
Transportation Performance Reporting

The Path Forward for Web-based Reporting

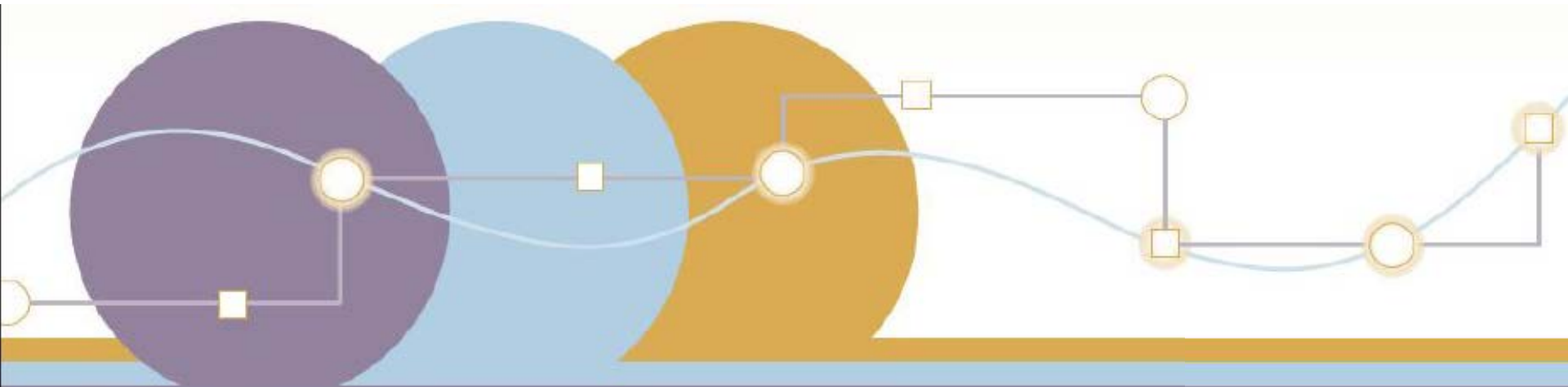
Connie Yew

Federal Highway Administration

AASHTO SCOP-SCOPM Joint Technical Meeting

Phoenix, AZ

June 18-19, 2014

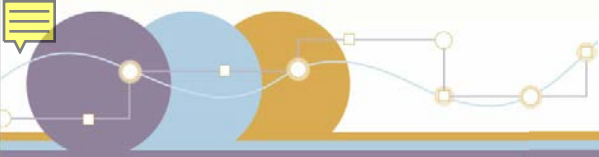




MAP-21 Implementation Schedule

2013 2014 2015 2016 2017 2018





State Performance Reporting

- **State** Report on Performance Progress
 - Required initially by October 1, 2016 and every 2 years thereafter
 - Report includes:
 - Condition and performance of NHS
 - Effectiveness of investment strategy for the NHS
 - Progress in achieving all State performance targets
 - Ways in which congestion bottlenecks in National Freight Plan are being addressed



Metropolitan Performance Reporting

- **Metropolitan System Performance Report**
 - Required in transportation plan every 4 or 5 yrs
 - Report includes:
 - Evaluate condition and performance of transportation system
 - Progress achieved in meeting performance targets in comparison with the performance in previous reports
 - Evaluation of how preferred scenario has improved conditions and performance, where applicable
 - Evaluation of how local policies and investments have impacted costs necessary to achieve performance targets , where applicable



USDOT Performance Reporting

- **USDOT** Report on Performance-based Planning Process
 - Submit to Congress within 5 years reports on effectiveness of the Metropolitan and Statewide performance based planning processes.
 - Report evaluating:
 - Overall effectiveness of performance-based planning as a tool to guide transportation investments
 - Effectiveness of the performance-based planning process in each MPO and State



Background

Phase 1 - FHWA Performance Reporting Project

Design an ideal transportation performance report that tells transportation stories in a visually compelling way that the target audience cares about.

