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

December 2020 Project Progress Update to CARB-D



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



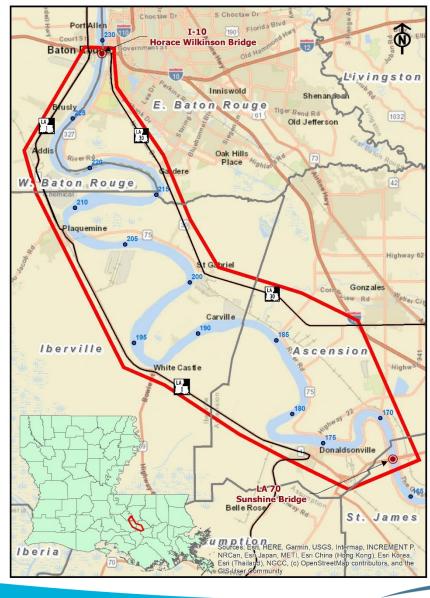
Project Overview

- Ultimate <u>objective</u> is to construct a new crossing of the Mississippi River
- Draft Purpose and Need:
 - To provide increased capacity and improved connectivity across the Mississippi River and to provide an alternate route for emergency evacuations or in response to incident-related closures
- Part I: Enhanced Planning Study (July 2020 – Summer 2022)
 Part II: Environmental Evaluation (Summer/Fall 2022 – Summer 2024)





Study Area





Deliverables (Part I)

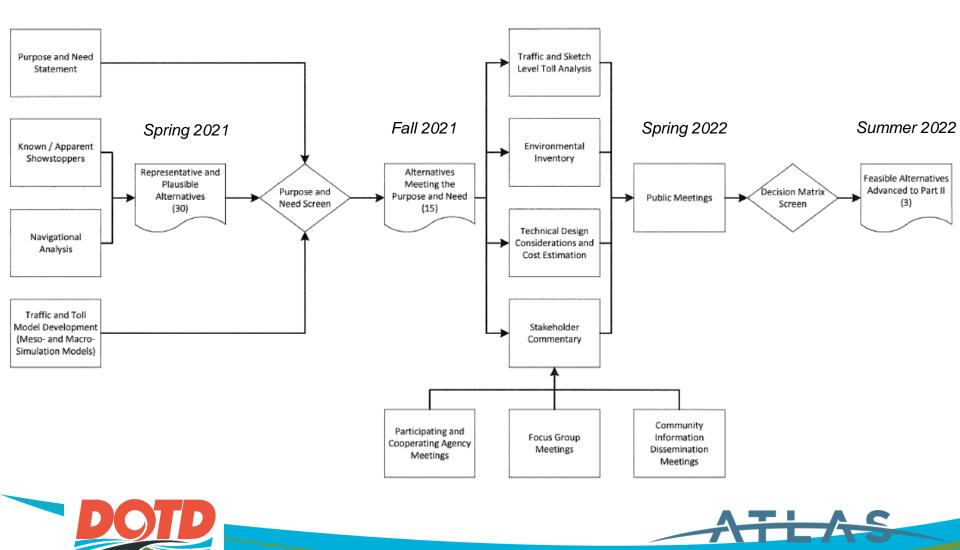
Macroscopic Traffic
 Model (Travel Demand)
 Environmental Inventory
 Mesoscopic Traffic Model > Preliminary Range of
 Traffic Analysis
 Level 1 "Sketch" Toll
 Part I Technical Report

Most Feasible Alternatives to Advance to Part II





Workflow and Timeline (Part I)

