

THE PORT OF HOUSTON AUTHORITY

Port Partnerships

Strategic Opportunities for Gateway & “Closer Market”

Ports to Work Together

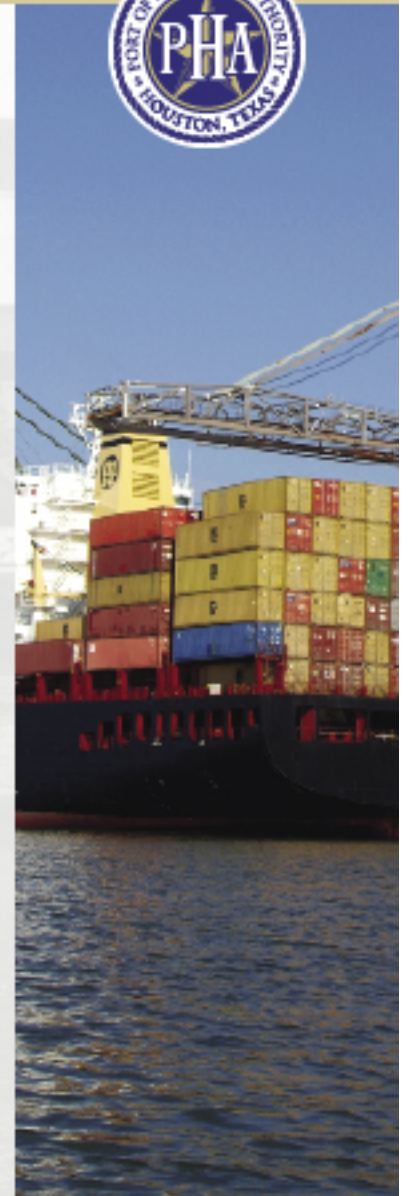
Presented by Rainer Lilienthal

General Manager-Trade Development



Port of Houston Overview

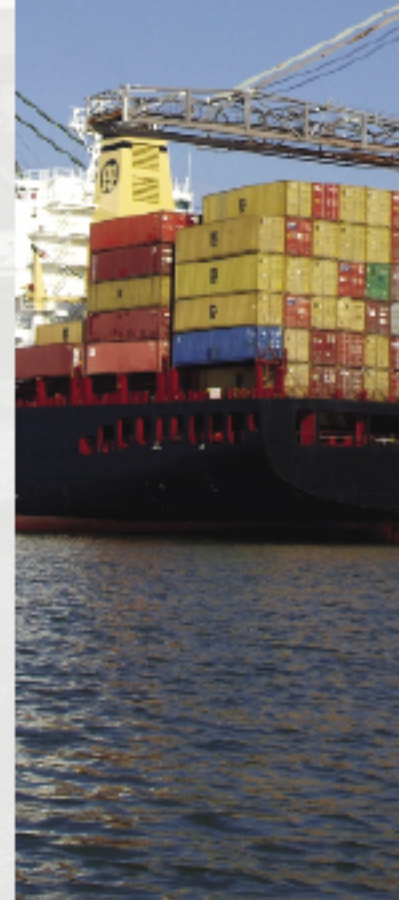
- The Port of Houston is comprised of the Port Authority and over 150 private industrial companies along the ship channel, including a \$15 billion petrochemical complex
- Nearly 100 steamship lines offer service with over 1,000 ports in more than 200 countries
- In 2005, the Port Authority deepened the channel from 40ft to 45ft and widened it from 400ft to 530 ft
- Bayport Container Terminal will open later this year and the cruise terminal will open in 2007





