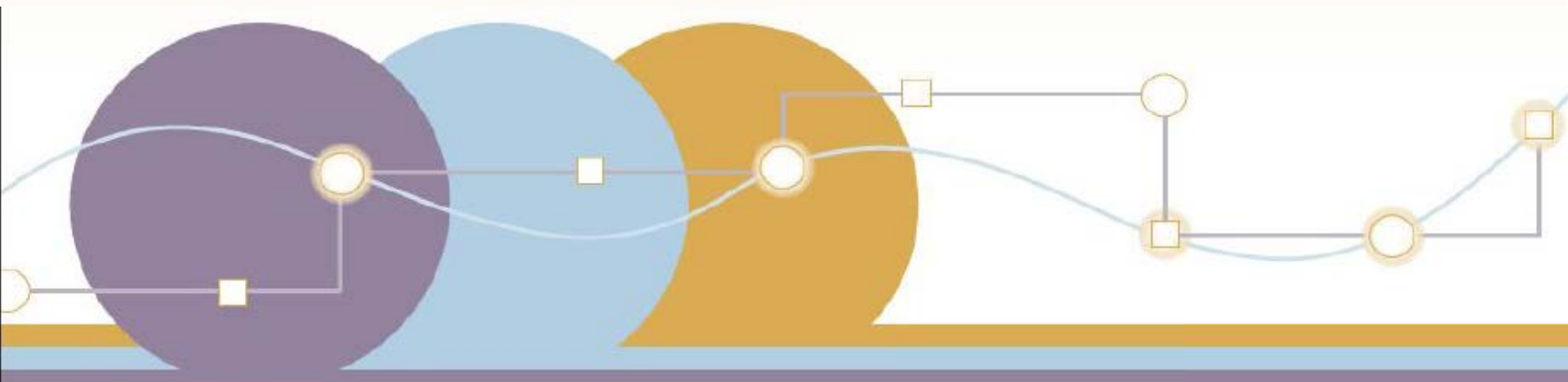


Practice Makes Perfect: State of the Practice and Opportunities

Collaborating Toward Successful Performance Management: FHWA and the States Working Together

5th International Transportation Systems Performance Measurement
and Data Conference June 2, 2015

