

TPM Technical Implementation Workshop

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# *TPM Performance Reporting: Telling Our Story*

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Transportation Performance Management Team

Phoenix, AZ

September 13 and 14, 2017



U.S. Department of Transportation  
Federal Highway Administration



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## *Objectives*

- 23 USC 150(e) Performance Report Requirements
- TPM Portal
- Performance Website Display
- Performance Storytelling
- Performance Dashboard



# *Performance Reporting & Portal*



U.S. Department of Transportation  
Federal Highway Administration



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## *Acronyms*

- NHPP: National Highway Performance Program
- NHFP: National Highway Freight Program
- HSIP: Highway Safety Improvement Program
- CMM: Capability Maturity Model
- PCB: Professional Capacity Building



# Why Report on Performance?

- Evaluate the impact of federal-aid funds on the national goal areas
- Report to the public on pavement and bridge conditions, congestion/air quality, freight, significant progress and target achievement in each State
- Report to Congress on the condition and performance of the Federal-aid highway system



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## *How Will States Report on Performance?*

- Under 23 USC 150(e), a Biennial Report is required every two years that must include at a minimum:
  - NHS condition and performance
  - Progress in achieving performance targets
  - Effectiveness of the investment strategies in the State's NHS asset management plan
  - How freight bottleneck congestion is being addressed

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# *Performance Reporting: What's Required*

## Reports:

- **Baseline** Report by Oct. 1 of the first performance year
- **Mid Period** Progress Report by Oct. 1 of the third performance year
- **Full Period** Progress Report by Oct. 1 of the fifth year **following** the performance period



# ***Performance Progress Report Includes*** ***(for all content requirements, see 23 CFR 490.107)***

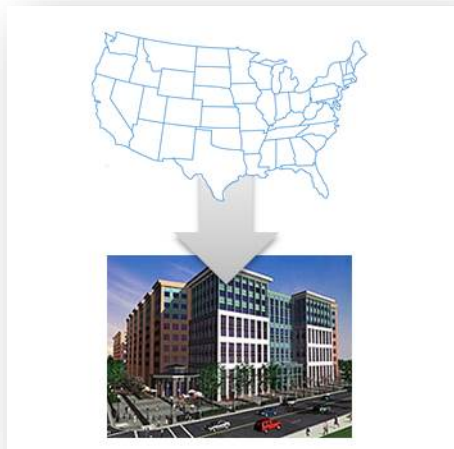
<b>Contents</b>	<b>Baseline</b>	<b>Mid Period</b>	<b>Full Period</b>
2-year targets	X		
4-year targets	X		
Basis for targets	X		
Baseline conditions/truck freight bottlenecks	X		
Ties to other plans	X		
Actual conditions		X	X
Progress discussion/truck freight bottlenecks		X	X
Investment strategy discussion		X	X
Adjusted four-year targets		X	
Extenuating circumstances		X	X
NHPP/NHFP target achievement discussion		X	X



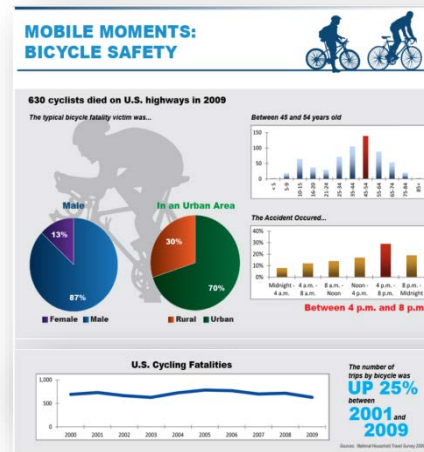


# Performance Reporting

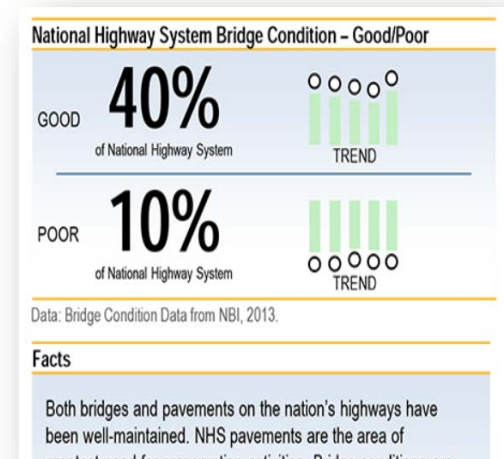
## State DOT Progress Reporting Portal



## Performance Storytelling



## Performance Reports



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## *Reporting Portal*

- Under development
- Demonstrate in 2018
- Training will be offered
- Today's discussion is illustrative only

# Biennial Performance Reporting Process

- States will submit their performance reports through an online portal that FHWA is developing
- Among other things, States will be able to describe extenuating circumstances and reasons for meeting or not meeting targets

The screenshot displays a web application interface for the 'POLICY INFORMATION DATA PORTAL'. The main heading is 'Performance Management Form Submission Dashboard'. There are tabs for 'Pending Submissions' and 'Approved Submissions'. A search bar is located on the right. Below the search bar is a table with the following data:

State	Report Year	Description	Performance Period	Report Due Date	Submission Status	InitiatedBy/On	SubmittedBy/On	Action
Pennsylvania	2018	BASELINE PERFORMANCE PERIOD REPORT (BPP)	2018-2021	10/01/2018	Initiated	TYAN 3/30/2017 2:56:17 PM	TYAN 3/30/2017 2:56:17 PM	Edit Delete

Showing 1 to 1 of 1 entries

# Performance Management Sample Form

State	Report Year	Report Type	Performance Period	Report Due Date
Delaware	2018	BASELINE PERFORMANCE PERIOD REPORT (BPP)	2018-2021	10/01/2018

<b>Overview</b>	Attachment	Pavement	Bridge	Congestion	Peak Hour	Freight	Reliability
Emissions - Part I	Emissions - Part II						



# Bridge Performance Measures Sample Form

Bridge	
<p><b>* B3</b> Please provide the current statewide percentage of deck area of bridges on the NHS classified as in Good condition.</p> <p><i>Note: The data submitted should cover the latest available conditions and performance as of the end of 2017 (§ 490.107(b)(1)(ii)(B)). For Example, enter 86.5% as 86.5</i></p>	<input type="text" value="Enter a percentage value, for e"/>
<p><b>* B4</b> Please provide the 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition that the State DOT has established for the 2018-2021 Performance Period.</p> <p><i>Note: This input is intended to be based on the expected condition/performance of this measure in the defined area at the end of 2019. For Example, enter 86.5% as 86.5</i></p>	<input type="text" value="Enter a percentage value, for e"/>

# Reliability Sample Form

## Reliability

**\* R3** Please provide the current percent of the statewide Interstate System providing for reliable travel times.

*Note: The data submitted should cover the latest available conditions and performance as of the end of 2017 (§ 490.107(b)(1)(ii)(B)). For Example, enter 86.5% as 86.5*

Enter a percentage value, for e

**\* R4** Please provide the 2-year target for the percent of the statewide Interstate System providing for reliable travel times that the State DOT has established for the 2018-2021 Performance Period.

*Note: This input is intended to be based on the expected condition/performance of this measure at the end of 2019. For Example, enter 86.5% as 86.5*

Enter a percentage value, for e

**\* R5** Please provide the 4-year target for the percent of the



# *Performance Website*



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## *Transparency*

- Make performance elements regularly available to the public
  - Internal communications
  - External communications
  - Feedback loop
- USDOT will facilitate transparency through use of web-based dashboard to communicate aggregated performance results





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## ***ONEDOT Performance Website Purpose***

- Display performance data received from States
- Display performance targets received from States
- Incorporate transit performance information
- Create a foundation for a multimodal performance reporting
- Include significant progress determination toward achieving NHPP, NHFP and HSIP targets

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# Website Overview

- 1<sup>st</sup> Phase
  - Transportation stories
  - Performance reporting area
  - Dashboard
  - Static content
- 2<sup>nd</sup> Phase
  - Dynamic content (data driven)
  - Embedded tools
  - Users create reports



# Landing Page

**Transportation.gov**  
U.S. Department of Transportation

Home

## Transportation Performance Management and Reporting

**Department of Transportation Launches 50th Anniversary Commemoration**  
Learn more about the creation of DOT and our five decades of moving America forward.

**PERFORMANCE REPORTS**  
Access performance reports and dashboards.  
Performance Reports

**PERFORMANCE CONTENT**  
Explore transportation stories that contextualize performance.  
Performance in context

**MORE INFORMATION**  
Browse additional information and links from this site and around the web.  
More information

**Highlighted Measure: Lowering Fatal Crashes**

**QUICK LINKS**  
Browse directly to performance reports for a state, urbanized area, or transit agency or select a performance area to view a national performance report.

- SELECT A STATE  
--Select a State--
- SELECT AN URBANIZED AREA  
--Select a UZA--
- SELECT A TRANSIT AGENCY  
--Select an Agency--
- SELECT A PERFORMANCE AREA  
--Select an Area--

**FATAL CRASH RATE**  
LOWERING FATAL CRASHES

1.14  
Per 100M VMT

Descriptive text here. This text is provisional and provided for illustrative purposes only. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.



# Performance Storytelling

**Transportation.gov**  
 U.S. Department of Transportation

[About DOT](#) | [Our Activities](#) | [Areas of Focus](#)

**National Performance Dashboard**

Performance in Context ▾

National Performance Dashboard and Reports ▾

State Performance Dashboards and Reports

Other Agency Reports

What's New

Home > Performance Management and Reporting > Infographics > Our Transportation Investment

## Our Transportation Investment

For decades, the Federal Highway Trust Fund has provided stable funding for the U.S. highway system, but that's no longer the case. Inflation has depreciated the buying power of motor fuels tax revenues that support the trust fund, and at the same time, increasing fuel efficiency standards and changing travel patterns continue to erode the fund. New approaches are needed as the U.S. is no longer keeping up with its infrastructure needs.

