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

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

March 25, 2024

Project History

Presented to CARB-D

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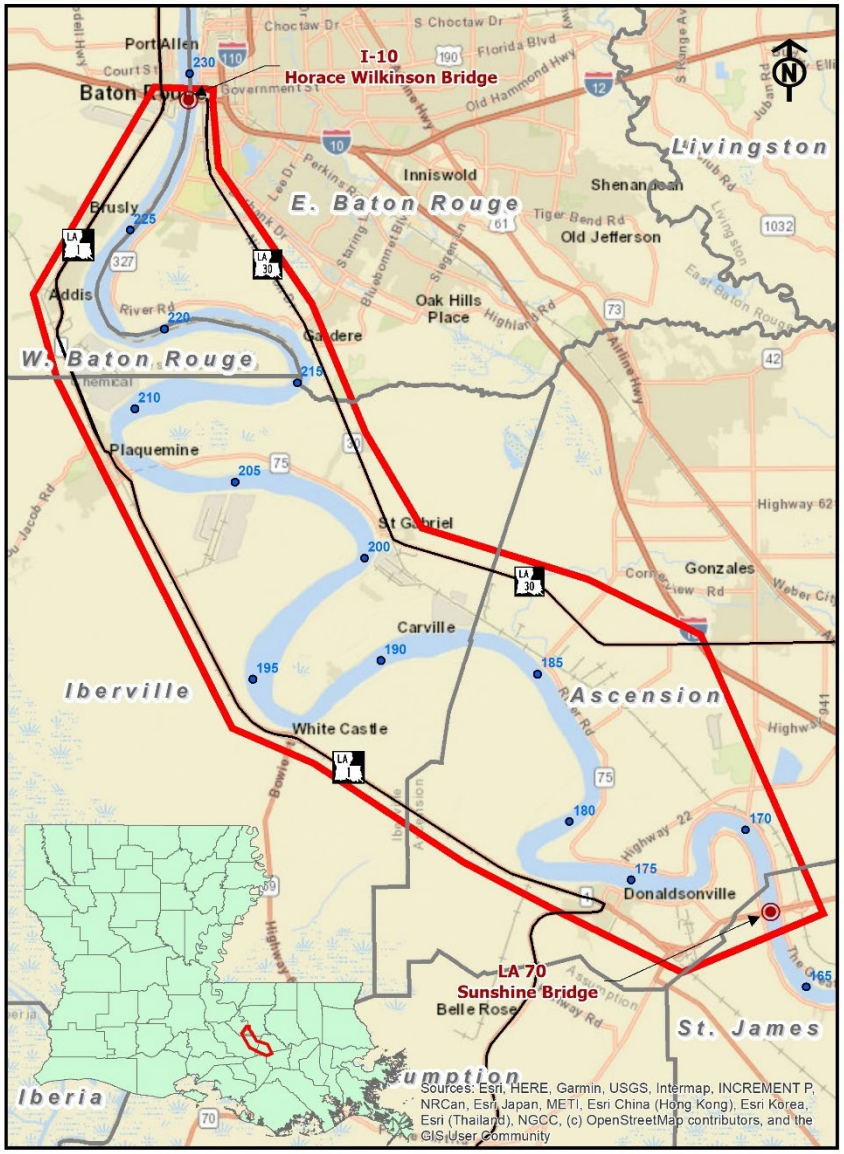
Project Overview

- 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 – Fall 2022)**

- **Part II: Environmental Evaluation (Winter 2022– Spring 2025)**

Study Area



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Purpose and Need

What is the problem? (Need)

- Congested traffic conditions
- Limited connectivity between road systems along the east and west banks of the Mississippi River
- Lack of alternate routes across the Mississippi River

How can we fix the problem? (Purpose)

- Increase capacity & connectivity across the Mississippi River
- Provide an alternate route for incident management and emergency evacuations.

Project Team
(Part I – Enhanced Planning)

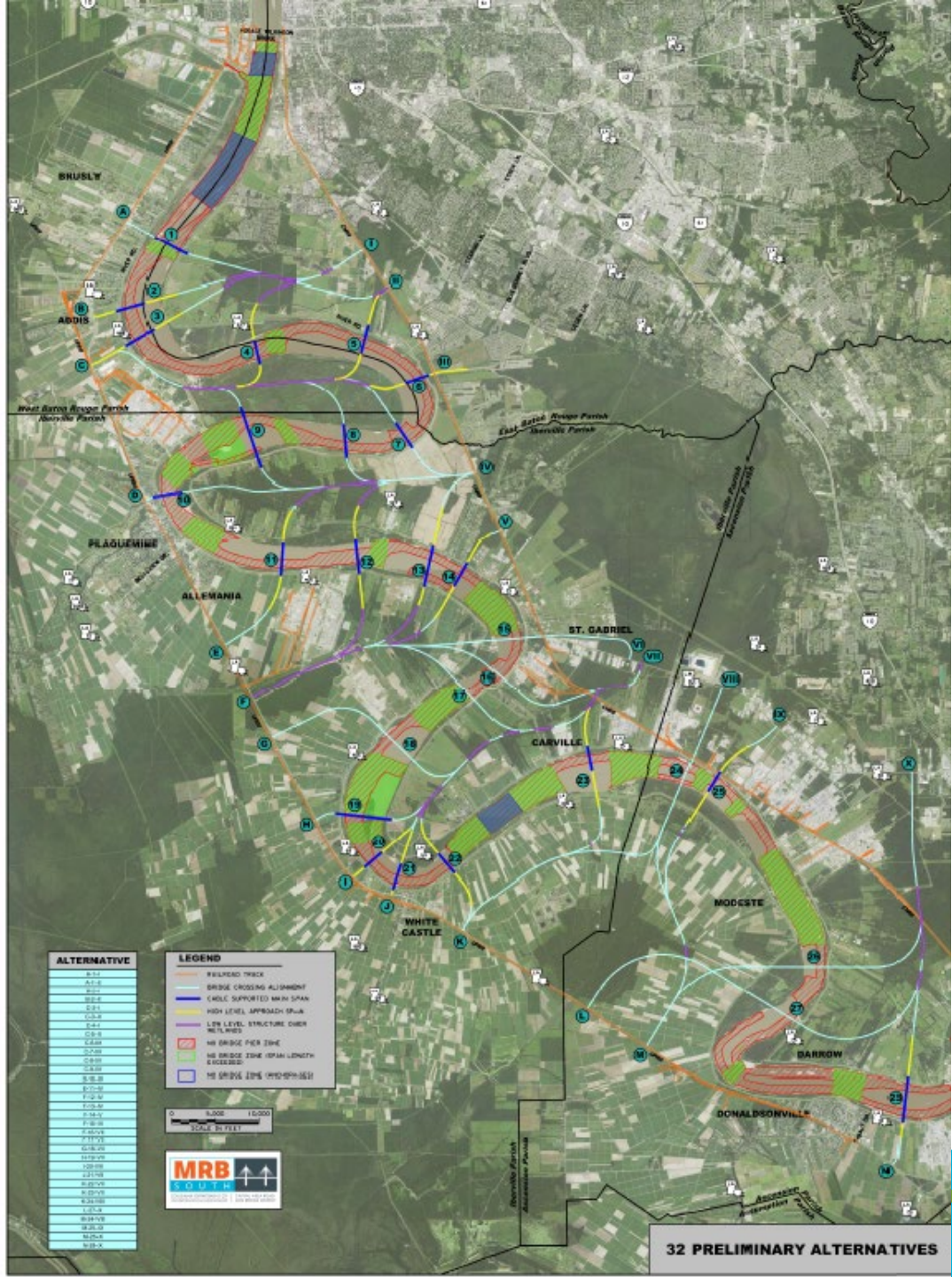
- Prime Consultant:
  - Atlas Technical Consultants, LLC

