

MAP-21

Moving Ahead for Progress in the 21st Century

Performance Management Elements

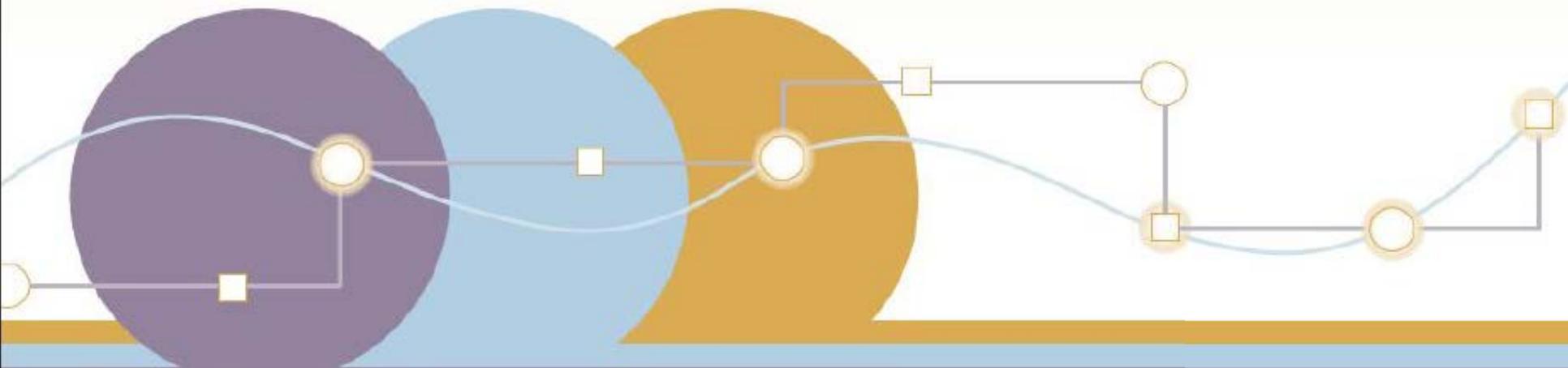
An Overview of Requirements and Implementation Status

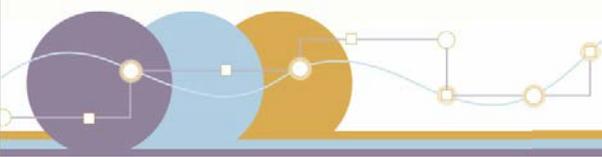
Highway Information Seminar

November 19, 2013

Pete Stephanos

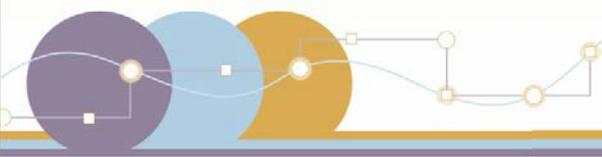
Federal Highway Administration





Presentation Outline

- MAP-21 Performance Requirements
- USDOT Implementation Approach
- Performance Management Initiatives
- Resources



MAP-21 Performance Requirements



MAP-21 Background-Performance Requirements

- ***National Goals***
- ***Measures***
- ***Targets***
- ***Plans***
- ***Reports***
- ***Accountability and Transparency***



Measure Areas

- National Highway Traffic Safety Administration
 - 14 measures documented in 2008 report
- Federal Highway Administration, Federal-aid Highway Program

– Fatalities	HSIP
– Serious Injuries	
– Pavement Condition	
– Bridge Condition	NHPP
– System Performance	
– Traffic Congestion	
– On-road Mobile Source Emissions	CMAQ
– Freight Movement	
- Federal Transit Administration - Public Transportation
 - State of Good Repair
 - Safety Criteria



Targets

- States, MPOs and public transportation agencies set targets.
- NHTSA required to approve safety targets
- Target Setting Due Dates
 - Highway Safety (NHTSA)
 - States set targets beginning in 2013
 - Federal-aid Highway (FHWA)
 - States set targets 1 yr after measures
 - MPOs set targets 180 days after State target
 - Public Transportation (FTA)
 - Transit providers set targets after measures
 - MPOs select targets 180 days after transit provider target



