WORKSHOP SUMMARIES

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PLANNING

Introduction

The discussion in this breakout group was based upon the resource paper presented by Michael Meyer. To focus their discussion, a series of questions were framed by the group in order to identify key issues and specific action items. The following summarizes those questions and resulting action items.

Summary of Discussion and Major Conclusions

The questions discussed and suggested actions included the following.

1. Are there institutional barriers that prevent the development of consistent statewide and regional priorities, priority ranking criteria and performance measures? Actions are needed to:

- Analyze state funding allocation laws.
- Analyze state constitutional barriers (e.g., gas tax can only be spent on highways).
- Determine ways to deal with the large number of local governments that typically have purely local interests.
- Address problems in states which are mostly rural, where multimodal issues are not considered by state DOT "boards" that have a rural highway orientation.
- Address difficulties in raising matching funds.
- Substantially expand the involvement and communication with freight interests.

2. What steps need to be taken to permit effective multimodal planning and programming to be carried out, considering the multitude of agencies and groups that need to be involved? Are there institutional changes that should be implemented to make such planning and programming more effective? Action items should include the following:

- Give all (legitimate) appropriate actors (including transportation providers) a voice and seat at the decisionmaking table.
- Conduct regional workshops (continuous education programs).
- Create forums to draw out a full range of concerns/issues.
- Use existing forums to disseminate information.
- Make the process transparent, open, and easy to grasp all along the way.
- Educate staffs on the fundamentals of freight planning.
- Get people to buy into the process, up front.
- Link emission reduction potential of air quality funded projects to programming priorities.

3. What institutional changes, if any, should be considered to strengthen the links between land use decisions controlled by local governments and transportation investment decisions controlled by implementing agencies? Action items should include:

- State review of local land use decisions.
- Establish linkages between long-range transportation and land use plans.
- Require transportation implementing agency involvement in growth management planning and concurrency reviews.

4. How can consensus be built? Items to consider should include:

- Consensus building skills should become a part of professional education/continuing education programs.
- Identify the real issues/objections underlying different positions/perspectives.
- Get people to buy into the process up front.
- Get people around the table to deal with each other face to face.
- Consider the use of facilitators/mediators.
- First obtain consensus on policies and goals; consensus is then more likely to evolve regarding conclusions about alternatives.
- Study past practice to determine which ISTEA statewide planning and programming requirements were being previously practiced.
- Voting membership is changing on a number of MPO policy boards to include transit operators and in some cases state DOTs; bylaws are also changing.
- More citizen involvement must be included in the process. The private sector is becoming more interested in the MPO process, and should also be involved.
- Roles in congestion management systems are very unclear.

• Roles will evolve as true multimodal planning begins to occur.
• Roles will also change and evolve as State Implementation Plans are developed.

The discussion of the above questions led to the formulation of the following conclusions:

1. The recommendations from this conference will take time to implement over a number of years.

2. Great effort will be needed to re-invigorate the relationships between federal, state, regional and local planning efforts.

3. Multimodal planning must be driven by a vision that is transformed into goals and objectives. That vision must reflect community values, quality of life criteria, and an emphasis on providing mobility as a service to support communities.

4. In addressing problems of mobility, more consideration must be given to social and environmental concerns, as well as economic costs and benefits. Land use issues must be given an important priority.

5. Effective multimodal planning will require that traditional "adversaries" must establish new relationships. This must eventually bring to the table transportation, clean air, clean water, environmental and many other planning interests. This kind of new planning environment will also impact the role of the private sector in providing services and facilities. The need for the integration of planning activities will require that new kinds of collaborative programs be established that will serve a broader set of goals than have been traditionally addressed.

6. There is a need to carefully evaluate when, where and how freight and commodity planning is carried out in order to better integrate land use, congestion, and other broadly based planning programs.

Research Recommendations

The following research areas were recommended for consideration:

1. Develop a manual on best practices for reaching consensus on complex transportation issues.

Establish a federal clearinghouse for information related to ISTEA. Also, develop training or assistance to develop the skills needed to build consensus in coalitions. Incorporate this training to improve education and communications of issues and planning decisions for business and communities in order to generate more active and informed participation in the overall decisionmaking process.

2. Develop effective methods for rural area planning.

The needs of rural areas and the smaller urban areas must be addressed. An urban emphasis in developing regulations could unnecessarily impact or unduly burden rural areas.

3. Identify a means to get accurate freight movement data when shippers are concerned about privileged or proprietary information.

In addition to the obvious, we must broaden the approach for multimodal planning to define and broaden measures and criteria for evaluation of multimodal issues. This must include both passenger and freight issues.

