

LOUISIANA  
Historic Bridge  
Inventory



# New Priorities for Old Bridges: Leading the Way in Louisiana

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and

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historicbridges  
**Mead  
& Hunt**

# Purpose and benefits

- Comply with federal historic preservation regulations
- Identify bridges eligible for listing in the National Register
- Identify bridges that are good candidates for future preservation
- Develop Programmatic Agreement (PA) to streamline project development



# Project steps



Historic context study



Organize and analyze bridges



Conduct field survey



Evaluate National Register eligibility



Identify bridges with preservation potential

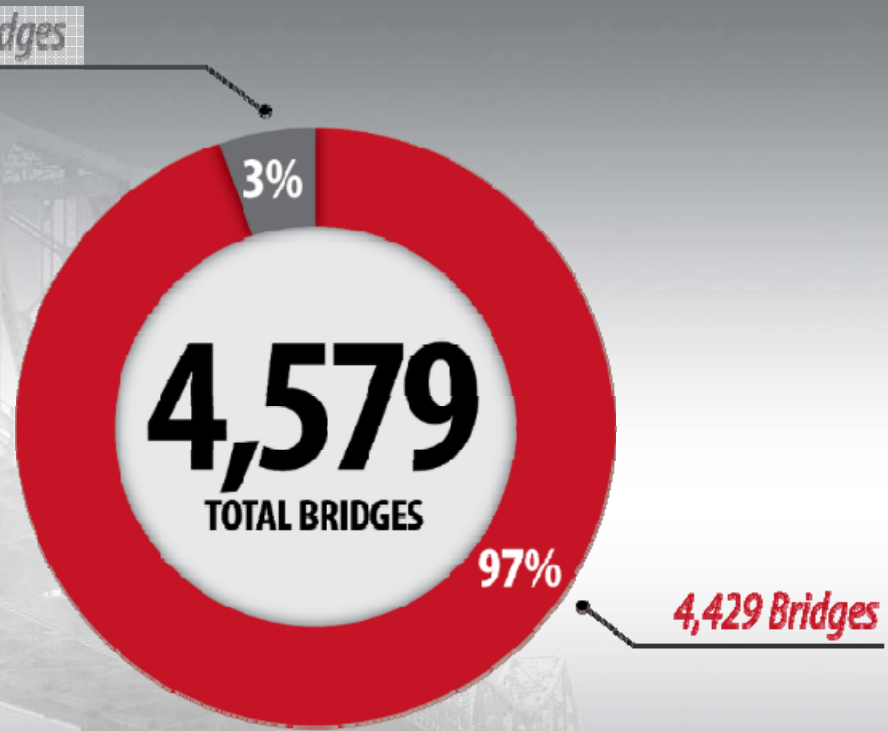
2012

2013

2014

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# Historic bridges

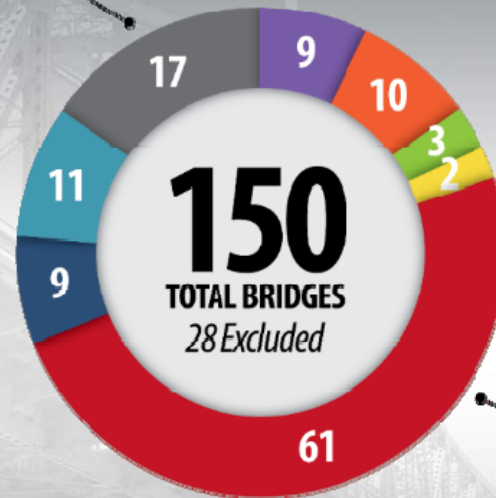


- Determined Eligible or Listed in National Register
- Determined Not Eligible

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# Historic bridge types

7 Pony  
10 Through



- 6 *Bascule*
- 19 *Lift - Span & Span Tower*
- 4 *Lift Tower*
- 6 *Pontoon Swing*
- 5 *Swing - Cable Stayed*
- 5 *Swing - Pony Truss*
- 1 *Swing - Through Truss*
- 15 *Swing - Plate Girder*

- Concrete Arch
- Concrete Slab, Beam & Girder
- Concrete Rigid Frame
- Culvert Pre-1946
- Movable
- Post-1945 Common Types
- Steel Beam & Girder
- Truss

