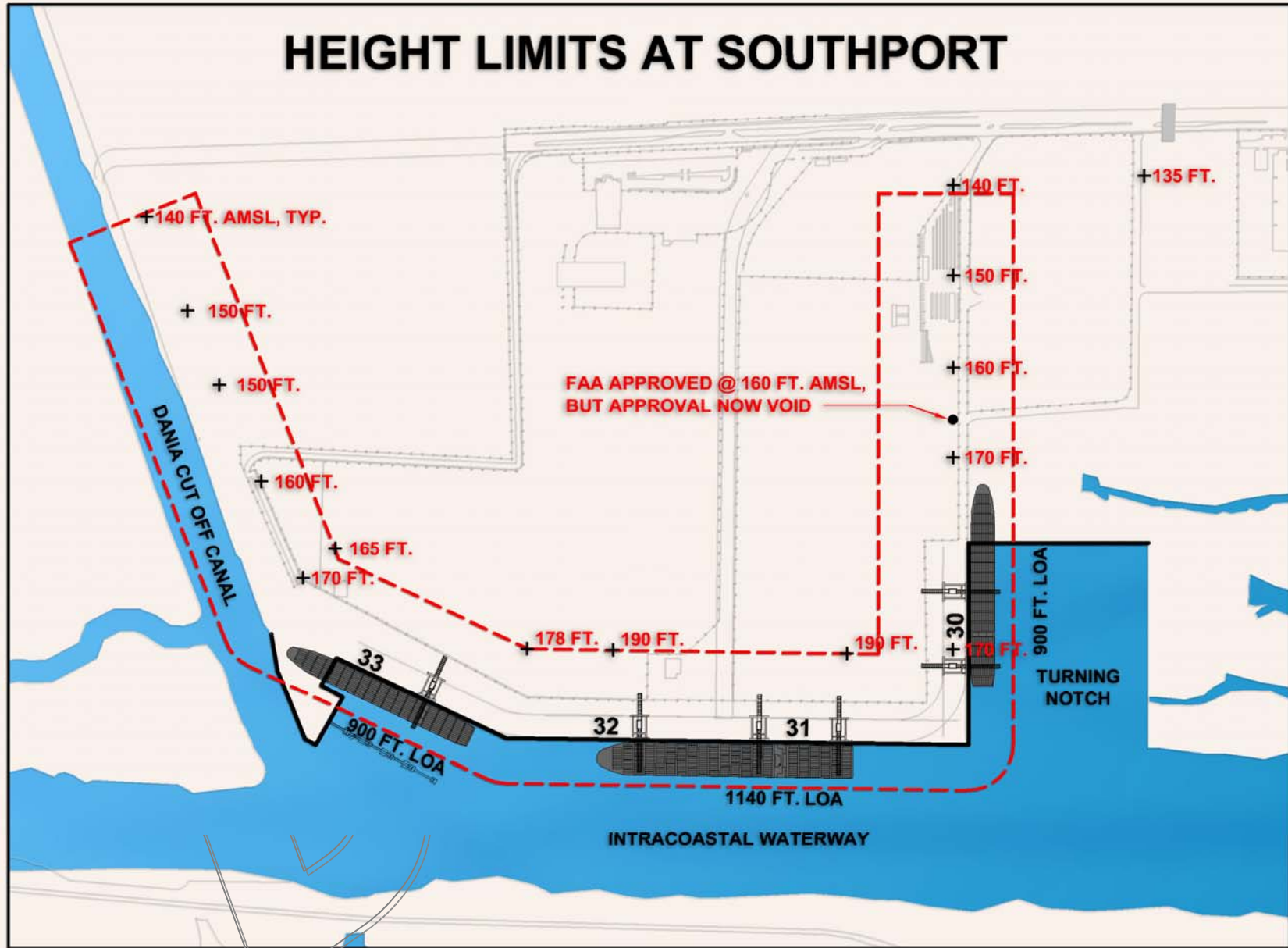




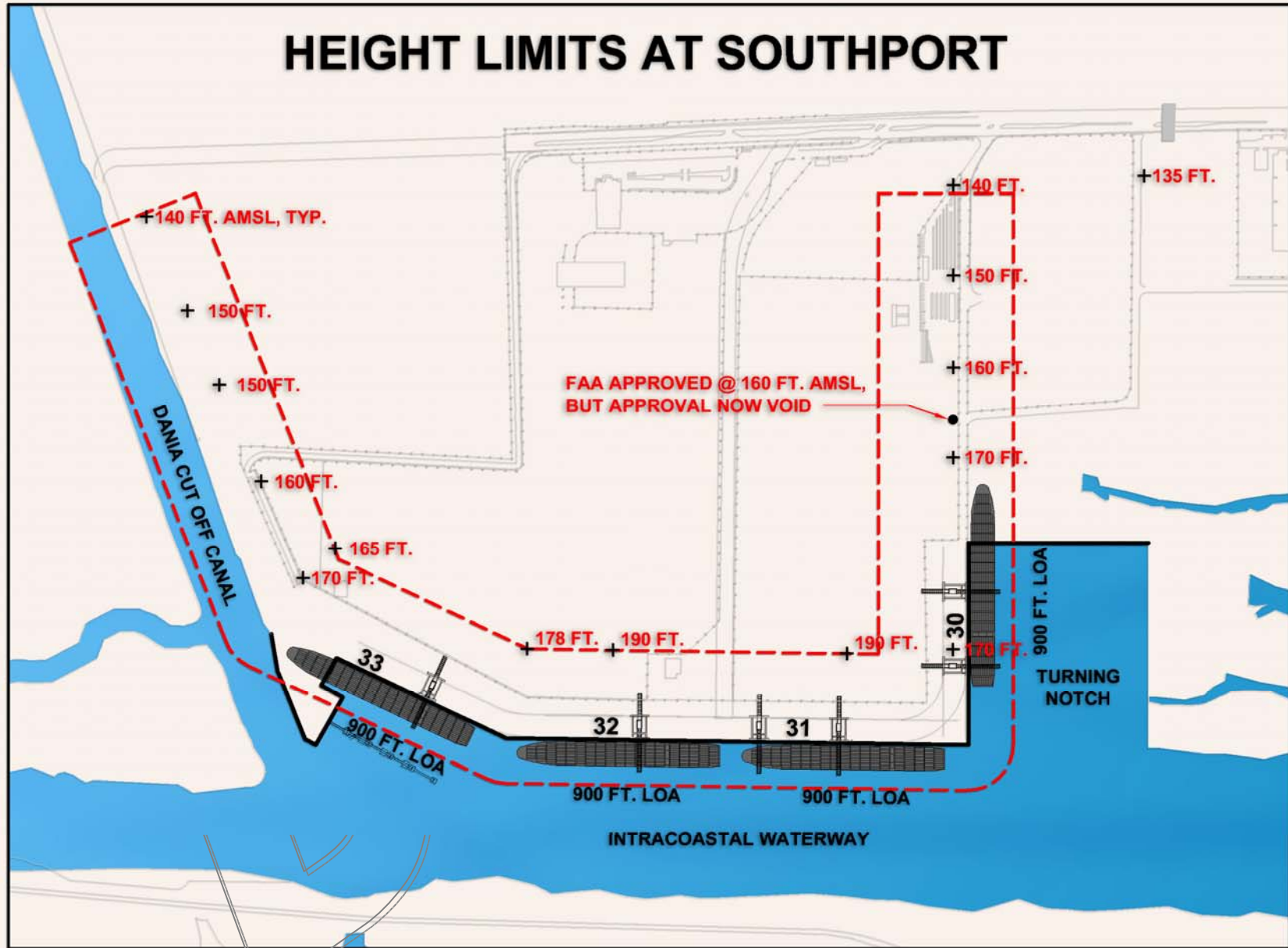
# HEIGHT LIMITS AT SOUTHPORT



# HEIGHT LIMITS AT SOUTHPORT

