



MOBILE RIVER BRIDGE AND BAYWAY



2025 ASCE Winter Meeting
March 14, 2025



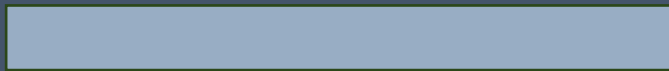
MOBILE RIVER BRIDGE AND BAYWAY

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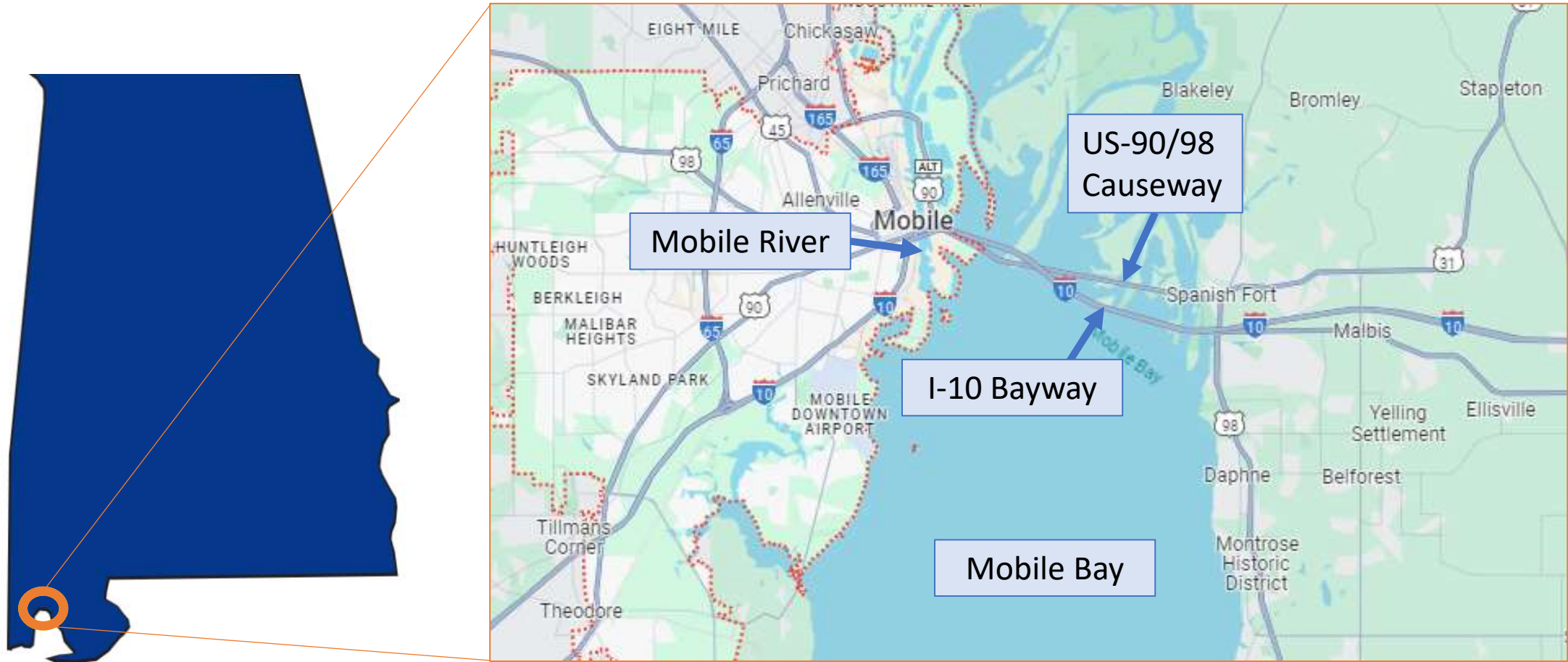
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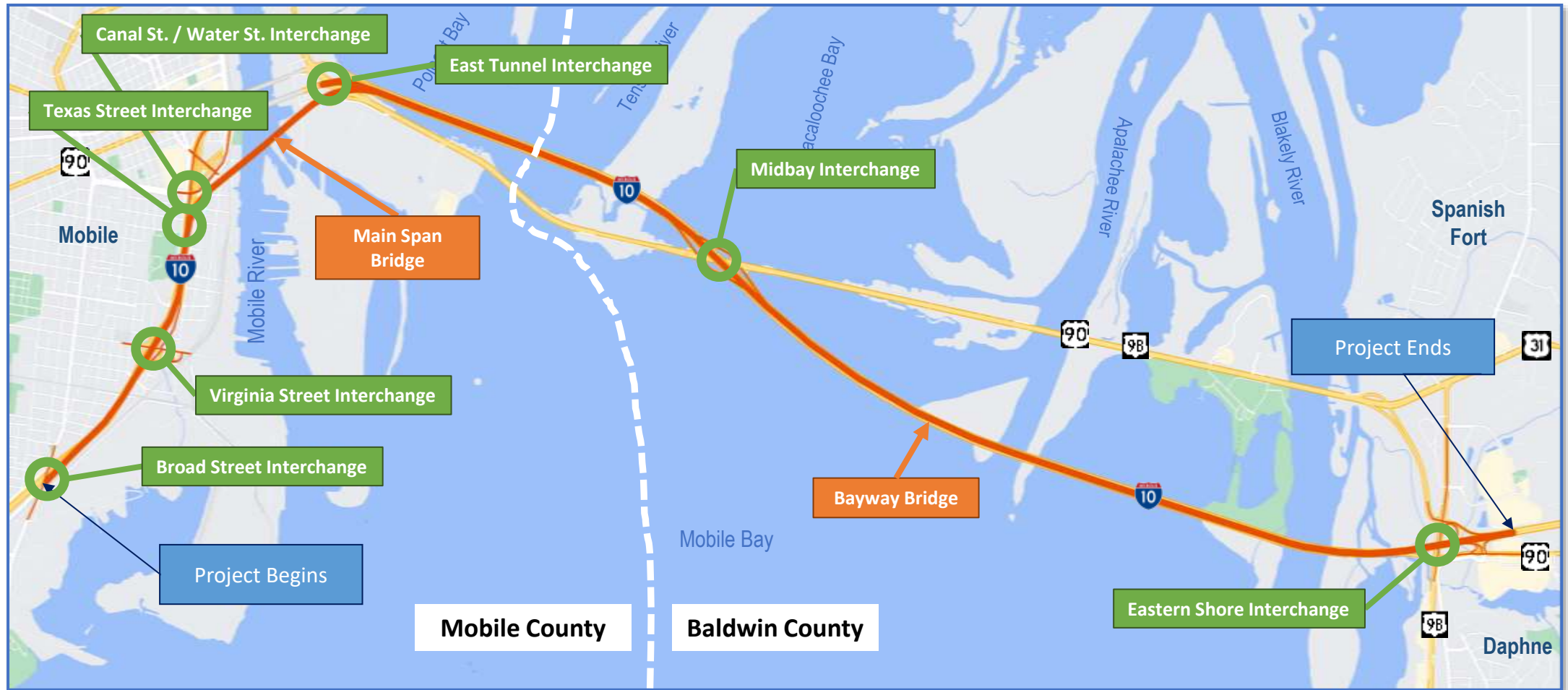
PROJECT OVERVIEW