Pete Stephanos
Federal Highway Administration



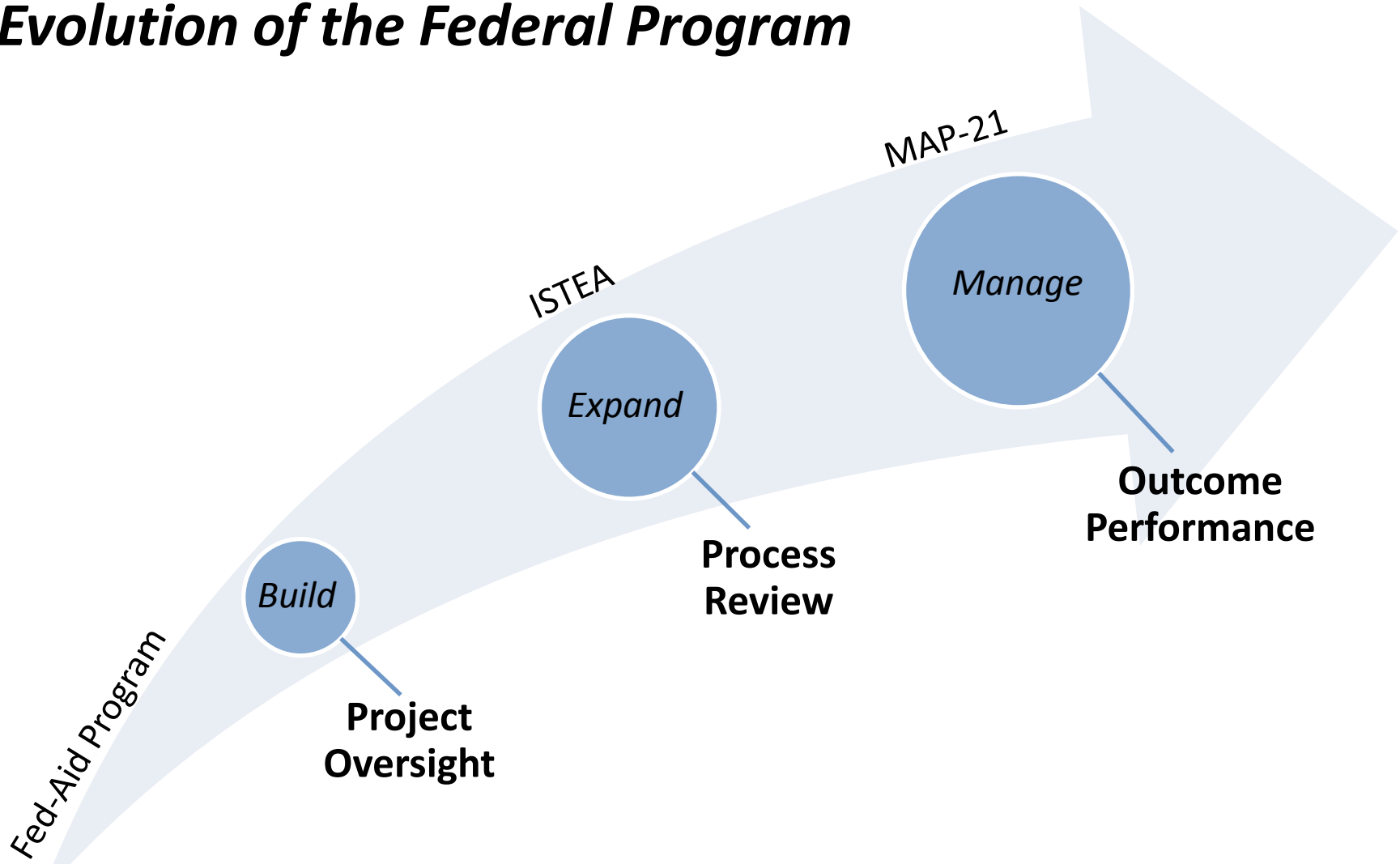


Presentation Outline

- Implementing National performance management program
 - Evolving Federal Program, NPRM schedule
 - Challenges and opportunities
- FHWA Efforts to Assist in Telling the Transportation Performance Management Story
 - Building on prior reporting efforts
 - Developing a comprehensive suite of technical assistance products



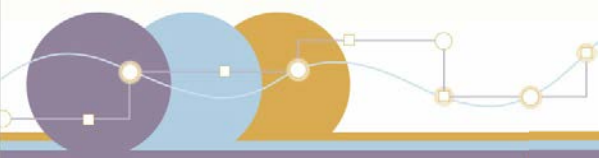
Evolution of the Federal Program





Transportation Performance Management

Performance Areas	NPRM	Comments Due	Anticipated Final Rule
Safety Performance Measures	March 11, 2014	<u>Closed</u> June 30, 2014	September 2015
Highway Safety Improvement Program	March 28, 2014	<u>Closed</u> June 30, 2014	August 2015
Statewide and Metro Planning; Non-Metro Planning	June 2, 2014	<u>Closed</u> October 2, 2014	September 2015
Pavement and Bridge Performance Measures	January 5, 2015	<u>Closed</u> May 8, 2015	n/a
Highway Asset Management Plan	February 20, 2015	<u>Closed</u> May 29, 2015	n/a
System Performance Measures	Projected August 2015	120 days	n/a



Challenges and Opportunities

- Providing both consistency and flexibility
- Finding the right balance of National measures
- Managing performance across jurisdictions
- Data requirements and management
- Linking performance measures to investments
- Advancing technologies





Transportation Performance Management





Challenges and Opportunities

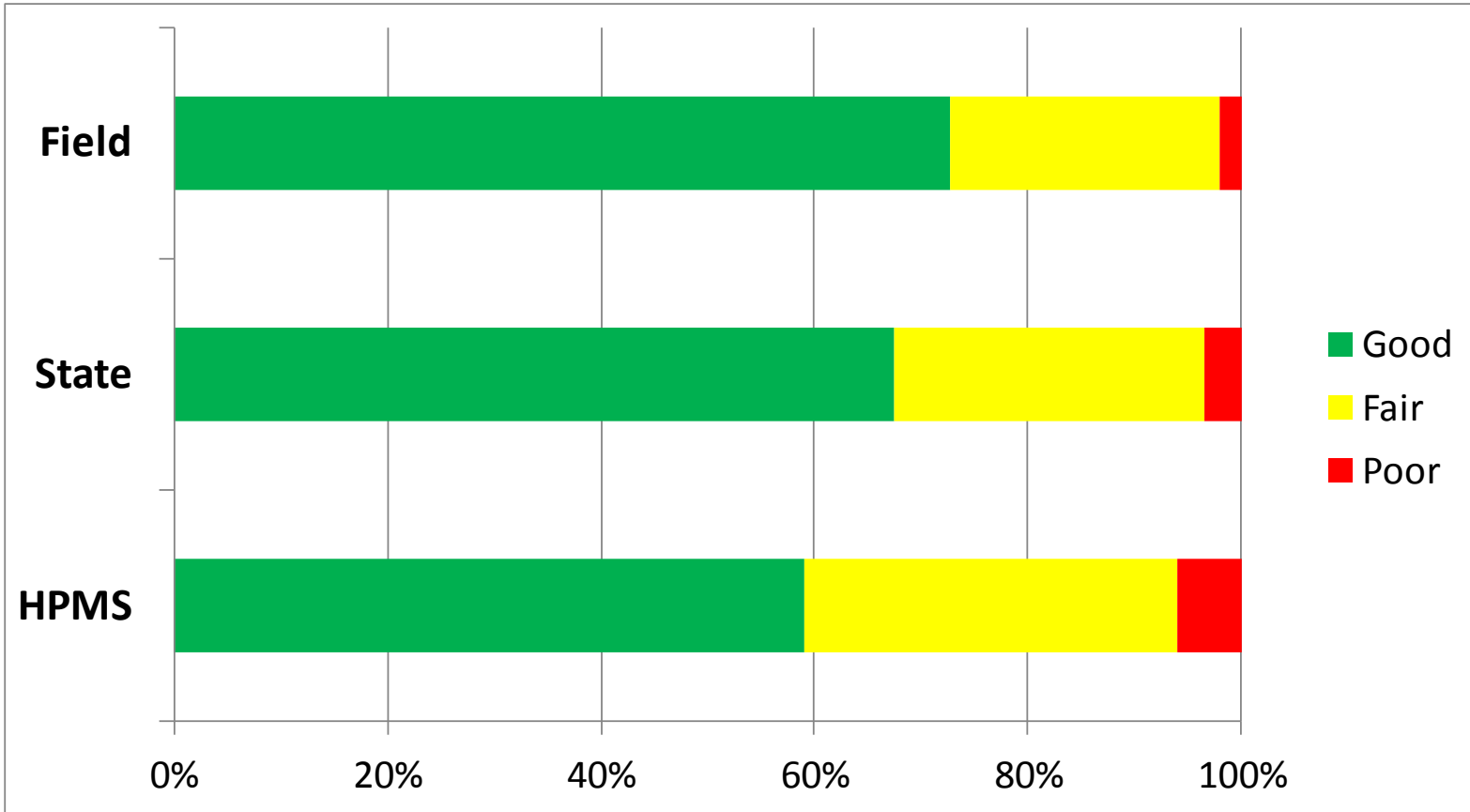
Example Deriving Measures from Multiple Sources/Methods

