

# *Transportation Performance Management: What's Next*

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UCI Annual Meeting

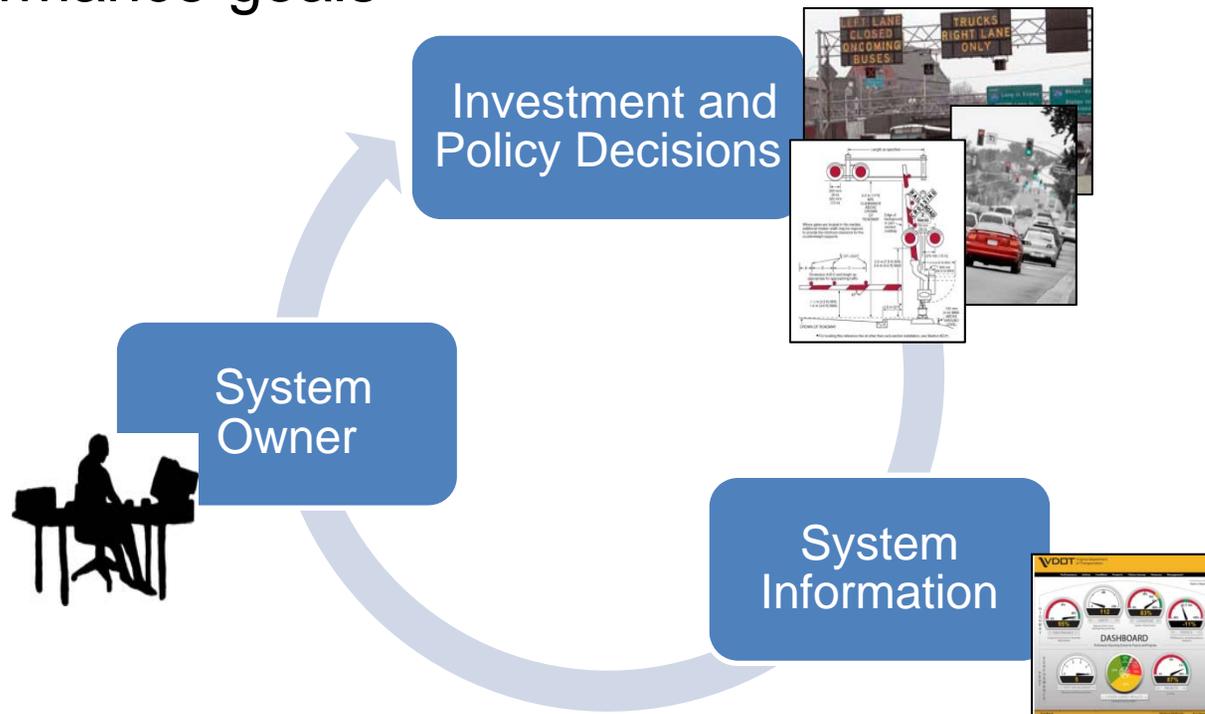
May 24<sup>th</sup> 2017

City of Hampton

# What is Transportation Performance Management (TPM)?

