

GALVESTON DISTRICT DREDGING CONFERENCE

October 24, 2012

TEXAS PORTS - VALUE TO THE NATION

Col. Christopher W. Sallese

Commander, Galveston District

U.S. Army Corps of Engineers

This briefing is UNCLASSIFIED



BUILDING STRONG®

USACE SNAPSHOT

WHERE WE ARE — U.S. ARMY CORPS OF ENGINEERS



- USACE projects and the water resources managed—valued at some \$165 billion—generate jobs and contribute to a stronger economy, environment and quality of life for all Americans.
- USACE is the nation's largest provider of outdoor recreation opportunities.
- USACE is the largest owner and operator of hydroelectric power plants in the U.S. and one of the largest in the world.
- USACE owns and operates 702 dams and maintains 12,000 miles of waterways.
- USACE' Regulatory Program protects the nation's aquatic resources while allowing effective and efficient economic development.



AGENDA

TEXAS PORTS – VALUE TO THE NATION

- The Texas System
- Navigation System Health
- Texas Port & Inland Waterway Statistics
- Economic Factors
- Federal Navigation Funding, National/Texas
- Beneficial Use of Dredged Material
- Conclusions



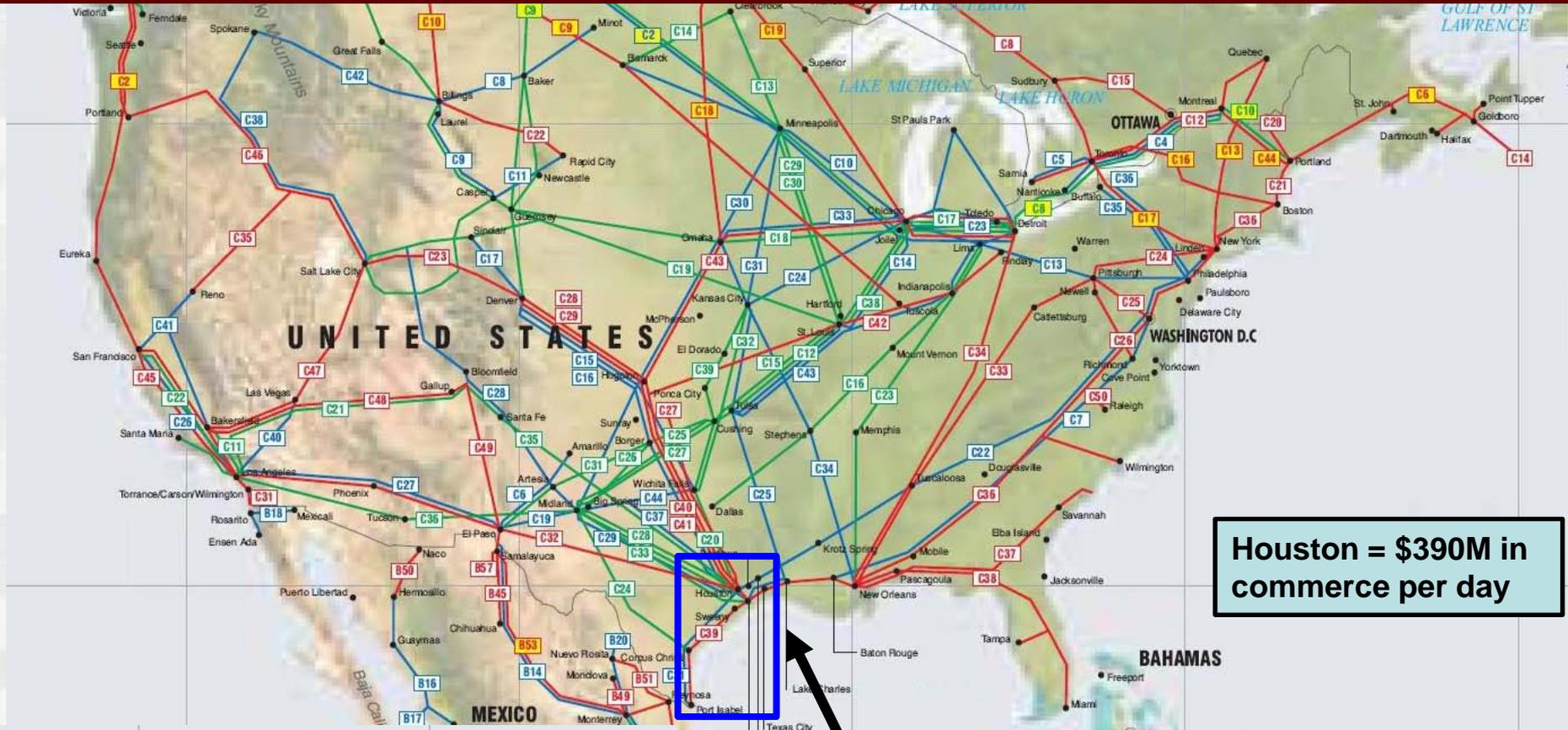
The Texas System



- 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
- \$40B in private investment happening now
 - Panama Cannel
 - Eagle Ford Shale



PETROCHEMICAL PIPELINE DIST.



