

H.013284

MRB South GBR:

LA 1 to LA 30 Connector

June 28, 2021

Project Progress Update to CARB-D



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



www.dotd.la.gov

Project Team

➤ Prime Consultant:

- Atlas Technical Consultants, LLC

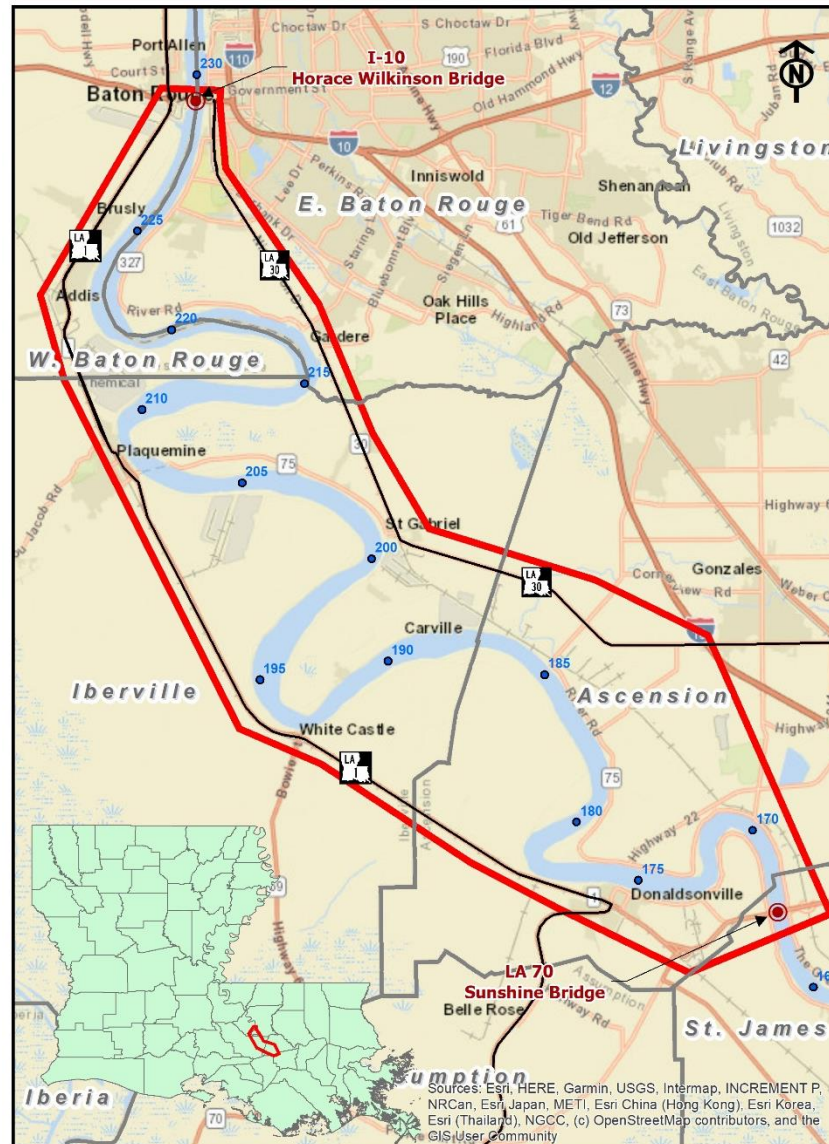
➤ Subconsultants:

- CDM Smith, Inc.
Travel Demand Model & Toll Analysis
- Neel-Schaffer, Inc.
Mesoscopic Model & Traffic Analysis
- INRO Consultants, Inc.
Mesoscopic Model Support
- Franklin Associates, LLC
Public Involvement
- FIGG Bridge Engineering, Inc.
Bridge Technical Concepts
- Shread-Kuyrkendall & Assoc., Inc.
Roadway Technical Concepts
- GIS Engineering, LLC
Navigational Considerations
- Providence Engineering & Environmental Group LLC
Environmental Inventory