4. We need to reexamine traditional definitions of trip types.

For example, the nature of travel of a few generations ago is different today. Today the traditional single home-to-work-trip is probably two to three trips. Rather than going from home to work, it could be home, to child care, to work; or work, to child care, to shopping, to home. Is that two trips? Is that three trips? How are these people counted? How are these trips modeled? What is it doing to the assessment of needs?

5. Examine the changing nature of demographics in society and incorporate these changes into planning and forecasting.

It is recommended that there should be a study of what are the most needed and the least-cost methods for effective data collection. We should review and disseminate information on additional techniques for travel data collection that tracks changing behavior. That is, we need to go beyond the conventional one time, single point OD type surveys and provide training and information on developing and monitoring trip diaries, travel panels, etc. It is important to try to identify better or automated means to track travel time and modal operational reliability for both the modeling input to planning and

for looking at alternatives as well as for the management systems for monitoring performance. We should define appropriate and useful measures of mobility.

6. Define reasonable, subjective and non-quantitative policy- or goal-oriented measures for multimodal evaluation and modal performance.

Instead of trying to quantify everything, there is a feeling that there needs to be a recognition that what we are trying to do is support policy-oriented programs. We need to determine how to develop subjective, admittedly subjective, and non-quantitative measures to relate what we are doing in our evaluations for recommendations to decisionmakers.

7. Inventory the analytical tools available for an analysis of multimodal issues.

We need to identify how to mix people and goods into analysis that is relevant for multimodal planning. We should improve market and customer research capabilities, examine peak hour pricing approaches and study parking policy options. We need to get a better handle on the effectiveness of transportation control measures and their performance. We also need to identify means for revenue sharing between jurisdictions; and how to integrate highway, transit (including HOV and ridesharing) truck, passenger, freight, rail, and air quality modeling into our planning processes. There is a whole host of things that are largely done quite independently. How can they be integrated? How can we better look at, interpret and utilize data?

8. Identify means to better monitor and forecast out-of-area travel for a given region.

This particularly applies to the smaller non-urban areas that are heavily impacted by seasonal freight movements or seasonal tourist movements. They may have a growth of five or ten times what they have on a normal daily basis on weekends, or during particular seasons. How can we provide assistance through research to better help them forecast and model those types of impacts?

9. Develop methods for more timely and accurate energy, VMT and ADT type information for modeling and performance measures.

We should evaluate current data collection methods for utility and assess the ability to eliminate some of the data collection going on to allow for new needs to be accommodated. It seems like we continually overlay what we are doing on top of everything else. We should reexamine what we are doing to see if we cannot eliminate some of the information we are collecting or consolidate data to provide more useful programs. There is also a need to look at vehicle characteristics and research. For example, we should look at the type, rates of replacement, energy and air quality aspects of fleet composition for major service providers; the availability and use of alternate fuels and who has access to these vehicles over time; etc. Since we are getting more into multimodal planning, we should learn more about and understand the rail point of view for freight situations and systems, including air and port connections. We should develop and distribute a handbook on goods movement as an educational effort.

10. Freight research initiatives.

We should educate local governments concerning freight movement needs. We also need to balance freight research between truck and rail movements. And we should identify examples of international successes with the integration of transportation, land use and urban design; areas suggested were Japan, Canada and France.

In addition to the preceding discussion of research needs, the following potential projects were also identified:

1. Develop models for creation of MPOs in new urbanized areas.

2. Develop methods on how to do transportation planning in multi-regional areas.

3. Identify public participation strategies.

4. Study regional governance models.

5. Monitor and report on institutional changes that are actually occurring.

6. Identify lessons learned from certification reviews.

7. Case study reviews: information about both success stories and interesting failures.

8. Develop a guide to sources of data, especially for goods movements.

FINANCE

Introduction

The transportation planning and programming process will be significantly affected by the requirements of ISTEA. The funding flexibility provided by the new legislation will require the formation of new partnerships and a much more extensive and complicated process for establishing priorities and making trade-offs among competing priorities.

Summary of Discussion and Major Conclusions

The transportation planning and programming process must now address a new set of issues and challenges. This discussion group summarized those issues and the recommended actions as follows.

The first of the several issues discussed focused on the difference between available funding and our expectations. As discussed throughout the conference, funding levels are flat or declining but very different and new program demands and new expectations have been forced upon us in transportation.

The next challenge is that state and local funding sources, in many cases, are not only inflexible but generally inadequate. In addition to the difficulty of using available funding sources, we also find that funding problems are essentially worsened by the constraints of fund dedication and the lack of flexibility that we have at the state and local level.

