Moving a DOT to Excellence with Performance Measures

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Organizational Excellence Through Performance Management for State DOTs

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RIDOT At a Glance
RIDOT’s Journey in Performance Management
State Performance Management Model (AASHTO)
Organizational Performance Management Topics
State and Federal Examples
Focus on Performance
• Responsible for providing and maintaining the surface transportation infrastructure that serves the needs of Rhode Island residents and visitors.
  • Highway - 3,300 lane miles of roadway
  • Bridges - 1,154 bridges
  • Bike Paths - 60+ miles of bike and pedestrian paths
  • Mass Transit (Commuter Rail) - 5 Train Stations
  • Safety - 104,000+ Traffic Devices/25,000+ Catch Basins
• Workforce

706 FTE’s

• FY 2014 Budget
  • Capital Budget
    Expenditures - $260M
  • Highway Operations-
    $90M
• Simple - You can’t control or improve what you can’t measure!

• RIDOT – Achieve Organizational and System Excellence

• State – Governor’s Initiative for all state agencies

• Federal – MAP-21 includes national performance measurements
• 2008 – FHWA Sponsored Scan Tour
  • Missouri, North Carolina – Best Practices
• 2009 – Educational Phase
• 2010 – Phase I Research Project
  • University of Rhode Island & RIDOT Team
• 2011 – Governor Lincoln Chafee’s Initiative
  • Performance Management for all state agencies
• 2012 – MAP-21: Establishment of National Goal Areas for Performance Management
• 2012 (Summer) – Establishment of RIDOT’s Office of Performance Management

<table>
<thead>
<tr>
<th>Primary Functions</th>
<th>Monthly Reporting (OMB)</th>
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</thead>
<tbody>
<tr>
<td>Collecting/Analyzing/Trending</td>
<td>TIGER Reporting</td>
</tr>
<tr>
<td>MAP-21 Preparation</td>
<td>Lean Management</td>
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</tbody>
</table>

• Notables:
  • Only Certified Performance Management Office in Rhode Island government
    – National Center for Public Performance (NCPP) at Rutgers
  • Yellow Belt Certification in Lean
  • Development of Performance Dashboard
• LOOK FOR MODELS
• AASHTO
  • Standing Committee on Performance Management
• BEST PRACTICES
  • FHWA
  • TRB
  • STATE DOT’s
• 1992: Standing Committee on Quality (SCOQ)
• 2008: Standing Committee on Performance Management (SCOPM)
• Coordinate on Performance Management Issues with:
  • Other AASHTO Committees & Subcommittees
  • AMPO, APTA, FHWA, FTA

**SCOPM CHARTER excerpt**
The Standing Committee on Performance Management is dedicated to provide State DOTs the expertise and resources to support performance based management and to create a results-driven environment to maximize the performance of both transportation systems and organizations.
AASHTO Standing Committee on Performance Management (SCOPM)

National Agreement: AMPO, APTA, FHWA, FTA

3 Focus Areas:
✓ Organizational Management
✓ Systems Performance
✓ Federal Policy, Regulations, Programs
| 1. Vision                                                                 |
| 2. Mission                                                               |
| 3. Values                                                                |
| 4. Guiding Principles                                                    |
| 5. Organizational Platform                                               |
| 6. Business Planning                                                     |
|   a. Strategic (multi-year)                                              |
|   b. Tactical (annual)                                                   |
|   c. Long-range                                                          |
| 7. Goals (organizational and system)                                     |
|   a. Goal Areas                                                          |
|   b. Goal Statements                                                     |
|   c. Objectives & Tactics                                                |
| 8. Performance Measurements                                              |
| 9. Performance Reporting                                                 |
| 10. Messaging                                                            |
MISSION/VISION STATEMENTS

• MISSION: To provide the best multi-modal transportation system for Colorado that most effectively and safely moves people, goods, and information.