Target audience:

- Public
- Transportation professionals
- Elected officials



Background

- What we Learned during the Phase 1 Project
 - Personalize and Localize; Be customer centric
 - Don't just provide performance snapshots, provide trends and context
 - Stakeholders are interested in state-by-state comparisons
 - Safety and Funding are of primary interest
 - Use headlines and simple explanations
 - Use a narrative that draw people in
 - Provide an interactive tool too

Transportation Performance



Our system at work



HOME

About Transportation Performance

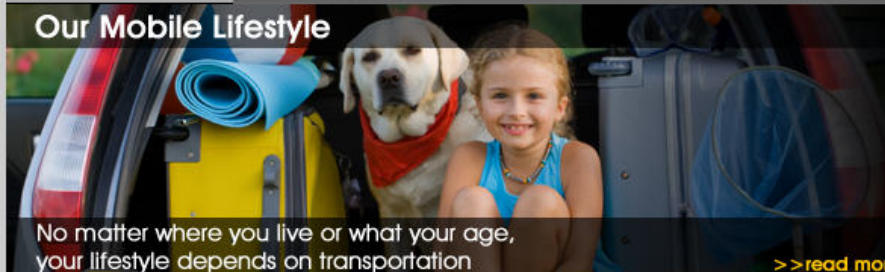
Our Transportation Investment

Our Economic Well-Being

Our Mobile Lifestyle

Performance Measures

Our Mobile Lifestyle



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

>>read more

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

In the Spotlight

SEARCH



Mobile Moments: Bicycle Safety Infographic

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



Performance Report Showcase: Maryland's Annual Attainment Report.

This report gives Maryland residents a transparent assessment of the performance of their transportation system.



Infographic: How Long is It Taking Americans to Get to Work?

New York and Chicago have the longest commutes. What about your city?

By AutoInsuranceCenter and posted at Visual.ly (<http://visual.ly/how-long-it-taking-americans-get-work>)



The High Cost of Congestion

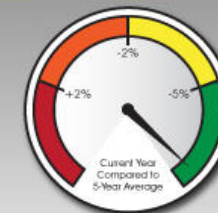
A Texas Transportation Institute study finds that Americans spend an extra 34 hours a year in their cars because of traffic, costing Americans \$101 billion a year--\$713 per urban commuter--in extra fuel and wasted time. Time Magazine - <http://www.time.com/time/magazine/article/0,9171,2096326,00.html>

HOW ARE WE MEASURING UP?

HIGHLIGHTED MEASURE

LOWERING FATAL CRASHES

snapshot



trend



ALL / SAFETY / PAVEMENT CONDITION / BRIDGE CONDITION / CONGESTION / RELIABILITY / FREIGHT / ENVIRONMENT / PROJECT DELIVERY



Our system at work



HOME

About Transportation Performance

Our Transportation Investment

Our Economic Well-Being

Our Mobile Lifestyle

Performance Measures

Select the Report Type and Measures You Would Like to See



Transportation Performance

Learn More About Our System at Work

FOR DEMONSTRATION ONLY

REPORT TYPE

>> NATIONAL

>> STATE

>> LOCAL

MEASURES

>> ALL

>> SAFETY

>> PAVEMENT CONDITION

>> BRIDGE CONDITION

>> CONGESTION

>> RELIABILITY

>> FREIGHT

>> ENVIRONMENT

>> PROJECT DELIVERY

INTERACTIVE PERFORMANCE DATA TOOL

Transportation Performance Report

This report summarizes transportation performance measures at the NATIONAL level.

HIGHLIGHTED MEASURES

These measures are recommended as a National Priority.

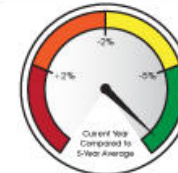
Are We Reducing Fatalities on our Roads?

YES

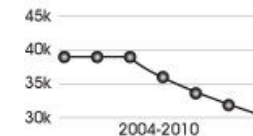
EXPLANATION

THE NUMBER OF FATAL CRASHES IS DOWN. The past five years have shown a steady decline in fatal crashes, but certain driver behaviors and crash types have remained a persistent threat to the safety of our roadways. There was a 19% reduction in fatal crashes in 2010 (versus the five-year average).

SNAPSHOT



TREND



Data Sources: Annual Fatal Crashes from FARS.

THE FACTS

- Fatal crashes in 2010 were at a 15-year low.
- Approximately 40,000 people are killed on the road every year.
- Seatbelt usage has shown an increasing trend since 1994. In 1994 usage was at 58%. In 2011 usage was 84%.¹ Studies have found seatbelts to be 56% effective at reducing fatalities.²
- Road departure crashes account for over 50% of fatal highway crashes.

