

University of Pennsylvania

Law Review

FOUNDED 1852

Formerly
American Law Register

VOLUME 122

NOVEMBER 1973

NUMBER 1

THE LEGAL STRUCTURE OF FRUSTRATION: ALTERNATIVE STRATEGIES FOR PUBLIC CHOICE CONCERNING FEDERALLY AIDED HIGHWAY CONSTRUCTION*

JERRY L. MASHAW†

One of the grand problems of society is to distinguish between those problems which are soluble by methods of reason and those which had better be left to preference.¹

TABLE OF CONTENTS

I.	INTRODUCTION	3
II.	THE STATUTORY HISTORY	5
	A. <i>The Core Developmental Thrust</i>	6
	B. <i>Socialization Trends</i>	9
	1. The Role of Local Governing Bodies	9
	2. Social, Economic and Environmental Considerations	10
	3. Planning	10
	4. Citizen Participation	11
	5. Relocation	12

*The research for this Article was supported in part by a grant from the National Science Foundation, administered by the Center for Science, Technology and Public Policy at the University of Virginia. The author is grateful to the Center not only for its financial support, but also for the advice and encouragement of its Director, Professor Mason Willrich.

† Professor of Law, University of Virginia. B.A. 1962, LL.B. 1964, Tulane University; Ph.D. 1969, University of Edinburgh. Member, Louisiana Bar.

¹H. HART & A. SACKS, *THE LEGAL PROCESS* 123 (tent. ed. 1958).

III.	BETWEEN THE PROMISE AND THE FULFILLMENT LIES ADMINISTRATION	13
	A. <i>Administration of the Federal-Aid Highway Program</i>	14
	B. <i>An Appreciation from the Administrative Perspective</i>	15
	1. Need	17
	2. Local Control	19
	3. Environmental, Economic and Social Considerations	21
	4. Citizen Participation	21
	C. <i>The Citizen's Lament</i>	22
	1. Public Hearings	22
	2. Local Planning	24
IV.	HIGHWAY LITIGATION	29
	A. <i>State Judicial Review</i>	30
	B. <i>Federal Judicial Review</i>	33
	1. The Party Defendant	33
	2. Review of Federal Administrative Enforcement ..	38
	a. <i>Procedural Issues</i>	38
	b. <i>Substantive Review of the Secretary's Decision</i> ..	40
	(i) Review Under Provisions Narrowly Limiting the Secretary's Authority: <i>Overton Park</i> and Section 138	40
	(ii) Review Under Less Restrictive Provisions of the Highway Code	44
V.	SOME SOLUTIONS TO THE HIGHWAY PROBLEMS	51
	A. <i>Tinkering with the Financing Scheme</i>	51
	B. <i>Facing the Problem of Public Choice</i>	54
	1. Organizational Solutions	54
	a. <i>Rationality and the Systems Approach</i>	55
	b. <i>Democratization: The Problem of Guarantees</i> ..	62
	(i) Weighted Participation	63
	(ii) Judicialization	64
	(iii) Planning with People	67
	c. <i>Summary</i>	69
	2. Pricing	70
	a. <i>Common Objections to Road Pricing</i>	73
	b. <i>Some More Serious Issues</i>	77
	(i) The "Marginal Cost" Debate	77
	(ii) Cost Allocation	85
	(iii) Competition	89
	(iv) Market Failure	90

3. A Composite Scheme	93
VI. CONCLUSION	96

I. INTRODUCTION

Building highways is certain to cause trouble. The enterprise must contend with the schizophrenia of a populace which chafes at any obstacle to freedom of movement in its role as consumer of transportation goods and services and yet demands in its capacity as landowner, conservationist or merchant that transportation facilities be constructed (or not constructed) in a manner which maximizes nontransportation values. Almost everybody tends to be for highways—provided that they go through somebody else's back yard while remaining close enough to his own property to provide access without loss of other amenities.² But it is not only that we are differentially affected by particular highway projects that creates dissension. Even if we could agree on the broad categories of things that are valuable to all of us and that we would like considered in highway planning,³ we would not be likely to rank them in the same order of priority. We are faced here, as in so many other areas, with developing a system of public choice which optimizes the realization of the demands of the whole populace within the constraints of limited resources.

The Federal-Aid Highways Acts' solution to this problem has not been getting a very good press recently. In part this may be the result of the quite phenomenal number of lawsuits that have been filed over the past four or five years for the purpose of enjoining the use of federal funds for particular highway projects. Press reports of lawsuits pitting citizens' groups against government functionaries and their bulldozers are likely to make the government look somewhat insensitive, even boorish, however objective the reporter (and of course not everyone is attempting to be neutral or objective) and whatever the technical legal claims involved or the eventual outcomes in litigation. This David versus Goliath imagery would seem to apply whether the

² Compare *Hearings on H.R. 17134 Before the Subcomm. on Roads of the House Comm. on Public Works*, 90th Cong., 2d Sess. 266-75 (1968) with HIGHWAY RESEARCH BOARD, TRANSPORTATION AND COMMUNITY VALUES (1969) (Special Rep. No. 105).

³A reasonable consensus listing appears in HIGHWAY RESEARCH BOARD, *supra* note 2, at 6-7.

“citizens” are seeking to protect parks, Indian lands, low-income or minority housing and historic sites, or whether they are concerned about local businesses, the stately oaks of the rich and such abstract environmental values as the contours of an ancient ice-carved valley.

A summary of the federal highway program’s popular criticisms would include: spoiling the landscape; destroying the inner city; fouling the air; contributing to unemployment, crime and delinquency; robbing the cities of tax base; intensifying the housing problem; and preventing the construction of the kind of transportation that we really need.⁴

Because many people take one or all these indictments to be true, they also suppose that this disaster could not have occurred without the conscious direction of persons whose self-interest is served by causing the nation’s transportation policy to run amuck.⁵ The burden of this Article is that this Devil Theory is wrong; that while there may be failures in the conception and execution of highway policy, they are the common failures of public policy choice in programs of large scale which have significant and multiple social impacts. The highway program has its share, but probably no more than its share, of villains.

I shall also argue that the failures of the highway program’s decision process are not easily remedied. There is ultimately a rather short list of available techniques for improving public choice. Increased democratization of the decision process, more rational or systematic evaluation techniques and increased use of pricing and market allocation probably exhaust the universe. The analysis which follows will emerge as skeptical about the application of any of these potential models for reform to the highway (or to any other public) program, save in combination and in moderation. “Democracy,” “rationality,” and “market allocation” all represent values which are generally recognized in our society but which often conflict in their operation because they give different weights to competing interests. For example, democratic decisionmaking, in the form of majority rule, will very likely give a different weight to consumer preference than would market allocation applied to the same investment decision. The choice of one of these approaches as the sole method for determining when, where and how we should invest in public roads may preclude consideration of competing values

⁴See, e.g., A. MOWBRAY, ROAD TO RUIN (1969).

⁵See, e.g., B. KELLY, THE PAVERS AND THE PAVED (1971).

or interests which would be dominant, or at least influential, were a different method of public choice employed. Moreover, all of these techniques for making public choices reveal serious limitations if we attempt to apply them systematically to public investment problems such as roadbuilding. Thus, if we intend to optimize the values of the whole society when making decisions about public roads, careful analysis, moderation and compromise are in order.

I shall begin by describing in some detail the statutory framework and administrative processes involved in federally aided highway construction. I shall then survey some of the stresses that have emerged in the existing decisional system and the role of litigation and judicial review in "righting the wrongs" of the highway program. Finally, I shall analyze proposals for reform which fall roughly under the headings of "rationality," "democratization" and "pricing." The conclusion is ultimately inconclusive, although an argument is advanced for the experimental introduction of pricing—the only major strategy for public choice as yet untried in the highway program.

II. THE STATUTORY HISTORY

The problem of organizing public decisionmaking about highways is complex. If we ask, for example, whether public provision of highways should be carved out of the whole of public policy planning for separate treatment, the answer will surely be, "no." We will immediately see that highway building is intimately connected with a whole range of other societal goals and programs. Surely decisions concerning the allocation of resources to highway construction are critically relevant to similar issues with respect to alternative modes of travel. And even were we to have a general transportation agency, its relationship to transportation agencies in other jurisdictions and the potential tensions between the goals of the transportation agency and those of local land use planners, the state air pollution control agency, or the department of natural resources must be considered. Yet existing government organization recognizes separate agency roles in all these areas. We generally concede that outside the family unit (and perhaps within it) we must pursue different purposes through different organs and coordinate their activities as best we can.

The problems of coordination become even more complex

when we realize that in addition to definitions of agency role based on subject matter and geographical jurisdiction we also find it convenient to provide agencies which specialize functionally (for example, in ratemaking, whether the subject matter is electricity, insurance or motor freight) or which have a role which is defined in terms of a particular clientele, such as the antipoverty agency. Indeed, it may be perfectly rational to organize administration according to subject matter, geography, function or clientele, but it is highly unlikely that the structure of any agency will reflect all these criteria for organization and hence suit all our purposes.

We generally attempt to make fragmented authority responsive to our goal of optimizing the demands of the whole populace by requiring either that an agency established to implement a particular purpose consider in its decisionmaking the impact of its decision on other stated societal values or goals,⁶ or that the agency in some fashion coordinate its action with other agencies, groups or individuals who represent values that we wish to be considered or protected.⁷ Of course, both of these approaches may be taken concurrently,⁸ and there are a significant number of variations on each. The agency may be free to pursue its primary mission substantially unrestrained, or its programs may be subject to vetoes in favor of other interests or values. The balance to be struck between these extremes will be the result of a number of competing considerations, including getting the job done, expertise thought to be required, initial value orderings, intensity of affected interests and the wit of the draftsman.

The history of the development of federal standards in the federal-aid highway program is a history of the growing recognition of these complexities. Moreover, it is a history which reveals significant progress toward the goal of responsive, informed, polycentric decisionmaking.

A. *The Core Developmental Thrust*

The initiation of the Federal-Aid Highways Program had a major impact on the administrative organization of road

⁶See, e.g., 42 U.S.C. § 4332 (2)(c) (1970) (impact on environmental values).

⁷See, e.g., 40 *id.* §§ 531-54; 42 *id.* §§ 4201-44.

⁸The modern federal law concerning standing to review the decisions of administrative agencies and to participate in their decisional processes suggests that when an agency is required to consider certain interests or values it is very likely to be called

building. Until the Federal-Aid Road Act of 1916⁹ roads were normally built and maintained by localities and turnpike companies.¹⁰ With the advent of federal aid the provision of public roads very quickly became a responsibility largely of state government with federal assistance. Moreover, the federal government early recognized the importance of federal influence in the expenditure of grant funds in order to assure the effectuation of federal policy.¹¹

The federal government's participation in roadbuilding has always been based on the notion that the primary national interest involved was the provision of a linked system of toll free¹² roads, for the movement of persons and goods in interstate commerce. Hence, aid is available only to the extent that a project is recognized as a part of a federal-aid highway system,¹³ and the major funding effort has been made with respect to the primary system which carries largely interurban transportation.¹⁴ To further insure that federal money not be frittered away on small improvements on diverse segments of roadway, the percentage of a state's highways that may be included within the federal-aid primary system is limited,¹⁵ and inclusion within any system is conditioned upon the road forming part of a long-range plan for development of highway networks to serve the major classes of travel.¹⁶

To promote this "systems-development" goal the states are

upon to admit parties who represent those interests into some aspects of its decision processes. *See, e.g.*, National Welfare Rights Org. v. Finch, 429 F.2d 725, 733-35 (D.C. Cir. 1970); Office of Communication of United Church of Christ v. FCC, 359 F.2d 994, 1002-06 (D.C. Cir. 1966). *See also* Annot., 11 A.L.R.3d 536, 569-74 (1972).

⁹Act of July 11, 1916, ch. 241, 39 Stat. 355.

¹⁰*See* Netherton, *Intergovernmental Relations in the Federal-Aid Highway Program*, 1 URB. L. ANN. 15, 16-17 (1968).

¹¹*See* Message of President Harding to Congress, *quoted in id.* 17-18. The occasional proponent of contrary views, *e.g.*, REPORT OF THE PRESIDENT'S COMMISSION ON INTERGOVERNMENTAL RELATIONS 219-20 (1955), has been lost in the deluge of subsequent legislation.

¹²23 U.S.C. § 301 (1970). *But see id.* § 129 (allowing toll roads on federal-aid systems).

¹³*Id.* §§ 103-05.

¹⁴The apportionment of "ABC" funds (primary, secondary, urban extensions) has always favored the primary system of "main highways." *See, e.g.*, Federal-Aid Highways Act of 1970, § 105, 23 U.S.C. § 105 (1970). Since the creation of the highway trust fund in 1956, Act of June 29, 1956, ch. 462, tit. II, § 209, 70 Stat. 397, the emphasis has been on completion of the interstate system between major metropolitan and industrial centers, a policy fostered by completion deadlines, gigantic appropriations and a 90-10 sharing formula, 23 U.S.C. § 120(c) (1970).

¹⁵23 U.S.C. § 103(b) (1970).

¹⁶23 C.F.R. § 1.6(c) (1973). Major classes of travel also include farm-to-market roads, which have always received federal support, and intraurban traffic, which is recognized under the urban extensions category and the new urban system provided for in the Federal-Aid Highways Act of 1970, 23 U.S.C. § 106(b) (1970).

required to have highway departments with sufficient authority to carry out the duties imposed by federal legislation.¹⁷ This authority must include responsibility for all projects, whether or not constructed by the department, and final decisional authority on matters relating to compliance with federal law.¹⁸ The state departments have been exhorted to consider local needs to the extent "practicable, suitable, and feasible,"¹⁹ and there is a special role for localities in secondary systems planning.²⁰ Beyond these requirements federal standards have until recently been concerned almost exclusively with engineering questions²¹ or other technical matters unrelated to the planning and location of facilities.

The federal-state highway engine is fueled by protected revenues at both the federal and state levels. At the federal level money is generated by tax dedications to the Highway Trust Fund,²² which until recently has been available only for highway planning and construction²³ and is still largely restricted to those purposes. Urged on by the Hayden-Cartwright Amendment of 1934,²⁴ which provided for withholding of federal aid to states which devoted highway user tax revenues to highway construction at less than their 1934 level, all states have, by custom, statute or constitution, pledged highway user taxes to highway construction.²⁵ As might be expected, the method of funding highway construction has become a major battleground for pro- and antihighway forces.

¹⁷23 U.S.C. § 302(a) (1970).

¹⁸23 C.F.R. § 1.3 - .4 (1973).

¹⁹23 U.S.C. § 101(b), 109(a) (1970).

²⁰*Id.* §§ 105(b), 106(b), 117.

²¹*Id.* § 109(a)-(f) (encompassing the pre-1970 view). The 1970 Act broadened the scope of federal concern to include economic, social and environmental aspects of construction. *Id.* § 109(h) (1970).

²²Act of June 29, 1956, ch. 462, tit. II, § 209, 70 Stat. 397, *as amended*, Act of Sept. 21, 1959, Pub. L. 86-342, tit. II, § 202, 73 Stat. 615.

²³The Federal-Aid Highways Act of 1973 allows trust funds allocated to any of the federal-aid systems to be used for the construction of bus lanes, bus passenger loading areas and parking facilities for "bus and other public mass transportation passengers . . ." Pub. L. No. 93-87, § 121(a), 87 Stat. 259. (The 1973 formulation represents some loosening of restrictions on the use of trust funds for bus lanes and fringe parking imposed by 23 U.S.C. § 142(d) (1970).) The 1973 Act also makes available trust funds allocated to the urban system for the construction of fixed-rail facilities and the purchase of trains and buses. Pub. L. No. 93-87, § 121(a), 87 Stat. 259-60.

²⁴23 U.S.C. § 126(a) (1970).

²⁵Netherton, *supra* note 10, at 27-38. The importance of this self-financing aspect of highway construction can hardly be overestimated. In Virginia, for example, the 1968-1970 appropriations reveal that the largest item in the state budget was the special fund appropriation for highways. Commonwealth of Virginia Budget, 1968-70 xvi (1968).

B. *Socialization Trends*

Beginning in 1958 with the requirement that projects bypassing or going through towns be approved for federal aid only on certification that opportunity for public hearing has been afforded and that the economic effects of the location have been considered,²⁶ a series of interrelated standards concerning comprehensive transportation planning, local control, citizen participation, environmental quality, relocation housing and social values have been grafted onto the federal-aid highway program.²⁷ These requirements have been contained not only in the Federal-Aid Highways Acts, but also in general legislation such as the Intergovernmental Cooperation Act of 1968²⁸ and the National Environmental Policy Act of 1969 (NEPA).²⁹

1. The Role of Local Governing Bodies

Although the interests of localities have never been forgotten in the federal-aid highway program³⁰ the role of the local governing body has been strengthened recently by requirements for: public hearings;³¹ state highway department certification that highway projects are consistent with the goals and objectives of local urban planning;³² cooperative planning between localities and state highway departments;³³ selection of routes on the new urban system in cooperation with appropriate local officials;³⁴ consideration of views of local governing bodies in all highway construction within Standard Metropolitan Statistical Areas (SMSA's);³⁵ and local comments on environmental quality questions.³⁶

²⁶23 U.S.C. § 128 (1970).

²⁷*Id.* §§ 128(a), 134, 109(h), 502, *repealed*, Act of Jan. 2, 1971, Pub. L. No. 91-646, tit. II, § 220(a) (10), 84 Stat. 1903.

²⁸40 U.S.C. §§ 531-35 (1970); 42 *id.* §§ 4201-44.

²⁹42 U.S.C.A. §§ 4321-47 (Supp. 1973).

³⁰*See* 23 U.S.C. §§ 101(b), 105(b), 106(b), 117 (1970).

³¹*Id.* § 128.

³²*Id.*

³³In SMSA's a memorandum of agreement with the local governing body concerning planning is required. FHWA Policy and Procedure Memorandum 50-9, ¶ 4(d) (June 21, 1967), *as amended* (Nov. 24, 1969) [hereinafter cited as PPM 50-9]. Local interests are given a special place in all federally funded projects under § 401(b)-(c) of the Intergovernmental Cooperation Act of 1968. 42 U.S.C. § 4231 (b)-(c) (1970). This rule is structured into the review procedure of Bureau of the Budget Circular A-95.

³⁴23 U.S.C.A. § 103(d) (1970).

³⁵*Id.* § 134 (a). For a requirement that certain controversial projects in the District of Columbia be restudied with local officials, see Act of Dec. 31, 1970, Pub. L. No. 91-605, § 129, 84 Stat. 1731. *But cf.* 23 U.S.C. § 143 (1970), which allows localities in areas of critical transportation need to be lumped together for planning purposes by DOT regulation.

³⁶*See* DOT Order 5610.1A (Oct. 4, 1971), which implements § 102(2)(C) of the

2. Social, Economic and Environmental Considerations

Under Section 128 of title 23 a state highway department must certify that it has considered in its location decision for a federal-aid project "the economic and social effects of such a location [and] its impact on the environment." This certification must be accompanied by a report "which indicates the consideration given to the economic, social, environmental and other effects of the plan on highway location or design and various alternatives which were . . . considered."³⁷ In addition, federal-aid highway projects must comply with NEPA's requirements, *inter alia*, of environmental impact statements and consultation with all federal agencies having authority or expertise with respect to the environmental impact involved.³⁸ Whenever a highway project contemplates taking property from any park, recreation area or wildlife refuge of national, state or local significance as determined by the responsible jurisdiction, it may do so only if there is no "feasible and prudent alternative" and "all possible planning" has been used to minimize harm.³⁹

3. Planning

In addition to the requirement that state highway departments certify that their projects are consistent with area planning objectives,⁴⁰ the Federal-Aid Highways Act of 1962 prohibits funding any project in a SMSA which is not based on a "continuing, comprehensive transportation planning process carried on cooperatively by States and local communities . . ." ⁴¹ This requirement is backed up by planning grants for which matching may be waived;⁴² by detailed regulatory prescription

National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)(C) (1970), by providing for local inputs through the procedure of Bureau of the Budget Circular A-95.

³⁷This requirement was previously contained in FHWA Policy and Procedure Memorandum 20-8, ¶ 10b (Jan. 17, 1969) (codified at 23 C.F.R. § 790.9 (1973)), which also elaborated 23 nonexclusive factors which should be included in "social, economic and environmental effects." *Id.* ¶ 4c. This list has been consolidated to 7 factors. 23 C.F.R. § 790.3(c) (1973). Pursuant to the requirement of 23 U.S.C. § 109(h) (1970), the Secretary issued, in 1972, new guidelines to ensure full consideration of these factors at each stage in the development of highway projects on the federal-aid systems. These guidelines are set forth at 23 C.F.R. ch. I, pt. 1 App. A (1973).

³⁸Exec. Order No. 11514, 3 C.F.R. 285 (1973); Council on Environmental Quality Guidelines, 36 Fed. Reg. 7724 (1971); DOT Order 5610.1A (October 4, 1971).

³⁹23 U.S.C. § 138 (1970). *See also* National Historic Preservation Act of 1966, 16 *id.* § 470f (1970).

⁴⁰23 *id.* § 128.

⁴¹*Id.* § 134.

⁴²*Id.* § 307(c)(1). *See also* 23 C.F.R. § 1.26 (1973).

of the comprehensive planning process;⁴³ and by the Bureau of the Budget's Bulletin A-95 review procedure,⁴⁴ a procedure by means of which all affected public bodies are invited to comment on proposed federal or federally aided projects.

Several steps have been taken recently which increase the scope and effectiveness of comprehensive transportation planning. The Intergovernmental Cooperation Act of 1968⁴⁵ and NEPA⁴⁶ reinforce the connection between planning and the consideration of social, economic and environmental factors.⁴⁷ Fragmentation caused by separate planning programs in multiple jurisdictions⁴⁸ was attacked by Congress in the Federal-Aid Highway Act of 1970, which enables the Secretary to provide regulatory charters for regional transportation planning agencies in corridors where the inadequacy of existing facilities requires accelerated development of multimodal systems.⁴⁹ Finally, the 1970 Act belatedly supported the commitment to comprehensive *transportation* planning by providing highway funds for bus lanes, fringe parking and other transit-related facilities.⁵⁰ That support was significantly strengthened in the Federal-Aid Highways Act of 1973, which made trust funds allocated to the urban system available for building mass transit facilities and for purchasing buses and trains.⁵¹

4. Citizen Participation

Section 128 of title 23 requires certification that public hearings have been held or made available when requesting approval of plans or projects. This requirement is elaborated in FHWA regulations, which mandate both a location hearing

⁴³PPM 50-9, *supra* note 33.

⁴⁴BOB Circular A-95, pt. I, ¶ 5A provides for comments directed at the relation of the reviewed project to area comprehensive planning.

⁴⁵42 U.S.C. § 4231(a) (1970) ("reasoned choices . . . between [the Act's] objectives when they conflict").

⁴⁶*Id.* §§ 4332(2)(A) (requiring that a "systematic, interdisciplinary approach" be employed), 4332(2)(B) (requiring that "presently unquantified environmental amenities and values" be given appropriate consideration).

⁴⁷Administrator Turner has testified that the comprehensive planning process is the major component in the Federal Highway Administration's environmental quality program. *Hearings on Implementation of the National Environmental Policy Act Relative to Highways Before the Subcomm. on Roads of the Senate Comm. on Public Works*, 91st Cong., 2d Sess. 16-17 (1970).

⁴⁸*Cf.* FEDERAL HIGHWAY ADMINISTRATION, U.S. DEPT OF TRANSPORTATION, 1970 NATIONAL HIGHWAY NEEDS REPORT 16 (prelim. ed. 1970).

⁴⁹23 U.S.C. § 134(b) (1970).

⁵⁰*Id.* § 142.

⁵¹Pub. L. No. 93-87, § 121(a), 87 Stat. 259-60.

before a transportation corridor is chosen⁵² and a design hearing before the final design of the facility is determined.⁵³ The hearings are to be held while the department retains flexibility to respond to the views presented; general public notice is required; written or oral statements may be allowed; information on alternatives considered by the department shall be made available; a verbatim transcript is taken; and the department submits the transcript plus a summary and analysis of the views presented to the federal highway administration. There is even some language in the regulations which would seem to go beyond hearings to a less structured form of "planning with people."⁵⁴

5. Relocation

The relocation problem was recognized legislatively in the 1962 Act, which provided matching grants for relocation assistance.⁵⁵ In 1968 a new chapter on relocation was added to title 23⁵⁶ requiring state assurances of fair and reasonable relocation payments, provision of relocation services and the availability of comparable replacement housing "to the extent that can reasonably be accomplished."⁵⁷ Although they have since disappeared from the highway code, these relocation requirements formed the model for portions of the Uniform Relocation Assistance Act of 1970,⁵⁸ which applies to all federally funded projects, including, of course, highways.

⁵²23 C.F.R. §§ 790.3(a), 790.5(a) (1973).

⁵³*Id.* §§ 790.3(b), 790.5(a).

⁵⁴*Id.* § 790.4.

There are also hearing requirements ("whenever appropriate") in § 2(b) of Executive Order 11,514 of March 5, 1970, 3 *id.* 285, 42 U.S.C. § 4321 (1970), which implements NEPA. These requirements seem to be taken care of by the present hearing process and by combining the hearing data on environmental factors with that produced by the BOB A-95 review procedure.

⁵⁵Act of Oct. 23, 1962, Pub. L. No. 87-866, § 5a, 76 Stat. 1146, *repealed*, Act of Aug. 23, 1968, Pub. L. No. 90-495, § 37, 82 Stat. 836.

⁵⁶Act of Aug. 23, 1968, Pub. L. No. 90-495, § 30, 82 Stat. 830, *repealed*, Act of Jan. 2, 1971, Pub. L. No. 91-646, tit. II, § 220(a)(10), 84 Stat. 1903.

