

H.013284

MRB South GBR:

LA 1 to LA 30 Connector

September 25, 2023

Project Progress Update to CARB-D



LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT | CAPITAL AREA ROAD AND BRIDGE DISTRICT



www.dotd.la.gov

Project Team (Part II – Environmental Evaluation)

➤ Prime Consultant:

- Atlas Technical Consultants, LLC

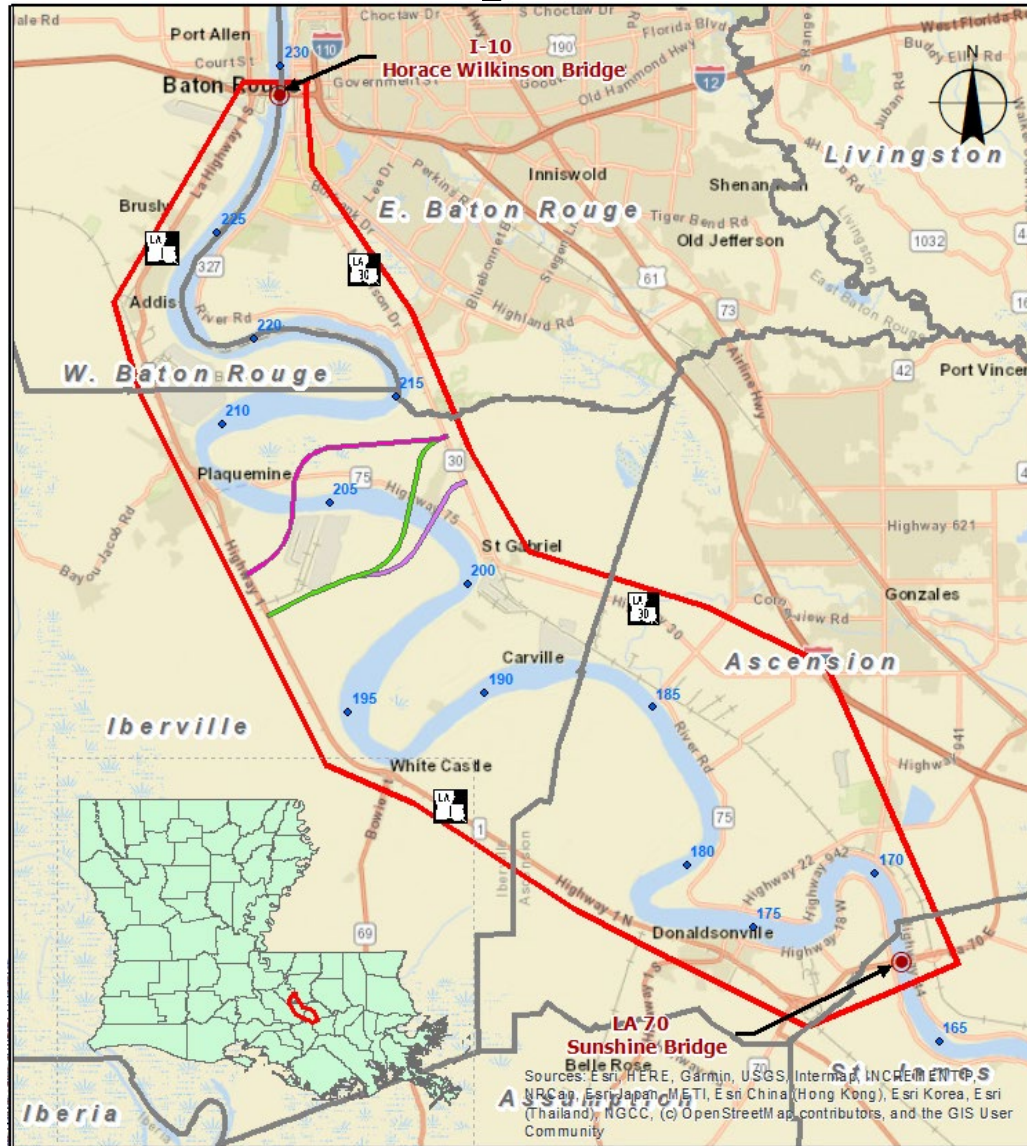
➤ Subconsultants:

- 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
- Providence
Environmental Inventory
- Ardaman
Geotech
- GOTECH
Topographic Survey
- Quality Eng.
& Surveying
SUE Survey

