

H.013284

MRB South GBR:

LA 1 to LA 30 Connector

March 28, 2022

Project Progress Update to CARB-D



Project Team

➤ Prime Consultant:

- Atlas Technical Consultants, LLC

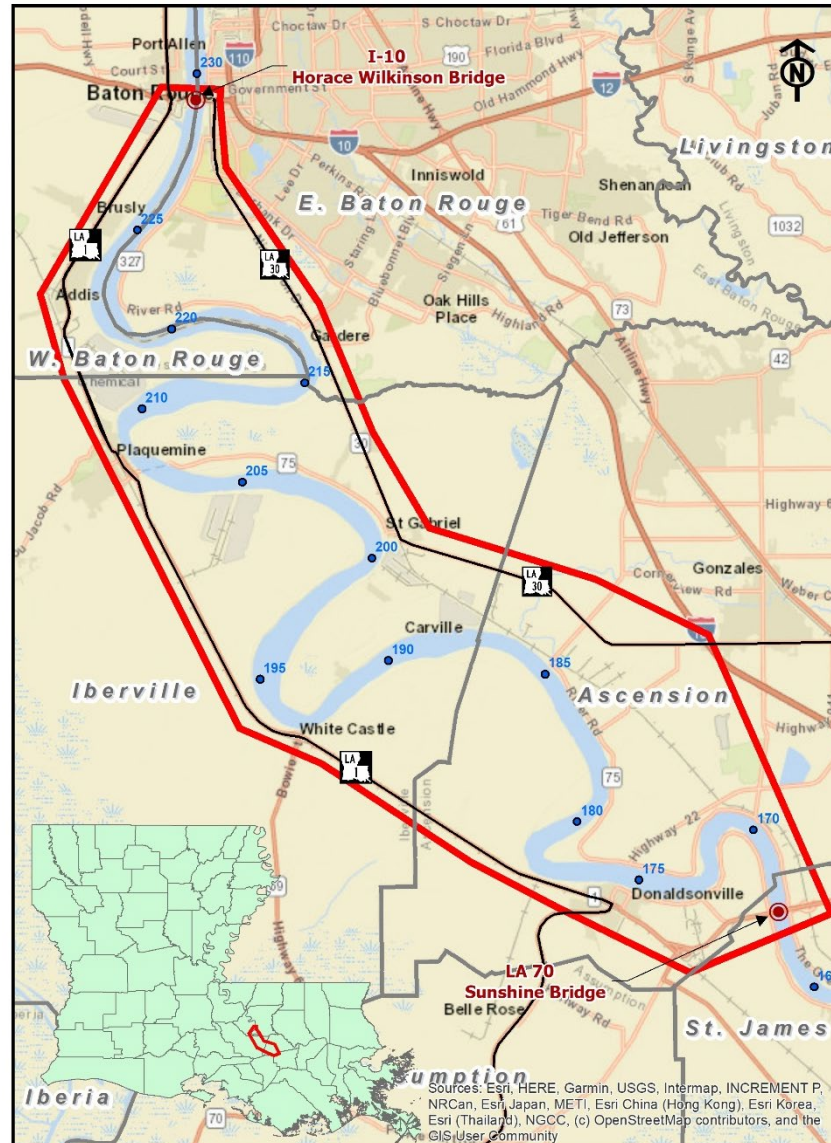
➤ Subconsultants:

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

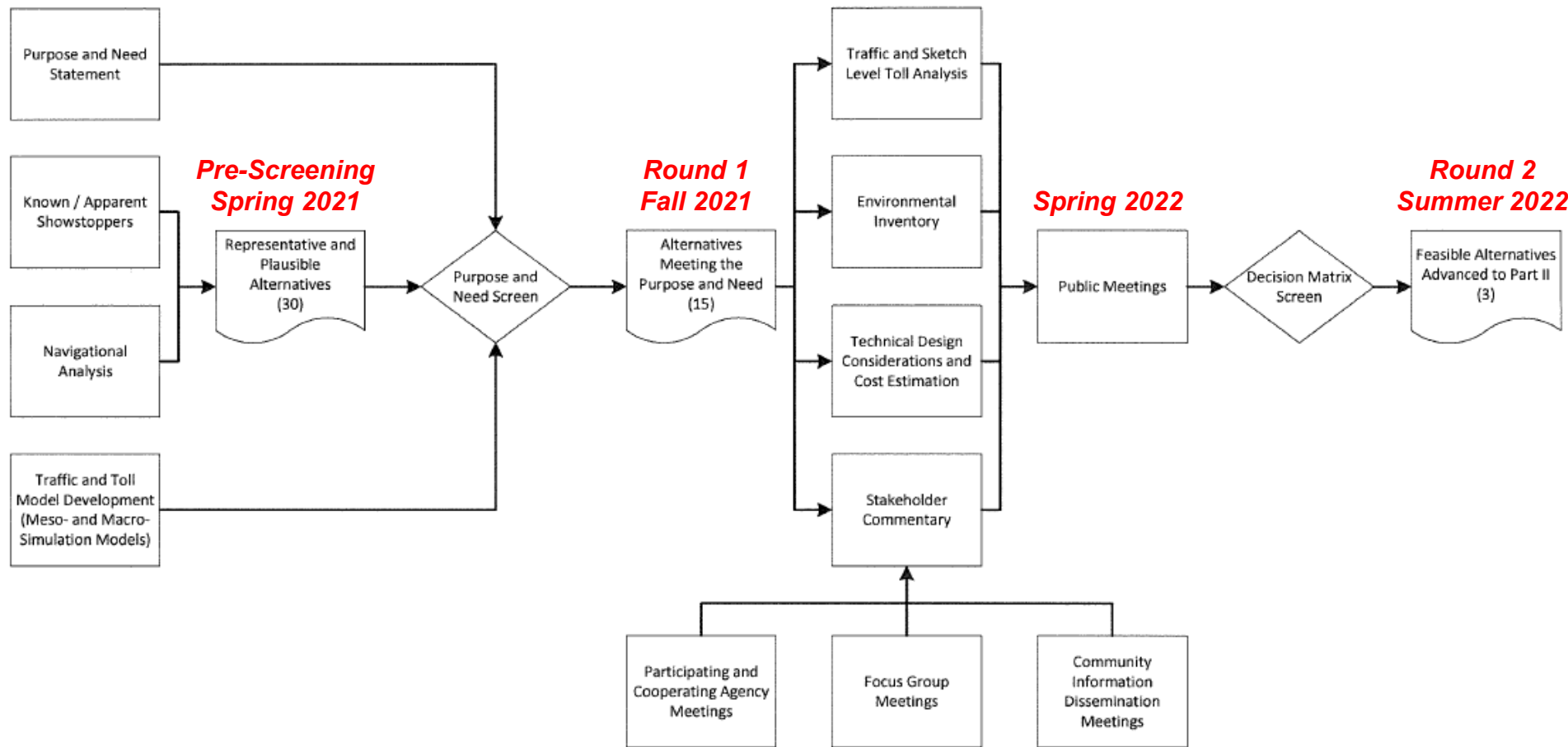
Project Overview

- 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)

