

Chapter 2

Opening Session

The conference was opened by Neil Pedersen, Chair of the TRB Committee on Statewide Multimodal Transportation Planning and Director of Planning for the Maryland State Highway Administration. Pedersen described the challenges in statewide transportation in the new millennium from the perspective of the Committee on Statewide Multimodal Transportation Planning. A copy of his paper is included in Chapter 2 as one of the keynote addresses. He thanked the host agency, the Alaska Department of Transportation and Public Facilities, for providing the attendees with not only an excellent job in hosting the conference but also the unique opportunity to experience the activities and attractions in the state, including their transportation system. He explained the conference format and the expectations of the conference steering committee on the conference products.

TOM BRIGHAM, *Alaska Department of Transportation and Public Facilities*

The welcoming presentation was by Tom Brigham, Statewide Planning Director for Alaska DOT and Public Facilities.

I am mainly going to stick to welcoming you all here and talk just very briefly about what I would consider some of the more interesting efforts we are engaged in right now. But I do want to say it is truly my pleasure to welcome you all here to Alaska. We have relatively few opportunities to host events of a national scope, and we are just delighted.

A very warm welcome to those of you who have not been to Alaska before, and I hope you have an opportunity to get out and experience the state, experience at least part of the state before or after the conference. It is pretty hard to go wrong. There are very few parts of the state or areas that you can poke your nose into and not come away rewarded in one way or another.

I would also like to welcome my fellow Alaskans here. There are a number of folks both with DOT and with other organizations in the state who are interested in the topics here and are choosing to participate. And also a special welcome to the members and friends of the sponsoring committees, the TRB Committee on Statewide Multimodal Transportation Planning, most of whom I now count as friends as well as colleagues. I have certainly enjoyed my association with that committee.

I hope you can take a little bit of time to see parts of the state. I know one spirited group came up on the ferry and came overland, which gives you a really true sense of where we are and how far it is from one end of the state to the other.

We often have a slide we use in presentations in which we overlay the contiguous 48 states and the state of Alaska at the same scale. What you notice in most maps is Alaska is located off the coast of California and it is kind of small. It is about the size of Iowa. Well, that is not true.

If you plot our three most distant DOT maintenance stations on a map of the United States, the Ketchikan maintenance station would be positioned over St. Petersburg, Fla.; the Barrow maintenance station would be on the border with Canada, somewhere in northern Minnesota; and the Unalaska maintenance station would be somewhere near El Paso, Tex. The state keeps going; the Aleutian Islands go out to what would be somewhere near Los Angeles.

The one statistic, though, that I will say has always amazed me is the fact that there actually are more miles of coastline in Alaska than there are in the remainder of the United States put together.

So, I hope you can experience some of it. I will be the first one to admit that a lot of it is hard to get to, but once you get there, that is part of the reward.

Let me describe a couple of planning efforts we are involved in that you might find interesting. One is our regional transportation plan in southeast Alaska. We have a lot of challenges keeping the marine highway system supported financially because as the population center of the state shifts to Anchorage, the rail belt, Fairbanks, and so on. The marine system is serving fewer and fewer people as only a percentage of the state and their elected representatives identify with or really understand the need for the marine highway system.

We addressed that and all the other transportation issues in southeast Alaska. And I believe we came up with a really excellent plan to configure the marine highway system in a way that lets it have two different products to deal with that are clearly two different markets for ferry service in southeast Alaska. The first is the service that some of you took from Bellingham to Skagway, which operates very successfully where people want to travel on a long length through the state. That service will continue. But there is very little right now for residents in southeast Alaska to go from place to place, and that is the kind of service we will be adding to the mix.

But we did look at all modes. We looked at land links. We did a very interesting technical modeling effort, developing both demand and supply characteristics for the intermodal options in southeast. The planning effort is finished. It was approved and adopted by the commissioner and the governor. We are now working with the other agencies in the department to implement the plan.

The other activities that I find of interest—because they are, in some respects, being paralleled in other parts of the country—are our efforts with the Alaska Land Managers Forum, which is a joint federal agency, state agency, and native corporation group headed by our lieutenant governor, the secretary of the interior's representative in Alaska, and the head of the Alaska Federation of Natives.

There is no other forum like this that I am aware of, and it has given us a ground on which we can build efforts, such as the one we are now involved in with Wrangell–St. Elias National Park.