- 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

Overview of Part I – Enhanced Planning Study

- Navigation Study
- Stakeholder Engagement and Public Outreach
- Traffic & Toll– Travel Demand Model, Mesoscopic Model, Level 1 Toll Analysis
- Identification of Environmental and other constraints
- Tiered approach to pare down 32 preliminary alternatives down to 3 that will proceed forward into the NEPA phase

Initial Analysis: 32 Preliminary Alternatives with 28 River Crossings



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Round 2

PRELIMINARY ALTERNATIVES SCREENING

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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) (VHT)		PROPERTY IMPACTS[1]							BRIDGE/ CONSTRUCT-ABILITY ISSUES[2,3]	PRELIMINARY ESTIMATED COST TO CONSTRUCT[4] (millions)	PRELIMINARY ESTIMATED 50-YEAR TOLL NET PRESENT VALUE[5] (millions)	ENVIRONMENTAL[6,7,8]		
							Acres	Structures					PIPELINES/ POWER LINES (linear feet)				LDEQ PERMITTED FACILITIES	ESSENTIAL FISH HABITAT PRESENT (acres)	WETLANDS (acres)
			AM	PM	AM	PM		R	B	P	I	O							
C-5-II	8.0	20,500	-1.36%	-2.7%	1.0%	-8.0%	M	0	1	0	1	0	L	MODERATE	$ 1,596	$206	1	0	H
C-6-III	7.8	23,100	-1.51%	-2.4%	-6.1%	-12.9%	M	0	1	0	1	0	L	MODERATE	$ 1,577	$233	1	0	H
★ E-11-IV	7.7	24,600	-0.08%	-1.1%	2.7%	2.6%	L	14	3	0	0	10	L	MINOR	$ 1,300	$262	0	0	L
F-12-IV	8.3	23,400	-0.23%	-1.6%	2.6%	8.1%	H	12	3	0	4	9	H	MODERATE	$ 1,554	$251	1	0	H
★ F-13-IV	7.6	25,100	0.19%	-2.0%	2.9%	4.1%	L	14	3	0	5	10	M	MAJOR	$ 1,430	$269	1	0	M
★ F-14-V	6.9	23,300	-0.16%	-1.4%	-1.5%	3.9%	L	7	0	0	6	5	H	MAJOR	$ 1,409	$250	2	0	M
H-19-VII	8.5	22,200	0.35%	0.7%	2.0%	17.2%	H	0	0	0	0	3	H	MODERATE	$ 1,940	$240	0	0	M
K-22-VII	9.1	21,600	0.83%	1.7%	7.3%	13.3%	H	2	0	0	0	1	M	MINOR	$ 1,399	$246	0	0	M
K-23-VII	8.2	23,200	0.34%	1.7%	3.4%	21.2%	M	0	0	0	0	5	M	MODERATE	$ 1,364	$263	0	0	L
M-25-IX	8.1	24,500	4.18%	2.2%	3.7%	10.5%	M	5	0	0	0	2	M	MODERATE	$ 1,293	$281	1	30	L

TABLE NOTES:
ADT – Average Daily Traffic, VHT – Vehicle Hours traveled, H – High, M-Moderate, L – Low, 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):	Travel time change/VHT AM:	Travel time change/VHT PM:	I-10 travel time change/VHT AM:	I-10 travel time change/VHT PM:
L =	< 22,425	L = < $242	L = 0.35% to 4.18%	L = 1.5% to 2.2%	L = 3.3% to 7.3%	L= 12.6% to 21.2%
M =	22,426 to 24,224	M = $243 to $262	M = -0.2% to 0.34%	M = -1.8% to 1.4%	M = 1.4% to 3.2%	M = 3.0% to 12.5%
H =	> 24,225	H = >$263	H = -1.51% to 0.21%	H = -2.7% to -1.9%	H = -6.1% to 1.3%	H = -12.9% to 2.9%

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

FOOTNOTES:
[1]Acres are for mainline and interchange 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.
[2]Constructability Issues are minor, moderate, or major (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.
[3]Impacts to Navigation were addressed in Table 4-1, ten alternatives presented with high impacts to navigation and were removed from Round 2 Screening.
[4]Preliminary 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.
[5]Net Present Value represents the value of the entire toll revenue stream over a 50-year period in current dollars.
[6]ROW 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.
[7]All alternatives involve a bridge over the Mississippi River, which supports the endangered pallid sturgeon.
[8]Environmental Justice (EJ) screening for all alternatives did not result in observation of impacts to EJ communities.

