

PORTING TOWARD THE FUTURE

PROJECT 11 – Accelerating Houston Ship Channel Expansion

National Waterways Conference
Thursday, October 27, 2022

Visit: www.expandthehoustonsipchannel.com



HSC PANEL & AGENDA



Byron Williams

USACE - SWG
Partnership



Charlie Jenkins

Port Houston
Project Importance



Lori Brownell

Port Houston
Project Execution



ACCELERATING HOUSTON SHIP CHANNEL EXPANSION

PARTNERSHIP



Byron Williams | USACE SWG



USACE, GALVESTON DISTRICT
CHAMPIONS OF THE TEXAS COAST

Byron Williams
Deputy District Engineer for Project Management
USACE, Galveston District (SWG)



US Army Corps
of Engineers®



PRE-CONSTRUCTION, ENGINEERING, AND DESIGN (PED)



- Began PED immediately after completion of Feasibility Study
- Normally begins after WRDA authorization
- Allowed for design to begin earlier than normal studies
- Normally 2-year Design for first set of Plans and Specs

Schedule

- Chief's Report - Apr 2020
- Design Agreement - **Jul 2020 Prior to Authorization**
- WRDA - Dec 2020
- 1st P&S Completed - Jun 2021
- Project Partnership Agreement - Jul 2021
- 1st Construction Contract Award - Nov 2021

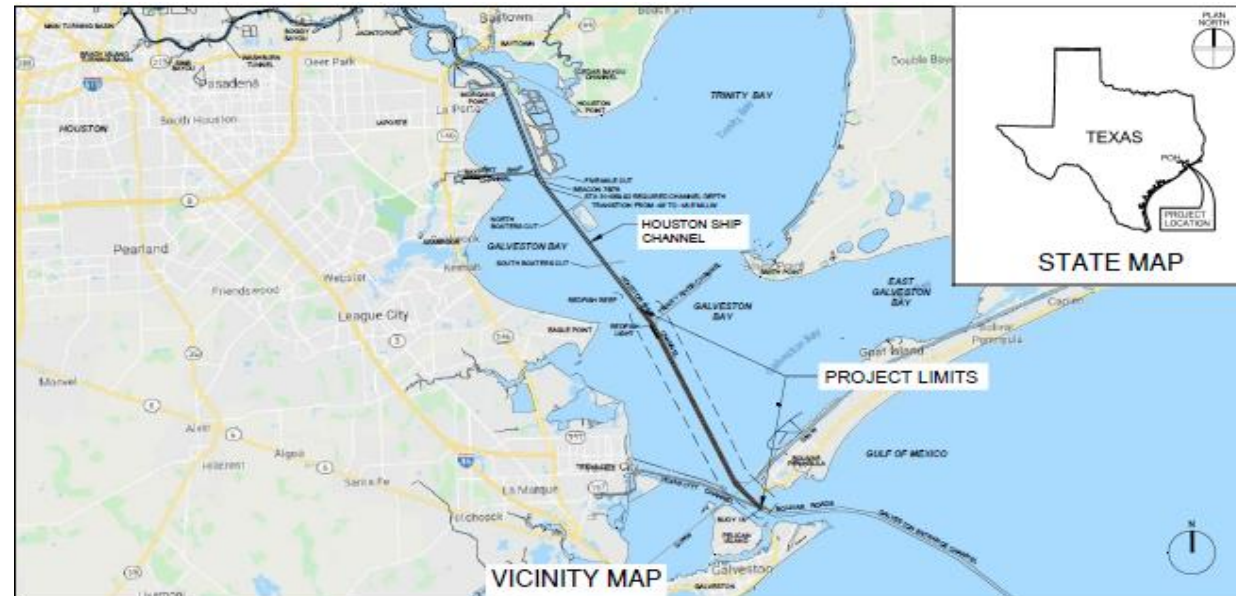




DESIGN AGREEMENT



- Design agreement (July 2020) laid out responsibilities of each partner for PED
- Contributed Funds allowed for work prior to Congressional appropriations
- PHA designed with input review by USACE
- This agreement allowed for a more flexible, agile working partnership

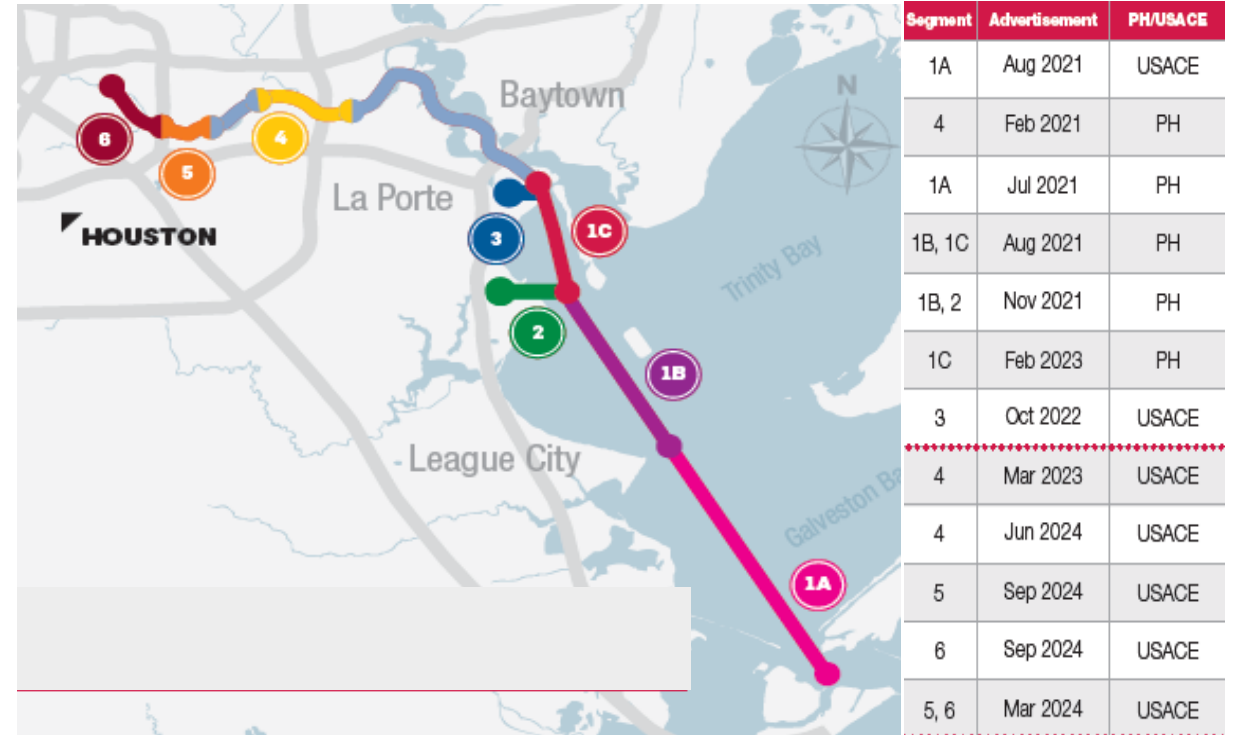




ADVANCED FUNDS AND WORK-IN-KIND



- PHA used Advanced Funds to initiate/award contracts for Galveston Bay portions of the Channel and Bayport Channel
- Allowed for completion of work prior to Congressional appropriations
- PHA credited for work as Work-in-Kind to be applied to later contracts (such as upper bayou reaches)