We are also finding that there is incompatibility between long-range planning and financial uncertainty.

Funds from the private sector are also difficult to obtain. Raising money has become a practical search for anything that we can put our hands on, rather than trying to make the choice of the most equitable or efficient source of funds.

As we are all aware, the designation of demonstration projects is something that has become a major drain on resources that seriously impinges upon the state or local cooperative efforts to fund the highest priority transport projects and programs. One can question whether the idea of having demonstration projects is at all compatible with the concept of ISTEA.

Continuing with these issues, we find that there are many new proposals for the mitigation of transportation and social cost problems. In fact, there are extreme pressures to fund non-transport activities out of traditionally transport sources. How we deal with this difficulty of mitigation when the climate of less than adequate funding is one of our major issues.

Finally, another major issue is that land use decisions are being made on the basis of transportation plans that are by and large unfundable.

The above issues were generally considered by the discussion groups to be of the highest importance. There were some additional observations which did not receive quite the same general support, but on the other hand, were considered to be quite important.

The first is that flexibility introduces more uncertainty and competition for funds that are available. Second is that the political follow-through at all levels of government on ISTEA provisions is uncertain and often unlikely. The third point is that opportunities for change come only at the margin, but expectations for expenditure changes are far greater. Those "revolutionary" changes are quite unlikely, however.

The next point is that the impacts of using alternative fuels threaten revenue sources. We also find that turf battles, which are very common, are also likely to be unproductive and we fear that this will take attention from financial priorities.

Prioritization and suballocation methods seem to require far more attention. Another interesting point that was discussed was that the use of more private sector finance introduces greater business cycle uncertainty in transportation, which can lessen the counter-cyclical capabilities that transportation is supposed to have in bringing about employment in times of recession.

Financial flexibility seems to work against the political stability of equal geographic and modal allocations of funds. While flexibility can be praised because it offers opportunities for gains, it also brings about change that is very difficult.

It appeared to several observers that cost allocation studies and their findings are increasingly needed to guide financial decisions. Yet, tax equity may fall by the wayside in the rush to support ever-increasing transportation demands.

Another area of concern is the impact of special interest groups, essentially producing funding decisions that may establish priorities through the courts. Court action on the part of various special interest groups is something that can make funding very questionable.

Research Recommendations

Based upon the above discussions and conclusions the following research recommendations were made.

1. Develop financial forecasting models.

We have rather limited information on the availability of models that can be used for forecasting such things

as general financial information. We do not have the tools and the education in the area of finance. ISTEA exposes a tremendous and also unfunded need for additional financial information and tools.

2. Private sector financing options.

The possible options available from private sector financing have so far proven disappointing and require far more attention to find out what is practical and what might work.

3. The need for more information.

Research is needed to identify ways to provide better, more immediate financial information that will realistically apprise politicians and stimulate action on their part.

4. Transportation and land use linkages.

The question of land use and transportation linkages is something that needs to be explored more fully to suggest revenue possibilities and cost reduction strategies using land use regulation.

5. Sharing best practices.

We need information on how financial markets work. We need to share the best financial plans developed by states or localities. Prototype financial plans would be very useful. The question of management systems and how they might better guide financial strategies might be summarized for best practices. We need to know more about the use of non-traditional tax mechanisms and the application of new revenue sources. It would be very useful to have more information on European financial practices and how those fit with land use decisions. Retrospective studies of innovative financing activities are rare, and these would be useful guides to offer either governments or private partners.

6. Citizen participation.

We need much more information about citizen participation techniques—what works best in the financial area.

7. Toll road financing.

Strategies concerning the institutional and financial use of toll roads and toll road funding need to be developed.

8. The use of market financing mechanisms.

The public needs to be much better informed about how pricing can work as an effective method for dealing with transportation issues.

PROGRAMMING

Introduction

The programming of transportation system improvements marks the point at which plans are turned into action. The new ISTEA requirements establish a critical need for more effective and consistent linkages between planning, programming and finance. Following is a summary of the programming breakout sessions.

Summary of Discussion and Major Conclusions

The programming sessions focused on the upcoming (and present) challenges facing transportation professionals; many of the challenges are a result of ISTEA. Those attending the programming sessions were very concerned about the ISTEA-mandated management systems, the development of new approaches to evaluate multimodal trade-offs (and priority setting), developing new ways to measure program effectiveness, CAAA impacts, and strengthening the linkages between programming, planning, and finance. Following is a summary of the discussion and major conclusions.