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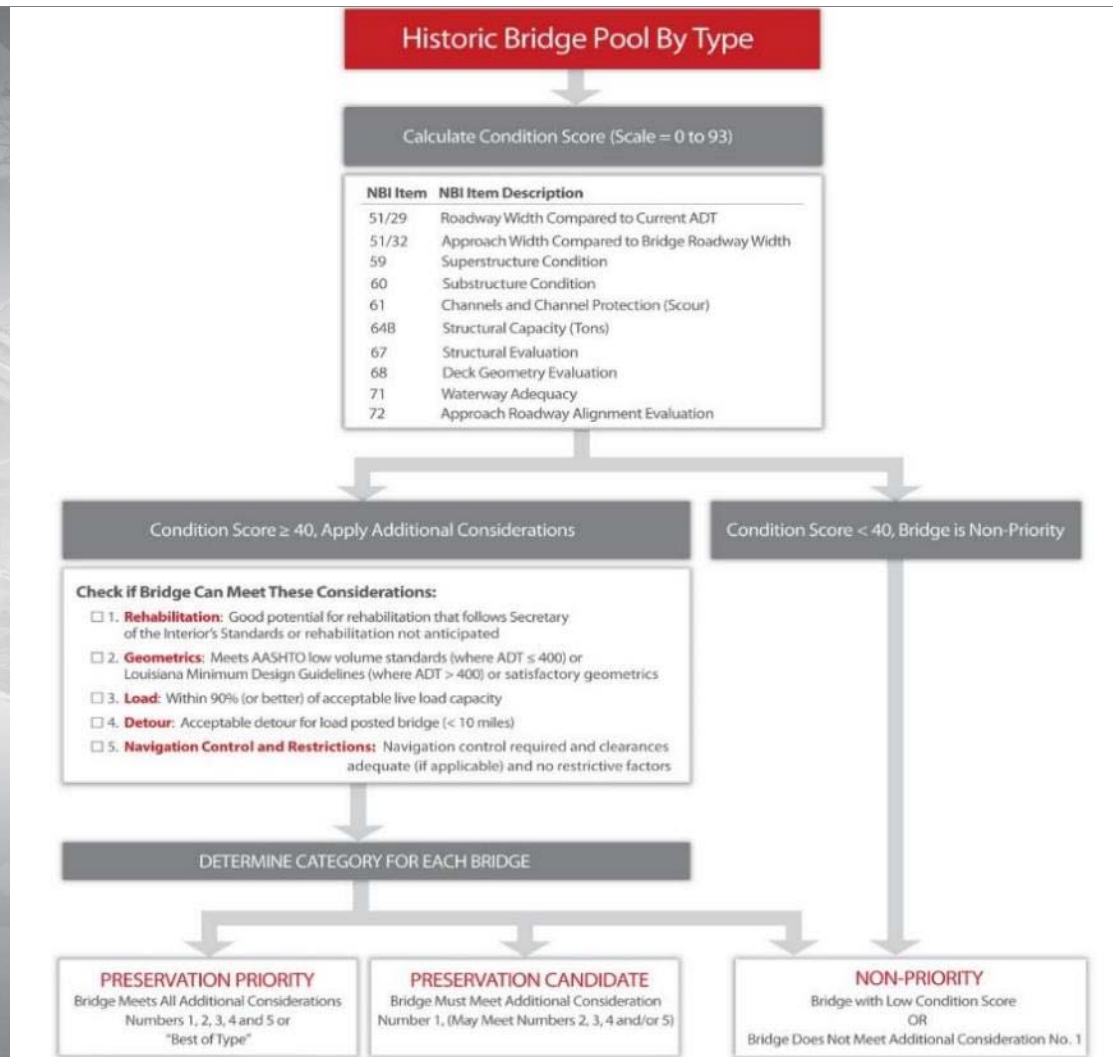
# Identify Preservation Priority bridges

- Develop and apply methodology
- Categorize historic bridges
  - **Preservation Priority:** Commitment to maintain and rehabilitate
  - **Preservation Candidate:** Maintain when prudent and feasible
  - **Non-Priority:** Can remove and replace when needed

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# Preservation prioritization methodology overview



# Condition score

- Comparative tool
- Indicator of preservation potential
- Isolates factors that typically determine whether preservation is prudent and feasible
- Sort condition scores (high to low)

## Calculate Condition Score (Scale = 0 to 93)

NBI Item	NBI Item Description
51/29	Roadway Width Compared to Current ADT
51/32	Approach Width Compared to Bridge Roadway Width
59	Superstructure Condition
60	Substructure Condition
61	Channels and Channel Protection (Scour)
64B	Structural Capacity (Tons)
67	Structural Evaluation
68	Deck Geometry Evaluation
71	Waterway Adequacy
72	Approach Roadway Alignment Evaluation

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# Apply Additional Considerations

Condition Score  $\geq 40$ , Apply Additional Considerations

## Check if Bridge Can Meet These Considerations:

- 1. **Rehabilitation:** Good potential for rehabilitation that follows Secretary of the Interior's Standards or rehabilitation not anticipated
- 2. **Geometrics:** Meets AASHTO low volume standards (where ADT  $\leq 400$ ) or Louisiana Minimum Design Guidelines (where ADT  $> 400$ ) or satisfactory geometrics
- 3. **Load:** Within 90% (or better) of acceptable live load capacity
- 4. **Detour:** Acceptable detour for load posted bridge ( $< 10$  miles)
- 5. **Navigation Control and Restrictions:** Navigation control required and clearances adequate (if applicable) and no restrictive factors

# Additional Consideration 1 - Rehabilitation



# Additional Consideration 1 - Rehabilitation



## Additional Consideration 2 - Geometrics



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## Additional Consideration 3 - Load



