Panama Canal Stakeholder Working Group

Bayport, Texas

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Texas Ports - VALUE TO THE NATION

Col. Christopher W. Sallese
Commander, Galveston District
U.S. Army Corps of Engineers

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AGENDA

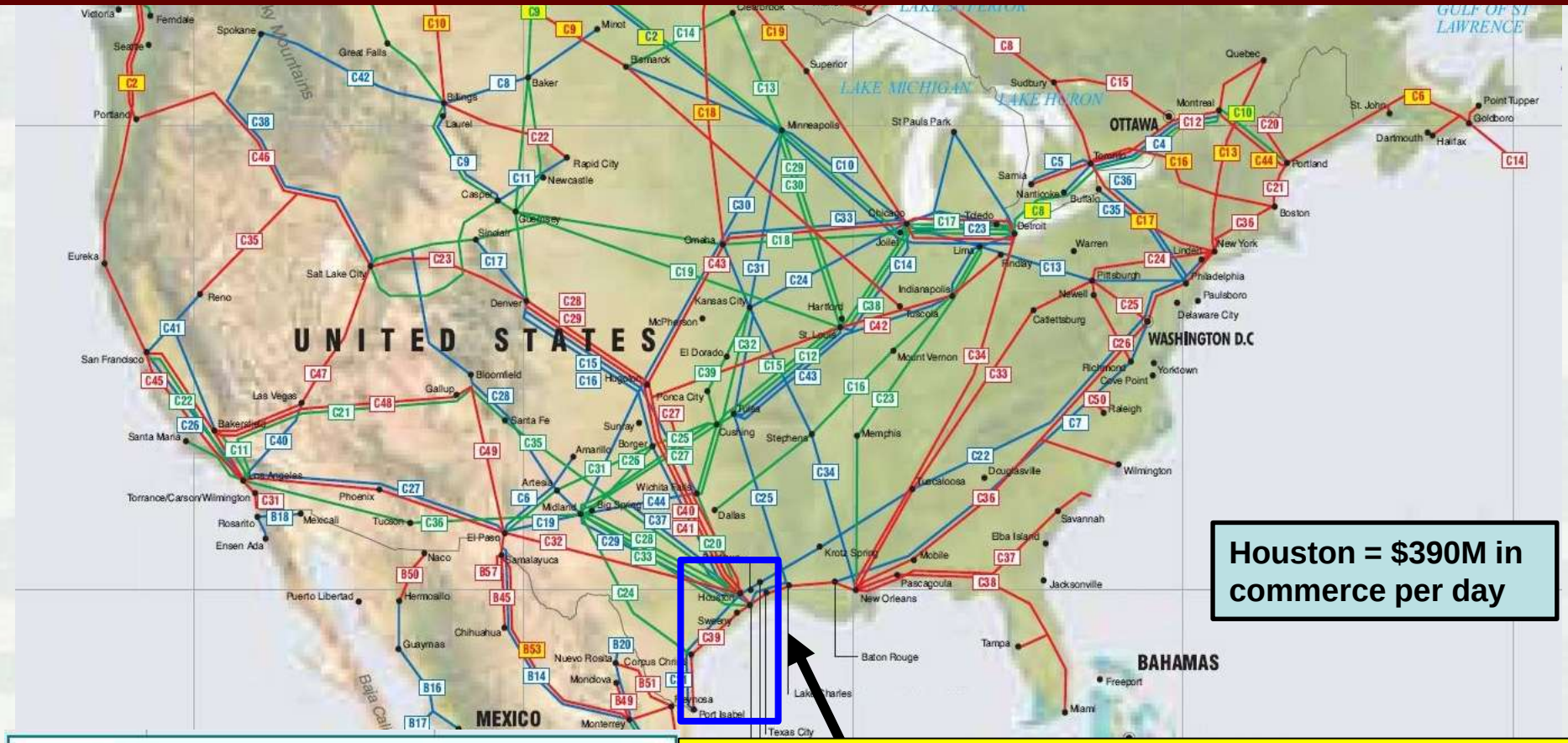
TEXAS PORTS – VALUE TO THE NATION

- The Texas System
- Federal Navigation Funding, National/Texas
- Navigation System Health
- Texas Port & Inland Waterway Statistics
- Economic Factors
- U.S. Port and Inland Waterways Modernization Report Observations & Findings
- Conclusions