Project Overview

- Ultimate objective 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

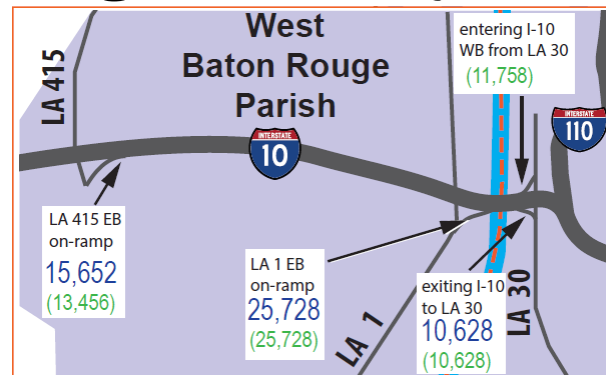


Benefits of a new River Crossing

- Meets our Purpose and Need:
 - 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

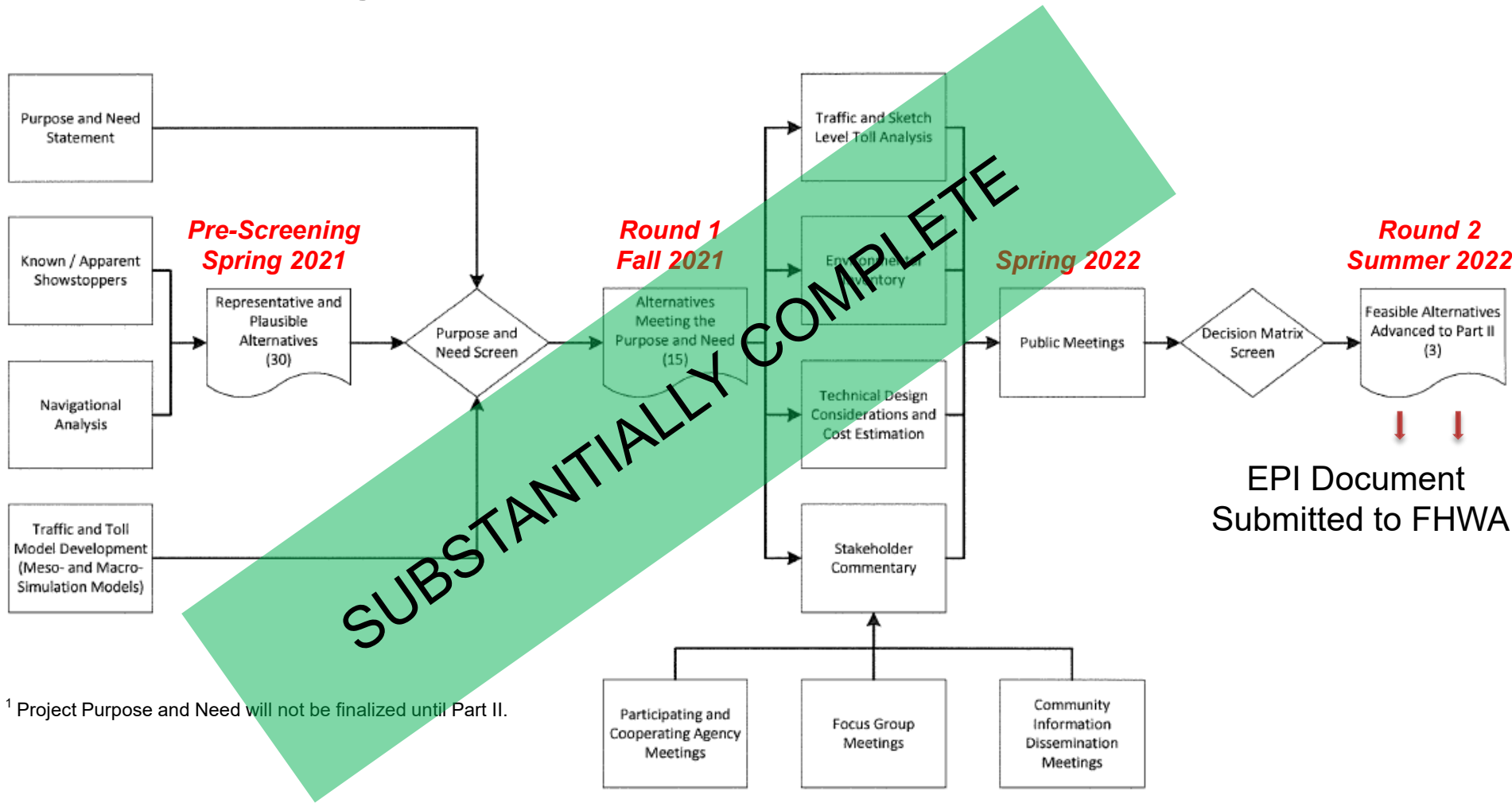
Benefits of a new River Crossing

- 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%



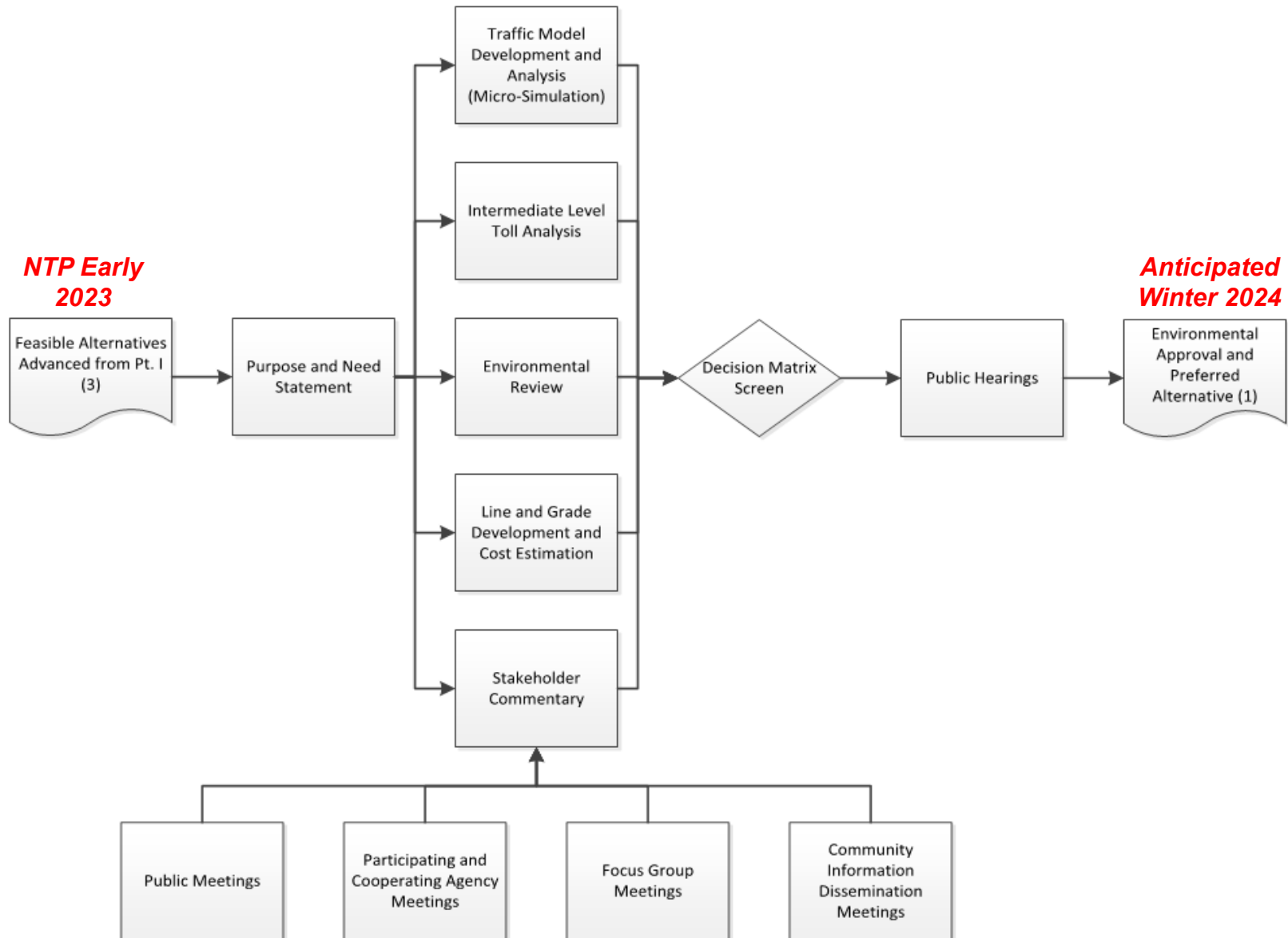
- Expected to save over 1 Million hours of travel time annually