Plans and Reports

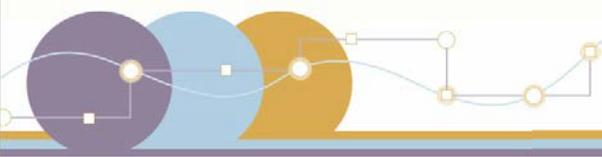
- Strategic Highway Safety Plan and Highway Safety Plan
- Transit and Highway Asset Management Plans
- CMAQ Performance Plan
- Metropolitan Long Range Plan
- Metro and State Transportation Improvement Program

- Highway Safety Improvement Program Report
- Highway Performance Report
- Transit Performance Report
- Metropolitan System Performance Report



Performance Accountability

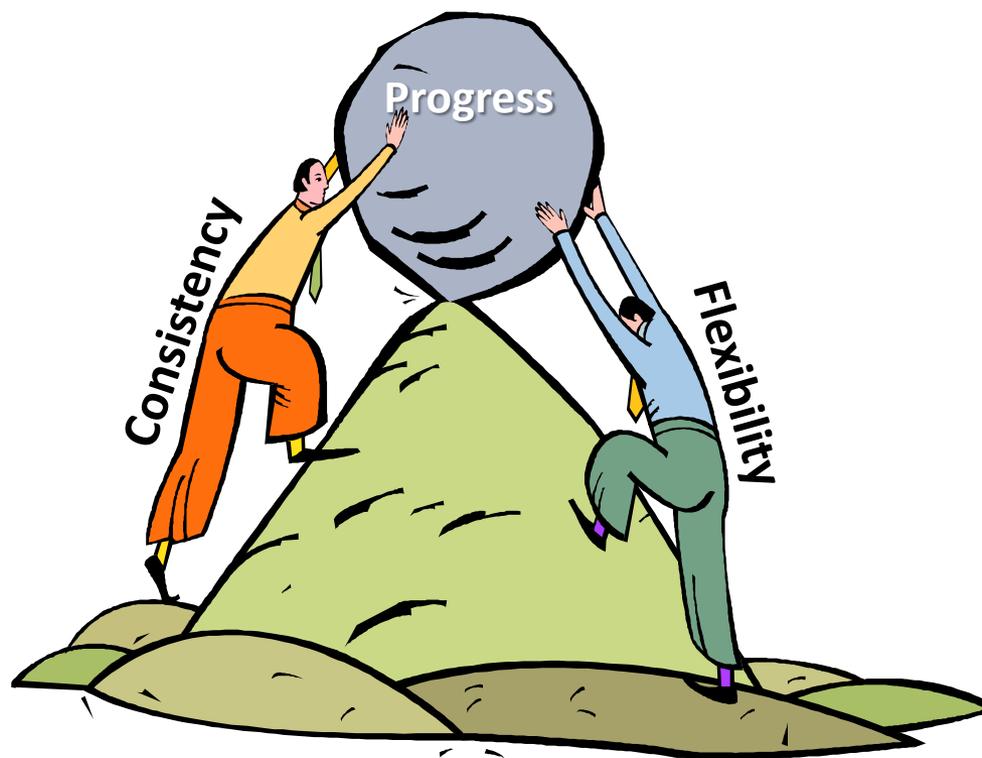
- Target Achievement Requirements
 - National Highway Performance Program
 - Highway Safety Improvement Program
- Standards
 - Interstate Pavements and NHS Bridges
 - Rural Road Safety and Older Driver Safety
- MPO Planning Certification
- State Performance-Based Planning Evaluation
- 5 Year Progress Evaluation



USDOT Implementation Approach



Consideration of Challenges





Stakeholder Outreach

■ **Methods of Outreach**

- Webinars
- National Online Dialogues
- Virtual Town Hall Meetings
- Subject Matter Meetings
- Direct Contact to FHWA : PerformanceMeasuresRulemaking@dot.gov

■ **Focused Areas for Outreach**

- Performance Measures
- Target Setting Listening Session
- Reporting and Assessment





Measure Groupings

PROGRAM	MEASURE CATEGORY
STATUS I Q3 CY2013	• Serious Injuries per VMT
	• Fatalities per VMT
	• Number of Serious Injuries
	• Number of Fatalities
STATUS II Q4 CY2013	• Pavement Condition on the Interstates
	• Pavement Condition on the Non-Interstate NHS
	• Bridge Condition on NHS
STATUS III Q1 CY2014	• Traffic Congestion
	• On-road mobile source emissions
	• Freight Movement
	• Performance of Interstate System
	• Performance of Non-Interstate NHS

USDOT Implementation of MAP-21 Performance Provisions: Nine Interrelated Rules

2013

2014

2015

Planning

Metropolitan and Statewide Planning Rule

- Establish a performance-based planning process at metropolitan and state level.
- Define coordination in the selection of targets, linking planning and programming to performance targets.