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### KEEPING US MOVING

#### Where Does Highway Funding Come From?

Combined Highway Funding Sources (National, State, and Local)

Source	Percentage
Motor-Fuel and Vehicle Taxes	38%
Government General Revenue	27%
Bonds	15%
Investment Income	6%
Other Taxes and Fees	14%

*The funding dedicated to our highway system is used to preserve and maintain our roadways and bridges, reduce congestion, improve safety, and invest in research that will lead to innovations and improvements in the future.*

#### Working as a Team

Total Annual Investment \$223 Billion (2010 Data)

Source	Percentage	Amount
States	47%	\$97,364
Local	25%	\$51,320
Federal	23%	\$47,099
Tolling	5%	\$9,531

*Local, State, and Federal transportation agencies work together to keep us moving.*

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# Performance Storytelling

**Transportation.gov**  
U.S. Department of Transportation

Home > Performance Management and Reporting > Infographics > Our Economic Well-Being

## Our Economic Well-Being

For decades, the Federal Highway Trust Fund has provided stable funding for the U.S. highway system, but that's no longer the case. Inflation has depreciated the buying power of motor fuels tax revenues that support the trust fund, and at the same time, increasing fuel efficiency standards and changing travel patterns continue to erode the fund. New approaches are needed as the U.S. is no longer keeping up with its infrastructure needs.

### BUSINESSES DEPEND ON OUR TRANSPORTATION SYSTEM

#### Industry Travel Costs

Transportation Cost for Every \$1 of Product

Agriculture	14.2 cents
Manufacturing	9 cents
Mining	1 cent

#### Shipping Costs

**1 day of delay** causes American President Line's eastbound trans-Pacific services to increase use of containers and chassis by **1,300**

**1-Week Delay in Container Movement in L.A.** Could Cost the U.S. Economy **\$455 Million to \$1.05 Billion per Week**

**NIKE** must spend an additional **\$4 Million per week** to carry an extra 7 to 14 days inventory to compensate for shipping delays

Source: [http://ops.fhwa.dot.gov/freight/freight\\_analysis/freight\\_story/index.htm](http://ops.fhwa.dot.gov/freight/freight_analysis/freight_story/index.htm)



# Performance Storytelling

**Transportation.gov**  
U.S. Department of Transportation

Home > Performance Management and Reporting > Infographics > Our Mobile Lifestyle

## Our Mobile Lifestyle

For decades, the Federal Highway Trust Fund has provided stable funding for the U.S. highway system, but that's no longer the case. Inflation has depreciated the buying power of motor fuels tax revenues that support the trust fund, and at the same time, increasing fuel efficiency standards and changing travel patterns continue to erode the fund. New approaches are needed as the U.S. is no longer keeping up with its infrastructure needs.

### TRANSPORTATION SHAPES OUR SPACE

#### Complete Streets Policies

Many factors influence the planning, design, and operation of roadways in the 21<sup>st</sup> century. Modern street design can accommodate the needs of an aging population, improve public health and fitness, minimize construction costs, create and maintain vibrant neighborhoods, and reduce the fossil fuel emissions that contribute to climate change. Complete Streets policies ensure safe access and travel for all users and strive to fulfill these goals.

Source: <http://www.fhwa.dot.gov/publications/publications/13/03aug/03.cfm>; City of Charlotte

#### Walking Around

Walking is the **2<sup>nd</sup> most common** form of travel, accounting for **10.9%** of all trips