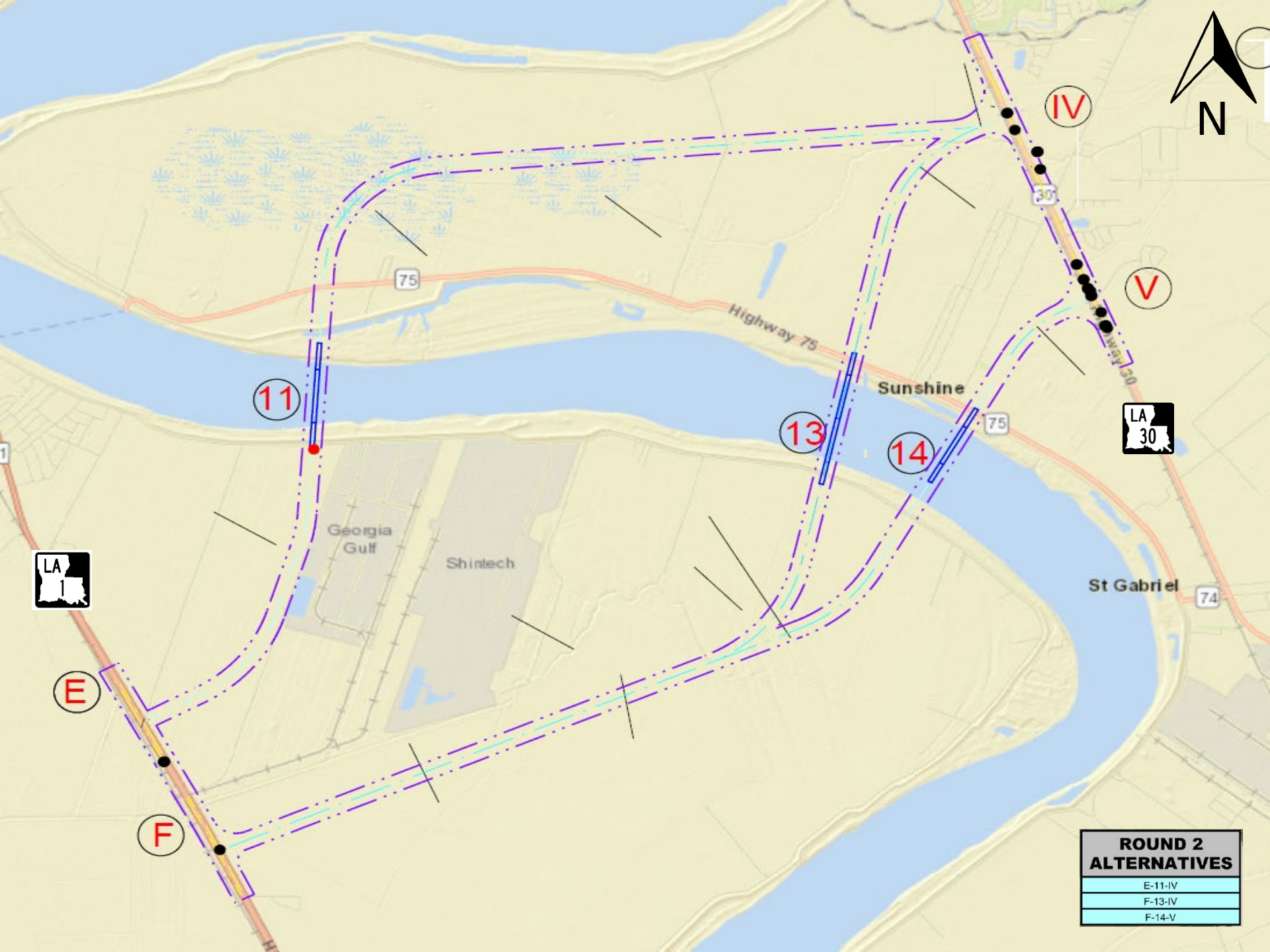
Project Workflow (Part I)



¹ Project Purpose and Need will not be finalized until Part II.