⁵⁷*Id.*

⁵⁸42 U.S.C. §§ 4601-55 (1970). Tracking the language of former § 502 of title 23, § 4630 of title 42 requires that

the head of a Federal agency shall not approve any grant to, or contract or agreement with, a state agency, under which Federal financial assistance will be available to pay all or part of the cost of any program or projects which will result in the displacement of any person on or after January 2, 1971, unless he receives satisfactory assurances from such State agency that—

(1) fair and reasonable relocation payments and assistance shall be provided to or for displaced persons, as are required to be provided

III. BETWEEN THE PROMISE AND FULFILLMENT LIES ADMINISTRATION

However progressive recent highway and highway-related legislation, there remains the translation of verbal formulae into operational realities. As the description of the administration of the highway program unfolds it may be tempting to suggest that quite a lot of legislative policy is getting lost in the administrative translation. On the other hand, we may also find that the administrator is dealing with problems that were very imperfectly understood by the Congress and for which no useful policy guidance was provided in the legislation. More important than these lacunae, however, are the fundamental conflicts which have appeared with Congress' recognition of an increasingly broad range of interests and values.

For example, the federal government insists that it be able to deal with a single state agency having final authority, usually the state highway department, and then insists that the highway department adapt to local needs and desires. In the same vein, the Federal-Aid Highways Acts provide enormous amounts of protected funds which must be spent by the states on highways or lost,⁵⁹ and at the same time require a comprehensive, rational approach to highway planning which rigorously considers alternative transportation modes and general social, economic and environmental values.⁶⁰ Further ambiguity is created by the requirement that the federal administrator consider economic, social and environmental factors⁶¹ in the absence of established priorities among them. For it is likely that each consideration will point toward different conclusions about the location and design of a highway facility. With such built-in tensions, how does the system keep operating? The answer must lie some-

by a Federal Agency under sections 4622, 4623, and 4624 of this title;

(2) relocation assistance programs offering the services described in section 4625 of this title shall be provided to such displaced persons;

(3) within a reasonable period of time prior to displacement, decent, safe, and sanitary replacement dwellings will be available to displaced persons in accordance with section 4625(c)(3) of this title.

Unlike its title 23 precursor, the requirement stated in § 4630(3) is not subject to the condition that relocation "can reasonably be accomplished," 23 *id.* § 502, but is absolute on its face.

FHWA's response to this statutory directive appears in Instructional Memorandum 80-1-71, 23 C.F.R. ch. I, pt. 1, app. A, at 30 (1973).

⁵⁹23 U.S.C. § 101(d) (1970); 23 C.F.R. § 790.8(b)(2)(i) (1973).

⁶⁰23 U.S.C. §§ 134(a), 109(h) (1970).

⁶¹*Id.* § 128(a).

where in the administrative process by which these conflicting pressures and demands are harmonized and perhaps in the nature of the standards themselves.

A. *Administration of the Federal-Aid
Highway Program*

Given the number and complexity of standards governing the construction of federal-aid highways, one might expect that the major role of the Federal Highway Administration in the grant process would be that of a federal policeman who carefully sifts and analyzes all the submissions of state highway departments to document compliance with each federal requirement. Indeed, this impression is likely to be drawn from any description of the project approval process.

We might, for example, break up the grant process into four major stages in the approval of a particular construction project.⁶² The first decision that must be made by FHWA is whether to add the proposed highway section to one of the federal-aid systems; this step must precede inclusion of the project in an annual state highway "program."⁶³ When it asks FHWA for program approval, the state will have already determined the need for the highway projects included in the program, established priorities among those projects, and coordinated these proposals with state and local planning in a manner sufficient to satisfy the BOB Bulletin A-95 review procedure.

The next step is a request by the state highway department for approval of the location of the project and for authorization to begin design engineering and right-of-way work. The state must certify that it has studied alternative locations, prepared an initial relocation plan, advertised and held public hearings on the location if requested, considered the hearing comments, selected a location and publicized its request for FHWA approval. If FHWA does not already have documents supporting these certifications, they will be filed at this time.

The next request to FHWA is for approval of the state's design plans⁶⁴ and its final right-of-way and relocation plans. At

⁶²The sequence of steps outlined here for approval of federal-aid highway projects relies heavily on FEDERAL HIGHWAY ADMINISTRATION, U.S. DEPT OF TRANSPORTATION, REVIEW OF FEDERAL-AID HIGHWAY PROGRAMS app. 1, charts I-A to I-E (1970) [hereinafter cited as FEDERAL-AID PROGRAMS].

⁶³See 23 U.S.C. § 105 (1970).

⁶⁴See 23 C.F.R. 790.3(d) (1973).

this point the state must have publicized the previous location approval, studied alternative designs, developed a final relocation plan, advertised and held a design public hearing if requested, evaluated the hearing comments and selected a design, and publicized the request for design approval. The submission to FHWA is again by certification with accompanying documents, for example the transcript of the design public hearing. The final stage in committing federal monies for a highway project is approval of the state's plans, specifications and estimates⁶⁵ on the basis of its certifications, *inter alia*, of completion of right-of-way acquisition and provision of relocation assistance.

Discussions with highway administrators indicate that while this skeleton of the grant approval process may not contain any false statements, its suggestion of state initiative and planning, with federal approval based on review of documentary evidence to evaluate compliance with federal standards, is extremely misleading.⁶⁶ Rather, the posture of the FHWA, which delegates virtually all grant approval authority to its division engineer in each state,⁶⁷ is one of helping the state highway department improve its planning and engineering capabilities through a process of continuous and close working liaison. The object has not been to build a record which demonstrates compliance with all federal standards, but to get the best possible job out of the highway department in relation to those standards. Approval of a project seems to be based essentially on that broad criterion.

B. *An Appreciation from the Administrative Perspective*

The FHWA's operational posture is sensible from a number of perspectives. First, the program is a construction program. Hence, one would think that a managerial model of administration would be appropriate. The questions to be decided are routinely questions concerning prospective demand, engineering feasibility, design and cost. These are decisions of a type common in private enterprise, made without extensive documentation or even arm's-length bargaining. Within an efficient

⁶⁵See 23 U.S.C. § 106 (1970).

⁶⁶*E.g.*, Interview with Mr. Harold C. King, Division Engineer, FHWA, in Richmond, Va., Mar. 25, 1971. This view is shared by Mr. Edward Wells, Chief Counsel, FHWA, Washington, D.C., whose comments on a draft containing the present language were received in the spring of 1973.

⁶⁷See FEDERAL-AID PROGRAMS, *supra* note 62, at 31.

managerial system one expects that there will be no neutral arbiters, that choices will be made under conditions of significant uncertainty after determination that some facts are not likely to justify the expense of an attempt to uncover them. It is also presumed that certain divisions or delegations of function are made and relied upon.

There is much in the federal-aid highway program's statutory framework which is consistent with these notions. Although the relationship between FHWA and state departments is in some sense hierarchical, there is no provision for administrative appeal from the decisions of the grantor agency. Disagreements must be resolved by negotiation or be allowed to develop into intergovernmental political squabbles, which cause the program professional to lose control of his program. While the legislation requires that certain factors be considered, there is no specification of the detail with which they must be investigated or of the weight to be assigned to them in arriving at a final judgment.⁶⁸ Certain questions are delegated to the grantee on condition only that it certify that the requirements have been fulfilled.⁶⁹

Second, the program that is being administered is a grant-in-aid program. This fact implies at least some recognition of substantial discretionary authority in the grantee. That authority may emanate from constitutional notions of division of powers, from historical operating relationships in the particular field involved or from a recognition of limited federal purposes. From wherever it comes, and it is likely to come from all these sources, the recognition of discretionary authority in the grantee produces an attitude of cooperation and negotiation which eschews formality and an appeal to strict rules of law.⁷⁰

The question, finally, is whether the conditions imposed on highway grants by the federal-aid highway legislation render these "managerial" and "intergovernmental" perspectives inappropriate. It seems sensible to conclude that they do not; that, in

⁶⁸See, e.g., 23 U.S.C. § 128 (1970).

⁶⁹The Federal-Aid Highways Act of 1973 greatly expands this class of questions with its provision for "certification acceptance." Pub. L. No. 93-87, § 116(a), 87 Stat. 258. Rather than review (or have his delegate review) each project at each step in its progress to completion, the Secretary may accept certification from the state under new § 117(a) of the highway code that projects will be carried out in accordance with state requirements at least as stringent as those established by the Federal-Aid Highways Acts. The Secretary need make only a final inspection of a project completed under this arrangement.

⁷⁰See generally M. DERTHICK, *THE INFLUENCE OF FEDERAL GRANTS ON PUBLIC ASSISTANCE IN MASSACHUSETTS* (1970).

fact, the federal requirements are drafted to preserve the compromise that "aiding" rather than "operating" programs generally imports; and that these requirements may quite properly be read as unsuited to an "enforcement oriented" administrative posture. Let us look back briefly at the requirements in order to develop with somewhat more specificity what they do, and do not, provide.

1. Need

On coming initially (or naively) upon the federal-aid highway program one might expect to find some criteria in the legislation for use in determining when highways are needed. At a minimum one might expect a system of priorities. There is neither. The Congress designated the terminal and connecting links in the interstate system,⁷¹ for instance, and otherwise left need determinations to the states⁷² and the localities. Indeed, the Secretary of Transportation is precluded by statute from using his authority to develop criteria for the evaluation of transportation investments when federal-aid projects are involved.⁷³ But while there are no federal legislative criteria for determining highway needs, the availability of federal-aid funds provides a very strong incentive for identifying such needs.⁷⁴

⁷¹23 U.S.C. § 103(e)(1) (1970). This section provides that the interstate system "shall be so located as to connect by routes . . . the principal metropolitan areas, cities, and industrial centers . . . and . . . to connect at suitable border points with routes of continental importance in the Dominion of Canada and the Republic of Mexico."

⁷²Of course, that determination by the states must take into account certain aspects of the federal program which may be more influential: that more money on better terms is available for interstate projects; that since the federal share of the costs of federal-aid highways is 70 to 90% the marginal benefits to the state need be only 10 to 30% of the benefits required from fully state-funded projects; that in rural areas at least roads are the only transportation facility with guaranteed aid; and that there can be no swapping of entitlements among states when the aid distribution formula gives Connecticut too much and Nevada too little. See Nelson, *Policy Analysis in Transportation Programs*, in 3 SUBCOMM. ON ECONOMY IN GOVERNMENT OF THE JOINT ECONOMIC COMM., 91ST CONG., 1ST SESS., ANALYSIS AND EVALUATION OF PUBLIC EXPENDITURES: THE PPM SYSTEM, 1102, 1119 (Comm. Print 1969) [hereinafter cited as ANALYSIS OF PUBLIC EXPENDITURE].

⁷³49 U.S.C. § 1653(b) (1970). For a political history of this section, see J. BURBY, *THE GREAT AMERICAN MOTION SICKNESS 40-44* (1971).

⁷⁴Assuming his not unaccustomed role of a voice crying in the wilderness, Senator Proxmire testified in 1970:

Only if Congress insists on obtaining the best possible economic information and analysis, so that the social value of highway investment can be compared to the value of other types of transportation investment and to the value of nontransportation uses of Federal funds, will we be able to make an informed judgment as to how many additional highway miles we "need."

At the state level the determination of "need" tends to be a function of professional planning and political logrolling. The highway program is a major, if not the major, pork barrel for state legislatures, and the legislative branch almost always has an opportunity to make the final decision on projects of any significance either by specific designation or through the appropriations process. Hence the highway department must plan its projects with a wary eye on the people's representatives, who generally view public works projects in their districts as a very good thing. But the legislature's interest in "equitable allocation" is not matched by an interest in the question of whether to build highways at all. To the extent that state statutes say anything about how the highway department is to determine road requirements, the provisions are vacuous.⁷⁵

The state highway departments, of course, have procedures for determining highway needs. The American Association of State Highway Officials (AASHO) publishes uniform standards for roads, including their carrying capacity. By agreement state officials submit needs reports to the Federal Highway Administrator using the AASHO standards. For the 1972 Highway Needs Report, the highway departments included as a "need" road improvements sufficient to move all projected traffic during the period 1970-1989 at a minimum speed of 35-40 miles per hour.⁷⁶ The total bill for achieving this goal would be 592 billion dollars.⁷⁷

It is perhaps not unrealistic to suggest that the delegation of highway need determinations to the state political process is the most significant aspect of the federal-aid highway statutes. This standardless delegation sets the dominant tone for the administration of the program and leaves without guiding principle the major question in every conflict about highway building: Is this highway needed?

The National Highway Needs Reports which are required to be submitted to Congress every 2 years (by the States) use quite a different concept of "need" than that which I have outlined above. "Need" as used in these reports refers to "capacity adequate to accommodate the highway travel forecast for a given target year."—1970 National Highway Needs Report, p.11—Since funds are apportioned to the States in accordance with their estimated "needs," the financing system contains a considerable incentive to produce travel forecasts.

Hearings on Federal-Aid Highways Act of 1970 Before the Subcomm. on Roads of the Senate Comm. on Public Works, 91st Cong., 2d Sess. 227 (1970).

⁷⁵See text accompanying notes 110-21 *infra*.

⁷⁶U.S. DEPT OF TRANSPORTATION, 1972 NATIONAL HIGHWAY NEEDS REPORT, pt. 1, at 10 (1972) [hereinafter cited as 1972 HIGHWAY NEEDS REPORT].

⁷⁷\$302 billion for arterials; \$107 billion for collector routes; \$183 billion for local systems. *Id.* 11.

2. Local Control

One of the points of obvious conflict concerning highway needs is that between local preferences and the requirements of a state or regional highway system. Local citizens and public officials can be expected to complain when their community is cut off of a main trade route in the interests of faster interstate travel or when their elm trees and architecture are obliterated in the interests of intercity through traffic. Whether cutting through the locality or bypassing it, state highway officials are likely to have a different perspective than the locals. As we have previously noted,⁷⁸ the federal legislation attempts to recognize the legitimacy of both these perspectives. But what should the Federal Highway Administration's posture be in the face of claims that local needs or desires are being neglected by the state officials seeking federal funding? It is supposed to approve projects which satisfy both local and national transportation needs,⁷⁹ but that is to say nothing about how a compromise is to be struck when these purposes conflict.

The signals that the FHWA gets from the federal-aid highway legislation and from other statutory sources suggest that conflicts should be ironed out at the state-local level. Under section 134(a) of title 23,⁸⁰ the Secretary is not to approve projects in SMSA's unless "based on" a "comprehensive transportation planning process" which is carried on cooperatively through policy committees having both state and local representation. Under this requirement the FHWA has assumed responsibility for determining both that the minimal elements of a "planning process" exist⁸¹ and that there is meaningful involvement of both states and localities.⁸² But the federal agency has not undertaken to assure that local interests will have a fair shot at preference in cases of conflict. The

⁷⁸See text accompanying notes 30-36 *supra*.

⁷⁹23 U.S.C. §§ 105, 109 (1970).

⁸⁰*Id.* § 134(a). Plans and priorities are officially adopted and modified by committees composed of state highway officials and elected officials from affected political subdivisions, operating under the terms of written agreements between the state and the locality. PPM 50-9, *supra* note 33, ¶ 4d.

⁸¹PPM 50-9, *supra* note 33, ¶ 5, breaks down the transportation planning process into ten elements, each of which FHWA must find to be present in the locality before granting its annual certification in SMSA's, a prerequisite to approval of the state's highway construction program. FHWA Instructional Memorandum 50-3-71 (Apr. 13, 1971).

⁸²PPM 50-9, *supra* note 33, ¶ 4d, defines "cooperatively" in some detail. It also specifies that "the State highway department will be expected to show by suitable evidence that scrupulous efforts have been made to carry out the intent of the Act with respect to cooperative action by all political subdivisions." Presumably this showing must accompany the state's annual application for certification of its planning process.

FHWA's justification for its position is that the statute requires, not a "plan," but only a "planning process," and also that it requires only that the project be "based on" that planning process. There is, after all, opportunity for local citizens and officials to be heard, either when the project is presented to local officials via the BOB A-95 review procedure, or at general public hearings, should they be dissatisfied with the product of the state-local highway planning process.

The FHWA position is often an unhappy one for persons opposing a federal-aid project, for in many of the highway controversies around the country one finds that the opponents of a particular highway project are a group of local citizens who are, in effect, saying that the local officials have not protected local values and interests. The familiar lament is that the highway department has all the money and all the expertise: the city planners and officials either are their colleagues, or are at their mercy, or, God forbid, agree with them. Hence, while there may have been some infusion of professional planning and nontransportation community values, the game is still power politics at the local level, and the complainants are the losers. But this merely states the complainants' problem. It does not justify an FHWA program for the reform of local government.

And even should there be official objections on behalf of local interests, how is the FHWA to deal with local and state conflicts? By refusing to provide funds until a compromise position is achieved? This is a neutral (and frequently used) technique. But what if the state position is sensible, and the highway department has authority under state law to construct the project? The multijurisdictional effects of highway construction virtually require that final authority rest with the state. Final authority in affected localities to block a highway project through their territory on environmental or social grounds would imply also allowing localities to prevent their being bypassed by a project just outside their boundaries on economic grounds. And if the prospect of giving localities final authority is not consistently appealing, surely that authority should be given to the state highway department, which is directly accountable to the state legislature for its stewardship of the state highway program and which is required to consult localities and to certify that it has considered the overall environmental, social and economic effects of the project. It is hardly surprising then that federal administrators tend to accept the state highway department as the final arbiter in this decision process.

3. Environmental, Economic and Social Considerations

The recognition of the primacy of the state department's choice is strengthened by the realization that considering economic, social and environmental effects of a highway project is clearly made a state responsibility, subject only to certification that the consideration has been undertaken. To be sure, FHWA has spelled out by regulation the sorts of questions which should be considered under these statutory labels, and the state is required to articulate its consideration of these factors in response to submissions made at the public hearing. But one certainly has no inkling from this requirement that Tuesday-evening planners should be permitted to actuate an exhaustive study by the highway department of any economic, social or environmental problem that they care to raise at a public hearing. Unless "consideration" can include a commonsense judgment that the problem is not sufficiently weighty to cause a change in plans or that a scientific inquiry into the particular effect in question is too costly or too speculative, highway building is at an end. Hence, complaints to FHWA that the highway department has failed to consider adequately something of peculiar value to the complainant will often produce little satisfaction. Again, the primary responsibility is the state department's and is to be exercised within the framework of the overall purpose of the program: building highways.

4. Citizen Participation

Nor is the public hearing requirement a significant limitation on the highway department's discretionary authority. The department has the responsibility of deciding contrary to the unanimous wishes of all hearing participants if in its view the "longrun public interest" will thereby be served.⁸³ Since public hearings rarely cast any light on issues other than the current consensus among those attending the hearing, highway departments are perhaps realistic to treat them largely as means for taking the political temperature of the locality and for selling the department's viewpoint.

In sum, there is really very little in the federal-aid highway legislation for the FHWA to enforce other than procedural regularity. The Congress has had something to say about local

⁸³Cf. 23 C.F.R. § 790.1(c)(2) (1973).

preferences, environmental and social considerations, and public participation. But the crucial question, "to build or not to build," is one of preference and power. The Federal-Aid Highways Acts largely reinforce the power of state legislatures and highway departments to act on their preferences. In this context, the FHWA's posture of senior partner in a common enterprise, rather than federal policeman or auditor, seems quite appropriate.

C. *The Citizen's Lament*

The introduction of limited and largely procedural "socialization" criteria into highway planning can give rise to false hopes and intense frustrations. The mere existence of legislative requirements dealing with the consideration of local needs, with "comprehensive planning," with the consideration of environmental and social factors or with public hearings, is sometimes taken as evidence of a revolutionary congressional reorientation of the highway program. These requirements are viewed, or are sought to be viewed, as shifting the federal-aid program away from its traditional concern with vehicular transportation and toward goals such as renewing the urban environment, abating pollution and reinforcing a sense of community and of local control over local affairs. The citizen who approaches any highway project with this set of attitudes is headed for disaffection with the administrative process. Indeed, should he approach the administrative process with no preconceptions concerning federal law and policy, he is nevertheless likely to come away convinced that the process is undemocratic, irrational and designed only to facilitate the building of highways.

1. Public Hearings

The citizen often gets his first impressions of the highway department at public hearings. It is not likely to be a good one. If you add to all the usual difficulties of gauging public sentiment from public hearings⁸⁴ the additional problem in highway public

⁸⁴See generally *Symposium on the Public Hearing*, 21 AD. L. REV. 119 (1969). A study of public hearings held in Virginia between May 26 and July 15, 1970, revealed that 81% of the participants were "white collar professional or managerial." R. Saroff & E. Walton, A Profile of Citizens Attending Public Hearings 7 (undated unpublished manuscript).

hearings that many people are there for the almost irrelevant purpose of talking about whether a road is needed,⁸⁵ the highway department immediately appears to be a villain. In highway planning terms—insufficiency of the existing roadway for present and future traffic—need has already been determined.⁸⁶ The major purpose of the public hearings is the discussion of location and design alternatives within a predetermined corridor.⁸⁷ Although the discussion of location and design questions is not an insignificant purpose, it is difficult for the highway department to get the public hearing participants to concentrate on those subjects. The participants may even have the bad grace to suggest that if the only alternative acceptable to them—no road—is not a live option, then the hearing is an exercise in futility.

In addition to this complaint the citizen who attends a public hearing on a highway is likely to think that the highway department has a monopoly on information and fails to take him seriously.⁸⁸ Even taking a location hearing at its best, the highway department is so far along in its evaluation of sites based on its travel demand estimates and preliminary engineering studies that the private individual can hardly compete.⁸⁹ When he does complain or even offer data at the hearing, he often receives no further communication from the highway department. His testimony is entered in the record and the department makes a decision. Whether the views expressed by the citizen

⁸⁵If one may draw conclusions from an eclectic survey of hearing transcripts in which other than purely informational questions were asked, this purpose seems as likely to be shared by professional planning consultants in urban areas as by lay participants in Deep Creek, Virginia.

⁸⁶The FHWA hearings regulations suggest that the “need” for the highway is properly a subject of hearings at the location phase. “A ‘corridor public hearing’ is a public hearing that . . . [i]s held to ensure that an opportunity is afforded for effective participation by interested persons in the process of determining the *need for*, and the location of, a Federal-aid highway . . .” 23 C.F.R. § 790.3(a)(2) (1973) (emphasis added). But by the time a proposed route reaches the location phase, it has already been put on a federal-aid system and has been included in the construction program submitted by the state. *See* text accompanying notes 63-67 *supra*. If the road passes through an urban area, 23 U.S.C. § 134(a) (1970), or if it is a secondary road, *id.* § 105(b), it will also have been approved by local officials. Thus, although the need for it might be disputed, the determination that it should be built has already been made by planners and politicians alike.

⁸⁷*See* 23 C.F.R. § 790.3 (a)-(b) (1973).

⁸⁸*See, e.g.,* Keith v. Volpe, 352 F. Supp. 1324 (C.D. Cal. 1972). *See also* R. Saroff & E. Walton, *A Strategy for Highway Hearings* (1971) (unpublished manuscript prepared for the Virginia Highway Research Board).

⁸⁹The ubiquity of this phenomenon in public hearings of all sorts has given rise to the so-called “advocate planner.” *See, e.g.,* Davidoff, *The Planner as Advocate*, in *URBAN GOVERNMENT: A READER IN ADMINISTRATION AND POLITICS* (E. Banfield ed. 1969).

have any impact on the ultimate decision will remain a mystery to him unless he pursues informal avenues of access to the department⁹⁰ after the hearing. The citizen participant in public hearings is hardly reassured by the failure of most departments to make any mention at the hearing of the "economic, social and environmental" factors they have considered or, for that matter, to set forth any formal rationale for the project. The department is there to inform the public of its plans and to hear from them. It is under no obligation to make an affirmative case or to subject its project rationale to cross-examination.

It seems fair to conclude that highway public hearings probably do not inspire confidence in the openness or rationality of the highway decision process. Perhaps because the hearing seems only an offcenter peephole into the backrooms of highway politics, highway opponents have begun to use hearings as focal points for political activity of their own.

2. Local Planning

The citizen of an urban area may discover for the first time at the highway department's public hearing that the project to which he objects has been approved by his local elected officials⁹¹—often on the recommendation of the local planning commission. In light of this fact, he can hardly accuse the highway department of unresponsiveness to local needs and of failure to consider local planning. Perhaps his efforts should be directed toward understanding and influencing local transportation planning. This may indeed be a sound strategy, but a look at what local transportation planning has accomplished, other than the building of additional roads, will not encourage him. Our hypothetical citizen is very likely to find that the efforts of his local planning agency are of dubious quality and that the state highway department is intimately involved in those efforts.

The ineffectiveness of city planners in this area has its roots in history. The initiation of trust fund financing for the federal-aid highways program and the "take-off" of the interstate program caught the planning profession unprepared. Even in

⁹⁰This is not to say that the hearing comments are ignored. The highway officials with whom this writer has had any contact firmly believe that they are responsive to any "good" or "high quality" comments made at hearings, and FHWA regulations do require that the highway department's requests for location or design approval contain a "summary and analysis" of the views it has obtained on the project. 23 C.F.R. § 790.9(b)(3) (1973).

⁹¹See note 80 *supra* & accompanying text.

the largest metropolitan areas the planners had little idea whether they wanted the roads that were to be made available to them. Answering that question required a comprehension of the goals of the community, the relationship of the physical structure of urban space to those goals, and the impact of street transportation on the configuration of the urban space. The planning profession was only beginning to come to grips with the first two issues;⁹² the transition from "city engineer" to "city planner" was in its infancy.

Moreover, the planner had to and indeed still must contend with the strong laissez-faire tradition in land use in the United States. In order to carve out a position for himself in city government, the planner has been required to move into a "detached" position and to keep his fences well mended with the middle-class coalition which forms his political base. The result has been planning which emphasizes the technical skills of the planning office and minimizes disputes concerning basic community values. In the words of one historian of planning, "conservation, caution and reluctance to act are the chief characteristics of most planning agencies."⁹³

The impact of the city planner's unfortunate posture on his effectiveness in transportation planning was predictable. Because he could develop no well-defined community goals as a basis for independent evaluation of street transportation plans, he was forced to float with the political sea around him. Because he was a "city," not a "transportation," and certainly not a "highway" planner, he could not capture significant power through the application of technical expertise.

A passage from DOT's *Transportation Planning Manual* suggests what happened when local planners failed to seize the initiative in the context of a well-funded public works program with a specific aim.

