Assessment of Community Planning for Mass Transit: Volume 12—Bibliography

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Assessment of Community Planning for Mass Transit Volume 12: Bibliography

Skidmore, Owings and Merrill

Proposed for Office of Technology Assessment

February 1976

UNITED STATES CONGRESS

OFFICE **OF** TECHNOLOGY **ASSESSMENT**

Bibliography

Part of an ASSESSMENT OF COMMUNITY PLANNING FOR MASS TRANSIT

Prepared at the Request of

The Senate Committee on Appropriations

Transportation Subcommittee

Prepared under Contract OTA C-4 by

Skidmore, Owings & Merrill System Design Concepts, Inc. Washington, D.C.

FEBRUARY 1976

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INTRODUCTION

This bibliography lists publications consulted or referenced during <u>An Assessment of Community Planning for Mass Transit</u>, a study sponsored by the Congressional office of Technology Assessment. The United States Senate Committee on Appropriations requested the study to be undertaken on behalf of its Transportation Subcommittee.

The bibliography has three parts. **Each** reference is listed on the <u>access index</u>, which identifies the type of publication, the-author's general approach, the publication% geographic context, and the planning issues it discusses. Next, comments on the most important general references are presented in an <u>annotated bibliography</u>. Finally, <u>metropolitan area references</u> are listed from each of nine metropolitan areas studied during the assessment. These references and the annotated publications are numbered in order of their entry on the access index.

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AUTHOR; George M. Smerk

TITLE: Urban Mass Transportation

PUBLISHER/SOURCE: Indiana University Press, Bloomington, Indiana

DATE: 1974

ANNOTATION **ANN**OTATION CATEGORIES **x** Book This book, published toward the end of the PUBLICATION study **OTA** community transit planning assessment, Q is the most recent history and evaluation of Article the Federal urban mass transportation program. Popular press It is also perhaps the most thorough and Official plan, report readable book on the subject, written by a $oldsymbol{lpha}$ gislation regs. college professor with several previous publications $o\bar{n}$ American urban transit to his MUTHOR'S APPROACH credit. Theoretical empirical The book begins by reviewing the evolution of the Federal transit program. It traces the National/Federal key political forces and individuals that have led the effort to shape Federal transit **S**tate policy from the late 1950s-through the Federal-Reqional/Local CONTEXT Aid Highway Act of 1973. Atlanta Boston The author then outlines arguments in favor Chicago of public investment in mass transit: (1) to GEOGRAPHIC reduce congestion more inexpensively than by building new highways; (2) to conserve scarce Denver Los Angeles urban space; (3) to improve urban design; (4) San Francisco to **reduce** noxious air pollutions; and (5) to save travelers' money (a benefit that is Seattle Twin Cities On the other side, arguments debatable). Washington, D.C. against transit claim that (1) transit is unattractive; (2) it is inflexible; (3) that the U.S. urban population is spread too thinly to be served effectively by transit; (4) that Gen. planning approach Political influences the auto, not transit, is the cheaper way to Goals, objectives Govt. institutions go. Financing A historical discussion of transit operating ISSUES Public evolvement agencies, followed by a *closer* look at the Needs forecasting UMTA program, sets the stage for an evaluation of the failures of mass transportation programs. PLANNING Land use planning Efforts to boost transit have been unable to Multimodal trans. plan stem the postwar erosion of ridership. Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management

<u>Urban Mass Transportation</u> Page Two

There are no national performance standards even to judge the quality of transit. Transit agencies are reluctant to adopt innovative improvements. Transit has not played a significant role in shaping urban growth. Lack of intermodal coordination and the fragmentation of government has hindered progress.

Recommendations for action include clarifying the mission of the Federal program by setting workable goals, increasing the available funds and the certainty that they will be available, providing incentives for governmental integration on the local level, establishing a rational national pricing policy for highways so user charges reflect the true costs, and improving transit management.

AUTHOR: Roger L. Creighton

St. & hwy. management
Transit management

TITLE: Urban Transportation Planning

PUBLISHER/SOURCE: University of Illinois Press

DATE: 1970

ANNOTATION CATEGORIES	ANNOTATION :
X Book Study Article Popular press Official plan, report Legislation, regs. Theoretical Empirical	Creighton's book is one of the most widely used urban transportation texts in engineering schools today. It provides a good summary of how urban transportation planning has been done, by relying heavily on the CATS and Niagara Frontier experience. These studies are among the earlier transportation studies, and while they did use the same basic procedures as more recent studies, they lack some of the later refinements developed for transit studies.
X/National/Federal State Regional/Local Atlanta Boston X Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.	Creighton describes a six step planning process including: (1) inventories; (2) forecasts; (3) goals; (4) Preparing network proposals; (S) testing; and (6) evaluation. These steps are used today, although the first two (especially land use forecasts) ar increasingly done by regional planning agencies rather than transportation agencies. The goals mentioned in the book include tran portation and some nontransportation goals. However, only the transportation goals were used in the evaluation of alternatives, Although Creighton discusses the need for using
X Gen. planning approach Political influences Goals, objectives Govt. institutions Financing Public involvement Needs forecasting Land use planning Multimodal trans. plan Dev. of alternatives Eval. of alternatives	he does not incorporate these goals into the evaluation "process. This failure to use nontransportation evaluation factors plus the emphasis on expressway planning limit the value of the book for transit planning purposes.

AUTHOR: B. G. Hutchinson

Transit management

TITLE: Principles of Urban Transport Systems Planning

PUBLISHER/SOURCE: Scripta Book Company, Washington, D.C., and

McGraw-Hill Book Company, New York

DATE: 1974

ANNOTATION: ANNOTATION CATEGORIES x Book This new textbook on urban transportation PUBLICATION planning addresses many of the very current Study g issues for the first time in a text (at Article least as known to these reviewers) . Popular press Official plan, report As a text, the book describes travel-demand Legislation, regs. forecasting, transport-related lane'L use models, urban transport technology, characteristics of urban structure, evaluation of urban <u>Theoretical</u> transport investments, and planning process Empirical theories. ■ National/Federal Perhaps" the most significant contribution is its critique of the planning processes of the x State 1950s and 1960s, which projected trend patterns of growth and selected an alternative X Regional/Local GEOGRAPHIC CONTEXT Atlanta plan capable of providing the greatest trans-Boston portation access at the lowest cost. Chicago The author argues that this approach has ig-Denver nored several major issues. ..environmental Los Angeles impacts, impacts on land development patterns, travel needs of tripmakers without access to San Francisco Seattle a car, and the question of comparative benefits from investments in other community Twin Cities services instead of transportation. Washington, D.C. The author describes a transportation planning Gen. Plaming approach model (Friend and Jessop) that places much Political influences greater attention on defining the problem and Goals, objectives strategies for implementation. Govt. institutions X Financing Public involvement Meeds forecasting Land use planning Multimodal trans. plan. Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management

AUTHOR: Frank C, Colcord, Jr.

TITLE: Urban Transportation Decision-Making, Final Report

PUBLISHER/SOURCE: U.S. Department of Transportation

DATE: 1974

ANNOTATION CATEGORIES Book PUBLICATION Study Ö Article TYPE Popular press Official plan, report egislation regs. WIHORE PPROPOS Theoretical x Empirical National/Federal State Regional/Local GEOGRAPHIC CONTEXT Atlanta Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C. Gen. **planning** approach influences Political x Goals, *objectives* x Govt. institutions Financing PLANNING ISSUES X Public involvement Needs forecasting x Land use planning Multimodal trans. Plan X Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management

ANNOTATION:

This summary report, produced under contract to the Department of Transportation, is a study of the transportation policymaking process *in* several American and foreign It provides an historical review of transportation planning institutions, transportation policy formulation, policy changes and general policy trends based on case studies in the following cities: Minneapolis-St. Paul, Boston, San Francisco, Seattle, Atlanta, Stockholm, Hamburg, Amsterdam, Leeds, Manchester, Montreal, and profiles on the individual cities Toronto. are included. Examination is made of the political, environmental, geographical, and economic characteristics influencing the determination of policy. Institutional and policy "trees," or diagrammatic models, show stages of growth and change, and each of the case studies can be plugged in to these Chapter VII of the summary contains conclusions and recommendations.

Colcord pinpoints two central problems in existing policy mechanisms: 1) the separation of land use planning and controls from transportation planning; and 2) the separation of decision making power in the hands of a local or regional agency from the agency making policy recommendations. He finds a universal need for a definition of what should be the appropriate responsibilities of local and 'parent" governmental Key elements of successful transagencies. portation policymaking are comprehensiveness (defined as a decisionmaking process in which a variety of possible policies are considered) and responsiveness (decisions are made by elected officials with broad policy responsibility). Cultural/political differences in the styles of transportation policymaking in the \overline{U} .s. and in Canada and Europe tend to make the American policy mechanisms less comprehensive and responsive.

<u>Urban Transportation Decision-Making, Final Report</u> Page Two

A new trend that has universal appeal is the establishment of High-level, multimodal transportation institutions to replace highly fragmented transportation planning structures. This trend and the extent to which it occurs is documented for each of the case cities. Colcord attributes this trend in the U.S. to the financial problems of transit operators and the unpopularity of the metropolitan (as opposed to municipal) government idea -- units of government which conceivably might take **over** areawide transportation responsibilities.

The report clearly illustrates the importance of institutional structure and policymaking trends as factors in the final outcome of transportation planning. On the basis of widespread past experience and on current trends among transportation policy institutions, careful recommendations are made for future structural changes, such as: single funding arrangements for transportation planning and implementation; stronger regional institutions; unification of transportation and land use planning; politicizing of policymaking at local levels so that community viewpoints must compete against each other; higher level (state and Federal) involvement in broad transportation planning and establishment of guidelines for local governments. The added value of this report is the recentness of the material in the case studies.

AUTHOR: Real Estate Research Corporation

TITLE: The Costs of-Sprawl

PUBLISHER/SOURCE: U.S. Government Printing Office

DATE: April 1974

ANNOTATION CATEGORIES Book x Study Article Popular press Official plan, report Legislation, regs. Theoretical x Empirical x National/Federal State

<u> x</u>	National/Federal					
	State					
X	Regional/Local					
	Atlanta					
	Boston					
	Chicago					
	Denver					
	Los Angeles					
1	San Francisco					
\prod	Seattle					
	Twin Cities					
=	$\mathtt{Washmgton}_{\scriptscriptstyle t}\mathtt{D.C.}$					

GEOGRAPHIC CONTEXT

	Gen. planning approach
	Political influences
	Goals, objectives
	Govt. institutions
ပ္သ	x Financing
ISSUES	Public involvement
IS	Needs forecasting
ဋ္ဌ	X Land use planning
~	Multimodal trans. plan
Z	mammadar 92 om 5 T T T T T T T T T T T T T T T T T T
ANNI	Dev. of alternatives
PLANNING	
PLANNI	Dev. of alternatives
PLANNI	Dev. of alternatives Eval. of alternatives

ANNOTATION:

This book seeks to provide information for local public officials on public and private costs of urbanization density and patterns. It includes economic costs; residential; open space/recreation; schools; streets and roads; utilities; public services; and land. It analyzes environmental effects; air pollution; water pollution; noise; vegetation and wildlife; visual effects; water and energy consumption. It also analyzes personal effects; psychic costs; travel time; traffic accidents; crime; use of discretionary time.

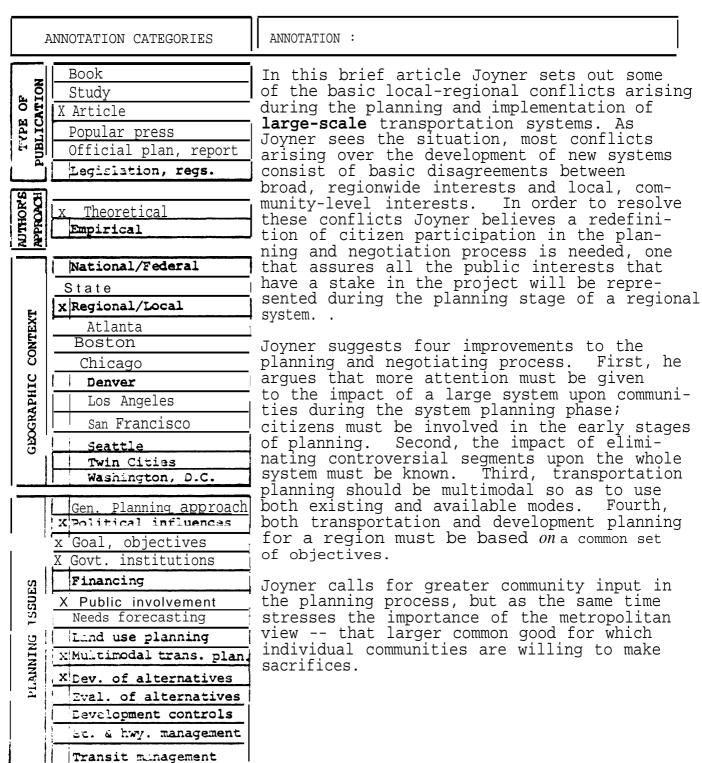
Several conclusions and findings are made in this report. The high density planned community consumed 40% less energy than the low density sprawl pattern. In annual terms this means 400 million BTU per dwelling unit in the low density sprawl pattern compared to about 210 million BTU per dwelling unit in the high density planned pattern. high density planned community cost per residential unit was \$21,000 compared to \$49,000 per unit **in** low density sprawl pat-This is for all community costs prorated. Water and air pollution are substantially less and water consumption less in the higher density pattern. With 52% less travel time required in the snore densely planned community, less accidents and other psychic benefits are described. Gas and electricity use 'is a function of housing type and structural characteristics no variation among planned and sprawl communities with the same housing mix is shown." 'significant variation in consumption of gasoline occurs as a result of the differences among community types...." The report concludes that significant energy savings can be attained through greater use of mass transit.

AUTHOR: Harvey R. Joyner

TITLE: " Regional Local Conflicts in Transportation Planning"

PUBLISHER/SOURCE: Transportation Engineering Journal, Vol. 98

DATE: August 1972



AUTHOR: Rodney E. Engelen and Danvin G. Stuart

TITLE: New Direction-in Urban Transportation Planning

PUBLISHER/SOURCE: American Society of Planning Officials, Planning Advisory Service Report #303

DATE: June 1974

x Transit management

	ANNOTATION CATEGORIES	ANNOTATION:
TYPE OF PUBLICATION	Book Study Article 1 Popular press Official plan, report Legislation, regs.	The report examines the expanding purposes of urban transportation planning and proposes methodological technical, and institutional changes in the conduct of urban transportation planning. It is a perceptive report, addressing many of the current planning issues.
MUTHORES	X Theoretical Empirical	Factors influencing transportation planning objectives are identified as the <i>energy</i> "crisis," the environmental movement, increased demand for public participation,
GEOGRAPHIC CONTEXT	x National/Federal State x Regional/Local Atlanta I Boston Chicago Denver Los Angeles	the rise of! metropolitan planning agencies, advances in transportation and planning technology, and growing interest in balanced urban transportation. To fulfill the new, broader objectives, the authors suggest improvements in the planning process, recognition of social, economic, and environmental impacts, and improvements in transportation service.
GEOGR	San Francisco Seattle Twin Cities Washington, D.C.	The report offers a planning framework that distinguishes among six levels of planning, six steps in the planning process, and six planning topics. The planning levels are identified as policy planning (the broadest
	X Gen. planning approach X Political influences x Goals, objectives	,]aa]\
PLANNING ISSUES	x Govt. institutions Financing Public involvement Needs forecasting x Land use planning x Multimdol trans. plan Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management	The authors emphasize the importance of corridor planning, characterizing it as a 'major new kind of activity for urban regions Corridor planning is defined as involving preparation of plans for major new line-haul highways or transit routes in an urban corridor 3-10 miles long and 3-6 miles wide. The report discusses the weaknesses of transportation planning institutional relationships and proposes ways to strengthen

New Directions in Urban Transportation Planning Page Two

these relationships. With regard to transit planning, the authors call for strengthening ties between transit operating agencies and local governments and clarification of responsibilities for the different levels of planning. They suggest a strategy of interagency task force planning as a primary vehicle for corridor planning in the style of Baltimore's Urban Design Concept Team and Chicago's Crosstown Associates. The regional planning agency is recommended to provide leadership at both the regional system and corridor planning levels.

The report also stresses the need to improve methods for implementation. It makes the important point that continued separation of transportation and land use planning from regulatory/investment decisions can lead to poorly managed growth. The authors emphasize the need for joint development of transportation and other facilities, especially in station areas. However, they note the lack of specific implementation tools other-than zoning and voluntary cooperation between private or public land developers and transportation agencies.

In proposing 'next steps," the authors purposefully avoid specific recommendations, citing the wide variations in needs of individual urban areas. However, the importance of integrating Federal transportation programs and providing greater flexibility in transit financing are recognized.