#### States with Complete Streets Policies

Year	Number of States
1970	0
1975	1 (Oregon)
1980	2

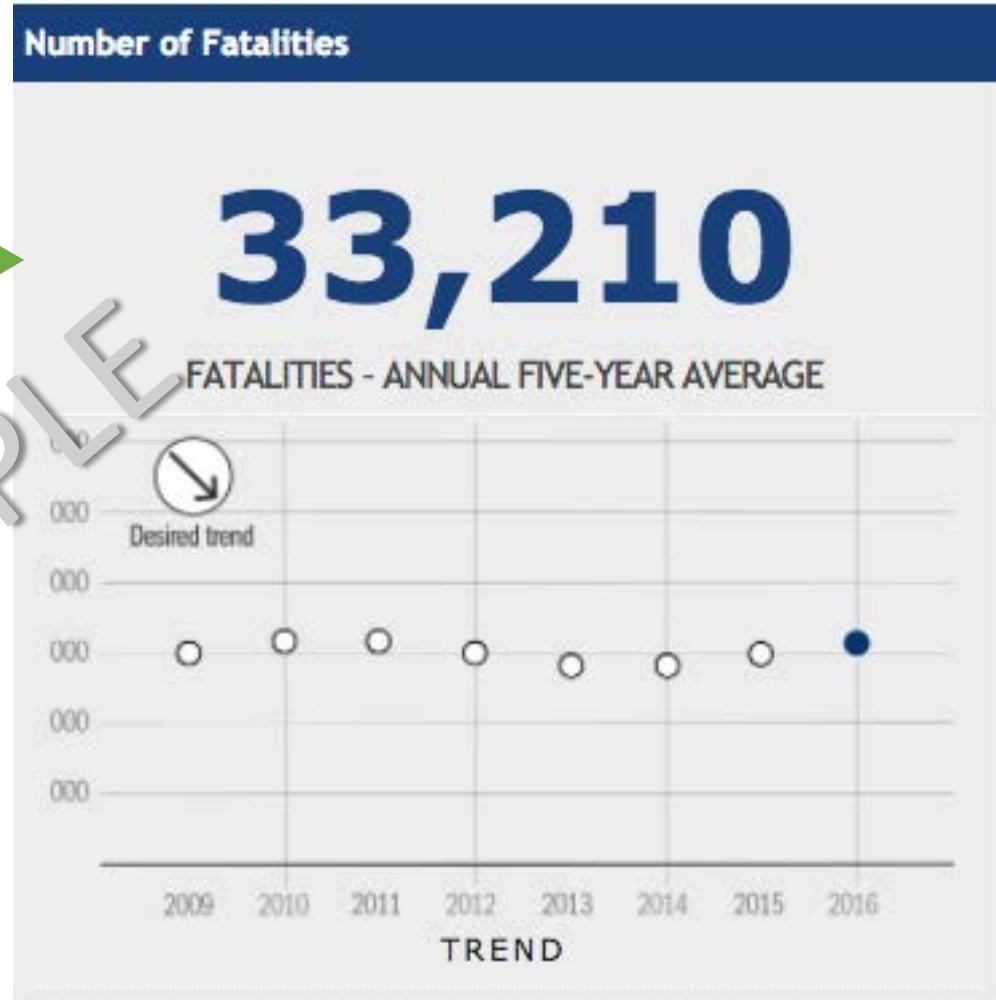
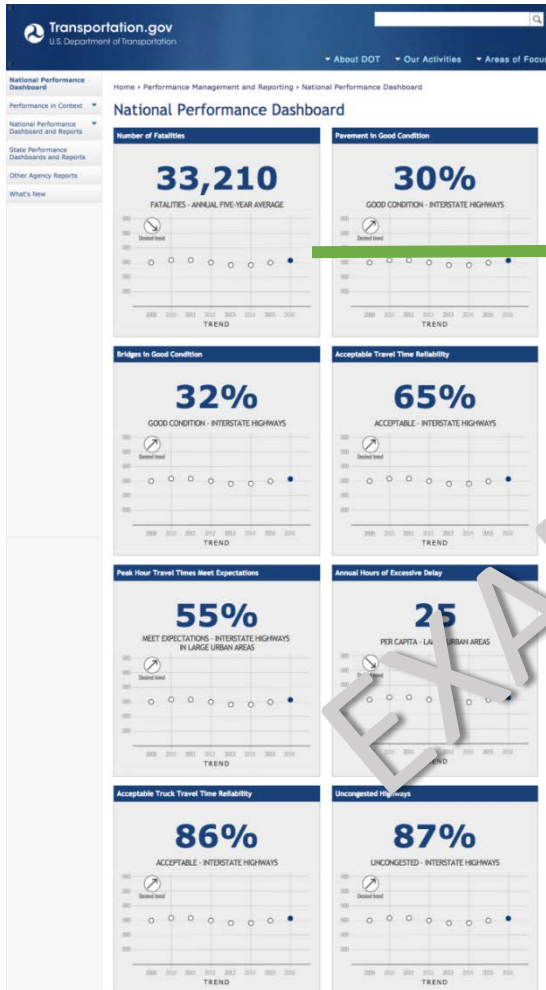


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## *Performance Reporting Area*

- National and State dashboards show:
  - Trends and projections
  - Measure area performance reports on a national level
  - Individual State performance reports, including targets and significant progress determinations
  - Individual large urbanized area performance reports

# National Dashboard





# National Performance Area Reports

Transportation.gov  
U.S. Department of Transportation

Home » Performance Management and Reporting » National Performance Dashboard » National Highway Safety Report

## National Highway Safety Report

**How are we doing?**

- The performance targets and results on this page are established annually and reported annually.
- To check on a state's progress, visit the state's website where updated data and additional measures may be reported.