In some areas, regional development goals do not exist explicitly or do not seem currently useful for transportation planning. In most cases they are not detailed enough to satisfy the needs of transportation planning. Therefore, it is usually the duty of the transportation planning staff to arrive at useful statements and to obtain policy approval of these.⁹⁴

⁹²M. SCOTT, *AMERICAN CITY PLANNING SINCE 1890*, at 536-41 (1969).

⁹³S. MAKIELSKI, *LOCAL PLANNING IN VIRGINIA 101* (1969).

⁹⁴U.S. Dep't of Transportation, *Transportation Planning Manual* (undated manuscript segment in author's files).

Elsewhere the *Planning Manual* suggests the contents of such "statements" in revealing detail: "Goal: to provide efficient, economical transportation; Objective: Minimize congestion; Evaluative Criterion: Travel volume in peak period."⁹⁵

These instructions, of course, are directed to those to whom the planning of highway facilities has gravitated—the state highway departments and private consultants specializing in highway projects. Only the largest cities have truly independent transportation planning capacity.⁹⁶ The rest rely on what the state highway departments, under the federal-aid arrangement, have consistently been able to offer: either money for a consultant to draw up a plan for local officials, or the technical resources to do the planning within the state agency.⁹⁷ In many cases even the original impetus for developing a local transportation plan may come from the state highway department, which recognizes the need for a planning process which will satisfy federal grant requirements.⁹⁸

The initial approach of the transportation planner is to make an origin-destination survey which tells him where people are and where they want to go. This information is then used in conjunction with information on vehicle registration, population and economic growth and existing and predicted land use to determine how traffic is likely to be generated and distributed over the existing transportation network. If areas of congestion show up, facilities are suggested, within predicted resource constraints, to relieve the congestion by siphoning off some of the traffic. The report then becomes the official transportation

⁹⁵ *Id.*

⁹⁶ Netherton, *supra* note 10, at 22-23; *Hearings on Urban Highway Planning, Location, and Design Before Subcomm. on Roads of the Senate Comm. on Public Works*, 90th Cong., 1st Sess. pt. 1, at 123, 126 (1968) [hereinafter cited as *Urban Highway Hearings*].

⁹⁷ An intensive study of planning in Charlottesville, Virginia, for example, revealed that the city's transportation planning process was almost completely controlled by the Virginia Department of Highways and that the state-local relationship was similar throughout the state. J. Natalie, *Charlottesville Planning History* (undated unpublished manuscript in author's files).

That the state highway department has not lost control is evidenced by the terms of *An Agreement for a Continuing Comprehensive Transportation Planning Process for the Richmond Region Between the Virginia Department of Highways and the Richmond Regional Planning Commission*. Executed in 1970, the agreement provides that "[t]he general supervision of any . . . adjustment of location and design of highways for Transportation Plan re-evaluation will be under the Department . . ." The permanency of this arrangement is indicated by a provision for termination "only when: (1) Section 9 of the 1962 Federal Highway Act . . . is repealed or amended . . . to no longer require the continuing, comprehensive and cooperative transportation planning process."

⁹⁸ See note 81 *supra*.

plan for the community when adopted by the appropriate officials.⁹⁹

This is, of course, a highly simplified model of the transportation planning process, but run-of-the-mill transportation planning is not significantly more sophisticated than this.¹⁰⁰ And, of course, the process usually results in the proposal of additional roads. This is partly due to factors I have just explored: the dominant role of the state highway department in planning and the absence of well-developed community goals, other than reducing congestion, to be fed into the plan.¹⁰¹ A further explanation is that most of the available resources for transportation facilities are available only for road building purposes. Finally, trends which appear from data on land use and on choice of travel mode, and which are used as a basis for transportation planning, are reflections in part of a continuing investment in road transport.¹⁰² There is widespread theoretical agreement, in fact, that the recommendations of planners employing the accepted methodology are self-fulfilling prophecies, because the effects of highways on land use will eventually substantiate the projected need.¹⁰³

It is possible, of course, that irate citizens will appear at local hearings on a new transportation plan which proposes additional streets and thoroughfares. But they are likely to be viewed as soreheads who place their private interests above the demonstrated need of the public for expanded facilities. They have no systematic approach to the development of the city to place against the seemingly inexorable predictions of the transportation planner. Indeed, should the planning commission or city council want to make changes in the plan, even they may meet objections from the highway department of the general form: "We must fund facilities which meet expected travel demands. If you want to delete projects for which our studies show a need, we will have to restudy the whole transportation system. We cannot get to that for three to five years. Meanwhile, we would have to

⁹⁹See Creighton, *Transportation Planning*, in LOCAL PLANNING ADMINISTRATION 189, 215-19 (McLean ed. 1959).

¹⁰⁰See generally R. CREIGHTON, URBAN TRANSPORTATION PLANNING (1970); R. ZETTEL & R. CARLL, SUMMARY REVIEW OF MAJOR METROPOLITAN AREA TRANSPORTATION STUDIES IN THE U.S. (1962).

¹⁰¹*Urban Highway Hearings*, *supra* note 95, at 453, 456.

¹⁰²See *Hearings on Economic Analysis and Efficiency in Government Before the Joint Economic Comm.*, 91st Cong., 2d Sess., pt. 5, at 1045 (1970) (statement by Assistant Secretary of Transportation Baker) [hereinafter cited as *Efficiency in Government*].

¹⁰³See TECHNIQUES OF TRANSPORT PLANNING 108-09 (J. Meyer ed. 1971).

suspend funding of any projects in your area." Rare is the mayor who does not want something significant from the highway department or who has a sufficiently aroused citizenry to risk the consequences of a loss of all funding.

When there is no city involved, there is likely to be no counterweight at all to the state highway department. Planning commissions in rural areas are rare and, if they exist, are generally weaker than their city counterparts. The citizenry is dispersed and unorganized. The only comments on a proposed highway project in a rural area are likely to come from other state agencies: the Department of Natural Resources, for example, or a Fish and Wildlife Commission.

The rejection by the Congress in 1962¹⁰⁴ of language which would have required that all road projects be "consistent" with urban planning and part of a "soundly based, balanced urban transportation system" in favor of the existing requirement that the project be "based on" a "continuing, comprehensive transportation planning *process*" is significant in this context. It reflects both the disarray of the urban planner¹⁰⁵ (who may have a "planning process" without ever producing a "plan") and the intricate balance of power between state highway departments and local officials. The balance has not been upset.¹⁰⁶ And, to the

¹⁰⁴S. 3136, 87th Cong., 2d Sess. (1962), would have amended the highway code to provide that all approved projects be "consistent with adequate comprehensive development plans" and that "the federal-aid system so developed be an integral part of a soundly based, balanced transportation system . . ." This language was rejected in favor of a comprehensive planning provision which omitted the requirement of consistency with a plan and the criterion of a "soundly based balanced transportation system." H.R. 12135, 87th Cong., 2d Sess. (1962). The Senate Committee on Public Works articulated the basis for its acceptance of the House version in these terms: "The Committee recognizes that transportation planning is almost invariably a continuing process; hence, this section has been drawn in such a way as to make it clear that a completed comprehensive plan, as such, is not necessary to meet its requirements." S. REP. NO. 1997, 87th Cong., 2d Sess. 25 (1962).

In Senate hearings on urban highways in 1968, several witnesses lamented the narrow focus of § 134 and the difficulty of producing truly comprehensive transportation planning under restrictions on the use of federal planning funds for highway planning only. See, e.g., *Urban Highway Hearings*, *supra* note 96, at 93 (testimony of Arthur Palmer, Transportation Administrator for New York City); cf. *id.* 16 (testimony of William Slayton, Executive Vice-President, Urban America, Inc.).

¹⁰⁵Robert Moses informed the House Committee on Public Works in 1962 that the requirement of a comprehensive plan would bring highway building in New York to a standstill, perhaps for a decade. *Hearings on the Federal-Aid Highways Act of 1962 Before the Subcomm. on Roads of the House Comm. on Public Works*, 87th Cong., 2d Sess. 48 (1962). And in 1964, the Federal Highway Administrator testified that only 100 of 219 urban areas subject to § 134 were geared up to meet the continuous, cooperative and comprehensive planning requirements of that section. *Hearings on the Federal-Aid Highways Act of 1964 Before the Subcomm. on Roads of the Senate Comm. on Public Works*, 88th Cong., 2d Sess. 35 (1964).

¹⁰⁶The technique by which FHWA obtained state-local cooperation was to require a

citizen attempting to challenge the highway builders' conclusions, the local "planning process" and the federal requirements which support it appear to be little more than a sham.

IV. HIGHWAY LITIGATION

A volatile mixture has resulted from the combination of: intense and conflicting interests among the affected public concerning the desirability of building roads in general or of constructing specific road projects in particular; apparent legislative efforts to reorient the federal-aid highway program which are blunted in their administration; loss of faith in local planners and public officials; a disenchantment with highway departments, in part engendered by the departments' own public hearings; a general increase in environmental and social consciousness; and an increasing belief in and ability to use litigation for the ventilation of issues of public choice. It is a mixture that has been exploding in the faces of state highway commissioners in courts all over the country and which has made the Secretary of Transportation one of the most sought-after defendants in the land.

This litigation has been of value in alerting many to the frustration and conflict which inhere in processes of public decisionmaking about highways. But whether judicial resolution of specific disputes should also be a means of "reforming" the decision process to alleviate these problems is quite another question. One thing seems reasonably clear: highway litigation will be difficult to defend on the general ground which may be offered in support of many environmental lawsuits, that is, as a least-cost method of establishing lines of communication or assembling parties to permit bargaining.¹⁰⁷ Litigation between highway officials and parties who challenge the legality of their decisions simply provides a new context and usually a new focus for disputes which have been going on elsewhere. The process for making decisions about highway construction that has been described above has many points at which views may be made

memorandum of agreement between state highway departments and local governing bodies. See note 80 *supra*. These agreements were similar in structure and in their substantive provisions and reflected FHWA's belief that municipalities were not generally competent to do transportation planning. See *Urban Highway Hearings*, *supra* note 96, at 539 (statement of Lowell K. Bridwell).

¹⁰⁷Cf. Note, *The Cost-Internalization Case for Class Actions*, 21 STAN. L. REV. 383 (1969).

known and pressure may be applied by those harboring antihighway sentiments. The public hearing provisions of the highway legislation and of most planning commission charters provide focal points for the assembling of all variations of public and official opinion. Because highway planning is essentially a political process, local representatives to both state and federal legislatures can and do provide access to state and federal administrators for discussions and negotiations outside the hearing context. Indeed, access to the highway administrator is seldom a problem for the citizen who fails to solicit an official introduction—he just talks to a lower level administrator.

Hence the social function of highway litigation is likely to consist of the usual mundane but necessary tasks of judicial review of administrative action: authoritative dispute resolution and the assurance of conformity with the statutory scheme under which the administrator operates. Yet there is always some potential for “reform” of the public decision process through the medium of judicial review. One such possibility is that the judiciary might come to interpret the statutory requirements for adequate administrative decisionmaking in ways which differ markedly from historical administrative practice. This potential for reform has been realized to some degree in judicial review of administrative decisions concerning highway building. We turn, then, to a review and evaluation of these reforms and how they have been effected. The general conclusions which emerge are that judicial review is not a very productive means of reforming the highway decision process and that the reforms produced may be of questionable value save to those interested in strategic shifts in the balance of power between highway builders and their opponents.

A. *State Judicial Review*

Attempts to secure state judicial review of highway planning decisions have been, at least in the short run, overwhelmingly unproductive. Several factors explain this result, but underlying them all is the judicial notion that the “legislature has placed in the [highway] commission discretion, authority and power [in regard to design and location of public highways]. Courts may interfere only when there is abuse of the power so granted or when there is attempted action beyond the grant of power.”¹⁰⁸

¹⁰⁸A & S, Inc. v. Iowa State Highway Comm’n, 253 Iowa 1377, 1385, 116 N.W.2d

Indeed, some courts view the planning process as so legislative in nature that "at least in the absence of statutory provisions, the determination of the necessity or advisability of locating and constructing highways is exclusively in the power of the tribunal created for such purpose by the legislature and the courts have no jurisdiction in such matters."¹⁰⁹ Whichever view is adopted, the result is essentially the same: state highway administrative decisions are final and free from judicial interference.

The courts are not to be faulted for taking a restrictive view of their role in the highway planning process. Save where legislatures specifically designate routes themselves, a highway statute commonly gives highway agencies virtually standardless discretion to establish highway systems.¹¹⁰ Although highway legislation varies significantly among the states, there is a pattern which generally characterizes its structure. Typically, the legislation establishes: the powers and responsibilities of the state highway department; the relationship between state and local jurisdictions in constructing and maintaining highway facilities; methods for allocating funds among the different areas of the state; and the definition or description of various state road systems. More important for the private litigant, however, is the common absence of provisions establishing standards by which to gauge the necessity for or the location of a given road.¹¹¹

Provisions which explicitly require consideration of social, economic or environmental factors, or which require coordination of state highways with local comprehensive planning, seldom appear in the state legislation. These concerns may be implicit in provisions making the consent and perhaps the financial participation of localities prerequisites to construction

496, 501 (1962); *accord*, *Saint Clair County v. Town of Riverside*, 272 Ala. 294, 128 So. 2d 333 (1961); *State Highway Dep't v. MacDonald*, 221 Ga. 312, 144 S.E.2d 363 (1965).

¹⁰⁹*Town of Clearmont v. State Highway Comm'n*, 357 P.2d 444, 445 (Wyo. 1960); *accord*, *Evans v. Edellbrock*, 106 Kan. 233, 187 P. 664 (1920).

¹¹⁰Occasionally the county court may exercise this political function with respect to local roads. *E.g.*, ALA. CODE, tit. 23, § 43 (1958) (courts of county commissioners have general superintendence of public roads); MINN. STAT. ANN. § 163.13 (1960) (appeal of right to county court).

¹¹¹*E.g.*,

The highway authorities of the state, counties, cities, towns, and villages, acting alone or in cooperation with each other . . . are hereby authorized to plan, designate, establish, regulate, vacate, alter, improve, maintain, and provide access facilities for public use wherever such authority or authorities are of the opinion that traffic conditions, present or future, will justify such special facilities . . ."

WYO. STAT. ANN. § 24-72 (1967).

of highway projects,¹¹² or demanding the justification of proposed road improvements in terms of adequacy of service and vehicle load;¹¹³ but without express provision of more stringent requirements, judicial review is largely a formality.

Even in those states in which specific need criteria are delineated, the provisions may be of little use to the plaintiff. The statutes are sometimes concerned only with the protection of localities, or they may apply only when roads are relocated, replaced or abandoned.¹¹⁴ Judicial review even at the instance of local governing bodies may be precluded.¹¹⁵ And the standards typically are so vague that virtually no administrative action under them could be classified as "arbitrary and . . . an abuse of discretion"¹¹⁶ or a misuse of legislative power under the usual review standard.¹¹⁷ The state highway department's actions are found to constitute an abuse of discretion only in that rare eminent domain proceeding in which arbitrariness is directed towards one property owner¹¹⁸ or where the highway commission runs afoul of a nonhighway statute.¹¹⁹

Statutorily prescribed procedures for state highway decisionmaking are also generally very limited; they offer little to the plaintiff searching for irregularities upon which to base a

¹¹²*E.g.*, N.C. GEN. STAT. § 136-60 (1964) (county commissioners must consent to abandonment or material alteration of roads in county system).

¹¹³*E.g.*, N.Y. H'WAY LAW § 220(4) (McKinney 1962).

¹¹⁴*E.g.*, IDAHO CODE § 40-121 (1961). *But see* CAL. STS. & H'WAYS CODE § 75.7 (West Supp. 1973), which specifies 13 factors which the state highway commission must expressly consider in a highway location report. Though the provision doubtless gives more guidance than most state statutes do, its failure to delineate the weight to be given to each factor suggests that the commission's report may serve as little more than a recording document.

¹¹⁵*E.g.*, N.C. GEN. STAT. § 136-59 (Supp. 1971).

¹¹⁶*Morningside-Lenox Park Ass'n v. State Highway Dep't*, 224 Ga. 344, 346, 161 S.E.2d 859, 861 (1968).

¹¹⁷*See, e.g.*, *Brown v. McMorran*, 23 App. Div. 2d 661, 662, 257 N.Y.S.2d 74, 77 (1965).

¹¹⁸The "public purpose" concept is so broad that virtually any taking for highway purposes is permissible. *See, e.g.*, *Washington Park, Inc. Appeal*, 425 Pa. 349, 229 A.2d 1 (1967). *But see* *Maher v. Lasater*, 163 Tex. 356, 354 S.W.2d 923 (1962). The "public purpose" test may not be met with respect to the taking of a particular piece of property for a concededly "public" highway, *e.g.*, *Brest v. Jacksonville Expressway Auth.*, 194 So. 2d 658 (Fla. Dist. Ct. App.), *aff'd per curiam*, 202 So. 2d 748 (Fla. 1967), but that has little impact on the project. The question raised is the necessity for taking the particular property, not the necessity for the highway.

State administrative procedure acts following the model act, REVISED MODEL STATE ADMINISTRATIVE PROCEDURE ACT § 15 (1970), treat highway planning decisions as unreviewable, and specific statutory review provisions are generally limited to issues that are irrelevant or peripheral to highway need and location decisions. *E.g.*, WASH. REV. CODE ANN. §§ 47.32.060, 47.42.060, 47.52.195 (1970). Injunction suits are the major vehicle for review apart from the occasional quixotic eminent domain contest.

¹¹⁹*Sacco v. Department of Public Works*, 352 Mass. 670, 227 N.E.2d 478 (1967).

claim for judicial relief. In most states, the only procedure of any importance is the public hearing, and this typically is required only in special situations, such as when a highway is vacated.¹²⁰ Attempts to read these procedures expansively, as requiring, for example, that the officials who make actual planning decisions attend the hearings, have not been successful.¹²¹

The only real hope of the state-court plaintiff is the application of federal grant standards to channel and confine the state highway department's discretion. But whenever the question of the applicability of federal standards has been confronted,¹²² the federal conditions have been considered inapplicable. Contrary to the developing trend toward utilization of federal standards as a basis for judicial review of the operations of grantees in fields like public housing and public assistance, the approach under the Federal-Aid Highways Acts has been that federal standards are conditions on funding and relevant only to a grant decision by FHWA.¹²³ Occasionally state statutes will require compliance with federal highway standards,¹²⁴ but even then the court may take the FHWA approval of the project as conclusive evidence of the satisfaction of these requirements.¹²⁵

B. *Federal Judicial Review*

1. The Party Defendant

The grant-in-aid nature of the federal highway program causes some substantial difficulties for the opponent of cooperative state and federal highway construction. His desire is to use the requirements of the Federal-Aid Highways Acts when complaining of highway construction by a state highway department. But the federal criteria are directions to the Secretary of Transportation. As a condition of federal participa-

¹²⁰ *E.g.*, IOWA CODE ANN. § 306.11-13 (Supp. 1972).

¹²¹ *See, e.g.*, Hinrichs v. Iowa State Highway Comm'n, 260 Iowa 1115, 152 N.W.2d 248 (1967).

¹²² The issue is occasionally skirted by a finding of conformity in fact with the federal law. *See, e.g.*, Piekarski v. Smith, 37 Del. Ch. 594, 153 A.2d 587 (Sup. Ct. 1958); Town of Clearmont v. State Highway Comm'n, 357 P.2d 470 (Wyo. 1960).

¹²³ Piekarski v. Smith, 37 Del. Ch. 594, 153 A.2d 587 (Sup. Ct. 1958); Morningside-Lenox Park Ass'n v. State Highway Dep't, 224 Ga. 344, 161 S.E.2d 859 (1968); Linnecke v. Department of Highways, 348 P.2d 235 (Nev. 1960); Futch v. Greer, 353 S.W.2d 896 (Tex. Civ. App.), *cert. denied*, 372 U.S. 913 (1963).

¹²⁴ *E.g.*, N.Y. HIGHWAY LAW § 85 (McKinney Supp. 1973).

¹²⁵ *See* Town of Clearmont v. State Highway Comm'n, 357 P.2d 470 (Wyo. 1960).

tion in the financing of a road, they require him to make certain determinations, such as that the facility serves both local and federal highway system needs,¹²⁶ or to receive certifications from state officials, such as that public hearings have been held and that the social, economic and environmental effects of the proposed project have been considered.¹²⁷ Accordingly, the courts have generally held that the federal statute creates no cause of action against state highway departments.¹²⁸

This almost cavalier determination that persons adversely affected by alleged violations of federal law have no federal cause of action based on the highway statutes is likely to be troubling to those familiar with federal securities regulation and the ubiquitous rule 10b-5¹²⁹ action or, more pertinently, with the deluge of lawsuits based on Title IV of the Social Security Act¹³⁰ brought against state welfare departments in the wake of *King v. Smith*.¹³¹ Of course, highway cases may be different. In the securities field the statutes and regulations protect a specified class of persons against certain proscribed conduct which is peculiarly injurious to their interests. The highway provisions are largely procedural rather than proscriptive; they protect the public generally and are enunciated in the context of a cooperative public works program of a sort traditionally outside the ambit of the private civil action or even a review proceeding. While the categorical public assistance programs are also grant-in-aid programs, welfare plaintiffs are individually affected by

¹²⁶23 U.S.C. § 109(a) (1970).

¹²⁷*Id.* § 128 (1970).

¹²⁸See, e.g., *Citizens Comm. for the Hudson Valley v. Volpe*, 297 F. Supp. 809, 812 (S.D.N.Y. 1969), *aff'd*, 425 F.2d 97 (2d Cir.), *cert. denied*, 400 U.S. 949 (1970); *Road Review League v. Boyd*, 270 F. Supp. 650 (S.D.N.Y. 1967).

These decisions have been rendered in the context of claims by the state department, the state highway commissioner, e.g., *Citizens Comm. for the Hudson Valley v. Volpe*, *supra*, at 810-11, or state contractors, e.g., *Elliot v. Volpe*, 328 F. Supp. 831 (D. Mass. 1971); *Pennsylvania Environmental Council, Inc. v. Bartlett*, 454 F.2d 613, 625 (3d Cir. 1971), that they are immune from suit in federal court by the citizens of that or another state. See generally U.S. Const. amend. XI; *Parden v. Terminal Ry.*, 377 U.S. 184 (1964) (involving a suit brought by former employees of a state-operated railroad for damages covering personal injuries sustained while employed: the Supreme Court rejected the state's claim of sovereign immunity). The existence or nonexistence of a federal cause of action based on the Federal-Aid Highways Acts was critical to the evaluation of the claimed defense, because a waiver of immunity might be found should the state be determined to have accepted participation in a program creating a federal cause of action for specific classes of persons. *Citizens Comm. for the Hudson Valley v. Volpe*, *supra*, at 812-13; cf. *Pennsylvania Environmental Council, Inc. v. Bartlett*, *supra*, at 625.

¹²⁹17 C.F.R. § 240.10b-5 (1973).

¹³⁰42 U.S.C. §§ 601-44 (1970).

¹³¹392 U.S. 309 (1968). See generally Note, *Federal Jurisdiction Over Challenges to State Welfare Programs*, 72 COLUM. L. REV. 1404 (1972).

the failure of state governments to abide by the protective conditions of the Social Security Act. This brings them within the ambit of section 1983,¹³² which provides a federal cause of action for any person deprived of any "right, privilege or immunity" guaranteed by federal law.¹³³ Only in certain situations which are not particularly germane to this study, for example, improper provision of relocation assistance, would a similarly specific claim accrue to the complainant in a highway case.¹³⁴

These distinctions are less than completely satisfying because the criteria are rather vague for determining whether federal statutes should be held to imply federal causes of action or whether claims should be included within the general scope of section 1983. Indeed, one is tempted to conclude that the law on these questions is in some considerable theoretical disarray.¹³⁵ Nor is the problem less dense if one eschews "cause of action" language and casts the question in terms of whether the statute entitles the plaintiff to obtain federal court "review" of the state department's actions. In the absence of a specific provision for review we have no theory of review of administrative action which is not based on either a unitary system of government (the prerogative writ system) or a claim analogous to a claim of private civil wrong. Neither basis can be used under these circumstances. Here the plaintiffs would be asking a *federal* court to "review" the actions of a *state* administrator. And the recent and happy divorce of "standing" to review federal agency action from the necessity of showing a "legal right,"¹³⁶ precludes the glib assertion that if the plaintiff has standing to seek to enjoin

¹³²42 U.S.C. § 1983 (1970).

¹³³*Id.* The provision requires that the right be threatened by one acting under color of state law: policemen, government inspectors, commissioners and other administrators. A similar cause of action based on the deprivation of fourth amendment rights has been allowed against federal officers where other remedies were considered inadequate. *Bivens v. Six Unknown Named Agents of the Fed. Bureau of Narcotics*, 403 U.S. 388 (1971).

¹³⁴In only 1 highway case has § 1983 been the basis for suit. The claim was appropriately so cast because the main complaint concerned racial discrimination. *Nashville I-40 Steering Comm. v. Ellington*, 387 F.2d 179 (6th Cir. 1967), *cert. denied*, 390 U.S. 921 (1968). *La Raza Unida v. Volpe*, 337 F. Supp. 221 (N.D. Cal. 1971), *cert. denied*, 409 U.S. 890 (1972), seems to be a similar case although the rejection of defendants' sovereign immunity claim is cast quite broadly.

¹³⁵*See generally* F. HARPER & F. JAMES, *THE LAW OF TORTS* § 17.5-17.6 (1956); W. PROSSER, *THE LAW OF TORTS* 190-204 (4th ed. 1971); Katz, *The Jurisprudence of Remedies: Constitutional Legality and the Law of Torts in Bell v. Hood*, 117 U. PA. L. REV. 1 (1968); Morris, *The Role of Criminal Statutes in Negligence Actions*, 49 COLUM. L. REV. 21 (1949); Note, *Limiting the § 1983 Action in the Wake of Monroe v. Pape*, 82 HARV. L. REV. 1486 (1969).

¹³⁶*See, e.g., Barlow v. Collins*, 397 U.S. 159 (1970).

federal funding because of a state's failure to conform to federal statutory standards, he must have a "right" to state compliance which can be pursued against the state via section 1983.