The Texas System

- Texas is the #1 state in the Nation for Maritime Commerce
- 760 miles shallow draft
  - GIWW links the entire system
  - 13 shallow draft ports
- 240 miles deep draft
  - 15 deep draft ports
  - 4 ports in the top 10
- Accounts for over $300B in economic value
- Provides over 1 Million direct jobs
- $20B in private investment happening now
  - Panama Cannel
  - Eagle Ford Shale

PETROCHEMICAL PIPELINE DIST.



Houston = $390M in commerce per day

Texas Coast - where the U.S. large refinery infrastructure exists…the main start and end point for the Value Chain

LEGEND:

- Oil pipeline
- Oil pipeline (planned/under construction)
- Gas pipeline
- Gas pipeline (planned/under construction)
- Products pipeline
- Products pipeline (planned/under construction)
- Inter-Country oil pipeline label
- Cross-Border oil pipeline label
- Inter-Country gas pipeline label
- Cross-Border gas pipeline label
- Inter-Country products pipeline label
- Cross-Border products pipeline label

PORT STATISTICS & STUDIES

TEXAS PORTS	AUTHORIZED DEPTH (ft)	TONNAGE (millions) 2010 DOMESTIC	FOREIGN	TOTAL	2011 Channel Availability 1/2 Width	2010 Value of Tonnage	UNDER STUDY IMPROVED DEPTH (ft)	STATUS
Deep Draft Coastal								
Houston (2)	45	67.6	159.6	227.1	53.3%	$170.4B	45	Construction Completed in June 2005
Beaumont (4)	40	25.2	51.8	77	12.9%	$37.8B	48	Chief's Report Signed July 2011
Corpus Christi (6)	45	18.8	54.8	73.7	83.8%	$35B	52	Draft LRR to SWD July 2012
Texas City (10)	45	16.5	40.1	56.6	87.5%	$28.5B	45	Construction Completed in June 2011
Port Arthur (25)	40	10.8	19.5	30.2	12.9%	$13.1B	48	Chief's Report Signed July 2011
Freeport (27)	45	4.3	22.3	26.7	61.6%	$13.7B	50-55	Chief's Report December 2012
Galveston (41)	45	5.9	8.0	13.9	76.0%	$8.6B	45	Construction Completed March 2011
Matagorda (54)	38	2.2	6.7	8.9	27.5%	$2.4B	38	No improvements forecasted
Brownsville (78)	42	2.1	2.5	4.6	66.3%	$3.1B	45-52	Chief's Report August 2014
Victoria (89)	12	2.8	0	2.8	62.5%	$2.1B	12	No improvements forecasted
Inland Waterway								
GIWW	12			67.0	Varies	$34.6B	12	

Texas is the Nation's #1 State for Waterborne Commerce
(Major Ports = 521.5M Tons worth $314.7B) - [source - IWR]

22.2% of Nation's Total Export Tonnage (Maritime)

43.4% of Imported Crude Oil (Maritime)

TEXAS EXPORTS

Year	Traffic	Commodity	US Total Tons	SWG Total Tons	SWG Tons %	US Total $-value	SWG Total $-value	SWG $-value %
2010	Overseas-Exports	Other Chemical and Related Products	51,391,464	25,341,797	49.3%	$91,129,716,109	$29,410,612,005	32.3%
2010	Overseas-Exports	Distillate, Residuals & other Fuel Oils; Lube Oil & Grease	55,498,570	28,223,919	50.9%	$24,851,646,909	$12,441,380,086	50.1%
2010	Overseas-Exports	Petroleum Pitches, Coke, Asphalt, Haptha & Solvents	34,010,721	14,839,856	43.6%	$4,787,161,004	$1,931,017,553	40.3%
2010	Overseas-Exports	Wheat	28,573,473	10,253,744	35.9%	$6,303,567,756	$2,285,160,231	36.3%
2010	Overseas-Exports	Gasoline, Jet Fuel, Kerosone	25,130,656	16,999,295	67.6%	$14,742,150,327	$10,304,486,561	69.9%
2010	Overseas-Exports	Barley, Rye, Oats, Rice and Sorgum Grains	7,566,469	2,937,633	38.8%	$2,530,395,992	$607,559,745	24.0%
2010	Overseas-Exports	All Manufactured Equipment, Machinery and Products	22,207,155	2,953,925	13.3%	$160,612,903,944	$24,104,041,873	15.0%

