WORKSHOP 3: THE PLANNER’S ROLE

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The purpose of Workshop 3 was to determine what research is required to better evaluate public transportation from the perspective of the transportation planner. To accomplish this task, the workshop first identified the steps in the planning process and evaluated current ability to perform each of these steps in terms of available procedures and knowledge. Where current knowledge and methodology did not exist or were inadequate to perform the various steps in the planning process, a research task was identified and a research statement produced.

Next, a number of points were discussed and agreed on in determining the nature of the planning process and the rules under which it should be conducted. This was necessary so that deficiencies in the process could be identified and research needs established.

Finally, as a result of these discussions, several concerns were raised with regard to manageability of the planning process.

STEPS IN THE PLANNING PROCESS

Figure 1 shows the steps in the planning process that focus on evaluation. The process is goal-directed. General goals and more specific objectives are developed and agreed on early in the process. These are refined, with the development of specific criteria to be used to assess the ability of transportation alternatives to meet the goals and objectives.

Next, several transportation alternatives are designed to serve the urban area. These alternatives are evaluated to determine their ability to meet the goal, objective, and evaluation criteria. This step is complex and may involve sophisticated travel forecasting and impact models. Once an alternative is selected that best meets the area's goals and objectives, it is implemented.

Throughout this planning process, there should be feedbacks. For example, the types of alternatives that best meet the goals and objectives may be deemed undesirable and require revising the goals. Or the actual effects of a transportation improvement may not match the forecast effects and require changes in earlier steps in the process.

The planning process should be structured as a learning process in which new information should be fed back and the various steps in the process reassessed in light of this information.

GUIDELINES FOR THE PLANNING AND EVALUATION PROCESS

Several points were agreed on that constitute ground rules or guidelines for the planning and evaluation process. These are discussed in the following sections.

Transit Versus Transportation Planning Process

The process should be a multimodal transportation planning process, not a transit planning process. Transit cannot be evaluated meaningfully in isolation from the remainder of the transportation system. In fact, it was argued that transportation cannot be evaluated in a manner isolated from the other systems in an urban area.

This issue is of growing concern as new options and alternatives are identified. It
is becoming increasingly difficult to determine where the definition "public transportation" begins and ends. This is particularly true when the alternatives include commuter bus clubs, dial-a-ride, shared-ride taxicabs, car pools, public automobile systems, jitneys, and subscription taxicab service. This wide spectrum of alternatives requires that the planning process evaluate all transportation modes in an integrated manner rather than focus narrowly on conventional transit modes.

Participatory Process

The planning process should be an open participatory process. It should not be a mechanical process where the evaluation technique is developed in the back room and the plans are evaluated by some scoring technique where the alternative with the highest score wins. The process should be a bargaining process that involves political decision-makers, citizens, and representatives from the various interested governmental agencies. That approach results in a very different kind of process than one in which the computer determines the answer. Participation should occur during all steps of the planning process, starting with the development of goals, objectives, and evaluation criteria, through the identification and evaluation of alternatives, to implementation, and in the feedbacks all along the way.

The role of the planner in such a participatory process becomes quite complex. The primary function of the planner is to communicate to the decision-makers and the citizens the implications of the alternatives in an understandable manner. The planner should assist in goal formulation, work with the decision-makers and citizens in the design of alternatives, provide the technical skills to evaluate the alternatives, and explain the results of the evaluations in an understandable manner.

Range of Alternatives

A wider range of alternatives should be evaluated in the planning process than has traditionally occurred. The number of alternatives evaluated will be limited by practical considerations of time and cost. However, they should include a broad range of service packages and pricing options, including capital-intensive, low-capital, and no-build options.

Short-Range Versus Long-Range Planning

The planning and evaluation process should be carried out for both short-range and long-range planning horizons. Traditionally, planning has concentrated on long-term horizons to the detriment of short-range issues. Recent changes in emphasis indicate that the pendulum may be swinging too far in the other direction by just looking at tomorrow and ignoring the longer range issues. With a short-term orientation, it will be impossible to produce a long-term strategy for improving the transportation system, especially for major facility investments. What is needed is both a short-term and long-term horizon.
Staging of Long-Range Plans

One approach to resolving the dichotomy between long-range and short-range planning is to develop a long-range plan and stage it into several short-term programs. However, the danger in such an approach is that the short-term programs will not produce operational transportation systems until the entire plan is implemented. Particular care should be taken to analyze the performance of the transportation systems based on the implementation of at least the first stage (2-5 years). Implementation of this first stage should produce a viable operational transportation system that does not require elements of later stages to make it workable. This requires the inclusion of transportation improvements in this stage that balance considerations of short-term needs and goals, implementation problems, and available funds.

