

Evaluation of the Planning and Programming Process

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This report summarizes a conference session dealing with an evaluation of the transportation planning and programming process. Experiences in implementing new regulations and new directions for the metropolitan planning process are discussed.

Recent federal planning and programming regulations have prompted federal, state, and regional agencies to conduct a significant review of the current structure and emphasis of the planning process. Therefore, the Transportation Research Board Committee on Planning, Programming, and Evaluation conducted a conference session at the 1977 Annual Meeting of the TRB to hear reports and discuss issues relating to these regulations. This report summarizes those papers and discussions. Our intent is to present the results and conclusions of various studies on the effectiveness of the planning and programming process, share new procedures with others, and point out areas for improvements.

URBAN SYSTEM STUDY

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The Urban System Study, commissioned by the Federal-Aid Highway Act of 1976, assessed the role of the Metropolitan Planning Organization (MPO) in filling the joint planning requirements of the Federal Highway Administration (FHWA) and Urban Mass Transportation Administration (UMTA). It analyzed the types of organizational arrangements for fulfilling the planning process, the status of the jurisdiction of the Federal-Aid Urban System Program responsibilities for programming transportation improvements, and the capabilities of MPOs in exercising their responsibilities under the joint guidelines. Researchers consulted several national liaison groups, who prepared position papers for the study. Several of the major conclusions of the Urban System Study are presented below.

1. The various planning liaison organizations held diverse opinions concerning the role of the MPO in fulfilling the joint planning regulations. The views varied from strong support of to strong opposition to the planning regulations, but groups that represented the states expressed particular concern for the role of the MPO. The responsibilities for programming were the most controversial aspect of the urban system program.
2. The program is becoming much more successful; obligations of federal urban system funds are increasing under the guidelines and the program is gaining momentum. However, the controversy over respective roles continues to present some problems. The local governments, acting through the policy committee (the MPO), have assumed the responsibility for setting priorities. At the same time, the states maintain a strong role in policy direction. The process of selecting projects varies according to the jurisdiction of the project in question. Allocations of funds are proceeding well;

the agency that has jurisdiction over the project is providing matching funds. Transit flexibility is being used in projects worth about \$77 million.

3. Although their capabilities vary, most units of governments are processing urban system projects.

The primary conclusions of the Urban System Study were that obligations for urban systems projects are increasing. Federal requirements should be simplified. Planning and programming emphasis is changing from long-range to short-range issues and planners are taking advantage of the flexibility built into the regulations. The roles of the MPO continue to be controversial. The study concluded that transportation improvements can be implemented to serve state and local needs. The concerns for responsibilities should not overshadow transportation objectives.

STATE-OF-THE-ART SYNTHESIS ON PRIORITY PROGRAMMING AND PROJECT SELECTION

Bruce Campbell, Fay, Spofford and Thorndike

National Cooperative Highway Research Project (NCHRP) 20-5 provides a description of the actual state of priority programming today: (a) how programming is managed and what are its key elements; (b) how decisions on why, where, and when are made; (c) at what level improvements should be made and how decisions are later modified; (d) what the balance is between technical and political factors; and (e) what impact technical priorities have on the allocation of resources. The information was obtained from interviews with officials of a dozen states, two transit agencies, two large counties, and several large cities. The basic conclusions of the study are listed below.

1. A structure for establishing improvement program needs to be defined.
2. The programming process has to involve matching available funds with available projects to accomplish specific objectives. If programming is not concerned with the achievement of objectives, it becomes a scheduling process.
3. A set of common definitions should be established for the programming process.
4. Similar programming processes are used in the areas under study. The major concern is the lack of understanding as to who makes the final decisions on projects.
5. A technical analysis is needed to guide decision makers in setting priorities. Decision makers need a framework and an orderly process for reaching agreement on priorities.
6. The total appropriation available for transportation improvements is the most important factor. Although considerable concern was voiced about the inequity of establishing allocation formulas, often this is the

only practical way to initiate the programming process. Some effort must be made to fund the most critical projects. Concern was expressed about establishing credibility and avoiding overprogramming.

7. Programming is not separate from planning but is part of the planning function.

8. Politics has not been significant in many of the programming exercises, partly because producing a project takes a long time.