2005 Port of Houston Statistics

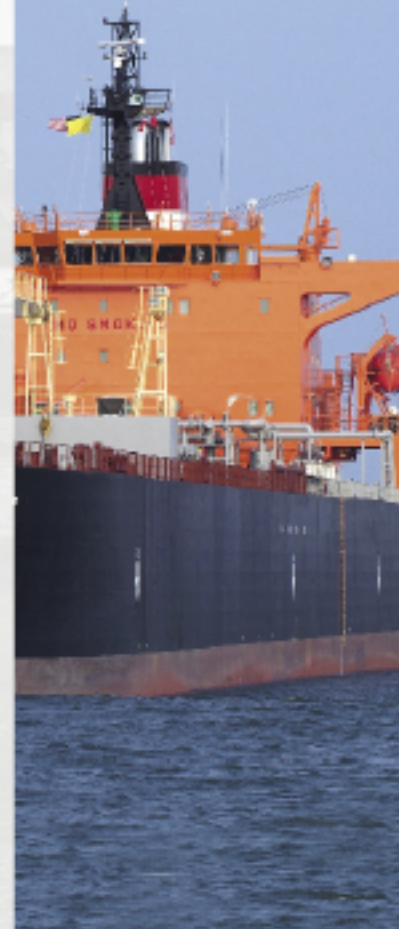
- **1st - Foreign Tonnage in the United States**
 - 153 Million Short Tons (estimated)
- **2nd - Total Tonnage in the United States**
 - 215 Million Short Tons (estimated)
- **10th - Total Volume in the World**
- **7057 Vessel Calls**



Port of Houston Authority

(Public facilities)

- **11 Public Terminals**
- **Over 9,000 acres**
- **150 Tenant Properties**
- **Oversees the 53-mile ship channel**
- **35 million tons handled by PHA**
 - **Nearly 16% of total 2005 Port of Houston tonnage**
- **1.6 million containers (TEUs)**
- **\$155 million PHA Operating Revenue**



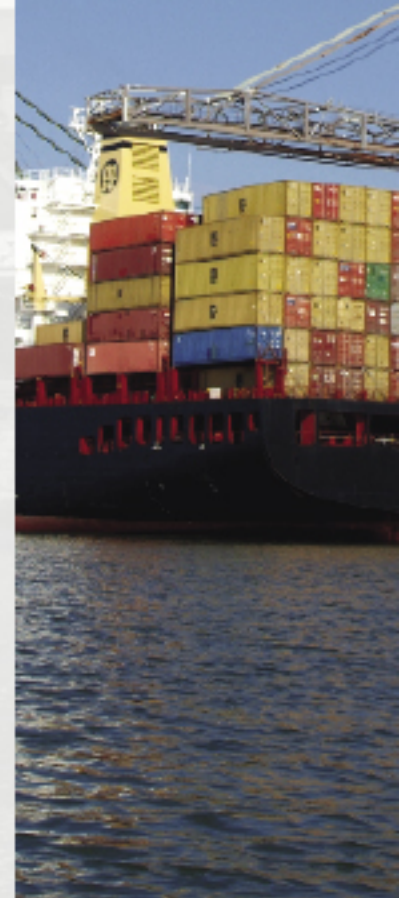
Port of Houston Trade

Top Import Commodities - 2005

- Petroleum & Petroleum Products
- Iron & Steel
- Crude Fertilizers & Minerals
- Organic Chemicals
- Wood & Articles of Wood

Top Export Commodities - 2005

- Petroleum & Petroleum Products
- Organic Chemicals
- Cereals & Cereal Products
- Plastics
- Animal or Vegetable Fats & Oils



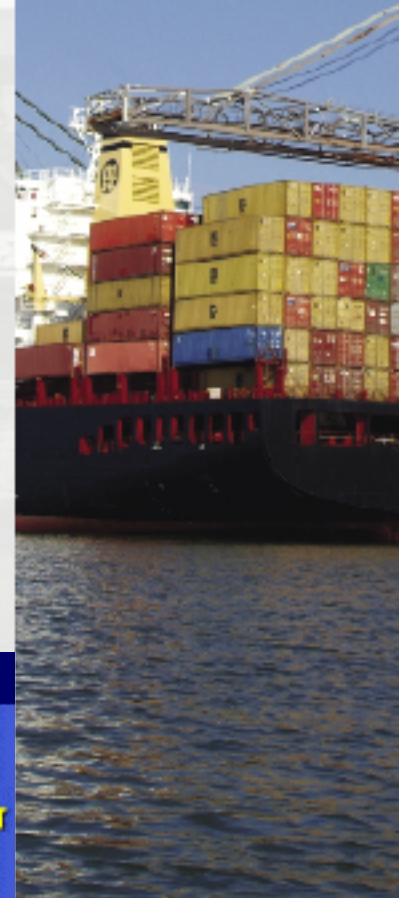
**THE PORT
DELIVERS**
The goods



Turning Basin Terminal



- 1.9 million sq ft covered storage
- 3.3 million sq ft open storage
- Rail access
- Direct Interstate access
- Two 40-ton container cranes
- Steel handling and processing
- Packing and staging areas