- **Management Systems**—There was some concern that ISTEA-mandated management systems might be very complex and, ultimately, of little use to the states. Some were concerned the FHWA might establish an extremely high set of expectations for the management systems and require these systems to actually select projects for the capital programs. The states see the need for the management systems and intend to use them as one more tool in the programming process. However, they should only guide resource allocation, not select projects. The attendees want the management systems unified within a regional information system using a common data source. They also see a need for a common definition of deficiencies (or minimum criteria) to achieve standardization. It should be noted that some view standard definitions as unnecessary and potentially harmful for those entities that use different definitions.
- **Multi-model Trade-offs and Priority Setting**—Session participants recognized the multimodal emphasis from the ISTEA, but are unable in most circumstances to evaluate the relative priority across

modal lines. There is a need for evaluation criteria that can apply across the modes to allow fair and equitable evaluation. Although most recognized the need for all modal agencies to "get along" over the near term, many transportation professionals will be facing difficult situations in the coming years that involve tough turf fights. The professional will require training in conflict resolution to help facilitate such discussions.

• **Linkages**—The group discussed the need and process for strengthening the links between programming and planning, and between programming and finance. Professionals are hungry for examples of successful processes, and the group suggests that FTA and FHWA provide a joint clearinghouse for reporting such successes. The group also recognized that there will be a strong need for improved financial forecasting techniques, and suggested the need for major training and education efforts to adapt to financial aspects of programming. The group was unanimous in pointing out that many of the barriers to planning and programming cooperation are institutional in nature.

• **Measuring Program Effectiveness**—The group interest in this area was intense. After all, professionals are being criticized from all quarters to change how they do business, but the professionals lack the tools to evaluate the effectiveness of the new programs they are developing. The group suggested research on identifying what the people and community want (ISTEA wants clean air, Mr./Ms. Citizen want a timely commute). The group concluded that it is essential to develop comprehensive, multimodal, measurable objectives and to develop ways to measure mobility. In addition, there are other non-transport, non-monetary impacts that should be studied and, ultimately, measured.

• **Clean Air**—Session participants also recognized the reality that air quality concerns will impact transportation programming for the foreseeable future. However, it is critical that these actions are monitored and evaluated to measure their effectiveness. There was a significant concern that air quality mandates will force a transit orientation at the expense of other goals, and many believe the transportation community shouldn't "hide" behind air quality goals at the expense of mobility gains. The group also thinks research is needed to examine the political acceptability of congestion pricing, the ultimate political tool in the battle to deal with congestion.

• **Other Issues**—There were also some miscellaneous concerns that did not fit neatly into the above topic areas. An information transfer should be developed to explore what works in transportation programming, not necessarily what's best. The group noted the lack of mention of the freight sector, and suggested inclusion of this important area in future discussions. The need to monitor the impact of transportation decisions on economic development and how private investment affects programming was also identified.

In summary, the transportation programmers at every level of government will face unprecedented changes in the application of their craft over the coming decade. New considerations abound from the ISTEA, and include the management systems, the ability to be multimodal, ways to become more coordinated with planning and finance activities, finding ways to measure the effectiveness of the new choices we will be making, and assessing the compatibility of clean air, ADA, and congestion mandates versus the priorities of the community.

The programming profession needs new tools, more and better data to support choices; they need more extensive training to stay current with the demands of their profession; and they need the patience of other disciplines and agencies to learn the dimensions of their changing profession.

Research Recommendations

Based upon the discussions of issues and action items summarized above, the following research initiatives were recommended:

1. Define Deficiency Criteria

A common definition of transportation system deficiencies should be established in order to standardize the criteria that are used within a state to define and evaluate the effectiveness of the various ISTEA-mandated management systems.

2. Develop Methods for Multimodal Trade-offs and Priority Setting

a. In developing analytical tools needed to make multimodal trade-offs and to set priorities among the modes, we need to develop evaluation criteria that can apply across the modes.
b. Training programs are necessary in order to establish experience in resolving conflicts that will occur in making multimodal trade-offs.
c. A monitoring process needs to be established to determine the effectiveness of the decisions made to trade off one modal improvement versus another.
d. Reliable data collection and analysis procedures must be established in order to quantify the effectiveness of multimodal trade-offs.

3. Develop Criteria to Strengthen Linkages Between Planning and Programming

Criteria need to be developed that will assist in measuring programming effectiveness; they must consider:

- Describing community-based priorities.
- Quantifiable, comprehensive, multimodal objectives.
- Measures of effectiveness.
- Measures of non-traditional impacts such as "non-user", "non-transport" and "non-monetary."