9. A policy-planning unit is needed. A technical evaluation of competing projects is necessary to understand the trade-offs in establishing priorities.

10. Planning and programming staff need to communicate with design staff to ensure that the original concept of a project is maintained in the final design.

FEDERAL PERSPECTIVES ON TRANSPORTATION SYSTEM MANAGEMENT

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This paper describes the institutional roles in transportation system management (TSM) planning. The two models of institutional decision making presented are the top-down model, which is the typical long-range planning process whereby the MPO establishes an overall TSM plan and then orchestrates the implementation of that plan, and the bottom-up model, which is a project-by-project incremental approach whereby TSM projects are initiated by the various operating agencies. The role of the MPO is to resolve conflicts and ensure consistency between the various proposals. Although the top-down model is useful in some applications, the bottom-up model is closest to the reality of metropolitan decision making because of the close involvement of implementing agencies most familiar with real-world problems. Several conclusions were presented:

1. The MPO must work closely with the operating agencies. Planning funds should often be passed through to the implementing agencies.
2. The MPOs should develop capabilities for analyzing the short-range implications of TSM proposals.
3. The private sector should become involved in the process to develop the TSM.
4. Those public ordinances that hinder the development of prospective TSM proposals should be eliminated.
5. Funds should be earmarked for TSM improvements in order to avoid competition with other improvements.
6. The process of developing the TSM plan should be on a shared-power basis.
7. The TSM plan should provide a balance in the transportation system.

EVALUATION OF THE REGULATIONS FOR TRANSPORTATION SYSTEM MANAGEMENT AND FOR TRANSPORTATION IMPROVEMENT PROGRAM: THE FIRST YEAR'S EXPERIENCE

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This paper presents the findings of a task force of the Transportation Programming, Planning, and Evaluation Committee on the first year's experience with the joint planning regulations. The task force interviewed people from seven state transportation agencies, two transit operators, and two local governments to obtain opinions

from people in all levels of government on how practitioners were dealing with the regulations.

In general, the task force found that the regulations have not produced major changes in transportation programming but that the programming process has worked better under the new regulations. A more comprehensive picture for decision making is available and more TSM projects are being implemented. Initially, the task force concentrated on the regulations that attempt to involve regional bodies of local governments in programming decisions. Although many of the respondents are disturbed by the newly defined roles of the MPO, in most areas the regulations are being implemented. The task force reached several specific conclusions.

1. FHWA and UMTA have implemented the joint regulations in a consistent and positive manner.
2. The staffs available to the MPOs are adequate to meet the requirements.
3. The local staffs are adequate to meet technical requirements with two exceptions; the first is the need for increased expertise in evaluating the effectiveness of TSM projects, and the second is the ability of local governments to meet federal requirements for environmental review.
4. Almost all of the respondents opposed the establishment of a regional authority responsible for maintaining all highway and transit facilities.

Nearly two-thirds of the respondents to the task force questionnaire indicated that the regulations should be changed. In spite of the controversy, few of the respondents suggested changes in the role of the MPO. Instead, changes were recommended in the flexibility of the programming process required by the regulations. It was suggested that the annual element requirement should be discarded in order to allow flexibility in selecting projects during a 3-year transportation improvement plan; that the need for documentation of projects should be reduced; and finally, that there be stricter analysis of fiscal resources, demonstrations of project effectiveness, and stronger backing for TSM projects.

DISCUSSION

The primary concern voiced during the discussion was the integration of long-range system planning in a traditional sense with pragmatic short-range decision making on transportation priorities. The long-range traditional system planning effort needs to be overhauled in order to focus on short-term concerns. Several people suggested that, although long-range plans should be somewhat optimistic and may call for projects that cannot be funded with existing revenues, many long-range plans need to be made more consistent with available resources.

The MPO should use a short-range evaluation process to ensure that transportation improvements are cost effective and consistent with long-range plans. To accomplish this, project design standards often need to be relaxed. Large projects can often be reduced in scope. In many cases, the planning process should identify less expensive projects that respond to transportation needs at relatively low levels of transportation service. All projects should be subjected to an analysis of their costs and benefits, both for the long term (perhaps 20 years) and for the short term. The process of establishing priorities is a local, metropolitan, and state effort. The planning process should be interrelated with the programming process.

