

# Overview of HRTPO Performance Management, Including FY14 RPM Update

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To TTAC

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# Measurement vs. Management

- “Performance Management”:
  - Management using “Performance Measurement”

# HRTPO Performance Management

## – 1. System Performance Measurement:

- to identify needs and to determine the impact of earlier efforts, HRTPO **measures the performance** of the transportation network
  - have measured congestion (LOS and V/C) **for approx. 30 years.**

## – 2. Project Performance Estimation:

- to aid in the selection of effective projects, HRTPO **estimates impact** of candidate transportation projects:
  - have tested candidates with 4-step model **for approx. 30 years.**
  - have used quantitative selection for CMAQ & RSTP **for approx. 20 years.**

## – 3. Promoting Effective Projects:

- Placing selected projects in Long-Range Transportation Plan (LRTP) making them **eligible** for construction
- Allocating CMAQ and RSTP dollars to selected projects (TIP)

– repeat

# Recent Additions

- 1. System Performance Measurement:
  - measure **safety, congestion, freight, military, etc.**
- 2. Project Performance Estimation:
  - using **Prioritization Tool**
- 3. Promoting Effective Projects:
  - TIP project **visualization**
- repeat

# 1. System Performance Measurement

- **Volumes, Speeds, and Congestion**
  - Annual report
- **Regional Performance Measures (RPMs)**
  - Annual report (today's report for FY14)
- **State of Transportation**
  - Annual report
- **Congestion Management Process (CMP)**
  - Four year process
  - Final report includes project recommendations
- **Historical Analysis of Census Transp. Data**
  - Updated decennially

# 1. System Performance Measurement

- Sept. 2012: **Military Trans. Needs**- survey of needs w/ recommended projects
- Sept. 2012: **Regional Freight Study**- flows w/ recommended project
- Nov. 2012: **Regional Bridge Study**- conditions
- July 2013: **Military Trans. Needs**- sea level rise w/ low roadways
- July 2013: **Travel Time Reliability**- by hwy. segment

# 1. System Performance Measurement

- Sept. 2013: **Existing and Future Truck Delay**- w/ recommended projects
- 2013/2014: **Safety Study**- by hwy. segment w/ recommended projects
- Mar. 2014: **Positioning HR for Freight Infra. Funding**- condition by segment w/ recommended projects
- July 2014: **Pavement Performance Measurement**- condition by highway segment
- Sept. 2014: **Congestion Management Process** final report- score by hwy. segment w/ rec'd projects

# Annual RPM Update

- Highlights:

- 2013 congestion (INRIX) lower than 2009-2011
- 2012 fatalities (99) below 100 for first time in years
- 2013 days with ozone exceedences: 0



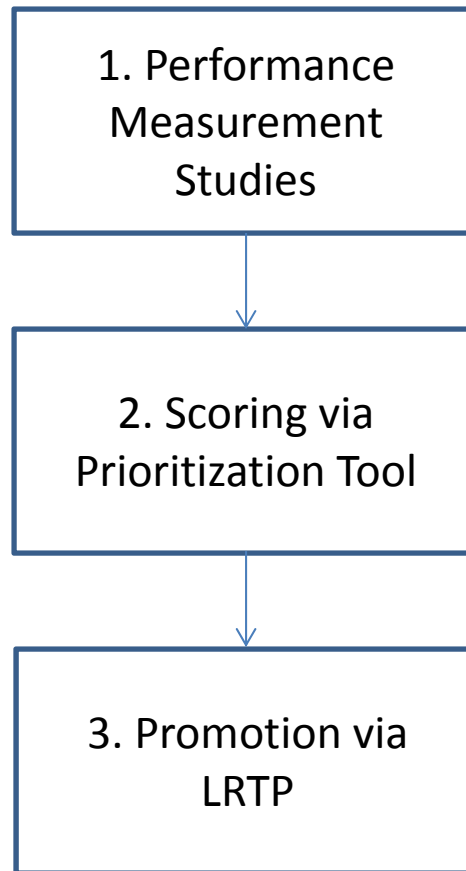
## 2. Project Performance Estimation

- Jan. 2012: **CMAQ/RSTP Projects and Allocations-**
  - emissions (CMAQ) and scores (RSTP)
- Mar. 2014: **Prioritizing Hwy Projects for Improvement of Evacuation-**
  - cost effectiveness w/ recommended projects
- Sept. 2014: **Congestion Management Process** final report-
  - Potential for Intersection Congestion Improvement (PICA) w/ recommended projects
- Late 2014: Prioritization Tool scores for candidate **2040 LRTP** projects

# 3. Promoting Effective Projects

- RSTP/CMAQ project scoring and selection
  - Annually
- Long-Range Transportation Plan (LRTP)
  - every four years

# Performance Management: LRTP



# Compatibility Between Components

- Selected Components
  - Prioritization Tool
  - Regional Performance Measures (RPMs)
  - State of Transportation categories
  - MAP-21 Planning Factors

# Compatibility Between Prioritization Tool and System Performance Measures

Prioritization Tool	RPMs	State of Trans.
Congestion	✓	✓
System continuity	---	---
Safety & Security	✓	✓
Cost Effectiveness	---	---
Land Use Compatibility	---	---
Infrastructure Condition	✓	✓
Project Viability	---	---
Labor Market Access	✓	---
Needs of Basic Industries	✓	✓

# Compatibility Between Prioritization Tool and System Performance Measures

Prioritization Tool	RPMs	State of Trans.
Opportunity	---	---
Modal Enhancements	✓	✓
Air Quality	✓	✓
Regional Significance	---	---
TDM Measures	✓	✓
Transit Ridership & Coverage	✓	✓
Transit Time Savings	---	---
Transit- Economic Distress Factors	---	---
Intermodal Movement (conflicts)	---	---

# Compatibility Between Prioritization Tool and System Performance Measures

Prioritization Tool	RPMs	State of Trans.
Access Improvements (to key sites)	---	---
Truck Movement	---	✓
Interaction Between Freight Modes	✓	✓

# MAP-21 Planning Factors vs. RPMs, Tool

MAP-21 Planning Factors	Prioritization Tool	RPMs
System Preservation	✓	✓
Safety	✓	✓
Security	✓	---
Access/Mobility	✓	✓
Environmental Coordination	✓	✓
Integration & Connectivity	✓	---
Economic Vitality	✓	---
System Management	✓	✓



# Next Steps: Performance Management in FY15

- Task 1.0 LRTP:
  - project selection via Prior. Tool
- Task 2.0 TIP:
  - CMAQ/RSTP allocation via scores
- Task 3.0 Performance Management:
  - annual congestion report
  - annual State of Transportation report
  - annual state/federal PMs (e.g. RPMs)
- Task 4.0 Public Participation:
  - measure performance of public involvement program

# Next Steps: Performance Management in FY15

- Task 5.0 UPWP:
  - FY16 UPWP based on MAP-21+ performance management
- Task 6.0 Freight:
  - annual measurement of freight performance
  - special report: impact of key projects on trucks
- Task 7.0 Safety/Security:
  - assist VDOT and localities in preparing candidate HSIP projects
- Task 8.0 Tech Support:
  - special report: impact of MTT/DTT tolls
  - special report: impact of SLR/storms on performance of regional roadways