¹ Governor's Highway Safety Associations.

² "Effectiveness of Seatbelts in Reducing Injuries" by Sunanda Dissanayaki and Inikie Ratnayaki June 2007.

ACTIONS

- FHWA and state DOT's have developed a focused approach to safety through the adoption of State Highway Safety Plans which establish strategic goals and include evaluation processes.
- Since the 1990's states have enacted graduated drivers licensing laws for teen drivers.
- Forty-eight states and D.C. have restricted nighttime driving and 45 states and D.C. have passenger restrictions.³
- Click it or Ticket mobilizations have been effective at increasing seatbelt usage.⁴

³ Governor's Highway Safety Association.

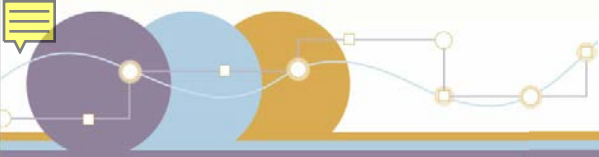
⁴ 6th edition of Counter Measures that Work.





Phase 2 - FHWA Performance Reporting Project

- The Purpose of the Phase 2 is to create a “deep” prototype site that:
 - Builds on Phase 1 website prototype
 - Includes infographics
 - Links to other FHWA products such as the C&P
 - Displays performance data collected from States and MPOs
 - Is ready to “go live” when performance reporting begins
- Initial focus is on performance reporting element