Highway Safety

Safety Performance Measure Rule

- Propose and define fatalities and serious injuries measures, along with target establishment, progress assessment and reporting requirements.
- Discuss the implementation of MAP-21 performance requirements.

Highway Safety Improvement Program (HSIP) Rule

- Integration of performance measures, targets, and reporting requirements into the HSIP.
- Strategic Highway Safety Plan updates.

Highway Safety Program Grants Rule *

- State target establishment and reporting requirements.
- Highway safety plan content, reporting requirements, and approval.

* Interim Final Rule issued by NHTSA in January 2013.

Highway Conditions

Pavement and Bridge Performance Measure Rule

- Propose and define pavement and bridge condition measures, along with minimum condition standards target establishment, progress assessment and reporting requirements.

Asset Management Plan Rule

- Contents and development process for asset management plan.
- Minimum standards for pavement and bridge management systems.

Congestion/System Performance

System Performance Measure Rule

- Define performance of the interstate system, non-interstate national highway system, and freight movement on the interstate system.
- Finalize interpretation of scope of CMAQ performance requirements, including congestion and on-road mobile source emissions.
- Summarize MAP-21 highway performance measure rules

Transit Performance

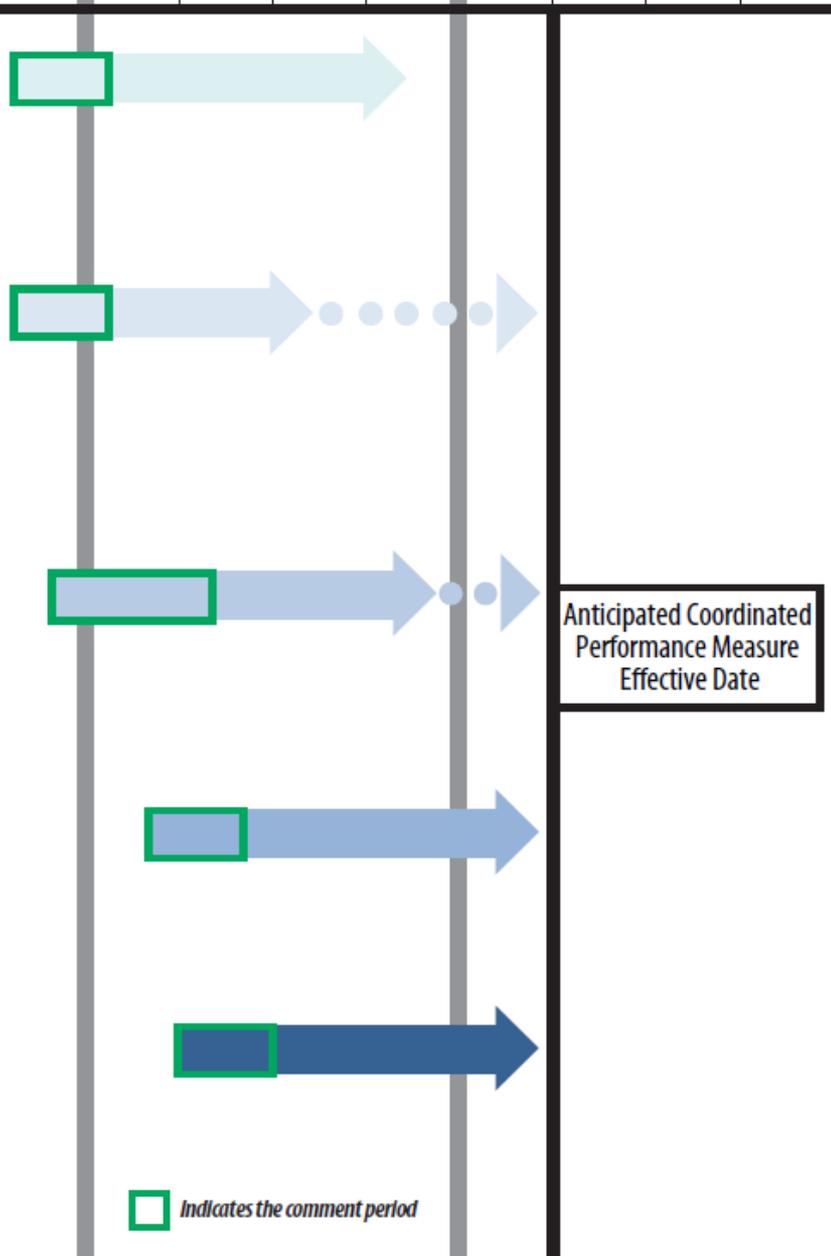
Transit State of Good Repair Rule

- Define state of good repair and establish measures.
- Transit asset management plan content, target establishment and reporting requirements.

Transit Safety Plan Rule

- Define transit safety standards.
- Transit safety plan content and reporting requirements.

Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4



Indicates the comment period

The Federal Transit Administration plans to issue an Advance Notice of Proposed Rulemaking (ANPRM) for each of these two proposed rules in the summer of 2013, providing an additional comment period.



Coordinating Implementation

Measure Rules

- Define Measure
 - Data Elements
 - Data Source
- Interstate Pavement Condition
- Target Setting Requirements
- Define Significant Progress
- State Performance Reporting
- Establish Timing

Planning Rule

- Performance-based Planning Process
- Target Setting Coordination
- MPO Performance Reporting
- STIP/TIP Discussion
- Transition Period

Program Rules

- Plan Requirements
- Special Rules
- Integrating Performance
- Transition Period