- Evaluate Different Data Sources
 - State Database
 - HPMS Database
 - Field Collected Data
- Evaluate Different Methods
 - Tier 1 – IRI based approach
 - Tier 2 – Composite Condition approach
 - Tier 3 – Structural Measurement approach



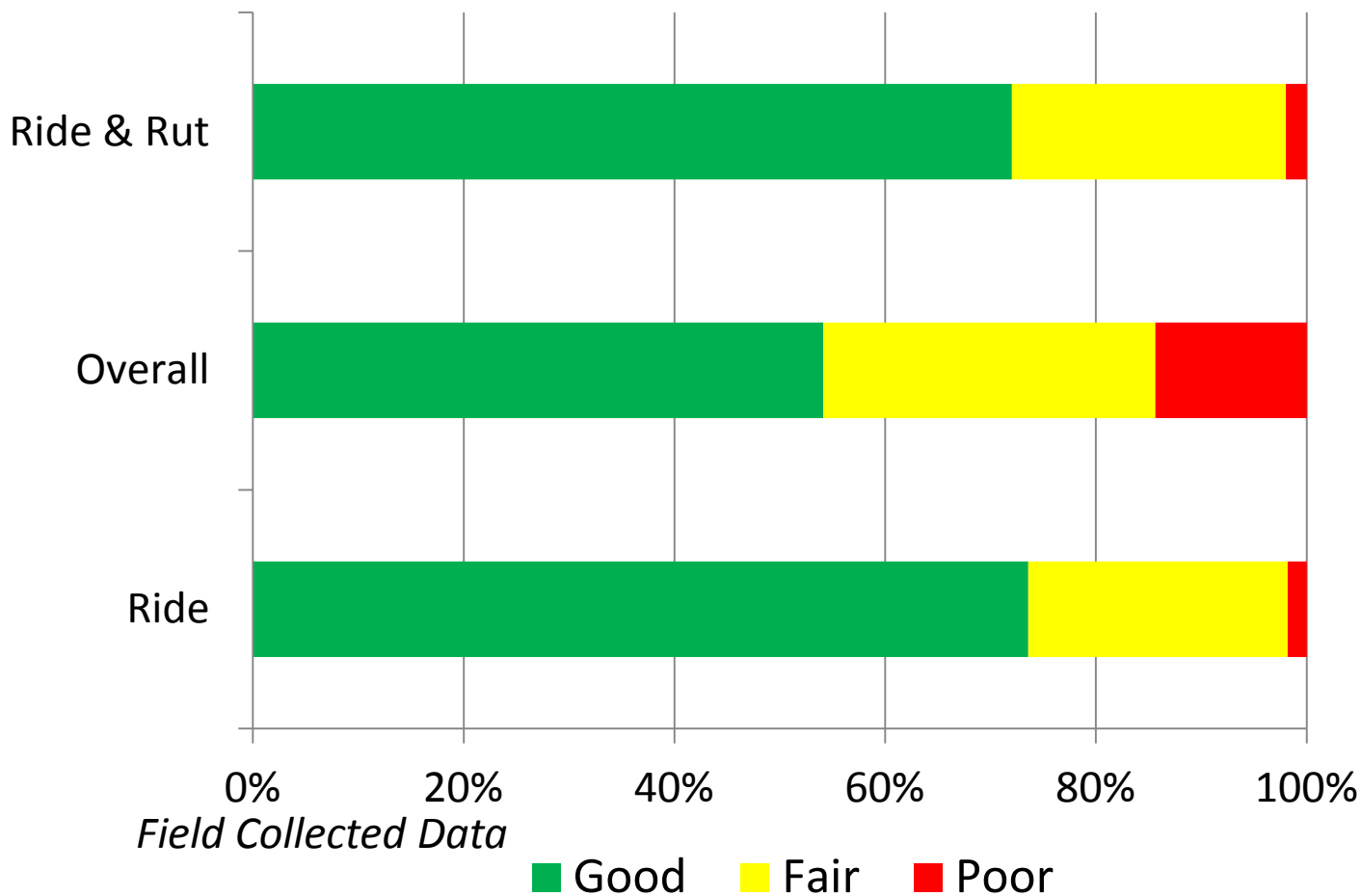
Ride Quality Comparison – Summary

Do HPMS, state, and field data collection methods tell us the same thing?

