Public Policy Development Process

MICHAEL D. MEYER

Transportation officials and professionals will face many challenges in the 1980s, especially in relation to reduced public funding. Thus, timely and useful analysis of the resources for, and consequences of, prospective transportation projects will be required. Often, however, analyses do not meet the needs of decisionmakers because those doing the analysis do not understand the dynamics of the policymaking process. In an effort to make transportation professionals aware of the process through which public policy is made, the policy development process is described, and concepts that may be useful to transportation professionals are identified. Emphasis is given to literature sources on the policy development process. Ambiguities in terminology are clarified, and a distinction is drawn between policy made through legislative action and policy made through administrative and judicial interpretation. The policy development process itself is divided into three major elements—issue identification, policy debate and formulation, and policy implementation—and the importance of each element in the transportation context is illustrated by mini case studies of transportation issues. It is concluded that there is a need for research in two major areas: (a) the role of analysis in decisionmaking and how analysis can better inform the policymaking process and (b) how, if at all, the policymaking process can be improved.

The environment in which transportation professionals operate has experienced significant change over the past 25 years. These changes reflect not only the expanded role that transportation now has in meeting environmental, social, and economic objectives but also the constant flux of power and responsibilities within the political systems that govern urban areas. Altshuler and Curry (1), for example, identify five trends that have profoundly transformed the "shared-power" system of American urban government as it relates to transportation: (a) an expansion of the public role, (b) the development of a decision process based on consensus (in their terms, "consensual federalism"), (c) the extension of citizen participation, (d) the quest for comprehensiveness, and (e) judicial activism and preferred values. Transportation investment has often been called on to solve environmental, equity, economic development, and other issues, and the resolution of such issues has always been politicized so that consensus played a major role. However, the main difference in today's transportation environment compared with that of several years ago is that the transportation system has achieved a certain maturity. A central problem in transportation policymaking is thus the mismatch between organizations that have traditionally served to create new infrastructure and the mature systems that they are now asked to manage.

Transportation analysts who are especially cognizant of the many political, social, and environmental factors that affect their work are many times unaware of how policy in this often rapidly changing environment is formulated. It would greatly ease the frustration of many analysts who see their work changed or ignored because of political feasibility considerations to have answers to questions such as, How is a policy issue defined? how is it placed on the government's agenda? what influences a decisionmaker's choice of alternative policies? and how is the implementation of a policy considered during the policy formulation process?

The Public Policy Development Process Committee of the Transportation Research Board feels that some effort should be made to make transportation professionals aware of the process through which public policy is made. This paper, which represents a beginning in this effort, is in one sense a description of the public policy development process and in

another an annotated bibliography that can direct interested readers to supplementary readings.

PERSPECTIVE AND DEFINITIONS

The technical aspects of planning and implementing transportation systems have dominated transportation literature for a long time. The more subtle political and institutional aspects that in many ways determine whether a program or project will be successfully implemented have been tactfully overlooked. After all, these were not issues that many transportation professionals were trained to address, nor were they, in a period of rapid expansion of transportation systems, of significant concern to planners who realized that the overwhelming public demand for improved mobility (through highway construction) would ensure the construction of some project. However, attitudes have changed dramatically during recent years and, given the increasing likelihood of fuel shortages, could change even more drastically in the future.

The implications of this changing environment for the role of the transportation professional are significant. First, in a period of fiscal austerity, policies being made by governmental bodies are putting new constraints on the type and level of transportation investment that will occur in a metropolitan area, in a state, and even at the national level. The transportation professional must play an ever more active role in informing the policymakers of the consequences of their decisions. As policy decisions on objectives and priorities become more difficult to make, it becomes necessary to provide more effective input into the policymaking process.

Second, policymaking in the transportation sector is increasingly influenced by requirements coming from sources external to the transportation sector. For example, federal air quality standards, and a potentially similar operational objective for gasoline consumption in a metropolitan area, place definite constraints on the types of transportation policies that can be adopted for a region. Thus, transportation policy is often responding to initiatives that are motivated more by environmental, economic development, and equity reasons than by the requirements of the transportation sector. The transportation professional must again play an active role in clarifying these relations and informing those involved in the policymaking process of the limitations they place on decisions.

Finally, the focus of transportation policy has begun to shift toward management (in terms of system performance and institutional coordination) of the existing transportation system. This focus in most cases requires a much more aggressive posture on the part of transportation professionals because implementation of nontraditional transportation projects faces issues of institutional coordination and political acceptance. An increasing number of professionals are needed who are comfortable serving multiple objectives, are able to operate in complex political environments, are able to build or catalyze "political" coalitions to achieve implementation, can provide expertise in a politically acceptable way, and can operate at different levels or problem scales in response to different constituencies (2).

Before transportation professionals can effec-

tively adopt the roles identified above, they must understand the dynamics of the public policy development process and the points at which input could have a significant impact on action. It is, of course, the purpose of this paper to begin this process of understanding.

At the outset, a number of terms--policy, policy development, policymaker, and policy analysis--need to be clarified. Such a task is not as simple as one might expect because there are many disciplines that are related to the study of policy--e.g., political science, sociology, economics, public administration, and planning--and each discipline often defines these terms differently. For example, policy has been defined in the policy sciences as "a body of principle to guide actions" (3). Other political scientists have defined public policy as "whatever governments choose to do or not to do" (4), "the authoritative allocation of values for the whole society" (5), and "a projected program of goals, values, and practices" (6). Others have been more explicit in their definition: "Policy consists of three parts: (1) the goals, objectives, or commitments of political units; (2) the means selected for implementing or obtaining these goals; and (3) the consequence of the means, i.e., whether in fact the goals are actually realized" (7), or, along similar lines, policy is "a statement or action that produces an allocation and/or expenditure of resources in such a way as to achieve a specific objective by a specified means" (8).