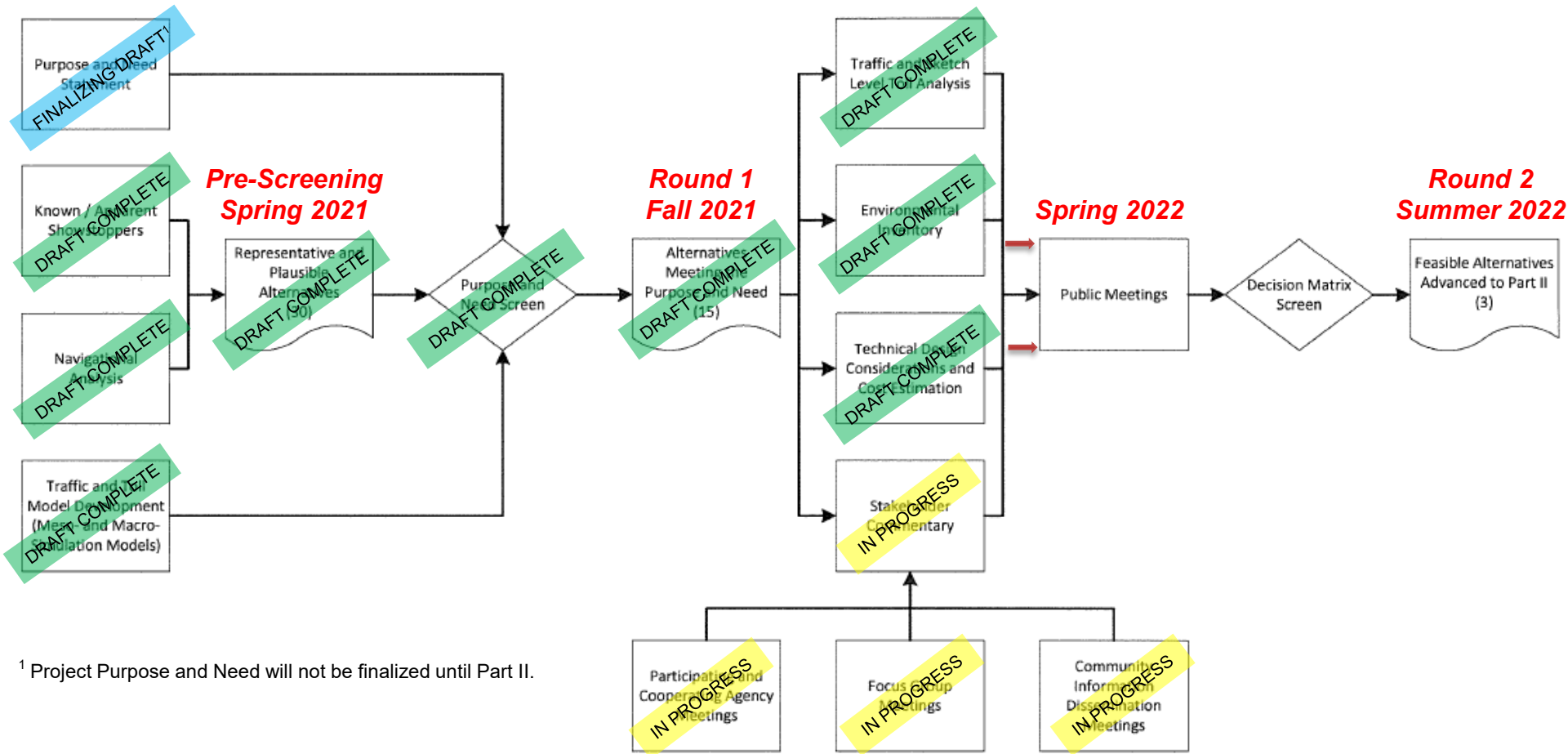
Study Area



Project Workflow (Part I)



Project Workflow (Part I)



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

Screening Methodology

- Pre-Screening (Complete)
 - Plausible and Reasonable Alternatives
 - 32 Alternatives Identified

- Round 1 Screening (Complete)
 - Avoid Highly Sensitive Resources
 - Incorporate Travel Demand Information
 - Incorporate Technical Bridge Considerations
 - 20 Alternatives Retained

Screening Methodology

- Stakeholder Commentary
 - USACE, River Pilots/Navigation Users, Levee Districts
 - **10 Alternatives Eliminated / 10 Retained**
- Public Meetings – Spring 2022
 - End of April / Early May
- Round 2 Screening
 - Identify Most Feasible Alternatives

Eliminated / Retained Alternatives

MRB SOUTH GBR: LA 1 TO LA 30 CONNECTOR (SPN H.013284)

ROUND 2 PRELIMINARY ALTERNATIVES SCREENING BRIDGE CONSIDERATIONS












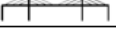