Although pursuit of these questions must await another day, they are of more than theoretical concern for the highway litigant. The dismissal of the state highway department from the litigation¹³⁷ creates a series of practical problems. Not the least of these is the realization that complete success results only in the exclusion of federal funding from the project. Should the state decide to proceed with its own funds, the victory is hollow. This prospect is particularly likely in those states whose annual road-building expenditure on roads qualified for inclusion within a federal-aid system exceeds the annual allotment to the state from federal revenues. In these states federal money lost on one project can be shifted to another which was being funded wholly from the state's own coffers, and vice versa. The switch is virtually costless.

The spectre of this sort of shell game became too much for Judge Thornberry in *Named Individual Members of the San Antonio Conservation Society v. Texas Highway Department*.¹³⁸ To summarize a long and complex history of litigation, the plaintiffs in that case were seeking to enjoin federal funding of two disconnected segments of highway known as the North Expressway Project. These segments would, when constructed, abut the north and south ends respectively of Breckinridge Park in San Antonio.¹³⁹ Plaintiffs claimed that federal funding was improper because the Secretary of Transportation had not found in accordance with section 138 of title 23 that there was no feasible or prudent alternative to taking land from Breckinridge Park. The Secretary and the Texas State Highway Department defended on the almost shameless ground that no parkland was being taken and that therefore no section 138 determination was required. Of course, once the expressway was built up to both sides of the park there would hardly be a feasible or prudent alternative to the taking of parkland for the connecting link, and the court quite appropriately refused to allow "segmenting" of the

¹³⁷The federal court may occasionally issue an order against the state where necessary to preserve its power to provide an effective remedy against the federal government. *Arlington Coalition v. Volpe*, 458 F.2d 1323 (4th Cir.), cert. denied, 409 U.S. 1000 (1972).

¹³⁸446 F.2d 1013 (5th Cir. 1971), cert. denied, 406 U.S. 933 (1972).

¹³⁹*Id.*

expressway into three projects in order to sidestep any significant application of the section 138 requirement.

However, the Texas Highway Department was committed to the North Expressway project, federal funds or no, and having not yet received any federal monies, it renounced all intention of applying for or accepting any such funds in aid of its project. The Highway Department then claimed that in this posture it was not bound by federal requirements and could not be enjoined from proceeding. Not so, concluded Judge Thornberry, and he enjoined further construction until the Secretary of Transportation complied with section 138 and NEPA. In the court's view: "The North Expressway is now a federal project, and it has been a federal project since the Secretary of Transportation authorized federal participation in the project"¹⁴⁰

Clearly state highway departments should not be allowed to accept federal money for highway projects while avoiding compliance with any federal requirements which appear troublesome by segmenting the project into state and federal portions.¹⁴¹ But this was not really the Texas Highway Department's proposal. It was prepared to exclude federal funding from all portions of the San Antonio North Expressway, although it admitted that it would be able to use elsewhere any surplus in the annual allotment to the state from federal highway trust funds that resulted from removing the previous reservation of funds for the San Antonio project. But, if the state highway department's general power to allocate federal aid funds among various highway projects is relied on by courts to justify the application of federal grant conditions to road building activities which are wholly state financed, the courts will have gone some distance toward "federalizing" all the activities of state highway departments which are carried out on routes which are within the general classifications eligible for federal funding. This result would upset the basic scheme of the grant-in-aid program.¹⁴² To be sure, there must come a time when proper claimants can enforce federal standards. But enforcement should normally be

¹⁴⁰*Id.* at 1027. Ironically, these plaintiffs are in the unusual position of having a state statute which might have provided a state claim. *Id.* at 1029 (Clark, J., dissenting).

¹⁴¹*See* Sierra Club v. Volpe, 351 F. Supp. 1002 (N.D. Cal. 1972); Thompson v. Fugate, 347 F. Supp. 120 (E.D. Va. 1972).

¹⁴²The "partnership" analogy to *Ivanhoe Irrigation Dist. v. McCracken*, 357 U.S. 275 (1958), employed by the court in *San Antonio*, 446 F.2d at 1027, is inapposite. There was no question of withdrawal in that case, only the issue of whose law applied in a contest with third parties.

directed at DOT. Otherwise, the first step in the process of qualification for federal funds locks the state into compliance with federal standards conditioning a federal grant that the state may decide it does not want because it will result in a project that the state does not wish to undertake.¹⁴³ This hardly seems the statutory scheme Congress had in mind.¹⁴⁴ In fact, Congress has recently acted to prevent *San Antonio's* conception of the highway program from becoming the wave of the future.¹⁴⁵

2. Review of Federal Administrative Enforcement

a. Procedural Issues

The federal courts have encountered considerable procedural underbrush in reaching the more substantive issues in highway litigation. Although the Federal Highway Administration and DOT have persistently fought against the rationalization of doctrines such as standing, reviewability, ripeness and sovereign immunity, the courts have been almost uniformly sensible and progressive in resolving these issues. The standing issue has been dispensed with for any reasonable class of plaintiffs having some local coloration by the now classic cases of *Road Review League v. Boyd*¹⁴⁶ and *Citizens Committee for the Hudson Valley v. Volpe*.¹⁴⁷ *Sierra Club v. Morton*¹⁴⁸ rejects the theory of *Hudson Valley* that longstanding concern and expertise in an area are sufficient to confer standing, but there seems no reason to believe that the requirement of an allegation of some harm to the plaintiff will severely inhibit antihighway litigants.¹⁴⁹ The

¹⁴³The conflict between the state and DOT over the North Expressway project in San Antonio seemed virtually irreconcilable before the last round of private litigation. But the plaintiff quite properly perceived that the Secretary had given away too many chips to avoid a final surrender. With the court's restoration of DOT's position of influence by denial of its power to "segment" its approval, I have no quarrel. 446 F.2d at 1022-23.

¹⁴⁴See, e.g., Statement by Administrator Turner, in *Hearing on the Report on the Status of the Federal-Aid Highway Program Before the Subcomm. on Roads of the Senate Comm. on Public Works*, 91st Cong., 2d Sess. 20-31 (1970).

¹⁴⁵The authorization of the appropriation of Federal funds or their availability for expenditure under this chapter shall in no way infringe on the sovereign rights of the States to determine which projects shall be federally financed. The provisions of this chapter provide for a federally assisted State program.

Federal-Aid Highways Act of 1973, Pub. L. No. 93-87, § 123(a), 87 Stat. 261-62. Congress also specifically removed the San Antonio North Expressway from the federal-aid system. *Id.* § 154(a), 87 Stat. 276.

¹⁴⁶270 F. Supp. 650 (S.D.N.Y. 1967).

¹⁴⁷425 F.2d 97, 102-04 (2d Cir.), cert. denied, 400 U.S. 949 (1970).

¹⁴⁸405 U.S. 727, 736 n.9 (1972).

¹⁴⁹See, e.g., *Ward v. Ackroyd*, 344 F. Supp. 1202 (D. Md. 1972).

Supreme Court has made clear that findings required of the Secretary of DOT are reviewable — at least where there is no clear showing of a legislative intent to prohibit judicial review and where the presence of “law to apply” indicates that the question has not been committed to agency discretion.¹⁵⁰ Finally, recognizing that the time span from the conception to the construction of a highway may easily be a decade, that there are substantial commitments of public resources at various stages of this process, and that the meaningful application of federal conditions cannot await the final commitment of federal funds, the courts have cut through the government’s alternating claims of lack of finality and laches to reach sound results.¹⁵¹

Even when these preliminary thickets have been penetrated, plaintiffs reaching the merits of their review petitions are often still in some sense talking procedure. Most complainants who have succeeded in obtaining an order against the Secretary have claimed a failure by the state to hold adequate public hearings,¹⁵² a failure to file an environmental impact statement¹⁵³ or the failure of the Secretary to make a finding that is required of him.¹⁵⁴ In these cases there is generally a fairly straightforward question of law involved, that is, was the particular procedural step or finding, which admittedly was omitted, required in this particular case. The interpretive issue may not be easy, but it is clearly within the traditional competence of the reviewing court.

A number of suits contesting the adequacy of environmental impact statements filed pursuant to the requirements of the National Environmental Policy Act have also been successful.¹⁵⁵ But again these victories were essentially procedural. The courts may be quite searching in their inquiry into the adequacy of the impact statement, but they generally recognize that NEPA

¹⁵⁰ See *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 410-13 (1971).

¹⁵¹ See, e.g., *Citizens' Comm. for the Hudson Valley v. Volpe*, 425 F.2d 97 (2d Cir. 1969), *cert. denied*, 400 U.S. 949 (1970); *Township of Hopewell v. Volpe*, 2 BNA ENV. REP. CAS. 1089 (D.N.J. 1969), *aff'd*, 446 F.2d 167 (3d Cir. 1971); *Hanley v. Volpe*, 305 F. Supp. 977 (E.D. Wis. 1969); *Road Review League v. Boyd*, 270 F. Supp. 650 (S.D.N.Y. 1967).

Despite these rulings, DOT's position in *San Antonio Conservation Soc'y v. Texas Highway Dep't*, 446 F.2d 1013, 1023 (5th Cir. 1971), concerning the time at which the Secretary's § 138 findings were required, seems indicative of a continuing willingness to manipulate timing problems in an attempt to avoid review. See the dissents of Justices Black and Douglas from the denial of certiorari in this case prior to appeal to the Fifth Circuit, 400 U.S. 968, 970-72, 976-77 (1970).

¹⁵² E.g., *D.C. Fed'n of Civic Ass'ns v. Volpe*, 316 F. Supp. 754 (D.D.C.), *rev'd on other grounds*, 459 F.2d 1231 (D.C. Cir. 1971), *cert. denied*, 405 U.S. 1030 (1972).

¹⁵³ E.g., *Morningside-Lenox Park Ass'n v. Volpe*, 334 F. Supp. 132 (N.D. Ga. 1971).

¹⁵⁴ E.g., *San Antonio Conservation Soc'y v. Volpe*, 446 F.2d 1013 (5th Cir. 1971).

¹⁵⁵ See, e.g., *Brooks v. Volpe*, 350 F. Supp. 269 (W.D. Wash. 1972); *Lathan v. Volpe*,

requires only that certain inquiries be made and spread on the record. The agency's discretion to choose among competing environmental considerations or to make judgments which trade off environmental considerations against social or economic concerns is not confined appreciably by the NEPA requirements.¹⁵⁶

b. *Substantive Review of the Secretary's Decision*

A few cases have gotten past the procedural issues to the substantive question whether the decision taken by the Secretary was within the applicable boundaries of reasonable judgment. The meaningful definition of these boundaries is, as usual, one of administrative law's great puzzles. Moreover, in the highway program the combination of the nature of the federal standards, the traditional modes of agency operation and the federal-state division of responsibility make the determination of an appropriate role for a reviewing court particularly difficult.

(i) Review Under Provisions Narrowly Limiting the Secretary's Authority: *Overton Park* and Section 138.

Like the *San Antonio Conservation Society* case, *Citizens to Preserve Overton Park v. Volpe*¹⁵⁷ involved Secretary Volpe's approval under section 138 of title 23 of a project which would take certain parklands — this time in Memphis. There was, however, no question that parklands would in fact be taken nor that federal aid was to be used in the project. The plaintiffs challenged both the Secretary's failure to make formal findings to accompany his approval of the project and the merits of his decision, contending that there were available to the state highway department "feasible and prudent alternatives" to the taking of the parklands and that "all possible planning," within the meaning of section 138, had not been done to preserve the park should some of its land have to be used for highway purposes. Because the absence of findings meant that there was

350 F. Supp. 262 (W.D. Wash. 1972); *Daly v. Volpe*, 350 F. Supp. 252 (W.D. Wash. 1972) (all I-95 freeway cases).

¹⁵⁶*See, e.g.*, *Pizitz v. Volpe*, 4 BNA ENV. REP. CAS. 1195 (M.D. Ala., *aff'd per curiam*, 467 F.2d 208 (5th Cir. 1972); *see also* *Environmental Defense Fund v. Corps of Engineers*, 479 F.2d 289, 298 (8th Cir. 1972), *cert. denied*, 93 S. Ct. 2749 (1973); *Environmental Defense Fund v. Froehlike*, 473 F.2d 346, 353 (8th Cir. 1972). *But see* Comment, *Judicial Review of Factual Issues Under the National Environmental Policy Act*, 51 ORE. L. REV. 408 (1972).

¹⁵⁷401 U.S. 402 (1971).

no written record of the reasons for his decision or the factors he considered in making it, the question whether the Secretary acted within his authority in finding that the section 138 criteria were satisfied was determined on the basis of affidavits submitted by the Secretary to the trial court. Nothing found in the affidavits suggested that the Secretary had exceeded his authority, and hence the district court upheld his decision.¹⁵⁸ The Sixth Circuit affirmed.¹⁵⁹ The Supreme Court reversed, ultimately on the narrow ground that review on the basis of affidavits prepared for litigation was not review on the whole record as required by the Administrative Procedure Act.¹⁶⁰

In reaching this result, however, Justice Marshall, writing for the Court, attempted to provide a basic structure for judicial review of federal-aid highway funding decisions. After a rather academic raising and rejection of the polar positions on scope of review (nonreviewability and *de novo* review) and of review for substantial evidence in the record,¹⁶¹ the reviewing court's role was articulated as one of determining whether the agency had acted within the scope of its authority; had not taken action which was arbitrary, capricious or an abuse of discretion; and had met necessary procedural requirements.¹⁶² Although the first two inquiries are difficult to separate, the "scope of authority" question is said to involve an inquiry into whether the Secretary "properly construed" his statutory authority and could have, on the facts available, reasonably believed that his action was within that proper range of his authority. The "arbitrariness" inquiry seems somewhat more searching in that it asks whether the Secretary actually considered the relevant factors and made no clear error of judgment.

Abstractly considered there is no problem with this formulation, but as the Court noted there are some functional difficulties. The first is the matter of a record upon which to evaluate agency action in the light of the enunciated review criteria. With few exceptions¹⁶³ the legislation under which the FHWA and the Secretary of DOT operate does not require formal findings of fact or law when approving or disapproving grants. Therefore, courts are unable to look to a formal report to

¹⁵⁸309 F. Supp. 1189 (W.D. Tenn. 1970).

¹⁵⁹432 F.2d 1307 (6th Cir. 1970).

¹⁶⁰*E.g.*, 5 U.S.C. §§ 551-59 (1970).

¹⁶¹401 U.S. at 410, 413-17.

¹⁶²*Id.* at 415-17.

¹⁶³*E.g.*, National Environmental Policy Act § 102(2)(C), 42 U.S.C. § 4332 (2)(C) (1970), DOT Order 5610.1A (Oct. 4, 1971).

ascertain whether the Administrator acted reasonably and within his scope of authority in making an administrative determination. Further, since there is no requirement that the Secretary or the Administrator act solely on the basis of matters presented at public hearings, a court purporting to review an action on the whole record must look to all of the facts and reports that were before the officer at the time of his decision. This necessarily involves the court in a lengthy and complex examination of factual inputs into the administrative process.

But even this detailed sort of inquiry may not be sufficient, for, as the Supreme Court has noted, "the bare record may not disclose the factors that were considered or the Secretary's construction of the evidence. . . ." ¹⁶⁴ If not, testimony from the administrative decisionmakers concerning their actions and the factual bases for those actions may be required. While an inquiry into the mental processes of administrators is to be avoided whenever possible, ¹⁶⁵ the Court was prepared to permit such an examination where there were no formal administrative findings at the time of the decision. ¹⁶⁶ Indeed, on remand the district court in *Overton Park* did admit extensive testimony concerning the mental processes of those involved in the decision, but it was nevertheless forced to hypothesize to some extent about what the Secretary believed at the time he acted. ¹⁶⁷

The desirability of this process of review is questionable. Any explanation that is offered by the administrator is suspect as a post hoc rationalization. ¹⁶⁸ The absence of a contemporaneous record against which to check a present reconstruction of events hinders a searching inquiry consistent with the dignity of the defendant and at the same time increases suspicions of impropriety. ¹⁶⁹ When this is combined with the burdensomeness of testifying, one could hardly blame the Secretary were he to delegate his section 138 responsibilities, as he has most others, ¹⁷⁰

¹⁶⁴401 U.S. at 420.

¹⁶⁵United States v. Morgan, 313 U.S. 409, 422 (1941).

¹⁶⁶401 U.S. at 420. Secretary Volpe, for example, testified for an extended period concerning his approval of the Three Sisters Bridge in Washington, D.C. See *D.C. Fed'n of Civic Ass'ns v. Volpe*, 316 F. Supp. 754, 760-61 & n.12 (D.D.C. 1970).

¹⁶⁷*Citizens to Preserve Overton Park, Inc. v. Volpe*, 335 F. Supp. 873, 883 (W.D. Tenn. 1972).

¹⁶⁸See *Citizens to Preserve Overton Park, Inc.*, 401 U.S. 402, 420 (1971); *D.C. Fed'n of Civic Ass'ns v. Volpe*, 459 F.2d 1231, 1237-38 (D.C. Cir. 1971).

¹⁶⁹In *D.C. Fed'n of Civic Ass'ns v. Volpe*, 459 F.2d 1231, 1237-38 (D.C. Cir. 1971), the absence of both formal findings and an administrative record seems to have taken on independent significance.

¹⁷⁰See text accompanying note 67 *supra*.

to Division Engineers in the FHWA. This would, of course, eliminate decisionmaking by persons who do not have a "highway orientation."

No matter who actually makes the decisions, the Secretary's prospects of being upheld on review do not seem very good if he allows the taking of parklands. Under the *Overton Park* interpretation of section 138, his findings must show that he approved the taking only because an alternative route was "not feasible" as an engineering matter or "not prudent" in the sense of "uniquely difficult." That the alternatives require taking businesses and residences is not unique.¹⁷¹ Should the Secretary's decision be justified on this very restricted interpretation of his statutory authority there is still the problem of showing that all "possible" planning has been done to minimize harm. Given the Court's view of "prudent" and "feasible," one is tempted to conclude that the "all possible planning" requirement in the hands of reasonably competent counsel translates the language of section 138 into a simple "Thou shalt take no parkland for federal-aid highway purposes."¹⁷²

Because Secretary Volpe had obviously not understood section 138 to sweep so broadly, an eventual remand of the *Overton Park* question was almost inevitable.¹⁷³ On reconsideration in light of the Supreme Court's directives, the Secretary refused to approve the *Overton Park* route and promptly had the question remanded to him again by the district court, this time on the petition of the State of Tennessee.¹⁷⁴ The state objected to the Secretary's failure to find that there were no feasible or prudent alternatives. This action was unaccompanied by an affirmative declaration that any alternative was found to be feasible and prudent and the state contended that this omission was fatal to the validity of the Secretary's new decision. The district court agreed with the state on the ground that without such a declaration the court could not provide the state with that careful judicial scrutiny of administrative action mandated by the Supreme Court.

While the irony of this turn of events is fine, the Secretary's position is no laughing matter. He has before him a record on the

¹⁷¹401 U.S. at 411-12.

¹⁷²*But see* *Citizens to Preserve Foster Park v. Volpe*, 466 F.2d 991 (7th Cir. 1972).

¹⁷³*Citizens to Preserve Overton Park, Inc. v. Volpe*, 335 F. Supp. 873 (W.D. Tenn. 1972).

¹⁷⁴*Citizens to Preserve Overton Park, Inc. v. Volpe*, 357 F. Supp. 846 (W.D. Tenn. 1973).

basis of which both the Tennessee Highway Department and the Federal Highway Administrator concluded that there is no feasible and prudent alternative to the Overton Park route.¹⁷⁵ Such a record may not support a finding that any particular alternative route is feasible and prudent. If it does, one would suspect that it does so, at least in part, on the basis of the evidence adduced by the original plaintiff. In that case the Secretary's decision is at least partially at the mercy of the plaintiff's choice among suggested alternative routes. Indeed, whatever the final outcome of that specific case it seems reasonably clear that *Overton Park's* interpretation of section 138 has shifted some of the functional power to locate federally aided highways from state and federal highway officials to persons interested in preserving parks.

These events, however, do not necessarily foretell a substantial redistribution of the power to make highway needs, location or design decisions via the medium of judicial review. The broader lesson of *Overton Park* is that the interpretation of the statute,¹⁷⁶ not the articulation of the scope of review, is the critical question. Given a statutory interpretation which narrowly confines the Secretary's authority, his decisions will be reversible by even a narrowly conceived exercise of judicial review. The principle can also work in reverse. Given the same scope of review, claims under sections of the Federal-Aid Highways Acts which grant the Secretary a broader discretion may be met with a marked reluctance among judges to reverse administrative decisions.

(ii) Review Under Less Restrictive Provisions of the Highway Code

Most of the provisions of the Federal-Aid Highways Acts will not bear the sort of narrow interpretation placed on section 138 in *Overton Park*. A good example of the role of judicial review under fuzzier standards is *Road Review League v. Boyd*.¹⁷⁷ The plaintiffs there claimed that FHWA's approval of the location of a link in the interstate system in New York was arbitrary and capricious because it failed to give adequate weight to environ-

¹⁷⁵*Id.* at 849, 851 n.3.

¹⁷⁶In this writer's view the *Overton Park* interpretations of § 138 are highly suspect. As the court recognized, its interpretation is not supported by the legislative history, 401 U.S. at 412 n.29, and the principle of the inherent superiority of parks over housing seems somehow unlikely to have commended itself to the Congress.

¹⁷⁷270 F. Supp. 650 (S.D.N.Y. 1967).

mental considerations¹⁷⁸ or to local needs¹⁷⁹ and local planning.¹⁸⁰ Although the facts required for a thorough feel for the case are too extensive to bear recitation here, it is fair to say that the plaintiffs had compiled persuasive evidence in favor of an alternative route which had originally been chosen by the New York Department of Highways. However, the inability of the plaintiffs to point to any standard in the federal statute or regulations which was to be given decisive, or even primary, weight seems to have tipped the balance. The court said,

Planning is an important factor, but it is only one factor out of several, just as cost is only one factor. The same is true of conservation. The ultimate question is whether the overall decision, viewed in the light of all the competing factors, was arbitrary. Here certain factors are clearly in favor of [the route approved by FHWA]. Others seem to me to weigh more heavily in favor of the westerly route than [the Administrator] thought they did.

. . . . The decision must be allowed to stand unless it was plainly wrong. I have reviewed this entire lengthy record and I have given this matter considerable thought. Having done so, I conclude that this administrative decision was not wrong enough to permit this court to upset it.¹⁸¹

Although *Boyd* represents the most probable judicial response to the claims of antihighway plaintiffs, a description of the place of judicial review in highway decisionmaking must contend with a contrary trend which appears in the formidable jurisprudence generated by road building in and around the District of Columbia, particularly the projected Three Sisters Bridge. The level and length of the conflict in that area seems unprecedented, and I shall not attempt to recite the full tale here. I will sketch the view which the courts in the D.C. litigation have taken of the role of a reviewing court under the Federal-Aid Highways Acts; explain briefly why this view seems inappropriate; and inquire into what can be expected of the Federal

¹⁷⁸The plaintiffs' environmental claims rested on a general policy expressed in Federal-Aid Highways Act of 1966, Pub. L. No. 89-574, § 15(a), 80 Stat. 771, *as amended*, 23 U.S.C. § 138 (1970), and in a general regulation at 23 C.F.R. § 1.6(c) (1973). A 1968 amendment to the highway code produced the strict criteria discussed in *Overton Park*, Federal-Aid Highways Act of 1968, Pub. L. No. 90-495, § 18(a), 82 Stat. 823.

¹⁷⁹23 U.S.C. §§ 101(b), 109(a)(2) (1970).

¹⁸⁰*Id.* § 134.

¹⁸¹270 F. Supp. at 663. *See Fayetteville Area Chamber of Commerce v. Volpe*, 463 F.2d 402, 404-05 (4th Cir. 1972); *Daly v. Volpe*, 350 F. Supp. 252 (W.D. Wash. 1972).

Highway Administration and the Secretary of Transportation in response to these decisions and others like them.

The Three Sisters Bridge case has been decided no less than four times in the district court and three times in the court of appeals.¹⁸² The conflict has become something of a *cause celebre* in the capital, not only because of the traditional protesters' prostrations before the machinery of "progress," but also because it has become entangled with the questions of subway appropriations and home rule for the District in the Congress.¹⁸³ For present purposes the last two rounds in this donnybrook are the most interesting. In the district court's fourth try at the case it held: (1) that appropriate public hearings had not been held; (2) that the FHWA Division Engineer had acted unreasonably in finding that the bridge was of a design "conducive to safety, durability, and economy of maintenance;"¹⁸⁴ and (3) that FHWA could not accept the certification of the Chief of the District of Columbia Department of Highways and Traffic's Office of Engineering that the "economic, social and environmental"¹⁸⁵ effects of the project had been considered because that official did not have personal charge of the planning staff who would have investigated these issues.¹⁸⁶ On appeal these rulings were upheld, and the following grounds for enjoining federal funding, which had been put forward by the plaintiffs but had been rejected by the district court, were added: that not only a design hearing but also a new location hearing must be held; that the Secretary's approval under section 138 was without authority since final design plans for certain access ramps had not been submitted at the time he gave it; that the finding of consistency of the project with local planning was not based on an understanding that the statute¹⁸⁷ required the Division Engineer to exercise his independent judgment rather than accepting the views of a local planning agency; that to the fullest extent practical the Secretary would have to resolve any questions covering the safety of riverbed conditions; that the

¹⁸²D.C. Fed'n of Civic Ass'ns v. Airis, 275 F. Supp. 533, 540 (D.D.C. 1967), *rev'd*, 391 F.2d 478 (D.C. Cir. 1968); D.C. Fed'n of Civic Ass'ns v. Volpe, 308 F. Supp. 423 (D.D.C.), *rev'd*, 434 F.2d 436 (D.C. Cir. 1970), *on remand*, 316 F. Supp. 754 (D.D.C. 1970), *rev'd*, 459 F.2d 1231 (D.C. Cir. 1972).

¹⁸³See D.C. Fed'n of Civic Ass'ns v. Volpe, 316 F. Supp. 754, 759, 762-63 (D.D.C. 1970).

¹⁸⁴23 U.S.C. § 109(a)(1) (1970).

¹⁸⁵*Id.* § 128.