Massachusetts Institute of Technology Urban Systems AUTHOR:

Laboratory
Proceedings of a Panel Discussion on the Interrelation of
Transportation Systems and Project Decisions

PUBLISHER/SOURCE: U.S. Department of Transportation

November 1, **1973** DATE:

	ANNOTATION CATEGORIES	ANNOTATION:
TYPE OF PUBLICATION	Book Study Article Popular press X Official plan, report Legislation, regs.	Them has been a growing concern among local communities and local offiaials over the effect on local areas of decisions on regionwide transportation systems. Transportation planners have become increasingly aware of the need to consider environmental effects during systems planning.
AUTHOR'S APPROACH	x Theoretical Empirical	This panel discussion was addressed to these concerns and related developments in planning methodology on system- and project-level decisions. The participants
EXT	I INational/Federal State x Regional/Local Atlanta	in the discussion were Federal officials, state and local officials, and leading professionals and academics in the transportation field.
GEOGRAPHIC CONTEXT	Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.	The panel reached several conclusions. They agreed that one of the factors working against improved exchange between systemand project-level decisionmaking is the fragmentation of government levels and agencies involved in transportation planning. Areawide governments improve this situation provided they have adequate resources and authority needed to carry out responsibilities.
PLANNING ISSUES	X Gen. planning approach X Political influences x Goals, objectives X Govt. institutions I Financing Public involvement Needs forecasting Land use planning Multimodal trans. plan 1 Dev. of alternatives Eval. Of alternatives	The panel also defined systems planning as 'a process in which near-term commitments are facilitated through an evaluation of short- and long-term impacts." The plans which emerge from this process are in no way to be considered "final." Systems planning, according to the panel, should proceed concurrently with project plans; and project plans should be evaluated according to how the project will fit in with a future regionwide system.
	Development controls St. & hwy. management /Transit management	A summary of the panel's discussion is included, as well as background information on the panel participants.

AUTHOR: Marvin L. Manheim

"How Should Transit Options be Analyzed" TITLE :

PUBLISHER/SOURCE: Paper Presented to the 54th Annual Meeting of the

Transportation Research Board, Washington, D.C.

DATE: January, 1975

ANNOTATION CATEGORIES NNOTATION: Book This paper provides one of the most recent TYPE OF PUBLICATION x study discussions of 'basic principles to be followed in doing a good analysis of transit Article options." The dominant principle, according Popular press to the author, is reliance: "The objective Official plan, report of a transportation system's analysis should Legislation, regs. be to bring out the critical issues which should be debated in the appropriate political **WITHOR'S** forums." x Theoretical Empirical Other principles deal with the need to evaluate a wide range of alternatives; the need to National/Federal identify all potential social, economic, and environmental effects; the advantages of State flexible implementation planning; the need for X Regional/Local timely public involvement; and the need to GEO RAPHIC CONTEXT Atlanta clarify the issues to be addressed by decision-Boston makers in evaluation reports written in lay Chicago lanquaqe. Denver "The paper presents a more detailed analysis of Los Angeles the validity of using "cost function" analysis San Francisco as a major basis for reaching decisions. This was the approach taken by J. Hayden Boyd, Seattle · · es Norman J. Asher, and Elliott S. Wexler of the Institute of Defense Analysis in a 1973 study for the Department of Transportation entitled roach Evaluation of Rail Rapid Transit and Express Bus Service in the Urban Commuter Market; Manheim's original mission in this paper was to Goals, objectives criticize the study. Cost function analyges Govt. institutions compare the cost of carrying different volumes x Financing PLANNING 1SSUES of passengers with different transportation X' Public involvement alternatives; for any given volume, the lowest cost alternative is considered best. Manheim Needs forecasting suggests that this approach ignores a number Land use Planning of important issues such as 'which interests Multimodal trans. plan receive which mobility improvements, when, at Dev. of alternatives what cost, to whom." Eval. of alternatives Development controls St. & hwy. management Transit management

AUTHOR: J. K. Meyer, J. F. Kain and M. Wohl

TITLE: The Urban Transportation Problem

PUBLISHER/SOURCE: Harvard University Press

DATE: **1965**

	ANNOTATION CATEGORIES	ANNOTATION:
TYPE OF PUBLICATION	x Book Study Article Popular press Official plan, report Legislation, regs.	Although only 10 years old, The Urban Transportation Problem has become a classic. The book is divided into three parts. The first part describes the recent trends and current conditions in urban areas and their relationships to urban transportation. The
AUTHOR'S APPROACH	X Theoretical X Empirical	discussion covers several social factors such as race and housing which influence the urban transportation problem in addition to the more traditional transportation related factors Such as: (1) economic change; (2)
	National/Federal state	location; (3) transport supply and financing; and (4) trip patterns and volumes.
GEOGRAPHIC CONTEXT	Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D. C.	The second part of the book presents a methodology for costing alternative urban" transportation modes. The book presents formulas which can be used under varying conditions to estimate modal costs for the three parts of an urban trip: (1) line haul; (2) residential collection and distribution; and (3) downtown distribution. Critics have maintained that the assumptions used in the book are biased against heavy rail systems. It is true that these formulas indicate only the costs of alternative systems (and the values applied
PLANNING ISSUES	X Gen. planning approach Political influences x Goals, objectives I Govt. institutions x Financing Public involvement x Needs forecasting Land use planning /Multimodal trans. plan. x Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management	are subject to local conditions) and thus would not reflect any benefits which might be peculiar to a particular system. The third part, which discusses solutions and public policy, is directed toward possible innovation and possible pricing, subsidies, and regulations which might reduce the urban transportation problem.

AUTHOR:

TITLE: 'l Citizen Participation in Transportation Planning"

Report of a Conference during the 52nd Annual Meeting of the Highway Research Board, Washington, D.C. PUBLISHER/SOURCE:

DATE: 1973

	ANNOTATION CATEGORIES	ANNOTATION:
S TYPE OF	Legislation, regs.	Citizen Participation in Transportation Planning is a summary of discussion and collection of papers presented at two Highway Research Board conferences held in 1973. It reflects a coalescence of viewpoints held by professionals in the field of transportation at the beginning of this decade and represents an attempt on the part of these
AUTHOR'S APPROACH	Theoretical x Empirical	conferees to assess the changes occurring transportation planning and decisionmaking as a result of the public pressures put upo the planning process during the turbulent
CONTEXT	National/Federal State XRegional/Local Atlanta Boston	decade of the 1960s. The conference sought to determine the proper role and effectiveness of citizen participation in the Political climate of the 1970s, and this book highlights the popular opinions and issues of the time.
GEOGRAPHIC	Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.	The publication begins with highlights of conference discussion and workshop reports on transportation issues. Seven papers presented at the conference are included on the subjects of techniques and politics in transpoplanning, citizen participation, regional planning, minority viewpoints, official view-
ş	X Gen. planning approach X Political influences [Goals, objectives Govt. institutions Financing	points, the urban state, the rural state, and the citizen's viewpoint. Also included are several papers from the Boston Transportation Planning Review, an 18-month study of citizen participation and interdisciplinary planning.
PLANNING ISSUE	Public involvement Needs forecasting Land use planning Multimodal trans. plan. Dev. of alternatives Eval. of alternatives 'Development controls St. & hwy. management	The conferees began by defining citizen participation, its desirability and effectiveness and the two elements information and funding required for its effectiveness. Most of the participants in the conference assumed outright that citizen participation is essential in the determination of goals, objectives, and priorities in the transportation planning process. They also agreed that
	Transit management	planners must create the channels for citizen

"Citizen participation in Transportation planning" Page Two

input. They believed that citizen participation should only go so far as to influence and inform decisionmakers; they did not believe that citizens should have the power to make final decisions or to veto final decisions. Therefore, citizens should have an active, but limited, role in decisionmaking. In the end, the conferrees felt, conflict can be resolved by developing a 'good plan that meets community needs."

AUTHOR: Edward H. Holmes

TITLE: The State of the Urban Transportation Art

PUBLISHER/SOURCE: Highway Research News

DATE: July 1973

ANNOTATION CATEGORIES ANNOTATION: Book The article discusses the history of urban PUBLICATION transportation planning since the 1930s Study from the view of highway planning. x Article portant legislative acts and developments Popular press in planning are described along with their Official plan, report implication for planning in the future. Legislation, regs. Some of the popular transportation topics AUTHOR'S APPROACH of today -- multimodal systems and the imx Theoretical pact of regionwide systems on local commu-Empirical nities, for example -- have been discussed in the past and are not new issues. x National/Federal devotes the last part of his paper to this subject and to the lack of progress in urban transportation planning and implementax State x Regional/Local tion.- The sharp division between the CONTEXT Atlanta sophisticated transportation planning technology that has been developed and the extent Boston Chicago to which it has been put to practical use is GEOGRAPHIC caused by: (1) inadequate planning staffs Denver at state and local levels; (2) the unsucces-Los Angeles ful attempts by local units and agencies San Francisco to adapt the transportation planning process Seattle to their local uses when the planning process was developed to be used at a regional scale; Twin Cities Washington, D.C. (3) transportation planning that has not been truly intermodal; (4) ad hoc transportation x Gen. planning approach agencies that do not work for continuing needs; (5) the small amount of attention that has been paid to citizen interests and social Political influences x Goals, objectives and environmental factors; and (6) the lack x Govt. institutions of land use controls. Financing PLANNING ISSUES X Public involvement Holmes' article is interesting both for its Needs forecasting historical overview of the transportation planning process and its analysis of the sucesx/Land use planning ses and failures of that process. Multimodal trans. plan. Dev. of alternatives Eval. of alternatives /Development controls x St. & hwy. management Transit Management

AUTHOR: Robert A.Burco

TITLE: 'Innovation in Urban Public Transport: The Conceptual and Institutional Environment of Change"

PUBLISHER/SOURCE: International Conference on PRT, Minneapolis, Minnesota

DATE: April 9, 1973

	ANNOTATION CATEGORIES	ANNOTATION:
AUTHOR'S TYPE OF PUBLICATION	Legislation, regs.	The author's central thesis is that new, protected bureaucracies and coalitions of interest that may evolve around PRT and BART-like transit projects only perpetuate the basic institutional problem that afflicts the highway program. The concentration of power at the state and Federal levels, and the concentration of expertise and finance within organizations having narrowly defined construction of operating responsibilities, has worked against responsive, adaptive
122	X National/Federal	planning.
APHIC CONTEXT	State Regional/Local Atlanta Boston Chicago Denver Los Angeles	The author contends that U.S. decisionmakers have the wrong conception about problem - solving. There is a tendency for problems to be viewed as more well-defined than they are. Specific solutions are undertaken to solve the problem "for good." In fact, the author argues we need evolutionary strategies to allow flexible and dynamic problem solving.
GEOGRAPHIC	X San Francisco Seattle Twin Cities Washington, D.C.	The author asserts that governmental centralization distorts local priorities; he cites the need to decentralize expertise, finance, research, and planning resources. An aggressive, evolutionary process of controlled
	X Gen. planning approach Political influences Goals, objectives X Govt. institutions	experimentation, with risk-sharing subsidies based on a project's potential for problem solving, might strike a better local-Federal-state balance.
PLANNING ISSUES	<pre>X Financing Public involvement Needs forecasting Land use planning Multimodal trans. plan. Dev. of alternatives Eval. of alternatives</pre>	The underlying theme of this evolutionary strategy is to gradually change agencies' funding and institutional responsibilities to match the emerging problem and even to lead it; not to stop and wait for an ideal solution nor to ignore the future" in the crush of present difficulties.
	Development controls St. & hwy. management X Transit management	

"Innovation in Public Transport: The Conceptual and Institutional Environment of Change" Page Two

The strategy is intended to avoid the difficulties surrounding BART. BART had to carry the U.S. transit R&D effort because the nation had willfully let transit wither and almost die. The author suggests that BART boosters raised too great expectations which may have caused disillusionment and lack of political and financial support. Although, congestion, air pollution, lack of mobility, and other problems persist, BART illustrates a 'problem ameliorating framework" that should serve "as a catalyst" for other cities, for Federal and state commitments, 'for the provision of adequate local transit. ..in the Bay Area, and for a redirection of urban development patterns through public infrastructure investment."

The author concludes that Bay Area people may have borne too much for the nation, but this catalyst effect may be the greatest BART contribution. BART failed only if one is 'second-guessing decisions made in an earlier area. It must be seen as part of an evolving solution gradually leading to other forms of traffic and traffic management. . . "newer transit proposals will still have to deal with present and future problems as shifting issues, rather than fixed and static planning or technological targets."

AUTHOR; Sid McCausland

People, Politics and Transportation: TITLE : "Along for the Ride:

California-Style"

PUBLISHER/SOURCE: Assembly Committee on Transportation, California

Legislature, Sacremento, California

DATE: October 1974

ANNOTATION CATEGORIES Book X Stu PE OF Article Popular_press PUBI E Official plan, report Legislation, regs. NUTRIOR'S NPPRONCH xTheoretical Empirical National/Federal state Regional/Local GEOGRAPHIC CONTEXT Atlanta I Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.

planning approach |Political influences Goals, objectives Govt. institutions X Financing X Public involvement Needs forecasting x Land use planning Multimodal tram. plan. Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management

PLANNING ISSUES

ANNOTATION:

The author makes a broad assessment of transportation problems, institutions, and planning in California from a legislator's perspective, with an orientation to the difficulties in serving local needs through higher level decisionmaking. He concludes that there is a need for public participation and decentralized decisionmaking. The book addresses the transit planning experience in California, but the lessons it draws are pertinent to other metropolitan areas.

One "important contribution is the documentation" of the tendency for public participation programs to be dominated by higher income groups. "Until the transit-dependent organize in an adversary posture, their needs will get lots of rhetoric, but little action. . . We need different sets of evaluation techniques for our analyses of commuter services and transitdependent services.

The book also shatters some myths about Toronto, which, the author writes, is developing in a dispersed form not unlike Los Angeles. Hiah density development resulted from deliberate planning and zoning decisions. Bus and streetcar service were saturated before a subway was built. In this context, however, Toronto (and Montreal) officials suggested that the only reason they were able to proceed was because their metropolitan form of government eliminated competition from other jurisdictions with **new** transit programs.

The author analyses the reason why transit Pro- " grams usually are dominated by plans for construction and acquisition of new equipment.

"Along for the Ride: People, Politics and Transportation: California-Style" Page Two

State and Federal officials tend 'to advocate facility dominated transit systems" because "large public works projects are the only situations in which you can really exercise control from remote power centers. I realize that Secretary Brinegar's statements appear to run counter to my philosophy, but I think his budget will ultimately vindicate my view."

The author also comments on labor problems. He points out that although 'labor is the dominate variable cost in transit, public agencies are incapable of negotiating productivity-oriented labor settlements." He suggests that labor costs will be "the eternal Achilles. Heel of public transit." 'It may be that government should put most transit operations in the hands of private operators who could be motivated to negotiate business-like agreements."

AUTHOR: Richard J. Solomon and Arthur Saltzman

TITLE: History of Transit and Innovative Systems- --

PUBLISHER/SOURCE: MIT Urban Systems Laboratory, Cambridge

DATE: March, 1971

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I	ANNOTATION CATEGORIES	ANNOTATION:
TYPE OF PUBLICATION	Book Study Article Popular press X Official plan, report Legislation, regs.	This report, publ Systems Laboratory torical development and an evaluation problems of today overview, the aut of the transit in
	Theoretical X Empirical National/Federal	decline, regulato actions, fare str The last half of of innovative dev ride), and the wa as those giving m transit operators
GEOGRAPHIC CONTEXT	State Regional/Local Atlanta Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.	systems. Several innovative are described: the door-to-door serving MAXI-CAB door-to-Ohio, dial-a-ride ventional transiting graphic Society's D.C., Metro system B & B Minibus Co.
PLANNING ISSUES	Gen. planning approach Political influences Goals, objectives Govt. institutions Financing Public involvement Needs forecasting Land use Planning Multimodal trans. plan. Dev. of alternatives Eval. Of alternatives St. & hwy. management	The authors concluboth private and parties in its often viewing innoting operation and authors observe thought of themselof specifically processing themselof.
	X Transit management	

This report, published by MIT's Urban Systems Laboratory, is an analysis of historical developments in the transit industry and an evaluation of some of the transit problems of today. As part of the historical overview, the authors highlight the growth of the transit industry, the beginning of its decline, regulatory issues and antitrust actions, fare structures, and revenue trends. The last half of the report is an examination of innovative developments (such as dial-a-ride), and the way service regulations (such as those giving monopolistic control to large transit operators) have hindered innovative

Several innovative systems now in operation are described: the Peoria Premium Special door-to-door service; the Flint, Michigan, MAXI-CAB door-to-door service; the Mansfield, Ohio, dial-a-ride and highly flexible, conventional transit services; the National Geographic Society's contact with the Washington, D.C., Metro system for specialized service; the B & B Minibus Co. commuter-van service in Nassau and Suffolk counties, New York; and the Reston, Virginia, express bus.

The authors conclude that the transit industry, both private and public, has been overly conservative in its reaction to innovation, often viewing innovation as a threat to existing operation and capital investment. The authors observe that transit operators have thought of themselves as being in the business of specifically providing bus, rail, or taxi service rather than being in the business of fulfilling public transportation needs.

AUTHOR: Bruce Brugman, Greggar Sletteland, eds.

"The Ultimate Highrise, San Francisco's Mad Rush Toward TITLE :

the Sky"

PUBLISHER/SOURCE: San Francisco Bay Guardian Books, San Francisco

DATE: 1971

	ANNOTATION CATEGORIES	ANNOTATION:
TYPE OF PUBLICATION	negisiación, regs.	The authors general thesis is that highrise advocates are milking the city and that build ing BART is part of a calculated strategy by CBD interests. The argument addresses the San Francisco case directly, but its significance is broader; this book presents perhaps better than any other publication the charge that high-speed-rapid transit alone may not meet an area's transit needs and indeed may have impacts on urban economics that are not fully understood.
AUTHOR'S APPROACH	/Theortical Empirical	
SEOGRAPHIC CONTEXT	National/Federal State X Regional/Local Atlanta . Boston Chicago Denver Los Angeles x San Francisco Seattle	carry the travelers; cars will. The authors also discuss BART and its intended impact on CBD land values and highrise development. BART cost \$300 million more than the 1970 assessed valuation of the entire City of San Francisco. The average San Francisco homeowner in 1970 paid \$39.90 for BART in property tax, another \$50 or so in the 1/2¢ BART sales tax, a still larger amount 'probably several hundred dollarsin high-density costs reflected in the municipal tax rate and assessments" "and of course, the costs of BART
PLANNING ISSUES GI	Twin Cities Washington, D.C. Gen. planning approach X Political influences Goals, Objectives Govt. institutions X Financing Pubic involvement Needs forecasting Land use planning Multimodal trans. plan. Dev. of alternatives Eval. Of alternatives	
	'Development controls St. & hwy. management Transit management	are only beginning to be felt."