**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 roads.

### Number of Fatalities

**33,210**  
Fatalities  
Rolling 5-year Average

Projection  
By 2018  
States are projected to reduce fatalities below

**28,000**  
Fatalities

**Fatal Crash Rate**

**1.14**  
Fatalities Per 100M VMT  
Rolling 5-year Average

Projection  
By 2018  
States are projected to reduce fatal crash rates below

**1.0**  
Fatalities per 100M VMT

### Serious Injuries

**2.5M**  
Serious Injuries

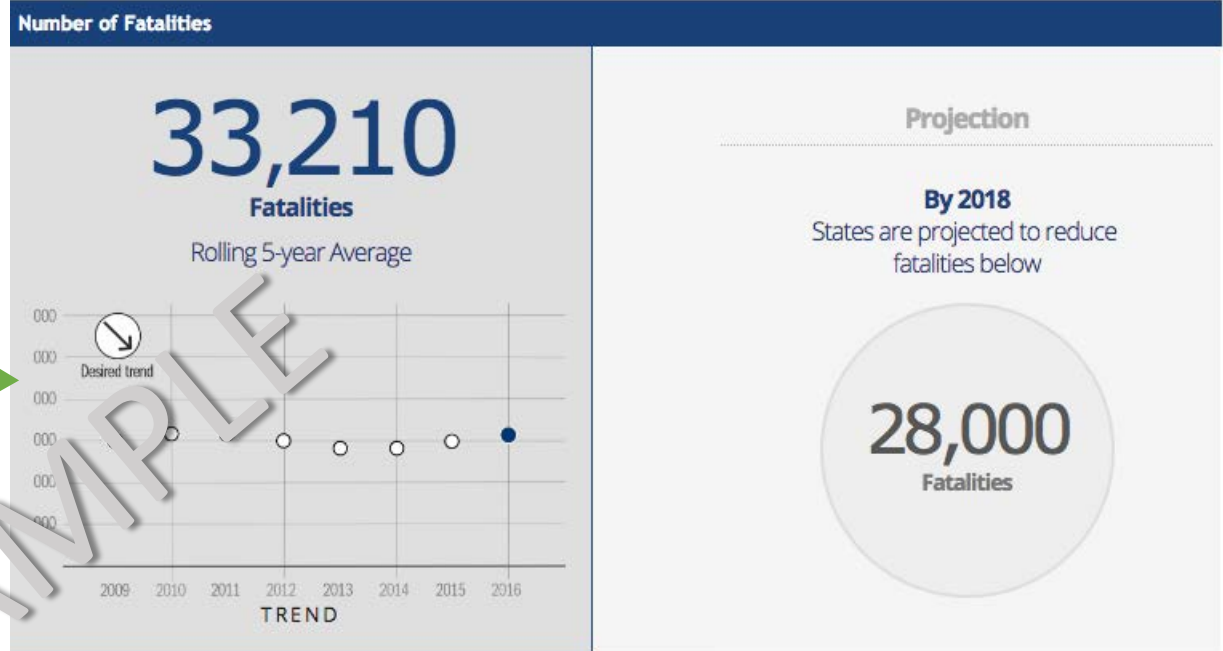
Projection  
By 2018  
States are projected to reduce serious injuries below

**2.5M**  
Serious Injuries

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

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

Data: Serious Injuries compiled from State DOTs; Data are from latest available year.



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

# State Performance Report

**Transportation.gov**  
U.S. Department of Transportation

Home > Performance Management and Reporting > State Performance Reports and Dashboards > Example-State Performance Dashboard > Example-State Safety Report

## Example-State Safety Report

**How are we doing?**

- The performance targets and results on this page are established annually and reported annually.
- To check on a state's progress, visit the state's website where updated data and additional measures may be reported.
- Direct links to state performance data and reports are provided at the bottom of this page, where available.

**Are We Making Our Roads Safer?**

Example-State has shown significant progress in making our roads safer. There have been reductions in fatalities, fatal crash rates, and serious injury crash rates, but serious injuries have increased slightly. Example-State DOT is working to improve safety in the future.

**Number of Fatalities**

826 Fatalities

2018 Target: 750 Or Fewer Fatalities

Example-State has implemented numerous countermeasures to reduce median cross over and other run-off-the-road crashes, a major source of fatalities in the State.

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

**Fatal Crash Rate**

1.12 Fatalities Per 100M VMT

2018 Target: 1.00 Or Fewer Fatalities Per 100M

Example-State has implemented numerous countermeasures to reduce median cross over and other run-off-the-road crashes, a major source of fatalities in the State.

Data: Example-State DOT; Data are from latest available year.

**Serious Injuries**

5466 Serious Injuries

2018 Target: 5,800 Serious Injuries

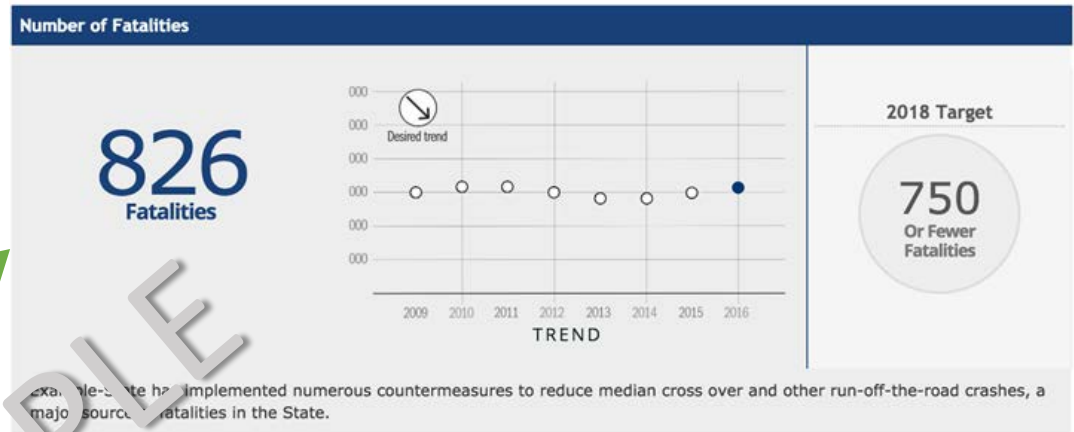
Use of certain countermeasures (e.g., median cable barriers) has reduced fatalities, but increased injuries. Example-State is investigating ways to resume the reduction of serious injuries.

Data: Example-State DOT; Data are from latest available year.

**Serious Injury Crash Rate**

6.33 Serious Injuries Per 100M VMT

2018 Target: 6.10 Serious Injuries Per 100M VMT



Example-State has implemented numerous countermeasures to reduce median cross over and other run-off-the-road crashes, a major source of fatalities in the State.

