# H.013284 MRB South GBR: LA 1 to LA 30 Connector



September 25, 2023
Project Progress Update to CARB-D



ATLAS

#### Project Team (Part II – Environmental Evaluation)

- Prime Consultant:
  - Atlas Technical Consultants, LLC
- > Subconsultants:
  - CDM Smith
     Toll Analysis
  - Neel-Schaffer
     Traffic Analysis
  - Franklin Assoc.
     Public Involvement
  - GSRC &
     RECON Offshore
     Cultural Resources

- FIGG Bridge Engineering
   Bridge Technical Concepts
- GIS Engineering
   Bathymetric Survey
- Shread-Kuyrkendall
   Roadway Technical Concepts
- Armeni (KCI Technologies)
   Cost Estimating
- ProvidenceEnvironmental Inventory

- ArdamanGeotech
- GOTECHTopographic Survey
- Quality Eng.& SurveyingSUE Survey





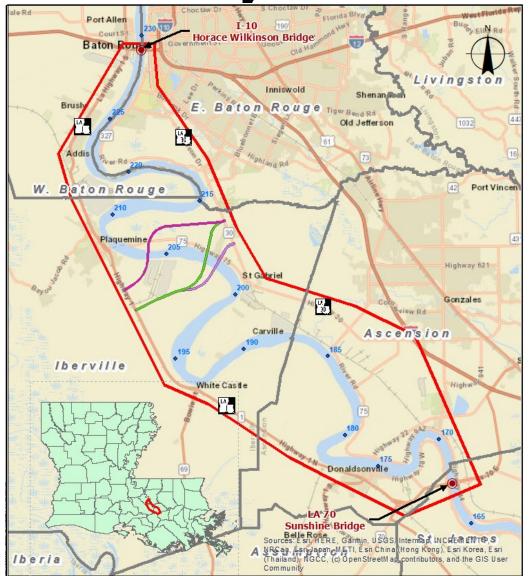
# **Project Overview**

- Ultimate <u>objective</u> is to construct a new crossing of the Mississippi River in the Greater Baton Rouge Area
- ➤ Part I: Enhanced Planning Study (July 2020 Summer 2022)
- ➤ Part II: Environmental Evaluation (Fall/Winter 2022 Winter 2024)





# **Study Area**





# Benefits of a new River Crossing

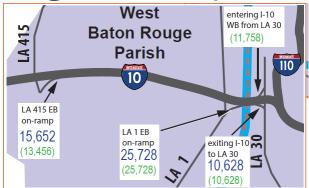
- Meets our <u>Purpose and Need</u>:
  - Increased Capacity & Improved Connectivity
  - Alternate Route for Incident Management
  - Improves Overall Transportation System Operations
- Proposed New Bridge Crossing expected to serve primarily LOCAL traffic between the East Bank and West Bank of MS River





# Benefits of a new River Crossing

- ➤ Greatest singular travel time benefit projected to be on LA 1 North Bound in the PM Peak Hour
  - Expected to reduce maximum queue length near I-10
     East Bound Merge Ramp by 50%

