The Importance of Transportation Research & Development

by Rep. Vernon J. Ehlers (R-Mich.)

When most people think about the surface transportation bill, they tend to focus on funding allocations for states and the list of specific projects in the bill. Few people think about transportation research. But, research is fundamental to all aspects of our transportation system. How many of us have used an E-Z Pass to breeze past congestion at a tollbooth? Have you been gently (or not so gently) reminded to stay on the road by a rumble strip? How many of us have benefited from pavements that are quieter and last longer than they did 30 years ago? Every driver and passenger is better off today because of past investments in transportation research and technology development.

Our current transportation system continues to face tremendous challenges. Tens of thousands of lives are lost each year on our highways. More drivers drive more miles, causing severe congestion. An aging infrastructure puts a strain on state and local transportation budgets. Changing patterns of where people live and work demand innovative planning for our future needs. The public rightly demands safer, less congested roads, and more transportation choices. Realizing that we can't simply build more roads to address all of these challenges, especially in urban areas, we must look for new ways to improve the overall system.

Fundamental improvements to the entire transportation system depend on solid research. Solid research translates into saved lives, saved money and saved time by providing the tools and information needed to produce solutions. For example:

- Research on pavements focuses on manipulating substances at the molecular level to create materials that are more durable and last significantly longer. This saves money, because more durable pavements need less maintenance and are replaced less frequently. It also saves time, reducing construction zones that are a major cause of congestion.
- Research on operations focuses on improving the design of dangerous merges and intersections. This research saves lives by providing planners the information to design safer roads. It also saves time by reducing accidents, which cause congestion.
- Research on transit focuses on how to make transit systems more cost-effective and efficient. Better transit systems give people more choices and save time by reducing the number of cars on the road.
- Research in the social sciences focuses on understanding how future changes in where people live and work will affect future transportation usage, so that planners can make early, smart investments to ensure that we meet future transportation needs at lower costs.

Recognizing the need for good research, I introduced H.R. 3551, the Surface Transportation Research and Development Act. This legislation increases stakeholder input, expands competition and peer review of research proposals and ensures greater accountability so that this research actually supports the goals of our transportation system. Many aspects of my legislation were included in the final version of the surface transportation reauthorization bill that passed the House of Representatives. Unfortunately, Congress has not yet reached agreement on a final transportation bill.

In addition to these important policy provisions, I believe it is critical that we provide adequate funding for transportation R&D. Under the last transportation authorization bill, TEA 21, overall spending on transportation increased dramatically, while funding for transportation research remained relatively flat. We cannot follow that same course again. If we conduct high-quality research into more durable pavement materials, more efficient transit systems and more effective operations and road design, among other R&D initiatives, we will be able to spend the rest of the funding more effectively.

As Congress continues to debate the transportation bill, you can be sure that I will continue to advocate for more transportation research funding and improvements to our research programs. I look forward to working with the National Stone, Sand & Gravel Association to promote the need for more research to make our transportation system safer, more durable and more efficient. ■

Rep. Ehlers, (R-Mich.), is chairman of the Environment, Technology and Standards Subcommittee of the House Committee on Science and also a member of the House Committee on Transportation and Infrastructure.