# Additional Consideration 4 - Detour



## **Additional Consideration 5 – Navigation Control and Restrictions**



## Additional Consideration 5 – Navigation Control and Restrictions



bridges



# Bridge Preservation Results

30 Bridges

25%

33 Bridges

27%

**122**  
TOTAL BRIDGES

48%

59 Bridges

- Preservation Priority
- Preservation Candidate
- Non-Priority

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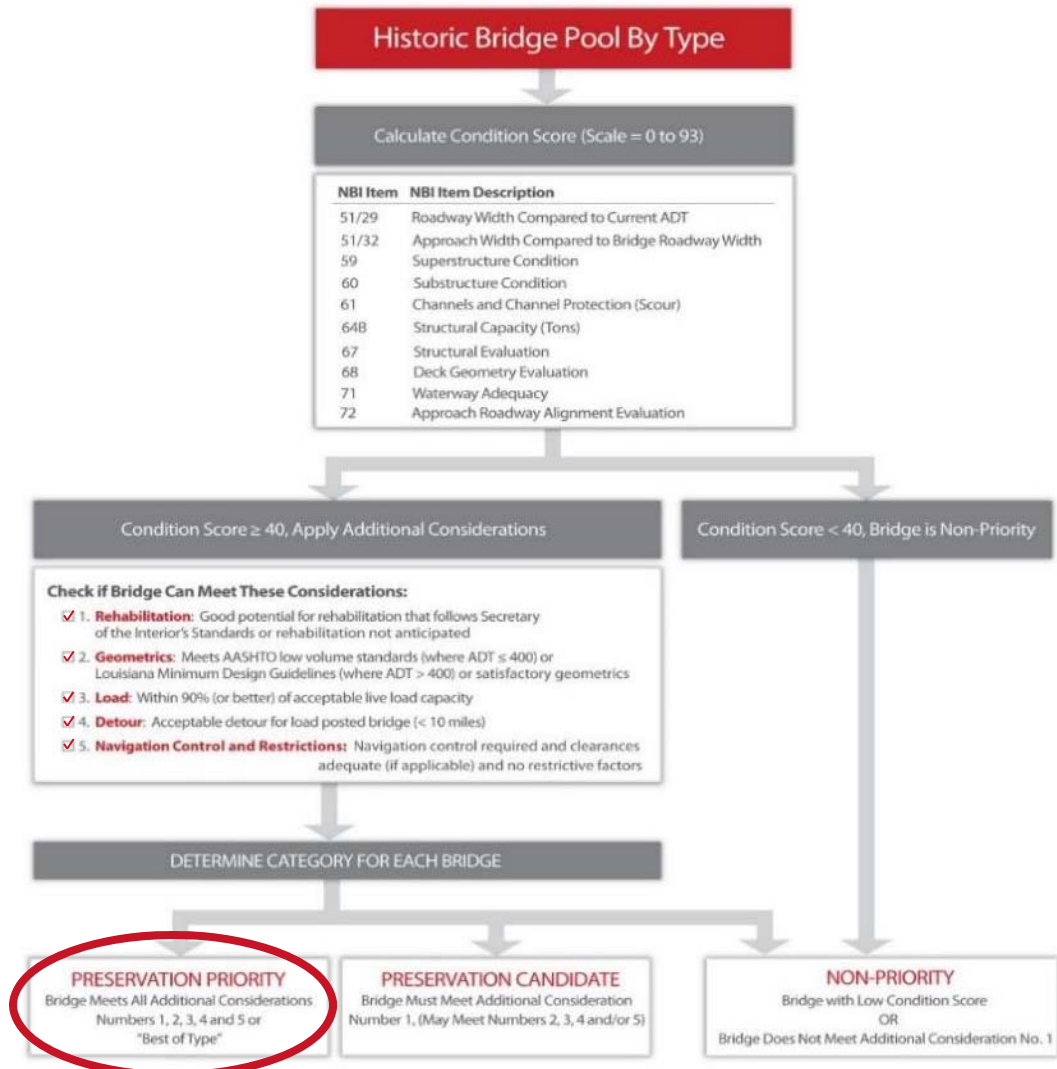


# Preservation Priority Bridge Examples

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# Preservation Priority

histo



# Preservation Priority

Vertical Lift – 1964

Recall No. 009460

Vermillion Parish

Facility Carried:  
LA0014BY

Facility Crossed:  
Vermillion River/  
Abbeville



# Preservation Priority

- ✓ Consideration 1 - Rehabilitation
- ✓ Consideration 2 - Geometrics
- ✓ Consideration 3 - Load
- ✓ Consideration 4 - Detour
- ✓ Consideration 5 - Navigation Control and Restrictions