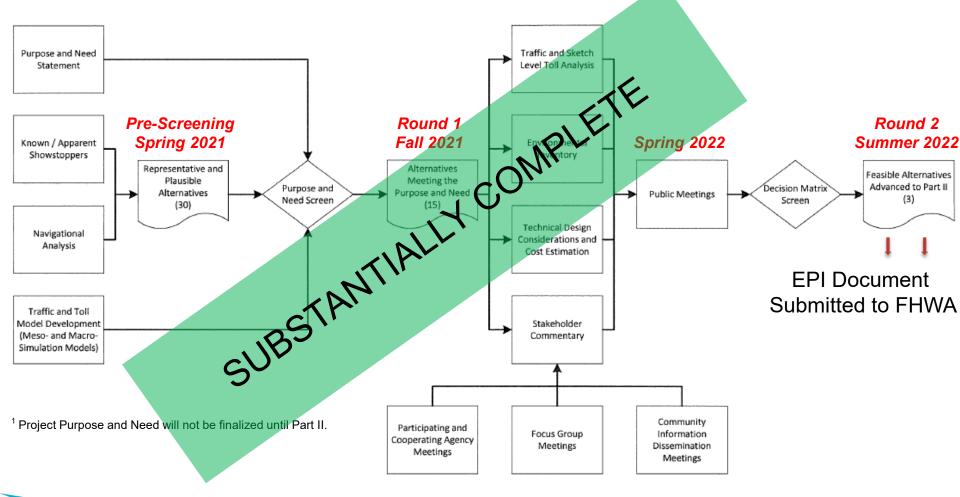


Expected to save over 1 Million hours of travel time annually





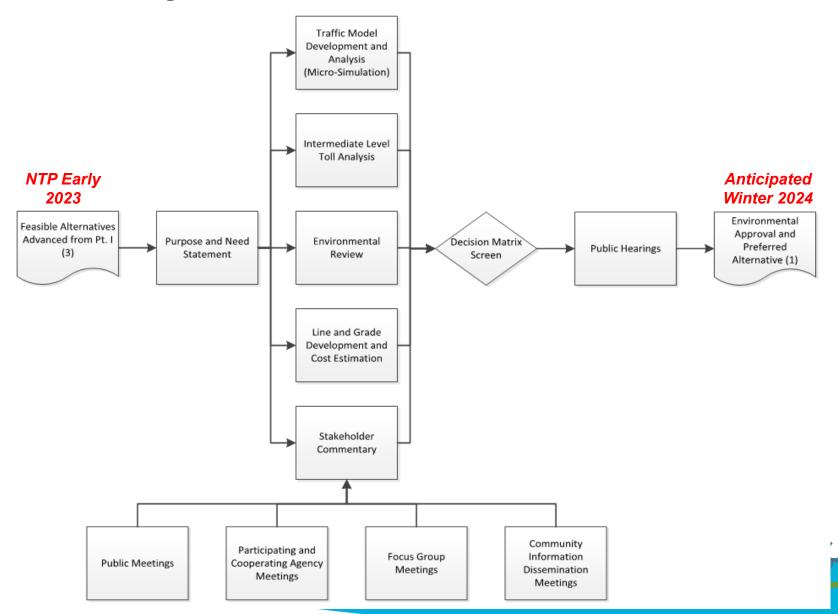
# **Project Workflow (Part I)**







# **Project Workflow (Part II)**





## **Scope for Part II (Environmental)**

- Pre-NEPA Tasks:
  - Surveys
    - LiDAR 🗸
    - Topographic & SUE\*\*
    - Bathymetric\*
    - Geotech<sup>\*\*</sup>
  - Line & Grade\*
- Public & Agency Outreach (ongoing)

- Traffic Refinement
  - Data Collection
- Intermediate Toll Study \*\*
- Conceptual Bridge Design<sup>\*\*</sup>
- Cost Estimates
- − H&H<sup>\*</sup>



\*The timeline for Traffic and Toll Analyses will span from pre-NEPA through completion of NEPA



#### **Traffic - Data Collection**

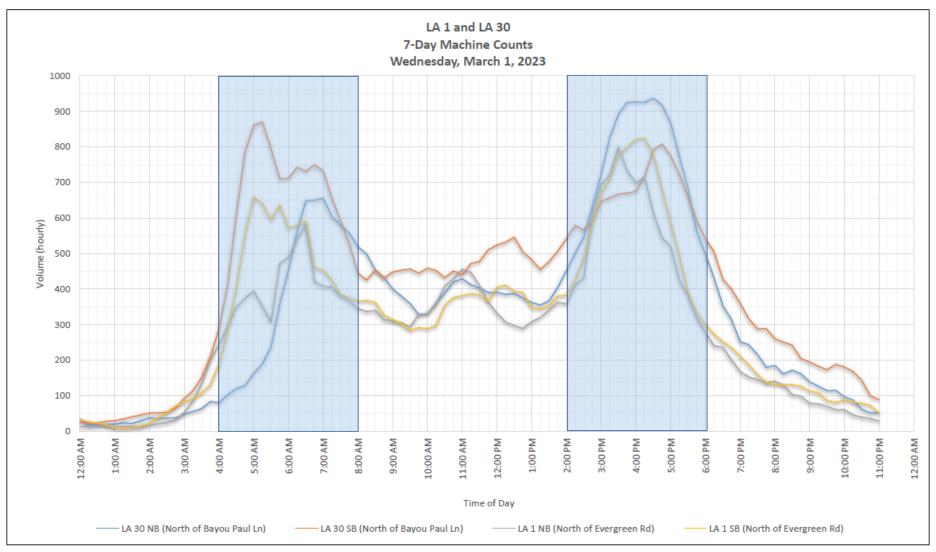




7-Day Tube Count Locations
Site 1 – LA 30 (North of Bayou Paul Lane)
Site 2 – LA 1 (North of Evergreen Road)