¹⁸⁶D.C. Fed'n of Civic Ass'ns v. Volpe, 316 F. Supp. 754, 785, 789, 792-93 (D.D.C. 1970).

¹⁸⁷23 U.S.C. § 134 (1970).

Division Engineer had failed to consider the effects of air pollution in his "safety determination" under section 109 of title 23;¹⁸⁸ and that on remand the Secretary must make his determination strictly on the merits without regard to a factor not made relevant by the statute—political pressure from Representative Natcher, Chairman of the Appropriations Subcommittee for the District of Columbia, who threatened to bottle up funds for Washington's Metro System unless the Three Sisters Bridge and the freeway it was to serve were constructed forthwith.

Some of these holdings are quite similar to those we have encountered in other cases, for example, the reinforcement of the public hearing requirement and the strict application of section 138. Similarly the "local planning" and "safety and durability" holdings are arguably within reasonably well-worn paths. The first involved what the court took to be an error in statutory interpretation, and the second was based on the Division Engineer's own testimony that he had very grave doubts about the feasibility of the design he approved. But cumulatively, and in some instances taken alone, the improprieties discovered by the District of Columbia Court of Appeals reflect a quite different approach to the review of highway planning than has appeared elsewhere. At least three aspects of these opinions require some comment.

First, the emphasis on political pressure seems misplaced. It presumes that the Federal-Aid Highways Acts establish a closed set of criteria on the basis of which decisions can be made concerning where, when and how highways are to be built. On the contrary, as we have noted, the question of the "need" for highways is essentially political. Although one can appreciate how the issue of home rule or at least a modicum of self-determination for the District of Columbia (whose planners were not enamored of the bridge) and the Congressman's highhandedness might influence the court's judgment, it does not violate the spirit of federal highway legislation to trade Representative Natcher a bridge for a subway.

The holding that the Division Engineer's decision concerning safety should be upset because there was no study of air pollution is also unsettling. The Division Engineer was probably

¹⁸⁸*Contra*, *Concerned Citizens of Marlboro v. Volpe*, 459 F.2d 332, 334 (3d Cir. 1972). The Federal-Aid Highways Act of 1970 included air, noise and water pollution as separate consideration. 23 U.S.C. § 109(h) (1970).

equally ignorant of the flight patterns of migratory birds and the chances for a tidal wave in the Chesapeake Bay. Was there some special impact of air pollution on safety here that cried out for detailed inquiry? If so, it does not appear from the opinions. Surely the opponents of a highway project should be required to establish the necessity for further study before the court upsets the highway planner's selection from the universe of possible considerations those most likely to have some immediate relevance to his decision.

Finally, the requirement that FHWA make its own decision on consistency with local planning misconceives both the reach of section 134 of title 23 and the nature of local planning. In this case, the Division Engineer was faced with two conflicting reports: a report from the National Capital Planning Commission which said the bridge was unnecessary and undesirable and a report from the Transportation Planning Board of the Metropolitan Washington Council of Governments which approved the facility as a part of a regional transportation system. He elected to follow the advice of the latter agency, which had jurisdictional authority for both ends of the bridge, and was told by the court of appeals to go back and consider for himself whether the project is "consistent with *sound* transportation planning for the region."¹⁸⁹ This language is strikingly similar to language proposed and rejected by the Congress for incorporation into section 134.¹⁹⁰

Presumably this requirement of independent federal evaluation would apply whether the overlapping planning agencies agreed or disagreed. Hence, if both agencies were in opposition, the Secretary might yet approve the project, or if both were in favor, he could reject it; the single planning agency situation would be treated similarly. But on what basis might these decisions be made? Could the Secretary reject the goals and values of the local planners? Or perhaps, the Secretary could merely take the local agency's plan and deduce that there was an incongruity between its ultimate goals and the means by which the local planners envisioned achieving those goals.

Neither proposal makes much sense. To reject the goals or

¹⁸⁹459 F.2d at 1240 (emphasis added).

¹⁹⁰See *Hearings on S. 3136 and H.R. 12135 Before the Subcomm. on Roads of the House Comm. on Public Works*, 87th Cong., 2d Sess. (1962); *Hearings on H.R. 9725, H.R. 9848 & H.R. 11199 Before the Subcomm. on Roads of the House Comm. on Public Works*, 87th Cong., 2d Sess. (1962); *Hearings on H.R. 12135 and S. 3136 Before the Subcomm. on Public Roads of the Senate Comm. on Public Works*, 87th Cong., 2d Sess. (1962).

values of the local planners is simply to substitute the federal officer's preferences for the local political process, a result which Congress may be deemed not to have intended in requiring *local* planning. Nor may the Secretary defensibly reject the local planners' approval of the project on the ground that the project does not really fit the agency's plan. The Secretary cannot determine with any greater precision than the local planner what the locality's goals are, how the transportation system effects those goals and certainly not how a particular project will affect them. Planning is after all only a collection of better or worse methods for the manipulation of predictions about the future which are about to be encased in concrete.¹⁹¹ It is because those predictions are value-laden and therefore express the political preferences of the political process to which the planner is responsive that the Congress required local planning. If the Secretary substitutes his "independent judgment" concerning whether the local planners' plan is "sound," in reality he will merely be substituting his goals or values for theirs.

In sum, the court of appeals reveals a preference for highway planning which is nonpolitical, rational, exhaustive and federal, and this preference becomes, in effect, a set of assumptions which color its review of agency action under the terms of the statute. This is doubtless a possible model for highway decisionmaking, but it is probably not the model Congress constructed. It is certainly not the system under which the Federal Highway Administration and state highway departments have been operating. The court's mandate to reform the decision process in its own image is uncertain at best. Nor is it clear why changes in the decision process of the sort the court requires will result in "better" decisions, save perhaps in the special sense of being more palatable to the plaintiffs in highway litigation.

Nevertheless, while I disagree with the approach of the District of Columbia Court of Appeals, I find its position wholly understandable. There is a progressive logic to judicial review which tends to push administrative action into a conceptual mold that employs clear divisions of function, sharp criteria for judgment and detailed explanation of reasons. Questions of administrative discretion or judgment are sharply formulated by the well-drawn complaints of antihighway plaintiffs. The

¹⁹¹ See, e.g., Tabb, *Alternative Futures and Distributional Planning*, 38 J. AM. INST. PL. 25 (1972).

influence of history, of intergovernmental politics, of the nonscientific side of planning, or of funding priorities on decisionmaking is difficult to reproduce. Such factors appear in the mouths of the defendants to be lame explanations for incompetence or evasion of legislative mandates. And so the administrator is once again trapped between a legislature which finds rationalization of his program impossible and a reviewing court which insists that the exercise of judgment not outrun cogent articulation of policy.

Should the D.C. Court of Appeals' approach to judicial review be generalized to other courts, one would expect that the Federal Highway Administration will respond in the time-honored fashion of the bureaucracy put on the defensive. It will shift some of its energies toward establishing explicit bases for its decisions, and will exercise more care when dealing with the formal or procedural requirements of the Federal-Aid Highways Acts and related legislation. In so doing it will to some degree alter the internal dynamics of highway decisionmaking and thereby shift to some unpredictable extent toward the emphasis on "nonhighway" values that its opponents are urging upon it. This new stance is likely to reestablish credibility in the eyes of the judiciary and limit the "success" of parties seeking judicial review of FHWA decisions.

In one sense the litigation which is being instituted by antihighway plaintiffs (and which shows little sign of abatement) is a skirmish over limited objectives. A few miles of highway will be cancelled and a few more rerouted.¹⁹² Most of the contested highways will eventually be built as planned. Moreover, if the judicial pressure on the federal grantor agency becomes too intense, Congress may simply nullify the tactical leverage that the threat of litigation has given highway opponents in the administrative process. Congress has moved in that direction with the passage of section 116(a) of the Federal-Aid Highways Act of 1973.¹⁹³ That provision delegates significant decisional

¹⁹²As of May 6, 1970, 20.3 miles of the Interstate System had been deleted because of controversy. The total system is 42,500 miles. EFFICIENCY IN GOVERNMENT, *supra* note 102, pt. 5, at 1057. The Federal-Aid Highways Act of 1973 may result in more significant deletions. It allows the Secretary to withdraw his approval of any portion of the interstate system on the request of a state governor and the local governments concerned. The plans for an interstate segment may be scrapped in favor of "a nonhighway public mass transit project involving the construction of fixed rail facilities . . ." Pub. L. No. 93-87, § 137(a), 87 Stat. 268-70. Of course, withdrawals under this section, if they occur, will be the result of political agitation, not court proceedings, although the latter may be used as a political device in this context.

¹⁹³Pub. L. No. 93-87, § 116(a), 87 Stat. 258.

authority over the use of federal-aid funds to states which certify to the Secretary that highway projects on federal-aid systems within that state will be carried out in accordance with state requirements at least as stringent as those contained in title 23 and the regulations issued under it. The delegation is not complete. The Administrator is not relieved of his responsibilities under NEPA, for instance, or the Uniform Relocation Assistance Act. But the delegation clause does cover provisions of the federal code which have been, or might have proved to be, of significant importance to antihighway plaintiffs, such as the requirement that all adverse economic, social and environmental effects be considered before approval of plans, specifications and estimates,¹⁹⁴ and section 134's requirement of consistency of federal-aid projects with the local planning process.¹⁹⁵ Presumably, when a delegation is made the need for an independent federal determination is eliminated,¹⁹⁶ and judicial review of the Secretary's action would be limited to technical questions, such as whether the appropriate certification had been made by a particular state.¹⁹⁷

But the highway litigation of the past few years may have accomplished something of lasting importance in moving the discussion of highway building into a more neutral and public forum and in giving it considerable public exposure. Although intensely frustrating for many of the participants, highway controversies do have the virtue of opening up public debates at all levels concerning such fundamental issues as the future shape of the urban space in which most of us live. The federal-aid highway program may thus become a focal point for a renewed interest in the question of how decisionmaking about public works projects should be organized. It is to this latter question that the remainder of this essay is directed.

V. SOME SOLUTIONS TO THE HIGHWAY PROBLEMS

A. *Tinkering with the Financing Scheme*

If the previous analysis of the functioning of the federal-aid highway program is at all consistent with reality, there are many aspects of the program which might be considered problems—

¹⁹⁴23 U.S.C. § 109(h) (1970).

¹⁹⁵*Id.* § 134(a).

¹⁹⁶*See* Pennsylvania Environmental Council v. Bartlett, 454 F.2d 613 (3d Cir. 1971).

¹⁹⁷*See* D.C. Fed'n of Civic Ass'ns v. Volpe, 459 F.2d 1231 (D.C. Cir. 1971).

that is, which might be thought to interfere with the establishment of an effective means of public choice about highway construction. There is the trust fund, which skews federal transportation investment toward road building. There is the 90-10 or 70-30 aid formula for states, which makes highway investment worthwhile to the state if that investment has benefits equaling 10% or 30% of its costs. There is the pervasive ambiguity of the intergovernmental relationship in a grant-in-aid program, which colors much of federal administration and many attempts at legal control through judicial review of official action.

Of course one may argue that these characteristics of the present funding system for the highway program do not skew decisionmaking at all—that the trust fund is necessary to neutralize the otherwise unreasonable risks in beginning long-term and large-scale public works projects on the basis of naked legislative promises of annual funding, and that the federal share of highway building pays merely for benefits to the nation which are external to the jurisdiction which does the construction. There is obviously something to these arguments. Yet given the superficial implausibility of the notions that only highway public works projects involve financial risks which require trust funding, and that seventy to ninety percent of the benefits of all federally aided roads accrue to people outside the jurisdiction of the state in which they are built, it would seem reasonable to allocate to their proponents the burden of factual proof.

There are several rather straightforward ways of altering the present funding system to eliminate the distortions which probably do exist under the present system. One alternative, the transportation trust fund, finally received the endorsement of the Secretary of Transportation¹⁹⁸ and has been given a limited trial in the Federal-Aid Highways Act of 1973.¹⁹⁹ Trust funds allocated to the federal-aid urban system will be available in the next fiscal year for the construction of fixed rail facilities and the purchase of trains as well as buses for highway mass transit.²⁰⁰ Under this new funding system, the positive skewing for highway building, in urban areas at least, might be eliminated over the years. But there might still be a bias in favor of transportation projects as against other sorts of expenditure. That problem could be ameliorated only by excising the fund's

¹⁹⁸1972 HIGHWAY NEEDS REPORT, *supra* note 76, pt. 1, at 22-26, 42.

¹⁹⁹Pub. L. No. 93-87, 87 Stat. 250.

²⁰⁰*Id.* § 121(a), 87 Stat. 259-61.

dedicated-revenues-for-construction feature and redesigning it for general long term planning purposes.

Even with some version of the transportation fund, a federal-aid system will still face the problem of determining the appropriate state and federal shares. One possibility would be to distribute one-half of the federal revenues to the Secretary of Transportation and one-half to the states on the basis of a formula which weights population and land area equally. The states would be allowed to spend their share (plus, of course, their own resources) on any transportation or transportation-related project. The Secretary could do likewise by entering into contracts with the states. Thus, under a distribution of one-half available federal funds to states and one-half to DOT, federal control over the placement and design of any facility would come simply from what the federal government could bargain for with its half of the allocation of federal funds to transportation. Although far from perfect, such a scheme might result in projects which more nearly approximated the returns to interests within and without a state than do projects under the current formulae.

An alternative to the fifty-fifty division might be to divide the transportation network into federal and state responsibilities. For example, the federal government might take full responsibility for designated interstate highways, rail lines and air routes, leaving the provision of other transportation facilities to the states and localities. The federal, state and local governments would be free to bargain about common facilities at points of intersection or tangency and about the placement and design of relatively independent projects. These suggestions are, of course, very sketchy, but they are perhaps sufficient to suggest that funding systems are possible which would significantly reduce the influence of the financing system over the allocation of public support among transportation modes. Decisionmaking responsibility under these schemes would also be more sharply focused by relatively clear divisions between federal and state interests. Basic political questions of how those responsibilities should be structured and legally controlled could be decided differently within each level of government without producing unseemly conflicts between levels concerning who is really in charge and whose law applies to whom.

Yet even if these substantial changes were made, there would remain a primary and unresolved problem of public choice concerning transportation policy. By what criteria and

processes do we, as a nation, a state or a locality, decide when and where to build any particular transportation facility or transportation system?

B. *Facing the Problem of Public Choice*

1. Organizational Solutions

We have already outlined in some detail an excellent example of one strategy for making public investment decisions. The current requirements of the Federal-Aid Highways Acts, the National Environmental Policy Act and the Intergovernmental Cooperation Act establish a complex process within which many different personal and institutional values may be brought to bear on the decision to undertake a particular project. This "pluralist" structure has been criticized because it presently is skewed in the direction of building highways. But that "skewing" can be corrected by reforms in the existing funding techniques. With some further changes in the current statutory requirements to allow bargaining between federal, state and local interests, we might provide an effective method of public choice.

I would suggest, however, that the state and federal departments of transportation, which under this model would coordinate with other agencies, hold public hearings and consider economic, social and environmental values, could in the context of this new decision process be expected to have the same or at least similar problems legitimizing their decisions as do the present administrators of the state and federal highway programs. They almost certainly will still be building highways, and the same interests which oppose highways now will almost as certainly continue their opposition. Presumably, the federal and state departments of transportation will also elect to build other types of transportation facilities, which will be opposed by others—or indeed perhaps by the same interests that now oppose highways. For, should the motor car become significantly cleaner over the next few years while the difficulties of disposing of the wastes from producing electric power become substantially greater, it is not at all clear that the environmentalist who now advocates the rapid rail alternative will continue to do so. Moreover, the construction of mass transit facilities has great potential for economic, social and environmental dislocations, a potential which is easy to ignore because we have in recent years built so few of them. Thus, even if money is shifted from

highways to subways or highspeed commuter trains, claims that particular values or interests are not being given appropriate weight in the decision calculus will again be made; indeed, the foregoing analysis suggests that such claims will emerge in any public works program of similar scope. Organizational responses to these pressures may involve movements in either of two directions: toward justification of decisionmaking in terms of rationality, or toward increased democratization of the decision making process.

a. *Rationality and the Systems Approach*

Historically, the questions of the proper relationship of various transportation modes in meeting the transportation needs of the country and of the relationship of transportation to other national and community goals have been approached piecemeal. Federal decisionmaking has been concerned almost exclusively with the promotion and regulation of discrete parts of the total transportation network. Many decry this lack of systematic planning.²⁰¹ Indeed, the call for increased rationality through systems planning has for some years been heard in the land. To take a page from the systems literature the problem is to get rid of the traditional "incrementalist" and "satisficing" strategies that permeate public decisionmaking and move to a rational and comprehensive approach: "In redesigning many of its urban systems society needs more than an incrementalist or a satisficer; presumably it is just that sort of decisionmaker who is responsible for the current need to rethink the nature and form of these systems."²⁰²

This position is representative of one of the major lines of political and administrative thought in the postwar era and particularly in the last decade. As more and more programs are seen to be both inadequate to the tasks to which they were addressed and perhaps seriously detrimental to the achievement of other goals, our reaction has understandably been to look for the causes of our frustration in the piecemeal or programmatic approach to problem solving that has been employed. Surely there must be something for the administrators of public works programs in the "interrelatedness" cliches which accost us at every rhetorical turn.

²⁰¹J. BURBY, *supra* note 73.

²⁰²Skjei, *Urban Systems Advocacy*, 38 J. AM. INST. PL. 11 (1972).

This basic instinct has been reinforced enormously by the staggering success of the government-industry team involved in the space program. We are led to believe (and there seems no good reason to doubt it) that that success is based in no small measure on the rigorous analytical approach to problem solving that was employed there. That approach includes at least the following steps: a comprehensive definition of the environment within which the program or system to be designed will function; a detailed description of system components; a statement of the objectives to be attained and performance criteria for the system as a whole and its components; a description of alternative criteria and means for achieving system goals; evaluation of the cost and effectiveness of system alternatives within the specified environmental framework. This "systems" approach to highly complex problems is made technically feasible by sophisticated computers and computer programs which store, retrieve and manipulate the mass of data required to simulate system performance and thereby "debug" it before the system goes into actual operation.²⁰³

This is obviously a very attractive analytical approach, not only because it is "scientific" and successful but also because it looks like applied common sense and seems to guard against "forgetting what we are trying to do," "left hands not knowing what right hands are doing," and "waste"—faults commonly ascribed to governmental (or bureaucratic) operations. Indeed so attractive was the systems approach that President Lyndon Johnson announced within a year of his election in 1964 the introduction of this "very new and very revolutionary system" into the management of every executive department of the federal government as the Planning, Programming, Budgeting System (PPBS).²⁰⁴ While PPBS as a budgetary and management technique applicable to scores of different types of programs is necessarily less mathematically rigorous than systems analysis as

²⁰³Although popularized by the space program, systems approaches as a part of general decision theory have a fairly long history in a number of fields and masquerade under different labels. Among social theorists the more familiar jargon may be "basic decision model," see McDougal, Lasswell & Reisman, *The World Constitutive Process of Authoritative Decision*, 19 J. LEGAL ED. 253, 258-59 (1967); Mayo & Jones, *Legal-Policy Decision Process: Alternative Thinking and the Predictive Function*, 33 GEO. WASH. L. REV. 318 (1964); management specialists may prefer "operational research." General systems theory has influenced theoretical writings in psychology, social psychology, sociology, public administration, political science and law. See, e.g., W. BUCKLEY, *SOCIOLOGY AND MODERN SYSTEMS THEORY* (1967); J. DAVISON & N. GRUNDSTEIN, *ADMINISTRATIVE LAW AND THE REGULATORY SYSTEM* (1966); *PSYCHOLOGICAL PRINCIPLES IN SYSTEM DEVELOPMENT* (R. Gagne ed. 1962).

²⁰⁴Gross, *The New Systems Budgeting*, 29 PUB. AD. REV. 113, 114 (1969).

employed by the purveyors and users of military and space hardware, it nevertheless seeks to achieve similar ends: to place program planning and budgeting within a broader framework of goals and to promote consideration and cost-effectiveness evaluation of alternative means to chosen ends.²⁰⁵ Indeed, no level of government has been immune to the infectious attractiveness of the systems approach,²⁰⁶ although PPBS has now been abandoned as a required budgetary technique for federal agencies.²⁰⁷

There are remarkable similarities between the systems analysis framework and the comprehensive planning process as described by urban planners. The latter includes systematic description of the present characteristics of the urban space; projection of changes in those characteristics based on historical trends; identification of community needs by comparing the description and projections with community goals; development of alternative means for meeting present or projected needs; and evaluation of all alternative projects or policies for effectiveness and consistency with other projects and policies.²⁰⁸ And, within the planning field, urban transportation studies have contributed the most advanced techniques of mathematical analysis and computer simulation.²⁰⁹ The rapid adaptation of systems analysis to transportation planning seems to have resulted from a number of converging factors: federal money has been available in sizeable amounts for highway transportation planning; transportation systems are easier to model than most other urban subsystems; the private concerns (notably RAND) which had been involved in military systems studies had early seen the potential applications in the transportation field. Moreover, since 1965 the Office of High Speed Ground Transportation has been engaged in a systems research program of mindboggling magnitude.²¹⁰ The object is the development of a comprehensive

²⁰⁵For a general critique of the "comprehensive" approach to decisionmaking, see D. BRAYBROOKE & C. LINDBLOM, *A STRATEGY OF DECISION* (1963).

²⁰⁶For a discussion of potential problems, see Mosher, *Limitations and Problems of PPBS in the States*, 29 PUB. AD. REV. 160 (1969); Mushkin, *PPB in Cities*, *id.* 167.

²⁰⁷Schick, *A Death in the Bureaucracy: The Demise of Federal PPB*, 33 PUB. AD. REV. 146 (1973).

²⁰⁸A succinct description may be found in CENTER FOR URBAN AND REGIONAL STUDIES, VIRGINIA POLYTECHNIC INSTITUTE, *THE COMPREHENSIVE PLANNING PROCESS* (1968) [hereinafter cited as *THE PLANNING PROCESS*].

²⁰⁹See G. HEMMENS, *URBAN DEVELOPMENT MODELING* (1970) (Monograph No. 6, Program of Policy Studies in Science and Technology, George Washington University).

²¹⁰See U.S. DEPT OF TRANSPORTATION, *THIRD REPORT ON THE HIGH SPEED GROUND TRANSPORTATION ACT OF 1965* (1969) [hereinafter cited as *THIRD REPORT ON HSGT*].

modeling technique for the evaluation of alternative intercity transportation investments in the Northeast (Boston-Washington) Corridor. Although there seems to have been some retrenchment from early goals,²¹¹ an effort has been made to go beyond engineering considerations and even the economic impacts of alternative systems to questions of effects on "quality," "style of life" and social and institutional structures within the community.²¹²

These developments suggest that an alternative legal structure for transportation policy formation and implementation might be a general planning agency, legally required to engage in comprehensive transportation planning. The criterion for public investment in highways or other transportation facilities would be its inclusion in the agency's master plan. In part this is the approach of the transportation revenue sharing bill sent to Congress in April of 1971. That bill would have combined the major federal-aid programs for transportation, eliminated trust fund limitations and made funds available to the states on essentially one condition—the creation of state and regional planning agencies to formulate general development plans.²¹³ The state and units of local government receiving pass-through funds would have included in these plans the projected use of shared transportation revenues and the relationship of this use to the overall plan.

But the substitution of a generalized and systems-analytic planning process for the present system of decisionmaking does not appear imminent. Indeed, it is doubtful that there exist appropriate techniques by which the transportation planner might derive an optimum transportation system. Techniques employed in the development of hardware or limited man-machine systems have less capacity to adapt to areas where the system's environment is complex and fluctuating, goals are

²¹¹Compare U.S. DEPT OF COMMERCE, NORTHEAST CORRIDOR TRANSPORTATION PROJECT AND STUDY DESIGN, TECHNICAL PAPER NO. 5 (1966) with THIRD REPORT ON HSGT, *supra* note 210.

²¹²This effort appeared more clearly in the CONSAD studies, *e.g.*, CONSAD RESEARCH CORP., DESIGN FOR IMPACT STUDIES, NORTHEAST CORRIDOR TRANSPORTATION PROJECT (1965), but has by no means been abandoned by RAND. RAND CORP., MEASUREMENT AND EVALUATION OF TRANSPORTATION SYSTEM EFFECTIVENESS (1969) (RAND Memorandum 5869-DOT).

²¹³S. 1693, 92d Cong., 1st Sess. (1971). That "planning" should become the ultimate requirement in an intergovernmental system is given a diverting, mock-serious treatment *a la* Parkinson in Kennedy, *The Law of Appropriateness*, PUB. AD. REV. 135, 141-43 (1972).

The use of plan conformity as a funding condition is found in a number of programs and may occasionally be enforced. *See, e.g.*, Johnson v. Russell, 3 BNA ENV. REP. CAS. 1523 (W.D. Tex. 1971).

either disputable or highly abstract, system boundaries are difficult to draw, and causal relationships are not established.

What, for example, are the goals of the state, the region or the locality, and what is the order of priority for those goals? The lack of clearly articulated public policy goals for most localities has already been noted. Even if those goals have been articulated and priorities are clear, they are not likely to provide a rule for making specific public decisions. Agreement in the abstract on planning goals must be limited to such nostrums as "orderly growth," "maintenance of a healthful environment" and "the provision of adequate transportation facilities." Whether a particular transportation plan supports any of these objectives is subject to highly subjective interpretation.