"The Ultimate Highrise, San Francisco's Mad Rush Toward the Sky" Page Two

The book provides **numerous** quotes describing the importance and strength of CBD interests. It details the politics **of** high rise development, in particular the ties between big land owners and elected officials and the media.

AUTHOR: John W. Bates

"A Look at the Critics (of rail transit programs)" TITLE :

PUBLISHER/SOURCE: Presented at the Second National Conference on Public

Transportation, Georgia State University, Atlanta

DATE: August **5, 1974**

ANNOTATION CATEGORIES hook PUBLICATION Study Article Popular press Official plan, report Legislation, regs. AUTHOR'S **RPPROACH** Theoretical **Empirical** National/Federal ticisms. tate Regional/Local GEOGRAPHIC CONTEXT Atlanta Boston Atlanta. Chicago Denver Angeles Los San Francisco Seattle Twin Cities Washington, D.C. Gen. planning approach apolitical influences X Goals, objectives Govt. institutions X Financing ISSUES Public involvement Needs forecasting PLANNING Land use planning Multimodal trans. plan. of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management

ANNOTATION:

In this presentation Mr. Bates attempts to refute several arguments made by rail transit These arguments are: 1) transit investment has no significant effect on land development patterns, 2) rail transit proposals focus upon the center city, in spite of recent trends in suburbanization; and in light of this suburbanization more flexible bus systems may be cheaper, 3) the benefits which accrue from the rail system are improperly allocated. Mr. Bates does not present arguments to refute any of these cri-

To help prove that rail systems do influence the location of new development Bates cites statistics from Toronto, San Francisco, and In all of these cities a very large proportion of the new growth had taken place around new rail systems. In Atlanta, Bates cited statistics indicating that office floor space in the central area increased from 16 million to 24 million square feet between 1960 and 1970. All of these statistics are However they do not convery interesting. clusively indicate that the rail system is responsible for this growth.

In response to the second criticism, Bates points out that the construction of a busway can cost just as much as construction of a rapid rail system. He also quotes some studies which indicate that rail systems can be as cheap to operate as bus systems even at corridor volumes as low as 2 to 5 thousand He also implies that buspersons per hour. way systems may result in very infrequent service compared to rail systems. It would have been interesting if Bates had used ex-It would amples from Atlanta rather than the general studies he cites.

"A Look at the Critics (of **rail** transit programs)" Page TWO

Bates' response to the third criticism is directed directly at Malcolm Getz's "The Incidence of Rapid Transit in Atlanta." He criticises Getz for using a value of time which is too low, for too few working days per year, for too little average time savings per trip, and other minor things such as an error in the date of acquisition of the Atlanta Transit System. Aside from these criticisms of Getz's work there is little in what Bates has said which would significantly alter Getz's results. Bates criticises Getz for not considering the equity in the low fare/sales tax method for financing MARTA. It is clear after reading Getz's report that all of the low fare and part of the sales tax was going toward support of the existing system. The new system would be financed by the Federal share plus the remaining portion of the local sales tax. Under these circumstances it is fair for Getz to compare the benefits of the new additional system with the cost of these taxes.

AUTHOR: Martin wachs, Barclay M. Hudson and Joseph L. Schofer

TITLE: 'Integrating Localized and Systemwide Objectives in Trans-

portation Planning"

PUBLISHER/SOURCE: Traffic Quarterly

DATE: April, 1974

ANNOTATION CATEGORIES		ANNOTATION:
AUTHOR'S TYPE OF APPROACH PUBLICATION	Book Study Article Popular press Official plan, report Legislation, regs. Theoretical Empirical	This article sets out to examine the differences between local planning issues and concerns and regional issues and concerns. In transportation planning these differences are observed in system planning (i.e. planning for a regionwide, long-term transportation system), and project implementation (i.e. implementation of the regional system at the neighborhood and the location of corridors, bus expressway, rail lines, etc.).
GEOGRAPHIC CONTEXT N	National/Federal State Regional/Local Atlanta Boston 'Chicago 'Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.	It is the opinion of the authors that planners and the decisionmaking tools that they have on hand are not appropriate for dealing with local issues and, as a result, local concerns are often ignored in favor of the broader, more comprehensive goals of the region. Conflict arises during the planning and implementation of large-scale transportation projects because of the distinction between unitary conceptions of the public interest the comnon good served by the regionwide transportation system and the individualistic conception of the public interest the individual neighborhood interest that may not coincide with regional
PLANNING ISSUES	X Gen. planning approach x Political influences Govt. institutions Financing x Public involvement Needs forecasting Land use planning Multimodal trans. plan Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management	level functioning for the benefit of all, holds the unitary view and therefore can come into conflict with individual neighborhoods. Typically, the proposed regional plan meets with little opposition; conflict and debate usually occur when lines and stations are mapped out and neighborhoods come face to face with the construction of the transporta-

integrating LocalAzed and Systemwide Objective in Transportation Planning"

Page Two

The authors feel the planner must integrate the divergent objectives of the unitary and individualistic levels and they propose new system evaluative tools to achieve this end. The idea is to represent in the plan process both "processed knowledge" -- information on the technology of the proposed system and on regional concerns and needs -- and "personal knowledge -- information on the social, economic and environmental needs of the neighborhood. If opposing views can be worked out in the planning process, there is less chance of conflict occurring at the implementation stage. The authors propose a dialectical debate set up between planners and an evaluation panel representing a variety of individual interests; transportation alternatives are debated and revised until some sort of agreement can be worked out. resolutions will be achieved by this debate: resolutions will be achieved by this debate: (1) no agreement is reached and the evaluative process begins again; (2) system designs are successfully adapted to represent individualistic needs; (3) the planning agency **adopts the** least objectionable alternative and lets further opposition to the plan be worked out in political and legal are successfully adapted to represent individualistic needs; spheres which would then have the final say on the system; (4) the system is rejected" completely" because the incorporation of individualistic concerns becomes too costly and outweighs the benefits of the regional system.

It is the intention of the authors to adapt the planning process to the needs and concerns of local interests while a project of regional scope is being undertaken. Their article provides an excellent view of the basis for conflict in transportation planning and implementation and offers a logical, if time-consuming, method for Integrating unitary and individualistic concerns using open debate to avoid conflict at the implementation stage.

AUTHOR: Institute of Public Administration

TITLE: proposed Criteria for the Urban Mass Transportation Capital

به تغول

Grants Program

PUBLISHER/SOURCE: Urban Mass Transportation Administration

DATE: August 1970

ANNOTATION CATEGORIES		ANNOTATION:			
TYPE OF PUBLICATION	μLegisiation, rags.	Faced for the first time with capital grants applications in excess of available funds, UMTA in 1970 hired the Institute of Public Administration to evaluate criteria and other means for critically selecting grant recipients. Thus, this report initiated the policymaking that has culminated in UTMA's proposed policy for major urban mass transportation			
AUTHOR'S APPROACH	1 Theoretical X Empirical	investments (August 1, 1975). The study found that from its initiation in			
GEOGRAPHIC CONTEXT	X National/Federal State x Regional/Local Atlanta Boston Chicago. Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.	grants program contributed to projects whose total value reached just under \$1 billion. Only in the case of San Francisco's Bay Area Rapid Transit system were UMTA capital funds used for mechanical or systems innovations. While bus transit grants accounted for 76% of grant transactions, they represented only 16% of gross project costs. The remaining 84% of capital grants was awarded to the six cities with rail transit systems in operation or under construction. Because bus operators were rapidly losing revenues, they were expected to make greatly increasing demands in the years following 1970.			
PLANNING ISSUES	Gen. planning approach apolitical influences X Goals, objectives X Govt. institutions X Financing Public involvement Needs forecasting I Land use planning Multimodal trans. plan- X Day Of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management	The study uncovered several kinds of policy issues needing resolution in the course of-developing capital grants criteria. Planning issues center on whether UMTA should give weight to the quality of regional comprehensive planning in selecting grant recipients. Other issues related to specific proposed criteria are: (1) should applicants be required to evaluate a range of alternatives using measures of economic feasibility? (2) Should UMTA provide incentives to encourage innovation? (3) How should social criteria be quantified and weighted? (4) Should UMTA set environmental standards? (5) Should UMTA support operators in danger of going out of business? (6) Should the promise of reducing			

<u>Proposed Criteria for the Urban Mass Transportation Capital Grants</u> <u>Program</u> Page Two

auto congestion be a criterion? (7) Should localities be required to demonstrate they have exhausted local sources of funds?

The report recommended two sets of criteria. Short-term criteria were based on available data that could be applied practically by the existing UMTA staff and local planning agencies. The recommended short-term criteria covered the need to demonstrate potential new ridership; guarantees of local operating subsidy, if necessary; UMTA standards for regional transportation planning; and others. Intermediate and long-run criteria that could be defined and implemented over a 5-15 year period covered requirement of alternatives analysis; higher planning standards; economic measures for evaluation; standards of-local financial support; higher weighting for short-term improvements; measures of severity of need for assistance.

AUTHOR: Andrew Hamer

Unorthodox Approaches to Urban Transportation: The TITLE :

Emerging Challenge to Conventional Planning

PUBLISHER/SOURCE: Bureau of Business and Economic Research Publishing

Services

DATE: 1972

GEOGRAPHIC CONTEXT

ANNOTATION CATEGORIES Book TYPE OF PUBLICATION Study Article Popular press Official plan, report Legislation, regs. AUTHOR'S APPROACH x Theoretical Empirical National/Federal

IState | Regional/Local Atlanta Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.

Political influences X|Goals, objectives Govt. institutions Financing ISSUES Public involvement Needs forecasting Land use planning PLANNING Multimodal trans. plan. of alternatives Eval. of alternatives 'Development controls St. & hwy. management Transit management

ANNOTATION:

This publication is a summary of the proceedings of a 1972 conference on urban transportation held at Georgia State University. The participants in the conference urged a reexamination of rail and other high-cost transportation solutions and more investigation into the possibilities offered by more efficient use of existing networks and lowcapital investments -- hence the approach of the conference was 'unorthodox" when compared to the positive attitude toward rail mass transit held by mass transportation planners in the past two decades.

Seven papers were presented at the conference. 'The Potential of Free Transit in Transportation Planning" outlines a study conducted by the Charles River Associates, which concluded that free transit would achieve the benefits claimed by its supporters but that other less costly methods can achieve the same benefits. The hidden subsidies to the automobile commuter are discussed in "The Use of Tolls in Controlling Urban Traffic Congestion." 'The Unexpected Potential of Freeway Rapid Transit in Regional Transportation" describes the potential "effectiveness of express bus lanes Gen. plaming approach and computerized stop lights on existing transportation networks. Concern for the carless population is reiterated in "Public Transportation and the Car. The supposed benefits of urban mass transit -- increased property values, revitalization of urban cores, and more -- are closely examined in "Myths and Realities in Urban Transportation Plan-This article and the one following --'Equity Considerations of Urban Transportation Planning" -- question the belief that new rail systems are the answers to our transporta-Finally, the last paper, tion problems. "Balanced Transportation Planning: praisal", summarizes many of the doubts expressed at the conference about the popularly-accepted solutions to urban transportation problems.

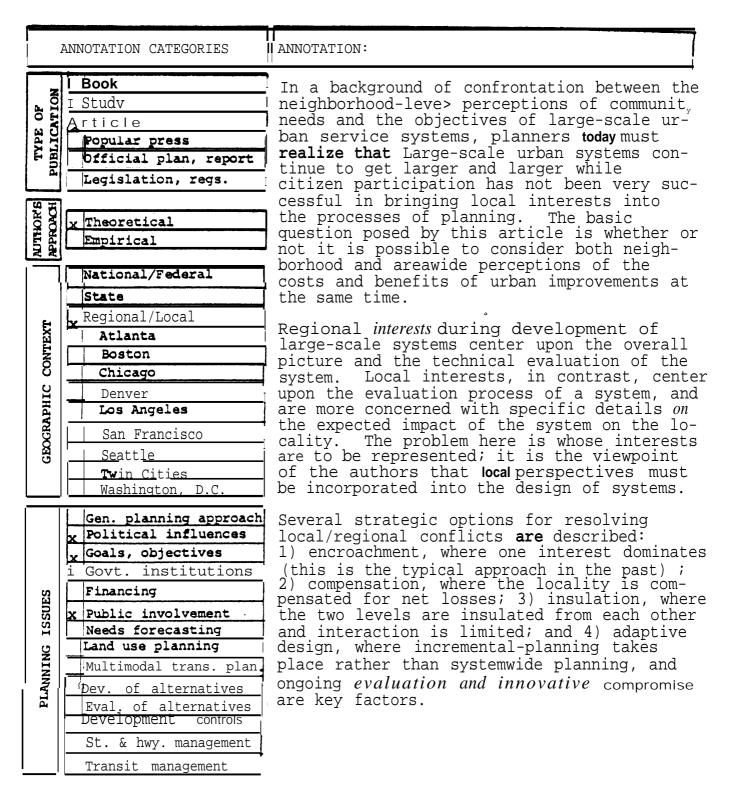
AUTHOR: Barclay M. Hudson, Martin Wachs, and Joseph L. Schofer

TITLE: 'Local Impact Evaluation in -the Design of Large-Scale

Urban Systems"

PUBLISHER/SOURCE: Journal of the American Institute of Planners

DATE: July 1974



"Local Impact Evaluation in the Design of Large-Scale Urban Systems" Page Two

The article discusses a variety of evaluative techniques such as: cost/benefit ratios; computer programs (such' as simulation and games); dialectical scanning (actual debate between interests); decision trees and methods of incorporating citizen participation into the planning process.

The authors feel it is important to view neighborhoods as 'fundamental system units" or modules of urban services.

AUTHOR: Melvin R. Levin and Norman A. Abend

TITLE: Bureaucrats in Collision: Case Studies. in Area Transportation

ANNOTATION:

Planning

ANNOTATION CATEGORIES

Transit management

PUBLISHER/SOURCE: MIT Press, Cambridge

DATE: 1971

The authors' purpose in writing this book Book TYPE OF PUBLICATION was to develop suggestions for the improvement Study of interagency and intergovernmental opera-Article tions with respect to urban development. Popular press They investigated the problems of planning Official plan, report and organizing multijurisdictional programs for urban development. Five transportation Legislation, regs. studies were used to identify some of the AUTHOR'S APPROACH problems of interagency projects; these . Theoretical studies were: the Boston Regional Planning xEmpirical Project (later called the Eastern Massachusetts Regional Planning Project) ; the Portland Area comprehensive Transportation Study; National/Federal the Niagara Frontier Transportation Study; State the Penn-Jersey, Transportation Study. x Regional/Local studies, all conducted since 1957, cover both GEOGRAPHIC CONTEXT Atlanta large regions with large populations and smaller metropolitan areas; all serve as Boston the basis for comparative analysis which leads Chicago to the determination of common transportation Denver problems and issues. Los Angeles The authors' major conclusion is that it is San Francisco still too early to expect "Significant" con-Seattle tributions from regional planning organiza-Twin Cities tions in the transportation planning process. Washington, D.C. This situation is true, they believe, because planning agencies, either local or regional, Gen. planning approach lack real implementation power in the face of Political influences political and bureaucratic power of local, Goals, objectives state, and Federal administrative agencies. Govt. institutions Planners are essentially instruments of Financing bureaucratic agencies whose ends the planners ISSUES must serve. Public involvement Needs forecasting The absence of clear national goals and pri-PLANNING Land use planning orities for transportation is a major impediment to effective coordination of local Multimodal trans. plan. Dev. of alternatives and regional development. The authors feel the solution to this problem lies in more Eval. of alternatives centralized management of Federal urban Development controls development programs, which would, in theory, St. & hwy. management reduce confusion between Federal, state, and

local agencies carrying out the myriad of

Bureaucrats in Collision: Case studies in Area Transportation Planning Page Two

Federal urban development programs. However, conflict among regional agencies over regional responsibilities and authority is another matter, and the authors feel this conflict is likely to increase rather than decrease as long as there continues to be a lack of national goals and a fragmentation of public authority in metropolitan areas.

The case studies investigated are all based on the belief of the planners conducting the studies that it was possible to reach a consensus on a regional transportation system by providing local decisionmakers with the right technical alternatives. But, as the authors clearly point out, the variety of regional and local agencies represents an equally varied number of interests and viewpoints that do. not easily come to terms with each other on areawide undertakings. Underlying the lack of national goals and local fragmentation is the failure of American institutions in general to determine what problems exist in our urban areas and how these problems should be solved.

The book is organized to cover the research design used to investigate the area studies, the area studies themselves, and general conclusions on the findings from all the studies.

AUTHOR:

TITLE: 'Transportation systems Planning and Resource Allocation" PUBLISHER/SOURCES Highway Research Record #467, Washington, D.C.

DATE: 1973

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임		Denver
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GEOGRAPHIC CONTEXT		San Francisco
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		Twin Cities
		Washington, D.C.
		

	x Gen. planning approach
	Political influences
	x Goals, objectives
	Govt. institutions
SS	Financing
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IS	x Needs forecasting
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ANN	X Dev. of alternatives
PLANNING	X Dev. of alternatives X Eval. of alternatives
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PLANN	X Eval. of alternatives

This publication is a collection of 10 reports prepared for the 52nd Annual Meeting of the Transportation Research Board. Many of the reports are case studies of a variety of topics in transportation administration and *economics* which are considered by the authors to be applicable to **broader** transportation issues.