Public Involvement

- Public Meetings

Monday, April 25, 2022 | 5-7pm
East Baton Rouge Parish
Bluebonnet Regional Branch Library
9200 Bluebonnet Blvd., Baton Rouge
Attendance: 341

Tuesday, April 26, 2022 | 5-7pm
Iberville Parish, East Bank
St. Gabriel Community Center
11400 Gordon Simon Leblanc Dr., St. Gabriel
Attendance: 258

Wednesday, April 27, 2022 | 5-7pm
West Baton Rouge Parish
Addis Community Center
7250 LA-1, Addis
Attendance: 136

Thursday, April 28, 2022 | 5-7pm
Ascension Parish, West Bank
Donaldsonville High School Gym
100 Tiger Dr., Donaldsonville
Attendance: 43

Monday, May 2, 2022 | 5-7pm
Ascension Parish, East Bank
Lamar Dixon Expo Center Banquet Hall
9039 S. St. Landry Ave., Gonzales
Attendance: 67

Tuesday, May 3, 2022 | 5-7pm
Iberville Parish, West Bank
Carl F. Grant Civic Center
24700 J Gerald Berret Blvd., Plaquemine
Attendance: 353

6 Open House Meetings

TOTAL ATTENDANCE = 1,198

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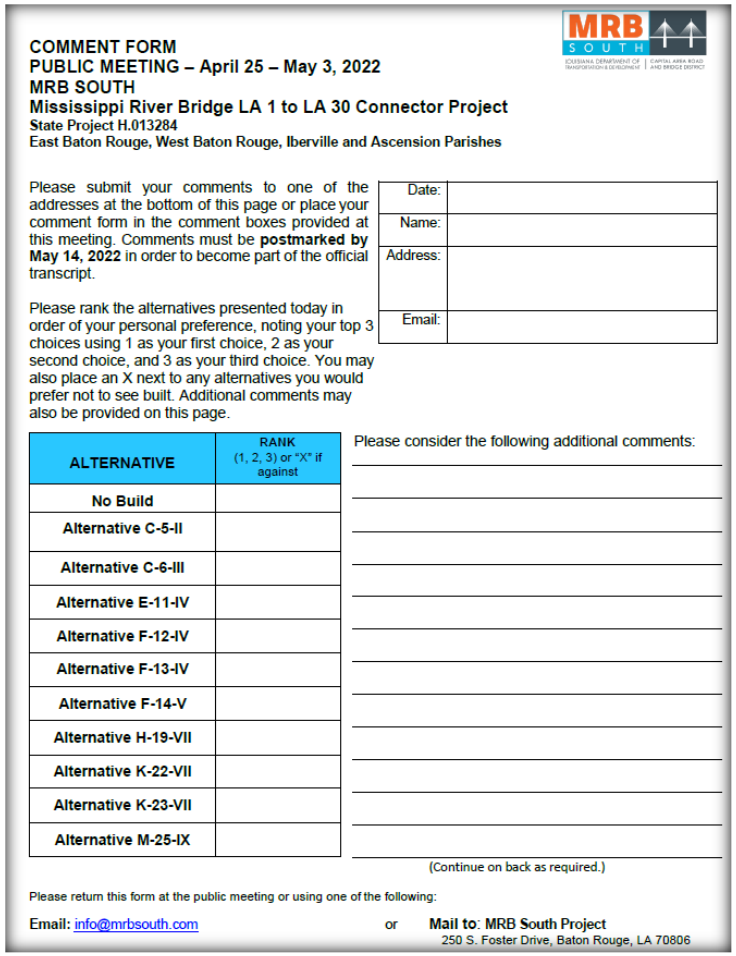
Public Involvement

- Public Input (April 25 – May 14, 2022)
  - 257 Comment Forms
  - 69 Emails
  - 30 Voice Messages
  - 1,876 Online Surveys (Maptionnaire)

TOTAL COMMENTS RECEIVED = 2,232



COMMENT FORM
PUBLIC MEETING – April 25 – May 3, 2022
MRB SOUTH
Mississippi River Bridge LA 1 to LA 30 Connector Project
State Project H.013284
East Baton Rouge, West Baton Rouge, Iberville and Ascension Parishes

Please submit your comments to one of the addresses at the bottom of this page or place your comment form in the comment boxes provided at this meeting. Comments must be **postmarked by May 14, 2022** in order to become part of the official transcript.

Date:	
Name:	
Address:	
Email:	

Please rank the alternatives presented today in order of your personal preference, noting your top 3 choices using 1 as your first choice, 2 as your second choice, and 3 as your third choice. You may also place an X next to any alternatives you would prefer not to see built. Additional comments may also be provided on this page.

ALTERNATIVE	RANK (1, 2, 3) or "X" if against
No Build	
Alternative C-5-II	
Alternative C-6-III	
Alternative E-11-IV	
Alternative F-12-IV	
Alternative F-13-IV	
Alternative F-14-V	
Alternative H-19-VII	
Alternative K-22-VII	
Alternative K-23-VII	
Alternative M-25-IX	

Please consider the following additional comments:

(Continue on back as required.)

