Future of Statewide Transportation Planning: Overview

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For the past several years, most major national transportation agencies and associations have been actively seeking to identify future directions for, and desired characteristics of, a national transportation program. Motivated in part by the completion of the Interstate highway program and the beginnings of the date of “What comes next?” that occurred during the passage of the 1987 Surface Transportation Assistance Act, these groups have begun to lay the groundwork for the next federal transportation program that will be defined by Congress in the early 1990s. Many of these organizations have joined in the 2020 Transportation Consensus Program to agree upon a set of principles and policy characteristics that will be considered seriously in the development of this program. As part of this effort, numerous “futures” efforts have been undertaken to identify the likely characteristics of the future, those relating to economic conditions, technology, demographic changes, institutional arrangements, and environmental concerns, among others. The TRB Committee on Statewide Multimodal Planning felt that given the level of interest and amount of effort relating to the future of transportation, it would be timely to hold a conference on how statewide transportation planning should respond to and guide considerations of transportation’s role in the future of our country. This Record includes the presentations made at the conference and a summary of key findings.

More than 100 people attended the conference. Special efforts were made to attract representatives of “consumers” of the information produced by state transportation planners. Such participants included current and former directors of state transportation agencies, a state legislator, a vice president for logistics of a major U.S. corporation, regional and local planning officials, and representatives of other government agencies. The conference was cosponsored by the American Association of State Highway and Transportation Officials (AASHTO) and was held concurrently with the annual meeting of its Standing Committee on Planning. Therefore, many state directors of transportation planning also participated in the conference. There was also representation from universities and consulting firms. In sum, the conference registrants represented the key groups participating in state transportation planning and the consumers of the resulting information.

The conference was organized to emphasize several aspects of statewide multimodal transportation planning. The general conference strategy was to have about 2 hours of panel or formal presentations followed by smaller discussion groups. This gave participants the opportunity to highlight what they thought were key issues or to disagree with the observations and conclusions made by the speakers. The panels and presentations focused on several issues:

- How is state transportation planning viewed by agency directors?
- What conclusions can be drawn from the futures work under way and how do they affect state transportation planning?
- What do the consumers of transportation planning think about the planning process and the resulting process?
- What are examples of good statewide multimodal planning practice?
- What are the likely key issues and challenges for statewide multimodal transportation planning?
- What impact will future technological change have on transportation and thus on transportation planning?
- How will professional and human resource needs affect the ability of state transportation planners to do their job?

The results of participant deliberations on these issues are found in this Record. However, several key concepts emerged from the conference discussions that nicely summarize the challenges facing statewide multimodal transportation planning. These concepts are discussed in the following paragraphs.

The most important concept was vision. There was a sense that instead of relying on expertise and the planning process as had been done in the past, plan recommendations and the plans themselves really need, in the future, to grab the imagination of the decision maker. One participant stated that the 1982 five-cent gasoline tax increase was “sold” on the basis of potholes (i.e., infrastructure deterioration) and that it was not likely that future legislation could be similarly packaged. There needs to be a vision, some concept to justify to decision makers the level of expenditures requested. One conference participant suggested that the positive benefit of transportation investment on economic development might be one such concept.

The second key issue is credibility. One participant mentioned that the primary purpose of planning is to advise. If, in fact, planning is the provision of information to decision makers, then that information needs to be credible. Lowell Jackson provided a good illustration of this concept. As he stated during his presentation, when he first became Secretary of Transportation in Wisconsin he went to a legislative appropriations committee requesting additional funds for highway construction. The committee asked him to justify the request. He responded that the highway program was needed to enhance and maintain economic development. Their response was, “Prove it.” In other words, the committee did not view as
credible his justification for the program expenditures. Similarly, one state department of transportation representative discussed the danger of overestimating program needs and the credibility problems that result when such expenditures are not likely to be forthcoming politically. In this case, the state official concluded that because the state legislature considered the needs estimate to be unrealistic, it questioned the credibility of his justification for the program expenditures. Sim­

discussed the danger of overestimating program needs and was used throughout the conference in discussing the man­

agement of the physical transportation system, the institu­tional system, the administrative system, and the planning system (including the sources of data). With regard to the physical system, the conference discussed such things as incident management, access control, corridor conservation and preservation, and high-tech corridor management. Many of these techniques have been discussed for many years in the transportation profession. There was general agreement that more attention was needed to bring those responsible for operations, traffic engineering, and maintenance together with planning officials so that a coordinated comprehensive approach to the transportation systems could be developed. In particular, given the tremendous problems of urban congestion, joining planning and traffic engineering more closely seems like a useful thing to do.

