Common Cents

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Dave's Two Cents

Safety and Mobility are Assets, too

If you go to the dictionary, you will find that asset is defined as, among other things, a valuable and useful quality that can be both tangible and intangible. Clearly, safety and mobility are valuable qualities to the transportation system, and are measurable, although our ability to influence the outcomes may be less direct and measurable than compared to assets like bridges.

As the Department determines and prioritizes its highway needs, Asset Management techniques can identify strategies, set goals, develop performance measures, and support integrated decisions in the programming of projects and programs in the areas of safety and mobility.

Safety and mobility are included in any successful and productive Asset Management Program. Asset Management inherently takes a long view of the assets under our control, whether they are hard or soft, and seeks to lay the groundwork for effective decision-making to determine overall system needs and priorities.

The public places great importance on safety and mobility. People expect to get to their destinations safely and in a reasonable amount of time. NJDOT employees expend considerable focus and energy on efforts to improve safety for motorists, pedestrians and bicyclists. That same diligence is applied by staff working to identify mobility solutions spots, rank them, and determine what works best.

The Department's Asset Management Steering Committee recently approved 10 Year Performance Targets for Pavement and Bridges. The Committee will now focus on setting targets for safety and mobility. The importance of <u>all</u> the assets we are responsible for cannot be overstated, and incorporating and addressing them as part of a comprehensive Asset Management Program is our goal.

I encourage you to go to our Asset Management Intranet Page for more information.

http://njdotintranet.dot.state.nj.us/about/asset/

Wisdom begins in wonder.

--Socrates

Rock Slopes and Our Highways

All of the Department's management systems contribute to our mission to improve lives by improving transportation. The Department's Rockfall Hazard Management System (RHMS) is a critical component for ensuring safe conditions on our highways.

Project Engineer John Jamerson, oversees the Engineering Geology section of Geotechnical Engineering Unit, and is responsible for maintaining the RHMS as well as issues related to excavation, abandoned mines, sub-surface exploration, and the design, construction and maintenance of rock cut slopes along state highways.

"Our RHMS was implemented over 15 years ago to establish an organized inventory of all New Jersey highway rock cuts," Jamerson said. "It was adapted from the Rockfall Hazard Rating System that was developed in the late 1980s by the Oregon DOT in conjunction with the FHWA."

The RHMS consists of three separate components: Slope Survey, Preliminary Ratings, and Detailed Ratings. Slope Survey consists of amassing the actual inventory list of all cut slopes, and the Preliminary Ratings deal with two basic factors: 1) the probability of rockfall, and 2) the likelihood of the rockfall reaching the roadway surface. Lastly, the Detailed Ratings consist of evaluating many characteristics of each slope (rock type, size, height, slope angle, sight distance, etc.), and assigning weighted numerical values to each. The resulting final score is then used to determine each cut's relative ranking within the System. The entire overall RHMS is utilized to identify rockfall potential throughout the inventory and present a rational, informed justification for allocation of funding towards developing rockfall mitigation projects statewide.

"It's also very important that we periodically update our records to accurately reflect field conditions, because these conditions change over time," Jamerson said. "In fact, we are currently in the midst of a complete reassessment of the entire rock cut inventory."

Jamerson believes that the RHMS is a critical component of the Department's overall asset management efforts. "The RHMS allows us to advance rock-related safety projects and maintain our infrastructure in a pro-active, cost-efficient manner. We're rationally addressing rockfall hazards rather than merely reacting to rockfall events." **- continued on page 3**

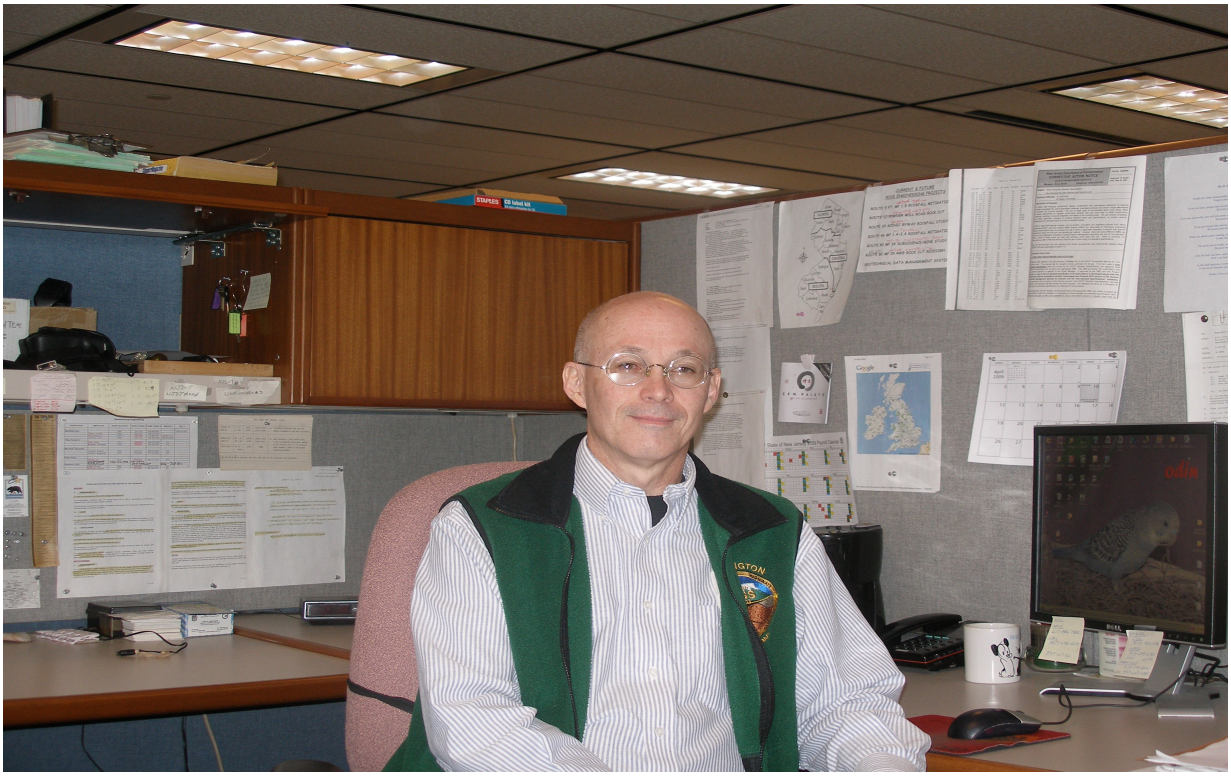
Rock Slopes and Our Highways—cont.

