REMARKS TO THE NATIONAL RESEARCH & TECHNOLOGY PARTNERSHIP FORUM DAVID L. HUFT JULY 99 1999 WASHINGTON, DC

Good Morning! My name is David Huft. I manage the Office of Research in the South Dakota Department of Transportation. I am privileged to chair the AASHTO Research Advisory Committee, which comprises my counterparts from each of the states. I am also vice-chairman of the AASHTO Standing Committee on Research, a smaller committee roughly composed half of Chief Engineers and Executive Officers, and half state research managers. On behalf of Dwight Bower, who chairs SCOR, and the members of both committees, thank you for this opportunity to work with all of you.

In the twelve years that I've managed research, I've noticed major changes in the nation's transportation research climate. We initiated and completed the Strategic Highway Research Program, an unprecedented, focused, national effort. The era of ISTEA-the Intermodal Surface Transportation Efficiency Act-gave states more funding, and flexibility in our own research programs. Under TEA-21, state research funding has increased further, although as we know, federal research funds have become more restricted.

During this period, we have all come to expect more from research. In our individual states, we research managers realize that, if we are to deliver on the promises of research, we need to more effectively respond to our departments' needs, better identify their research priorities, and define and execute sound research programs. Through Research Advisory Committee activities, and through extensive use of peer exchanges, we have helped each other to dramatically improve our work. Similarly, the AASHTO Standing Committee on Research believes that it can foster more effective research nationally. Its strategic plan would expand SCOR's role beyond simply programming the National Cooperative Highway Research Program, to be "AASHTO's driving force for transportation research and innovation". The plan includes developing a national research agenda to meet the needs of the states. Likewise, this Forum is evidence of the Federal Highway Administration's and other partners' intent to do research that really matters.

I believe we stand at an important threshold today: We've long felt that we need more effective research, but now we realize that we can actually deliver it.

We speak of a national research agenda. What does that mean? If we had a national research agenda, what would it look like? What would it do for us? I'd like to share a few thoughts with you.

First, I believe a national research agenda should be business-driven. By that, I mean that the research would be selected to address critical needs of our organizations and our customers. In the past, we've tended to ask ourselves

"what are our research needs " rather than "what are our business needs, and how can research meet them?" There is a big difference. So our first steps must include an assessment of our current and emerging business needs, which are many and constantly changing.

Second, a national research agenda should be "broadly focused". The terms "broad" and "focused" appear contradictory at first, but they are not mutually exclusive. I believe the national research agenda should encompass needs in all disciplines, because every aspect of our business can benefit from improvement. We can't afford to focus exclusively on one area or a just a few, to the complete neglect of the rest. At the same time, our work within each area must be focused, so we know our goals, and when the work is done, whether or not we've accomplished them.

A national research agenda should encourage, between those who need innovation and those who perform research, a common understanding of where we're going and why. Working with SCOR, I've noticed different perspectives between the members who are CAO's and Chief Engineers, and those who are research managers. Executives are most strongly concerned with research need and potential, while research managers tend to think about technical foundations and likelihood of success. Which viewpoint is right? Well, they both are, but we each need to recognize and appreciate the other. Both viewpoints must be considered as we develop a national research agenda.

A national research agenda should provide clear opportunities for all willing participants-states, cooperative programs, federal agencies, industry, universities-to "plug in" and contribute tangibly to common goals. This means each participant will have to: understand the agenda and appreciate the significance of its goals; be aware of discrete efforts-" pieces" of the agenda-that can be pursued individually or with other partners; and be willing to perform and report sound research. We'll need a mechanism for compiling the results of these discrete efforts, and for interpreting what we've really learned together. No single organization can accomplish this, but together, we can. The essential element for success is open, consistent communication between all-of the partners in the enterprise.

A national research agenda should provide mile markers along which we can measure and demonstrate progress. We ought to be able to say-3 years, 5 years, 10 years from now: "This is what we needed to learn. Here we succeeded. Here we need to work more." Our measured progress should merit the continued support of our research endeavors.

A national research agenda cannot be static. Optimistically, we might be able to adequately define research needs at a moment in time. But we all know that the needs will change as we progress and encounter challenges unforeseen now. More important than defining a single

collection of research emphases and projects, will be establishing a process for ongoing dialog and consensus.

A national research agenda must be voluntary, not mandated. Our research resources are distributed among a multitude of independent organizations, each with individual interests and talents. The benefits of collaboration are within our reach, but only as we share a common vision.

Finally, a national research agenda must provide some way to establish relative priority among subject areas. To some extent, we've been able to identify priorities within subject areas, like bridges, maintenance, concrete pavements, or safety. But in light of constrained financial and technical resources, we also need to set priorities that encompass these individual areas.

Many unanswered questions face us. What authority is necessary to declare a research agenda "national"? How will we engage the various interests involved? Who will do the work? How can we establish high-level priorities? Today's work, and the work that follows, will provide some of the answers we need.

These are challenging days, and my colleagues in SCOR and RAC are eager to work with you to meet the challenges. On their behalf, I offer our support and help. Thanks to each of you for opening the door to our collaboration.