The road to the park is a state road. There are also private inholdings in the park because the park came along much later, in 1980. There also is no local government in that part of the state. So, we are standing in the shoes of local government to attempt to address the land-use issues, inside and just outside the park that come along with increased tourism and development.

We are right in the middle. We are in the process of hiring a consultant to look at those broader issues and involve the agencies as well as the residents of that area.

Both of those activities are certainly of interest to us and I hope would also be of interest to all of you.

Again, welcome, and I hope you have a great time.

SHELDON EDNER, *Federal Highway Administration*

The next speaker was Sheldon Edner from FHWA, who works in the Office of Environment and Planning. He presented a summary of two conferences that were held earlier this year on Refocusing Statewide Transportation Planning for the 21st Century. Edner was very instrumental in the planning and providing support for these conferences.

My charge here is to give you a very quick overview of these two conferences, what we have done and what you will be seeing in the near future.

Let me quickly review for you what Refocusing Planning for the 21st Century was all about. It was all about an effort to get focused on a new transportation planning research agenda for the 21st century. It was not about a federal agenda. From a federal highway and federal transit perspective, the two cosponsoring agencies that helped encourage TRB to put on these conferences, we were not interested to essentially compile one more federal agenda.

What we are interested in doing is looking at the changing nature of transportation, the changing nature of the agenda for research in transportation, and engaging as many of our partners as possible in trying to shape that agenda.

So, yes, while in part we, the federal agencies, tried to pick out areas we were interested in funding for research purposes as a result of the two conferences, our primary effort was really to encourage the transportation community to take another look at the question of what is transportation research and where are we headed.

We held the first steering committee meeting for the refocusing planning conference in November. We held the first conference in February. We held a second conference in April. The first conference initially pulled together about 150 people from a broad spectrum of interests, not traditional transportation planning types, but a lot of folks who are now interested in the agenda because of the financial flexibility, the issues of impact, sustainability, and other concerns that have cropped up over the last couple of years and basically tried to get people together to rethink our entire approach to research.

Out of that conference came 52 group work sessions that produced 52 summaries of issues that went into a conference that we later held in Irvine in April that produced 106 research problem statements.

That is not terribly remarkable in the sense that we always have had a big research agenda, but they are very different in many cases than the ones we have traditionally seen. What they do is afford an opportunity for all of us to take a look at those and decide for ourselves whether or not they reflect the kind of agenda that we really see as needed going into the 21st century.

What I would like to do is close by coming to a point of discussion that surfaced in this morning's Statewide Multimodal Transportation Planning committee meeting in terms of talking about so what. So what? We have 106 problem statements. What do we do with them?

Well, I think the point that is most important to take away from this is that the refocusing conference has set the stage for catalyzing an entirely new approach to thinking about research. As many of you know, the Federal Highway and Federal Transit Administration (FTA) no longer are the big kids on the block with all the money to fund research. We are now the ones looking around, looking around for partners to try and fund our research agenda and figure out just exactly how we are going to get the things done we need to get done.

In addition to that, the traditional benchmarks of what constitutes planning research, environmental research, social research, even hard versus soft research, is fast disappearing. Many of the new topics that we are having to look at in terms of transportation today don't fit traditional organizational boxes, disciplinary boxes, or any of the things we have taken for granted over the last 30 years of transportation that we use as a way of characterizing what our needs were and could be.

I will offer for thought intelligent transportation systems (ITS) integration and the national architecture on ITS and what that is going to mean for us. It is bringing together a whole new cast of characters and a whole new set of issues that many of us have not thought through before; thus forcing us to think through it in a way that we haven't had even the institutional capability of dealing with. The discussion in the committee meeting this morning was all about how do we think through the research agenda for the 21st century. We don't even have the institutional focus to do that with.

If you take the time to read a paper that Mike Meyer wrote for the April Conference on Refocusing Statewide Transportation Planning, one of the things that Mike made reference to is a pyramid of research needs. He identified four layers in that pyramid: implementation, process, tool techniques and methods, and enabling research. The one thing that surfaced in the discussion this morning was the need to sort through the types of research issues we have.

You can add to those four categories two others that were proposed by Ken Leonard, who heads up the NCHRP research project for planning, and Marty Wachs, who provided another paper on the issue of research in the 21st century. Market-based research from Marty Wachs is essentially saying we need to somehow maintain a sustained market in research issues that is not just a question of today's hot topics that fade into tomorrow's has-beens before they even get the research done. But add in the notion that at the same time we have to be enabling and sustaining basic research over a long period. The second proposal from Ken Leonard was the need to get things done quickly, which is what the NCHRP effort is all about.