Please return this form at the public meeting or using one of the following:

Email: info@mrbsouth.com or **Mail to: MRB South Project** 250 S. Foster Drive, Baton Rouge, LA 70806

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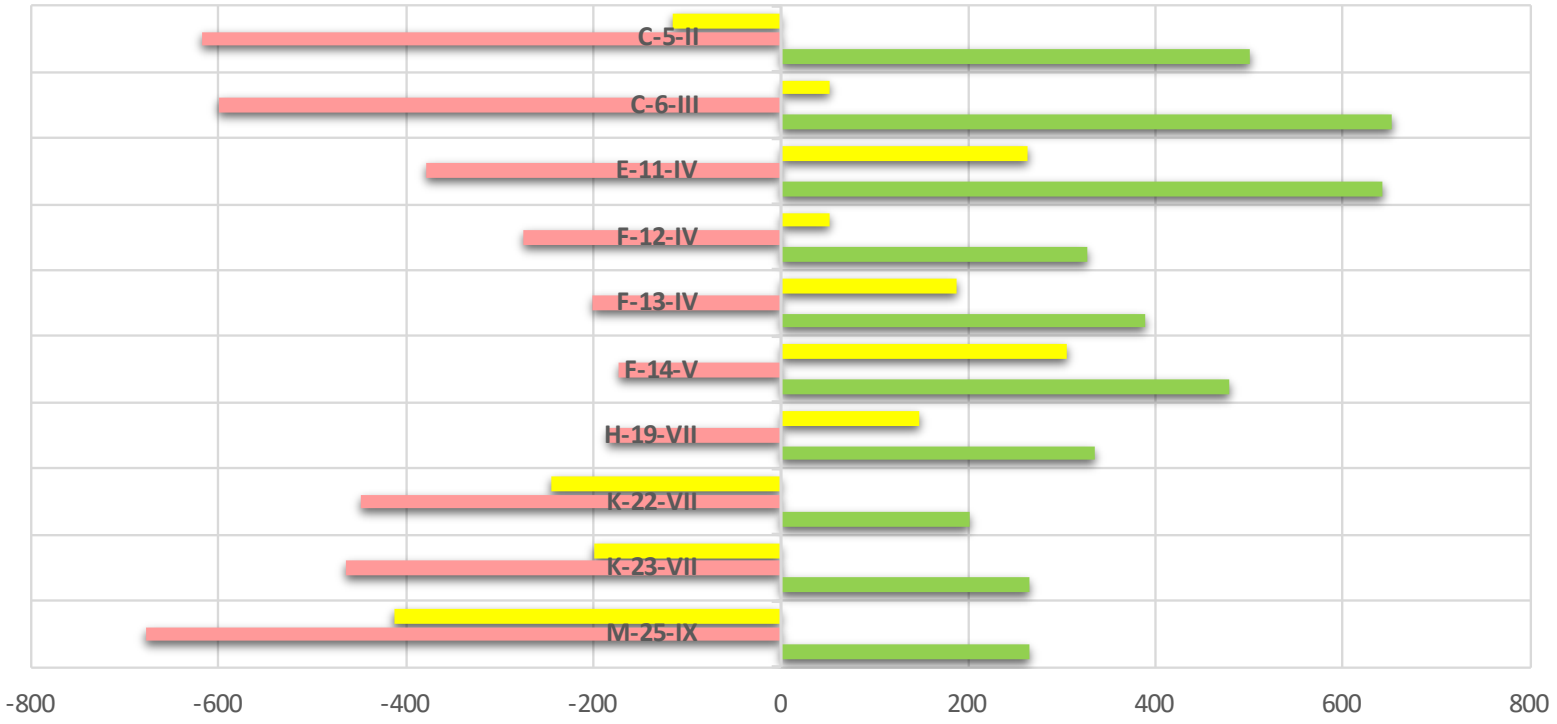
Public Involvement

MRB Spring 2022 Public Input: Alternatives Preferences



	M-25-IX	K-23-VII	K-22-VII	H-19-VII	F-14-V	F-13-IV	F-12-IV	E-11-IV	C-6-III	C-5-II
Relative Preference Level	-413	-200	-246	148	305	187	51	263	52	-116
Dislikes	-678	-465	-448	-186	-173	-202	-276	-378	-599	-617
Likes	265	265	202	334	478	389	327	641	651	501

Round 2 Screening

ALTERNATIVES	NUMBER OF VEHICLES PER DAY ON TOLLED BRIDGE IN 2042 (ADT)	CHANGE IN AREA-WIDE TOTAL VEHICLE HOURS IN 2042 (VHT) AM & PM	BRIDGE/ CONSTRUCT-ABILITY ISSUES[1]	BRIDGE/ NAVIGATION ISSUES[2]	PIPELINES/ POWER LINES (linear feet)	WETLANDS (acres)	PUBLIC/STAKEHOLDER OUTREACH	WEIGHTED AVERAGE (LOWER SCORES ARE BETTER)
Weight Factor Contribution	*13%*	*20%*	*7%*	*7%*	*7%*	*13%*	*33%*	
C-5-II								0.00
C-6-III								0.00
E-11-IV								0.00
F-12-IV								0.00
F-13-IV								0.00
F-14-V								0.00
H-19-VII								0.00
K-22-VII								0.00
K-23-VII								0.00
M-25-IX								0.00

33%

34%

33%

3 Sets of Data Used for Screening:

- VHT and ADT (to address Purpose and Need)
- Environmental (to address Permitting Issues)
- Public Involvement

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Round 2 Screening Results

PRELIMINARY ALTERNATIVES	TRAFFIC		ENVIRONMENTAL & PERMITTING				PUBLIC COMMENT	WEIGHTED AVERAGE (LOWER SCORES ARE BETTER)
	NUMBER OF VEHICLES PER DAY ON TOLLED BRIDGE IN 2042 (ADT)	CHANGE IN AREA-WIDE TOTAL VEHICLE HOURS IN 2042 (VHT) AM & PM	BRIDGE/ CONSTRUCT-ABILITY ISSUES[1]	BRIDGE/ NAVIGATION ISSUES[2]	PIPELINES/ POWER LINES (linear feet)[3]	WETLANDS (acres)[3]	PUBLIC/STAKEHOLDER OUTREACH[4]	
Weight Factor Contribution	*13%*	*20%*	*7%*	*7%*	*7%*	*13%*	*33%*	
C-5-II	2	1	2	1	1	3	3	2.29
C-6-III	1	1	2	2	1	3	2	1.86
E-11-IV	1	2	1	1	1	1	1	1.29
F-12-IV	1	2	2	1	2	3	2	2.07
F-13-IV	1	2	3	2	2	2	1	1.71
F-14-V	1	2	3	2	2	2	1	1.71
H-19-VII	2	3	2	1	3	2	1	2.00
K-22-VII	2	3	1	1	1	2	3	2.50
K-23-VII	1	3	2	1	1	1	3	2.29
M-25-IX	1	3	2	1	1	1	3	2.29