TEXAS IMPORTS

Year	Traffic	Commodity	US Total Tons	SWG Total Tons	SWG Tons %	US Total $-value	SWG Total $-value	SWG $-value %
2010	Overseas-Imports	Crude Petroleum	423,611,392	182,804,854	43.2%	$200,249,352,676	$86,863,625,063	43.4%
2010	Overseas-Imports	Distillate,Residual & Other Fuel Oils; Lube Oil & Greases	57,321,506	18,316,053	32.0%	$21,521,271,303	$7,289,466,131	33.9%
2010	Overseas-Imports	Other Chemicals and Related Products	33,196,384	9,455,386	28.5%	$54,271,443,752	$6,746,689,271	12.4%
2010	Overseas-Imports	Primary Iron and Steel Products (Ingots, Bars, Rods)	21,041,435	5,220,000	24.8%	$17,740,874,422	$4,973,544,844	28.0%
2010	Overseas-Imports	Gasoline, Jet Fuel, Kerosene	36,445,862	5,233,673	14.4%	$9,604,883,681	$2,265,694,184	23.6%
2010	Overseas-Imports	Non-Ferrous Ores and Scrap	14,559,145	7,315,196	50.2%	$3,421,736,181	$559,022,702	16.3%
2010	Overseas-Imports	Sand, Gravel, Stone, Rock, Limestone, Soil, Dredged Material	14,705,864	3,669,977	25.0%	$927,612,258	$200,717,480	21.6%
2010	Overseas-Imports	Building Cement & Concrete, Lime, Glass	9,669,341	1,347,010	13.9%	$6,117,946,391	$386,924,711	6.3%
2010	Overseas-Imports	All Manufactured Equipment, Machinery and Products	66,852,486	2,143,044	3.2%	$430,852,307,058	$14,579,458,660	3.4%

ECONOMIC FACTORS

Positive Factors-

- Texas ports create over 1.0 million direct jobs regionally and ~1.3 million indirect jobs nationally
- Port of Houston alone helped generate $4.5 billion in local and state tax revenue
- Current and future exports help stabilize the dollar the reduce the value of the federal deficit. (national revenue)
- Allows nation to optimize the benefits of prior year strategic investments in navigation and supply chain infrastructure
- GIWW provides a intermodal linkage through domestic and international markets and facilities

Negative Factors-

- 1' of draft restriction = lost benefits due to lightering and lightening loads
  - Houston - $188 million/year
  - Matagorda - $80 million/year
  - GIWW - Texas – 130 million/year
- Texas ports receive less than $.25 on the dollar of HMTF contributions for O&M
- From a study aspect ready to take advantage of Panama Canal expansion
  - (2 channels authorized at > 50 ft with two more pending……none constructed)
- The current channels depths do not optimize transportation or supply chain efficiences

The nation's navigation system requires a strategic investment to realize its full economic benefit.