The ambiguities in terminology need to be sorted out, and the critical distinctions from all relevant perspectives must be considered before a cogent discussion on policy can proceed. For purposes of this paper, policy is defined as a societal objective to which public or private resources have been allocated by constitutional, legislative, executive, or judicial action. This definition incorporates the previous uses of the term and also reflects the high degree to which power and responsibility are dispersed within the governmental structures established in this country. It should also be noted that the major areas of action--i.e., constitutional, legislative, executive, and judicial--are very much related to one another. For example, constitutional, legislative, or judicial action is often necessary for the executive to have any power--i.e., policymaking ability.

With the definition of policy now established, the related definitions fall into place:

1. Policymakers--Those who allocate the resources to attain the objective, a category that, in the context above, would include legislators, executives, and judges;

2. Policy development--The process by which policies are made, which includes the analyses and group interaction that occur prior to a policy decision;

3. Policy analysis--A systematic investigation of alternative policy options that enumerates direct and indirect consequences of their implementation and takes into account the social, environmental, intergovernmental, political, and physical requirements and impacts of any given policy proposal and its implementation; and

4. Policy research--The use of research methods to measure the worth or performance of a policy or program in terms of established criteria, the results of which are used to inform the policymaking process and to suggest improvements in policy and policy process content.

An important distinction needs to be made between policy that is made through legislative action and policy that is made through administrative and judicial interpretation. In some cases both judges and administrators find in legislative statements justifications for action that legislators had never consciously put there, whereas in other cases both attempt to resolve difficulties that the legislature consciously left for them to resolve. In transportation, for example, there are often disagreements between congressional committees and the U.S. Department of Transportation (DOT) over the "intent" of Congress. In 1974, such a disagreement occurred over the DOT requirement that there be designated in each urbanized area an agency called the metropolitan planning organization (MPO), which would be responsible for coordinating the transportation planning process. Although congressional legislation did mention an MPO, it did not require that there be such a designation. Thus, administrators are continually laying down rules for the future, interpreting what the law is, what it means in terms of action, and what the rights of parties are with respect to both transactions in progress and prospective actions. It might be said, then, that legislative bodies often establish very general policy directions and that administrators influence policy outcomes by implementing those actions that they feel will attain the objectives of the legislative action. Since such is the case, the link between legislative policy intent and administrative policy interpretation is a significant component of the policy development process.

POLICY DEVELOPMENT PROCESS

An exhaustive bibliography on the public policy development process would have to include books from the fields of political science, sociology, economics, public administration, and planning. Such is not the intent of this paper. We have identified those sources that convey, in an easily understood manner, a description of the public policy development process. Not all descriptions are alike, nor should they be, since no one policy framework is applicable to all situations. However, these descriptions do highlight many of the variables that are keys to an understanding of how policy is made.

Although much of the research on the policy development process is reported in books, in recent years several journals have devoted most, if not all, of their space to specific policy development issues. For example, the journal, Policy Analysis, has a regular section on the analyst's role in policymaking, and The Public Interest frequently has articles on implementation and organizational issues, particularly with respect to social programs. The Public Administration Review, the Journal of the American Planning Association, and Public Policy often have articles on the many dimensions of policymaking and even more articles on the numerous dimensions of why the results of policy actions did not correspond with original intentions. On a more theoretical level, Policy Sciences and Transport Policy and Decision Making often examine specific issues in the policy development process and relate them to relevant bodies of theory. All of these journals make useful reading.

Very little work is published on the policy development process in the transportation sector. Only recently have academicians and government agencies started to examine the process of transportation policy development. Such studies as Colcord's on urban transportation decisionmaking (9) and the assessment of community planning for mass transit sponsored by the Office of Technology Assessment (10) have greatly increased our understanding of urban transportation decisionmaking. However, these

studies only represent a beginning. Therefore, to understand the policy development process in transportation, it is necessary to search beyond the transportation sector and examine the characteristics of policy development in general.

One of the more useful descriptions of decisionmaking in the United States was provided in a recent paper by Coates (11). Coates makes the following observations on public policy decisionmaking in the United States context:

* Decisionmaking is disaggregated among at least three levels of government and numerous agencies at each level. No one has plenipotentiary power. While no one person, agency or institution is in charge or has a clear field or the authority to accomplish things, often dozens, if not scores, of units of government have the power to intervene, to slow down, or to stop action by others.

* The public policy process of the United States is thoroughly adversarial and premised on the parties at interest coming forward, in conflict, to express their positions or concerns....Separately and together the parties rarely have more than a myopic time horizon....

* Another fundamental fact of the American political situation is there is no public. There are only publics representing partial, factionated, astigmatic, myopic facets of any question....

* What follows from this view of forces entering into decisionmaking is that the most effective approach to the identification and analysis of public policy issues is at the intermediate level reflecting the limited boundaries or limited authority of any potential user of a study, input, diagnosis, or analysis....

* Many issues are not information driven....The search for information is often a delaying tactic. It can be a mechanism for apparently taking action while taking no action....

* Public policy decisionmaking is not irrational or nonrational. Quite the contrary, it assimilates a wider range of consideration, values and perspectives, under the influence of more hostile, partisan and vindictive forces than you or I are familiar with....

* The structural conflict in policy issues is most readily visible in Supreme Court cases involving the Bill of Rights.

Other authors have viewed the policy development process in alternative ways, some considering it a process of conflict resolution and others viewing it more in terms of public management. For purposes of this discussion, the policy development process is divided into three major elements: issues identification, policy debate and formulation, and policy implementation. Such a division is useful to pinpoint major characteristics of this particular part of the policy development process and to discuss their importance in the context of transportation. To achieve the latter, mini case studies of transportation issues are presented to illustrate in transportation terms the importance of these components in the policy development process.

ISSUE IDENTIFICATION

A public policy issue is defined by Coates (11) as "a conflict among or between objectives, goals, customs, plans, activities or stakeholders which is not likely to be resolved completely in favor of any polar position in that conflict." This definition is useful to a discussion on issue identification in that it gives rise to several observations on the process of how issues reach the public agenda.