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

# Phased Development

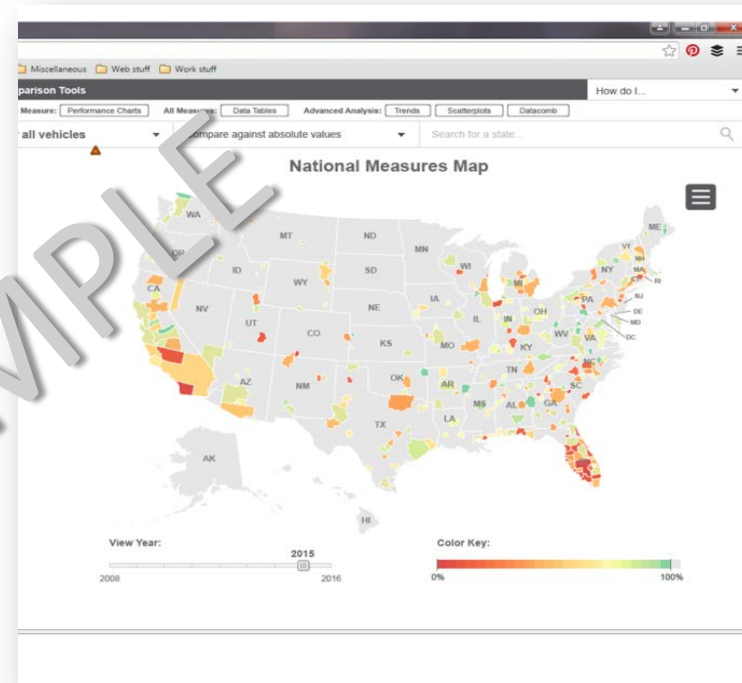
## 1.0



transportation.gov

- Static pages
- Highway & Transit
- Determinations
- US, State, Transit

## 2.0



Dynamic content!

# Timeline

## Design and Build Out

- ✓ External Showcase Webinar
- ✓ Phase 1 Site Build Out
- ✓ Phase 2 Data Visualization and Analysis Tools
- ✓ Research/Testing
- ✓ Phase 1 Launch

2018

## Website Launch

- ✓ Phase 2 Launch
- ✓ Content Management and Maintenance

2019



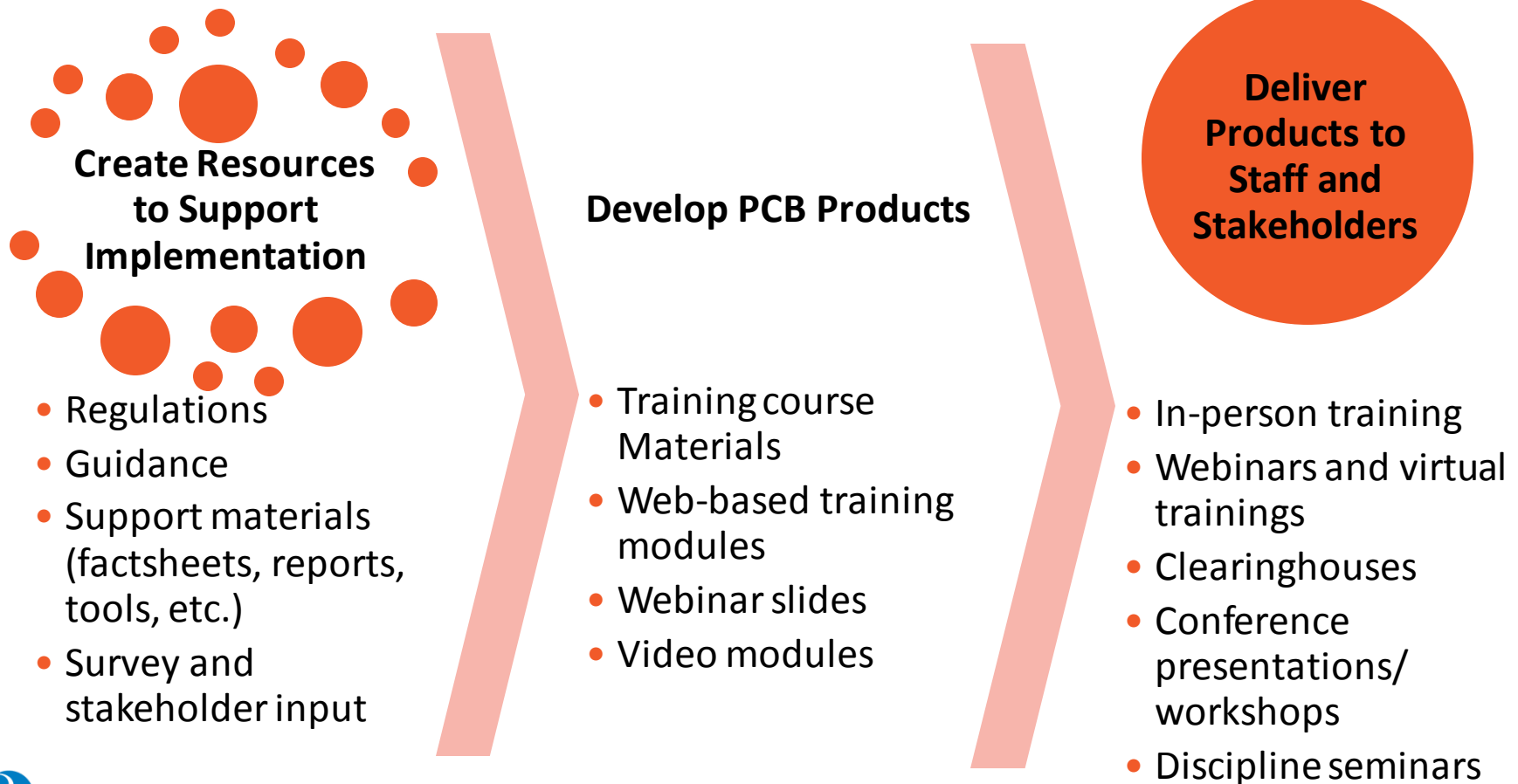
# *Resources*



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Federal Highway Administration