Our research agenda is very different. We need to approach not only the question of research needs and what the topic should be, but also the much more fundamental questions.

How do we even focus our discussion on what we should be looking at? A message that came out of this morning's discussion as I heard it was, "What is the outcome we are looking for?" It is not just a completed research project. It is not just a new fact on what it takes to predict travel demand, but a question of what we are going to do with it, how we are going to utilize it, where it fits into our basic research structure.

Refocusing Statewide Transportation Planning for the 21st Century was intended initially to get to the research problem statements, but it has taken us in a new direction. When the report emerges from TRB this fall—and that is a new record in terms of

publication—we will see the report of both conferences compiled and produced, and it is going to be out in rough form. It is that much paper. It will get boiled down to a report form. But it will be a major summary and it will occur in less than a year. That is attributable to the work of Henry Peyrebrune, who has done most of the work in synthesizing the results, and to Jim Scott in terms of pushing through the impossible.

With that, I would like to thank the members of the steering committee, Ysela Llorca, co-chair of the conference, and Les Sterman, the other co-chair, for having done a remarkable job in doing something far beyond our wildest imagination in terms of helping set the stage for research in the 21st century.

I would also like to pick up off of Neil's comment about a friend and a professional colleague. I owe my presence here to Neil and his willingness to allow me to be here and be part of this process, because it is a major commitment to look much more broadly than we have traditionally. I think that is attributable to his leadership on the Statewide Planning Committee and to all of you for looking much beyond the box.

HENRY PEYREBRUNE, *Transportation Consultant*

The final opening session presentation was by Henry Peyrebrune, presenting preliminary results from the Synthesis Project on Multimodal Aspects of Statewide Transportation Planning. The need for this project was identified by the Committee on Statewide Multimodal Transportation Planning 1½ years ago at its January business meeting, following a discussion about the multimodal aspects of statewide planning and identifying issues and particularly research needs in the multimodal aspects.

As a result of that discussion, a proposal was made by the committee to the NCHRP synthesis program and was accepted.

The first work item for the synthesis was to identify which multimodal aspects are we talking about. I identified three of them: the consideration of modal alternatives in various processes; the look at a mix of modes, not just one mode but a mix of solutions; and the integration of the different modes. So those are the three aspects that the synthesis deals with.

The second problem I had was what do you mean by statewide transportation planning. Using the FHWA Manual of Statewide Planning, I decided to focus on three functions within statewide planning. The first is the state planning function, which includes policy and strategic planning as well as the development of the state transportation plan. The second is corridor studies that are usually done in the corridor planning effort. Third is finance, budget, and programming, which gets us toward implementation.

The committee wanted me to focus not only on planning but also on how projects and programs have been implemented and what actually comes out of the process that we call statewide multimodal planning.

The objectives of the synthesis were to document the state of the practice, provide examples of successful practice, and then identify key research needs. The approach that I took was first to do a literature survey search. The second was to do a survey of the states that many of you responded to and the third was to look at case studies. For the case studies in the report, I wanted to look at states that had not been reported in the

literature. The four states I selected have not been reported: New York, Iowa, New Hampshire, and Delaware.

I added a fifth state, Wisconsin. Wisconsin's Multimodal State Transportation Plan, TransLink 21, has been extensively covered in the literature. In talking to Ken Leonard, I said I would like to do a case study on what happened five years after the study was completed in terms of implementing projects. How has the state plan shaped the state and has it shaped what actually comes out of the pipeline? Ken has given me some good information on that. So I have included Wisconsin in that process.

I then pulled it all together into a summary, conclusions, and research needs. The following is a draft of the summary chapter.

The state of the practice in the consideration of multimodal aspects in statewide planning has evolved rapidly since the passage of the ISTEA. In addition, a significant research program focusing on developing improved tools and methods for multimodal planning was undertaken following ISTEA. The results of these efforts, which are now becoming available, will enable multimodal planning to evolve during the era of the TEA-21.

