

NATIONAL BRIDGE INSPECTION PROGRAM



Tony Sullivan
Assistant Chief Engineer
Operations



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HISTORY OF THE BRIDGE INSPECTION PROGRAM

- 1968 – Federal-Aid Highway Act – NBIS (State & Federal Bridges)
- 1978 – Surface Transportation Assistance Act (Bridges on public roads – This is where the counties come in)
- 1985 – AR reorganized – Hired fulltime Inspectors – Created the Structures Inventory & Rating Section – Annual posting certification program – HBM Engineer provided coordination of Inspection Program
- 2011 – FHWA rolled out the 23 Metrics (Things got more complicated)
- 2011 – Title changes – HBM Engineer designated Program Manager – District Construction Engineers designated District Bridge Inspection Program Mangers (Your contact person)
- 2014 – Moved to a mobile inspection platform (InspectTech) and started email notifications to help comply with the 23 Metrics

GRADING THE BRIDGE INSPECTION PROGRAM

Requirements can all be tied to the 23 Metrics
(Data Driven, Risk-Based)

There are 3 performance levels:

- Satisfactory – Adhering to the intent of the National Bridge Inspection Standards (NBIS) regulations
- Actively Improving – Plan of Corrective Action (PCA) is required – Email notifications for postings and critical findings are examples
- Unsatisfactory – Not adhering to the NBIS – **Bad place to be**

ROLES IN THE BRIDGE INSPECTION PROGRAM

What Our Inspectors See



Let us not make the local critters too comfortable. Please clean up under the bridges.

FRED RESTING IN HIS RECLINER

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What Our Inspectors See



Hard to inspect what you can't see. Cutting back the vegetation would really help us access what we need to inspect.

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What Our Inspectors See



Posting signs don't do much good if you can't see them.

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What Our Inspectors See



Posting signs also don't do much good if you can't read them.

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What Our Inspectors See



Please, Please – Take care of your Critical Findings. We are **REQUIRED** to report these to the Feds so there is lots of documentation that we have notified you of your problems.

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What You See

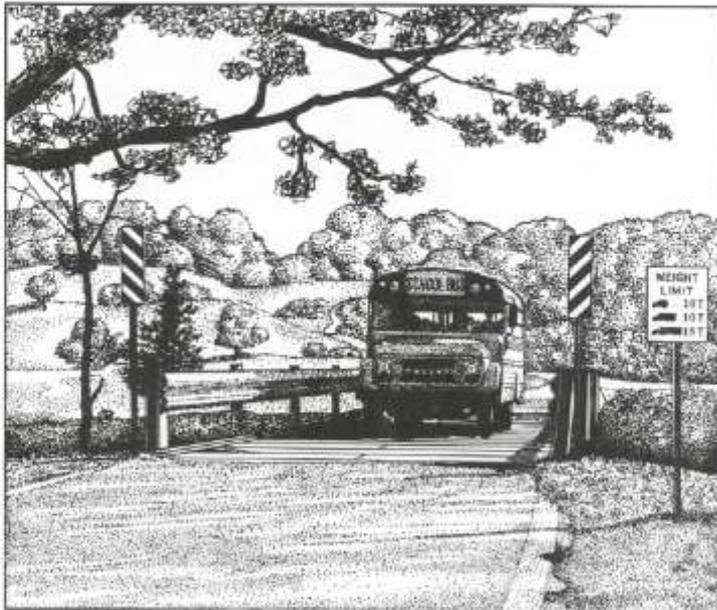
- 1st of Month – Emails sent out for Critical Findings (Metric 21)
- 15th of Month – Emails sent out for Posting Issues (Metric 14)
- Form VII – Designated Contact Person
- Form VIII – Bridge Revisions Affecting Inventory Data
- Form IX – Material Requisition and Installation Log
- Posting Recommendations
- Bridge Closure Letter
- Bridge Inspection Teams

ROLES IN THE BRIDGE INSPECTION PROGRAM

What You See

SEPTEMBER 2017

LOCAL GOVERNMENT PROCEDURES FOR COMPLIANCE WITH THE NATIONAL BRIDGE INSPECTION STANDARDS



PREPARED AND DISTRIBUTED BY
THE ARKANSAS
DEPARTMENT OF TRANSPORTATION

Contains detailed information on the responsibilities of the Department and your responsibilities as it pertains to your position.

Lots of good information here.

PLEASE READ

Can be found at:

http://web.ahtd.com/bridge_division/LocGovtCompMan_2017.pdf

ROLES IN THE BRIDGE INSPECTION PROGRAM

What You Don't See

 U.S. Department of Transportation
Federal Highway Administration

NBIS Oversight Program

HIBS-30
NBIPOT

Metrics for the Oversight of the National Bridge Inspection Program



April 1, 2013

The process assesses compliance with 23 metrics that represent measurable requirements of the NBIS regulation. The metrics are designed to assess the quality and performance of each State's program and, collectively, the national program.... Basically means we are being compared to everyone else every year even if we have different situations.