Houston = \$390M in commerce per day

LEGEND:

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

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



BUILDING STRONG®

PORT STATISTICS & STUDIES

					2011			
					Channel	2010	UNDER STUDY	
TEXAS	AUTHORIZED	TONNAGE (millions) 2010			Availability	Value of	IMPROVED	
PORTS	DEPTH (ft)	DOMESTIC	FOREIGN	TOTAL	1/2 Width	Tonnage	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	LRR approval Dec 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 Dec 2013
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	

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

43.4% of Imported Crude Oil (Maritime)

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



BUILDING STRONG®

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, Kerosene	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 Sorghum 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%



BUILDING STRONG®

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%



BUILDING STRONG®

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-

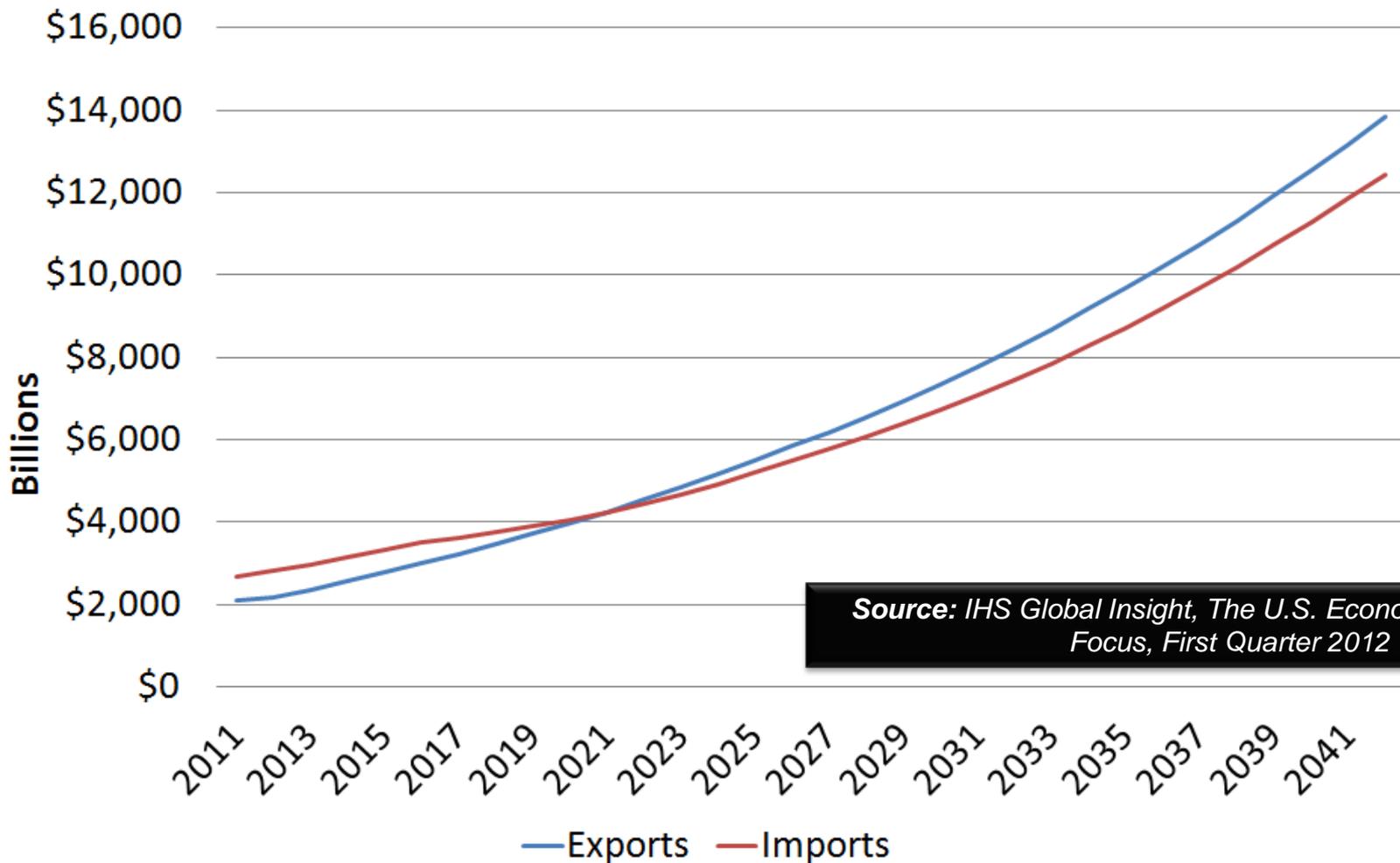
- 1' of draft restriction = lost benefits due to lightering and lightening loads
 - Houston - \$188 million/year
 - Matagorda - \$80 million/year
 - GIWW - Texas – 130 million/year
- Texas ports receive less than \$.25 on the dollar of HMTF contributions for O&M
- From a study aspect ready to take advantage 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 efficiencies