#### **Traffic - Data Collection**

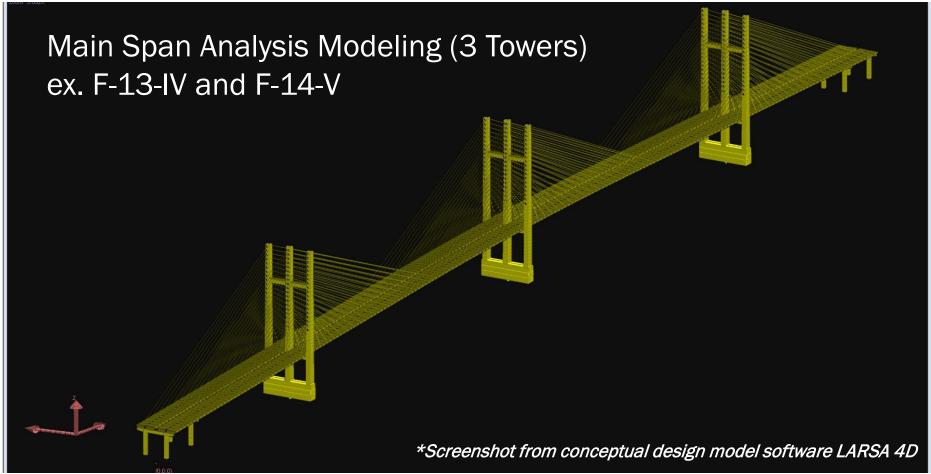




\*Peak Periods as identified in Traffic Report – Appendix A



### Conceptual Bridge Design



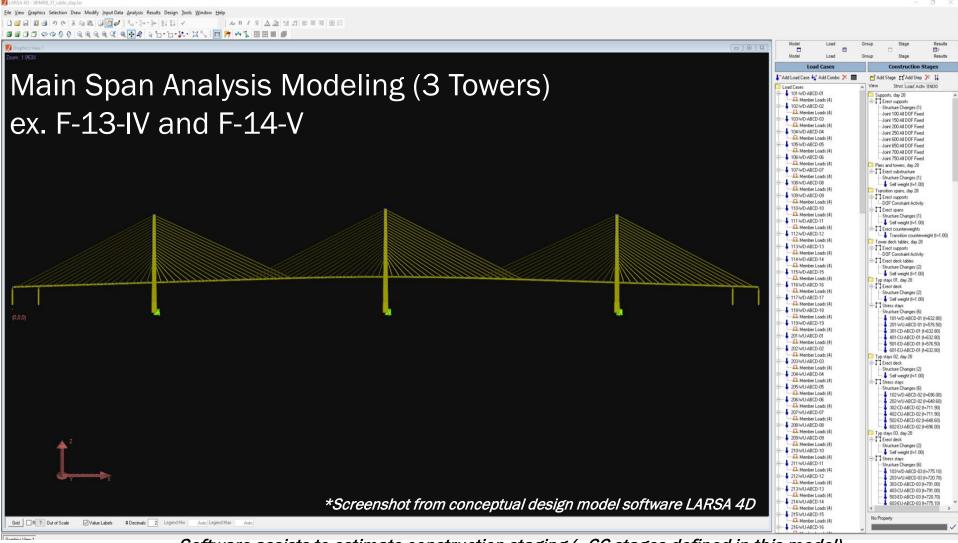
LARSA 4D Software is commonly used to analyze complex cable-stayed bridges, and will be used to confirm stay cable sizes, loads for conceptual foundation design, sizing, etc...

This data will help to determine preliminary cost estimates and preliminary construction schedules.