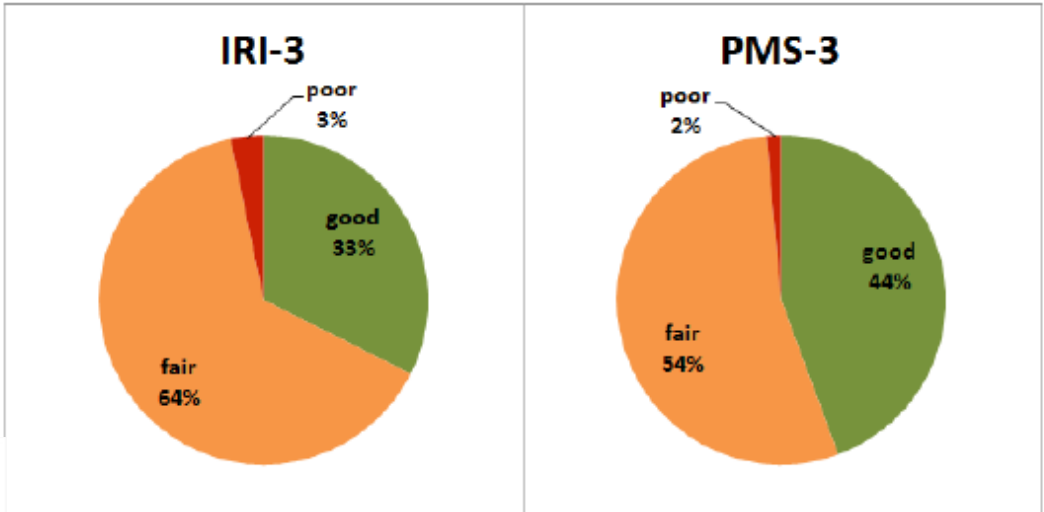
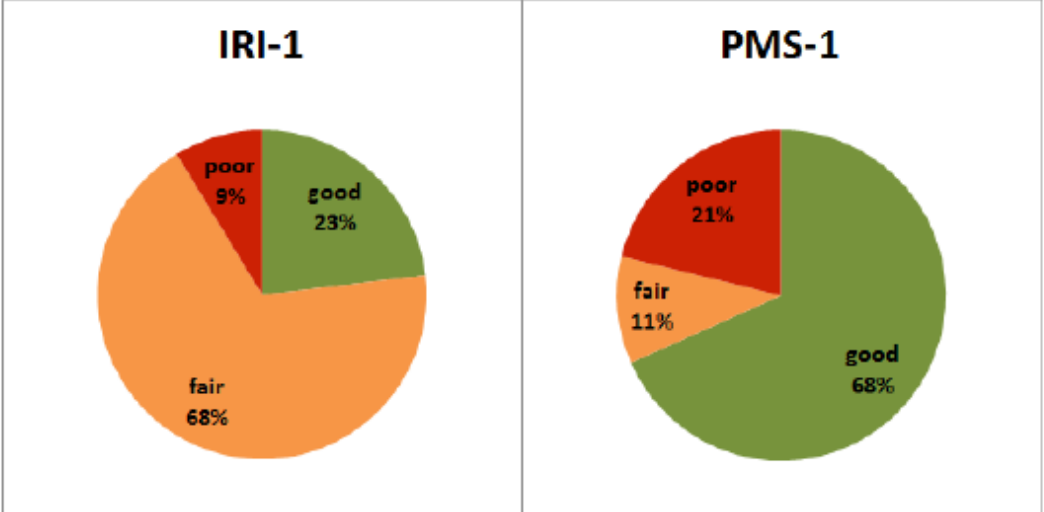




Comparing Good/Fair/Poor Options



NCHRP 20-24(82) Comparison of Metrics





FHWA Efforts to Assist in Telling the Transportation Performance Management Story

- Some precedent with prior examples of National performance reporting
 - Performance and Accountability Report
 - Conditions and Performance Reports to Congress
 - American Recovery and Reinvestment Act
- A wide range of TPM support is / will be available
 - Technical assistance, training, data tools and support