ACCELERATING HOUSTON SHIP CHANNEL EXPANSION

PROJECT IMPORTANCE



Charlie Jenkins | Port Houston



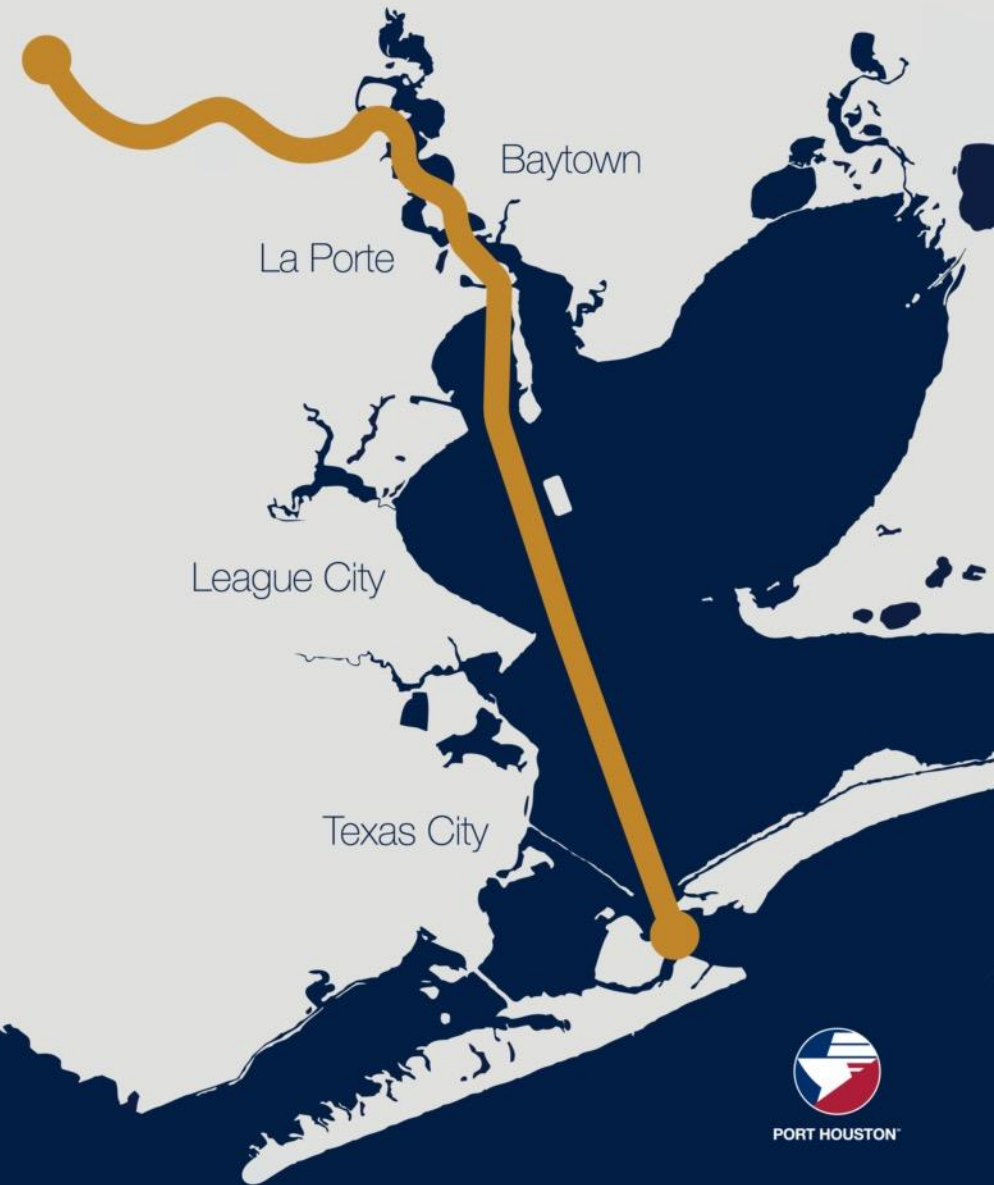
PORT HOUSTON

WHO WE ARE

We manage eight public terminals — including two container facilities we operate and six others for which we're the landlord

As the advocate and a strategic leader of the Houston Ship Channel, we support the more than 200 facilities and the neighboring communities along it by working with the federal government

We facilitate vital commerce through the port that helps keep the local and state economy moving



PORT HOUSTON

THE ENERGY CAPITAL OF THE WORLD

- The Houston Ship Channel is home to the largest **petrochemical** complex in the U.S.
- Houston also has the largest **energy pipeline and storage** network in the U.S.
- **500 million barrels** of liquid storage along the Houston Ship Channel
- A total of **74% of cargo** on Houston Ship Channel is liquid bulk



Visit: www.expandthehoustonsipchannel.com



HOUSTON SHIP CHANNEL, A FEDERAL WATERWAY



1.35
MILLION
JOBS IN TEXAS



3.2
MILLION
JOBS NATIONWIDE



\$339
BILLION
ECONOMIC IMPACT
IN TEXAS



\$802
BILLION
ECONOMIC IMPACT
ACROSS THE U.S.

BY THE NUMBERS



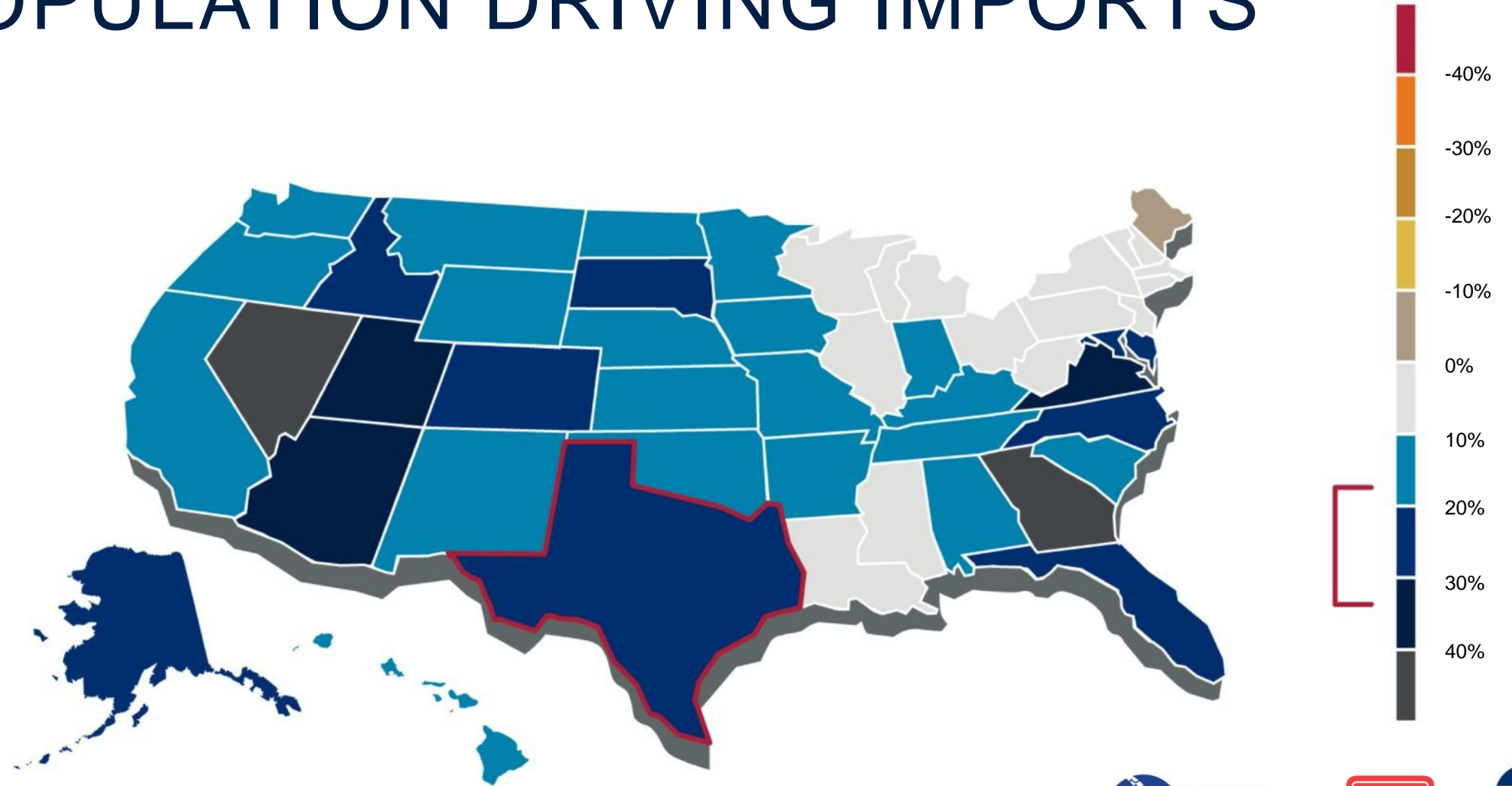
*Note: 1 Short Ton equals 0.907 Metric Ton; Excludes liquid bulk, grains, etc.
Source: Journal of Commerce (PIERS), PH Research & Forecasting*

