



# FHWA Update

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**Northeast Bridge Preservation Partnership**

**2015 Meeting**

**Manchester, NH**

**September 9-11, 2015**



# Overview

- Transportation Performance Management
- National Tunnel Inspection Program
- National Bridge Inspection Program
- Bridge Management and Preservation
- SHRP2



# Transportation Performance Management (TPM)

- MAP-21 started the transition to a performance based highway program
- MAP-21 instituted performance and accountability requirements to prioritize NHPP projects
- TPM is a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals



# TPM and Rulemakings

- FHWA is in the process of several rulemakings that will affect bridge and tunnel owners in regard to TPM
  - Pavement and Bridge Condition Performance Measures
  - Asset Management Plan



# Pavement and Bridge Conditions Performance Measures

- NPRM was issued Jan. 5, 2015 and comments were accepted through April 6, 2015
  - Proposed measures for NHS bridges in good and poor condition
  - Proposed reporting on targets every two years
  - Proposed minimum level of condition for NHS bridges (10% structurally deficient)
- FHWA is currently reviewing comments and developing the Final Rule



# Asset Management Plan

- NPRM was issued Feb. 20, 2015 and comments were accepted through May 29, 2015
  - Proposed to establish asset management plan to improve and preserve the condition of NHS assets
  - Proposed minimum content of an asset management plan
  - Proposed minimum standards for bridge management systems
- FHWA is currently reviewing comments and developing the Final Rule



# National Tunnel Inspection Program

- National Tunnel Inspection Standards (NTIS)
- National Tunnel Inventory (NTI)
- Specifications for the National Tunnel Inventory
- Tunnel Operations, Maintenance, Inspection and Evaluation (TOMIE) Manual
- Tunnel Safety Inspection Training (NHI)



# National Tunnel Inspection Standards

- Ensure uniformity
- Establish qualifications of inspection team.
- Establish national certification for inspectors.
- Specify, in detail, the inspection method.
- Determine maximum inspection intervals.
- Establish rules to maintain and make available:
  - Written reports and notations of any action taken.
  - Current inventory data reflecting recent inspections.





# National Tunnel Inventory

- National Tunnel Inventory
  - Based on Specifications for the National Tunnel Inventory (SNTI)
  - 2 Part Implementation
    - Part 1 – Preliminary NTI
    - Part 2 – NTI



# National Tunnel Inventory

- SNTI
  - Introduction
  - Inventory Items
  - Elements
  - Index of Inventory Items and Elements
  - Tunnel Coding Example
  - References



## Specifications for the National Tunnel Inventory





# TOMIE Manual

Tunnel

Operations

Maintenance

Inspection

Evaluation



a) Cut and Cover



b) Bored (TBM)



c) Jacked Tunnel



d) Immersed Tube (in dry dock)



e) Drill and Blast (Rockbolts)



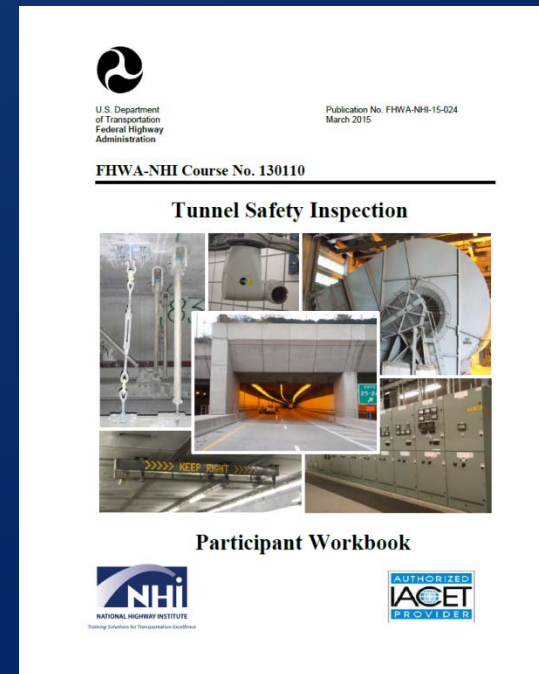
f) Sequential excavation method in relatively weak rock (center, 2 side [L & R] headings & bench)





# Tunnel Safety Inspection Course

- NHI 130110
- Comprehensive Training Course
- 5-days
- Pre-requisites Same as 130055
  - WBT – 130101/A
  - ILT – 130054





# Tunnel Safety Inspection Course

- First 8 Sessions
- Providing Funding for Attendees
  - 2 State DOT
  - 1 Division Office (DBE)
    - HQ, RC and FLH
- Open to Requests in 2016