FACILITIES



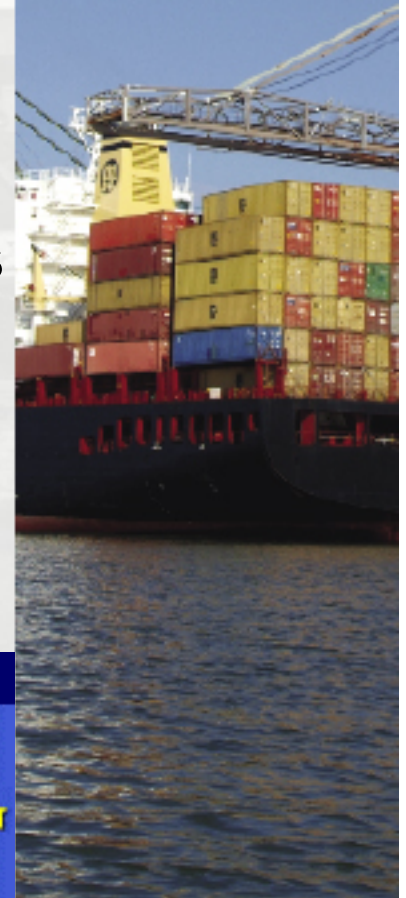
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Woodhouse Terminal



- 235,000 sq ft warehousing
- Three cargo docks (1,910 ft)
- Straight and quarter ro-ro ramps
- 200-ton crane capacity
- Rail access



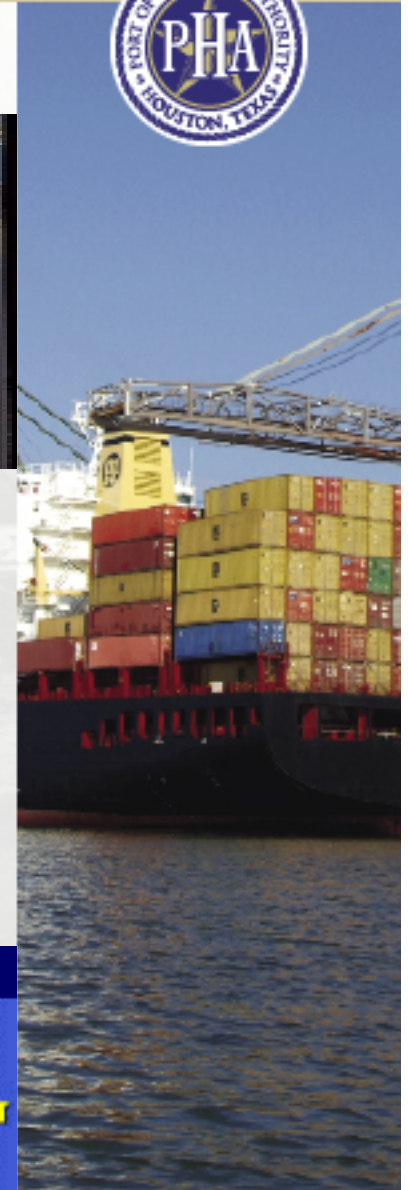
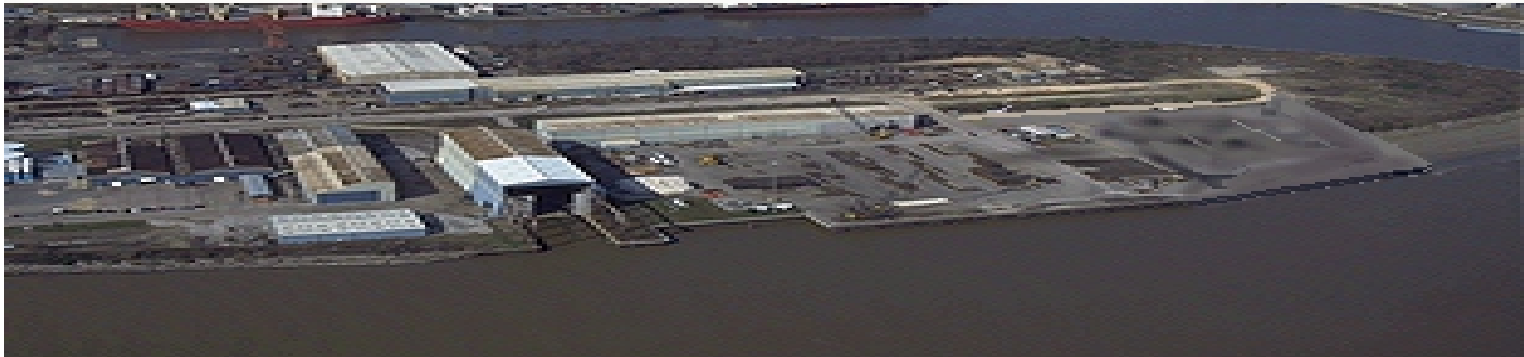
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Care Terminal