# ***TPM Professional Capacity Building (PCB)***



# TPM Website

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

Home / Programs / Transportation Performance Management



**TPM DIGEST**  
FHWA Transportation Performance Management

**TPM Digest:** Find out the latest in TPM including: Online State Dashboards, Performance Reports, Mobility, Performance Based Planning, Safety, Events, Workshops, Webinars, Transportation Performance Management Research, and Innovation.

[Play](#)
[Previous](#)
[Next](#)

[1](#)
[2](#)
[3](#)
[4](#)

<h3>Implementation</h3> <ul style="list-style-type: none"> <li>What is TPM?</li> <li>National Goals</li> <li>MAP-21 Putting Performance into Action (.pdf, 1.3 mb)</li> <li>Implementation Schedule (.pdf, 0.1 mb)</li> <li>TPM Rulemakings</li> <li>Guidance</li> </ul>	<h3>Engagement</h3> <ul style="list-style-type: none"> <li>Rulemaking Stakeholder Engagement</li> <li>Reporting</li> </ul>	<h3>Resources</h3> <ul style="list-style-type: none"> <li>Apply for P2P Technical Assistance</li> <li>Noteworthy Practices</li> <li>Presentations and Webinars</li> <li>Publications</li> <li>Tools</li> <li>TPM Digest</li> <li>Training</li> </ul>	<h3>Email Notification</h3> <p style="text-align: center;"> <a href="#">Subscribe to email updates</a> </p> <hr/> <h3>Calendar</h3> <ul style="list-style-type: none"> <li>Lessons Learned from Target Setting Coordination Webinar</li> <li>June 13, 2017</li> </ul>
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### Events

- [Lessons Learned from Target Setting Coordination Webinar](#)  
June 13, 2017  
2:00-3:30 PM EST
- [View all Upcoming Events](#)

### Related Links

- [FHWA/DOT TPM-related Links](#)
- [TPM External links](#)

### Contacts

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



## *Materials in Development*

- Technical Advisories Guidance
  - S/TIP Performance-Based Discussion
  - LRTP System Performance Report
  - Linking Targets to Long-Term Expectations
- Guidebooks and Effective Practices
  - Transportation Investment Strategy Analysis (Summer 2017)
  - TPM Target Setting Coordination (Summer 2017)
  - Analyzing Freight Bottlenecks for TPM (Winter 2017)



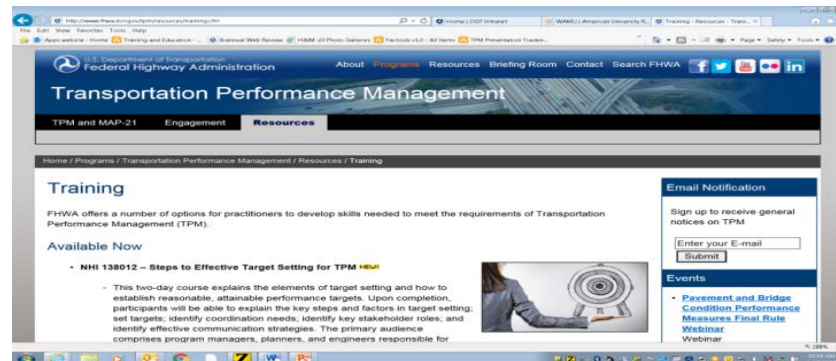
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## *Technical Assistance: National Webinars*

- Let's Talk Performance Series
  - Recorded Sessions on Key TPM Topics
    - Asset Management (November 2016)
    - Safety Target Setting and Coordination (September 2016)
    - Basics of Target Setting (July 2016)

# *NHI In-Person Courses Available Now*

- Overview of MAP-21 TPM (with FAST Act Updates)
- TPM for Safety
- Performance-based Planning and Programming
- Steps to Effective Target Setting
- The Role of Data in TPM



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## ***Formal Peer-to-Peer Technical Assistance***

- Learn from DOT/MPO/Transit Peers
- Apply for:
  - FHWA TPM Professional Capacity Building Program
  - FHWA Transportation Planning Capacity Building Program
    - FHWA Scenario Planning Peer Exchange Workshop
- Apply through Division Office

# TPM Toolbox

- Visit <http://www.tpmtools.org>
  - Assess your agency's level of TPM maturity
  - Use the practical tools to move your agency to the next level in a range of performance areas



## TPM Guidebook

The TPM Implementation Guidebook provides clear practical actionable steps that state DOT leadership, management, and staff can implement to enhance performance management practices.