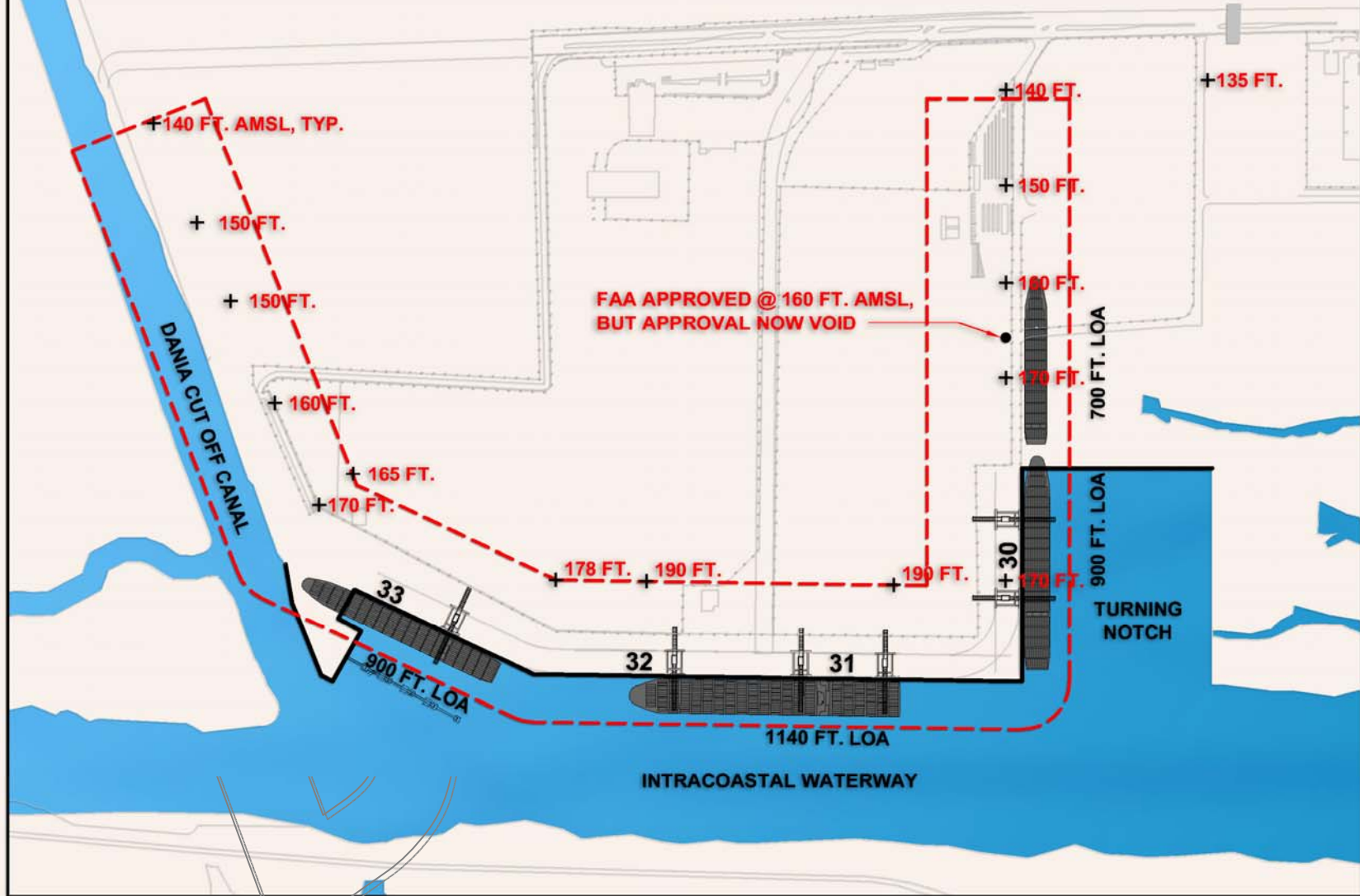


# HEIGHT LIMITS AT SOUTHPORT





# HEIGHT LIMITS AT SOUTHPORT



# Alternative Enhancement Plan





# Crushed Rock Import Facility