- 34 acre site
- 2 berths totaling 1,115 ft
- 36 - 38 ft draft (11 m)
- Up to 1,000 lb / sq ft capacity
- 45,900 sq ft shed space

FACILITIES



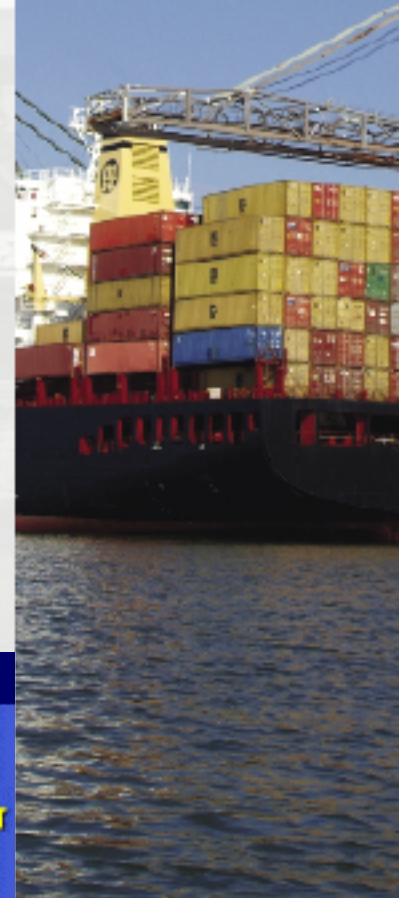
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Jacintoport Terminal



- 437,000 sq ft shed
- Independent third-party operator
- 11,278 sq ft shed on dock
- 300,000 sq ft covered space
- 124 total acres
- Foreign Trade Zone designation



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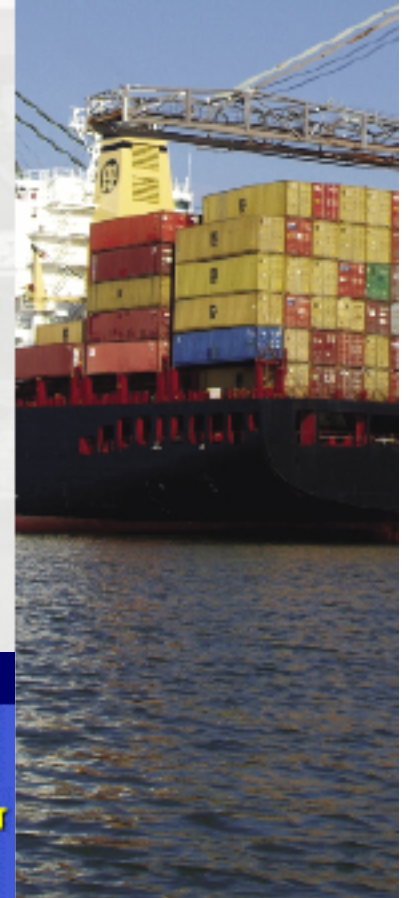
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Grain Elevator # 2



- 1.4 million Tons handled 2005
- 6 million bushel storage
- 120,000 bushel load rate
- More than 200 bins
- USDA lab on site