The planning process needs to examine how important the existing transportation system will be for the next

6 years and how cost effective the various projects are in supplying mobility needs. The process must move from a long-range system plan to a pragmatic bottom-up approach of fitting together the most cost-effective projects. The transportation program should involve three major components: (a) maintain the existing transportation system, (b) improve the existing system, and (c) expand the system. The planning process must reflect concern for financial constraints and acceptable levels of service. In many cases, additional financing needs to be found once the level of service at low financing has been shown to be unacceptable.

A current problem is that transit investment programs are not financially constrained. The planning process must guard against losing credibility if, for example, plans are too expensive to be implemented. Care must be taken not to overpromise. A system-level cost-effectiveness approach can estimate the costs and benefits of various projects. The planning process can then be used to advocate specific projects and to assist in finding the needed resources. The implications of proj-

ects, including low-cost TSM alternatives, should be assessed.

The MPO is a forum for achieving agreement on the transportation investments to be made in metropolitan areas. A balance must be reached between a plan that only allocates existing resources and an overall optimistic plan based on an unrealistic estimate of possible funding sources. A major concern must be increasing the efficiency of the transportation system, particularly the public transportation system. Excess capacity provided in the off-peak hours is a great waste.

If a consensus is not reached on all plan elements, contingency plans should suggest alternative solutions for allocating money, including their costs and benefits. A transportation planning and programming effort must demonstrate the benefits of proposals and suggest and implement alternatives that are both cost effective and feasible.

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The Secretary of Transportation's Innovative Public Hearings

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On June 21, 1975, former Secretary of Transportation William T. Coleman, Jr., presided at a public hearing concerning an important transportation project, Interstate 66. This was the first time that a cabinet officer presided at a public hearing. Mr. Coleman subsequently held hearings on the Concorde, another segment of I-66, the St. Louis Airport, and air bags. This paper examines what this action means in terms of the hearing officer, the hearing participant, the public hearing technique, and the transportation planning process. Coleman's decision-making process consisted of examining the issues, writing a position paper, conducting staff briefings, holding a public hearing, receiving written evidence, reviewing testimony, making a decision, and writing an explanation. The written explanation of the decision became a unique document for reviewing the decision-making process. It provided both a tool for congressional and judicial review and a report card on the performance of the administration. The Coleman hearing was designed to restore public confidence in government following the Watergate debacle. In this it was successful; most of the participants interviewed were pleased to have direct access to the decision maker, to have a chance to influence the decision, and to counteract those vested interests that have easier access to decision makers. The Coleman hearing has set a precedent that is being followed by the new administration. It will have a significant impact on both the citizen participation process and transportation planning.

The public hearing concept changed on June 21, 1975, when a cabinet officer, former Secretary of Transportation William T. Coleman, Jr., held a public hearing. This hearing concerned the controversial Interstate 66 (I-66). Other hearings followed on Concorde, a second segment of I-66, the St. Louis Airport, and air bags.

The following question is addressed in this paper: What does this action really mean in terms of the hearing officer (in this case the Secretary of Transportation), the hearing participant, and the public hearing technique and the transportation planning process? Before addressing

this question, the main objectives of the transportation planning process need to be enumerated:

1. Determining mobility needs of individuals and their community and the requirements for transferring goods;
2. Developing a strategy to meet these needs;
3. Determining the socioeconomic impacts of the various strategies on the community, the region, and the society in general; and
4. Devising means of fulfilling sound transportation projects.

Citizen input is an effective way to achieve these objectives, and the most popular way to collect direct citizen input is by means of the public hearing.

PUBLIC HEARINGS AND THE TRANSPORTATION PLANNING PROCESS

Historically, transportation planning decisions were based on the mobility of people and goods. In the last 10 years, transportation planners attempted to assess other objectives, especially those of a social or economic nature (1). One of the most popular and effective means of determining and evaluating these objectives has been the citizen participation process, and the public hearing is the most popular of the techniques used. The Federal Highway Administration (FHWA) mandated public hearings in 1968.

These hearings were generally held at the conceptual planning stage when the facility design was firm. They