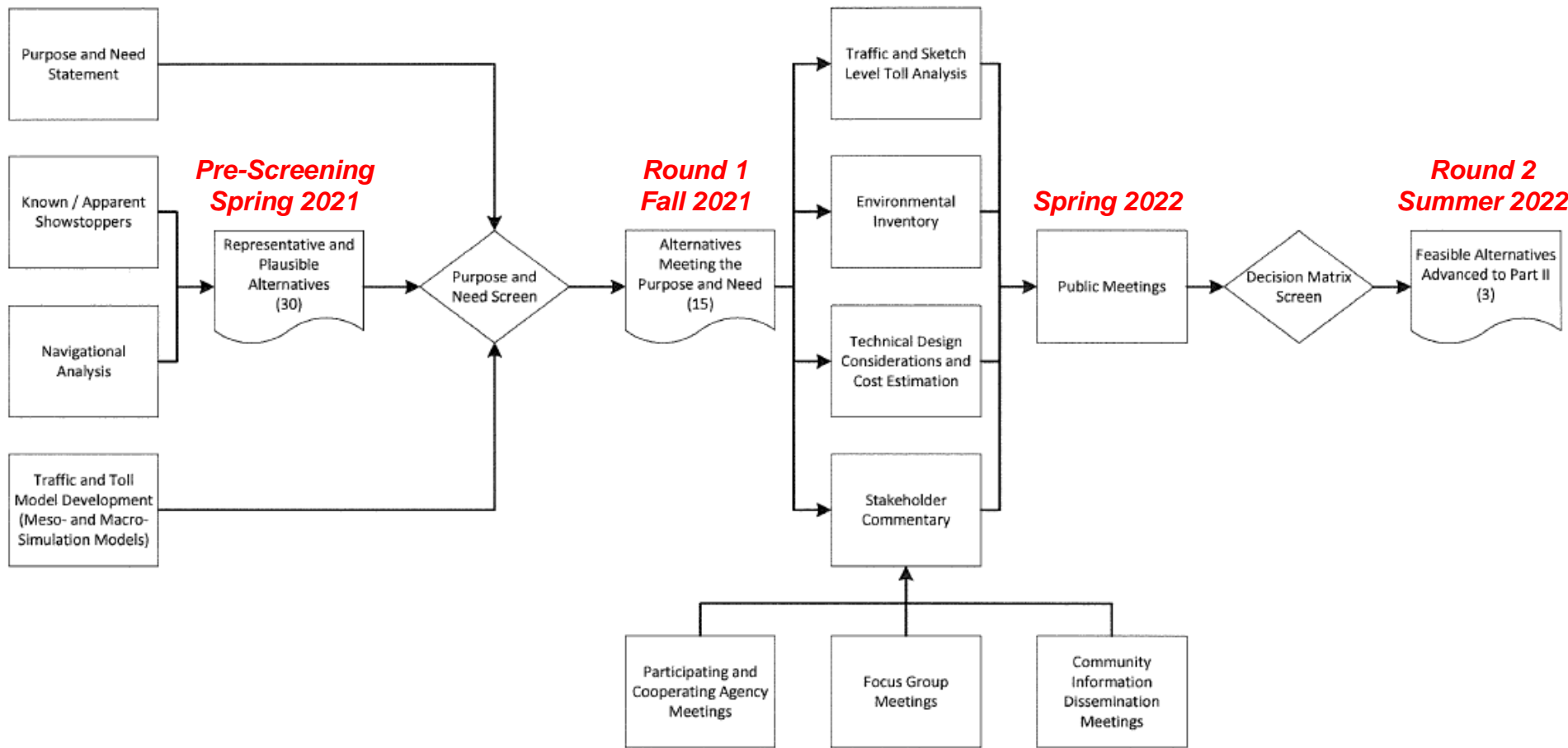
Project Overview

- 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 (Summer/Fall 2022 – Summer 2024)