• VISION: To enhance the quality of life and the environment of the citizens of Colorado by creating an integrated transportation system that focuses on safely moving people and goods by offering convenient linkages among modal choices.
VALUES

1. Dedication – We will provide service around the clock under all circumstances
2. Respect – We will treat the public as our valued customer, and treat one another how we would like to be treated
3. Innovation – We will improve and integrate transportation services using creative thinking and best available practices and technology, while minimizing disruption to traffic
4. Diversity – We will promote an inclusive workforce and a culture that serves employees and customers fairly
5. Honesty – We will provide the public accurate information that is understandable and accessible
VALUES

1. Public Service – We are committed to the pursuit of professional excellence motivated by serving the public interest and providing high quality products and timely services.

2. Integrity – Ethics, fairness and honesty define the way we do our work and conduct ourselves. We have the courage to both be innovative and make tough decisions.

3. Respect – We value individual diversity and the unique strengths, skills, expertise, and background of our employees. We treat others in a polite and courteous manner.

4. Personal Development – Through a wide variety of learning opportunities, we nurture the development and use of leadership, technical and professional skills in all of our employees.

5. Collaboration – We maximize our collective talents through teamwork and partnerships based on mutual trust, respect, support, cooperation and communication.

6. Family – We support, care about, listen to and respond to employees and their family needs.
ORGANIZATIONAL PLATFORMS

• Balanced Scorecard - NHDOT

• Baldridge - MoDOT, OHDOT, FHWA

• ISO 9000 – IDOT, FHWA’s EFLHD

• Total Quality Management
GUIDING PRINCIPLES

• “NYSDOT Forward Four”
  • Preservation First,
  • System Not Projects,
  • Maximize Return on Investment,
  • Make it Sustainable
ORGANIZATIONAL PERFORMANCE MANAGEMENT TOPICS

BUSINESS PLANNING

Strategic (multi-year)

Tactical (annual)

Long-range (20- to 50-yr)
GOAL AREAS AND GOAL STATEMENTS

“MAPSS”

1. **Mobility**: Delivering transportation choices that result in efficient trips and no unexpected delays.

2. **Accountability**: The continuous effort to use public dollars in the most efficient and cost-effective way.

3. **Preservation**: Protecting, maintaining and operating Wisconsin’s transportation system efficiently by making sound investments that preserve and extend the life of our infrastructure, while protecting our natural environment.

4. **Safety**: Moving toward minimizing the number of deaths, injuries and crashes on our roadways.

5. **Service**: High quality and accurate products and services delivered in a timely fashion by a professional and proactive workforce.
## Performance Measurements and Targets

**“MAPSS” Performance Dashboard**

**Mobility:** Delivering transportation choices that result in efficient trips and no unexpected delays.

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Description</th>
<th>Target or Goal</th>
<th>Variance</th>
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</thead>
<tbody>
<tr>
<td>Delay (hours of vehicle delay)</td>
<td>Number of hours spent in interstate traffic below posted speed</td>
<td>1,582,128 hrs.</td>
<td>Reduced hours of delay</td>
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<tr>
<td>Reliability (planning time index)</td>
<td>Index based on extreme travel time in a period</td>
<td>1.15</td>
<td>More on time arrival</td>
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<tr>
<td>Transit availability</td>
<td>Percent of population served by transit</td>
<td>54.0</td>
<td>75.0</td>
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<tr>
<td>Bicycling conditions on rural highways</td>
<td>Percent of rural highway miles with favorable bicycling conditions</td>
<td>State hwys: 67.2; County roads: 90.4</td>
<td>100 percent on roads where bicycles are permitted</td>
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<tr>
<td>Incident response</td>
<td>Average time to clear full closures on the interstate</td>
<td>4 hrs. 30 min.</td>
<td>4 hours</td>
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<tr>
<td>Winter response</td>
<td>Percent to bare-wet within a specific time period after a storm</td>
<td>59 for 18-hr roads; 66 for 24-hr roads</td>
<td>70.0 within specified time</td>
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## ORGANIZATIONAL PERFORMANCE MANAGEMENT TOPICS