# Tunnel Safety Inspection Course

- Sacramento, CA – August 24 - 28, 2015
- Lakewood, CO – September 14 - 18, 2015
- Vancouver, WA – September 28 - October 2, 2015
- Nashville, TN – October 19 - 23, 2015
- Matteson, IL – November 2 - 6, 2015
- **Boston, MA – November 16 - 20, 2015**
- Atlanta, GA – November 30 - December 4, 2015
- Arlington, VA – December 14 - 18, 2015



# Tunnel Inspection Refresher

- NHI Course Being Developed
  - 4 Hours of WBT
  - 2.5 Days of ILT
  - 19 Hours of FHWA Approved Training
- Availability in 2017



# Implementation Timeframe

- June 26, 2015 – OMB Clearance
- July 14, 2015 – NTIS Publication
  - Publication of TOMIE, SNTI, NHI Course, etc.
- August 13, 2015 – Effective Date
- August – December 2015 – FHWA Sponsored Training Sessions
- December 11, 2015 – Preliminary NTI Submittals Due





# Implementation Timeframe

- August 13, 2017 – Qualified Program Manager
- August 13, 2017 – Initial Inspection Completed
  - Requires a Qualified Team Leader
  - Tunnel-Specific Inspection Procedures
- March/April , 2018 – NTI Submittals
- April 1, 2018 – NTIP Oversight Begins



# Website

- <http://www.fhwa.dot.gov/bridge/inspection/tunnel/>



# National Bridge Inspection Program

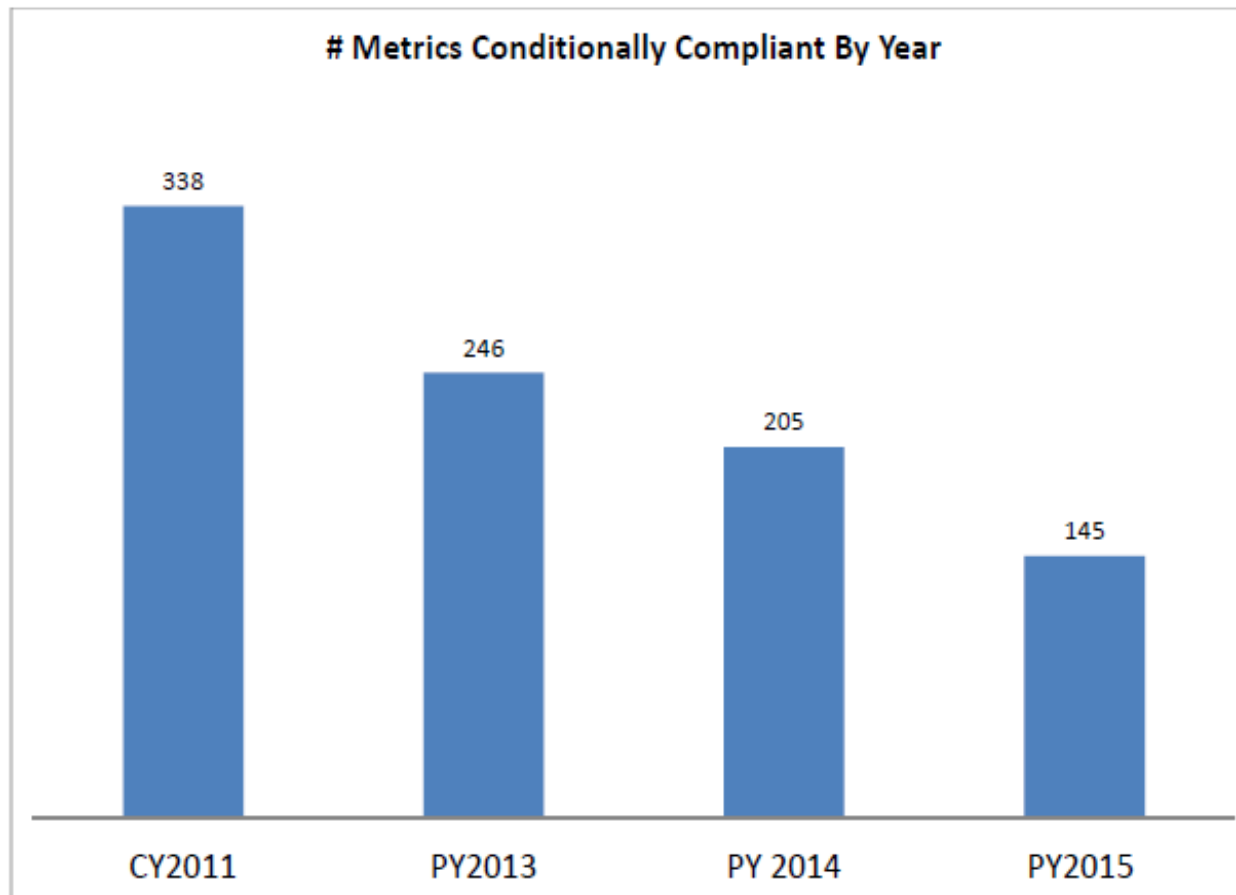
- National Bridge Inspection Standards (NBIS) NPRM
  - Scheduled (tentatively) for publication in early 2016
- Specifications for the National Bridge Inventory (Coding Guide)
  - Being updated to coincide with NBIS NPRM
- Risk-Based, Data-Driven Oversight (23 metrics)