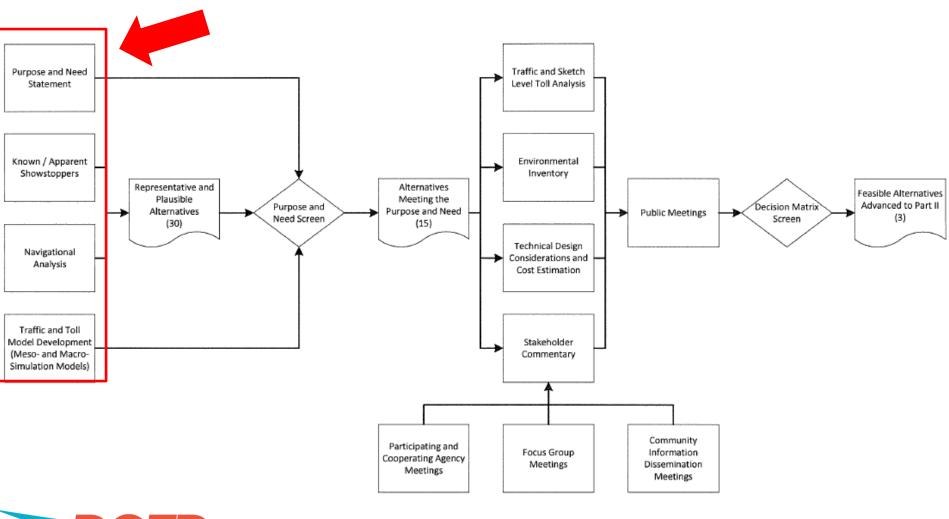


IOUISIANA DEPARTMENT OF

TRANSPORTATION & DEVELOPMENT

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Current Status (Part I)





Work In Progress

Development

[]	> Environmental
Purpose and Need Statement	 Purpose and Need
	 Project Work Plan
Known / Apparent Showstoppers	– Stakeholder Letters 🔰
	 Avoidance Mapping
Navigational Analysis Traffic and Toll Model Development (Meso- and Macro- Simulation Models)	Public Involvement
	– Public Engagement Plar
	 Website Development
	Navigational Analysis
	 Methodology Development
	– Avoidance Mapping

Technical Considerations

- Bridge Design Criteria
- Roadway Design Criteria
- Traffic and Toll Modeling
 - Data Collection Report
 - **Base Model Validation**
 - Macroscopic Model (Travel Demand)
 - Mesoscopic Model (Traffic Impacts)





Navigational Analysis

> Avoidance Considerations (i.e. "No Pier Locations)

- Deep Draft Vessels
- Shallow Draft Vessels
- Anchorages
- Mooring Structures and
- Mooring Areas
- Fleeting Areas
- Channel Crossing Locations

- Permitted Facilities (i.e. Docks)
- Offsets & Proximity to Existing Facilities
- Canal Entrances
- Terminal Access Channels
- Submarine Cables
- Submerged Pipelines
- Regulatory Agency and Stakeholder Coordination





Traffic Model Development

Macroscopic Model (Travel Demand Model)

- Based on CRPC Regional Travel Demand Model
- MRB Project Model updated to include project-specific conditions at 2019 levels
- Produces forecasts of future year traffic (2032 and 2042)
- Traffic forecasts used in the initial assessment of alternatives
- Traffic forecasts used as inputs to Mesoscopic Model and to Traffic and Revenue Model





Traffic Model Development

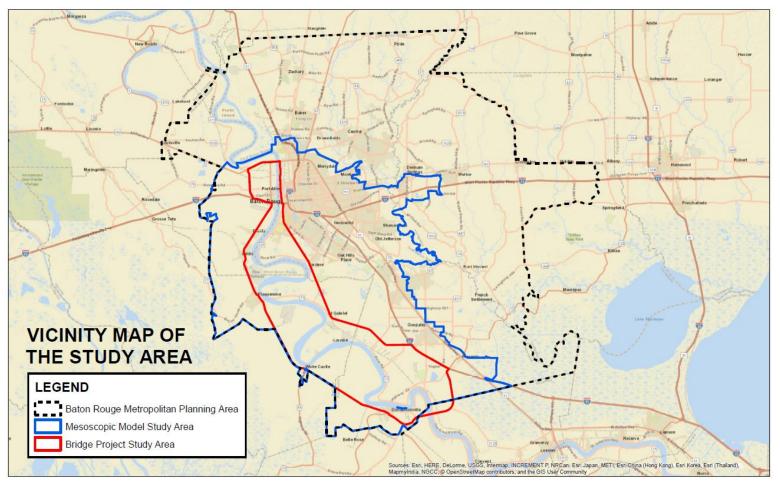
Mesoscopic Model ("Traffic" Model)

- Traffic forecast inputs from the Travel Demand Model
- Detailed representation of study area network and traffic controls (Signals, Stop and Yield Signs, Turn Lanes etc.), including I-10, I-12, I-110, LA 1, LA 30 and connecting roadways
- Provides summary performance measures about traffic operations in terms of route choice based on congestion, travel time, speed and delay for no-build and build alternatives.