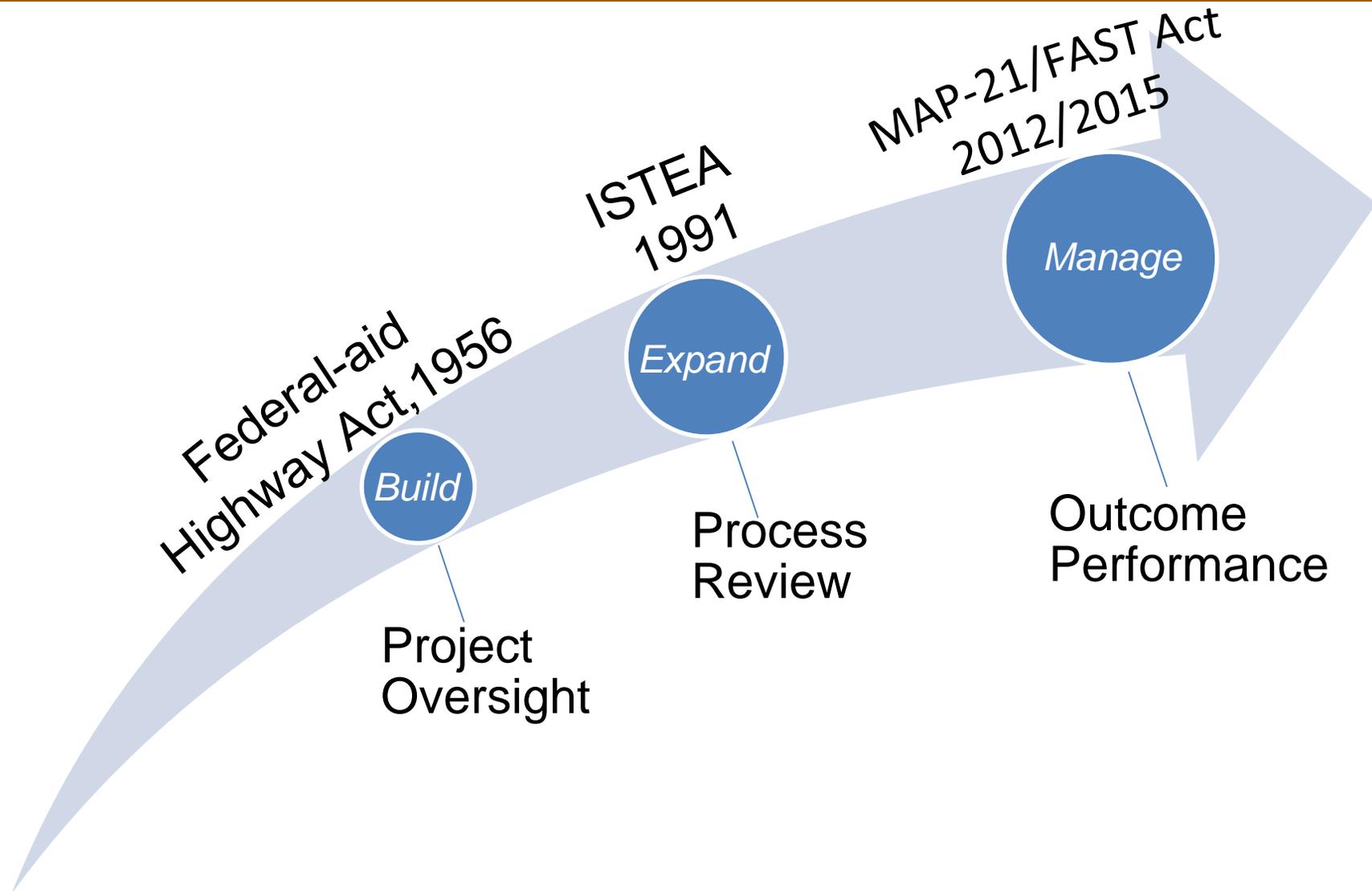
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A strategic approach that uses system information to make investment and policy decisions to achieve transportation system performance goals