First, issues do not become such until they are articulated. The role of the media, policy advocates, and elected officials in developing public awareness of specific issues is thus very important. This leads to a second point. Issues can be defined, and actions sought, by individuals other than those directly affected, which could also result in issues being defined differently by those directly affected than by others. It is thus important to understand that whether some condition or situation is regarded as a problem depends not only on its objective dimensions but also, and many times more importantly, on the way in which it is perceived. Third, issues and problem definitions evolve, and this of course has significant impact on the ability of agencies to implement selected actions. Some issues remain a relatively long time in the public spotlight whereas others disappear quickly.

However, the number of public problems in the various domestic issue areas is so great as to be incalculable. Clearly, not every problem finds a place on the legislative and/or executive agenda. Thus, as Jones (12) argues, the process by which some get there and others do not is extremely important because problems are the inputs of the policymaking system. Jones suggests several "conditioning" variables that determine the route a problem follows in getting onto the agenda. Among these are the scope, definition, and intensity of the consequences themselves; the structure and leadership of the groups associated with the problem; the access of these groups to those in policymaking positions; and the structure, responsiveness, and leadership of the policy process itself. Each variable is important in understanding how problems are first identified, what political coalitions are formed to further the cause of a particular policy, and the form of the final legislative act or executive order.

Truman (13) presents a different concept of how problems achieve agenda status. He argues that groups seek to maintain themselves in a state of reasonable equilibrium, and if anything threatens this condition they react accordingly, which many times necessitates recourse to the government. Thus, neighborhood groups that feel threatened by the intrusion of transportation facilities or automobile traffic will demand government action. Or downtown merchants who perceive that an automobile-restricted zone will have deleterious effects on their business will, in this case, demand that government action be stopped.

Another way for an issue to achieve agenda status and be acted on is as the consequence of some kind of crisis. Indeed, some have argued that executives operate on a crisis management basis anyhow. In a study on the operation and management of four executive agencies in the Massachusetts state government, Weinberg (14) found that the most important characteristic of elected chief executives (at least in Massachusetts) was their reliance on crisis management. As Weinberg states, "It is clear that the crisis management style of elected chief executives means that these executives must be as responsive to the incidents that generate concern among the public

or important groups on a day-to-day basis as they must be to issues of long-term significance for policy." If one accepts the importance of crisis management for publicly elected chief executives, then one can better understand why some kinds of decisions are made. Politicians do not have the luxury of calculating a long-range strategy for how to achieve their goals. The public's perception of the politician's performance is too closely related to the appearance of a smoothly run governmental machinery to allow many elected decisionmakers to put much effort into long-run policies. What is placed on the agenda many times dictates what and how policy will be developed.

In summary, issue identification and placement on the governmental agenda are important components of the policy development process in that they define what policies will be made. Issues can achieve agenda status in several ways, including constituency reaction to a threatening situation; political leadership, for whatever reasons (perhaps political advantage or concern for public interest), choosing to identify and focus on particular problems; public official response to some kind of crisis; protest activity aimed at a particular issue; widespread publicity by the communications media to define new agenda items or give salience to older ones; and forced consideration of specific items by other governmental actors (e.g., the federal requirement to address air quality issues).

The dynamic nature of issue identification is well illustrated in the following example. In December 1970, Congress wrote into law very rigid standards for regulating automobile emissions. As described by Margolis (15), however, some puzzling characteristics of this action were the minimum level of analysis that preceded the decision and the framing of the program rationale in terms of "normal imperatives presumed to transcend calculations of costs and benefits." The issues relating to automobile emissions were identified closely with the environmental movement of the late 1960s and created in Congress a crisis atmosphere to pass legislation that showed its concern for this area of rapidly increasing public interest. Thus, issue identification was closely tied to a general trend in public concern and, given the interplay between politicians who used the issue to further their cause in the eyes of the public, greatly enhanced its importance on the agenda of Congress. Even though there was little scientific evidence to support the final action of the legislators, the fact that automobile emissions controls became a national issue created the need for strong action. This is not to suggest that policy development in this case was simplistic or that the issues were not well examined. However, the example of automobile emissions standards does illustrate well the importance of issue identification and the impetus it gave to legislative action.

Another example of how an issue comes to the attention of policymakers is found in the implementation of several preferential lanes on freeways in U.S. cities. These cases also illustrate quite forcefully the impact of the media on issue identification and maintaining an issue in public awareness. During an experiment to implement a preferential lane on the Santa Monica freeway in Los Angeles, the local newspapers opposed the lane editorially and consistently printed "horror" stories of lane operation. For example, one day after project implementation, a major newspaper called the project "a worthless bauble....Instead of carats, Los Angeles's new 'diamonds' [for Diamond Lane] can be measured in collisions, confusion, and caustic comments from motorists...." One day after the project was ended by court order, this same news-

paper stated that the decision to terminate the project was "a victory for the people over oppressive government. And it was a triumph of common sense over social engineering." It is quite clear from this case that the media played an important role in keeping the issue on the public agenda.

A similar situation occurred in the case of a preferential lane on the Southeast Expressway, the most heavily traveled highway in the Boston metropolitan area. Originally implemented as a means of handling increased congestion caused by reconstruction of the highway, the preferential lane was accepted by most commuters and the media as a necessary restriction on free use of highway space. Transportation officials had also announced that the lane would not be enforced and instead would rely on the voluntary compliance of automobile commuters. When the reconstruction was finished, however, these officials decided to continue the lane and also apply strict enforcement so that the 80 percent violation rate experienced during the early stages of the project could be reduced. Due to this enforcement, the violation rate did decline but congestion in the remaining general-purpose lanes became intolerable. A local newspaper began calling the lane a "flop" and a "war against commuters". When the lane finally succumbed to the political pressure being applied for its termination, the newspaper's headline read "Good News For Xway Commuters--Diamond Dies; No Mourners".

In both the Santa Monica and Boston cases, the media played an important role in keeping the issue alive and making a local or corridor-level transportation issue a regional issue that required action at several levels of government.