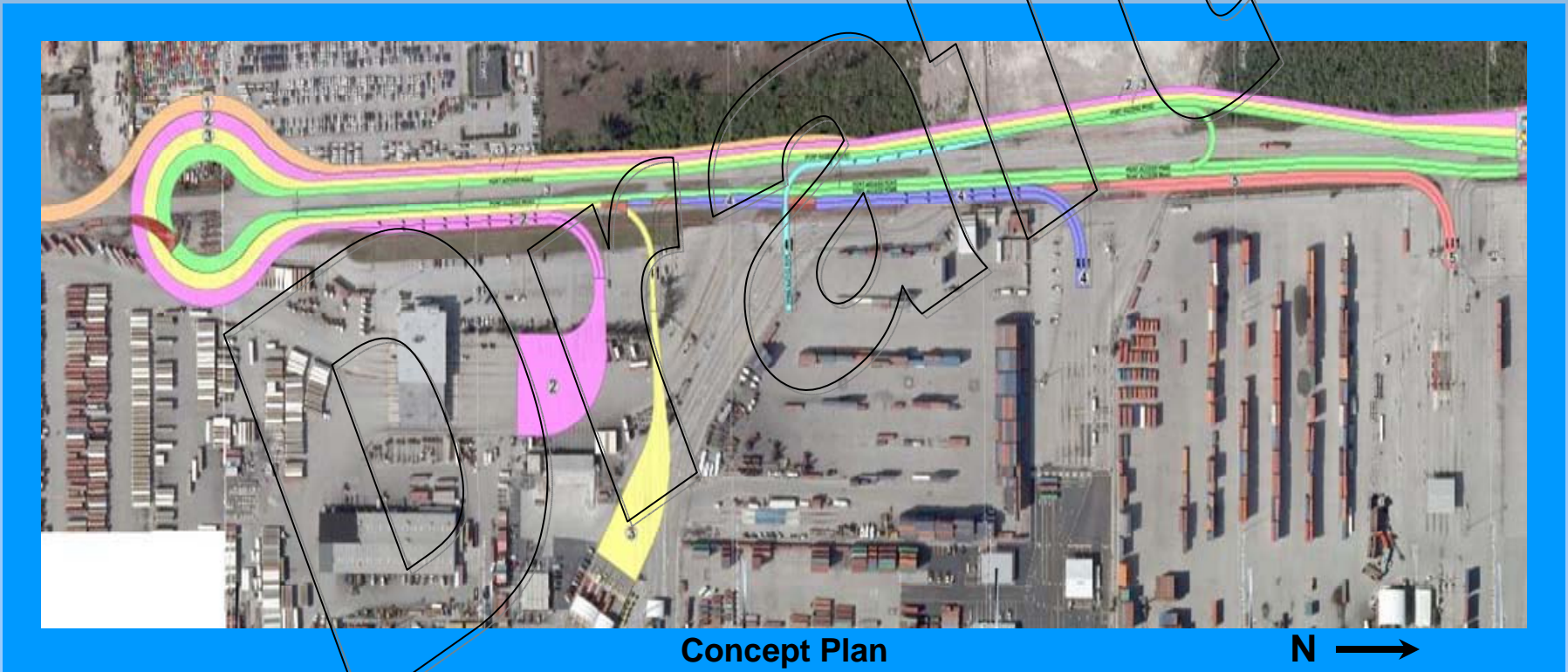
- Location and size of ship berth if Turning Notch is expanded
- Location and size of ship berth if Turning Notch is not expanded