Waterborne Commerce Statistics Center Tonnage for Selected U.S. Ports in 2020 Short Tons

Rank	Port	Total
1	Houston Port Authority, TX	275,940,289
2	South Louisiana, LA, Port of	225,086,697
3	Corpus Christi, TX	150,755,485
4	New York, NY & NJ	123,697,438
5	New Orleans, LA	81,067,448
6	Port of Long Beach, CA	79,178,087
7	Port of Greater Baton Rouge, LA	71,686,872
8	Beaumont, TX	70,567,386
9	Port of Los Angeles, CA	59,452,139
10	Virginia, VA, Port of	58,048,785



POPULATION DRIVING IMPORTS

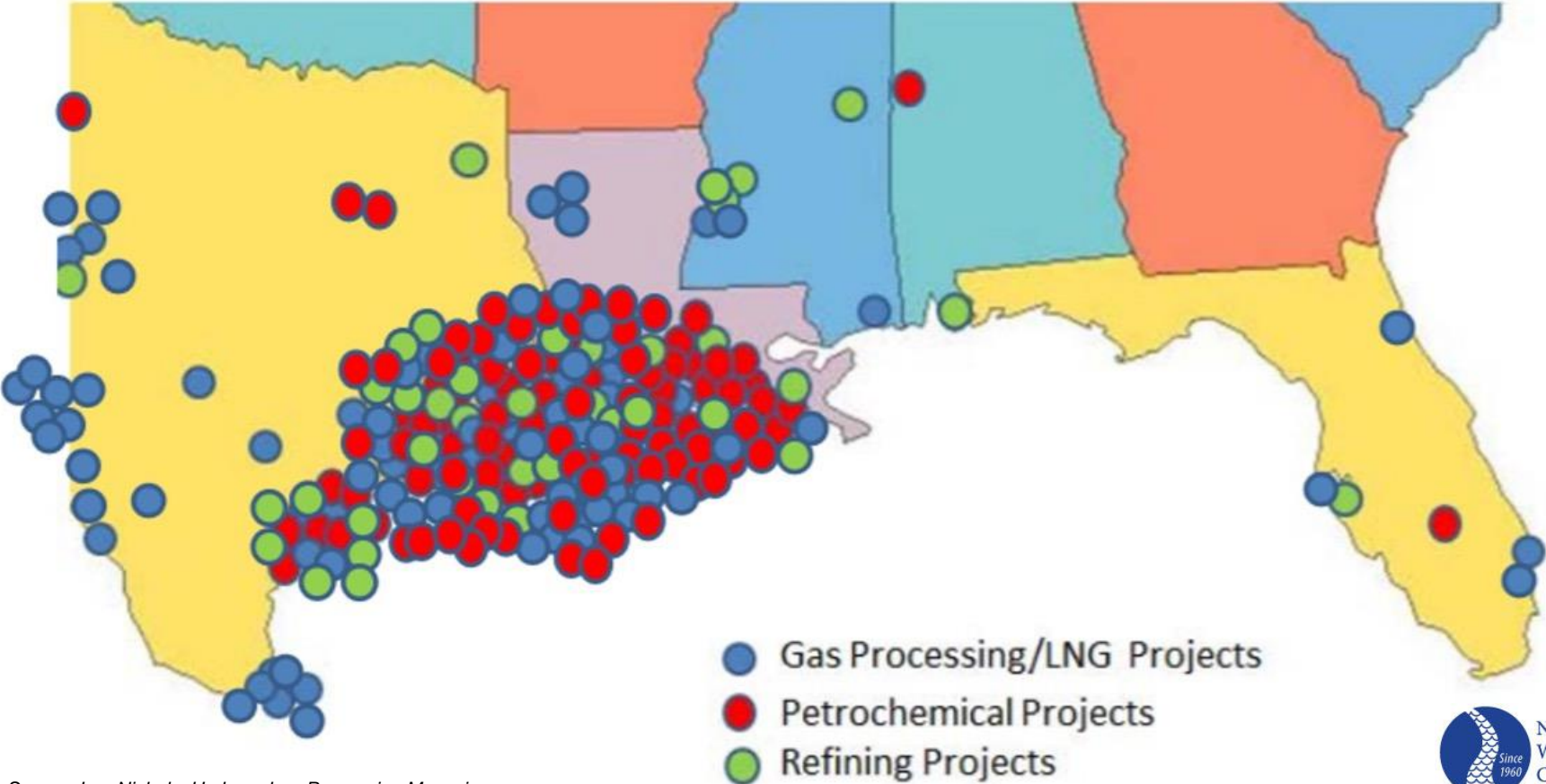


Source: Urban Institute Mapping America's Futures



ENERGY & MANUFACTURING DRIVING EXPORTS

NEW PROJECT ANNOUNCEMENTS THROUGH Q1-2016



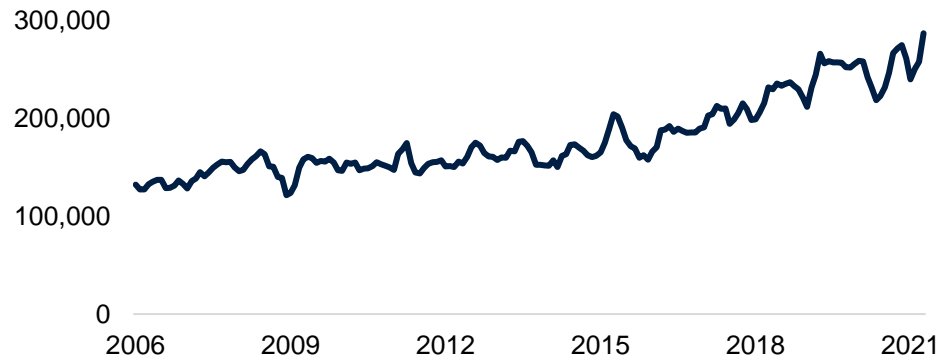
Source: Lee Nichols, Hydrocarbon Processing Magazine, Energy Construction Form 3/16