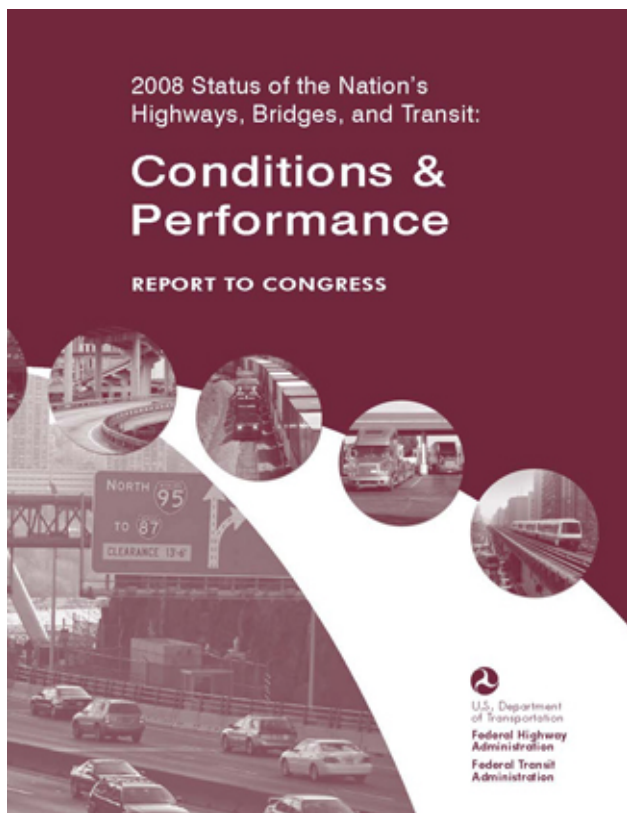




Prior Examples of National Performance Reporting *USDOT Performance Report*

Performance Measure	2010	2011	2012	2013	2014 Target	2014 Actual	Met?
Percent NHS Good Pavements	55.0	54.3	57.1	57.6	58.4	59.0	Met
Percent NHS Structurally Deficient Bridges	8.3	7.8	7.1	6.7	6.6	6.0	Met

Prior Examples of National Performance Reporting **USDOT Performance Report**



Report to Congress

- System Conditions
- Operational Performance
- Safety
- Revenue and Expenditures
- Investment Analysis