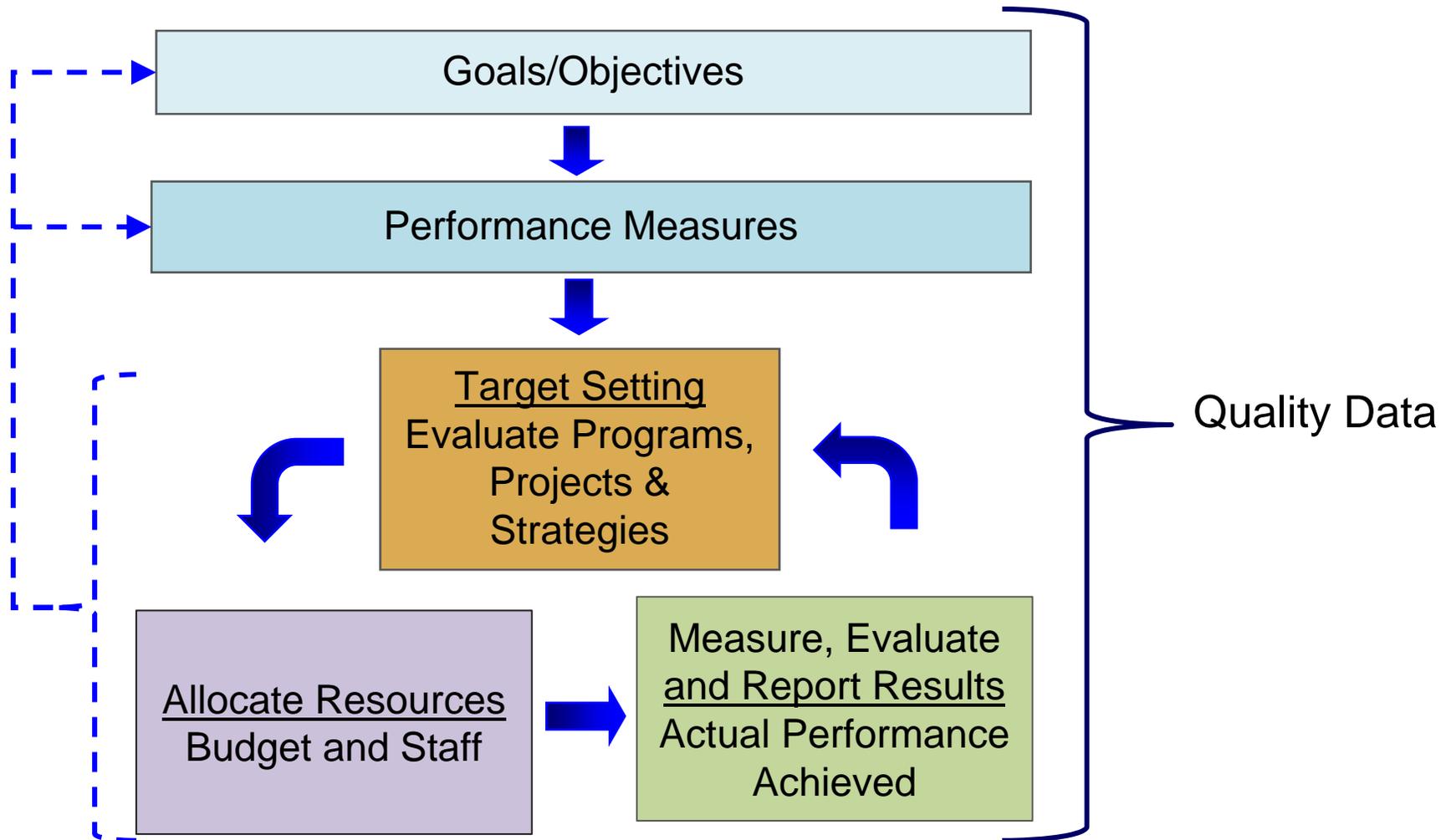
# Performance Management is Not New

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# MAP-21/FAST Act is Consistent with Best Practice

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# MAP-21/FAST Act and TPM

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- MAP-21/FAST Act contains several provisions that require USDOT and partner organizations to implement performance-based Federal-aid Programs
- Transportation performance management represents the opportunity to:
  - Prioritize needs
  - Align resources for optimizing system performance in a collaborative manner

# TPM Elements

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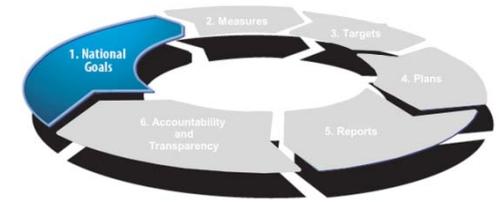
# TPM Timelines

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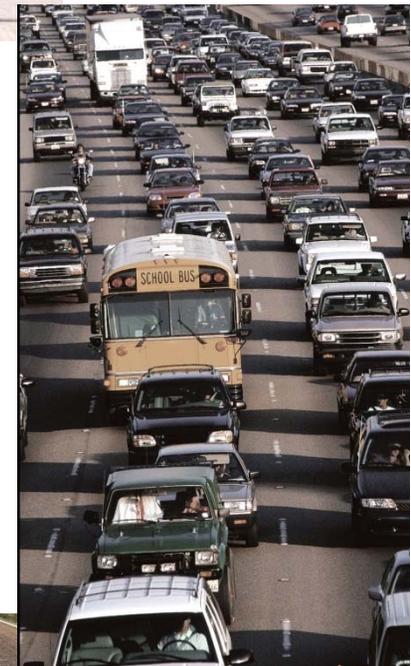
MAP-21 Enactment



# 1. National Goal Areas



- Safety
- Infrastructure condition
- Congestion reduction
- System reliability
- Freight movement and economic vitality
- Environmental sustainability
- Reduced project delivery delays



# MAP-21/FAST Act Performance Measure Requirements

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USDOT establishes national performance measure areas within:

- Highway Safety Improvement Program (HSIP)
- National Highway Performance Program (NHPP)
- Congestion Mitigation and Air Quality Improvement (CMAQ) Program
- National Highway Freight Program (NHFP)

# MAP-21/FAST Act Requirements: **HSIP**

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Measure Area	Scope
Number of fatalities	<i>All public roads</i>
Rate of fatalities per vehicle miles traveled	
Number of serious injuries	
Rate of serious injuries per vehicle mile traveled	
Number of Non-motorized Fatalities and Serious Injuries	