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Purpose of the Project

- Increase the capacity of Interstate 10 (I-10) to meet existing and predicted future traffic volumes
- Provide a direct route for vehicles transporting hazardous materials and minimize impacts to Mobile's maritime industry
- Improve geometrics, enhance access to major industrial and freight destinations in the Mobile area and facilitate economic growth



PROJECT OVERVIEW

Project Importance

Current crossing of the Mobile River (Wallace Tunnels) was designed for 35,000 vehicles/day. Daily traffic today is double original capacity and rising.

Holiday, summer, and emergency evacuation traffic can see up to 100,000 vehicles/day.

July 2024 Summer Traffic



Hurricane Evacuation

The existing Bayway bridges are susceptible to storm surge impacts similar to what has happened to nearby cities during major storms.



I-10 Pensacola

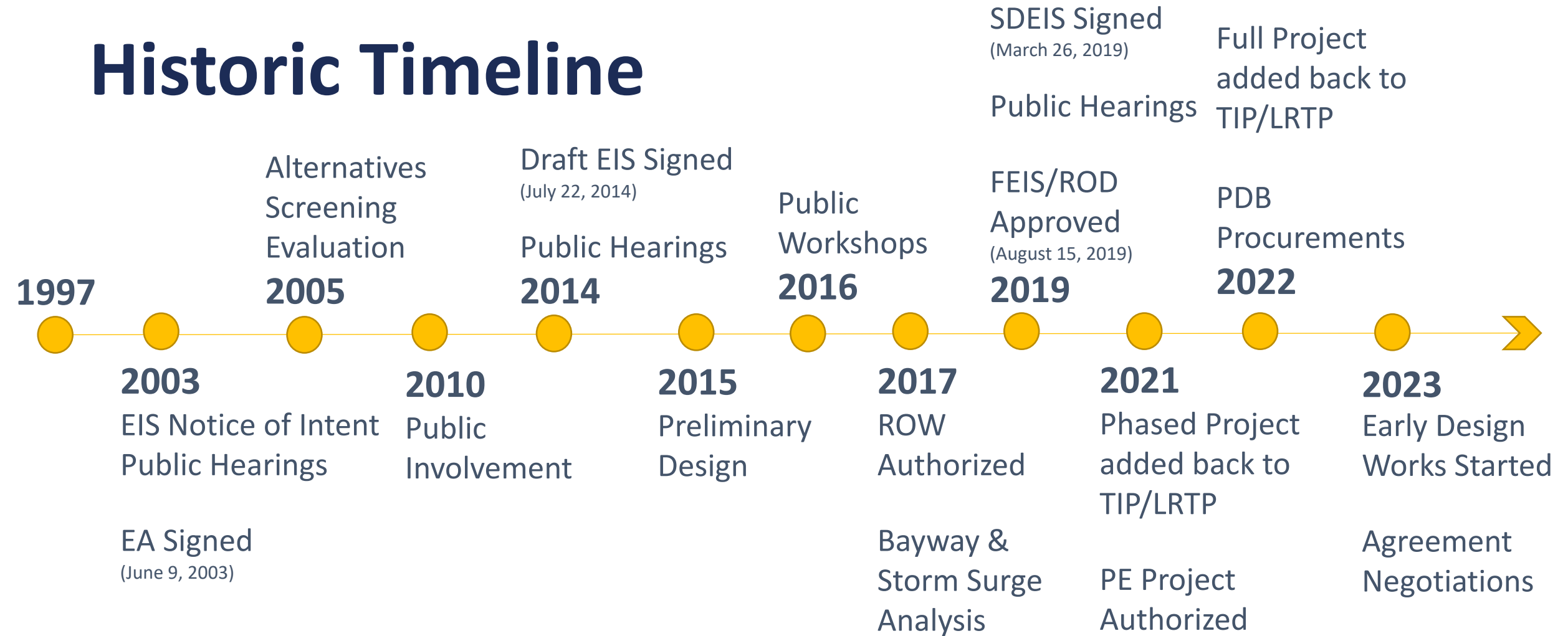


Hwy 90 Biloxi

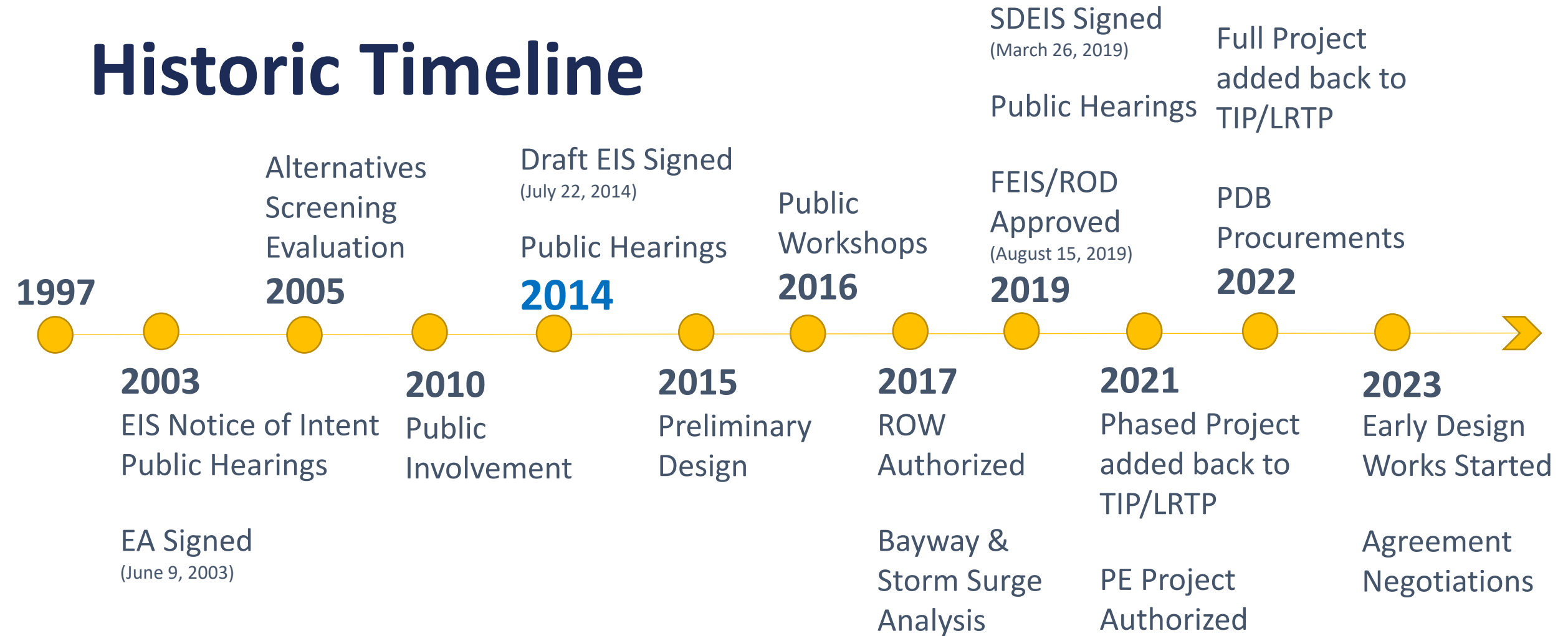


I-10 New Orleans

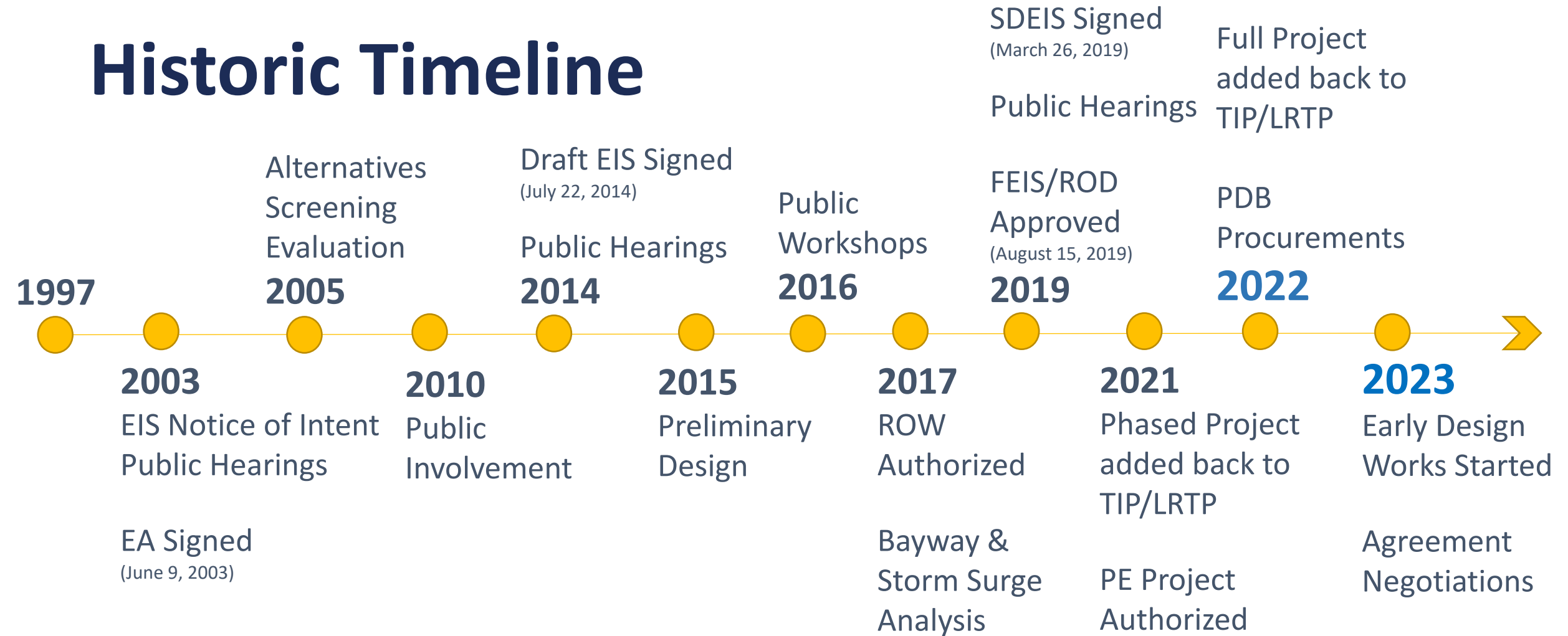
Historic Timeline



