Today’s Presentation

- What are we doing?
- Why are we doing this?
- What are the highlights?
- When?
What are we doing?

- Moving from a subjective annual National Bridge Inspection Program review process to a more data-driven, risk-based process
- Removing some subjectivity
- Focusing FHWA oversight resources
- Establishing national consistency
- Clearly defining terms and processes
Why are we doing this?

- OIG audit followed I-35W bridge collapse
- 2009 and 2010 audit recommendations
  - Minimum requirements for data-driven, risk-based bridge oversight during annual NBIS compliance reviews.
  - Detailed criteria to ... determine [overall compliance] with greater consistency.
  - A policy ...that defines procedures Division Offices should follow to enforce compliance with the NBIS.
Why are we doing this? (continued)

Strong direction from Congress...Conference Report to FY 2010 Approps Act

“The Committee expects the Federal Highway Administration to make more significant progress in improving its oversight of bridge conditions and safety over the course of fiscal year 2010. In order to ensure that the agency has the staff necessary to conduct more rigorous oversight of bridges, the Committee directs the Federal Highway Administration to use $5,000,000 of the funds for hiring additional personnel at the agency headquarters and in each of the division offices.”
Why are we doing this? (continued)

- Recognition by FHWA of several opportunities for improvement
- Continually identified as a high-risk area
- Concerns by States that our level of oversight is not consistent across the nation
Current oversight process

- FHWA NBIP oversight today

  - Annual review
    - typically involves review of files and documentation, on-site bridge visits, NBI data checks, interviews, and review of procedures
  - General guidance offered, but not too structured
  - Outcome: Overall assessment of compliance
  - Annual summary report prepared by Divisions and forwarded to HQ
Future oversight process

23 Individual Metrics. Each metric ...

- Is linked to specific NBIS provisions
- Has criteria identified to determine compliance status
  - Sampling required
- Three possible review levels
  - Minimum
  - Intermediate
  - In-depth
Future oversight process
(continued)

- 5 year cycle of annual reviews
- Reporting via a database
- Actions for non-compliance defined

- Important difference from today...assessing 23 individual metrics and determining compliance on each rather than overall
Definitions

- **Metric**: Quantified NBIS information by which one can make an assessment of compliance.
Metric Example

650.313 (e) (1) – Bridges with fracture critical members

Are the location of FCMs identified and the FCM inspection frequency and procedures described in the inspection records for each bridge requiring a fracture critical member inspection? Are FCMs inspected according to these procedures?
Definitions

- 4 Levels of Compliance for each metric
  - Compliance
  - Substantial Compliance
  - Non-compliance
  - Conditional Compliance
## Metric Example

<table>
<thead>
<tr>
<th>Compliance</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Substantial Compliance</strong></td>
<td>At least 95% of files sampled of bridges with FCMs have the FCMs properly identified and the inspection frequencies, procedures and conditions of FCMs described.</td>
</tr>
<tr>
<td><strong>Non-compliance</strong></td>
<td>Less than 95% of files sampled of bridges with FCMs have the FCMs properly identified and the inspection frequencies, procedures and conditions of FCMs described.</td>
</tr>
<tr>
<td><strong>Conditional Compliance</strong></td>
<td>Adhering to approved plan of corrective action.</td>
</tr>
</tbody>
</table>
Review Level Definitions

- **Minimum**: Division Bridge Engineer’s general knowledge and awareness of the state’s program in relation to the metric.
  - Enhanced with interviews of State staff as appropriate and/or NBI data review
  - Ranges from brief consideration of the metric with respect to any changes since last review to a more detailed look at NBI data and a review of historical trends
  - Includes a check on items previously identified for improvement or corrective action
**Review Level Definitions**

- **Intermediate:** Verifying minimum level review through sampling of inspection records or files, analysis of NBI data, visits to bridges, interviews of inspectors, and documentation of qualifications.

- **In-depth:** Supplementing intermediate review with larger sample sizes, more interviews, and research of records and/or history.
Process Highlights

- Division Offices assess compliance with the NBIS on an annual basis.
  - Year 0 - all metrics reviewed ("baseline") at intermediate level. In-depth reviews at Division’s discretion.
  - Divisions then assess results or findings
    - Initiate improvement plans for metrics that are in substantial compliance,
    - Initiate plans of corrective actions for metrics that are in non-compliance, and
    - Develop an annual risk assessment and review strategy covering the next five years.
Process Highlights (continued)

- The five year strategy shall consider:
  - Appropriate risk assessment levels and level of review (minimum, intermediate, or in-depth) for each metric. Minimum level each year.
  - Metrics assessed as having higher risk at either the State or National level (focus areas for future reviews).
  - The monitoring of corrective actions documented in improvement plans and/or Plans of Corrective Action.
    - Verification of accomplishments under plans
Process Highlights (continued)

- Years 1, 2, 3, and 4 – Execute the strategy and reassess risks.
- Every five years, step back to examine the past five year history
  - Look for trends and gaps
  - Interaction of metrics as a whole
  - Develop next five year strategy
- Overarching goal - no metric should receive a minimum level assessment for five continuous years.
- Repeat cycle
When?

- Completed a pilot in 12 Divisions
  - Ended May 21\textsuperscript{st}
  - Will now be assessing results

- Ready for full implementation in 2011
Questions