'Incorporating Environmental Impacts in the Transportation System Evaluation Process" assesses present evaluation techniques for socioeconomic, environmental? and political impacts of transportation facilities. Because of the **enormous** number **of** factors that must be taken into account in the transportation decisionmaking process, the authors of this report attempt to devise some numerical ranking technique for comparing alternative consequences of transportation planning in which alternatives that do not satisfy general objectives already laid out **are** rejected outright. The authors admit to imperfections in this model.

'Structuring an Analysis of Pedestrian Travel" sets out to determine pedestrian needs and the impedances to walking by determining the supply (advantages, incentives) of walking and the demand (needs, inclinations to walk). A model is set up to describe pedestrian activity, a model similar to those used for vehicular travel.

The report 'A Review of the Public Hearing Process as a Means of Obtaining Citizen Views and Values" compares the views expressed at public hearings in Milwaukee on transportation improvements with the views obtained in a transportation home interview survey conducted. More opposition to proposed improvements was expressed at the public hearings than in the survey.

'Transportation Systems Planning and Resource Allocation" Page Two

'Environmental Mapping" developes a systematic preparation of an ecological inventory in a particular area in order to predict possible environmental impacts of improvements. "A Study of Land Development and Traffic Generation on Controlled-Access Highways in North Carolina" deals with the problem of traffic build up at interchanges. The report 'Resource Allocation and the System Process" describes methods used by some state transportation agencies to divide funds among their districts -- i.e., according to the "criteria" of economic efficiency, benefit-cost ratios, level of service, equity considerations, individual project allocation (project by project) and political allocation. The report describes each method and concludes that the process of choosing a method of allocation is chiefly a political process. 'Balancing Project Costs and Revenue Targets" details the attempt made by the California Department of Public Works to look for quicker methods of responding to change during the process of highway planning; this report describes a planning and monitoring computer system developed to balance costs and revenues. "Measuring Time Losses at Highway Bottlenecks and Empirical Findings for the Chesapeake Bay Bridge" describes a technique for time loss measurement. 'Accident Costs: Some Estimates for Use in Engineering-Economy Studies" discusses the cost data developed by state highway departments in order to devise a procedure for estimating costs. And finally, the report 'Evaluating Mutually reclusive Investment Alternatives: Rate of Return Methodology Reconciled with Net Present Worth" is a refinement of algebraic methods used to make these two estimates.

AUTHOR: John E. Hirten

TITLE: "Needed -- A New Perception of Transportation"

PUBLISHER/SOURCE: Journal of the American Institute of Planners

DATE: July 1973

ANNOTATION: ANNOTATION CATEGORIES In this article John Hirten calls for a new Book PUBLICATION approach in transportation planning -- one Study Q that integrates transportation planning and Article TYPE The article briefly covers urban planning. Popular press the historical basis for the current trans-Official plan, report portation situation in the U.S., pointing Legislation, regs. out that the different modes of transportation grew independently of each other and AUTHOR'S APPROACH continued to be treated separately by the X Theoretical Federal Government through the agencies of Empirical the Federal Railroad Administration, the Federal Highway Administration, the Federal * National/Federal Aviation Administration, and the Urban Mass Transportation Administration. Mobility has State been viewed in the U.S. as an end in itself Regional/Local and this perception has led to the dominance CONTEXT Atlanta of the automobile with the resulting congestion, air pollution, high fuel and land Boston Chicago consumption, and neglect of public transit. GEOGRAPHIC What is needed in the future as a solution Denver to these problems is a symbiotic relationship Los Angeles between transportation and urban development. San Francisco Hirten feels that the formation of the Depart-<u>Se</u>attle ment of Transportation and the establishment Twin Cities of national policies on the environment are Washington, D.C. the beginnings of a new approach at the Federal He adds his own suggestions for further level. Gen. planning approach Political influences action. Institutional changes, he feels, must occur to create a new partnership between x Goals, objectives Federal and local governments so that planning x Govt. institutions and implementation decisions are carried out x Financing at the local level while the Federal Govern-PLANNING ISSUES ment establishes national goals, undertakes Public *involvement* technical services and research, and allocates **Needs** forecasting fuel supplies. Hirten's premises for a uni-Land use planning fied transportation strategy include: transx, Multimodal trans. plan portation decisions must relate to communityof Dev. alternatives wide objectives; priority should be placed of alternatives on moving people, not vehicles; a single /Development controls fund should be set up for all transportation purposes; and the use of streets should extend beyond transportation to other uses such as recreation. St. & hwy. management Transit management

'Needed -- A New Perception of Transportation" '
Page Two

Writing as the Assistant to the Secretary of Transportation, Hirten is a strong voice in calling for the perception of mass transportation as a public utility -- that is, as a service provided for the whole community and one that does not necessarily pay for itself. Such an approach could revolutionize transportation planning in this country.

AUTHORS: Alan Lupo, Frank Colcord, and Edward P. Fowler

TITLE: Rites of Way: The Politics of Transportation in Boston and the U.S. City
PUBLISHER/SOURCE: Little, Brown, Boston

DATE: 1971

	ANNOTATION CATEGORIES	ANNOTATION:
AUTHOR'S TYPE TYPE PUBLICH N	Legislation, regs.	This book documents the growth of community opposition to proposed expressway projects" in Boston, and places that opposition movement in a nationwide context of transportation planning and decisionmaking in the United States. The two complementary scales of analysis effectively describe the basic issues involved in recent and emerging highway controversy across the nation.
GEOGRAPHIC CONTEXT APP	X National/Federal State Regional/Local Atlanta X Boston	Part I, which deals with the Boston experience between 1966 and 1970, is exceptionally well researched and written. It documents one process by which controversial issues emerged from a state of inchoate concern to a state of clearly defined and politically explosive confrontation between antihighway and prohighway groups. It analyzes the motivations of numerous public officials and community group leaders, describes how "the position of major actors evolved in response to developing political forces, and explains how social and environmental impact issues ultimately gained ascendancy over the transportation service and economic development rationales which formed the most compelling
PLANNING ISSUES	Gen. planning approach x Political influences Goals, objectives x Govt. institutions Financing X Public involvement 1 Needs forecasting Land use planning Multimodal trans. plan Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management	Part II compares the Boston highway controversy and resulting construction moratorium with transportation decisionmaking in other major urban areas. Although it lacks much of the immediacy and interest found in Part I it does provide-useful background perspectives of existing and emerging frameworks of trans-

AUTHOR: J. Hayden Boyd, Norman J. Asher and Elliot S. Wetzler

TITLE: Evaluation of Rail Rapid Transit and Express Bus Service

in the Urban Commuter Market PUBLISHER/SOURCE:

Department of Transportation, Institute for

Defence Analysis

DATE: October 1973

	ANNOTATION CATEGORIES	ANNOTATION:
TYPE OF PUBLICATION	Book Study Article Popular press Official plan, report Legislation, regs.	This study are probabl comparative bus systems supplier couser time couse and rai
AUTHOR'S APPROACH	XTheoretical Empirical	Fuel consum examined fo
GEOGRAPHIC CONTEXT	National/Federal State Regional/Local Atlanta I Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.	busway serv service at passengers/l was always of 30,000 pa corridor with costs were busway bus street bus Several of penalize the clusions were assumed tha
PLANNING ISSUES	Gen. planning approach Political influences Goals, objectives Govt. institutions /Financing Public involvement I Needs forecasting Land use planning Multimodal trans. plan Dev. of alternatives Leval. of alternatives Development controls St. & hwy. management I Transit management I	the rail st any passenge This assump to transfer costs), but to transfer assumed to

This study and the one by Meyer Kain and Wohl are probably the best known studies of the comparative performance of rail and express bus systems. This IDA study compared the supplier cost (operating and capital) and user time costs for arterial bus, busway, bus and rail (with feeder bus) operations. Fuel consumption and emissions were also examined for the alternatives.

The major finding was that express bus on busway service was cheaper than local bus service at corridor volumes of about 10,000 passengers/hour or more, and that rail service was always more expensive even at volumes f 30,000 passengers per hour. In a 10-mile corridor with 18,000 passengers per hour, costs were estimated at \$2.97 per passenger, busway bus costs were \$1.40, and arterial "street bus service was \$1.53.

the assumptions used tend to e rail alternative and severely circumstances for which the conere valid. First, it was apparently t every rail patron took a bus to ation since no mention was made of ers walking to the rail station. tion requires all rail passengers (incurring additional user time t bus passengers were assumed not Second, the service area was be 3 or 5 miles along each side of or rail line and that passenger rates were uniform in the servide approach eliminates the possibility a rail station within walking a high density node. The three-e service area is probably excessive e very few areas within the Capital Washington are 3 miles from a proline, and within the District only are more than 1½ miles from the

Evaluation of Rail Rapid Transit and Express Bus Service in the Urban Commuter Market Page Two

Metro lines. Third, the CBD was assumed to be only one **square** mile. washington's CBD (in the District alone) is at least five **square miles.** This small CBD size tends to **mitigate rail's** CBD speed advantage over the bus operations which are assumed to be in mixed traffic in the CBD.

AUTHOR: Lyle C. Fitch and Associates

TITLE: Urban Transportation and Public Policy

PUBLISHER/SOURCE: Chandler Publishing Company, San Francisco

DATE: 1964

ANNOTATION CATEGORIES ANNOTATION: x Book This book is an in-depth discussion of issues PUBLICATION in urban transportation policy. StUdY on a 1961 study conducted by the Institute of Public Administration for the Department Article Popular press of Commerce and the Housing and Home Finance Official plan, report Agency. Legislation, regs. The book begins with a summary of major NUTHORE points and recommendations, on urban develop-Theoretical ment in the general areas of urban develop-Empirical ment and transportation; planning and organization; characteristics of urban transportation; economics and financing; technology; k National/Federal Federal policy; programmatic recommendations; State alternative forms of Federal assistance. Regional/Local GEOGRAPHIC CONTEXT Atlanta Chapter I discusses the various deficiencies of urban transportation. Two basic defi-Boston . ciencies occur at peak demand of the Chicago journey to and from work, and at the recrea-Denver tional peaks. Physical deficiencies are Los Angeles discomfort, inconvenience, low average speed, and obsolescence of equipment. San Francisco tutional deficiencies consist of poor organi-Seattle zation and financing of transit agencies. Conceptual deficiencies are basically an Twin Cities Washington, D.C. inadequate understanding of the real functioning of the transportation system in the Gen. planning approach city and the failure to consider alternative Political influences patterns of urban development. Chapter 11 🔀 Goals, objectives is an historical overview of urban transpor-Govt. institutions tation, including its relationship to urban Financing development. In addition there is a descrip-PLANNING ISSUES tion of intraurban travel, trends in travel, Public involvement and a description of the transit industry, Needs forecasting with related statistical tables and graphs. , Land use planning A rough estimate made at the time of capital Multimodal trans. plan. needs for mass transportation puts the figure at \$918 billion for the nation in the years Dev. of alternatives Eval. of alternatives 1962 through 1971. Development controls In discussing policy for mass transportation, St. & nwy. management the authors argue that public policy has Transit management hastened the decline of mass transit in many

<u>Urban Transportation and Public Policy</u> Page Two

cities by excessive taxation, harmful regulation, and by excluding transportation planning from general land use planning. They argue that the most logical location for transportation planning is at the regional level, where the major responsibility for decision—making should occur. The role of the Federal Government, in this case, is to encourage, advise, and assist the regional level agency.

Chapter III discusses economic considerations in the transportation process, specifically: the application of economic analysis to transportation planning; the definition of terms such as costs, benefits, prices, user charges, demand; benefit-cast analysis elaborated with respect to mass transportation; setting prices with regard to mass transportation. Recommendations on policies of subsidizing urban transportation are made, along with mathematical models to support the recommendations.

Chapter IV covers the technology aspects of mass transportation, describing a variety of technological improvements Including rail systems and more unconventional systems.

Chapter V describes implications for public policy. Three major points are made: assistance for transit should not be held up waiting for technological advances; a large-scale program of research is needed, especially to find maximum productivity in existing city centers; and finally, research should concentrate on moving people and goods not vehicles.

Chapter VI discusses forms of financial assistance, the objectives of assistance, and the pros and cons of financing facilities or service. Chapter VII describes the development of possible Federal policy and is a discussion and list of recommendations of alternatives for: conditions for Federal assistance; form of assistance; planning criteria; research and development; use of highway funds for transit.

AUTHOR:

TITLE: Report to the Congress of the United States on Urban

Transportation Policies and Activities

PUBLISHER/SOURCE: U.S. Department of Transportation,

U.S. Department of Housing and Urban Development

DATE: June 1974

ANNOTATION: ANNOTATION CATEGORIES Book The purpose of this joint publication PUBLICATION describe activities in planning, implementa-Study Q. tion, and research in the transportation field **Arti**cle TYPE that are of common interest to both the De-Popular press partment of Transportation and Housing and Official plan, report Urban Development. The report is organized into a summary of actions, a description of Legislation, regs. current activities, and lastly a discussion of future directions in policymaking. The ad-NUTHOR'S PPROACH Theoretical ministrative and legislative activities under-|X |Empirical taken were intended to strengthen unified transportation and urban development policies and programs while providing state and local X National/Federal governments with the flexibility to undertake State development programs of their own. x Regional/Local CONTEXT Atlanta Specific planning programs administered' by DŌT and HŪD are: Boston (1) the Highway Planning Program; (2) the 'Technical Studies" programs Chicago SEOGRAPHIC (a grant program for mass transportation); Denver (3) the Airport planning Program (DOT/Fro); Los Angeles (4) the National Transportation Study (a Federal/state/local effort); and (5) the Compre-San Francisco Seattle hensive Planning Assistance Program (Section 701 concerning development and transportation Twin Cities activities) . Washington, D.C. Gen. planning approach! At the metropolitan level Intermodal Planning Groups, the DOT Planning Committee, and Unipolitical influences fied Work Programs serve to coordinate local x Goals, objectives transportation planning. Govt. institutions Financing During project implementation, HUD and DOT ISSUES cooperate with relocation assistance, carry out activities in the New Communities Program, 1 | Public involvement Needs forecasting and determine environmental policy. Land use planning PLANNING Systems funds can be used during project imx Multimodal trans. plan plementation for urban mass transportation Dev. of alternatives projects instead of highway construction. Eval. of alternatives Research and development programs handled Development controls jointly by HUD and DOT include the Joint **St.** & hwy. management Transit Station Development, the BART Impact Transit management

Report to the Congress of the United Skates on Urban Transportation Policies and Activities Page Two

Study, and various new technology grants.

The report states that future policies will attempt to further coordinate the efforts of HUD and DOT in the transportation field.

AUTHOR: Hanson, Royce

Congress and Urban Problems TITLE :

Frederic N. Cleveland & Associates, .The Brookings PUBLISHER/SOURCE:

Institution

DATE: 1969

ANNOTATION CATEGORIES	ANNOTATION:	
x Book 'study Article Popular press Official plan, report Legislation, regs.	This chapter, part of a book on Congress' reaction to urban problems, concentrates on the four-year battle to pass urban mass transportation legislation in the U.S. Congress. Hanson first describes the background upon which urban transportation issues began to grow in the late 1950s. He then describes	
Theoretical x Empirical	in detail the successful and unsuccessful efforts to create Federal legislation on mass transportation, efforts that culminated firs in the passage of the Housing Act of 1961 which included a mass transportation program	
X National/Federal State Regional/Local Atlanta Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C. Gen. planning approach X Political influences	and the passage of the Urban Mass Transportation Act of 1964. Hanson concentrates on the events that led up to success or failure of the various bills proposed: the public and private interests involved; the particular senators and representatives and their motivations for supporting or-rejecting Federal commitments; the issues Congressmen and the Administration felt were at stake and the bargains they were willing to make; the techniques of mobilization of support by both the opponents and proponents of a bill. The detail of the individual histories of the important bills allows the reader to see the actual development of potential Federal legislation. Hanson makes several conclusions from Congress' experience with early mass transportation bills. He concludes that the outcome of proposed urban legislation is no different than most legislation: its fate depends on the committee to which it is	
Goals, objectives X Govt. institutions Financing Public involvement Needs forecasting Land use planning Multimodal trans. plan Dev. of alternatives Eval. of alternatives Development controls St. & hwy. management Transit management		

AUTHOR: **Secretary** of Transportation

TITLE: A Progress Report on National Transportation Policy

PUBLISHER/SOURCE: Us. Department of Transportation

DATE: May 1974

ANNOTATION CATEGORIES

ANNOTATION:

	7	Book
<u>S</u>	2	l Study
O Ar		Article
rpe	ă	Popular press
H		x Official plan, report
		I Legislation, regs.

Theoretical empirical

r	x National/Federal
	State
	Regional/Local
EX	Atlanta
GEOGRAPHIC CONTEXT	Boston
	Chicago
	Denver
APE	Los Angeles
SE	San Francisco
ЭЕС	Seattle
	Twin Cities
	Washington, D.C.

| Political influences | x | Goals, objectives . | X | Govt. institutions | Financing | Public involvement | Needs forecasting | Land use planning | [Multimodal trans. plan. | Dev. of alternatives | Eval. of alternatives | Development controls | St. & hwy. management | Transit management

ISSUES

PLANNING

x|Gen. planning approach|

This statement by the Secretary of Transportation was based on testiMony before the Appropriations Subcommittee on Transportation of the U.S. House of Representatives in May 1974.