Draft



# McIntosh Road Development

- Incorporation of latest alternative
- Review of traffic on McIntosh north of the Gate

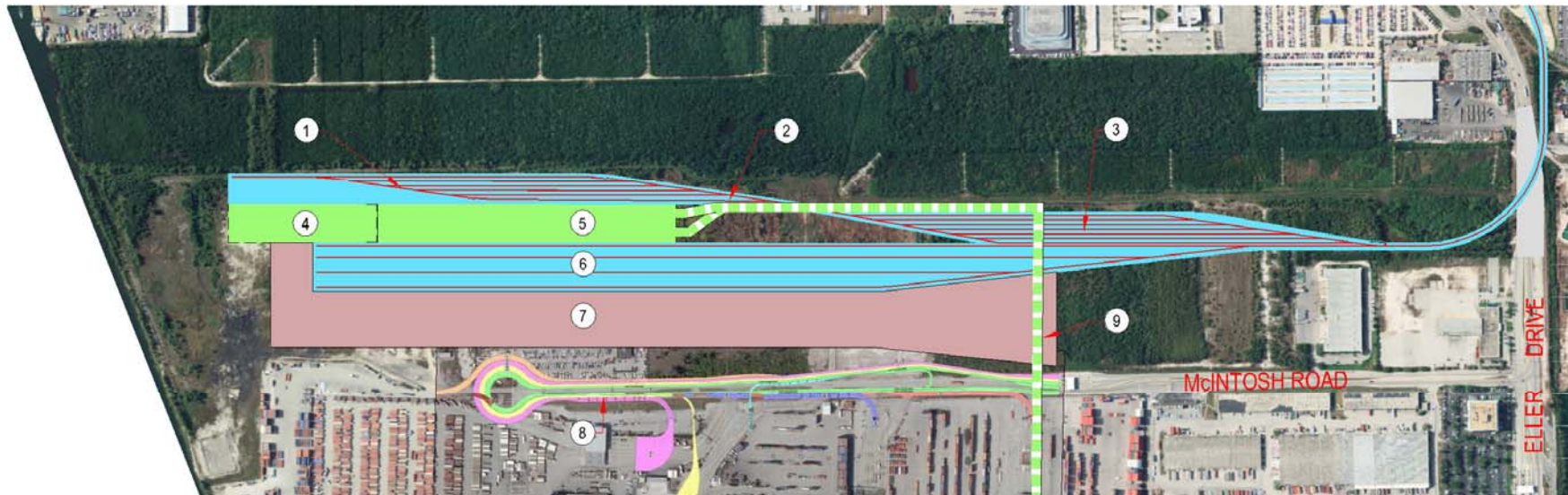


# ICTF Development

## - Definition of throughput capacity and infrastructure requirements

### KEYNOTES

- |  |   |                                    |
|--|---|------------------------------------|
| ① AGGREGATE STORAGE TRACKS / EMPTY CARS (6 - 1,700' TRACKS)  | ④ ± 4-ACRE DRY BULK STORAGE SHED (9,500 MT CAPACITY)        | ⑦ INTERMODAL STORAGE YARD          |
| ② AGGREGATE LOADER TRACKS (2-CAR CAPACITY)                   | ⑤ ± 9-ACRE AGGREGATE STORAGE SHED (200,000 MT CAPACITY)     | ⑧ McINTOSH ROAD ALIGNMENT          |
| ③ AGGREGATE STORAGE TRACKS / LOADED CARS (6 - 1,700' TRACKS) | ⑥ PROPOSED INTERMODAL RAIL YARD (3 - 3,000' LOADING TRACKS) | ⑨ AGGREGATE CONVEYOR (BELOW GRADE) |