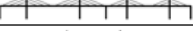
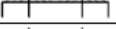
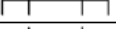

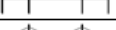

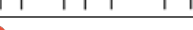
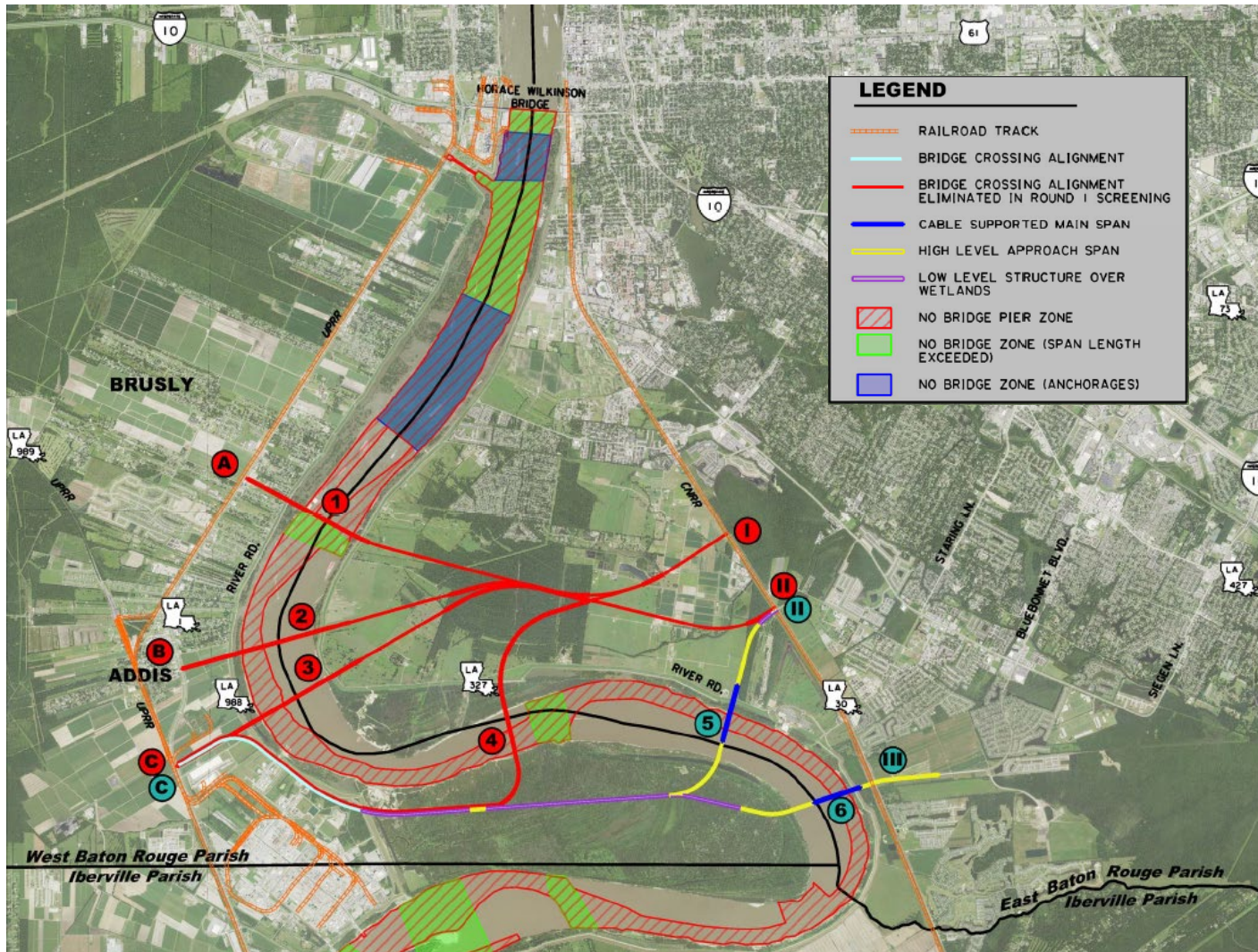
ALTERNATIVE	APPROX. MAIN SPAN LENGTH ⁰ [in feet (ft)]	BRIDGE CONCEPT VIEW	IMPACTS TO NAVIGATION ¹	IMPACTS TO LEVEES ²
A-1-I	2,100 ft		High	None
A-1-II	2,100 ft		High	None
B-2-I	1,700 ft		High	None
B-2-II	1,700 ft		High	None
C-3-I	2,000 ft (x2)		High	None
C-3-II	2,000 ft (x2)		High	None
C-4-I	2,100 ft		High	None
C-5-II	2,100 ft		Low	None
C-6-III	2,000 ft		Low	None
E-11-IV	1,900 ft		Low	None
F-12-IV	2,000 ft		Low	None
F-13-IV	1,600 ft		Low	None
F-14-V	1,600 ft (x2)		Low	None
H-19-VII	2,100 ft, 1,000 ft		Low	None
I-20-VII	1,300 ft		High	None
J-21-VII	1,500 ft		High	None
K-22-VII	1,900 ft		Low	None
K-23-VII	2,100 ft		Low	None
M-25-IX	2,100 ft		Low	None
N-28-X	1,150 ft, 1,400 ft		High	None