An introductory section discusses the importance of transportation policy of the nation. It is followed by a description of past policy and legislative and regulative acts. A large portion of the statement is an assessment of the present state of transportation programs and systems for all modes of transportation, including a brief discussion on energy usage.

The last section of the statement sets out the newest policy elements, briefly summarized here. The main emphasis of DOT'S policy is to see that 'the nation has an overall transportation system that reasonably meets its essential needs." This system should be private where possible. Important issues to be dealt with include conservation of energy resources, safe transportation, protection of the environment, and provision of service to the transit-dependent. Intermodal cooperation and joint use of transportation facilities by various modes is of prime concern as well.

AUTHOR: Advisory Commission on Intergovernmental Relations

New Inter-Toward More Balanced Transportation: governmental Proposals TITLE:

PUBLISHER/SOURCE: U.S. Government Printing Office

DATE: December, 1974

	ANNOTATION CATEGORIES	ANNOTATION:
AUTH)R' TYPE OF PUBLICATION	Legislacion, legs.	The Advisory Commission on Intergovernmental Relations was established by Congress in 1959 to study problems impeding the effectiveness of the Federal system and to make recommendations. In June 1973 it identified metropolitan transportation as such an important intergovernmental problem, and (after extending the scope to nonmetropolitan areas) this staff report was prepared and approved by the Commission on December 13, 1974.
<u> </u>	X National/Federal	The major recommendations, quoted verbatim from the report's summary, are:
PHIC CONTEXT	X State X Regional/Local Atlanta I Boston Chicago Denver Los Angeles	1. The Federal urban system, secondary high- way system, and mass transportation pro- grams should be merged into a single block grant to be distributed among metropolitan and nonmetropolitan regions largely ac- cording to a formula based primarily on pop- ulation.
San Francisco Seattle Twin Cities Washington, D.C. X Gen. planning approach San Francisco 2. This new unit used for any operating put ported by a from the national by Congression of the position of the po	2. This new unified grant program could be used for any mode and for either capital or operating purposes, and it would be supported by a combination of earmarked monies from the national Highway Trust Fund and by Congressional appropriations from the general fund.	
PLANNING ISSUES	Goals, objectives X Govt. institutions V.Financing Public involvement Needs forecasting Land use planning X Multimodal trans. plan. Dev. of alternatives Eval. of alternatives X Development controls St. & hwy. management XI Transit management	3. The funds would be channeled through the states for regions wholly within a single state if the state has as the Commission believes every state should a strong intermodal DOT responsive to overall policy control by the governor, and a substantial intermodal program of financial assistance for regional systems. Funds would go directly to the regional planning bodies in those states not meeting these criteria and in all interstate regions.

<u>Toward More Balanced Transportation: New Intergovernmental Proposals</u> Page Two

- 4* Ultimately-the funds would be passed on to the appropriate construction, maintenance, and operating units, and perhaps even to the individual transportation users, by designating regional planning bodies in accordance with their own plans and policies.
- 5. All of the regional bodies designated for these important Federal aid roles would be required to have well defined authoritative decision-making powers, but their form could vary: a strengthened regional council similar to the **one in** Minneapolis-St. Paul; a city-county consolidated metropolitan government like that in Jacksonville, Nashville, and Indianapolis: or even a State agency, in some cases, working closely with the locally controlled regional body having responsibilities under the state% substate districting system and OMB Circular A-95.
- 6. These regional bodies would have expanded powers to plan and program regional transportation systems and to initiate and/or approve or disapprove transportation projects in accordance with their comprehensive regional plans and politics. They also would be empowered to monitor and participate in the regulatory proceedings of bodies which set transportation fares and prices, community development controls, environmental controls and other related rules, so that regulatory decisions will be more likely to be coordinated with comprehensive planning policies.
- 7. The states would authorize an areawide intermodal transportation authority which would have the power to raise funds, coordinate and assist the activities of existing transportation provider organizations, subsidize certain classes of transportation users -- like the elderly and the poor -- and directly provide such needed transportation facilities or services as may otherwise be unavailable. These authorities could exercise their powers only in accordance with decisions of the regional policy bodies.
- 8. State and local transportation financing policies should be made more flexible, so that impediments removed **from the Federal** aid programs would not be perpetuated by outdated state and local limitations.
- 9. Finally, the Congress and state legislatures should consider consolidating the various transportation regulatory bodies they have established, creating single intermodal ones charged with considering -- in addition to economic criteria -- modal productivity and efficiency, energy conservation, desired community development, environmental protection, enhanced mobility and improved access.

This is an outstanding document. The recommendations are comprehensive and well thought out. They are based on a thorough understanding of where we are, what our problems are, and what is politically and institutionally feasible within our system of government at this time and in the near future. Its recommendations are well supported by the findings and conclusions and by precedents in legislation and other actions. It contains the most complete data of any source on transportation institutions at all levels.

Toward More Balanced Transportation: . New Intergovernmental Proposals Page Three

The body of the document recognizes quite well the current inadequacies in metropolitan planning, particularly as it relates to the ineffectiveness in implementing land development plans. However, the recommendations fall short of attempting to use transportation policy and programs as leverage in overcoming this problem.

The document deals quite thoroughly with the integration of system planning for all modes at the metropolitan, regional and state levels. However, with the exception of a few passing comments, it ignores the important point that integration of decisionmaking for planning and operating of various modes is needed to achieve maximum compatibility, efficiency, and effectiveness of different kinds of urban transportation.

(The Advisory Commission on Intergovernmental Affairs is composed of 26 members -- nine representing the Federal Government, 14 representing the public. Three U.S. Senators, 3 U.S. Representatives, 4 governors, and 4 mayors and various other county and state legislative leaders are on the Commission. In some particular recommendations, individual members of the Commission are cited as dissenting from certain aspects.)

AUTHOR: American Institute of Planners

TITLE: Metropolitan Transportation Planning Seminars

PUBLIHER/SOURCE: Department of Transportation

DATE: December 1971

i		
ANNOTATION CATEGORIES		ANNOTATION:
AUTHOR'S TYPE OF PUBLICATION	Legislation, regs.	This publication summarizes a series of semi- nars sponsored by The American Institute of Planners for the Department of Transportation. The specific topics covered are: "Improving the Technical Process of Transportation Plan- ning;" "The Need for Land Development Poli- cies;" organizing and Coordinating the Plan- ning Effort;" 'Citizen Participation as a Positive Force;" and "A Direction for Public Transportation."
GEOGRAPHIC CONTEXT	NationaL/Federal X State X Regional/Local Atlanta Boston Chicago Denver Los Angeles San Francisco Seattle Twin Cities Washington, D.C.	Of special interest to the assessment are the seminars on technical process and organizing the planning effort. The former is a discussion of system planning, its major problems and recent changes in the planning process. The major problems cited are: (1) the single-mode funding mechanism, and (2) the highly technical orientation of the transportation planning process. Changes in the process regarding multimodal planning, joint transportation/land use planning, community and involvement, goals, funding, and project planning are discussed. Five specific recommendations were made during
PLANNING ISSUES	Gen. planning approach Political influences Goals, objectives Goals, objectives Govt. institutions Financing Yublic involvement Needs forecasting Xubic Land use planning Multimodal trans. plan Xubev. of alternatives Development controls St. & hwy. management Transit management	this seminar. First, more experimentation with different land use patterns and transportation systems should occur. Second, social and environmental factors should be included in the evaluation of alternatives. Third, combinations of transit and highway systems should be tested with the different land use patterns. Fourth, public information programs should be strengthened. And fifth, the funding agency or agencies should carry the social and environmental costs of transportation projects. The seminar on organizing planning efforts includes various statements by some of the seminar's participants. Two main views are expressed: (1) the fragmentation of authority and multiplication of planning agencies hinders

comprehensive planning, and (2) there still exists a problem of administering planning funds.

AUTHOR; George W. Hilton

TITLE: Federal Transit Subsidies The UMTA Program

PUBLISHER/SOURCE: American Enterprise Institute for Public Policy

Research, Washington, D. C.

DATE: June, 1974

IOTATION CATEGORIES

ANNOTATION:

YPE OF	X Book
	Study
	Article
	Popular press
T I	Official plan, report
1.	Legislation, regs.

1973 evaluating the UMTA program. He concludes that experience under the program is "consistent with one's a priori expectations on the basis of the program's statuatory authority."

Theoretical
XEmpirical

A generally excellent, concise section on the legislative background of the UMTA program explains the history of the legislation from the initial motivations for the 1961 Housing Act through the substantial increases authorized in the. late 1960s and early 1970s. The key factors involved in the legislative process are described (such as competition with the highway program, Executive Branch reorganization, the increasing need for stability of funding), and the key interests who lobbied for the various bills are identified.

Hilton spent the period of July 1971 to June

	XNational/Federal
GEOGRAPHIC CONTEXT	State
	Regional/Local
	Atlanta
	Boston
	Chicago
	Denver
	[] Los Angeles
	San Francisco
	Seattle
	Twin Cities
	Washington, D.C.

Hilton comments that the research, development, and demonstration grant program had its origin in a belief that the urban transportation problem stemmed in part from intellectual and technological stagnation in the transit industry. He concludes that most of the management and operations projects under the bus program have been failures or close failures. The bus priority projects, on the other hand, "have been, on the whole, the most successful in the entire UMTA program."

Gen. planning approach
Political influences
Goals. objectives
Govt. institutions I

Development controls

St. & hwy. management

Transit management

Hilton also reviews the projects undertaken under the rail program. The projects were more frequently successful."

Public involvement
Needs forecasting
Land use planning
Multimodal trans. plan.
Dev. of alternatives
Eval. of alternatives

Hilton is critical of the capital grant program which accounted for over 85% of UMTA's expenditures because of its emphasis on public takeover of private operations. He claims that this approach to the assessment of transit properties resulted in high public costs. Hilton asserts that improvements only temporarily

halted declines; benefits were realized by the properties only in the form of lower operating costs. He attributes BART's extreme capital-intensiveness to the fact that capital is being provided exogenously. UMTA funding was not contemplated at all when the system was designed, nor were any funds from outside the region itself expected from state sources. Hilton notes that more than two-thirds of the BART fare will come from subsidy (64% from property tax, 12% from sales tax, 10% from UMTA and 14% from tolls), creating a strong presumption that the expenditure is regressive.

Until 1971 UMTA had not used any criteria to guide grantmaking -just a queuing process. By then grant requests of \$2.6 billion were
outstanding and annual outlays were only \$284 million. The result was
the 1972 Capital Grants for UMTA: Information for Applicants. Hilton
criticizes the guidelines for failing to stress profitability or even
ridership increases. Hilton also criticizes the criteria for being
vague and nonqantitative, for not specifying minimum densities or passenger volumes, and for not requiring benefit cost analysis.

Hilton concludes simply: 'To date, the UMTA program has not been successful." He says it has failed because transit has continued to decline in ridership and in financial performance and because 41 transit systems went out of existence from 1965 to 1970. He also claims UMTA was fruitlessly trying to promote the wrong type of urban development pattern -central cities of the radial, rail-oriented type were declining in population, in contrast to the newer, less dense cities. He says the transit dependent has not been aided by transit, arguing that more cars, not more transit, are needed to help the urban poor.

Hilton also criticizes UMTA for emphasizing rail systems despite the evidence that busways are more effective in attracting motorists. John Kain is cited as saying that Atlanta could get all of its rail benefits for 2% of the rail system's cost by giving priority treatment to buses. Hilton argues that building rapid transit systems tends to increase congestion by increasing CBD employment densities, thereby attracting more auto traffic. But more importantly, given the negative income elasticity of rail and the unavoidable development trends of urban areas, a rail system can serve only a diminishing portion of a declining percentage of trips. These corridors are already well served by the best utilized existing transit services, so that, Hilton argues, the new rail lines merely place the rest of the transit system in a much worse financial condition.

He argues against using the Highway Trust Fund for transit because it is such a regressive tax, it falls too much on the rural poor, and it puts a larger portion of the economy in dependence on it, thereby increasing political support for an inflexible and undesirable funding and institutional mechanism.

Hilton proposes that metropolitan-level monopolies have been a major handicap to the transit industry. He traces the problem historically to the economy of scale of areawide streetcar systems with electric grids. Jitneys successfully competed with them-for short trips because they had flat fare systems. In retaliation the streetcar monopolies pressured jitneys out of business. Otherwise, Hilton believes, jitneys would have evolved into a more productive, efficient system Of competitive bus operators. As it happened the streetcar monopolies converted to bus monopolies, encouraging the formation of strong unions.

Hilton suggests that free entry of taxis -- which amounts to re-leqalization of jitneys -- would be the most beneficial transportation policy for residents of inner-city poverty areas.

Hilton argues that "the problems to which UMTA is directed are essentially symptoms of inadequate charging of drives for their movement," resulting in excessive auto-use, congestion, political demand for more roads, and the demand for rail rapid transit. The UMTA program has the effect of reducing the peak period by increasing the comfort level of the peak hour trip. It also tends to increase journey-to-work distances; both effects aggravate the problem with which it is intended to deal. Hilton concludes that the UMTA program will continue to fail unless it is restructured to permit pricing control of peak period auto use.

Although Hilton's conclusions have much merit, they are extreme and too sweeping in their generalization. His research suffers from being based almost entirely on literature review -- he apparently did almost no interviewing of UMTA officials or people involved in R & D, planning or decision-making, nor did he perform any analytical work of his own. His evaluation of UMTA's programs and projects suffers also from being based almost entirely one conomic efficiency criteria.

Despite these failings, Hilton's conclusions are basically sound regarding the ineffectiveness of UMTA program in relieving congestion, solving air pollution problems, creating biases toward over capitalization of the transit industry, over-emphasizing long haul rail plans, and in general doing a poor job of evaluation.

AUTHOR:

TITLE: The Motion Commotion: Human Factors in Transportation

PUBLISHER/SOURCE: NASA Langley Research Center, Old Dominion University

DATE: 1972

ANNOTATION . ANNOTATION CATEGORIES Book TYPE OF This book is a summary of discussions and re-Study sults of a Summer Faculty Program held at the Article NASA Langley Research Center in 1972. A multi -disciplinary team of academics, engineers, Popular press and scientists of both the public and private Official plan, report sectors participated in a systems approach to Legislation, regs. the problem of incorporating human factors NUTHOR'S into transportation planning. The intended $\sum_{i=1}^{n} \mathbb{C}_{i}$ coretical audience is the general public and political/ bureaucratic decisionmakers . | Kampirical Topics covered by the book include: the indi-.National/Federal vidual in the environment, the social and XState psychological environment, the institutional XRegional/Local framework for policymaking, income and mobility, GEOGRAPHIC CONTEXT land use tools , circulatory systems, inter-Atlanta faces, and system design. Boston Chicago Fifteen major summary findings and recommenda -Tevnec tions are made in the book; a few are summarized The role of transportation is seen as a Los Angeles service and as a tool for land use planning San Francisco and social and economic development. Congress, Seattle accordingly, should pass a comprehensive land Twin Cities use planning act, Of great concern are public Washington, D.C. involvement, short-term solutions, general trans portation funds as opposed to modal fund-MGen. planning approach ing, auto-free areas, and pedestrian and bi-5 Political influences cycle rights-of-way. The most significant MGoals, objectives recommendation is that public transportation *Govt. institutions be viewed as an essential service, similar to police/fire/sanitation services, and should XFinancing ISCUES not be required to be self -supporting. Mublic involvement Needs forecasting Land use planning PLANNING Multimodal trans. plan. Day. of alternatives Itul. of alternatives Davalopment controls Dt. 3 hwy. management

Transit management

ATLANTA

- Johnson, Julian Rodney, The Metropolitan Atlanta Rapid Transit Authority, A Brief History (history honors thesis); 1970.
- 36. Metropolitan Atlanta Rapid Transit Overview Committee, Report of the MARTA Overview Committee; December 1974.
- 37. Metropolitan Atlanta Rapid Transit Authority, Rapid Transit for Metro Atlanta; September 1971.
- 38. "A New Politics in Atlanta," New Yorker, December 31, 1973.
- Parsons Brinckerhoff-Tudor-Bechtel and Wilbur Smith and Associates, Metropolitan Atlanta Rapid Transit Authority, Atlanta Urban Corridor Demonstration Program Phase I (Planning) Recommendations: a report done for the U.S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration; March 1972.
- 40. Parsons Brinckerhoff-Tudor-Bechtel, Metropolitan Atlanta Rapid
 Transit Plan, Engineering Report Summarizing the Comprehensive
 Transit Plan for the Atlanta Metropolitan Area, Including
 the Short-Range Transit Improvement Program; September 1971.
- 41. Powledge, Fred, "Atlanta Loses its Seeming Immunity to Urban Problems, " American Institute of Architects Journal, April 1975.
- 42. Toliver, William M., William F. Kennedy, Jr. and Collier B.
 Gladin, City Planning Department, Atlanta, Perry Holmes
 MARTA Station Area Development Plan: Policy Plan, Preliminary
 Final Draft: a report done for the Department of Transportation and the State of Georgia; November 1973.
- 43. Watters, Pat, "Profiles: Atlanta's Strong and Sizable Black Middle Class, " American Institute of Architects Journal, April 1975.
- Institute for Public Administration, The MARTA Referendum and Support for Mass Transit in the Atlanta Area; 1969.
- 45. "A New Politics in Atlanta, " New Yorker, December 31, 1973.
- 46. Alan M. Voorhees and Associates, Inc., Policy and Technical Coordinating Committees Of the Atlanta Area Transportation Study, Summary of Highlights: Recommend Transportation Program: April 10, 1969.
- 47. Atlanta Region Metropolitan Planning Commission, Atlanta Region Comprehensive Plan: Rapid Transit; June 1961.