Jamerson's toughest assignment was developing the I-80 Roxbury Rockfall Mitigation Project. This site was highly ranked in the RHMS, and entailed a complete redesign and construction of the large existing rock cut along I-80 in Morris County.

"Construction of the project is now under way, and we're providing on-site technical recommendations to the Resident Engineer. The project has a lot of rock blasting, which must be safely accomplished with minimal interference to everyday traffic on I-80," Jamerson said.

Like many NJDOT employees, Jamerson has a long "to do" list, and works hard to accomplish as much as possible. "I've been fortunate enough to be involved with all sorts of interesting projects, and speaking as a geologist, New Jersey is quite interesting despite its small size."

For the thousands of commuters who use highways like I-80 every day, the RHMS provides an added measure of safety, thanks to the work of Jamerson and his staff.



John Jamerson

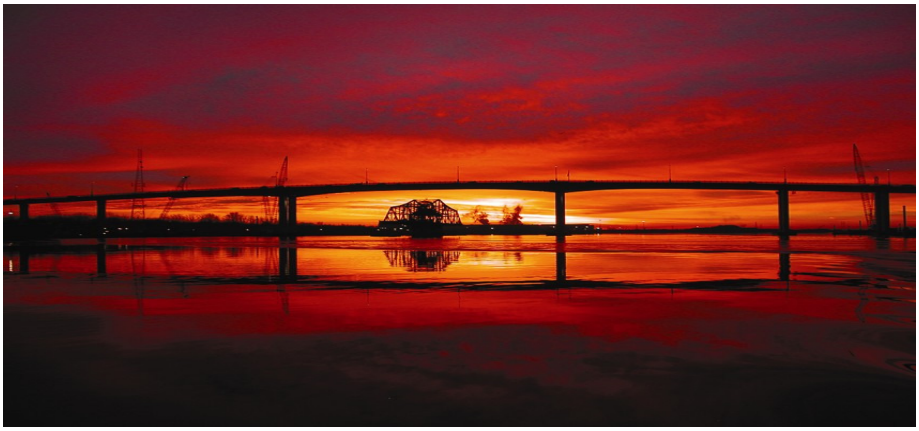
10 Year Performance Targets Approved for Bridges

Because of the importance of keeping our bridges in the best possible condition, and the priority Commissioner Dilts has placed on addressing deficient bridges, the Asset Management Steering Committee has approved 10 Year Performance Targets for bridges on the state highway system.

"The Department is going to measure our performance on basically a two-track approach," said Committee Member Rick Hammer, Assistant Commissioner, Capital Program Management. "We have set a target for reducing the overall deck square footage that is deficient, and we have also set a target for reducing the number of deficient bridges. The benefit of having both performance targets is that we get a comprehensive view of how well we're doing in ridding the overall system of deficiencies."

Over the next 10 years, the Department will strive to reduce the deck square footage of deficient bridge decks by 50 percent. Currently, 5,000,000 million square feet of bridge deck footage is considered deficient. Reducing this amount by 50 percent will eliminate 2,500,000 million square feet of deficient bridge decks.

In keeping with this overall target of deck square footage, the Committee approved a similar reduction in the number of deficient bridges. Currently 87 percent of State-owned bridges are in Acceptable Condition, with 13 percent in deficient condition. The 10 Year Performance Target approved by the Committee will reduce the percentage of deficient to approximately 7 percent, with approximately 93 percent in Acceptable Condition.



"Commissioner Dilts felt it was very important that we address the number of deficient bridges in concert with deck footage," Committee Chairperson Jen Godoski, Deputy Commissioner, said. "An example of this is a very small bridge that might be on a high volume roadway like Route 17 in Bergen County. While that bridge may not have a lot of deck footage, it becomes an absolutely critical link because of the usage it gets. We needed both types of targets in place to ensure that we adequately address all of our bridges -- large or small."

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