This produces a lot of....

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What You May See



PAPERWORK – We need your help in documenting your repairs and your postings to keep both us and YOU out of hot water.

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What None of Us Want to See



Trust us – Better to work with us than the Feds

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What None of Us Want to See

For Example – In Mississippi, Federal Authorities closed 62 bridges in the Spring of 2017 after a Federal tour:



After the Federal closures, Mississippi closed additional bridges for a total of more than 160 bridges closed.

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ROLES IN THE BRIDGE INSPECTION PROGRAM

What None of Us Want to See



Little bridges can cause big problems. Anyone want to explain to the parents of these children why you didn't take of this bridge?

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**TO KEEP IT OUR
BUSINESS WE NEED
TO TAKE CARE OF
BUSINESS**



If you need to close a bridge then **REALLY CLOSE IT**
Here is a good job



Same bridge, other side – Not so good

Loading up a bridge with dirt/gravel or asphalt can seriously affect posting.

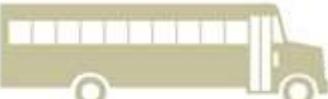
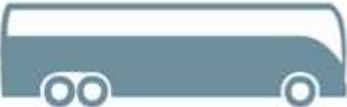
1 inch of gravel/dirt weighs about 9 lb/ft²
16 inches = approximately 144 lb/ft²
This bridge is loaded with about 167,780 lb of dirt/gravel

LOG



Approximate vehicle weights

Lower weight limits for about 1,400 load posted state bridges:

 AVERAGE STANDARD CAR: 1.5 TONS	 AVERAGE PICKUP TRUCK: 3 TONS	 AVERAGE AMBULANCE: 5 TONS
 AVERAGE DELIVERY TRUCK: 6 TONS	 AVERAGE LOADED SCHOOL BUS: 17 TONS	
 AVERAGE LOADED GARBAGE TRUCK: 25 TONS	 AVERAGE LOADED CHARTER BUS: 20 TONS	
 AVERAGE FIRE TRUCK: 19-30 TONS	 AVERAGE LOADED COMBINE HARVESTER: 30 TONS	
 AVERAGE LOADED PLOW TRUCK: 28 TONS	 AVERAGE LOADED CONCRETE TRUCK: 33 TONS	 AVERAGE LOADED DUMP TRUCK: 36 TONS
 AVERAGE LOADED TRACTOR TRAILER: 40 TONS		

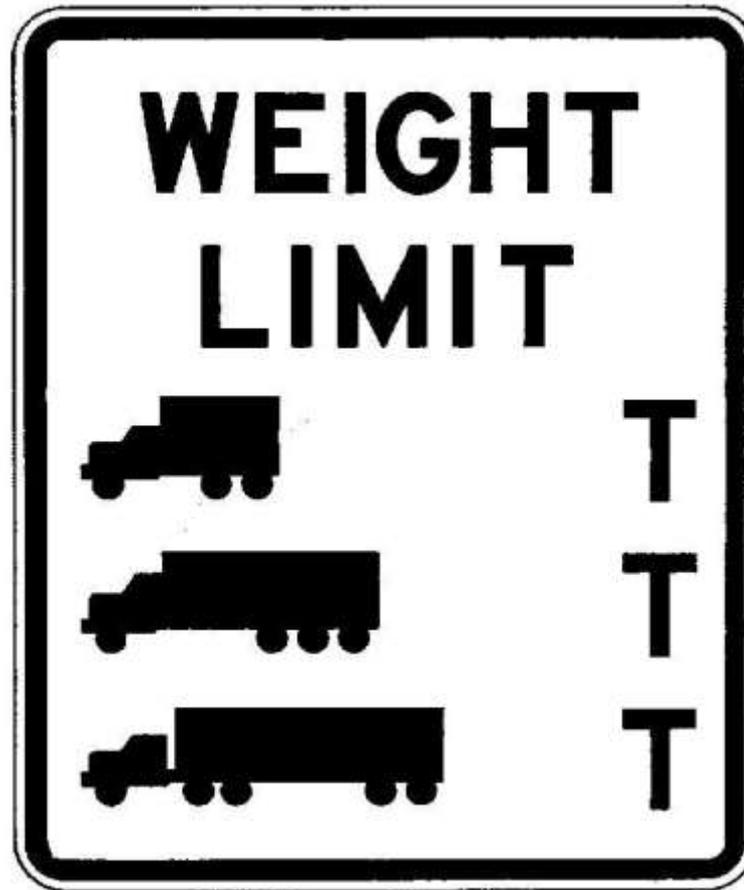
Source: PennDOT James Hilston/Post-Gazette

Be aware of what your bridges are posted for and what may be going over them.

Do you know the school bus routes in your county?