# MAP-21/FAST Act Requirements: **NHPP**

Measure Area	Scope
Pavement condition	<ul style="list-style-type: none"><li>• Interstate System</li><li>• National Highway System (NHS)</li></ul>
Bridge condition	<ul style="list-style-type: none"><li>• NHS</li></ul>
System Performance* (e.g., system reliability)	<ul style="list-style-type: none"><li>• Interstate System</li><li>• NHS</li></ul>

# MAP-21/FAST Act Requirements:

## CMAQ

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Measure Area	Scope
Traffic congestion	Defined in NPRM
On-road mobile source emissions	Define in NPRM

# MAP-21/FAST Act Requirements:

## NHFP

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Measure Area	Scope
Freight movement	Interstate System

\* 'Freight movement' will be defined by rulemaking

# Data Sources for Proposed Performance Measures

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Data Sources	Applicable Measures (Proposed 23 CFR §490)
Fatal Analysis Reporting System (FARS) and State Reported Serious Injury Data	<ul style="list-style-type: none"><li>• Safety Performance Measures</li></ul>
National Bridge Inventory (NBI)	<ul style="list-style-type: none"><li>• NHS Bridge Condition Performance Measures</li></ul>
Highway Performance Monitoring System (HPMS)	<ul style="list-style-type: none"><li>• Safety Performance Measures</li><li>• Pavement Condition Performance Measures</li></ul>

Note: Measures, data sources and calculations are all proposed and can change with Final Rule publication

# Roles and Responsibilities: **USDOT**

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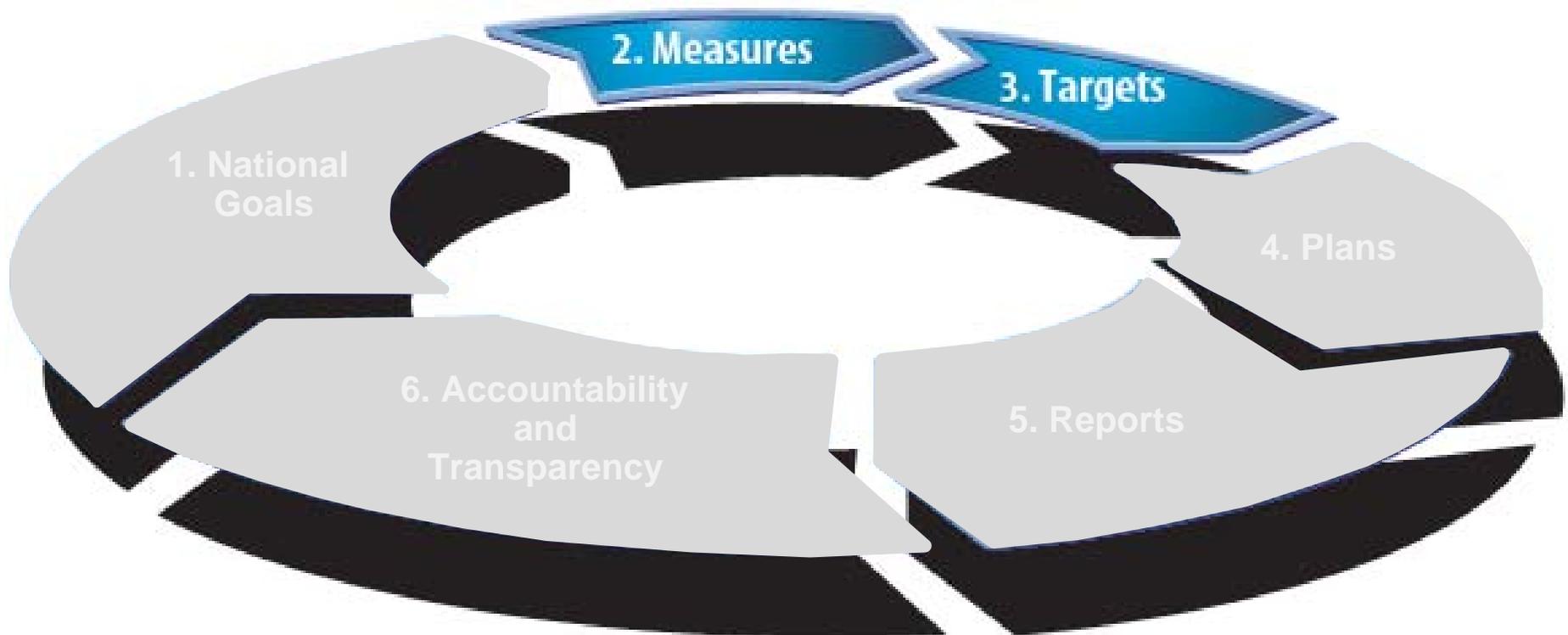


U.S. Department of Transportation

- Rulemaking to define measures, significant progress and reporting requirements
- Report to Congress
- Stewardship and oversight of the process
  - Capacity building support to State DOTs, MPOs and public transportation agencies

# TPM Elements—What's Next?

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# What are Performance Targets?