TABLE NOTES:

⁰Main span lengths are the middle length for a typical three span unit. Four span units are indicated with (x2) and list the two interior span lengths. Two separate three-span units with a shared transition pier will have the middle span length listed for each unit.

¹Impacts to Navigation are Low, Moderate, or High and consider that some pier layouts may be located such that it is difficult to navigate (bends, central channel crossings). A value of High means that the pier locations present an impediment or risk to navigation that cannot be feasibly or reasonably overcome. No bridge layouts/locations were determined to have moderate impacts to navigation.

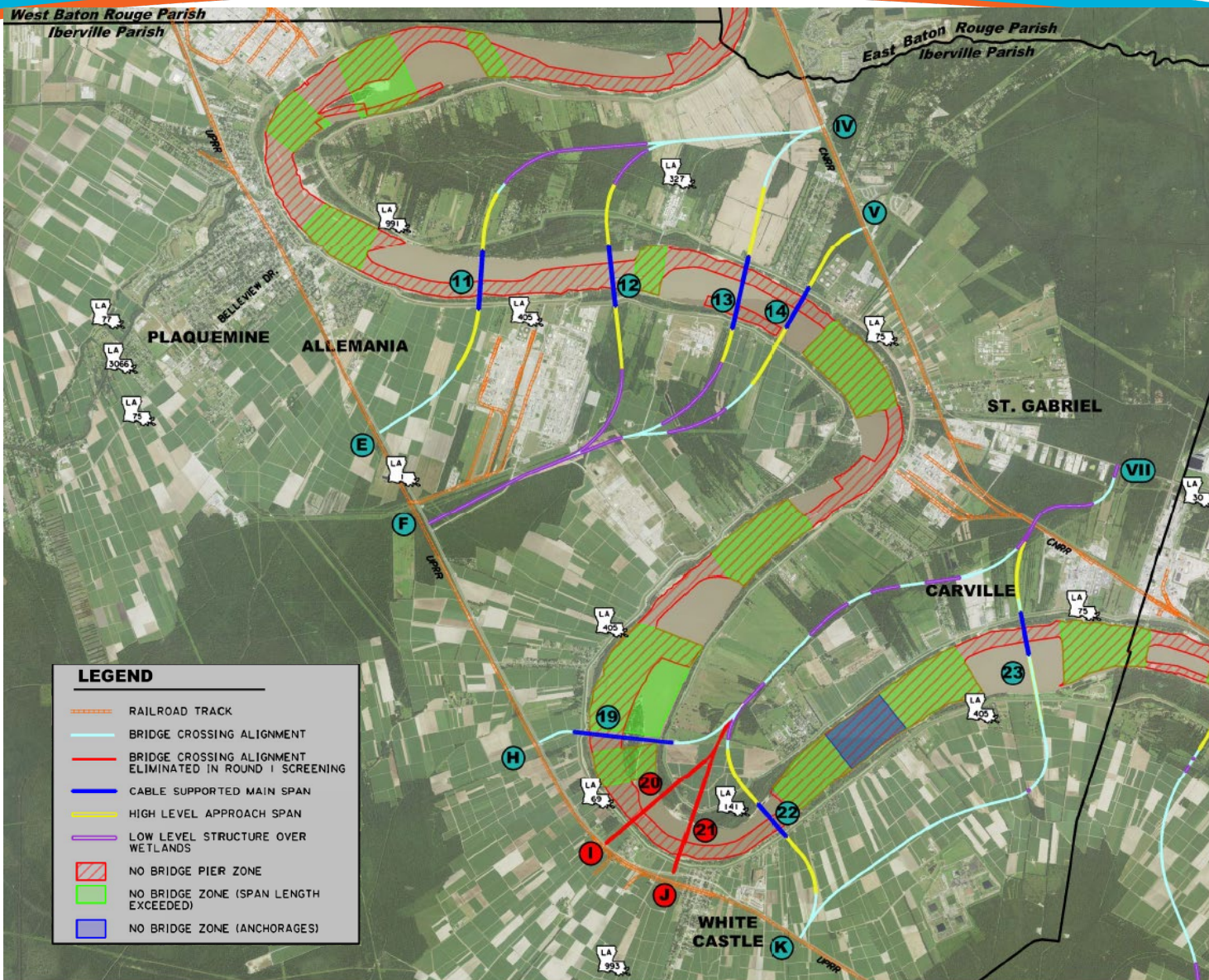
²Impacts to Levees are None, Minor, Major and consider that some pier layouts may be at the toe of levees or within the levee. No bridges were determined to have adverse impacts to levees. Construction will adhere to guidelines established by the USACE and local levee districts to ensure that levees are not adversely affected during construction (such as restrictions on pile driving at specified river stages).