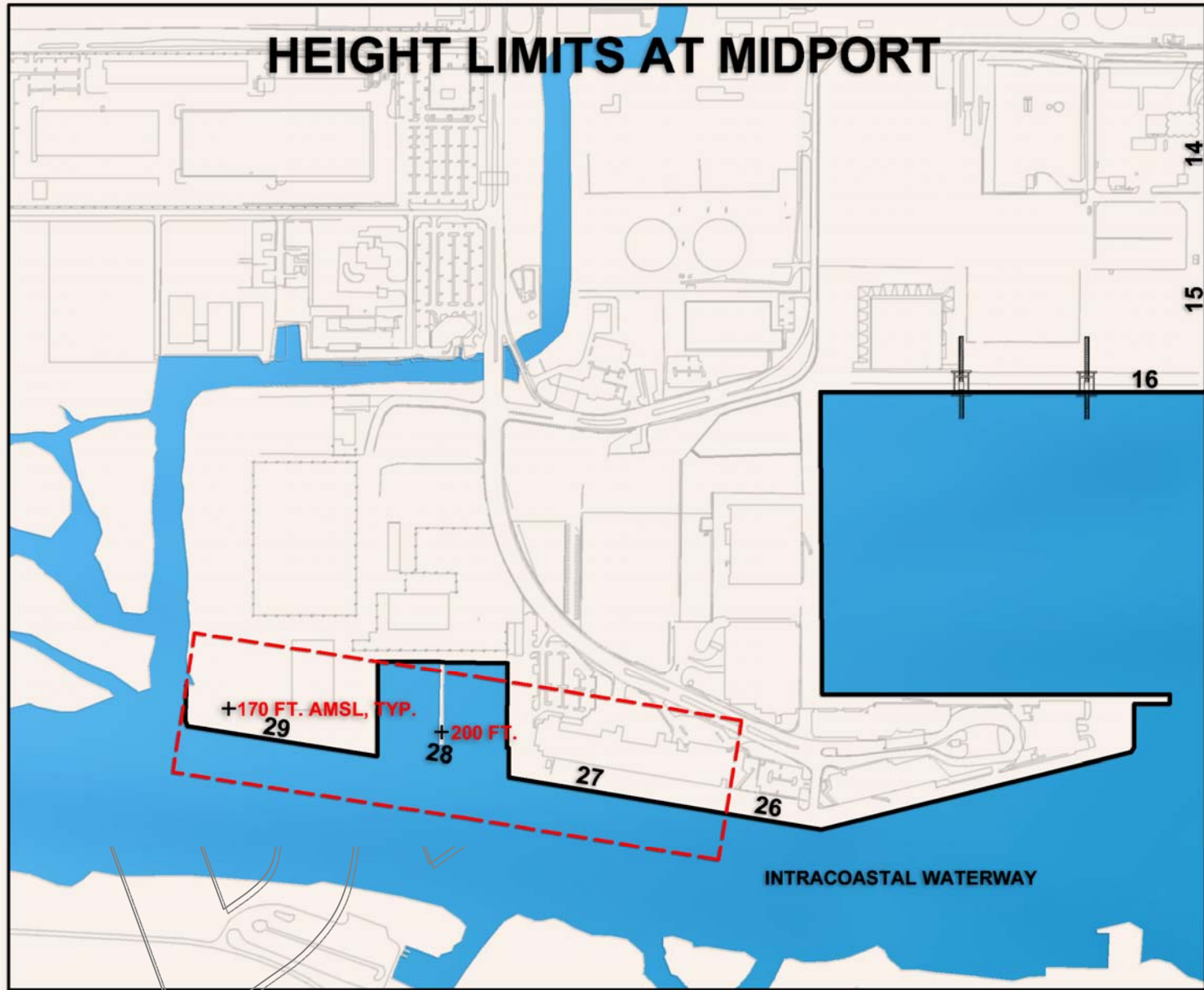


# Midport Berth Expansion

- **Location of berth(s) for panamax ships to accommodate:**
- **Existing crane height of 160 feet AMSL**
- **Vessel LOA: 900 feet**
- **Berth 27 expansion for cruise ships**
- **Location of Ferry Vessels?**