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



STRONG®

U.S. IMPORT/EXPORT FORECAST



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



BUILDING STRONG®

NAVIGATION FUNDING

National Navigation Funding



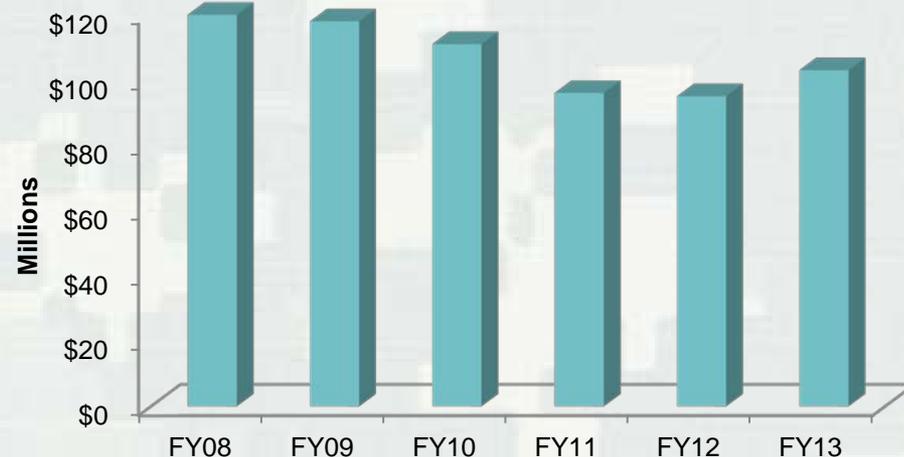
Navigation Funding Amounts Includes
Federal Appropriations from:

- General Investigations
- Construction General
- Operations & Maintenance

Not Included;
Federal Appropriations from:

- ARRA
- Storm Supplemental

Galveston Navigation Funding



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

The system is rapidly losing its resiliency.

Navigation Mission

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



SOUTH PADRE ISLAND

Brazos Island Harbor



Beach Nourishment

- 3000 feet of beach nourishment
- City of South Padre in background
- Hydraulic pipeline at right

2011 - Great Lakes Dredge & Dock



BUILDING STRONG®

NECHES RIVER CHANNEL

(Sabine-Neches Waterway - Bessie Heights Marsh)



Marsh Creation

Channels form shortly after pumping of dredged material into open water area

Established 28 acres of marsh one year later.



2003 – Pine Bluff Sand & Gravel



BUILDING STRONG®

HOUSTON SHIP CHANNEL

Upper Galveston Bay



Marsh Creation

Aerial of Atkinson Island cells with containment levees



2000 through 2012 Weeks Marine & Great Lakes Dredge & Dock



BUILDING STRONG®

HOUSTON SHIP CHANNEL

Lower Galveston Bay

Bird Island Creation

6-acre Evia Island



3,000 birds present in summer of 2001

1998 – Great Lakes Dredge & Dock



BUILDING STRONG®

CONCLUSIONS

- Texas is a **ready and supportive** partner for federal investment into required **navigation improvements** which have national benefits
- Keys to success
 - 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**

DIG THIS: 2012
TEXAS DREDGING VIDEO



BUILDING STRONG®

Questions?"



CONNECT WITH US!



ON FACEBOOK

www.facebook.com/GalvestonDistrict



ON TWITTER

www.twitter.com/USACEgalveston



ON YOUTUBE

www.YouTube.com/GalvestonDistrict



ON DVIDS

www.dvidshub.net/units/USACE-GD



ONLINE

www.swg.usace.army.mil



BUILDING STRONG®