3 Preliminary Alternatives

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
  - Providence
    Environmental Inventory
  - Shread-Kuyrkendall
    Roadway Technical Concepts
  - Armeni (KCI Technologies)
    Cost Estimating
  - GIS Engineering
    Bathymetric Survey
  - Ardaman
    Geotech
  - GOTECH
    Topographic Survey
  - Quality Eng. & Surveying
    SUE Survey

Scope for Part II (Environmental)

- Pre-NEPA Tasks:
  - Surveys
    - LiDAR ✓, Topo ✓, SUE ✓, Bathymetric ✓
    - Geotech *
  - Line & Grade *
  - Conceptual Bridge Design *
  - H&H *
- NEPA Tasks:
  - Public & Agency Outreach
  - Document Preparation (EA/EIS)
  - Cost Estimates
  - Field Surveys
    - Wetlands/T&E
    - Cultural Resources
    - Air, Noise, CSRP, Phase I ESA
- Traffic Refinement – Data Collection ✓
- Intermediate Toll Study *

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

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What is NEPA?

- The National Environmental Policy Act (1969) requires federal agencies to factor environmental considerations into their decision making.
- NEPA includes full range of activities to evaluate the environmental impacts of a proposed action.
- NEPA requires environmentally ***informed*** decisions.
- NEPA is a procedural statute and does not dictate a decision or require elevation of environmental concerns over other pertinent considerations.

NEPA & Transportation Decision Making

Project Development

DOTD is responsible for the identification and development of projects

U.S. Department of Transportation Federal Highway Administration

Assessment of Impacts

DOTD evaluates the impact of the project on the environment

NEPA Document

DOTD prepares Document

As Lead Federal Agency, FHWA reviews/approves Document

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Why is this Important?

What are the Benefits of a New Bridge Crossing?

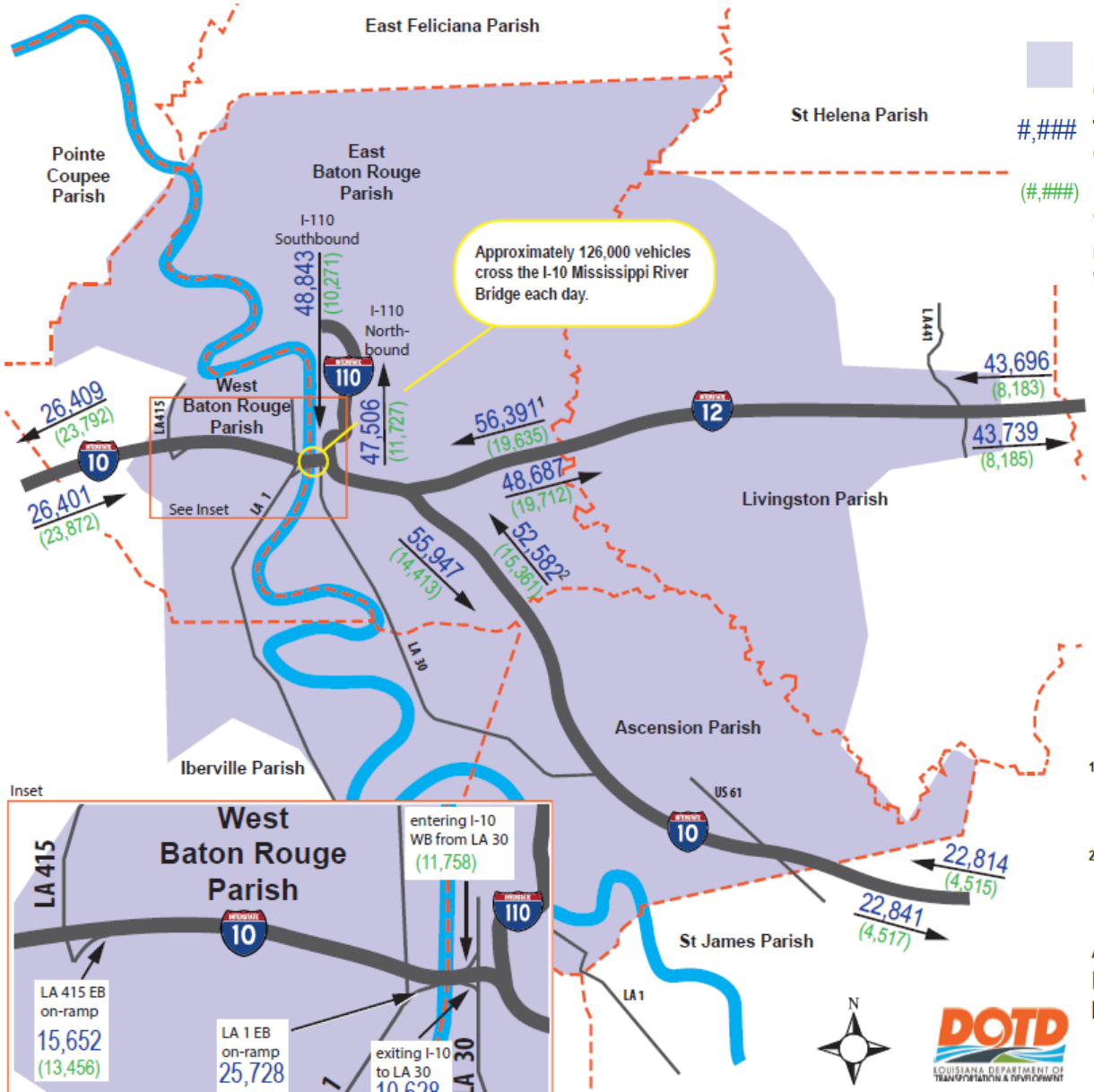
Questions to Consider

- How many vehicles per day cross the Mississippi River on I-10?
- Of those vehicles, what percentage do not stop within the MPO? Take I-12? Take I-10?
- What percentage of those vehicles are Trucks?