This document presents information on the practice of multimodal statewide planning. In particular, the report examines the application of three multimodal aspects: alternatives, modal mix, and integration in three statewide planning functions, including state planning; corridor studies; and financing, budgeting, and programming. The emphasis of the report is on the implementation of policies, programs, and projects that have resulted from the consideration of multimodal aspects in the statewide planning process, as well as the processes and research that are currently under development. The report used three approaches to document the state of the practice: a literature search, results of a survey of state DOTs, and five case studies. The summary, conclusions, and research needs were developed from the three approaches described above.

Summary

The consideration of multimodal aspects in statewide planning is clearly an evolutionary process. Comparing the three syntheses/research studies on this topic—the first in 1991–92, the second in 1995, and this report based on 1999 data—one can see that the technical tools for multimodal considerations have advanced greatly, as has the application of multimodal considerations to policies, programs, and projects. Early multimodal activities were generally project-focused and relied on a “champion or entrepreneur” rather than a multimodal planning process for initiation and success. The early round of state transportation plans that were required under ISTEA yield a first look at multimodal issues for some states. These plans are now being updated and refined, with more emphasis on intermodal and multimodal concerns. Almost all states that responded to the survey reported that they were involved in multimodal planning at least to some degree.

The consideration of multimodal aspects has advanced rapidly since the passage of ISTEA. In one sense this is surprising, given that there are still many institutional and organizational factors working against the practice of multimodalism. These factors include a modal federal DOT administering modal programs, congressional authorization and appropriations committees organized around modes, congressional earmarking of projects, modal constituency organizations, prohibitions in state trust fund legislation, federal funding prohibitions, and organizational fragmentation.

Against this backdrop, which is unfavorable to multimodal considerations, there are three major interrelated forces that make the consideration of multimodal considerations (at the appropriate scale) mandatory. There should not be a federal mandate to consider multimodal aspects; however, the consideration should be appropriate to the situation in each state.

The first force is that the planning process is becoming more and more focused on dealing with needs of the customer, or user, with less emphasis on facility-based planning. When looking at the transportation needs from a customer/user basis, multimodal considerations are mandatory. People routinely make transportation decisions on the basis of multimodal considerations, and many of the trips are intermodal.

The movement of goods is increasingly based on multimodal considerations from logistics managers who view the total realm of modal possibilities and intermodal opportunities to satisfy customers' demands for dependability and cost-effectiveness. Travelers and logistics managers don't care about institutional, jurisdictional, and financial prohibitions and constraints. They expect transportation officials to work these things out and provide systems and services that meet their needs.

The second major force is government accountability and the use of performance measures to meet customers' and users' needs. Some states are required to present performance information as part of a budget process or other statutory government accountability requirement. At the national level, the Government Performance and Results Act requires all federal agencies to report performance measures. Other states have adopted performance measurement or performance-based planning as a "good government practice." When accountability is linked to customer or user expectations, multimodal considerations become more evident and important.

The third major force that leads to multimodal considerations is the reemergence of the notion that transportation serves a larger purpose. Policies articulated at the highest level—under such terms such as *growth management*, *livable communities*, *economic development* and *sustainability*—all focus on issues of modal choice and efficient use of limited resources.

These three forces make the movement toward multimodal considerations imperative at a scale that is appropriate to the conditions in each particular state. The lead for these considerations may not even be with the state DOT, depending on the roles and responsibilities assigned by the "authorizing environment."

The DOT may be the sole transportation agency in the state or it may be one transportation agency among several involved in establishing state transportation policy. However, there is a need somewhere within the state structure to have a coordinated focus on multimodal and intermodal issues.

While the consideration of multimodal aspects has evolved rapidly in the last 7 years under ISTEA, the evolution should be even more rapid in the next 6 years under TEA-21 for a number of reasons:

- Advances in the availability of national databases and technical methods, such as those resulting from eight multimodal research studies under NCHRP that are discussed in Chapter 2, will provide improved technical tools for use in statewide and regional planning.

- There has been much experimentation with management systems, including intermodal management systems. Some ideas have worked, others have not. States are evolving to a set of management systems, including the content, scope, and scale of systems that make sense for their state, not because of a federal mandate.
- The first round of state transportation plans are largely complete. The survey showed that many states are updating these plans and that the consideration of multimodal aspects is increasing.
- TEA-21 has removed some of the impediments to intermodal and multimodal projects. The “One U.S. DOT” initiative is also facilitating the implementation of these projects.
- The initial efforts to involve additional stakeholders in the planning process have created a greater understanding of the needs of different groups. The initial dialogues should continue to present opportunities for intermodal and multimodal projects and programs.