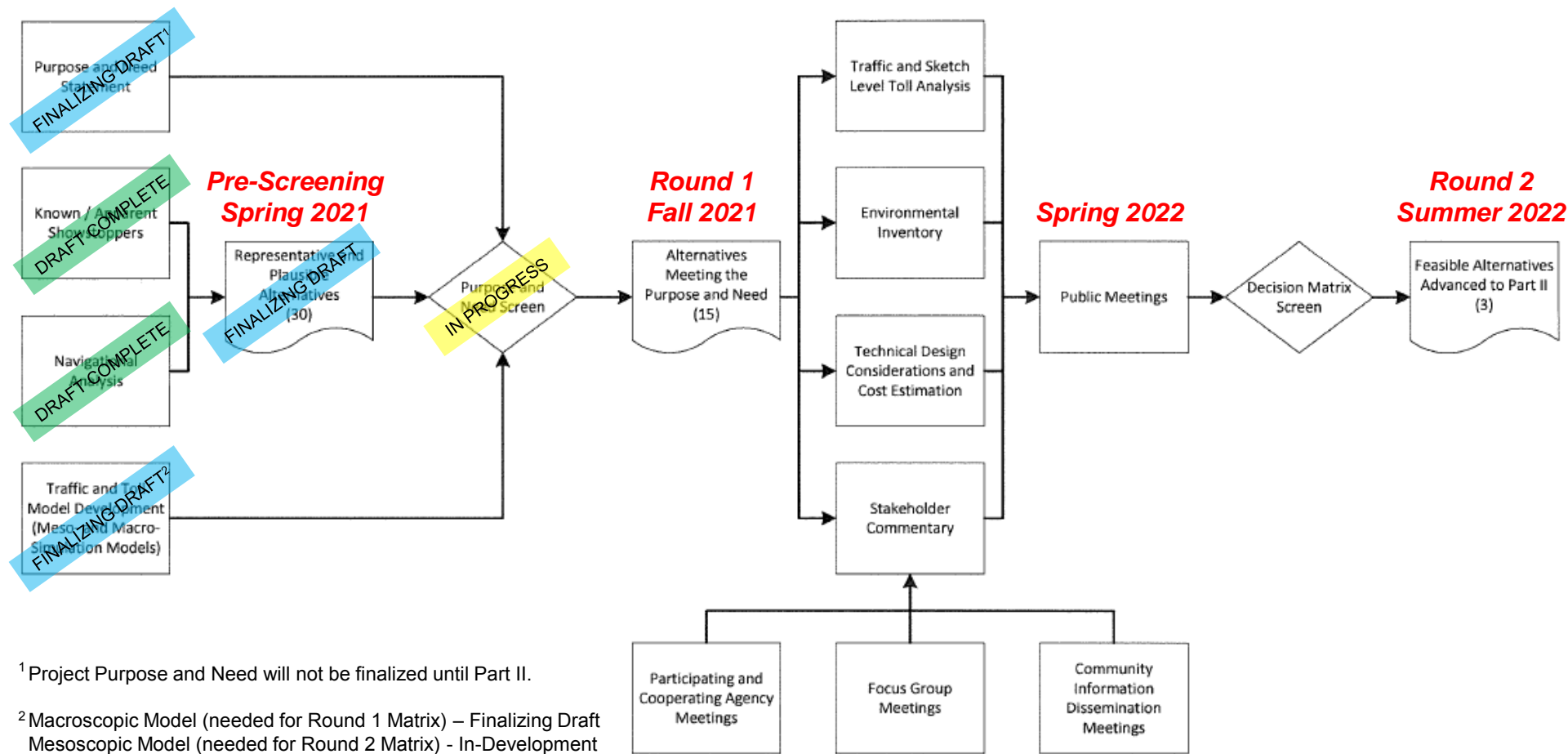
Study Area



Project Workflow (Part I)



Project Workflow (Part I)



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

² Macroscopic Model (needed for Round 1 Matrix) – Finalizing Draft
 Mesoscopic Model (needed for Round 2 Matrix) - In-Development

Completed Reports

- Navigation Study Engineering Report
- Travel Demand Model
 - Base Year Model Validation Technical Memo
 - Future Year No Build Model Technical Memo (within the next week)
- Reports Available on Project Website
<https://www.mrbssouth.com>

Screening Methodology

- Pre-Screening
 - Plausible and Reasonable Alternatives
- Round 1 Screening
 - Avoid Highly Sensitive Resources
 - Incorporate Travel Demand Information
 - Incorporate Technical Bridge Considerations

PUBLIC MEETINGS

- Round 2 Screening
 - Identify Most Feasible Alternatives

Round 1 Screening

- Avoid Highly Sensitive Resources
 - Known Section 4(f) Properties
 - Protected Species Critical Habitat
- Incorporate Travel Demand Information
 - MRB Travel Demand (ADT and VHT)
 - I-10 Congestion Relief (VHT)
 - LA 1 Congestion Relief (VHT)
- Bridge Constraints