The transportation planner also has great difficulty establishing a sensible environment within which his transportation system is to function. If he chooses the traditional trip distribution approach in which alternatives are evaluated in terms of their capacity to satisfy existing demands for movement in the chosen urban (or suburban or rural) space, he is strongly committed to the status quo. Because the model presumes existing land uses served by existing modes of transportation at existing price and service levels, it cannot—no matter how sophisticated the computer program—reveal the land-use, productivity or wealth consequences of a change in the *type* of transportation provided. In order to trace these consequences the planner would have to know the specific causal relationships among the transportation and nontransportation variables in the model. But those relationships are not well established; indeed, they are highly disputable. Moreover, the more "soft" variables that are introduced—such as environmental or social values whose magnitude can only be "guesstimated"—the more likely it is that large system or subsystem errors will result. Output ultimately must be checked "intuitively," and often the data must be "massaged" to make the model's predictions look sensible. Hence, "comprehensive" transportation planning tends to vacillate between rigorous but conceptually narrow justifications for incremental additions to the existing transportation network and broadly based but unconvincing manipulations of conjunctural data according to hypothetical formulae.²¹⁴

This necessity of choosing between planning which lacks

²¹⁴For a more extensive and rigorous critique of large scale modeling see Lee, *Requiem for Large-Scale Models*, 39 J. AM. INST. PL. 163 (1973).

comprehensiveness and planning whose trustworthiness is highly suspect significantly detracts from the attractiveness of comprehensive transportation planning as the primary means for making decisions about transportation policy. Moreover, to the extent that comprehensive planning involves "modeling," we may also wonder whether the techniques involved do not shift a virtually unreviewable political power to the functionaries who construct the models. In the evaluative stages of any systems analysis of proposed transportation facilities, the analyst must either translate all the factors which should be considered into a common unit of measurement or admit that he is subjectively comparing chalk and cheese. If he chooses the former course, he must either leave out of account important but unquantifiable factors or make some highly arbitrary assignments of values to those factors.²¹⁵ At their best, those attempts at quantification and systematic comparison of alternatives provide some real insights into the potential effects of judgments which ultimately must be made on the basis of preference. Often they obscure value choice in a haze of technical detail.²¹⁶ Within a systems analytic framework, questions of what is to be considered and how it is to be measured are in fact questions of policy or politics.²¹⁷

Finally we may worry about how this sort of "result" or "outcome-oriented" decisionmaking fits into our traditionally pluralist and process-oriented politics.²¹⁸ Planners tend to emphasize that planning is a "process" involving all elements of the community,²¹⁹ yet they may also be heard to decry the results of pluralistic decisionmaking.²²⁰ Systems planning is a decisional approach which seeks to optimize outcomes by rigorous attention to the reciprocal effects of multiple ends and alternative means. It is not designed to solve the problems of disenfranchisement inherent in the politics of pressure group activity. And its

²¹⁵ See, e.g., RAND CORP., ASSESSING ALTERNATIVE TRANSPORTATION SYSTEMS (1969) (RAND Memorandum 5865-DOT); RESOURCE MANAGEMENT CORP., EXTERNAL COSTS AND BENEFITS ANALYSES, NORTHEAST CORRIDOR TRANSPORTATION PROJECT (1969).

²¹⁶ See, e.g., Schlesinger, *Two-and-a-Half Cheers for Systems Analysis*, in INFORMATION TECHNOLOGY IN A DEMOCRACY 395 (A. Westin ed., 1971) [hereinafter cited as TECHNOLOGY IN A DEMOCRACY].

²¹⁷ See, e.g., the recent attempt to impose uniform evaluative policy on the analysis of water resource projects, SENATE COMM. ON PUBLIC WORKS, 92d CONG., 1st SESS., PROCEDURES FOR EVALUATION OF WATER AND RELATED LAND RESOURCE PROJECTS (Comm. Print 1971).

²¹⁸ See generally Schick, *Systems Politics and Systems Budgeting*, 29 PUB. AD. REV. 137 (1969).

²¹⁹ THE PLANNING PROCESS, *supra* note 208, at 41-42.

²²⁰ URBAN PLANNING IN TRANSITION xvii (E. Erber ed. 1970).

actual effect may be to narrow effective participation further by raising the level of sophistication necessary for relevant submissions by interested groups.²²¹

This last point raises a major issue which permeates contemporary concern with the processes of collective decision-making. As Erich Fromm has said, "Between the act of voting and the most momentous high-level political decisions is a connection which is mysterious. One cannot say that there is none at all, nor can one say that the final decision is an outcome of the voter's will."²²² If the connection between the traditional expression of popular will and "momentous" and "high-level" decisions is obscure, that relationship becomes even more tenuous as one moves toward the "routine" and "low-level" end of the decisional scale. Yet our "democratic morality" tells us that universal and meaningful participation in decisionmaking is both an instrumental and an ultimate value in a society dedicated to maximum self-realization.²²³ The civil rights movement and the "discovery" of poverty have made these abstract considerations immediate concerns by revealing, at least in part, who is being left out in the bargaining which takes place between voting and the execution of policy. They have helped to expose the myth that there is a "public interest" which is objectively determinable by administrators,²²⁴ and we have therefore begun to search for political processes of decision which provide access and participation to everyone who is seriously affected.²²⁵

Were we to adopt a "rational planning model" as the appropriate decision process for making judgments about transportation investments, we would have some difficulty accommodating democratization while at the same time maintaining the integrity of the planning process. Some sense of the difficulty can be derived from a preliminary examination of what is actually involved in "citizen participation." If the phrase means the equal opportunity of all interested parties to affect an outcome, there arises immediately the problem of deciding who are the interested parties. Even after that decision has been made, the fact remains that some parties are more interested

²²¹ See, e.g., Michael, *Democratic Participation and Technological Planning*, in *TECHNOLOGY IN A DEMOCRACY*, *supra* note 216, at 291.

²²² E. FROMM, *THE SANE SOCIETY* 191 (1955).

²²³ For an excellent discussion, see E. REDFORD, *DEMOCRACY IN THE ADMINISTRATIVE STATE* 6-9, 19-22 (1969).

²²⁴ Reich, *The Law of the Planned Society*, 75 *YALE L.J.* 1227, 1235 (1966).

²²⁵ See, e.g., Plager & Handler, *The Politics of Planning for Urban Redevelopment: Strategies in the Manipulation of Public Law*, 1966 *WIS. L. REV.* 724.

than others—are more directly or seriously benefitted or deprived. Of course, participation might be weighted in some way to reflect differing intensities of interest. But democratization would also seem to require at least the mitigation of differentials in ability to participate. Thus, effective participation in the planning process would almost necessarily entail a significant broadening of access to technical expertise. Even with these refinements, however, democracy in planning may amount to nothing more than political bargaining with a more diverse and expanded cast of characters. If all that can be accomplished is a more sophisticated way of fashioning policy out of trade-offs among existing interests, democratization seems irreconcilable with the basic concept of planning, which is to focus systematically on long-range and widely shared goals.²²⁶ This apparent conceptual repugnance of planning to pluralist politics should make us question a legal structure which put all its eggs in the planning basket.

b. *Democratization: The Problem of Guarantees*

Despite an avowed love of “democracy,” however, it is reasonably clear that we are not about to put all transportation planning projects to a plebiscite. There are, of course, practical grounds for eschewing this “pure democracy” model in the public works arena; there are also perfectly sound theoretical reasons for believing that referenda are democratic only in a special sense. If intensity of interest should count for anything, a process, like the current one, which allows trade-offs among affected groups, is more “democratic” than a simple majority voting system.²²⁷ Nevertheless, in the real world of unequal wealth distribution, the politics that operates in the present highway program may reflect more the power of affected interests than the intensity of their concern. A pressure group such as the “highway lobby,” which combines the automobile manufacturers, the insurance industry, the horizontal construc-

²²⁶These problems are not new, of course, and a great many people have been worrying about these or related questions in print. See, e.g., D. MOYNIHAN, *MAXIMUM FEASIBLE MISUNDERSTANDING* (1969); *URBAN GOVERNMENT: A READER IN ADMINISTRATION AND POLITICS* (E. Banfield ed. 1969); Cahn & Cahn, *The War on Poverty: A Civilian Perspective*, 73 *YALE L.J.* 1317 (1964); Jowell, *The Limits of the Public Hearing as a Tool of Urban Planning*, 21 *AD.L. REV.* 123 (1969); Note, *Citizen Participation in Urban Renewal*, 66 *COLUM. L. REV.* 485 (1966); Symposium, *Planning and Citizen Participation*, 35 *J. AM. INST. PL.* 215-63 (1969).

²²⁷See, e.g., J. BUCHANAN & G. TULLOCK, *THE CALCULUS OF CONSENT* (1962).

tion industry and the truckers, does have some inherent advantages over loosely organized coalitions of environmental and consumer groups. What follows explores devices that promise to eliminate this imbalance in the present representation of interests and at the same time avoid the pitfalls of majoritarian democracy.

(i) Weighted Participation

There are several techniques by which affected interests which are thought to be "underrepresented" may be "enfranchised" for purposes of public decisionmaking. One method is to weight the participation of particular groups that are thought to have interests requiring special protection. This weighting may be accomplished by the manipulation of the criteria which guide administrative action. We have seen two somewhat different examples of this type of weighting in the highway program. The first is the leverage provided to groups with interests in the preservation of parklands by the very strict "no feasible or prudent alternative" standard which governs the taking of park properties for highway purposes.²²⁸ A second example is the relocation guarantee provided to persons who lose their residences or places of business to highway construction.²²⁹ Presumably, the requirement that the highway planner not only consider the dislocatees' costs but actually pay them will force the decisionmakers to give more weight to the interests of the homeowner and shopowner.

The experience with weighting devices in the highway program, however, suggests that they are not without difficulties. Numerous reports attest to the failure of the relocation guarantees to provide an effective voice or effective compensation to those displaced.²³⁰ The failure seems to be traceable to the high incidence of road building in relatively impoverished areas and areas of minority group concentration. The park protectionists are doubtless doing better. Because they are likely to have the human and economic resources necessary to make effective use of the statutory lever, weighted participation is for them an effective device. But, of course, to the extent that they

²²⁸ See text accompanying notes 157-76 *supra*.

²²⁹ See text accompanying notes 56-58 *supra*.

²³⁰ See, e.g., Hartman, *Relocation: Illusory Promises and No Relief*, 57 VA. L. REV. 745 (1971).

are effective in diverting road building from parklands, they will put increased pressure on alternate land uses—that is, houses and shops—and on the class of potential displacees. Thus, in attempting to weight the interests of more than one group the federal-aid legislation may end up simply taking away with the left hand what was given with the right. And, of course, any particular scheme for the weighting of votes is always subject to the criticism of those whose priorities differ or who disagree about the facts or both, and who therefore would allocate the counters differently. In short, scale balancing by means of weighted participation may be useful; but the effects of weighting on the relative status of other interests may be difficult to foresee or control, and in any event a weighting scheme may not increase the sense of the legitimacy of any agency's decision among interested parties.

(ii) Judicialization

An alternative means of increasing the effective participation of groups that are currently thought to be underrepresented in the decision process is to change the decisional context. This technique is often combined with such elements of democratic morality as "openness" and "accountability" to produce general reforms in public hearing processes and other formal aspects of administrative decisionmaking. The general idea is to bring decisionmaking out of the cloakrooms, agency offices and other haunts of "special interest" groups and into a forum where all may participate equally.

Experience in the highway program and elsewhere suggests that this sort of procedural reform will not produce any substantial realignment of power, unless it goes beyond providing for public investigative or informational hearings. For, if democratization means providing meaningful participation in public decisionmaking through the use of an open forum, then that right to participation must be structured in such a fashion that it may be made effective when exercised and is protected against end runs by opposing interests with special access to the decisionmakers. The progressive logic of this type of reformist approach leads almost inevitably in the direction of an increased "judicialization" of the decision process.

In the highway context, numerous proposals have been made to amend the public hearing requirements of section 128 of title 23 to make those hearings approximate an adversary

process.²³¹ For example, the highway opponent's limited access to technical information might be broadened by providing for cross-examination of highway department personnel in public hearings. The decisionmaker's supposed lack of responsiveness to citizen complaints and submissions might be remedied by a requirement that the ultimate decision be reasoned and explicitly responsive to the issues ventilated at the hearing. Indeed, if one were really serious about avoiding undisclosed special interest pleading and low visibility decisionmaking in accordance with the conventional wisdom of dominant groups, the whole panoply of adjudicatory hearing rights embodied in sections 7 and 8 of the federal Administrative Procedure Act might be adopted.

The desirability of such a radical reorientation of the existing decision process is doubtful particularly in light of less drastic (and less costly) measures available to secure essentially the same goals. Better information may be supplied to interested parties and comprehensible procedures for citizen complaints may be established without resorting to highly judicialized procedure. A well-publicized complaint procedure would contribute to a feeling on the part of the affected public that its grievances and submissions were being fairly and seriously treated, without the need for formal hearings. Highway decisionmakers could do a much better job than they do now of informing the public of their plans, explicating the operative criteria for judgment and the basis for their decisions, and making this information available when it would be useful to participants in the public hearings or the complaints process. These fairly limited proposals have been elaborated at some length elsewhere.²³² When integrated with a provision such as the 1970 Federal Aid Highways Act's amendment of section 128 of title 23, which requires a statement from the decisionmaker certifying his attention to a range of specific factors, these reforms in administrative practice would seem to be about as far as "procedural reform" should be carried in the attempt to make transportation decisionmaking more open and explicitly responsive to all affected interests.

This conclusion is supported by the unlikelihood that much would be gained by further moves in the direction of judicializa-

²³¹ See, e.g., 116 CONG. REC. 38973-74 (1970) (amendments offered by Congressman Reid).

²³² See Tomlinson & Mashaw, *The Enforcement of Federal Standards in Grant-in-Aid Programs: Suggestions for Beneficiary Involvement*, 58 VA. L. REV. 600 (1972).

tion. Although this is not the place for extensive analysis of the use and abuse of adjudicatory process in administrative decision-making,²³³ two rather fundamental points may be made in this connection. First, adjudicatory procedure will not produce a significant increase in the perceived legitimacy of decisions unless there are reasonably well-understood principles upon which such decisions may be logically explained. The fact that a decisionmaker has been required to listen to the submissions of all affected parties and to make a decision exclusively on the record compiled at a formal hearing will not necessarily make the losing parties feel that their participation in the decision process was meaningful, if in the final analysis the decider can only say that he thought the interests or values represented by someone else were more important. When the decision to be made is whether to build a particular transportation facility, *considering all the relevant economic, social and environmental effects of that decision*, there is simply no technique for logical deduction from common premises to ultimate conclusions. Opposition to freeways on the ground that they contribute to urban sprawl confronts the Federal Highway Administrator's statement, "I love urban sprawl, and so do most of my best friends,"²³⁴ with no clear guidelines concerning whose preferences are to be preferred.

Second, if the long experience of federal regulatory agencies is taken as the model of judicialized administrative decisionmaking, we should also be wary of the notion that judicialization will necessarily provide a more explicit and consistent articulation of the values that are in fact being favored. A major and persistent criticism of the "independent regulatory commission" has been its failure to enunciate and follow clear policies.²³⁵ I would suggest that this is not a failure which can be traced to the organization of the independent regulatory commissions or to any laxness in their use of quasi-judicial procedure.²³⁶ Rather, it results from assigning them the job of rational determination of *the* public interest. That job cannot be done. Forcing the task into the adjudicatory mold, including the requirement of reasoned

²³³See, e.g., Reich, *The Law of the Planned Society*, 75 YALE L. J. 1227 (1966); Robinson, *The Making of Administrative Policy: Another Look at Rulemaking and Adjudication and Administrative Procedure Reform*, 118 U. PA. L. REV. 485 (1970).

²³⁴J. BURBY, *supra* note 73, at 296.

²³⁵See, e.g., Hector, *Problems of the CAB and the Independent Regulatory Commissions*, 69 YALE L. J. 931, 939 (1960).

²³⁶See Robinson, *On Reorganizing the Independent Regulatory Agencies*, 57 VA. L. REV. 947 (1971).

decisionmaking, merely ensures that the agency will appear inarticulate or arbitrary as it struggles to deal with the complex, shifting and sometimes inconsistent set of values which are relevant to its decisions.

Hence, it is not possible to predict whether any presently disenfranchised groups would find their interests better protected by the rigorous equality of participation normally associated with adjudicatory processes. Moreover, it is highly unrealistic to assume that access to an adjudicatory process would really be easier for many affected interests. If "judicialization" of transportation decisions were marked by the same formality, delay and cost which pervade the quasi-judicial regulatory process, it seems doubtful that the cast of characters who have a real voice in policymaking would change significantly.

To be sure, the antihighway participant with significant resources would gain the leverage available to anyone who wishes to delay decisionmaking in a highly formalized and essentially open-ended procedural system. But such participants are not likely to appear with any frequency, and their impact will be lessened by the staying power of producer interests. Moreover, the more judicialized the procedure becomes, the more appropriate it will be to give the citizen a single shot at making his case in the hearing. Hence, a major value to the lay participant may be lost: his ability under the present system to use hearings as a focal point for organizing a citizens' group to engage in a continuing dialogue with the state highway department, FHWA, or elected officials. In short, depoliticizing the decision process is not likely to be useful to the presently powerless unless decisional criteria which will tend to produce results in accordance with their value orderings can be supplied to the decisionmaker. But, of course, if we already knew what results we wanted, that is, results that accord with the wishes of particular groups or which respond exclusively to particular rather than to multiple values, we would not need any reforms in the decision process for arriving at public choices concerning highways or other public investments.

(iii) Planning with People

We have previously mentioned another variation on "democratization" or "participatory democracy," the so-called "planning with people" approach. There are quite a number of

variations on this theme,²³⁷ but the core idea is to provide a decisional structure which allocates some power to lay participants who are directly affected by the public project or program involved. Citizen participation in planning which relies wholly on persuasion through guaranteed access to the public decision-maker is usually considered a form of "planning with people,"²³⁸ but that model is so little removed from the traditional administrative decision after an informal public hearing that we need not be concerned with it here. The comments which follow refer rather to citizen participation which includes some decisional authority, through participation either in the decisional body or in a parallel, lay organization which has the power to approve or disapprove some parts or all of any proposed action.

This is an approach which avoids the pitfalls of the excessive formalization and unsuccessful depoliticization which attend the "judicialized" model of guaranteed participation. The framework for decisionmaking may remain fluid and essentially managerial. The idea is simply to put people with different interests and perspectives in a position to share decisional power with the agency professionals. Unless one is peculiarly susceptible to administrative claims of competence and rational pursuit of the public interest, planning with people sounds like a worthwhile idea. But like all strategies for producing acceptable public choice, it has its problems.

There is first the problem of choosing those citizens, and hence those interests, who will be included in this special form of participation. As experience with OEO Community Action Agencies has revealed, selection may involve the creation of an entirely new political process which turns out to have many of the same difficulties of the old one. Second, the planning that is to be done with the people is not to be carried on in a vacuum. A particular public agency's mission, its resources, its professional bias and its political prognostications are ever-present factors; they all diminish the effectiveness of lay participation.²³⁹

²³⁷The *Public Administration Review* has been virtually filled with articles on various aspects of "citizen participation" over the past few years. See, e.g., *Citizens Action in Model Cities and CAP Programs: Case Studies and Evaluation*, 32 PUB. AD. REV. 337-470 (1972); *Curriculum Essays on Citizens, Politics and Administration in Urban Neighborhoods*, 32 PUB. AD. REV. 565-738 (1972).

²³⁸For a description of this approach as applied to highway planning, see Memorandum from Kent R. Larrabee, ACSW Environmental Development Division, U.S. Bureau of Public Roads, 116 CONG. REC. 38993-96 (1970).

²³⁹See, e.g., Borton & Warner, *Involving Citizens in Water Resources Planning*, 3 ENVIRONMENT AND BEHAVIOR 284 (1971).

There is finally the problem of the scale or dimension of issues. This problem is particularly troublesome when attempting to "democratize" transportation decisionmaking. Planning with people suggests a decentralization of decisionmaking which will make intense participation by affected parties feasible. But the same sort of participation made available to those interested in a neighborhood park, or the policies of the precinct police station, cannot be made available in the planning of the state's arterial road network or of a metropolitan subway system. By the time a transportation project gets down to a scale where the most directly affected populace can be identified, the basic decisions have usually been made. Citizen participation of a significant sort may yet be had on some questions of location and design, but the big, systemic issues of need and choice of mode cannot as a matter of formal policy be kept open at the project design stage. And any attempt to organize citizen participation at a level which deals with these broader issues will almost necessarily simply replicate the existing structure of representative government.²⁴⁰ If that structure is not presently operating on the basis of acceptable criteria for public choice about the transportation system, a different set of decisionmakers elected in the same fashion from among the same populace will not guarantee improvement.

c. *Summary*

The blend of "rational planning" and "public participation" with centralized administrative responsibility represented by the decision process under the current federal-aid highway legislation appears, if not judicious, at least not wholly wrongheaded when the implications of increased emphasis on either "rationality" or "democratization" in transportation decisionmaking are briefly explored. Either of these approaches, if not combined with the other, turns fairly quickly into a theoretical or an operational cul-de-sac, and while reasonable men might differ about where the appropriate balance should be struck, it seems clear that no organizational solution promises more than some tinkering with the management of conflict about transportation policy. Although certain decisional processes may further one interest or value as against another, there seems to be little

²⁴⁰ Cf. Graves, *Citizen Participation in Metropolitan Planning*, 32 PUB. AD. REV. 198 (1972).

prospect that any change in the process of decision can be justified as self-evidently promoting "better" decisions. Whether the decisions are likely to be "better" depends largely upon one's preferences and whether those preferences tend to be supported by the new decision process.

There is, however, a system for making decisions about the allocation of resources to the production of transportation goods and services which has not been discussed. It is a system which has been explicitly rejected as a part of federal highway policy and plays a very limited part in state and local transportation policies. That system is the "price" or "market" system. Without seeming to offer pricing as a panacea for the ills of public decisionmaking about transportation, it shall be the purpose of the remainder of this Article to argue for the introduction of pricing strategies into the process of public decisionmaking about transportation expenditures. While the details of pricing particular road uses cannot be developed here, the general feasibility and desirability of pricing road use will be explored.

2. Pricing

Pricing solutions to the problem of determining when the public interest is served by road building are almost never proposed by the present coalition of antihighway reformers. This is understandable. The interests involved march under banners such as low-income housing, the environment, and "rational" (read "aesthetically pleasing to the upper middle class") urban planning. These are not causes which "market allocation" is thought to promote. It is perhaps for this reason that there has been little public discussion of the pricing of road use in this country and little attention outside the technical literature to the impact of making road investment decisions on the basis of an efficiency standard. Hence there may seem to be some irony in the suggestion that the solution to the problems of the antihighway environmentalist or protector of low-income housing may lie in creating a marketplace for roads. Nevertheless, there is clearly something to the notion that the introduction of full cost pricing of roads would both cut down highway construction²⁴¹ and provide a process for making decisions about

²⁴¹This results from the decreasing net benefits of road construction once prices are imposed and the level of congestion is reduced. New construction will then produce a smaller increase in flow than when added to a road system using zero pricing. See Thompson, *Some Aspects of Evaluating Road Improvements in Congested Areas*, 38 *ECONOMETRICA* 298 (1970).

highway investment which (1) substitutes "efficiency" for the presently vague standard of highway "needs" and (2) substitutes the market mechanism for the current complexities of administrative investment decisions.

By an "efficiency standard" is meant simply that money for the construction and maintenance of a highway facility will be spent only if the total price that prospective users would be willing to pay for its use equals or exceeds total construction and maintenance costs. Of course, the choice of this standard does not, as a theoretical matter, dictate a pricing scheme. The same standard might be employed by the comprehensive transportation planners under section 134, for instance, in place of the vague "goals" which planners now pursue.²⁴² In deciding to recommend a new addition, planners might balance cost estimates against what an informed guess told them prospective users "would be willing to pay." The practical problem is, however, that unless some pricing is done, reliable information about preferences is never forthcoming, and the efficiency standard becomes a sham. Thus, the premise of the discussion which follows is that, to some extent at least, the operation of the efficiency criterion requires that road use be marketed in the general economy along with all other goods and services, and that the road builder operate under the usual market constraints—including sufficient profitability to attract capital.

Because this proposal involves a rather radical reorientation of our thinking about transportation policymaking, it might be useful to develop a limited model of how decisionmaking concerning transportation investments might operate under such a pricing system. Let us imagine a small city with an existing street system laid out in a grid pattern. Major highways run both north-south and east-west through the city. Congestion is increasing on these highways, on major streets and in the downtown area. A proposal is made to widen the major thoroughfares and/or to build a limited-access circumferential route around the city. Objections are immediately raised to both plans by various affected groups and the city council is urged to look into alternative modes of transportation. Thus far the scenario is not unfamiliar.

However, our hypothetical city, call it Smithville, has a rather bizarre approach to transportation policy. It provides only those transportation facilities that can be paid for out of charges

²⁴²See text following note 94 *supra*.

to users, and is currently charging users the full costs of the existing transportation system. Hence the city council begins its deliberations by estimating the construction and maintenance costs of the various alternatives and comparing those costs with the estimated revenues that can be generated by each project. Included in Smithville's cost estimates should be not only direct costs but also any indirect costs, *e.g.*, traffic or air pollution control, that it will have to bear because of the new facility. Should these figures be negative they would then be included in the revenue estimates along with such items as tolls or special license fees that might be collected on the limited-access road, increases in general permit or license fees that might be made for use of improved or expanded facilities, and payments by abutting landowners to induce the city to increase access to their premises. If total revenues exceed total costs, the project is worthwhile. Should projects be mutually exclusive, that project or combination which maximizes the city's return will be chosen.

In considering the design of the various facilities the Smithville City Council maximizes its returns for each project by trading off conflicting preferences, for example, the desires of through traffic for limited access against the desires of adjacent property owners for easy access, or the desires of some motorists and shopowners for on-street parking against the desire of other motorists for decreased congestion, through the price mechanism. If landowners and shopowners are willing to pay more for easy access and adjacent on-street parking than motorists are willing to pay for decreased congestion and travel time, the desires of the former are honored. Similarly, if the city can buy and operate additional buses at a return which is greater than that which is estimated to result from increasing street capacity, it will choose to provide transportation service in the form of additional bus routes rather than in additional streets. In determining total revenues from buses, Smithville will, of course, take into account losses from automobile permit fees and parking charges that result from increased bus ridership, as well as gains that might result from subsidies to the bus service by merchants and increases in automobile permit rates made possible by decreasing congestion.