POLICY DEBATE AND FORMULATION

Much of the research that has been conducted on the policy development process has focused almost exclusively on the component of policy debate and formulation. In perhaps the best expose of this topic as it relates to urban transportation, Altshuler (16) follows the evolution of transportation policy since the 1950s and discusses it in the context of the political environment in which it has occurred. He concludes that American governments can spend great sums of money to provide additional services but find it extremely difficult to implement programs that, although extremely effective, would inconvenience large numbers of voters. Altshuler categorizes and ranks policy and technical innovations in order of political acceptability as follows:

1. The innovation is one that consumers will buy voluntarily in the marketplace at a price high enough to cover its cost.
2. Among measures that entail some compulsion, the most attractive are those that alleviate widely perceived problems at little or no cost and that either operate on corporate enterprises rather than individual travelers (for example, new-car performance standards) or entail the exercise of traditional governmental powers in relatively unobtrusive ways (such as traffic management improvements).
3. In the next broad category of acceptability are measures that entail significant public or private cost for the benefits they confer but in a manner that permits substantial diffusion and deferment of the blame.
4. The least acceptable innovations are those that entail substantial costs or interference with established patterns of behavior, imposed in such a manner that the blame will fall clearly and inescapably on the public officials who adopt the innovation.

Altshuler uses transportation examples to illustrate each of these categories and succeeds in conveying a sense of the "political acceptability" criterion that makes some government actions more feasible than others.

The literature on policymaking and decisionmaking can be classified in terms of several conceptual models of the actual process of making decisions (17-20). The school of thought that has become very influential in recent years is best represented by the work of Simon (21) and his exploration of the concept of "bounded rationality". Simon points to the cognitive limits that lead decisionmakers to look for solutions that are "good enough":

> In the real world we usually do not have a choice between satisfactory and optimal solutions, for we only rarely have a method of finding the optimum....We cannot, within practicable computational limits, generate all the admissible alternatives and compare their relative merits. Nor can we recognize the best alternative, even if we are fortunate enough to generate it early, until we have seen all of them. We satisfice by looking for alternatives in such a way that we can generally find an acceptable one after only moderate search.

Other well-known works on policy debate and formulation that reflect this school of thought are two by Lindblom (22,23). In both, Lindblom presents a useful explanation of the policy development process and explores the role (and relative influence) of interest groups. Although formal mechanisms such as committee systems and party organizations do exist to allow policymakers to reach agreement, innumerable informal ways are used to achieve mutual adjustment. Policymakers often do no more than point out for each other that the facts are different from what they have been thought to be or that a policy that one official believes he wants does not actually serve his own interests. In other situations, however, this bargaining might take on a more serious aspect and more substantive items could be exchanged.

Lindblom (23) argues that policy development is an incremental process--i.e., an adaptive strategy of policy development that, in recognizing the necessary compromises that must be made to formulate an acceptable policy, adopts incremental changes to the status quo. Based on this model, Jones (24) formulates general characteristics of policy development that could be used to guide an analysis of the process. According to Jones, an analyst could expect to find

1. Limited information and expertise
2. Cautious initial policy decisions, probably directed toward research
3. Variation in problem definition at various levels and between units at the same level
4. Remedies applied to immediate, observable symptoms
5. Limited coordination and communication
6. Slight increments in policy
7. Limited public interest and involvement in decision-making

The analysis that is guided by these characteristics thus tends to be restricted (both in the number of alternatives weighed and in the consequences of each), means oriented, remedial of short-term problems, and fragmented.

In a related work, Braybrook and Lindblom (25) focus on one central model of policymaking--incremental adjustments to the existing policy status

quo: "They [policy analysts] seek to improve their idea of present conditions, policies, and objectives by obtaining more information about them....they often do so by comparing alternatives all of which are similar to the status quo." This model of policymaking presents a limited strategic approach (in both the total number of alternatives considered and the estimation of their consequences), has a means orientation, is remedial of short-term problems, and assumes limited coordination and communication among the key decisionmakers. As stated by the authors (25), it is a strategy characterized by "apparent inattention to needs for completeness and co-ordination."

Dror (26) agrees with this description of the policy development process. He starts by looking at group decisionmaking and then relates the "realities" of this decisionmaking to public policymaking as a whole. For example, one of the characteristics of organizational decisionmaking is that the process "includes much bargaining and coalition formation, in which exchanges of favors, power calculations, personal relations, and similar variables are often the most important influence." In support of Lindblom's concept, Dror continues by saying that "most public policy-making tends to follow the line of least resistance, and to limit searching for alternatives to finding one of satisfactory quality."

These characteristics of policy development--bargaining, limited alternatives, incremental adjustment, and limited use of expertise--might be useful in describing a "normal" process of policy development, but, if Weinberg's thesis of government by crisis management is true, another dimension of policy development must be considered. In relating her work to previous theories, Weinberg (14, p. 211) states that elected officials "make some calculation of values that transcend each particular situation. A primary value for them is maintenance of public support, which no governor knowingly sacrifices to the dictates of 'incrementalism'. In addition, the theory of muddling through does not take into account the fact that elected chief executives do not always make decisions that only marginally affect policies." In crisis situations, decisions are made and policies are formulated with little time for extensive study of the issues. The major considerations in most of these cases are the political consequences attached to each action as they relate to key constituency groups and to the general public.

ROLE OF LEADERSHIP IN POLICY FORMULATION

Leadership is the forcing function of the policy-making process. Leadership can involve analysis and efforts to allocate resources efficiently, but its primary collective function is creation and maintenance of consent, or voluntary agreement of social priorities.

Leaders seek consent for policies they prefer and programs they support. The goals and commitments of different leaders depend on their personal values, their ambitions, the expectations of their many constituencies, and their role and position in the policymaking process.

The way leadership is exercised and the dynamics of consent account for the shape, content, and cost of policy. This point can be illustrated by showing how different leadership roles have shaped transportation policy over the course of recent years. The following discussion focuses on seven leadership roles:

1. Crisis management,
2. Consultation and craftsmanship,
3. Selling,

4. The stimulation of expectations,
5. Mediation,
6. The allocation of resources, and
7. Fiscal restraint.

Crisis Management

Crises are times when consent is relatively easier to obtain because crisis creates the perception that "something must be done." The creation of a federal capital grant program for mass transit illustrates crisis management at work. The deteriorating financial condition of eastern commuter railroads led big-city mayors to propose federal grants in aid for the replacement of aging equipment. The first proposals for federal subsidy were rebuffed by Congress, but abandonment litigation followed and, in brinksmanship fashion, Congress approved the Urban Mass Transportation Assistance Act of 1964.