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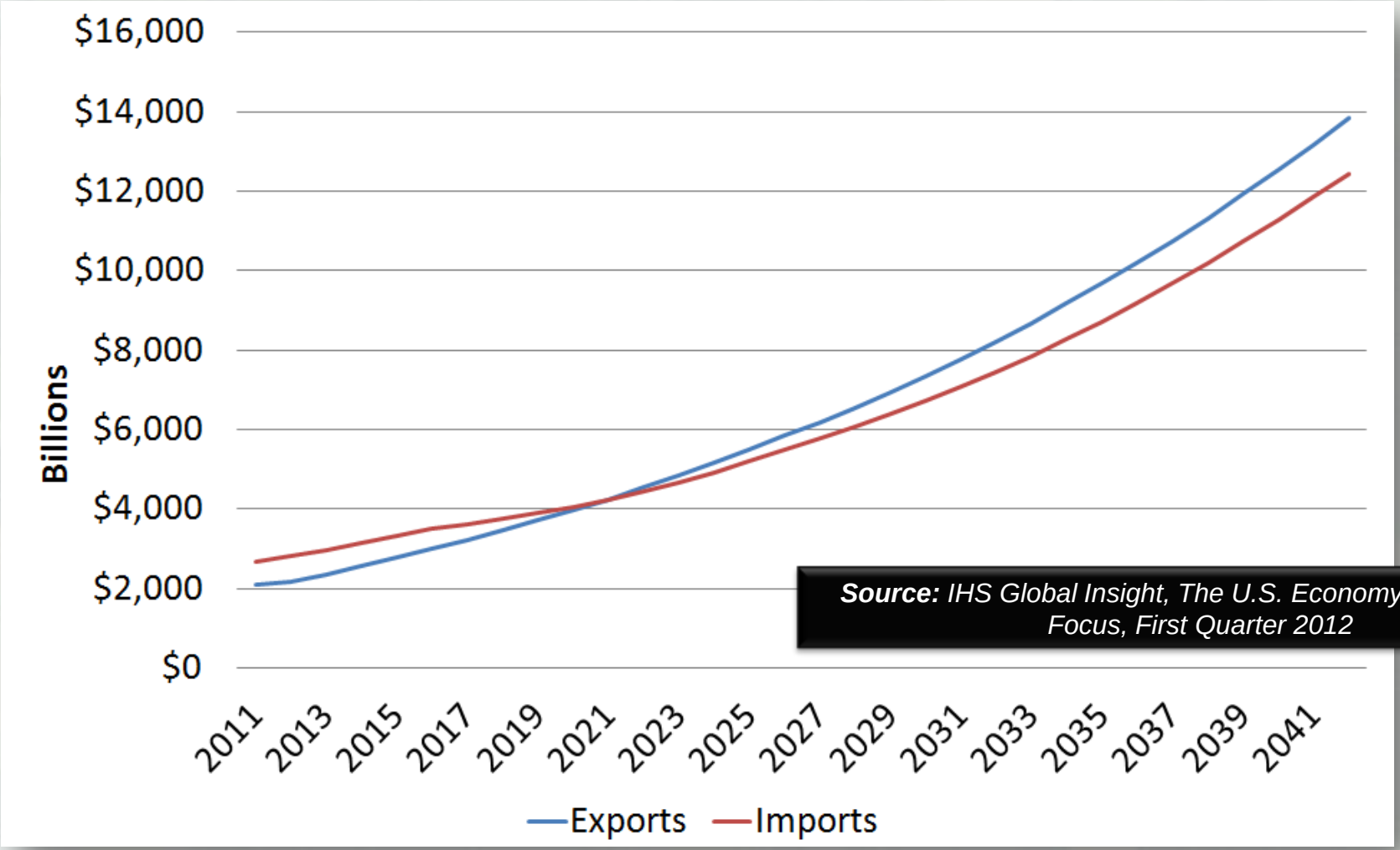
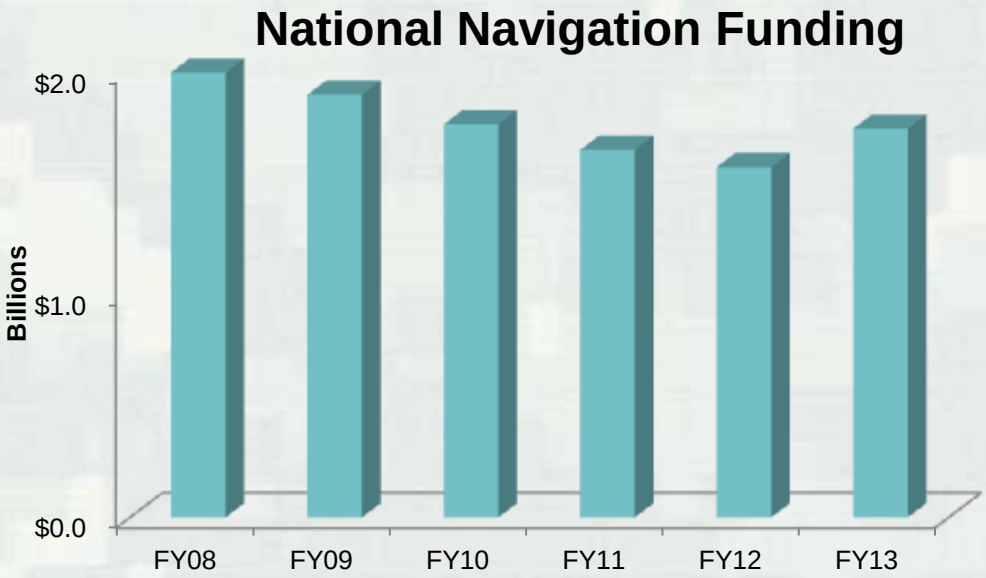
U.S. IMPORT/EXPORT FORECAST