Mesoscopic Model Study Area







Traffic Model Development

- Traffic and Revenue Model (Toll Model)
 - Traffic forecast inputs from the Travel Demand Model
 - Provides transaction and toll revenue streams (30-year period) for short-listed alignments





Status of Traffic Model Development

Macroscopic Model (Travel Demand Model)

- Base Year Model Validation
- Base Year Model Validation Report DRAFT Complete, Under Review
- Future Year No-Build Model
- Future Year No-Build Model Report DRAFT Expected by mid-Dec Scheduled March 2021
- Future Year Build Model
- Build Model Documentation

Mesoscopic Model ("Traffic" Model)

- Base Year Model
- Future Year No-Build Model
- Future Year Build Models

Under Development Scheduled Jan 2021 Scheduled July 2021

Scheduled March 2021

DRAFT Complete

Traffic and Revenue Model (Toll Model)

- Model Development
- Level 1 Toll Study

Scheduled May 2021 Scheduled May/August 2021

DRAFT Complete, Under Review





Public Involvement

Project Informational Website

Coming Soon

- >Agency & Stakeholder Meetings
 - On-Going as Needed
- Public Meetings

- Spring 2022





Future Steps Screening Methodology (Part I)

>Round 1 Screening (30 Maximum)

- Plausible Alternatives
- >Round 2 Screening (15 Estimated)
 - Alternatives Meeting Project Purpose and Need
 - Incorporates Travel Demand Information

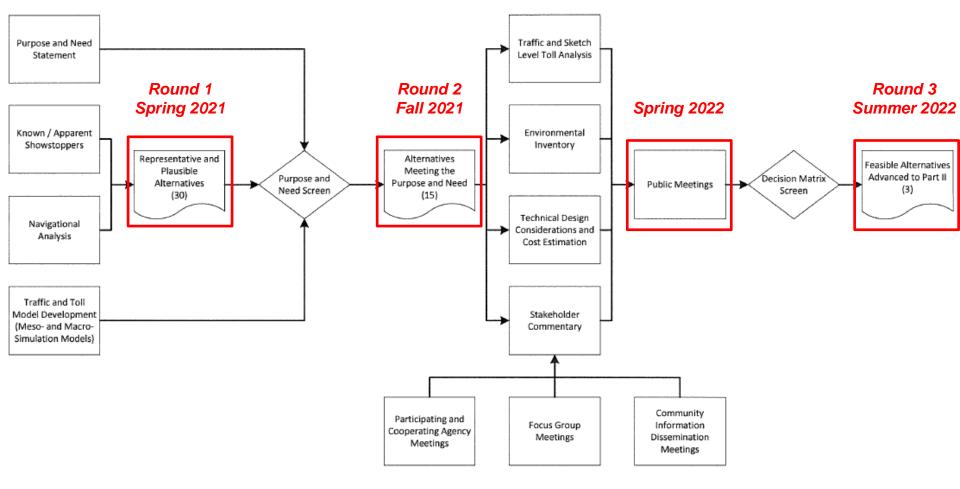
PUBLIC MEETINGS

Round 3 Screening (3 Estimated) Most Feasible Alternatives





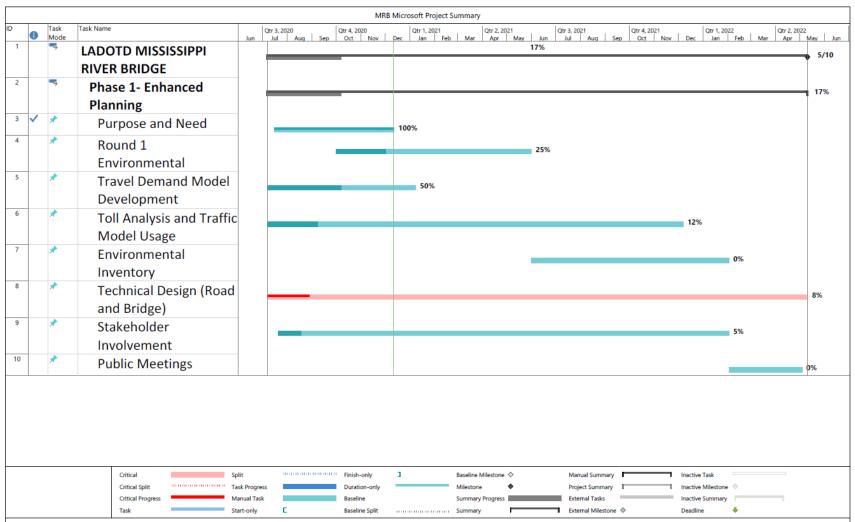
Project Workflow







Overall Progress (Part I)







Thank You!