Our Interstates Primarily Serve Local Traffic

Interstate Traffic Movements Within and Through our 5-Parish Area

Produced August 2022



MPO Study Area
(Metropolitan Planning Organization / Capital Region Planning Commission)

#,### **Total Volume**
(Modeled Average Daily Traffic)

(#,###) **Bridge Volume**
(Portion of the total coming from / going to the I-10 bridge.)

Data Source: Project specific travel demand model 2019, CDM Smith & Neel-Schaffer. StreetLight Data, 2019.

[1] 85% of the daily I-12 traffic between O'Neal and the split is local.

87% of the daily I-10 traffic between the split and Acadian is local.

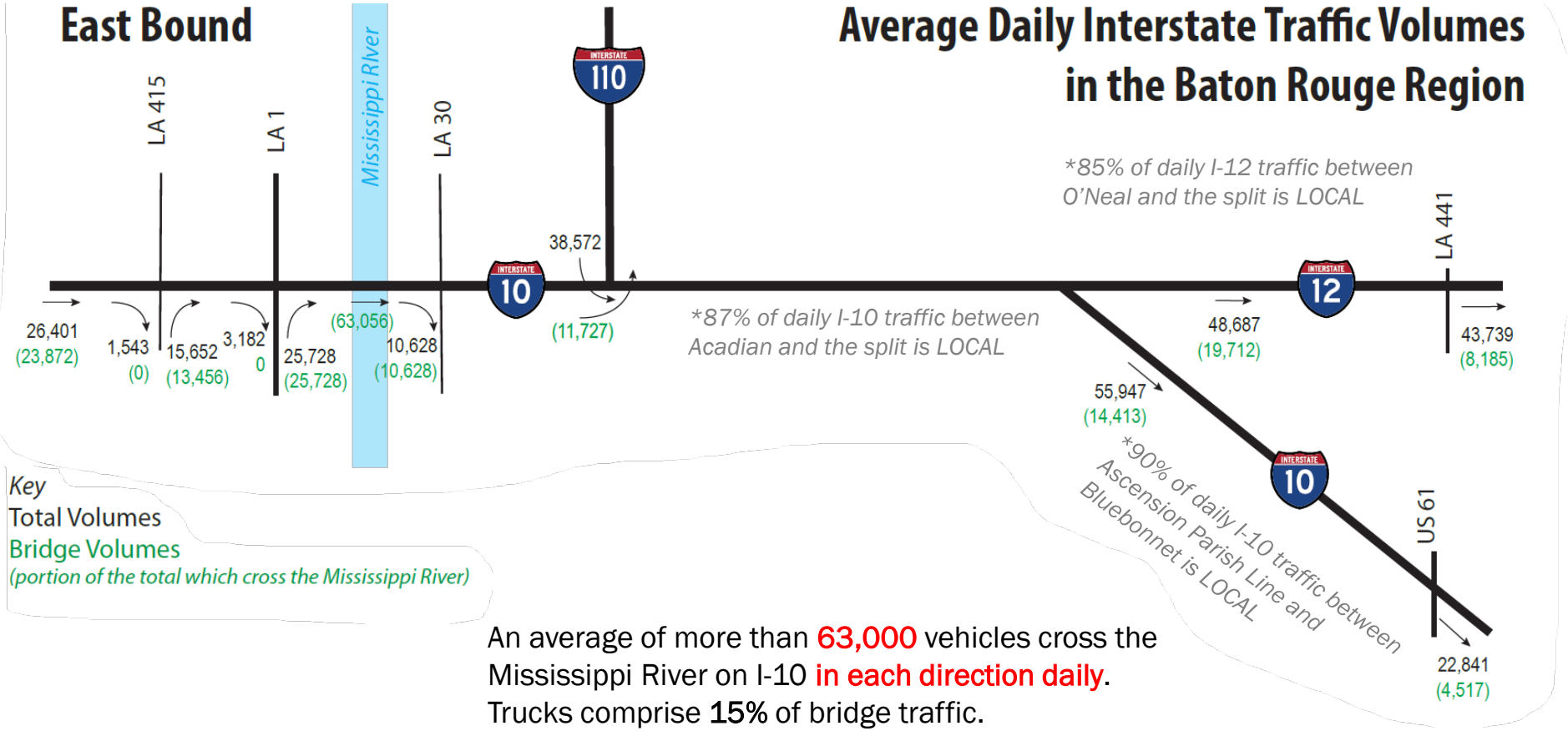
[2] 90% of the daily I-10 traffic between the Ascension Parish line and Bluebonnet is local.

An average of **more than 63,000** vehicles cross the Mississippi River on I-10 **in each direction daily**. Trucks comprise 15% of bridge traffic.

Through Trips % on I-10 Bridge:
- Daily - 18%
- Morning Peak (6 - 9 am) - 11%
- Afternoon Peak (3 - 6 pm) - 15%

* Through Traffic = traffic that begin and end their trip outside of the MPO area without a stop inside the MPO area.

EAST BOUND TRAFFIC



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* Percentages shown are for both EB and WB