Difficult to associate performance
with federal investments

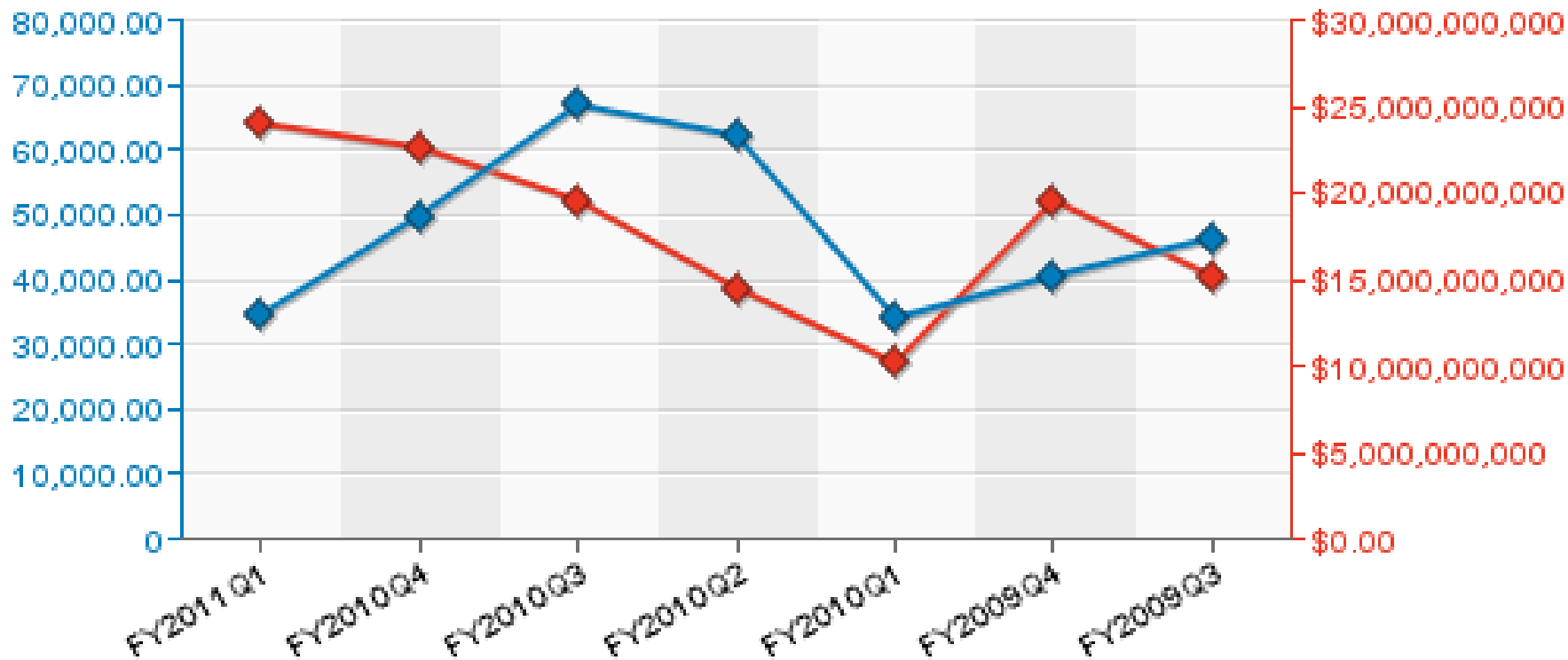




Prior Examples of National Performance Reporting

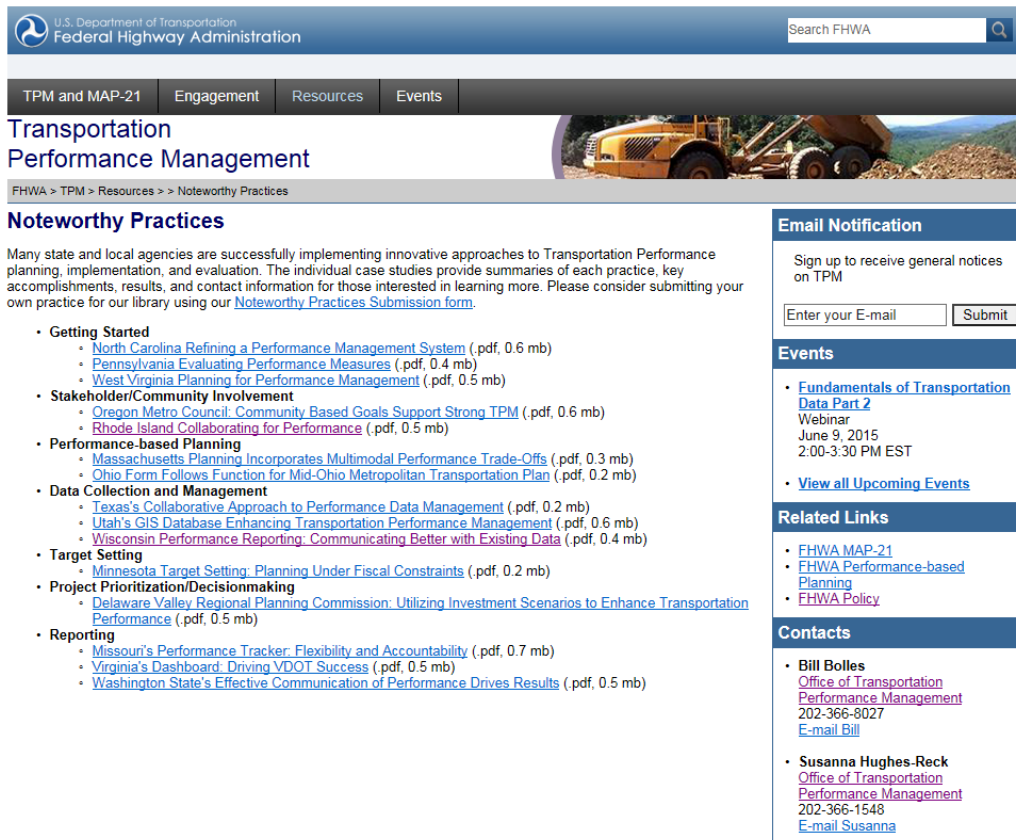
ARRA Reporting

Displaying:



National TPM Support Activities

Noteworthy Practices, TPM Digest, Training



U.S. Department of Transportation
Federal Highway Administration

Search FHWA

TPM and MAP-21 Engagement Resources Events

Transportation Performance Management

FHWA > TPM > Resources >> Noteworthy Practices

Noteworthy Practices

Many state and local agencies are successfully implementing innovative approaches to Transportation Performance planning, implementation, and evaluation. The individual case studies provide summaries of each practice, key accomplishments, results, and contact information for those interested in learning more. Please consider submitting your own practice for our library using our [Noteworthy Practices Submission form](#).

- **Getting Started**
 - [North Carolina Refining a Performance Management System](#) (.pdf, 0.6 mb)
 - [Pennsylvania Evaluating Performance Measures](#) (.pdf, 0.4 mb)
 - [West Virginia Planning for Performance Management](#) (.pdf, 0.5 mb)
- **Stakeholder/Community Involvement**
 - [Oregon Metro Council. Community Based Goals Support Strong TPM](#) (.pdf, 0.6 mb)
 - [Rhode Island Collaborating for Performance](#) (.pdf, 0.5 mb)
- **Performance-based Planning**
 - [Massachusetts Planning Incorporates Multimodal Performance Trade-Offs](#) (.pdf, 0.3 mb)
 - [Ohio Form Follows Function for Mid-Ohio Metropolitan Transportation Plan](#) (.pdf, 0.2 mb)
- **Data Collection and Management**
 - [Texas's Collaborative Approach to Performance Data Management](#) (.pdf, 0.2 mb)
 - [Utah's GIS Database Enhancing Transportation Performance Management](#) (.pdf, 0.6 mb)
 - [Wisconsin Performance Reporting: Communicating Better with Existing Data](#) (.pdf, 0.4 mb)
- **Target Setting**
 - [Minnesota Target Setting: Planning Under Fiscal Constraints](#) (.pdf, 0.2 mb)
- **Project Prioritization/Decisionmaking**
 - [Delaware Valley Regional Planning Commission: Utilizing Investment Scenarios to Enhance Transportation Performance](#) (.pdf, 0.5 mb)
- **Reporting**
 - [Missouri's Performance Tracker: Flexibility and Accountability](#) (.pdf, 0.7 mb)
 - [Virginia's Dashboard: Driving VDOT Success](#) (.pdf, 0.5 mb)
 - [Washington State's Effective Communication of Performance Drives Results](#) (.pdf, 0.5 mb)