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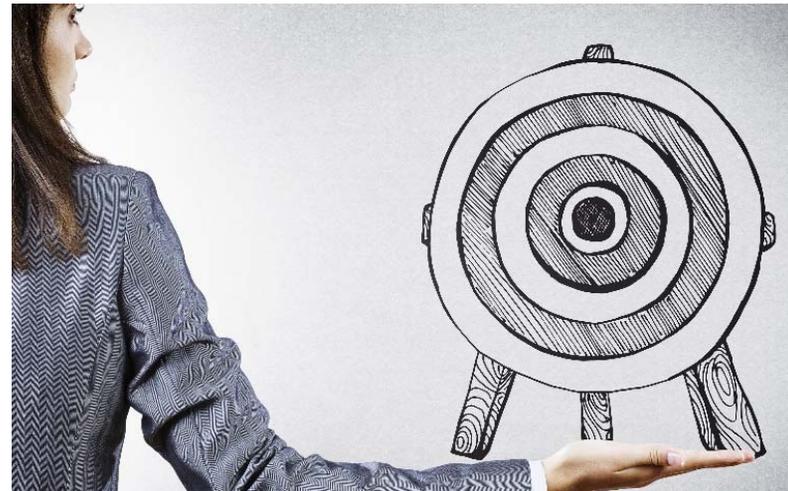


- Specific numerical figures with expected future performance (e.g., X decrease in traffic fatalities in Y years)
- VDOT and MPOs set their own targets, but must coordinate
- Target setting is iterative and ongoing

# Why Set a Target?

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- Provide guidance on prioritization and allocation of resources
- Focus on the connection between actions and results
- Clarify outcomes the agency is trying to achieve
- Hold the agency accountable for performance
- Highlight where more resources are best deployed
- Manage expectations
- Foster conversation about performance
- Measure incremental progress towards achieving a goal or objective



# What is Target Setting?

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- A data-driven collaborative [process](#) that determines what an agency realistically expects to achieve within a specific time frame
- Targets are used in relation to measures to assess progress toward achieving strategic goals and objectives, inform programmatic adjustments, consider tradeoffs and risks in achieving objectives, and communicate with stakeholders



# Target Setting in Transportation

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Pavements



Bridges



Safety



Mobility



Freight Movement



Congestion Mitigation and Air Quality



Project Delivery



# Target Setting in Every Day Life

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New Year's Resolution



Athletic Improvement



# Roles and Responsibilities: **VDOT**

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- Set targets for each performance measure
- Report performance and targets to FHWA (USDOT)
- Incorporate national goals, performance measures and targets into Long-Range Statewide Transportation Plans and STIPs
- Develop performance plans in other program areas
- Oversee collaborative TPM process

# MAP-21/FAST Act Performance Target Setting Requirements: **States**

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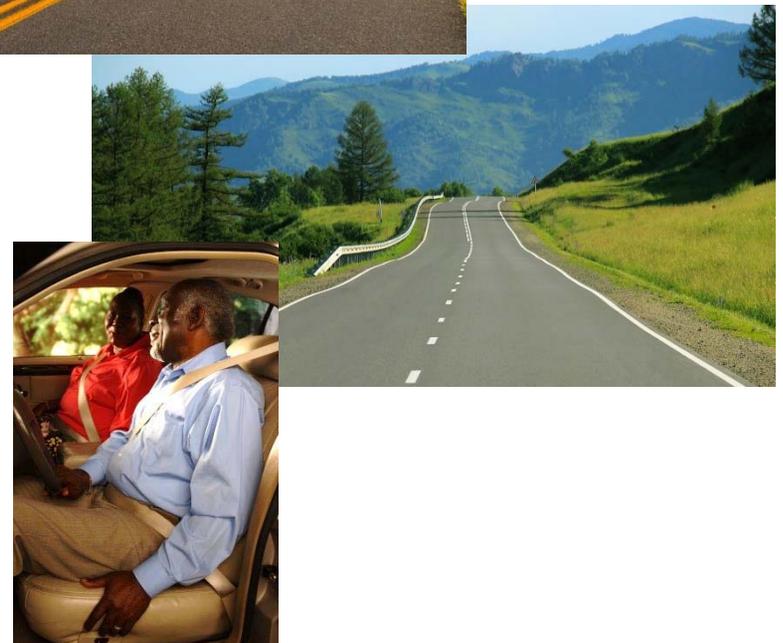
After the USDOT Final Rule, States:

- Are required to set performance targets for all measures within one year
- May set different targets for urbanized and non-urbanized areas
- Coordinate with MPOs and public transportation providers when setting performance targets
- Incorporate measures and targets into plans

# MAP-21/FAST Act Performance Target Setting: Related Requirements

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- Infrastructure Condition – minimum thresholds for bridge and pavement condition
- Safety – special rules for high risk rural roads and drivers/pedestrians 65 and over



# Roles and Responsibilities: **MPOs**

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- Set targets for each performance measure
- Report performance and targets to State DOTs
- Incorporate national goals, performance measures and targets into Metropolitan Transportation Plans and TIPs

# MAP-21/FAST Act Performance Target Setting Requirements: **MPOs**

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After States set targets, MPOs are required to:

- Set performance targets for all measures within 180 days of VDOT-set targets
- Coordinate with VDOT and other agencies or partners when setting targets
- Communicate their targets to VDOT for inclusion in the Long-Range Statewide Transportation Plan
- Develop a system performance report as part of the MPO Metropolitan Transportation Plan

# Considerations for Target Setting

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- Define current conditions
- Examine factors influencing target setting:
  - External trends
  - Organizational culture and goals
  - Policy considerations
  - Availability of funding and other resources

# Considerations for Target Setting (cont.)

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- Establish target performance level
  - Policy-driven
  - Consensus-based
  - Customer feedback
  - Benchmarking
- Monitor and assess progress

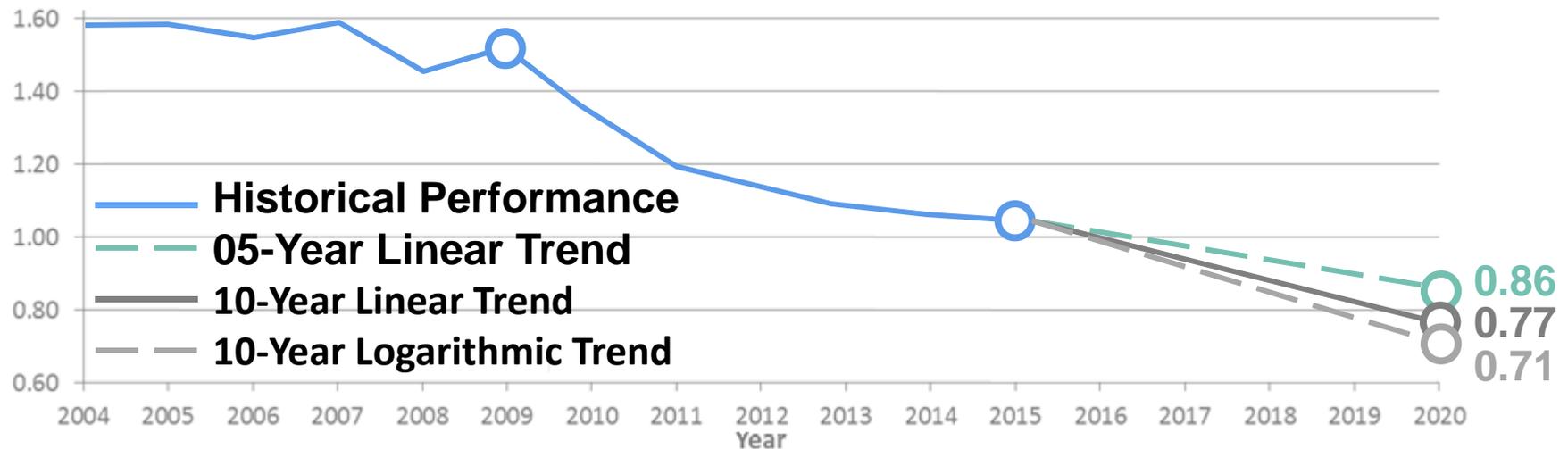
# Data Trend Analysis for Target Setting