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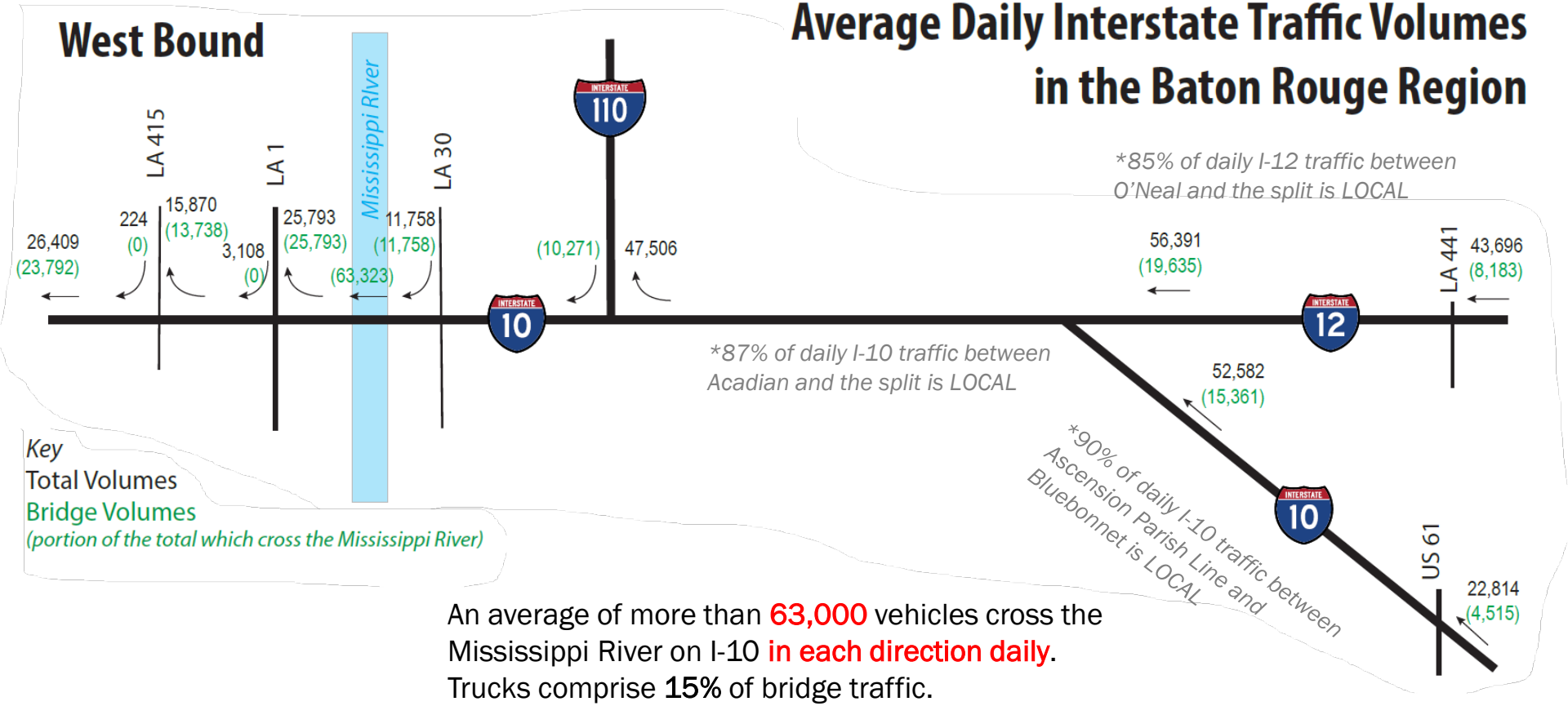
WEST BOUND TRAFFIC



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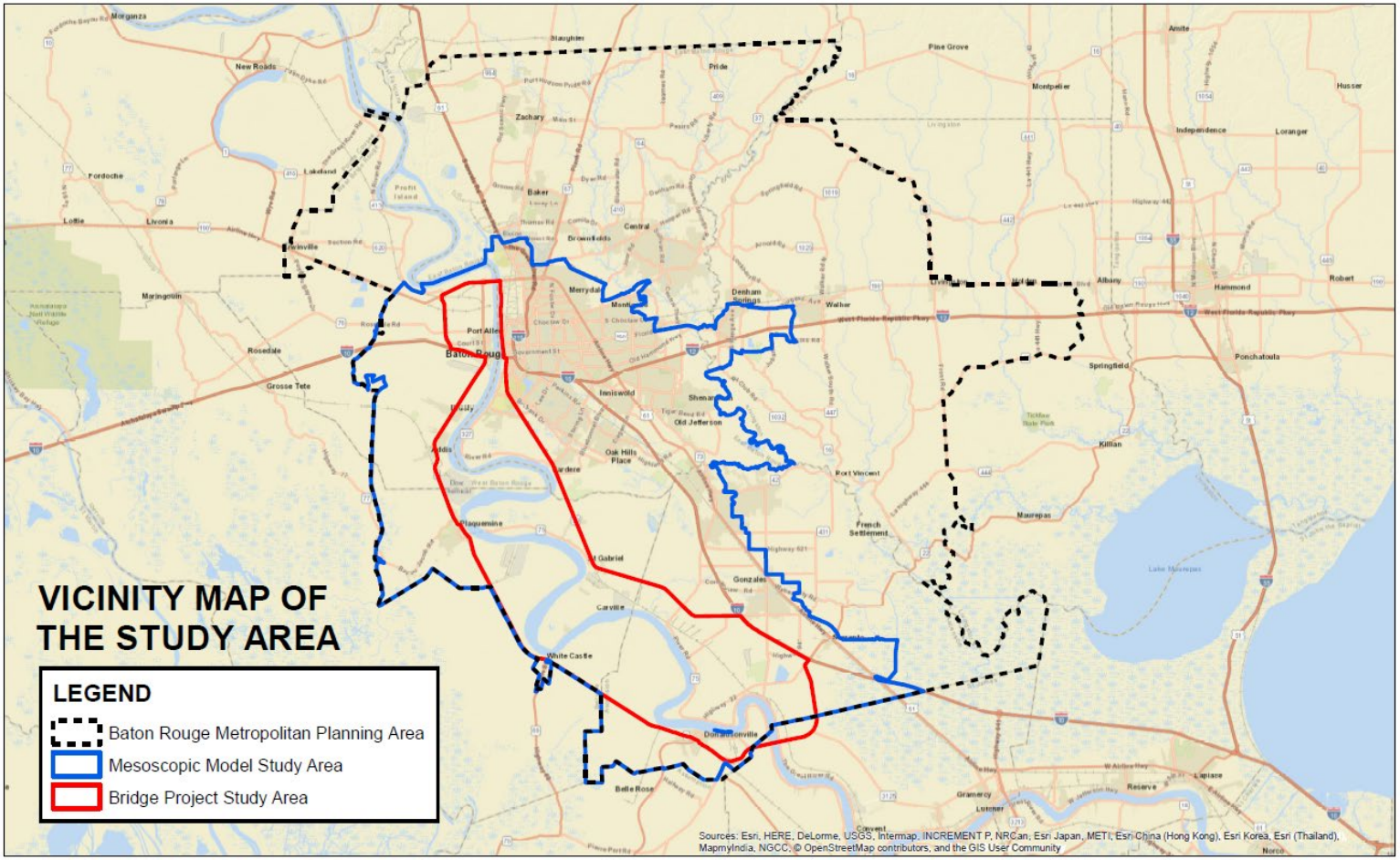
Lessons Learned