Source: *IHS Global Insight, The U.S. Economy, The 30-year Focus, First Quarter 2012*

NAVIGATION FUNDING

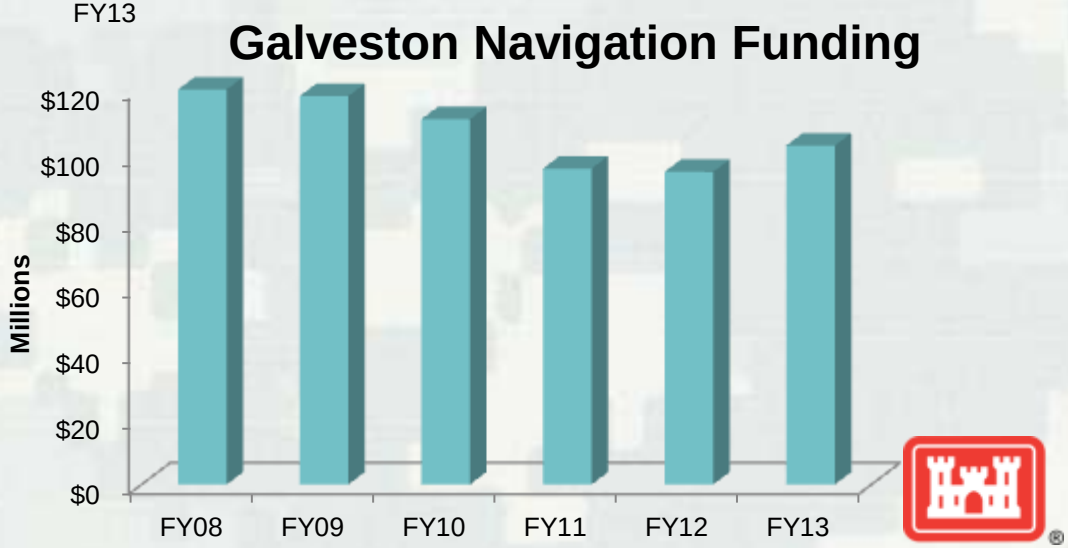


Navigation Funding Amounts Includes Federal Appropriations from:

- General Investigations
- Construction General
- Operations & Maintenance

Not Included;
Federal Appropriations from:

- ARRA
- Storm Supplemental



SYSTEM HEALTH REQUIREMENTS

Adequate funding stream to support:

- Dredging project depth + advanced maintenance "just in time"
- Construct incremental levee capacity
- O&M lock and gated facilities – GIWW
- Conduct jetty repairs
- Prepare placement areas and DMMPs
- Conduct O&M discretionary studies
- Implement DAMP activities
- Environmental sustainability
- Safety (navigation)

The system is rapidly losing its resiliency.

➢In our current strain fiscal environment, we must consider revamping our current financial options. (HMTF and IWTF changes, user fees, PPP, cost shares,??????)