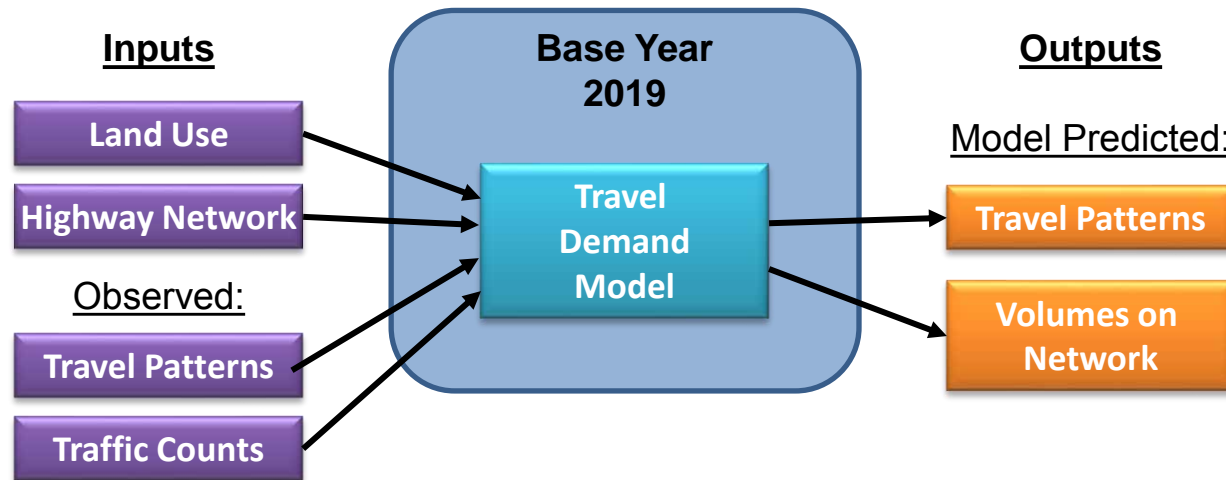
ADT – Average Daily Traffic | VHT – Vehicle Hours Traveled

Round 1 Screening

MACROSCOPIC (TRAVEL DEMAND) MODEL

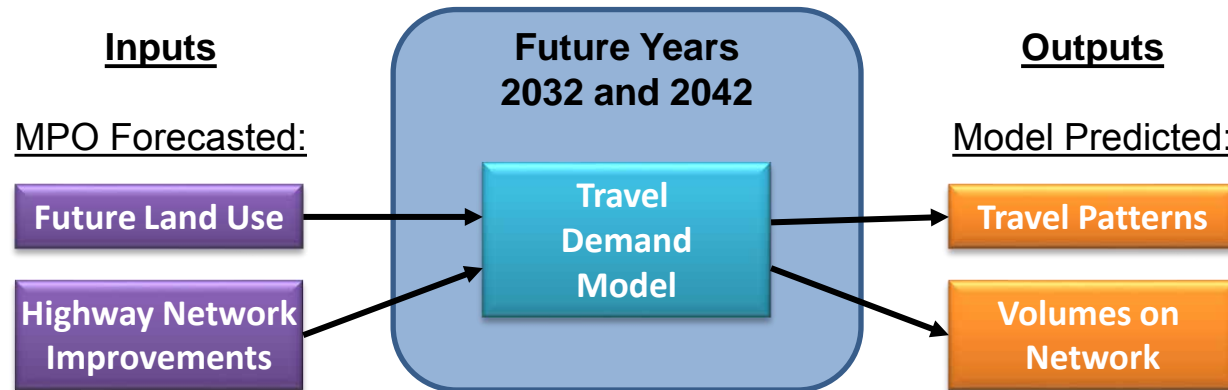
| ALTERNATIVE | KNOWN SECTION 4(F) PROPERTIES | PROTECTED SPECIES CRITICAL HABITAT | MRB TRAVEL DEMAND | | I-10 CONGESTION RELIEF | LA 1 CONGESTION RELIEF | BRIDGE CONSTRAINTS |
|-------------|-------------------------------|------------------------------------|-------------------|-----|------------------------|------------------------|--------------------|
| | | | ADT | VHT | VHT | VHT | |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
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Model Development and Validation



- Model developed from the CRPC Regional Travel Demand Model.
- Model validation involves adjusting model parameters so that model predicted values match observations.

Model Application to Forecasts



- Use the validated model to predict future travel patterns.
- Future Years 2032 and 2042 include:
 - Forecasts of future land use from CRPC
 - Future Year Networks from CRPC including planned highway improvements
- Develop forecasts of traffic under:
 - No Build Conditions
 - Build Conditions for each potential alignment
 - Build Toll Conditions for each potential alignment (Round 2 Screening)

Travel Demand Model Screening

- **Forecast Traffic Volumes on the New Bridge**
 - Measured by Average Daily Traffic (ADT) Volume in 2042
- **Forecast Congestion Relief System Wide**
 - Measured by the change in vehicle-hours traveled (VHT) per day on all relevant major routes in 2042
- **Forecast Congestion Relief along I-10**
 - Measured by the change in vehicle-hours traveled (VHT) per day on I-10 in 2042
- **Forecast Congestion Relief along LA 1**
 - Measured by the change in vehicle-hours traveled (VHT) per day on LA 1 in 2042

Notes:

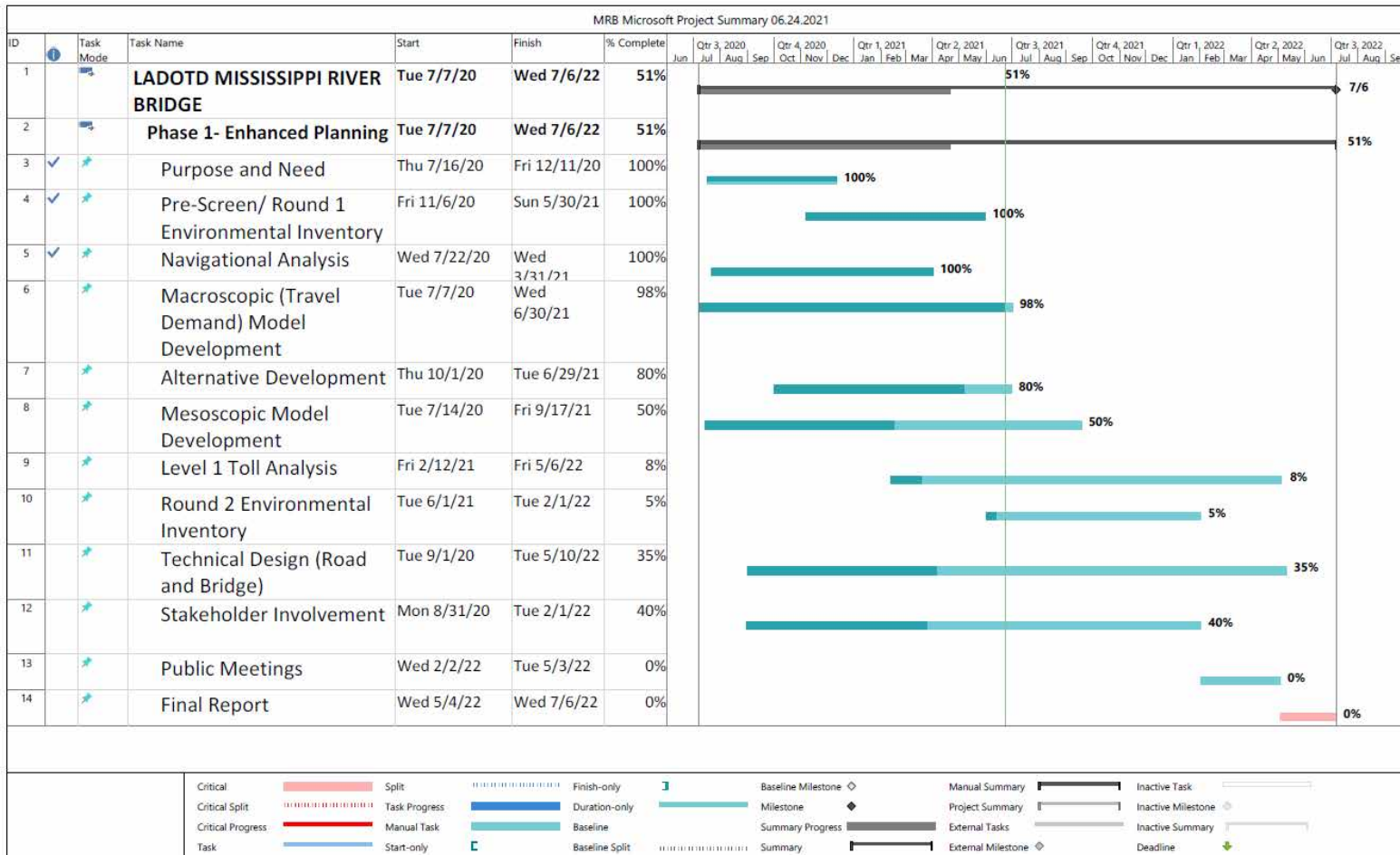
*VHT is a measure of network congestion that is the sum product of forecast traffic volume and travel time on all relevant links.

*VHT change is the difference between Build and No Build conditions.

Public Involvement

- Agency and Stakeholder Meetings
 - Iberville Parish and West Baton Rouge Parish
 - CRISIS Presentation
 - East Iberville Community Advisory Panel
 - On-Going as Needed
- Public Meetings
 - Spring 2022
- Project Informational Website
 - <https://www.mrbsouth.com>

Overall Progress (Part I)



Looking Ahead...

For 3rd Quarter CARB-D Meeting, expect to see:

- Refined Purpose and Need
- Remaining Prescreen and Round 1 Reports
 - Screening Technical Memo
 - Future Year Build Model Technical Memo
- Maps depicting all Round 1 Alignments to be carried into the Round 2 Screening

Thank You!