Leading Management Practices in Determining Funding Levels for Maintenance & Preservation

NCHRP DOMESTIC SCAN 14-01

CONDUCTED UNDER NCHRP 20-68A, US DOMESTIC SCAN PROGRAM
Agenda

- Brief Overview of Scan
- Summary of Findings
- Recommendations
- Update on Peer Exchange Request
Scan Objective

- Identify funding allocation practices that have successfully ensured reliable, adequate funding to support the delivery of efficient and effective maintenance programs
The Scan Explored How...

- Funding levels are determined
- Funds are allocated to districts and regions
- Districts and regions determine the amount to spend on specific maintenance tasks
- Agencies determine optimal allocations
- Performance measures are used to allocate funds
Scan Team

- **Mark McConnell**, MS DOT, Chair
- **Dale Doughty**, Me DOT
- **Tim Lattner**, FL DOT
- **Laura Mester**, MI DOT
- **Cory Pope**, UT DOT
- **Lonnie Watkins**, NC DOT
- **Tony Sullivan**, AR Highway and Transportation Department
- **Thomas Van**, FHWA
- **Katie Zimmerman**, APTech, SME
### Scan Approach

<table>
<thead>
<tr>
<th>Category 1 States</th>
<th>Features</th>
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</thead>
<tbody>
<tr>
<td>Florida DOT</td>
<td>Adequately funded to address maintenance needs</td>
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<tr>
<td>Utah DOT</td>
<td>Use maintenance performance data to determine maintenance funding at the state level</td>
</tr>
<tr>
<td>Washington State DOT</td>
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Scan Participants

[Map showing states that participated in the domestic scan, with states such as Arizona, Colorado, Florida, and others highlighted in green.]
Organization of Initial Findings

- Agency culture
- Relationship with elected officials
- Performance measures and targets
- Data
- Program support

Photo provided by the NCDOT
Recommendations

1. Establish performance measures and targets that drive the development of a unified agency culture

2. After establishing agency performance measures & targets, allow regions & districts flexibility in planning work activities

3. Develop customer-driven targets to convey need and achievable targets for accountability

4. Develop national guidance on data quality, governance, and utilization
Implementation Activities – Dissemination

- Post products
- Webinars
- Presentations
- Technology showcase
Implementation Activities – Advance Practice

- **Peer exchange**
- Maintenance performance information clearinghouse
- Guides for sharing findings, such as a legislator’s guide or a guide on maintenance data collection
- Research statement on data quality, governance, and utilization guidance
- Research statement that leads to parameters for an external process review of maintenance activities
Peer Exchange Request

- Scan Team Request
- NCHRP 20-68A endorsement
- Request sent to NCHRP 20-44 (Accelerating the Application of NCHRP Research Results) for funding approval
Peer Exchange Proposed Outcomes

- Sharing Best Practices
- Re-institute the Maintenance Quality Assurance (MQA) Document Library (See Lacy)
- Establish a State Directory of Contacts for MQA Programs
- Development of a Summary Report
- Mentoring Pilot Program
Proposed Format for Peer Exchange

- One person per state, potential for others virtually
- Organized by 5 Topic Areas (Discussion and Presentations)
  1. Agency Culture Impacts
  2. Relationships with Elected Officials
  3. Performance Measures and Targets
  4. Inventory and Condition Assessment
  5. Maintenance Program Support
MQA WEBSITE

Maintenance Quality Assurance (MQA)

This website contains an electronic library created to support the highway maintenance community throughout the country. Its creation is an outcome of the Maintenance Peer Network (MPN) sponsored by the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO) in partnership with the Associated General Contractors of America (AGC), American Road & Transportation Builders Association (ARTBA) and the Association for Management and Operations of Transportation Infrastructure Assets (AMOTIA). Under the MPN, four regional workshops were held across the U.S. to assemble and share information between State DOT maintenance and infrastructure managers to improve roadway and bridge maintenance practices across the country.

As an outcome of these workshops, the attendees supported the creation of a national information library on Maintenance Quality Assurance (MQA) for the highway maintenance community. This recommendation parallels the resolution passed by the AASHTO Subcommittee on Maintenance in 2014 supporting a similar effort, as well as a recommendation from NCHRP Domestic Scan 14-01 Leading Management Practices in Determining Funding Levels for Maintenance and Preservation.

The assembled information is a collection of state DOTs’ documents, reports, manuals, and presentations on their MQA programs. Visitors to this site may query the electronic library by several different search methods such as by State, type of document, publication year, highway feature, etc. The goal is to provide the maintenance community with relevant and up-to-date information on state-specific MQA programs.

We need your help to populate and keep the electronic library current. Please submit your documents, publications, manuals, or other relevant resources to Lazy.Love@Volkart.com.

Research Documents By State

- North Carolina
- Virginia
- Florida
- Tennessee
- All States
- Arizona
MQA WEBSITE

Quick Pick List

Maintenance Quality Assurance (MQA)

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Research Documents By State

North Carolina | Virginia | Florida | Tennessee | All States | Arizona
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<th>State</th>
<th>Publication Year</th>
<th>Publication Date</th>
<th>Title</th>
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<th>Shoulders</th>
<th>Ditches</th>
<th>Culverts</th>
<th>Curb/Shoulder</th>
<th>Other Drainage Features</th>
<th>Brush/Trees</th>
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<td>MAINTENANCE DATA COLLECTION GUIDE</td>
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### Filter by Asset

- **Arizona**
  - **Year:** 2009
  - **Title:** ADOIT Maintenance Data Collection Guide

- **Florida**
  - **Year:** 2016
  - **Title:** FDOT/MRPHandbook2016

- **North Carolina**
  - **Year:** 2011
  - **Title:** MCAP 2011 Maintenance Condition Manual

- **Tennessee**
  - **Year:** 2010
  - **Title:** TxDOTMRIR Training Manual_2010

- **Missouri**
  - **Year:** 2009
  - **Title:** MODOT-MPRReport_2009

- **South Carolina**
  - **Year:** 2014
  - **Title:** SCDOT Maintenance Rating Manual Revised 2-20-14 Draft

- **Mississippi**
  - **Year:** 2013
  - **Title:** MDOT.DataCollectionManual
• Contact
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lwatkins@ncdot.gov
Lacy Love, Volkert
Lacy.Love@Volkert.com
For More Information

- Please visit U.S. Domestic Scan program TRB webpage http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=1570

- Visit U.S. Domestic Scan Program Website www.domesticscan.org

- Google NCHRP Domestic Scan Program and look for scan 14-01