#### **Conceptual Bridge Design**



Software assists to estimate construction staging (~66 stages defined in this model) to get reasonable estimates of force distribution to major structural elements





#### Scope for Part II (Environmental)

- > NEPA Tasks:
  - Public & Agency Outreach
    - Stakeholders
    - Public Meetings / Public Hearings
  - Document Preparation (EA/EIS)
  - Field Surveys
    - Wetlands/T&E
    - Cultural Resources
    - Air, Noise, CSRP, Phase I ESA
      - > Traffic Refinement
      - > Intermediate Toll Study

\*The timeline for Traffic and Toll Analyses will span from pre-NEPA through completion of NEPA



# Overall Schedule (Part II)

										<u> </u>
ID	Task Name		Start	Finish	2023 J	F M	A M J	J   A	s   0   N	D 2024 F M A M J J A S O N D
1	H.013284 MRB South Part 2 Schedule		Mon 1/23/23	Tue 12/17/24	r					
2	NTP		Mon 1/23/23	Mon 1/23/23	•	1/23				
3	Project Management		Mon 1/23/23	Tue 12/17/24						
4	Agency Coordination & Public Outread	h	Mon 1/23/23	Fri 8/9/24	1					
5	LIDAR and Aerial Photography (DOTD t	o Provide)	Mon 1/23/23	Fri 3/24/23	1					
6	Geotechnical Surveys		Fri 7/14/23	Mon 3/18/24						
7	Topo & Bathy Surveys		Mon 5/22/23	Fri 1/12/24						
8	Level II Intermediate Toll Study		Mon 8/7/23	Fri 3/22/24						
9	Data Collection		Mon 8/7/23	Mon 11/6/23						
10	Socioeconimic Review and Stated Pr	reference Survey	Mon 8/7/23	Mon 11/27/23						<b>I</b>
11	Model Development		Mon 8/7/23	Wed 2/14/24						
12	Toll Plan and Operations Plan		Tue 11/28/23	Mon 1/22/24						<u>*</u>
13	Transaction & Revenue Estimates		Tue 1/23/24	Mon 2/19/24						
14	Sensitivity Tests		Tue 2/20/24	Fri 3/22/24						<b>*</b>
15	Traffic		Mon 5/22/23	Fri 2/23/24						
16	Data Collection & Safety Analysis		Mon 5/22/23	Fri 8/25/23						
17	High Level Screening to Identify Corridors due to New Bridge		Mon 7/3/23	Fri 8/4/23						
18	Forecast Peak Hour Volumes		Mon 8/28/23	Fri 2/23/24						
19	Existing Safety Analysis		Mon 6/5/23	Fri 7/14/23						
20	Existing and No-Build Analysis		Mon 10/16/23	Fri 2/2/24						
21	Conceptual Design/Line & Grade Study		Mon 3/6/23	Fri 7/26/24						
22	Road Design		Mon 5/22/23	Mon 7/22/24						
23	Bridge Design		Mon 3/6/23	Fri 7/26/24						
24	Hydraulic & Hydrologic Drainage De	sign	Wed 6/14/23	Fri 11/3/23						
25	Draft Opinion of Probable Cost		Tue 7/23/24	Mon 10/14/24						
26	NEPA		Tue 1/2/24	Tue 12/17/24						
27	Early Coordination		Tue 1/2/24	Mon 2/12/24						
28	Technical Studies		Tue 1/2/24	Tue 4/30/24						
29	Cultural Resources		Tue 1/2/24	Tue 4/30/24						
30	Field surveys for Cultural Resources		Tue 1/2/24	Mon 2/12/24						
31	Draft Cultural Resources AOE Report		Fri 2/9/24	Mon 4/29/24						
32	Biological/Wetlands		Tue 1/2/24	Mon 4/29/24						
33	Field surveys for Biological/Wetlands			Mon 2/12/24						
34	Biological/Wetlands AOE Report			Mon 4/29/24						
35	Noise		Tue 1/30/24							
36	Field surveys for Noise Study			Mon 2/19/24						
37	Noise Study Report			Mon 4/8/24						
38	Environmental Justice Analysis			Mon 4/8/24						
39	NEPA Document			Tue 12/17/24						
40	Public Meeting			Fri 7/26/24						
41	EA			Mon 7/22/24						
42	Public Hearing			Fri 8/9/24						
43	EA & FONSI	EA & FONSI		Tue 12/17/24						
44										
	Task		Project Summary			Manual Task		Start-only	Е	Deadline 🖖
Projec	ct: MRB Part 2 Summary Schedule	Split				Duration-only		Finish-only	3	Progress
	Wed 9/20/23	Milestone	Inactive Milestone			Manual Summary Rollup		External Tasks		Manual Progress
		Summary	Inactive Summary			Manual Summary		External Milestone		





# **Thank You!**