Historic Timeline



Historic Timeline

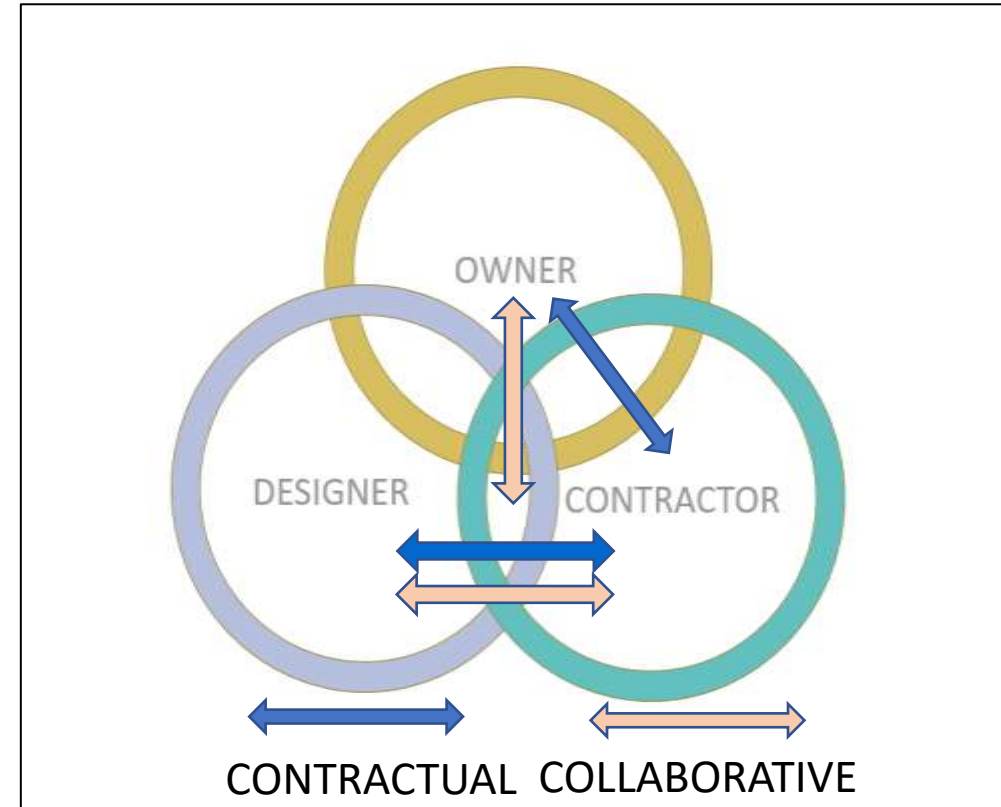


Goals of Progressive Design Build

- Accelerate the Project delivery by getting teams on board sooner to work directly with ALDOT
- Leverage private sector knowledge and facilitate innovation to construct the Project within ALDOT's budget and timeframe
- Allow for decisions to be made early helping to expedite permitting and environmental re-evaluation
- Reach a Guaranteed Maximum Price (GMP) in budget and start construction as soon as possible.