This is a rather sketchy model but it should be sufficient to convey the general idea and to allow discussion of a series of problems with road pricing schemes. Some of the objections are not very serious, and these will be discussed first. We shall then

take up some rather more difficult theoretical and practical issues.

a. *Common Objections to Road Pricing*

Initially, there is the question of whether the "efficiency" standard is appropriate. There are perhaps two arguments lurking here. The first is that because of various types of market failure, pricing in a wholly free market does not reflect the real social costs of activities. Therefore, the social benefits from employing the efficiency standard are illusory; resources are not necessarily going to their highest value uses. The second is that the efficiency standard ignores the income distribution consequences of resource allocations by means of pricing. Both of these arguments have considerable force in other contexts, but they have a limited application to the pricing of road use.

The objection on allocational grounds must contend with an existing state of affairs in which virtually none of the negative externalities of road use (*e.g.*, congestion, pollution, community disruption, court and police costs) are borne directly by the road user. All proposals for road user charges internalize at least some of these costs and are to that degree superior on social accounting grounds to the present system of road planning which attempts to meet "all [current and] projected travel demands"²⁴³ untroubled by cost. The objection on the basis of distributional effects would have to make a case that "free roads" contribute to "equitable" income distribution. But when only slightly more than one-half of poor families²⁴⁴ have access to automobiles, a means of transport from which the nonpoor aged, young and disabled are also often excluded; and when the negative impacts of urban highways seem to fall disproportionately on poor people,²⁴⁵ that case begins to be very hard to make. There may in fact be very large wealth transfers from

²⁴³See Smith, *Purpose and Conduct of Transportation Studies*, in INSTITUTE OF CIVIL ENGINEERS, PROCEEDINGS OF THE TRANSPORT ENGINEERING CONFERENCE (1965).

²⁴⁴U.S. DEPT OF COMMERCE, SPECIAL REPORT ON HOUSEHOLD OWNERSHIP AND PURCHASE OF DURABLES, 1960-67, at 65 (1967). The McCone Commission found that only 14% of Watts' families owned cars at the time of the Watts riots and that the lack of transportation to commute to work or even to seek work was considered a major factor in the frustrations of the ghetto residents. CALIFORNIA GOVERNOR'S COMM'N ON THE LOS ANGELES RIOTS, VIOLENCE IN THE CITY—AN END OR A BEGINNING 65-68 (1965).

²⁴⁵These negative impacts include both loss of housing and neighborhood amenities, see Hartman, *Relocation: Illusory Promises and No Relief*, 57 VA. L. REV. 745 (1971), and the acceleration of urban land use patterns which make the transportation problems of the poor more acute. See O. ORNATI, TRANSPORTATION NEEDS OF THE POOR (1969).

poor to rich under the present system. Perhaps the best that can be hazarded is that it is likely to be very difficult to predict where the gains and losses will fall among the populace should road pricing be introduced.²⁴⁶ Hence, while "efficiency" as a decision rule with market pricing as its concomitant decision process may be vulnerable to some degree from both allocational and distributional perspectives, it seems unlikely that present need criteria and decision processes are less vulnerable.

A second obstacle to the pricing of road use is technical or technological. Tolls on expressways or bridges are clearly feasible, but urban streets and country roads are a different matter. At base the issue here is how fine-grained the pricing mechanism must be in order for pricing to play a useful role in resource allocation decisions. If we are satisfied with nothing less than charges which reflect the true social (including congestion) costs of each car's impact on a stream of traffic, then the battle is lost. On the other hand, if we can be satisfied with something less than perfect pricing, a mixture of tolls, restricted licenses, land taxes, parking charges and variable fuel taxes will do a fair job of making and collecting charges for road use.²⁴⁷ After all, we can

²⁴⁶ See A. WALTERS, *THE ECONOMICS OF ROAD USER CHARGES* 237-40 (1968).

²⁴⁷ See generally GREAT BRITAIN MINISTRY OF TRANSPORT, *ROAD PRICING, THE ECONOMIC AND TECHNICAL POSSIBILITIES* (1964); G. ROTH, *PAYING FOR ROADS* (1967); A. WALTERS, *supra* note 246.

Fuel taxes measure the amount of fuel consumed. The obvious difficulty with these taxes is their failure to ration use of roads at the margin. That is, except to the slight extent that travel on congested roads requires more fuel, payment of fuel taxes does not ration use of congested roads more than uncongested roads. Hence the tax can indicate at best how much roadway can be financed, not where to put it and who should use it. Balanced against the misallocation of highway resources which the fuel tax scheme leaves room for is the ease of collection.

Parking charges measure the amount of time and space consumed in parking. An obvious limitation of parking charges is their inability to tax road users who only pass through a congested area and do not park. Hence, they must be used along with other pricing techniques. Another possible disadvantage is the way in which parking charges based on time can operate to increase congestion by promoting a more rapid turnover of cars. Nevertheless, to the extent that parking charges which reflect the real costs of street use in particular areas would deter motorists from driving and encourage transfer to public transport or fringe parking, these charges would be beneficial in allocating resources to higher value users. Also, downtown merchants, as nonuser beneficiaries of parking on public streets, might bear some of the burden of parking charges by validating parking tickets. In this way the value to abutting landowners of customer parking on public property could be collected and the parking charges would function in a manner similar to land taxes.

Special land taxes can be used to charge for the benefits to land owners which result from nearby servicing roads or roads in general. Like all charges for the use of roads these taxes should tend to allocate the use of land to its highest value use— roads or something else. See Demsetz, *Why Regulate Utilities?*, 11 J.L. & ECON. 55, 62 (1968). Since the right to use publicly owned land by deriving benefits from proximity to it is a right to use a scarce resource, the absence of a price for this use that reflects the opportunity costs of alternative uses will lead to overutilization. However, there are both theoretical and

seldom find a real-world example of pricing which takes account of all external costs and benefits. And in an imperfect market any movement toward pricing is subject to the objection that it can never, or only under exceptional circumstances, yield unambiguous information on whether a gain in allocational efficiency has been achieved. Thus, although the technical problems of pricing road use are not insignificant, one can certainly argue on the strength of our tolerance of imperfect pricing in other areas, despite this objection, that we should be satisfied with something less than perfect pricing in transportation decisionmaking. Whether to use the pricing mechanism should always be a question of its relative usefulness and costliness as compared with alternative means of generating information and making decisions. We shall return to this comparison below.

A third common objection is that we already know how much public investment in roads is desired by the populace, because the road system is self-financed by the users. This is an ubiquitous refrain in government and highway building circles. The statement is so transparently false that its continued vitality can only be attributed to a misperception of the implications of its denial. One need not claim that the present tax system for raising highway revenues produces no information concerning

empirical difficulties with setting taxes to measure the benefit to abutting landowners. Not only is this tax bound to be empirically imprecise, but it must also contend with a reciprocity problem: just as the roadway influences the value of the land, the land use influences the value of the roadway.

The sale of restricted licenses and permits is a fairly straightforward way to determine who shall use certain roads at certain times. Although somewhat cumbersome if too many categories of permits are used, this has proved workable in allocating space to stationary vehicles and could be used for moving vehicles as well. The allocation of permits by the market place would be theoretically acceptable, although G. ROTH, *supra*, is troubled by the emergence of a black market in permits. Since such a black market would allocate the permits to those users who placed the highest value on road travel, I am not certain why we should be concerned by this problem, at least in the short run. But the free exchange of permits outside a publicly controlled market might obscure some demand signals and hence skew public investment policy.

Tolls may offer the most direct means of charging the marginal social cost imposed by each additional motorist. If transactions were costless, some higher value users could be expected to pay some lower value users to stay off the roads, or at least certain roads at certain times. But organizing these transactions would, in fact, be prohibitively costly. Obviously a toll which included an amount for congestion costs imposed on others would serve as a less costly substitute for private transactions between rush-hour motorists, and hence as a means for compelling each user to "pay his own way." The practical difficulties of determining congestion costs have led some to despair of the effective use of tolls, *see, e.g.,* Sherman, *Subsidies to Relieve Urban Traffic Congestion*, 6 J. TRANSPORT ECON. & POLICY 22 (1972). Others are more sanguine about this mechanism for charging road users. *See* G. ROTH, *supra*, ch. 5 (discussing various technologies for recording and computing tolls on cars and for measuring either time spent in each congestion zone or miles traveled in various zones). *See also* Vickrey, *Pricing in Urban and Suburban Transport*, 53 AM. ECON. REV. 452 (1963).

the public's demand for highways to deny that the information produced is worth very much as an indicator of allocational efficiency. Although the tax is incurred as a part of a voluntary exchange for gasoline or tires, there is considerable difficulty in saying that the involuntary portion of the price is an accurate reflection of the purchasers' aggregate demand for highways—even given the admittedly close relationship between the demand for the product which is purchased and the product which is "tied" to its sale. By the simple expedient of changing the size of his vehicle the purchaser can enormously increase or decrease his use (in vehicle miles per year) of highways without altering his tax payments. More importantly, the collected revenues may be spent virtually anywhere in the highway system and therefore give little information concerning where the purchasers want the highways built.²⁴⁸ Finally, the inability of the taxing system to differentiate between peak and off-peak users, for example, prevents short run allocation of existing highway resources to their highest valued users. In economists' terms, it is an "average" rather than "marginal" cost pricing scheme.

This is not, of course, to say that the gasoline tax must be abandoned as a part of any system of user charges. It is to say only that the present tax financing system gives very fuzzy signals concerning consumer preferences, and therefore inadequate information to guide and evaluate specific investment decisions.

There has also been some opposition to the notion that marginal cost pricing of road use really involves pricing in any usual sense of that term. The argument is that in most road pricing schemes the addition to each motorist's bill of the congestion costs that his road use imposes on other users includes costs which are ignored in the market pricing of other goods.²⁴⁹ Presumably this limits the utility of road pricing in achieving allocational efficiency. This objection is theoretically untenable, however. It seems clear that a profit-seeking seller of road space desiring to maximize passenger-car-miles per hour should indeed consider congestion costs in his pricing and thereby internalize them,²⁵⁰ in the same way that Smithville

²⁴⁸See Milliman, *Beneficiary Charges and Efficient Public Expenditure Decisions*, in 1 ANALYSIS OF PUBLIC EXPENDITURE, *supra* note 72 at 291, 298.

²⁴⁹Sharp, *Congestion and Welfare — An Examination of the Case for a Congestion Tax*, 76 ECON. J. 806 (1966).

²⁵⁰Moore, *Congestion and Welfare — Comment*, 78 ECON. J. 157 (1968).

considered competing use demands in our previous example. Moreover, all systems for pricing road use need not attempt to charge for congestion costs explicitly. Congestion costs are not a problem, for example, where the total social costs of providing and maintaining a road facility are charged to the users, as in our Smithville example. Persons wishing to reduce congestion will simply bid additional resources into the provision of transportation goods and services.

Congestion costs do seem to require explicit treatment, however, in pricing schemes which, unlike the Smithville system, do not charge users for long-run or total marginal costs. And it may be argued that Smithville has avoided the congestion charge problem through the introduction of long-run marginal cost pricing which produces serious allocational inefficiency. This and several other troublesome but less pervasive objections constitute a serious threat to the viability of the Smithville system.

b. *Some More Serious Issues*

(i) The "Marginal Cost" Debate

Everyone seems to agree that for purposes of promoting allocational efficiency the appropriate price to be charged for any particular use of a transportation facility is the marginal cost of that use. Disagreement breaks out, however, concerning what should be included in marginal cost when indivisibilities on the supply side point toward different pricing policies for shortrun as against longrun efficiency. The issue may be illuminated by an analysis of two schools of thought which have emerged in the literature.²⁵¹

The first school has as its fundamental tenet the necessity of ignoring construction and invariable maintenance costs when pricing the use of roads. According to this view any charge above shortrun marginal costs, that is, maintenance costs which vary with use²⁵² and congestion costs, necessarily results in an underutilization of road resources once in place. Trips will be foregone which have a value to road users which is greater than

²⁵¹ See Coase, *The Theory of Public Utility Pricing and Its Application*, 1 BELL J. ECON. & MGT. SCI. 113 (1970) & sources cited.

²⁵² We can without distortion include institutional requirements for a road system, for example, police and courts, within this heading.

the marginal social cost of the trips because the price charged includes a sum for the sunk, irretrievable and therefore currently irrelevant costs of building the road in the first place.²⁵³

The archetypical case is the situation in which shortrun marginal costs are zero. Let us consider, for example, a road with only one potential user. We assume that there is no congestion and no measurable impact of use on maintenance, that the road costs \$100 per year to construct and maintain *and* that we intend to collect the cost from the user. If the user's demand for trips is like that represented in Figure 1,²⁵⁴ the pricing policy of a state following the Smithville plan will be to charge a toll of between \$.20 and \$1.00. But charging a toll of \$.20 will eliminate 500

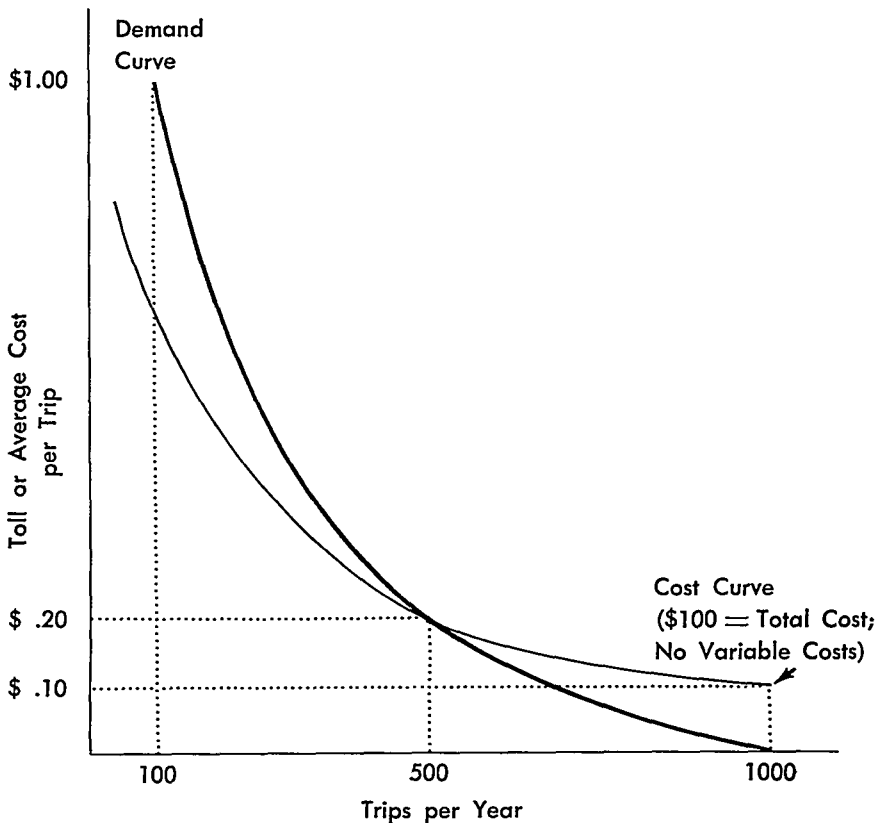


FIGURE 1

²⁵³See A. WALTERS, *supra* note 246, at 9-13.

²⁵⁴*Id.* 18.

trips per year whose value would be greater than their marginal social cost—in efficiency terms, socially desirable trips. On the strength of this insight alone a state might reasonably choose to charge the user nothing, even though this strategy meant the failure to recoup its initial investment.

The implications of this analysis for the use of pricing as a means of allocating resources to transportation uses are significant. If efficient allocation of existing facilities requires that prices be limited to shortrun marginal costs, no information will be generated about the willingness of users to pay the total costs of the facility. Hence the pricing system cannot be used as a basis for decisions about the construction or provision of transportation facilities.

But even if this analysis is correct, and I shall argue shortly that it is not, it does not dispose of the case for making user charges equal to shortrun marginal costs. In actual situations these costs will be a positive figure, although they were assumed to be zero in the previous example. And there seems to be no reason, *a priori*, to eschew the rationing of existing facilities that may be accomplished by charging users the marginal costs of their use.

Under such a system of charges, decisions about further investments in transportation goods and services could be approached on the basis of a cost-benefit analysis which measures benefits by the creation of consumer surplus, which may be defined for present purposes as the value of new transportation facilities over and above the price which is paid to use them. In short form, the principle is that if the demand for highways is presumed to increase independently of their supply,²⁵⁵ then within certain limitations, additions to the road supply will generate greater consumer surplus than would be produced by holding supply constant in the face of increasing demand. This can be represented graphically as in Figure 2, where initial demand and supply are represented by D_1 and S_1 respectively. As demand increases to D_2 , the price per mile of road use will increase in the absence of expanded capacity. If new facilities alter the supply curve to S_2 , however, the price per

²⁵⁵While I shall not at this point contest this proposition, there seem strong reasons to believe that the building or improvement of highways has long run effects on the slope of the demand curve for road use. Contrary to the usual case this "canting" of demand may be in the direction of long run inelasticity. See, e.g., Nelson, *Policy Analysis in Transportation Programs*, in 3 ANALYSIS OF PUBLIC EXPENDITURE, *supra* note 72, at 1102, 1110-11 (1969).

mile drops from A to B while the flow of traffic increases from M to N. The consumer surplus generated by the new facility is the amount by which the estimated total which its users would be willing to pay for its use ($P_3 P_4 MN$) exceeds what those users do in fact pay ($XP_4 MN$). This appears as $P_3 X P_4$ in the figure.²⁵⁶ Alternative projects may then be judged on the basis of the size of the consumer surplus which they would produce.²⁵⁷

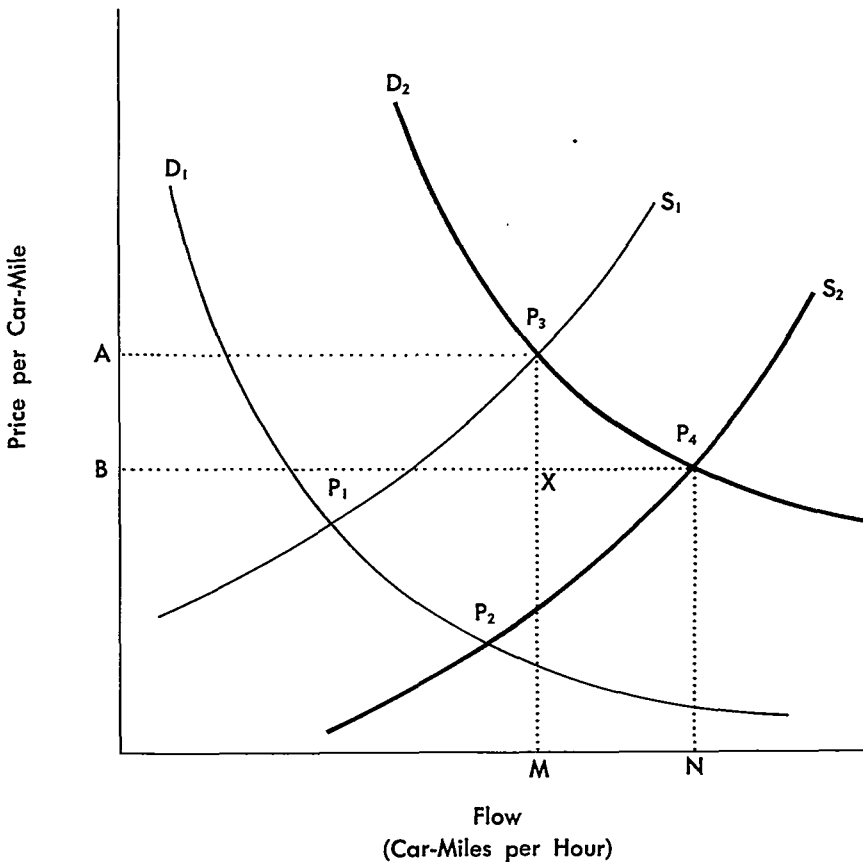


FIGURE 2

²⁵⁶Thompson, *Some Aspects of Evaluating Road Improvements in Congested Areas*, 38 *ECONOMETRICA* 298 (1970).

²⁵⁷This sort of analysis is indeed an improvement over the cost-benefit analyses which commonly are used for purposes of determining public expenditure policy. It at least does not assume that all the flow on the new facility (P_4) would have been accommodated on the old at the increased price (P_3). See Margolis, *Shadow Prices for Incorrect or Non-Existent Market Values*, in *ANALYSIS OF PUBLIC EXPENDITURE*, *supra* note 72, at 533, 543-44.

A slightly different and more detailed application of this approach by Walters²⁵⁸ views the question of public benefit from the perspective of optimum, short term marginal pricing, taking into account that the total social costs of the use of a road, including costs of congestion, may at some point increase while mobility is decreasing. This jump in costs occurs because on a given length of roadway the total number of trips per day will increase with increasing congestion only up to a certain critical number of vehicles. Past that point the addition of vehicles to the stream of traffic reduces not only the average number of trips per vehicle but also the total number of vehicle trips that will be completed. At the point where adding vehicles reduces total trips, society is incurring increasing total costs for decreasing total returns. Employing this phenomenon Walters posits the road capacity for an existing facility as the point at which the cost curve becomes backward-bending. This point is represented by Q in Figure 3. The optimum pricing policy is that which balances demand and supply at road capacity. Hence in Figure 3 the user charges should be a congestion, really a "capacity," charge set at OR minus OH and a maintenance charge of OA, where DD describes the demand and OH minus OA the users' operating costs. Again, whether this facility should be built depends on whether construction and invariable maintenance costs are exceeded by consumer surplus, RDP.²⁵⁹ Of course, if the demand fell to D'D', no congestion charge would be levied, and the benefit for comparative purposes would be HD' Z.

While the Walters analysis makes a reasonably strong case for the imposition of user charges, including charges to cover congestion costs, the problem with this or any cost-benefit approach is that the consumer surplus-opportunity cost comparison reveals nothing about the optimum long term allocation of resources. It assumes that the lumping together of these resources in a road necessarily produces a consumer surplus greater than the surplus produced by their utilization elsewhere in the economy. The assumption is valid only if the resources employed would, if released, be dispersed to marginal units of production elsewhere whose value was no greater than cost.²⁶⁰

²⁵⁸A. WALTERS, *supra* note 246.

²⁵⁹Actually Walters is using this model to deal with the question of whether to continue operating an existing facility. I think, however, he is including rent in invariable costs and hence the analysis should hold for a prospective facility.

²⁶⁰See 1 TECHNIQUES OF TRANSPORT PLANNING 190-91 (J. Meyer ed. 1971) [hereinafter cited as TRANSPORT PLANNING].

This condition might obtain under ideal circumstances, for if higher value uses existed, in the private sector at least, the resources would be appropriated to those uses by profit-seekers. But if there were any possibility of lumpiness or specialization in the resources which would inhibit their dispersion, the assumption is no longer warranted. Only a full evaluation of the consumer surplus produced by all available alternative uses would justify the conclusion that the use of material, machinery and manpower in the road was the highest value use to which they could be put. Since it is generally recognized that the heavy construction industry is divided into somewhat specialized horizontal and vertical segments, our confidence that a positive cost-benefit ratio reveals an efficient allocation of resources is stretched very thin.²⁶¹ When we add to this source of concern the empirical difficulties of describing a demand curve in the absence of historical data on the fluctuation of demand with changes in

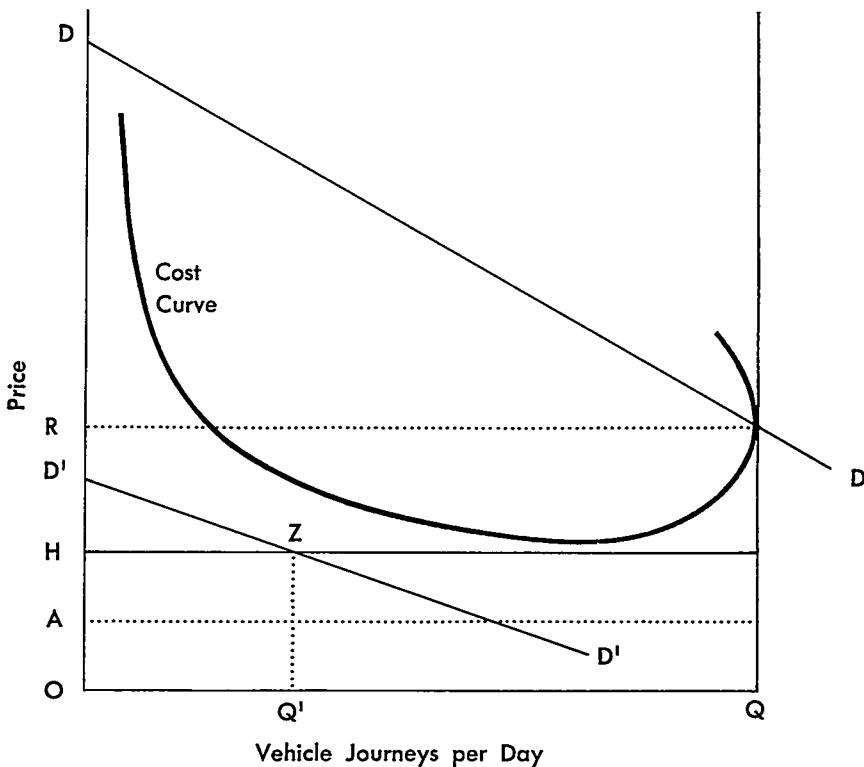


FIGURE 3

²⁶¹See generally, R. HAMMOND, BENEFIT-COST ANALYSIS AND WATER POLLUTION CONTROL 21-26 (1960).

price, and the theoretical problems of an appropriate discount rate, we may well wonder whether the simple finding of a net benefit or deficit is at all reliable.²⁶²

The Walters pricing scheme suffers from the additional failing that it does not necessarily allocate existing facilities to their highest value users and thus may fail to maximize the total benefit to society. Each vehicle trip seems on his analysis to be considered as precisely equal in value to every other trip. Hence the choice of the point Q, where total trips begin to decrease, as descriptive of the capacity of the road, and the use of a congestion charge to maintain the number of vehicles at Q. However, if we assume that certain users' trips are more valuable than others' (because they are willing to pay a higher price to make the trips), the total social product from vehicle trips may decrease while total trips are still increasing.