Navigation Mission

Provide a balance of funds across the required activities to maintain an efficient, interactive and reliable navigation system

REPORT OBSERVATIONS & FINDINGS

U.S. Port and Inland Waterways Modernization: Preparing for Post-Panamax Vessels

- World trade and U.S. trade is expected to continue to grow
- *Post-Panamax* size vessels will dominate the world fleet in the future
- These vessels will call in increasing numbers at U.S. ports that can accommodate them
- Along the Southeast and Gulf Coast there may be opportunities for economically justified port expansion projects to accommodate *post-Panamax* vessels. (rising population, trade forecasts and current port capabilities)

View full report: http://tinyurl.com/953xc57

REPORT OBSERVATIONS & FINDINGS

U.S. Port and Inland Waterways Modernization: Preparing for Post-Panamax Vessels

- Investment opportunities at specific ports will need to be individually studied

- Transportation cost saving using *post-Panamax* size vessels to ship to Asia through the Panama Canal may lead to an increase in grain traffic on the Mississippi River for export at Gulf ports

- Individual investment opportunities for port expansion can be identified - preliminary estimates indicate the total investment opportunities may be in the $3-$5 billion range

- Environmental mitigation costs associated with port expansion can be significant and will play an important role in investment decisions

- The primary challenge with the current process to deliver navigation improvements is to ensure adequate and timely funding to take advantage of potential opportunities

View full report: http://tinyurl.com/953xc57

OTHER FACTORS TO CONSIDER

- The need for more multi-modal connectivity and capacity of the intermodal freight transportation corridors (water-rail-truck)

- Environmental Impacts- avoidance, protection and mitigation

- Opportunities to contribute to the Administration's initiative to increase exports, energy independence and enhance national security

- Local sponsor commitment to cost sharing and community support

- Additonal consideration for Ports that service multiple regions nation wide verse a local catch basin (lower use harbors on TX coastline)

Opportunities Ready Now


Brazos River Floodgates

Texas Navigation

- Corpus Christi (main channel) – CG to continue PED
- Cedar Bayou – CG for new start construction
- Sabine-Neches Waterway – GI for new start PED
- Brazos Island Harbor – GI to finish ongoing study in 2014
- Freeport Channel Deepening – GI to start PED

Ports that are ready:

- Port of Virginia (Norfolk)
- New York

Ports that are investing:

- Baltimore (ready by 2015)
- Miami is investing $2 billion into improvements
- Savannah is preparing to move forward with a $652 million deepening project
- South Carolina Legislature has committed $300 million to dredging for Charleston

WHY The GULF? WHY NOW?

Here:

- External factors (Panama Canal, Gulf and Brazil oil reserves, LNG, Eagle Ford Shale)
- Private industry is postured to invest over $20 billion into infrastructure on the Texas coast (LNG, DOW , Chevron, BASF, TEPCO, ….)
- LNG exports expected to increase
- Texas already optimized for energy production

Now:

- The number of Post-Panamax vessels in the world fleet is expected to more than double. These Post-Panamax vessels typically have a minimum hull draft of 39 ft. -60 ft.
- For liquid bulkers, the world vessel fleet is expected to see an increase similar to the bulkers. The tankers on order typically have a hull draft is 49 ft-70 ft.
- These largest tankers are currently lightered or lightened at gulf ports. No Gulf port has a draft greater than 50 ft.
- Completed navigation studies posture ports for real investment
- Texas Gulf navigation system health is getting out of balance and losing resiliency
- Rising price of oil, grain and the worldwide demand to for low priced natural gas

Continued deferment of investment incurs annual lost benefits and project cost growth; erodes the Corps' value to the nation and our relationship with our partners.

CONCLUSIONS

- Texas is a **ready and supportive** partner for federal investment into required **navigation improvements** which have national benefits
- Keys to success
  - State level involvement in the Federal authorization and funding process
  - Port partnerships
  - Partnership with dredging industry
  - Managing expectations
  - Strategic communications
  - Facilitating private investment (risk reduction)
- Texas is in **desperate need** of comprehensive coastal study to **mitigate hurricane risks , protect** its industrial base, and **insure** their navigation infrastructure

"Our challenge is to invest in capacity expansion in the right places at the right time consistent with industry needs."

Questions?”

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