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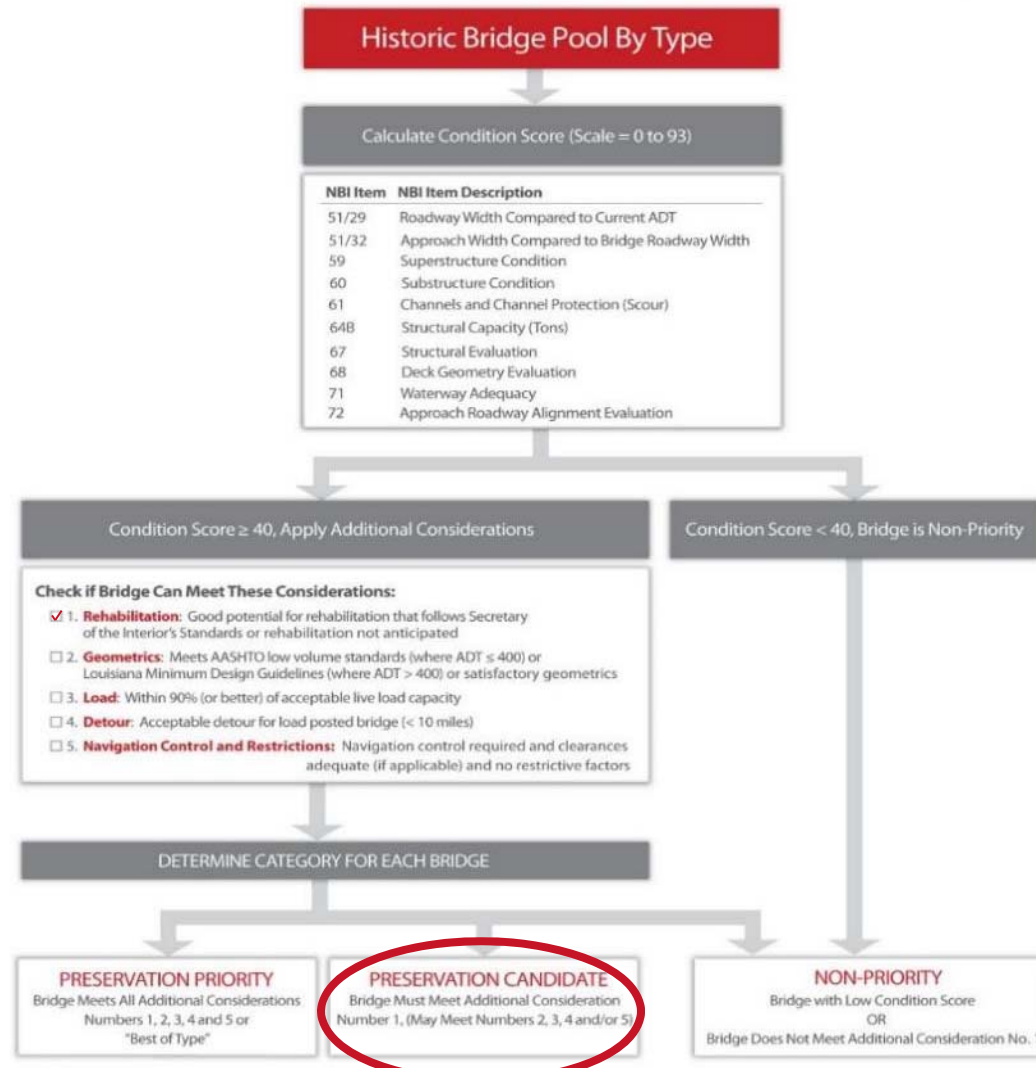


# Preservation Candidate Bridge Examples

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# Preservation Candidate

historical



# Preservation Candidate

Through truss – 1952

Recall No. 012548

Bossier Parish

Facility Carried  
LA0002

Facility Crossed:  
Red River – Miller's Bluff





# Preservation Candidate

✓ Consideration 1 - Rehabilitation

Consideration 2 - Geometrics

✓ Consideration 3 - Load

✓ Consideration 4 - Detour

✓ Consideration 5 - Navigation  
Control and Restrictions



historic b

The logo features a red silhouette of the state of Louisiana. Inside the outline, the text "LOUISIANA" is written in blue, "Historic Bridge" in white, and "Inventory" in white script. A small graphic of a truss bridge is positioned below the text.

