

# Off-System Bridge Load Rating

## - DOTD's Plan Moving Forward

Louisiana Parish Engineers Association (LPESA)

Baton Rouge, Louisiana

4/25/2019

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LADOTD Bridge Design Administrator



# OUTLINE

- National Bridge Inspection Program (NBIP) 23 Metrics Compliance
- Off-System Bridges Remaining to be Load Rated
- DOTD's Plan Moving Forward
- Bridge Owners' Responsibilities
- Action Items

# NBIP 23 Metrics Compliance

➤ Code of Federal Regulations (CFR)  
Title 23 – Highways  
Part 650 – Bridges, Structures, and Hydraulics  
Subpart C – National Bridge Inspection Standards

➤ DOTD Compliance Deadline  
Dec. 2020

DOTD will lose federal funds if not in compliance by this date

# 23 Metrics

## National Bridge Inspection Program Metrics

- Introduction .....
- NBIP Metrics Glossary .....
- Metric #1: Bridge inspection organization.....
- Metric #2: Qualifications of personnel – Program Manager.....
- Metric #3: Qualifications of personnel – Team Leader(s).....
- Metric #4: Qualifications of personnel – Load Rating Engineer .....
- Metric #5: Qualifications of personnel – UW Bridge Inspection Diver .....
- Metric #6: Inspection frequency – Routine – Lower risk bridges.....
- Metric #7: Inspection frequency – Routine – Higher risk bridges.....
- Metric #8: Inspection frequency – Underwater – Lower risk bridges .....
- Metric #9: Inspection frequency – Underwater – Higher risk bridges.....
- Metric #10: Inspection frequency – Fracture Critical Member.....
- Metric #11: Inspection frequency – Frequency criteria .....
- Metric #12: Inspection procedures – Quality Inspections.....
- Metric #13: Inspection procedures – Load Rating .....**
- Metric #14: Inspection procedures – Post or Restrict .....
- Metric #15: Inspection procedures – Bridge Files .....
- Metric #16: Inspection procedures – Fracture Critical Members.....
- Metric #17: Inspection procedures – Underwater.....
- Metric #18: Inspection procedures – Scour.....
- Metric #19: Inspection procedures – Complex Bridges.....
- Metric #20: Inspection procedures – QC/QA .....
- Metric #21: Inspection procedures – Critical Findings .....
- Metric #22: Inventory – Prepare and Maintain .....
- Metric #23: Inventory – Timely Updating of Data .....



## **Metric #13: Off-System Bridge Load Rating**

**All off-system  
bridges must be  
load rated prior  
to Dec. 2020.**

# Off-System Bridges Remaining To Be Load Rated

# 2566 Bridges

(1232 – Built by DOTD, 1334 – Built by Others)

Est. Eng. Cost to Rate Each Bridge = \$5,000

Funding Needed =  $2566 \times \$5,000 = \$12.83 \text{ M}$

Deadline to Complete this task = Dec. 2020

(Total No. of Off-System Bridges = 4854)

# DOTD's Plan Moving Forward



# Initial Bridge Rating

- 1232 (Bridges Built by DOTD)

DOTD will load rate these bridges at no cost to Owners.

- 1334 (Bridges Built by Others)

DOTD will load rate these bridges, however the engineering cost to load rate these bridges will be deducted from each parish's Off-System Bridge Program Balance.

# Example

## Bridges to be Load Rated in Parish X

Parish	No. of Bridges Built by DOTD	No. of Bridges Built by Others
X	50	20



DOTD will rate 50 bridges at no cost to Parish X.



DOTD will rate 20 bridges, but \$100,000 (20 x \$5000) will be deducted from Parish X's Off-System Bridge Program Balance.

# Bridge Re-Rating Due to Condition Drops

- DOTD will re-rate all off-system bridges (including timber bridges) due to condition drops per DOTD policies at no cost to Owners.

# Routine Inspections

- DOTD will continue to perform routine inspections at no cost to Owners.

# Owners' Responsibilities

(Refer to DOTD Directives and Off-System Policies and Guidelines)

- Perform interim (special) inspections as required
- Load posting bridges
- Review overloads and permits
- If the bridge is closed by DOTD or Owners, owners must perform repair, re - rating, and provide bridge load rating with supporting documentations to DOTD prior to re-opening the bridge.
- When opening a new bridge or an existing bridge after repair/rehabilitations, owners must provide bridge load rating with supporting documentations to DOTD.

# Action Items

- BY 4/29/19, DOTD District Bridge Engineers will send the “No. of Bridges Remaining to be Load Rated” to each parish for verification. These numbers are based on DOTD’s records for each parish.
- By 5/10/19, each parish shall verify the numbers received from DOTD and confirm or provide updated numbers to DOTD District Bridge Engineers. If DOTD receives no response back from the parish, DOTD’s numbers will be used for contract preparation.