- Approximately **80%** of Greater Baton Rouge Traffic is made up of **local drivers**
- Local Drivers Use I-10 like a Surface Street
- **Truck Traffic** comprises only about **15%** of daily traffic on the I-10 Horace Wilkinson Bridge
- Out of 63,000+ vehicles crossing the I-10 MRB in the East Bound direction:
  - ~62% of the Volume comes from LA 1 and LA 415
  - 4,517 are I-10 Through Traffic (~7%)
  - 8,185 are I-12 Through Traffic (~13%)

Benefits of a new River Crossing

- New Bridge Volume approximately 24,000 vehicles per day
- No substantial deviations in Through Traffic on I-10
- No major impacts through City of Plaquemine:
  - Reduction in North Bound LA 1 traffic due to diversion to New South Bridge crossing
  - Slight increase in South Bound traffic due to traffic heading towards New South Bridge crossing

Mesoscopic Model Study Area



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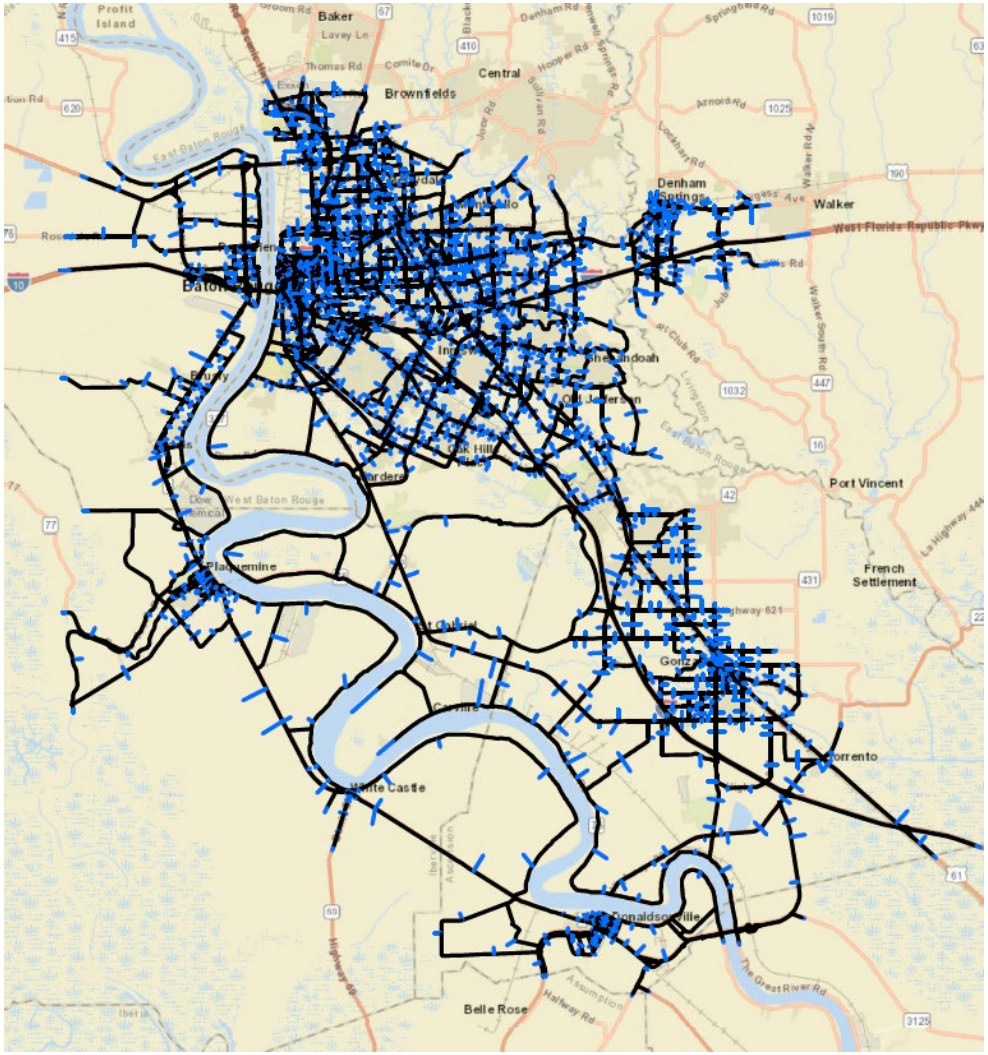
Mesoscopic Model Network Area



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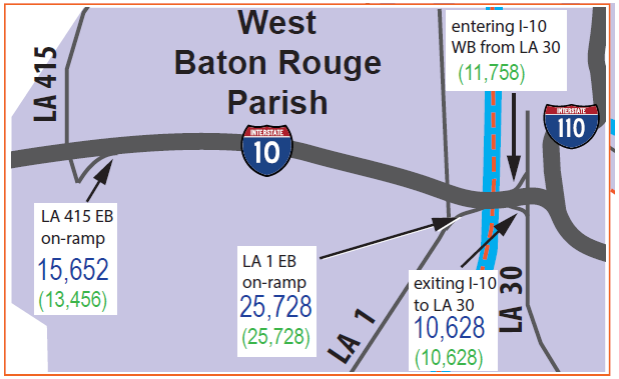
Benefits of a new River Crossing

- Greatest 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

Questions??

Kara Moree, CFM

Atlas
National Director – NEPA & Environmental Compliance

Maria Bernard Reid

Atlas
NEPA Environmental Specialist

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