Implementation Schedule

2013

2014

2015

2016

2017

2018





Safety Measures

- Considerations
 - Defining serious injuries
 - Time lag associated with national data
 - Coordination with Highway Safety Plan
 - Target setting
- Current Efforts
 - Highway Safety Plan Interim Final Rule
 - Target setting best practices
 - Highway Safety Improvement Program guidance



Traffic Congestion and NHS Performance

- Considerations
 - Data sources, availability, coverage
 - Trip information, movement of people
 - Modes of transportation
 - Scalability
 - Target setting
- Current Efforts
 - Acquiring data
 - Exploring measure alternatives
 - Evaluating feasibility for implementation



Infrastructure Condition Measures

- Considerations
 - HPMS as a national reporting source
 - Measures linked to decision making
 - NBI element level data requirements
 - Advancing technologies
 - Target setting
- Current Efforts
 - Evaluating data (HPMS 2010+)
 - Exploring measure alternatives
 - Evaluating feasibility for implementation (pilot studies)



Performance Management Initiatives



Travel Time Data Contract

- Data – Actual travel times, date, direction, location
- Travel Measured - freight and passenger traffic
- Coverage – Full National Highway System
- Granularity – TMC segments in 5 minute bins
- Frequency – Monthly updates
- Timing – The 15th of the following month
- Availability – State DOTs and MPOs
- Support – Initial training followed with support
- When – Data available beginning in September, 2013



Safety Target Setting Study

- Evaluate methods used currently
- Develop guidance for States to use in setting fatality related targets
- Tasks:
 - Literature Review
 - Survey of States and SHOSs
 - Peer Exchange – noteworthy practices
 - Guidance Document
- Final Guidance expected in Fall, 2013



Performance-Based Planning

- PBPP Guidebook – available online
- Guidebook on Long Range Plans that are performance based
 - Provide examples of plans
 - Conducting site interviews
- Framework for an electronic STIP
 - Performance based
 - Survey conducted through AASHTO



Regional and State Workshops

- Planning and Performance Management
- Two workshops held in FY2013
- Current focus on PBPP, Target Setting, and Reporting
- State DOTs, MPOs, Transit Agencies
- Format
 - Pre-Workshop webinars to share information and further define workshop focus
 - Workshop event – face to face event
 - Post Workshop – collaboration resources
- Funding assistance for travel will be provided
- Quarterly webinars on current practices