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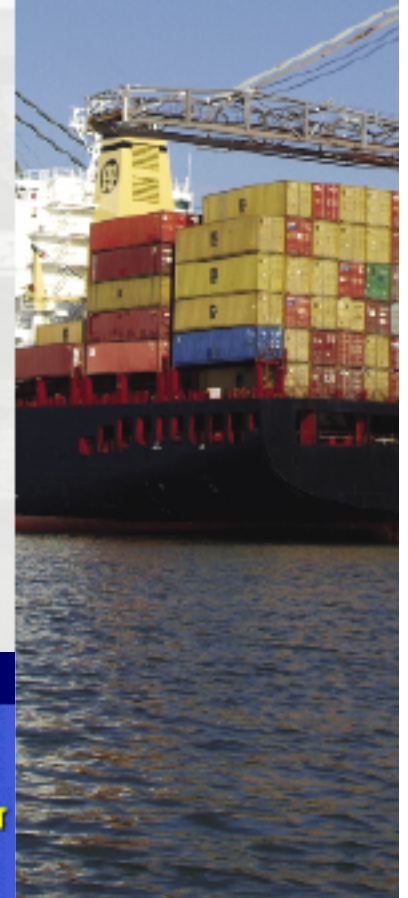
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Bulk Materials Handling Plant



- 4 million tons handled 2005
- High speed loading system
- Dust collection system
- Granules to 8" diameter
- 200 lb / cu ft gear capacity



FACILITIES



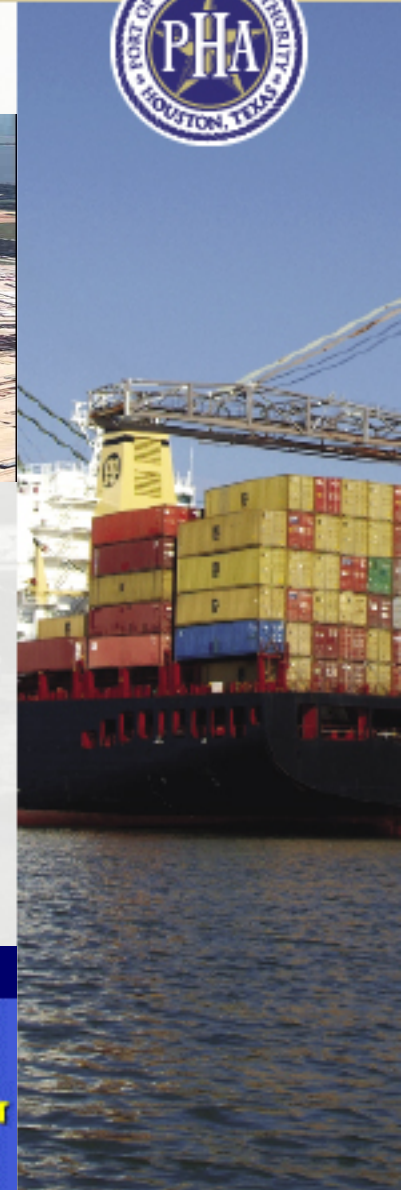
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Barbours Cut Terminal



- Six 1,000 ft (305 m) berths
- 12 shore cranes; 30 RTG yard cranes
- Two 100,000 sq ft sheds
- One 55,000 sq ft shed
- 203 container acres