ALTERNATIVE	
	A-1-I
	A-1-II
	B-2-I
	B-2-II
	C-3-I
	C-3-II
	C-4-I
	C-5-II
	C-6-II

West Baton Rouge Parish
Iberville Parish

East Baton Rouge Parish
Iberville Parish



LEGEND

- RAILROAD TRACK
- BRIDGE CROSSING ALIGNMENT
- BRIDGE CROSSING ALIGNMENT ELIMINATED IN ROUND 1 SCREENING
- CABLE SUPPORTED MAIN SPAN
- HIGH LEVEL APPROACH SPAN
- LOW LEVEL STRUCTURE OVER WETLANDS
- NO BRIDGE PIER ZONE
- NO BRIDGE ZONE (SPAN LENGTH EXCEEDED)
- NO BRIDGE ZONE (ANCHORAGES)

ALTERNATIVE

E-11-IV

F-12-IV

F-13-IV

F-14-V

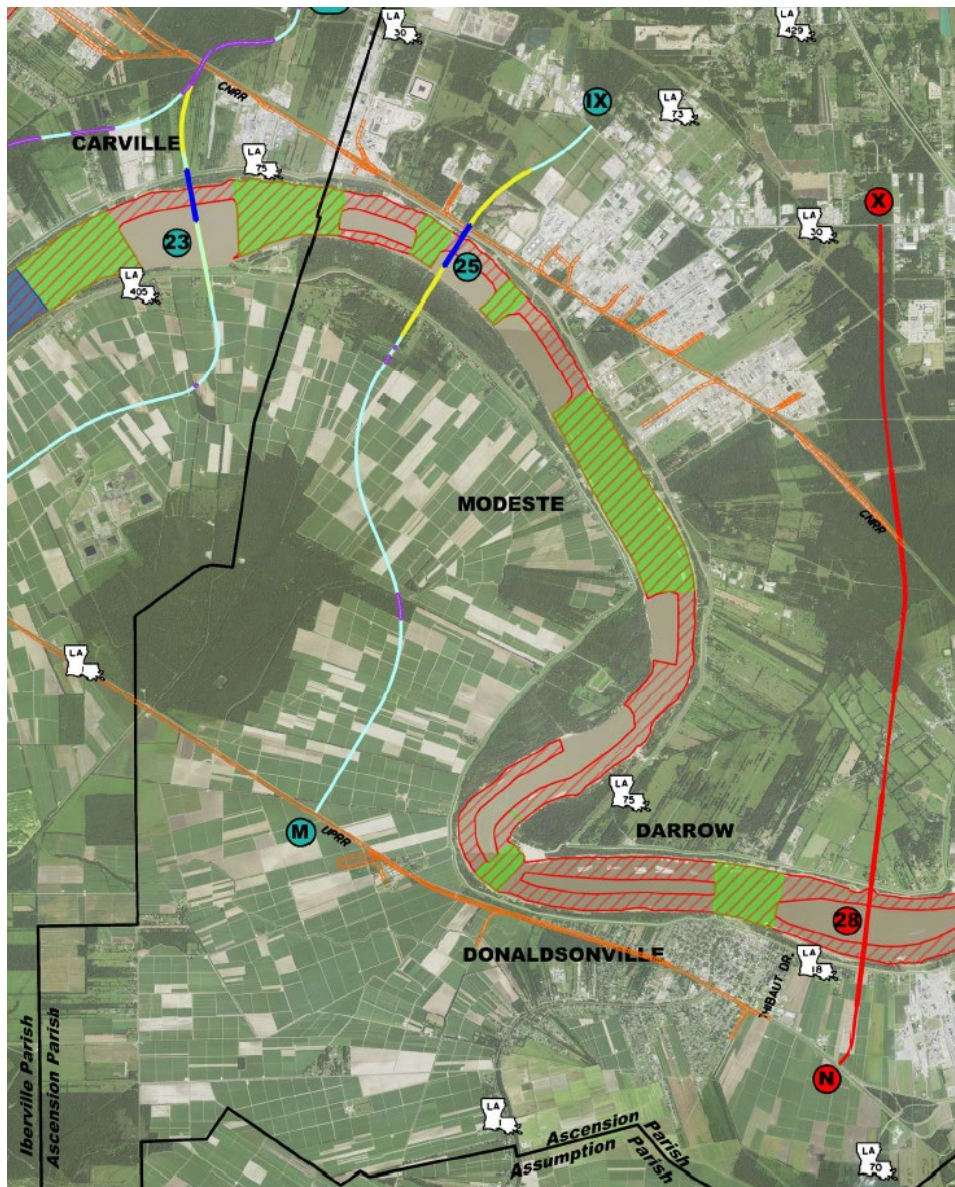
H-19-VII

I-20-VII

J-21-VII

K-22-VII

K-23-VII



ALTERNATIVE

M-25-IX

N-28-X

LEGEND

- RAILROAD TRACK
- BRIDGE CROSSING ALIGNMENT
- BRIDGE CROSSING ALIGNMENT ELIMINATED IN ROUND 1 SCREENING
- CABLE SUPPORTED MAIN SPAN
- HIGH LEVEL APPROACH SPAN
- LOW LEVEL STRUCTURE OVER WETLANDS
- NO BRIDGE PIER ZONE
- NO BRIDGE ZONE (SPAN LENGTH EXCEEDED)
- NO BRIDGE ZONE (ANCHORAGES)

Round 2 Screening – Evaluation Factors

- Travel Demand and Traffic Impacts
 - Average Daily Traffic / Vehicle Hours Traveled
- Property Impacts
 - Right-of-Way / Utility / LDEQ Permitted Facilities
- Bridge Impacts
 - Constructability / Navigability / Levees
- Cost Considerations
 - Estimated Construction Costs
 - Estimated Toll Revenue
- Environmental Impacts
 - Protected Species / Fish Habitat / Wetlands /
Environmental Justice Communities

ROUND 2 PRELIMINARY ALTERNATIVES DRAFT SCREENING

ALTERNATIVES	APPROX. LENGTH IN MILES	NUMBER OF VEHICLES PER DAY ON TOLLED BRIDGE IN 2042 (ADT)	CHANGE IN AREA-WIDE TOTAL VEHICLE HOURS IN 2042 (VHT)		CHANGE IN I-10 TOTAL VEHICLE HOURS IN 2042 (LA 415 to I-10/12 SPLIT) (VHT)		PROPERTY IMPACTS ¹						BRIDGE CONSTRUCT-ABILITY ISSUES ^{2,3}	PRELIMINARY ESTIMATED COST TO CONSTRUCT ⁴ (millions)	PRELIMINARY ESTIMATED 50-YEAR TOLL PRESENT VALUE ⁵ (millions)	ENVIRONMENTAL AND SOCIAL ^{6,7,8}			
			AM	PM	AM	PM	ACRES	STRUCTURES								PIPELINES / POWER LINES (linear feet)	LDEQ PERMITTED FACILITIES	ESSENTIAL FISH HABITAT (acres)	WETLANDS (acres)
								R	B	P	I	O							
C-5-II	8.0	L	H	H	H	H	M	0	1	0	1	0	L	M	\$ 1,596	\$206	1	0	H
C-6-III	7.8	M	H	H	H	H	M	0	1	0	1	0	L	M	\$ 1,577	\$233	1	0	H
E-11-IV	7.7	H	M	M	M	H	L	14	3	0	0	10	L	L	\$ 1,300	\$262	0	0	L
F-12-IV	8.3	M	H	M	M	M	H	12	3	0	4	10	H	M	\$ 1,554	\$251	1	0	H
F-13-IV	7.6	H	M	H	M	M	L	14	3	0	5	11	M	H	\$ 1,430	\$269	1	0	M
F-14-V	6.9	M	M	M	H	M	L	7	0	0	6	6	H	H	\$ 1,409	\$250	2	0	M
H-19-VII	8.5	L	L	M	M	L	H	0	0	0	0	3	H	M	\$ 1,940	\$240	0	0	M
K-22-VII	9.1	L	L	L	L	L	H	2	0	0	0	1	M	L	\$ 1,399	\$246	0	0	M
K-23-VII	8.2	M	M	L	L	L	M	0	0	0	0	5	M	M	\$ 1,364	\$263	0	0	L
M-25-IX	8.1	H	L	L	L	M	M	5	0	0	0	2	M	M	\$ 1,293	\$281	1	30	L

TABLE NOTES:

ADT – Average Daily Traffic, VHT – Vehicle Hours traveled, H – High, M – Moderate, L – Low, ROW – right-of-way, R – Residential, B – Business, P – Public, I – Industrial, O – Other, NPV – Net Present Value, LDEQ – Louisiana Department of Environmental Quality, Green represents the highest benefit, Yellow is of moderate benefit, Red is the least benefit or most problematic.