INSTITUTIONAL

Introduction

Since the early days of the transportation planning and programming process, some of the most difficult challenges have been raised by the need for the numerous actors to agree upon goals, objectives and actions to deal with transportation needs. Increasing federal requirements since 1962 have resulted in the necessity for those various public and private sector participants to work out their differences. This has been possible in some cases, but not so in many others. The new requirements of ISTEA create a whole new set of challenges and opportunities that were discussed at this conference, as summarized below.

Summary of Discussion and Major Conclusions

The roles and relationships among the various public agencies and their interaction with MPOs, citizens, and other groups varies throughout the country. Those roles have emerged over the years, as continuing federal requirements have called for increased participation and as new issues are included in the planning and programming process. The nature of formal, as well as informal, participation has seen an increase in citizen and MPO involvement in planning processes around the country.

The general consensus is that among most of the participants we are not seeing radical changes in roles occurring at this time. It is assumed that changing roles will evolve over time. We can also expect that there will be significant changes occurring as State Implementation Plans are actually developed. The roles of the various participants in congestion management are still unclear and probably will be until the first of such systems are actually developed.

The issues related to institutional barriers will continue to make the planning and programming process complex and difficult. There continues to be, for example, state constitutional barriers that prohibit the use of gas taxes on anything but highways. Another example concerns the priorities of local government, which are often purely local and parochial in nature. There continues to be the often conflicting interests and needs of rural areas and urban areas. This makes it very difficult to objectively evaluate multimodal trade-offs. For example, it is anticipated that when federal funds are available for agencies other than a State DOT, it will be difficult for other levels of government to raise the matching funds. Using another example, it was stated that freight transportation must be given a higher priority in all planning activities. Flexibility is needed to enable MPOs to have adequate authority to deal effectively with freight needs.

The group concluded that in order to permit effective multimodal planning and programming, all appropriate actors, including transportation providers and MPOs, must be given a legitimate voice in the decisionmaking process. An important action item in this regard is that regional workshops and continuing educational programs should be established to create forums that will draw out the full range of concerns and issues. It was observed that in some cases we are not effectively organized to do so. Better use of existing communications forums should be used for this purpose as well.

It was also concluded that professional staffs need to be trained concerning the fundamentals of freight planning. In addition, there is the need to link emission reduction for air quality improvements, to congestion management, to priority programming.

The next topic focused on the linkages between transportation and land use. A common theme that ran through the discussion was the need for more state involvement and state review relative to local land use decisions. The linkages between transportation and land use decisions do not necessarily have to be through state law. That would be difficult if not impossible to do. However, state administrative policies could help to establish those linkages. This could be done by requiring the state transportation implementing agency to become involved in growth management planning concurrency reviews. This would lead to more realistic land use forecasts for use in transportation planning. However, it should be noted that there was objection to the concept of too much state involvement in local land use decisions. Land use decisions have traditionally been made at the local level, and this still has many advantages.

The next issue discussed at the breakout session concerned consensus building. It was concluded that consensus building, negotiation, and mediation skills should become part of the professional education of transportation planners. These skills are necessary in order to identify the real issues and objections underlying different positions and perspectives. It could help people to buy into the process at the very beginning, and facilitate the ability to deal with issues face-to-face at the same table. To accomplish these objectives, we should consider including facilitators and mediators as an integral part of the decisionmaking process.

Research Recommendations

Based upon the discussions summarized above, the following research initiatives were recommended.

1. Information Sharing

We must develop better methods for sharing information. This could be accomplished by developing case studies to share and learn from success stories. Synthesis reports on the case studies should be widely distributed.

2. Develop a "Best-Practices" Manual

Based upon our many years of experience, it should be possible to develop a "best-practices" manual for creating MPOs in new urbanized areas.

3. Multi-Regional Planning

Research is needed on how to do transportation planning in multi-regional areas.

4. New Requirements for Citizen Participation

Although effective citizen participation programs are in place in many areas, research is needed to identify more effective public participation strategies in light of the new ISTEA requirements.

5. Monitor Institutional Changes

It is likely that institutional changes will occur as a result of ISTEA. Monitoring and reporting mechanisms need to be established to take advantage of those experiences.

6. State and MPO Planning Experiences

A study should be initiated concerning how State DOTs have (or have not) been able to successfully integrate MPO plans into state transportation plans and how citizen participation affected those actions.

7. Changes in Organization Responses to ISTEA

Research should be initiated to analyze how current institutional and organizational arrangements (say as of January 1993) were changed to deal with ISTEA.