I would like to thank everyone for the time, energy, and thought they brought to this forum. This is an important process that will really make a difference. Many interesting and valuable themes that will help us shape federal transportation research and development (R&D) have been expressed during this forum. I will not try to go over all of them—but I would like to mention a few.

The theme of partnership has permeated the discussions from the very beginning: not only explicit partnerships such as the Partnership for a New Generation of Vehicles and the Strategic Highway Research Program, but also the broad concept that we must all work together—listening carefully to each other—in defining vision and goals, shaping and implementing programs, and seeing that the results are both useful and used. Depending on the endeavor, the roles of each party—federal and other levels of government, carriers, suppliers, manufacturers, and societal stakeholders—will vary greatly. But the value and ultimate impact of what we do will depend greatly on the insights, experiences, perspectives, and needs of everyone. This forum symbolizes the kind of interaction that is necessary for a truly effective transportation research enterprise.

Another continuing message has been the importance of performance measures. This covers a wide area, from assessing how well we are conducting research, to evaluating R&D results, to assessing the performance of the entire transportation system and its elements as a basis for ongoing investment and R&D decisions. I can assure you that the Department of Transportation takes this seriously.

We have heard so much about the importance of listening to the user and customer that I do not think I need to dwell on it. I will note, however, that it is by no means a trivial process to go from perceiving a transportation need or problem to defining the specific research activities that will best address it.

Another message we have heard at this forum is that we must be particularly attentive not just to the creation of technology, broadly defined, but also to technology deployment. Bringing new systems, technology, and operational strategies to reality depends on far more than the research itself. The process must be communicated clearly to the user, in whatever way is necessary to make the process effective and user-friendly. For agencies conducting
research, this means that the job is not necessarily done when the final report is printed—the necessary follow-up must be part of the original project planning.

I am pleased to hear the broad support for the system assessment area of research, which often gets overlooked. This area includes what is traditionally called policy support, but is even broader. It covers a wide range of activities, including developing a wide range of data, analytical models, simulations, and decision-support tools; analyzing costs and benefits; and assessing risk. System assessment is needed as a resource base for everyone involved with the transportation enterprise, not just the federal government.

Many of you have also emphasized the importance of including in our R&D strategy a strong role for university research, both as a performer and, perhaps more important, as the basic source of professionals who will design and operate the transportation systems of the future.

I am glad to hear how strong the support is for intermodalism and for research that cuts across all modes. This was a central thrust of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and has been an important force shaping our current effort to restructure and streamline the Department of Transportation (DOT). The path we are on will greatly facilitate coordination among modes and development of specific intermodal and cross-modal programs. DOT will shortly be sending to Congress the second edition of the Surface Transportation R&D Plan, which is required by ISTEA. This plan will bring together in one place all the department's surface-transportation R&D, organized not by mode, but by functionally oriented categories.

Because I suspect there is still some confusion about the National Science and Technology Council (NSTC) process and how this forum fits into it, I would like to place the work of this forum in context. NSTC represents a noteworthy coupling of the White House Office of Science and Technology Policy, headed by John Gibbons, and the Office of Management and Budget, which ultimately holds the purse strings. As Congressman Mineta said earlier in this forum, we are in a very fiscally constrained environment, so it is very important to have this direct linkage of R&D policy to the budget process. This makes the NSTC process especially important for ensuring that the purpose and value of transportation R&D are well understood at the highest levels and for ensuring a level of coordination across all agencies that focuses our efforts on the most critical needs, prevents duplication, and maximizes synergistic interactions.

Operating under the auspices of NSTC, the Committee on Transportation Research and Development has several federal departments and agencies as members. The committee, which is divided into subcommittees that focus on particular topics, coordinates with other NSTC committees, such as the Civilian Industrial Technology and Environment and Natural Resources committees. To a large degree, each subcommittee is concerned with one of the areas defined in our framework—physical infrastructure, information infrastructure, system assessment, and so forth. We are currently restructuring the subcommittees to build on the committee's first year of work, and we will very much take to heart in this process what you have said here. As we move forward, I encourage you to contact the committee and its subcommittees to extend and elaborate on the thoughts already expressed here.

I thank you for your participation in the forum and look forward to working with you to ensure a better and stronger transportation R&D program that is fully responsive to our national goals and needs.

We have heard in this forum about the importance of focusing on outcomes when trying to develop a framework for a research program. We must always remember that our research is not an end unto itself. It must be, as Congressman Mineta reminded us, quoting the eloquent words of Albert Einstein, a blessing, not a curse, to mankind. We must remember this diligently as we pursue our R&D program.