Progressive Design Build Approach

- PDB team hired by owner based on qualifications
- Owner has a single contract with the contractor
- Designer's contract is with contractor
- Preliminary Design is collaborative effort with all 3 entities
- Guaranteed Maximum Price (GMP) is developed after preliminary design
- Construction starts after GMP and is simultaneous with final design



PROJECT OVERVIEW

Benefits of Progressive Design-Build Procurement

1. Early Coordination – Allows selected teams and ALDOT to work together during design and cooperatively develop technical provisions and agreements.
2. Enhances Creativity and Innovation – By working closely with ALDOT during the design process, the design-builders have the freedom to propose innovative solutions for the project design or construction.
3. Increases Owner Involvement and Control – Early involvement and coordination between ALDOT and the design-builders prevents surprises later in the project and allows ALDOT to make decisions early.
4. Increases Price Certainty – The design-builders and ALDOT along with ALDOT's Independent Cost Estimators (ICE) hold workshops and work together developing estimates.

Progressive Design-Build Procurement leads to better schedule and cost certainty, reduction of risks, and accelerated delivery of the project.



Benefits of Progressive Design-Build Procurement

Opinion of Probable Construction Costs (OPCC) Design Cost Estimating Workshops

- Identified areas to save money and reduce schedule
- Helped reduce design-builder risk
- Design-build estimators and ICE are aligned on plug costs leading into GMP
- Ensured all estimates are using the same base data and construction methodology

PROJECT OVERVIEW

Learned from Progressive Design-Build

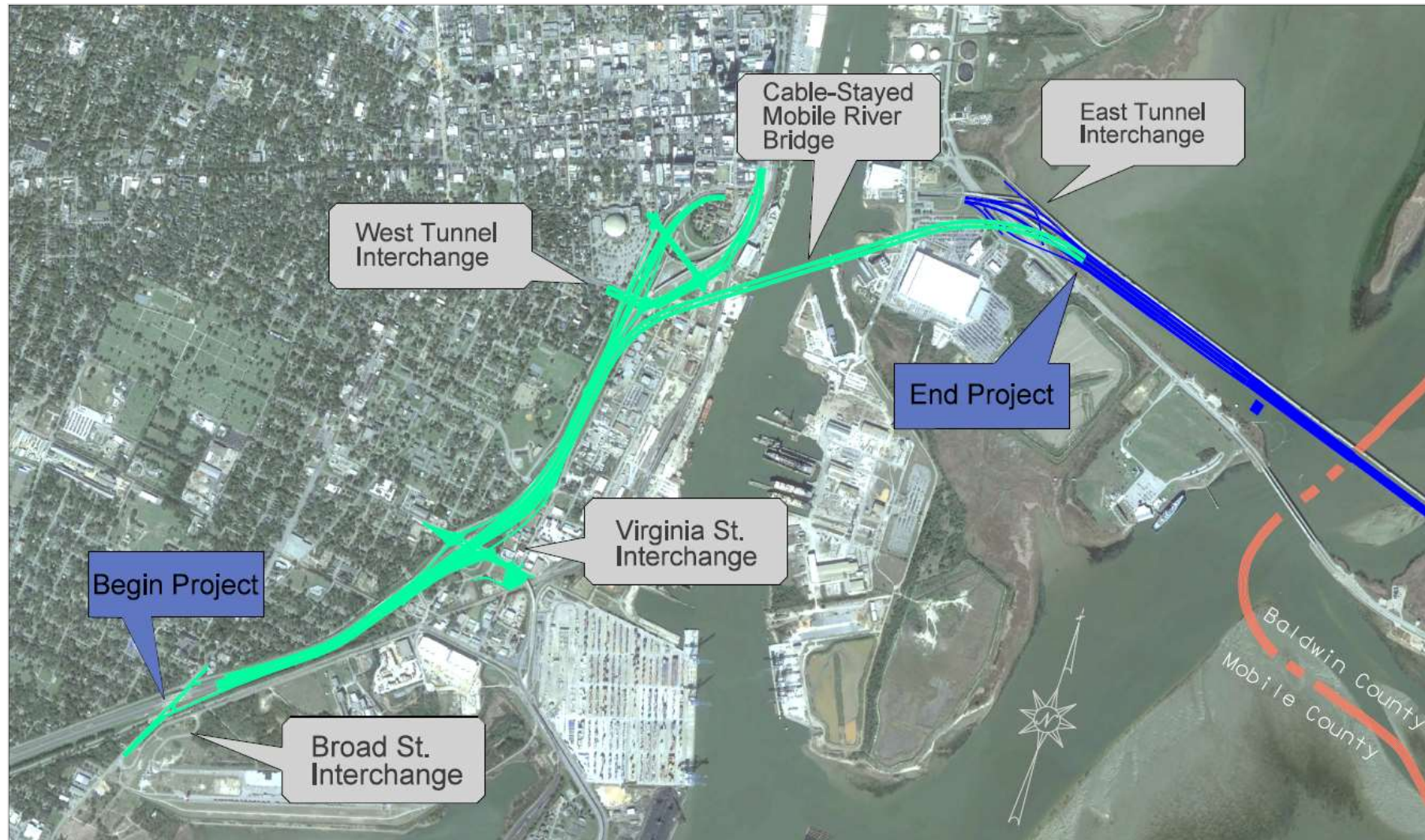
- Better appreciation for how design/builder develops a comprehensive construction cost estimate
- Better understanding of risk
- Improved understanding of how contract/agreements are developed
- Open conversations between what's needed for the project