Conclusions

The following conclusions are offered from the information gathered and analyzed for this synthesis.

1. The consideration of multimodal aspects, as defined for this study, is a policy decision that needs to be made at the highest decision level in the state. The policy decision involves changing the mindset of an organization from modal facility planning to a customer/performance-based process that considers the movement of people and goods.
2. Successful multimodal planning processes operate best under the umbrella of some higher state or regional vision, land-use and/or economic development policy, or sustainability consideration. These broader policy objectives tend to drive the transportation planning process toward a more multimodal focus.
3. The multimodal planning process should be appropriate to the conditions and issues of each state, but there is a minimum level of multimodal planning and the consideration of multimodal aspects appropriate for each state. The state DOT may be the appropriate location for this process, or the consideration can occur at some other administrative level; for example, at a transportation commission or in the governor’s office, if the state DOT is not chartered to take the lead in multimodal issues. Even for states primarily involved in the operation of the state highway system, the state highways are major multimodal facilities handling single-occupant vehicles, multiple-occupant vehicles, public transit vehicles, car and van pools, goods-movement vehicles, and communications systems.
4. To be effective the consideration of multimodal aspects must be institutionalized throughout the DOT. Institutionalization means that the multimodal considerations are part of the daily business of all the functional areas, including design, construction, maintenance, operations, and modal divisions. They must also be present in planning, and, where appropriate, the

field structure and main office. To be effective, the consideration of multimodal aspects needs to more than a planning responsibility.

5. The impediments to effective multimodal planning most often cited—funding restrictions, organization and institutional fragmentation, and the lack of technical tools—are real, but they have been successfully overcome in some states. Again, the consideration of multimodal aspects is a policy decision.
6. The initial step for the successful consideration of multimodal aspects is not data collection and the development of technical processes; rather, it is the creation of a dialogue with the customers and stakeholders of the transportation system. Technical tools and data requirements will follow.
7. Data collection and the application of technical processes should be appropriate to the scale of the multimodal considerations. If multimodal concerns are at the margin, that is, plus or minus 1 to 2 percent of travel, it does not make sense to invest in detailed technical processes. Sketch planning tools and focus groups may be more appropriate, at least initially, to set the scale of the consideration.
8. The focus of statewide multimodal planning activities has shifted from meeting federal requirements under ISTEA to developing processes that are appropriate to the conditions within the state while still meeting the requirements.

States are struggling with the notion of whether to provide a choice of modes when they look at a mix of different modes in a planning process. Providing a choice has fiscal implications that can affect the entire transportation program and budget. More information and analysis are needed in this area.

Additional Research Needs

This synthesis shows that while the consideration of multimodal aspects is evolving and there has been a considerable investment made in research to advance the state of the art, there are areas where additional research investment is warranted during the period of TEA-21.

1. The bibliography of references on multimodal planning created in 1995, as part of NCHRP Report 404, should be updated and published every 5 years.
2. A summary and users' guide should be prepared for the eight NCHRP multimodal research projects. The summary should also include the use of Surface Transportation Efficiency Analysis Model (STEAM) and ITS Deployment Analysis System (IDAS) as multimodal planning tools at the state level. The summary should include case studies on the application of the new technical tools in real-world situations.
3. A synthesis or summary should be provided on the lessons learned from the first round of state transportation plans prepared under ISTEA and the issues and processes being used by the states in the current round of plan updates.
4. Research is needed on the role of state financial programs in the consideration of multimodal aspects. The research should examine in greater depth the "real funding prohibitions" in state trust funds and multimodal funding programs in

some states. It should also look at how some states have successfully overcome impediments to multimodal programs and projects.

5. More in-depth research is needed on the different institutional arrangements that exist in the states, the role of the state DOT, and successful models for coordinating or consolidating the various transportation organizations.
6. Research is needed on how a state transportation agency can successfully institutionalize the consideration of multimodal aspects throughout the agency and the “authorizing environment.”
7. The development of quick-response order of magnitude multimodal planning tools is needed to establish the initial scale of the multimodal considerations.
8. The reporting on multistate, national, and international corridor planning activities was incomplete in the responses to the survey; however, there appears to be a great deal of innovative planning practices, many of which are multimodal, evolving from these planning activities. These types of studies will probably increase over time. Therefore, a synthesis should be conducted of the multimodal aspects of multistate studies at the point that the studies reach the implementation stage.