# 23 Metrics

## Preliminary Metric Results of PY 2015 NBIS Program Review

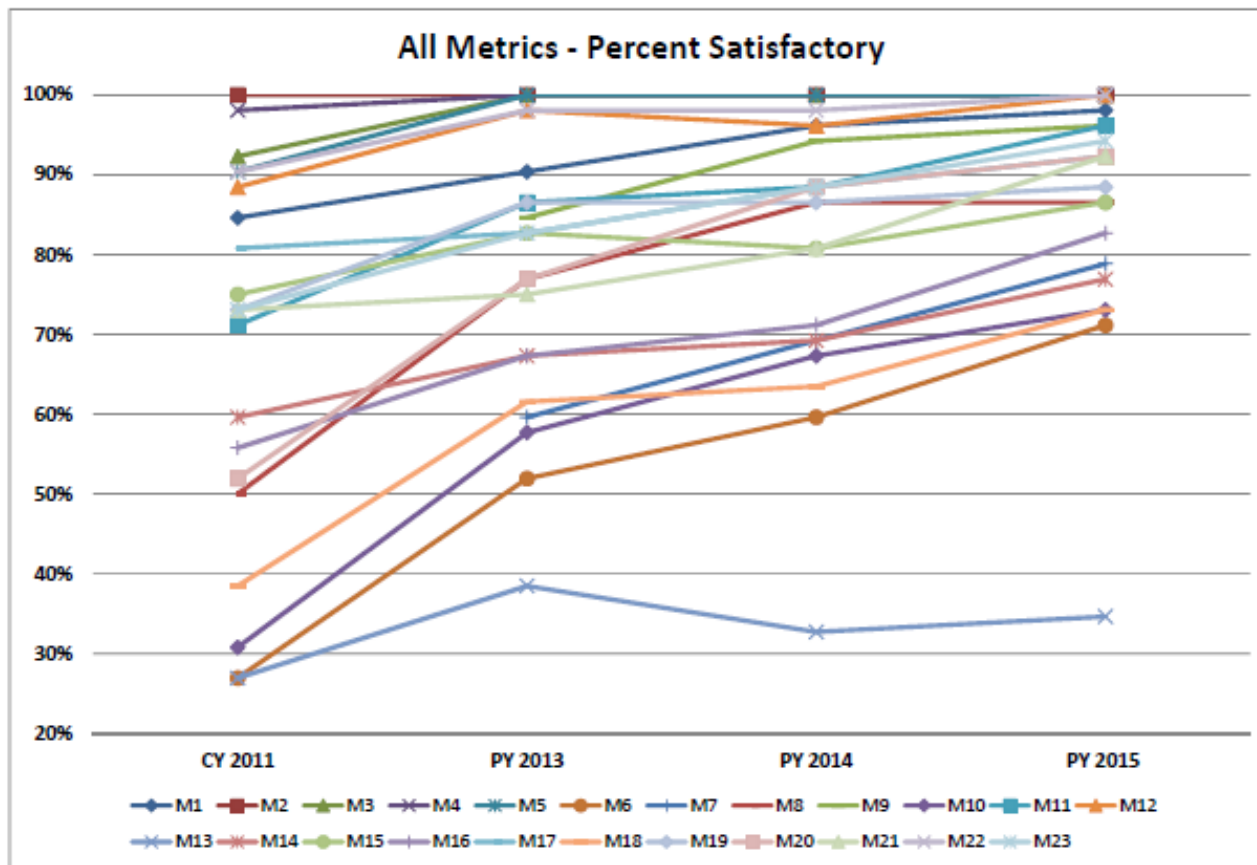
# Metrics Conditionally Compliant By Year





