What’s All the Hype About Performance Management?
Let’s Answer These ???

1. What is Performance Management and why is it important?
2. How and why did Missouri DOT do it?
3. Why is National Performance Management important to the industry?
4. How does Performance Management impact ITS?
The “WHAT”

- Performance management is an ongoing, systematic approach to improving results through:
  - Evidence-based decision-making
  - Continuous organizational learning
  - A focus on accountability for performance
The “WHY”

- Tool used to focus on and increase performance
- Management tool to make the best decisions based on fact
- Planning tool to ensure the best use of resources and to meet objectives
- Accountability tool to drive performance throughout the organization
1. What is Performance Management and why is it important?

- Different definitions – but genesis the same
- Important to note: It’s a journey, not a race!
  Takes agility and focus
MoDOT’s Performance Management Journey

• Developed Tracker in 2005
• Created Tangible Results and Values collaboratively
• Developed Performance Measures to show progress

NOTE: Not required by law, just believed it was the right approach.
Focus on Customers’ Expectations

- Based upon their customers’ expectations
- Show how well they are achieving expectations
- Demonstrates transparency and accountability
Accountability

• Quarterly review meetings
• Talk about strategies to improve performance
• Comparison to benchmarks
Sustaining Performance Management

- Leadership commitment from start
- Tied to customer expectations
- Performance Measures driven throughout MoDOT
- Continuous change
- Ready for national performance measures
2. How and why did Missouri DOT do it?

- Many states have embraced PM
  - No “one right way” – must create system that work for your agency/DOT
  - MUST be robust enough to be sustained through leadership changes
HERE WE GO....
Performance Management – MAP21

- 7 National Goals
- 12 Performance Measures
- Performance Targets
- 3 Performance Plans
- Performance Reporting
Performance Measures

- Safety
- Pavement Condition
- Bridge Condition
- System Reliability
- CMAQ-Congestion
- CMAQ-Environmental Sustainability
- Freight
Performance Targets

National Minimum levels will be set for:

- Interstate Pavement Conditions
- Bridge Conditions
- Consequences if not met

States and MPOs set targets to ensure consistency

Can be different by collaboration will be necessary
Performance Plans

Highway Safety Plan
- Required by NHTSA
- Submitted yearly

Risk-Based Asset Management Plan
- Established within in a year of final rule
- Planning process reviewed and certified by USDOT every 4 years
Performance Plans

MPO/Congestion & Air Quality Program Performance Plan

- Includes area baseline level for traffic congestion and on-road mobile source emissions
- Describes progress made in achieving targets
- Includes description of projects identified for funding and how projects will contribute to achieving those targets
Performance Reports

States report on progress toward targets

- Within 4 years of enactment (not going to make 2016!)
- Biennially thereafter
- Insufficient progress toward NHPP/ HSIP targets triggers corrective actions (not sanctions)
Performance Management Federally:

- Sets stage for increased investment in infrastructure for country
- Create transparency and accountability nationally
- Helps to tell the story
- Creates opportunity for more flexibility for State DOTS/MPOs

What States fear:
- Funding prescribed by performance
- Comparing states
- Creates more prescriptive processes and possibly project selection
“FHWA defines Transportation Performance Management as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals,”
Jeff Paniati, Retired Executive Director
FHWA
3. Why is National Performance Management important to the industry?

- Believe it will create a national “need” for investment
- Accountability and Transparency are the “norm”
- Jury still out on how it will be used futuristically
Many ITS-Related Performance Measures

Travel Time
Effective Work Zone
Incident Clearance
Signal Timing
Congestion Costs
BIG DATA!!

For most of us it is overwhelming.

But it has arrived!
Data, data, data Where does it all come from?

Vendors are processing Billions of probe points in real time!

Data is collected from real-time probes from a variety of sources

- Connected Cars
- Mobile Devices
- Portable Navigation
- Commercial Fleet
- Sensors

Exponential growth continues
Big Data turned into Useful Performance Management

Real Time Traffic
- Real-time speeds and travel times
- Real-time incidents (accidents, construction)

Traffic Analytics
- Rich datasets of daily historical traffic speed and statistical information that allow you to:
  - Before and after analysis of construction projects
  - Assess work zone impacts
  - Compare seasonal impacts on traffic
  - Analyze and demonstrate network operational improvements completed or needed

Predictive Traffic
- Modeled real-time traffic forecasts for future time slots
- to help drivers, fleets, and road network operators make better decisions.
Data enables powerful solutions for ITS and transportation performance management

Real-time and Predictive Information enable accurate, insightful real-time traffic services and data

Analytics and Performance Measurement enable easy access and integration of maps, traffic, incidents, to assess network performance

Connected and Automated Vehicles offer next wave of mobility and safety enhancement
4. How does Performance Management impact ITS?

- Managing by big data – smarter, faster and direct link to safety
- Need to filter what you don’t need/want – TOO MUCH
  - ITS is the future – can’t build our way out of congestion
- PM helps in all three critical ITS buckets: historical, real time and predictive
Performance Management Isn’t Hype!

It truly makes a difference!

THANK YOU!

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