Project Workflow (Part II)





ROUND 2 ALTERNATIVES	
E-11-IV	
F-13-IV	
F-14-V	



75

Highway 75

Sunshine

75

St Gabriel

74

Georgia Gulf

Shintech

11

13

14

IV

V

E

F

Scope for Part II (Environmental)

➤ Pre-NEPA Tasks:

- Surveys
 - LiDAR ✓
 - Topographic & SUE *
 - Bathymetric *
 - Geotech *
- Line & Grade *
- Traffic Refinement
 - Data Collection ✓
- Intermediate Toll Study *
- Conceptual Bridge Design *
- Cost Estimates
- H&H *

➤ Public & Agency Outreach (ongoing)

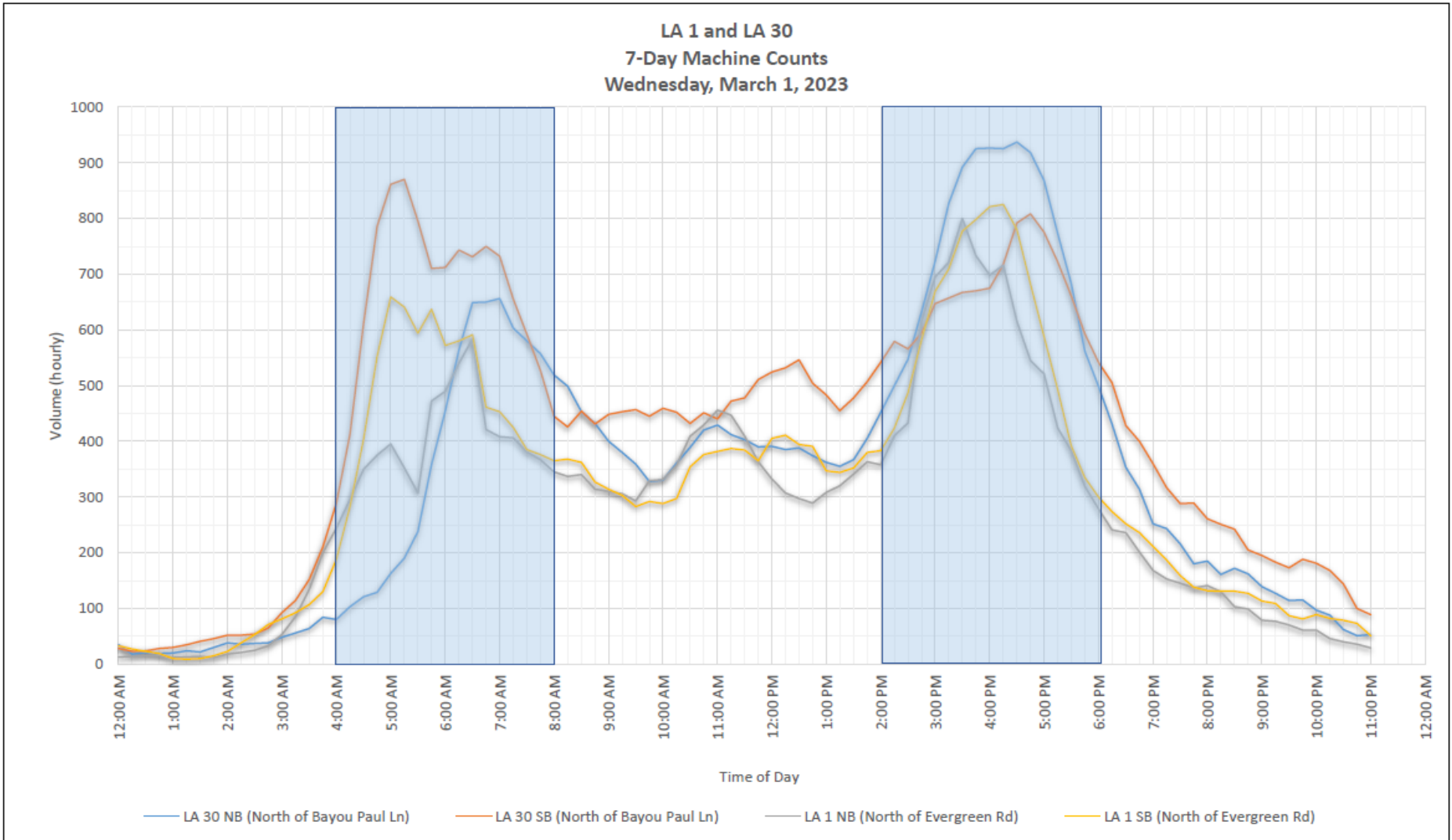
✓ = Complete
* = In Progress

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

Traffic - Data Collection



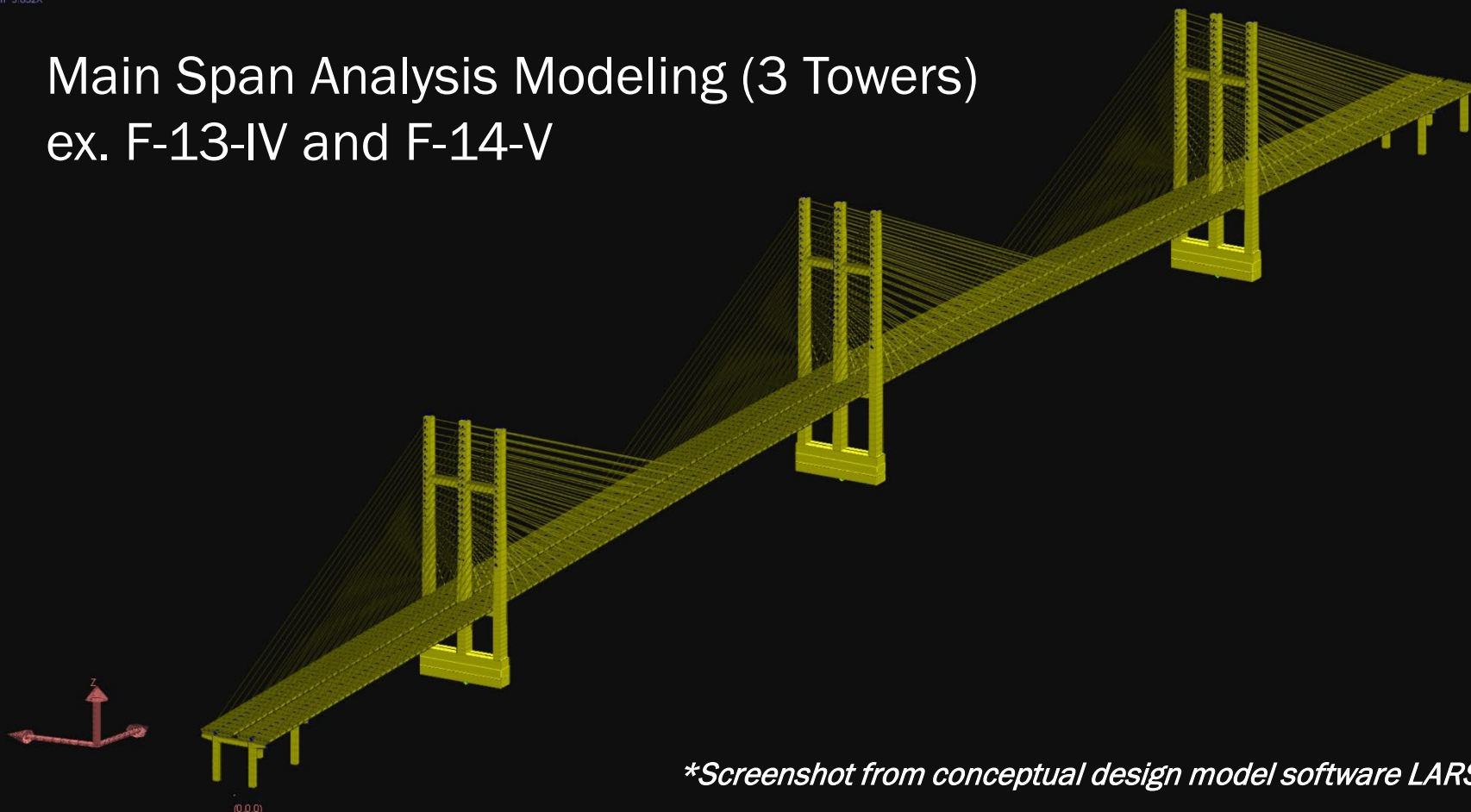