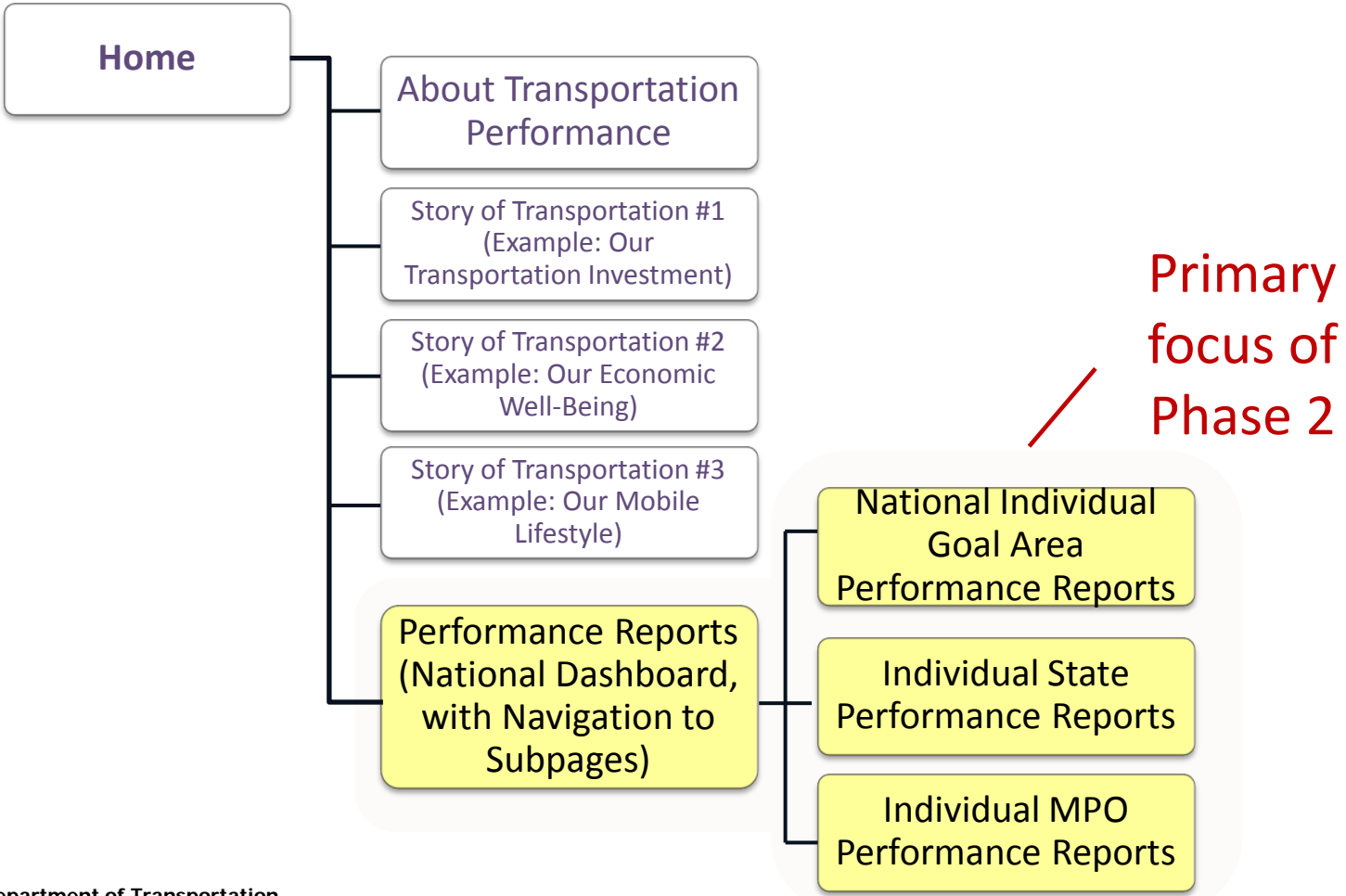


What Is the Best Mechanism for Performance Reporting?

- Report should be web-based
 - Based on results of audience research
 - Provides opportunity for drill down and links to other sites and information
- Focused on results and actions to improve performance
- Driven by goal area...
 - Organize by goal area (tells a better story)
 - Avoid organization by FHWA responsibility where possible (audience does not care)
 - Allow easy drill-down to individual state and MPOs (audience wants local information)

Website Navigation

Sample Basic Navigation Tree





What Could the Technical Performance Reports Look Like?

Remember to Answer the Viewer's Questions

How was the performance?

An effective report will quickly get to the point, while providing needed context and emphasizing future targets and actions, all while avoiding unnecessary clutter.

Is that good or bad?

What are we doing to get there?

What are we trying to achieve?

What are the key takeaways?
(Is everything on the page essential?)



Transportation Performance Management

U.S. Department of Transportation
Federal Highway Administration

Transportation Performance Management

Home / Programs / Transportation Performance Management / Performance Measures

TPM and MAP-21 | Engagement | Resources | Events | Performance Measures

About Performance Reports | Our Transportation Investment | Our Economic Well-Being | Our Mobile Lifestyle | Performance Reports

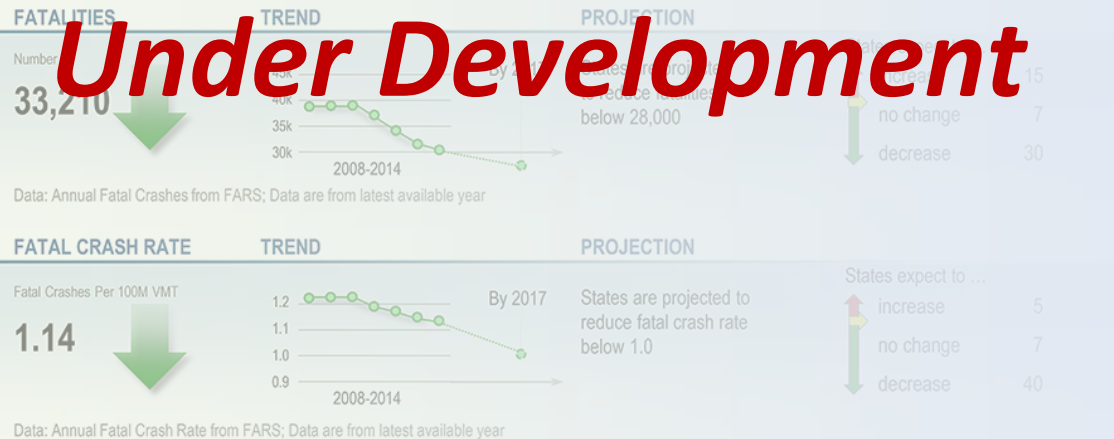
National | Select A State | Select A City

[Dashboard](#) | [Safety](#) | [Infrastructure Condition](#) | [Travel Time](#) | [Traffic Congestion](#) | [Mobile Source Emissions](#) | [Freight Movement](#)

National Safety Report

Are We Making Our Roads Safer?

While the number of fatalities on our roads continues to decline, injury, hospitalizations, and certain types of crashes and crash types have remained a persistent threat to the safety of our roadways.



Website Prototype Under Development