RAPID GROWTH

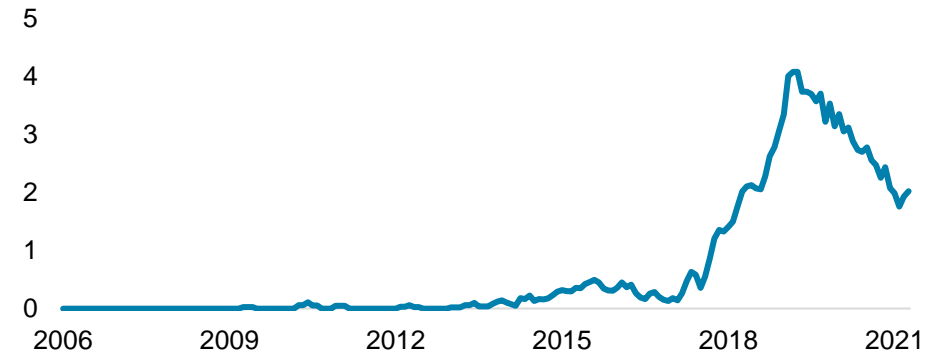
Port Houston Container Volume

TEUs, Monthly



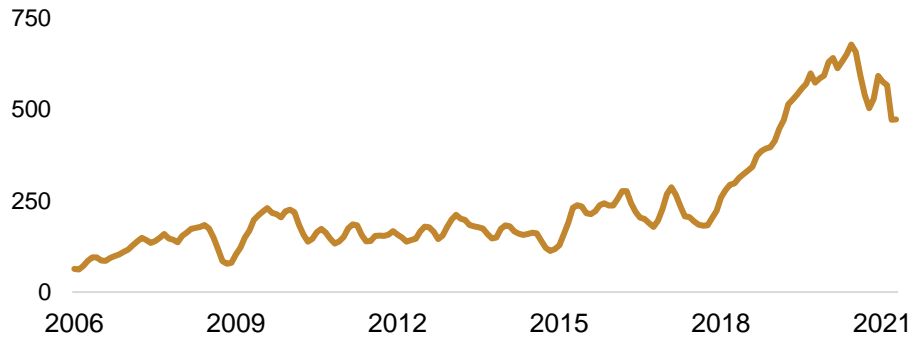
Crude Oil Exports, Greater Port of Houston

Millions of Short Tons, Monthly



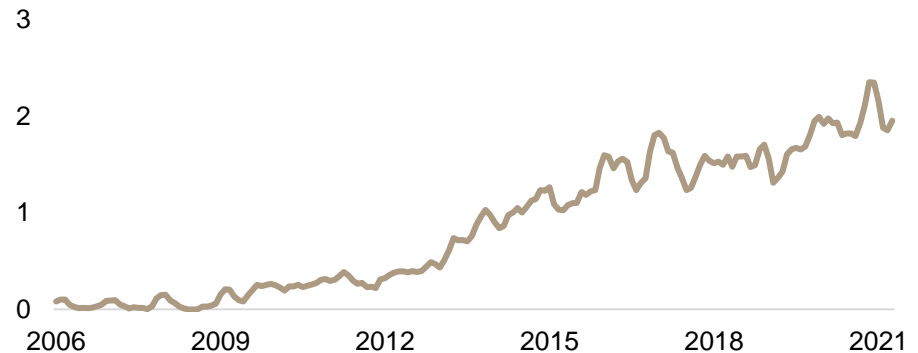
Polyethylene Exports Greater Port of Houston

Thousands of Short Tons, Monthly



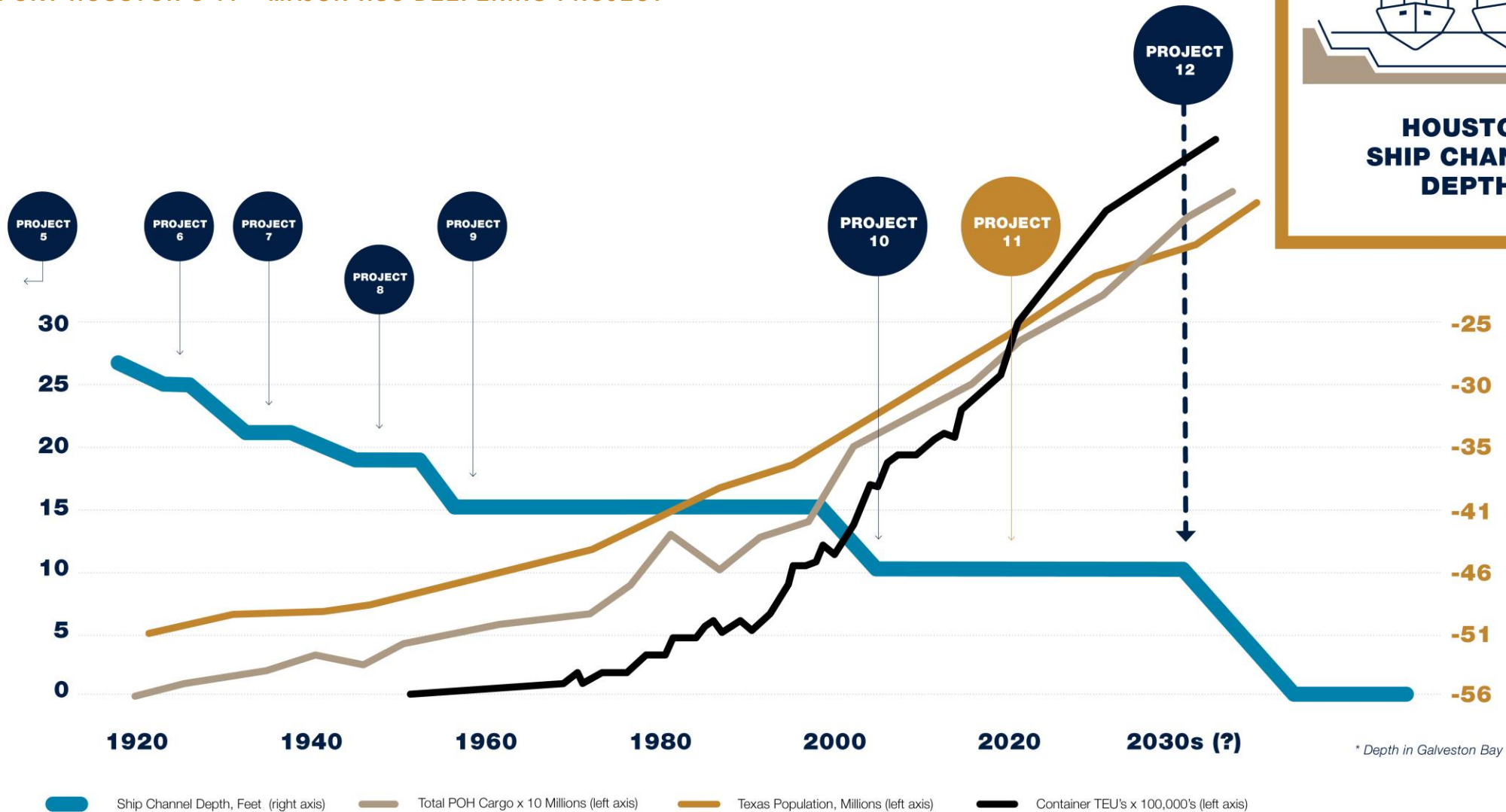
Propane Exports, Greater Port of Houston