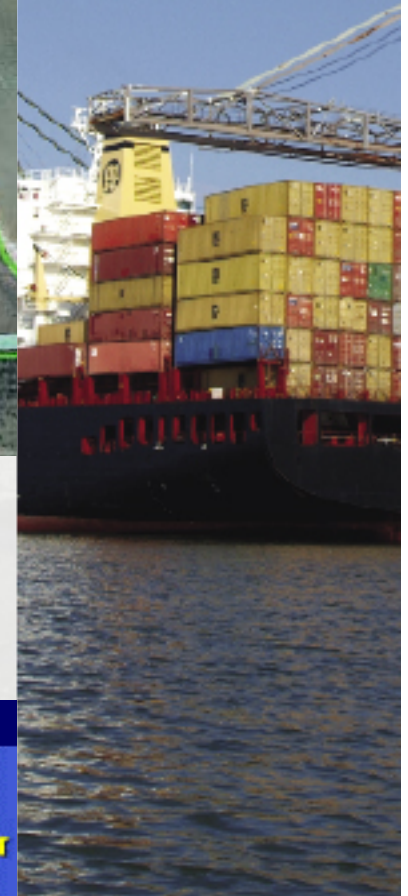


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Bayport Terminal



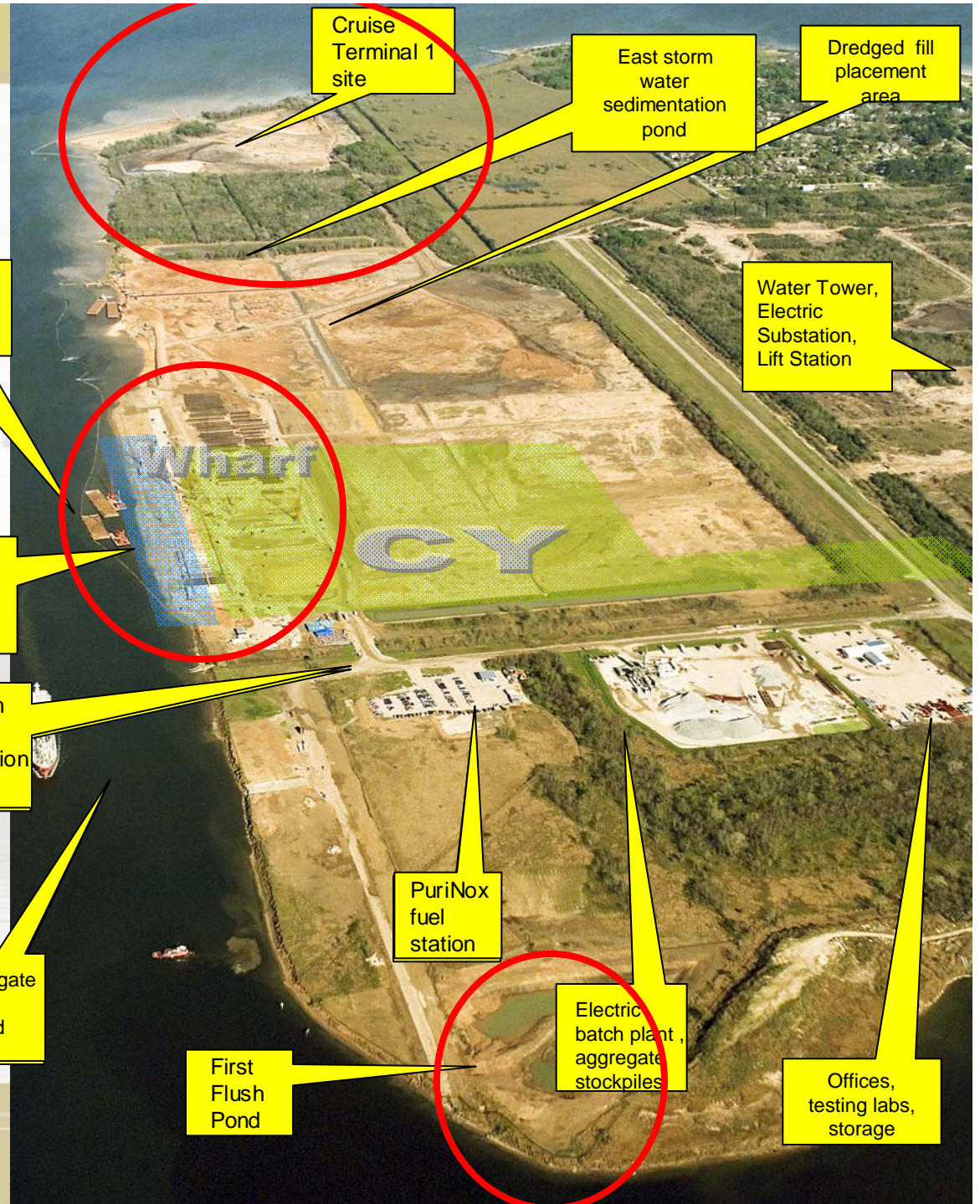
- 7-Berth Container Terminal
- 7,000 ft of berthing space
- 1,100 total acres
- Intermodal Facility
- 2.3 million TEU capacity
- 3-Berth cruise terminal