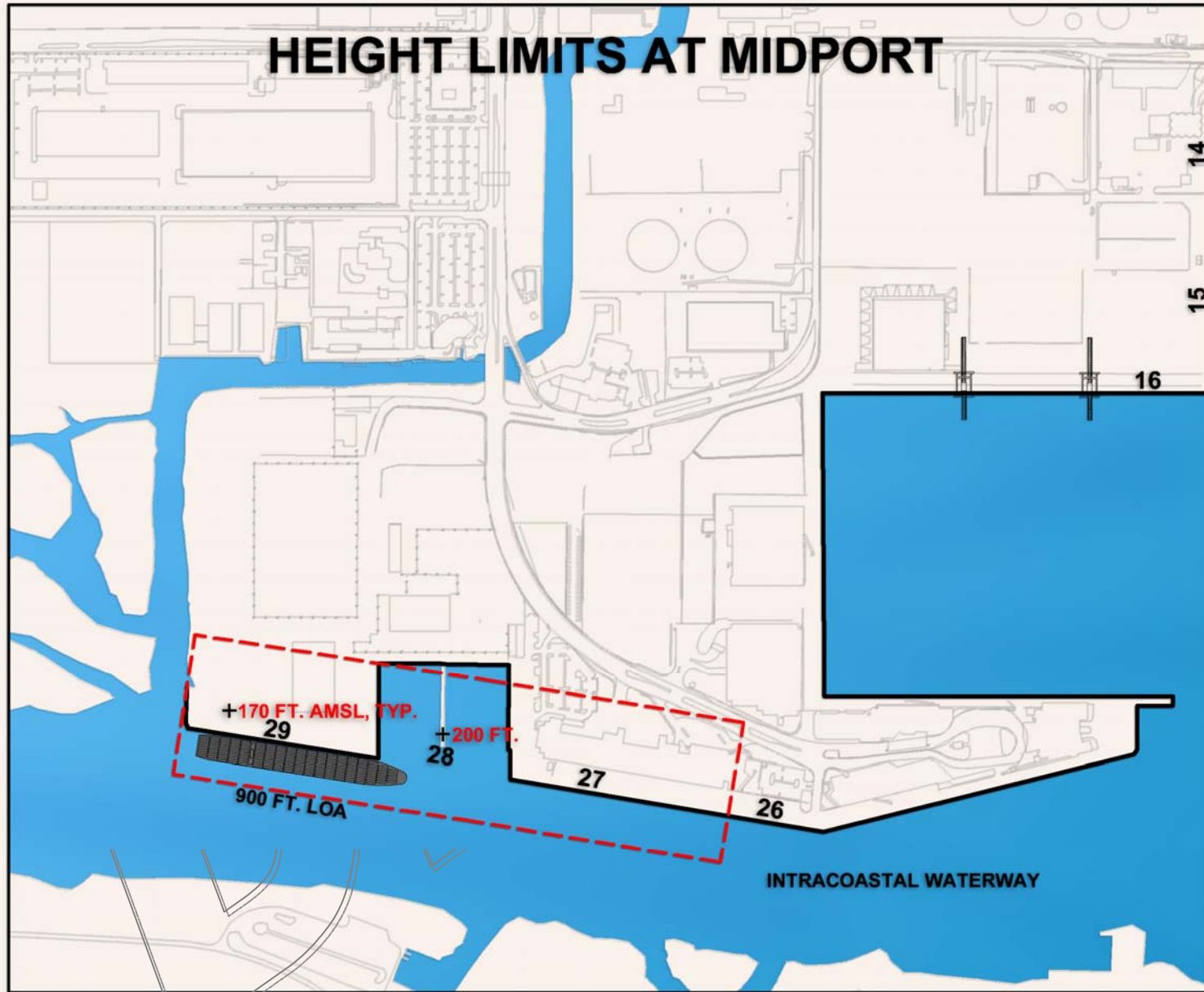


# HEIGHT LIMITS AT MIDPORT





# HEIGHT LIMITS AT MIDPORT



## Port-Wide Projects

- **Incorporation of Locally Preferred Plan for Harbor Dredging and Widening**
- **Incorporation of Updates to the Bulkhead Conditions Assessment**
- **Location of ID center**
- **Traffic and Parking Strategies**



# Traffic Projections through the Gates

Location: McIntosh Road s/o Eller Drive Start Date 04/01/09						
	Direction: N		Direction: S		Combined Total	
24-Hour Totals	4216		4113		8329	
Peak Volume	Hour	Volume	Hour	Volume	Hour	Volume
	AM 0945	444	AM 0645	452	AM 0945	841
	PM 1430	454	PM 1200	393	PM 1350	784
	Daily 1430	454	Daily 0645	452	Daily 0945	841
Truck Percentage	19.69		28.84		24.40	