LOUISIANA  
Historic Bridge  
Inventory

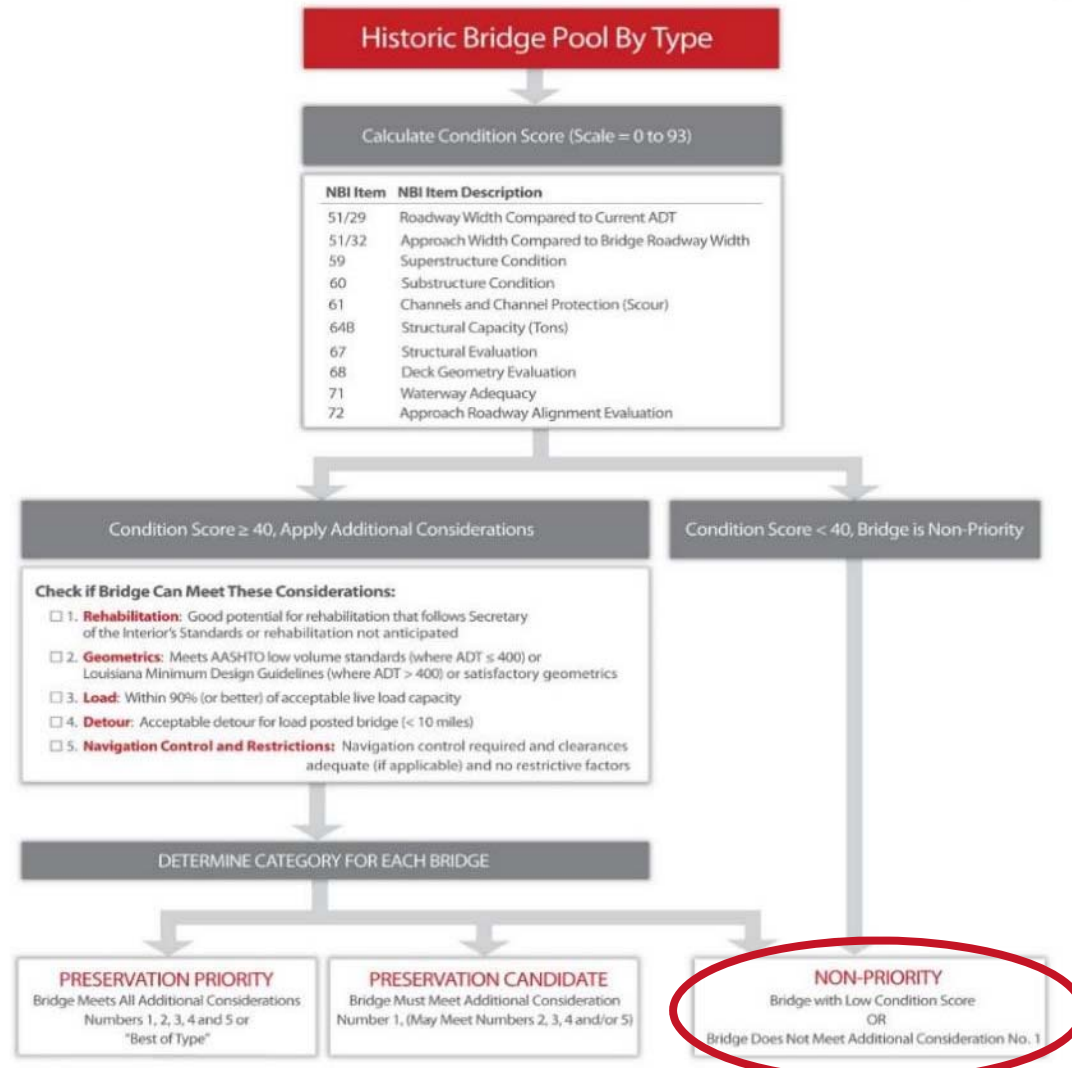


## Non-Priority Bridge Examples

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# Non-Priority

histo



# Non-Priority

Swing Plate Girder –  
1935

Recall No. 002830

St. Charles Parish

Facility Carried:  
LA0631

Facility Crossed:  
Bayou Des Allemands



Historic Bridges

# Non-Priority

Consideration 1 - Rehabilitation

Consideration 2 - Geometrics

Consideration 3 - Load

✓ Consideration 4 - Detour

Consideration 5 - Navigation  
Control and Restrictions



# Results

- Categorizes 122 historic bridges
- Makes commitment to Preservation Priority Bridges
- Streamlines efforts for LADOTD and local owners
- Provides model for other states to consider



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# Programmatic Agreement Streamlining Benefits



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# Accomplishments in Historic Bridge Preservation: Completed Projects