Traffic - Data Collection



**Peak Periods as identified in
Traffic Report - Appendix A*

Conceptual Bridge Design

Main Span Analysis Modeling (3 Towers)
ex. F-13-IV and F-14-V

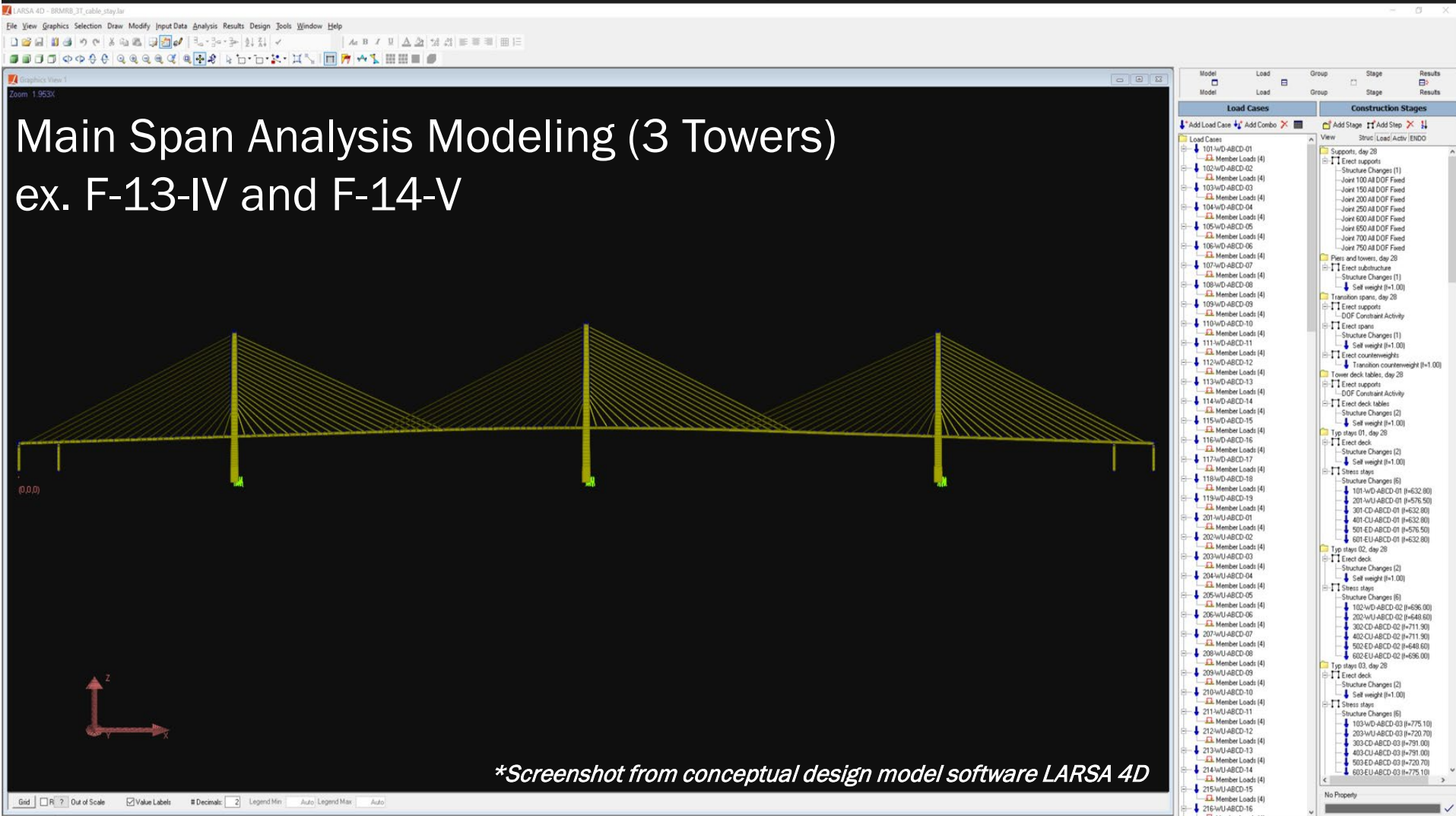


**Screenshot from conceptual design model software LARSA 4D*

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)



Thank You!