Setting the Target

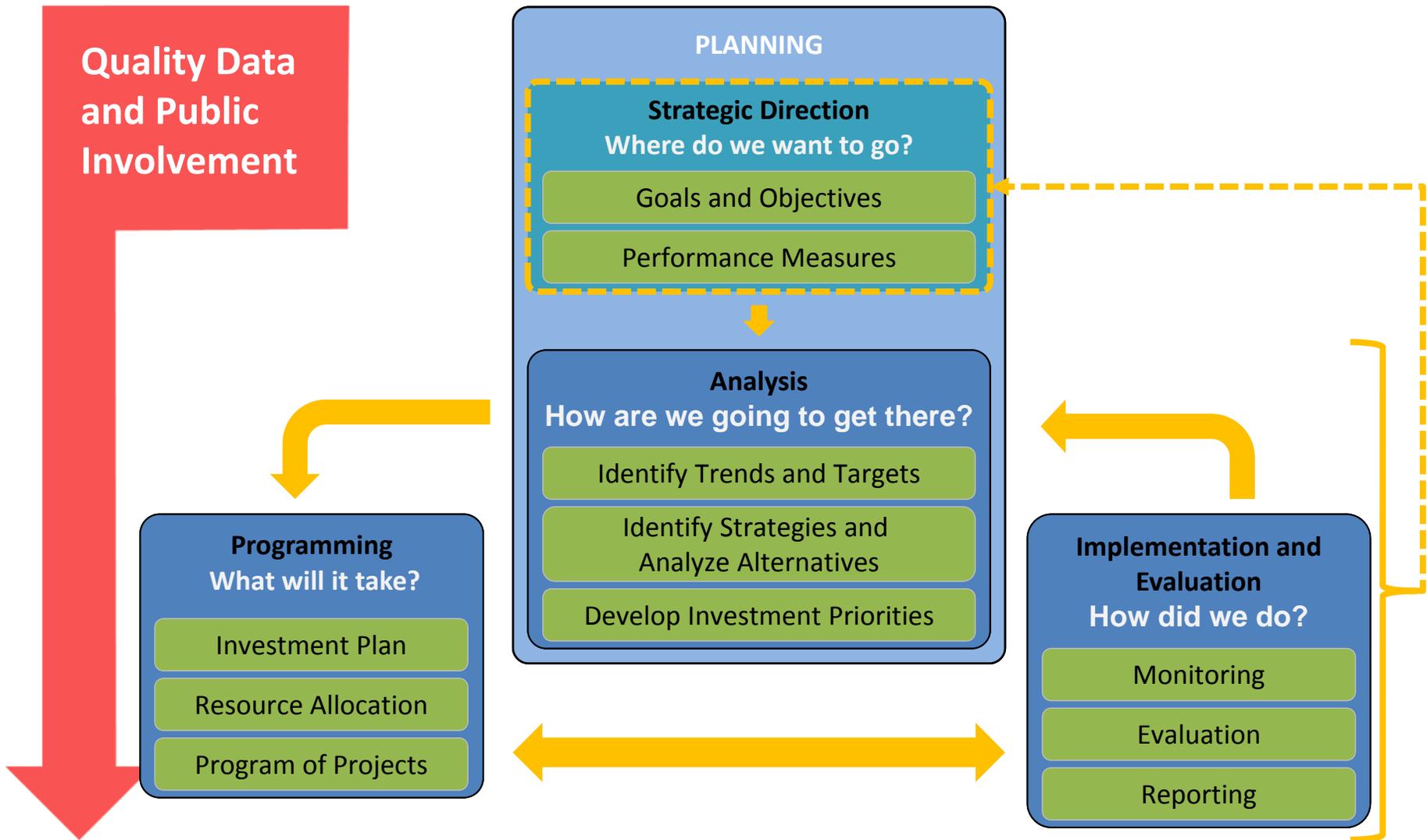
Tracking Progress  
Towards Target

Reporting and  
Communicating Results

- Assemble historical measure data
- Plot Data and Draw Trend
- Decide on the best trend line to represent that data



# Targets Support TPM and Performance-based Planning



# Purpose of MAP-21 Target Setting

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- Communicate what can be achieved with the resources available
- Connect plans, programs, and delivery to achieve targets
- Coordinate with all stakeholders to set targets, where appropriate



# Coordination on Target Setting

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- States, MPOs and transit agencies have overlapping responsibility for performance measurement
- Collaborating on target setting is critical – States and MPOs will draw from the same data sources and will want to collaborate on assumptions
- Agencies may have different priorities
- Target setting implies tradeoffs across program areas -- made through the planning process





U.S. Department of Transportation

# Role of USDOT in Target Setting

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- Provide assistance to State DOTs, MPOs & public transportation providers
- Provide oversight of target setting and coordination
- Assess progress towards targets

# Target Setting Coordination – Missouri DOT

MAP-21 PM Summary

Prepared by  
Transportation Planning Division  
Missouri Department of Transportation

**February 2015**  
For more information, contact:  
Karen Miller at (573) 522-5529

## Status of National Performance Measures

### How It Started

In 2012, the Moving Ahead for Progress in the 21st Century Act became the first surface transportation act to require national performance measures. Specific measures were required for seven goal areas:

- Safety
- Infrastructure Condition
- System Reliability
- Congestion Reduction
- Environmental Sustainability
- Freight Movement and Economic Vitality
- Reduced Project Delivery Delays



### What's Happened So Far

Over the past 18 months, the Federal Highway Administration has used the rulemaking process to collect input from national, state and local agencies regarding the most practical data collection, analysis and target setting toward reporting progress. To date safety goal has completed the rulemaking process with final rule expected by September 2015. The infrastructure condition goal has begun process and the remaining system performance goal areas are expected to begin this spring. In addition to the performance measure goals, the metropolitan and statewide planning process has completed with final rule expected by September 2015.

### What's Next

Once the final rules are published, the development process will turn to target setting. Staff from MoDOT and local planning partners will work together to establish targets and then to integrate those targets into performance-based plans.

- The areas where most assistance is needed are listed below in rank order:

Assistance Needed in ...	A lot	Some	None
Integrating data	6	2	1
Setting targets	5	3	1
Driving organizational change through effective performance management	5	2	2
Processing data to develop metrics	4	4	1
Reporting performance	4	4	1
Understanding MAP-21 requirements/expectations	3	4	2
Coordinating with other entities	3	3	3



System Performance Measures



- Overall Summary
- Survey of MPO needs
- Regular coordination calls

# Target Setting Coordination – Washington State DOT



### Target setting collaborative framework for the Moving Ahead for Progress in the 21st Century Act



### An overview of safety performance requirements for the Moving Ahead for Progress in the 21st Century Act

and the types of engagement are best for each.

This folio describes the organizational structure to facilitate the collaborative process that will include the



### An overview of pavement performance requirements for the Moving Ahead for Progress in the 21st Century Act

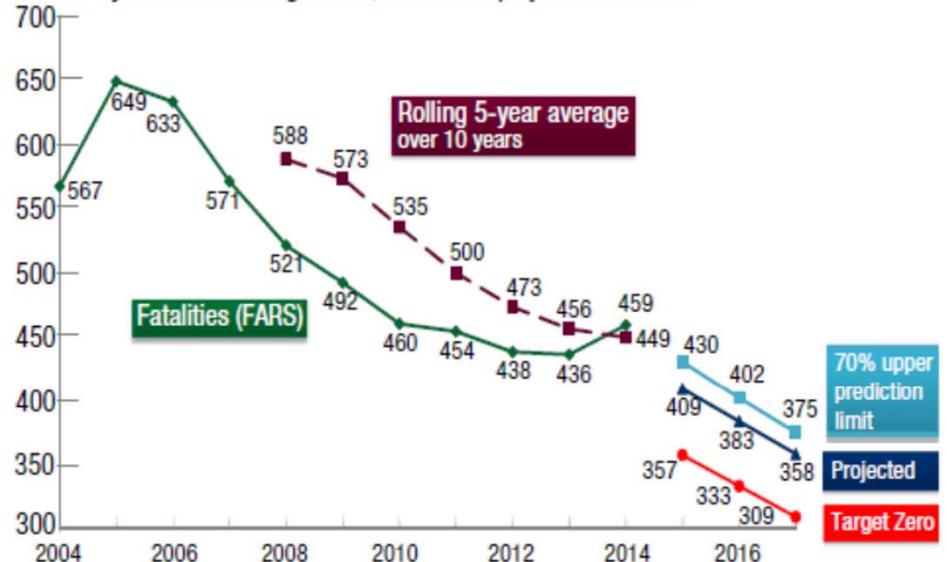
to methodology and data requirements

The group will also make advisory target setting decisions. Their

The Target Setting Technical Teams dive deep into Notices of Proposed

### Target setting: fatalities

Calendar years 2004 through 2017; actual and projected numbers



Data source: Washington State Traffic Safety Commission, Fatality Analysis Reporting System (FARS).

Notes: Fatality data for 2014 is preliminary. The MAP-21 prescribed "70% upper prediction limit" and the "projected" lines are based on the historic, continuous or rolling 5-year average trend. The "Target Zero" line represents Washington's current projection to achieve zero fatalities by 2030.

# TPM and Performance-Based Planning and Programming

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## Definition of Transportation Performance Management:

A strategic approach that uses system information to make investment and policy decisions to achieve system performance goals

*Focus of MAP-21/FAST Act*

*Focus of the planning and programming process*

*Focus of performance management and planning*

## MAP-21 and Agency Target Setting

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- A by-product of target setting is that it helps to see how much there is available to invest in each goal area





- For more information, contact:

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