Millions of Short Tons, Monthly



PROJECT 11

PORT HOUSTON'S 11TH MAJOR HSC DEEPENING PROJECT



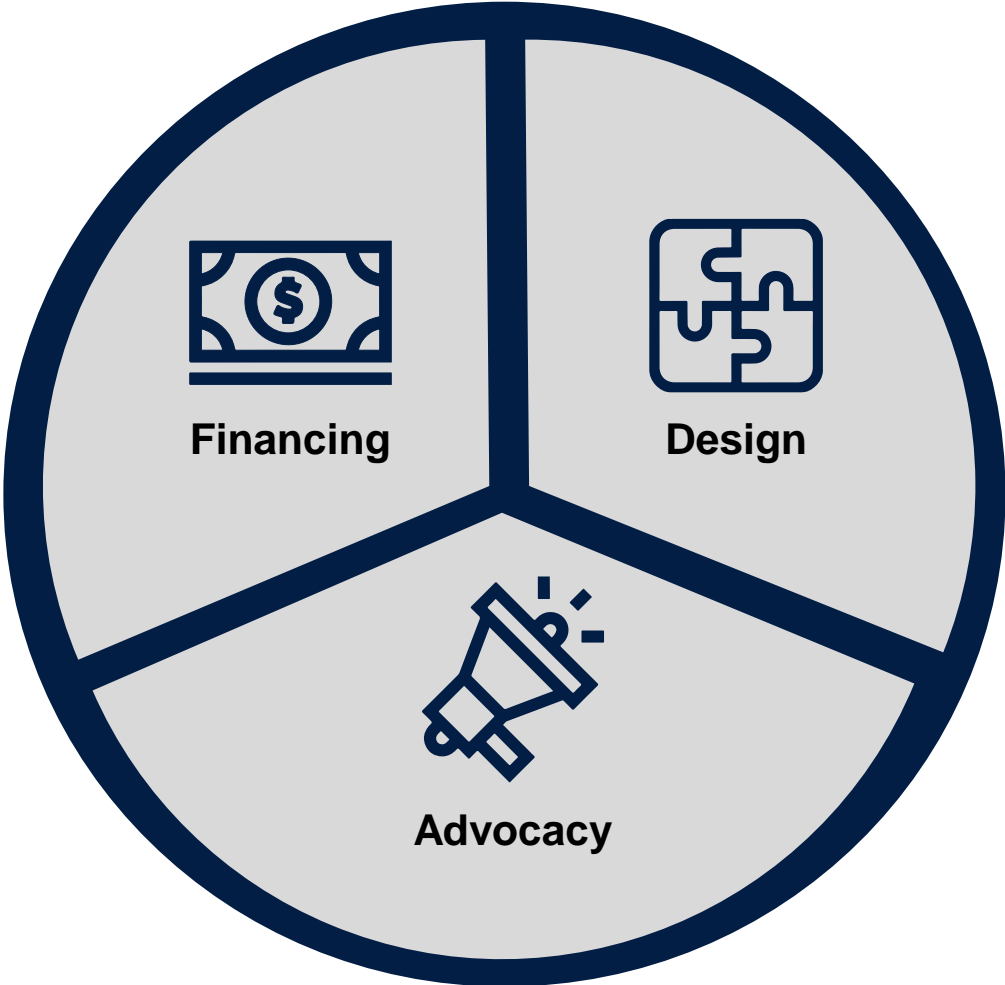
* Depth in Galveston Bay

■ Ship Channel Depth, Feet (right axis)
 ■ Total POH Cargo x 10 Millions (left axis)
 ■ Texas Population, Millions (left axis)
 ■ Container TEU's x 100,000's (left axis)



GETTING IT DONE

BALANCE OF FINANCING, ADVOCACY, AND DESIGN



ACCELERATING HOUSTON SHIP CHANNEL EXPANSION

PROJECT EXECUTION



Lori Brownell | Port Houston



PORT HOUSTON

PROJECT 11

RETHINKING THE TRADITIONAL PROCESS

- **Advocacy**
 - Strategic partnerships, collaboration, and broad support
- **Finance**
 - Port-funded design (Segments 1-4) and construction (Segments 1-2)
 - Work-In-Kind
- **Design**
 - USACE and PHA leadership
 - Proactive communication with stakeholders
 - COVID working conditions
 - Parallel design and approval/authorization timeline
 - Design consultant teams and strategic Scope of Work alignment



“Running with Scissors.”
Col. Timothy R. Vail,
U.S. Army, Retired



NATIONAL
WATERWAYS
CONFERENCE



PROJECT 11

RETHINKING THE TRADITIONAL PROCESS – PORT-FUNDED DESIGN AND CONSTRUCTION

1A

Bolivar Roads to Redfish

- Approximately 11.5 miles in length
- Widen Channel to 700 feet
- Bend easing
- Construct New Bird Island
- Mitigate for oyster habitat loss

1B

Redfish to Bayport Ship Channel

- Approximately 8.3 miles in length
- Widen Channel to a minimum of 700 feet
- Bend easing
- Construct marshes and three bird islands in Galveston Bay
- Mitigate for oyster habitat loss
- Currently not in the proposed federal plan, so must be built by local interests

1C

Bayport Ship Channel to Barbours Cut

- Approximately 5 miles in length
- Widen Channel to 700 feet
- Construct additional marshes
- Mitigate for oyster habitat loss
- Currently not in the proposed federal plan, so must be built by local interests

2

Bayport Ship Channel

- Approximately 4 miles in length
- Widen Channel to approximately 455 feet
- Construct marshes and three bird islands in Galveston Bay
- Mitigate for oyster habitat loss
- Modify channel entrance to reduce shoaling

3

Barbours Cut Ship Channel

- Widen Channel to approximately 455 feet
- Construct additional marshes on Atkinson Island
- Modify channel entrance

4

Boggy Bayou (BW 8) to Sims Bayou

- Widen Channel to approximately 530 feet through Greens Bayou confluence
- Deepen from existing 41 feet to 46.5 feet from Boggy Bayou to Hunting Bayou (last Turning Basin before reaching Washburn Tunnel)