- 48. Atlanta Regional Commission, Annual Report 1973; January 28, 1974.
- 49. Atlanta Regional Commission, Georgia Laws 1971, Act No. 5 and Georgia Laws 1973, Act No. 66; May 1973.
- 50. City of Atlanta Planning Department, 1983 Land Use Plan, City of -Atlanta; January 5, 1968.
- 51. Colcord, Frank C., Jr., Steven M. Polan, <u>Urban Transportation</u>

 <u>Decision-Making: Atlanta: Case Study</u> (draft): a report

 done for the U.S. Department of Transportation; 1974.
- 52. Davis, Abraham, Atlanta University School of Business Administration, An Analysis of the Decision-Making Process of the Metropolitan Atlanta Rapid Transit Authority: a report done for the Urban Mass Transportation Administration; April 1972.
- 53. Dunlop, Beth, "An Accidental City with a Laissez-Faire Approach to Planning," American Institute of Architects Journal; April 197S.
- 54. Georgia Department of Transportation, Georgia Action Plan; April 1974.
- 55. Georgia Department of Transportation Division of Planning and Programming, A 20 Year Multi-Modal Transportation Plan.
- 56. Eric Hill Associates, Parsons Brinckerhoff-Tudor-Bechtel, Achieving Urban Order with Rapid Transit; June 1972.
- 57. Eric Hill Associates, Atlanta Region Metropolitan Planning Commission, The Impact of Rapid Transit on Metropolitan Atlanta: Corridor Impact Study; March 1968.
- 58. Buckley, Bill, "Atlanta Broadens its Regional Ease," Association of Planning Officials Magazine, August 1972.
- Cannon, Mark W., institute of Public Administration, The MARTA Referendum and Support for Mass Transit in the Atlanta Area;
 October 1969.
- 60. Coogan, Matthew A., James H. Landon, James T. Roe 111, and Edmund S. Schaffer, Harvard Law School Urban Mass Transportation Study, Transportation Politics in Atlanta: the Mass Transit Bond Referendum of November 1968; 1970.
- 61. Davis, Abraham, An Analysis of the November 9, 1971 Referendum

 Yote on Rapid Transit in Fulton County (unpublished paper);

 1973.

- 62. Goldman, C. David, <u>Urban Transportation Decision Making:</u>
 <u>Institutional Approaches (unpublished study prepared for U.S. Department of Transportation, Office of Secretary, Office of Environment and Urban Systems); 1972.</u>
- 63. Lee, David, The MARTA Referenda: A Political Analysis of the Atlanta Mass Transit Bond Issues (unpublished paper); 1972.
- 64. Atlanta Metropolitan Planning commission, Access to Central Atlanta; 1959.
- 65. Atlanta Metropolitan Region Special Report--Rapid Transit for Metroplitan Atlanta (update of the 1962 Parsons Brinckerhoff, Quade and Douglas Report); September 1967.
- 66. Atlanta Metropolitan Planning Commission, <u>Crosstown and Bypass</u> <u>Ex[resswaus'</u>; 1959.
- 67. Alan M. Voorhees and Associates, Inc., <u>Development and Evalua-yion of a Recommended Transportation System for the Atlanta Region</u>; 1971.
- 68. Parsons Brinckerhof f-Tudor-Bechtel, <u>Metropolitan Atlanta</u>
 Rapid Transit Plan (Engineering Report); 1972.
- 69. Atlanta Metropolitan Planning Commission, Now for Tomorrow; 1954.
- 70. Parsons Brinckerhoff, Quade and Douglas, <u>Metropolitan Atlanca</u>

 Transit Study Commission, Plan and Program for Rapid Transit;

 December 1962.
- 71. Atlanta Transit System, Rapid Transit for Metro-Atlanta; August 1960.
- 72. Atlanta Region Metropolitan Planning Commission, <u>Regional</u> <u>Development Plan: Land Use and Transportion;</u> 1962.
- 73. Alan M. Voorhees and Associates, <u>Summary of Highlights</u>, <u>Recommended Transportation Program</u>; April **1969**.
- 74. C o At anta Depar ment of P ann n Tow e Sn te B s Se e A Ce tral C ty Park and R e Shu e s Se ce or Commuters Apr 9 2
- 75. Atlanta Region Transportation Planning Program, 1973 Transportation Planning Program; 1973.
- 76. City of Atlanta, Department of *Planning*, *Urban* Framework Concept Plan; May 1973.

- 77. Atlanta Region Metropolitan Planning Commission, What You Should Know About Rapid Transit; September 1960.
- 78. Atlanta Regional Commission, The Atlanta Regional Transportation Two povements Program; October 1973.
- 79. Bates, John W. et. al., A Look at the Critics (of Rail Transit Programs), presented to the Second National Conference on Public Transportation, Georgia State University, Atlanta, Georgia, August 5, 1974.
- 80. Getz, Malcolm M., Atlanta University School of Business
 Administration, The Incidence of Rapic Transit in Atlanta:
 a report done for the Urban Transportation and Urban Affairs
 Project; 1973.
- 81. Metropolitan Atlanta Rapid Transit Authority, Long Range Rapid Transit System Planning and Preliminary Engineering (draft) (Vol. 1 of Mass Transit Plan for the Atlanta Metro Area); December 1971.
- 82. Parsons Brinckerhoff-Tudor-Bechtel, Metropolitan Atlanta Rapid Transit Authority, Technical Report Covering Preliminary Engineering of the 44-Mile System (draft); June 1970.
- 83. Urban Mass Transportation Administration, Metropolitan Atlanta Rapid Transit System Final Environmental Statement; March 1973.
- 84. Metropolitan Atlanta Rapid Transit Authority, The Effect of Fare Reduction On Transit Ridership in the Atlanta Region:

 Analysis of Transit Passenger Data: Technical Report No. 2; February 1974.
- 85. Atlanta Regional Commission, Evaluation Results: Initial Regional Devalopment Plan Alternatives, Vol. 2, Technical Report; August 1974.
- Studies: Area Plan Review in the Rapid Transit Corridor; February 1974.
- 87. Atlanta Regional Commission, Analysis of Zoning Trends in Metropolitan Atlanta; December 1973.
- 88. Development Research Associates, Metropolitan Atlanta Rapid Transit Authority, Benefits to the Atlanta Metropolitan Area From the Proposed Regional Transportation Program; December 1971.
- 89. Harkness, G. Eric and William F. Kennedy, City Planning Department, Rapid Station Area Development Plans, Atlanta Urban Framework Plan; May J. 7/3.

BOSTON

- 89. Joint Regional Transportation Committee, <u>Transportation Plan for the Boston Region</u>, 1974-1983; 1974.
- 90 Massachusetts Bay Transportation Authority, <u>Ten Year Transit</u>
 Development Program, 1974-1983; 1974.
- 91. Wilbur Smith & Associates, Massachusetts Department of Public Works, An Access Oriented Parking Strategy for the Boston Metropolitan Area; 1974.
- 92. Boston Transportation Planning Review, Final Study Summary Report; 1973.
- 93. Boston Transportation Planning Review, <u>Mobility Problems of</u> Elderly Cambridge Residents; 1972.
- 94. Boston Transportation Planning Reviewm, **Special** Mobility Staff Report; 1972.
- 95. Boston Transportation Planning Review, <u>Circumferential Transit;</u> 1972.
- 96. Boston Transportation Planning Review, <u>Third Harbor Crossing</u>
 Report; 1972
- 97. Boston Transportation Planning Review, Southwest Corridor Report; 1972.
- 98. Boston Transportation Planning Review, <u>Commuter Rail Improvement</u>
 <u>Program;</u> 1972.
- 99. Boston Transportation Planning Review; Regional Framework; 1972.
- 100. Boston Transportation Planning Review, Regional Systems; 1972.
- 101. Boston Transportation Planning Review, <u>Study Element Summary</u> Report: Community Liaison and Technical Assistance; 1973.
- 102. Thomas K. Dyer, Inc., Massachusetts Bay Transportation Authority, plan for Acquisition and Use of Railroad Rights-of-Way: 1972.

- 103. Peat, Marwick, Mitchell & Co. J Massachusetts Department of Public Works, Traffic Forecasting Report, Eastern Massachusetts Region (vol. 1: Inner Belt/Task A); 1970.
- 104. System Design Concepts, Inc., Boston Transportation Planning Review, Steering Group, Study Design for a Balanced Transportation Development Program for the Boston Metropolitan Region; 1970.
- 105. Massachusetts Bay Transportation Authority, Report on Alternative Programs for Suburban Commuter Service (2 volumes); 1969.
- 106. Massachusetts Bay Transportation Authority, Revised Program for Mass Transportation; 1969.
- 107. Boston Redevelopment Authority, <u>Transportation Facts for the Boston Region</u>; 1968.
- 108. Zastarn Massachusetts Regional planning Project, Recommended Highway and Transit Plan; 1968.
- 109. Gibbs and Hill, Inc., Massachusetts Bay Transportation Authority, Central Area Systems Study; 1967.
- 110. Gibbs and Hill, Massachusetts Bay Transportation Authority, <u>Comparison of Vehicular Transit</u> Systems in the Greater Boston <u>Area</u>; 1967.
- 111. Massachusetts Bay Transportation Authority, <u>Program for Mass</u> Transportation; 1966.
- 112. Boston Redevelopment Authority, 1965/1975 General Plan for the City of Boston and the Regional Core; 1965.
- 113. Mass Transportation Commission, <u>Mass Transportation in Massachusetts</u>; 1964.
- 114. Mass Transportation Commission, A Bibliography of Planning Studies of the Boston Metropolitan Region; 1962.
- 115. C.A. Maguire & Associates, Joint Board for the Metropolitan Master Highway Plan, -Master Highway Plan for the Boston Metropolitan Alea; 1948.

- 116. Gackenheimer, -Ralph, <u>Technics</u> and <u>Conflict</u>: <u>The Open Study in Urban Transportation</u> (unpublished critique of the Boston Transportation Planning Review Study).
- 117. Warner, Sam Bass, Jr., Streetcar Suburbs: the Process of Growth in Boston, 1870-1900, Atheneum: New York, 1973.
- 118. Hyman, H. H., "Planning with Citizens: Two Styles," Journal of the American Institute of Planners, March 1969.
- 119. Urban Planning Aid, A Critique of Transportation Planning in the Boston Area; 1966.

CHICAGO

- 120. Airier Lean Bethtel, Inc., et al., Chicago Urban T ransportation District, Interim Report, Chicago Area Transit Project; November, 1973.
- 121. American Bechtel, Inc., etal., Chicago Urban Transportation District, Environmental Impact Analysis: Chicago Central Area Transit Project; December 14, 1973.
- 122. Regional Transportation Planning Board, Descriptive Details. of the 1995 Transit and Freeway Alternatives: May, 1973.
- 123. Chicago Transit Authority, <u>Skokie Swift--The Commuter's Friend</u>; May, 1968.
- 124. Chicago Transit Authority, Chicago Transit History and Progress; (date unknown).
- 125. Chicago Plan Commission, City of Chicago, Chicago 21 Plan: A Plan for the Central Area Communities, City of Chicago; September, 1973
- 126. Governor's Transportation Task Force, State of Illinois,

 Crisis and Solution: Public Transportation in Northeastern* Illinoi

 January, 1973.
- 127. Regional Transportation Planning Board, Mass Transit Development Program of the Chicago Gary Region; May, 1973.
- 128. Chicago Area Transportation Study and the Northeastern Indiana Planning Commission, 1995 Transportation System Plan; June, 1974.
- 129. Regional Transportation Planning Board, <u>Mass Transit Development Program of the Northeastern Illinois Northwestern Indiana Regions -- Fiscal Years 1975 1979; October, 1974.</u>
- 130. City of Chicago, <u>Transit Planning Study</u>: <u>Chicago Central Area</u>: Volume I; April, 1968
- 131. City of Chicago, Department of Public Works, Crosstown Public Transit Study; August, 1974.
- 132. Mricago Area Transportation Study, Transit Development Program for Fiscal Years 1975 1979: Technical Background for Selecting Public Transportation Improvements; September, 1974.

- Chicago Area Transportation Study, Transit Development Program for Fiscal Years 1975 1979: A Description of the Methodology and Impact of Funding the Five-Year Capital Needs Under Various Fiscal Constraints; October, 1974.
- li4. Chicago Area Transportation Study, Chicago Area Transportation Study: Volume I. Survey Findings; December, 1959.
 - Chicago Area Transportation Study, Chicago Area Transportation Study: Volume III: Transportation Plan; April 1962.
- 135. Alan M. Voorhees & Associates, Inc., City of Chicago, Department of Public Works, Study of a Ground Access System for O'Hare International Airport: Final Report (Volume Two); December, 1973.

DENVER

- 137. Denver Regional Council of Governments, Regional Lard Use,
 Highway and Public Transportation Plans--Denver Region,
 (Summary Report); January 1974.
- 138. State of Colorado, An Approach to Regional Services, The Colorado Service Authority Act of '72; May 1972.
- 139. Denver Planning Office, <u>Denver: The Core City;</u> January 1974.

 Jefferson County Profile; January 1972.
- 140. The First National Bank of Denver, Denver, Colorado--A Place for Living.
- 141. Walt , A. Roger, Colorado: A Practical Guide to its Government and politics, Shields Publishing CO., Inc.: Fort Colins, Colorado; 1973.
- 142. Regional Transportation District, RTD Frontier; Vol. II.

 No. 6-1; Vol. IV, No. 3, April 1974; Vol. IV, No. 6,

 July 1974; Vol. IV, No. 7, August, 1974.
- 143. URS/The Ken R. White Company, Boulder Valley Transportation Study (Final Report prepared for City of Boulder, Colorado); Januar'y 1974.
- 144. State of Colorado, Regional Transportation District Act,

 (as amended by the General Assembly of the State of Colorado and as effective July 1, 1971; updated through 1974).
- 145. ATE Management and Service Co., Inc., Denver Metro Transit, A Report to the City & County of Denver on Operations 1971-1973.
- 146. Denver Metro Transit, "Comparison of Annual Budget with Actual Operation for 12 Months Ended December 31, 1972;" 1973.
- 147. Denver Metro Transit; "Comparison of Annual Budget with Actual Operation for 12 Months Ended December 31, 1973;" 1974.
- 148. Denver Metro Transit; "Comparison of Annual Budget with Actual Operation--Partial 1974;" 1975.

- 149. Regional Transportation District, Early Action Program.
- Development Research Associates, Inc./Wallace, McHarg, Roberts & Todd, Inc., A Public Transportation Plan for Colorado's Regional Transportation District, Technical Report 1--Praliminary System Design, and Technical Report 2--PRT Route Analysis; June 1973.
- 151. Development Research Associates, Inc. /Wallace, McHarg, Roberts & Todd, Inc., Regional Transportation District, Phase One--A Concept Interim Report; January 1972.
- 152. Nelson, Haley, Patterson, and Quirk, and Ecodesign, Regional Transportation District, Advanced Urban Transit Technology Study for Denver Colorado: October 1972.
- 153. Transportation and Environmental Operations for Colorado Regional Transportation District, <u>Alternatives Analysis Procedure Appendix A: System Concepts Selected for Evaluation; September, 1974. (Preliminary)</u>
- 154. Transportation and Environmental Operations for Colorado Regional Transport tion District, Alternatives Analysis Procedure Appendix B: Alternatives Evaluation Framework; Sept = e ~ 74.
- 155. Colorado State Department of Highways, <u>Action Plan;</u> Submitted November 30, 1973.
- 156. Denver Regional Council of Governments, <u>Transportation System</u>
 Report, Joint Regional Planning Program; December 1973.
- 157. Denver Regional Council of Governments, A Growth Policy Strategy for the Regional Study Area, Joint Regional Planning Program;
 December 15, 1973.
- 158. Denver Regional Council of Governments, Regional Transportation
 District and Colorado Division of Highways, Joint Regional Planning Program 1974-75 Work Program and Unified Regional Transportation Work Program; July 1974.
- 159. Denver Regional Council of Governments, Regional Transportation
 District and Colorado Division of Highways, Joint Regional
 Planning Program 1973-74 Work Program and Unified Regional Transportation Work Program: June 1973.
- 160. Asher, Joe, "Denver Looks (Cautiously) at Transit for the Masse s," Railway Age, February 14, 1972.

- 161. Bruce, John, "Mass Transit's Role in the Present and Future of Big Cities, " Traffic Engineering, October 1964.
- 162. Jackson, Ralph E., "Nation's First Extensive Urban PRT System Underway in Denver," Traffic Engineering, June 1974.
- 163. Lee, Y., and V. Ii. Surti, University of Colorado Center for Urban Transportation Studies, Effect of Fare Reduction on Transit Patronage; 1974.
- 164. Reish, R., and V.H. Surti, "Feasibility Study of Free Bus Service for a Street Corridor of Denver, "Highway Research Record No. 427; 1973.
- 165. University of Colorado Center of Urban Transportation Studies, <u>Transportation Needs of the Chicano Poor in Denver</u>; November 1973.
- 165. Regional Transportation District, 'Transit Development Program 1975-1980; March 1975.
- 167. Regional Transportation District, 1975.
- 168. System Management Contractor, Regional Transit District, Patronage Results for the Analysis of Transit Alternatives for the Regional Transportation District; May 1975.
- 169. System Management Contractor, Regional Transit District, Economic Analysis Report: Draft; May 1975.
- 170. System Management Contractor; Regional Transit District, Cost

 <u>Estimates and Basis of Estimates for the Alternatives Analysis;</u>
 April 1975.
- 171. System Management Contractor, Regional Transit District, SMC Multi-Modal Patronage Model; May 1975.
- 172. System Management Contractor, Regional Transit District, <u>Transit Network Analysis: Summary Report;</u> June 1975.
- 173. Regional Transit District, Long Range Transit Development Analysis, Transit Concept Comparison; April 1975.