PROJECT SCOPES



PROJECT SCOPES

Mobile River Bridge Project



- **Cable-stayed bridge and approaches** – new six-lane state-of-art cable-stayed bridge with a minimum 215 feet of air-draft clearance across the Mobile River channel.
 - Cable-stayed main span bridge will be approximately 2,575 feet across the Mobile River.
 - The western pylon will be on land near the Mobile River; the eastern pylon will be on Pinto Pass peninsula.
 - The high-level approaches are approximately one mile long on either side of the cable-stayed bridge.
- **Roadway, interchanges, and bridges** – roadway and bridge portions of I-10 from Broad Street interchange to the Wallace Tunnels. Interchanges include Broad Street, Virginia Street, Texas Street, and West Tunnel.
- **Other components** – toll collection system components, ITS, and belvedere (overlook) located at the west tower pylon with elevator and stair tower.

PROJECT SCOPES

Mobile River Bridge Project



Design-Build Team

PROPOSER / LEAD CONTRACTOR



Kiewit



MASSMAN
CONSTRUCTION CO.

TRAYLOR
TRAYLOR BROS., INC.

a Joint Venture

MAJOR PARTICIPANTS (DESIGN)



Kiewit

SYSTR
INTERNATIONAL
BRIDGE
TECHNOLOGIES

VOLKERT



PROJECT SCOPES

Bayway Project



- **Bayway** –new six-lane Bayway bridges built between the existing Bayway bridges. Will begin at end of east high-level approaches and end at the eastern shore interchange.
 - Majority of Bayway will be built above 100-year storm surge wave impacts. Portions below storm surge impacts will reinforced/rehabbed to withstand impacts.
- **Interchanges** – East Tunnel, Midbay, and Eastern Shore interchanges.
- **Other components** – environmental mitigation, bridge demolition, toll collection system components and ITS.

PROJECT SCOPES

Bayway Project



PROJECT SCOPES

Bayway Design-Build Team

PROPOSER / LEAD CONTRACTOR



MAJOR PARTICIPANTS (DESIGN)