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# US 90 Huey P. Long Bridge

Owned by New Orleans Public Belt Railroad

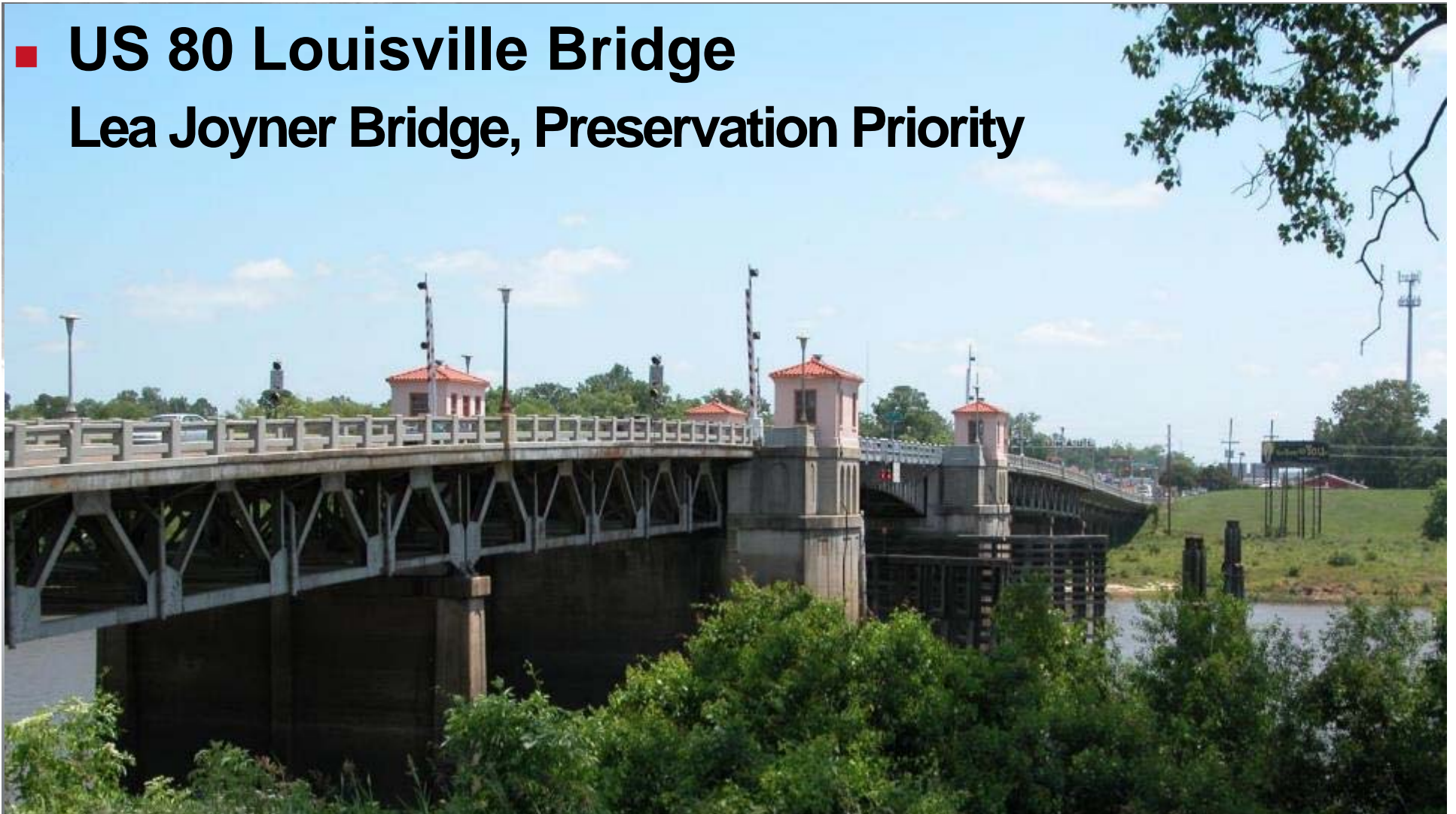


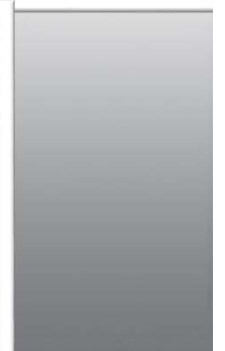


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- **US 80 Louisville Bridge**  
**Lea Joyner Bridge, Preservation Priority**