5

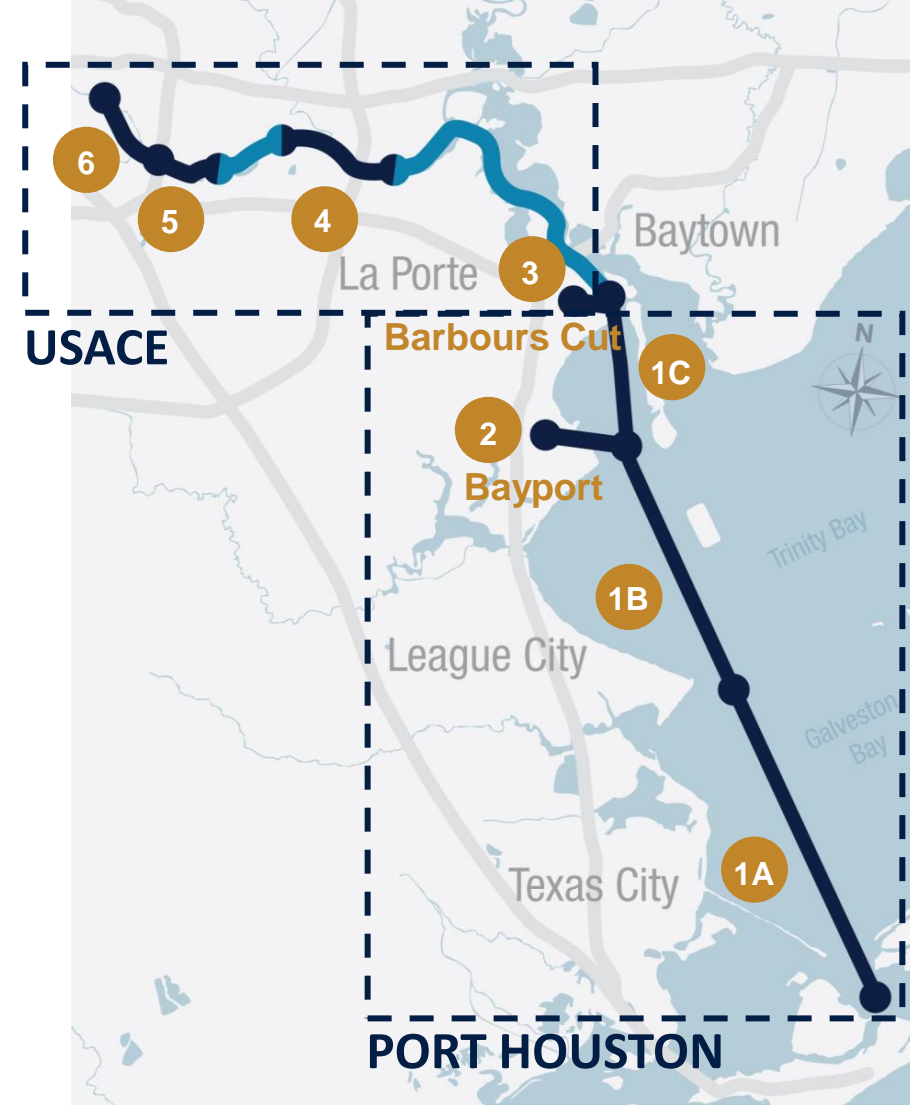
Sims Bayou to IH 610

- Deepen from existing 37 feet to 41.5 feet

6

IH 610 to Turning Basin

- Deepen from existing up to 41.5 feet
- Increase Brady Island Turning Basin



 No work planned in these areas



PROJECT 11

RETHINKING THE TRADITIONAL PROCESS

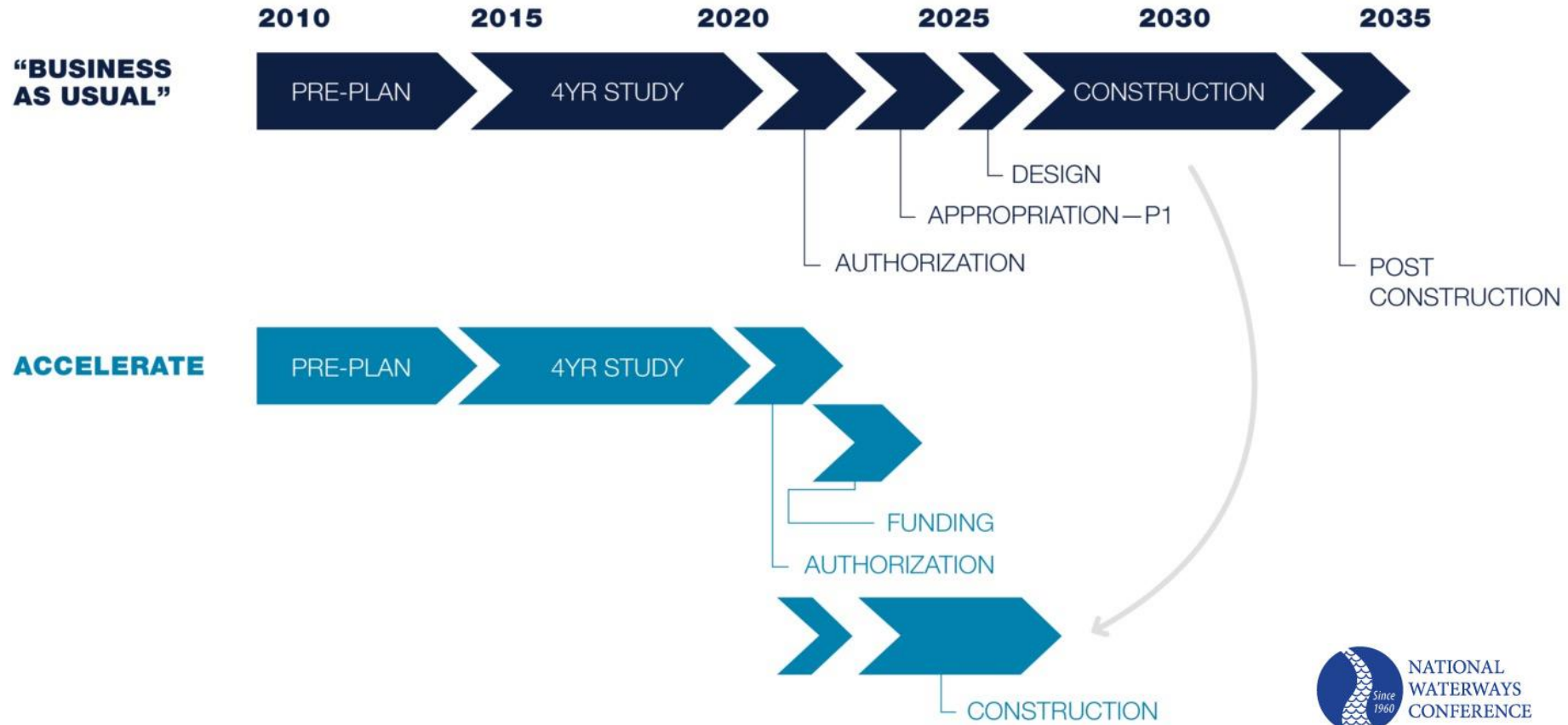
- **Advocacy**
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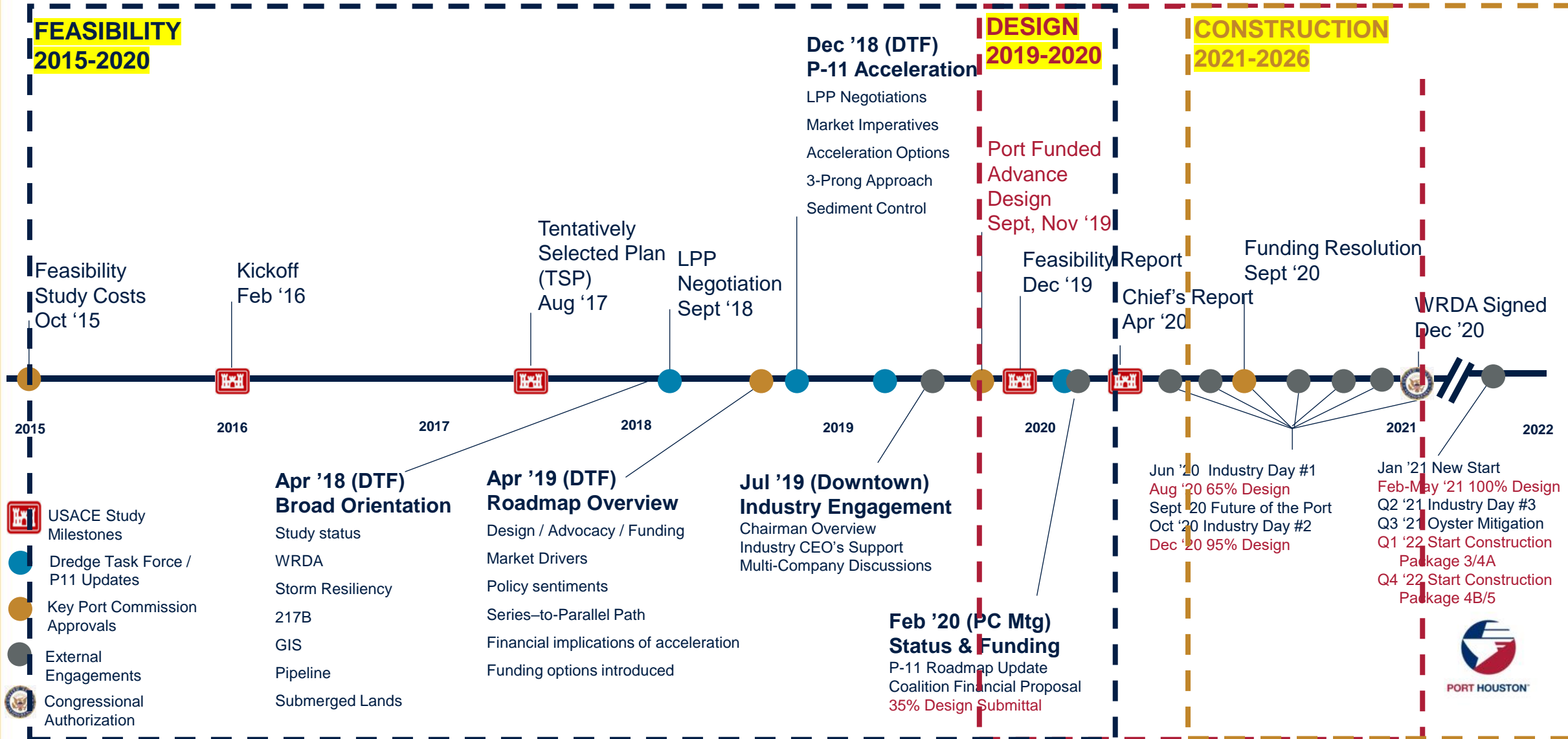
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RETHINKING THE TRADITIONAL PROCESS – PARALLEL DESIGN AND APPROVAL / AUTHORIZATION TIMELINE