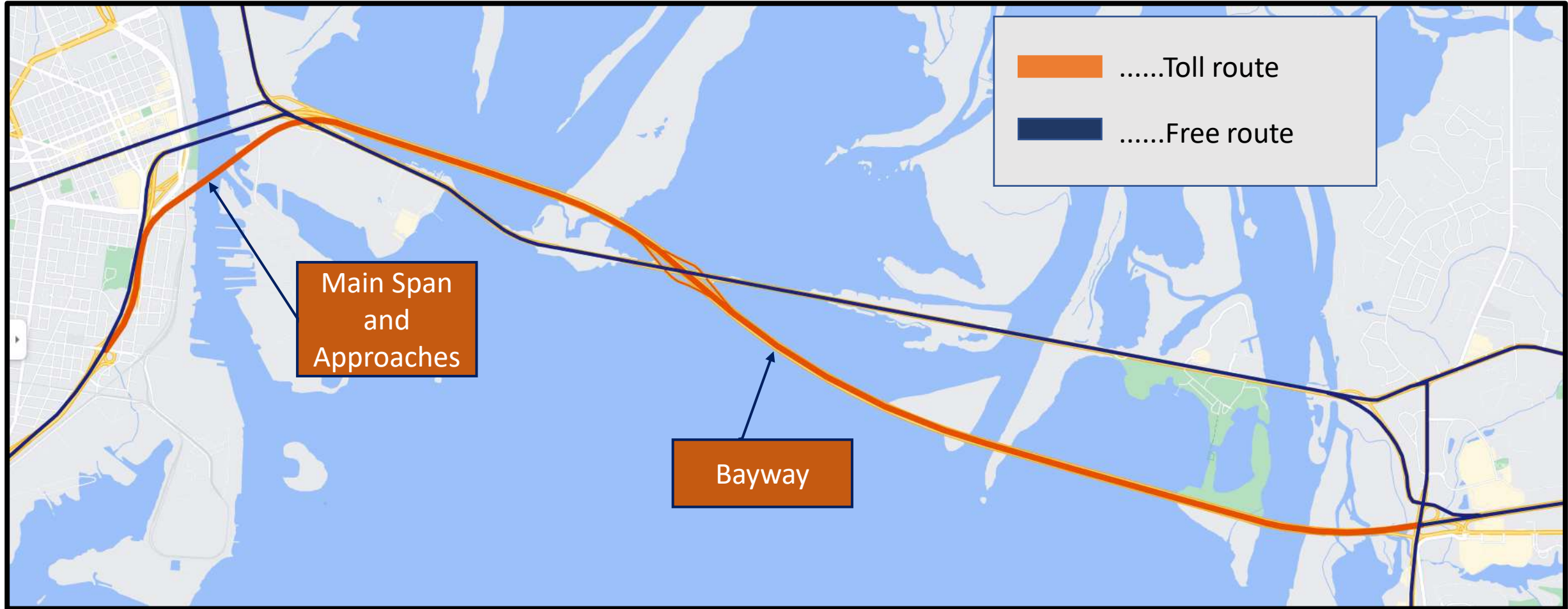


ALL ELECTRONIC TOLLING



ALL ELECTRONIC TOLLING

Toll Route



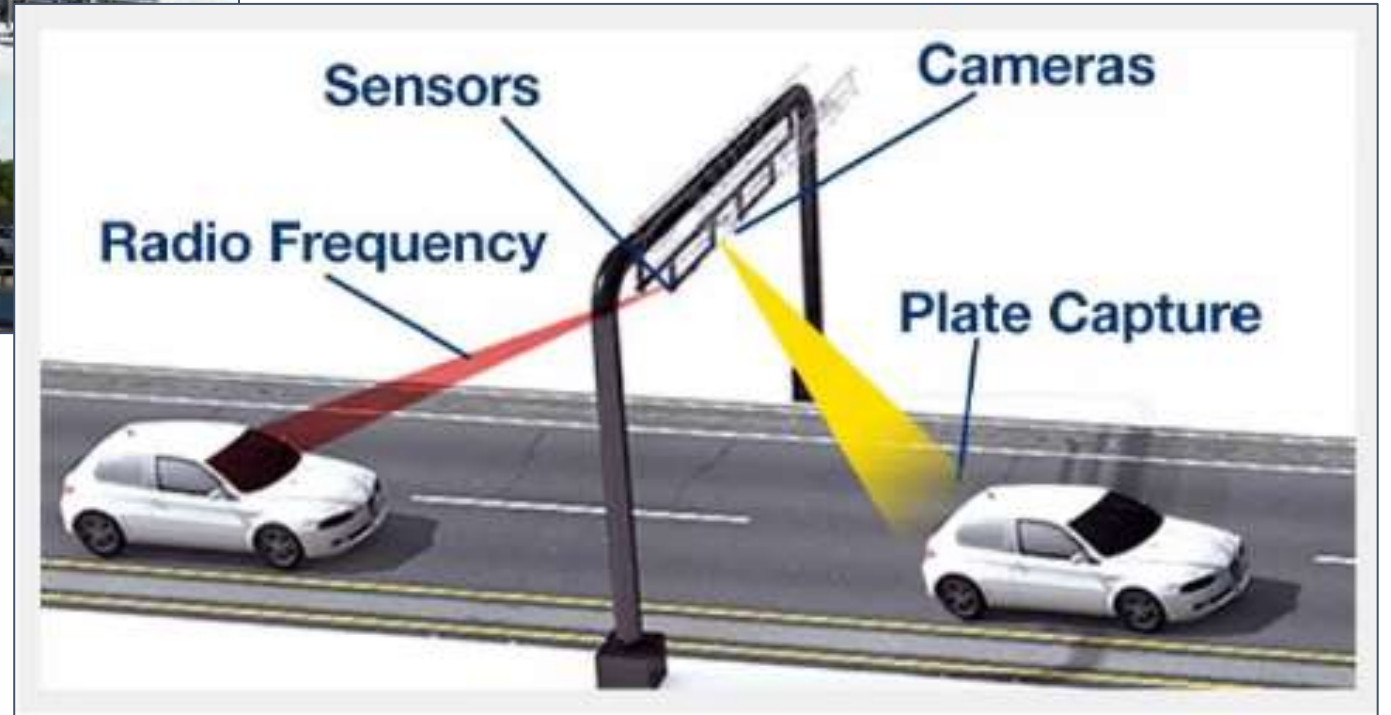
ALL ELECTRONIC TOLLING



ALL ELECTRONIC TOLLING



Gantries with sensors and cameras will scan the transponder or capture a picture of the license plate.
No slowing or stopping.



Toll Operations / ALDOT Coordination

The importance of team coordination throughout the planning, design, implementation, and testing process.