# La. 82 Mermentau River Bridge Preservation Priority

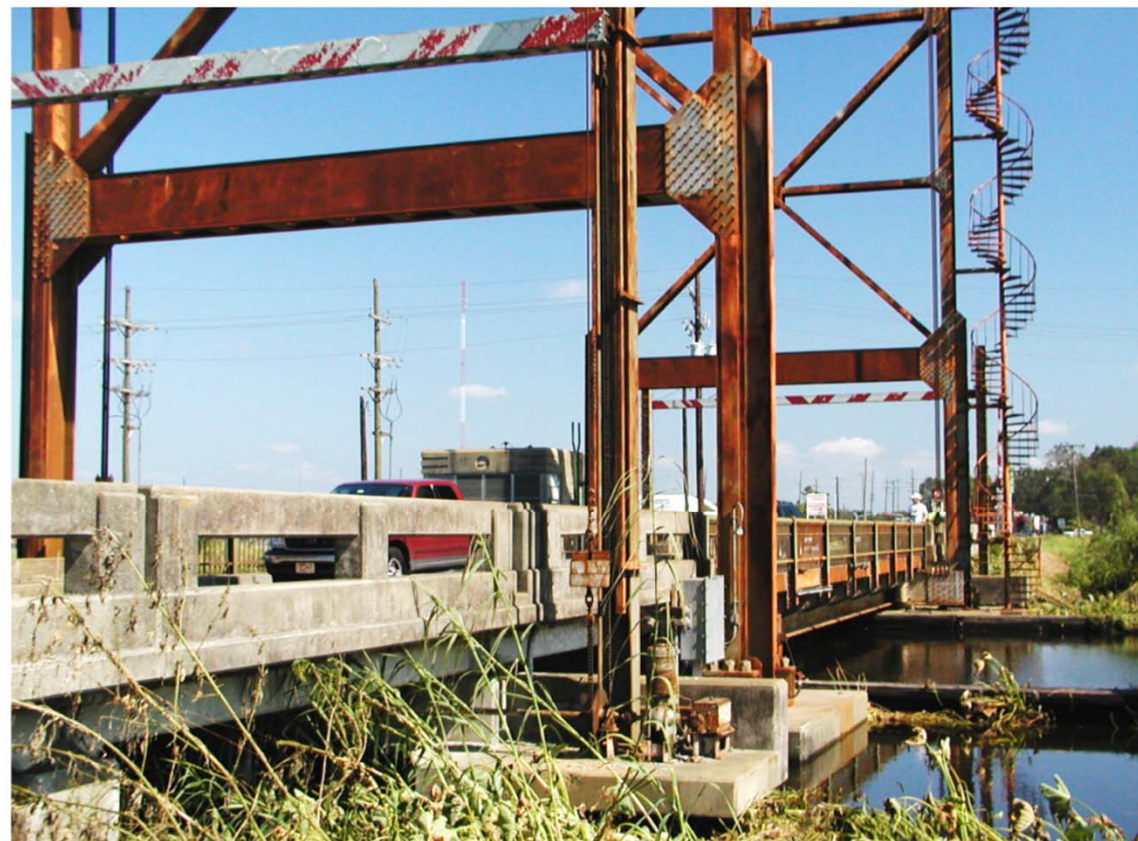


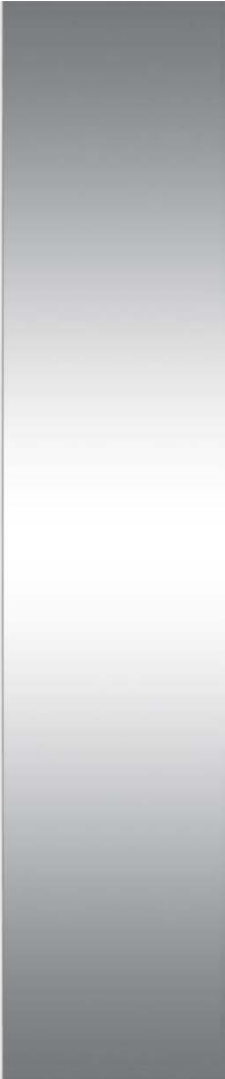


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# La. 661 Bayou LaCarpe Bridge Preservation Candidate





# La. 24 Bayou Petit Caillou Bridge (Presque Isle) Preservation Candidate







# Projects Under Design or Construction

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**US 190 Mississippi River Bridge  
Huey P. Long Bridge  
Preservation Priority**



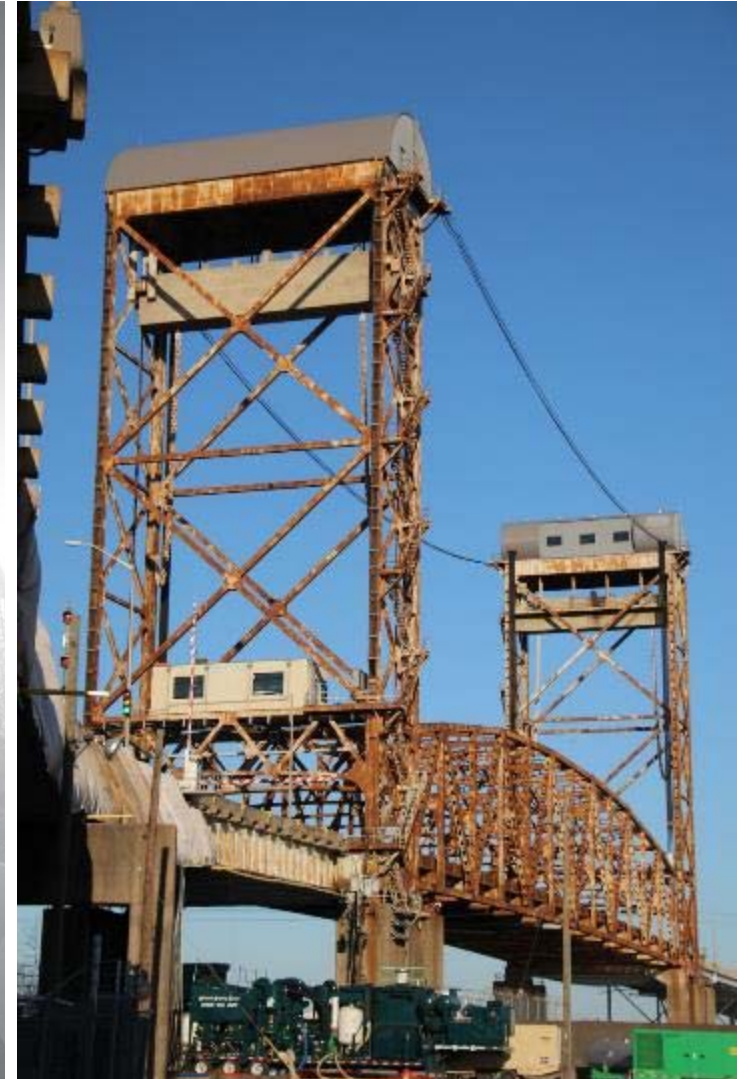


# La. 70 Sunshine Bridge Preservation Priority





# La. 39 Claiborne Bridge Preservation Priority





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# Projects Under Design

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# La. 66 Big Bayou Sara Bridge Preservation Priority

