



2019 Michigan Bridge Conference **Metric 15 – Bridge Files** **Sonny Jadun, P.E.**



U.S. Department of Transportation
Federal Highway Administration



Presentation Summary

- Describe the intent of the metric
- Describe the process for evaluation and compliance determination
- Identify recent changes to the metric
- Metric Compliance Trend.



Metric 15 Intent

Metric 15 verifies bridge files contain applicable components.

What are some applicable components?





Metric Intent

From the Metric 15 commentary:

The list of *applicable significant bridge file components* for Metric 15, which is a subset of the larger list provided in the MBE is composed of:

- Inspection reports
- Waterway information – channel cross-sections, soundings, stream profiles
- Special inspection procedures or requirements
- Load rating documentation, including load testing results
- Posting documentation
- Critical findings and actions taken
- Scour assessment
- Scour Plan of Action (POA)(for scour critical bridges and those with unknown foundations) and documentation of post-event inspection or follow-up
- Inventory and evaluation data and collection/verification forms
- Significant correspondence



Min-AL M15

- Monitor PCA
- Assess based on previous review results and knowledge and awareness



Int-AL M15

- In addition to Min-AL:
 - Review randomly sampled bridge files

PY 2018

Intermediate Assessment (Int-AL): In addition to the Min-AL:

- Randomly sample bridges to verify that bridge files and significant bridge file components exist; if some components are only referenced, verify the components exist in the referenced location(s) and are readily available.

Note:

No field review site visits required



Int-AL M15

- Sampling is Statewide
- Partitioning is not allowed



Int-AL M15

File Review Form:

For your use

Generated from the Sampling Tool

Metric 15 – Inspection Procedures, Bridge Files					
File Components Present – (Y/N/[R]eferenced)					
Inspection Reports:		Waterway Information:		Correspondence:	
Inspection Procedures:		Load Rating:		Posting Information:	
Critical Findings:		Scour Assessment:		Scour POA:	
Inventory Data:					
Metric 15 Notes:					



Int-AL M15

If an significant component is not located in the bridge file, but is referenced to a location, verification of existence of the referenced file must be completed



InD-AL

Same as other metrics

In-Depth Assessment (InD-AL): In-Depth Assessment (InD-AL): Perform one of the following:

- Division InD-AL – In addition to the Int-AL, develop guidelines for review, with concurrence from BSE, and conduct in accordance with guidelines.
- National InD-AL – Conduct in accordance with national direction and guidelines



Compliance Determination

Each bridge is considered one data point for measuring compliance.

- Must meet all items identified in the metric
Compliance Levels
- If one items is not acceptable, whole bridge is counted as not meeting criteria
- $\% = (\# \text{ bridges meeting crit.}) / (\# \text{ reviewed}) * 100$



Compliance Determination

Compliance:

All bridges have files with applicable significant components



Compliance (C): All of the following must be met for C:

- All sampled bridges have files.
- All sampled files have the applicable significant components.



Compliance Determination

Substantial Compliance:

All bridges have files with 85% having applicable significant components

Substantial Compliance (SC): All of the following must be met for SC:

- All sampled bridges have files.
- At least 85% of sampled bridge files have the applicable significant components.



Compliance Determination

Non-Compliance:

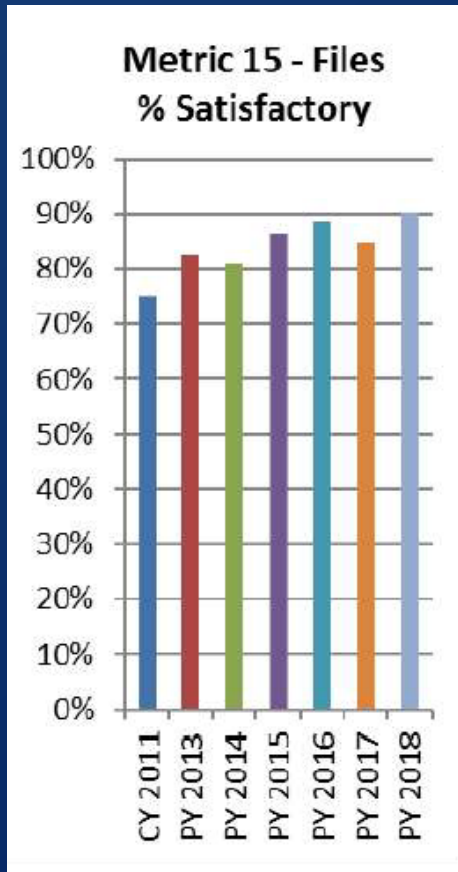
One or more SC criteria not met



Non-Compliance (NC): One or more SC criteria not met.



Compliance Trend – 2011-18





Questions