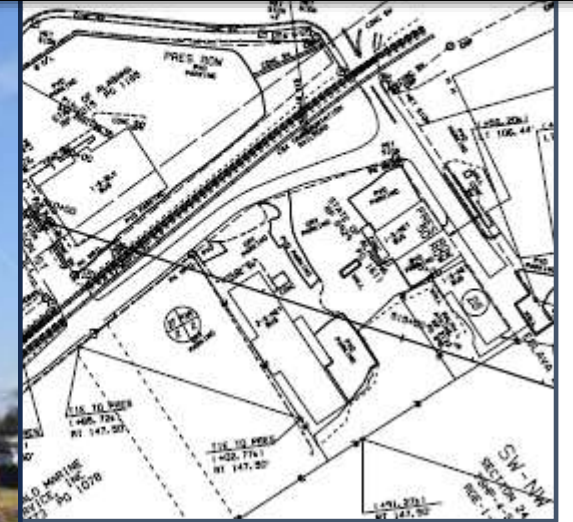


UPCOMING ACTIVITIES

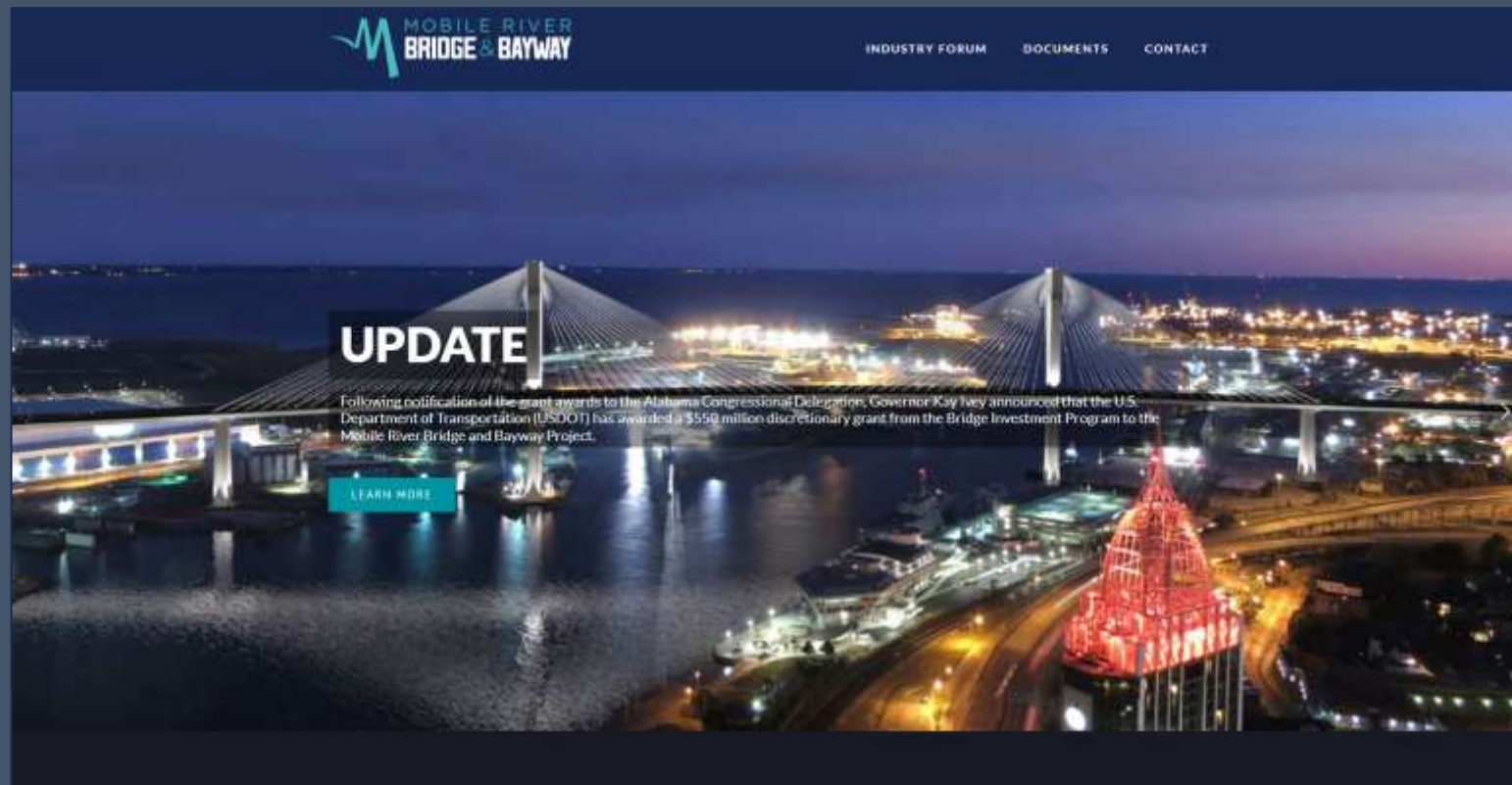
UPCOMING ACTIVITIES

What's Next?

- Final Design
- Geotechnical Investigations
- Load Test
- Environmental Re-evaluation & Permits



QUESTIONS?



Project Website
www.mobileriverbridge.com