### PERFORMANCE REPORTING

**State and Federal DOT Examples**

#### WSDOT’s Goals, Performance and Trends

<table>
<thead>
<tr>
<th>Category</th>
<th>Previous Goal</th>
<th>Current Goal</th>
<th>Goal</th>
<th>Stewardship</th>
<th>Future Goal</th>
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<tbody>
<tr>
<td>Safety</td>
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<td>Rate of traffic fatalities per 100 million vehicle miles traveled</td>
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<td>Rate of property damage collisions per 100 million vehicle miles traveled</td>
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<td>Presentance</td>
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<tr>
<td>Percentage of vehicle miles traveled in traffic on Interstate highways</td>
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<tr>
<td>Percentage of vehicle miles traveled in traffic on other highways</td>
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<td>Mobility (Congestion Relief)</td>
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<td>Percentage of interstate highway miles traveled at or above 85th percentile travel time</td>
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<td>Percentage of interstate highway miles traveled at or above 90th percentile travel time</td>
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<td>Environmental Management</td>
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<td>Percentage of wastewater management facilities operated in compliance</td>
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<td>Percentage of WSDOT high-priority restoration projects completed</td>
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<td>Stewardship</td>
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<tr>
<td>Number of WSDOT projects completed and on time</td>
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<tr>
<td>Percentage of WSDOT projects completed and on time</td>
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<tr>
<td><strong>TOTAL PERFORMANCE HIGHLIGHTS</strong></td>
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<td>84% reduction in fatalities</td>
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<td>91.8% of WSDOT’s roads were in fair or better condition in 2012</td>
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<td>$343M in WSDOT’s pavement rehabilitation was completed in 2013</td>
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<td>5.8% decrease in fatalities</td>
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<td>90% of maintenance conditions met</td>
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<td>15% of road hazards were corrected by WSDOT in 2013</td>
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*Notes: Data is for the state of Washington and is subject to change from year to year.*
MoDOT’s Tracker is a tool to assess how well we deliver services and products to our customers. Much like a GPS tracking system, this tool can only show the direction in which the department is headed. We must determine if it is going in the right direction to best serve our customers.
PERFORMANCE REPORTING
State and Federal DOT Examples
MESSAGING
State and Federal DOT Examples

Infrastructure Health: Statewide

- Bridge Health Index 64.6%
- Pavement Condition 68.9%
- Roadside Feature Condition 89.7
Over the last five years, RIDOT has spent an average of $10.4 million on winter maintenance.

- 51.6% was for materials, including salt.
• Maintenance Division was an early adopter of Performance Measurements
SALT APPLICATION

The Department is committed to reducing winter costs and alleviating environmental concerns related to the use of salt products to treat roadways during winter storms. RIDOT has retro-fitted a portion of its winter operations fleet to use a closed-loop system to reduce salt usage in winter storms.

Figure F: Average Pounds of Salt per Lane Mile

Key Points:
- This graph represents average salt usage for all RIDOT and contractor equipment, in pounds per lane-mile. The solid line represents usage for the entire fleet, while the dot illustrates the amount used by fleet equipment equipped with closed-loop systems as of 1/30/2013.
- The Department has reduced roadway salt application by more than 27.0 percent over the last seven years. For additional information about winter maintenance cost reductions, see the Focus on Performance page.
• Tracking through Performance Management allowed us to make the business case for closed loop systems
  • Closed-loop controllers provide more uniform salt and sand application and computerized data tracking
  • These systems achieve a 20-30 percent reduction in material usage compared to conventional spreaders

• To date, RIDOT has installed “closed-loop” systems in 86 of 107 (80.0 percent) state-owned snowplows
Performance Management makes sense - You can’t control or improve what you can’t measure!

You can achieve both organizational and system excellence through Performance Management.

A wealth of resources available to the Transportation Community on Performance Management.

AASHTO, FHWA, TRB, Other States, etc.

Don’t go at it alone – Phone a friend!
• To research and assess training and educational needs of contributing members, develop and deliver training, and facilitate the sharing and retention of performance management best practices.

• 14 partners to date

• State Led/AASHTO Administered

• [http://www.pooledfund.org/Details/Solicitation/1394](http://www.pooledfund.org/Details/Solicitation/1394)
• JOIN US!
THE END
(?)
PERFORMANCE MANAGEMENT IS A PROCESS OF CONTINUOUS IMPROVEMENT
PM3

PM$^3$

Management

Messaging

Performance Measurements
THANK YOU

Ευχαριστώ

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