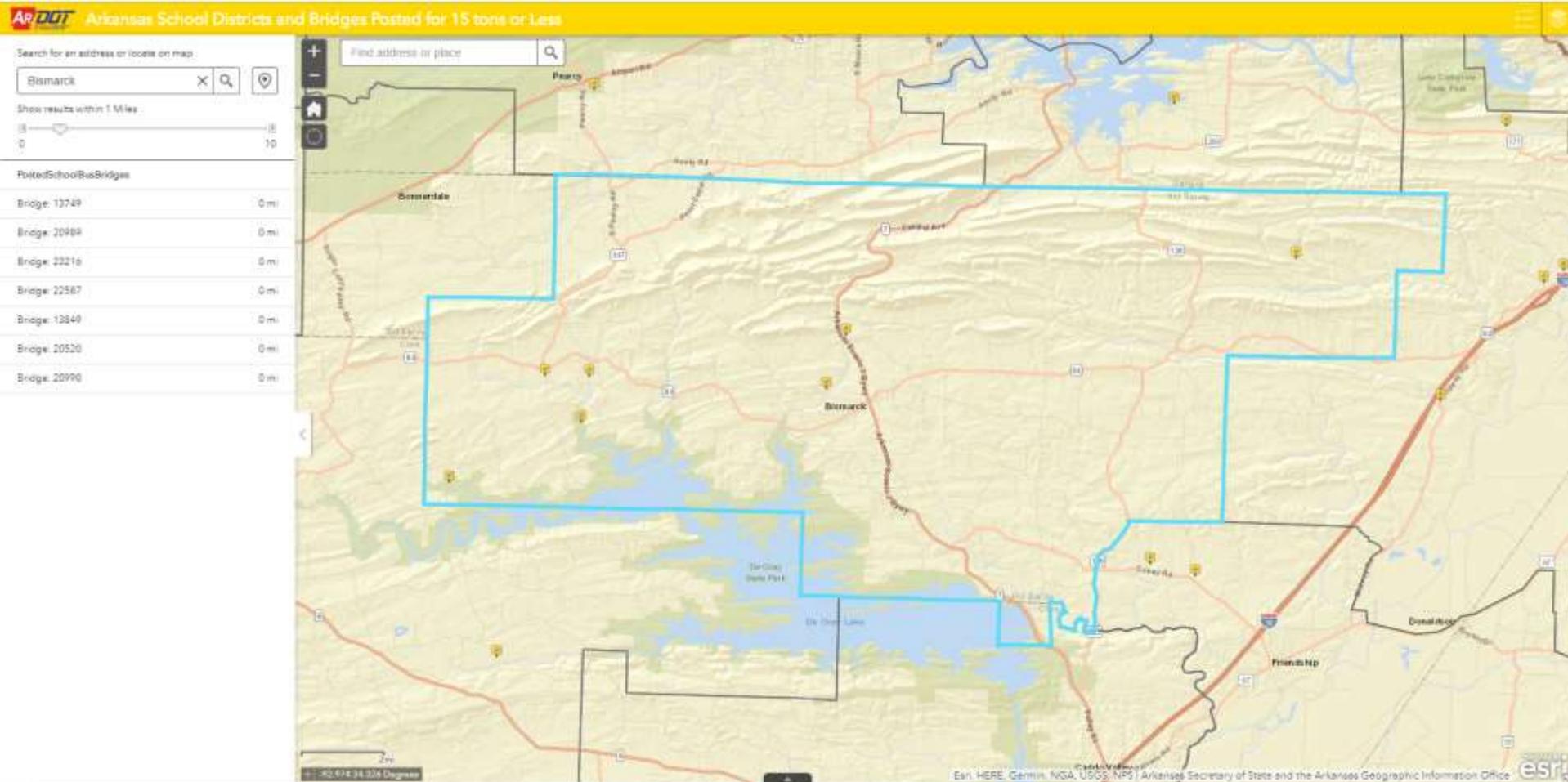
Weight Limit Posting Loads



It is a ... **LIABILITY ISSUE** ... Take care of your signs

You can search posted bridges in school districts at this website

<http://ardot.maps.arcgis.com/apps/webappviewer/index.html?id=db2748bc30904a55a1fbc709543613c0>



Or... You can go to I Drive Arkansas and search posted
• bridges by county.

You Can Build Better Bridges with the
ARDOT Salvage Steel Program

In an effort to partner with local governments to improve their bridge inventory and the safety of the traveling public, the Department will allow the transfer of salvage bridge materials for local governments on public roads.



HOW TO PARTICIPATE IN PROGRAM

- Sign a Memorandum of Agreement
 - Provide List of Salvageable Material Requested
 - Describe Where and How Material to be Used
 - Provide Labor/Equipment Needed to Unload Material
 - Commit to Using Material Within 2 Years of Delivery
 - Build a Bridge that is Structurally Sound with Opening that is Hydraulically Adequate
 - Comply with Local, State, and Federal laws
-
-

Please – If you get free steel... Build better bridges than this.





**WE WANT TO PARTNER WITH
YOU FOR BETTER BRIDGES**