LOS ANGELES

- 175. Alan M. Voorhees and Associates, Inc., Southern California Rapid Transit District, 1990 Patronage. Revenue, and Cost Estimates for Two Transit Concepts; April, 1974.
- 176. Alan M. Voorhees and Associates, Inc., Southern California Rapid Transit District, A Summary Techni cal Report of the Study of Alternative Transit Corridors and Systems, Phase III; October, 1974.
- 177. Alan M. Voorhees and Associates, Inc., Southern California
 Rapid Transit District, <u>Technical Working Paper</u>, <u>Test 8.1:</u>
 1990 Patronage, Revenue, and Cost Estimates for Two Transit
 Concepts: April, 1974.
- 178. Alan M. Voorhees and Associates, Inc., Southern California Rapid Transit District, Preliminary Estimates of System Usage Revenue and Expenses; July, 1974.
- 179. Asher, Jce, "Los Angeles Expressway Buses Today, Rail Transit Tomorrow?" Railway Age, August 14, 1972.
- 180. Battelle Laboratories, <u>Preliminary Draft of Summary Report on a Technology Assessment of Automatic Train Control for Rail Rapid Transit: February 21, 1975.</u>
- 181. Battelle Laboratories, Preliminary Draft of Sections II-V of the Technical Appendix to Summary Report on A Technology Assessment of Automatic Train Control for Rail Rapid Transit; February 27, 1975.
- 182. Burco, Robert A., Transportation Research Board, <u>Legislative</u>
 Perspectives on the State Transportation Planning Process
 and on Transit Planning in California; January 13-17, 1975.
- 183. California State Assembly, Assembly Committee on Transportation of Los Angeles, Subcommittee on Los Angeles Regional Transportation, Proposals for a Rapid Transit System in Los Angeles County; Second Hearing, First Public Response; August, 1973.
- 184. Cambridge Systematic, Inc., Barton-Aschman Associates, Inc.
 Guideway Transit for Southern California: A Policy Analysis:
 a report for the Southern California Association of Governments; May, 1974.
- 185. Citizens' Advisory Committee on Rapid Transit, "Public Trans portation: The Citizens' View, Needs and Opportunities for Development of a Regional Transportation System for the Los Angeles Basin;" May, 1974.

- 186. Cray, Ed, "Can Bradley Move Los Angeles? The Politics of Rapid Transit," COAST, (date unknown).
- 187. Cro W ns n W and Bear ce D erma Souh rn C orn a

 A Study n Deve opment o Go ernment or a

 a Area Un vers t of Cal or a Press Be ke ey
 and Los Angeles, 1963.
- 188. Emerson, Norman H., Planning a Rapid Transit System for
 Los Angeles: Merging political and Technical Issues -A View from the Mayor's Office, presented at the 25th—Annual
 Meeting of the Transportation Research Forum, San Francisco;
 October 11, 1974.
- 189. Ferebee, Ann, "Learning from Los Angeles", Design and Environment, Fall, 1973.
- 190. Eilton, G.W., "Rail Transit and the Pattern of Modern Cities: The California Case," Traffic Quarterly, July, 1967.
- 191. McCausland, Sid, Assembly Committee on Transportation, California Legislature, Along for the Ride; People, Politics and Transportation: California-Style; August, 1974.
- 192. Pegrum, Dudley F., "Residential Population and Urban Transport Facilities in the Los Angeles Metropolitan Area", Bureau of Business and Economic Research, University of California: Los Angeles, 1964.
- 193. Taylor, Paul C., et al., Southern California Rapid Transit District, A Public Transportation Improvement Program: A Summary Report of Consultants' Recommendations; Marcn, 1974.
- 194. Howard C. Ullrich, Director, California Department of Transportation, Testimony before the Assembly Transportation Committee, Los Angeles, California; December 13, 1974.
- 195. Southern California Rapid Transit District and Orange County Transit District, Evaluation: Transit Systems Proposals: a report for the California Legislature; May 31, 1974.
- 196. U.S. Congress, Senate. Senate Public Works Committee Remarks by Mayor Tom Bradley of the City of Los Angeles, Transportation Talk; May 25, 1974.
- 197. U.S. Congress, Senate. Committee of the Judiciary, Remarks

 Ly Mayor Tom Bradley on Los Angeles' Transit History and

 Manufacturing, Washington; February 27, 1974.
- 198. Southern California Rapid Transit District, Orange County
 Transit District, Evaluation: Transit Systems Proposals:
 a report to the California Legislature.

- Rapid Transit Starter Line Corridor as of July 15, 1975.
- 200. Southern California Regional Transit District, <u>Issues Behind</u> the Transit Plan for Los <u>Angelas</u>; August, 1974.
- 201. Southern California Regional Transit District, An Evaluation of 3-month Trial of 25¢ Fare in Los Angeles County;
 July 25, 1974.
- 202, Statement by Ray Remy, Executive Director and William O. Ackerman, Director, Transportation Planning, Southern California Association of Governments, Testimony before the Assembly Committee on Transportation, California; December 13, 1974.
- 203. Statement of Supervisor Pete Schabarum, Supervisor, First District, Los Angeles County, Testimony before the Assembly Subcommittee on Southern California Regional Transportation; December 13, 197.
- 204. Statement of Mayor Tom Bradley, City of Los Angles, Testimony before the Assembly Transportation Committee; December 13, 1974.
- 205. "Can Rapid Transit Compete with Freeways?" <u>Business Week</u>, February 10, 1965.
- 206. "Report Recommends Buses for Los Angeles, " Engineering News-Record, April 4, 1974.
- 207. Alan M. Voorhees and Associates, Inc., A Special Program of Low-Capital-Cost Transit Improvements for Los Angeles; July, 1973.
- 208. Cambridge Systematics, Inc., Barton-Aschman Associates, Inc., Guideway Transit for Southern California: A Policy Analysis (draft): a report done for the Southern California Association of Governments; May, 1974.
- 2139. Metropolitan Transportation Commission, Procosed Regiona _______
 Transportation Plan; June 1, 1973.
- 210. Metropolitan Transportation Commission, <u>Proposed Regional</u>
 <u>Transportation Pian: Support System Transit--Service Areas;</u>
 June, 1973 (MAP)
- 211. Metropolitan Transportation Commission, Proposed Regional Transportation Plan: Existing and Approved Facilities; June, 1973 (MAP)
- 212. Metropolitan Transportation Commission, <u>Proposed Regional</u>
 <u>Transportation Plan: Improvement Proposals; June, 1973 (MAP)</u>
- Peat, Marwick, Mitchell & Co. et al., Southern California
 Rapid Transit District and the Citizens of the Los Angeles
 Region, Rapid Transit for Los Angeles: Summary Report of
 Con sul tants ' Recommendations; July ,='3

- 214. Stone and Youngberg Municipal Financing Consultants, Inc. et. al., A Public Transportation Improvement Program: a report done for the Southern California Rapid Transit District; March, 1974.
- 215. Southern California Rapid Transit District, Southern California Association of Governments, Transit for Los Angeles County A Subregional Transit Element of the Transportation Plan; July, 1974.
- 216. Orange County Transit District, Southern California Association of Governments, Coordinated Transit Planning Program;
 April 15, 1975.
- 217. Southern California Association of Governments, <u>Preliminary</u> Region of Transportation Plan: Towards a Balanced Transportation System; November, 1974.
- 218. Southern California Association of Governments, <u>Critical</u>
 <u>Decisions Plan for Regional Transportation</u>: June 13, 1974.
- 219. Southern California Association of Governments, <u>Critical</u>
 <u>Decisions Plan for Regional Transportation</u> (draft); May 13, 1974.
- 220. Southern California Association of Governments, Short Range Transportation Plan; First Printing, April 11, 1974; Second Printing, August, 1974.
- 221. Southern California Rapid Transit District, <u>Phase I Progress</u>
 Report: Study of Alternate Transit Corridors and Systems;
 March, 1973.

SAN FRANCISCO

- 222. Metrowlitan Transport at i on Commission, Bay Area Rapid Transit District and Cities of Pittsburg and Antioch, Pittsburg-Antioch, BART Extension Project -- Summary Report.
- 223. "BART: A Lesson for other Transit Builders," Engineering News-Record, September 26,1974.
- 224. Homburger, Wolfgang S., "Fixed Facilities and Shifting Values," High Speed Ground Transportation Journal, January 1970.
- 225. Kennedy, Norman, San Francisco Bay Area Rapid Transit: Promises, Problems, Prospects, presented at the Convention, Society of Automotive Engineers -- Australasia, Melbourne, Australia, October 18-22, 1971.
- 226. Merewitz, Leonard, <u>BART Impact Studies -- Public Transportation:</u>
 Wish Fulfillment and Reality in the San Francisco Bay Area;
 (Working Paper No. 165/BART 4); November 1971.
- 227. San Francisco Bay Area Rapid Transit Commission, report to the Legislature of the State of California: December 1957.
- 228. R.I. Banks & Associates, Inc. et. al., Study and Evaluation of Urban Mass Transportation Regulation and Regulatory Bodies, vol. I: Summary and Main Report: a report done for Office of Program Planning, Urban Mass Transportation Administration; May 1972.
- 229. Homburger, Wolfgang S. and Vukan R. Vuchic, "Federation of Transit Agencies as a Solution for Service Integration,"

 Traffic Quarterly, July 1970.
- 230. Kennedy, Norman, <u>Some Remarks on Urban Mass Transit</u>, presented to the Mass Transit Subcommittee, Metropolitan and Urban Affairs Committee, State of Minnesota Senate, meeting in San Francisco on November 1, 1973.
- 231. Marine, Gene, "Vietnam, Allende, and Big Bad BART: Rapid Trap. sit as a Tool of Foreign Policy," (reprinted from unknown source).
- 232. San Francisco Bay Area Council, <u>Discussion Paper: Financing</u>
 Provisions of the MTC Regional Transportation Plan;
 November 19, 1973.
- 233. San Francisco Bay Area Council, <u>Technical and Engineering Reports prepared for San Francisco Bay Area Rapid Transit District.</u>
- 234. Zwerling, Stephen, "BART: Manhattan Rises on San Francisco Bay," Environment, December 1973.

- 235. Bay Area Council Transit Finance Report; September 27, 1974.
- 236. Bay Area Rapid Transit District, <u>Claim for Transportation</u> Development Funds; March 29, 1974.
- 237. Metropolitan Transportation Commission, MTC Staff Evaluation -- Bay Area Rapid Transit District Transit-Aid Claim, Fiscal Year 1573 74 (final draft); July 27, 1973.
- Metropolitan Transportation Commission, MTC Staff Evaluation -San Francisco Municipal Transit System Transit Aid Claim
 Fiscal Year 1973-74 (final draft); July 13, 1973.
- 239. San Francisco Municipal Transit System, Transportation Development Act of 1971 Claim (1974-75); February 1974.
- 240. Metropolitan Transportation Commission, Special Report on Transit Finance; April 10, 1974.
- 241. Transit Aid Program, Allocations for Operation and Capital Expenditures, Article 4 & 8 Claims Fiscal Year 1974-74.
- 242. Transit Aid Program, Summary of Proposed T.D.A. Fund Allocation for 1973-74 Comparison with 1972-73 Allocation; July 1973.
- 243. Transit Aid Program, Allocation of Transportation Development Act Funds in Fiscal Year 1973-74; June 29, 1973.
- 244. Banks, James, University of California at Berkeley, <u>Critique of M.T.C. Structure and Decision-Making Process</u> (progress report on his dissertation).
- 245. Jones David W., Jr., Robert Taggart and Elizabeth Dorosin, The Stanford Transportation Research Program and the Center for Interdisciplinary Research, The Metropolitan Transportation Commission: An Innovative Experiment in Incremental Planning; A Cautious Experiment in Regionalism; August 1974.
- 246. Metropo ta Transporta ion Comm ss on <u>A Popu ar Summ r of the</u>

 <u>D ft Env ronmental Im act Report of the MTC Reg ona ra sporta</u>

 <u>t on P an Adopted June 9 3</u> Apr 1 11 19 4
- 247. Metropolitan Transportation Commission, <u>Proposed Revisions to the Regional Transportation Plan</u>; June 17, 1974.
- 243. Parsons Brinckerhoff-Tudor-Bechtel, <u>Evaluation of BART Extension-Growth Alternatives</u>; <u>Pittsburg-Antioch BART Extension Project</u>; <u>July 9, 1973.</u>

- Parsons Brinckerhoff-Tudor-Bechtel, Issues: Pittsburg-Antiocn
 BART Extension Project; November 28, 1972.
- 250. Parsons Brinckerhoff-Tudor-Bechtel, et. al., San Mateo County
 Transit Development Project: Airport-Menlo Park; April 2.1, 1974.
- 251. Peat, Marwick, Mitchell & Co., Metropolitan Transportation Commission, A Review of Some Anticipated and Observed Impacts of the Bay Area Rapid Transit System; April 1974.
- 252. San Francisco Bay Area Council, Specific Recommendations on the MTC Regional Transportation Plan; June 5, 1973.
- 253. Metropolitan Transportation Commission, No Fare and Low Fare Transit: An Evaluation of their Feasibility and Potential Impact in the San Francisco Bay Area; June 27, 1973.
- 254. Statement by B.R. Stokes, General Manager, San Francisco Bay Area Rapid Transit, Hearings before the Subcommittee on Transportation of the Public Works, U.S. House of Representatives, on H.R. 12859 March 1974.
- 255. Statement of Hon. Joseph Alioto, Mayor of San Francisco, Joint Hearing before the House and Senate Conference Committee on the Emergency Urban Mass Transportation Act; September 25, 1974.
- 256. Statements of Joseph Alioto; B.R. Stokes; A. Alan Post; Norman Mineta; Al Luehring and Al Bingham; R.J. DeLa Castra (Colorado Contractors Association; Karl Pingle; Connie Parrish; John C. Beckett), Hearings before the Subcommittee on Transportation of the Committee on Public Works, U.S. Senate on Transportation Planning and Priorities for the Seventies; May 24 and 25, 1974.
- 257. Statement of John C. Beckett, Chairman, Metropolitan Gransportation Commission of the San Francisco Bay Area, Hearings before the Committee on Public Works, U.S. HouseofRepresentatives on Public Mass Transportation; April 5, 1974.
- 258. I pa f he Bay Area Rap d Trans t Sys em on th S F a sco Metropo tan Reg on proceed ngs of a Workshop Conrerence February 9 11 1970 H ghway Research Board Wa h ngton D C 19 0
- 259. "BART Begets a Building Boom," Railway Age, March 6, 1967.
- **260.** "BART: How to Discourage Mass Transit in the United States," testimony of Dr. Willard Harvev Wattenberg before the Urban Affairs subcommittee of the Joint Economic Committee of Congress, May 13, 1974.

- 261. Belser, Karl, "The Planning Fiasco in California," <u>Cry</u> <u>California</u>, Sumner 1967.
- 262. Colcord, Frank C., <u>Urban Transportation Decision Making 3:</u>
 San Francisco: A Case Study, Massachusetts institute of Technology: Cambridge, Massachusetts, 1971.
- 263. Highway Research Board, Joint Program of Urban Transportation Study, University of California at Berkeley, Proceedings of the Workshop on the Impact of the BART System on the San Francisco Metropolitan Region; February 9-11, 1970.
- 264. Homburger, Wolfgang S., "An Analysis of the Vote on Rapid Transit Bonds in the San Francisco Bay Area" (ITTE Research Report No. 36, University of California at Berkeley);
 June 1963.
- 265. Hommurger, Wolfgang S., <u>Mass Transit Planning and Development</u> in the San Francisco Bay Area.
- 266. Liskamm, W.H., "BART," Architectural Forum, April 1973.
- 267. Mcgillivray, R.G., "Binary Choice of Urban Transport Mode in the San Francisco Bay Region," Econometric, September 1972.
- 268. Scott, Mel, The San Francisco Bay Area: A Metropolis in Perspective, University of California Press: Berkeley, 1959.
- 269. Watt, P.C., "Transportation Planning in the San Francisco
 Bay Area A History of Institutional Frustration," from
 Transportation and the Prospects for Improved Efficiency,
 National Academy os Engineering: Washington, D.C., 1973
- 270. Zwerling, Stephen, Mass Transit and the Politics of Technology, Praeger: New York, 1974.
- 271. Zwerling, Stephen, "BART Critic Cites Lack of Planning in Public Interest," The Sacramento Bee, July 1, 1973.
- 272. Bruck, Charles, "What We Can Learn from BART's Misadventures," Fortune, July, 1975.
- 273. Burco, Robert A., Transportation Research Board, <u>Legislative</u> perspectives on the State Transportation Planning Process and on Transit Planning in California; January, 1975.
- 274. Wolfe, Burton H., "BART: Steve Bechtel's \$2 Billion Toy: A Special Guardian Probe," San Francisco Bay Guardian, February 14, 1973.
- 175. Thistle, Susan, Vicki Smith and William Ristow, "BART: Forcing the Mission Underground," San Francisco Bay Guardian, November 15 through 28, 1973.

- 276. Homburger, Wolfgang S., Transportation Research Board,
 Travel Patterns on A New Regional Rapid Transit System;
 January 1975.
- 277. U.S. **Joint** Army-Navy Board, Report of Joint Army-Navy Board on Additional Crossing of San Francisco Bay; January 25, 1947.