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Phase 1A

- 90 Acres
- 1,600-ft. wharf
- 4 Wharf Cranes
- 12 RTG's





Strategies/Opportunities that could be pursued by Gateway Deepwater Ports and Shallow Draft Coastal or Inland Ports

- Review, jointly assess container cargo traffic exceeding weight limits on inbound/outbound shipments
- Where feasible promote shipment of cargo by barge to avoid deconsolidation expenses
- Discussions on port tariffs affecting double handling of ship-barge tandem moves

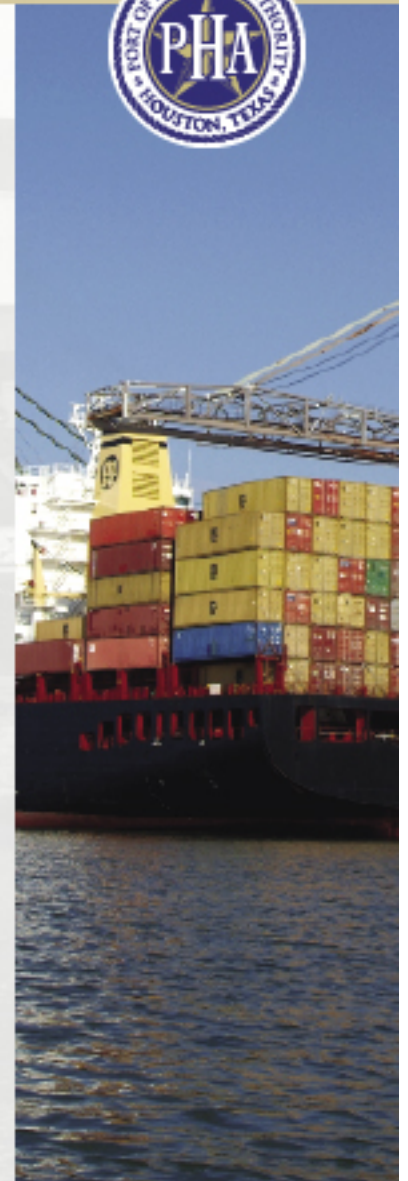


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Strategies/Opportunities

- **Set up information exchanges on potential projects destined for job sites close to coastal and/or closer-to-market inland ports for possible barge transport**
- **Set up information exchanges on potential retail/distribution centers, current or planned, to closer-to-market inland ports for possible barge transport**
- **Develop intermodal-rail ramp infrastructure at coastal and/or closer-to-market ports to alleviate rail congestion & truck delays**
- **Explore opportunities for short-term shipping routes, particularly those from East Asia to Mexican East Coastal ports & relayed to U.S. Gulf via short-sea services**