To take a simple example, assume that motorists A and B wish to use the same road. A's trip is worth \$100 and B's is worth \$20. If A had the highway to himself, he could make one trip per day. The same is true for B. When both use the road each can only make $\frac{3}{4}$ of a trip. Total trips thereby increase from 1 to $1\frac{1}{2}$, but the total social product from these trips declines from the \$100 value of A traveling alone to \$90: A's $\frac{3}{4}$ trip (at \$100 per trip) plus B's $\frac{3}{4}$ trip (at \$20 per trip).

These difficulties suggest the desirability of a pricing scheme which seeks to recover longrun marginal costs, if such a scheme can be employed without producing short run distortions. To return to the example represented by Figure 1, there would appear to be two nondistorting price solutions available. The first is to price discriminate among trips by collecting a toll equal to the value of each trip to the traveler and not less than the shortrun marginal cost. In that way no charge in excess of the marginal value of a particular trip would be imposed and hence no socially useful trip would be deterred by a charge in excess of its marginal cost.

Unfortunately this solution is neither feasible nor desirable. It is impracticable because we cannot know without bargaining what the user will be willing to pay for each particular trip, and bargaining with each traveler about each trip is too costly under most circumstances. It is undesirable because the ability to price

²⁶²See generally TRANSPORT PLANNING, *supra* note 260, at 185-215; Baumol, *On the Discount Rate for Public Projects*, in 1 ANALYSIS OF PUBLIC EXPENDITURE, *supra* note 72, at 489; Margolis, *supra* note 257; Nelson, *supra* note 255.

discriminate presumes a monopoly power to transfer wealth, equal to the consumer surplus under competitive conditions, from buyers to sellers.

A second solution is more acceptable. The user could be charged longrun costs separately from the marginal costs of any particular trip. Thus in the case of our Figure 1 example, the user would be charged a \$100 permit fee and no tolls. Under this pricing policy the user would pay the longrun marginal cost of providing the road (\$100) and also make all trips which have a value to him equal to shortrun marginal cost (zero).

In fact, this pricing technique is widely used in providing residential streets to service new housing or shopping areas, or in making certain types of local street improvements. The access value of these streets is, in effect, transferred along with the abutting property, and the developer recovers his costs of developing the street system through the sale of that property. Hence, resources are already being allocated to certain types of road uses through market processes. Indeed, the lump sum payment (for a road permit or license) with no additional charge for road use is merely a special case of two-part pricing techniques which are well known in other contexts. The absence of the second part of the charge in this case reflects our initial assumption that the per-trip marginal cost is zero. If shortrun marginal cost is greater than zero, an additional charge could be made. With such a pricing system for public roads we would know whether the public were willing to pay the overall cost of constructing the road system and the variable costs of traveling on certain segments of it.

That certain persons willing to pay shortrun but not longrun costs will be excluded from road use by such a pricing policy should not trouble us. The function of the pricing system is efficient resource allocation among competing users. If pricing to include longrun costs excludes certain classes of users from facilities or fails to provide facilities suited to their needs, then their preferences have been rebuffed in the marketplace for the usual reason: they are unwilling to pay the costs associated with their consumption. Indeed, the difference between their bids and the higher bids of those who are willing to pay for their exclusion represents the congestion charge which should be levied for their use. Hence, the private bidding eliminates the necessity for such charges.²⁶³

²⁶³See Mohring, *Urban Highway Investments*, in MEASURING BENEFITS OF GOVERN-

(ii) Cost Allocation

There remain a series of problems, however, that would have to be solved before one could confidently assert the superiority of a market allocation of resources to the production of roads, through multipart pricing, to the present political allocation of those resources. One such problem is a more complex formulation of the problem of allocating construction, invariate maintenance and institutional costs—that is, costs which do not vary with use. While a multipart pricing system might solve part of that problem, there is yet a question of how longrun costs should be divided among the various users or classes of users. If a highway is provided for rush-hour and long-haul traffic, it will also be available for off-peak and local travel. Should the latter two classes of users be charged none of the longrun costs? If they should be charged some of those costs, how much? If this problem cannot be solved rationally, any system of charges may involve under- and overcharges to various users and hence misallocations of resources.

One approach has been suggested by Harold Demsetz.²⁶⁴ On his view the indivisibility problem, that is, the shortrun distortion which results from allocating costs of initial production of a public good to users whose demands can be satisfied at no additional costs, is the result of a failure to see that the good being provided is divisible in terms of its uses to different parties. Once that has been recognized, a quite simple joint-product analysis will provide a pricing policy which leads to allocational efficiency.

The elements of this analysis can be made clear through a simple analogy to the production of beef and cowhide. Slaughtering the animal in that case contributes as much to the production of one good as the other; we could say that production of one of the goods is costless. But significantly fewer cows will be slaughtered if only one of the goods is priced. This becomes clear from a study of Figure 4. There the cost of slaughtering each additional cow is represented by MC and is the same whether the cow is used for beef or hide or both. The slaughterhouse may charge for beef or hides or both, of course, but no matter what its policy in this regard, the total price which

MENT INVESTMENTS 231-41 (R. Dorfman ed. 1965); cf. G. TULLOCK, PRIVATE WANTS, PUBLIC MEANS, 161-72 (1970).

²⁶⁴See generally Demsetz, *Private Production of Public Goods*, 13 J.L. & ECON. 293 (1970).

it can expect to get for products made from each additional animal killed must be at least equal to MC to make the extra effort worthwhile. Thus, if only hides were priced, only the demand for hides (D_H) would be considered in setting production levels, and the quantity of cows slaughtered would be C. Similarly, if only beef were priced, the quantity slaughtered would reflect only the demand for beef (D_B) and would settle at B. But if the slaughterhouse planned to charge a price for both products, as is the likely case, demand for both items (D_{H+B}) would be taken into account and the number of animals killed would rise to A. The prices charged for beef and hides would then be P_1 and P_2 respectively, totalling the marginal costs of slaughtering at P_3 under competitive conditions. Neither hides nor beef could be distributed at zero price without affecting the allocation decision of how much to produce unless meeting the demand for the product made no contribution to covering the marginal cost. Such a situation would exist with demand at D_{H1} .

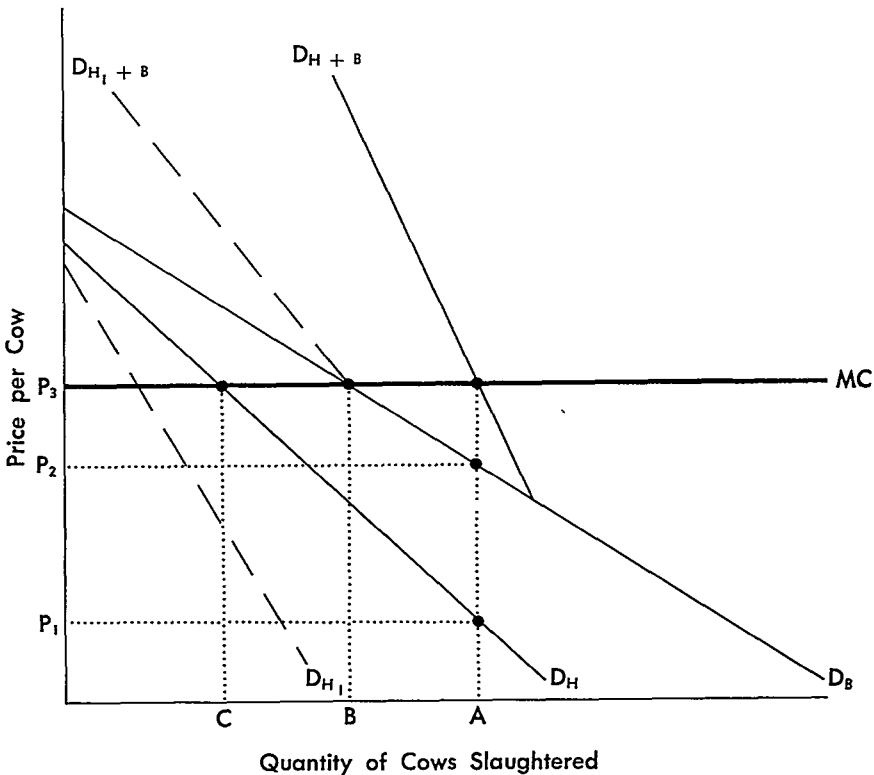


FIGURE 4

In the initial case, however, production at B (or C) would result in the loss of consumer surplus that would be generated by production at A and would therefore represent a misallocation of resources.²⁶⁵

Applying this analysis to highway pricing is relatively straightforward. In Figure 5 MC is the opportunity cost of providing, operating and maintaining the facility, and D_1 through D_4 are separable demands for highway use, for example, off-peak auto users, peak auto users, transit users, truck users, through traffic and local traffic. Only persons paying peak load prices will be allowed to travel at peak times, only buyers of truck use may use trucks and so forth. If the sum of D_1 through D_4 exceeds MC, an addition to the facility is indicated and *vice versa*.

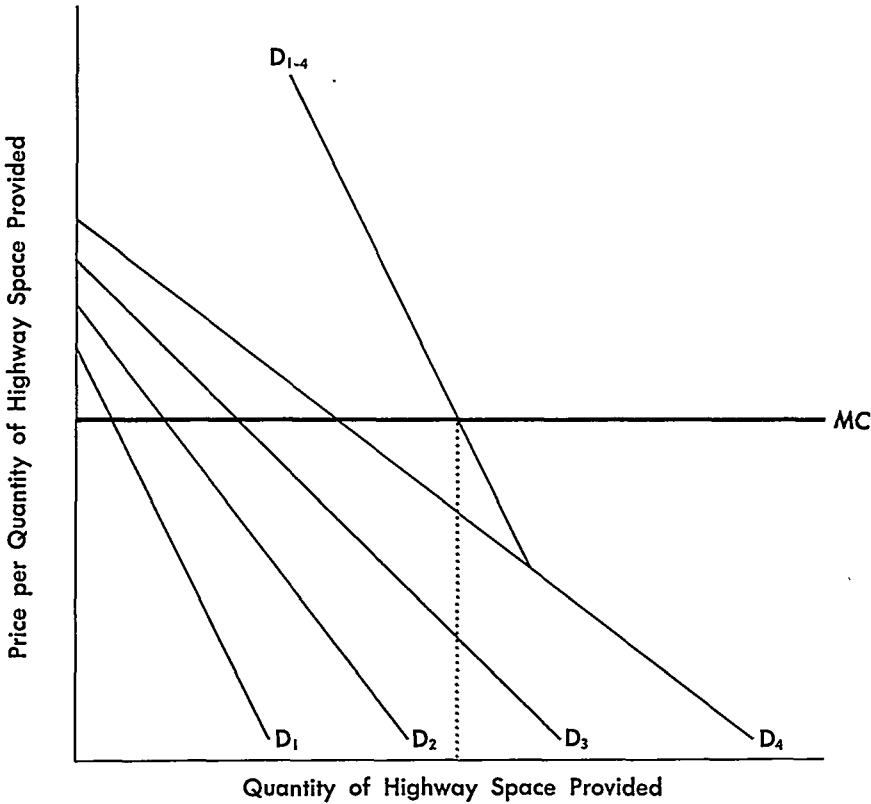


FIGURE 5

²⁶⁵It should be noted that this analysis treats marginal cost (MC) as constant but not as zero; that is, it takes into account initial production costs as a part of marginal cost. Moreover, it presumes that the jointly produced goods can be separately priced.

Because this analysis permits zero pricing to some parties and satisfies all demand at any price, it does not result in underutilization of existing facilities. Moreover, it does not ignore the fact that facilities do have opportunity costs, however slight the cost of introducing additional users.

It may be objected that this analysis does not quite fit the highway case or, more precisely, that it does not entirely solve the problem of allocating the opportunity costs of highways. Some of the demand categories just mentioned are not in fact relevant to a joint-product solution. The separation of buyers into peak and off-peak users would be a true joint-product pricing strategy, because the production of capacity for peak users would make that capacity available for off-peak users. As with beef and hides one cannot be produced without the other, nor can the ratio of peak to off-peak capacity be varied. But, within either of these "noncompetitive" categories, there may be incompatible users of highway space whose demands cannot be summed vertically. The local bus service requires numerous access points, safe places for discharging and taking on passengers and a stream of traffic that is slow enough for it to gain access to the roadway from a stop. But the crosstown commuter traveling the same corridor in a private automobile wants limited access and high average speed. The two-lane blacktop road over the mountain is acceptable to the gasoline truck, but not to the fifty cars lined up behind it. In these cases special capacity must be built for each special demand, or existing capacity allocated among them. If any user classification is unwilling to pay the longrun marginal cost of providing the facility for its needs, it will obtain no assistance from the demand of competing users—that is, users who want to use the same facility at the same time for incompatible purposes. Costs incurred for the benefit of competing users are generally denominated "common" rather than "joint" costs.

The allocation of these common costs, such as the costs of maintaining the highway department or of constructing a passing lane, is difficult to determine in a principled way. Indeed, it is sometimes said that such allocations are necessarily arbitrary,²⁶⁶ and therefore produce some distortions or misallocations of resources. This may be true, but one may yet doubt the seriousness of the difficulty. Most pricing outside the single-

²⁶⁶See Note, *The Postal Reorganization Act: A Case Study of Regulated Industry Reform*, 58 VA. L. REV. 1030, 1058 n. 123 (1972).

product firm involves some "arbitrary" assignment of unallocable costs, but that does not in most cases dissuade us of the comparative desirability of the price mechanism for making decisions about resource allocations. Moreover, in the case of roadways the allocation of such costs on some general basis such as vehicle miles per year may be arbitrary, but it is hardly nonsensical.²⁶⁷ While this principle of allocation might have to be varied or fictionalized to deal with some kinds of uses, for example, on-street parking, a workable scheme does not seem beyond our capacity.

(iii) Competition

Efficient allocation of resources through pricing is generally agreed to presume a competitive market for goods and services. Hence the efficacy of a pricing strategy may be thought to turn on the existence or nonexistence of competition in the relevant market. Can such a market exist in the transportation field with respect to major system investments such as highways? This is hardly the place for a prolonged analysis of monopoly theory and its application to various sorts of road investments. We shall therefore be satisfied with a short response: perhaps not, but it is not at all clear that we should therefore abandon attempts at pricing roads.

First, let us address the "perhaps not" in our response. It would appear that the provision of roads generally involves a "natural monopoly"; that is, economies of scale will lead to the elimination of all but one road provider in any relevant market. If A lays a two-lane road between X and Y, and B, his competitor, lays one beside it, it should not take A and B long to discover that better service can be provided at lower cost and their profits therefore enhanced—in the absence of any attempt at monopoly pricing—by consolidating their roadways into a four-lane divided highway or by specialization in unidirectional travel. In either event A and B will no longer be competitors. Moreover, if we consider the planning, regulation or marketing of the use of city streets, there would appear to be very large economies of scale involved in unified ownership. Thus, while some competition among providers might occur and while there is some intermodal competition, it does not seem likely that a wholly private market in roads would remain any more competitive than has the market for railroads.

²⁶⁷For a more detailed exposition in a different context, see *id.* 1065-69.

But, to continue the prior response, lack of competition does not necessarily preclude pricing of road facilities any more than it suggests that railway lines should be tax-financed and free to all users. The middle grounds of private ownership with price and service regulation or public ownership with the requirement that services be "non-profit" but self-financing through user charges are often chosen when a competitive market is unavailable and when tax-financed, "free" provision is not justified on distributional grounds or by the inability to exclude free-riders. Continuing the almost universal practice of public ownership of road facilities is not inconsistent with changing the criteria employed for public roads investments from "needs" politically defined to "wants" established through market pricing.

To be sure, such compromise solutions sometimes provide weak controls over costs which reward private or public managers at the expense of consumers.²⁶⁸ But it does not seem reasonable to suppose that a system which provided road and other transportation services on the basis of an ability to cover (even somewhat inflated) costs through the marketing of those services would provide a poorer reflection of society's demand for such services than a system, like the present one, which determines demand on the assumption that transportation goods and services are costless and then finances as much construction to meet that demand as the political process determines is appropriate. At least the proposition is not so self-evident that experimentation with road pricing should be rejected.

(iv) Market Failure

To return to our Smithville example: is it really possible for a public authority to organize the pricing of road facilities in a fashion which provides sufficiently explicit signals to guide road investment? Or is any system of charges likely to be only a poor reflection of demand and therefore a poor guide for public decisionmakers? Smithville would clearly have to deal with

²⁶⁸Strategies for the solution of this difficulty, such as annual bidding for the roads franchise, *see* Demsetz, *supra* note 247, are of limited utility in this instance. Our interest is in the use of market pricing to guide public investment decisions. Giving the roads franchise to the party which promises to operate the road network at the lowest level of charges to users deals only with the issue of preventing capture of consumer surplus through monopolistic pricing.

several types of "market failure" which might distort its information and therefore its judgments.

First, Smithville should know that no pricing strategy will internalize all the externalities—both positive and negative—of highway travel. It could charge part of the costs of air pollution abatement against the roads budget, for example, but abatement costs do not necessarily represent the real social costs of achieving a particular level of air quality. Nor does taxing part of the costs of a new road facility against an abutting or nearby owner necessarily collect from him either what he would have paid to have the road or the real increase in his property values. Yet taxation of approximate benefits will probably be necessary because bidding by those who want roads will usually be skewed by serious "free-rider" problems: each bidder will have incentives to underbid because his expenditure will benefit others who cannot be excluded from those benefits except at prohibitive cost. Since each bidder will also benefit from the expenditures of others, his rational response is to disguise his true demand. Similarly, some persons, including some nearby landowners, may well view the facility as a cost rather than as a benefit, but there is, again because of "free-rider" effects, not likely to be any effective market in which to reflect the disutility to these residents.

Another sort of market failure stems from the difficulty of making payment for access to facilities sufficiently fine-grained to provide an answer to the specific issue around which highway conflicts now rage: should this particular road or road segment be constructed? For example, we might require a permit for the use of the Smithville city streets, but we cannot feasibly require a different permit for every street. The allocation signals which are produced by the citywide permit may tell us to expand or to contract the transportation resources deployed in the city, but they will not tell us which particular streets to close or to expand. Nor will these signals give us more than hints about the economic feasibility of additions or substitutions in the form of transportation modes not employing concrete and rubber tires.

A variation on this problem of the "coarseness" of pricing signals involves pricing policy for connected road systems. The highways criss-crossing Smithville presumably can carry both local and through traffic. If we assume that these roadways are owned by the city and are accessible to local residents through the acquisition of a general permit to use city streets, some means

for charging nonlocal or through users is required. Of course, tolls might be charged these users, but charging tolls for short segments may be prohibitively expensive. A less costly alternative might be a system of state charges for the use of highways with rebates to the city, but the determination of appropriate rebates to the city from the state license fee or toll system may be either expensive or inexact. State ownership would, of course, produce the same problems in reverse.

In each case, the costs of marketing roads cause demand signals to diverge from the signals that would be produced by a market uninhibited by these transaction costs. In light of this divergence, the allocational efficiency of the market cannot be guaranteed, and the desirability of market pricing becomes an issue once again. The question is really how far off the allocation signals must become before pricing should be abandoned; and, in a sense, that is a nonsense question. We can never know how far off the signals are, because by hypothesis there are market failures which preclude the establishment of the perfect market which would provide a basis for comparison. And, of course, if we could confidently predict the operation of that market in its absence, the use of market pricing would not be necessary. Hence, we are left with the necessity of making a rough judgment about whether a decision process which includes pricing is superior to one which does not.

In some situations, national defense, for example, the free-rider effects are so dominant that any attempt at pricing seems frivolous. But the provision of transportation facilities and services does not seem so dominated by the free-rider phenomenon. Long- and short-term permits, parking charges and, in some circumstances, tolls are presently available means for charging major classes or users a price for their use of roadways. Moreover, a serious attempt to implement road pricing might well solve a number of the "coarseness" problems that have been posed. For example, electronic metering devices that would make toll collection much less costly are currently under development in the United Kingdom. The utilization of hardware of this sort could make possible a system of tolls which would provide relatively detailed and continuous information on aggregate demand for various types of road capacity at various times and in various places. The discovery through the imposition of such charges that users are willing to pay the costs of providing a particular total capacity of hard-surface city

streets may not solve the problem of where to build additions when demand will support them, but it is nevertheless a highly significant bit of information. When combined with the highway engineer's trip-survey data and a projection that a proposed facility will yield greater revenues than any alternative proposal for meeting demand, one has at least a system for concluding that the road improvement is *prima facie* justified. If, on the other hand, aggregate demand, similarly expressed, is insufficient to support the provision of a road at the current scale, strategies for disposing of excess capacity, or for converting the facility to other or better uses, would seem to be in order.

3. A Composite Scheme

Nonetheless, few would want to relegate decisions entirely to our admittedly imperfect market system, no matter what refinements are made in toll collection. The significant external effects of the transportation network on our total living environment argue for some role in transportation investment decisions for interests whose preferences cannot be expressed through a functional market. One strategy for the inclusion of these interests in the context of a pricing system would be simply to consider positive and negative externalities as factors which may overcome a *prima facie* case established by pricing. Under such a system the proponent or opponent of road investments, whose position was not supported by available market information, would have the burden of persuasion, and in carrying this burden, information tending to show the existence and magnitude of positive and negative externalities would be the only relevant evidence. In this context the discussion of specific projects could be carried on with some intelligence because the issue would be relatively clearly posed: should a public subsidy of a specific amount be provided to offset costs, or should a particular "penalty" be added to the costs of a project, because certain estimable costs and benefits are not reflected in a market system of allocation?

Without attempting to develop a detailed decision-process model, I will sketch briefly a possible framework for making a road investment decision in Smithville within a legal structure which recognizes both the efficacy of road pricing and its limitations. To take an example with limited parameters: suppose that the city is experiencing a deficit in its transportation

facilities account and is therefore seeking a project which would increase its revenue. After analyzing what it knows about existing and projected demand, the responsible department of the city government, say the Department of Transportation, proposes that certain street segments in the downtown area be closed off and converted into parking lots. The agency estimates that this will have an insignificant effect on the demand for vehicle permits and will generate needed revenues from parking fees.

Obviously such a project will have, or appear to have, a deleterious effect on some property owners: those owners who have property abutting the streets proposed to be closed and whose access will be restricted by the project. Nor is it possible to say to those owners that their remedy is simply to pay the city to keep the street open, because the "free-rider" problems mentioned earlier may intervene. The property owners, therefore, may want to make two sorts of objections to the proposal: that it will not have the revenue producing effect predicted by the Department because the estimates of parking demand are faulty; and that negative effects on their property outweigh the net gains to the city from the project.

Because either or both of these claims might be true, the property owners should be provided a forum in which to attempt to convince the city. A hearing might therefore be convened before an independent authority, for example, the City Planning Commission. At that hearing the Transportation Department would submit its justification for the project, and the opposing property owners would submit their data and arguments. While the attributes of this hearing could be elaborated further, perhaps it suffices to say that the hearing contemplated is one having essentially the attributes of the current highway location and design public hearings—with the added feature of an independent forum.

A legislative-type public process is necessary because interests and officials other than the Department of Transportation and abutting landowners may have a desire to participate in order to bring additional positive and negative effects to the attention of the Commission. But this should not mean that the hearing will be as diffuse and unsatisfactory as current highway public hearings. The narrower focus of the inquiry—Is this project justifiable on efficiency grounds?—should provide a clearer joinder of issues, and make reference of the dispute to an

independent, quasi-legislative body sensible. Moreover, having to convince an authority independent of the Transportation Department that the project is justified will militate against the unresponsiveness of project proponents which often prevents meaningful exchanges in current highway hearings.

On the basis of its evaluation of the evidence and arguments at the hearing, the Planning Commission would make a recommended decision, to be accepted or rejected by the City Council without further hearing or *ex parte* contact with interested parties. Should the Council desire further information from any source, it could request it but would be required to give notice to all the participants in the previous hearing and allow them to comment on the information or advice received. Judicial review on issues other than a claim of failure to follow prescribed procedures would be excluded.

This process of proposal, hearing and political decision under the efficiency standard should also be expected to take place under certain predetermined constraints. For example, all projects might require Planning Department clearance for conformity with the comprehensive plan, thus injecting into the process the degree of "rational planning" that has been achieved at the local level, and the taking of park or historic area property for any transportation project might be prohibited. The proponent of a transportation project might also be required to canvass certain external effects, environmental impact, for example, in its initial proposal. These constraints express prior political consensus concerning the relationship of transportation to other values, and they no more contradict the use of market allocation in transportation decisionmaking than zoning ordinances contradict market allocation of land resources.²⁶⁹

To be sure, the process just described will not eliminate dispute. Much argument can be expected about the accuracy of the predictions of consumer demand in an admittedly loose pricing system, and the accuracy of "evidence" brought forward to demonstrate positive and negative externalities could be endlessly debated. Nor is it a neutral system. The *prima facie* status of pricing indicators clearly gives priority to preferences which can be expressed accurately through available markets.

²⁶⁹As previously noted, parallel decision processes may be established at regional, state and national levels to deal with transportation decisions for which governments at those levels have responsibility. Nor is it impossible to employ an efficiency criterion through similar processes under a grant-in-aid system requiring intergovernmental cooperation in transportation projects.

Nor is the enfranchisement of interested but technically unskilled parties a less difficult problem here than under the current highway program. But the system described does have some attractive features when compared with present criteria and processes for deciding where and when to build roads: it provides a systematic criterion for investment—allocational efficiency—to replace the fuzzy and infinitely expansive notion of “highway needs”; it provides a starting point for political discussion of external costs and benefits; it presumes that resources are scarce and that users pay the costs of their use. Therefore, market intervention must be explicit and must be justified on acceptable social welfare criteria. In short, it is a system which requires that some hard questions about resource allocation be confronted explicitly.

VI. CONCLUSION

The case that has been made for allocating resources to road uses through some form of pricing is obviously not overpowering. Serious and difficult problems would have to be resolved before such a scheme could be made operational. Yet it does not seem unreasonable to urge a major national research effort to develop those solutions. We currently have an intensely frustrating system of public decisionmaking about transportation investments—particularly road investments. That process is producing increasing conflict, unsatisfying resolution of the controversies which arise and, perhaps, mammoth misallocations of resources. Moreover, alternative strategies, such as better “planning” or increased “democratization,” seem bankrupt in the absence of basic criteria for judgment about highway needs. An attempt to develop a system of road pricing would at least address the basic issues.