2042 Travel Demand (with toll):	ADT:	NPV (in millions):	Traffic savings/VHT AM:	Traffic savings/VHT PM:	I-10 traffic savings/VHT AM:	I-10 traffic savings/VHT PM:
L =	< 22,425	L = < \$242	L = > 0.3%	L = > 1.5%	L = > 3.3%	L = > 12.6
M =	22,426 to 24,224	M = \$243 to \$262	M = -0.1% to 0.2%	M = -1.8 to 1.4%	M = 1.4% to 3.2%	M = 3.0 to 12.5
H =	> 24,225	H = > \$263	H = < -0.2%	H = < -1.9%	H = < 1.3%	H = < 2.9

Other Values:	ROW Acres:	Pipeline/Power Lines (ft):	Wetlands (acres):	Preliminary Estimated Cost to Construct (in millions):
L =	< 580	L = < 3,256	L = < 194	L = < \$1,359
M =	581 to 617	M = 3,257 to 10,374	M = 195 to 345	M = \$1,360 to \$1,554
H =	> 618	H = > 10,375	H = > 346	H = > \$1,555

FOOTNOTES:

¹ROW is for mainline and interchange acres areas combined using a 300-foot buffer outside a 300-foot footprint for approximately 600 feet of ROW. This overall area also applies to pipeline/power line and wetland totals. Number of structures is shown.

²Constructability Issues are minor (L), moderate (M), or major (H) (relative to the alternatives listed) and consider the number of piers in the water, complexity of span arrangements, temporary access required, and exposure of temporary access to navigation traffic.

³Impacts to Navigation were addressed in Table 4-1, ten alternatives presented with high impacts to navigation and were removed from Round 2 Screening. All remaining alternatives have low impacts to navigation.

⁴Preliminary construction cost reflects the estimated cost to construct the bridge and roadway, estimated cost to acquire ROW acreage and structures, including the buffered areas, and estimated wetland mitigation cost, also including the buffered areas.

The cost is based on 2022 dollars with a 2% inflation rate through 2030, representing either the construction midpoint date under a public private partnership/design build or a design-bid-build letting date.

Cost does not reflect engineering design, operation and maintenance costs, financing cost, construction project management, noise mitigation, structure relocation, or utility relocation.

⁵Total Present Value is the total amount of funding that could be realized by bonding out all toll revenue collected over a 50 year period.

⁶ROW for Alternatives C-5 and 6 affect a pipe rack and infringe on Dow Chemical property. ROW for Alternatives F-12, 13, and 14 may affect Shintech's entry, substation, and pipe rack between two of their facilities.

ROW for Alternative F-14 may affect a tank farm at Willow Glen on the east bank. M-25-IX is a property only impact to Rubicon.

⁷All alternatives involve a bridge over the Mississippi River, which supports the endangered pallid sturgeon.

⁸Environmental Justice (EJ) screening for all alternatives did not result in observation of impacts to EJ communities.



Horace Wilkinson
I-10 bridge

West
Baton Rouge
Parish

East Baton Rouge Parish

Iberville Parish

Ascension Parish

Iberville Parish

Ascension Parish

Sunshine bridge

MRB South Preliminary Alternatives

- C-5-II
- C-6-III
- E-11-IV
- F-12-IV
- F-13-IV
- F-14-V
- H-19-VII
- K-22-VII
- K-23-VII
- M-25-IX
- Parish
Boundaries

MRB
SOUTH



LOUISIANA DEPARTMENT OF
TRANSPORTATION & DEVELOPMENT

CAPITAL AREA ROAD
AND BRIDGE DISTRICT

Public Involvement

➤ Meetings with Elected Officials

- Ascension, East Baton Rouge, Iberville, and West Baton Rouge Parishes
- City of St. Gabriel
- Office of Congressman Garret Graves

➤ Meetings with Other Stakeholders

- Capital Region Industry for Sustainable Infrastructure Solutions (CRISIS)
- East Iberville Community Advisory Panel
- Baton Rouge Area Chamber
- Greater Baton Rouge Industry Alliance (GBRIA)
- Louisiana Motor Transport Association (LMTA)

Public Involvement

- Public Meetings
 - Open House Format
 - Six In-Person Meetings
 - Schedule:

Monday, April 25, 2022 | 5-7pm

East Baton Rouge Parish
Bluebonnet Regional Branch Library
9200 Bluebonnet Blvd., Baton Rouge

Tuesday, April 26, 2022 | 5-7pm

Iberville Parish, East Bank
St. Gabriel Community Center
11400 Gordon Simon Leblanc Dr., St. Gabriel

Wednesday, April 27, 2022 | 5-7pm

West Baton Rouge Parish
Addis Community Center
7250 LA-1, Addis

Thursday, April 28, 2022 | 5-7pm

Ascension Parish, West Bank
Donaldsonville High School Gym
100 Tiger Dr., Donaldsonville