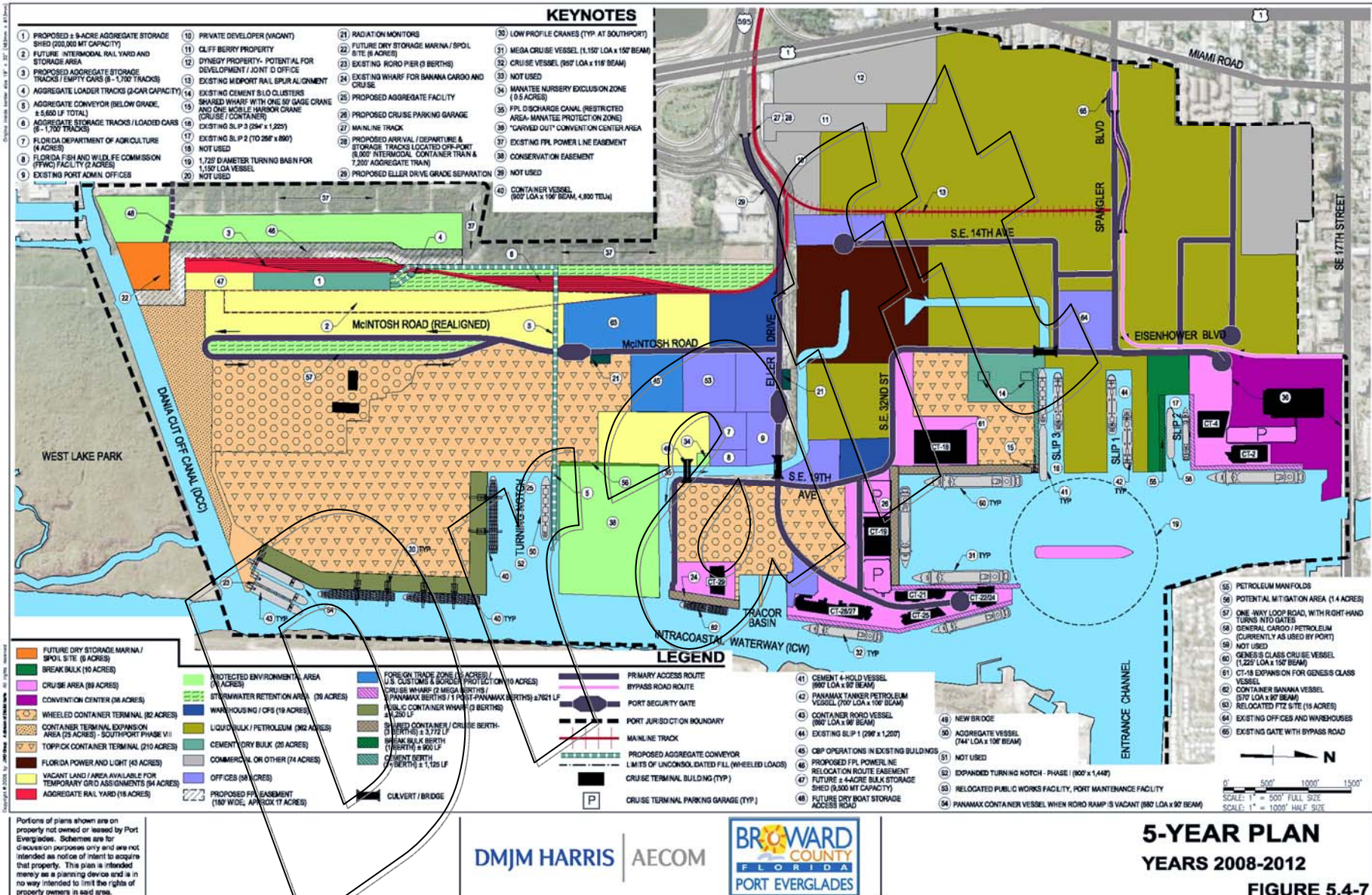
# Parking Projections

<u>Parameter</u>	<u>Parking Facility</u>				<u>Additional Parking</u>
	<u>Midport</u>	<u>Northport</u>	<u>T-19 Surface Lot</u>	<u>Total Spaces</u>	<u>CT-18</u>
Parking Capacity	1,950	2,350	404	4,704	600
Peak Month Overnight	Dec-08	Mar-08	Nov-08		
Average peak Month Overnight	1,622	955	250	2,827	
High Peak Month Overnight	1,872	1,229	404	3,505	