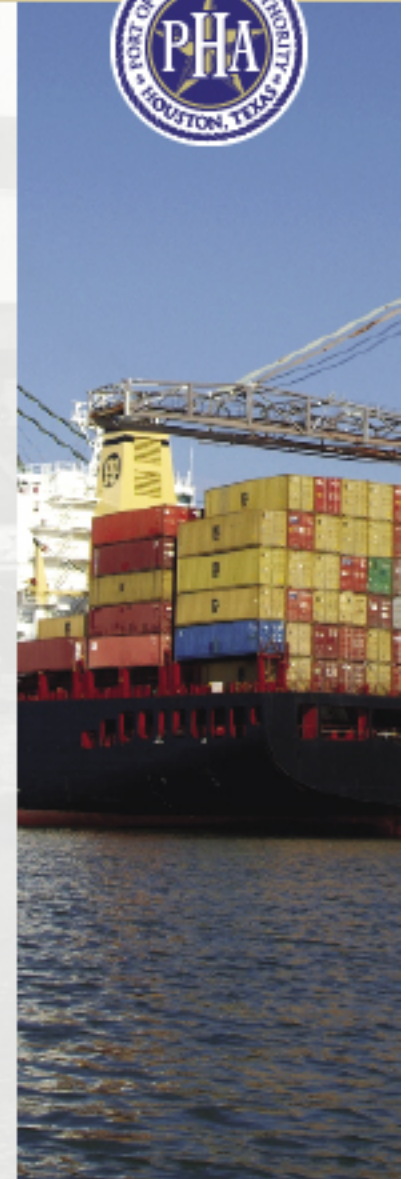


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Strategies/Opportunities

- **Relaying of import/export cargoes are a valuable and logical first step, as most of these shippers/consignees are already in a box. Port pair advantages can be explored on a strategic level with smaller inland facilities to create competitive advantages over alternate port routings**
- **Water on-carriage can create operational and financial advantages both for the shippers and the hub port. In the case of shipper, it can support faster L/C processing on L/C free on board terms. On the hub port side it would help alleviate congestion.**



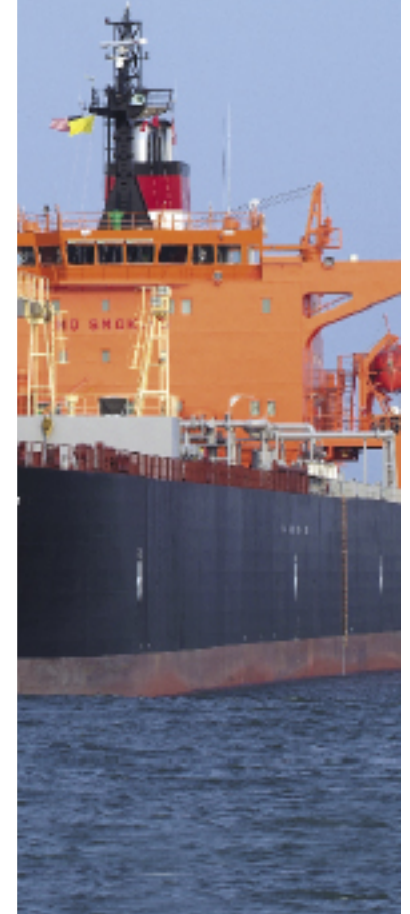
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Strategies/Opportunities New Distribution Trade Lanes

- **The large retailers are re-examining their supply chains, seeking diversity and flexibility**



- **We must be ready for large distribution centers and the emergence of “Mega” DCs**

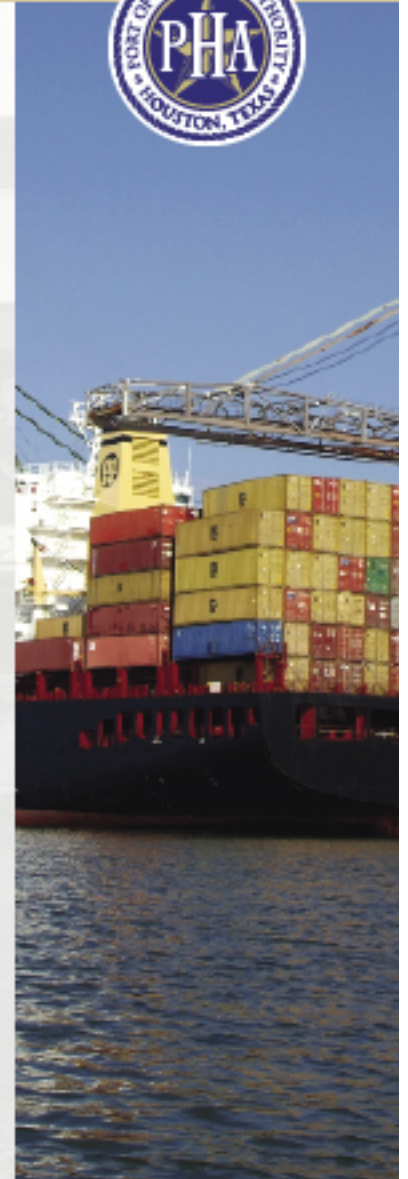


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Strategies/Opportunities

- **Finally, the largest and probably the mostly untapped, is the domestic market.**
- **Hub ports, generally speaking, do not explore “cabotage” markets to the level that smaller ports do and as such, represents a new business opportunity that both large coastal ports and smaller coastal and inland ports can pursue jointly.**



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Strategies/Opportunities

Isthmus of Tehuantepec Dry Canal Project



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