## Self-Assessment

The TPM self-assessment helps to determine your or organization's level of performance management maturity. Your assessment results are linked directly to the guidebook and other resources on this site.

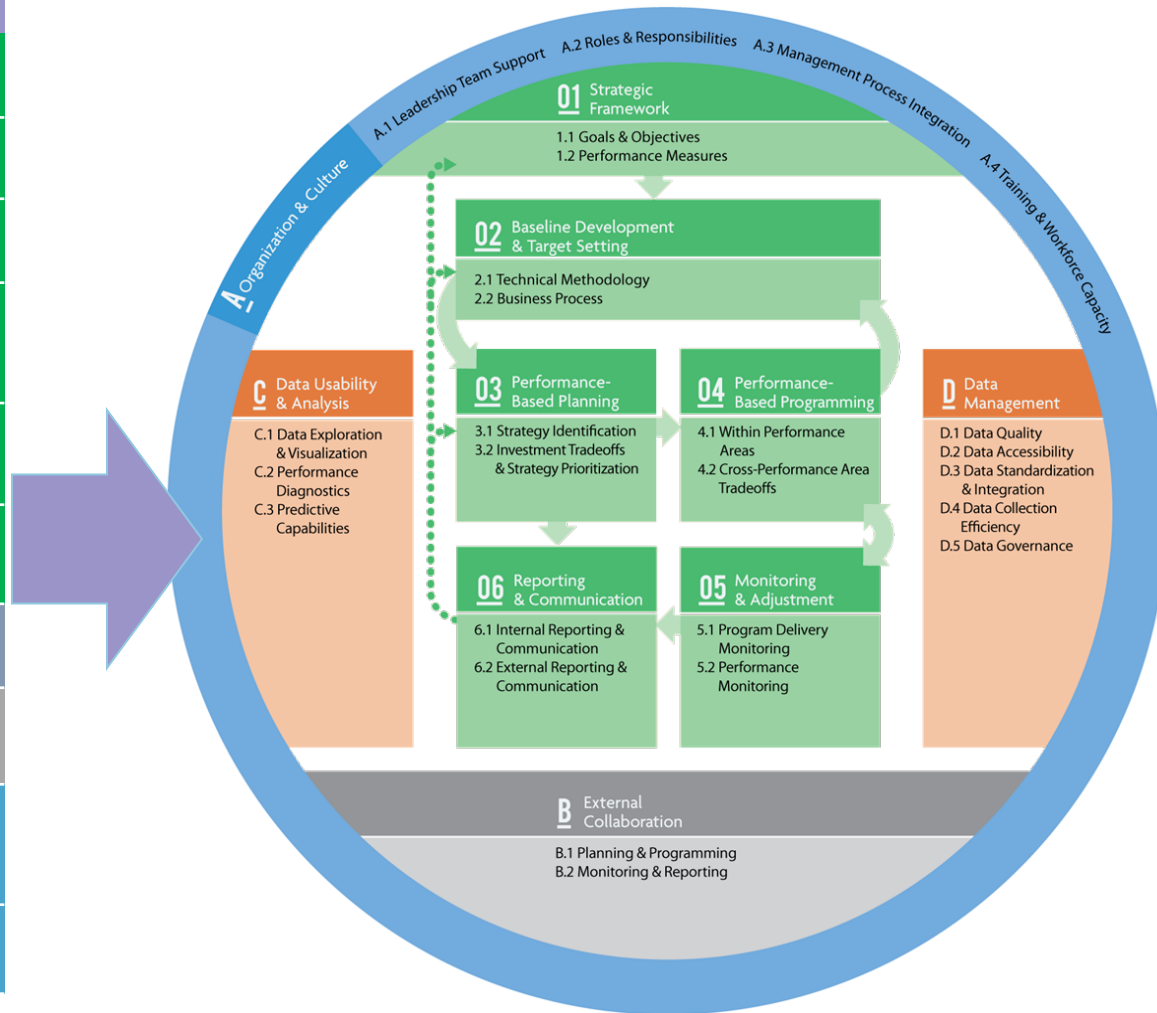
## TPM Resources

The TPM Resources Library contains best practices, precedents, and other helpful resources. Browse the library or quickly navigate to a specific document using our search tools.

# TPM Capability Maturity Model (CMM)



- CMM has 10 components w/ 26 Subcomponents
- 1. Strategic Framework**
- 2. Target Setting**
- 3. Performance-Based Planning**
- 4. Performance-Based Programming**
- 5. Monitoring & Assessment**
- 6. Reporting & Communication**
- A. TPM Organization & Culture**
- B. External Collaboration**
- C. Data Usability & Analysis Capabilities**
- D. Data Management**



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## ***FHWA Website Resources***

- Policy and Guidance Center
  - <https://www.fhwa.dot.gov/pgc/>
- TPM
  - <https://www.fhwa.dot.gov/TPM/index.cfm>
- Asset Management
  - <https://www.fhwa.dot.gov/asset/>



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## *Contacts*

For questions or more information, please contact:

Transportation Performance Management  
Team:

*Susanna Hughes Reck,*

[Susanna.Hughesreck@dot.gov](mailto:Susanna.Hughesreck@dot.gov), 202-366-1548



*Questions?*



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