Asset Management Plan Pilots

- Development of Transportation Asset Management Plans in 3 States
- Provide as examples for all States
- Pilots: LA, MN, NY
- Observer States: AK, NV, OR
- Holding monthly web meetings to discuss progress
- Generic work plan available on website
- Anticipated completion in 5/30/2014



Corridor Performance Management

- Study how multiple agencies have worked together to manage performance of a multi-state corridor
- Focus on MAP-21 goal areas
- Development and testing of Maturity Model
- Test application of model on I-95 and I-15
- Final Report posted online
 - Maturity model and assessment tool
 - Noteworthy practices
 - Implementation plan recommendations

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?

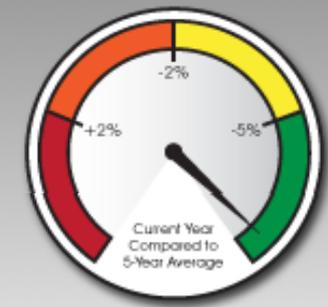
By AutoInsuranceCenter and posted at Visual.ly (<http://visual.ly/how-long-it-taking-americans-get-work>)

HOW ARE WE MEASURING UP?

HIGHLIGHTED MEASURE

LOWERING FATAL CRASHES

snapshot



rend





Our system at work



HOME

About Transportation
Performance

Our Transportation
Investment

Our Economic
Well-Being

Our Mobile
Lifestyle

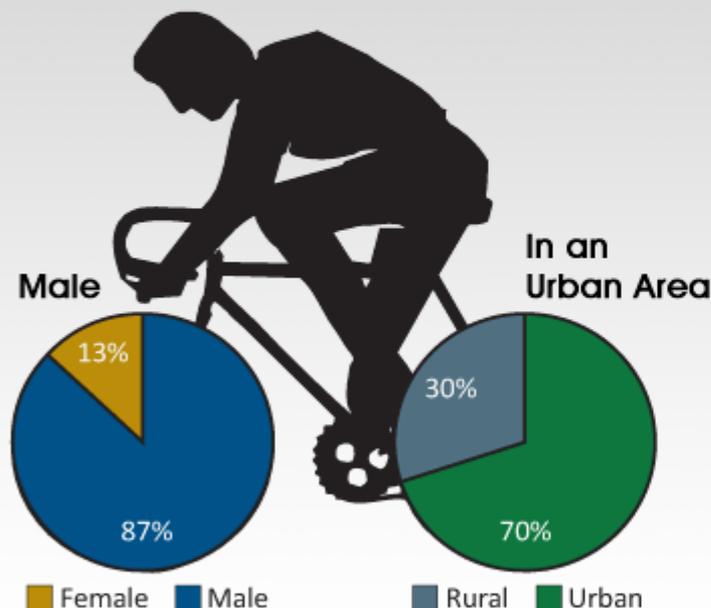
Performance
Measures

Mobile Moments: Bicycle Safety Infographic

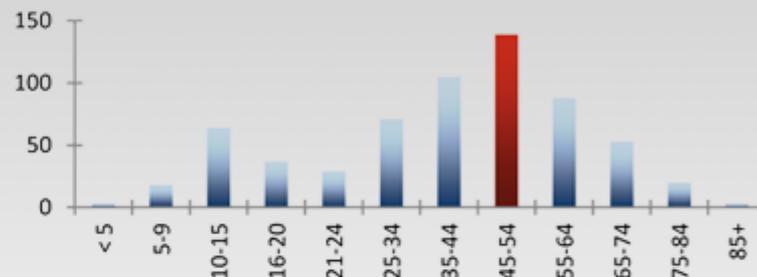
FOR DEMONSTRATION ONLY

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

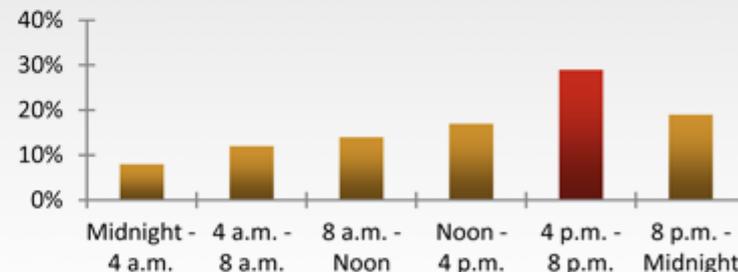
The typical bicycle fatality victim was:



Between 45 and 54 Years Old



The accident occurred:

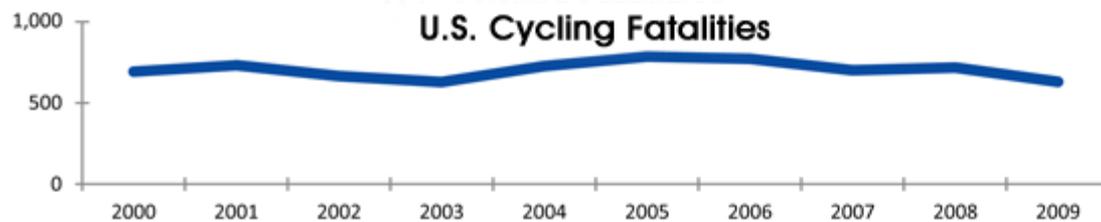


Between 4 p.m. and 8 p.m.

The number of trips by bicycle was up 25% between 2001 and 2009.

Source: National Household Travel Survey (2009).

>> [Transportation Performance: Learn More About Our System at Work](#)





Our system at work



HOME

About Transportation Performance

Our Transportation Investment

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Our Mobile Lifestyle

Performance Measures

Select the Report Type and Measures You Would Like to See

REPORT TYPE

>> NATIONAL

>> STATE

>> LOCAL

MEASURES

>> ALL

>> SAFETY

>> PAVEMENT CONDITION

>> BRIDGE CONDITION

>> CONGESTION

>> RELIABILITY

>> FREIGHT

>> ENVIRONMENT

>> PROJECT DELIVERY



Transportation Performance

Learn More About Our System at Work

FOR DEMONSTRATION ONLY

Transportation Performance Report

This report summarizes transportation performance measures at the NATIONAL level.

HIGHLIGHTED MEASURES

These measures are recommended as a National Priority.

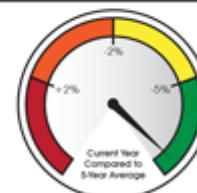
Are We Reducing Fatalities on our Roads?

YES

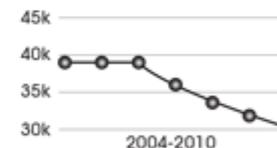
EXPLANATION

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.

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



Resources



More Information

- MAP-21 website
 - Bill summary and funding tables
 - Fact sheets and Q&As
 - Presentations
 - Points of contact
 - Recordings of webinars
(<http://www.fhwa.dot.gov/map21/webinars.cfm>)
- Performance Management Website
- Training and Support (under development)



Transportation Performance Management

FHWA > Transportation Performance Management



North Carolina

Refining a Performance Management System



NC Refining a Performance Management System

NCDOT recognized they needed to refine their performance management system and therefore began a transformation process. (.pdf, 0.6 mb)



What is TPM?



NC Refining a Performance Management System



WSDOT's Effective Communication of Performance Drives Results



Transportation Data Palooza

TPM and MAP-21

- [What is TPM?](#)
- [National Goals](#)
- [MAP-21 Performance Requirements Summary](#)
- [Implementation Schedule](#)

Engagement

- [Rulemaking Stakeholder Engagement](#)
- [Readiness Stakeholder Engagement](#)

Resources

- [Tools](#)
- [Noteworthy Practices](#)
- [Presentations](#)

News and Events

- [FHWA Webinar Series: Asset Management Book Club Webinar](#)
March 27, 2013, 2:00 PM EST
- [View all TPM Events](#)
- [Subscribe to email updates](#)



Additional Resources

- **Transportation Performance Management website**
www.fhwa.dot.gov/tpm/
- **MAP-21 Web 3232Site**
www.fhwa.dot.gov/map21
- **Performance Measure Rulemaking Direct Contact to FHWA**
PerformanceMeasuresRulemaking@dot.gov
- **U.S. DOT Transportation Data Palooza Event Recording**
www.fhwa.dot.gov/tpm/events/datapalooza.cfm