# Off-System Bridges - Status List 2019-04-24

DISTRICT **03** PARISH NUMBER **01** **Acadia**

Unrated DOTD Built **35**  Parish: Reviewed by:  
 Unrated Non-DOTD Built **8**   
 Total unrated **43**

RECALL NUMBER	BRIDGE NAME	YEAR BUILT	BRIDGE TYPE	PROJECT NUMBER	Will be load rated by Parish/Owner? (Y/N) (Notes)	
030127	ACADIA PH ROAD NO.0317	1998	COPBOX	713-58-0059	<input type="checkbox"/>	<input type="text"/>
030129	FAULK RD OVER LYONS POIN	2012	COSLAB	H.005985	<input type="checkbox"/>	<input type="text"/>
030217	COULEE	1993	COSLAB	713-56-0027	<input type="checkbox"/>	<input type="text"/>
030218	ACADIA PH ROAD NO 0066	1993	COPCSS	713-55-0047	<input type="checkbox"/>	<input type="text"/>
030219	ACADIA PH ROAD NO 45	1994	COPCSS	713-55-0053	<input type="checkbox"/>	<input type="text"/>
030221	ACADIA PH ROAD NO 0320	1993	COPCSS	713-55-0052	<input type="checkbox"/>	<input type="text"/>
030284	ACADIA PH ROAD NO 0318	1999	COSLAB	713-59-0106	<input type="checkbox"/>	<input type="text"/>
030502	Napp St. Over Coulee	2017	COPBOX	H.010150	<input type="checkbox"/>	<input type="text"/>
200440	SONNIER DR. @ CREEK	2012	COSLAB	713-01-0121	<input type="checkbox"/>	<input type="text"/>
200445		1999	COSLAB	713-59-0109	<input type="checkbox"/>	<input type="text"/>
200449	GRANDE COULEE	1986	STLPIP	713-45-0038	<input type="checkbox"/>	<input type="text"/>
200451	ACADIA PH ROAD NO 0266 B	2012	COSLAB	713-01-0119	<input type="checkbox"/>	<input type="text"/>
200452	ACADIA PH ROAD # 266	1999	COSLAB		<input type="checkbox"/>	<input type="text"/>
200453	ACADIA PH RD ST MATHEW	2002	CONBOX		<input type="checkbox"/>	<input type="text"/>

*Thank you!*



Office of Operations  
PO Box 94245 | Baton Rouge, LA 70804-9245  
ph: 225-379-1581 | fx: 225-379-1851

John Bel Edwards, Governor  
Shawn D. Wilson, Ph.D., Secretary

April 29, 2019

Off System Bridge Owners  
Statewide

**RE: Off System Load Rating Status**

Dear Off System Bridge Owners:

A list of off system bridges that still require a load rating for each Parish is provided with this letter (attached). Every Parish is required to review the list provided and follow the instructions below. In addition, LADOTD’s plan of action to mitigate these outstanding load ratings is given. Parishes shall indicate on the list provided whether or not they plan to load rate each bridge.

Will be load rated by Parish/Owner?	
(Y/N)	(Notes)

Each listed bridge shall be marked by the bridge owner as:

- **Y** (Owner provided previously or will provide complete load rating) or
- **N** (LA DOTD will assist load rating with condition listed below)
- Please indicate in the notes if a load rating has been provided to LADOTD previously or if the owner intends to load rate the bridge. All bridge load ratings that will be done by bridge owners shall be submitted to LA DOTD by **June 30, 2020**.

The reviewed list must be returned to LADOTD by **May 10, 2019**. A failure by the Parish to respond by this date will result in LADOTD performing the load rating, and deducting the cost of the load rating from the Parish’s Off System Bridge Replacement Program budget. This must be done to comply with Federal National Bridge Inspection Program Requirements.

**DOTD Built Bridges :** Bridges listed on the attached list with State Project number (xxx-xx-xxxx or H.xxxxxx) were built under a State project/program. These bridges will be rated by LADOTD at no cost to the bridge owner if they do not have a load rating. These bridges should be marked with ‘N,’ unless the owner has rated the bridge in the past or has the bridge under contract to be load rated (in that case, a Y should be placed in the box).

**Non- DOTD Built Bridges :** For all bridges not built under the state Project/Program that will be rated by LADOTD, the cost will be funded by deducting from the parish’s Federal Off-system Highway Bridge Program at \$5,000 each bridge. If the Parish wishes to perform the load rating in order to avoid this deduction, the Parish must note this on the list with a Y, and the load rating must be submitted to LADOTD by **June 30, 2020**.



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Please review the list of bridges. At the top right corner of each list, a parish official with signatory authority must sign that the list was reviewed.

Unrated DOTD Built	8		Parish: Reviewed by:
Unrated Non-DOTD Built	25		
Total unrated	33		

Important Dates:

**May 10, 2019** – Due date for Parish to submit the rating list with markups and signature

**June 30, 2020** – Due date for Parish to submit Parish-funded completed load ratings

If you have any further question. Please contact Jenny Fu at 225-379-1321.

Sincerely,

Jasmine Galjour

C: Nick Fagerburg  
Dana Feng  
Jenny Fu  
Kian Yap