The Benefits of NTPEP

A Small State's Perspective

Bill Real
New Hampshire DOT Product Evaluation Supervisor
Is New Hampshire a Small State?

- Area = 9,000 square miles  
  - 39th

- Population = 1.3 million  
  - 42nd

- Road miles = 4,600 CL miles  
  - 42nd

- # of DOT employees = 1,500

- Vehicle miles/yr = 12.7 billion  
  - 41st

- Federal funding = $106 million  
  - 50th
Small states use the same products, and have the same quality assurance needs that large states do!
Benefits of being a small state

• Fewer people involved in decision making

• All functions i.e. design, materials, operations, administration are centralized as compared to large states with regional offices

• Because each employee wears more hats, we are more aware of Department roles, functions, and issues.

• May be more agile, nimble.
Disadvantages of being a small state

• **Less Funding** - Trying to perform the same functions as larger states with less money.

• **Less Manpower** - Everyone is wearing many hats. Hard to develop technical expertise in one narrow field.

• **Less Equipment** - Hard to justify purchase of specialized equipment and staff to run it.

• **Small Market** - Harder to influence manufacturers to make changes such as participating in NTPEP
Benefits of Using NTPEP - States

- Cost savings from reduced testing and auditing
- Improved product quality acceptance
- Reliable, independent test results
- Shop for products to populate your QPL/APL
- Shared expertise and experience
- Partner with other states to raise the quality bar.
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<tr>
<th>NTPEP used by NHDOT</th>
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<th>Improved Acceptance</th>
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## NTPEP Opportunities for NH

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NTPEP Implementation in NH

Phased Implementation

- Notify manufacturers of intent to implement use of NTPEP for product type
- Immediate implementation for new product submittals
- NTPEP required for all products after appropriate time.
NTPEP Implementation in NH

NTPEP Audit Programs

• Implementation of audit program by spec

“Manufacturers of reinforcing steel must participate in, and maintain compliance with, the AASHTO National Transportation Product Evaluation Program (www.ntpep.org) that audits producers of reinforcing steel.”
NTPEP Implementation in NH

NTPEP Audit Programs

• Implementation of audit program by spec

“Manufactures of geotextiles and those marketing geotextiles made by others as a “Private Labeler” shall participate in and maintain compliance with the NTPEP audit program for geotextiles.”

“Manufacturer’s labels providing product name, AASHTO M288 class, roll number, and production date shall be affixed to both ends of the roll.”
Reasons (Excuses) for not using NTPEP

- NTPEP doesn’t include needed test methods
- NTPEP test methods are performed differently
- NTPEP field trial doesn’t simulate conditions in my state
- If NTPEP does my job, what happens
- My state has gobs of money and no other place to spend it!
NTPEP Implementation Suggestions

• Review work plans

   Look for elements of the plan that can work for you.

   What doesn’t work for you?

   Can the NTPEP plan supplement your in-house evaluation?

   Can NTPEP be used as a screening tool?
NTPEP Implementation Suggestions

- Review work plans
- Attend field trials
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- Attend Audits
NTPEP Implementation Suggestions

- Review work plans
- Attend field trials
- Attend Audits
- Involve the subject experts in your Department
- Join Technical Committee and give input
- Vote!
How can NTPEP help your State?

- Does your state use products that are evaluated by NTPEP?

- Can your state realize a cost savings by using NTPEP testing or auditing?

- Can your state realize an improvement in product acceptance by using NTPEP testing or auditing?

- Look for ways to promote use of NTPEP in your product qualification program.
NHDOT Benefits From NTPEP

What is NTPEP?

The National Transportation Product Evaluation Program (NTPEP) combines the professional and physical resources of the AASHTO member departments in order to evaluate materials, products and devices of common interest for use in highway and bridge construction. The primary goal of the program is to provide cost-effective evaluations for the state DOTs by eliminating duplication of testing and auditing by the states and duplication of effort by the manufacturers that provide products for evaluation.

NHDOT participation on NTPEP technical committees provides the opportunity to influence design of NTPEP testing protocols to be most relevant to NH’s needs.

NTPEP Testing Programs

Testing protocols are determined by a consensus of member states. Manufacturers submit products for testing and pay associated costs. Random samples are obtained from the production line by NTPEP representatives. Test results are published for use by member states. NHDOT requires NTPEP test results for:

- Concrete Curing Compounds
- Concrete Admixtures
- Railed Erosion Control Products
- Geotextiles
- Concrete Joint Sealants
- Hot-applied Crack Sealants
- Rapid Set Concrete Patching Materials
- Structural Steel Coatings

NTEP Audit Programs

NTPEP performs annual quality control audits of manufacturer’s facilities. This includes a review of production lines, quality control testing, and documentation. Product samples are obtained for independent testing. Manufacturer’s audit status is published online. NHDOT specifications currently require that manufacturers of the following product types participate in and maintain compliance with the NTPEP audit program:

- Reinforcing Steel
- HDPE and PVC drainage pipe

Additional Opportunities to use NTPEP Programs

New or planned NTPEP audit or testing programs will offer additional opportunities for NHDOT to improve product qualification. Those product types are:

Audit Programs:
- Guardrail
- Precast Concrete Products
- Elastomeric Bridge Bearing Pads
- Geotextile
- Erosion Control Products
- Polypropylene Drainage Pipe

Testing Programs:
- Warm Mix Asphalt Technologies
- Geosynthetic Reinforcement
- Polymer Concrete Overlays
- Asphalt Release Agents
Improved Quality Oversight of Manufactured Materials

The use of quality construction products contributes significantly to the longevity of transportation infrastructure. Through participation in the “National Transportation Product Evaluation Program” (NTPEP), a technical service program of the American Association of State Highway and Transportation Officials (AASHTO), the NHDOT is raising the level of product quality assurance while reducing the cost of in-house oversight and testing. NTPEP pools the resources of member states to provide shared product testing and auditing of facilities producing construction products that are incorporated into New Hampshire roads and bridges.

The NHDOT now utilizes NTPEP data for acceptance of a variety of products, including reinforcing steel, protective coatings for bridge girders, asphalt crack sealers, plastic drainage pipe, and reflective sign sheeting. This successful program promises opportunities for additional quality improvement and cost savings in the future.
NESMEA
2013 North Eastern State’s Materials Engineers Association
States don’t want to require NTPEP until more manufacturers are participating.

Manufacturers don’t want to invest in NTPEP testing until they see more States requiring it.
Benefits of Using NTPEP - Manufacturers

• Avoid time and expense of repeated evaluations
• Product exposure
• Raise the bar
• Contribute to work plan development
• Opportunity to voice concerns
• Face to Face meetings with State representatives
Market NTPEP use to customers

- Maximize investment in NTPEP testing
- Encourage advances in product quality assurance
- Grow your market through improved confidence in product quality
- Remain price competitive while investing in product improvements
In conclusion:

- Participate
- Get the word out
- Vote

Given budget cutbacks, staffing shortages, and increased demands on transportation infrastructure, the NTPEP mission has never been more relevant.