Consultation and Craftsmanship

Consultation with affected parties is an efficient way to gather information to inform policy development. The art of leadership involves purposeful consultation intended to win support and to inform the crafting of compromise resolutions that satisfy competing interests. This is the context in which "satisficing" occurs--the negotiation of satisfactory agreements that satisfy divergent and often rival interests.

The formula structure of the federal aid highway program offers a case in point: The formulas are crafted to secure the support of states that are both urban and rural, populous and sparsely settled. The cost-allocation structure of highway user taxes is the product of consultation and craftsmanship as well. The taxes paid by different users do not reflect marginal costs; they do reflect the calculus of consent.

Selling

Persuasion is at the heart of governance, and persuasiveness is a critical leadership skill. Transportation programs have established a central position on the public agenda because their advocates were able to link transportation to more important national goals. The magnitude of highway expenditures, relative to, say, health or education, cannot be explained by the value of highways per se. A better explanation of the priority given to highways is the success of their advocates in linking highway spending to the superordinate social goals of national defense, jobs, economic stimulus, and unemployment relief. Transit advocates have linked transit to a succession of superordinate national goals--environmental quality, the revitalization of the cities, the welfare of the poor, and new energy conservation.

Stimulation of Expectations

One role of planning is the analysis of options, but a second role--the leadership role--is the creation of expectations that can be voiced as claims and demands in the political process. The transportation plan that can be implemented must usually satisfy two kinds of demand--both travel demand and constituency claims. Plans and programs offer rallying points for constituencies and can be used as such if planners see leadership as well as analysis as a legitimate professional role. Thus, one test of "good" analysis is its persuasive power.

Mediation

Conflict resolution is a leadership role, and the negotiation of settlements is a leadership skill. The regulation of interstate commerce involves a mediation process as well as an exercise in transportation economics. Mediation involves balancing rather than maximizing, and Interstate Commerce Commission decisions are better understood as brokered settlements than as policies intended to maximize economic efficiency.

Allocation of Resources

The allocation of resources is ostensibly the domain of economics, but in practice it is the central function of political leadership. "The power of the purse" is a critical instrument for creating consent, and the objective of consensus prevails over return on investment in most public budgeting decisions.

Revenue surpluses generated by economic growth have allowed policymakers to approach budgeting as a "fair-share" problem rather than a question of maximizing social return. The geographic and jurisdictional apportionment of federal transportation funds reflects the fair-share dynamic at work.

Leadership in resource allocation is exercised by the Ways and Means Committees of Congress and state legislatures and the finance committees of local city councils. But it is also exercised by aggressive program administrators and attentive interest groups and trade associations. DOT and the American Public Transit Association worked together, for example, to obtain a presidential commitment to reserve a share of the receipts from the windfall oil profits tax for mass transit.

Fiscal Restraint

The calculus of consent involves the delivery of program benefits, but it also entails the burden of taxation. Easing or containing the tax burden is a leadership role that is fundamentally different from the six roles explored above, but it is no less important in maintaining political support and social consent.

Historically, the advocates of fiscal restraint have tested public policy against three cardinal principles:

1. Limited government: Can the function be performed by private enterprise?
2. Local control: Can the function be performed by the unit of government closest to the citizenry desiring the service?
3. User financing: Can the program be financed through beneficiary taxes or fees?

These three principles amount to a consent equation: New programs should be able to command supplementary taxes agreeable to those who will pay them.

Over the past three decades, the disciplinary role of fiscal restraint has been eroded by the increasing federal role in program finance and by the revenue dividend produced by rapid economic growth. During this period, consent policies operated on the supply side of the expenditure equation while the politics of restraint on the tax side of that equation were more or less suspended by the revenue bonuses associated with rapidly growing income-tax collections.

With economic growth slowing and real income in decline, the leadership role of fiscal restraint may regain primacy. This would seem to be the lesson of California's Proposition 13 and similar tax-limitation initiatives elsewhere.

If the policies of consent swing toward fiscal

restraint, transportation programs could be affected significantly. For example, highway and transit facilities that use federal funds as capital might have to be maintained and operated with a larger-than-anticipated share of local funds. Thus, there may be serious long-term financial liability in using "free federal funds" if the anticipated level of operating and maintenance assistance is not forthcoming from the federal government.

If maintaining consent requires increasingly stringent fiscal restraint, a shift in some of the leadership roles discussed above would probably also follow, as it did in California after Proposition 13. In California, leadership roles styled around program promotion gave way to leadership roles styled around fiscal restraint; planning for new programs and facilities was subordinated to planning for cost containment and improved efficiency; mediated settlements tilted in the direction of cost control, to the disadvantage of public employees; and greater emphasis was placed on earning revenues through performance, a shift away from allocation rules based on fair-share entitlements.

As these examples indicate, the same leadership role can be played according to different rules: program promotion or fiscal restraint. Thus, policy can veer more dramatically than incrementalist theory would predict. The constant is the interplay of leaders performing their collective function of creating and maintaining social consent.

In summary, the debate and formulation of policy are often characterized by limited information, variations in problem definitions, a tendency toward incremental change, and a focus on developing a consensus among key actors and supporting groups. The role of leadership in this context is thus the creation and maintenance of consent. Given this description of the policy formulation process, the role of analysis becomes one of informing the process and of providing information that is needed by policy leaders to develop a coalition around a particular issue.

A good example of the debate and policy formulation process that often occurs in the governmental sector is a recent fiscal crisis faced by the Massachusetts Bay Transportation Authority (MBTA), the transit agency that serves the metropolitan Boston region. The MBTA provides commuting services for approximately 200 000 persons daily, many of whom have no other means of transportation. The financing of the MBTA service has a long and troublesome history of conflict between the cities and towns that receive the service and the state, which runs the MBTA. For the past several years, the cities and towns had budgetary approval power but had no way of influencing the management and provision of service without causing the system to shut down, an action that most politicians were against. Thus, although the cities and towns within the MBTA service district had to pay 50 percent of the deficit, they had no say in management affairs. However, dramatically increasing deficits, a perception of inept management at the MBTA, newspaper articles showing the MBTA to be the most inefficient transit system in the country, and, perhaps most importantly, a voter referendum that severely reduced tax revenues to the cities and towns influenced mayors and other town officials to vote down increased budget requests and thus created the possibility that the MBTA would go bankrupt.