Monday, May 2, 2022 | 5-7pm

Ascension Parish, East Bank
Lamar Dixon Expo Center Banquet Hall
9039 S. St. Landry Ave., Gonzales

Tuesday, May 3, 2022 | 5-7pm

Iberville Parish, West Bank
Carl F. Grant Civic Center
24700 J Gerald Berret Blvd., Plaquemine

Public Involvement

➤ Public Meetings

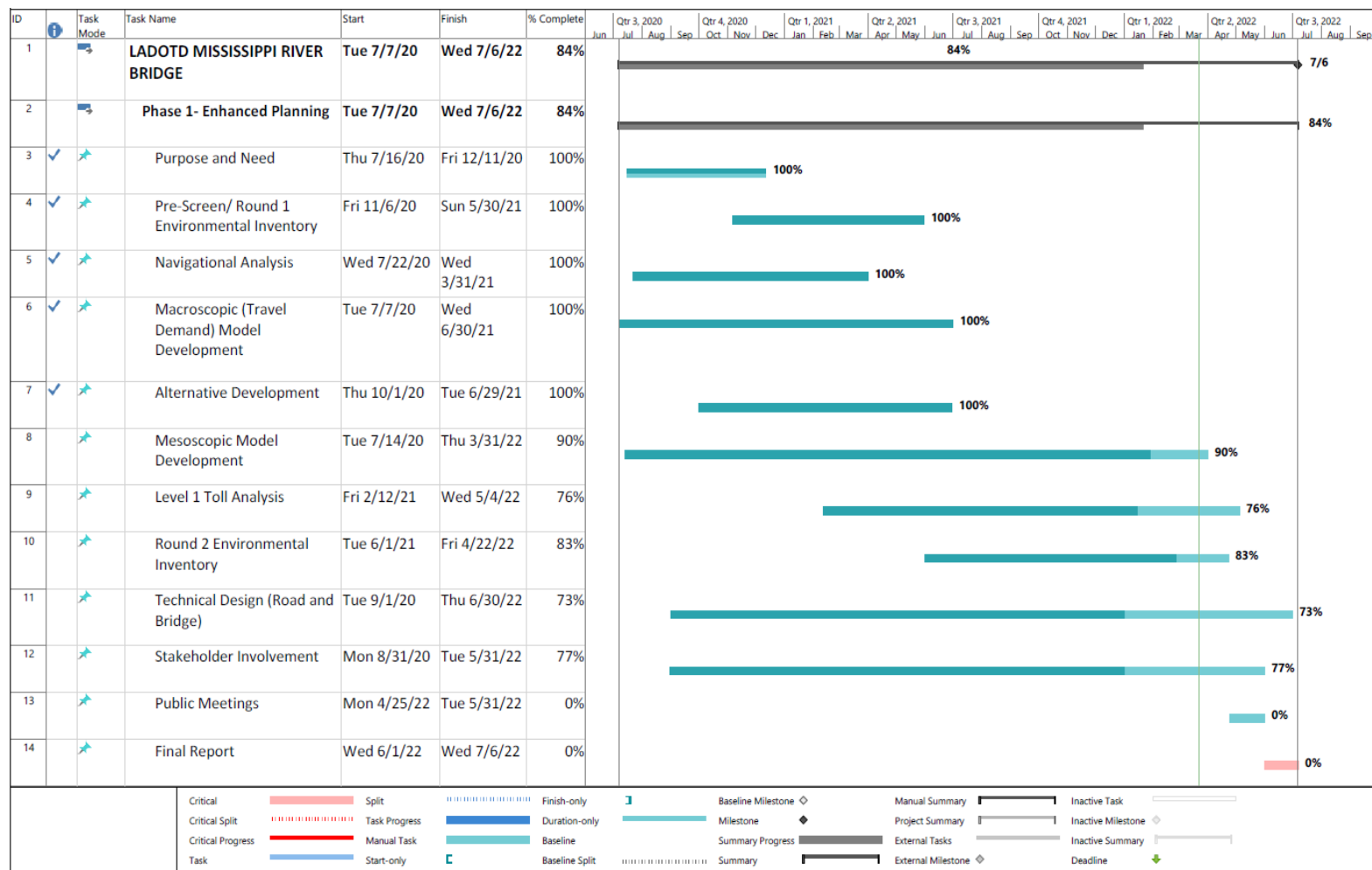
— Online Engagement Component

- Map-Based Virtual Mechanism
- Illustrate Alignment Alternatives
- Solicit Feedback on areas of concern
(historic, recreational, faith-based,
transportation items, etc.)

➤ Project Informational Website

<https://www.mrbsouth.com>

Overall Progress (Part I)



➤ 84% Work Completed

➤ 86% Time Elapsed

➤ 61% Funds Dispersed

Looking Ahead...

- Obtain Public Feedback on 10 Alternatives (Comments Due by May 14)
- Complete Round 2 Screening to identify up to 3 Alternatives (late May) + No-Build Alternative
- Proceed to Part II – NEPA/Environmental Evaluation – Summer 2022

Thank You!