

# Vermont, New Hampshire, and Maine Asset Management

## *Regional Models of Cooperation Case Study Series*

### **Tri-State Data Sharing Raises Efficiency of Asset Management Efforts**

Developing new software to manage transportation assets within a state can be a daunting task. Recognizing the potential for saving costs and benefiting from peer experiences, the Operations Divisions of the Vermont, New Hampshire, and Maine Departments of Transportation (VTTrans, NHDOT, and MaineDOT, respectively) came together to develop Managing Assets for Transportation System (MATS), a customized software system for operations tracking and reporting. Joint collaboration on the development and maintenance of MATS has resulted in significant improvements in asset performance monitoring, as well as cost efficiencies from not having to duplicate software development efforts.

#### **Motivation for Establishing the Collaboration**

VTTrans, NHDOT, and MaineDOT have collaborated since the early 1990s as members of the Tri-State Partnership. This consortium meets quarterly to improve each agency's maintenance and asset management through strategies like sharing contracts to maximize purchasing power. When VTTrans adopted new technology in the early 2000s to improve its operations reporting process, NHDOT and MaineDOT quickly recognized the potential benefits of sharing costs to develop a tool that all three states could use. By jointly adopting and improving a new Managing Assets for Transportation System (MATS), the partners more efficiently monitor labor and equipment, cost, operation activities, and reporting deadlines.

#### **Collaboration Structure**

While VTTrans officially leads the group because it holds the contract with the vendor, the three state agencies are equal partners in consultation and decision-making. The MATS group conducts bi-weekly conference calls to discuss contractor-related issues. It also convenes quarterly to discuss and resolve technical issues without paying the contractor to solve them, a strategy which has significantly reduced costs for all three agencies. The MATS partners are also developing a memorandum of understanding (MOU) to formalize the partnership, a document they are adapting from the Tri-State Partnership MOU.

To document meetings and facilitate data sharing and communication, the states use a SharePoint site. The site uses issue-tracking and version control software to document the problems with and development of the MATS interface.

VTTrans, NHDOT, and MaineDOT began their collaboration on MATS by discussing goals and designating tasks to each agency. The states agreed to maintain three individual databases to allow each state to meet its own budget and management requirements, but nonetheless aimed to leverage the tool for tri-state asset performance monitoring in the future. To that end, the partners use the same application interface, with identical data fields that can be turned on and off depending on the state's reporting requirements. These data fields include daily work reporting, equipment use, materials and stockpile management, expenditure reporting, budgeting, and planning.



### Collaboration Accomplishments

The Tri-State Partnership is currently refining multi-state asset management by finalizing shared objectives for the agencies' Operations Divisions. After the partners adopt common asset management objectives, the shared interface developed by the MATS group will enable the agencies to track progress individually and then easily compare across the three states.

By providing information for future measures, MATS is set to support the significant progress the three DOTs have already made in their goal to implement tri-state asset performance monitoring. In 2010, the Tri-State Partnership entered into an MOU to develop Standard Performance Measures for asset conditions, business processes, and safety. Each year since, the Tri-State Partnership has tracked and annually reported on asset performance measures for bridge and pavement condition, safety, and traffic signs as well as business process performance measures for annual bid advertisement percent on time, annual dollar amount advertised compared to planned, and engineers' estimate compared to low bid result. The Tri-State Partnership also developed its own asset performance measure, which documents the percentage of structurally deficient bridges by deck area, as well as tested a new asset performance measure for the AASHTO Subcommittee on Bridges and Structures (SCOBS). Rather than the traditional good-to-critical rating, SCOBS wanted to try measuring bridge condition by maintenance requirement, from routine to major rehabilitation. The Partnership reported on both these measures in the [2013 Annual Report on Tri-State Performance Measures](#).

### Challenges and Lessons Learned

Developing a shared contract for MATS presented the most significant challenge for the group because VTrans, NHDOT, and MaineDOT each have different contracting procedures. After working for two years with each agency's attorneys to reach an agreement on a new contract, the partners learned that it was wise to clarify each state's requirements and involve attorneys early on in the process.

The agencies' shared learning process while developing the program has also presented an effective strategy to deal with challenges. When one state encounters a problem with the interface, the others brainstorm solutions or provide tips based on their experience with a similar problem in the past. This process not only helps the partners solve problems more quickly, but often yields more effective and efficient solutions than the agencies would have identified on their own, thereby saving each agency time and money.

Overall, the MATS agencies not only improved their individual operations tracking procedures, achieved cost efficiencies, and facilitated collaboration on maintaining shared assets, but also laid the groundwork for tri-state goal-setting and performance management. For VTrans, NHDOT, and MaineDOT, data-sharing helped leverage existing collaboration on contract agreements into cutting-edge coordination of vision, resources, and projects to strengthen the infrastructure and economy of the entire region.