Management of the institutional system is critical to a suc­

cessful implementation of the programs that emerge from statewide multimodal transportation planning. Institutional issues seemed to be one of the important issues continually discussed at the conference. One discussion group, for example, suggested that there needs to be an examination of how to forge (or force) a process of cooperation between the different governments and sectors. One participant, representing a local government, said that if you cannot lead or do not want to lead, then get out of the way because there will be a lot of other people trying to get things done. The message to state agencies seemed to be: do not become a barrier to progress.

Administrative management was discussed mainly as strategies for “working smarter.” Executive management inform­

ation systems, vehicle location and monitoring, and other technological innovations will likely make our jobs easier than they have been in the past. The challenge, however, is to identify the most appropriate use of this technology and let it work for us rather than the other way around. The discussion on administrative management also included management of the planning system, most often data base management. Geographic Information Systems (GISs) were identified as one of the technology applications that will help a great deal in this regard. One of the interesting questions with regard to GIS relates to the institutional issues discussed before. Will the need to combine the data bases from many different agencies force a greater amount of cooperation over time?

The fourth major issue is multimodal planning. Several states made presentations at the conference on their attempts at corridor-level multimodal transportation planning. One discussion group concluded that it was much easier to plan for multiple modes than it was to plan multimodally. The major issue is how to identify the tradeoffs between the modes. Such a question could be a very interesting research question.

The fifth issue is the land use/transportation relationship. Whether defined as economic development or something as simple as trip generation, the land use/transportation rela­tionship is fundamental to the transportation planning pro­

cess. For many years, those transportation planners involved in air quality and transportation planning have been exposed to the term “consistency,” which is the determination of how consistent the transportation plans are with air quality goals. There was general agreement that in the 1990s transportation planners might be exposed to another “C” word, “concurrency,” which requires that transportation infrastructure be in place before land use is allowed to be developed. Such a process is now in place in Florida, and conference participants felt that other parts of the country would see something similar.

The sixth issue was not discussed in great detail, and as one discussion group noted, the fact that it was not makes it an important issue. The issue was how transportation relates to the environment. It seemed to many participants that the 1990s will see greater emphasis on environmental quality. In particular, air quality and transportation’s role in air pollution will likely receive greater attention.

The next issue was communication. Transportation planners have been greatly interested in communication with the general public. Conference participants felt that transportation planners have often done a poor job communicating with decision makers and other key constituency groups. To have some impact on the outcome of the decision-making process, planners need to communicate effectively with these groups.

The eighth issue was personnel or professional needs. An effective institutional structure and strong technological support are useless without the right people. One session was devoted to this subject and there was a general consensus that educating transportation planners and engineers, and providing opportunities for continuing education for those already in the profession, will be an important challenge to the profession in the 1990s. At the state level in particular there are many obstacles to finding well-trained planning professionals.

The final issue was technology and the role it will play in the future of transportation. There was some concern expressed that the transportation profession could suffer a credibility gap if it “oversells” the potential of technology. Most participants agreed that in-vehicle navigation and control are going to be a very important contribution to a more effective transportation system. There was some caution, however, about what could realistically be expected from the road system technology (the “smart” highway), at least in the near future. We need more research both on the technology side, but also on how this technology relates to institutional structure, eco­

system, society, etc. One participant concluded that the profession seems to be “stuck” between the great leaps in transportation technology. The internal combustion engine revolutionized transportation over the past 80 years and we are now waiting to see what the next technology will bring. The participant suggested that we continually redefine the important issues facing transportation, but that the underlying issues stay the same. It was suggested, however, that another explanation for the sense of being “stuck” was the very nature of planning. Planners always like to think that planning comes first, followed by decisions. As we know, however, policy comes first and is defined on the basis of a common understand­

ing of technology and the existing characteristics of socie­

ty. Given the rapid change in society, in particular the infor­

mation processing aspect of our work, it is not surprising that there are many questions on what we should be doing as a society.
It was interesting that two chief executive officers used the term "policy planning" in describing their planning processes. In one case, the distinction was made between policy planning, system planning, program planning, and project planning. Perhaps this distinction between policy planning and system planning that at least seems to be made by agency directors is one reason for a feeling of frustration on the part of planners.

In summary, the results of this conference suggest that we may be facing a new "3C" planning process in the 1990's. This new process is one in which transportation planners need to be Creative in a Credible way, and be able to Communicate effectively to decision makers. Creativity, credibility, and communication: This will be the challenge of transportation planning as we head into the twenty-first century.