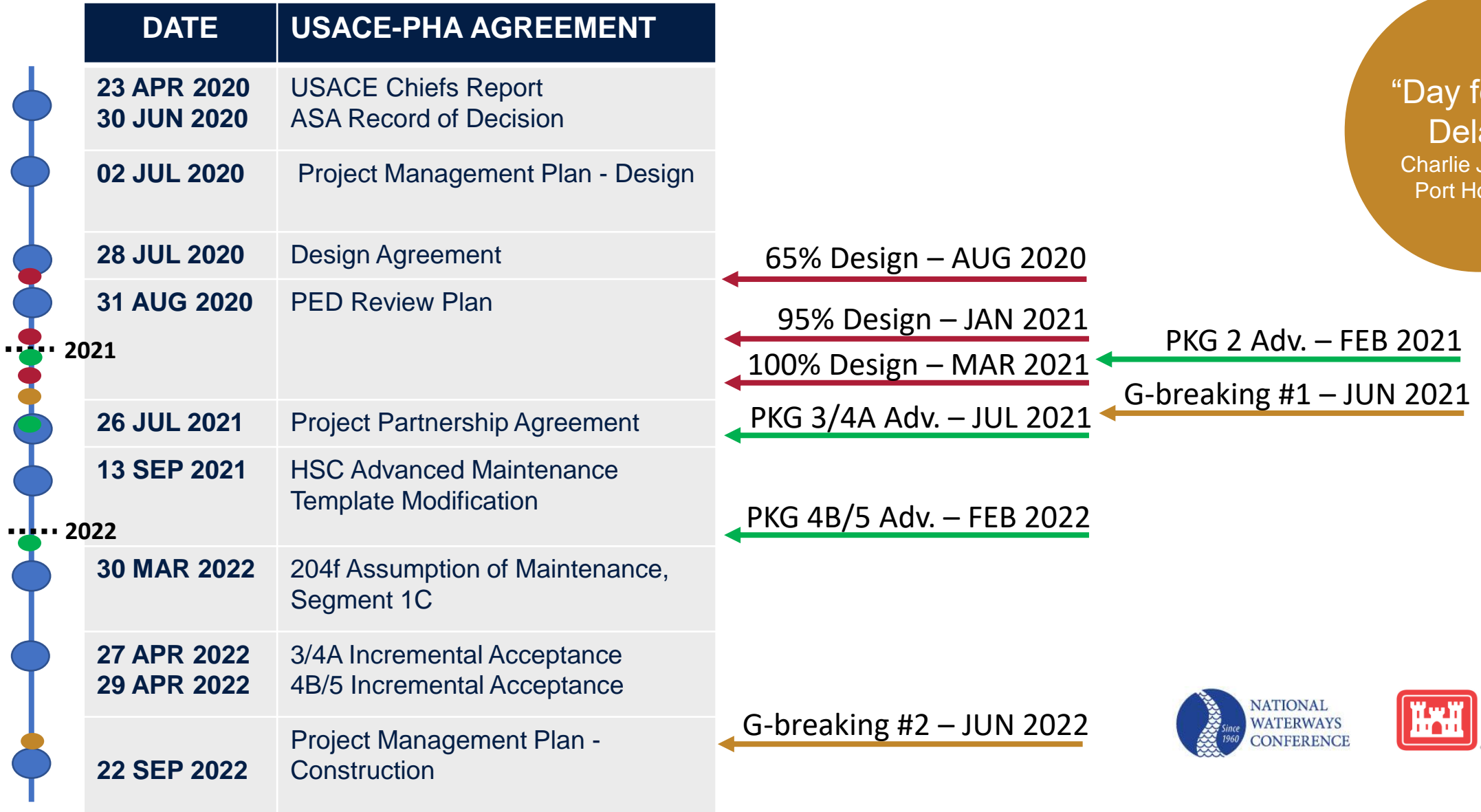
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RETHINKING THE TRADITIONAL PROCESS – PARALLEL DESIGN AND APPROVAL / AUTHORIZATION TIMELINE