SEATTLE

- 278. George, E., "The Transportation System Development and Evaluation as Practiced in Seattle, " Highway Research Record No. 238; 1968.
- 279. Gogerty, Robert, and David Whitlow, An Analysis of Forward Thrust (unpublished paper) .
- 280. Kurz, J.W., 'Transformation of Plans into Actions," <u>Journal of Urban Planning</u>, September 1973.
 - "Seattle Freeway Plans Stir Criticism," Engineering News-Record, September 21, 1967.
- 281. Delauw, Cather & Co., Interim Report to the Puget Sound Governmental Conference on the Feasibility of Rapid Transit Operation within the Seattle Area; 1965.
- 282. Colcord, Frank C., Jr. Tufts University, Urban Transportation Decision-Making: Seattle Case Study; October 1974.
- 283. Alexander, D.E., University of Washington Civil Engineering Department, Seattle Monorail; October 1962.
- 284. Alan M. Voorhees and Associates, Inc., Blue Streak Bus Rapid Transit Demonstration Project, Final Report; 1973.
- 285. Puget Sound Governmental Conference, Environmental Assessment of the 1990 Transportation Plan fortneCentral Puget Sound Region; April 1974.
- 286. Puget Sound Governmental Conference, Interim Regional Development Plan.
- Deleuw, Cather & Co., et. al., The Rapid Transit Plan for the Metropolitan Seattle Area, Technical Appendix; March 19, 1970.
- Municipality of Metropolitan Seattle, Transit Development Program (draft); September 1974.
- 289. Puget Sound Governmental Conference, 1990 Transportation System Plan for the Central Puget Sound Region, Vol. I: Summary; September 30, 1975.
- 290. Pruget Sound Governmental Conference, A Transit Plan for the Latropo Litan Area, Seattle and King County, Summary ______. Sort; May 12,1974.

- Puget Sound Governmental Conference, Washington State
 Highway Commission, Puget Sound Regional Transportation
 Study Summary Report; September 1967.
- 292. Seattle 2000 Commission, Citizens of Seattle, <u>Goals for</u> <u>Seattle</u>; 1973.
- 293. DeLeuw, Cather & Co., Report on a Comprehensive Public Transportation Plan for the Metropolitan Seattle Area; October 1967.
- 294. Daniel, Man& Johnson and Mendenhall, Transit Plan for the Central Puget Sound Region: An Update of the Puget Sound Region Transit Plan; May 1972.
- 295. Beyers, W.B., et. al., University of Washington, Vote No on the Forward Thrust Rail Rapid Transit Proposal; May 1970.
- Merrill, Richard L., University of Washington, The Forward Thrust Mass Rapid Transit Proposal: An Econ~c-Geographic Analysis (unpublished paper); 1970.
- 297. Horwood, Edgar M., University of Washington, Environmental Myths and Mass Transit (unpublished paper); April 1970.
- 298. Horwood Edgar M University of Washington T ansportat o Author ties and Bond Issues Legal and Polit ca Imp a tions unpub ished paper June 1970
- 299. Schneider, J.B., University of Washington, Rails or Renewal:
 Seattle's Choice (unpublished paper); March 1970.
- 300. Puget Sound Governmental Conference, An Environmental Assessment of the 1990 Transportation System Plan for the Central Puget Sound Region; April 1974.

TWIN CITIES

- 303. Citizens League of Minneapolis/St. Paul, <u>Building Incentives</u> for <u>Drivers to Ride</u>; March 1973.
- 304 Einsweiler, Robert C., *Case Study: Twin Cities Mass Transit as a Factor in Metropolitan Planning, from Urban Mass Transit Planning, Brooklyn Polytechnical Institute: New York, 1967.
 - 305. Jamieson, J.R., 'Continuing Transportation Planning in Minnesota with Emphasis on the Twin Cities Area," from American Association of State Highway Officials Procedures; 1966.
 - 306. Jamieson, J.R., 'Transportation Organization in the Twin Cities Metropolitan Region," <u>Highway Research News</u> No. 30, 1968.
 - 307. Kelm, Douglas, 'Statement on the Roles and Relationships of the Metropolitan Council and the Metropolitan Transit Commission;" 1973.
 - McKeown, Timothy, Paula D. Osborn and A. Karim Ahmed,
 Minneapolis Public Interest Group, The MTC Long Range
 Planning Process: We're Not Getting There; 1972.
 - 309. Wood, E.W., Real Estate Research Corporation, "Environmental, Social, and Aesthetic Factors in Urban Transportation Planning"; August 1973.
 - 310. Barton-Aschman Associates, Inc., Metropolitan Council of The Twin Cities Area, Feasibility of a Low Risk, Incremental Investment Strategy; 1973.
 - 311. Citizens League Committee on the Role of Consultants, April 24, 1974.
 - 312. CitizensLeague Transportation Planning Committee, Highways,
 Transit and The Metropolitan Council, How The Twin Cities
 Area Can Develop a Planned, Balanced Transportation
 System; December 6, 1968.
- 313. Citizens League on Transit Facilities, Transit: Redirect Prioriti es Toward a Small-Vehicle System and Shorter Trips: January 21, 1974.

- 314. Citizens League Committee on Urban Transportation Facilities,

 Transit: The Key Thing to Build is Usage! February 17, 1971.
- 315. City of Minneapolis, Office of City Coordinator, <u>Minneapolis</u> People Mover -- Summary Report; April 1973.
- 316. Daniel, Mann, Johnson and Mendenhall, Midwest Planning and Research, Inc., Technical Report Number 1, Transit Corridor Refinement and Fast Link System Concepts: a report done for The Twin Cities Area Metropolitan Transit Commission; November 1970.
- 317. Metropolitan Transit Commission, <u>Transit Development Program</u>, 1973-1990 (Revised); January 31, 1973.
- 318. Metropolitan Transit Commission, The Transit Development Program: Summary of Action, 1573-1990; February 1973.
- 319. Metropolitan Transit Commission, <u>Transit in Transportation;</u> January 1971.
- 320. Daniel, Mann, Johnson and Mendenhall, Midwest Planning and Research, Inc., <u>Transit Options for The Twin Cities Metropolitan Region:</u> a report done for The **Twin Cities** Area Metropolitan Transit Commission; January 1971.
- 321. Metropolitan Council, Development Framework Chapter, Metropolitan Development Guide, January, 1975.
- 322. Metropolitan Council, Metropolitan Development Framework Interim Policies; February 14, 1974.

WASHINGTON, D.C.

- 323. Artabane, Joseph A. and Francis Joseph Nealon, A Transit

 System in Crisis: A Case Study of D.C. Transit,

 Consortium of Universities: Washington, D.C.
- 324. Aten, Beach W. et al, WMA Transit Company, Consortium of Universities: Washington, D.C.
- 325. Fisher, R.J., "Shirley Highway Express Bus on Freeway Demonstration Project," <u>Highway Research Record</u> No. 415; 1972.
- 326. Gale, James E., <u>Transportation Policy Alternatives and the Socioeconomic Reactions: A Case Study of the Washington Metropolitan Area</u>, Consortium of Universities: Washington, D.C.
- 327. Langfield, S.C., The Balanced and Orderly Development of the Site in Close Proximity to a Metro Station as a Contributor to a More Healthy and Economically Viable Urban Environment in the Washington Metropolitan Area Consortium of Universities: Washington, D.C., June 1971.
- 328. Murin, Williams J., The Evolution of Metro, Consortium of Universities: Washington, D.C., 1970.
- 329. Parente, Francis R., <u>D.C. Transportation Controversies</u>, <u>Values and Integration of Communities</u>, Consortium of Universities: Washington, **D.C.**
- 330. Fromise and Challenge: The Potential of Metro, Symposium sponsored by the Maryland-National Capital Park and Planning Commission, the Washington Suburban Transit Commission, Washington Metropolitan Area Transit Authority, and the Maryland Department of State Planning, Silver Spring, Maryland; June 19, 1971.
- 331. Scheiber, W.A., "Meeting Urban Transportation Demands:
 Problems and Progress-in the Washington Metropolitan
 Area," Transportation and the Prospects for Improved
 Efficiency, National Academy of Engineering: Washington,
 D.C., 1973.

- 332. Studholme, Edward D., Metro Impact in Arlington County:
 A Case Study and Evaluation of a Transit Growth Model,
 Consortium of Universities: Washington, D.C.
- 333. Tuzo, G.C., The Evolution of the D.C. Highway System, Consortium of Universities: Washington, D.C., June 1971.
- 334. Transit Development Team, Transit Development Planning in the District of Columbia, presentation made before the 1971 A.I.P. Conference, San Francisco, California; October 1971.
- 335. U.S. Congress, Senate, Rapid Rail Transit for the National Capital Region; Report of the Committee on the District of Columbia (to accompany H.R. 4822), Report #53604 Washington, U.S. Government Printing Office, June 25, 1965.
- 336. U.S. Congress, Senate, Rapid Rail Transit for the National Capital Region; Hearing Before the Committee on the District of Columbia on H.R. 4022 and S.1117 (to Authorize the prosecution of a Transit Development Program for the National Capital Region). Washington, U.S. Government Printing Office, July 20,21,23,1965.
- 337. Metropolitan Washington Council of Governments, By-Laws; 1972.
- 338. U.S. Congress, House of Representatives, The Second Supplemental Appropriations Bill; Hearings Before Subcommittees of the Committee on Appropriations. Washington, U.S. Government Printing Office; March 2, 1955.
- 339. U.S. Congress, House of Representatives, Transit Program for the National Capital Region; Hearings before Subcommittee No. 6 of the Committee on the District of Columbia on H.R. 663 3 and H.R. 7240. Washington, U.S. Government Printing Office; July 9,10,16,18,24,25,29,31, 1963.
- 340. The Board of Commissioners of the District of Columbia, A Preliminary Evaluation of the Transportation Plan Recommended by the National Capital Transportation Agency; February 18,1963.
- 341. Nat onal Capital Transportation Agency Transit Development P o gram 1965 Ra l Rap d Transit fo the Nation's Cap tal January 1965.
- 342. Smith, San, "Other Ways of Getting Around", D.C. Gazette, March 1974.

- 343. National Capital Region Transportation Planning Board, By-Laws; adopted March 21, 1973.
- 344. Office of Planning, <u>Proposed Commuter Railroad Service in the National Capital Region</u>; April 23, 1969.
- 345. Alan W. Voorhees & Associates, Inc., W.C. Gilman & Co., Inc., Technical Report on the Mid-City Alternative Rail Line Location: a report done for the Washington Metropolitan Ārea Transit Authority; July 1969.
- Municipal Planning Office District of Columbia Government,

 Draft Report: D.C. Metro Impact Study, Service Area No. 1,

 Service Area No. 2, Service Area No. 3, Service Area No. 4,

 Service Area No. 5, Service Area No. 6, Service Area No. 7,

 Service Area No. 8, and Service Area No. 9; Washington, D.C.,

 1975.
- 347. National Capital Transportation Planning Board, Metropolitan Washington Council of Governments, Short-Range Transit Development Program for the Washington Metropolitan Area; 1975.
- National Capital Planning Commission, National Capital Regional Planning Council, General Development Plan for National Capital Region: a report done for the Mass Transportation Survey; February 1959.
- 349. Development Research Associates, <u>Benefits to the Washington</u>
 Area from the <u>Adopted Regional Metro System;</u> October 25, 1968.
- 350. National Capital Planning Commission, <u>The Proposed Comprehensive</u>
 <u>Plan for the National Capital</u>; February 1967.
- 351. National Capital Planning Commission, <u>Elements of the Comprehensive Plan for the National Capital</u>; 1970.
- 352. **Leavitt, Helen,** "Subway Avoids Existing Facilities; Promotes Dispersal," Metropolitan Washington Examiner, April 1975.
- 353. "Public Rail Transit Could Blanket Area with Existing Funds," Metropolitan Washington Examiner, March 1975.
- 354. Robert Gladstone & Associates, Alan M. Voorhees & Associates, Economic and Transportation Impact Analysis: Takoma Park Study Area: a report done for the Metropolitan Washington Council of Governments; February 1968.
- 355. Robert L. Plavnick, A.I.P., The Washington Metropolitan Area-Population and Employment (summary of a presentation to the Washington Metropolitan Area Transit Authority); February 1967.

- 356. Metropolitan Washington Council of Governments, Natio~~l Capital Region Transportation Planning Board, FY-75 Unified Work Program for the Washington Metropolitan Area, A Unified Transportation Planning- Program (draft); April 8, 1974.
- 357* Northern Virginia Planning District Commission, Northern Virginia Metro Station Impact Study, Phase I: Inventory Analysis; April 1973.
- 358. Conconi, Charles, "Metro Is Coming:" The Washingtonian, May 1975.
- 359. "Metro," Mass Transit, March 1975.
- 360. Maryland Department of Transportation, Office of the Secretary,
 Western Prince George's County Transportation Alternatives
 Study, Phase II: Report Summary.
- 361. Leavitt, Helen, <u>Superhighway Superhoax</u>, Doubleday and <u>company</u>, New York, 1971.
- 362. u.s. Government Printing Office, Staff Reports and Hearings of the Joint Committee on Washington Metropolitan Problems, 1958-1960.
- 363. W.C. Gilman & Co., Inc., Alan M. Voorhees & Associates, Inc.

 Supplemental Report No. 1: Net Income Analysis: Information
 on Existing Transit Systems: a report done for the Washington
 Metropolitan Area Transit Authority; February 1969.
- 364. "Cutting the Tentacles of the Metropus," The D.C. Gazette, February 1975.
- 365. "A Mass Transit Plan for D.C.," The D.C. Gazette, February 1975.
- 366. Larry Smith & Company, Inc., Washington Metropolitan Area Transit Authority, Metro Property Utilization; January 15, 1969.
- 367. Larry Smith & Company, Inc., Washington Metropolitan Area Transit Authority, Metro property Utilization, Volume 1; July 22, 1963.
- 368. Washington Metropolitan Area Transit Authority, <u>Legislation</u>
 Relating to the Development of Rapid Transit in the Washington
 Metropolitan Area; undated.
- 369. Washington Metropolitan Area Transit Authority, Annual Report, December 31, 1973.
- 370. Washington Metropolitan Area Transit Authority, Organization Approved by WMATA Board of Directors; November 16,1972.

- 371. Washington Metropolitan Area **Transit** Authority, **Office** of Planning, <u>Transit</u> Planning Process Minimum **Time** Schedule; January 1974.
- 372. Washington Suburban Transit Commission, Annual Report Fiscal Year 1973; December 31, 1973.
- 373. Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board, A Long Range Transportation Plan for the National Capital Region; June 20, 1973.
- 374. Urban Transportation Center Consortium of Universities, The Urban Transportation Center: Final Report; August 1974.
- 375. Washington Metropolitan Area Transit Authority, Net Income Analysis, 681 Traffic Zone System; May 1970.
- 376. Community Renewal **Program**, Office of Assistant to the Mayor for Housing Programs, F-NE (Washington's Far Northeast 1971): Metro Impact Commercial Development: a report to Mayor Walter E. Washington; May 1971.
- 377. National Capital Planning Commission-National Capital Regional Planning Council, <u>Transportation Plan: National Capital</u> Region; 1959.
- 378. Transportation Planning Board, Metropolitan Washington Council of Governments, <u>Study Design for a Unified Comprehensive Short-Range Transit Development Program for the Washington Metropolitan Area; January 1972.</u>
- 379. Maryland Department of Transportation, "Washington Metropolitan Regional Transportation Planning Process" (appendix H of Action Plan Describing the Transportation Planning Process);
 June 15, 1973.
- 380. Washington Metropolitan Area Transit Authority, <u>Adopted</u>
 <u>Regional Rapid Rail Transit Plan and Program March 1, 1968</u>
 (revised); February 7, 1969.
- 381. Hertz, A.D., <u>Economic Feasibility: Dial-a-Ride Service for the Consortium of Universities</u>, Urban Transportation Center: Washington, **D.C.**, June 1974.
- 382. Meany, Judity A., Energy Allocation in the Urban Transportation
 Sector, Urban Transportation Center, Consortium of Universities:
 Washington, D.C., May 1974.
- 383. Sherman, Michel Marcel, Subsidization of Transit Operating costs: A Case Study of Metro, Urban Transportation Center: Washington, D.C., May 1973.

- 384. Stein, Steven, Work Schedule Changes: Their Ire-pact on Washington, D. C., Urban Transportation Center: Washington, D.C., May 1974.
- Wright, Samueland Leonard Hysong, An Analysis of Alternatives for Servicing Work Travel by Buses in the Event of an Energy Crisis:

 A Case Study of Washington, D.C., Urban Transportation Center:
 Washington, D.C., May 1974.
- 386. W.C. Gilman & Co., Inc., Alan M. Voorhees & Associates, Inc.,
 Traffic, Revenue and Operating Costs, Revised, February 1971,
 Authorized Regional System: a report done for the Washington
 Metropolitan Area Transit Authority.
- 387. Policy Advisory Committee to the District Commissioners,
 Arthur Little, Inc., Transportation Planning in the District
 of Columbia, 1955 to 1965: A Review and Critique; March 22, 1966.
- 388. National Capital Planning Commission, National Capital Regional Planning Council, General Development Plan National Capital Region: Mass Transportation Survey; February 1959.
- 389. W.C. Gilman & Co, Inc., Alan M. Voorhees & Associates, Inc., <u>Traffic Revenue and Operating costs</u>: a report done for the Washington Metropolitan **Area** Transit Authority; February 1969.
- 390. Washington Metropolitan Area Transit Authority, Proposed Regional Rapid Rail Transit Plan and Program; December 1967.
- 391. Development Research Associates, The Economics of Metro; 1968.