Email Notification

Sign up to receive general notices on TPM

Enter your E-mail

Events

- [Fundamentals of Transportation Data Part 2](#)
Webinar
June 9, 2015
2:00-3:30 PM EST
- [View all Upcoming Events](#)

Related Links

- [FHWA MAP-21](#)
- [FHWA Performance-based Planning](#)
- [FHWA Policy](#)

Contacts

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[E-mail Bill](#)
- **Susanna Hughes-Reck**
[Office of Transportation Performance Management](#)
202-366-1548
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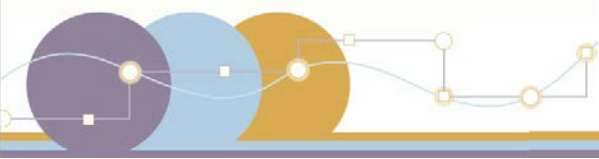


http://www.fhwa.dot.gov/tpm/resources/digest/2015_04.cfm

NHI Training

- Overall TPM
- Performance Area Specific
- Target Setting

<http://www.fhwa.dot.gov/tpm/resources/noteworthy.cfm>



National TPM Support Activities

FHWA's TPM Technical Assistance Program

The TPM Technical Assistance Program (TAP) will be comprised of three parts:

Technical Assistance Resources

On-Site Assistance and Action Planning

National Assessments and Surveys



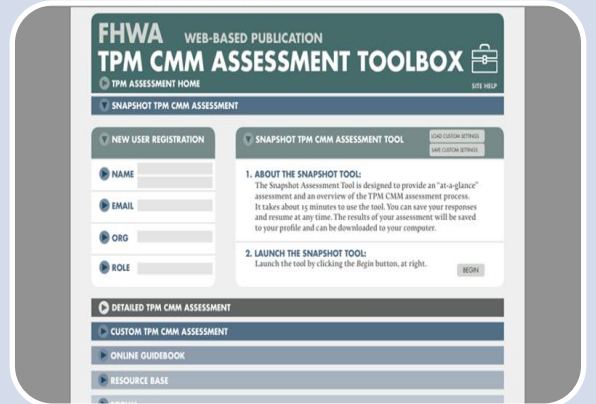
National TPM Support Activities FHWA's TPM Technical Assistance Program

Assessment Areas: TPM Programs	Assessment Elements	
	Governance	Management
Agency-wide	2-Aware	Not Assessed
Safety	5-Optimizing	4-Proficient
Pavements	1-Initial	5-Optimizing
Bridges	4-Proficient	4-Proficient
Investment Analysis	1-Initial	3-Defined

Develop TPM Capability Maturity Model (CMM)



Distribute TPM Implementation Guidebook
• Date: Fall 2015



Deploy TPM Toolbox that integrates TPM CMM and Guidebook
• Date: Fall 2015



National TPM Support Activities ***FHWA's TPM Technical Assistance Program***

Administer Division TPM Readiness Assessment

- **Purpose: Assess the abilities of DOs to oversee and provide support in the implementation of MAP-21 performance provisions**
- Aligns with Roles and Responsibility Report
- Date: Spring 2015

Administer National TPM Implementation Review

- **Purpose: Review the degree to which State Transportation Agencies and MPOs have implemented MAP-21 performance provisions**
- Date: After Rulemaking and again in two years



National TPM Support Activities

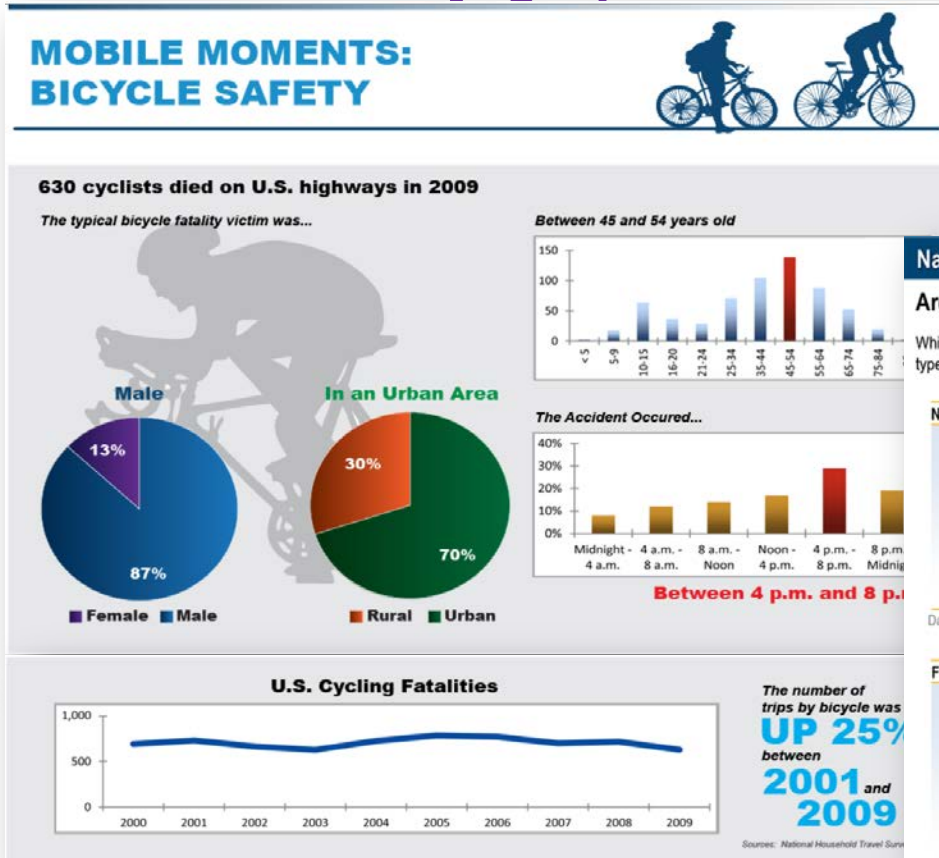
Improve How Data is Made Available and Presented