PROJECT 11

RETHINKING THE TRADITIONAL PROCESS – PARALLEL DESIGN AND APPROVAL / AUTHORIZATION TIMELINE



PROJECT 11

RETHINKING THE TRADITIONAL PROCESS – DESIGN CONSULTANT TEAMS



Industry

State and Federal Agencies



PORT HOUSTON™



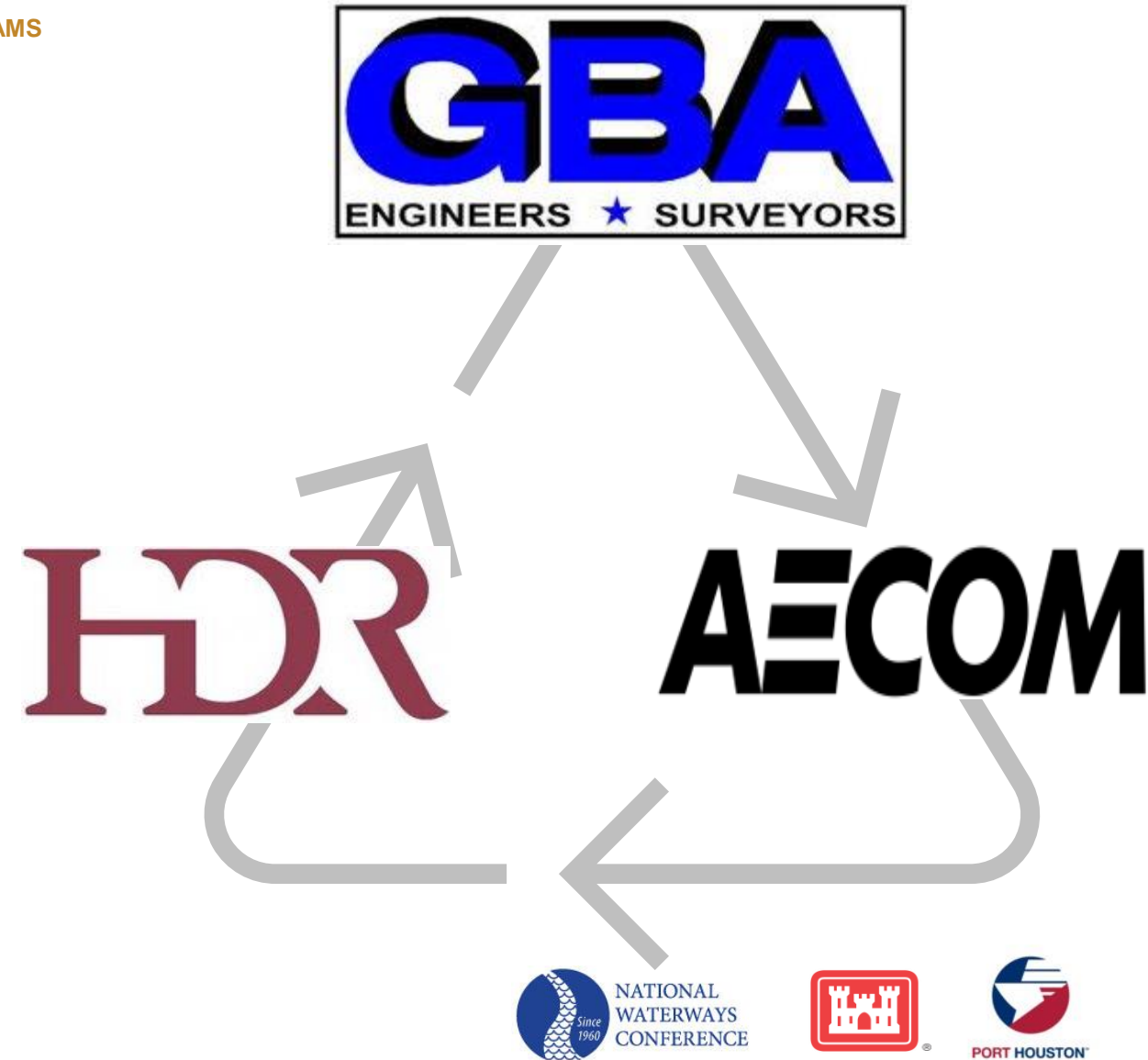
Corps



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RETHINKING THE TRADITIONAL PROCESS – DESIGN CONSULTANT TEAMS

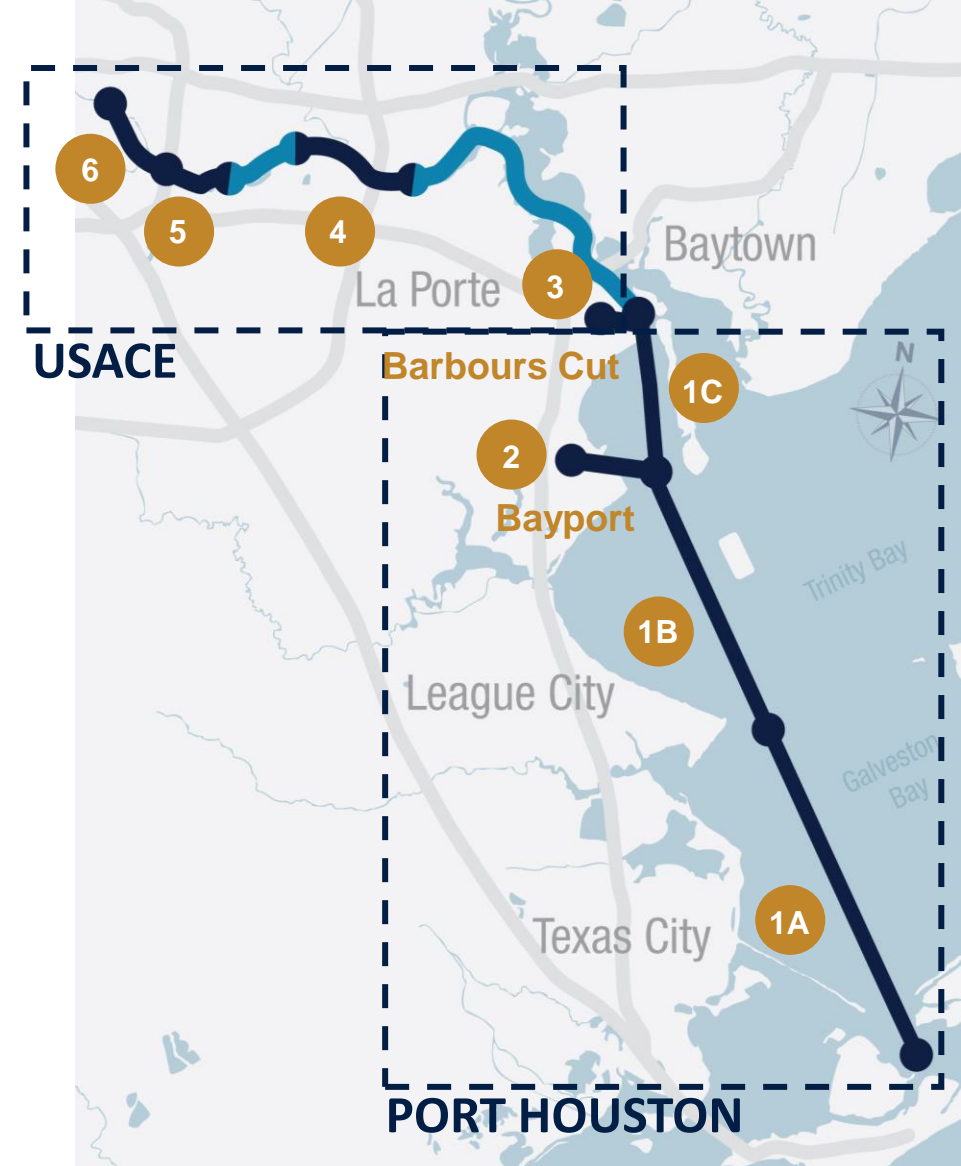
SEGMENT	TEAM	SOW DIVISION
1-4	JV	Ship simulation
1-4	HDR	Ship-wake analysis
1-4	JV	Before-dredge bathymetric survey
1-3	JV	Magnetometer survey
4	HDR	Magnetometer survey
1-4	JV	In-water geotechnical
3-4	HDR	Upland geotechnical
1-4	HDR	Pipeline research
1-4	HDR	Cultural resources



PROJECT 11

RETHINKING THE TRADITIONAL PROCESS – TENTATIVE PROCUREMENT SCHEDULE

	Package	Segment	Advertisement	Construction	
Under Contract	1	1A	Aug 2021	USACE	Jan - Oct 2022
	2	4	Feb 2021	Port	Jun 2021 - Jun 2022
	3/4A	1A	Jul 2021	Port	Mar - Dec 2022
	Abandoned Pipeline Removal	1A-1C	Aug 2021	Port	Jan - Jul 2022
	4B/5	1B,1C, 2	Nov 2021	Port	Oct 2022 - Dec 2024
Funded	6	1C	Apr 2023	Port	Dec 2023 - Nov 2024
	7	3	Jan 2023	USACE	Jun 2023 - Dec 2025
Pending Federal Appropriations	8	4	Apr 2023	USACE	Aug 2023 - Nov 2024
	9	4	Jun 2024	USACE	Nov 2024 - Nov 2025
	10	5	Jul 2024	USACE	Nov 2024 - Jul 2025
	11	6	Jul 2024	USACE	Nov 2024 - Jul 2025
	12	5, 6	Dec 2024	USACE	Mar 2025 - Dec 2025



 No work planned in these areas



QUESTIONS?

Visit the Project 11 Webpage

<https://www.expandthehoustonshipchannel.com/>

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