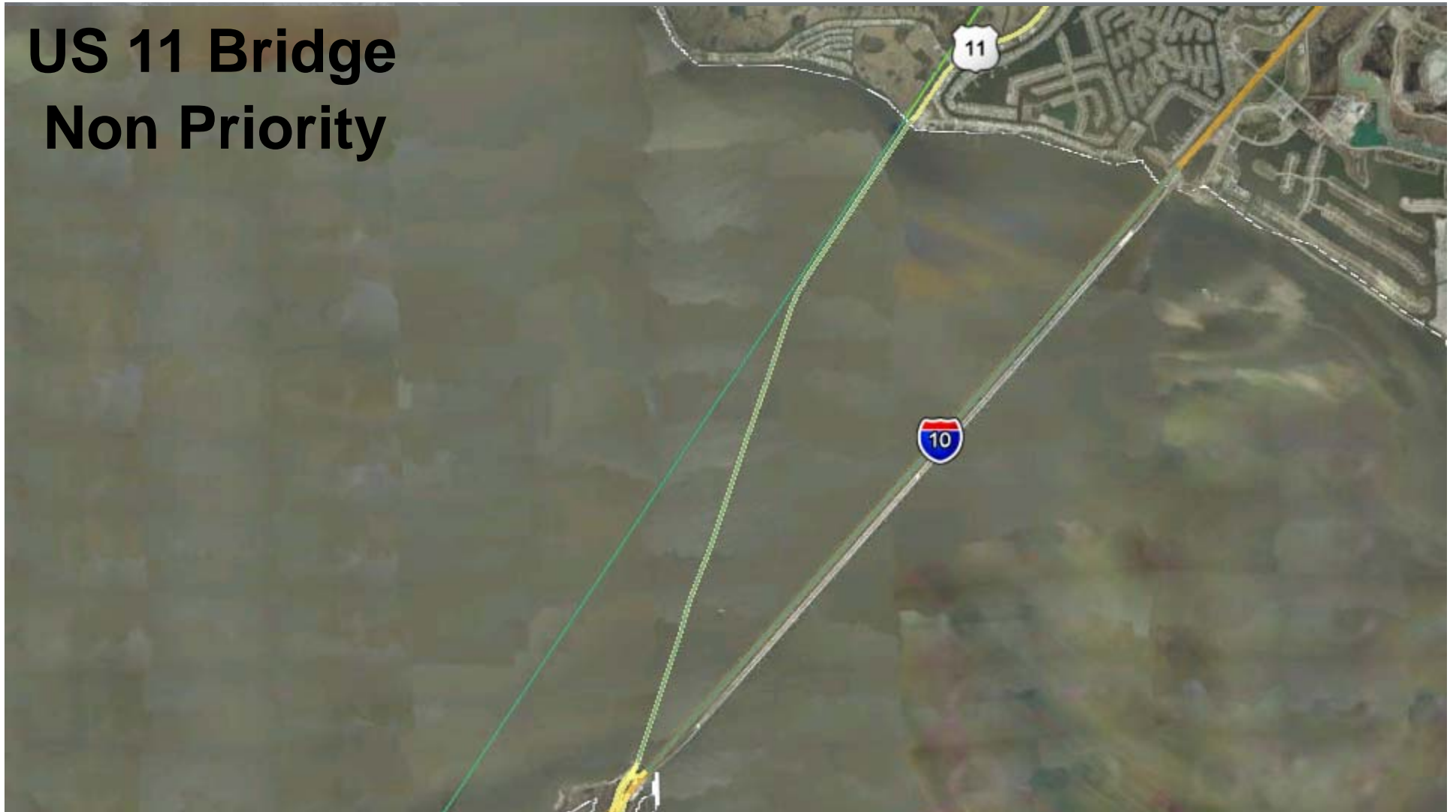


**La. 1 Intracoastal  
Waterway Bridge (West  
Larose)  
Preservation Candidate**

historic br



# US 11 Bridge Non Priority





# Questions or Comments?

**Email:**

**[LAHistoricBridges@la.gov](mailto:LAHistoricBridges@la.gov)**

**Project website:**

**[http://www.dotd.la.gov/administration/public\\_info/projects/historicbridges/](http://www.dotd.la.gov/administration/public_info/projects/historicbridges/)**