# 23 Metrics

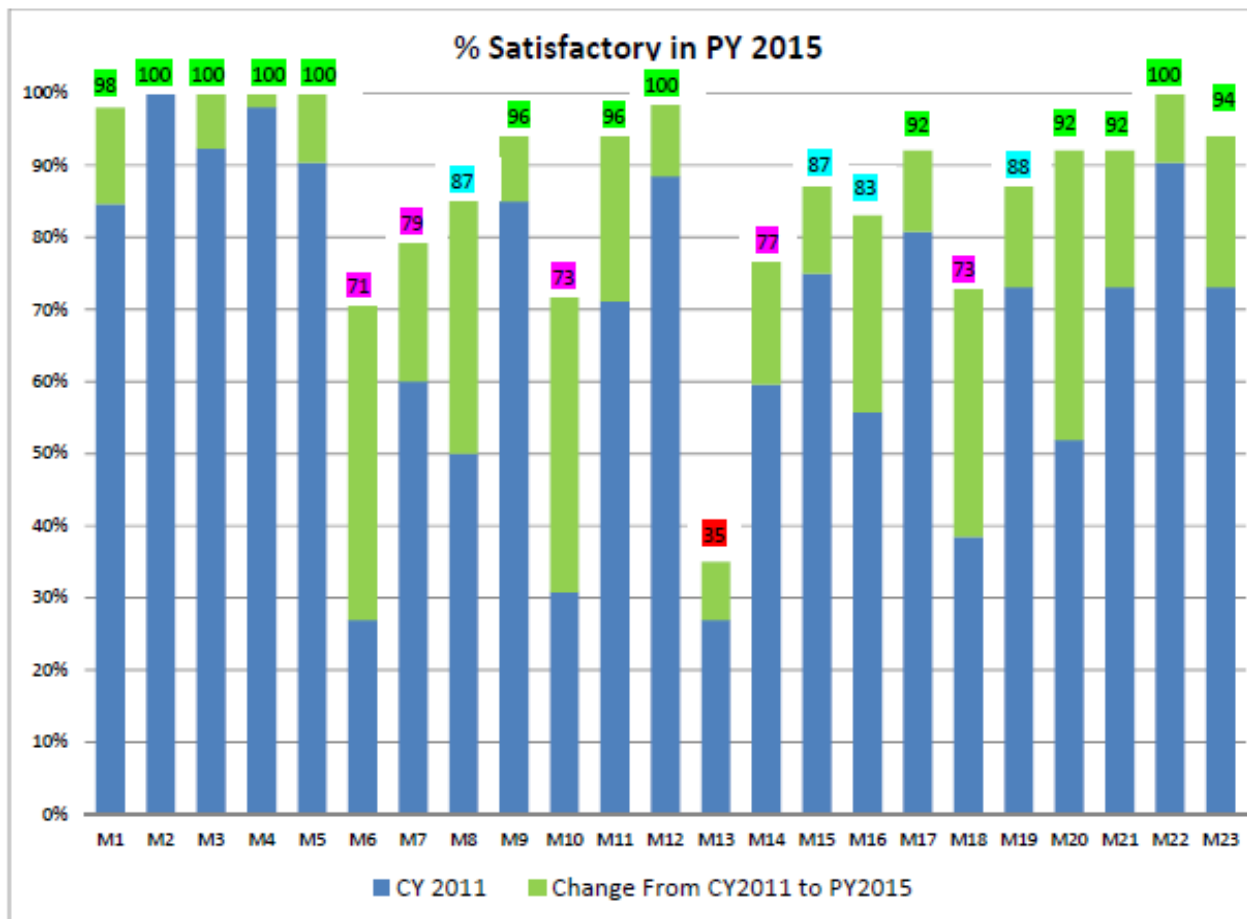
Preliminary Metric Results of PY 2015 NBIS Program Review





# 23 Metrics

Preliminary Metric Results of PY 2015 NBIS Program Review





# Bridge Management and Preservation

- Developing several NHI training courses
  - Bridge Preservation WBT – now available
    - 130106 A, B, and C
  - Bridge Management WBT – now available
    - 130109 A & B
  - Bridge Maintenance Training and Reference Manual – being updated for 2016
  - [www.nhi.fhwa.dot.gov](http://www.nhi.fhwa.dot.gov)



# SHRP2

- Service Life Design for Bridges (R19A)
  - Goal: Provide longer service life by design through durable and state-of-the-art materials, construction techniques, and utilization of emerging technologies that are ideally suited for the bridge
  - Comprehensive reference manual
  - Lead adopters – PA, OR, HI, IA, VA
  - [www.fhwa.dot.gov/goshrp2/solutions/renewal/R19](http://www.fhwa.dot.gov/goshrp2/solutions/renewal/R19)





# Questions



Ashuelot Covered Bridge