- New public data files for national data systems
- FHWA cloud testing for pavement and bridge data
- Data Visualization Center
- Research datasets
- Data Governance Plan

National TPM Support Activities

Communicating Transportation Performance

Infographics



Performance Reports

National Safety Report

Are We Making Our Roads Safer?

While the number of fatalities on our roads continues to decline, injuries have slightly increased. Certain driver behaviors and crash types have remained a persistent threat to the safety of our roadways.

Number of Fatalities

33,210

Annual 5-Year Average



TREND

Projection

States are projected to reduce fatalities below

28,000

by 2017

States that expect the number of fatalities to...



Data: Annual Fatal Crashes from FARS; Data are from latest available year.

Fatal Crash Rate

1.14

Per 100M VMT



TREND

Projection

States are projected to reduce the fatal crash rate below

1.0

by 2017

States expect the fatal crash rate to ...

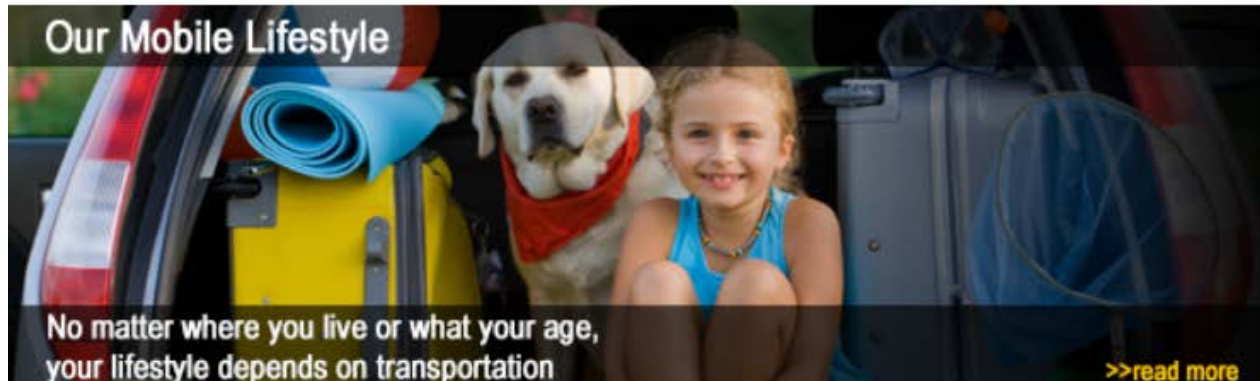


Transportation Performance Management



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Our Mobile Lifestyle



No matter where you live or what your age, your lifestyle depends on transportation

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BORING BUT IMPORTANT

- Bridges in the U.S.: 599,766
- Bridges requiring repairs: 152,324
- Cost to repair them: \$140 billion
- What Americans spend each year on soft drinks: \$65 billion
- What the US spent in 2008 repairing bridges: \$12.8 billion

Source: AASHTO, ASCE, National Soft Drink Association



[America In Motion!](#)

It's hard not to marvel at the transportation system that keeps America – and you – going.



[Demographics Changing Transportation](#)

As we look to the future of transportation, we see that America's needs are evolving.



[How is Transportation Funded in the U.S.?](#)

Learn more about how the United States funds transportation and why innovative funding sources are needed.



[Mobile Moments: Bicycle Safety Infographic](#)

630 cyclists died on U.S. highways in 2009.

HOW ARE WE MEASURING UP?

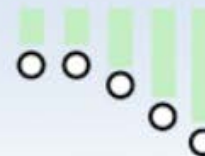
HIGHLIGHTED MEASURE

LOWERING FATAL CRASHES

Number of Fatalities

33,210

Annual 5-Year Average



TREND

Transportation Performance Management

Transportation Performance Management

TPM and MAP-21 Engagement Resources

Home / Programs / Transportation Performance Management



TPM DIGEST
FHWA Transportation Performance Management

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Pause Previous Next

1 2 3 4

TPM and MAP-21

What is TPM?
National Goals
MAP-21 Performance Requirements Summary
MAP-21 Putting Performance into Action (.pdf, 1.3 mb)
Implementation Schedule

Engagement

Rulemaking Stakeholder Engagement
Readiness Stakeholder Engagement Reporting

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[E-mail Susanna](#)

Thank You

Peter.stephanos@dot.gov

<http://www.fhwa.dot.gov/tpm/>