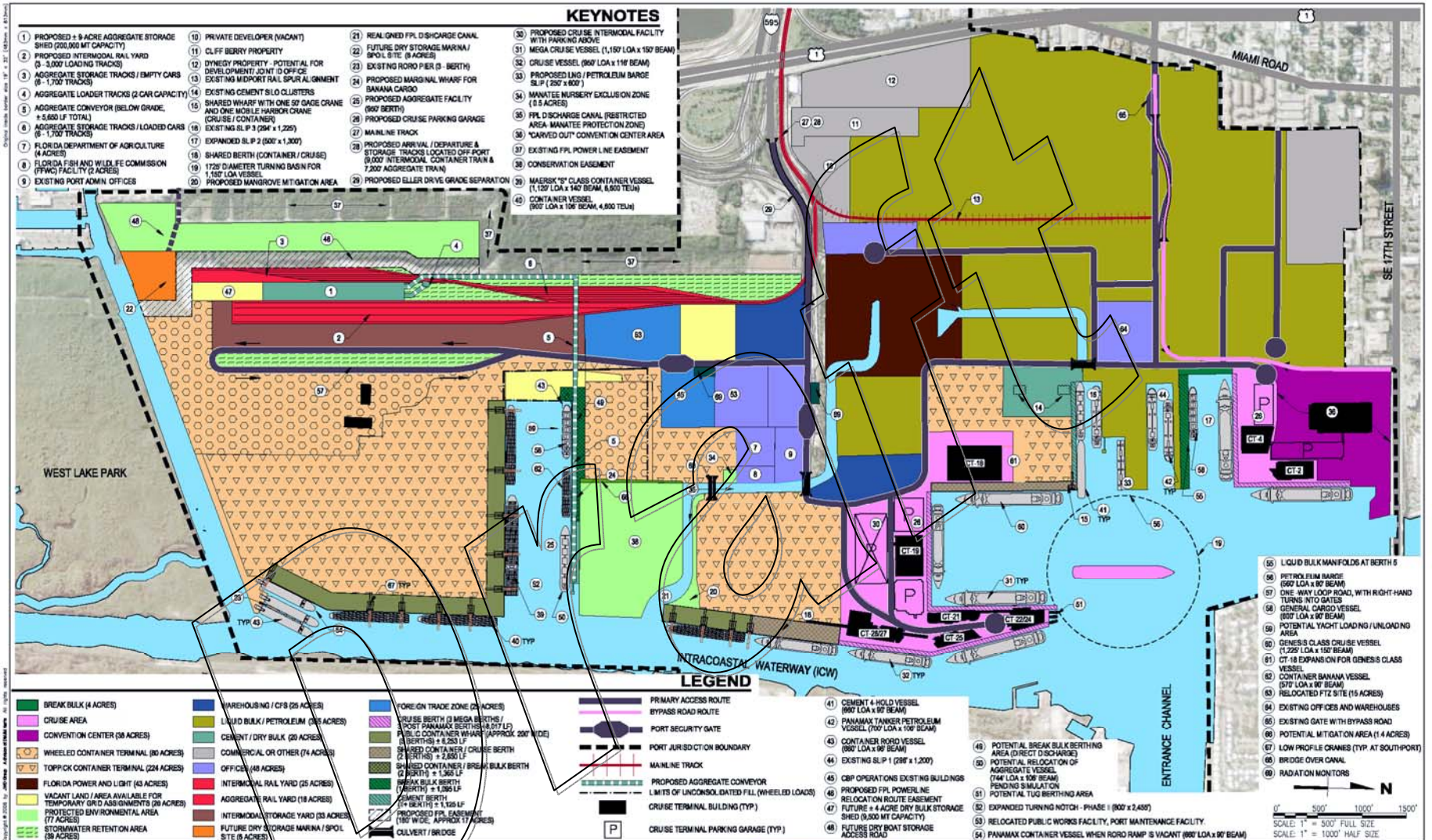


# 5-Year Plan to be Updated to Fiscal Years 2010 to 2014





# 10-Year Vision Plan to be Updated to Fiscal Years 2015 to 2019



Portions of plans shown are on property not owned or leased by Port Everglades. Schemes are for discussion purposes only and are not intended as notice of intent to acquire that property. This plan is intended merely as a planning device and is in no way intended to limit the rights of property owners in said area.

DMJM HARRIS | AECOM



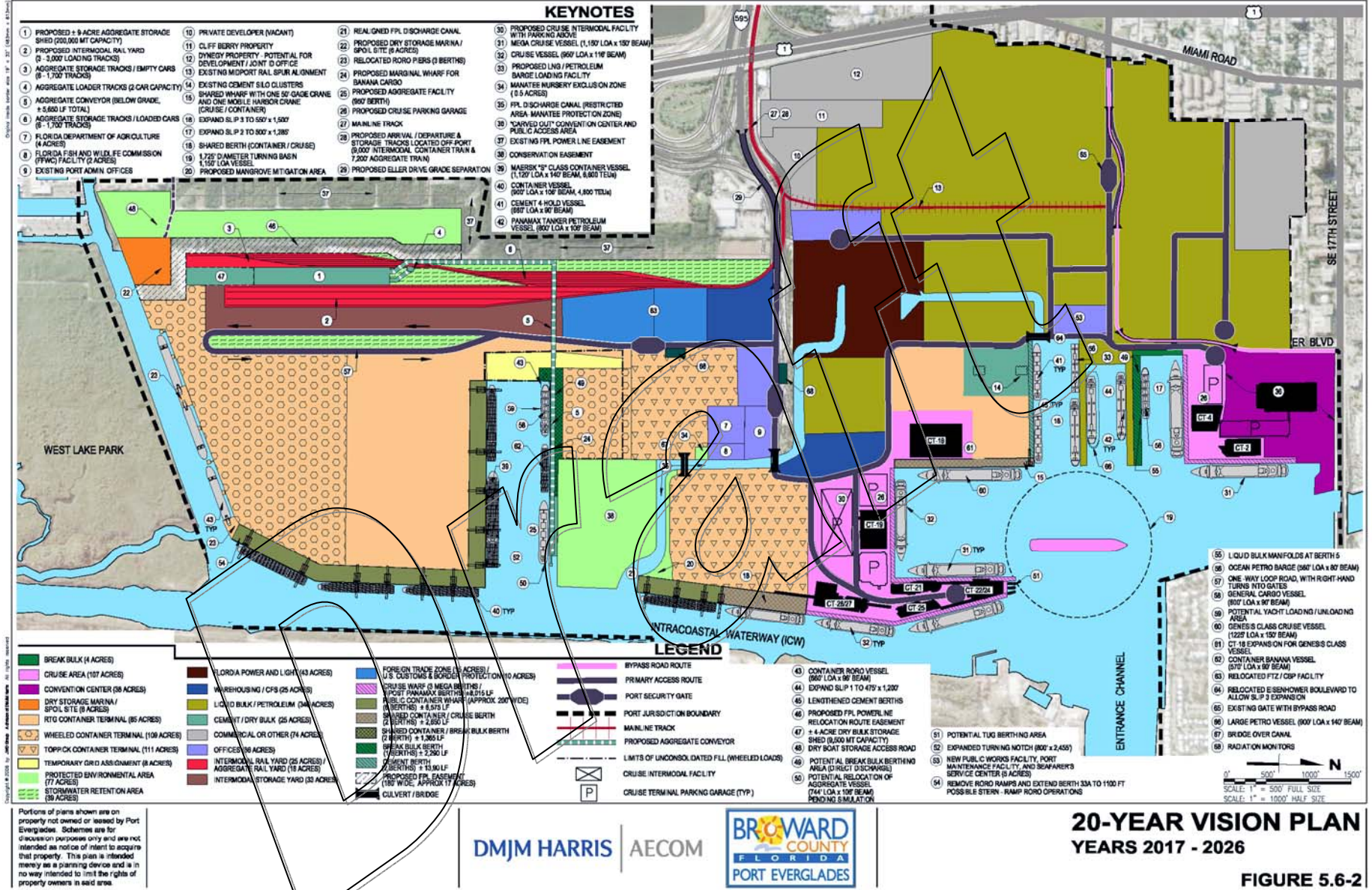
**10-YEAR VISION PLAN**  
YEARS 2013-2016

FIGURE 5.5-5





# 20-Year Vision Plan to be Updated to Fiscal Years 2020 to 2029



# Next Steps

- **All Business Sectors to meet for Summary of Comments**
  - June 19, 2009; 10:00 am to 12:00 noon;
  - Port Everglades Administration Building; Auditorium

Draft