Multidisciplinary Team Effort

The planning process should be performed by a multidisciplinary team effort. Engineers and planners do not have a broad enough range of skills to deal effectively with the extent and complexity of issues that are being raised in the planning process. Planning is becoming an increasingly complex task, and the issues required to deal with it are broadening beyond the training and skills of the professionals who have traditionally been involved in it. It will also be necessary to learn how to organize and manage interdisciplinary groups to work together effectively and productively.

Influence of Funding Agencies

The source of implementation and planning funds should not constrain the results of the planning and evaluation process. The planning process should respond to local problems, issues, and goals. Alternatives should be developed and evaluated in a manner that best responds to these locally determined goals. Funding agencies should be involved in the planning process but should not constrain the nature of alternatives and the evaluation. This is particularly important in the current fluid situation where the roles of various agencies are being reviewed and changed and where pending legislative proposals could radically alter funding authority and amounts at all levels of government.

Size of Urban Area

The planning process should be scaled to the size of the urban area. It is possible that if small urban areas (50,000-150,000 in population) used sophisticated planning techniques and carried out a planning process as complex as those in large urban areas, they could spend more money in conducting the planning than in implementing the results. The planning process in small urban areas can evaluate a narrow range and smaller number of alternatives than large urban areas. Further, the techniques used for forecasting and evaluating alternatives need not be as sophisticated. Research should be conducted to develop simplified planning techniques to permit these smaller urban areas to perform their planning and evaluation.

Measuring the Impacts of Transportation Changes

After implementation has occurred, the impacts of transportation changes or system improvements should be continually measured. This information should be fed back through the planning process to assess the accuracy of the forecast and to evaluate whether the impacts are those that are desired by the urban area. The assessment of these transportation improvements should affect earlier steps in the planning
process and could even affect the goals and objectives established at the beginning of the process.

**National Transit Performance Standards**

Standards are specific values of criteria, either maximum or minimum values, that represent a desirable level to be achieved. These standards cannot be established without knowledge of the goals or objectives to be achieved. Performance standards are meaningless in isolation without relating them to goals and objectives of an urban area. It was previously agreed that goals and objectives should be locally determined. As a consequence, performance standards should also be locally determined. Even if national goals and objectives could be identified and agreed on, they would not apply equally to all urban areas. Further, they would not cover all concerns of specific urban areas, and thus each area would still be required to develop its own set of goals and objectives.

Although in general there are no national performance standards, there are several areas in which national standards could be developed. These include safety, environment, and possibly security. Further research on this issue may yield national standards in other areas.

**Concerns About the Planning Process**

The discussion of the steps in and the guidelines for the planning process raised several concerns. First, it is not clear whether the task of making trade-offs among the wide range of issues in the planning process is manageable. Trade-offs must be made—among goals, among evaluation criteria within goals, among the wide range of alternatives, and between short-range and long-range problems and issues. Each of these adds a dimension of complexity to the planning process. Planners will have to make as many of these trade-offs as possible within the practical constraints of time, cost, manpower, available techniques, and guidance of the participants in the process.

Second, as the planning process grows, the growing complexity of the planning process in terms of the number of alternatives and impacts that should be considered and the number and heterogeneity of participants in the process will consume more time and money. It will also require large staffs with a wider range of expertise. Planning for smaller urban areas is of particular concern in this regard.

Third, as the complexity of the planning process increases, so does the difficulty of communicating the issues, alternatives, and impacts to citizens and decision-makers. This problem could jeopardize the credibility and effectiveness of the process.

**Research Needs**

Research needs and project statements were derived from a discussion of the structure and content of the planning process and evaluation of the ability of current methodology to perform the various steps in the process in a satisfactory manner. Where deficiencies were identified in methodology or current understanding, research statements were prepared.

The following research projects were developed by Workshop 3; they are listed in the order of the steps in the planning process.

**I. Overall Planning Process**

3-1. Development of a Participatory Multimode Transportation Planning Process

II. Goals and Objectives

3-4. Deriving Goals and Objectives for Transportation in Urban Areas

III. Criteria

3-2. Matching Transportation System Criteria to Transportation Goals

IV. Alternatives

3-5. Methodology to Match Transportation Modes to Different Markets
3-7. Techniques for Segmenting the Public Transit Market
3-11. Manual of Performance and Operating Characteristics of Transit Modes

V. Evaluation

3-3. Identification and Measurement of Transportation System Costs and Benefits
3-6. Transit and Paratransit Forecasting Techniques
3-9. Sketch Planning Techniques for Low-Capital Alternatives
3-10. Methodology for Measuring Transportation Impacts on Land Use

VI. Implementation

3-12. Determination of the Length of Time Required for Transportation Impacts to Occur

A detailed description of each research project is given in Part IV of this book. The top-ranked projects selected by this workshop were

3-1. Development of a Participatory Multimode Transportation Planning Process
3-3. Identification and Measurement of Transportation System Costs and Benefits