Given an impasse between the Governor and local officials, the state legislature was called into special session to solve the problem and itself became bogged down in a series of conflicts. Legislators from the western part of the state would not agree to any proposal that did not curb some of the "excesses" of the MBTA. The business community was applying heavy pressure so that the MBTA would not shut down during the Christmas season. Young legislators were viewing the issue as an opportunity to further their careers and challenged the positions of some of their older colleagues. The labor unions were lobbying against measures that would reduce their influence. Throughout the legislative debate, legislators referred to a recently passed voter referendum that placed a limit on property tax revenues as justification for dramatic changes in the operation of the MBTA. The courts also played a major role throughout the process by declaring some actions illegal and thus forcing a resolution of the conflict.

Because there were so many groups involved with a large number of divergent views, no consensus could be reached and the MBTA actually shut down for one day for lack of funds. With the shutdown, however, the MBTA "problem" became a crisis and a compromise was quickly worked out. The interesting aspects of this compromise were the following. The fundamental problem that had to be addressed, i.e., the funding of the MBTA, was not solved in any long-lasting manner. Funds were provided to keep the system running to the end of the year, but with no change in the funding mechanisms the possibility of another MBTA crisis in the following year was great. Thus, the policy outcome was incremental in nature. The major actors involved in the policy debate all had their own definitions of what the problem was and, of course, how the problem should be solved. No clear leadership role was played by any of the key actors, and the debate thus often seemed as if it had no direction. Finally, very little analysis was conducted on the options that were being considered. The compromise was very much a product of political negotiation and bargaining, and the final solution remained open to different interpretations and legal challenges.

POLICY IMPLEMENTATION

Although practitioners and academicians have not agreed on a precise definition of implementation, both seem to agree that for too long the processes, problems, and possible paradigms that come into play when a policy is carried out have been ignored. Going one step further, the challenge for policymakers and policy analysts is to make the difficulties of implementation a part of the initial formulation of policy. As stated by Pressman and Wildavsky (27), implementation "must be conceived as a process that takes place after, and independent of, the design of policy. Means and ends can be brought into somewhat closer correspondence only by making each partially dependent on the other." They go one step further and suggest ways in which policy might be designed to facilitate implementation: "An appreciation and unpredictability of necessary decision sequences in implementation should lead the designers of policy to consider more direct means for accomplishing their desired ends," and policymakers should "pay as much attention to the creation of organizational machinery for executing a program as for launching one."

Much of the recent literature on policy implementation has focused on the organizational aspects of program implementation (28,29). There are several ways to view problems of implementation from an organizational perspective. The "rational", systems approach assumes that implementation is always goal directed and value maximizing, that responsibilities for performance will be assigned to organizational subunits consistent with these objectives, and that system performance will be monitored and changes

made to enhance goal attainment. The bureaucratic perspective views implementation as identifying where organizational discretion is concentrated and what standard operating procedures will be needed to implement the policy. The organizational development model says that the implementation process is necessarily one of consensus building and accommodation between policymakers and implementers. The last perspective, implementation as conflict and bargaining, focuses on the distribution of power within organizations and how this power is manifested in the complex series of bargained decisions reflecting the preferences and resources of participants (30,31).

Bardach (32) views the implementation process in a slightly different way. He states that the essential implementation problem is "to control and direct the vast profusion of program-related activities carried on by numerous and disparate organizations and individuals so as to achieve program objectives, keep costs down, and reduce delay." Although some have viewed implementation as a process subjected to pressure politics (33), as an attempt to mass "assent" (34), as an administrative control process (18,35,36), and as a process of intergovernmental bargaining (37), Bardach considers the implementation process as a system of loosely interrelated games whereby critical program elements are withheld from or delivered to the program "assembly" on particular terms. One way for analysts to develop good implementation strategies is to design scenarios that answer the questions of what games will be played (e.g., easy money, budget, or funding) and how the policy will deal with problems of incompetency, variability in the objects of control, and coordination.

At a more macro level, Berman (30) examines the hypothesis that implementation problems stem mostly from the interaction of a policy with its institutional setting. Berman distinguishes between the macro implementation problem--i.e., the attempt of the federal government through policy action to influence local delivery organizations--and micro implementation, which is the manner in which these local agencies respond to the federal actions. As Berman states, federal policy takes place in a "loosely coupled setting in which (a) many actors interact to determine who gets what, and when, and how, and (b) policy passes through and is transmuted by successive levels of implementing operations."

A book by Nakamura and Smallwood (38) provides the best overview of the policy implementation process. In this book, the authors examine several components of the policy development process--policy formation, policy implementation, policy evaluation, and judicial implementation--and examine the necessary linkages between them to make the overall process successful. As stated in their concluding section on policy implementation,

The implementation environment is characterized by a high degree of diversity, fluidity, and complexity in terms of actors, arenas, bureaucratic imperatives, linkages, and compliance mechanisms. The formal implementers face the task of attempting to coordinate and orchestrate this environment in an effort to carry out policy directives that can be ambiguous and diffuse. Their tasks can be compounded by the need to reconcile their implementation responsibilities with the internal norms that tend to influence behavior within their own institutional settings. Additional complexity results from the growing use of outside intermediaries who are relatively immune to many of the negative sanctions traditionally employed in an effort to en-

sure compliance. As a result, the implementation environment has become increasingly more political, and bargaining and other forms of negotiation have taken on growing importance in the implementation process.

The policy implementation process is a dynamic process that requires the participation of those involved with establishing the policy and those charged with the responsibility for carrying it out. At the state level, for example, there is considerable interchange between legislators as individuals, legislative committees, legislative staff, a state DOT staff, and constituent groups. The important point to consider, however, is that the implementation process shapes the way the policy is perceived by those who must respond and hence is an important factor in ensuring a favorable response to or compliance with policy and program directives.

A useful case in the transportation sector that illustrates the dynamics of the implementation process and the importance of the linkages between policy formation and implementation is the promulgation of the transportation system management (TSM) regulations by the Federal Highway Administration (FHWA) and the Urban Mass Transportation Administration (UMTA). In an effort to establish at the local level a process in which short-range, low-cost planning activities could effectively compete with long-range, high-capital planning, and also to strengthen the role of the MPO in regional transportation planning and programming, FHWA and UMTA issued a TSM regulation that required that the transportation plan for a metropolitan region consist of a long-range element and an element that addresses the short-range transportation problems of the area and that those projects programmed for construction be drawn from these elements. Also included was a unilateral requirement from UMTA that reasonable progress be demonstrated in implementing previously programmed projects. The MPO was given responsibility for coordinating these activities. The TSM regulation was thus intended to bridge policy and planning at the local level and, it was hoped, to establish a complete tie to action through the project programming process.

The response to these regulations was not encouraging. One of the principal reasons for the many problems encountered in this program was that an effective strategy for implementing the TSM program did not exist (39). The field staffs of both UMTA and FHWA were not actively involved in policy formation and thus were often unable to answer questions from local officials on the content of the policy document. No incentives were provided to regional or local planners to respond in the desired manner; i.e., no effort was made to develop a program constituency. The ambiguity of the policy statement also created serious confusion in implementation and response. In sum, the implementation of the TSM program was severely hampered by a lack of effort during policy formation to consider the characteristics of the implementation environment and to develop either a policy reflective of these characteristics or a strategy to change them.

CONCLUSIONS

As the discussion above indicates, the public policy development process can be complex and often continuously in flux. The need to understand this process, however, is great if we expect the political process to provide the answers to the major problems facing the transportation sector. Unfortunately, little effort is being made to create this awareness among the existing transportation community or in

university transportation education programs where future transportation professionals are currently being educated. A minimal amount of research has been undertaken to examine in detail the policy-making process in the transportation arena.

During the past 10 years, there has been a growing concern in the transportation profession about the "institutional" problems and barriers that characterize project implementation or program management. Many of these institutional problems can often be related to a lack of understanding among transportation professionals of the characteristics of policy development. Such professionals could have an increasingly less influential role in decisionmaking due to their inability to understand the policy process and manage the complex political interaction of a major program or project.

There are two major areas of research that can contribute to an improved policy development process and ultimately more effective policy outcomes. The first research area relates to the role of analysis in decisionmaking and how analysis can better inform the policymaking process. The major research focus in this area is on determining the major characteristics of the decisionmaking process in alternative policy contexts so as to identify the types of analysis (i.e., the kind of information) needed to support effective decisionmaking, the analysis tools necessary to provide this support, and the interaction between analysts and policymakers. Some research has been conducted in this area, but in most cases this research has not made the linkage between the tools of analysis (and the information derived from this analysis) and the characteristics of the decisionmaking process.

The second research area is an examination of the policymaking process itself to identify how, if at all, this process can be improved. This might include an investigation of who should be involved in decisionmaking, the criteria that should be considered in making policy decisions, the major issues likely to be faced in later years due to decisions made in the short term, and the factors that should be included in a policymaking process. For example, earlier sections of this paper discussed the need of incorporating implementation considerations into the policymaking process. How is this to be done? What are alternative ways of viewing implementation? What are the characteristics of alternative strategies to overcome the barriers to implementation?

Both of these research areas are different from much of the research that is currently undertaken in the transportation sector and would require for its advancement support and commitment from the transportation community, above all from government agencies and universities. However, given the growing complexity of the issues facing transportation, such research is necessary if we are to solve the problems that will be faced in this decade.

REFERENCES

1. A.A. Altshuler and R.W. Curry. The Changing Environment of Urban Development Policy: Shared Power or Shared Impotence? Urban Law Annual, Winter 1976.
2. J. Roark and M. Meyer. Conference Summary and Findings. In Transportation System Management in 1980: State of the Art and Future Directions, TRB, Special Rept. 190, 1980, pp. 3-8.
3. D. Lerner and H. Lasswell. The Policy Sciences. Stanford Univ. Press, Palo Alto, CA, 1951.
4. T. Dye. Understanding Public Policy. Prentice-Hall, Englewood Cliffs, NJ, 1978.
5. D. Easton. The Political System. Knopf, New York, 1953.
6. H. Lasswell and A. Kaplan. Power and Society. Yale Univ. Press, New Haven, CT, 1970.
7. D. Schooler, Jr. Science, Scientists, and Public Policy. The Free Press, New York, 1971.
8. R.F. Baker, R.M. Michaels, and E.S. Preston. Public Policy Development: Linking the Technical and Political Processes. Wiley, New York, 1975.
9. F. Colcord, Jr. Urban Transportation Decision-Making: Summary. U.S. Department of Transportation, 1974.
10. Office of Technology Assessment. An Assessment of Community Planning for Mass Transit: Summary. U.S. Government Printing Office, 1976.
11. J.F. Coates. What Is a Public Policy Issue? Presented at Symposium on Judgment and Choice in Public Policy Decisions, Annual Meeting of American Assn. for the Advancement of Science, Denver, Feb. 23, 1977.
12. C. Jones. An Introduction to the Study of Public Policy. Duxbury Press, Belmont, CA, 1970, pp. 27-67.
13. D. Truman. The Governmental Process. Knopf, New York, 1951.
14. M. Weinberg. Managing the State. M.I.T. Press, Cambridge, MA, 1977, pp. 208-230.
15. H. Margolis. The Politics of Auto Emissions. Public Interest, No. 49, Fall 1977.
16. A. Altshuler. The Urban Transportation System: Politics and Policy Innovation. M.I.T. Press, Cambridge, MA, 1979.
17. P.G.W. Keen and M.S. Scott Morton. Decision Support Systems: An Organizational Perspective. Addison-Wesley, Reading, MA, 1978.
18. G. Allison. Essence of Decision, Explaining the Cuban Missile Crisis. Little, Brown and Co., Boston, 1971.
19. I.L. Janis. Victims of Groupthink. Houghton Mifflin, Boston, 1972.
20. R.F. Elmore. Organizational Models of Social Program Implementation. Public Policy, Vol. 26, No. 2, Spring 1978.
21. H.A. Simon. A Behavioral Model of Rational Choice. In Models of Man, Wiley, New York, 1957.
22. C. Lindblom. The Policy-Making Process. Prentice-Hall, Englewood Cliffs, NJ, 1968, pp. 62-115.
23. C. Lindblom. The Science of "Muddling Through". Public Administration Review, Vol. 19, 1959, pp. 79-88.
24. C. Jones. Clean Air, the Policies and Politics of Pollution Control. Univ. of Pittsburgh Press, Pittsburgh, PA, 1975.
25. D. Braybrooke and C. Lindblom. A Strategy of Decision. The Free Press, New York, 1970, pp. 61-79.
26. Y. Dror. Public Policymaking Reexamined. Chandler, San Francisco, 1968, pp. 78-98.
27. J. Pressman and A. Wildavsky. Implementation. Univ. of California Press, Berkeley, 1973.
28. R. Elmore. Organizational Models of Social

Program Implementation. Public Policy, Spring 1978.

29. W. Williams. Implementation Analysis and Assessment. In Social Program Implementation (Williams and Elmore, eds.), Academic Press, Washington, DC, 1976.

30. P. Berman. The Study of Macro and Micro Implementation. Public Policy, Spring 1978.

31. H. Ingram. Policy Implementation Through Bargaining: The Case of Federal Grants-in-Aid. Public Policy, Fall 1977.

32. E. Bardach. The Implementation Game: What Happens After a Bill Becomes Law. M.I.T. Press, Cambridge, MA, 1977.

33. J. Murphy. The Education Bureaucracies Implement School Policy: The Politics of Title I of ESEA, 1965-72. In Policy and Politics in America (A.P. Sindler, ed.), Little, Brown and Co., Boston, 1973.

34. D. Bunker. Policy Sciences Perspectives on Implementation Processes. Policy Sciences, March 1972.

35. M. Halperin. Bureaucratic Politics and Foreign Policy. Brookings Institution, Washington, DC, 1974.

36. A. Downs. Inside Bureaucracy. Little, Brown and Co., Boston, 1967.

37. M. Derthik. New Towns In-Town. Urban Institute, Washington, DC, 1972.

38. R.T. Nakamura and F. Smallwood. The Politics of Policy Implementation. St. Martin's Press, New York, 1980.

39. M. Meyer. Organizational Response to a Federal Policy Initiative in the Public Transportation Sector: A Study of Implementation and Compliance. Massachusetts Institute of Technology, Cambridge, Ph.D. dissertation, June 1978.

Los Angeles Urban Transportation: Who Has the Power?

PETER L. SHAW AND RENEE B. SIMON

In 1976, the California Legislature took a bold step toward untangling the transportation planning snarl that has characterized Southern California. Believing that only a new and innovative transportation policy planning and coordinating institution could solve the problems, the legislators adopted Assembly Bill 1246, which created transportation commissions in four Southern California counties: Los Angeles, Orange, Riverside, and San Bernadino. Of the four, Los Angeles is the largest and faces the most complex and difficult-to-solve transportation problems. The development, structure, authority, and operations of the Los Angeles County Transportation Commission are described. The Commission is directed by 10 of the principal county and city elected officials and one citizen member. Its powers include short-range planning, policy and program development, project selection, new system development, and resource generation and allocation (power of the purse). For Southern California, this particular blend of powers and institutional form is innovative and has the potential for making significant public policy impacts. The Commission is fully operational and is involved with a solid schedule of activities. Not all of its major powers are being used, but most are, and the impact is slowly being felt on the decisionmaking process.

In 1976, the California Legislature took a bold step toward untangling the transportation planning snarl that has characterized Southern California. Believing that only a new and innovative transportation policy planning and coordinating institution could solve the problems, the legislators adopted Assembly Bill (AB) 1246, which created transportation commissions in four Southern California counties: Los Angeles, Orange, Riverside, and San Bernardino. Of the four, Los Angeles is the largest and faces the most complex and difficult-to-solve urban transportation problems. Therefore, its Commission warrants particular study as an experiment in transportation problem solving.

The Los Angeles County Transportation Commission (LACTC) is directed by 10 of the principal county and city elected officials and one citizen member. Its political power base was a critical factor in the legislative intent of the bill. The state legislators, out of frustration with a transportation policy history often marked by disagreement and lack of coordination and progress, mandated that the county's key decisionmakers sit together as a single policy board to discuss, decide, and act in concert.

They gave the Commission powers for short-range planning, policy and program development, project selection and new system development, and resource generation and allocation (the power of the purse). This particular blend of powers and institutional form is innovative, has the potential for making significant public policy impacts, and could become a model for other urban areas. Reinforcing this perspective is an early Commission staff self-perception taken from an LACTC staff budget memorandum of April 26, 1978:

> The Los Angeles County Transportation Commission is a creature of state law. Unlike some voluntary agencies, it has a legislative mandate—to coordinate transportation planning and development in Los Angeles County. Many different reasons are cited as motivating factors for establishing the Commission. They include the need to get the best value for the public's transportation dollar, the need for better integration of highway and public transportation development, the importance of developing a realistic transit program supported by this area's political leadership, and so forth.
>
> The important fact is that the Commission exists. There are no precedents for this kind of transportation policy and programming agency. Unlike SCAG [the Southern California Association of Governments], we are not regional planners; unlike Caltrans [the California Department of Transportation], SCRTD [the Southern California Rapid Transit District], and other implementing agencies, we are not builders and transportation system operators. To the Commission is entrusted responsibility for policy-setting, programming of federal and state funds and priority-setting, among competing projects. In this sense, the Commission is truly an experiment in government.
>
> This experiment in government is evolving: defining priorities, allocating funds, establishing relationships.